

Supplementary information

Integrative analyses of pyrimidine salvage pathway-related genes revealing the associations between UPP1 and tumor microenvironment

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Supplementary Figures

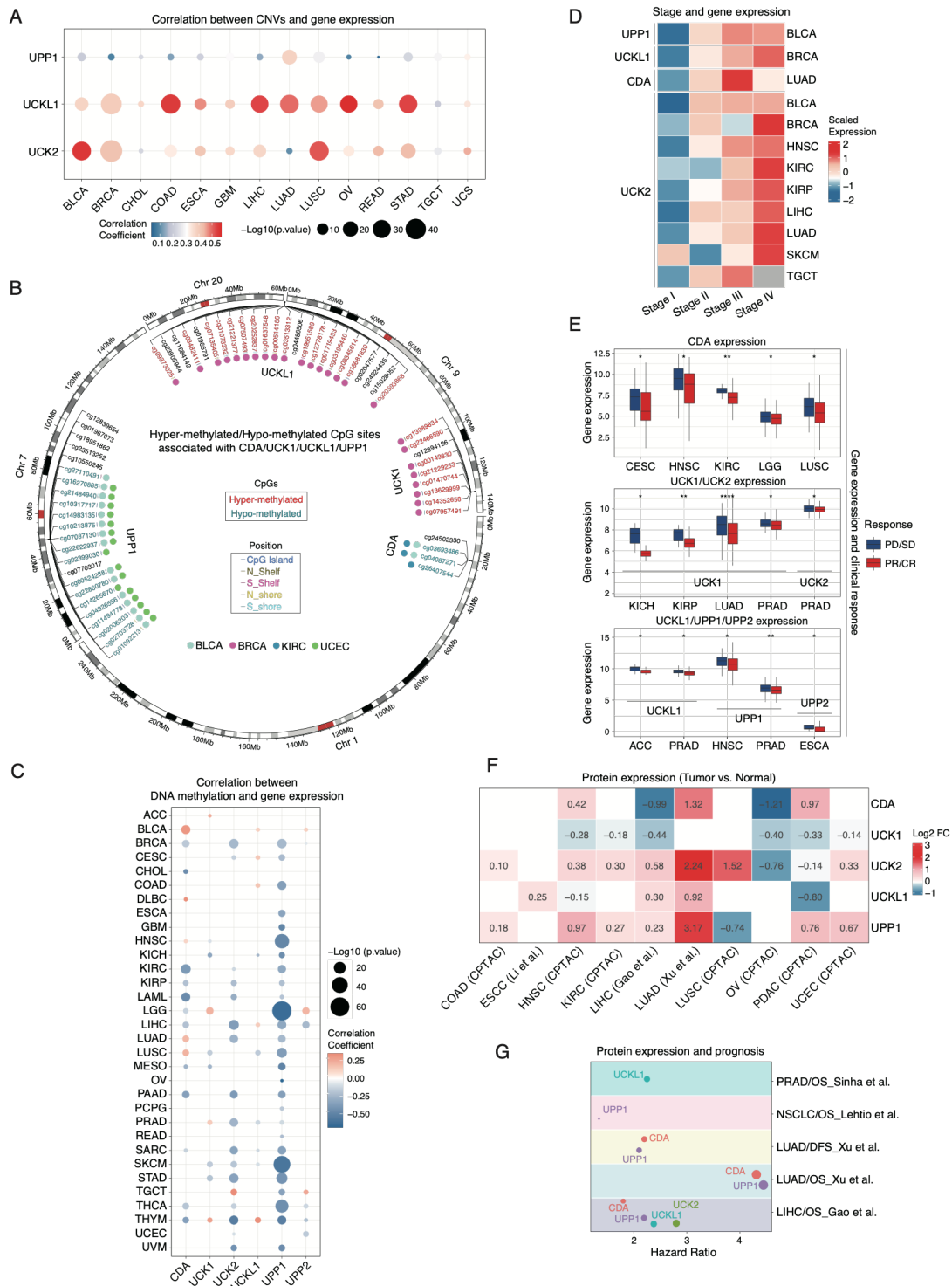


Figure S1. Comprehensive analysis of PSPG.

A. Pearson correlation analysis between copy number variations and gene expression ($p < 0.05$).

B. Specific sites of aberrant methylation in CDA/UCK1/UCKL1/UPP1 in tumor samples. Red methylation sites represent significantly hypermethylated sites, while blue sites represent

significantly hypomethylated sites. The dots above the methylation sites represent different types of tumors, and the lines above represent the specific locations of methylation sites.

C. Pearson correlation analysis between DNA methylation and gene expression ($p < 0.05$).

D. PSPGs significantly correlated with clinical stages ($p < 0.05$). Statistical analysis was conducted using the two-tailed Kruskal-Wallis test.

E. PSPGs significantly correlated with clinical drug treatment (*: $p < 0.05$; **: $p < 0.01$; ***: $p < 0.001$; ****: $p < 0.0001$). Statistical analysis was conducted using the two-tailed Wilcoxon rank-sum test.

F. Changes in protein expression of PSPGs. Red indicated up-regulation, blue indicated down-regulation, only genes with $p < 0.05$ were shown. Statistical analysis was conducted using the two-tailed Wilcoxon rank-sum test.

G. Association between PSPG protein expression and patient prognosis. The x-axis represents the hazard ratio, with values greater than 1 associated with poor patient prognosis. All displayed PSPGs were associated with poor patient prognosis ($p < 0.05$).

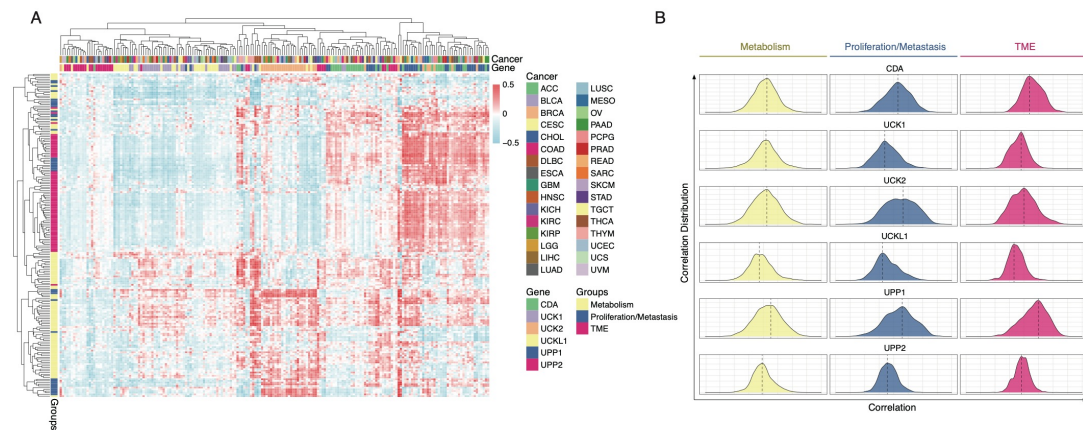


Figure S2. Correlation of PSPGs with tumor-related biological characteristics.

A. Heatmap displaying the overall correlation of PSPGs with tumor-related biological features.

B. Density plot of the correlation distribution between PSPGs and tumor-related biological features.

The dashed line represents the median correlation of overall features. UCK2 shows the highest correlation with proliferation and metastasis-related biological processes, while UPP1 has the highest correlation with TME.

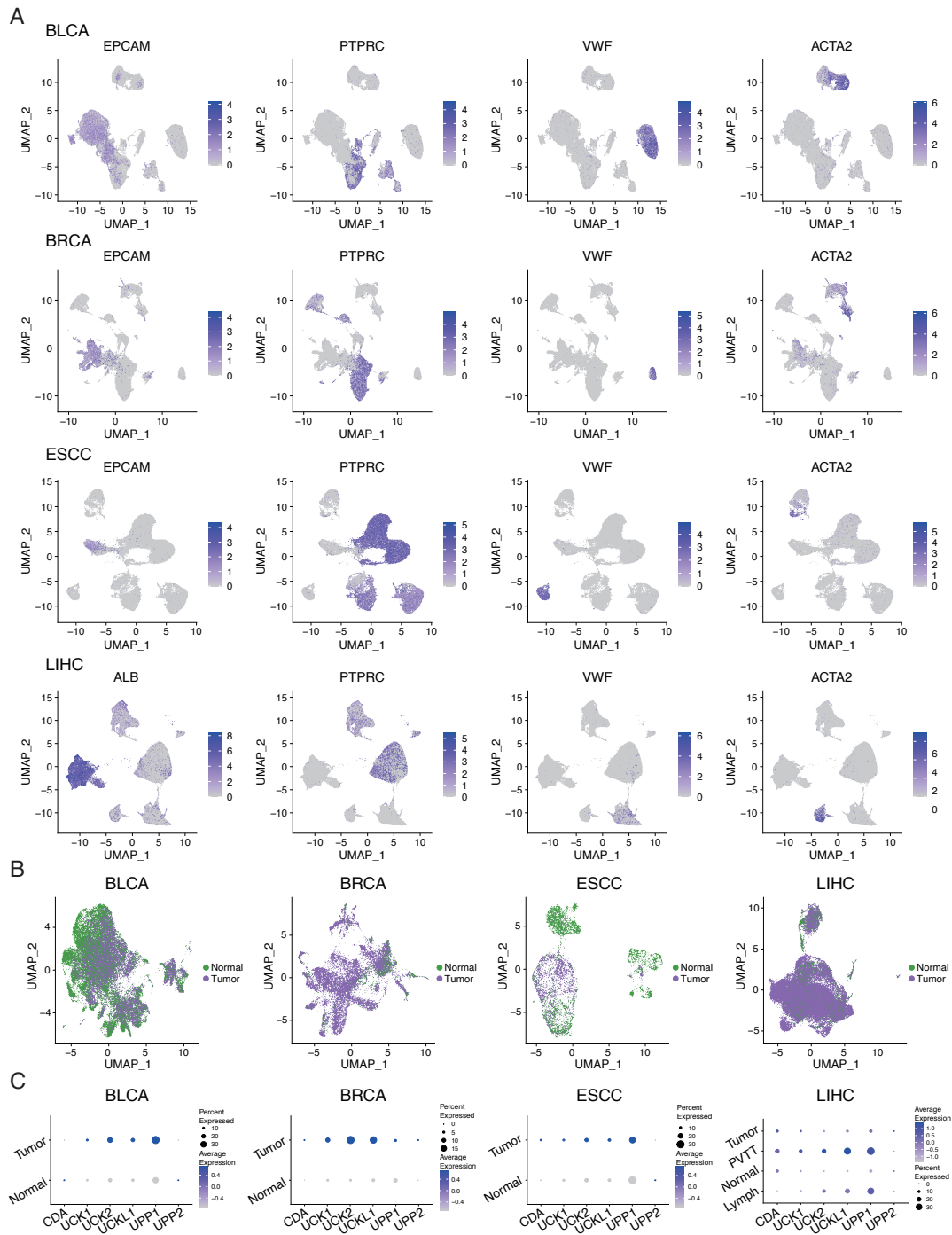


Figure S3. Cell-type-specific marker expression and PSPGs expression differences between tumor and normal cells.

A. UMAP visualization showing the expression of immune cell markers, epithelial cell (hepatocyte) markers, fibroblast markers, and endothelial cell markers.

B. Identification of tumor cells and normal cells based on inferCNV.

C. Comparison of PSPGs expression differences between tumor cells and normal cells.

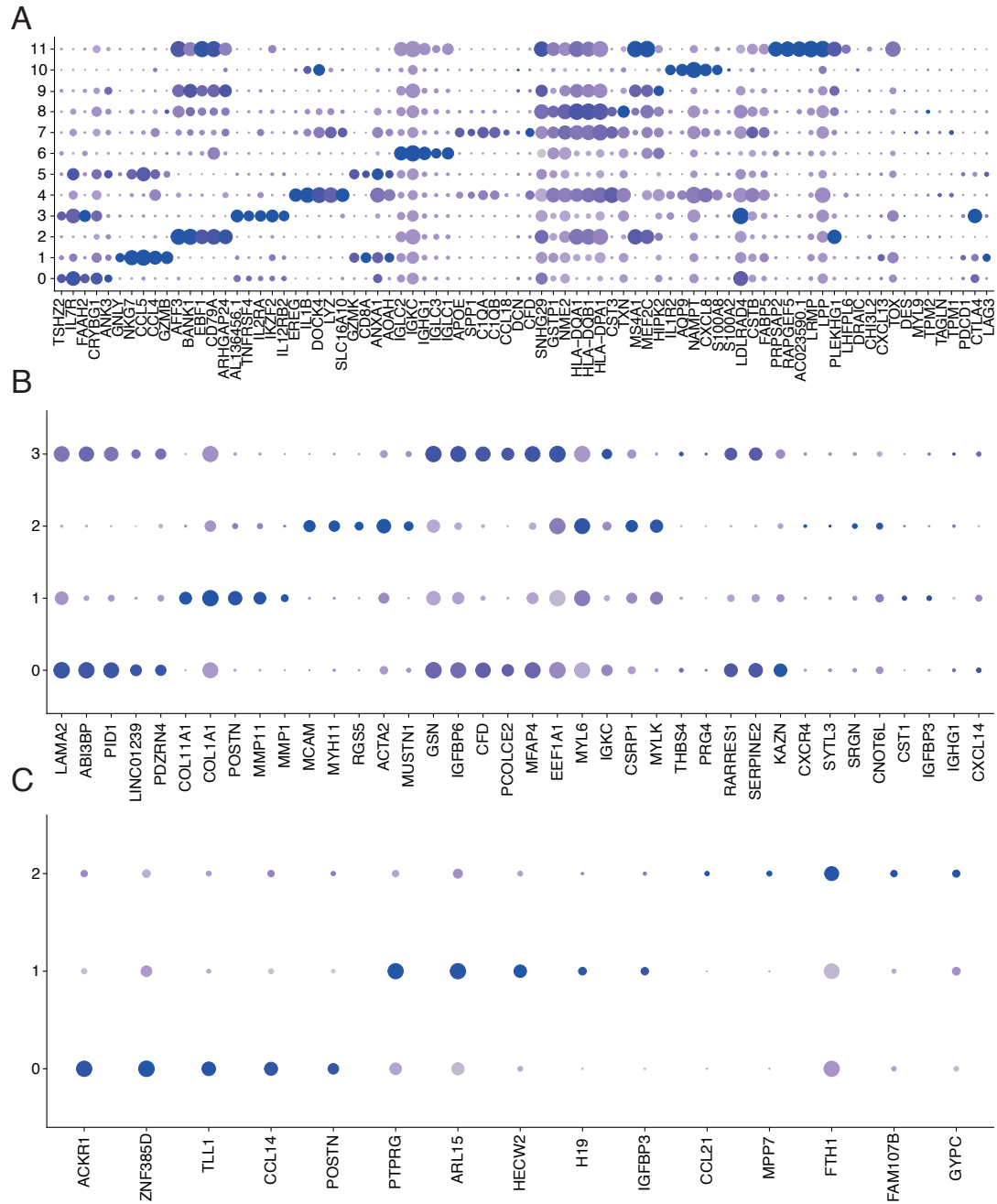


Figure S4. Top 5 differentially expressed genes in each identified cell subgroup in ESCC single-cell sequencing data.

A. Immune cells.

B. Fibroblasts.

C. Endothelial cells.

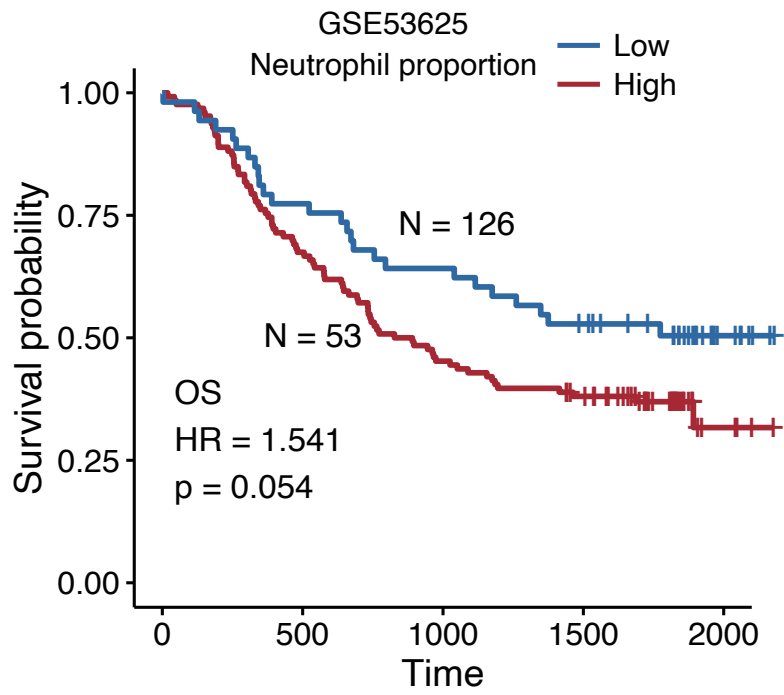


Figure S5. Analysis of the association between neutrophils and patient prognosis in the GSE53625 cohort. Statistical analysis was conducted using log-rank tests.

Table S1: siRNA sequence and primers.

siRNA	sense (5'-3')
UPP1	GCUCCAACGUCACUAUCAUTT
Primers	(5'-3')
GAPDH-Forward	AGGTCGGAGTCAACGGATTTGG
GAPDH-Reverse	TGCCATGGGTGGAATCATATTGG
UPP1-Forward	TGATTGCCCGTCAGACTTTT
UPP1-Reverse	CACCAACGCACCTGATGAAG
TGFB1Forward	CACCAACTATTGCTTCAGCTCCAC
TGFB1-Reverse	TCCTTGCGGAAGTCAATGTACAGC
CCL2-Forward	CAGCCAGATGCAATCAATGCC
CCL2-Reverse	TGGAATCCTGAACCCACTTCT
CCL3-Forward	TGGCTCTCTGCAA CCAGTTCTC
CCL3-Reverse	CGAAGCTTCTGGACCCCTCA
CCL4-Forward	GTCTGTGCTGATCCCAGTGA
CCL4-Reverse	GCGGAGAGGAGTCCTGAGTA
CCL5-Forward	TGCTGCTTTGCCTACATTGC
CCL5-Reverse	CCTTGACCTGTGGACGACTG
CCL26-Forward	GAGAAGTGGGAAGCCCAGATG
CCL26-Reverse	TATGAGACTGAGACGGCCCC
CXCL3-Forward	GCCCAAACCGAAGTCATAGC
CXCL3-Reverse	CCCTGCAGGAAGTGTCAATG
VEGFB-Forward	CACCAAGTCCGGATGCAGAT
VEGFB-Reverse	GGAGTGGGATGGGTGATGTC
IL1A-Forward	AGATGCCTGAGATACCCAAAACC
IL1A-Reverse	CCAAGCACACCCAGTAGTCT
IL1B-Forward	GAAGTCAAAGCTCTCCACCTCCAG
IL1B-Reverse	AAAGGACATGGAGAACACCACTTG
IL6-Forward	GCAGAAAACAACCTGAACCTTC
IL6-Reverse	ACCTCAAACCTCCAAAAGACCAG
IL11-Forward	AGCGGACAGGGAAGGGTTAAAG
IL11-Reverse	GGCGGCAAACACAGTTCATGTC
IL18-Forward	ATCGCTTCCTCTCGCAACAAAC
IL18-Reverse	TCTTCTACTGGTTCAGCAGCCATC
IL32-Forward	CTCTCTCGGCTGAGTATTTGTG
IL32-Reverse	GCTCGACATCACCTGTCCAC

antisense (5'-3')
AUGAUAGUGACGUUGGAGCTT

Table S2: Genetic Features of PSPGs in TCGA

Sheet1: Mutation frequency of PSPGs in TCGA

Sheet2: CNVs (Copy Number Variations) of PSPGs in TCGA

Sheet3: DNA methylation features of PSPGs in TCGA

Sheet1: Mutation frequency of PSPGs in TCGA

	CDA	UCK1	UCK2	UCKL1	UPP1	UPP2
ACC		0	0	0.010869565	0	0
BLCA	0.004878049	0.004878049		0	0.014634146	0
BRCA	0.001264223	0.001264223	0.002528445	0.001264223	0.003792668	0.001264223
CESC		0	0.003460208	0.01384083		0
CHOL		0		0	0.027777778	0
COAD		0	0.003448276	0.006896552	0.024137931	0.020689655
DLBC		0		0	0.027027027	0
ESCA		0	0	0.005434783	0.010869565	0.005434783
GBM	0.006369427		0	0	0.006369427	0.00955414
HNSC		0	0.00591716	0.01183432	0.00591716	0.00591716
KICH		0		0	0	0.015151515
KIRC		0	0.002717391	0.002717391		0
KIRP		0		0	0	0.003558719
LGG		0	0.005870841		0.001956947	0.001956947
LIHC	0.008264463		0	0.002754821	0.002754821	0.005509642
LUAD	0.003898635		0	0.019493177	0.001949318	0.011695906
LUSC	0.002083333	0.002083333	0.00625	0.004166667		0.00625
MESO		0		0	0	0
OV		0		0	0	0
PAAD		0		0	0	0
PCPG		0		0	0	0
PRAD		0	0.002020202		0	0.004040404
READ	0.011111111	0.011111111		0	0.011111111	0
SARC		0	0.004237288		0	0.004237288
SKCM	0.009615385		0	0.009615385	0.019230769	0.009615385
STAD		0	0.013667426	0.002277904	0.018223235	0.004555809
TGCT		0		0	0	0
THCA		0		0	0	0
THYM		0		0	0	0
UCEC	0.008948546	0.031319911	0.040268456	0.033557047	0.022371365	0.026845638
UCS		0	0	0.01754386		0
UVM		0		0	0	0
LAML		0		0	0	0

Sheet2: CNV (Copy Number Variations) of PSPGs in TCGA

CNV Amplification Frequency	ACC
CDA	0.055555556
UCK1	0.388888889
UCK2	0.155555556
UCKL1	0.577777778
UPP1	0.533333333
UPP2	0.155555556

CNV Loss Frequency	ACC
CDA	0.366666667
UCK1	0.055555556
UCK2	0.144444444
UCKL1	0.055555556
UPP1	0.066666667
UPP2	0.177777778

CNV Frequency (CNV Amplification Frequency-CN Loss Frequency)	ACC
CDA	-0.311111111
UCK1	0.333333333
UCK2	0.011111111
UCKL1	0.522222222
UPP1	0.466666667
UPP2	-0.022222222

CNV on Gene Expression	ACC Correlation
CDA	0.015438303
UCK1	0.443042573
UCK2	0.292067936
UCKL1	0.292567984
UPP1	0.318369833
UPP2	-0.161507221

BLCA	BRCA	CESC
0.196078431	0.063888889	0.277966102
0.151960784	0.137962963	0.203389831
0.485294118	0.735185185	0.53559322
0.558823529	0.484259259	0.420338983
0.433823529	0.313888889	0.145762712
0.12745098	0.082407407	0.125423729

BLCA	BRCA	CESC
0.191176471	0.412037037	0.118644068
0.401960784	0.266666667	0.169491525
0.051470588	0.021296296	0.027118644
0.056372549	0.044444444	0.047457627
0.051470588	0.088888889	0.081355932
0.272058824	0.225925926	0.152542373

BLCA	BRCA	CESC
0.004901961	-0.348148148	0.159322034
-0.25	-0.128703704	0.033898305
0.433823529	0.713888889	0.508474576
0.50245098	0.439814815	0.372881356
0.382352941	0.225	0.06440678
-0.144607843	-0.143518519	-0.027118644

ACC p-value	BLCA Correlation	BLCA p-value
0.893985651	-0.084361029	0.09037905
5.46E-05	0.505293335	1.44E-27
0.009953856	0.54960685	2.91E-33
0.009821692	0.378870062	3.08E-15
0.004775317	0.199192948	5.54E-05
0.160536044	0.032388842	0.516234404

CHOL	COAD	DLBC
0	0.015521064	0
0.027777778	0.150776053	0.145833333
0.638888889	0.208425721	0.3125
0.361111111	0.720620843	0.083333333
0.194444444	0.549889135	0.291666667
0.166666667	0.179600887	0.083333333

CHOL	COAD	DLBC
0.805555556	0.354767184	0.125
0.5	0.128603104	0.020833333
0	0.099778271	0.041666667
0.027777778	0	0.041666667
0.083333333	0.002217295	0.083333333
0.083333333	0.033259424	0.166666667

CHOL	COAD	DLBC
-0.805555556	-0.33924612	-0.125
-0.472222222	0.022172949	0.125
0.638888889	0.10864745	0.270833333
0.333333333	0.720620843	0.041666667
0.111111111	0.54767184	0.208333333
0.083333333	0.146341463	-0.083333333

BRCA Correlation	BRCA p-value	CESC Correlation
0.098513234	0.001201162	0.024986739
0.439466843	3.99E-52	0.381592381
0.415762672	2.65E-46	0.370274935
0.395993954	8.58E-42	0.568055461
0.084850979	0.00530835	0.356636463
0.079072522	0.009397718	0.113810878

ESCA	GBM	HNSC
0.119565217	0.140381282	0.105363985
0.288043478	0.159445407	0.342911877
0.483695652	0.168110919	0.256704981
0.635869565	0.389948007	0.38697318
0.657608696	0.779896014	0.373563218
0.282608696	0.058925477	0.157088123

ESCA	GBM	HNSC
0.364130435	0.093587522	0.172413793
0.304347826	0.128249567	0.126436782
0.059782609	0.020797227	0.074712644
0.032608696	0.034662045	0.063218391
0.054347826	0.019064125	0.044061303
0.135869565	0.060658579	0.109195402

ESCA	GBM	HNSC
-0.244565217	0.046793761	-0.067049808
-0.016304348	0.031195841	0.216475096
0.423913043	0.147313692	0.181992337
0.60326087	0.355285962	0.323754789
0.60326087	0.760831889	0.329501916
0.14673913	-0.001733102	0.04789272

CESC p-value	CHOL Correlation	CHOL p-value
0.670684634	0.413203053	0.012252584
1.48E-11	0.592766775	0.000139311
6.41E-11	0.223377292	0.190336886
2.38E-26	0.372146926	0.02541464
3.48E-10	0.229863265	0.177450696
0.0520432	-0.204242121	0.232145764

KICH	KIRC	KIRP
0.015151515	0.015151515	0
0.136363636	0.024621212	0.013888889
0.015151515	0.117424242	0.059027778
0.348484848	0.227272727	0.354166667
0.363636364	0.327651515	0.600694444
0.045454545	0.149621212	0.173611111

KICH	KIRC	KIRP
0.803030303	0.185606061	0.180555556
0.166666667	0.295454545	0.118055556
0.772727273	0.0625	0.069444444
0.045454545	0.001893939	0
0.015151515	0.003787879	0.003472222
0.696969697	0.026515152	0.017361111

KICH	KIRC	KIRP
-0.787878788	-0.170454545	-0.180555556
-0.03030303	-0.270833333	-0.104166667
-0.757575758	0.054924242	-0.010416667
0.303030303	0.225378788	0.354166667
0.348484848	0.323863636	0.597222222
-0.651515152	0.123106061	0.15625

COAD Correlation	COAD p-value	DLBC Correlation
0.145390609	0.002156491	0.081851695
0.460024757	1.39E-24	-0.008853944
0.332177685	7.15E-13	0.267009861
0.544129858	1.66E-35	0.150076742
0.130927639	0.005783475	-0.288938917
0.101688707	0.032370761	0.230385874

LAML	LGG	LHC
0.02617801	0.027290448	0.056756757
0.015706806	0.074074074	0.081081081
0.015706806	0.066276803	0.745945946
0.010471204	0.097465887	0.340540541
0.010471204	0.228070175	0.305405405
0.005235602	0.023391813	0.148648649

LAML	LGG	LHC
0.005235602	0.380116959	0.381081081
0.010471204	0.095516569	0.294594595
0	0.023391813	0.010810811
0.010471204	0.023391813	0.021621622
0.089005236	0.007797271	0.043243243
0	0.044834308	0.127027027

LAML	LGG	LHC
0.020942408	-0.352826511	-0.324324324
0.005235602	-0.021442495	-0.213513514
0.015706806	0.04288499	0.735135135
0	0.074074074	0.318918919
-0.078534031	0.220272904	0.262162162
0.005235602	-0.021442495	0.021621622

DLBC p-value	ESCA Correlation	ESCA p-value
0.580217951	0.203769898	0.005661829
0.952373787	0.500496316	5.41E-13
0.066564733	0.407070072	1.07E-08
0.308613771	0.468386239	2.29E-11
0.046396593	0.21067886	0.004200698
0.115173225	-0.023360028	0.753607547

LUAD	LUSC	MESO
0.226744186	0.099800399	0.034482759
0.104651163	0.213572854	0.045977011
0.71124031	0.518962076	0.275862069
0.486434109	0.493013972	0.149425287
0.519379845	0.471057884	0.275862069
0.290697674	0.303393214	0.08045977

LUAD	LUSC	MESO
0.240310078	0.45508982	0.333333333
0.437984496	0.45508982	0.24137931
0.019379845	0.047904192	0.034482759
0.079457364	0.125748503	0.034482759
0.067829457	0.141716567	0.011494253
0.058139535	0.105788423	0.045977011

LUAD	LUSC	MESO
-0.013565891	-0.355289421	-0.298850575
-0.333333333	-0.241516966	-0.195402299
0.691860465	0.471057884	0.24137931
0.406976744	0.367265469	0.114942529
0.451550388	0.329341317	0.264367816
0.23255814	0.19760479	0.034482759

GBM Correlation	GBM p-value	HNSC Correlation
-0.037016376	0.655121642	0.126656795
0.464468252	2.74E-09	0.487445386
0.368706624	4.01E-06	0.438601625
0.393403261	7.56E-07	0.35344121
0.299560223	0.000216693	0.263185508
-0.004696259	0.954825323	0.055605985

OV	PAAD	PCPG
0.246977547	0.038043478	0.00617284
0.124352332	0.065217391	0.018518519
0.557858377	0.315217391	0.154320988
0.692573402	0.260869565	0.061728395
0.312607945	0.298913043	0.172839506
0.379965458	0.119565217	0.018518519
OV	PAAD	PCPG
0.430051813	0.326086957	0.62962963
0.590673575	0.244565217	0.067901235
0.039723661	0.038043478	0.086419753
0.04835924	0.032608696	0.024691358
0.195164076	0.02173913	0
0.117443869	0.038043478	0.080246914
OV	PAAD	PCPG
-0.183074266	-0.288043478	-0.62345679
-0.466321244	-0.179347826	-0.049382716
0.518134715	0.277173913	0.067901235
0.644214162	0.22826087	0.037037037
0.117443869	0.277173913	0.172839506
0.262521589	0.081521739	-0.061728395
HNSC p-value	KICH Correlation	KICH p-value
0.004026119	-0.155729042	0.211807783
4.95E-32	0.525766739	5.81E-06
1.41E-25	0.250903144	0.042150534
1.44E-16	0.445205723	0.000179916
1.37E-09	-0.038573214	0.758464894
0.208182246	0.051413648	0.681822671

PRAD	READ	SARC
0.012195122	0.018181818	0.303501946
0.113821138	0.218181818	0.272373541
0.056910569	0.278787879	0.346303502
0.083333333	0.884848485	0.357976654
0.201219512	0.636363636	0.295719844
0.018292683	0.260606061	0.128404669

PRAD	READ	SARC
0.091463415	0.448484848	0.163424125
0.028455285	0.193939394	0.214007782
0.046747967	0.090909091	0.101167315
0.014227642	0.006060606	0.140077821
0.012195122	0.006060606	0.13618677
0.115853659	0.054545455	0.280155642

PRAD	READ	SARC
-0.079268293	-0.43030303	0.140077821
0.085365854	0.024242424	0.058365759
0.010162602	0.187878788	0.245136187
0.069105691	0.878787879	0.217898833
0.18902439	0.63030303	0.159533074
-0.097560976	0.206060606	-0.151750973

KIRC Correlation	KIRC p-value	KIRP Correlation
0.043524194	0.319561576	-0.048445073
0.466254532	1.08E-29	0.347377175
0.210316969	1.16E-06	0.294388316
0.153739666	0.000407373	0.516315043
0.147872944	0.000676768	0.151359653
0.122917777	0.004796543	0.169191113

STAD	TGCT	THCA
0.092970522	0.16	0.006012024
0.256235828	0.113333333	0.01002004
0.349206349	0.453333333	0.054108216
0.64399093	0.28	0.024048096
0.492063492	0.813333333	0.036072144
0.163265306	0.293333333	0.002004008

STAD	TGCT	THCA
0.253968254	0.193333333	0.008016032
0.197278912	0.406666667	0.056112224
0.031746032	0.006666667	0.006012024
0.013605442	0.1	0
0.015873016	0.02	0
0.10430839	0.046666667	0.02004008

STAD	TGCT	THCA
-0.160997732	-0.033333333	-0.002004008
0.058956916	-0.293333333	-0.046092184
0.317460317	0.446666667	0.048096192
0.630385488	0.18	0.024048096
0.476190476	0.793333333	0.036072144
0.058956916	0.246666667	-0.018036072

KIRP p-value	LAML Correlation	LAML p-value
0.412760333	-0.015577883	0.842104373
1.37E-09	0.171304767	0.027330237
3.63E-07	-0.12848597	0.09899156
5.03E-21	0.196688433	0.011089545
0.010101823	0.205597357	0.007875272
0.003982185	NA	NA

THYM	UCEC	UCS
0.008130081	0.070500928	0.25
0.097560976	0.038961039	0.089285714
0.195121951	0.447124304	0.696428571
0.081300813	0.276437848	0.821428571
0.113821138	0.146567718	0.428571429
0	0.170686456	0.375

THYM	UCEC	UCS
0.06504065	0.146567718	0.303571429
0.024390244	0.231910946	0.696428571
0	0.012987013	0.071428571
0.008130081	0.022263451	0.053571429
0.024390244	0.079777365	0.178571429
0.024390244	0.033395176	0.071428571

THYM	UCEC	UCS
-0.056910569	-0.07606679	-0.053571429
0.073170732	-0.192949907	-0.607142857
0.195121951	0.434137291	0.625
0.073170732	0.254174397	0.767857143
0.089430894	0.066790353	0.25
-0.024390244	0.13729128	0.303571429

LGG Correlation	LGG p-value	LIHC Correlation
-0.03710566	0.401658173	0.264813365
0.357131698	7.07E-17	0.477380348
0.160735511	0.000256687	0.373236933
0.217684296	6.42E-07	0.531179153
0.355862451	9.24E-17	0.143140143
0.036632615	0.407690611	-0.080378791

UVM
0
0.05
0.1
0.1125
0.1125
0.1

UVM
0.3125
0.075
0
0
0
0

UVM
-0.3125
-0.025
0.1
0.1125
0.1125
0.1

LIHC p-value	LUAD Correlation	LUAD p-value
2.95E-07	0.049038767	0.268045402
4.07E-22	0.494341407	6.60E-33
1.78E-13	0.105125572	0.017336012
6.86E-28	0.495469041	4.52E-33
0.006225769	0.381559581	3.44E-19
0.125835477	-0.031302615	0.479728471

LUSC Correlation	LUSC p-value	MESO Correlation
0.018072832	0.68744036	0.148112831
0.633045337	3.97E-57	0.544156022
0.515347572	3.92E-35	0.251176882
0.456292652	5.59E-27	0.209495488
0.27901439	2.34E-10	-0.110098827
0.005664602	0.899657422	-0.057448214

MESO p-value	OV Correlation	OV p-value
0.17097203	0.007067622	0.902811909
5.11E-08	0.658424345	8.79E-39
0.018940962	0.337726497	1.83E-09
0.051480839	0.571450017	1.72E-27
0.310024601	0.088391309	0.125980187
0.597133035	0.170080538	0.003075332

PAAD Correlation	PAAD p-value	PCPG Correlation
0.02292641	0.761970062	0.174694307
0.312565334	2.28E-05	0.229007551
0.536474002	1.40E-14	0.353368666
0.361597106	7.61E-07	0.3282793
0.171155867	0.022739602	0.049312788
-0.011827601	0.87583868	0.186531007

PCPG p-value	PRAD Correlation	PRAD p-value
0.026188597	0.087707399	0.052106006
0.003375717	0.348309726	1.89E-15
3.98E-06	0.320556161	3.39E-13
2.00E-05	0.137213196	0.002310484
0.533173892	0.080734315	0.073887122
0.017469917	0.033967732	0.452668931

READ Correlation	READ p-value	SARC Correlation
0.230545464	0.003565279	0.023243012
0.526879588	1.15E-12	0.467715292
0.432114607	1.43E-08	0.355876386
0.417279278	4.91E-08	0.382007659
0.039445103	0.622668533	0.246459012
0.068921368	0.389528357	0.097522552

SARC p-value	STAD Correlation	STAD p-value
0.711838903	-0.045737688	0.353839434
2.89E-15	0.386807939	3.44E-16
4.99E-09	0.427065289	9.74E-20
2.77E-10	0.532639362	1.22E-31
6.95E-05	0.225727068	3.60E-06
0.120336195	0.034432516	0.485278809

TGCT Correlation	TGCT p-value	THCA Correlation
0.401656633	3.50E-07	-0.020914822
0.526168477	4.68E-12	0.19045516
0.265137728	0.001041817	0.152918309
0.196888291	0.015739799	0.149757048
0.286862321	0.000372212	-0.132526812
0.012494122	0.879386533	0.143857153

THCA p-value	THYM Correlation	THYM p-value
0.641830248	-0.056437664	0.542093728
1.92E-05	0.409536987	3.75E-06
0.000624744	0.432905004	8.78E-07
0.000810725	0.366142084	4.22E-05
0.003075258	0.008676872	0.925382296
0.001301063	-0.005431732	0.953248257

UCEC Correlation	UCEC p-value	UCS Correlation
0.047366406	0.279126006	-0.01126898
0.403499837	6.16E-22	0.356553107
0.466933169	9.86E-30	0.445315464
0.437006167	7.54E-26	0.344281052
0.123418872	0.004665516	0.325419461
0.030072043	0.49215082	0.247630607

UCS p-value	UVM Correlation	UVM p-value
0.934304857	0.056058603	0.621376297
0.006990465	0.365942843	0.000843328
0.000583606	0.354592178	0.001250071
0.009371015	0.448024381	3.08E-05
0.014392769	-0.026556094	0.815118625
0.065757008	-0.189849559	0.091657482

Sheet3: DNA methylation features of PSPGs in TCGA

Cancer	Gene	Mean difference (Tumor vs. Normal)
BLCA	CDA	-0.113288801
BRCA	CDA	0.004418384
CESC	CDA	-0.061762716
CHOL	CDA	0.069736389
COAD	CDA	-0.051831235
ESCA	CDA	-0.019651109
GBM	CDA	-0.1316654
HNSC	CDA	-0.055432657
KIRC	CDA	-0.086001607
KIRP	CDA	-0.040258817
LIHC	CDA	-0.051274528
LUAD	CDA	-0.006285175
LUSC	CDA	-0.017604302
PAAD	CDA	-0.053366563
PCPG	CDA	-0.042996079
PRAD	CDA	-0.044160657
READ	CDA	-0.076743483
SARC	CDA	-0.085830939
SKCM	CDA	-0.075398969
STAD	CDA	-0.044534905
THCA	CDA	0.002867328
THYM	CDA	-0.002909435
UCEC	CDA	-0.0684049
BLCA	UCK1	0.002501104
BRCA	UCK1	0.043796223
CESC	UCK1	0.025807765
CHOL	UCK1	0.025578765
COAD	UCK1	0.038465977
ESCA	UCK1	0.021383312
GBM	UCK1	0.042412289
HNSC	UCK1	0.022154153
KIRC	UCK1	0.012022005
KIRP	UCK1	0.01880156
LIHC	UCK1	-0.018628838
LUAD	UCK1	-0.002213821
LUSC	UCK1	-0.017187308
PAAD	UCK1	-0.006871101
PCPG	UCK1	-0.02644997
PRAD	UCK1	0.028911184
READ	UCK1	0.025450835
SARC	UCK1	0.021839304
SKCM	UCK1	0.002740282
STAD	UCK1	-0.017377809
THCA	UCK1	0.002663905
THYM	UCK1	-0.024048763
UCEC	UCK1	0.041434237
BLCA	UCK2	-0.005477015
BRCA	UCK2	0.01701438
CESC	UCK2	0.007808077
CHOL	UCK2	0.006333981
COAD	UCK2	-0.004542035
ESCA	UCK2	0.010877869

GBM	UCK2	-0.040691488
HNSC	UCK2	0.014171674
KIRC	UCK2	-0.030456061
KIRP	UCK2	-0.002229902
LIHC	UCK2	-0.018151132
LUAD	UCK2	0.001423005
LUSC	UCK2	-0.007858531
PAAD	UCK2	-0.009869817
PCPG	UCK2	-0.006571784
PRAD	UCK2	-0.009416833
READ	UCK2	-0.017322583
SARC	UCK2	0.00192278
SKCM	UCK2	0.028306815
STAD	UCK2	-0.014007292
THCA	UCK2	0.004939578
THYM	UCK2	0.005721156
UCEC	UCK2	0.01972769
BLCA	UCKL1	0.015799179
BRCA	UCKL1	0.067171587
CESC	UCKL1	0.00921939
CHOL	UCKL1	-3.38E-05
COAD	UCKL1	-0.008474633
ESCA	UCKL1	0.012428049
GBM	UCKL1	-0.014816371
HNSC	UCKL1	0.022794183
KIRC	UCKL1	-0.005487274
KIRP	UCKL1	0.029494938
LIHC	UCKL1	-0.004326916
LUAD	UCKL1	0.018069323
LUSC	UCKL1	-0.010533856
PAAD	UCKL1	-0.008055407
PCPG	UCKL1	-0.035278427
PRAD	UCKL1	0.008836768
READ	UCKL1	-0.012896272
SARC	UCKL1	0.036594624
SKCM	UCKL1	0.033842583
STAD	UCKL1	0.009121718
THCA	UCKL1	0.011780644
THYM	UCKL1	-0.019418863
UCEC	UCKL1	0.02517301
BLCA	UPP1	-0.114478426
BRCA	UPP1	-0.022367513
CESC	UPP1	-0.109841058
CHOL	UPP1	-0.048054891
COAD	UPP1	-0.021872489
ESCA	UPP1	-0.034046503
GBM	UPP1	-0.009880112
HNSC	UPP1	-0.058480224
KIRC	UPP1	-0.000565149
KIRP	UPP1	-0.020916443
LIHC	UPP1	0.009124096
LUAD	UPP1	-0.045064815
LUSC	UPP1	-0.01153826
PAAD	UPP1	-0.011387267

PCPG	UPP1	0.036413027
PRAD	UPP1	0.034211167
READ	UPP1	-0.015451902
SARC	UPP1	0.001460571
SKCM	UPP1	-0.082014336
STAD	UPP1	-0.03828202
THCA	UPP1	-0.026352557
THYM	UPP1	0.014691655
UCEC	UPP1	-0.127472029
BLCA	UPP2	-0.036803224
BRCA	UPP2	-0.000588401
CESC	UPP2	0.002873602
CHOL	UPP2	0.03745796
COAD	UPP2	-0.027036479
ESCA	UPP2	-0.017480605
GBM	UPP2	-0.089001716
HNSC	UPP2	-0.03515321
KIRC	UPP2	-0.016211352
KIRP	UPP2	0.001504377
LIHC	UPP2	-0.018584559
LUAD	UPP2	-0.019896872
LUSC	UPP2	-0.049333694
PAAD	UPP2	-0.017923586
PCPG	UPP2	0.002602941
PRAD	UPP2	0.000618332
READ	UPP2	-0.04089468
SARC	UPP2	-0.001418289
SKCM	UPP2	0.012088086
STAD	UPP2	0.009838914
THCA	UPP2	-0.003837783
THYM	UPP2	0.007336316
UCEC	UPP2	-0.035202038

Mean Difference (Log Transformed)	p-value
-0.374857444	5.14E-09
0.011263456	0.738103422
-0.185803584	0.158626081
0.173638283	0.005218951
-0.186795938	2.30E-07
-0.067330352	0.310534973
-0.328655536	0.121488441
-0.171840652	1.22E-08
-0.212937399	1.30E-43
-0.096085713	4.80E-05
-0.146116885	1.67E-07
-0.018758115	0.919099647
-0.055676726	0.218706303
-0.162905814	0.002155231
-0.115715893	0.34691196
-0.148699143	1.02E-05
-0.281335317	0.002068844
-0.251273117	0.166440852
-0.215716938	0.312866306
-0.153327994	0.262393916
0.006735921	0.701238974
-0.006564054	0.945533019
-0.18180443	1.70E-05
0.011850505	0.988616478
0.216753576	1.03E-26
0.128887368	0.364686884
0.111876715	0.11649151
0.167615311	4.38E-07
0.101730089	0.038656067
0.216516917	0.194906581
0.105367271	3.87E-05
0.05525768	6.77E-07
0.083749449	0.000163538
-0.088503235	4.70E-08
-0.00937805	0.424574154
-0.079731176	1.50E-05
-0.032229913	0.123265702
-0.139032739	0.138561907
0.137837641	6.46E-12
0.113249381	0.042721172
0.110981747	0.376619763
0.013280563	0.891188546
-0.073348191	0.312981345
0.01229915	0.746965789
-0.099331936	0.564738473
0.199295824	3.50E-08
-0.024220074	0.491193176
0.074691236	5.92E-16
0.03441241	0.318869059
0.030238854	0.425252653
-0.023792685	0.152152265
0.052337741	0.141283995

-0.173137357	0.096444375
0.063456498	1.91E-09
-0.141396293	5.32E-37
-0.010081174	0.520630395
-0.086452994	1.73E-06
0.006030126	0.793457464
-0.034536426	0.045571048
-0.046995009	0.159814467
-0.028700103	0.649770823
-0.042619273	2.64E-07
-0.090726425	0.006894428
0.00875843	0.660802036
0.121082179	0.254000283
-0.067787498	0.511061938
0.02001843	0.002084536
0.025298716	0.660529001
0.085158611	2.67E-08
0.0380954	0.021920924
0.168782767	1.94E-35
0.023255357	0.739689181
-7.43E-05	0.603795699
-0.019735666	0.411637566
0.031702508	0.13754014
-0.03525607	0.558540911
0.060552039	7.08E-06
-0.012773998	0.13590685
0.066153162	6.38E-11
-0.009614995	0.366569472
0.044003934	5.71E-05
-0.026945144	0.167632143
-0.019218821	0.413176984
-0.090138157	0.225940796
0.023029683	0.035670263
-0.029905599	0.570442982
0.088531996	0.058610764
0.086550977	0.257163647
0.022644285	0.661571379
0.025800722	0.000190502
-0.047807619	0.82239062
0.061982359	0.000222953
-0.431767156	1.03E-12
-0.069295638	0.046689478
-0.378382208	0.0168313
-0.174342023	0.014595744
-0.073927526	0.361471981
-0.136832689	0.013207245
-0.035595657	0.474034423
-0.210426173	3.67E-12
-0.002209062	0.236227039
-0.083631908	2.06E-05
0.030078499	0.000450881
-0.16842189	9.61E-11
-0.042923716	0.021356039
-0.04304403	0.307384341

0.156517762	0.381178544
0.102852576	5.40E-07
-0.052343357	0.735560915
0.00427164	0.596687339
-0.283451096	0.197749819
-0.138695689	0.275843162
-0.096968791	2.16E-07
0.040674276	0.837609605
-0.438775321	1.13E-18
-0.110689682	5.78E-05
-0.001794779	0.385826948
0.008918302	0.554966129
0.114508086	0.001956488
-0.078653484	6.49E-11
-0.054932529	0.082424209
-0.274416083	0.091755914
-0.111060152	0.000479835
-0.049036296	1.43E-14
0.004532581	0.376789399
-0.05703524	3.79E-05
-0.060048373	6.09E-07
-0.151093404	1.16E-16
-0.053653028	0.001880761
0.008114804	0.689139299
0.00182959	0.898963263
-0.11919087	4.51E-05
-0.004492083	0.769886974
0.036752102	0.468267738
0.030340469	0.500507004
-0.010660153	0.035655906
0.020945991	0.551618332
-0.108272856	6.33E-09

Table S3: Gene expression features of PSPGs across cancer types

Sheet1: Gene expression alterations of PSPGs in TCGA

Sheet2: Protein expression alterations of PSPGs

Sheet1: Gene expression alterations of PSPGs in TCGA

Log2 Fold Change	CDA	UCK1	UCK2	UCKL1	UPP1
BLCA	0.1311791	0.3206901	1.3935255	0.7573413	0.8212165
COAD	-1.589387	-0.452947	0.1951225	0.8913469	-0.895973
HNSC	-0.056942	-0.027198	0.4557727	-0.051561	0.7098007
KICH	0.6910242	0.4433212	-0.792721	0.5934606	2.8516727
KIRC	-0.223446	0.0495557	0.5969762	0.3612435	0.6274656
KIRP	-3.251791	0.0686228	0.3261552	0.4095776	0.9075711
LIHC	-2.247245	0.051303	1.1996388	0.5125606	-0.01073
LUAD	1.2479526	-0.133484	1.4353645	0.5245002	0.3652977
LUSC	-0.268307	-0.032362	2.6479271	0.5821127	-0.0836
PRAD	-0.175079	0.0580522	0.7981261	0.3538632	-0.254739
READ	-1.451938	-0.307563	0.173125	1.3105	-0.5335
STAD	-0.538134	-0.434568	0.8986713	0.3438176	0.2535594
THCA	1.9283323	0.0116956	0.0855815	-0.043786	1.9452254
UCEC	-0.436352	-0.050342	1.6097446	0.3353793	1.0579567
ESCA	1.8802569	-0.355094	1.2569664	0.5282658	1.5979545
BRCA	0.2738217	-0.077336	0.8307576	0.3634605	0.2347733

p-value	CDA	UCK1	UCK2	UCKL1	UPP1
BLCA	0.8499132	0.0291523	1.68E-09	2.85E-07	0.0020767
COAD	1.49E-11	1.58E-12	0.0116959	1.95E-17	1.40E-11
HNSC	0.570711	0.6652971	4.38E-08	0.7486915	0.0087142
KICH	0.0038018	1.86E-05	1.87E-08	8.86E-08	1.49E-11
KIRC	0.0182699	0.521198	8.05E-19	4.20E-09	6.88E-11
KIRP	6.89E-18	0.506487	0.1255953	4.64E-05	1.76E-08
LIHC	3.03E-17	0.9639536	5.62E-21	4.54E-11	0.9201143
LUAD	4.98E-05	0.0027794	1.28E-16	8.66E-14	0.0033392
LUSC	0.0566686	0.4646083	2.84E-31	1.94E-16	0.643271
PRAD	0.1721339	0.5469591	1.63E-17	1.76E-08	0.01009
READ	0.0010202	0.0391037	0.3837604	2.81E-07	0.0547767
STAD	0.4883262	9.86E-07	6.15E-11	0.0001575	0.0130295
THCA	2.79E-27	0.5454767	0.1607849	0.2378352	7.88E-26
UCEC	0.0111421	0.3118185	6.84E-20	0.0009149	9.41E-08
ESCA	0.0052952	0.0152842	1.49E-06	0.0006966	0.0002029
BRCA	0.198777	0.0236432	3.02E-26	4.33E-09	0.0364859

UPP2

-0.240922
-0.03422
-0.09026
-5.527515
-4.16471
-3.976291
-1.731824
-0.026119
-0.159412
-0.292141
-0.248563
0.1547057
0.5542947
-0.500034
0.1754694
-0.520504

UPP2

0.0503219
0.1430611
0.1622723
1.17E-12
1.81E-27
3.19E-13
2.32E-05
0.4275153
0.00229
0.000258
0.0641294
0.3116629
2.80E-07
0.0059829
0.3267504
1.07E-12

Sheet2: Protein expression alterations of PSPGs

Gene	Log2 Fold Change	p-value	Cancer
UPP1	0.04589979	0.8002137	ESCC
CDA	-0.168442943	0.0839995	ESCC
UCKL1	0.248270265	0.0060243	ESCC
UCK2	0.093495062	0.3567616	ESCC
UCK1	0.415125	0.4444444	ESCC
CDA	1.322981674	0.0014255	LUAD
UCK1	0.793947248	0.0588301	LUAD
UCK2	2.243950496	0.0296022	LUAD
UCKL1	0.922963543	0.0007443	LUAD
UPP1	3.16577876	1.99E-13	LUAD
CDA	0.022915362	0.9024372	KIRC
UCK1	-0.177187681	9.90E-11	KIRC
UCK2	0.303427102	2.31E-13	KIRC
UPP1	0.267680243	2.50E-06	KIRC
CDA	0.124353034	0.6994267	COAD
UCK2	0.102434376	0.040097	COAD
UCKL1	0.153573411	0.1494382	COAD
UPP1	0.178724361	0.0036194	COAD
CDA	0.418342444	0.0001172	HNSC
UCK1	-0.282256085	0.0063429	HNSC
UCK2	0.379259588	1.21E-11	HNSC
UCKL1	-0.149730357	0.0001404	HNSC
UPP1	0.965102092	3.01E-13	HNSC
CDA	0.458526263	0.2623743	LUSC
UCK2	1.516638384	1.27E-24	LUSC
UCKL1	-0.154048569	0.0773013	LUSC
UPP1	-0.741540909	5.94E-06	LUSC
UCK1	-0.400715941	0.0077114	OV
UPP1	-0.2883495	0.0672478	OV
CDA	-1.208798181	6.13E-08	OV
UCK2	-0.756485313	4.48E-05	OV
UCKL1	-0.535506837	0.1576103	OV
CDA	0.969643641	1.35E-18	PDAC
UCK1	-0.33362873	6.79E-05	PDAC
UCK2	-0.141194333	0.0069484	PDAC
UCKL1	-0.79758288	1.11E-19	PDAC
UPP1	0.762998467	2.03E-21	PDAC
CDA	0.310094488	0.2785263	UCEC
UCK1	-0.139937351	0.0087792	UCEC
UCK2	0.328070801	0.0005803	UCEC
UCKL1	-0.060871723	0.0561264	UCEC
UPP1	0.668064106	5.43E-09	UCEC
CDA	-0.988096546	1.45E-19	LIHC

UPP1	0.231144849	2.17E-05	LIHC
UCK2	0.580118906	1.85E-29	LIHC
UCK1	-0.43590109	3.15E-24	LIHC
UCKL1	0.301129878	3.99E-24	LIHC

Table S4: Survival analysis of PSPGs in TCGA

Sheet1: Overall Survival (OS)

Sheet2: Progression-Free Interval (PFI)

Sheet3: Disease-Free Interval (DFI)

Sheet4: Disease-Specific Survival (DSS)

Sheet1: Overall Survival (OS)

p-value	Hazard Ratio	Gene	Cancer
0.41111485	0.70023925	CDA	ACC
0.04665829	2.08598782	UCK1	ACC
0.04021058	2.15429669	UCK2	ACC
0.01152692	2.50730459	UCKL1	ACC
0.04474239	2.58983474	UPP1	ACC
0.00047117	0.18881115	UPP2	ACC
0.0075247	1.50497143	CDA	BLCA
0.16052493	0.80766316	UCK1	BLCA
0.1578225	1.26358541	UCK2	BLCA
0.01806658	0.69757126	UCKL1	BLCA
0.04672127	1.34549725	UPP1	BLCA
0.10622622	0.77033843	UPP2	BLCA
0.41426034	0.86201154	CDA	BRCA
0.30347597	1.19309333	UCK1	BRCA
0.01101085	1.50361393	UCK2	BRCA
0.20951127	1.22219475	UCKL1	BRCA
0.22420578	0.81343059	UPP1	BRCA
0.39617349	1.14644379	UPP2	BRCA
0.00066446	2.17165525	CDA	CESC
0.00098323	0.40591406	UCK1	CESC
0.01693048	1.74373085	UCK2	CESC
0.03916973	0.61368137	UCKL1	CESC
0.02711979	1.69900594	UPP1	CESC
0.09859115	0.66659397	UPP2	CESC
0.08756151	2.1680829	CDA	CHOL
0.03754019	0.39500659	UCK1	CHOL
0.12623836	0.46719836	UCK2	CHOL
0.03534223	0.36758905	UCKL1	CHOL
0.16401495	1.96776788	UPP1	CHOL
0.17527944	1.89575621	UPP2	CHOL
0.10971602	0.72266469	CDA	COAD
0.06403345	1.44097389	UCK1	COAD
0.20421597	0.76660402	UCK2	COAD
0.39786861	1.18906492	UCKL1	COAD
0.07488138	1.4231225	UPP1	COAD
0.07790362	1.41684049	UPP2	COAD
0.02445861	0.2184633	CDA	DLBC
0.01974256	0.23136847	UCK1	DLBC
0.08290475	0	UCK2	DLBC
0.38717786	0.57614197	UCKL1	DLBC
0.506787	1.47314588	UPP1	DLBC
0.18945414	2.24939049	UPP2	DLBC
0.14229522	0.71511325	CDA	ESCA

0.22739873	0.74332068	UCK1	ESCA
0.40526294	0.81815657	UCK2	ESCA
0.15608836	1.41732743	UCKL1	ESCA
0.24078168	0.75173776	UPP1	ESCA
0.32525284	0.79257235	UPP2	ESCA
0.10067084	1.34050921	CDA	GBM
0.24706331	0.82116305	UCK1	GBM
0.26665725	1.20808949	UCK2	GBM
0.26854565	0.82147151	UCKL1	GBM
0.00036138	1.81269687	UPP1	GBM
0.35166791	0.8426525	UPP2	GBM
0.00114407	1.66605803	CDA	HNSC
0.1994213	0.83604996	UCK1	HNSC
0.02110879	1.38150111	UCK2	HNSC
0.06572455	1.29603907	UCKL1	HNSC
0.06371389	1.32340983	UPP1	HNSC
0.3751106	0.55635035	CDA	KICH
0.04550034	0.15868713	UCK1	KICH
0.52820741	0.64276767	UCK2	KICH
0.03311012	0.21280742	UCKL1	KICH
0.09205265	4.98452876	UPP1	KICH
0.06658302	3.19308885	UPP2	KICH
0.02871582	1.3951454	CDA	KIRC
0.10644606	0.77680636	UCK1	KIRC
5.08E-09	2.35819561	UCK2	KIRC
0.00072589	1.67481786	UCKL1	KIRC
1.40E-06	2.37371852	UPP1	KIRC
0.0332561	0.7148749	UPP2	KIRC
0.33205611	1.38581203	CDA	KIRP
0.05286263	0.55782843	UCK1	KIRP
3.06E-07	4.27223407	UCK2	KIRP
0.01945149	0.5021721	UCKL1	KIRP
0.06396437	1.74340681	UPP1	KIRP
0.00876907	0.46254731	UPP2	KIRP
0.15062756	1.32999718	CDA	LAML
0.08534791	1.41747981	UCK1	LAML
0.01184251	0.60884391	UCK2	LAML
0.12777552	1.37442313	UCKL1	LAML
0.00027275	2.0655345	UPP1	LAML
0.21998515	1.26718062	UPP2	LAML
0.21943251	1.23745807	CDA	LGG
8.41E-07	0.43692567	UCK1	LGG
0.23746995	0.81927544	UCK2	LGG
0.17764213	1.2657041	UCKL1	LGG
6.56E-12	3.06527135	UPP1	LGG

4.98E-07	0.42984424	UPP2	LGG
0.33851495	1.19781294	CDA	LIHC
0.18974019	0.79113535	UCK1	LIHC
6.75E-08	2.48783899	UCK2	LIHC
0.13609306	1.30816661	UCKL1	LIHC
0.0028385	1.68012809	UPP1	LIHC
0.01662615	0.65259929	UPP2	LIHC
0.00707637	1.49728695	CDA	LUAD
0.08792851	0.77543684	UCK1	LUAD
9.05E-07	2.03827077	UCK2	LUAD
0.03392119	0.71647435	UCKL1	LUAD
0.00285838	1.54829456	UPP1	LUAD
0.33664993	1.15197799	UPP2	LUAD
0.04563236	1.33193857	CDA	LUSC
0.04365197	1.32078801	UCK1	LUSC
0.25121679	0.84680518	UCK2	LUSC
0.2520201	1.18023425	UCKL1	LUSC
0.02306056	1.38147057	UPP1	LUSC
0.21627274	0.84540367	UPP2	LUSC
0.03876617	1.63826697	CDA	MESO
0.01355224	0.56406593	UCK1	MESO
3.63E-08	3.30651096	UCK2	MESO
0.10363677	1.45840275	UCKL1	MESO
0.00049516	2.45721589	UPP1	MESO
0.42868763	0.83303012	UPP2	MESO
0.02986945	1.37598113	CDA	OV
0.58852126	1.0880271	UCK1	OV
0.03801368	0.73255509	UCK2	OV
0.12526219	0.79934555	UCKL1	OV
0.35159707	1.16255036	UPP1	OV
0.18532171	0.81320207	UPP2	OV
0.00024519	2.44381398	CDA	PAAD
0.00958214	0.56003855	UCK1	PAAD
0.00219554	1.98094189	UCK2	PAAD
0.00105972	0.4619144	UCKL1	PAAD
0.17407145	1.33139501	UPP1	PAAD
0.22765504	0.76161713	UPP2	PAAD
0.42239845	0.54445793	CDA	PCPG
0.31899109	1.98940629	UCK1	PCPG
0.17188674	0.38410735	UCK2	PCPG
0.06311121	3.99960498	UCKL1	PCPG
0.56177633	1.51863735	UPP1	PCPG
0.01124015	0.16932734	UPP2	PCPG
0.03443943	0.2869923	CDA	PRAD
0.21433025	0.38957329	UCK1	PRAD

0.04560646	3.55563122	UCK2	PRAD
0.06228674	5.09252484	UCKL1	PRAD
0.04275382	0.15747607	UPP1	PRAD
0.32237908	1.83775547	UPP2	PRAD
0.00883628	3.35928117	CDA	READ
0.01841982	2.52090458	UCK1	READ
0.48858223	1.33332357	UCK2	READ
0.45752722	0.74049332	UCKL1	READ
0.06360308	2.10732731	UPP1	READ
0.19962067	1.68336441	UPP2	READ
0.09196011	0.70187116	CDA	SARC
0.21338088	0.76923727	UCK1	SARC
0.00884005	1.90197787	UCK2	SARC
0.0093753	1.67033672	UCKL1	SARC
0.18678892	1.30159035	UPP1	SARC
0.06048151	1.48729894	UPP2	SARC
0.12807089	1.25962215	CDA	SKCM
0.00127551	1.5871551	UCK1	SKCM
0.00661782	1.45874439	UCK2	SKCM
0.03893838	1.35124681	UCKL1	SKCM
0.01340452	1.42358097	UPP1	SKCM
0.01201583	0.6982518	UPP2	SKCM
0.00947128	1.51300533	CDA	STAD
0.13093886	0.7763114	UCK1	STAD
0.00217298	0.60743853	UCK2	STAD
0.27371284	1.20226969	UCKL1	STAD
0.02270791	1.43727586	UPP1	STAD
0.5780893	1.09426026	UPP2	STAD
0.28826003	3.18953604	CDA	TGCT
0.0336363	0	UCK1	TGCT
0.12951923	0.24615955	UCK2	TGCT
0.2697437	3.32128389	UCKL1	TGCT
0.17022036	3.91190694	UPP1	TGCT
0.11743623	4.99552054	UPP2	TGCT
0.08328223	2.33067557	CDA	THCA
0.25863587	0.57522916	UCK1	THCA
0.16591018	2.17975642	UCK2	THCA
0.19009645	1.99044343	UCKL1	THCA
0.63601108	0.77592219	UPP1	THCA
0.16846495	0.46193287	UPP2	THCA
0.17927697	0.4197803	CDA	THYM
0.30451656	0.49771499	UCK1	THYM
0.0760392	0.33128038	UCK2	THYM
0.03431738	0.2532235	UCKL1	THYM
0.01383882	Inf	UPP1	THYM

0.01614834	8.04684788	UPP2	THYM
0.20588189	0.75361535	CDA	UCEC
0.00259156	0.53126031	UCK1	UCEC
0.00306937	2.03838238	UCK2	UCEC
0.03254356	1.585589	UCKL1	UCEC
0.0790305	0.66270298	UPP1	UCEC
0.00091259	0.48295432	UPP2	UCEC
0.41217981	1.3345621	CDA	UCS
0.50602359	1.2530989	UCK1	UCS
0.23403515	0.65241009	UCK2	UCS
0.26692845	1.47529905	UCKL1	UCS
0.42628306	0.76549639	UPP1	UCS
0.37775212	0.73285483	UPP2	UCS
0.14629225	2.03973297	CDA	UVM
0.31689461	0.66170224	UCK1	UVM
0.01087467	2.95663608	UCK2	UVM
0.08699822	3.27024585	UCKL1	UVM
0.00014675	4.33766172	UPP1	UVM

Sheet2: Progression-Free Interval (PFI)

p-value	Hazard Ratio	Gene	Cancer
0.037887949	0.480897392	CDA	ACC
0.042360312	1.901569718	UCK1	ACC
0.040430975	1.873275291	UCK2	ACC
0.053578273	1.82204408	UCKL1	ACC
0.099618989	1.840556794	UPP1	ACC
0.000151526	0.323293401	UPP2	ACC
0.016958467	1.450691817	CDA	BLCA
0.122715947	0.79210964	UCK1	BLCA
0.013239637	1.456330836	UCK2	BLCA
0.078359246	0.759435792	UCKL1	BLCA
0.206849532	1.220622391	UPP1	BLCA
0.396221504	0.871680955	UPP2	BLCA
0.074721557	1.343223449	CDA	BRCA
0.042997214	1.390845676	UCK1	BRCA
0.002740054	1.632627455	UCK2	BRCA
0.075544732	1.38659839	UCKL1	BRCA
0.110814536	1.313326842	UPP1	BRCA
0.252816745	1.207195026	UPP2	BRCA
0.017244142	1.739964952	CDA	CESC
0.006051451	0.468076688	UCK1	CESC
0.135191024	1.431721703	UCK2	CESC
0.329765344	0.782281957	UCKL1	CESC
0.216346267	0.746011805	UPP1	CESC
0.56859517	0.872737862	UPP2	CESC
0.062619775	0.438851295	CDA	CHOL
0.119550963	0.509187341	UCK1	CHOL
0.092685478	2.085746386	UCK2	CHOL
0.22904113	0.582489601	UCKL1	CHOL
0.189024932	1.826597102	UPP1	CHOL
0.304442958	1.57832836	UPP2	CHOL
0.330531434	0.836458572	CDA	COAD
0.105677673	1.33886481	UCK1	COAD
0.070650077	1.434028475	UCK2	COAD
0.350500826	1.184774554	UCKL1	COAD
0.056931158	1.431905594	UPP1	COAD
0.426923015	0.857211848	UPP2	COAD
0.027682918	0.307030285	CDA	DLBC
0.330483555	0.586518009	UCK1	DLBC
0.265483301	1.843264314	UCK2	DLBC
0.10378801	0.410102781	UCKL1	DLBC
0.178079108	0.469928948	UPP1	DLBC
0.673176951	0.762650777	UPP2	DLBC
0.105949176	0.703717747	CDA	ESCA

0.049194646	1.529595332	UCK1	ESCA
0.135680987	0.704931193	UCK2	ESCA
0.004495369	2.020816259	UCKL1	ESCA
0.064128873	0.65140232	UPP1	ESCA
0.206886258	0.734761072	UPP2	ESCA
0.093798678	1.37546376	CDA	GBM
0.001899916	0.584112405	UCK1	GBM
0.135860635	0.773044276	UCK2	GBM
0.488206034	1.133566268	UCKL1	GBM
0.000151995	1.882696308	UPP1	GBM
0.264053467	1.21224414	UPP2	GBM
0.045572994	1.376039524	CDA	HNSC
0.346160358	0.875119601	UCK1	HNSC
0.057406416	1.324562342	UCK2	HNSC
0.001181794	1.590509365	UCKL1	HNSC
0.198084827	1.225071167	UPP1	HNSC
0.222999468	0.448029309	CDA	KICH
0.019416823	0.269159414	UCK1	KICH
0.337727709	1.89239507	UCK2	KICH
0.040811676	0.31131464	UCKL1	KICH
0.034612038	6.751907943	UPP1	KICH
0.238956328	2.009548514	UPP2	KICH
0.001894098	1.628584321	CDA	KIRC
0.005966246	0.648414799	UCK1	KIRC
8.42E-11	2.69213183	UCK2	KIRC
0.522486003	1.106452592	UCKL1	KIRC
4.90E-06	2.349224647	UPP1	KIRC
0.020453277	0.684051611	UPP2	KIRC
0.182613235	1.486145469	CDA	KIRP
0.21595042	0.723741352	UCK1	KIRP
1.86E-08	4.004232899	UCK2	KIRP
0.026219247	0.543492235	UCKL1	KIRP
0.178107309	1.436462038	UPP1	KIRP
0.009600499	0.511424542	UPP2	KIRP
0.034367591	1.352758014	CDA	LGG
0.004053438	0.660409342	UCK1	LGG
0.108807864	0.801168149	UCK2	LGG
0.037349404	1.355152999	UCKL1	LGG
4.93E-10	2.325041224	UPP1	LGG
0.000215408	0.594732253	UPP2	LGG
0.46776999	0.889633791	CDA	LIHC
0.285823479	1.175066628	UCK1	LIHC
0.000128103	1.851246223	UCK2	LIHC
0.011085521	1.46970723	UCKL1	LIHC
0.074322376	1.326708397	UPP1	LIHC

0.02128693	0.704884916	UPP2	LIHC
0.108702303	1.26295845	CDA	LUAD
0.271320332	0.84544307	UCK1	LUAD
1.54E-05	1.818339144	UCK2	LUAD
0.084296767	0.771462777	UCKL1	LUAD
0.037401899	1.332242199	UPP1	LUAD
0.098724875	0.794371884	UPP2	LUAD
0.008642693	1.593084131	CDA	LUSC
0.014883114	1.524940361	UCK1	LUSC
0.02653135	0.695956625	UCK2	LUSC
0.087851655	1.323197443	UCKL1	LUSC
0.004241509	1.618238973	UPP1	LUSC
0.235191173	0.822725703	UPP2	LUSC
0.474389655	0.830642505	CDA	MESO
0.156856566	0.696801176	UCK1	MESO
0.019652474	1.850145982	UCK2	MESO
0.174129736	1.457583237	UCKL1	MESO
0.018152373	1.822430672	UPP1	MESO
0.136516274	1.468892374	UPP2	MESO
0.164148922	1.228044774	CDA	OV
0.444361069	0.89931942	UCK1	OV
0.313193703	1.15567031	UCK2	OV
0.199771585	0.834787034	UCKL1	OV
0.167024442	0.818074491	UPP1	OV
0.066118014	1.289176343	UPP2	OV
0.001173753	1.891954329	CDA	PAAD
0.00113972	0.503438991	UCK1	PAAD
0.005495827	1.829453897	UCK2	PAAD
0.007536432	0.57589998	UCKL1	PAAD
0.351164474	1.224729856	UPP1	PAAD
0.031362139	0.631640803	UPP2	PAAD
0.52584995	1.288528528	CDA	PCPG
0.160802877	1.771622565	UCK1	PCPG
0.092397357	0.507453274	UCK2	PCPG
0.371582567	1.514454624	UCKL1	PCPG
0.061008956	2.128181465	UPP1	PCPG
0.003583323	0.314420956	UPP2	PCPG
0.011365997	1.682029683	CDA	PRAD
0.01036374	1.932827152	UCK1	PRAD
0.069611262	1.452179515	UCK2	PRAD
6.58E-06	2.451633745	UCKL1	PRAD
0.038212436	1.635296369	UPP1	PRAD
0.001412736	1.911706261	UPP2	PRAD
0.025126473	2.227809758	CDA	READ
0.104419123	0.550474036	UCK1	READ

0.078657151	1.811421273	UCK2	READ
0.127357105	1.680241854	UCKL1	READ
0.049336171	2.100686944	UPP1	READ
0.175224373	0.570089938	UPP2	READ
0.009003186	0.607908277	CDA	SARC
0.331031845	0.847019962	UCK1	SARC
0.03131666	1.508661966	UCK2	SARC
0.161275283	1.26939664	UCKL1	SARC
0.069624915	1.394377451	UPP1	SARC
0.154894911	1.278426102	UPP2	SARC
0.0355559	1.269396206	CDA	SKCM
0.021468879	1.312327099	UCK1	SKCM
0.013534943	1.373739151	UCK2	SKCM
0.16098776	0.845375944	UCKL1	SKCM
0.040591784	1.269388704	UPP1	SKCM
0.026620174	0.772341739	UPP2	SKCM
0.020340099	1.485964977	CDA	STAD
0.298432984	0.835232126	UCK1	STAD
0.027127675	0.682878948	UCK2	STAD
0.076009759	0.737689257	UCKL1	STAD
0.070328271	1.3636834	UPP1	STAD
0.211355368	1.242486208	UPP2	STAD
0.325728606	1.365428033	CDA	TGCT
0.26988258	1.413437308	UCK1	TGCT
0.318180119	1.374905902	UCK2	TGCT
0.008506405	2.249802572	UCKL1	TGCT
0.235156455	1.456700128	UPP1	TGCT
0.113447626	1.638327115	UPP2	TGCT
0.020280687	0.493741563	CDA	THCA
0.383587199	0.787424979	UCK1	THCA
0.227272962	1.387197803	UCK2	THCA
0.212983036	1.481695796	UCKL1	THCA
0.069647033	1.634943274	UPP1	THCA
0.00793923	0.43074949	UPP2	THCA
0.366417581	0.668717474	CDA	THYM
0.24175716	1.744209609	UCK1	THYM
0.071040008	2.156369394	UCK2	THYM
0.17651215	0.561509749	UCKL1	THYM
0.051406509	2.774524659	UPP1	THYM
0.076786521	0.439830481	UPP2	THYM
0.139869444	0.758653356	CDA	UCEC
0.000833283	0.549611487	UCK1	UCEC
0.000130594	1.993422391	UCK2	UCEC
0.014457479	1.553926289	UCKL1	UCEC
0.186397305	1.311197581	UPP1	UCEC

0.017761168	0.6499346	UPP2	UCEC
0.308363838	0.711529491	CDA	UCS
0.16169575	0.616505424	UCK1	UCS
0.063221807	1.992087474	UCK2	UCS
0.057439947	1.93240417	UCKL1	UCS
0.052020651	1.970981423	UPP1	UCS
0.365244388	0.742074399	UPP2	UCS
0.179773337	0.557538447	CDA	UVM
0.27712643	0.669335235	UCK1	UVM
0.000559687	3.732717821	UCK2	UVM
0.037178923	3.278022866	UCKL1	UVM
0.009145053	2.467862074	UPP1	UVM

Sheet3: Disease-Free Interval (DFI)

p-value	Hazard Ratio	Gene	Cancer
0.444307525	0.599377257	CDA	ACC
0.153097709	3.975100151	UCK1	ACC
0.007194767	4.575155837	UCK2	ACC
0.045357371	0.323864616	UCKL1	ACC
0.34835655	2.044567847	UPP1	ACC
0.022144276	0.276604988	UPP2	ACC
0.311083296	0.693401266	CDA	BLCA
0.381749003	1.370116052	UCK1	BLCA
0.171407895	1.636391354	UCK2	BLCA
0.003734824	0.368154008	UCKL1	BLCA
0.319354822	1.460484758	UPP1	BLCA
0.695543341	0.857083673	UPP2	BLCA
0.029394925	1.618963715	CDA	BRCA
0.010827203	1.735537546	UCK1	BRCA
0.027461625	1.613665993	UCK2	BRCA
0.137261008	1.401890807	UCKL1	BRCA
0.026708306	1.624500109	UPP1	BRCA
0.253368003	0.774242264	UPP2	BRCA
0.440318905	0.737154862	CDA	CESC
0.011565813	0.241922978	UCK1	CESC
0.389936799	0.708499174	UCK2	CESC
0.160468944	0.504415449	UCKL1	CESC
0.052682583	0.475003965	UPP1	CESC
0.621573762	0.811332167	UPP2	CESC
0.268923958	0.497276568	CDA	CHOL
0.666637864	0.758188352	UCK1	CHOL
0.535325838	1.48745869	UCK2	CHOL
0.34520609	0.549988261	UCKL1	CHOL
0.039894074	Inf	UPP1	CHOL
0.158853455	0.346185775	UPP2	CHOL
0.097440625	0.480295342	CDA	COAD
0.22120862	1.686286583	UCK1	COAD
0.353818021	1.540347995	UCK2	COAD
0.037858699	2.360773895	UCKL1	COAD
0.088852113	0.405109981	UPP1	COAD
0.370663889	1.519320865	UPP2	COAD
0.105222869	0.305361305	CDA	DLBC
0.222112855	Inf	UCK1	DLBC
0.362050192	0	UCK2	DLBC
0.202521523	0.323877069	UCKL1	DLBC
0.34949733	0.443298969	UPP1	DLBC
0.725770964	1.461538462	UPP2	DLBC
0.060062721	0.437393566	CDA	ESCA

0.005253526	3.710448521	UCK1	ESCA
0.087642143	0.434315321	UCK2	ESCA
0.221658703	1.655359576	UCKL1	ESCA
0.171520343	1.959615045	UPP1	ESCA
0.613052239	0.797929586	UPP2	ESCA
0.351357529	0.679290573	CDA	HNSC
0.237531932	1.711012578	UCK1	HNSC
0.349820108	0.681162607	UCK2	HNSC
0.047932644	2.041499157	UCKL1	HNSC
0.03221797	0.441277155	UPP1	HNSC
0.310115219	0	CDA	KICH
0.043981784	0.128272251	UCK1	KICH
0.208667788	4.127659574	UCK2	KICH
0.505911907	2.210526316	UCKL1	KICH
0.084400126	Inf	UPP1	KICH
0.058570291	Inf	UPP2	KICH
0.394651034	0.645358189	CDA	KIRC
0.268599477	1.751369402	UCK1	KIRC
0.11163565	3.081691495	UCK2	KIRC
0.095227366	0.396720603	UCKL1	KIRC
0.182039014	0.436473855	UPP1	KIRC
0.252222926	1.792994361	UPP2	KIRC
0.237190475	1.561612591	CDA	KIRP
0.088442961	0.537501602	UCK1	KIRP
0.007733401	2.553727187	UCK2	KIRP
0.020798042	0.38307445	UCKL1	KIRP
0.008780211	0.355838168	UPP1	KIRP
0.25397952	0.655093025	UPP2	KIRP
0.19069829	1.72603774	CDA	LGG
0.035506468	2.430803909	UCK1	LGG
0.411116342	1.415965794	UCK2	LGG
0.016767832	2.927053282	UCKL1	LGG
0.246822227	1.86446294	UPP1	LGG
0.071079823	0.386760026	UPP2	LGG
0.113511076	1.319934797	CDA	LIHC
0.04141198	1.403960987	UCK1	LIHC
7.06E-05	2.031449904	UCK2	LIHC
0.004088338	1.622763676	UCKL1	LIHC
0.077191411	1.340129767	UPP1	LIHC
0.018700167	0.671594276	UPP2	LIHC
0.075353495	1.448572793	CDA	LUAD
0.375242508	1.204439305	UCK1	LUAD
0.007974313	1.736598875	UCK2	LUAD
0.20271754	1.344435614	UCKL1	LUAD
0.025922126	1.595179393	UPP1	LUAD

0.290325244	1.267013441	UPP2	LUAD
0.14564289	1.489896912	CDA	LUSC
9.15E-05	3.387703906	UCK1	LUSC
0.131620507	1.543597935	UCK2	LUSC
0.08170156	0.564904896	UCKL1	LUSC
0.202591169	1.388052249	UPP1	LUSC
0.465155784	0.828810757	UPP2	LUSC
0.4729184	1.664124466	CDA	MESO
0.154162596	3.801116936	UCK1	MESO
0.015160379	4.320459906	UCK2	MESO
0.049786013	3.866933319	UCKL1	MESO
0.085694866	3.293505236	UPP1	MESO
0.024661013	4.890553292	UPP2	MESO
0.264681567	1.274980467	CDA	OV
0.286975111	0.810996721	UCK1	OV
0.204869335	0.766581081	UCK2	OV
0.323090033	0.820592211	UCKL1	OV
0.456108249	0.852870797	UPP1	OV
0.273635326	1.239287202	UPP2	OV
0.020501234	2.707251602	CDA	PAAD
0.005211133	0.249377048	UCK1	PAAD
0.010243413	5.36312997	UCK2	PAAD
0.015344086	0.363315326	UCKL1	PAAD
0.219342064	1.775773192	UPP1	PAAD
0.017576779	0.390367946	UPP2	PAAD
0.501641406	1.934271951	CDA	PCPG
0.069032601	0.161530664	UCK1	PCPG
0.41106305	0.449874164	UCK2	PCPG
0.075468379	0	UCKL1	PCPG
0.286562412	0.362705614	UPP1	PCPG
0.156294996	0	UPP2	PCPG
0.055123572	1.965101144	CDA	PRAD
0.004005132	4.847656723	UCK1	PRAD
0.071686469	1.903069279	UCK2	PRAD
2.17E-06	4.816201708	UCKL1	PRAD
0.014170358	2.63222312	UPP1	PRAD
0.050464517	2.00373061	UPP2	PRAD
0.034873332	7.177233734	CDA	READ
0.055501907	0	UCK1	READ
0.026780429	7.058416491	UCK2	READ
0.117461208	3.50481341	UCKL1	READ
0.27853058	3.058253937	UPP1	READ
0.800576137	1.312407952	UPP2	READ
0.038149051	0.552173191	CDA	SARC
0.085498363	0.66309543	UCK1	SARC

0.180975913	1.459285343	UCK2	SARC
0.102599456	1.497938518	UCKL1	SARC
0.244118872	1.364428116	UPP1	SARC
0.237238178	0.72500431	UPP2	SARC
0.276802283	1.392381016	CDA	STAD
0.085903242	0.599114553	UCK1	STAD
0.301483694	0.724699227	UCK2	STAD
0.497289962	1.227053642	UCKL1	STAD
0.179710376	1.492535452	UPP1	STAD
0.495221141	1.237240545	UPP2	STAD
0.029118732	2.12600304	CDA	TGCT
0.173550056	1.60539924	UCK1	TGCT
0.201957428	1.56991018	UCK2	TGCT
0.016780112	2.267572141	UCKL1	TGCT
0.096868689	1.795735063	UPP1	TGCT
0.156034711	1.634540164	UPP2	TGCT
0.218854697	0.599009167	CDA	THCA
0.003960863	0.335290891	UCK1	THCA
0.015716551	3.419017376	UCK2	THCA
0.023977808	0.367200336	UCKL1	THCA
0.274167373	1.518943949	UPP1	THCA
0.002844632	0.194554941	UPP2	THCA
0.121743849	0.655611998	CDA	UCEC
0.082333243	1.593813931	UCK1	UCEC
0.00072257	2.419970693	UCK2	UCEC
0.033413848	1.788759806	UCKL1	UCEC
0.221599414	1.397373784	UPP1	UCEC
0.097031595	0.641344229	UPP2	UCEC
0.236758632	2.460587274	CDA	UCS
0.166679609	3.86196881	UCK1	UCS
0.017401004	5.325769658	UCK2	UCS
0.217304423	2.146006361	UCKL1	UCS
0.168248389	0.353760905	UPP1	UCS
0.142742223	0.333182628	UPP2	UCS

Sheet4: Disease-Specific Survival (DSS)

p-value	Hazard Ratio	Gene	Cancer
0.374867406	0.66386686	CDA	ACC
0.028461925	2.300091561	UCK1	ACC
0.088987544	1.925917738	UCK2	ACC
0.006298878	2.790286381	UCKL1	ACC
0.034399287	2.978909334	UPP1	ACC
0.000905717	0.200738479	UPP2	ACC
0.020801621	1.526653279	CDA	BLCA
0.180689492	0.783706844	UCK1	BLCA
0.194259445	1.30104081	UCK2	BLCA
0.098814816	0.735281136	UCKL1	BLCA
0.182861084	1.273734155	UPP1	BLCA
0.229555204	0.789652648	UPP2	BLCA
0.05943989	1.505441387	CDA	BRCA
0.092658485	1.434730373	UCK1	BRCA
0.002164338	1.941520793	UCK2	BRCA
0.040584782	1.619086881	UCKL1	BRCA
0.334072131	1.241534904	UPP1	BRCA
0.04660215	1.536517529	UPP2	BRCA
0.001540197	2.287870782	CDA	CESC
0.001794199	0.420310566	UCK1	CESC
0.089200857	1.594707208	UCK2	CESC
0.088334943	0.629143862	UCKL1	CESC
0.023198142	1.846768527	UPP1	CESC
0.618471724	1.151003472	UPP2	CESC
0.261954679	1.750926314	CDA	CHOL
0.035072398	0.370318149	UCK1	CHOL
0.047510082	0.371308241	UCK2	CHOL
0.028867677	0.329776075	UCKL1	CHOL
0.136237342	2.172378663	UPP1	CHOL
0.174875019	1.977320445	UPP2	CHOL
0.166991413	0.700592515	CDA	COAD
0.084780855	1.535331661	UCK1	COAD
0.430105625	0.812096731	UCK2	COAD
0.338263801	1.272453207	UCKL1	COAD
0.030375283	1.726556622	UPP1	COAD
0.060542646	1.596567509	UPP2	COAD
0.239123664	0.280820675	CDA	DLBC
0.297969331	0.368907862	UCK1	DLBC
0.126594522	0	UCK2	DLBC
0.129377721	0.205975465	UCKL1	DLBC
0.278916864	3.25451764	UPP1	DLBC
0.550074957	1.790745297	UPP2	DLBC
0.291300328	0.743377517	CDA	ESCA

0.573084375	0.854831701	UCK1	ESCA
0.340044891	0.752215907	UCK2	ESCA
0.031967055	1.992064928	UCKL1	ESCA
0.31989223	0.742718949	UPP1	ESCA
0.298459314	0.737152577	UPP2	ESCA
0.131474984	1.315284068	CDA	GBM
0.086502578	0.735622609	UCK1	GBM
0.38828535	0.854558519	UCK2	GBM
0.234005745	0.799780467	UCKL1	GBM
0.000737379	1.814831271	UPP1	GBM
0.509571553	0.882074852	UPP2	GBM
0.001496535	1.949166442	CDA	HNSC
0.156624109	0.781664323	UCK1	HNSC
0.043629351	1.449086248	UCK2	HNSC
0.051642721	1.417660351	UCKL1	HNSC
0.061781163	1.450798803	UPP1	HNSC
0.100503984	0.277024509	CDA	KICH
0.09759685	0.201044603	UCK1	KICH
0.464007756	1.828072006	UCK2	KICH
0.005878281	0.140129007	UCKL1	KICH
0.179293248	3.838668757	UPP1	KICH
0.072526769	3.594698783	UPP2	KICH
0.001243568	1.838291176	CDA	KIRC
0.087834253	0.715919527	UCK1	KIRC
2.33E-12	3.713296754	UCK2	KIRC
0.029612187	1.513855143	UCKL1	KIRC
4.52E-07	2.680552309	UPP1	KIRC
0.026143096	0.646851701	UPP2	KIRC
0.135530557	2.052978946	CDA	KIRP
0.100051497	0.539328013	UCK1	KIRP
2.51E-12	16.22247688	UCK2	KIRP
0.002249884	0.326088664	UCKL1	KIRP
0.030299351	2.218472361	UPP1	KIRP
8.90E-05	0.241224596	UPP2	KIRP
0.082427282	1.377493128	CDA	LGG
4.32E-06	0.442849118	UCK1	LGG
0.287201248	0.827846342	UCK2	LGG
0.207014385	1.262938011	UCKL1	LGG
2.44E-11	3.128031437	UPP1	LGG
1.26E-06	0.424708372	UPP2	LGG
0.126917934	1.405492915	CDA	LIHC
0.455473063	1.192739772	UCK1	LIHC
0.000335648	2.610044239	UCK2	LIHC
0.016713593	1.707606836	UCKL1	LIHC
0.045392871	1.563720787	UPP1	LIHC

0.091134644	0.681619179	UPP2	LIHC
0.019999526	1.54581841	CDA	LUAD
0.107540472	0.733715874	UCK1	LUAD
1.72E-05	2.207251119	UCK2	LUAD
0.020004255	0.620535358	UCKL1	LUAD
0.062772449	1.417667078	UPP1	LUAD
0.199957227	0.784495543	UPP2	LUAD
0.026258688	1.660901822	CDA	LUSC
0.069769302	1.500586497	UCK1	LUSC
0.116474459	1.451371717	UCK2	LUSC
0.073559363	1.490527833	UCKL1	LUSC
0.011779027	1.717898533	UPP1	LUSC
0.033400469	0.635537533	UPP2	LUSC
0.13691948	1.588903058	CDA	MESO
0.020521309	0.500876442	UCK1	MESO
0.00020017	4.01866573	UCK2	MESO
0.370269075	1.342617051	UCKL1	MESO
0.001235306	3.251242701	UPP1	MESO
0.158750998	1.530313053	UPP2	MESO
0.101372205	1.299357699	CDA	OV
0.462581671	1.126728847	UCK1	OV
0.05770001	0.732755442	UCK2	OV
0.024562095	0.701181219	UCKL1	OV
0.255144114	0.83089938	UPP1	OV
0.145654134	1.260591974	UPP2	OV
0.000468649	2.374109762	CDA	PAAD
0.038993758	0.57739751	UCK1	PAAD
0.013803455	1.852698596	UCK2	PAAD
0.001007764	0.405066159	UCKL1	PAAD
0.109690371	1.458111156	UPP1	PAAD
0.313466668	0.775225388	UPP2	PAAD
0.48447092	0.589905363	CDA	PCPG
0.091948098	3.848932842	UCK1	PCPG
0.164628673	0.321288896	UCK2	PCPG
0.247729471	2.586168698	UCKL1	PCPG
0.350348754	0.476650276	UPP1	PCPG
0.000594013	0	UPP2	PCPG
0.285876354	0.417286108	CDA	PRAD
0.338169941	2.333624012	UCK1	PRAD
0.096943697	Inf	UCK2	PRAD
0.226723523	3.147139055	UCKL1	PRAD
0.064128756	0	UPP1	PRAD
0.258052945	0.371889984	UPP2	PRAD
0.038114263	4.318609059	CDA	READ
0.085345584	2.581842166	UCK1	READ

0.407436963	0.62079435	UCK2	READ
0.021239821	3.524051558	UCKL1	READ
0.229642695	1.985376399	UPP1	READ
0.166743913	0.460150617	UPP2	READ
0.050027934	0.641001715	CDA	SARC
0.134968402	0.702895639	UCK1	SARC
0.012473092	1.976042382	UCK2	SARC
0.050586285	1.532201866	UCKL1	SARC
0.156136725	1.363546125	UPP1	SARC
0.111459797	1.45456647	UPP2	SARC
0.27760427	1.175864694	CDA	SKCM
0.001354112	1.630020759	UCK1	SKCM
0.005932766	1.500178564	UCK2	SKCM
0.03096649	1.395959046	UCKL1	SKCM
0.006769024	1.503235255	UPP1	SKCM
0.028918317	0.717181136	UPP2	SKCM
0.035469182	1.532535809	CDA	STAD
0.05223418	0.666151524	UCK1	STAD
0.001835213	0.528652825	UCK2	STAD
0.265998952	0.796205748	UCKL1	STAD
0.102948481	1.395222766	UPP1	STAD
0.22801421	1.284521315	UPP2	STAD
0.219635029	0	CDA	TGCT
0.036847646	0	UCK1	TGCT
0.129519231	0	UCK2	TGCT
0.48617101	2.290775769	UCKL1	TGCT
0.212627401	4.084362815	UPP1	TGCT
0.014363547	Inf	UPP2	TGCT
0.242422749	2.374470563	CDA	THCA
0.066022547	4.120534643	UCK1	THCA
0.288952002	2.201518612	UCK2	THCA
0.013881308	Inf	UCKL1	THCA
0.304476417	0.346859318	UPP1	THCA
0.171523931	3.919489216	UPP2	THCA
0.4190845	0.456007801	CDA	THYM
0.35684919	0.372498818	UCK1	THYM
0.010730215	Inf	UCK2	THYM
0.119422583	4.951489255	UCKL1	THYM
0.00923931	Inf	UPP1	THYM
0.074591779	4.787695316	UPP2	THYM
0.114023671	0.655956755	CDA	UCEC
0.00020115	0.392150139	UCK1	UCEC
0.03277507	1.734469938	UCK2	UCEC
0.163580539	1.45139199	UCKL1	UCEC
0.147388413	0.661602081	UPP1	UCEC

0.002169744	0.450850911	UPP2	UCEC
0.128920258	1.728487853	CDA	UCS
0.420967734	1.334601175	UCK1	UCS
0.292374274	1.489653976	UCK2	UCS
0.276151645	1.515111038	UCKL1	UCS
0.343500943	1.398737044	UPP1	UCS
0.132369938	0.575464826	UPP2	UCS
0.12177569	2.299496982	CDA	UVM
0.152251795	0.531482274	UCK1	UVM
0.002594727	3.808697892	UCK2	UVM
0.121850418	2.960541216	UCKL1	UVM
0.000330529	4.38508169	UPP1	UVM

Table S5: Functional enrichment analysis of PSPGs

Sheet1: Correlation between PSPGs and TME-, Metabolism-, and Proliferation/

Sheet2: Correlation between PSPGs and cytokines in different cancers

Sheet3: Correlation between PSPGs and checkpoints in different cancers

Metastasis- associated biological terms in different cancers

Sheet1: Correlation between PSPGs and TME-, Metabolism-, and Prolife

Gene	Terms	Cancer	Correlation
CDA	Abnormal plasma cell	ACC	-0.073435088
CDA	Activated b cell	ACC	0.122414268
CDA	Activated cd4+ t cell	ACC	0.369066548
CDA	Activated t cell	ACC	0.314759172
CDA	Alanine, aspartate and glu	ACC	-0.348990621
CDA	Alcala_apoptosis	ACC	0.071665177
CDA	Alpha-linolenic acid meta	ACC	0.062701859
CDA	Amino sugar and nucleoti	ACC	-0.039531868
CDA	Ampk_pathway	ACC	-0.387868817
CDA	Angiogenesis	ACC	0.236373846
CDA	Arachidonic acid metabol	ACC	0.303181037
CDA	Arginine and proline metæ	ACC	0.042507435
CDA	Arginine biosynthesis	ACC	-0.169828466
CDA	Ascorbate and aldarate mε	ACC	-0.047731291
CDA	Atypical memory b cell	ACC	0.036133447
CDA	Axl+siglec6+ dendritic ce	ACC	0.285979865
CDA	B cell	ACC	0.304436635
CDA	B1 cell	ACC	-0.081590556
CDA	Basal cell	ACC	0.32783619
CDA	Beta-alanine metabolism	ACC	0.037258878
CDA	Biosynthesis of unsaturate	ACC	-0.089069529
CDA	Biotin metabolism	ACC	0.027961608
CDA	Butanoate metabolism	ACC	-0.143559513
CDA	Caffeine metabolism	ACC	-0.034021016
CDA	Cancer stem cell	ACC	0.278680897
CDA	Cancer stem-like cell	ACC	0.154041429
CDA	Cd4+ cytotoxic t cell	ACC	0.377642591
CDA	Cd4+ memory t cell	ACC	0.020872551
CDA	Cd4+ regulatory t cell	ACC	0.356603567
CDA	Cd4+ t helper cell	ACC	0.409656064
CDA	Cd4+cd25+ regulatory t c	ACC	0.378987884
CDA	Cd8+ cytotoxic t cell	ACC	0.403966189
CDA	Cd8+ regulatory t cell	ACC	0.286364252
CDA	Cell_cycle	ACC	-0.297117595
CDA	Chandran_metastasis_top&	ACC	-0.493332618
CDA	Citrate cycle (tca cycle)	ACC	-0.209441161
CDA	Cysteine and methionine r	ACC	-0.185947376
CDA	Cytokine induced killer cε	ACC	0.190759425
CDA	D-arginine and d-ornithin	ACC	-0.052891712
CDA	D-glutamine and d-glutan	ACC	-0.248693456
CDA	Dendritic cell	ACC	0.348578902

CDA	Dna_repair	ACC	-0.08750107
CDA	Dna_replication	ACC	-0.159749286
CDA	Double-negative memory	ACC	0.200840031
CDA	Drug metabolism - cytoch	ACC	0.220004052
CDA	Drug metabolism - other	ACC	0.247266829
CDA	E2f_targets	ACC	-0.238703253
CDA	Ecm_receptor_interaction	ACC	0.06204823
CDA	Effector cd4+ memory t	ACC	0.321655733
CDA	Effector cd8+ memory t	ACC	0.351050682
CDA	Effector memory t cell	ACC	0.260889656
CDA	Effector regulatory t (treg)	ACC	0.335301978
CDA	Elvidge_hif1a_targets_up	ACC	-0.175455036
CDA	Endothelial cell	ACC	0.350600786
CDA	Eosinophil	ACC	0.399109032
CDA	Ether lipid metabolism	ACC	-0.059049896
CDA	Exhausted cd4+ t cell	ACC	0.16753993
CDA	Exhausted cd8+ t cell	ACC	0.248131529
CDA	Exhausted t cell	ACC	0.411877142
CDA	Fat cell (adipocyte)	ACC	0.140980563
CDA	Fatty acid biosynthesis	ACC	0.026865717
CDA	Fatty acid degradation	ACC	-0.089753973
CDA	Fatty acid elongation	ACC	-0.079838762
CDA	Fibroblast	ACC	0.285065195
CDA	Folate biosynthesis	ACC	-0.084016703
CDA	Follicular b cell	ACC	0.351182703
CDA	Follicular dendritic cell	ACC	0.079992767
CDA	Follicular helper (tfh) t ce	ACC	0.240344505
CDA	Follicular t cell	ACC	0.386992046
CDA	Foxp3+il-17+ t cell	ACC	0.114911498
CDA	Fructose and mannose me	ACC	-0.075929585
CDA	G2m_checkpoint	ACC	-0.283004766
CDA	Galactose metabolism	ACC	-0.124886501
CDA	Galie_tumor_stemness_ge	ACC	0.003508411
CDA	Glutathione metabolism	ACC	0.187756834
CDA	Glycerolipid metabolism	ACC	0.020198792
CDA	Glycerophospholipid metε	ACC	0.084575447
CDA	Glycine, serine and threor	ACC	0.008507078
CDA	Glycolysis / gluconeogene	ACC	-0.19415433
CDA	Glycosaminoglycan biosy1	ACC	0.261854491
CDA	Glycosaminoglycan biosy1	ACC	-0.201399462
CDA	Glycosaminoglycan biosy1	ACC	0.056955026
CDA	Glycosaminoglycan degra	ACC	0.063211295
CDA	Glycosphingolipid biosyn1	ACC	-0.151230908

CDA	Glycosphingolipid biosyn	ACC	0.264144635
CDA	Glycosphingolipid biosyn	ACC	0.050054198
CDA	Glycosylphosphatidylinos	ACC	-0.109205155
CDA	Glyoxylate and dicarboxy	ACC	-0.215496827
CDA	Granulocyte	ACC	0.386380492
CDA	Hedgehog_signaling	ACC	-0.213041094
CDA	Histidine metabolism	ACC	0.301414668
CDA	Hypoxia	ACC	-0.009071213
CDA	Il-17alpha t cell	ACC	0.186692738
CDA	Il2_stat5_signaling	ACC	0.339030957
CDA	Il6_jak_stat3_signaling	ACC	0.309243277
CDA	Immune_checkpoints_tur	ACC	0.21955702
CDA	Immune_inhibition_cytok	ACC	0.424076631
CDA	Inositol phosphate metabo	ACC	-0.228267396
CDA	Interleukin_6_signaling	ACC	-0.000581916
CDA	Jaeger_metastasis_up	ACC	-0.147351863
CDA	Jain_nfkb_signaling	ACC	-0.180055828
CDA	Kras_signaling_up	ACC	0.402740967
CDA	Linoleic acid metabolism	ACC	0.045914471
CDA	Lipoic acid metabolism	ACC	0.204606705
CDA	Lysine degradation	ACC	-0.255964387
CDA	Lysosome	ACC	-0.021250711
CDA	M1 macrophage	ACC	0.274037237
CDA	M2 macrophage	ACC	0.352854528
CDA	Mannose type o-glycan bi	ACC	-0.211938979
CDA	Mapk_signaling_pathway	ACC	0.023384909
CDA	Mapk3_erk1_activation	ACC	-0.219725702
CDA	Marginal zone b cell	ACC	0.163640976
CDA	Memory b cell	ACC	0.289866231
CDA	Mesenchymal cell	ACC	0.281607497
CDA	Mesenchymal stem cell	ACC	0.327845388
CDA	Metabolism of xenobiotic	ACC	0.294055915
CDA	Migrating cancer stem cel	ACC	0.067309582
CDA	Mitotic_spindle	ACC	-0.432366776
CDA	Monocyte	ACC	0.399463775
CDA	Mtor_signaling_pathway	ACC	-0.09774139
CDA	Mtorc1_signaling	ACC	-0.229652415
CDA	Mucin type o-glycan biosy	ACC	-0.253089814
CDA	Myc_targets_v1	ACC	-0.1727767
CDA	Myeloid cell	ACC	0.367921167
CDA	N-glycan biosynthesis	ACC	-0.333379157
CDA	Naive b cell	ACC	0.29202317
CDA	Naive cd4+ t cell	ACC	0.290262768

CDA	Naive cd8+ t cell	ACC	0.064279332
CDA	Natural killer cell	ACC	0.330449317
CDA	Natural killer t (nkt) cell	ACC	0.189214418
CDA	Natural regulatory t (treg)	ACC	0.172690089
CDA	Neomycin, kanamycin and	ACC	0.016074307
CDA	Neutrophil	ACC	0.406446127
CDA	Nicotinate and nicotinamide	ACC	-0.00846191
CDA	Nitrogen metabolism	ACC	-0.133186119
CDA	Nod_like_receptor_signaling	ACC	0.260300671
CDA	Notch_signaling	ACC	0.278121092
CDA	One carbon pool by folate	ACC	-0.176987495
CDA	Other glycan degradation	ACC	-0.0168833
CDA	Other types of o-glycan biosynthesis	ACC	-0.078151234
CDA	Oxidative phosphorylation	ACC	0.167126168
CDA	P53_pathway	ACC	0.3167243
CDA	P53_signaling_pathway	ACC	-0.220275432
CDA	Pantothenate and coenzyme biosynthesis	ACC	0.201445755
CDA	Pentose and glucuronate interconversions	ACC	0.040214005
CDA	Pentose phosphate pathway	ACC	-0.120556863
CDA	Pericyte	ACC	0.331475243
CDA	Phenylalanine metabolism	ACC	0.190947311
CDA	Phenylalanine, tyrosine and tryptophan	ACC	0.069612121
CDA	Phosphonate and phosphite metabolism	ACC	0.074603946
CDA	Pi3k_akt_activation	ACC	-0.112451452
CDA	Pi3k_akt_mtor_signaling	ACC	-0.119696348
CDA	Porphyrin and chlorophyll metabolism	ACC	-0.056403082
CDA	Primary bile acid biosynthesis	ACC	0.125921042
CDA	Propanoate metabolism	ACC	-0.305089123
CDA	Purine metabolism	ACC	-0.102827142
CDA	Pyrimidine metabolism	ACC	-0.110880977
CDA	Pyruvate metabolism	ACC	-0.239091342
CDA	Regulation_of_autophagy	ACC	-0.179206835
CDA	Retinol metabolism	ACC	0.062063206
CDA	Riboflavin metabolism	ACC	0.025905589
CDA	Schmahl_pdgf_signaling	ACC	0.171949751
CDA	Selenocompound metabolism	ACC	-0.247695743
CDA	Signaling_by_hippo	ACC	-0.397451689
CDA	Sphingolipid metabolism	ACC	-0.419720965
CDA	Starch and sucrose metabolism	ACC	0.032137997
CDA	Steroid biosynthesis	ACC	-0.179199416
CDA	Steroid hormone biosynthesis	ACC	0.05553057
CDA	Sulfur metabolism	ACC	-0.164782386
CDA	Synthesis and degradation	ACC	-0.11465317

CDA	T helper cell	ACC	0.302594308
CDA	T helper1 (th1) cell	ACC	0.371002635
CDA	T helper17 (th17) cell	ACC	0.329491118
CDA	T helper2 (th2) cell	ACC	0.405359746
CDA	T helper9 (th9) cell	ACC	0.379738306
CDA	Taurine and hypotaurine r	ACC	0.088990581
CDA	Terpenoid backbone biosy	ACC	-0.210562882
CDA	Tgf_beta_signaling_pathw	ACC	-0.032637747
CDA	Thiamine metabolism	ACC	-0.045211366
CDA	Tnfa_signaling_via_nfkb	ACC	0.28861838
CDA	Tryptophan metabolism	ACC	0.07791304
CDA	Tumor endothelial cell	ACC	0.03200154
CDA	Tyrosine metabolism	ACC	0.215215422
CDA	Ubiquinone and other terp	ACC	-0.093916994
CDA	Valine, leucine and isoleu	ACC	0.146792031
CDA	Valine, leucine and isoleu	ACC	-0.241649857
CDA	Vascular endothelial cell	ACC	0.401044715
CDA	Vascular smooth muscle c	ACC	0.372430864
CDA	Vegf_signaling_pathway	ACC	0.098755683
CDA	Vitamin b6 metabolism	ACC	-0.261969707
CDA	Willert_wnt_signaling	ACC	-0.122415778
CDA	Wnt_beta_catenin_signali	ACC	0.005186458
UCK1	Abnormal plasma cell	ACC	0.147946341
UCK1	Activated b cell	ACC	-0.087680997
UCK1	Activated cd4+ t cell	ACC	-0.185745809
UCK1	Activated t cell	ACC	-0.123831956
UCK1	Alanine, aspartate and glu	ACC	-0.275883603
UCK1	Alcala_apoptosis	ACC	-0.146808669
UCK1	Alpha-linolenic acid meta	ACC	0.221249964
UCK1	Amino sugar and nucleoti	ACC	-0.184081955
UCK1	Ampk_pathway	ACC	0.191595175
UCK1	Angiogenesis	ACC	-0.053436678
UCK1	Arachidonic acid metabol	ACC	0.173951915
UCK1	Arginine and proline metε	ACC	-0.171974906
UCK1	Arginine biosynthesis	ACC	-0.402608799
UCK1	Ascorbate and aldarate mε	ACC	-0.107389706
UCK1	Atypical memory b cell	ACC	-0.090863061
UCK1	Axl+siglec6+ dendritic ce	ACC	-0.042001814
UCK1	B cell	ACC	-0.230160629
UCK1	B1 cell	ACC	-0.134592933
UCK1	Basal cell	ACC	-0.104729207
UCK1	Beta-alanine metabolism	ACC	-0.092923011
UCK1	Biosynthesis of unsaturate	ACC	0.091951658

UCK1	Biotin metabolism	ACC	0.016429077
UCK1	Butanoate metabolism	ACC	-0.066514817
UCK1	Caffeine metabolism	ACC	-0.035174104
UCK1	Cancer stem cell	ACC	-0.230930902
UCK1	Cancer stem-like cell	ACC	-0.149441588
UCK1	Cd4+ cytotoxic t cell	ACC	-0.149094698
UCK1	Cd4+ memory t cell	ACC	-0.262576726
UCK1	Cd4+ regulatory t cell	ACC	-0.086927054
UCK1	Cd4+ t helper cell	ACC	-0.121067366
UCK1	Cd4+cd25+ regulatory t c	ACC	-0.149914665
UCK1	Cd8+ cytotoxic t cell	ACC	-0.163812972
UCK1	Cd8+ regulatory t cell	ACC	-0.15506034
UCK1	Cell_cycle	ACC	0.080299363
UCK1	Chandran_metastasis_top5	ACC	-0.233675365
UCK1	Citrate cycle (tca cycle)	ACC	-0.147110153
UCK1	Cysteine and methionine r	ACC	-0.16129961
UCK1	Cytokine induced killer cε	ACC	0.056673338
UCK1	D-arginine and d-ornithin	ACC	0.061166671
UCK1	D-glutamine and d-glutan	ACC	-0.298500187
UCK1	Dendritic cell	ACC	-0.200834387
UCK1	Dna_repair	ACC	0.311595181
UCK1	Dna_replication	ACC	0.156208715
UCK1	Double-negative memory	ACC	0.035527737
UCK1	Drug metabolism - cytoch	ACC	-0.04001795
UCK1	Drug metabolism - other ε	ACC	0.161252392
UCK1	E2f_targets	ACC	0.097457021
UCK1	Ecm_receptor_interaction	ACC	-0.272781218
UCK1	Effector cd4+ memory t (	ACC	-0.233168554
UCK1	Effector cd8+ memory t (	ACC	-0.195839332
UCK1	Effector memory t cell	ACC	-0.199879493
UCK1	Effector regulatory t (treg	ACC	-0.188516469
UCK1	Elvidge_hif1a_targets_up	ACC	-0.319769248
UCK1	Endothelial cell	ACC	-0.128363061
UCK1	Eosinophil	ACC	-0.148117961
UCK1	Ether lipid metabolism	ACC	0.012186996
UCK1	Exhausted cd4+ t cell	ACC	-0.288154932
UCK1	Exhausted cd8+ t cell	ACC	-0.284313125
UCK1	Exhausted t cell	ACC	-0.105161687
UCK1	Fat cell (adipocyte)	ACC	0.132736397
UCK1	Fatty acid biosynthesis	ACC	-0.146705311
UCK1	Fatty acid degradation	ACC	-0.1165903
UCK1	Fatty acid elongation	ACC	-0.037199997
UCK1	Fibroblast	ACC	-0.181390798

UCK1	Folate biosynthesis	ACC	0.165542579
UCK1	Follicular b cell	ACC	-0.146569543
UCK1	Follicular dendritic cell	ACC	-0.260120577
UCK1	Follicular helper (tfh) t ce	ACC	-0.166629714
UCK1	Follicular t cell	ACC	0.12729941
UCK1	Foxp3+il-17+ t cell	ACC	0.208018132
UCK1	Fructose and mannose me	ACC	-0.112345185
UCK1	G2m_checkpoint	ACC	0.045681627
UCK1	Galactose metabolism	ACC	-0.012558517
UCK1	Galie_tumor_stemness_ge	ACC	-0.077946376
UCK1	Glutathione metabolism	ACC	-0.01030217
UCK1	Glycerolipid metabolism	ACC	0.063739593
UCK1	Glycerophospholipid metε	ACC	0.094524086
UCK1	Glycine, serine and threor	ACC	-0.031995508
UCK1	Glycolysis / gluconeogene	ACC	-0.140798772
UCK1	Glycosaminoglycan biosy ₁	ACC	-0.047694758
UCK1	Glycosaminoglycan biosy ₁	ACC	-0.148278999
UCK1	Glycosaminoglycan biosy ₁	ACC	-0.002049476
UCK1	Glycosaminoglycan degra	ACC	0.068348794
UCK1	Glycosphingolipid biosyn ₁	ACC	0.146343941
UCK1	Glycosphingolipid biosyn ₁	ACC	0.242894435
UCK1	Glycosphingolipid biosyn ₁	ACC	0.215549505
UCK1	Glycosylphosphatidylinos	ACC	0.067998662
UCK1	Glyoxylate and dicarboxy	ACC	-0.075589166
UCK1	Granulocyte	ACC	-0.133246644
UCK1	Hedgehog_signaling	ACC	-0.16942436
UCK1	Histidine metabolism	ACC	-0.070656025
UCK1	Hypoxia	ACC	-0.167979117
UCK1	Il-17ralpha t cell	ACC	-0.204162916
UCK1	Il2_stat5_signaling	ACC	-0.207424563
UCK1	Il6_jak_stat3_signaling	ACC	-0.221229915
UCK1	Immune_checkpoints_turr	ACC	-0.127908187
UCK1	Immune_inhibition_cytok	ACC	-0.110973094
UCK1	Inositol phosphate metabo	ACC	-0.198865611
UCK1	Interleukin_6_signaling	ACC	-0.461353877
UCK1	Jaeger_metastasis_up	ACC	-0.008240427
UCK1	Jain_nfkb_signaling	ACC	-0.172223895
UCK1	Kras_signaling_up	ACC	-0.275247455
UCK1	Linoleic acid metabolism	ACC	0.196372232
UCK1	Lipoic acid metabolism	ACC	0.089781355
UCK1	Lysine degradation	ACC	-0.056234456
UCK1	Lysosome	ACC	-0.153328884
UCK1	M1 macrophage	ACC	-0.193584725

UCK1	M2 macrophage	ACC	-0.220640055
UCK1	Mannose type o-glycan bi	ACC	0.222914542
UCK1	Mapk_signaling_pathway	ACC	-0.341043155
UCK1	Mapk3_erk1_activation	ACC	-0.468492779
UCK1	Marginal zone b cell	ACC	-0.232986677
UCK1	Memory b cell	ACC	-0.159083255
UCK1	Mesenchymal cell	ACC	0.001947557
UCK1	Mesenchymal stem cell	ACC	-0.234508442
UCK1	Metabolism of xenobiotic	ACC	0.079221612
UCK1	Migrating cancer stem cel	ACC	-0.296118407
UCK1	Mitotic_spindle	ACC	-0.28552206
UCK1	Monocyte	ACC	-0.177048839
UCK1	Mtor_signaling_pathway	ACC	-0.163440356
UCK1	Mtorc1_signaling	ACC	-0.092387874
UCK1	Mucin type o-glycan biosy	ACC	-0.30155319
UCK1	Myc_targets_v1	ACC	0.111844924
UCK1	Myeloid cell	ACC	-0.207051716
UCK1	N-glycan biosynthesis	ACC	0.137822045
UCK1	Naive b cell	ACC	-0.021639274
UCK1	Naive cd4+ t cell	ACC	-0.191769549
UCK1	Naive cd8+ t cell	ACC	-0.050624282
UCK1	Natural killer cell	ACC	-0.161517327
UCK1	Natural killer t (nkt) cell	ACC	-0.152313156
UCK1	Natural regulatory t (treg)	ACC	-0.218594054
UCK1	Neomycin, kanamycin an	ACC	-0.129038672
UCK1	Neutrophil	ACC	-0.177851491
UCK1	Nicotinate and nicotinami	ACC	-0.26908627
UCK1	Nitrogen metabolism	ACC	-0.497519707
UCK1	Nod_like_receptor_signal	ACC	-0.362238348
UCK1	Notch_signaling	ACC	-0.22286295
UCK1	One carbon pool by folate	ACC	-0.010804586
UCK1	Other glycan degradation	ACC	-0.058832826
UCK1	Other types of o-glycan b	ACC	0.141128494
UCK1	Oxidative phosphorylatio	ACC	0.216792699
UCK1	P53_pathway	ACC	-0.03480498
UCK1	P53_signaling_pathway	ACC	-0.110014666
UCK1	Pantothenate and coa bios	ACC	-0.202245607
UCK1	Pentose and glucuronate i	ACC	-0.142594959
UCK1	Pentose phosphate pathwa	ACC	-0.024362431
UCK1	Pericyte	ACC	-0.09425231
UCK1	Phenylalanine metabolism	ACC	0.114706578
UCK1	Phenylalanine, tyrosine ar	ACC	0.018625847
UCK1	Phosphonate and phosphir	ACC	-0.119980515

UCK1	Pi3k_akt_activation	ACC	-0.225238652
UCK1	Pi3k_akt_mtor_signaling	ACC	-0.1976664
UCK1	Porphyrin and chlorophyl	ACC	-0.026707848
UCK1	Primary bile acid biosynt	ACC	-0.185156779
UCK1	Propanoate metabolism	ACC	-0.188697711
UCK1	Purine metabolism	ACC	0.002012632
UCK1	Pyrimidine metabolism	ACC	0.087056119
UCK1	Pyruvate metabolism	ACC	0.044856334
UCK1	Regulation_of_autophagy	ACC	-0.420109098
UCK1	Retinol metabolism	ACC	-0.085563775
UCK1	Riboflavin metabolism	ACC	0.073190513
UCK1	Schmahl_pdgf_signaling	ACC	-0.105397617
UCK1	Selenocompound metabol	ACC	-0.04033282
UCK1	Signaling_by_hippo	ACC	-0.252702494
UCK1	Sphingolipid metabolism	ACC	-0.180703656
UCK1	Starch and sucrose metabo	ACC	-0.14233814
UCK1	Steroid biosynthesis	ACC	0.093250859
UCK1	Steroid hormone biosynth	ACC	0.093393016
UCK1	Sulfur metabolism	ACC	-0.049842742
UCK1	Synthesis and degradation	ACC	-0.068691061
UCK1	T helper cell	ACC	-0.197703473
UCK1	T helper1 (th1) cell	ACC	-0.181645447
UCK1	T helper17 (th17) cell	ACC	-0.108517482
UCK1	T helper2 (th2) cell	ACC	-0.137653681
UCK1	T helper9 (th9) cell	ACC	-0.090612141
UCK1	Taurine and hypotaurine r	ACC	0.036489675
UCK1	Terpenoid backbone biosy	ACC	0.127883491
UCK1	Tgf_beta_signaling_pathw	ACC	-0.231235778
UCK1	Thiamine metabolism	ACC	0.26721044
UCK1	Tnfa_signaling_via_nfk	ACC	-0.204419185
UCK1	Tryptophan metabolism	ACC	-0.027023418
UCK1	Tumor endothelial cell	ACC	0.089148879
UCK1	Tyrosine metabolism	ACC	-0.032644488
UCK1	Ubiquinone and other ter	ACC	0.148272704
UCK1	Valine, leucine and isoleu	ACC	0.087408395
UCK1	Valine, leucine and isoleu	ACC	-0.061962321
UCK1	Vascular endothelial cell	ACC	-0.189941671
UCK1	Vascular smooth muscle c	ACC	-0.115068966
UCK1	Vegf_signaling_pathway	ACC	-0.22616977
UCK1	Vitamin b6 metabolism	ACC	0.08457884
UCK1	Willert_wnt_signaling	ACC	0.185468794
UCK1	Wnt_beta_catenin_signali	ACC	0.088005369
UCK2	Abnormal plasma cell	ACC	-0.255836917

UCK2	Activated b cell	ACC	0.139715385
UCK2	Activated cd4+ t cell	ACC	0.364196563
UCK2	Activated t cell	ACC	0.428521476
UCK2	Alanine, aspartate and glu	ACC	0.006903263
UCK2	Alcala_apoptosis	ACC	0.435569546
UCK2	Alpha-linolenic acid meta	ACC	-0.315014898
UCK2	Amino sugar and nucleoti	ACC	0.127657996
UCK2	Ampk_pathway	ACC	-0.048443827
UCK2	Angiogenesis	ACC	0.296855938
UCK2	Arachidonic acid metabol	ACC	0.083373163
UCK2	Arginine and proline metε	ACC	-0.046586849
UCK2	Arginine biosynthesis	ACC	0.112050936
UCK2	Ascorbate and aldarate mε	ACC	-0.250504416
UCK2	Atypical memory b cell	ACC	0.116148269
UCK2	Axl+siglec6+ dendritic ce	ACC	0.297501563
UCK2	B cell	ACC	0.401521832
UCK2	B1 cell	ACC	0.002591546
UCK2	Basal cell	ACC	0.534079896
UCK2	Beta-alanine metabolism	ACC	-0.157574635
UCK2	Biosynthesis of unsaturate	ACC	-0.132602109
UCK2	Biotin metabolism	ACC	-0.129629008
UCK2	Butanoate metabolism	ACC	-0.328516207
UCK2	Caffeine metabolism	ACC	-0.00507719
UCK2	Cancer stem cell	ACC	0.439228717
UCK2	Cancer stem-like cell	ACC	0.372903698
UCK2	Cd4+ cytotoxic t cell	ACC	0.396438437
UCK2	Cd4+ memory t cell	ACC	0.064116598
UCK2	Cd4+ regulatory t cell	ACC	0.271485216
UCK2	Cd4+ t helper cell	ACC	0.302718242
UCK2	Cd4+cd25+ regulatory t c	ACC	0.311234481
UCK2	Cd8+ cytotoxic t cell	ACC	0.399338877
UCK2	Cd8+ regulatory t cell	ACC	0.425832449
UCK2	Cell_cycle	ACC	0.225504557
UCK2	Chandran_metastasis_top ⁵	ACC	-0.195459409
UCK2	Citrate cycle (tca cycle)	ACC	-0.15658919
UCK2	Cysteine and methionine r	ACC	0.021012119
UCK2	Cytokine induced killer cε	ACC	-0.056578385
UCK2	D-arginine and d-ornithin	ACC	-0.026068191
UCK2	D-glutamine and d-glutan	ACC	-0.169629355
UCK2	Dendritic cell	ACC	0.393536791
UCK2	Dna_repair	ACC	0.24166146
UCK2	Dna_replication	ACC	0.357412466
UCK2	Double-negative memory	ACC	0.149435494

UCK2	Drug metabolism - cytochACC	-0.131869175
UCK2	Drug metabolism - other (ACC	0.330605339
UCK2	E2f_targets ACC	0.370032602
UCK2	Ecm_receptor_interaction ACC	0.348516588
UCK2	Effector cd4+ memory t (ACC	0.28597048
UCK2	Effector cd8+ memory t (ACC	0.427186571
UCK2	Effector memory t cell ACC	0.276701029
UCK2	Effector regulatory t (tregACC	0.325799021
UCK2	Elvidge_hif1a_targets_up ACC	-0.035762068
UCK2	Endothelial cell ACC	0.513860306
UCK2	Eosinophil ACC	0.373819163
UCK2	Ether lipid metabolism ACC	-0.271315151
UCK2	Exhausted cd4+ t cell ACC	0.420503946
UCK2	Exhausted cd8+ t cell ACC	0.480019774
UCK2	Exhausted t cell ACC	0.331383304
UCK2	Fat cell (adipocyte) ACC	-0.049215686
UCK2	Fatty acid biosynthesis ACC	-0.113121267
UCK2	Fatty acid degradation ACC	-0.30030658
UCK2	Fatty acid elongation ACC	0.010111132
UCK2	Fibroblast ACC	0.345551395
UCK2	Folate biosynthesis ACC	-0.120152701
UCK2	Follicular b cell ACC	0.230695353
UCK2	Follicular dendritic cell ACC	0.312650472
UCK2	Follicular helper (tfh) t ceACC	0.346633917
UCK2	Follicular t cell ACC	0.335354332
UCK2	Foxp3+il-17+ t cell ACC	0.048185457
UCK2	Fructose and mannose meACC	0.074814833
UCK2	G2m_checkpoint ACC	0.360625396
UCK2	Galactose metabolism ACC	0.234704115
UCK2	Galie_tumor_stemness_geACC	0.042845614
UCK2	Glutathione metabolism ACC	0.270924967
UCK2	Glycerolipid metabolism ACC	-0.054796385
UCK2	Glycerophospholipid metεACC	-0.162454497
UCK2	Glycine, serine and threorACC	-0.045509738
UCK2	Glycolysis / gluconeogeneACC	-0.051262008
UCK2	Glycosaminoglycan biosy1ACC	0.277443217
UCK2	Glycosaminoglycan biosy1ACC	-0.164640506
UCK2	Glycosaminoglycan biosy1ACC	0.322125752
UCK2	Glycosaminoglycan degraACC	0.151897711
UCK2	Glycosphingolipid biosyn1ACC	-0.00867871
UCK2	Glycosphingolipid biosyn1ACC	0.088834468
UCK2	Glycosphingolipid biosyn1ACC	0.301126966
UCK2	Glycosylphosphatidylinos:ACC	0.009008966

UCK2	Glyoxylate and dicarboxy	ACC	-0.149943625
UCK2	Granulocyte	ACC	0.397653764
UCK2	Hedgehog_signaling	ACC	-0.176954396
UCK2	Histidine metabolism	ACC	0.037400666
UCK2	Hypoxia	ACC	0.289952492
UCK2	Il-17alpha t cell	ACC	0.205831543
UCK2	Il2_stat5_signaling	ACC	0.522270007
UCK2	Il6_jak_stat3_signaling	ACC	0.452449983
UCK2	Immune_checkpoints_turr	ACC	0.334768199
UCK2	Immune_inhibition_cytok	ACC	0.496707867
UCK2	Inositol phosphate metabo	ACC	-0.241209166
UCK2	Interleukin_6_signaling	ACC	0.285853478
UCK2	Jaeger_metastasis_up	ACC	0.239651565
UCK2	Jain_nfkb_signaling	ACC	0.263508734
UCK2	Kras_signaling_up	ACC	0.321953219
UCK2	Linoleic acid metabolism	ACC	-0.308838735
UCK2	Lipoic acid metabolism	ACC	-0.203741707
UCK2	Lysine degradation	ACC	-0.124591504
UCK2	Lysosome	ACC	-0.042492617
UCK2	M1 macrophage	ACC	0.376775052
UCK2	M2 macrophage	ACC	0.320320513
UCK2	Mannose type o-glycan bi	ACC	0.160652198
UCK2	Mapk_signaling_pathway	ACC	0.060809638
UCK2	Mapk3_erk1_activation	ACC	0.094165567
UCK2	Marginal zone b cell	ACC	0.204933153
UCK2	Memory b cell	ACC	0.209838074
UCK2	Mesenchymal cell	ACC	0.397835042
UCK2	Mesenchymal stem cell	ACC	0.38959016
UCK2	Metabolism of xenobiotic	ACC	0.016903995
UCK2	Migrating cancer stem cel	ACC	0.565303207
UCK2	Mitotic_spindle	ACC	0.171020389
UCK2	Monocyte	ACC	0.404756299
UCK2	Mtor_signaling_pathway	ACC	-0.211122823
UCK2	Mtorc1_signaling	ACC	0.14396623
UCK2	Mucin type o-glycan biosy	ACC	-0.113227857
UCK2	Myc_targets_v1	ACC	0.294016303
UCK2	Myeloid cell	ACC	0.360671383
UCK2	N-glycan biosynthesis	ACC	0.047062064
UCK2	Naive b cell	ACC	0.305916375
UCK2	Naive cd4+ t cell	ACC	0.142732347
UCK2	Naive cd8+ t cell	ACC	0.089028117
UCK2	Natural killer cell	ACC	0.362918526
UCK2	Natural killer t (nkt) cell	ACC	0.493612173

UCK2	Natural regulatory t (treg)	ACC	0.139401461
UCK2	Neomycin, kanamycin and	ACC	0.230326325
UCK2	Neutrophil	ACC	0.464219925
UCK2	Nicotinate and nicotinami	ACC	0.129853684
UCK2	Nitrogen metabolism	ACC	0.036572102
UCK2	Nod_like_receptor_signal	ACC	0.411409284
UCK2	Notch_signaling	ACC	0.20563698
UCK2	One carbon pool by folate	ACC	0.403289459
UCK2	Other glycan degradation	ACC	-0.008019172
UCK2	Other types of o-glycan b	ACC	0.222829775
UCK2	Oxidative phosphorylatio	ACC	-0.117586025
UCK2	P53_pathway	ACC	0.179919235
UCK2	P53_signaling_pathway	ACC	0.221029243
UCK2	Pantothenate and coa bios	ACC	0.076285794
UCK2	Pentose and glucuronate in	ACC	-0.02768053
UCK2	Pentose phosphate pathwa	ACC	0.092191016
UCK2	Pericyte	ACC	0.299947906
UCK2	Phenylalanine metabolism	ACC	-0.104354468
UCK2	Phenylalanine, tyrosine ar	ACC	-0.191143477
UCK2	Phosphonate and phosphir	ACC	-0.200191305
UCK2	Pi3k_akt_activation	ACC	-0.08545581
UCK2	Pi3k_akt_mtor_signaling	ACC	0.18860533
UCK2	Porphyrin and chlorophyl	ACC	-0.196713117
UCK2	Primary bile acid biosynt	ACC	-0.283743205
UCK2	Propanoate metabolism	ACC	-0.293744548
UCK2	Purine metabolism	ACC	0.409796215
UCK2	Pyrimidine metabolism	ACC	0.467281395
UCK2	Pyruvate metabolism	ACC	-0.318380864
UCK2	Regulation_of_autophagy	ACC	-0.408703321
UCK2	Retinol metabolism	ACC	-0.186235353
UCK2	Riboflavin metabolism	ACC	0.249632338
UCK2	Schmahl_pdgf_signaling	ACC	0.16505149
UCK2	Selenocompound metabol	ACC	-0.260564372
UCK2	Signaling_by_hippo	ACC	0.077637317
UCK2	Sphingolipid metabolism	ACC	-0.103414816
UCK2	Starch and sucrose metabo	ACC	-0.031416369
UCK2	Steroid biosynthesis	ACC	-0.285984005
UCK2	Steroid hormone biosynth	ACC	-0.277017269
UCK2	Sulfur metabolism	ACC	-0.100312804
UCK2	Synthesis and degradation	ACC	-0.241886025
UCK2	T helper cell	ACC	0.292531189
UCK2	T helper1 (th1) cell	ACC	0.348929678
UCK2	T helper17 (th17) cell	ACC	0.403124746

UCK2	T helper2 (th2) cell	ACC	0.402723371
UCK2	T helper9 (th9) cell	ACC	0.362022962
UCK2	Taurine and hypotaurine r	ACC	-0.274545364
UCK2	Terpenoid backbone biosy	ACC	-0.140926713
UCK2	Tgf_beta_signaling_pathw	ACC	0.098638018
UCK2	Thiamine metabolism	ACC	-0.127952533
UCK2	Tnfa_signaling_via_nfkB	ACC	0.550076085
UCK2	Tryptophan metabolism	ACC	-0.138421086
UCK2	Tumor endothelial cell	ACC	0.341888827
UCK2	Tyrosine metabolism	ACC	-0.065859222
UCK2	Ubiquinone and other ter	ACC	-0.136663596
UCK2	Valine, leucine and isoleu	ACC	0.199949773
UCK2	Valine, leucine and isoleu	ACC	-0.364880388
UCK2	Vascular endothelial cell	ACC	0.329150178
UCK2	Vascular smooth muscle c	ACC	0.17398509
UCK2	Vegf_signaling_pathway	ACC	0.092016349
UCK2	Vitamin b6 metabolism	ACC	0.031282899
UCK2	Willert_wnt_signaling	ACC	0.01385381
UCK2	Wnt_beta_catenin_signali	ACC	0.054102847
UCKL1	Abnormal plasma cell	ACC	0.02990623
UCKL1	Activated b cell	ACC	-0.039899555
UCKL1	Activated cd4+ t cell	ACC	-0.028864797
UCKL1	Activated t cell	ACC	-0.003482896
UCKL1	Alanine, aspartate and glu	ACC	0.164256755
UCKL1	Alcala_apoptosis	ACC	0.118822746
UCKL1	Alpha-linolenic acid meta	ACC	-0.072192868
UCKL1	Amino sugar and nucleoti	ACC	-0.165044152
UCKL1	Ampk_pathway	ACC	0.221519718
UCKL1	Angiogenesis	ACC	-0.127442859
UCKL1	Arachidonic acid metabol	ACC	-0.125705697
UCKL1	Arginine and proline metæ	ACC	-0.187773361
UCKL1	Arginine biosynthesis	ACC	0.038314251
UCKL1	Ascorbate and aldarate mε	ACC	-0.221753798
UCKL1	Atypical memory b cell	ACC	-0.03410511
UCKL1	Axl+siglec6+ dendritic ce	ACC	-0.072608109
UCKL1	B cell	ACC	0.023600114
UCKL1	B1 cell	ACC	-0.013952845
UCKL1	Basal cell	ACC	-0.046128525
UCKL1	Beta-alanine metabolism	ACC	-0.311428121
UCKL1	Biosynthesis of unsaturate	ACC	0.070170126
UCKL1	Biotin metabolism	ACC	-0.049107719
UCKL1	Butanoate metabolism	ACC	-0.049932095
UCKL1	Caffeine metabolism	ACC	-0.222445229

UCKL1	Cancer stem cell	ACC	-0.034277307
UCKL1	Cancer stem-like cell	ACC	-0.026839319
UCKL1	Cd4+ cytotoxic t cell	ACC	-0.089585315
UCKL1	Cd4+ memory t cell	ACC	-0.197308657
UCKL1	Cd4+ regulatory t cell	ACC	-0.027330029
UCKL1	Cd4+ t helper cell	ACC	-0.014933679
UCKL1	Cd4+cd25+ regulatory t c	ACC	-0.018469578
UCKL1	Cd8+ cytotoxic t cell	ACC	-0.04678295
UCKL1	Cd8+ regulatory t cell	ACC	0.003878212
UCKL1	Cell_cycle	ACC	0.239873514
UCKL1	Chandran_metastasis_top5	ACC	0.060589233
UCKL1	Citrate cycle (tca cycle)	ACC	0.002551389
UCKL1	Cysteine and methionine r	ACC	0.04660307
UCKL1	Cytokine induced killer c	ACC	-0.020600904
UCKL1	D-arginine and d-ornithin	ACC	-0.048822977
UCKL1	D-glutamine and d-glutan	ACC	0.099871026
UCKL1	Dendritic cell	ACC	-0.011986884
UCKL1	Dna_repair	ACC	0.180922353
UCKL1	Dna_replication	ACC	0.174527675
UCKL1	Double-negative memory	ACC	-0.056262143
UCKL1	Drug metabolism - cytoch	ACC	-0.198397465
UCKL1	Drug metabolism - other	ACC	0.009057877
UCKL1	E2f_targets	ACC	0.177519993
UCKL1	Ecm_receptor_interaction	ACC	0.029336727
UCKL1	Effector cd4+ memory t (	ACC	-0.037028818
UCKL1	Effector cd8+ memory t (	ACC	-0.074045241
UCKL1	Effector memory t cell	ACC	-0.115470977
UCKL1	Effector regulatory t (treg	ACC	-0.010252105
UCKL1	Elvidge_hif1a_targets_up	ACC	-0.078419319
UCKL1	Endothelial cell	ACC	0.037802621
UCKL1	Eosinophil	ACC	-0.027152409
UCKL1	Ether lipid metabolism	ACC	-0.138166389
UCKL1	Exhausted cd4+ t cell	ACC	-0.040959783
UCKL1	Exhausted cd8+ t cell	ACC	-0.070181241
UCKL1	Exhausted t cell	ACC	-0.062296006
UCKL1	Fat cell (adipocyte)	ACC	-0.055900295
UCKL1	Fatty acid biosynthesis	ACC	-0.171084307
UCKL1	Fatty acid degradation	ACC	-0.075474596
UCKL1	Fatty acid elongation	ACC	0.074161356
UCKL1	Fibroblast	ACC	-0.011056965
UCKL1	Folate biosynthesis	ACC	-0.135462795
UCKL1	Follicular b cell	ACC	-0.104292794
UCKL1	Follicular dendritic cell	ACC	-0.042134482

UCKL1	Follicular helper (tfh) t ce	ACC	-0.052723119
UCKL1	Follicular t cell	ACC	0.09365334
UCKL1	Foxp3+il-17+ t cell	ACC	-0.106961081
UCKL1	Fructose and mannose me	ACC	-0.162140014
UCKL1	G2m_checkpoint	ACC	0.158670252
UCKL1	Galactose metabolism	ACC	-0.059099841
UCKL1	Galie_tumor_stemness_ge	ACC	-0.152169854
UCKL1	Glutathione metabolism	ACC	0.012992557
UCKL1	Glycerolipid metabolism	ACC	-0.056043752
UCKL1	Glycerophospholipid metæ	ACC	0.089076682
UCKL1	Glycine, serine and threor	ACC	-0.238135469
UCKL1	Glycolysis / gluconeogene	ACC	-0.14071007
UCKL1	Glycosaminoglycan biosy1	ACC	-0.122071487
UCKL1	Glycosaminoglycan biosy1	ACC	-0.133789104
UCKL1	Glycosaminoglycan biosy1	ACC	-0.135353771
UCKL1	Glycosaminoglycan degra	ACC	-0.1000528
UCKL1	Glycosphingolipid biosyn1	ACC	-0.171187115
UCKL1	Glycosphingolipid biosyn1	ACC	-0.049156615
UCKL1	Glycosphingolipid biosyn1	ACC	-0.005276734
UCKL1	Glycosylphosphatidylinos:	ACC	-0.036648271
UCKL1	Glyoxylate and dicarboxy	ACC	0.101195758
UCKL1	Granulocyte	ACC	0.03602276
UCKL1	Hedgehog_signaling	ACC	-0.187403269
UCKL1	Histidine metabolism	ACC	-0.355147833
UCKL1	Hypoxia	ACC	-0.098775487
UCKL1	Il-17ralpha t cell	ACC	-0.140635566
UCKL1	Il2_stat5_signaling	ACC	-0.104902099
UCKL1	Il6_jak_stat3_signaling	ACC	-0.11413884
UCKL1	Immune_checkpoints_tur	ACC	-0.1566395
UCKL1	Immune_inhibition_cytok	ACC	-0.154744557
UCKL1	Inositol phosphate metabo	ACC	-0.111328722
UCKL1	Interleukin_6_signaling	ACC	-0.085905283
UCKL1	Jaeger_metastasis_up	ACC	0.18780591
UCKL1	Jain_nfkb_signaling	ACC	0.158117789
UCKL1	Kras_signaling_up	ACC	-0.226587452
UCKL1	Linoleic acid metabolism	ACC	-0.197874587
UCKL1	Lipoic acid metabolism	ACC	-0.081413419
UCKL1	Lysine degradation	ACC	-0.128891986
UCKL1	Lysosome	ACC	-0.181628799
UCKL1	M1 macrophage	ACC	-0.032095927
UCKL1	M2 macrophage	ACC	-0.029817201
UCKL1	Mannose type o-glycan bi	ACC	0.163974049
UCKL1	Mapk_signaling_pathway	ACC	-0.101973199

UCKL1	Mapk3_erk1_activation	ACC	-0.099018655
UCKL1	Marginal zone b cell	ACC	-0.117045369
UCKL1	Memory b cell	ACC	-0.063260212
UCKL1	Mesenchymal cell	ACC	0.02016631
UCKL1	Mesenchymal stem cell	ACC	-0.065866741
UCKL1	Metabolism of xenobiotic	ACC	-0.095849259
UCKL1	Migrating cancer stem cel	ACC	0.16149964
UCKL1	Mitotic_spindle	ACC	0.066795823
UCKL1	Monocyte	ACC	-0.062871828
UCKL1	Mtor_signaling_pathway	ACC	-0.078042162
UCKL1	Mtorc1_signaling	ACC	0.082165379
UCKL1	Mucin type o-glycan bios	ACC	-0.444749738
UCKL1	Myc_targets_v1	ACC	0.196517041
UCKL1	Myeloid cell	ACC	0.003982533
UCKL1	N-glycan biosynthesis	ACC	-0.022140003
UCKL1	Naive b cell	ACC	-0.207013143
UCKL1	Naive cd4+ t cell	ACC	-0.123740687
UCKL1	Naive cd8+ t cell	ACC	-0.012905744
UCKL1	Natural killer cell	ACC	-0.030243362
UCKL1	Natural killer t (nkt) cell	ACC	0.173146439
UCKL1	Natural regulatory t (treg)	ACC	-0.107337401
UCKL1	Neomycin, kanamycin an	ACC	-0.057166711
UCKL1	Neutrophil	ACC	-0.039001244
UCKL1	Nicotinate and nicotinami	ACC	-0.193069156
UCKL1	Nitrogen metabolism	ACC	-0.07608348
UCKL1	Nod_like_receptor_signal	ACC	-0.129831633
UCKL1	Notch_signaling	ACC	-0.220437969
UCKL1	One carbon pool by folate	ACC	0.143565172
UCKL1	Other glycan degradation	ACC	-0.118508462
UCKL1	Other types of o-glycan b	ACC	0.148517553
UCKL1	Oxidative phosphorylatio	ACC	0.036410879
UCKL1	P53_pathway	ACC	-0.175248251
UCKL1	P53_signaling_pathway	ACC	0.130942087
UCKL1	Pantothenate and coa bios	ACC	0.048025919
UCKL1	Pentose and glucuronate i	ACC	-0.136024872
UCKL1	Pentose phosphate pathwa	ACC	-0.067105766
UCKL1	Pericyte	ACC	-0.034893581
UCKL1	Phenylalanine metabolism	ACC	-0.256828694
UCKL1	Phenylalanine, tyrosine ar	ACC	-0.022536884
UCKL1	Phosphonate and phosphir	ACC	-0.075870837
UCKL1	Pi3k_akt_activation	ACC	-0.142775236
UCKL1	Pi3k_akt_mtor_signaling	ACC	0.063107084
UCKL1	Porphyryn and chlorophyl	ACC	-0.205057642

UCKL1	Primary bile acid biosynt	ACC	-0.198051128
UCKL1	Propanoate metabolism	ACC	0.032678006
UCKL1	Purine metabolism	ACC	0.076925217
UCKL1	Pyrimidine metabolism	ACC	0.254684746
UCKL1	Pyruvate metabolism	ACC	0.067325762
UCKL1	Regulation_of_autophagy	ACC	-0.092092977
UCKL1	Retinol metabolism	ACC	-0.332341738
UCKL1	Riboflavin metabolism	ACC	-0.048331305
UCKL1	Schmahl_pdgf_signaling	ACC	-0.200573215
UCKL1	Selenocompound metabol	ACC	-0.093092762
UCKL1	Signaling_by_hippo	ACC	0.019954538
UCKL1	Sphingolipid metabolism	ACC	-0.21485776
UCKL1	Starch and sucrose metabo	ACC	-0.083392901
UCKL1	Steroid biosynthesis	ACC	0.124684489
UCKL1	Steroid hormone biosynth	ACC	-0.178894258
UCKL1	Sulfur metabolism	ACC	-0.142042602
UCKL1	Synthesis and degradation	ACC	-0.07109922
UCKL1	T helper cell	ACC	-0.103782497
UCKL1	T helper1 (th1) cell	ACC	-0.043774187
UCKL1	T helper17 (th17) cell	ACC	-0.097066265
UCKL1	T helper2 (th2) cell	ACC	-0.111470998
UCKL1	T helper9 (th9) cell	ACC	-0.005044036
UCKL1	Taurine and hypotaurine r	ACC	0.109680436
UCKL1	Terpenoid backbone biosy	ACC	0.053557434
UCKL1	Tgf_beta_signaling_pathw	ACC	-0.055067206
UCKL1	Thiamine metabolism	ACC	-0.094420455
UCKL1	Tnfa_signaling_via_nfkb	ACC	-0.121703296
UCKL1	Tryptophan metabolism	ACC	-0.141327635
UCKL1	Tumor endothelial cell	ACC	-0.060948092
UCKL1	Tyrosine metabolism	ACC	-0.320033803
UCKL1	Ubiquinone and other terp	ACC	-0.115376672
UCKL1	Valine, leucine and isoleu	ACC	-0.068768085
UCKL1	Valine, leucine and isoleu	ACC	-0.006155838
UCKL1	Vascular endothelial cell	ACC	0.081034206
UCKL1	Vascular smooth muscle c	ACC	-0.084570697
UCKL1	Vegf_signaling_pathway	ACC	-0.167959819
UCKL1	Vitamin b6 metabolism	ACC	-0.015797671
UCKL1	Willert_wnt_signaling	ACC	0.069968013
UCKL1	Wnt_beta_catenin_signali	ACC	0.189713668
UPP1	Abnormal plasma cell	ACC	-0.086847231
UPP1	Activated b cell	ACC	0.23299951
UPP1	Activated cd4+ t cell	ACC	0.270357638
UPP1	Activated t cell	ACC	0.233429172

UPP1	Alanine, aspartate and glu	ACC	0.088669973
UPP1	Alcala_apoptosis	ACC	0.251829828
UPP1	Alpha-linolenic acid meta	ACC	-0.050393427
UPP1	Amino sugar and nucleoti	ACC	0.318899854
UPP1	Ampk_pathway	ACC	-0.132362229
UPP1	Angiogenesis	ACC	0.154128824
UPP1	Arachidonic acid metabol	ACC	0.207741783
UPP1	Arginine and proline metæ	ACC	0.099543014
UPP1	Arginine biosynthesis	ACC	0.056772924
UPP1	Ascorbate and aldarate mε	ACC	-0.077394938
UPP1	Atypical memory b cell	ACC	0.15144163
UPP1	Axl+siglec6+ dendritic ce	ACC	0.208036997
UPP1	B cell	ACC	0.348049246
UPP1	B1 cell	ACC	0.201095691
UPP1	Basal cell	ACC	0.267698727
UPP1	Beta-alanine metabolism	ACC	-0.155313648
UPP1	Biosynthesis of unsaturate	ACC	-0.273413643
UPP1	Biotin metabolism	ACC	-0.086623606
UPP1	Butanoate metabolism	ACC	-0.064178615
UPP1	Caffeine metabolism	ACC	-0.159670082
UPP1	Cancer stem cell	ACC	0.285994409
UPP1	Cancer stem-like cell	ACC	0.140133433
UPP1	Cd4+ cytotoxic t cell	ACC	0.229728106
UPP1	Cd4+ memory t cell	ACC	0.087036551
UPP1	Cd4+ regulatory t cell	ACC	0.186689669
UPP1	Cd4+ t helper cell	ACC	0.242205573
UPP1	Cd4+cd25+ regulatory t c	ACC	0.237419908
UPP1	Cd8+ cytotoxic t cell	ACC	0.161987188
UPP1	Cd8+ regulatory t cell	ACC	0.265729693
UPP1	Cell_cycle	ACC	0.084459887
UPP1	Chandran_metastasis_topε	ACC	-0.080588883
UPP1	Citrate cycle (tca cycle)	ACC	0.148829305
UPP1	Cysteine and methionine r	ACC	0.172608407
UPP1	Cytokine induced killer cε	ACC	0.104456533
UPP1	D-arginine and d-ornithin	ACC	-0.019733457
UPP1	D-glutamine and d-glutan	ACC	-0.239918607
UPP1	Dendritic cell	ACC	0.277795
UPP1	Dna_repair	ACC	0.060844587
UPP1	Dna_replication	ACC	0.188581371
UPP1	Double-negative memory	ACC	0.059568847
UPP1	Drug metabolism - cytoch	ACC	-0.040339263
UPP1	Drug metabolism - other ε	ACC	0.008422949
UPP1	E2f_targets	ACC	0.124614678

UPP1	Ecm_receptor_interaction ACC	0.153719829
UPP1	Effector cd4+ memory t (ACC	0.258136237
UPP1	Effector cd8+ memory t (ACC	0.346833398
UPP1	Effector memory t cell ACC	0.232215848
UPP1	Effector regulatory t (treg ACC	0.246641106
UPP1	Elvidge_hif1a_targets_up ACC	0.166263233
UPP1	Endothelial cell ACC	0.170603585
UPP1	Eosinophil ACC	0.309623882
UPP1	Ether lipid metabolism ACC	-0.092615921
UPP1	Exhausted cd4+ t cell ACC	0.275587225
UPP1	Exhausted cd8+ t cell ACC	0.328816247
UPP1	Exhausted t cell ACC	0.243196941
UPP1	Fat cell (adipocyte) ACC	0.069753622
UPP1	Fatty acid biosynthesis ACC	0.159467364
UPP1	Fatty acid degradation ACC	-0.180913483
UPP1	Fatty acid elongation ACC	-0.183299176
UPP1	Fibroblast ACC	0.208207987
UPP1	Folate biosynthesis ACC	0.081962169
UPP1	Follicular b cell ACC	0.21006529
UPP1	Follicular dendritic cell ACC	0.0290291
UPP1	Follicular helper (tfh) t cell ACC	0.285676625
UPP1	Follicular t cell ACC	0.311589529
UPP1	Foxp3+il-17+ t cell ACC	-0.221058349
UPP1	Fructose and mannose me ACC	0.27327988
UPP1	G2m_checkpoint ACC	0.082098326
UPP1	Galactose metabolism ACC	0.10091982
UPP1	Galie_tumor_stemness_ge ACC	-0.102102582
UPP1	Glutathione metabolism ACC	0.176513369
UPP1	Glycerolipid metabolism ACC	0.053206021
UPP1	Glycerophospholipid metε ACC	-0.16139633
UPP1	Glycine, serine and threor ACC	0.232208854
UPP1	Glycolysis / gluconeogene ACC	0.093066416
UPP1	Glycosaminoglycan biosy1 ACC	0.011809729
UPP1	Glycosaminoglycan biosy1 ACC	-0.155967418
UPP1	Glycosaminoglycan biosy1 ACC	0.093332699
UPP1	Glycosaminoglycan degra ACC	0.33493196
UPP1	Glycosphingolipid biosyn1 ACC	0.036312639
UPP1	Glycosphingolipid biosyn1 ACC	0.224480861
UPP1	Glycosphingolipid biosyn1 ACC	-0.038891848
UPP1	Glycosylphosphatidylinos: ACC	-0.245794921
UPP1	Glyoxylate and dicarboxy ACC	0.158094122
UPP1	Granulocyte ACC	0.318409537
UPP1	Hedgehog_signaling ACC	-0.017041634

UPP1	Histidine metabolism	ACC	-0.001093987
UPP1	Hypoxia	ACC	0.216559611
UPP1	Il-17alpha t cell	ACC	0.165621279
UPP1	Il2_stat5_signaling	ACC	0.198381427
UPP1	Il6_jak_stat3_signaling	ACC	0.293933662
UPP1	Immune_checkpoints_tur	ACC	0.371475017
UPP1	Immune_inhibition_cytok	ACC	0.283910311
UPP1	Inositol phosphate metabo	ACC	-0.047111703
UPP1	Interleukin_6_signaling	ACC	0.255759105
UPP1	Jaeger_metastasis_up	ACC	0.160163618
UPP1	Jain_nfkb_signaling	ACC	0.225014005
UPP1	Kras_signaling_up	ACC	0.312936192
UPP1	Linoleic acid metabolism	ACC	0.022886835
UPP1	Lipoic acid metabolism	ACC	-0.143508309
UPP1	Lysine degradation	ACC	-0.142898631
UPP1	Lysosome	ACC	0.224808227
UPP1	M1 macrophage	ACC	0.320907966
UPP1	M2 macrophage	ACC	0.256439668
UPP1	Mannose type o-glycan bi	ACC	-0.025439569
UPP1	Mapk_signaling_pathway	ACC	0.171264392
UPP1	Mapk3_erk1_activation	ACC	0.163720394
UPP1	Marginal zone b cell	ACC	0.160422051
UPP1	Memory b cell	ACC	0.20619407
UPP1	Mesenchymal cell	ACC	0.063659351
UPP1	Mesenchymal stem cell	ACC	0.271110806
UPP1	Metabolism of xenobiotic	ACC	-0.01158839
UPP1	Migrating cancer stem cel	ACC	0.207021544
UPP1	Mitotic_spindle	ACC	-0.047098696
UPP1	Monocyte	ACC	0.325987736
UPP1	Mtor_signaling_pathway	ACC	0.011750508
UPP1	Mtorc1_signaling	ACC	0.242408093
UPP1	Mucin type o-glycan biosy	ACC	0.116661625
UPP1	Myc_targets_v1	ACC	0.141373116
UPP1	Myeloid cell	ACC	0.245098135
UPP1	N-glycan biosynthesis	ACC	0.036730719
UPP1	Naive b cell	ACC	0.025292357
UPP1	Naive cd4+ t cell	ACC	0.146717848
UPP1	Naive cd8+ t cell	ACC	0.087270014
UPP1	Natural killer cell	ACC	0.254159811
UPP1	Natural killer t (nkt) cell	ACC	0.295768683
UPP1	Natural regulatory t (treg)	ACC	0.184045481
UPP1	Neomycin, kanamycin an	ACC	0.280182823
UPP1	Neutrophil	ACC	0.354401258

UPP1	Nicotinate and nicotinami ACC	0.200914486
UPP1	Nitrogen metabolism ACC	-0.088938019
UPP1	Nod_like_receptor_signal: ACC	0.146665214
UPP1	Notch_signaling ACC	0.125127834
UPP1	One carbon pool by folate ACC	0.143166597
UPP1	Other glycan degradation ACC	0.13043573
UPP1	Other types of o-glycan b: ACC	0.080082829
UPP1	Oxidative phosphorylatior ACC	0.158855336
UPP1	P53_pathway ACC	0.281658656
UPP1	P53_signaling_pathway ACC	-0.013513546
UPP1	Pantothenate and coa bios ACC	0.12798685
UPP1	Pentose and glucuronate in ACC	0.169589196
UPP1	Pentose phosphate pathwa ACC	0.148313812
UPP1	Pericyte ACC	0.295488523
UPP1	Phenylalanine metabolism ACC	0.134002608
UPP1	Phenylalanine, tyrosine ar ACC	0.337451768
UPP1	Phosphonate and phosphir ACC	0.022769414
UPP1	Pi3k_akt_activation ACC	0.00034901
UPP1	Pi3k_akt_mtor_signaling ACC	0.093791307
UPP1	Porphyrin and chlorophyl ACC	0.14944004
UPP1	Primary bile acid biosyntfl ACC	-0.066800663
UPP1	Propanoate metabolism ACC	-0.14271893
UPP1	Purine metabolism ACC	0.159027233
UPP1	Pyrimidine metabolism ACC	0.185241563
UPP1	Pyruvate metabolism ACC	-0.071266789
UPP1	Regulation_of_autophagy ACC	0.04075023
UPP1	Retinol metabolism ACC	-0.056731045
UPP1	Riboflavin metabolism ACC	0.099863555
UPP1	Schmahl_pdgf_signaling ACC	-0.007500687
UPP1	Selenocompound metabol ACC	-0.097039479
UPP1	Signaling_by_hippo ACC	-0.311180691
UPP1	Sphingolipid metabolism ACC	0.134846938
UPP1	Starch and sucrose metabo ACC	0.138842215
UPP1	Steroid biosynthesis ACC	-0.01383691
UPP1	Steroid hormone biosynth ACC	-0.097340631
UPP1	Sulfur metabolism ACC	-0.153441351
UPP1	Synthesis and degradation ACC	0.050612654
UPP1	T helper cell ACC	0.278491454
UPP1	T helper1 (th1) cell ACC	0.239126791
UPP1	T helper17 (th17) cell ACC	0.304836926
UPP1	T helper2 (th2) cell ACC	0.232436366
UPP1	T helper9 (th9) cell ACC	0.218692671
UPP1	Taurine and hypotaurine r ACC	-0.006851897

UPP1	Terpenoid backbone biosy	ACC	0.009737634
UPP1	Tgf_beta_signaling_pathw	ACC	-0.169424645
UPP1	Thiamine metabolism	ACC	0.082831363
UPP1	Tnfa_signaling_via_nfk	ACC	0.284461429
UPP1	Tryptophan metabolism	ACC	0.039209079
UPP1	Tumor endothelial cell	ACC	0.086979921
UPP1	Tyrosine metabolism	ACC	-0.010997075
UPP1	Ubiquinone and other ter	ACC	-0.118699583
UPP1	Valine, leucine and isoleu	ACC	0.433752566
UPP1	Valine, leucine and isoleu	ACC	-0.073730481
UPP1	Vascular endothelial cell	ACC	0.270187766
UPP1	Vascular smooth muscle c	ACC	0.132048738
UPP1	Vegf_signaling_pathway	ACC	0.122676141
UPP1	Vitamin b6 metabolism	ACC	0.029897907
UPP1	Willert_wnt_signaling	ACC	-0.117138275
UPP1	Wnt_beta_catenin_signali	ACC	-0.018398771
UPP2	Abnormal plasma cell	ACC	0.132233004
UPP2	Activated b cell	ACC	0.006540738
UPP2	Activated cd4+ t cell	ACC	0.242152354
UPP2	Activated t cell	ACC	0.106345677
UPP2	Alanine, aspartate and glu	ACC	0.105217066
UPP2	Alcala_apoptosis	ACC	-0.109010669
UPP2	Alpha-linolenic acid meta	ACC	0.049821263
UPP2	Amino sugar and nucleoti	ACC	0.145156733
UPP2	Ampk_pathway	ACC	-0.224845045
UPP2	Angiogenesis	ACC	-0.123688877
UPP2	Arachidonic acid metabo	ACC	-0.016702591
UPP2	Arginine and proline metε	ACC	0.289250335
UPP2	Arginine biosynthesis	ACC	0.060503213
UPP2	Ascorbate and aldarate mε	ACC	0.37897866
UPP2	Atypical memory b cell	ACC	0.09800525
UPP2	Axl+siglec6+ dendritic ce	ACC	-0.043182243
UPP2	B cell	ACC	0.130984581
UPP2	B1 cell	ACC	-0.078883822
UPP2	Basal cell	ACC	-0.101963685
UPP2	Beta-alanine metabolism	ACC	0.084931675
UPP2	Biosynthesis of unsaturate	ACC	-0.224166534
UPP2	Biotin metabolism	ACC	0.062885441
UPP2	Butanoate metabolism	ACC	0.159117035
UPP2	Caffeine metabolism	ACC	0.247354332
UPP2	Cancer stem cell	ACC	-0.011703857
UPP2	Cancer stem-like cell	ACC	0.093977168
UPP2	Cd4+ cytotoxic t cell	ACC	0.164179445

UPP2	Cd4+ memory t cell	ACC	0.248382818
UPP2	Cd4+ regulatory t cell	ACC	0.166060551
UPP2	Cd4+ t helper cell	ACC	0.202579038
UPP2	Cd4+cd25+ regulatory t c	ACC	0.201064485
UPP2	Cd8+ cytotoxic t cell	ACC	0.101412032
UPP2	Cd8+ regulatory t cell	ACC	0.130561117
UPP2	Cell_cycle	ACC	-0.265616505
UPP2	Chandran_metastasis_top5	ACC	0.149900393
UPP2	Citrate cycle (tca cycle)	ACC	0.124600724
UPP2	Cysteine and methionine r	ACC	-0.005005306
UPP2	Cytokine induced killer c	ACC	0.285980709
UPP2	D-arginine and d-ornithin	ACC	-0.080881743
UPP2	D-glutamine and d-glutan	ACC	0.013461783
UPP2	Dendritic cell	ACC	0.103132835
UPP2	Dna_repair	ACC	-0.356476848
UPP2	Dna_replication	ACC	-0.246060066
UPP2	Double-negative memory	ACC	0.095438709
UPP2	Drug metabolism - cytoch	ACC	0.391329865
UPP2	Drug metabolism - other	ACC	0.056325049
UPP2	E2f_targets	ACC	-0.253752348
UPP2	Ecm_receptor_interaction	ACC	-0.272027398
UPP2	Effector cd4+ memory t (	ACC	0.224950883
UPP2	Effector cd8+ memory t (	ACC	0.145118684
UPP2	Effector memory t cell	ACC	0.266295856
UPP2	Effector regulatory t (treg	ACC	0.187302187
UPP2	Elvidge_hif1a_targets_up	ACC	0.040513296
UPP2	Endothelial cell	ACC	-0.118840792
UPP2	Eosinophil	ACC	0.13031132
UPP2	Ether lipid metabolism	ACC	0.077531779
UPP2	Exhausted cd4+ t cell	ACC	0.015787167
UPP2	Exhausted cd8+ t cell	ACC	0.051089451
UPP2	Exhausted t cell	ACC	0.183208744
UPP2	Fat cell (adipocyte)	ACC	0.093144311
UPP2	Fatty acid biosynthesis	ACC	0.123647837
UPP2	Fatty acid degradation	ACC	0.058986479
UPP2	Fatty acid elongation	ACC	-0.084888101
UPP2	Fibroblast	ACC	0.00555827
UPP2	Folate biosynthesis	ACC	0.050707267
UPP2	Follicular b cell	ACC	0.172215285
UPP2	Follicular dendritic cell	ACC	-0.076895988
UPP2	Follicular helper (tfh) t ce	ACC	0.144516199
UPP2	Follicular t cell	ACC	0.113877268
UPP2	Foxp3+il-17+ t cell	ACC	-0.224662367

UPP2	Fructose and mannose me ACC	0.217136601
UPP2	G2m_checkpoint ACC	-0.269827174
UPP2	Galactose metabolism ACC	0.016433206
UPP2	Galie_tumor_stemness_ge ACC	-0.120690781
UPP2	Glutathione metabolism ACC	-0.119970671
UPP2	Glycerolipid metabolism ACC	0.037460619
UPP2	Glycerophospholipid metε ACC	0.08016906
UPP2	Glycine, serine and threor ACC	-0.04641319
UPP2	Glycolysis / gluconeogene ACC	0.059233391
UPP2	Glycosaminoglycan biosy1 ACC	0.033434751
UPP2	Glycosaminoglycan biosy1 ACC	-0.291900536
UPP2	Glycosaminoglycan biosy1 ACC	-0.079036008
UPP2	Glycosaminoglycan degra ACC	0.088942237
UPP2	Glycosphingolipid biosyn1 ACC	-0.091643598
UPP2	Glycosphingolipid biosyn1 ACC	-0.149685834
UPP2	Glycosphingolipid biosyn1 ACC	-0.280777519
UPP2	Glycosylphosphatidylinos: ACC	0.006928876
UPP2	Glyoxylate and dicarboxy ACC	-0.006384772
UPP2	Granulocyte ACC	0.13090597
UPP2	Hedgehog_signaling ACC	-0.052905104
UPP2	Histidine metabolism ACC	0.174142883
UPP2	Hypoxia ACC	0.013171672
UPP2	Il-17ralpha t cell ACC	0.238529741
UPP2	Il2_stat5_signaling ACC	-0.021799764
UPP2	Il6_jak_stat3_signaling ACC	0.005258048
UPP2	Immune_checkpoints_tunr ACC	0.039367093
UPP2	Immune_inhibition_cytok ACC	-0.088975377
UPP2	Inositol phosphate metabo ACC	-0.102130861
UPP2	Interleukin_6_signaling ACC	0.066769359
UPP2	Jaeger_metastasis_up ACC	-0.136301344
UPP2	Jain_nfkb_signaling ACC	0.114430209
UPP2	Kras_signaling_up ACC	0.087446315
UPP2	Linoleic acid metabolism ACC	0.238952454
UPP2	Lipoic acid metabolism ACC	0.032614655
UPP2	Lysine degradation ACC	-0.055181512
UPP2	Lysosome ACC	0.389730685
UPP2	M1 macrophage ACC	0.103312447
UPP2	M2 macrophage ACC	0.180130607
UPP2	Mannose type o-glycan bi ACC	-0.341811611
UPP2	Mapk_signaling_pathway ACC	-0.018733161
UPP2	Mapk3_erk1_activation ACC	0.144381166
UPP2	Marginal zone b cell ACC	0.196867222
UPP2	Memory b cell ACC	0.200313564

UPP2	Mesenchymal cell	ACC	-0.236030161
UPP2	Mesenchymal stem cell	ACC	0.052378314
UPP2	Metabolism of xenobiotic	ACC	0.263341767
UPP2	Migrating cancer stem cel	ACC	-0.264774523
UPP2	Mitotic_spindle	ACC	-0.167270988
UPP2	Monocyte	ACC	0.142364548
UPP2	Mtor_signaling_pathway	ACC	0.266995523
UPP2	Mtorc1_signaling	ACC	-0.130242211
UPP2	Mucin type o-glycan biosy	ACC	0.163457071
UPP2	Myc_targets_v1	ACC	-0.333810953
UPP2	Myeloid cell	ACC	0.109041718
UPP2	N-glycan biosynthesis	ACC	-0.178542489
UPP2	Naive b cell	ACC	0.037316534
UPP2	Naive cd4+ t cell	ACC	0.248269892
UPP2	Naive cd8+ t cell	ACC	-0.143020173
UPP2	Natural killer cell	ACC	0.093573296
UPP2	Natural killer t (nkt) cell	ACC	-0.011289831
UPP2	Natural regulatory t (treg)	ACC	0.265796275
UPP2	Neomycin, kanamycin an	ACC	-0.025897781
UPP2	Neutrophil	ACC	0.132718985
UPP2	Nicotinate and nicotinami	ACC	0.233863523
UPP2	Nitrogen metabolism	ACC	0.380073586
UPP2	Nod_like_receptor_signal	ACC	0.023689626
UPP2	Notch_signaling	ACC	-0.112805789
UPP2	One carbon pool by folate	ACC	-0.359992534
UPP2	Other glycan degradation	ACC	0.254013305
UPP2	Other types of o-glycan b	ACC	-0.221477709
UPP2	Oxidative phosphorylatio	ACC	0.301728589
UPP2	P53_pathway	ACC	0.081785924
UPP2	P53_signaling_pathway	ACC	-0.274861955
UPP2	Pantothenate and coa bios	ACC	0.228582738
UPP2	Pentose and glucuronate i	ACC	0.397605594
UPP2	Pentose phosphate pathwa	ACC	0.078093387
UPP2	Pericyte	ACC	0.070526038
UPP2	Phenylalanine metabolism	ACC	0.151837762
UPP2	Phenylalanine, tyrosine ar	ACC	0.100038716
UPP2	Phosphonate and phosphir	ACC	0.092433124
UPP2	Pi3k_akt_activation	ACC	0.11737387
UPP2	Pi3k_akt_mtor_signaling	ACC	-0.023014095
UPP2	Porphyrin and chlorophyl	ACC	0.218593309
UPP2	Primary bile acid biosynt	ACC	0.454044934
UPP2	Propanoate metabolism	ACC	0.043859277
UPP2	Purine metabolism	ACC	-0.294194659

UPP2	Pyrimidine metabolism	ACC	-0.240958311
UPP2	Pyruvate metabolism	ACC	0.006209152
UPP2	Regulation_of_autophagy	ACC	0.284699825
UPP2	Retinol metabolism	ACC	0.319583145
UPP2	Riboflavin metabolism	ACC	-0.02669979
UPP2	Schmahl_pdgf_signaling	ACC	0.037827509
UPP2	Selenocompound metabol	ACC	-0.013168141
UPP2	Signaling_by_hippo	ACC	-0.186087454
UPP2	Sphingolipid metabolism	ACC	0.034092824
UPP2	Starch and sucrose metabo	ACC	0.165906512
UPP2	Steroid biosynthesis	ACC	-0.030934589
UPP2	Steroid hormone biosynth	ACC	0.32773263
UPP2	Sulfur metabolism	ACC	0.149263298
UPP2	Synthesis and degradation	ACC	0.020518575
UPP2	T helper cell	ACC	0.167980614
UPP2	T helper1 (th1) cell	ACC	0.132542765
UPP2	T helper17 (th17) cell	ACC	0.079967813
UPP2	T helper2 (th2) cell	ACC	0.171087998
UPP2	T helper9 (th9) cell	ACC	0.078853455
UPP2	Taurine and hypotaurine r	ACC	-0.108309498
UPP2	Terpenoid backbone biosy	ACC	-0.174793147
UPP2	Tgf_beta_signaling_pathw	ACC	-0.346586501
UPP2	Thiamine metabolism	ACC	-0.03125088
UPP2	Tnfa_signaling_via_nfbk	ACC	-0.150266291
UPP2	Tryptophan metabolism	ACC	0.06442235
UPP2	Tumor endothelial cell	ACC	-0.18408661
UPP2	Tyrosine metabolism	ACC	0.191382938
UPP2	Ubiquinone and other ter	ACC	0.046633073
UPP2	Valine, leucine and isoleu	ACC	-0.13718906
UPP2	Valine, leucine and isoleu	ACC	0.084834408
UPP2	Vascular endothelial cell	ACC	0.042120817
UPP2	Vascular smooth muscle c	ACC	-0.033483611
UPP2	Vegf_signaling_pathway	ACC	0.010111086
UPP2	Vitamin b6 metabolism	ACC	-0.118740434
UPP2	Willert_wnt_signaling	ACC	-0.443598149
UPP2	Wnt_beta_catenin_signali	ACC	-0.261734412
CDA	Abnormal plasma cell	BLCA	0.233192265
CDA	Activated b cell	BLCA	0.294148378
CDA	Activated cd4+ t cell	BLCA	0.360864128
CDA	Activated t cell	BLCA	0.34827046
CDA	Alanine, aspartate and glu	BLCA	-0.352713207
CDA	Alcala_apoptosis	BLCA	0.314632967
CDA	Alpha-linolenic acid meta	BLCA	-0.28230882

CDA	Amino sugar and nucleoti	BLCA	0.271528589
CDA	Ampk_pathway	BLCA	-0.017753753
CDA	Angiogenesis	BLCA	0.514421893
CDA	Arachidonic acid metabol	BLCA	-0.0064885
CDA	Arginine and proline metε	BLCA	0.078224036
CDA	Arginine biosynthesis	BLCA	-0.150705939
CDA	Ascorbate and aldarate mε	BLCA	-0.397212871
CDA	Atypical memory b cell	BLCA	0.164487221
CDA	Axl+siglec6+ dendritic ce	BLCA	0.434891405
CDA	B cell	BLCA	0.246109395
CDA	B1 cell	BLCA	0.198658869
CDA	Basal cell	BLCA	0.281043009
CDA	Beta-alanine metabolism	BLCA	-0.164453535
CDA	Biosynthesis of unsaturate	BLCA	-0.117176343
CDA	Biotin metabolism	BLCA	-0.299890413
CDA	Butanoate metabolism	BLCA	-0.420303921
CDA	Caffeine metabolism	BLCA	-0.1158374
CDA	Cancer stem cell	BLCA	0.501897031
CDA	Cancer stem-like cell	BLCA	0.25971103
CDA	Cd4+ cytotoxic t cell	BLCA	0.398780156
CDA	Cd4+ memory t cell	BLCA	0.132353182
CDA	Cd4+ regulatory t cell	BLCA	0.361781546
CDA	Cd4+ t helper cell	BLCA	0.30256534
CDA	Cd4+cd25+ regulatory t c	BLCA	0.319246073
CDA	Cd8+ cytotoxic t cell	BLCA	0.32810943
CDA	Cd8+ regulatory t cell	BLCA	0.304235483
CDA	Cell_cycle	BLCA	0.120837385
CDA	Chandran_metastasis_top ⁵	BLCA	-0.289107627
CDA	Citrate cycle (tca cycle)	BLCA	-0.106713487
CDA	Cysteine and methionine r	BLCA	-0.246610062
CDA	Cytokine induced killer cε	BLCA	0.275341767
CDA	D-arginine and d-ornithin	BLCA	0.089604727
CDA	D-glutamine and d-glutan	BLCA	-0.124439918
CDA	Dendritic cell	BLCA	0.47144398
CDA	Dna_repair	BLCA	0.058125442
CDA	Dna_replication	BLCA	0.16653568
CDA	Double-negative memory	BLCA	0.174267045
CDA	Drug metabolism - cytoch	BLCA	-0.37579158
CDA	Drug metabolism - other ε	BLCA	-0.060969614
CDA	E2f_targets	BLCA	0.096025655
CDA	Ecm_receptor_interaction	BLCA	0.529940489
CDA	Effector cd4+ memory t (	BLCA	0.093061946
CDA	Effector cd8+ memory t (	BLCA	0.47064974

CDA	Effector memory t cell	BLCA	0.24123284
CDA	Effector regulatory t (treg	BLCA	0.372051269
CDA	Elvidge_hif1a_targets_up	BLCA	0.112029593
CDA	Endothelial cell	BLCA	0.455717353
CDA	Eosinophil	BLCA	0.421000608
CDA	Ether lipid metabolism	BLCA	-0.13580651
CDA	Exhausted cd4+ t cell	BLCA	0.456267303
CDA	Exhausted cd8+ t cell	BLCA	0.403460385
CDA	Exhausted t cell	BLCA	0.270031084
CDA	Fat cell (adipocyte)	BLCA	-0.065637932
CDA	Fatty acid biosynthesis	BLCA	-0.39918837
CDA	Fatty acid degradation	BLCA	-0.503745923
CDA	Fatty acid elongation	BLCA	0.047126636
CDA	Fibroblast	BLCA	0.472885207
CDA	Folate biosynthesis	BLCA	-0.187516591
CDA	Follicular b cell	BLCA	0.209940674
CDA	Follicular dendritic cell	BLCA	0.174402406
CDA	Follicular helper (tfh) t ce	BLCA	0.337617196
CDA	Follicular t cell	BLCA	0.279378993
CDA	Foxp3+il-17+ t cell	BLCA	0.190841427
CDA	Fructose and mannose me	BLCA	-0.008720489
CDA	G2m_checkpoint	BLCA	0.094936396
CDA	Galactose metabolism	BLCA	0.289901568
CDA	Galie_tumor_stemness_ge	BLCA	0.440301641
CDA	Glutathione metabolism	BLCA	-0.092792454
CDA	Glycerolipid metabolism	BLCA	-0.211285089
CDA	Glycerophospholipid met	BLCA	-0.189240124
CDA	Glycine, serine and threor	BLCA	-0.201415537
CDA	Glycolysis / gluconeogene	BLCA	-0.106424497
CDA	Glycosaminoglycan biosy	BLCA	0.590110775
CDA	Glycosaminoglycan biosy	BLCA	0.186003299
CDA	Glycosaminoglycan biosy	BLCA	0.258225552
CDA	Glycosaminoglycan degra	BLCA	0.236177417
CDA	Glycosphingolipid biosyn	BLCA	0.298621307
CDA	Glycosphingolipid biosyn	BLCA	0.134900979
CDA	Glycosphingolipid biosyn	BLCA	0.161939112
CDA	Glycosylphosphatidylinos	BLCA	-0.345012413
CDA	Glyoxylate and dicarboxy	BLCA	-0.224362548
CDA	Granulocyte	BLCA	0.487295942
CDA	Hedgehog_signaling	BLCA	0.324730958
CDA	Histidine metabolism	BLCA	-0.092002574
CDA	Hypoxia	BLCA	0.488191908
CDA	Il-17ralpha t cell	BLCA	0.319418342

CDA	Il2_stat5_signaling	BLCA	0.516313338
CDA	Il6_jak_stat3_signaling	BLCA	0.510295233
CDA	Immune_checkpoints_tunr	BLCA	0.37995795
CDA	Immune_inhibition_cytok	BLCA	0.507254358
CDA	Inositol phosphate metabo	BLCA	-0.251318514
CDA	Interleukin_6_signaling	BLCA	0.341851266
CDA	Jaeger_metastasis_up	BLCA	0.341510312
CDA	Jain_nfkb_signaling	BLCA	-0.103810881
CDA	Kras_signaling_up	BLCA	0.477952397
CDA	Linoleic acid metabolism	BLCA	-0.329960687
CDA	Lipoic acid metabolism	BLCA	-0.379313062
CDA	Lysine degradation	BLCA	-0.260745688
CDA	Lysosome	BLCA	0.244025205
CDA	M1 macrophage	BLCA	0.387454594
CDA	M2 macrophage	BLCA	0.472170784
CDA	Mannose type o-glycan bi	BLCA	0.042538117
CDA	Mapk_signaling_pathway	BLCA	0.415320134
CDA	Mapk3_erk1_activation	BLCA	0.302974637
CDA	Marginal zone b cell	BLCA	0.253479329
CDA	Memory b cell	BLCA	0.301366368
CDA	Mesenchymal cell	BLCA	0.534496836
CDA	Mesenchymal stem cell	BLCA	0.498172876
CDA	Metabolism of xenobiotic	BLCA	-0.366905035
CDA	Migrating cancer stem cel	BLCA	0.221053459
CDA	Mitotic_spindle	BLCA	0.150811188
CDA	Monocyte	BLCA	0.484395522
CDA	Mtor_signaling_pathway	BLCA	-0.00252868
CDA	Mtorc1_signaling	BLCA	0.209944906
CDA	Mucin type o-glycan biosy	BLCA	0.101664236
CDA	Myc_targets_v1	BLCA	0.108768129
CDA	Myeloid cell	BLCA	0.406106999
CDA	N-glycan biosynthesis	BLCA	-0.005851625
CDA	Naive b cell	BLCA	0.186955781
CDA	Naive cd4+ t cell	BLCA	0.115946509
CDA	Naive cd8+ t cell	BLCA	0.037605602
CDA	Natural killer cell	BLCA	0.372583592
CDA	Natural killer t (nkt) cell	BLCA	0.101671427
CDA	Natural regulatory t (treg)	BLCA	0.198517032
CDA	Neomycin, kanamycin an	BLCA	0.402223679
CDA	Neutrophil	BLCA	0.527282327
CDA	Nicotinate and nicotinami	BLCA	0.22986025
CDA	Nitrogen metabolism	BLCA	-0.111258462
CDA	Nod_like_receptor_signal	BLCA	0.475701948

CDA	Notch_signaling	BLCA	0.188480934
CDA	One carbon pool by folate	BLCA	0.002661032
CDA	Other glycan degradation	BLCA	-0.081906965
CDA	Other types of o-glycan b	BLCA	0.274773507
CDA	Oxidative phosphorylatior	BLCA	-0.055294681
CDA	P53_pathway	BLCA	0.30984133
CDA	P53_signaling_pathway	BLCA	0.024567552
CDA	Pantothenate and coa bios	BLCA	0.26997674
CDA	Pentose and glucuronate i	BLCA	-0.41839038
CDA	Pentose phosphate pathwa	BLCA	0.022958884
CDA	Pericyte	BLCA	0.510560147
CDA	Phenylalanine metabolism	BLCA	-0.151133514
CDA	Phenylalanine, tyrosine ar	BLCA	-0.093602551
CDA	Phosphonate and phosphir	BLCA	-0.297701839
CDA	Pi3k_akt_activation	BLCA	0.095810912
CDA	Pi3k_akt_mtor_signaling	BLCA	0.181526228
CDA	Porphyrin and chlorophyl	BLCA	-0.24742687
CDA	Primary bile acid biosynt	BLCA	0.004530207
CDA	Propanoate metabolism	BLCA	-0.473599799
CDA	Purine metabolism	BLCA	0.229527189
CDA	Pyrimidine metabolism	BLCA	0.238960049
CDA	Pyruvate metabolism	BLCA	-0.132492911
CDA	Regulation_of_autophagy	BLCA	0.007642581
CDA	Retinol metabolism	BLCA	-0.328245383
CDA	Riboflavin metabolism	BLCA	0.340883579
CDA	Schmahl_pdgf_signaling	BLCA	0.008304823
CDA	Selenocompound metabol	BLCA	-0.043022505
CDA	Signaling_by_hippo	BLCA	0.132542845
CDA	Sphingolipid metabolism	BLCA	0.058587903
CDA	Starch and sucrose metabo	BLCA	0.271168758
CDA	Steroid biosynthesis	BLCA	-0.052846035
CDA	Steroid hormone biosynth	BLCA	-0.335487564
CDA	Sulfur metabolism	BLCA	-0.198497277
CDA	Synthesis and degradation	BLCA	-0.175754783
CDA	T helper cell	BLCA	0.375358972
CDA	T helper1 (th1) cell	BLCA	0.423939883
CDA	T helper17 (th17) cell	BLCA	0.365509843
CDA	T helper2 (th2) cell	BLCA	0.268404349
CDA	T helper9 (th9) cell	BLCA	0.165589298
CDA	Taurine and hypotaurine r	BLCA	-0.204393637
CDA	Terpenoid backbone biosy	BLCA	-0.093798897
CDA	Tgf_beta_signaling_pathw	BLCA	0.169419834
CDA	Thiamine metabolism	BLCA	0.142188296

CDA	Tnfa_signaling_via_nfk	BLCA	0.497238071
CDA	Tryptophan metabolism	BLCA	-0.048823374
CDA	Tumor endothelial cell	BLCA	0.335198986
CDA	Tyrosine metabolism	BLCA	-0.267807859
CDA	Ubiquinone and other ter	BLCA	-0.073760482
CDA	Valine, leucine and isoleu	BLCA	0.139918599
CDA	Valine, leucine and isoleu	BLCA	-0.469764949
CDA	Vascular endothelial cell	BLCA	0.347778971
CDA	Vascular smooth muscle c	BLCA	0.266553164
CDA	Vegf_signaling_pathway	BLCA	0.206292158
CDA	Vitamin b6 metabolism	BLCA	0.148967246
CDA	Willert_wnt_signaling	BLCA	-0.0635283
CDA	Wnt_beta_catenin_signali	BLCA	0.20359668
UCK1	Abnormal plasma cell	BLCA	0.052284644
UCK1	Activated b cell	BLCA	0.087360476
UCK1	Activated cd4+ t cell	BLCA	0.015580206
UCK1	Activated t cell	BLCA	0.053153195
UCK1	Alanine, aspartate and glu	BLCA	-0.247225197
UCK1	Alcala_apoptosis	BLCA	0.060657653
UCK1	Alpha-linolenic acid meta	BLCA	-0.213785216
UCK1	Amino sugar and nucleoti	BLCA	0.00215971
UCK1	Ampk_pathway	BLCA	0.077231967
UCK1	Angiogenesis	BLCA	-0.062367525
UCK1	Arachidonic acid metabol	BLCA	-0.095207472
UCK1	Arginine and proline metæ	BLCA	-0.013691568
UCK1	Arginine biosynthesis	BLCA	-0.264161569
UCK1	Ascorbate and aldarate mε	BLCA	-0.269823326
UCK1	Atypical memory b cell	BLCA	0.071841509
UCK1	Axl+siglec6+ dendritic ce	BLCA	0.051057409
UCK1	B cell	BLCA	0.020260261
UCK1	B1 cell	BLCA	0.041280151
UCK1	Basal cell	BLCA	-0.165659201
UCK1	Beta-alanine metabolism	BLCA	-0.143173704
UCK1	Biosynthesis of unsaturate	BLCA	-0.019076271
UCK1	Biotin metabolism	BLCA	-0.0450605
UCK1	Butanoate metabolism	BLCA	-0.060530244
UCK1	Caffeine metabolism	BLCA	-0.01904755
UCK1	Cancer stem cell	BLCA	-0.090233484
UCK1	Cancer stem-like cell	BLCA	0.056158088
UCK1	Cd4+ cytotoxic t cell	BLCA	0.05010719
UCK1	Cd4+ memory t cell	BLCA	-0.053180628
UCK1	Cd4+ regulatory t cell	BLCA	0.0278564
UCK1	Cd4+ t helper cell	BLCA	0.016316547

UCK1	Cd4+cd25+ regulatory t c	BLCA	0.016167569
UCK1	Cd8+ cytotoxic t cell	BLCA	0.0672381
UCK1	Cd8+ regulatory t cell	BLCA	0.03177823
UCK1	Cell_cycle	BLCA	0.02060435
UCK1	Chandran_metastasis_top5	BLCA	-0.244296944
UCK1	Citrate cycle (tca cycle)	BLCA	-0.048690383
UCK1	Cysteine and methionine r	BLCA	-0.067241866
UCK1	Cytokine induced killer c	BLCA	0.085568797
UCK1	D-arginine and d-ornithin	BLCA	0.082032814
UCK1	D-glutamine and d-glutan	BLCA	-0.398222565
UCK1	Dendritic cell	BLCA	0.045887867
UCK1	Dna_repair	BLCA	0.292203356
UCK1	Dna_replication	BLCA	0.260515046
UCK1	Double-negative memory	BLCA	0.099015887
UCK1	Drug metabolism - cytoch	BLCA	-0.236564663
UCK1	Drug metabolism - other c	BLCA	-0.058192874
UCK1	E2f_targets	BLCA	0.101463051
UCK1	Ecm_receptor_interaction	BLCA	-0.040977033
UCK1	Effector cd4+ memory t (	BLCA	-0.111921066
UCK1	Effector cd8+ memory t (	BLCA	0.016784595
UCK1	Effector memory t cell	BLCA	-0.054345069
UCK1	Effector regulatory t (treg	BLCA	0.005624192
UCK1	Elvidge_hif1a_targets_up	BLCA	-0.195763519
UCK1	Endothelial cell	BLCA	0.012649424
UCK1	Eosinophil	BLCA	0.012751025
UCK1	Ether lipid metabolism	BLCA	-0.312432939
UCK1	Exhausted cd4+ t cell	BLCA	0.001474418
UCK1	Exhausted cd8+ t cell	BLCA	-0.033263665
UCK1	Exhausted t cell	BLCA	0.054523612
UCK1	Fat cell (adipocyte)	BLCA	0.075189093
UCK1	Fatty acid biosynthesis	BLCA	-0.231560338
UCK1	Fatty acid degradation	BLCA	-0.210636026
UCK1	Fatty acid elongation	BLCA	0.108247899
UCK1	Fibroblast	BLCA	0.001529364
UCK1	Folate biosynthesis	BLCA	0.029012278
UCK1	Follicular b cell	BLCA	-0.011193453
UCK1	Follicular dendritic cell	BLCA	0.037505032
UCK1	Follicular helper (tfh) t ce	BLCA	0.015175489
UCK1	Follicular t cell	BLCA	0.096324136
UCK1	Foxp3+il-17+ t cell	BLCA	-0.010519478
UCK1	Fructose and mannose me	BLCA	-0.083457307
UCK1	G2m_checkpoint	BLCA	0.000283142
UCK1	Galactose metabolism	BLCA	-0.001414424

UCK1	Galie_tumor_stemness_ge	BLCA	-0.052550393
UCK1	Glutathione metabolism	BLCA	-0.12597196
UCK1	Glycerolipid metabolism	BLCA	-0.113258433
UCK1	Glycerophospholipid met	BLCA	-0.176152251
UCK1	Glycine, serine and threor	BLCA	0.060360801
UCK1	Glycolysis / gluconeogene	BLCA	-0.120451873
UCK1	Glycosaminoglycan biosyn	BLCA	0.152421842
UCK1	Glycosaminoglycan biosyn	BLCA	-0.063429485
UCK1	Glycosaminoglycan biosyn	BLCA	0.038240338
UCK1	Glycosaminoglycan degra	BLCA	-0.034923588
UCK1	Glycosphingolipid biosyn	BLCA	0.08462911
UCK1	Glycosphingolipid biosyn	BLCA	-0.118308323
UCK1	Glycosphingolipid biosyn	BLCA	-0.061970052
UCK1	Glycosylphosphatidylinos	BLCA	-0.072826648
UCK1	Glyoxylate and dicarboxy	BLCA	0.108111346
UCK1	Granulocyte	BLCA	0.058838719
UCK1	Hedgehog_signaling	BLCA	-0.053073202
UCK1	Histidine metabolism	BLCA	-0.039151071
UCK1	Hypoxia	BLCA	-0.095718368
UCK1	Il-17ralpha t cell	BLCA	0.005178021
UCK1	Il2_stat5_signaling	BLCA	-0.024187175
UCK1	Il6_jak_stat3_signaling	BLCA	-0.040416394
UCK1	Immune_checkpoints_tur	BLCA	0.044245285
UCK1	Immune_inhibition_cytok	BLCA	0.071054326
UCK1	Inositol phosphate metabo	BLCA	-0.404936944
UCK1	Interleukin_6_signaling	BLCA	-0.188659531
UCK1	Jaeger_metastasis_up	BLCA	0.128931774
UCK1	Jain_nfkb_signaling	BLCA	-0.146260506
UCK1	Kras_signaling_up	BLCA	-0.109667152
UCK1	Linoleic acid metabolism	BLCA	-0.19299669
UCK1	Lipoic acid metabolism	BLCA	-0.039667626
UCK1	Lysine degradation	BLCA	0.11232652
UCK1	Lysosome	BLCA	-0.088182023
UCK1	M1 macrophage	BLCA	-0.057208961
UCK1	M2 macrophage	BLCA	0.02286539
UCK1	Mannose type o-glycan bi	BLCA	0.317838214
UCK1	Mapk_signaling_pathway	BLCA	-0.16843816
UCK1	Mapk3_erk1_activation	BLCA	-0.196223434
UCK1	Marginal zone b cell	BLCA	0.006023507
UCK1	Memory b cell	BLCA	0.081226348
UCK1	Mesenchymal cell	BLCA	0.068689248
UCK1	Mesenchymal stem cell	BLCA	-0.013689453
UCK1	Metabolism of xenobiotic	BLCA	-0.184497879

UCK1	Migrating cancer stem cel	BLCA	-0.09297985
UCK1	Mitotic_spindle	BLCA	-0.171971489
UCK1	Monocyte	BLCA	-0.024376367
UCK1	Mtor_signaling_pathway	BLCA	-0.216990054
UCK1	Mtorc1_signaling	BLCA	-0.139167206
UCK1	Mucin type o-glycan bios	BLCA	-0.345844602
UCK1	Myc_targets_v1	BLCA	0.050561145
UCK1	Myeloid cell	BLCA	-0.002757879
UCK1	N-glycan biosynthesis	BLCA	0.050316302
UCK1	Naive b cell	BLCA	0.037872869
UCK1	Naive cd4+ t cell	BLCA	-0.161526966
UCK1	Naive cd8+ t cell	BLCA	-0.100433926
UCK1	Natural killer cell	BLCA	0.045690868
UCK1	Natural killer t (nkt) cell	BLCA	-0.030218383
UCK1	Natural regulatory t (treg)	BLCA	-0.101003434
UCK1	Neomycin, kanamycin an	BLCA	-0.025683194
UCK1	Neutrophil	BLCA	-0.021318564
UCK1	Nicotinate and nicotinami	BLCA	0.011076569
UCK1	Nitrogen metabolism	BLCA	-0.151085794
UCK1	Nod_like_receptor_signal	BLCA	-0.088557873
UCK1	Notch_signaling	BLCA	-0.258456746
UCK1	One carbon pool by folate	BLCA	0.073255843
UCK1	Other glycan degradation	BLCA	-0.050989176
UCK1	Other types of o-glycan b	BLCA	0.380271665
UCK1	Oxidative phosphorylatio	BLCA	0.153005983
UCK1	P53_pathway	BLCA	-0.171166097
UCK1	P53_signaling_pathway	BLCA	-0.329703583
UCK1	Pantothenate and coa bios	BLCA	0.064211378
UCK1	Pentose and glucuronate i	BLCA	-0.271868697
UCK1	Pentose phosphate pathwa	BLCA	0.016172642
UCK1	Pericyte	BLCA	0.073575452
UCK1	Phenylalanine metabolism	BLCA	-0.098937896
UCK1	Phenylalanine, tyrosine ar	BLCA	0.086231154
UCK1	Phosphonate and phosphir	BLCA	-0.039002698
UCK1	Pi3k_akt_activation	BLCA	-0.241190221
UCK1	Pi3k_akt_mtor_signaling	BLCA	-0.236331104
UCK1	Porphyrin and chlorophyl	BLCA	-0.112276153
UCK1	Primary bile acid biosynt	BLCA	0.033654622
UCK1	Propanoate metabolism	BLCA	-0.309929925
UCK1	Purine metabolism	BLCA	0.137512772
UCK1	Pyrimidine metabolism	BLCA	0.219588101
UCK1	Pyruvate metabolism	BLCA	0.100773958
UCK1	Regulation_of_autophagy	BLCA	0.024874379

UCK1	Retinol metabolism	BLCA	-0.209483802
UCK1	Riboflavin metabolism	BLCA	0.383638322
UCK1	Schmahl_pdgf_signaling	BLCA	-0.280749387
UCK1	Selenocompound metabol	BLCA	-0.002829807
UCK1	Signaling_by_hippo	BLCA	-0.127836391
UCK1	Sphingolipid metabolism	BLCA	-0.091414551
UCK1	Starch and sucrose metabo	BLCA	-0.046962701
UCK1	Steroid biosynthesis	BLCA	-0.058992735
UCK1	Steroid hormone biosynth	BLCA	-0.217197483
UCK1	Sulfur metabolism	BLCA	-0.259626518
UCK1	Synthesis and degradation	BLCA	0.106551481
UCK1	T helper cell	BLCA	0.022964724
UCK1	T helper1 (th1) cell	BLCA	0.034291077
UCK1	T helper17 (th17) cell	BLCA	-0.068058414
UCK1	T helper2 (th2) cell	BLCA	-0.071640074
UCK1	T helper9 (th9) cell	BLCA	-0.037613805
UCK1	Taurine and hypotaurine r	BLCA	0.119402523
UCK1	Terpenoid backbone biosy	BLCA	-0.051973751
UCK1	Tgf_beta_signaling_pathw	BLCA	-0.294248024
UCK1	Thiamine metabolism	BLCA	0.342717282
UCK1	Tnfa_signaling_via_nfkb	BLCA	-0.101922457
UCK1	Tryptophan metabolism	BLCA	0.080469683
UCK1	Tumor endothelial cell	BLCA	0.037410724
UCK1	Tyrosine metabolism	BLCA	-0.124671134
UCK1	Ubiquinone and other terp	BLCA	0.095955866
UCK1	Valine, leucine and isoleu	BLCA	0.050850061
UCK1	Valine, leucine and isoleu	BLCA	-0.139228592
UCK1	Vascular endothelial cell	BLCA	0.055993387
UCK1	Vascular smooth muscle c	BLCA	0.023587808
UCK1	Vegf_signaling_pathway	BLCA	-0.277943182
UCK1	Vitamin b6 metabolism	BLCA	0.178086072
UCK1	Willert_wnt_signaling	BLCA	-0.194275627
UCK1	Wnt_beta_catenin_signali	BLCA	-0.092448312
UCK2	Abnormal plasma cell	BLCA	0.003135892
UCK2	Activated b cell	BLCA	0.062954573
UCK2	Activated cd4+ t cell	BLCA	0.040697641
UCK2	Activated t cell	BLCA	0.060446807
UCK2	Alanine, aspartate and glu	BLCA	0.062493773
UCK2	Alcala_apoptosis	BLCA	0.177276896
UCK2	Alpha-linolenic acid meta	BLCA	-0.260564293
UCK2	Amino sugar and nucleoti	BLCA	0.17468624
UCK2	Ampk_pathway	BLCA	0.10449987
UCK2	Angiogenesis	BLCA	0.023778372

UCK2	Arachidonic acid metabolism	BLCA	-0.227407161
UCK2	Arginine and proline metabolism	BLCA	0.122888943
UCK2	Arginine biosynthesis	BLCA	-0.090491448
UCK2	Ascorbate and aldarate metabolism	BLCA	-0.238673742
UCK2	Atypical memory b cell	BLCA	-0.019344719
UCK2	Axl+siglec6+ dendritic cell	BLCA	-0.093268379
UCK2	B cell	BLCA	-0.087888557
UCK2	B1 cell	BLCA	0.006403739
UCK2	Basal cell	BLCA	0.010331809
UCK2	Beta-alanine metabolism	BLCA	-0.069103215
UCK2	Biosynthesis of unsaturated fatty acids	BLCA	0.052457703
UCK2	Biotin metabolism	BLCA	-0.04407581
UCK2	Butanoate metabolism	BLCA	-0.105983544
UCK2	Caffeine metabolism	BLCA	-0.056399798
UCK2	Cancer stem cell	BLCA	0.037089539
UCK2	Cancer stem-like cell	BLCA	0.036149868
UCK2	Cd4+ cytotoxic t cell	BLCA	0.01177961
UCK2	Cd4+ memory t cell	BLCA	-0.074597528
UCK2	Cd4+ regulatory t cell	BLCA	0.024507481
UCK2	Cd4+ t helper cell	BLCA	-0.018650861
UCK2	Cd4+cd25+ regulatory t cell	BLCA	0.001981095
UCK2	Cd8+ cytotoxic t cell	BLCA	0.093183875
UCK2	Cd8+ regulatory t cell	BLCA	0.099340648
UCK2	Cell cycle	BLCA	0.375336667
UCK2	Chandran_metastasis_top2	BLCA	0.158354443
UCK2	Citrate cycle (tricarballic acid cycle)	BLCA	0.143471464
UCK2	Cysteine and methionine metabolism	BLCA	0.246426512
UCK2	Cytokine induced killer cell	BLCA	-0.014000126
UCK2	D-arginine and d-ornithine	BLCA	0.091529738
UCK2	D-glutamine and d-glutamate	BLCA	-0.115742275
UCK2	Dendritic cell	BLCA	0.0538796
UCK2	Dna_repair	BLCA	0.363841385
UCK2	Dna_replication	BLCA	0.486846044
UCK2	Double-negative memory t cell	BLCA	-0.024778762
UCK2	Drug metabolism - cytochrome p450	BLCA	-0.255493471
UCK2	Drug metabolism - other	BLCA	0.096432225
UCK2	E2f_targets	BLCA	0.46836081
UCK2	Ecm_receptor_interaction	BLCA	0.003253707
UCK2	Effector cd4+ memory t cell	BLCA	-0.056203693
UCK2	Effector cd8+ memory t cell	BLCA	0.023411536
UCK2	Effector memory t cell	BLCA	0.012129434
UCK2	Effector regulatory t (treg)	BLCA	0.033084131
UCK2	Elvidge_hif1a_targets_up	BLCA	0.242575092

UCK2	Endothelial cell	BLCA	0.111080694
UCK2	Eosinophil	BLCA	0.046710429
UCK2	Ether lipid metabolism	BLCA	-0.351381481
UCK2	Exhausted cd4+ t cell	BLCA	0.034311049
UCK2	Exhausted cd8+ t cell	BLCA	-0.003992167
UCK2	Exhausted t cell	BLCA	0.050745278
UCK2	Fat cell (adipocyte)	BLCA	-0.054492714
UCK2	Fatty acid biosynthesis	BLCA	-0.172549931
UCK2	Fatty acid degradation	BLCA	-0.174150794
UCK2	Fatty acid elongation	BLCA	0.166813022
UCK2	Fibroblast	BLCA	0.045107057
UCK2	Folate biosynthesis	BLCA	0.056018215
UCK2	Follicular b cell	BLCA	-0.070602102
UCK2	Follicular dendritic cell	BLCA	-0.036965534
UCK2	Follicular helper (tfh) t ce	BLCA	-0.003862373
UCK2	Follicular t cell	BLCA	0.090577304
UCK2	Foxp3+il-17+ t cell	BLCA	0.006685322
UCK2	Fructose and mannose me	BLCA	0.007887414
UCK2	G2m_checkpoint	BLCA	0.399796477
UCK2	Galactose metabolism	BLCA	0.044551603
UCK2	Galie_tumor_stemness_ge	BLCA	-0.096240119
UCK2	Glutathione metabolism	BLCA	0.106086971
UCK2	Glycerolipid metabolism	BLCA	-0.08473994
UCK2	Glycerophospholipid met	BLCA	-0.321824355
UCK2	Glycine, serine and threor	BLCA	0.079187537
UCK2	Glycolysis / gluconeogene	BLCA	0.028731442
UCK2	Glycosaminoglycan biosy	BLCA	0.109412512
UCK2	Glycosaminoglycan biosy	BLCA	-0.134607236
UCK2	Glycosaminoglycan biosy	BLCA	0.076134271
UCK2	Glycosaminoglycan degra	BLCA	-0.10885741
UCK2	Glycosphingolipid biosyn	BLCA	-0.119765732
UCK2	Glycosphingolipid biosyn	BLCA	-0.246564143
UCK2	Glycosphingolipid biosyn	BLCA	-0.101800446
UCK2	Glycosylphosphatidylinos	BLCA	0.025719624
UCK2	Glyoxylate and dicarboxy	BLCA	0.146670324
UCK2	Granulocyte	BLCA	0.142032588
UCK2	Hedgehog_signaling	BLCA	-0.072455948
UCK2	Histidine metabolism	BLCA	-0.084820517
UCK2	Hypoxia	BLCA	0.010669203
UCK2	Il-17alpha t cell	BLCA	-0.001179739
UCK2	Il2_stat5_signaling	BLCA	0.050835743
UCK2	Il6_jak_stat3_signaling	BLCA	0.021998101
UCK2	Immune_checkpoints_turr	BLCA	0.036493519

UCK2	Immune_inhibition_cytok	BLCA	0.107530639
UCK2	Inositol phosphate metabo	BLCA	-0.448574369
UCK2	Interleukin_6_signaling	BLCA	-0.017057985
UCK2	Jaeger_metastasis_up	BLCA	0.373625732
UCK2	Jain_nfkb_signaling	BLCA	0.317814862
UCK2	Kras_signaling_up	BLCA	-0.057803845
UCK2	Linoleic acid metabolism	BLCA	-0.303009677
UCK2	Lipoic acid metabolism	BLCA	-0.080001406
UCK2	Lysine degradation	BLCA	0.182920662
UCK2	Lysosome	BLCA	-0.202070157
UCK2	M1 macrophage	BLCA	0.0967804
UCK2	M2 macrophage	BLCA	0.107783788
UCK2	Mannose type o-glycan bi	BLCA	0.170929328
UCK2	Mapk_signaling_pathway	BLCA	-0.091349394
UCK2	Mapk3_erk1_activation	BLCA	0.037208817
UCK2	Marginal zone b cell	BLCA	-0.022730197
UCK2	Memory b cell	BLCA	0.02517665
UCK2	Mesenchymal cell	BLCA	0.087651808
UCK2	Mesenchymal stem cell	BLCA	0.023512218
UCK2	Metabolism of xenobiotic	BLCA	-0.207381625
UCK2	Migrating cancer stem cel	BLCA	0.081136548
UCK2	Mitotic_spindle	BLCA	0.107623249
UCK2	Monocyte	BLCA	0.026608886
UCK2	Mtor_signaling_pathway	BLCA	-0.182943142
UCK2	Mtorc1_signaling	BLCA	0.346820212
UCK2	Mucin type o-glycan biosy	BLCA	-0.277533982
UCK2	Myc_targets_v1	BLCA	0.48256922
UCK2	Myeloid cell	BLCA	0.049388434
UCK2	N-glycan biosynthesis	BLCA	0.116392218
UCK2	Naive b cell	BLCA	-0.00749803
UCK2	Naive cd4+ t cell	BLCA	-0.132366741
UCK2	Naive cd8+ t cell	BLCA	-0.218923433
UCK2	Natural killer cell	BLCA	0.066415575
UCK2	Natural killer t (nkt) cell	BLCA	0.118012057
UCK2	Natural regulatory t (treg)	BLCA	-0.100846878
UCK2	Neomycin, kanamycin an	BLCA	0.057213102
UCK2	Neutrophil	BLCA	0.093000577
UCK2	Nicotinate and nicotinami	BLCA	-0.1210363
UCK2	Nitrogen metabolism	BLCA	-0.017435685
UCK2	Nod_like_receptor_signal	BLCA	0.043344219
UCK2	Notch_signaling	BLCA	-0.105171124
UCK2	One carbon pool by folate	BLCA	0.377802613
UCK2	Other glycan degradation	BLCA	-0.205706529

UCK2	Other types of o-glycan b	BLCA	0.17002478
UCK2	Oxidative phosphorylation	BLCA	0.187606965
UCK2	P53_pathway	BLCA	-0.213285455
UCK2	P53_signaling_pathway	BLCA	-0.149784399
UCK2	Pantothenate and coa biosynthesis	BLCA	0.051433627
UCK2	Pentose and glucuronate interconversions	BLCA	-0.235097263
UCK2	Pentose phosphate pathway	BLCA	0.128906542
UCK2	Pericyte	BLCA	0.042461652
UCK2	Phenylalanine metabolism	BLCA	-0.097839559
UCK2	Phenylalanine, tyrosine and tryptophan metabolism	BLCA	0.046526436
UCK2	Phosphonate and phosphite metabolism	BLCA	-0.044596294
UCK2	Pi3k_akt_activation	BLCA	-0.168719296
UCK2	Pi3k_akt_mtor_signaling	BLCA	-0.038278298
UCK2	Porphyrin and chlorophyll metabolism	BLCA	-0.055401192
UCK2	Primary bile acid biosynthesis	BLCA	-0.114695106
UCK2	Propanoate metabolism	BLCA	-0.20139027
UCK2	Purine metabolism	BLCA	0.457069742
UCK2	Pyrimidine metabolism	BLCA	0.509313546
UCK2	Pyruvate metabolism	BLCA	0.227737996
UCK2	Regulation_of_autophagy	BLCA	0.007993354
UCK2	Retinol metabolism	BLCA	-0.288303846
UCK2	Riboflavin metabolism	BLCA	0.324521243
UCK2	Schmahl_pdgf_signaling	BLCA	-0.336827328
UCK2	Selenocompound metabolism	BLCA	0.138619185
UCK2	Signaling_by_hippo	BLCA	-0.062922869
UCK2	Sphingolipid metabolism	BLCA	-0.1101712
UCK2	Starch and sucrose metabolism	BLCA	-0.149141343
UCK2	Steroid biosynthesis	BLCA	0.163288472
UCK2	Steroid hormone biosynthesis	BLCA	-0.262831222
UCK2	Sulfur metabolism	BLCA	-0.188963924
UCK2	Synthesis and degradation of ribonucleotides	BLCA	0.017798731
UCK2	T helper cell	BLCA	0.01179213
UCK2	T helper1 (th1) cell	BLCA	0.07069572
UCK2	T helper17 (th17) cell	BLCA	-0.004863795
UCK2	T helper2 (th2) cell	BLCA	-0.122750164
UCK2	T helper9 (th9) cell	BLCA	-0.154574885
UCK2	Taurine and hypotaurine metabolism	BLCA	-0.129292761
UCK2	Terpenoid backbone biosynthesis	BLCA	0.231435177
UCK2	Tgf_beta_signaling_pathway	BLCA	-0.1747834
UCK2	Thiamine metabolism	BLCA	0.21044681
UCK2	Tnfa_signaling_via_nfkB	BLCA	0.023191524
UCK2	Tryptophan metabolism	BLCA	0.08403022
UCK2	Tumor endothelial cell	BLCA	0.248312663

UCK2	Tyrosine metabolism	BLCA	-0.210991326
UCK2	Ubiquinone and other terpenoid	BLCA	0.177986911
UCK2	Valine, leucine and isoleucine	BLCA	0.133682007
UCK2	Valine, leucine and isoleucine	BLCA	-0.12274001
UCK2	Vascular endothelial cell	BLCA	0.020944656
UCK2	Vascular smooth muscle cell	BLCA	-0.010277788
UCK2	Vegf_signaling_pathway	BLCA	-0.262658654
UCK2	Vitamin b6 metabolism	BLCA	0.164990199
UCK2	Willert_wnt_signaling	BLCA	0.022260183
UCK2	Wnt_beta_catenin_signaling	BLCA	-0.039646603
UCKL1	Abnormal plasma cell	BLCA	-0.170864234
UCKL1	Activated b cell	BLCA	-0.164056947
UCKL1	Activated cd4+ t cell	BLCA	-0.249543056
UCKL1	Activated t cell	BLCA	-0.225290644
UCKL1	Alanine, aspartate and glutamate	BLCA	0.050071932
UCKL1	Alcalal apoptosis	BLCA	-0.100343743
UCKL1	Alpha-linolenic acid metabolism	BLCA	0.007112123
UCKL1	Amino sugar and nucleotide	BLCA	-0.202933309
UCKL1	Ampk_pathway	BLCA	0.144855778
UCKL1	Angiogenesis	BLCA	-0.287061678
UCKL1	Arachidonic acid metabolism	BLCA	-0.093607218
UCKL1	Arginine and proline metabolism	BLCA	-0.150486741
UCKL1	Arginine biosynthesis	BLCA	-0.000944427
UCKL1	Ascorbate and aldarate metabolism	BLCA	-0.05653072
UCKL1	Atypical memory b cell	BLCA	-0.169859759
UCKL1	Axl+siglec6+ dendritic cell	BLCA	-0.331654748
UCKL1	B cell	BLCA	-0.257196415
UCKL1	B1 cell	BLCA	-0.155741739
UCKL1	Basal cell	BLCA	-0.086089368
UCKL1	Beta-alanine metabolism	BLCA	-0.221516622
UCKL1	Biosynthesis of unsaturated	BLCA	-0.07209484
UCKL1	Biotin metabolism	BLCA	0.102639951
UCKL1	Butanoate metabolism	BLCA	0.065960496
UCKL1	Caffeine metabolism	BLCA	-0.158587293
UCKL1	Cancer stem cell	BLCA	-0.372184994
UCKL1	Cancer stem-like cell	BLCA	-0.211918911
UCKL1	Cd4+ cytotoxic t cell	BLCA	-0.260180121
UCKL1	Cd4+ memory t cell	BLCA	-0.071952462
UCKL1	Cd4+ regulatory t cell	BLCA	-0.242917435
UCKL1	Cd4+ t helper cell	BLCA	-0.228071478
UCKL1	Cd4+cd25+ regulatory t cell	BLCA	-0.230023015
UCKL1	Cd8+ cytotoxic t cell	BLCA	-0.171408883
UCKL1	Cd8+ regulatory t cell	BLCA	-0.234299718

UCKL1	Cell_cycle	BLCA	-0.04328374
UCKL1	Chandran_metastasis_top	BLCA	-0.008722977
UCKL1	Citrate cycle (tca cycle)	BLCA	0.04095451
UCKL1	Cysteine and methionine r	BLCA	0.040984759
UCKL1	Cytokine induced killer c	BLCA	-0.193362488
UCKL1	D-arginine and d-ornithin	BLCA	0.021570035
UCKL1	D-glutamine and d-glutan	BLCA	-0.009057929
UCKL1	Dendritic cell	BLCA	-0.26745061
UCKL1	Dna_repair	BLCA	0.252048454
UCKL1	Dna_replication	BLCA	0.041247516
UCKL1	Double-negative memory	BLCA	-0.098986862
UCKL1	Drug metabolism - cytoch	BLCA	0.01840317
UCKL1	Drug metabolism - other	BLCA	0.106464341
UCKL1	E2f_targets	BLCA	0.009199534
UCKL1	Ecm_receptor_interaction	BLCA	-0.306958158
UCKL1	Effector cd4+ memory t	BLCA	-0.07793827
UCKL1	Effector cd8+ memory t	BLCA	-0.26863537
UCKL1	Effector memory t cell	BLCA	-0.20364292
UCKL1	Effector regulatory t (treg	BLCA	-0.268126476
UCKL1	Elvidge_hif1a_targets_up	BLCA	-0.285984539
UCKL1	Endothelial cell	BLCA	-0.331262094
UCKL1	Eosinophil	BLCA	-0.277148172
UCKL1	Ether lipid metabolism	BLCA	-0.092386955
UCKL1	Exhausted cd4+ t cell	BLCA	-0.345667326
UCKL1	Exhausted cd8+ t cell	BLCA	-0.330510082
UCKL1	Exhausted t cell	BLCA	-0.179779403
UCKL1	Fat cell (adipocyte)	BLCA	0.101035053
UCKL1	Fatty acid biosynthesis	BLCA	0.018498533
UCKL1	Fatty acid degradation	BLCA	0.010017185
UCKL1	Fatty acid elongation	BLCA	-0.029188477
UCKL1	Fibroblast	BLCA	-0.301660156
UCKL1	Folate biosynthesis	BLCA	0.113730664
UCKL1	Follicular b cell	BLCA	-0.201411276
UCKL1	Follicular dendritic cell	BLCA	-0.157263479
UCKL1	Follicular helper (tfh) t ce	BLCA	-0.237614308
UCKL1	Follicular t cell	BLCA	-0.137498981
UCKL1	Foxp3+il-17+ t cell	BLCA	-0.165052552
UCKL1	Fructose and mannose me	BLCA	0.146933394
UCKL1	G2m_checkpoint	BLCA	-0.06406063
UCKL1	Galactose metabolism	BLCA	-0.075257486
UCKL1	Galie_tumor_stemness_ge	BLCA	-0.328055007
UCKL1	Glutathione metabolism	BLCA	-0.011099894
UCKL1	Glycerolipid metabolism	BLCA	0.059114358

UCKL1	Glycerophospholipid metabolism	BLCA	0.16911111
UCKL1	Glycine, serine and threonine metabolism	BLCA	0.03352665
UCKL1	Glycolysis / gluconeogenesis	BLCA	-0.007956644
UCKL1	Glycosaminoglycan biosynthesis	BLCA	-0.190759819
UCKL1	Glycosaminoglycan biosynthesis	BLCA	-0.145839549
UCKL1	Glycosaminoglycan biosynthesis	BLCA	-0.17033552
UCKL1	Glycosaminoglycan degradation	BLCA	-0.199920578
UCKL1	Glycosphingolipid biosynthesis	BLCA	-0.238189894
UCKL1	Glycosphingolipid biosynthesis	BLCA	-0.202168222
UCKL1	Glycosphingolipid biosynthesis	BLCA	-0.228515075
UCKL1	Glycosylphosphatidylinositol signaling	BLCA	0.162116797
UCKL1	Glyoxylate and dicarboxylate metabolism	BLCA	0.130841896
UCKL1	Granulocyte	BLCA	-0.259029412
UCKL1	Hedgehog signaling	BLCA	-0.220179035
UCKL1	Histidine metabolism	BLCA	-0.22898377
UCKL1	Hypoxia	BLCA	-0.242499121
UCKL1	IL-17 receptor signaling	BLCA	-0.225819505
UCKL1	IL2 signaling	BLCA	-0.33284113
UCKL1	IL6 signaling	BLCA	-0.343510329
UCKL1	Immune checkpoints	BLCA	-0.278736084
UCKL1	Immune inhibition	BLCA	-0.238335373
UCKL1	Inositol phosphate metabolism	BLCA	-0.206903401
UCKL1	Interleukin_6 signaling	BLCA	-0.361061242
UCKL1	Jaeger metastasis up	BLCA	-0.175303017
UCKL1	Jain_nfkB signaling	BLCA	0.132836763
UCKL1	Kras signaling up	BLCA	-0.365412637
UCKL1	Linoleic acid metabolism	BLCA	0.01032203
UCKL1	Lipoic acid metabolism	BLCA	0.233783907
UCKL1	Lysine degradation	BLCA	0.054208283
UCKL1	Lysosome	BLCA	-0.245067353
UCKL1	M1 macrophage	BLCA	-0.264912758
UCKL1	M2 macrophage	BLCA	-0.253502864
UCKL1	Mannose type o-glycan biosynthesis	BLCA	0.201816883
UCKL1	Mapk signaling pathway	BLCA	-0.348942916
UCKL1	Mapk3_erk1 activation	BLCA	-0.338400658
UCKL1	Marginal zone b cell	BLCA	-0.256313447
UCKL1	Memory b cell	BLCA	-0.197538711
UCKL1	Mesenchymal cell	BLCA	-0.223774804
UCKL1	Mesenchymal stem cell	BLCA	-0.328581166
UCKL1	Metabolism of xenobiotics	BLCA	0.033316456
UCKL1	Migrating cancer stem cell	BLCA	-0.142847474
UCKL1	Mitotic spindle	BLCA	-0.228667418
UCKL1	Monocyte	BLCA	-0.298286528

UCKL1	Mtor_signaling_pathway	BLCA	-0.172645344
UCKL1	Mtorc1_signaling	BLCA	-0.199234572
UCKL1	Mucin type o-glycan biosynthesis	BLCA	-0.414988719
UCKL1	Myc_targets_v1	BLCA	0.107869927
UCKL1	Myeloid cell	BLCA	-0.290253494
UCKL1	N-glycan biosynthesis	BLCA	-0.135516675
UCKL1	Naive b cell	BLCA	-0.0974134
UCKL1	Naive cd4+ t cell	BLCA	-0.257477268
UCKL1	Naive cd8+ t cell	BLCA	-0.132179348
UCKL1	Natural killer cell	BLCA	-0.238321544
UCKL1	Natural killer t (nkt) cell	BLCA	-0.083441613
UCKL1	Natural regulatory t (treg) cell	BLCA	-0.27689553
UCKL1	Neomycin, kanamycin and streptomycin	BLCA	-0.189023571
UCKL1	Neutrophil	BLCA	-0.301229694
UCKL1	Nicotinate and nicotinamide metabolism	BLCA	-0.203743993
UCKL1	Nitrogen metabolism	BLCA	0.021039988
UCKL1	Nod_like_receptor_signaling	BLCA	-0.301615535
UCKL1	Notch_signaling	BLCA	-0.142930922
UCKL1	One carbon pool by folate	BLCA	0.00079416
UCKL1	Other glycan degradation	BLCA	-0.013024994
UCKL1	Other types of o-glycan biosynthesis	BLCA	0.202461608
UCKL1	Oxidative phosphorylation	BLCA	0.203052856
UCKL1	P53_pathway	BLCA	-0.203088225
UCKL1	P53_signaling_pathway	BLCA	-0.229761789
UCKL1	Pantothenate and coenzyme a biosynthesis	BLCA	-0.123387431
UCKL1	Pentose and glucuronate interconversions	BLCA	0.000388007
UCKL1	Pentose phosphate pathway	BLCA	0.016456215
UCKL1	Pericyte	BLCA	-0.269279135
UCKL1	Phenylalanine metabolism	BLCA	0.03023726
UCKL1	Phenylalanine, tyrosine and tryptophan metabolism	BLCA	0.081411138
UCKL1	Phosphonate and phosphite metabolism	BLCA	0.072560147
UCKL1	Pi3k_akt_activation	BLCA	-0.336165581
UCKL1	Pi3k_akt_mtor_signaling	BLCA	-0.321668102
UCKL1	Porphyrin and chlorophyll metabolism	BLCA	-0.027634232
UCKL1	Primary bile acid biosynthesis	BLCA	-0.038286932
UCKL1	Propanoate metabolism	BLCA	-0.055748794
UCKL1	Purine metabolism	BLCA	0.104036433
UCKL1	Pyrimidine metabolism	BLCA	0.159738226
UCKL1	Pyruvate metabolism	BLCA	0.040923895
UCKL1	Regulation_of_autophagy	BLCA	0.042970367
UCKL1	Retinol metabolism	BLCA	0.014304302
UCKL1	Riboflavin metabolism	BLCA	-0.08008715
UCKL1	Schmahl_pdgf_signaling	BLCA	-0.286362552

UCKL1	Selenocompound metabol	BLCA	-0.037837726
UCKL1	Signaling_by_hippo	BLCA	-0.275594939
UCKL1	Sphingolipid metabolism	BLCA	-0.190681994
UCKL1	Starch and sucrose metabo	BLCA	-0.159072917
UCKL1	Steroid biosynthesis	BLCA	0.017523935
UCKL1	Steroid hormone biosynth	BLCA	0.020347239
UCKL1	Sulfur metabolism	BLCA	-0.078253558
UCKL1	Synthesis and degradation	BLCA	0.118783431
UCKL1	T helper cell	BLCA	-0.260309695
UCKL1	T helper1 (th1) cell	BLCA	-0.2389961
UCKL1	T helper17 (th17) cell	BLCA	-0.240299967
UCKL1	T helper2 (th2) cell	BLCA	-0.213425323
UCKL1	T helper9 (th9) cell	BLCA	-0.182596949
UCKL1	Taurine and hypotaurine r	BLCA	0.239751301
UCKL1	Terpenoid backbone biosy	BLCA	0.042244949
UCKL1	Tgf_beta_signaling_pathw	BLCA	-0.280624601
UCKL1	Thiamine metabolism	BLCA	0.09585577
UCKL1	Tnfa_signaling_via_nfbk	BLCA	-0.320148943
UCKL1	Tryptophan metabolism	BLCA	-0.091488641
UCKL1	Tumor endothelial cell	BLCA	0.045685122
UCKL1	Tyrosine metabolism	BLCA	0.037719394
UCKL1	Ubiquinone and other ter	BLCA	0.140044012
UCKL1	Valine, leucine and isoleu	BLCA	-0.110307056
UCKL1	Valine, leucine and isoleu	BLCA	-0.003934582
UCKL1	Vascular endothelial cell	BLCA	-0.248792129
UCKL1	Vascular smooth muscle c	BLCA	-0.173925069
UCKL1	Vegf_signaling_pathway	BLCA	-0.218923572
UCKL1	Vitamin b6 metabolism	BLCA	0.04294317
UCKL1	Willert_wnt_signaling	BLCA	0.060126659
UCKL1	Wnt_beta_catenin_signali	BLCA	-0.10493955
UPP1	Abnormal plasma cell	BLCA	0.170571544
UPP1	Activated b cell	BLCA	0.276488306
UPP1	Activated cd4+ t cell	BLCA	0.298299804
UPP1	Activated t cell	BLCA	0.308075748
UPP1	Alanine, aspartate and glu	BLCA	-0.150953079
UPP1	Alcala_apoptosis	BLCA	0.321872605
UPP1	Alpha-linolenic acid meta	BLCA	-0.050928462
UPP1	Amino sugar and nucleoti	BLCA	0.38336397
UPP1	Ampk_pathway	BLCA	-0.163269492
UPP1	Angiogenesis	BLCA	0.273985302
UPP1	Arachidonic acid metabo	BLCA	0.157092529
UPP1	Arginine and proline met	BLCA	0.110476731
UPP1	Arginine biosynthesis	BLCA	-0.037898226

UPP1	Ascorbate and aldarate me	BLCA	-0.174816833
UPP1	Atypical memory b cell	BLCA	0.189045929
UPP1	Axl+siglec6+ dendritic ce	BLCA	0.287354314
UPP1	B cell	BLCA	0.243363574
UPP1	B1 cell	BLCA	0.191552976
UPP1	Basal cell	BLCA	0.208725517
UPP1	Beta-alanine metabolism	BLCA	0.024704275
UPP1	Biosynthesis of unsaturate	BLCA	0.051457649
UPP1	Biotin metabolism	BLCA	-0.135115793
UPP1	Butanoate metabolism	BLCA	-0.15655133
UPP1	Caffeine metabolism	BLCA	0.078820219
UPP1	Cancer stem cell	BLCA	0.263039616
UPP1	Cancer stem-like cell	BLCA	0.093793575
UPP1	Cd4+ cytotoxic t cell	BLCA	0.348453047
UPP1	Cd4+ memory t cell	BLCA	0.166790814
UPP1	Cd4+ regulatory t cell	BLCA	0.269477962
UPP1	Cd4+ t helper cell	BLCA	0.270006344
UPP1	Cd4+cd25+ regulatory t c	BLCA	0.281980544
UPP1	Cd8+ cytotoxic t cell	BLCA	0.311360839
UPP1	Cd8+ regulatory t cell	BLCA	0.271313134
UPP1	Cell_cycle	BLCA	0.038695162
UPP1	Chandran_metastasis_top5	BLCA	-0.198183875
UPP1	Citrate cycle (tca cycle)	BLCA	0.031887371
UPP1	Cysteine and methionine r	BLCA	0.024517915
UPP1	Cytokine induced killer c	BLCA	0.230143501
UPP1	D-arginine and d-ornithin	BLCA	0.090075773
UPP1	D-glutamine and d-glutan	BLCA	-0.218431456
UPP1	Dendritic cell	BLCA	0.340942856
UPP1	Dna_repair	BLCA	0.138780048
UPP1	Dna_replication	BLCA	0.151460298
UPP1	Double-negative memory	BLCA	0.232499671
UPP1	Drug metabolism - cytoch	BLCA	-0.087045736
UPP1	Drug metabolism - other	BLCA	0.197525548
UPP1	E2f_targets	BLCA	0.062276241
UPP1	Ecm_receptor_interaction	BLCA	0.24323667
UPP1	Effector cd4+ memory t (	BLCA	0.127467219
UPP1	Effector cd8+ memory t (	BLCA	0.368152201
UPP1	Effector memory t cell	BLCA	0.220978521
UPP1	Effector regulatory t (treg	BLCA	0.271626271
UPP1	Elvidge_hif1a_targets_up	BLCA	0.149798745
UPP1	Endothelial cell	BLCA	0.245622751
UPP1	Eosinophil	BLCA	0.373685068
UPP1	Ether lipid metabolism	BLCA	-0.073720737

UPP1	Exhausted cd4+ t cell	BLCA	0.305742061
UPP1	Exhausted cd8+ t cell	BLCA	0.310400653
UPP1	Exhausted t cell	BLCA	0.29135073
UPP1	Fat cell (adipocyte)	BLCA	0.092310749
UPP1	Fatty acid biosynthesis	BLCA	-0.13568649
UPP1	Fatty acid degradation	BLCA	-0.187029556
UPP1	Fatty acid elongation	BLCA	0.160376974
UPP1	Fibroblast	BLCA	0.277192375
UPP1	Folate biosynthesis	BLCA	0.076166889
UPP1	Follicular b cell	BLCA	0.230345752
UPP1	Follicular dendritic cell	BLCA	0.203678307
UPP1	Follicular helper (tfh) t ce	BLCA	0.31267449
UPP1	Follicular t cell	BLCA	0.266748099
UPP1	Foxp3+il-17+ t cell	BLCA	0.157463241
UPP1	Fructose and mannose me	BLCA	0.195721419
UPP1	G2m_checkpoint	BLCA	0.013929174
UPP1	Galactose metabolism	BLCA	0.324665208
UPP1	Galie_tumor_stemness_ge	BLCA	0.101046462
UPP1	Glutathione metabolism	BLCA	0.166476505
UPP1	Glycerolipid metabolism	BLCA	-0.079024664
UPP1	Glycerophospholipid metæ	BLCA	-0.076488645
UPP1	Glycine, serine and threor	BLCA	0.098321184
UPP1	Glycolysis / gluconeogene	BLCA	0.083241174
UPP1	Glycosaminoglycan biosy	BLCA	0.299873856
UPP1	Glycosaminoglycan biosy	BLCA	0.012016815
UPP1	Glycosaminoglycan biosy	BLCA	0.239590314
UPP1	Glycosaminoglycan degra	BLCA	0.188729918
UPP1	Glycosphingolipid biosyn	BLCA	0.203024296
UPP1	Glycosphingolipid biosyn	BLCA	0.135604232
UPP1	Glycosphingolipid biosyn	BLCA	0.171394527
UPP1	Glycosylphosphatidylinos	BLCA	-0.120648127
UPP1	Glyoxylate and dicarboxy	BLCA	0.039316189
UPP1	Granulocyte	BLCA	0.348086305
UPP1	Hedgehog_signaling	BLCA	0.008321034
UPP1	Histidine metabolism	BLCA	0.052916138
UPP1	Hypoxia	BLCA	0.298395153
UPP1	Il-17ralpha t cell	BLCA	0.284286307
UPP1	Il2_stat5_signaling	BLCA	0.389159556
UPP1	Il6_jak_stat3_signaling	BLCA	0.397841723
UPP1	Immune_checkpoints_tur	BLCA	0.306850369
UPP1	Immune_inhibition_cytok	BLCA	0.441747499
UPP1	Inositol phosphate metabo	BLCA	-0.263004296
UPP1	Interleukin_6_signaling	BLCA	0.159001045

Upp1	Jaeger_metastasis_up	BLCA	0.226939355
Upp1	Jain_nfkb_signaling	BLCA	0.002780486
Upp1	Kras_signaling_up	BLCA	0.305286472
Upp1	Linoleic acid metabolism	BLCA	-0.116930454
Upp1	Lipoic acid metabolism	BLCA	-0.135574403
Upp1	Lysine degradation	BLCA	-0.240267261
Upp1	Lysosome	BLCA	0.213786198
Upp1	M1 macrophage	BLCA	0.354651783
Upp1	M2 macrophage	BLCA	0.42235676
Upp1	Mannose type o-glycan bi	BLCA	-0.003929473
Upp1	Mapk_signaling_pathway	BLCA	0.187312521
Upp1	Mapk3_erk1_activation	BLCA	0.109096134
Upp1	Marginal zone b cell	BLCA	0.188653681
Upp1	Memory b cell	BLCA	0.225230302
Upp1	Mesenchymal cell	BLCA	0.263660856
Upp1	Mesenchymal stem cell	BLCA	0.28331599
Upp1	Metabolism of xenobiotic	BLCA	-0.045213
Upp1	Migrating cancer stem cel	BLCA	0.129833872
Upp1	Mitotic_spindle	BLCA	-0.061458151
Upp1	Monocyte	BLCA	0.441238623
Upp1	Mtor_signaling_pathway	BLCA	-0.079279695
Upp1	Mtorc1_signaling	BLCA	0.262245037
Upp1	Mucin type o-glycan biosy	BLCA	0.050513022
Upp1	Myc_targets_v1	BLCA	0.116407795
Upp1	Myeloid cell	BLCA	0.329818705
Upp1	N-glycan biosynthesis	BLCA	0.065453534
Upp1	Naive b cell	BLCA	0.238889617
Upp1	Naive cd4+ t cell	BLCA	0.101215995
Upp1	Naive cd8+ t cell	BLCA	-0.010933485
Upp1	Natural killer cell	BLCA	0.320091971
Upp1	Natural killer t (nkt) cell	BLCA	0.211133309
Upp1	Natural regulatory t (treg)	BLCA	0.249944917
Upp1	Neomycin, kanamycin an	BLCA	0.248002513
Upp1	Neutrophil	BLCA	0.453535351
Upp1	Nicotinate and nicotinami	BLCA	0.207414178
Upp1	Nitrogen metabolism	BLCA	-0.03624793
Upp1	Nod_like_receptor_signal	BLCA	0.361004128
Upp1	Notch_signaling	BLCA	0.094723821
Upp1	One carbon pool by folate	BLCA	-0.025781871
Upp1	Other glycan degradation	BLCA	0.037818144
Upp1	Other types of o-glycan b	BLCA	0.157668403
Upp1	Oxidative phosphorylatior	BLCA	0.193631847
Upp1	P53_pathway	BLCA	0.282684127

UPP1	P53_signaling_pathway	BLCA	-0.030372257
UPP1	Pantothenate and coa bios	BLCA	0.286525725
UPP1	Pentose and glucuronate i	BLCA	-0.101588674
UPP1	Pentose phosphate pathwa	BLCA	0.23955601
UPP1	Pericyte	BLCA	0.261104933
UPP1	Phenylalanine metabolism	BLCA	0.168675439
UPP1	Phenylalanine, tyrosine ar	BLCA	0.124041628
UPP1	Phosphonate and phosphir	BLCA	-0.134718932
UPP1	Pi3k_akt_activation	BLCA	-0.058738524
UPP1	Pi3k_akt_mtor_signaling	BLCA	0.190616473
UPP1	Porphyrin and chlorophyl	BLCA	0.051803265
UPP1	Primary bile acid biosynt	BLCA	0.031305937
UPP1	Propanoate metabolism	BLCA	-0.256060498
UPP1	Purine metabolism	BLCA	0.172668567
UPP1	Pyrimidine metabolism	BLCA	0.227331217
UPP1	Pyruvate metabolism	BLCA	0.019047123
UPP1	Regulation_of_autophagy	BLCA	0.017328396
UPP1	Retinol metabolism	BLCA	-0.108287917
UPP1	Riboflavin metabolism	BLCA	0.373426506
UPP1	Schmahl_pdgf_signaling	BLCA	-0.066612887
UPP1	Selenocompound metabol	BLCA	-0.13390455
UPP1	Signaling_by_hippo	BLCA	-0.05957663
UPP1	Sphingolipid metabolism	BLCA	0.056942431
UPP1	Starch and sucrose metabo	BLCA	0.188984735
UPP1	Steroid biosynthesis	BLCA	0.111571477
UPP1	Steroid hormone biosynth	BLCA	-0.064280076
UPP1	Sulfur metabolism	BLCA	-0.121953686
UPP1	Synthesis and degradation	BLCA	-0.073054744
UPP1	T helper cell	BLCA	0.310473705
UPP1	T helper1 (th1) cell	BLCA	0.36233708
UPP1	T helper17 (th17) cell	BLCA	0.393674205
UPP1	T helper2 (th2) cell	BLCA	0.31931496
UPP1	T helper9 (th9) cell	BLCA	0.277835651
UPP1	Taurine and hypotaurine r	BLCA	-0.122644845
UPP1	Terpenoid backbone biosy	BLCA	0.058314653
UPP1	Tgf_beta_signaling_pathw	BLCA	-0.173760032
UPP1	Thiamine metabolism	BLCA	0.170109926
UPP1	Tnfa_signaling_via_nfk	BLCA	0.390243755
UPP1	Tryptophan metabolism	BLCA	0.158610908
UPP1	Tumor endothelial cell	BLCA	0.190201747
UPP1	Tyrosine metabolism	BLCA	0.05256352
UPP1	Ubiquinone and other ter	BLCA	0.088505045
UPP1	Valine, leucine and isoleu	BLCA	0.299246903

UPP1	Valine, leucine and isoleu	BLCA	-0.22209194
UPP1	Vascular endothelial cell	BLCA	0.265967607
UPP1	Vascular smooth muscle c	BLCA	0.165347232
UPP1	Vegf_signaling_pathway	BLCA	0.130803805
UPP1	Vitamin b6 metabolism	BLCA	0.169747299
UPP1	Willert_wnt_signaling	BLCA	-0.019473888
UPP1	Wnt_beta_catenin_signali	BLCA	-0.081054311
UPP2	Abnormal plasma cell	BLCA	-0.05987762
UPP2	Activated b cell	BLCA	-0.119517752
UPP2	Activated cd4+ t cell	BLCA	-0.130125725
UPP2	Activated t cell	BLCA	-0.131412141
UPP2	Alanine, aspartate and glu	BLCA	-0.000762749
UPP2	Alcala_apoptosis	BLCA	-0.224364236
UPP2	Alpha-linolenic acid meta	BLCA	-0.031545079
UPP2	Amino sugar and nucleoti	BLCA	-0.174587906
UPP2	Ampk_pathway	BLCA	0.045035553
UPP2	Angiogenesis	BLCA	-0.106666441
UPP2	Arachidonic acid metabol	BLCA	-0.036028898
UPP2	Arginine and proline metε	BLCA	-0.187132134
UPP2	Arginine biosynthesis	BLCA	-0.016049146
UPP2	Ascorbate and aldarate mε	BLCA	0.024824017
UPP2	Atypical memory b cell	BLCA	-0.121089617
UPP2	Axl+siglec6+ dendritic ce	BLCA	-0.119541297
UPP2	B cell	BLCA	-0.095466009
UPP2	B1 cell	BLCA	-0.094447922
UPP2	Basal cell	BLCA	-0.144780761
UPP2	Beta-alanine metabolism	BLCA	-0.098202623
UPP2	Biosynthesis of unsaturate	BLCA	-0.104569786
UPP2	Biotin metabolism	BLCA	0.031310884
UPP2	Butanoate metabolism	BLCA	-0.033560749
UPP2	Caffeine metabolism	BLCA	0.0382994
UPP2	Cancer stem cell	BLCA	-0.079793785
UPP2	Cancer stem-like cell	BLCA	0.060460435
UPP2	Cd4+ cytotoxic t cell	BLCA	-0.121911636
UPP2	Cd4+ memory t cell	BLCA	-0.16707598
UPP2	Cd4+ regulatory t cell	BLCA	-0.089565638
UPP2	Cd4+ t helper cell	BLCA	-0.106895298
UPP2	Cd4+cd25+ regulatory t c	BLCA	-0.113907368
UPP2	Cd8+ cytotoxic t cell	BLCA	-0.126990482
UPP2	Cd8+ regulatory t cell	BLCA	-0.145351951
UPP2	Cell_cycle	BLCA	-0.201320189
UPP2	Chandran_metastasis_topε	BLCA	-0.087811896
UPP2	Citrate cycle (tca cycle)	BLCA	-0.17662847

UPP2	Cysteine and methionine r	BLCA	-0.116620296
UPP2	Cytokine induced killer c	BLCA	-0.088098174
UPP2	D-arginine and d-ornithin	BLCA	-0.009119498
UPP2	D-glutamine and d-glutan	BLCA	-0.065535617
UPP2	Dendritic cell	BLCA	-0.129423394
UPP2	Dna_repair	BLCA	-0.184590094
UPP2	Dna_replication	BLCA	-0.187963556
UPP2	Double-negative memory	BLCA	-0.10038872
UPP2	Drug metabolism - cytoch	BLCA	0.0431056
UPP2	Drug metabolism - other c	BLCA	-0.071272087
UPP2	E2f_targets	BLCA	-0.185111881
UPP2	Ecm_receptor_interaction	BLCA	-0.08002869
UPP2	Effector cd4+ memory t (	BLCA	-0.162639926
UPP2	Effector cd8+ memory t (	BLCA	-0.117618208
UPP2	Effector memory t cell	BLCA	-0.152463833
UPP2	Effector regulatory t (treg	BLCA	-0.100174537
UPP2	Elvidge_hif1a_targets_up	BLCA	-0.255309789
UPP2	Endothelial cell	BLCA	-0.09933616
UPP2	Eosinophil	BLCA	-0.145966753
UPP2	Ether lipid metabolism	BLCA	0.014437588
UPP2	Exhausted cd4+ t cell	BLCA	-0.156309209
UPP2	Exhausted cd8+ t cell	BLCA	-0.140446721
UPP2	Exhausted t cell	BLCA	-0.118204848
UPP2	Fat cell (adipocyte)	BLCA	-0.040958049
UPP2	Fatty acid biosynthesis	BLCA	0.024203449
UPP2	Fatty acid degradation	BLCA	-0.004124896
UPP2	Fatty acid elongation	BLCA	-0.121261939
UPP2	Fibroblast	BLCA	-0.11010771
UPP2	Folate biosynthesis	BLCA	-0.070400839
UPP2	Follicular b cell	BLCA	-0.103060932
UPP2	Follicular dendritic cell	BLCA	-0.102142547
UPP2	Follicular helper (tfh) t c	BLCA	-0.129005959
UPP2	Follicular t cell	BLCA	-0.128372313
UPP2	Foxp3+il-17+ t cell	BLCA	-0.083545212
UPP2	Fructose and mannose me	BLCA	-0.096017667
UPP2	G2m_checkpoint	BLCA	-0.187103863
UPP2	Galactose metabolism	BLCA	-0.168631974
UPP2	Galie_tumor_stemness_ge	BLCA	-0.059210036
UPP2	Glutathione metabolism	BLCA	-0.120779591
UPP2	Glycerolipid metabolism	BLCA	0.095409844
UPP2	Glycerophospholipid met	BLCA	0.094037873
UPP2	Glycine, serine and threor	BLCA	-0.081454235
UPP2	Glycolysis / gluconeogene	BLCA	-0.087002646

UPP2	Glycosaminoglycan biosyn	BLCA	-0.068879004
UPP2	Glycosaminoglycan biosyn	BLCA	0.01300028
UPP2	Glycosaminoglycan biosyn	BLCA	-0.083881956
UPP2	Glycosaminoglycan degra	BLCA	0.043291802
UPP2	Glycosphingolipid biosyn	BLCA	-0.028643197
UPP2	Glycosphingolipid biosyn	BLCA	-0.066204205
UPP2	Glycosphingolipid biosyn	BLCA	-0.002151953
UPP2	Glycosylphosphatidylinos	BLCA	0.017387797
UPP2	Glyoxylate and dicarboxy	BLCA	-0.088628542
UPP2	Granulocyte	BLCA	-0.132452819
UPP2	Hedgehog_signaling	BLCA	0.03051618
UPP2	Histidine metabolism	BLCA	-0.04946836
UPP2	Hypoxia	BLCA	-0.109009789
UPP2	Il-17alpha t cell	BLCA	-0.135127696
UPP2	Il2_stat5_signaling	BLCA	-0.136143734
UPP2	Il6_jak_stat3_signaling	BLCA	-0.149089121
UPP2	Immune_checkpoints_tun	BLCA	-0.104824154
UPP2	Immune_inhibition_cytok	BLCA	-0.130408113
UPP2	Inositol phosphate metabo	BLCA	0.038782164
UPP2	Interleukin_6_signaling	BLCA	-0.093074589
UPP2	Jaeger_metastasis_up	BLCA	-0.150441465
UPP2	Jain_nfkb_signaling	BLCA	-0.127201253
UPP2	Kras_signaling_up	BLCA	-0.081006244
UPP2	Linoleic acid metabolism	BLCA	0.064798503
UPP2	Lipoic acid metabolism	BLCA	0.056740654
UPP2	Lysine degradation	BLCA	-0.029415319
UPP2	Lysosome	BLCA	-0.074821515
UPP2	M1 macrophage	BLCA	-0.15916449
UPP2	M2 macrophage	BLCA	-0.15386045
UPP2	Mannose type o-glycan bi	BLCA	0.064328951
UPP2	Mapk_signaling_pathway	BLCA	-0.093068586
UPP2	Mapk3_erk1_activation	BLCA	-0.111153549
UPP2	Marginal zone b cell	BLCA	-0.120542246
UPP2	Memory b cell	BLCA	-0.08297923
UPP2	Mesenchymal cell	BLCA	-0.099777363
UPP2	Mesenchymal stem cell	BLCA	-0.094429734
UPP2	Metabolism of xenobiotic	BLCA	0.004286116
UPP2	Migrating cancer stem cel	BLCA	-0.049417977
UPP2	Mitotic_spindle	BLCA	-0.109619207
UPP2	Monocyte	BLCA	-0.156393575
UPP2	Mtor_signaling_pathway	BLCA	0.028537037
UPP2	Mtorc1_signaling	BLCA	-0.246187213
UPP2	Mucin type o-glycan bios	BLCA	-0.058095626

UPP2	Myc_targets_v1	BLCA	-0.231379619
UPP2	Myeloid cell	BLCA	-0.127742899
UPP2	N-glycan biosynthesis	BLCA	-0.149075873
UPP2	Naive b cell	BLCA	-0.1126281
UPP2	Naive cd4+ t cell	BLCA	-0.117089862
UPP2	Naive cd8+ t cell	BLCA	-0.045442086
UPP2	Natural killer cell	BLCA	-0.124829024
UPP2	Natural killer t (nkt) cell	BLCA	-0.166157546
UPP2	Natural regulatory t (treg)	BLCA	-0.107863944
UPP2	Neomycin, kanamycin and	BLCA	-0.166724498
UPP2	Neutrophil	BLCA	-0.162653504
UPP2	Nicotinate and nicotinami	BLCA	-0.011087842
UPP2	Nitrogen metabolism	BLCA	0.126961137
UPP2	Nod_like_receptor_signal	BLCA	-0.160141001
UPP2	Notch_signaling	BLCA	-0.107558233
UPP2	One carbon pool by folate	BLCA	-0.136531874
UPP2	Other glycan degradation	BLCA	0.100492056
UPP2	Other types of o-glycan b	BLCA	0.048514835
UPP2	Oxidative phosphorylatio	BLCA	-0.098732319
UPP2	P53_pathway	BLCA	-0.142076797
UPP2	P53_signaling_pathway	BLCA	-0.18966794
UPP2	Pantothenate and coa bios	BLCA	-0.069904007
UPP2	Pentose and glucuronate i	BLCA	0.032464352
UPP2	Pentose phosphate pathwa	BLCA	-0.129130316
UPP2	Pericyte	BLCA	-0.076249905
UPP2	Phenylalanine metabolism	BLCA	-0.084832521
UPP2	Phenylalanine, tyrosine ar	BLCA	-0.003391327
UPP2	Phosphonate and phosphir	BLCA	0.025496626
UPP2	Pi3k_akt_activation	BLCA	-0.049146018
UPP2	Pi3k_akt_mtor_signaling	BLCA	-0.221104464
UPP2	Porphyrin and chlorophyl	BLCA	-0.063880376
UPP2	Primary bile acid biosynt	BLCA	0.156109538
UPP2	Propanoate metabolism	BLCA	0.010562981
UPP2	Purine metabolism	BLCA	-0.181154744
UPP2	Pyrimidine metabolism	BLCA	-0.194824258
UPP2	Pyruvate metabolism	BLCA	-0.078795253
UPP2	Regulation_of_autophagy	BLCA	0.043537029
UPP2	Retinol metabolism	BLCA	0.036425268
UPP2	Riboflavin metabolism	BLCA	-0.076386121
UPP2	Schmahl_pdgf_signaling	BLCA	-0.051231012
UPP2	Selenocompound metabol	BLCA	0.035926865
UPP2	Signaling_by_hippo	BLCA	-0.038110172
UPP2	Sphingolipid metabolism	BLCA	-0.065490871

UPP2	Starch and sucrose metabo	BLCA	0.041739305
UPP2	Steroid biosynthesis	BLCA	-0.043959988
UPP2	Steroid hormone biosynth	BLCA	0.037242843
UPP2	Sulfur metabolism	BLCA	-0.064257546
UPP2	Synthesis and degradation	BLCA	0.033739459
UPP2	T helper cell	BLCA	-0.140493555
UPP2	T helper1 (th1) cell	BLCA	-0.127843205
UPP2	T helper17 (th17) cell	BLCA	-0.113908593
UPP2	T helper2 (th2) cell	BLCA	-0.111062924
UPP2	T helper9 (th9) cell	BLCA	-0.101684637
UPP2	Taurine and hypotaurine r	BLCA	0.246250069
UPP2	Terpenoid backbone biosy	BLCA	-0.074762572
UPP2	Tgf_beta_signaling_pathw	BLCA	-0.000901103
UPP2	Thiamine metabolism	BLCA	-0.068247949
UPP2	Tnfa_signaling_via_nfk	BLCA	-0.150344601
UPP2	Tryptophan metabolism	BLCA	-0.112434676
UPP2	Tumor endothelial cell	BLCA	-0.153606408
UPP2	Tyrosine metabolism	BLCA	-0.034047243
UPP2	Ubiquinone and other ter	BLCA	-0.106736869
UPP2	Valine, leucine and isoleu	BLCA	-0.173527981
UPP2	Valine, leucine and isoleu	BLCA	-0.026095198
UPP2	Vascular endothelial cell	BLCA	-0.077291268
UPP2	Vascular smooth muscle c	BLCA	-0.03959207
UPP2	Vegf_signaling_pathway	BLCA	-0.119869663
UPP2	Vitamin b6 metabolism	BLCA	-0.018205821
UPP2	Willert_wnt_signaling	BLCA	-0.052138255
UPP2	Wnt_beta_catenin_signali	BLCA	0.033689911
CDA	Abnormal plasma cell	BRCA	0.035055302
CDA	Activated b cell	BRCA	0.100047651
CDA	Activated cd4+ t cell	BRCA	0.0792184
CDA	Activated t cell	BRCA	0.096270327
CDA	Alanine, aspartate and glu	BRCA	-0.226356013
CDA	Alcala_apoptosis	BRCA	0.049681385
CDA	Alpha-linolenic acid meta	BRCA	0.221655121
CDA	Amino sugar and nucleoti	BRCA	-0.004170179
CDA	Ampk_pathway	BRCA	-0.302394499
CDA	Angiogenesis	BRCA	0.249252334
CDA	Arachidonic acid metaboli	BRCA	0.409646851
CDA	Arginine and proline met	BRCA	0.065121717
CDA	Arginine biosynthesis	BRCA	-0.004715721
CDA	Ascorbate and aldarate m	BRCA	-0.053998143
CDA	Atypical memory b cell	BRCA	0.125832767
CDA	Axl+siglec6+ dendritic ce	BRCA	0.261726203

CDA	B cell	BRCA	0.119767865
CDA	B1 cell	BRCA	0.123194694
CDA	Basal cell	BRCA	0.333793788
CDA	Beta-alanine metabolism	BRCA	0.088112208
CDA	Biosynthesis of unsaturate	BRCA	-0.060160567
CDA	Biotin metabolism	BRCA	-0.114444517
CDA	Butanoate metabolism	BRCA	-0.070456342
CDA	Caffeine metabolism	BRCA	0.091948394
CDA	Cancer stem cell	BRCA	0.223761037
CDA	Cancer stem-like cell	BRCA	0.162477995
CDA	Cd4+ cytotoxic t cell	BRCA	0.221988964
CDA	Cd4+ memory t cell	BRCA	0.086545399
CDA	Cd4+ regulatory t cell	BRCA	0.076155242
CDA	Cd4+ t helper cell	BRCA	0.120182619
CDA	Cd4+cd25+ regulatory t c	BRCA	0.106428141
CDA	Cd8+ cytotoxic t cell	BRCA	0.135003462
CDA	Cd8+ regulatory t cell	BRCA	0.054499521
CDA	Cell_cycle	BRCA	-0.281131927
CDA	Chandran_metastasis_top	BRCA	-0.404850378
CDA	Citrate cycle (tca cycle)	BRCA	-0.082168478
CDA	Cysteine and methionine r	BRCA	-0.150835214
CDA	Cytokine induced killer c	BRCA	0.128478766
CDA	D-arginine and d-ornithin	BRCA	0.040838627
CDA	D-glutamine and d-glutan	BRCA	-0.200022956
CDA	Dendritic cell	BRCA	0.203168492
CDA	Dna_repair	BRCA	0.001327085
CDA	Dna_replication	BRCA	-0.164049803
CDA	Double-negative memory	BRCA	0.121392331
CDA	Drug metabolism - cytoch	BRCA	0.204118889
CDA	Drug metabolism - other	BRCA	0.146190551
CDA	E2f_targets	BRCA	-0.272849933
CDA	Ecm_receptor_interaction	BRCA	0.170728009
CDA	Effector cd4+ memory t	BRCA	0.063586026
CDA	Effector cd8+ memory t	BRCA	0.158134721
CDA	Effector memory t cell	BRCA	0.102342602
CDA	Effector regulatory t (treg	BRCA	0.044360136
CDA	Elvidge_hif1a_targets_up	BRCA	-0.262207285
CDA	Endothelial cell	BRCA	0.255256623
CDA	Eosinophil	BRCA	0.147382128
CDA	Ether lipid metabolism	BRCA	0.204424767
CDA	Exhausted cd4+ t cell	BRCA	0.111671246
CDA	Exhausted cd8+ t cell	BRCA	0.169221351
CDA	Exhausted t cell	BRCA	0.105438086

CDA	Fat cell (adipocyte)	BRCA	0.18192475
CDA	Fatty acid biosynthesis	BRCA	-0.018446741
CDA	Fatty acid degradation	BRCA	0.062861884
CDA	Fatty acid elongation	BRCA	0.054442214
CDA	Fibroblast	BRCA	0.214764165
CDA	Folate biosynthesis	BRCA	0.049043371
CDA	Follicular b cell	BRCA	0.129590065
CDA	Follicular dendritic cell	BRCA	0.066178876
CDA	Follicular helper (tfh) t ce	BRCA	0.121211516
CDA	Follicular t cell	BRCA	0.12275131
CDA	Foxp3+il-17+ t cell	BRCA	0.013385678
CDA	Fructose and mannose me	BRCA	-0.044787179
CDA	G2m_checkpoint	BRCA	-0.339241127
CDA	Galactose metabolism	BRCA	0.081384638
CDA	Galie_tumor_stemness_ge	BRCA	0.143924168
CDA	Glutathione metabolism	BRCA	0.168643482
CDA	Glycerolipid metabolism	BRCA	0.149076998
CDA	Glycerophospholipid metæ	BRCA	0.242431259
CDA	Glycine, serine and threor	BRCA	0.081893682
CDA	Glycolysis / gluconeogene	BRCA	-0.018317099
CDA	Glycosaminoglycan biosy	BRCA	0.323595157
CDA	Glycosaminoglycan biosy	BRCA	0.015342401
CDA	Glycosaminoglycan biosy	BRCA	0.135179285
CDA	Glycosaminoglycan degra	BRCA	0.244054945
CDA	Glycosphingolipid biosyn	BRCA	0.187509924
CDA	Glycosphingolipid biosyn	BRCA	0.169155233
CDA	Glycosphingolipid biosyn	BRCA	0.052694698
CDA	Glycosylphosphatidylinos	BRCA	-0.108225671
CDA	Glyoxylate and dicarboxy	BRCA	-0.027547568
CDA	Granulocyte	BRCA	0.132256471
CDA	Hedgehog_signaling	BRCA	0.040484065
CDA	Histidine metabolism	BRCA	0.166988537
CDA	Hypoxia	BRCA	0.184091361
CDA	Il-17alpha t cell	BRCA	0.107968928
CDA	Il2_stat5_signaling	BRCA	0.238359115
CDA	Il6_jak_stat3_signaling	BRCA	0.163689613
CDA	Immune_checkpoints_tur	BRCA	0.12665351
CDA	Immune_inhibition_cytok	BRCA	0.264478521
CDA	Inositol phosphate metabo	BRCA	-0.24896828
CDA	Interleukin_6_signaling	BRCA	-0.113586774
CDA	Jaeger_metastasis_up	BRCA	-0.158885464
CDA	Jain_nfkb_signaling	BRCA	-0.224989622
CDA	Kras_signaling_up	BRCA	0.239750895

CDA	Linoleic acid metabolism	BRCA	0.221515132
CDA	Lipoic acid metabolism	BRCA	0.036231312
CDA	Lysine degradation	BRCA	-0.271245084
CDA	Lysosome	BRCA	0.09403952
CDA	M1 macrophage	BRCA	0.132516375
CDA	M2 macrophage	BRCA	0.157220019
CDA	Mannose type o-glycan bi	BRCA	-0.027396237
CDA	Mapk_signaling_pathway	BRCA	0.12890378
CDA	Mapk3_erk1_activation	BRCA	-0.143775844
CDA	Marginal zone b cell	BRCA	0.084825424
CDA	Memory b cell	BRCA	0.049419771
CDA	Mesenchymal cell	BRCA	0.328354568
CDA	Mesenchymal stem cell	BRCA	0.217505441
CDA	Metabolism of xenobiotic	BRCA	0.201680835
CDA	Migrating cancer stem cel	BRCA	-0.05387611
CDA	Mitotic_spindle	BRCA	-0.33587834
CDA	Monocyte	BRCA	0.288650693
CDA	Mtor_signaling_pathway	BRCA	-0.133339273
CDA	Mtorc1_signaling	BRCA	-0.169020154
CDA	Mucin type o-glycan biosy	BRCA	-0.043308738
CDA	Myc_targets_v1	BRCA	-0.133425413
CDA	Myeloid cell	BRCA	0.127613156
CDA	N-glycan biosynthesis	BRCA	-0.129541245
CDA	Naive b cell	BRCA	0.060362471
CDA	Naive cd4+ t cell	BRCA	0.1643688
CDA	Naive cd8+ t cell	BRCA	0.137609837
CDA	Natural killer cell	BRCA	0.126481919
CDA	Natural killer t (nkt) cell	BRCA	0.09917579
CDA	Natural regulatory t (treg)	BRCA	0.075759798
CDA	Neomycin, kanamycin and	BRCA	0.034098744
CDA	Neutrophil	BRCA	0.230405214
CDA	Nicotinate and nicotinami	BRCA	0.007808117
CDA	Nitrogen metabolism	BRCA	-0.048201889
CDA	Nod_like_receptor_signal	BRCA	0.044734003
CDA	Notch_signaling	BRCA	0.230502332
CDA	One carbon pool by folate	BRCA	-0.213297302
CDA	Other glycan degradation	BRCA	0.055171817
CDA	Other types of o-glycan b	BRCA	0.162788158
CDA	Oxidative phosphorylatior	BRCA	0.188124771
CDA	P53_pathway	BRCA	0.362265392
CDA	P53_signaling_pathway	BRCA	-0.112657906
CDA	Pantothenate and coa bios	BRCA	-0.009741241
CDA	Pentose and glucuronate in	BRCA	-0.037319535

CDA	Pentose phosphate pathwa	BRCA	0.013869595
CDA	Pericyte	BRCA	0.303017611
CDA	Phenylalanine metabolism	BRCA	0.204732052
CDA	Phenylalanine, tyrosine ar	BRCA	-0.044905066
CDA	Phosphonate and phosphir	BRCA	-0.142169104
CDA	Pi3k_akt_activation	BRCA	-0.048372805
CDA	Pi3k_akt_mtor_signaling	BRCA	-0.115705365
CDA	Porphyrin and chlorophyl	BRCA	-0.028293175
CDA	Primary bile acid biosynt	BRCA	0.160658749
CDA	Propanoate metabolism	BRCA	-0.173118855
CDA	Purine metabolism	BRCA	-0.093391607
CDA	Pyrimidine metabolism	BRCA	-0.109399205
CDA	Pyruvate metabolism	BRCA	-0.062315684
CDA	Regulation_of_autophagy	BRCA	-0.088323435
CDA	Retinol metabolism	BRCA	0.168359729
CDA	Riboflavin metabolism	BRCA	0.008058042
CDA	Schmahl_pdgf_signaling	BRCA	0.076391841
CDA	Selenocompound metabol	BRCA	-0.293949379
CDA	Signaling_by_hippo	BRCA	-0.207099113
CDA	Sphingolipid metabolism	BRCA	-0.177988602
CDA	Starch and sucrose metabo	BRCA	0.071063716
CDA	Steroid biosynthesis	BRCA	-0.077729209
CDA	Steroid hormone biosynth	BRCA	0.131910292
CDA	Sulfur metabolism	BRCA	-0.037500686
CDA	Synthesis and degradation	BRCA	-0.050471054
CDA	T helper cell	BRCA	0.181806469
CDA	T helper1 (th1) cell	BRCA	0.121222503
CDA	T helper17 (th17) cell	BRCA	0.197382478
CDA	T helper2 (th2) cell	BRCA	0.209172225
CDA	T helper9 (th9) cell	BRCA	0.129822433
CDA	Taurine and hypotaurine r	BRCA	0.145685494
CDA	Terpenoid backbone biosy	BRCA	-0.149855189
CDA	Tgf_beta_signaling_pathw	BRCA	-0.025220269
CDA	Thiamine metabolism	BRCA	0.110678426
CDA	Tnfa_signaling_via_nfkb	BRCA	0.212950345
CDA	Tryptophan metabolism	BRCA	0.100965964
CDA	Tumor endothelial cell	BRCA	0.153775646
CDA	Tyrosine metabolism	BRCA	0.204036763
CDA	Ubiquinone and other terç	BRCA	-0.047813316
CDA	Valine, leucine and isoleu	BRCA	0.136931675
CDA	Valine, leucine and isoleu	BRCA	-0.097034339
CDA	Vascular endothelial cell	BRCA	0.418172962
CDA	Vascular smooth muscle c	BRCA	0.25775673

CDA	Vegf_signaling_pathway	BRCA	0.182627992
CDA	Vitamin b6 metabolism	BRCA	-0.046470839
CDA	Willert_wnt_signaling	BRCA	0.022065599
CDA	Wnt_beta_catenin_signali	BRCA	0.175169864
UCK1	Abnormal plasma cell	BRCA	-0.064059386
UCK1	Activated b cell	BRCA	-0.047121962
UCK1	Activated cd4+ t cell	BRCA	-0.103988558
UCK1	Activated t cell	BRCA	-0.053963613
UCK1	Alanine, aspartate and glu	BRCA	-0.148221129
UCK1	Alcala_apoptosis	BRCA	0.131085849
UCK1	Alpha-linolenic acid meta	BRCA	0.245903397
UCK1	Amino sugar and nucleoti	BRCA	0.093573872
UCK1	Ampk_pathway	BRCA	-0.044718801
UCK1	Angiogenesis	BRCA	-0.118656759
UCK1	Arachidonic acid metaboli	BRCA	0.333879553
UCK1	Arginine and proline metε	BRCA	0.101689305
UCK1	Arginine biosynthesis	BRCA	-0.02843356
UCK1	Ascorbate and aldarate mε	BRCA	0.015527172
UCK1	Atypical memory b cell	BRCA	-0.045124928
UCK1	Ax1+siglec6+ dendritic ce	BRCA	-0.05324734
UCK1	B cell	BRCA	-0.10930129
UCK1	B1 cell	BRCA	-0.006945369
UCK1	Basal cell	BRCA	0.071049553
UCK1	Beta-alanine metabolism	BRCA	0.048830655
UCK1	Biosynthesis of unsaturate	BRCA	0.036501084
UCK1	Biotin metabolism	BRCA	-0.0562907
UCK1	Butanoate metabolism	BRCA	0.07854958
UCK1	Caffeine metabolism	BRCA	0.058954863
UCK1	Cancer stem cell	BRCA	-0.21275391
UCK1	Cancer stem-like cell	BRCA	-0.157495236
UCK1	Cd4+ cytotoxic t cell	BRCA	-0.002528174
UCK1	Cd4+ memory t cell	BRCA	-0.042592863
UCK1	Cd4+ regulatory t cell	BRCA	-0.073225216
UCK1	Cd4+ t helper cell	BRCA	-0.069275999
UCK1	Cd4+cd25+ regulatory t c	BRCA	-0.076417749
UCK1	Cd8+ cytotoxic t cell	BRCA	0.013066014
UCK1	Cd8+ regulatory t cell	BRCA	-0.059507161
UCK1	Cell_cycle	BRCA	-0.220585984
UCK1	Chandran_metastasis_top5	BRCA	-0.375005838
UCK1	Citrate cycle (tca cycle)	BRCA	-0.015857398
UCK1	Cysteine and methionine r	BRCA	-0.089013205
UCK1	Cytokine induced killer cε	BRCA	0.019386775
UCK1	D-arginine and d-ornithin	BRCA	0.017052397

UCK1	D-glutamine and d-glutan	BRCA	-0.310741009
UCK1	Dendritic cell	BRCA	-0.129925158
UCK1	Dna_repair	BRCA	0.370216138
UCK1	Dna_replication	BRCA	0.061395091
UCK1	Double-negative memory	BRCA	0.091294467
UCK1	Drug metabolism - cytoch	BRCA	0.117268325
UCK1	Drug metabolism - other	BRCA	0.280666173
UCK1	E2f_targets	BRCA	-0.166422798
UCK1	Ecm_receptor_interaction	BRCA	-0.181488982
UCK1	Effector cd4+ memory t	BRCA	-0.150111089
UCK1	Effector cd8+ memory t	BRCA	-0.08704358
UCK1	Effector memory t cell	BRCA	-0.09682013
UCK1	Effector regulatory t (treg	BRCA	-0.212419505
UCK1	Elvidge_hif1a_targets_up	BRCA	-0.358926195
UCK1	Endothelial cell	BRCA	-0.198157223
UCK1	Eosinophil	BRCA	-0.094280471
UCK1	Ether lipid metabolism	BRCA	0.0096041
UCK1	Exhausted cd4+ t cell	BRCA	-0.168169892
UCK1	Exhausted cd8+ t cell	BRCA	-0.088494066
UCK1	Exhausted t cell	BRCA	-0.023642354
UCK1	Fat cell (adipocyte)	BRCA	0.103585155
UCK1	Fatty acid biosynthesis	BRCA	-0.124883224
UCK1	Fatty acid degradation	BRCA	0.036666462
UCK1	Fatty acid elongation	BRCA	0.117164138
UCK1	Fibroblast	BRCA	-0.196252668
UCK1	Folate biosynthesis	BRCA	0.139569238
UCK1	Follicular b cell	BRCA	-0.111643613
UCK1	Follicular dendritic cell	BRCA	-0.080473366
UCK1	Follicular helper (tfh) t ce	BRCA	-0.083588802
UCK1	Follicular t cell	BRCA	0.140667508
UCK1	Foxp3+il-17+ t cell	BRCA	-0.026761364
UCK1	Fructose and mannose me	BRCA	0.243284447
UCK1	G2m_checkpoint	BRCA	-0.270306689
UCK1	Galactose metabolism	BRCA	0.145697743
UCK1	Galie_tumor_stemness_ge	BRCA	-0.105803646
UCK1	Glutathione metabolism	BRCA	0.179700161
UCK1	Glycerolipid metabolism	BRCA	0.116610385
UCK1	Glycerophospholipid metæ	BRCA	0.292689084
UCK1	Glycine, serine and threor	BRCA	0.286777787
UCK1	Glycolysis / gluconeogene	BRCA	0.044694651
UCK1	Glycosaminoglycan biosy	BRCA	0.18123236
UCK1	Glycosaminoglycan biosy	BRCA	0.013100926
UCK1	Glycosaminoglycan biosy	BRCA	-0.012333935

UCK1	Glycosaminoglycan degra	BRCA	0.099505435
UCK1	Glycosphingolipid biosyn	BRCA	0.018839099
UCK1	Glycosphingolipid biosyn	BRCA	-0.118537814
UCK1	Glycosphingolipid biosyn	BRCA	-0.125134364
UCK1	Glycosylphosphatidylinos	BRCA	0.038914765
UCK1	Glyoxylate and dicarboxy	BRCA	0.167209598
UCK1	Granulocyte	BRCA	-0.137347891
UCK1	Hedgehog_signaling	BRCA	-0.225252934
UCK1	Histidine metabolism	BRCA	0.055097232
UCK1	Hypoxia	BRCA	-0.03597747
UCK1	Il-17alpha t cell	BRCA	-0.059482692
UCK1	Il2_stat5_signaling	BRCA	-0.12684739
UCK1	Il6_jak_stat3_signaling	BRCA	-0.152316173
UCK1	Immune_checkpoints_tur	BRCA	-0.151628352
UCK1	Immune_inhibition_cytok	BRCA	0.035954706
UCK1	Inositol phosphate metabo	BRCA	-0.414479208
UCK1	Interleukin_6_signaling	BRCA	-0.440108489
UCK1	Jaeger_metastasis_up	BRCA	-0.277699275
UCK1	Jain_nfkb_signaling	BRCA	-0.12717785
UCK1	Kras_signaling_up	BRCA	-0.210087977
UCK1	Linoleic acid metabolism	BRCA	0.249250696
UCK1	Lipoic acid metabolism	BRCA	0.180470612
UCK1	Lysine degradation	BRCA	-0.159079563
UCK1	Lysosome	BRCA	0.038523413
UCK1	M1 macrophage	BRCA	-0.176090876
UCK1	M2 macrophage	BRCA	-0.113734364
UCK1	Mannose type o-glycan bi	BRCA	0.238016562
UCK1	Mapk_signaling_pathway	BRCA	-0.19197532
UCK1	Mapk3_erk1_activation	BRCA	-0.420324479
UCK1	Marginal zone b cell	BRCA	-0.174817395
UCK1	Memory b cell	BRCA	-0.17126764
UCK1	Mesenchymal cell	BRCA	0.016799703
UCK1	Mesenchymal stem cell	BRCA	-0.195654556
UCK1	Metabolism of xenobiotic	BRCA	0.176271734
UCK1	Migrating cancer stem cel	BRCA	-0.174099544
UCK1	Mitotic_spindle	BRCA	-0.450535663
UCK1	Monocyte	BRCA	-0.016885214
UCK1	Mtor_signaling_pathway	BRCA	-0.163606443
UCK1	Mtorc1_signaling	BRCA	-0.17158466
UCK1	Mucin type o-glycan bios	BRCA	-0.266203506
UCK1	Myc_targets_v1	BRCA	0.00190919
UCK1	Myeloid cell	BRCA	-0.166114132
UCK1	N-glycan biosynthesis	BRCA	-0.012107803

UCK1	Naive b cell	BRCA	0.021078873
UCK1	Naive cd4+ t cell	BRCA	-0.143081761
UCK1	Naive cd8+ t cell	BRCA	-0.119935104
UCK1	Natural killer cell	BRCA	-0.088464279
UCK1	Natural killer t (nkt) cell	BRCA	0.06523468
UCK1	Natural regulatory t (treg)	BRCA	-0.144124219
UCK1	Neomycin, kanamycin and	BRCA	0.042301279
UCK1	Neutrophil	BRCA	-0.128844595
UCK1	Nicotinate and nicotinami	BRCA	0.014089176
UCK1	Nitrogen metabolism	BRCA	-0.125845203
UCK1	Nod_like_receptor_signal	BRCA	-0.243080495
UCK1	Notch_signaling	BRCA	-0.048018718
UCK1	One carbon pool by folate	BRCA	-0.176155991
UCK1	Other glycan degradation	BRCA	0.207109169
UCK1	Other types of o-glycan b	BRCA	0.316144643
UCK1	Oxidative phosphorylatio	BRCA	0.359314843
UCK1	P53_pathway	BRCA	0.309217774
UCK1	P53_signaling_pathway	BRCA	-0.236366939
UCK1	Pantothenate and coa bios	BRCA	0.036125399
UCK1	Pentose and glucuronate i	BRCA	0.034472122
UCK1	Pentose phosphate pathwa	BRCA	0.147695629
UCK1	Pericyte	BRCA	-0.078542804
UCK1	Phenylalanine metabolism	BRCA	0.196375192
UCK1	Phenylalanine, tyrosine ar	BRCA	0.079253577
UCK1	Phosphonate and phosphir	BRCA	-0.204208797
UCK1	Pi3k_akt_activation	BRCA	-0.261017021
UCK1	Pi3k_akt_mtor_signaling	BRCA	-0.140807706
UCK1	Porphyrin and chlorophyl	BRCA	0.199717519
UCK1	Primary bile acid biosynt	BRCA	0.143028872
UCK1	Propanoate metabolism	BRCA	-0.182032596
UCK1	Purine metabolism	BRCA	0.068565885
UCK1	Pyrimidine metabolism	BRCA	0.171057682
UCK1	Pyruvate metabolism	BRCA	0.015197902
UCK1	Regulation_of_autophagy	BRCA	-0.022161696
UCK1	Retinol metabolism	BRCA	0.120492956
UCK1	Riboflavin metabolism	BRCA	0.213136489
UCK1	Schmahl_pdgf_signaling	BRCA	-0.262221796
UCK1	Selenocompound metabol	BRCA	-0.224202702
UCK1	Signaling_by_hippo	BRCA	-0.482413088
UCK1	Sphingolipid metabolism	BRCA	-0.180109225
UCK1	Starch and sucrose metabo	BRCA	-0.10651779
UCK1	Steroid biosynthesis	BRCA	0.032395889
UCK1	Steroid hormone biosynth	BRCA	0.12929279

UCK1	Sulfur metabolism	BRCA	0.045388423
UCK1	Synthesis and degradation	BRCA	0.073240347
UCK1	T helper cell	BRCA	-0.075654536
UCK1	T helper1 (th1) cell	BRCA	-0.091007498
UCK1	T helper17 (th17) cell	BRCA	-0.093144306
UCK1	T helper2 (th2) cell	BRCA	-0.02619094
UCK1	T helper9 (th9) cell	BRCA	0.00919369
UCK1	Taurine and hypotaurine r	BRCA	0.27805502
UCK1	Terpenoid backbone biosy	BRCA	-0.034823365
UCK1	Tgf_beta_signaling_pathw	BRCA	-0.406470863
UCK1	Thiamine metabolism	BRCA	0.305642376
UCK1	Tnfa_signaling_via_nfkB	BRCA	-0.118785736
UCK1	Tryptophan metabolism	BRCA	0.052162535
UCK1	Tumor endothelial cell	BRCA	0.012063519
UCK1	Tyrosine metabolism	BRCA	0.283292915
UCK1	Ubiquinone and other terp	BRCA	0.139592311
UCK1	Valine, leucine and isoleu	BRCA	0.21143514
UCK1	Valine, leucine and isoleu	BRCA	0.029401519
UCK1	Vascular endothelial cell	BRCA	0.020024949
UCK1	Vascular smooth muscle c	BRCA	0.041078442
UCK1	Vegf_signaling_pathway	BRCA	-0.049262489
UCK1	Vitamin b6 metabolism	BRCA	0.028871962
UCK1	Willert_wnt_signaling	BRCA	-0.123509594
UCK1	Wnt_beta_catenin_signali	BRCA	0.071510335
UCK2	Abnormal plasma cell	BRCA	0.227245115
UCK2	Activated b cell	BRCA	0.093878994
UCK2	Activated cd4+ t cell	BRCA	0.057815712
UCK2	Activated t cell	BRCA	0.114256502
UCK2	Alanine, aspartate and glu	BRCA	0.083319388
UCK2	Alcala_apoptosis	BRCA	0.40518842
UCK2	Alpha-linolenic acid meta	BRCA	-0.203666109
UCK2	Amino sugar and nucleoti	BRCA	0.268613647
UCK2	Ampk_pathway	BRCA	0.12216811
UCK2	Angiogenesis	BRCA	-0.117963454
UCK2	Arachidonic acid metabol	BRCA	-0.202213699
UCK2	Arginine and proline metε	BRCA	0.411910881
UCK2	Arginine biosynthesis	BRCA	-0.01406444
UCK2	Ascorbate and aldarate mε	BRCA	-0.059004194
UCK2	Atypical memory b cell	BRCA	0.032452261
UCK2	Axl+siglec6+ dendritic ce	BRCA	-0.349875434
UCK2	B cell	BRCA	-0.032683496
UCK2	B1 cell	BRCA	0.026835989
UCK2	Basal cell	BRCA	0.261865747

UCK2	Beta-alanine metabolism	BRCA	0.016403265
UCK2	Biosynthesis of unsaturate	BRCA	-0.174529178
UCK2	Biotin metabolism	BRCA	-0.177834977
UCK2	Butanoate metabolism	BRCA	-0.164929232
UCK2	Caffeine metabolism	BRCA	-0.424193394
UCK2	Cancer stem cell	BRCA	0.074223747
UCK2	Cancer stem-like cell	BRCA	0.111220621
UCK2	Cd4+ cytotoxic t cell	BRCA	0.039500131
UCK2	Cd4+ memory t cell	BRCA	0.031577985
UCK2	Cd4+ regulatory t cell	BRCA	0.096167339
UCK2	Cd4+ t helper cell	BRCA	-0.004314104
UCK2	Cd4+cd25+ regulatory t c	BRCA	0.028170793
UCK2	Cd8+ cytotoxic t cell	BRCA	0.113334799
UCK2	Cd8+ regulatory t cell	BRCA	0.031837825
UCK2	Cell_cycle	BRCA	0.465553345
UCK2	Chandran_metastasis_top5	BRCA	-0.017237119
UCK2	Citrate cycle (tca cycle)	BRCA	0.295548822
UCK2	Cysteine and methionine r	BRCA	0.476327929
UCK2	Cytokine induced killer c	BRCA	0.056475873
UCK2	D-arginine and d-ornithin	BRCA	0.021477045
UCK2	D-glutamine and d-glutan	BRCA	-0.269438059
UCK2	Dendritic cell	BRCA	-0.000694601
UCK2	Dna_repair	BRCA	0.3492991
UCK2	Dna_replication	BRCA	0.531857473
UCK2	Double-negative memory	BRCA	0.08377964
UCK2	Drug metabolism - cytoch	BRCA	-0.154053177
UCK2	Drug metabolism - other	BRCA	0.199568948
UCK2	E2f_targets	BRCA	0.543553579
UCK2	Ecm_receptor_interaction	BRCA	-0.232381729
UCK2	Effector cd4+ memory t (	BRCA	-0.036202
UCK2	Effector cd8+ memory t (	BRCA	-0.046095362
UCK2	Effector memory t cell	BRCA	-0.005330623
UCK2	Effector regulatory t (treg	BRCA	-0.021784978
UCK2	Elvidge_hif1a_targets_up	BRCA	0.309112984
UCK2	Endothelial cell	BRCA	-0.015863309
UCK2	Eosinophil	BRCA	0.049622053
UCK2	Ether lipid metabolism	BRCA	-0.188100802
UCK2	Exhausted cd4+ t cell	BRCA	0.022243193
UCK2	Exhausted cd8+ t cell	BRCA	0.058139855
UCK2	Exhausted t cell	BRCA	0.092224108
UCK2	Fat cell (adipocyte)	BRCA	-0.159200124
UCK2	Fatty acid biosynthesis	BRCA	0.114542274
UCK2	Fatty acid degradation	BRCA	-0.191871579

UCK2	Fatty acid elongation	BRCA	-0.020361369
UCK2	Fibroblast	BRCA	-0.184486147
UCK2	Folate biosynthesis	BRCA	0.096094438
UCK2	Follicular b cell	BRCA	0.002121868
UCK2	Follicular dendritic cell	BRCA	0.039547086
UCK2	Follicular helper (tfh) t ce	BRCA	0.074860374
UCK2	Follicular t cell	BRCA	0.14908129
UCK2	Foxp3+il-17+ t cell	BRCA	0.177800646
UCK2	Fructose and mannose me	BRCA	0.133321257
UCK2	G2m_checkpoint	BRCA	0.484261865
UCK2	Galactose metabolism	BRCA	0.376523991
UCK2	Galie_tumor_stemness_ge	BRCA	-0.174738158
UCK2	Glutathione metabolism	BRCA	0.244255642
UCK2	Glycerolipid metabolism	BRCA	0.138401931
UCK2	Glycerophospholipid metæ	BRCA	-0.133390625
UCK2	Glycine, serine and threor	BRCA	0.15923563
UCK2	Glycolysis / gluconeogene	BRCA	0.278075138
UCK2	Glycosaminoglycan biosy1	BRCA	-0.097924489
UCK2	Glycosaminoglycan biosy1	BRCA	-0.179084584
UCK2	Glycosaminoglycan biosy1	BRCA	0.300682963
UCK2	Glycosaminoglycan degra	BRCA	-0.123375273
UCK2	Glycosphingolipid biosyn1	BRCA	-0.047770018
UCK2	Glycosphingolipid biosyn1	BRCA	0.007557501
UCK2	Glycosphingolipid biosyn1	BRCA	0.473382618
UCK2	Glycosylphosphatidylinos	BRCA	-0.184351028
UCK2	Glyoxylate and dicarboxy	BRCA	0.181983757
UCK2	Granulocyte	BRCA	-0.000554425
UCK2	Hedgehog_signaling	BRCA	-0.153521581
UCK2	Histidine metabolism	BRCA	-0.088596375
UCK2	Hypoxia	BRCA	0.182160429
UCK2	Il-17ralpha t cell	BRCA	0.034641612
UCK2	Il2_stat5_signaling	BRCA	0.068571064
UCK2	Il6_jak_stat3_signaling	BRCA	0.106462929
UCK2	Immune_checkpoints_tun	BRCA	0.085884527
UCK2	Immune_inhibition_cytok	BRCA	0.192614062
UCK2	Inositol phosphate metabo	BRCA	-0.230120416
UCK2	Interleukin_6_signaling	BRCA	-0.204082399
UCK2	Jaeger_metastasis_up	BRCA	0.42296099
UCK2	Jain_nfkb_signaling	BRCA	0.492832506
UCK2	Kras_signaling_up	BRCA	-0.073854095
UCK2	Linoleic acid metabolism	BRCA	-0.184516789
UCK2	Lipoic acid metabolism	BRCA	-0.114447035
UCK2	Lysine degradation	BRCA	0.218008586

UCK2	Lysosome	BRCA	-0.164207464
UCK2	M1 macrophage	BRCA	0.112334598
UCK2	M2 macrophage	BRCA	0.010584225
UCK2	Mannose type o-glycan bi	BRCA	0.168681897
UCK2	Mapk_signaling_pathway	BRCA	-0.311313629
UCK2	Mapk3_erk1_activation	BRCA	-0.249040554
UCK2	Marginal zone b cell	BRCA	0.017482548
UCK2	Memory b cell	BRCA	0.116742077
UCK2	Mesenchymal cell	BRCA	-0.050617398
UCK2	Mesenchymal stem cell	BRCA	-0.099275734
UCK2	Metabolism of xenobiotic	BRCA	-0.07593938
UCK2	Migrating cancer stem cel	BRCA	0.137260199
UCK2	Mitotic_spindle	BRCA	0.149172829
UCK2	Monocyte	BRCA	0.026867398
UCK2	Mtor_signaling_pathway	BRCA	-0.274669515
UCK2	Mtorc1_signaling	BRCA	0.486528767
UCK2	Mucin type o-glycan biosy	BRCA	-0.198618881
UCK2	Myc_targets_v1	BRCA	0.611511998
UCK2	Myeloid cell	BRCA	-0.011386561
UCK2	N-glycan biosynthesis	BRCA	0.021291118
UCK2	Naive b cell	BRCA	0.161329015
UCK2	Naive cd4+ t cell	BRCA	-0.078181349
UCK2	Naive cd8+ t cell	BRCA	-0.117438763
UCK2	Natural killer cell	BRCA	0.041590884
UCK2	Natural killer t (nkt) cell	BRCA	0.239622926
UCK2	Natural regulatory t (treg)	BRCA	-0.002081063
UCK2	Neomycin, kanamycin an	BRCA	0.031189763
UCK2	Neutrophil	BRCA	0.218593592
UCK2	Nicotinate and nicotinami	BRCA	-0.038526886
UCK2	Nitrogen metabolism	BRCA	-0.258012136
UCK2	Nod_like_receptor_signal	BRCA	0.152067417
UCK2	Notch_signaling	BRCA	0.136549548
UCK2	One carbon pool by folate	BRCA	0.506824126
UCK2	Other glycan degradation	BRCA	-0.171369086
UCK2	Other types of o-glycan b	BRCA	0.006040897
UCK2	Oxidative phosphorylatio	BRCA	0.269911751
UCK2	P53_pathway	BRCA	-0.060917253
UCK2	P53_signaling_pathway	BRCA	0.238362256
UCK2	Pantothenate and coa bios	BRCA	-0.14236652
UCK2	Pentose and glucuronate i	BRCA	-0.043721633
UCK2	Pentose phosphate pathwa	BRCA	0.431603252
UCK2	Pericyte	BRCA	-0.203710113
UCK2	Phenylalanine metabolism	BRCA	-0.02196998

UCK2	Phenylalanine, tyrosine ar	BRCA	0.057674854
UCK2	Phosphonate and phosphir	BRCA	0.057920669
UCK2	Pi3k_akt_activation	BRCA	-0.338973272
UCK2	Pi3k_akt_mtor_signaling	BRCA	0.163800676
UCK2	Porphyrin and chlorophyl	BRCA	0.088675274
UCK2	Primary bile acid biosynt	BRCA	-0.181480851
UCK2	Propanoate metabolism	BRCA	-0.177964616
UCK2	Purine metabolism	BRCA	0.55997718
UCK2	Pyrimidine metabolism	BRCA	0.538745901
UCK2	Pyruvate metabolism	BRCA	0.290071991
UCK2	Regulation_of_autophagy	BRCA	-0.123192809
UCK2	Retinol metabolism	BRCA	-0.191420519
UCK2	Riboflavin metabolism	BRCA	-0.010217743
UCK2	Schmahl_pdgf_signaling	BRCA	-0.166544413
UCK2	Selenocompound metabol	BRCA	0.216032658
UCK2	Signaling_by_hippo	BRCA	0.041405345
UCK2	Sphingolipid metabolism	BRCA	-0.330587567
UCK2	Starch and sucrose metabo	BRCA	0.057835783
UCK2	Steroid biosynthesis	BRCA	0.221915492
UCK2	Steroid hormone biosynth	BRCA	-0.05538753
UCK2	Sulfur metabolism	BRCA	0.175306315
UCK2	Synthesis and degradation	BRCA	0.023027657
UCK2	T helper cell	BRCA	-0.02269493
UCK2	T helper1 (th1) cell	BRCA	0.13672488
UCK2	T helper17 (th17) cell	BRCA	0.010482103
UCK2	T helper2 (th2) cell	BRCA	-0.074565482
UCK2	T helper9 (th9) cell	BRCA	-0.117271415
UCK2	Taurine and hypotaurine r	BRCA	-0.213047984
UCK2	Terpenoid backbone biosy	BRCA	0.309843995
UCK2	Tgf_beta_signaling_pathw	BRCA	-0.238022982
UCK2	Thiamine metabolism	BRCA	0.064473487
UCK2	Tnfa_signaling_via_nfk	BRCA	0.11932049
UCK2	Tryptophan metabolism	BRCA	0.206530882
UCK2	Tumor endothelial cell	BRCA	0.411293363
UCK2	Tyrosine metabolism	BRCA	-0.174105674
UCK2	Ubiquinone and other ter	BRCA	-0.069150216
UCK2	Valine, leucine and isoleu	BRCA	-0.093198005
UCK2	Valine, leucine and isoleu	BRCA	-0.205680099
UCK2	Vascular endothelial cell	BRCA	-0.177120214
UCK2	Vascular smooth muscle c	BRCA	-0.30463402
UCK2	Vegf_signaling_pathway	BRCA	-0.025398777
UCK2	Vitamin b6 metabolism	BRCA	0.275476775
UCK2	Willert_wnt_signaling	BRCA	-0.011301986

UCK2	Wnt_beta_catenin_signali	BRCA	0.210152708
UCKL1	Abnormal plasma cell	BRCA	-0.081415772
UCKL1	Activated b cell	BRCA	-0.003287069
UCKL1	Activated cd4+ t cell	BRCA	-0.073074685
UCKL1	Activated t cell	BRCA	-0.033013172
UCKL1	Alanine, aspartate and glu	BRCA	-0.087029096
UCKL1	Alcala_apoptosis	BRCA	0.106359866
UCKL1	Alpha-linolenic acid meta	BRCA	0.020287424
UCKL1	Amino sugar and nucleoti	BRCA	0.055903946
UCKL1	Ampk_pathway	BRCA	0.255238378
UCKL1	Angiogenesis	BRCA	-0.232812673
UCKL1	Arachidonic acid metabol	BRCA	0.06014062
UCKL1	Arginine and proline metæ	BRCA	0.016235918
UCKL1	Arginine biosynthesis	BRCA	-0.031393787
UCKL1	Ascorbate and aldarate mε	BRCA	-0.182633529
UCKL1	Atypical memory b cell	BRCA	-0.048849487
UCKL1	Axl+siglec6+ dendritic ce	BRCA	-0.175028986
UCKL1	B cell	BRCA	-0.144179341
UCKL1	B1 cell	BRCA	0.018612902
UCKL1	Basal cell	BRCA	0.00800512
UCKL1	Beta-alanine metabolism	BRCA	-0.203473213
UCKL1	Biosynthesis of unsaturate	BRCA	-0.096965045
UCKL1	Biotin metabolism	BRCA	-0.183435254
UCKL1	Butanoate metabolism	BRCA	-0.094262197
UCKL1	Caffeine metabolism	BRCA	-0.171509692
UCKL1	Cancer stem cell	BRCA	-0.264120823
UCKL1	Cancer stem-like cell	BRCA	-0.235376579
UCKL1	Cd4+ cytotoxic t cell	BRCA	-0.053397622
UCKL1	Cd4+ memory t cell	BRCA	-0.00500921
UCKL1	Cd4+ regulatory t cell	BRCA	-0.056087766
UCKL1	Cd4+ t helper cell	BRCA	-0.078630385
UCKL1	Cd4+cd25+ regulatory t c	BRCA	-0.073167375
UCKL1	Cd8+ cytotoxic t cell	BRCA	-0.023449466
UCKL1	Cd8+ regulatory t cell	BRCA	-0.031550118
UCKL1	Cell_cycle	BRCA	0.031193678
UCKL1	Chandran_metastasis_topε	BRCA	-0.248969682
UCKL1	Citrate cycle (tca cycle)	BRCA	8.78E-05
UCKL1	Cysteine and methionine r	BRCA	0.066090699
UCKL1	Cytokine induced killer cε	BRCA	-0.016580023
UCKL1	D-arginine and d-ornithin	BRCA	0.022094502
UCKL1	D-glutamine and d-glutan	BRCA	-0.253492217
UCKL1	Dendritic cell	BRCA	-0.122179245
UCKL1	Dna_repair	BRCA	0.383715756

UCKL1	Dna_replication	BRCA	0.210570367
UCKL1	Double-negative memory	BRCA	0.106641081
UCKL1	Drug metabolism - cytoch	BRCA	-0.10167204
UCKL1	Drug metabolism - other	BRCA	0.191436696
UCKL1	E2f_targets	BRCA	0.102511845
UCKL1	Ecm_receptor_interaction	BRCA	-0.233491199
UCKL1	Effector cd4+ memory t	BRCA	-0.104561544
UCKL1	Effector cd8+ memory t	BRCA	-0.085523638
UCKL1	Effector memory t cell	BRCA	-0.082714791
UCKL1	Effector regulatory t (treg	BRCA	-0.154669837
UCKL1	Elvidge_hif1a_targets_up	BRCA	-0.191395262
UCKL1	Endothelial cell	BRCA	-0.290654052
UCKL1	Eosinophil	BRCA	-0.105123639
UCKL1	Ether lipid metabolism	BRCA	-0.058676943
UCKL1	Exhausted cd4+ t cell	BRCA	-0.192550505
UCKL1	Exhausted cd8+ t cell	BRCA	-0.138842109
UCKL1	Exhausted t cell	BRCA	-0.00793833
UCKL1	Fat cell (adipocyte)	BRCA	0.032403394
UCKL1	Fatty acid biosynthesis	BRCA	-0.128513494
UCKL1	Fatty acid degradation	BRCA	-0.171355906
UCKL1	Fatty acid elongation	BRCA	-0.014739326
UCKL1	Fibroblast	BRCA	-0.288984279
UCKL1	Folate biosynthesis	BRCA	0.07319828
UCKL1	Follicular b cell	BRCA	-0.09075375
UCKL1	Follicular dendritic cell	BRCA	0.00146002
UCKL1	Follicular helper (tfh) t ce	BRCA	-0.085279257
UCKL1	Follicular t cell	BRCA	0.195049654
UCKL1	Foxp3+il-17+ t cell	BRCA	0.007857383
UCKL1	Fructose and mannose me	BRCA	0.270236758
UCKL1	G2m_checkpoint	BRCA	-0.003356908
UCKL1	Galactose metabolism	BRCA	0.14278899
UCKL1	Galie_tumor_stemness_ge	BRCA	-0.324608646
UCKL1	Glutathione metabolism	BRCA	0.07057199
UCKL1	Glycerolipid metabolism	BRCA	-0.027385817
UCKL1	Glycerophospholipid metæ	BRCA	0.271783647
UCKL1	Glycine, serine and threor	BRCA	0.176481184
UCKL1	Glycolysis / gluconeogene	BRCA	0.085520981
UCKL1	Glycosaminoglycan biosy	BRCA	0.055583947
UCKL1	Glycosaminoglycan biosy	BRCA	-0.055467533
UCKL1	Glycosaminoglycan biosy	BRCA	-0.078298277
UCKL1	Glycosaminoglycan degra	BRCA	0.025805775
UCKL1	Glycosphingolipid biosyn	BRCA	-0.12054876
UCKL1	Glycosphingolipid biosyn	BRCA	-0.144092671

UCKL1	Glycosphingolipid biosyn	BRCA	-0.068042295
UCKL1	Glycosylphosphatidylinos	BRCA	-0.040602742
UCKL1	Glyoxylate and dicarboxy	BRCA	0.109226879
UCKL1	Granulocyte	BRCA	-0.152564182
UCKL1	Hedgehog_signaling	BRCA	-0.227244446
UCKL1	Histidine metabolism	BRCA	-0.12939301
UCKL1	Hypoxia	BRCA	-0.091162389
UCKL1	Il-17alpha t cell	BRCA	-0.055388806
UCKL1	Il2_stat5_signaling	BRCA	-0.18221606
UCKL1	Il6_jak_stat3_signaling	BRCA	-0.15999031
UCKL1	Immune_checkpoints_tun	BRCA	-0.179828213
UCKL1	Immune_inhibition_cytok	BRCA	0.039428809
UCKL1	Inositol phosphate metabo	BRCA	-0.28968689
UCKL1	Interleukin_6_signaling	BRCA	-0.403069743
UCKL1	Jaeger_metastasis_up	BRCA	-0.109455292
UCKL1	Jain_nfkb_signaling	BRCA	0.10964275
UCKL1	Kras_signaling_up	BRCA	-0.327724751
UCKL1	Linoleic acid metabolism	BRCA	0.103539753
UCKL1	Lipoic acid metabolism	BRCA	0.144113494
UCKL1	Lysine degradation	BRCA	-0.165264722
UCKL1	Lysosome	BRCA	-0.063420921
UCKL1	M1 macrophage	BRCA	-0.14276485
UCKL1	M2 macrophage	BRCA	-0.129843883
UCKL1	Mannose type o-glycan bi	BRCA	0.082564535
UCKL1	Mapk_signaling_pathway	BRCA	-0.242294862
UCKL1	Mapk3_erk1_activation	BRCA	-0.306149515
UCKL1	Marginal zone b cell	BRCA	-0.140187124
UCKL1	Memory b cell	BRCA	-0.138756797
UCKL1	Mesenchymal cell	BRCA	-0.126917665
UCKL1	Mesenchymal stem cell	BRCA	-0.273187745
UCKL1	Metabolism of xenobiotic	BRCA	-0.000244685
UCKL1	Migrating cancer stem cel	BRCA	-0.247790774
UCKL1	Mitotic_spindle	BRCA	-0.18937648
UCKL1	Monocyte	BRCA	-0.106136814
UCKL1	Mtor_signaling_pathway	BRCA	-0.134074332
UCKL1	Mtorc1_signaling	BRCA	-0.063540242
UCKL1	Mucin type o-glycan bios	BRCA	-0.439625205
UCKL1	Myc_targets_v1	BRCA	0.128809795
UCKL1	Myeloid cell	BRCA	-0.160145818
UCKL1	N-glycan biosynthesis	BRCA	-0.224491076
UCKL1	Naive b cell	BRCA	0.060341708
UCKL1	Naive cd4+ t cell	BRCA	-0.176082221
UCKL1	Naive cd8+ t cell	BRCA	-0.121211089

UCKL1	Natural killer cell	BRCA	-0.095600435
UCKL1	Natural killer t (nkt) cell	BRCA	0.091346817
UCKL1	Natural regulatory t (treg)	BRCA	-0.134730055
UCKL1	Neomycin, kanamycin and	BRCA	0.106210329
UCKL1	Neutrophil	BRCA	-0.153669163
UCKL1	Nicotinate and nicotinami	BRCA	-0.011663133
UCKL1	Nitrogen metabolism	BRCA	-0.302593136
UCKL1	Nod_like_receptor_signal	BRCA	-0.17839578
UCKL1	Notch_signaling	BRCA	-0.175449276
UCKL1	One carbon pool by folate	BRCA	0.042237329
UCKL1	Other glycan degradation	BRCA	0.1599504
UCKL1	Other types of o-glycan b	BRCA	0.168466121
UCKL1	Oxidative phosphorylatio	BRCA	0.243887851
UCKL1	P53_pathway	BRCA	0.023397011
UCKL1	P53_signaling_pathway	BRCA	-0.220839166
UCKL1	Pantothenate and coa bios	BRCA	-0.038522238
UCKL1	Pentose and glucuronate i	BRCA	-0.163781847
UCKL1	Pentose phosphate pathwa	BRCA	0.144985893
UCKL1	Pericyte	BRCA	-0.200195479
UCKL1	Phenylalanine metabolism	BRCA	0.118745196
UCKL1	Phenylalanine, tyrosine ar	BRCA	0.134717213
UCKL1	Phosphonate and phosphir	BRCA	-0.18946441
UCKL1	Pi3k_akt_activation	BRCA	-0.29836109
UCKL1	Pi3k_akt_mtor_signaling	BRCA	-0.183326378
UCKL1	Porphyrin and chlorophyl	BRCA	-0.009660059
UCKL1	Primary bile acid biosynt	BRCA	-0.163265371
UCKL1	Propanoate metabolism	BRCA	-0.250110645
UCKL1	Purine metabolism	BRCA	0.142693833
UCKL1	Pyrimidine metabolism	BRCA	0.305824655
UCKL1	Pyruvate metabolism	BRCA	0.043376974
UCKL1	Regulation_of_autophagy	BRCA	-0.009698996
UCKL1	Retinol metabolism	BRCA	-0.13265263
UCKL1	Riboflavin metabolism	BRCA	0.050723236
UCKL1	Schmahl_pdgf_signaling	BRCA	-0.471463304
UCKL1	Selenocompound metabol	BRCA	-0.110601133
UCKL1	Signaling_by_hippo	BRCA	-0.42714243
UCKL1	Sphingolipid metabolism	BRCA	-0.403385834
UCKL1	Starch and sucrose metabo	BRCA	-0.176353687
UCKL1	Steroid biosynthesis	BRCA	0.073789772
UCKL1	Steroid hormone biosynth	BRCA	-0.112221136
UCKL1	Sulfur metabolism	BRCA	-0.120028225
UCKL1	Synthesis and degradation	BRCA	0.00707369
UCKL1	T helper cell	BRCA	-0.112895636

UCKL1	T helper1 (th1) cell	BRCA	-0.078407413
UCKL1	T helper17 (th17) cell	BRCA	-0.132054328
UCKL1	T helper2 (th2) cell	BRCA	-0.086719248
UCKL1	T helper9 (th9) cell	BRCA	-0.042344201
UCKL1	Taurine and hypotaurine r	BRCA	0.147889549
UCKL1	Terpenoid backbone biosy	BRCA	0.004299854
UCKL1	Tgf_beta_signaling_pathw	BRCA	-0.411539179
UCKL1	Thiamine metabolism	BRCA	0.12590321
UCKL1	Tnfa_signaling_via_nfkb	BRCA	-0.128413492
UCKL1	Tryptophan metabolism	BRCA	-0.096011997
UCKL1	Tumor endothelial cell	BRCA	0.08395703
UCKL1	Tyrosine metabolism	BRCA	0.04274803
UCKL1	Ubiquinone and other terf	BRCA	-0.006992816
UCKL1	Valine, leucine and isoleu	BRCA	0.153135018
UCKL1	Valine, leucine and isoleu	BRCA	-0.162467455
UCKL1	Vascular endothelial cell	BRCA	-0.165706456
UCKL1	Vascular smooth muscle c	BRCA	-0.101817986
UCKL1	Vegf_signaling_pathway	BRCA	0.005326781
UCKL1	Vitamin b6 metabolism	BRCA	0.07643241
UCKL1	Willert_wnt_signaling	BRCA	-0.170652301
UCKL1	Wnt_beta_catenin_signali	BRCA	0.090674346
UPP1	Abnormal plasma cell	BRCA	0.350767391
UPP1	Activated b cell	BRCA	0.399921795
UPP1	Activated cd4+ t cell	BRCA	0.38818154
UPP1	Activated t cell	BRCA	0.372567573
UPP1	Alanine, aspartate and glu	BRCA	-0.200228776
UPP1	Alcala_apoptosis	BRCA	0.391965023
UPP1	Alpha-linolenic acid meta	BRCA	0.026997468
UPP1	Amino sugar and nucleoti	BRCA	0.366167226
UPP1	Ampk_pathway	BRCA	-0.164229076
UPP1	Angiogenesis	BRCA	0.28027526
UPP1	Arachidonic acid metaboli	BRCA	0.275553278
UPP1	Arginine and proline met	BRCA	0.287219373
UPP1	Arginine biosynthesis	BRCA	-0.137241942
UPP1	Ascorbate and aldarate m	BRCA	-0.168218213
UPP1	Atypical memory b cell	BRCA	0.31645619
UPP1	Axl+siglec6+ dendritic ce	BRCA	0.20664321
UPP1	B cell	BRCA	0.306405971
UPP1	B1 cell	BRCA	0.298543759
UPP1	Basal cell	BRCA	0.548322364
UPP1	Beta-alanine metabolism	BRCA	0.088277849
UPP1	Biosynthesis of unsaturate	BRCA	-0.242614665
UPP1	Biotin metabolism	BRCA	-0.384765776

UPP1	Butanoate metabolism	BRCA	-0.277832117
UPP1	Caffeine metabolism	BRCA	-0.359750651
UPP1	Cancer stem cell	BRCA	0.39680301
UPP1	Cancer stem-like cell	BRCA	0.273790114
UPP1	Cd4+ cytotoxic t cell	BRCA	0.511203534
UPP1	Cd4+ memory t cell	BRCA	0.272319063
UPP1	Cd4+ regulatory t cell	BRCA	0.399676145
UPP1	Cd4+ t helper cell	BRCA	0.31766648
UPP1	Cd4+cd25+ regulatory t c	BRCA	0.337913798
UPP1	Cd8+ cytotoxic t cell	BRCA	0.351067607
UPP1	Cd8+ regulatory t cell	BRCA	0.29131275
UPP1	Cell_cycle	BRCA	0.046994776
UPP1	Chandran_metastasis_top	BRCA	-0.545678675
UPP1	Citrate cycle (tca cycle)	BRCA	0.063291224
UPP1	Cysteine and methionine r	BRCA	0.169989262
UPP1	Cytokine induced killer c	BRCA	0.341927353
UPP1	D-arginine and d-ornithin	BRCA	0.024667233
UPP1	D-glutamine and d-glutan	BRCA	-0.432723713
UPP1	Dendritic cell	BRCA	0.459172677
UPP1	Dna_repair	BRCA	0.194444914
UPP1	Dna_replication	BRCA	0.210334597
UPP1	Double-negative memory	BRCA	0.333658714
UPP1	Drug metabolism - cytoch	BRCA	-0.03869392
UPP1	Drug metabolism - other	BRCA	0.148540328
UPP1	E2f_targets	BRCA	0.097125817
UPP1	Ecm_receptor_interaction	BRCA	0.15359356
UPP1	Effector cd4+ memory t (	BRCA	0.240349132
UPP1	Effector cd8+ memory t (	BRCA	0.472622617
UPP1	Effector memory t cell	BRCA	0.27773746
UPP1	Effector regulatory t (treg	BRCA	0.30210471
UPP1	Elvidge_hif1a_targets_up	BRCA	-0.059986464
UPP1	Endothelial cell	BRCA	0.286702377
UPP1	Eosinophil	BRCA	0.455698071
UPP1	Ether lipid metabolism	BRCA	0.1548026
UPP1	Exhausted cd4+ t cell	BRCA	0.350552078
UPP1	Exhausted cd8+ t cell	BRCA	0.456233878
UPP1	Exhausted t cell	BRCA	0.362083133
UPP1	Fat cell (adipocyte)	BRCA	0.090436693
UPP1	Fatty acid biosynthesis	BRCA	0.082185592
UPP1	Fatty acid degradation	BRCA	-0.14752321
UPP1	Fatty acid elongation	BRCA	-0.096081494
UPP1	Fibroblast	BRCA	0.229453854
UPP1	Folate biosynthesis	BRCA	-0.049064495

UPP1	Follicular b cell	BRCA	0.322558832
UPP1	Follicular dendritic cell	BRCA	0.314494503
UPP1	Follicular helper (tfh) t ce	BRCA	0.405850969
UPP1	Follicular t cell	BRCA	0.419664828
UPP1	Foxp3+il-17+ t cell	BRCA	0.281580491
UPP1	Fructose and mannose me	BRCA	0.221106386
UPP1	G2m_checkpoint	BRCA	0.015241739
UPP1	Galactose metabolism	BRCA	0.56050178
UPP1	Galie_tumor_stemness_ge	BRCA	0.105796812
UPP1	Glutathione metabolism	BRCA	0.314183214
UPP1	Glycerolipid metabolism	BRCA	0.256758553
UPP1	Glycerophospholipid metæ	BRCA	0.171590074
UPP1	Glycine, serine and threor	BRCA	0.24763266
UPP1	Glycolysis / gluconeogene	BRCA	0.262022721
UPP1	Glycosaminoglycan biosy	BRCA	0.464006556
UPP1	Glycosaminoglycan biosy	BRCA	0.113815119
UPP1	Glycosaminoglycan biosy	BRCA	0.440505997
UPP1	Glycosaminoglycan degra	BRCA	0.288042719
UPP1	Glycosphingolipid biosyn	BRCA	0.319480857
UPP1	Glycosphingolipid biosyn	BRCA	0.338988766
UPP1	Glycosphingolipid biosyn	BRCA	0.514454722
UPP1	Glycosylphosphatidylinos	BRCA	-0.46255323
UPP1	Glyoxylate and dicarboxy	BRCA	0.03377002
UPP1	Granulocyte	BRCA	0.441626621
UPP1	Hedgehog_signaling	BRCA	0.069347408
UPP1	Histidine metabolism	BRCA	0.022971727
UPP1	Hypoxia	BRCA	0.597067901
UPP1	Il-17alpha t cell	BRCA	0.283728088
UPP1	Il2_stat5_signaling	BRCA	0.492625537
UPP1	Il6_jak_stat3_signaling	BRCA	0.498977918
UPP1	Immune_checkpoints_tun	BRCA	0.399493649
UPP1	Immune_inhibition_cytok	BRCA	0.584854079
UPP1	Inositol phosphate metabo	BRCA	-0.331272501
UPP1	Interleukin_6_signaling	BRCA	-0.032373287
UPP1	Jaeger_metastasis_up	BRCA	0.256180969
UPP1	Jain_nfkb_signaling	BRCA	0.064600299
UPP1	Kras_signaling_up	BRCA	0.362076331
UPP1	Linoleic acid metabolism	BRCA	0.008605662
UPP1	Lipoic acid metabolism	BRCA	-0.188049878
UPP1	Lysine degradation	BRCA	-0.188019552
UPP1	Lysosome	BRCA	0.175275447
UPP1	M1 macrophage	BRCA	0.447707164
UPP1	M2 macrophage	BRCA	0.469275763

UPP1	Mannose type o-glycan bi	BRCA	0.154419434
UPP1	Mapk_signaling_pathway	BRCA	0.169977569
UPP1	Mapk3_erk1_activation	BRCA	-0.082456415
UPP1	Marginal zone b cell	BRCA	0.282487769
UPP1	Memory b cell	BRCA	0.326232476
UPP1	Mesenchymal cell	BRCA	0.407370675
UPP1	Mesenchymal stem cell	BRCA	0.36723809
UPP1	Metabolism of xenobiotic	BRCA	0.068901952
UPP1	Migrating cancer stem cel	BRCA	0.134974198
UPP1	Mitotic_spindle	BRCA	-0.114951236
UPP1	Monocyte	BRCA	0.569471277
UPP1	Mtor_signaling_pathway	BRCA	-0.187575216
UPP1	Mtorc1_signaling	BRCA	0.229004962
UPP1	Mucin type o-glycan bios	BRCA	-0.137049396
UPP1	Myc_targets_v1	BRCA	0.200875001
UPP1	Myeloid cell	BRCA	0.382563724
UPP1	N-glycan biosynthesis	BRCA	-0.141944277
UPP1	Naive b cell	BRCA	0.310699625
UPP1	Naive cd4+ t cell	BRCA	0.25963584
UPP1	Naive cd8+ t cell	BRCA	0.217127524
UPP1	Natural killer cell	BRCA	0.377417266
UPP1	Natural killer t (nkt) cell	BRCA	0.389664483
UPP1	Natural regulatory t (treg)	BRCA	0.285234662
UPP1	Neomycin, kanamycin and	BRCA	0.331033651
UPP1	Neutrophil	BRCA	0.615306205
UPP1	Nicotinate and nicotinami	BRCA	0.107987958
UPP1	Nitrogen metabolism	BRCA	-0.306368915
UPP1	Nod_like_receptor_signal	BRCA	0.418585726
UPP1	Notch_signaling	BRCA	0.347965896
UPP1	One carbon pool by folate	BRCA	0.184936706
UPP1	Other glycan degradation	BRCA	0.090792115
UPP1	Other types of o-glycan b	BRCA	0.243922782
UPP1	Oxidative phosphorylatio	BRCA	0.236453242
UPP1	P53_pathway	BRCA	0.465451433
UPP1	P53_signaling_pathway	BRCA	0.117112334
UPP1	Pantothenate and coa bios	BRCA	-0.02517587
UPP1	Pentose and glucuronate in	BRCA	-0.091021329
UPP1	Pentose phosphate pathwa	BRCA	0.426872894
UPP1	Pericyte	BRCA	0.284846329
UPP1	Phenylalanine metabolism	BRCA	0.233272632
UPP1	Phenylalanine, tyrosine ar	BRCA	0.029438485
UPP1	Phosphonate and phosphir	BRCA	-0.020783694
UPP1	Pi3k_akt_activation	BRCA	-0.224320367

UPP1	Pi3k_akt_mtor_signaling	BRCA	0.125622503
UPP1	Porphyrin and chlorophyl	BRCA	-0.012228197
UPP1	Primary bile acid biosynt	BRCA	0.022274961
UPP1	Propanoate metabolism	BRCA	-0.385287142
UPP1	Purine metabolism	BRCA	0.195862684
UPP1	Pyrimidine metabolism	BRCA	0.203250901
UPP1	Pyruvate metabolism	BRCA	0.04467928
UPP1	Regulation_of_autophagy	BRCA	-0.161817692
UPP1	Retinol metabolism	BRCA	-0.016531084
UPP1	Riboflavin metabolism	BRCA	-0.016786945
UPP1	Schmahl_pdgf_signaling	BRCA	-0.04424291
UPP1	Selenocompound metabol	BRCA	-0.225472387
UPP1	Signaling_by_hippo	BRCA	-0.158633702
UPP1	Sphingolipid metabolism	BRCA	-0.356945863
UPP1	Starch and sucrose metabo	BRCA	0.268953355
UPP1	Steroid biosynthesis	BRCA	0.055880731
UPP1	Steroid hormone biosynth	BRCA	0.043668275
UPP1	Sulfur metabolism	BRCA	-0.050200416
UPP1	Synthesis and degradation	BRCA	-0.059516045
UPP1	T helper cell	BRCA	0.342251498
UPP1	T helper1 (th1) cell	BRCA	0.434537563
UPP1	T helper17 (th17) cell	BRCA	0.386021042
UPP1	T helper2 (th2) cell	BRCA	0.308845548
UPP1	T helper9 (th9) cell	BRCA	0.207915305
UPP1	Taurine and hypotaurine r	BRCA	-0.040788963
UPP1	Terpenoid backbone biosy	BRCA	0.014873302
UPP1	Tgf_beta_signaling_pathw	BRCA	-0.139715939
UPP1	Thiamine metabolism	BRCA	0.083791736
UPP1	Tnfa_signaling_via_nfkb	BRCA	0.540556924
UPP1	Tryptophan metabolism	BRCA	0.272895401
UPP1	Tumor endothelial cell	BRCA	0.485444547
UPP1	Tyrosine metabolism	BRCA	0.058716451
UPP1	Ubiquinone and other ter	BRCA	-0.231279205
UPP1	Valine, leucine and isoleu	BRCA	0.155825407
UPP1	Valine, leucine and isoleu	BRCA	-0.323193938
UPP1	Vascular endothelial cell	BRCA	0.289761081
UPP1	Vascular smooth muscle c	BRCA	0.01493071
UPP1	Vegf_signaling_pathway	BRCA	0.398183485
UPP1	Vitamin b6 metabolism	BRCA	0.161826778
UPP1	Willert_wnt_signaling	BRCA	-0.091210895
UPP1	Wnt_beta_catenin_signali	BRCA	0.32862492
UPP2	Abnormal plasma cell	BRCA	-0.095160789
UPP2	Activated b cell	BRCA	-0.141437912

UPP2	Activated cd4+ t cell	BRCA	-0.151711107
UPP2	Activated t cell	BRCA	-0.143567986
UPP2	Alanine, aspartate and glu	BRCA	-0.095593982
UPP2	Alcala_apoptosis	BRCA	-0.227101002
UPP2	Alpha-linolenic acid meta	BRCA	0.015936278
UPP2	Amino sugar and nucleoti	BRCA	-0.219658024
UPP2	Ampk_pathway	BRCA	-0.042230414
UPP2	Angiogenesis	BRCA	-0.092612525
UPP2	Arachidonic acid metabol	BRCA	0.041797421
UPP2	Arginine and proline metε	BRCA	-0.146598538
UPP2	Arginine biosynthesis	BRCA	-0.010546646
UPP2	Ascorbate and aldarate mε	BRCA	-0.054467917
UPP2	Atypical memory b cell	BRCA	-0.087565221
UPP2	Axl+siglec6+ dendritic ce	BRCA	-0.038185554
UPP2	B cell	BRCA	-0.119071463
UPP2	B1 cell	BRCA	-0.10075213
UPP2	Basal cell	BRCA	-0.042078685
UPP2	Beta-alanine metabolism	BRCA	-0.075589354
UPP2	Biosynthesis of unsaturate	BRCA	-0.078959199
UPP2	Biotin metabolism	BRCA	0.032257744
UPP2	Butanoate metabolism	BRCA	-0.022006779
UPP2	Caffeine metabolism	BRCA	0.080604004
UPP2	Cancer stem cell	BRCA	-0.117772677
UPP2	Cancer stem-like cell	BRCA	-0.028434717
UPP2	Cd4+ cytotoxic t cell	BRCA	-0.120564561
UPP2	Cd4+ memory t cell	BRCA	-0.09035361
UPP2	Cd4+ regulatory t cell	BRCA	-0.167830263
UPP2	Cd4+ t helper cell	BRCA	-0.121647251
UPP2	Cd4+cd25+ regulatory t c	BRCA	-0.133844539
UPP2	Cd8+ cytotoxic t cell	BRCA	-0.115816862
UPP2	Cd8+ regulatory t cell	BRCA	-0.124780484
UPP2	Cell_cycle	BRCA	-0.151709861
UPP2	Chandran_metastasis_top ⁵	BRCA	-0.096868545
UPP2	Citrate cycle (tca cycle)	BRCA	-0.178208892
UPP2	Cysteine and methionine r	BRCA	-0.163054405
UPP2	Cytokine induced killer cε	BRCA	-0.092908014
UPP2	D-arginine and d-ornithin	BRCA	-0.012808222
UPP2	D-glutamine and d-glutan	BRCA	0.056272218
UPP2	Dendritic cell	BRCA	-0.130124409
UPP2	Dna_repair	BRCA	-0.108313131
UPP2	Dna_replication	BRCA	-0.17145315
UPP2	Double-negative memory	BRCA	-0.082837528
UPP2	Drug metabolism - cytoch	BRCA	0.092683779

UPP2	Drug metabolism - other (BRCA	-0.016441757
UPP2	E2f_targets BRCA	-0.178221386
UPP2	Ecm_receptor_interaction BRCA	-0.050747163
UPP2	Effector cd4+ memory t (BRCA	-0.10822843
UPP2	Effector cd8+ memory t (BRCA	-0.156425616
UPP2	Effector memory t cell BRCA	-0.101051605
UPP2	Effector regulatory t (treg BRCA	-0.15461285
UPP2	Elvidge_hif1a_targets_up BRCA	-0.242881925
UPP2	Endothelial cell BRCA	-0.096458439
UPP2	Eosinophil BRCA	-0.173274217
UPP2	Ether lipid metabolism BRCA	0.048359298
UPP2	Exhausted cd4+ t cell BRCA	-0.151123671
UPP2	Exhausted cd8+ t cell BRCA	-0.15534748
UPP2	Exhausted t cell BRCA	-0.129585803
UPP2	Fat cell (adipocyte) BRCA	0.043103865
UPP2	Fatty acid biosynthesis BRCA	-0.07115646
UPP2	Fatty acid degradation BRCA	0.029292324
UPP2	Fatty acid elongation BRCA	0.035545238
UPP2	Fibroblast BRCA	-0.074398198
UPP2	Folate biosynthesis BRCA	-0.003361051
UPP2	Follicular b cell BRCA	-0.10715091
UPP2	Follicular dendritic cell BRCA	-0.110013508
UPP2	Follicular helper (tfh) t ce BRCA	-0.140678506
UPP2	Follicular t cell BRCA	-0.113229816
UPP2	Foxp3+il-17+ t cell BRCA	-0.133012851
UPP2	Fructose and mannose me BRCA	-0.141825939
UPP2	G2m_checkpoint BRCA	-0.193774911
UPP2	Galactose metabolism BRCA	-0.156626041
UPP2	Galie_tumor_stemness_ge BRCA	-0.033276739
UPP2	Glutathione metabolism BRCA	-0.068776495
UPP2	Glycerolipid metabolism BRCA	-0.049615495
UPP2	Glycerophospholipid metæ BRCA	0.073409838
UPP2	Glycine, serine and threor BRCA	-0.022949252
UPP2	Glycolysis / gluconeogene BRCA	-0.158940228
UPP2	Glycosaminoglycan biosy1 BRCA	-0.057705807
UPP2	Glycosaminoglycan biosy1 BRCA	-0.059150388
UPP2	Glycosaminoglycan biosy1 BRCA	-0.104880464
UPP2	Glycosaminoglycan degra BRCA	-0.042335248
UPP2	Glycosphingolipid biosyn1 BRCA	-0.124378554
UPP2	Glycosphingolipid biosyn1 BRCA	-0.101811204
UPP2	Glycosphingolipid biosyn1 BRCA	-0.118297032
UPP2	Glycosylphosphatidylinos: BRCA	0.070362735
UPP2	Glyoxylate and dicarboxy BRCA	-0.07068403

UPP2	Granulocyte	BRCA	-0.151737464
UPP2	Hedgehog_signaling	BRCA	-0.068566012
UPP2	Histidine metabolism	BRCA	0.104026324
UPP2	Hypoxia	BRCA	-0.137882642
UPP2	Il-17alpha t cell	BRCA	-0.108298024
UPP2	Il2_stat5_signaling	BRCA	-0.163353604
UPP2	Il6_jak_stat3_signaling	BRCA	-0.168762975
UPP2	Immune_checkpoints_tun	BRCA	-0.116319638
UPP2	Immune_inhibition_cytok	BRCA	-0.115310404
UPP2	Inositol phosphate metabo	BRCA	-0.004766551
UPP2	Interleukin_6_signaling	BRCA	-0.094737291
UPP2	Jaeger_metastasis_up	BRCA	-0.262890703
UPP2	Jain_nfkb_signaling	BRCA	-0.201733619
UPP2	Kras_signaling_up	BRCA	-0.104272978
UPP2	Linoleic acid metabolism	BRCA	0.137251241
UPP2	Lipoic acid metabolism	BRCA	0.163766083
UPP2	Lysine degradation	BRCA	-0.118476627
UPP2	Lysosome	BRCA	-0.108531902
UPP2	M1 macrophage	BRCA	-0.166198651
UPP2	M2 macrophage	BRCA	-0.154854209
UPP2	Mannose type o-glycan bi	BRCA	-0.005683206
UPP2	Mapk_signaling_pathway	BRCA	-0.068448002
UPP2	Mapk3_erk1_activation	BRCA	-0.084461038
UPP2	Marginal zone b cell	BRCA	-0.118172745
UPP2	Memory b cell	BRCA	-0.118066469
UPP2	Mesenchymal cell	BRCA	-0.087575181
UPP2	Mesenchymal stem cell	BRCA	-0.097205393
UPP2	Metabolism of xenobiotic	BRCA	0.045636875
UPP2	Migrating cancer stem cel	BRCA	-0.146186026
UPP2	Mitotic_spindle	BRCA	-0.164468685
UPP2	Monocyte	BRCA	-0.131570178
UPP2	Mtor_signaling_pathway	BRCA	-0.019028406
UPP2	Mtorc1_signaling	BRCA	-0.254103814
UPP2	Mucin type o-glycan bios	BRCA	-0.087111988
UPP2	Myc_targets_v1	BRCA	-0.193017284
UPP2	Myeloid cell	BRCA	-0.143326504
UPP2	N-glycan biosynthesis	BRCA	-0.182562148
UPP2	Naive b cell	BRCA	-0.082635688
UPP2	Naive cd4+ t cell	BRCA	-0.043671834
UPP2	Naive cd8+ t cell	BRCA	-0.004263517
UPP2	Natural killer cell	BRCA	-0.130777796
UPP2	Natural killer t (nkt) cell	BRCA	-0.16327113
UPP2	Natural regulatory t (treg)	BRCA	-0.119230932

UPP2	Neomycin, kanamycin and	BRCA	-0.14370414
UPP2	Neutrophil	BRCA	-0.145757246
UPP2	Nicotinate and nicotinami	BRCA	-0.014750798
UPP2	Nitrogen metabolism	BRCA	0.119713498
UPP2	Nod_like_receptor_signal	BRCA	-0.167796247
UPP2	Notch_signaling	BRCA	-0.063302698
UPP2	One carbon pool by folate	BRCA	-0.177533002
UPP2	Other glycan degradation	BRCA	0.007668131
UPP2	Other types of o-glycan b	BRCA	0.015728968
UPP2	Oxidative phosphorylatio	BRCA	-0.041128236
UPP2	P53_pathway	BRCA	-0.04854788
UPP2	P53_signaling_pathway	BRCA	-0.187858654
UPP2	Pantothenate and coa bios	BRCA	-0.091445113
UPP2	Pentose and glucuronate in	BRCA	-0.089021294
UPP2	Pentose phosphate pathwa	BRCA	-0.175284396
UPP2	Pericyte	BRCA	-0.0437019
UPP2	Phenylalanine metabolism	BRCA	0.035325412
UPP2	Phenylalanine, tyrosine ar	BRCA	-0.058779368
UPP2	Phosphonate and phosphir	BRCA	-0.020456078
UPP2	Pi3k_akt_activation	BRCA	0.040007309
UPP2	Pi3k_akt_mtor_signaling	BRCA	-0.262391524
UPP2	Porphyrin and chlorophyl	BRCA	-0.123762997
UPP2	Primary bile acid biosynt	BRCA	0.032467537
UPP2	Propanoate metabolism	BRCA	-0.022769111
UPP2	Purine metabolism	BRCA	-0.184791475
UPP2	Pyrimidine metabolism	BRCA	-0.134719456
UPP2	Pyruvate metabolism	BRCA	-0.116322296
UPP2	Regulation_of_autophagy	BRCA	0.019947599
UPP2	Retinol metabolism	BRCA	0.035155822
UPP2	Riboflavin metabolism	BRCA	-0.062781356
UPP2	Schmahl_pdgf_signaling	BRCA	-0.010321218
UPP2	Selenocompound metabol	BRCA	-0.060475811
UPP2	Signaling_by_hippo	BRCA	-0.059981568
UPP2	Sphingolipid metabolism	BRCA	-0.05396272
UPP2	Starch and sucrose metabo	BRCA	-0.070719729
UPP2	Steroid biosynthesis	BRCA	-0.112354712
UPP2	Steroid hormone biosynth	BRCA	-0.000912945
UPP2	Sulfur metabolism	BRCA	0.004123037
UPP2	Synthesis and degradation	BRCA	-0.04721186
UPP2	T helper cell	BRCA	-0.108870944
UPP2	T helper1 (th1) cell	BRCA	-0.147490535
UPP2	T helper17 (th17) cell	BRCA	-0.110838834
UPP2	T helper2 (th2) cell	BRCA	-0.084058496

UPP2	T helper9 (th9) cell	BRCA	-0.08365768
UPP2	Taurine and hypotaurine r	BRCA	0.111517997
UPP2	Terpenoid backbone biosy	BRCA	-0.157792535
UPP2	Tgf_beta_signaling_pathw	BRCA	-0.032551752
UPP2	Thiamine metabolism	BRCA	0.018476325
UPP2	Tnfa_signaling_via_nfkb	BRCA	-0.107151629
UPP2	Tryptophan metabolism	BRCA	-0.14612568
UPP2	Tumor endothelial cell	BRCA	-0.054052269
UPP2	Tyrosine metabolism	BRCA	0.051089319
UPP2	Ubiquinone and other terf	BRCA	-0.011531692
UPP2	Valine, leucine and isoleu	BRCA	-0.101894129
UPP2	Valine, leucine and isoleu	BRCA	-0.006206572
UPP2	Vascular endothelial cell	BRCA	-0.021976601
UPP2	Vascular smooth muscle c	BRCA	0.069344809
UPP2	Vegf_signaling_pathway	BRCA	-0.139224415
UPP2	Vitamin b6 metabolism	BRCA	-0.070984649
UPP2	Willert_wnt_signaling	BRCA	-0.033727384
UPP2	Wnt_beta_catenin_signali	BRCA	0.00053589
CDA	Abnormal plasma cell	CESC	-0.015702202
CDA	Activated b cell	CESC	0.003515912
CDA	Activated cd4+ t cell	CESC	0.033351823
CDA	Activated t cell	CESC	-0.000556402
CDA	Alanine, aspartate and glu	CESC	-0.119192255
CDA	Alcala_apoptosis	CESC	0.12466136
CDA	Alpha-linolenic acid meta	CESC	0.079225811
CDA	Amino sugar and nucleoti	CESC	0.162459526
CDA	Ampk_pathway	CESC	-0.190868998
CDA	Angiogenesis	CESC	0.422836885
CDA	Arachidonic acid metabol:	CESC	0.158122773
CDA	Arginine and proline metæ	CESC	-0.008926382
CDA	Arginine biosynthesis	CESC	-0.001324737
CDA	Ascorbate and aldarate mε	CESC	-0.189664182
CDA	Atypical memory b cell	CESC	0.070731403
CDA	Axl+siglec6+ dendritic ce	CESC	0.16235199
CDA	B cell	CESC	-0.077641753
CDA	B1 cell	CESC	-0.065626284
CDA	Basal cell	CESC	0.234346532
CDA	Beta-alanine metabolism	CESC	0.02187046
CDA	Biosynthesis of unsaturate	CESC	-0.068143338
CDA	Biotin metabolism	CESC	-0.251485102
CDA	Butanoate metabolism	CESC	-0.253105548
CDA	Caffeine metabolism	CESC	0.136148619
CDA	Cancer stem cell	CESC	0.273622112

CDA	Cancer stem-like cell	CESC	-0.109976155
CDA	Cd4+ cytotoxic t cell	CESC	0.125744276
CDA	Cd4+ memory t cell	CESC	0.02307103
CDA	Cd4+ regulatory t cell	CESC	0.072328927
CDA	Cd4+ t helper cell	CESC	0.035541368
CDA	Cd4+cd25+ regulatory t c	CESC	0.039006104
CDA	Cd8+ cytotoxic t cell	CESC	0.053563182
CDA	Cd8+ regulatory t cell	CESC	-0.005984034
CDA	Cell_cycle	CESC	-0.144243234
CDA	Chandran_metastasis_top5	CESC	-0.076475641
CDA	Citrate cycle (tca cycle)	CESC	-0.042707967
CDA	Cysteine and methionine r	CESC	-0.202638179
CDA	Cytokine induced killer c	CESC	-0.000290427
CDA	D-arginine and d-ornithin	CESC	0.023268782
CDA	D-glutamine and d-glutan	CESC	0.001924531
CDA	Dendritic cell	CESC	0.187601552
CDA	Dna_repair	CESC	0.004634131
CDA	Dna_replication	CESC	-0.206194898
CDA	Double-negative memory	CESC	-0.030517566
CDA	Drug metabolism - cytoch	CESC	-0.116970492
CDA	Drug metabolism - other (	CESC	0.120006707
CDA	E2f_targets	CESC	-0.24498032
CDA	Ecm_receptor_interaction	CESC	0.346449708
CDA	Effector cd4+ memory t (	CESC	-0.019427159
CDA	Effector cd8+ memory t (	CESC	0.200463185
CDA	Effector memory t cell	CESC	0.014644951
CDA	Effector regulatory t (treg	CESC	0.071075222
CDA	Elvidge_hif1a_targets_up	CESC	0.093815324
CDA	Endothelial cell	CESC	0.147690805
CDA	Eosinophil	CESC	0.104474102
CDA	Ether lipid metabolism	CESC	0.183965515
CDA	Exhausted cd4+ t cell	CESC	0.073092036
CDA	Exhausted cd8+ t cell	CESC	0.088991678
CDA	Exhausted t cell	CESC	0.018783657
CDA	Fat cell (adipocyte)	CESC	0.200111669
CDA	Fatty acid biosynthesis	CESC	-0.003934556
CDA	Fatty acid degradation	CESC	-0.237251266
CDA	Fatty acid elongation	CESC	0.155462372
CDA	Fibroblast	CESC	0.268780236
CDA	Folate biosynthesis	CESC	0.1391057
CDA	Follicular b cell	CESC	-0.005736352
CDA	Follicular dendritic cell	CESC	0.046167223
CDA	Follicular helper (tfh) t ce	CESC	0.091910394

CDA	Follicular t cell	CESC	0.026175416
CDA	Foxp3+il-17+ t cell	CESC	-0.025943692
CDA	Fructose and mannose me	CESC	0.187704068
CDA	G2m_checkpoint	CESC	-0.18781091
CDA	Galactose metabolism	CESC	0.260748023
CDA	Galie_tumor_stemness_ge	CESC	0.177326168
CDA	Glutathione metabolism	CESC	-0.086609359
CDA	Glycerolipid metabolism	CESC	0.070679648
CDA	Glycerophospholipid metæ	CESC	0.133635502
CDA	Glycine, serine and threor	CESC	-0.073047197
CDA	Glycolysis / gluconeogene	CESC	0.079267753
CDA	Glycosaminoglycan biosy1	CESC	0.323194381
CDA	Glycosaminoglycan biosy1	CESC	0.11415539
CDA	Glycosaminoglycan biosy1	CESC	0.10798854
CDA	Glycosaminoglycan degra	CESC	0.112617413
CDA	Glycosphingolipid biosyn1	CESC	0.08022017
CDA	Glycosphingolipid biosyn1	CESC	0.21755984
CDA	Glycosphingolipid biosyn1	CESC	0.068934193
CDA	Glycosylphosphatidylinos:	CESC	-0.155617409
CDA	Glyoxylate and dicarboxy	CESC	-0.194500214
CDA	Granulocyte	CESC	0.118966858
CDA	Hedgehog_signaling	CESC	0.069319728
CDA	Histidine metabolism	CESC	0.114058105
CDA	Hypoxia	CESC	0.34634766
CDA	Il-17ralpha t cell	CESC	0.043502202
CDA	Il2_stat5_signaling	CESC	0.290361957
CDA	Il6_jak_stat3_signaling	CESC	0.229577943
CDA	Immune_checkpoints_tunr	CESC	0.17565955
CDA	Immune_inhibition_cytok	CESC	0.257327604
CDA	Inositol phosphate metabo	CESC	-0.169671836
CDA	Interleukin_6_signaling	CESC	0.063581896
CDA	Jaeger_metastasis_up	CESC	0.004696545
CDA	Jain_nfkb_signaling	CESC	0.030410582
CDA	Kras_signaling_up	CESC	0.329430057
CDA	Linoleic acid metabolism	CESC	-0.03784769
CDA	Lipoic acid metabolism	CESC	-0.124507697
CDA	Lysine degradation	CESC	-0.357477044
CDA	Lysosome	CESC	0.159851365
CDA	M1 macrophage	CESC	0.135295351
CDA	M2 macrophage	CESC	0.228097651
CDA	Mannose type o-glycan bi	CESC	0.024089755
CDA	Mapk_signaling_pathway	CESC	0.184454994
CDA	Mapk3_erk1_activation	CESC	0.056676784

CDA	Marginal zone b cell	CESC	-0.036925797
CDA	Memory b cell	CESC	-0.068294353
CDA	Mesenchymal cell	CESC	0.318124214
CDA	Mesenchymal stem cell	CESC	0.239744663
CDA	Metabolism of xenobiotics	CESC	-0.127054558
CDA	Migrating cancer stem cell	CESC	0.097841985
CDA	Mitotic_spindle	CESC	-0.076970975
CDA	Monocyte	CESC	0.28026986
CDA	Mtor_signaling_pathway	CESC	-0.089146273
CDA	Mtorc1_signaling	CESC	0.081721781
CDA	Mucin type o-glycan biosynthesis	CESC	0.14604047
CDA	Myc_targets_v1	CESC	0.078665297
CDA	Myeloid cell	CESC	0.083712598
CDA	N-glycan biosynthesis	CESC	-0.033202992
CDA	Naive b cell	CESC	0.012947349
CDA	Naive cd4+ t cell	CESC	0.008245662
CDA	Naive cd8+ t cell	CESC	0.033314284
CDA	Natural killer cell	CESC	0.092567821
CDA	Natural killer t (nkt) cell	CESC	-0.087894486
CDA	Natural regulatory t (treg) cell	CESC	0.05496888
CDA	Neomycin, kanamycin and streptomycin	CESC	0.334597362
CDA	Neutrophil	CESC	0.451324984
CDA	Nicotinate and nicotinamide metabolism	CESC	0.151529633
CDA	Nitrogen metabolism	CESC	0.045630732
CDA	Nod_like_receptor_signaling	CESC	0.233091321
CDA	Notch_signaling	CESC	0.245604177
CDA	One carbon pool by folate	CESC	-0.14180831
CDA	Other glycan degradation	CESC	-0.021958278
CDA	Other types of o-glycan biosynthesis	CESC	0.037478349
CDA	Oxidative phosphorylation	CESC	0.069067486
CDA	P53_pathway	CESC	0.268531045
CDA	P53_signaling_pathway	CESC	0.020681864
CDA	Pantothenate and coa biosynthesis	CESC	-0.007825895
CDA	Pentose and glucuronate interconversions	CESC	-0.1490488
CDA	Pentose phosphate pathway	CESC	0.078466281
CDA	Pericyte	CESC	0.307384767
CDA	Phenylalanine metabolism	CESC	0.21819421
CDA	Phenylalanine, tyrosine and tryptophan metabolism	CESC	-0.017408801
CDA	Phosphonate and phosphite metabolism	CESC	-0.061224944
CDA	Pi3k_akt_activation	CESC	-0.078021488
CDA	Pi3k_akt_mtor_signaling	CESC	0.09727062
CDA	Porphyrin and chlorophyll metabolism	CESC	-0.055539404
CDA	Primary bile acid biosynthesis	CESC	0.029630115

CDA	Propanoate metabolism	CESC	-0.297112514
CDA	Purine metabolism	CESC	0.080503038
CDA	Pyrimidine metabolism	CESC	0.040812708
CDA	Pyruvate metabolism	CESC	-0.169769752
CDA	Regulation_of_autophagy	CESC	-0.253827257
CDA	Retinol metabolism	CESC	0.027419658
CDA	Riboflavin metabolism	CESC	-0.008862061
CDA	Schmahl_pdgf_signaling	CESC	0.011637905
CDA	Selenocompound metabol	CESC	-0.293079717
CDA	Signaling_by_hippo	CESC	0.04468504
CDA	Sphingolipid metabolism	CESC	0.011354876
CDA	Starch and sucrose metabo	CESC	0.156717845
CDA	Steroid biosynthesis	CESC	-0.065559383
CDA	Steroid hormone biosynth	CESC	0.067026511
CDA	Sulfur metabolism	CESC	0.058407925
CDA	Synthesis and degradation	CESC	-0.091903195
CDA	T helper cell	CESC	0.063520522
CDA	T helper1 (th1) cell	CESC	0.128812148
CDA	T helper17 (th17) cell	CESC	0.246038299
CDA	T helper2 (th2) cell	CESC	0.118244842
CDA	T helper9 (th9) cell	CESC	0.086529795
CDA	Taurine and hypotaurine r	CESC	-0.203635757
CDA	Terpenoid backbone biosy	CESC	-0.066250525
CDA	Tgf_beta_signaling_pathw	CESC	0.139451594
CDA	Thiamine metabolism	CESC	0.09729646
CDA	Tnfa_signaling_via_nfbk	CESC	0.280837485
CDA	Tryptophan metabolism	CESC	-0.1568866
CDA	Tumor endothelial cell	CESC	0.303738676
CDA	Tyrosine metabolism	CESC	0.089756589
CDA	Ubiquinone and other terf	CESC	-0.11101703
CDA	Valine, leucine and isoleu	CESC	0.13150565
CDA	Valine, leucine and isoleu	CESC	-0.267937179
CDA	Vascular endothelial cell	CESC	0.181151708
CDA	Vascular smooth muscle c	CESC	0.100923589
CDA	Vegf_signaling_pathway	CESC	0.108714988
CDA	Vitamin b6 metabolism	CESC	-0.057964888
CDA	Willert_wnt_signaling	CESC	0.168256812
CDA	Wnt_beta_catenin_signali	CESC	0.098845539
UCK1	Abnormal plasma cell	CESC	0.060756049
UCK1	Activated b cell	CESC	0.184737666
UCK1	Activated cd4+ t cell	CESC	0.117249939
UCK1	Activated t cell	CESC	0.190174667
UCK1	Alanine, aspartate and glu	CESC	-0.093096969

UCK1	Alcala_apoptosis	CESC	0.259686215
UCK1	Alpha-linolenic acid meta	CESC	0.069934401
UCK1	Amino sugar and nucleoti	CESC	0.082755226
UCK1	Ampk_pathway	CESC	-0.089939423
UCK1	Angiogenesis	CESC	-0.204688595
UCK1	Arachidonic acid metabol	CESC	0.147101545
UCK1	Arginine and proline metæ	CESC	0.120832975
UCK1	Arginine biosynthesis	CESC	-0.122079077
UCK1	Ascorbate and aldarate mε	CESC	0.060123114
UCK1	Atypical memory b cell	CESC	0.007307584
UCK1	Axl+siglec6+ dendritic ce	CESC	0.041170543
UCK1	B cell	CESC	0.094686485
UCK1	B1 cell	CESC	0.155066543
UCK1	Basal cell	CESC	-0.017265793
UCK1	Beta-alanine metabolism	CESC	0.095209672
UCK1	Biosynthesis of unsaturate	CESC	0.066436236
UCK1	Biotin metabolism	CESC	0.080544991
UCK1	Butanoate metabolism	CESC	0.232468592
UCK1	Caffeine metabolism	CESC	-0.123380908
UCK1	Cancer stem cell	CESC	-0.239029605
UCK1	Cancer stem-like cell	CESC	-0.11479516
UCK1	Cd4+ cytotoxic t cell	CESC	0.180677671
UCK1	Cd4+ memory t cell	CESC	0.088931099
UCK1	Cd4+ regulatory t cell	CESC	0.132099741
UCK1	Cd4+ t helper cell	CESC	0.167375437
UCK1	Cd4+cd25+ regulatory t c	CESC	0.161410145
UCK1	Cd8+ cytotoxic t cell	CESC	0.21457913
UCK1	Cd8+ regulatory t cell	CESC	0.154591594
UCK1	Cell_cycle	CESC	-0.200095973
UCK1	Chandran_metastasis_top ⁵	CESC	-0.279541934
UCK1	Citrate cycle (tca cycle)	CESC	0.040619905
UCK1	Cysteine and methionine r	CESC	0.026933703
UCK1	Cytokine induced killer cε	CESC	0.263325544
UCK1	D-arginine and d-ornithin	CESC	0.142238586
UCK1	D-glutamine and d-glutan	CESC	-0.226765738
UCK1	Dendritic cell	CESC	0.071154976
UCK1	Dna_repair	CESC	0.340708701
UCK1	Dna_replication	CESC	0.172698776
UCK1	Double-negative memory	CESC	0.24775847
UCK1	Drug metabolism - cytoch	CESC	0.098346698
UCK1	Drug metabolism - other ε	CESC	0.215319874
UCK1	E2f_targets	CESC	-0.114736277
UCK1	Ecm_receptor_interaction	CESC	-0.268306158

UCK1	Effector cd4+ memory t (CESC	0.01077668
UCK1	Effector cd8+ memory t (CESC	0.051115326
UCK1	Effector memory t cell CESC	0.091893652
UCK1	Effector regulatory t (treg CESC	0.089855117
UCK1	Elvidge_hif1a_targets_up CESC	-0.31692164
UCK1	Endothelial cell CESC	-0.113760708
UCK1	Eosinophil CESC	0.123576486
UCK1	Ether lipid metabolism CESC	-0.034010052
UCK1	Exhausted cd4+ t cell CESC	0.088946281
UCK1	Exhausted cd8+ t cell CESC	0.105906945
UCK1	Exhausted t cell CESC	0.230759135
UCK1	Fat cell (adipocyte) CESC	0.071261529
UCK1	Fatty acid biosynthesis CESC	-0.072493952
UCK1	Fatty acid degradation CESC	0.170267941
UCK1	Fatty acid elongation CESC	0.036713038
UCK1	Fibroblast CESC	-0.139322756
UCK1	Folate biosynthesis CESC	0.208980956
UCK1	Follicular b cell CESC	0.090316702
UCK1	Follicular dendritic cell CESC	-0.02203353
UCK1	Follicular helper (tfh) t ce CESC	0.114107172
UCK1	Follicular t cell CESC	0.208367941
UCK1	Foxp3+il-17+ t cell CESC	0.128618083
UCK1	Fructose and mannose me CESC	0.028919037
UCK1	G2m_checkpoint CESC	-0.297913595
UCK1	Galactose metabolism CESC	0.058515559
UCK1	Galie_tumor_stemness_ge CESC	-0.191677322
UCK1	Glutathione metabolism CESC	0.198496031
UCK1	Glycerolipid metabolism CESC	0.034288845
UCK1	Glycerophospholipid metæ CESC	0.140251001
UCK1	Glycine, serine and threor CESC	0.279686946
UCK1	Glycolysis / gluconeogene CESC	0.009552063
UCK1	Glycosaminoglycan biosy1 CESC	0.012187127
UCK1	Glycosaminoglycan biosy1 CESC	-0.130051473
UCK1	Glycosaminoglycan biosy1 CESC	-0.151085885
UCK1	Glycosaminoglycan degra CESC	0.081587594
UCK1	Glycosphingolipid biosyn1 CESC	0.108743151
UCK1	Glycosphingolipid biosyn1 CESC	0.128723805
UCK1	Glycosphingolipid biosyn1 CESC	-0.131973404
UCK1	Glycosylphosphatidylinos: CESC	0.194517614
UCK1	Glyoxylate and dicarboxy CESC	0.228572727
UCK1	Granulocyte CESC	0.06911989
UCK1	Hedgehog_signaling CESC	-0.27915286
UCK1	Histidine metabolism CESC	0.082739228

UCK1	Hypoxia	CESC	-0.115813165
UCK1	Il-17alpha t cell	CESC	0.174188382
UCK1	Il2_stat5_signaling	CESC	-0.057347641
UCK1	Il6_jak_stat3_signaling	CESC	-0.068799073
UCK1	Immune_checkpoints_tun	CESC	0.081448977
UCK1	Immune_inhibition_cytok	CESC	0.024486965
UCK1	Inositol phosphate metabo	CESC	-0.249830724
UCK1	Interleukin_6_signaling	CESC	-0.308794563
UCK1	Jaeger_metastasis_up	CESC	-0.100544307
UCK1	Jain_nfkb_signaling	CESC	-0.063942666
UCK1	Kras_signaling_up	CESC	-0.163017157
UCK1	Linoleic acid metabolism	CESC	0.054538586
UCK1	Lipoic acid metabolism	CESC	0.243430615
UCK1	Lysine degradation	CESC	0.046819162
UCK1	Lysosome	CESC	0.178862171
UCK1	M1 macrophage	CESC	0.052883312
UCK1	M2 macrophage	CESC	0.053509183
UCK1	Mannose type o-glycan bi	CESC	0.049861063
UCK1	Mapk_signaling_pathway	CESC	-0.290309307
UCK1	Mapk3_erk1_activation	CESC	-0.336137693
UCK1	Marginal zone b cell	CESC	0.053306387
UCK1	Memory b cell	CESC	0.223502189
UCK1	Mesenchymal cell	CESC	-0.089991976
UCK1	Mesenchymal stem cell	CESC	-0.133401395
UCK1	Metabolism of xenobiotic	CESC	0.143710437
UCK1	Migrating cancer stem cel	CESC	-0.143694594
UCK1	Mitotic_spindle	CESC	-0.436490848
UCK1	Monocyte	CESC	0.03854161
UCK1	Mtor_signaling_pathway	CESC	-0.150043768
UCK1	Mtorc1_signaling	CESC	-0.112096848
UCK1	Mucin type o-glycan biosy	CESC	-0.341297587
UCK1	Myc_targets_v1	CESC	0.058176292
UCK1	Myeloid cell	CESC	0.081966722
UCK1	N-glycan biosynthesis	CESC	0.035686491
UCK1	Naive b cell	CESC	0.136206131
UCK1	Naive cd4+ t cell	CESC	-0.014384677
UCK1	Naive cd8+ t cell	CESC	-0.06042002
UCK1	Natural killer cell	CESC	0.160843567
UCK1	Natural killer t (nkt) cell	CESC	0.214621699
UCK1	Natural regulatory t (treg)	CESC	0.042139624
UCK1	Neomycin, kanamycin and	CESC	-0.118628617
UCK1	Neutrophil	CESC	-0.112037074
UCK1	Nicotinate and nicotinami	CESC	-0.009835124

UCK1	Nitrogen metabolism	CESC	-0.139071709
UCK1	Nod_like_receptor_signal	CESC	-0.157965633
UCK1	Notch_signaling	CESC	-0.135770645
UCK1	One carbon pool by folate	CESC	0.028473846
UCK1	Other glycan degradation	CESC	0.137015071
UCK1	Other types of o-glycan b	CESC	0.077800224
UCK1	Oxidative phosphorylatio	CESC	0.388893673
UCK1	P53_pathway	CESC	0.033033419
UCK1	P53_signaling_pathway	CESC	-0.200580391
UCK1	Pantothenate and coa bios	CESC	0.097702266
UCK1	Pentose and glucuronate in	CESC	0.066698901
UCK1	Pentose phosphate pathwa	CESC	0.119503462
UCK1	Pericyte	CESC	-0.138277155
UCK1	Phenylalanine metabolism	CESC	0.020824319
UCK1	Phenylalanine, tyrosine ar	CESC	0.070632655
UCK1	Phosphonate and phosphir	CESC	-0.000388625
UCK1	Pi3k_akt_activation	CESC	-0.248944568
UCK1	Pi3k_akt_mtor_signaling	CESC	-0.129677185
UCK1	Porphyrin and chlorophyl	CESC	0.233082224
UCK1	Primary bile acid biosynt	CESC	0.072425843
UCK1	Propanoate metabolism	CESC	0.018610847
UCK1	Purine metabolism	CESC	0.09478037
UCK1	Pyrimidine metabolism	CESC	0.161582195
UCK1	Pyruvate metabolism	CESC	0.164638748
UCK1	Regulation_of_autophagy	CESC	0.175961594
UCK1	Retinol metabolism	CESC	0.037131918
UCK1	Riboflavin metabolism	CESC	0.211633817
UCK1	Schmahl_pdgf_signaling	CESC	-0.282605417
UCK1	Selenocompound metabol	CESC	-0.037376065
UCK1	Signaling_by_hippo	CESC	-0.436844998
UCK1	Sphingolipid metabolism	CESC	-0.21184864
UCK1	Starch and sucrose metabo	CESC	0.01866182
UCK1	Steroid biosynthesis	CESC	0.004249598
UCK1	Steroid hormone biosynth	CESC	0.03305698
UCK1	Sulfur metabolism	CESC	-0.058973684
UCK1	Synthesis and degradation	CESC	0.122143752
UCK1	T helper cell	CESC	0.115393607
UCK1	T helper1 (th1) cell	CESC	0.148130091
UCK1	T helper17 (th17) cell	CESC	-0.020067988
UCK1	T helper2 (th2) cell	CESC	0.134780992
UCK1	T helper9 (th9) cell	CESC	0.172180522
UCK1	Taurine and hypotaurine r	CESC	0.149290477
UCK1	Terpenoid backbone biosy	CESC	0.014623995

UCK1	Tgf_beta_signaling_pathway	CEC	-0.386214673
UCK1	Thiamine metabolism	CEC	0.2213173
UCK1	Tnfa_signaling_via_nfk	CEC	-0.144016424
UCK1	Tryptophan metabolism	CEC	0.342866105
UCK1	Tumor endothelial cell	CEC	-0.049760534
UCK1	Tyrosine metabolism	CEC	0.124648086
UCK1	Ubiquinone and other ter	CEC	0.216719187
UCK1	Valine, leucine and isoleu	CEC	0.199096945
UCK1	Valine, leucine and isoleu	CEC	0.141421435
UCK1	Vascular endothelial cell	CEC	-0.045323511
UCK1	Vascular smooth muscle c	CEC	-0.087804347
UCK1	Vegf_signaling_pathway	CEC	-0.180608062
UCK1	Vitamin b6 metabolism	CEC	0.275453232
UCK1	Willert_wnt_signaling	CEC	0.039935
UCK1	Wnt_beta_catenin_signali	CEC	-0.196099189
UCK2	Abnormal plasma cell	CEC	-0.040155173
UCK2	Activated b cell	CEC	0.085704665
UCK2	Activated cd4+ t cell	CEC	0.049748206
UCK2	Activated t cell	CEC	0.006417626
UCK2	Alanine, aspartate and glu	CEC	0.126646621
UCK2	Alcala_apoptosis	CEC	0.306847295
UCK2	Alpha-linolenic acid meta	CEC	0.004445042
UCK2	Amino sugar and nucleoti	CEC	0.110323355
UCK2	Ampk_pathway	CEC	-0.052314733
UCK2	Angiogenesis	CEC	0.056982333
UCK2	Arachidonic acid metabol	CEC	0.047322406
UCK2	Arginine and proline met	CEC	0.167264347
UCK2	Arginine biosynthesis	CEC	0.079025319
UCK2	Ascorbate and aldarate m	CEC	-0.007302975
UCK2	Atypical memory b cell	CEC	0.032467904
UCK2	Axl+siglec6+ dendritic ce	CEC	-0.101168366
UCK2	B cell	CEC	-0.185831271
UCK2	B1 cell	CEC	-0.002773029
UCK2	Basal cell	CEC	0.296503682
UCK2	Beta-alanine metabolism	CEC	0.032310111
UCK2	Biosynthesis of unsaturate	CEC	0.019814809
UCK2	Biotin metabolism	CEC	-0.061906869
UCK2	Butanoate metabolism	CEC	-0.084937694
UCK2	Caffeine metabolism	CEC	-0.138275667
UCK2	Cancer stem cell	CEC	-0.010428142
UCK2	Cancer stem-like cell	CEC	-0.311689942
UCK2	Cd4+ cytotoxic t cell	CEC	0.018881744
UCK2	Cd4+ memory t cell	CEC	-0.003907705

UCK2	Cd4+ regulatory t cell	CESC	0.078765791
UCK2	Cd4+ t helper cell	CESC	0.005138752
UCK2	Cd4+cd25+ regulatory t c	CESC	0.019910257
UCK2	Cd8+ cytotoxic t cell	CESC	0.062335578
UCK2	Cd8+ regulatory t cell	CESC	0.021305184
UCK2	Cell_cycle	CESC	0.213047632
UCK2	Chandran_metastasis_top5	CESC	0.238879931
UCK2	Citrate cycle (tca cycle)	CESC	0.218607656
UCK2	Cysteine and methionine r	CESC	0.1246921
UCK2	Cytokine induced killer c	CESC	-0.021554466
UCK2	D-arginine and d-ornithin	CESC	0.036342588
UCK2	D-glutamine and d-glutan	CESC	0.12222648
UCK2	Dendritic cell	CESC	0.127774722
UCK2	Dna_repair	CESC	0.308188904
UCK2	Dna_replication	CESC	0.138783526
UCK2	Double-negative memory	CESC	-0.019803778
UCK2	Drug metabolism - cytoch	CESC	-0.009863234
UCK2	Drug metabolism - other (	CESC	0.377667777
UCK2	E2f_targets	CESC	0.172530282
UCK2	Ecm_receptor_interaction	CESC	-0.054241674
UCK2	Effector cd4+ memory t (	CESC	-0.023668934
UCK2	Effector cd8+ memory t (	CESC	0.065779437
UCK2	Effector memory t cell	CESC	-0.006812822
UCK2	Effector regulatory t (treg	CESC	0.022104899
UCK2	Elvidge_hif1a_targets_up	CESC	0.400339035
UCK2	Endothelial cell	CESC	-0.116271156
UCK2	Eosinophil	CESC	0.04903177
UCK2	Ether lipid metabolism	CESC	-0.042323942
UCK2	Exhausted cd4+ t cell	CESC	-0.012628876
UCK2	Exhausted cd8+ t cell	CESC	-0.029630623
UCK2	Exhausted t cell	CESC	0.036720222
UCK2	Fat cell (adipocyte)	CESC	0.048640229
UCK2	Fatty acid biosynthesis	CESC	0.065970819
UCK2	Fatty acid degradation	CESC	-0.115465164
UCK2	Fatty acid elongation	CESC	0.275468041
UCK2	Fibroblast	CESC	-0.025073576
UCK2	Folate biosynthesis	CESC	0.222742084
UCK2	Follicular b cell	CESC	-0.005300955
UCK2	Follicular dendritic cell	CESC	-0.090754371
UCK2	Follicular helper (tfh) t ce	CESC	0.109462084
UCK2	Follicular t cell	CESC	0.033996765
UCK2	Foxp3+il-17+ t cell	CESC	0.063365073
UCK2	Fructose and mannose me	CESC	0.189177729

UCK2	G2m_checkpoint	CESC	0.169561424
UCK2	Galactose metabolism	CESC	0.244879947
UCK2	Galie_tumor_stemness_ge	CESC	-0.232980343
UCK2	Glutathione metabolism	CESC	0.12932781
UCK2	Glycerolipid metabolism	CESC	-0.068112269
UCK2	Glycerophospholipid metæ	CESC	-0.00300205
UCK2	Glycine, serine and threor	CESC	0.019216044
UCK2	Glycolysis / gluconeogene	CESC	0.182789716
UCK2	Glycosaminoglycan biosy1	CESC	0.087251532
UCK2	Glycosaminoglycan biosy1	CESC	0.019607419
UCK2	Glycosaminoglycan biosy1	CESC	-0.127202404
UCK2	Glycosaminoglycan degra	CESC	-0.155682322
UCK2	Glycosphingolipid biosyn1	CESC	-0.197639997
UCK2	Glycosphingolipid biosyn1	CESC	-0.219803313
UCK2	Glycosphingolipid biosyn1	CESC	-0.141621723
UCK2	Glycosylphosphatidylinos:	CESC	0.06110329
UCK2	Glyoxylate and dicarboxy	CESC	0.095840902
UCK2	Granulocyte	CESC	0.040067163
UCK2	Hedgehog_signaling	CESC	-0.099218305
UCK2	Histidine metabolism	CESC	-0.036265369
UCK2	Hypoxia	CESC	0.184258815
UCK2	Il-17alpha t cell	CESC	-0.000411237
UCK2	Il2_stat5_signaling	CESC	0.135934835
UCK2	Il6_jak_stat3_signaling	CESC	0.097511428
UCK2	Immune_checkpoints_tun	CESC	-0.044004254
UCK2	Immune_inhibition_cytok	CESC	0.115198308
UCK2	Inositol phosphate metabo	CESC	-0.214357496
UCK2	Interleukin_6_signaling	CESC	-0.051053167
UCK2	Jaeger_metastasis_up	CESC	0.092771351
UCK2	Jain_nfkb_signaling	CESC	0.490839371
UCK2	Kras_signaling_up	CESC	-0.041189763
UCK2	Linoleic acid metabolism	CESC	-0.050887279
UCK2	Lipoic acid metabolism	CESC	-0.046872342
UCK2	Lysine degradation	CESC	0.00083851
UCK2	Lysosome	CESC	-0.123108474
UCK2	M1 macrophage	CESC	0.155355846
UCK2	M2 macrophage	CESC	0.196813068
UCK2	Mannose type o-glycan bi	CESC	0.002706201
UCK2	Mapk_signaling_pathway	CESC	0.057174982
UCK2	Mapk3_erk1_activation	CESC	-0.036113594
UCK2	Marginal zone b cell	CESC	0.017431315
UCK2	Memory b cell	CESC	0.04756578
UCK2	Mesenchymal cell	CESC	0.045450385

UCK2	Mesenchymal stem cell	CESC	-0.081022671
UCK2	Metabolism of xenobiotic	CESC	0.035469033
UCK2	Migrating cancer stem cel	CESC	0.185245336
UCK2	Mitotic_spindle	CESC	-0.100945593
UCK2	Monocyte	CESC	0.090498945
UCK2	Mtor_signaling_pathway	CESC	0.062802052
UCK2	Mtorc1_signaling	CESC	0.439325735
UCK2	Mucin type o-glycan bios	CESC	-0.275396902
UCK2	Myc_targets_v1	CESC	0.542615352
UCK2	Myeloid cell	CESC	0.043165182
UCK2	N-glycan biosynthesis	CESC	-0.132764344
UCK2	Naive b cell	CESC	-0.046091583
UCK2	Naive cd4+ t cell	CESC	-0.064968692
UCK2	Naive cd8+ t cell	CESC	-0.107853225
UCK2	Natural killer cell	CESC	0.058189546
UCK2	Natural killer t (nkt) cell	CESC	0.177523404
UCK2	Natural regulatory t (treg)	CESC	-0.029883565
UCK2	Neomycin, kanamycin an	CESC	0.248193915
UCK2	Neutrophil	CESC	0.135798203
UCK2	Nicotinate and nicotinami	CESC	-0.13499038
UCK2	Nitrogen metabolism	CESC	-0.012994293
UCK2	Nod_like_receptor_signal	CESC	0.209325711
UCK2	Notch_signaling	CESC	0.142035236
UCK2	One carbon pool by folate	CESC	0.146069656
UCK2	Other glycan degradation	CESC	-0.316640519
UCK2	Other types of o-glycan b	CESC	-0.170820499
UCK2	Oxidative phosphorylatio	CESC	0.27229149
UCK2	P53_pathway	CESC	0.24003315
UCK2	P53_signaling_pathway	CESC	0.087041335
UCK2	Pantothenate and coa bios	CESC	-0.041859283
UCK2	Pentose and glucuronate in	CESC	0.03286944
UCK2	Pentose phosphate pathwa	CESC	0.220503784
UCK2	Pericyte	CESC	-0.092503395
UCK2	Phenylalanine metabolism	CESC	0.217042778
UCK2	Phenylalanine, tyrosine ar	CESC	0.190564674
UCK2	Phosphonate and phosphiri	CESC	0.152293764
UCK2	Pi3k_akt_activation	CESC	-0.04260048
UCK2	Pi3k_akt_mtor_signaling	CESC	0.242687567
UCK2	Porphyrin and chlorophyl	CESC	0.229467057
UCK2	Primary bile acid biosynt	CESC	-0.046856754
UCK2	Propanoate metabolism	CESC	-0.113208283
UCK2	Purine metabolism	CESC	0.40445095
UCK2	Pyrimidine metabolism	CESC	0.461721717

UCK2	Pyruvate metabolism	CESC	0.171348257
UCK2	Regulation_of_autophagy	CESC	0.033933584
UCK2	Retinol metabolism	CESC	0.034249209
UCK2	Riboflavin metabolism	CESC	-0.003807367
UCK2	Schmahl_pdgf_signaling	CESC	-0.055302087
UCK2	Selenocompound metabol	CESC	-0.065934004
UCK2	Signaling_by_hippo	CESC	-0.076595962
UCK2	Sphingolipid metabolism	CESC	-0.286650602
UCK2	Starch and sucrose metabo	CESC	0.069382086
UCK2	Steroid biosynthesis	CESC	0.277628741
UCK2	Steroid hormone biosynth	CESC	0.145086477
UCK2	Sulfur metabolism	CESC	-0.096805494
UCK2	Synthesis and degradation	CESC	-0.025753415
UCK2	T helper cell	CESC	-0.052588905
UCK2	T helper1 (th1) cell	CESC	0.08791805
UCK2	T helper17 (th17) cell	CESC	0.113660966
UCK2	T helper2 (th2) cell	CESC	0.053115451
UCK2	T helper9 (th9) cell	CESC	0.020804347
UCK2	Taurine and hypotaurine r	CESC	-0.233123725
UCK2	Terpenoid backbone biosy	CESC	0.296357738
UCK2	Tgf_beta_signaling_pathw	CESC	0.033145194
UCK2	Thiamine metabolism	CESC	-0.09273326
UCK2	Tnfa_signaling_via_nfk	CESC	0.160757782
UCK2	Tryptophan metabolism	CESC	-0.025230955
UCK2	Tumor endothelial cell	CESC	0.244043403
UCK2	Tyrosine metabolism	CESC	0.063932774
UCK2	Ubiquinone and other ter	CESC	0.061281083
UCK2	Valine, leucine and isoleu	CESC	0.071381335
UCK2	Valine, leucine and isoleu	CESC	-0.084896039
UCK2	Vascular endothelial cell	CESC	-0.021441004
UCK2	Vascular smooth muscle c	CESC	-0.057741312
UCK2	Vegf_signaling_pathway	CESC	0.121912941
UCK2	Vitamin b6 metabolism	CESC	0.086007462
UCK2	Willert_wnt_signaling	CESC	0.134580376
UCK2	Wnt_beta_catenin_signali	CESC	0.070547702
UCKL1	Abnormal plasma cell	CESC	0.015282528
UCKL1	Activated b cell	CESC	0.042433407
UCKL1	Activated cd4+ t cell	CESC	-0.026128357
UCKL1	Activated t cell	CESC	0.020113808
UCKL1	Alanine, aspartate and glu	CESC	0.110697906
UCKL1	Alcala_apoptosis	CESC	0.190169055
UCKL1	Alpha-linolenic acid meta	CESC	-0.050979022
UCKL1	Amino sugar and nucleoti	CESC	-0.029296319

UCKL1	Ampk_pathway	CESC	0.150292409
UCKL1	Angiogenesis	CESC	-0.092409474
UCKL1	Arachidonic acid metabolism	CESC	-0.145118928
UCKL1	Arginine and proline metabolism	CESC	0.094853174
UCKL1	Arginine biosynthesis	CESC	-0.041557813
UCKL1	Ascorbate and aldarate metabolism	CESC	-0.108519915
UCKL1	Atypical memory b cell	CESC	0.003396831
UCKL1	Axl+siglec6+ dendritic cell	CESC	-0.163448562
UCKL1	B cell	CESC	-0.015569522
UCKL1	B1 cell	CESC	0.051105652
UCKL1	Basal cell	CESC	-0.254047509
UCKL1	Beta-alanine metabolism	CESC	-0.081297131
UCKL1	Biosynthesis of unsaturated fatty acids	CESC	0.059238908
UCKL1	Biotin metabolism	CESC	0.083051681
UCKL1	Butanoate metabolism	CESC	0.165118573
UCKL1	Caffeine metabolism	CESC	-0.223250771
UCKL1	Cancer stem cell	CESC	-0.222060211
UCKL1	Cancer stem-like cell	CESC	0.067475386
UCKL1	Cd4+ cytotoxic t cell	CESC	-0.061172387
UCKL1	Cd4+ memory t cell	CESC	0.0416823
UCKL1	Cd4+ regulatory t cell	CESC	-0.027805349
UCKL1	Cd4+ t helper cell	CESC	-0.004809784
UCKL1	Cd4+cd25+ regulatory t cell	CESC	-0.007321795
UCKL1	Cd8+ cytotoxic t cell	CESC	0.022599587
UCKL1	Cd8+ regulatory t cell	CESC	0.008913241
UCKL1	Cell_cycle	CESC	-0.159991839
UCKL1	Chandran_metastasis_top5	CESC	-0.024170395
UCKL1	Citrate cycle (tca cycle)	CESC	0.180774191
UCKL1	Cysteine and methionine metabolism	CESC	0.084173855
UCKL1	Cytokine induced killer cell	CESC	0.087172761
UCKL1	D-arginine and d-ornithine	CESC	0.176771477
UCKL1	D-glutamine and d-glutamate	CESC	-0.187569802
UCKL1	Dendritic cell	CESC	-0.100648362
UCKL1	Dna_repair	CESC	0.30183182
UCKL1	Dna_replication	CESC	0.043571889
UCKL1	Double-negative memory t cell	CESC	0.17289305
UCKL1	Drug metabolism - cytochrome p450	CESC	-0.171282121
UCKL1	Drug metabolism - other	CESC	0.103466996
UCKL1	E2f_targets	CESC	-0.036979093
UCKL1	Ecm_receptor_interaction	CESC	-0.10317726
UCKL1	Effector cd4+ memory t cell	CESC	-0.09294179
UCKL1	Effector cd8+ memory t cell	CESC	-0.122722043
UCKL1	Effector memory t cell	CESC	-0.040674315

UCKL1	Effector regulatory t (treg	CESC	-0.056038852
UCKL1	Elvidge_hif1a_targets_up	CESC	-0.136981898
UCKL1	Endothelial cell	CESC	-0.119423329
UCKL1	Eosinophil	CESC	-0.076728728
UCKL1	Ether lipid metabolism	CESC	-0.154004421
UCKL1	Exhausted cd4+ t cell	CESC	-0.151108259
UCKL1	Exhausted cd8+ t cell	CESC	-0.149516723
UCKL1	Exhausted t cell	CESC	0.046929731
UCKL1	Fat cell (adipocyte)	CESC	0.201347327
UCKL1	Fatty acid biosynthesis	CESC	0.138682484
UCKL1	Fatty acid degradation	CESC	0.053017053
UCKL1	Fatty acid elongation	CESC	0.138892948
UCKL1	Fibroblast	CESC	-0.143381582
UCKL1	Folate biosynthesis	CESC	-0.017112493
UCKL1	Follicular b cell	CESC	-0.06810426
UCKL1	Follicular dendritic cell	CESC	-0.010517457
UCKL1	Follicular helper (tfh) t ce	CESC	-0.05511118
UCKL1	Follicular t cell	CESC	0.098558543
UCKL1	Foxp3+il-17+ t cell	CESC	-0.014602299
UCKL1	Fructose and mannose me	CESC	0.15305966
UCKL1	G2m_checkpoint	CESC	-0.177627018
UCKL1	Galactose metabolism	CESC	-0.024861683
UCKL1	Galie_tumor_stemness_ge	CESC	-0.22742658
UCKL1	Glutathione metabolism	CESC	0.059316046
UCKL1	Glycerolipid metabolism	CESC	0.067805535
UCKL1	Glycerophospholipid metæ	CESC	0.171455943
UCKL1	Glycine, serine and threor	CESC	0.170524944
UCKL1	Glycolysis / gluconeogene	CESC	0.039515101
UCKL1	Glycosaminoglycan biosy1	CESC	0.041250235
UCKL1	Glycosaminoglycan biosy1	CESC	-0.095794234
UCKL1	Glycosaminoglycan biosy1	CESC	-0.058102428
UCKL1	Glycosaminoglycan degra	CESC	-0.001846627
UCKL1	Glycosphingolipid biosyn1	CESC	0.062095467
UCKL1	Glycosphingolipid biosyn1	CESC	-0.047300292
UCKL1	Glycosphingolipid biosyn1	CESC	-0.146146628
UCKL1	Glycosylphosphatidylinos:	CESC	0.083711151
UCKL1	Glyoxylate and dicarboxy	CESC	0.297421084
UCKL1	Granulocyte	CESC	-0.029693982
UCKL1	Hedgehog_signaling	CESC	-0.182258338
UCKL1	Histidine metabolism	CESC	-0.117423884
UCKL1	Hypoxia	CESC	-0.138837051
UCKL1	Il-17ralpha t cell	CESC	0.020272847
UCKL1	Il2_stat5_signaling	CESC	-0.202368943

UCKL1	Il6_jak_stat3_signaling	CESC	-0.24272941
UCKL1	Immune_checkpoints_tun	CESC	-0.093349543
UCKL1	Immune_inhibition_cytok	CESC	-0.057240211
UCKL1	Inositol phosphate metabo	CESC	-0.305739037
UCKL1	Interleukin_6_signaling	CESC	-0.406460647
UCKL1	Jaeger_metastasis_up	CESC	0.101084746
UCKL1	Jain_nfkb_signaling	CESC	0.012346788
UCKL1	Kras_signaling_up	CESC	-0.261539904
UCKL1	Linoleic acid metabolism	CESC	-0.17495912
UCKL1	Lipoic acid metabolism	CESC	0.133641739
UCKL1	Lysine degradation	CESC	0.047195878
UCKL1	Lysosome	CESC	-0.029628848
UCKL1	M1 macrophage	CESC	-0.141349031
UCKL1	M2 macrophage	CESC	-0.086935036
UCKL1	Mannose type o-glycan bi	CESC	0.21995622
UCKL1	Mapk_signaling_pathway	CESC	-0.354867258
UCKL1	Mapk3_erk1_activation	CESC	-0.371207075
UCKL1	Marginal zone b cell	CESC	-0.0998117
UCKL1	Memory b cell	CESC	-0.009728071
UCKL1	Mesenchymal cell	CESC	0.005961161
UCKL1	Mesenchymal stem cell	CESC	-0.121179747
UCKL1	Metabolism of xenobiotic	CESC	-0.095812578
UCKL1	Migrating cancer stem cel	CESC	-0.191236387
UCKL1	Mitotic_spindle	CESC	-0.291517097
UCKL1	Monocyte	CESC	-0.146733068
UCKL1	Mtor_signaling_pathway	CESC	-0.126849115
UCKL1	Mtorc1_signaling	CESC	-0.108494485
UCKL1	Mucin type o-glycan biosy	CESC	-0.301369907
UCKL1	Myc_targets_v1	CESC	0.198031171
UCKL1	Myeloid cell	CESC	-0.066196823
UCKL1	N-glycan biosynthesis	CESC	0.010084922
UCKL1	Naive b cell	CESC	0.077970036
UCKL1	Naive cd4+ t cell	CESC	-0.149739689
UCKL1	Naive cd8+ t cell	CESC	-0.042273714
UCKL1	Natural killer cell	CESC	-0.023744021
UCKL1	Natural killer t (nkt) cell	CESC	0.081195397
UCKL1	Natural regulatory t (treg)	CESC	-0.125359604
UCKL1	Neomycin, kanamycin and	CESC	-0.194509032
UCKL1	Neutrophil	CESC	-0.202543539
UCKL1	Nicotinate and nicotinami	CESC	-0.045207426
UCKL1	Nitrogen metabolism	CESC	-0.110713449
UCKL1	Nod_like_receptor_signal	CESC	-0.221479217
UCKL1	Notch_signaling	CESC	-0.055253301

UCKL1	One carbon pool by folate	CESC	0.091973911
UCKL1	Other glycan degradation	CESC	0.121593386
UCKL1	Other types of o-glycan b	CESC	0.389886902
UCKL1	Oxidative phosphorylatior	CESC	0.316350019
UCKL1	P53_pathway	CESC	-0.23941412
UCKL1	P53_signaling_pathway	CESC	-0.406324108
UCKL1	Pantothenate and coa bios	CESC	-0.005257495
UCKL1	Pentose and glucuronate in	CESC	-0.0140805
UCKL1	Pentose phosphate pathwa	CESC	0.146718398
UCKL1	Pericyte	CESC	-0.046121052
UCKL1	Phenylalanine metabolism	CESC	0.00843283
UCKL1	Phenylalanine, tyrosine ar	CESC	0.16737891
UCKL1	Phosphonate and phosphir	CESC	-0.04028404
UCKL1	Pi3k_akt_activation	CESC	-0.185806252
UCKL1	Pi3k_akt_mtor_signaling	CESC	-0.27899887
UCKL1	Porphyrin and chlorophyl	CESC	0.037373962
UCKL1	Primary bile acid biosynt	CESC	0.13356567
UCKL1	Propanoate metabolism	CESC	0.034195106
UCKL1	Purine metabolism	CESC	0.281537499
UCKL1	Pyrimidine metabolism	CESC	0.30547759
UCKL1	Pyruvate metabolism	CESC	0.253251133
UCKL1	Regulation_of_autophagy	CESC	-0.024635198
UCKL1	Retinol metabolism	CESC	-0.194473888
UCKL1	Riboflavin metabolism	CESC	0.137123883
UCKL1	Schmahl_pdgf_signaling	CESC	-0.49961741
UCKL1	Selenocompound metabol	CESC	0.077781692
UCKL1	Signaling_by_hippo	CESC	-0.223929542
UCKL1	Sphingolipid metabolism	CESC	-0.165635952
UCKL1	Starch and sucrose metabo	CESC	-0.132671248
UCKL1	Steroid biosynthesis	CESC	-0.194990714
UCKL1	Steroid hormone biosynth	CESC	-0.178668534
UCKL1	Sulfur metabolism	CESC	-0.151765379
UCKL1	Synthesis and degradation	CESC	0.223014773
UCKL1	T helper cell	CESC	-0.039104783
UCKL1	T helper1 (th1) cell	CESC	-0.034163287
UCKL1	T helper17 (th17) cell	CESC	-0.106251232
UCKL1	T helper2 (th2) cell	CESC	-0.034265034
UCKL1	T helper9 (th9) cell	CESC	0.01628458
UCKL1	Taurine and hypotaurine r	CESC	0.21408476
UCKL1	Terpenoid backbone biosy	CESC	0.076786543
UCKL1	Tgf_beta_signaling_pathw	CESC	-0.225764383
UCKL1	Thiamine metabolism	CESC	0.241207115
UCKL1	Tnfa_signaling_via_nfbk	CESC	-0.287716086

UCKL1	Tryptophan metabolism	CESC	0.147022154
UCKL1	Tumor endothelial cell	CESC	-0.12019024
UCKL1	Tyrosine metabolism	CESC	0.010486398
UCKL1	Ubiquinone and other ter	CESC	0.211057069
UCKL1	Valine, leucine and isoleu	CESC	0.154996741
UCKL1	Valine, leucine and isoleu	CESC	0.142916483
UCKL1	Vascular endothelial cell	CESC	0.012058615
UCKL1	Vascular smooth muscle c	CESC	-0.011958289
UCKL1	Vegf_signaling_pathway	CESC	-0.149492108
UCKL1	Vitamin b6 metabolism	CESC	0.277972297
UCKL1	Willert_wnt_signaling	CESC	0.172475632
UCKL1	Wnt_beta_catenin_signali	CESC	-0.076960448
UPP1	Abnormal plasma cell	CESC	0.100693559
UPP1	Activated b cell	CESC	0.205978534
UPP1	Activated cd4+ t cell	CESC	0.189515531
UPP1	Activated t cell	CESC	0.180195353
UPP1	Alanine, aspartate and glu	CESC	-0.055863571
UPP1	Alcala_apoptosis	CESC	0.29408241
UPP1	Alpha-linolenic acid meta	CESC	0.09748541
UPP1	Amino sugar and nucleoti	CESC	0.338386997
UPP1	Ampk_pathway	CESC	-0.287782201
UPP1	Angiogenesis	CESC	0.368568165
UPP1	Arachidonic acid metabol	CESC	0.307337359
UPP1	Arginine and proline meta	CESC	0.057848613
UPP1	Arginine biosynthesis	CESC	0.104864455
UPP1	Ascorbate and aldarate mε	CESC	-0.033927824
UPP1	Atypical memory b cell	CESC	0.174542387
UPP1	Axl+siglec6+ dendritic ce	CESC	0.197872947
UPP1	B cell	CESC	-0.022415494
UPP1	B1 cell	CESC	0.034975871
UPP1	Basal cell	CESC	0.529956778
UPP1	Beta-alanine metabolism	CESC	0.061855518
UPP1	Biosynthesis of unsaturate	CESC	-0.048526161
UPP1	Biotin metabolism	CESC	-0.186784895
UPP1	Butanoate metabolism	CESC	-0.090106897
UPP1	Caffeine metabolism	CESC	0.018907911
UPP1	Cancer stem cell	CESC	0.24643988
UPP1	Cancer stem-like cell	CESC	-0.336993771
UPP1	Cd4+ cytotoxic t cell	CESC	0.270169201
UPP1	Cd4+ memory t cell	CESC	0.175862989
UPP1	Cd4+ regulatory t cell	CESC	0.207218387
UPP1	Cd4+ t helper cell	CESC	0.165030228
UPP1	Cd4+cd25+ regulatory t c	CESC	0.180248171

UPP1	Cd8+ cytotoxic t cell	CESC	0.240691185
UPP1	Cd8+ regulatory t cell	CESC	0.145352339
UPP1	Cell_cycle	CESC	-0.004911148
UPP1	Chandran_metastasis_top5	CESC	-0.11163064
UPP1	Citrate cycle (tca cycle)	CESC	0.018981545
UPP1	Cysteine and methionine r	CESC	0.010875565
UPP1	Cytokine induced killer c	CESC	0.149781889
UPP1	D-arginine and d-ornithin	CESC	0.024062602
UPP1	D-glutamine and d-glutan	CESC	0.090795465
UPP1	Dendritic cell	CESC	0.363261953
UPP1	Dna_repair	CESC	0.132803839
UPP1	Dna_replication	CESC	0.032170165
UPP1	Double-negative memory	CESC	0.142973837
UPP1	Drug metabolism - cytoch	CESC	0.014098517
UPP1	Drug metabolism - other c	CESC	0.347870978
UPP1	E2f_targets	CESC	-0.121337382
UPP1	Ecm_receptor_interaction	CESC	0.233705627
UPP1	Effector cd4+ memory t (	CESC	0.088632576
UPP1	Effector cd8+ memory t (	CESC	0.368036551
UPP1	Effector memory t cell	CESC	0.151957693
UPP1	Effector regulatory t (treg	CESC	0.165295335
UPP1	Elvidge_hif1a_targets_up	CESC	0.047833356
UPP1	Endothelial cell	CESC	0.089891116
UPP1	Eosinophil	CESC	0.280888775
UPP1	Ether lipid metabolism	CESC	0.109483994
UPP1	Exhausted cd4+ t cell	CESC	0.283343287
UPP1	Exhausted cd8+ t cell	CESC	0.250437953
UPP1	Exhausted t cell	CESC	0.19581335
UPP1	Fat cell (adipocyte)	CESC	0.066781235
UPP1	Fatty acid biosynthesis	CESC	-0.147723733
UPP1	Fatty acid degradation	CESC	-0.22188184
UPP1	Fatty acid elongation	CESC	0.089851355
UPP1	Fibroblast	CESC	0.21151717
UPP1	Folate biosynthesis	CESC	0.232235164
UPP1	Follicular b cell	CESC	0.212685435
UPP1	Follicular dendritic cell	CESC	0.068458652
UPP1	Follicular helper (tfh) t ce	CESC	0.296560641
UPP1	Follicular t cell	CESC	0.155596592
UPP1	Foxp3+il-17+ t cell	CESC	0.095758893
UPP1	Fructose and mannose me	CESC	0.373683485
UPP1	G2m_checkpoint	CESC	-0.120794808
UPP1	Galactose metabolism	CESC	0.504255989
UPP1	Galie_tumor_stemness_ge	CESC	0.104902922

UPP1	Glutathione metabolism	CESC	0.069531707
UPP1	Glycerolipid metabolism	CESC	0.003946802
UPP1	Glycerophospholipid metabolism	CESC	0.117418288
UPP1	Glycine, serine and threonine metabolism	CESC	0.133790223
UPP1	Glycolysis / gluconeogenesis	CESC	0.271967935
UPP1	Glycosaminoglycan biosynthesis	CESC	0.331827903
UPP1	Glycosaminoglycan biosynthesis	CESC	0.068204089
UPP1	Glycosaminoglycan biosynthesis	CESC	-0.054027334
UPP1	Glycosaminoglycan degradation	CESC	0.031498981
UPP1	Glycosphingolipid biosynthesis	CESC	0.049858709
UPP1	Glycosphingolipid biosynthesis	CESC	0.128078436
UPP1	Glycosphingolipid biosynthesis	CESC	-0.028542773
UPP1	Glycosylphosphatidylinositol biosynthesis	CESC	-0.123608955
UPP1	Glyoxylate and dicarboxylate metabolism	CESC	-0.140073396
UPP1	Granulocyte	CESC	0.192652234
UPP1	Hedgehog signaling	CESC	-0.044282798
UPP1	Histidine metabolism	CESC	-0.025705369
UPP1	Hypoxia	CESC	0.53584748
UPP1	IL-17Ralpha T cell	CESC	0.204669244
UPP1	IL2_stat5_signaling	CESC	0.517000234
UPP1	IL6_jak_stat3_signaling	CESC	0.436275362
UPP1	Immune checkpoints	CESC	0.321423064
UPP1	Immune inhibition cytokines	CESC	0.435369968
UPP1	Inositol phosphate metabolism	CESC	-0.113312432
UPP1	Interleukin_6_signaling	CESC	0.149686883
UPP1	Jaeger metastasis up	CESC	-0.028569757
UPP1	Jain_nfkB_signaling	CESC	0.197434607
UPP1	Kras_signaling_up	CESC	0.383733365
UPP1	Linoleic acid metabolism	CESC	0.02825967
UPP1	Lipoic acid metabolism	CESC	-0.135976229
UPP1	Lysine degradation	CESC	-0.36649394
UPP1	Lysosome	CESC	0.217462875
UPP1	M1 macrophage	CESC	0.363681734
UPP1	M2 macrophage	CESC	0.440132449
UPP1	Mannose type O-glycan biosynthesis	CESC	-0.114785679
UPP1	Mapk_signaling_pathway	CESC	0.357255794
UPP1	Mapk3_erk1_activation	CESC	0.11727664
UPP1	Marginal zone B cell	CESC	0.075865813
UPP1	Memory B cell	CESC	0.18057307
UPP1	Mesenchymal cell	CESC	0.249378241
UPP1	Mesenchymal stem cell	CESC	0.189142994
UPP1	Metabolism of xenobiotics	CESC	0.047578909
UPP1	Migrating cancer stem cell	CESC	0.315374524

UPP1	Mitotic_spindle	CESC	-0.092019264
UPP1	Monocyte	CESC	0.457373897
UPP1	Mtor_signaling_pathway	CESC	0.048217332
UPP1	Mtorc1_signaling	CESC	0.382845577
UPP1	Mucin type o-glycan biosy	CESC	-0.086243591
UPP1	Myc_targets_v1	CESC	0.263132292
UPP1	Myeloid cell	CESC	0.249465771
UPP1	N-glycan biosynthesis	CESC	-0.215691081
UPP1	Naive b cell	CESC	0.165257923
UPP1	Naive cd4+ t cell	CESC	0.074088555
UPP1	Naive cd8+ t cell	CESC	-0.038353048
UPP1	Natural killer cell	CESC	0.239201347
UPP1	Natural killer t (nkt) cell	CESC	0.129512021
UPP1	Natural regulatory t (treg)	CESC	0.225334719
UPP1	Neomycin, kanamycin and	CESC	0.421300589
UPP1	Neutrophil	CESC	0.516072244
UPP1	Nicotinate and nicotinami	CESC	0.003931329
UPP1	Nitrogen metabolism	CESC	0.021499236
UPP1	Nod_like_receptor_signal	CESC	0.47632475
UPP1	Notch_signaling	CESC	0.145806922
UPP1	One carbon pool by folate	CESC	-0.153798927
UPP1	Other glycan degradation	CESC	-0.127254895
UPP1	Other types of o-glycan b	CESC	-0.199990321
UPP1	Oxidative phosphorylatio	CESC	0.194190604
UPP1	P53_pathway	CESC	0.579244742
UPP1	P53_signaling_pathway	CESC	0.203111626
UPP1	Pantothenate and coa bios	CESC	0.064702938
UPP1	Pentose and glucuronate in	CESC	0.031597294
UPP1	Pentose phosphate pathwa	CESC	0.328053995
UPP1	Pericyte	CESC	0.162992918
UPP1	Phenylalanine metabolism	CESC	0.314993503
UPP1	Phenylalanine, tyrosine ar	CESC	0.14022887
UPP1	Phosphonate and phosphir	CESC	-0.061590056
UPP1	Pi3k_akt_activation	CESC	0.051672946
UPP1	Pi3k_akt_mtor_signaling	CESC	0.391836745
UPP1	Porphyrin and chlorophyl	CESC	0.163522403
UPP1	Primary bile acid biosynt	CESC	-0.063274423
UPP1	Propanoate metabolism	CESC	-0.275277746
UPP1	Purine metabolism	CESC	0.080466422
UPP1	Pyrimidine metabolism	CESC	0.217303523
UPP1	Pyruvate metabolism	CESC	-0.072945028
UPP1	Regulation_of_autophagy	CESC	0.067308354
UPP1	Retinol metabolism	CESC	0.144692382

UPP1	Riboflavin metabolism	CESC	-0.038977733
UPP1	Schmahl_pdgf_signaling	CESC	0.109869038
UPP1	Selenocompound metabol	CESC	-0.445026015
UPP1	Signaling_by_hippo	CESC	-0.068040004
UPP1	Sphingolipid metabolism	CESC	-0.100721674
UPP1	Starch and sucrose metabo	CESC	0.25870111
UPP1	Steroid biosynthesis	CESC	0.229057064
UPP1	Steroid hormone biosynth	CESC	0.251637164
UPP1	Sulfur metabolism	CESC	-0.098240244
UPP1	Synthesis and degradation	CESC	-0.019327013
UPP1	T helper cell	CESC	0.176692361
UPP1	T helper1 (th1) cell	CESC	0.330833755
UPP1	T helper17 (th17) cell	CESC	0.419653731
UPP1	T helper2 (th2) cell	CESC	0.277257621
UPP1	T helper9 (th9) cell	CESC	0.220422621
UPP1	Taurine and hypotaurine r	CESC	-0.260661256
UPP1	Terpenoid backbone biosy	CESC	0.066639373
UPP1	Tgf_beta_signaling_pathw	CESC	0.024875801
UPP1	Thiamine metabolism	CESC	-0.051688604
UPP1	Tnfa_signaling_via_nfkb	CESC	0.554491532
UPP1	Tryptophan metabolism	CESC	0.041200461
UPP1	Tumor endothelial cell	CESC	0.377683809
UPP1	Tyrosine metabolism	CESC	0.146330894
UPP1	Ubiquinone and other terf	CESC	-0.072111595
UPP1	Valine, leucine and isoleu	CESC	0.28246224
UPP1	Valine, leucine and isoleu	CESC	-0.257693444
UPP1	Vascular endothelial cell	CESC	0.145312648
UPP1	Vascular smooth muscle c	CESC	-0.046846622
UPP1	Vegf_signaling_pathway	CESC	0.332280853
UPP1	Vitamin b6 metabolism	CESC	0.038847865
UPP1	Willert_wnt_signaling	CESC	0.159137723
UPP1	Wnt_beta_catenin_signali	CESC	0.034227885
UPP2	Abnormal plasma cell	CESC	0.002391993
UPP2	Activated b cell	CESC	-0.096135609
UPP2	Activated cd4+ t cell	CESC	-0.105370322
UPP2	Activated t cell	CESC	-0.078710154
UPP2	Alanine, aspartate and glu	CESC	0.036494517
UPP2	Alcala_apoptosis	CESC	-0.217632542
UPP2	Alpha-linolenic acid meta	CESC	-0.00931511
UPP2	Amino sugar and nucleoti	CESC	-0.107411211
UPP2	Ampk_pathway	CESC	-0.029254834
UPP2	Angiogenesis	CESC	-0.096707286
UPP2	Arachidonic acid metaboli	CESC	-0.027144011

UPP2	Arginine and proline meta	CEC	-0.034351651
UPP2	Arginine biosynthesis	CEC	-0.082574428
UPP2	Ascorbate and aldarate me	CEC	0.002155793
UPP2	Atypical memory b cell	CEC	-0.08073238
UPP2	Axl+siglec6+ dendritic ce	CEC	0.042823696
UPP2	B cell	CEC	0.094712054
UPP2	B1 cell	CEC	-0.06167426
UPP2	Basal cell	CEC	-0.288881781
UPP2	Beta-alanine metabolism	CEC	-0.05121465
UPP2	Biosynthesis of unsaturate	CEC	-0.017121421
UPP2	Biotin metabolism	CEC	-0.049864286
UPP2	Butanoate metabolism	CEC	0.070811118
UPP2	Caffeine metabolism	CEC	0.038020513
UPP2	Cancer stem cell	CEC	-0.070976328
UPP2	Cancer stem-like cell	CEC	0.292067655
UPP2	Cd4+ cytotoxic t cell	CEC	-0.051337628
UPP2	Cd4+ memory t cell	CEC	-0.11228707
UPP2	Cd4+ regulatory t cell	CEC	-0.12289498
UPP2	Cd4+ t helper cell	CEC	-0.089096933
UPP2	Cd4+cd25+ regulatory t c	CEC	-0.096758834
UPP2	Cd8+ cytotoxic t cell	CEC	-0.104555398
UPP2	Cd8+ regulatory t cell	CEC	-0.075646326
UPP2	Cell_cycle	CEC	-0.214537558
UPP2	Chandran_metastasis_top	CEC	-0.167025625
UPP2	Citrate cycle (tca cycle)	CEC	-0.107365557
UPP2	Cysteine and methionine r	CEC	0.034026064
UPP2	Cytokine induced killer c	CEC	-0.039212637
UPP2	D-arginine and d-ornithin	CEC	-0.01502942
UPP2	D-glutamine and d-glutan	CEC	-0.095861155
UPP2	Dendritic cell	CEC	-0.116616332
UPP2	Dna_repair	CEC	-0.136438278
UPP2	Dna_replication	CEC	-0.119977262
UPP2	Double-negative memory	CEC	-0.033664362
UPP2	Drug metabolism - cytoch	CEC	0.063662561
UPP2	Drug metabolism - other	CEC	-0.094000498
UPP2	E2f_targets	CEC	-0.148022023
UPP2	Ecm_receptor_interaction	CEC	-0.047947328
UPP2	Effector cd4+ memory t (	CEC	-0.104291613
UPP2	Effector cd8+ memory t (	CEC	-0.126897155
UPP2	Effector memory t cell	CEC	-0.108080925
UPP2	Effector regulatory t (treg	CEC	-0.085162386
UPP2	Elvidge_hif1a_targets_up	CEC	-0.214007195
UPP2	Endothelial cell	CEC	0.047929463

UPP2	Eosinophil	CESC	-0.089194786
UPP2	Ether lipid metabolism	CESC	-0.023486422
UPP2	Exhausted cd4+ t cell	CESC	-0.077907339
UPP2	Exhausted cd8+ t cell	CESC	-0.076633607
UPP2	Exhausted t cell	CESC	-0.099204366
UPP2	Fat cell (adipocyte)	CESC	-0.033750912
UPP2	Fatty acid biosynthesis	CESC	0.046676821
UPP2	Fatty acid degradation	CESC	0.110625231
UPP2	Fatty acid elongation	CESC	-0.099858355
UPP2	Fibroblast	CESC	-0.022736772
UPP2	Folate biosynthesis	CESC	-0.059951716
UPP2	Follicular b cell	CESC	-0.104270933
UPP2	Follicular dendritic cell	CESC	0.054894151
UPP2	Follicular helper (tfh) t ce	CESC	-0.153547337
UPP2	Follicular t cell	CESC	-0.084420632
UPP2	Foxp3+il-17+ t cell	CESC	-0.138482176
UPP2	Fructose and mannose me	CESC	-0.156549812
UPP2	G2m_checkpoint	CESC	-0.213856449
UPP2	Galactose metabolism	CESC	-0.17095964
UPP2	Galie_tumor_stemness_ge	CESC	0.05729969
UPP2	Glutathione metabolism	CESC	0.068238994
UPP2	Glycerolipid metabolism	CESC	0.149684517
UPP2	Glycerophospholipid met&	CESC	0.009819879
UPP2	Glycine, serine and threor	CESC	0.082253652
UPP2	Glycolysis / gluconeogene	CESC	-0.183263905
UPP2	Glycosaminoglycan biosy	CESC	-0.0320099
UPP2	Glycosaminoglycan biosy	CESC	0.016240473
UPP2	Glycosaminoglycan biosy	CESC	0.067163075
UPP2	Glycosaminoglycan degra	CESC	0.052191444
UPP2	Glycosphingolipid biosyn	CESC	0.16217626
UPP2	Glycosphingolipid biosyn	CESC	0.047091476
UPP2	Glycosphingolipid biosyn	CESC	-0.011508778
UPP2	Glycosylphosphatidylinos	CESC	-0.068350043
UPP2	Glyoxylate and dicarboxy	CESC	-0.00390904
UPP2	Granulocyte	CESC	-0.055831441
UPP2	Hedgehog_signaling	CESC	0.040092714
UPP2	Histidine metabolism	CESC	-0.00235867
UPP2	Hypoxia	CESC	-0.257136204
UPP2	Il-17alpha t cell	CESC	-0.102051103
UPP2	Il2_stat5_signaling	CESC	-0.174854784
UPP2	Il6_jak_stat3_signaling	CESC	-0.232932653
UPP2	Immune_checkpoints_tun	CESC	-0.07980233
UPP2	Immune_inhibition_cytok	CESC	-0.165227517

UPP2	Inositol phosphate metabo	CESC	-0.048917019
UPP2	Interleukin_6_signaling	CESC	-0.17254081
UPP2	Jaeger_metastasis_up	CESC	0.054619861
UPP2	Jain_nfkb_signaling	CESC	-0.34084728
UPP2	Kras_signaling_up	CESC	-0.075086681
UPP2	Linoleic acid metabolism	CESC	0.077502289
UPP2	Lipoic acid metabolism	CESC	0.101626143
UPP2	Lysine degradatation	CESC	0.028656868
UPP2	Lysosome	CESC	-0.003293489
UPP2	M1 macrophage	CESC	-0.158168178
UPP2	M2 macrophage	CESC	-0.152448763
UPP2	Mannose type o-glycan bi	CESC	0.018128003
UPP2	Mapk_signaling_pathway	CESC	-0.192572701
UPP2	Mapk3_erk1_activation	CESC	-0.191446045
UPP2	Marginal zone b cell	CESC	-0.087638659
UPP2	Memory b cell	CESC	-0.078708179
UPP2	Mesenchymal cell	CESC	0.028224754
UPP2	Mesenchymal stem cell	CESC	0.023684633
UPP2	Metabolism of xenobiotic	CESC	0.069778986
UPP2	Migrating cancer stem cel	CESC	-0.207910712
UPP2	Mitotic_spindle	CESC	-0.178632858
UPP2	Monocyte	CESC	-0.134560971
UPP2	Mtor_signaling_pathway	CESC	-0.151092897
UPP2	Mtorc1_signaling	CESC	-0.301518604
UPP2	Mucin type o-glycan biosy	CESC	0.040734829
UPP2	Myc_targets_v1	CESC	-0.244987646
UPP2	Myeloid cell	CESC	-0.09057316
UPP2	N-glycan biosynthesis	CESC	0.021437966
UPP2	Naive b cell	CESC	-0.003322607
UPP2	Naive cd4+ t cell	CESC	-0.016722022
UPP2	Naive cd8+ t cell	CESC	-0.008161521
UPP2	Natural killer cell	CESC	-0.10598982
UPP2	Natural killer t (nkt) cell	CESC	-0.118782066
UPP2	Natural regulatory t (treg)	CESC	-0.12867442
UPP2	Neomycin, kanamycin an	CESC	-0.157221228
UPP2	Neutrophil	CESC	-0.204673658
UPP2	Nicotinate and nicotinami	CESC	0.03651475
UPP2	Nitrogen metabolism	CESC	0.014115973
UPP2	Nod_like_receptor_signal	CESC	-0.294068424
UPP2	Notch_signaling	CESC	-0.082824847
UPP2	One carbon pool by folate	CESC	-0.082929736
UPP2	Other glycan degradatation	CESC	0.147592229
UPP2	Other types of o-glycan b	CESC	0.1605979

UPP2	Oxidative phosphorylation	CESC	0.001361755
UPP2	P53_pathway	CESC	-0.295679512
UPP2	P53_signaling_pathway	CESC	-0.166371777
UPP2	Pantothenate and coa biosynthesis	CESC	0.04708662
UPP2	Pentose and glucuronate interconversions	CESC	0.001631115
UPP2	Pentose phosphate pathway	CESC	-0.179013333
UPP2	Pericyte	CESC	0.02738455
UPP2	Phenylalanine metabolism	CESC	-0.115367804
UPP2	Phenylalanine, tyrosine and tryptophan metabolism	CESC	-0.077222998
UPP2	Phosphonate and phosphite metabolism	CESC	-0.056793023
UPP2	Pi3k_akt_activation	CESC	-0.016218819
UPP2	Pi3k_akt_mtor_signaling	CESC	-0.316149824
UPP2	Porphyrin and chlorophyll metabolism	CESC	-0.067976535
UPP2	Primary bile acid biosynthesis	CESC	0.161936752
UPP2	Propanoate metabolism	CESC	-0.013767361
UPP2	Purine metabolism	CESC	-0.104918899
UPP2	Pyrimidine metabolism	CESC	-0.200250612
UPP2	Pyruvate metabolism	CESC	-0.041351242
UPP2	Regulation_of_autophagy	CESC	-0.049733936
UPP2	Retinol metabolism	CESC	8.98E-06
UPP2	Riboflavin metabolism	CESC	0.109213784
UPP2	Schmahl_pdgf_signaling	CESC	-0.116218473
UPP2	Selenocompound metabolism	CESC	0.219705106
UPP2	Signaling_by_hippo	CESC	-0.116430217
UPP2	Sphingolipid metabolism	CESC	0.076776741
UPP2	Starch and sucrose metabolism	CESC	-0.06476654
UPP2	Steroid biosynthesis	CESC	-0.133259313
UPP2	Steroid hormone biosynthesis	CESC	-0.072325559
UPP2	Sulfur metabolism	CESC	0.12643047
UPP2	Synthesis and degradation of ribonucleotides	CESC	-0.008654527
UPP2	T helper cell	CESC	-0.033577321
UPP2	T helper1 (th1) cell	CESC	-0.1245839
UPP2	T helper17 (th17) cell	CESC	-0.214972629
UPP2	T helper2 (th2) cell	CESC	-0.108975529
UPP2	T helper9 (th9) cell	CESC	-0.109895907
UPP2	Taurine and hypotaurine interconversions	CESC	0.290179468
UPP2	Terpenoid backbone biosynthesis	CESC	-0.141845636
UPP2	Tgf_beta_signaling_pathway	CESC	-0.120065135
UPP2	Thiamine metabolism	CESC	0.191188534
UPP2	Tnfa_signaling_via_nfkappaB	CESC	-0.267394553
UPP2	Tryptophan metabolism	CESC	0.08024904
UPP2	Tumor endothelial cell	CESC	-0.210269581
UPP2	Tyrosine metabolism	CESC	0.017762716

UPP2	Ubiquinone and other ter	CESC	0.059397953
UPP2	Valine, leucine and isoleu	CESC	0.042230669
UPP2	Valine, leucine and isoleu	CESC	0.033494809
UPP2	Vascular endothelial cell	CESC	-0.015789098
UPP2	Vascular smooth muscle c	CESC	0.036238814
UPP2	Vegf_signaling_pathway	CESC	-0.239014581
UPP2	Vitamin b6 metabolism	CESC	0.050911858
UPP2	Willert_wnt_signaling	CESC	0.02522054
UPP2	Wnt_beta_catenin_signali	CESC	-0.123403027
CDA	Abnormal plasma cell	CHOL	0.440036691
CDA	Activated b cell	CHOL	0.020184287
CDA	Activated cd4+ t cell	CHOL	0.175423858
CDA	Activated t cell	CHOL	0.171657834
CDA	Alanine, aspartate and glu	CHOL	0.134490617
CDA	Alcala_apoptosis	CHOL	-0.139077974
CDA	Alpha-linolenic acid meta	CHOL	0.426216926
CDA	Amino sugar and nucleoti	CHOL	0.108725691
CDA	Ampk_pathway	CHOL	-0.123768927
CDA	Angiogenesis	CHOL	0.088173299
CDA	Arachidonic acid metaboli	CHOL	0.502286752
CDA	Arginine and proline metæ	CHOL	0.227597762
CDA	Arginine biosynthesis	CHOL	0.335450251
CDA	Ascorbate and aldarate me	CHOL	0.129401541
CDA	Atypical memory b cell	CHOL	0.138493569
CDA	Ax1+siglec6+ dendritic ce	CHOL	0.181075319
CDA	B cell	CHOL	0.054839166
CDA	B1 cell	CHOL	0.07237993
CDA	Basal cell	CHOL	0.285991812
CDA	Beta-alanine metabolism	CHOL	0.220594614
CDA	Biosynthesis of unsaturate	CHOL	0.082752724
CDA	Biotin metabolism	CHOL	-0.185419884
CDA	Butanoate metabolism	CHOL	0.35544702
CDA	Caffeine metabolism	CHOL	0.007524387
CDA	Cancer stem cell	CHOL	0.478811135
CDA	Cancer stem-like cell	CHOL	0.132053529
CDA	Cd4+ cytotoxic t cell	CHOL	0.192880577
CDA	Cd4+ memory t cell	CHOL	0.067458632
CDA	Cd4+ regulatory t cell	CHOL	0.1573621
CDA	Cd4+ t helper cell	CHOL	0.249313941
CDA	Cd4+cd25+ regulatory t c	CHOL	0.245411297
CDA	Cd8+ cytotoxic t cell	CHOL	0.250246197
CDA	Cd8+ regulatory t cell	CHOL	0.105981787
CDA	Cell_cycle	CHOL	0.032014334

CDA	Chandran_metastasis_top5	CHOL	-0.195878668
CDA	Citrate cycle (tca cycle)	CHOL	0.056007487
CDA	Cysteine and methionine r	CHOL	0.139671413
CDA	Cytokine induced killer c	CHOL	0.356050809
CDA	D-arginine and d-ornithin	CHOL	0.270360999
CDA	D-glutamine and d-glutan	CHOL	-0.108762564
CDA	Dendritic cell	CHOL	0.087734273
CDA	Dna_repair	CHOL	-0.055091261
CDA	Dna_replication	CHOL	-0.063867579
CDA	Double-negative memory	CHOL	0.106743636
CDA	Drug metabolism - cytoch	CHOL	0.310946388
CDA	Drug metabolism - other	CHOL	0.281910049
CDA	E2f_targets	CHOL	-0.022414993
CDA	Ecm_receptor_interaction	CHOL	0.061883509
CDA	Effector cd4+ memory t (	CHOL	0.083340373
CDA	Effector cd8+ memory t (	CHOL	0.039588577
CDA	Effector memory t cell	CHOL	0.195008144
CDA	Effector regulatory t (treg	CHOL	0.148846382
CDA	Elvidge_hif1a_targets_up	CHOL	-0.020272802
CDA	Endothelial cell	CHOL	0.39544922
CDA	Eosinophil	CHOL	0.13666134
CDA	Ether lipid metabolism	CHOL	0.292504118
CDA	Exhausted cd4+ t cell	CHOL	0.128016741
CDA	Exhausted cd8+ t cell	CHOL	0.075626754
CDA	Exhausted t cell	CHOL	0.115350477
CDA	Fat cell (adipocyte)	CHOL	0.18305431
CDA	Fatty acid biosynthesis	CHOL	0.261917072
CDA	Fatty acid degradation	CHOL	0.226819456
CDA	Fatty acid elongation	CHOL	0.184231107
CDA	Fibroblast	CHOL	0.303473968
CDA	Folate biosynthesis	CHOL	0.155302191
CDA	Follicular b cell	CHOL	0.025731167
CDA	Follicular dendritic cell	CHOL	0.065720556
CDA	Follicular helper (tfh) t ce	CHOL	0.192751949
CDA	Follicular t cell	CHOL	-0.357816209
CDA	Foxp3+il-17+ t cell	CHOL	0.077022318
CDA	Fructose and mannose me	CHOL	0.06214082
CDA	G2m_checkpoint	CHOL	-0.016793853
CDA	Galactose metabolism	CHOL	0.100592699
CDA	Galie_tumor_stemness_ge	CHOL	0.256537194
CDA	Glutathione metabolism	CHOL	0.198184405
CDA	Glycerolipid metabolism	CHOL	0.322259759
CDA	Glycerophospholipid met	CHOL	0.486687059

CDA	Glycine, serine and threor	CHOL	0.152115338
CDA	Glycolysis / gluconeogene	CHOL	0.139346407
CDA	Glycosaminoglycan biosy	CHOL	0.039536898
CDA	Glycosaminoglycan biosy	CHOL	0.243574819
CDA	Glycosaminoglycan biosy	CHOL	0.471268561
CDA	Glycosaminoglycan degra	CHOL	0.055596309
CDA	Glycosphingolipid biosyn	CHOL	0.266720451
CDA	Glycosphingolipid biosyn	CHOL	0.443078848
CDA	Glycosphingolipid biosyn	CHOL	0.46790313
CDA	Glycosylphosphatidylinos	CHOL	-0.020340134
CDA	Glyoxylate and dicarboxy	CHOL	-0.025414474
CDA	Granulocyte	CHOL	0.082136848
CDA	Hedgehog_signaling	CHOL	0.166582312
CDA	Histidine metabolism	CHOL	0.019035582
CDA	Hypoxia	CHOL	0.136170699
CDA	Il-17alpha t cell	CHOL	0.249418727
CDA	Il2_stat5_signaling	CHOL	0.301984931
CDA	Il6_jak_stat3_signaling	CHOL	0.140186327
CDA	Immune_checkpoints_tun	CHOL	0.000407219
CDA	Immune_inhibition_cytok	CHOL	0.288874297
CDA	Inositol phosphate metabo	CHOL	0.184248214
CDA	Interleukin_6_signaling	CHOL	-0.192690169
CDA	Jaeger_metastasis_up	CHOL	0.051169117
CDA	Jain_nfkb_signaling	CHOL	-0.401259586
CDA	Kras_signaling_up	CHOL	0.259083938
CDA	Linoleic acid metabolism	CHOL	0.279127606
CDA	Lipoic acid metabolism	CHOL	-0.168540239
CDA	Lysine degradation	CHOL	-0.023549803
CDA	Lysosome	CHOL	0.134113155
CDA	M1 macrophage	CHOL	0.060607907
CDA	M2 macrophage	CHOL	0.278808887
CDA	Mannose type o-glycan bi	CHOL	0.002538008
CDA	Mapk_signaling_pathway	CHOL	0.177315686
CDA	Mapk3_erk1_activation	CHOL	-0.025724475
CDA	Marginal zone b cell	CHOL	-0.009655685
CDA	Memory b cell	CHOL	-0.115057474
CDA	Mesenchymal cell	CHOL	0.297388305
CDA	Mesenchymal stem cell	CHOL	0.322201131
CDA	Metabolism of xenobiotic	CHOL	0.365142652
CDA	Migrating cancer stem cel	CHOL	0.089906032
CDA	Mitotic_spindle	CHOL	-0.214912381
CDA	Monocyte	CHOL	0.232378427
CDA	Mtor_signaling_pathway	CHOL	0.056881562

CDA	Mtorc1_signaling	CHOL	0.171026317
CDA	Mucin type o-glycan biosynthesis	CHOL	0.435995079
CDA	Myc_targets_v1	CHOL	0.025015722
CDA	Myeloid cell	CHOL	0.189049447
CDA	N-glycan biosynthesis	CHOL	0.120009324
CDA	Naive b cell	CHOL	0.160701994
CDA	Naive cd4+ t cell	CHOL	0.107009213
CDA	Naive cd8+ t cell	CHOL	-0.049966383
CDA	Natural killer cell	CHOL	0.162248534
CDA	Natural killer t (nkt) cell	CHOL	0.013232144
CDA	Natural regulatory t (treg) cell	CHOL	0.13935219
CDA	Neomycin, kanamycin and streptomycin	CHOL	0.233068228
CDA	Neutrophil	CHOL	0.332281243
CDA	Nicotinate and nicotinamide metabolism	CHOL	0.47582423
CDA	Nitrogen metabolism	CHOL	0.511884794
CDA	Nod_like_receptor_signaling	CHOL	0.100281461
CDA	Notch_signaling	CHOL	-0.122794556
CDA	One carbon pool by folate	CHOL	-0.160025926
CDA	Other glycan degradation	CHOL	0.128993433
CDA	Other types of o-glycan biosynthesis	CHOL	0.121068485
CDA	Oxidative phosphorylation	CHOL	0.076413726
CDA	P53_pathway	CHOL	0.283499858
CDA	P53_signaling_pathway	CHOL	0.06793466
CDA	Pantothenate and coenzyme a biosynthesis	CHOL	0.398514578
CDA	Pentose and glucuronate interconversions	CHOL	0.178633434
CDA	Pentose phosphate pathway	CHOL	0.241919138
CDA	Pericyte	CHOL	0.352583778
CDA	Phenylalanine metabolism	CHOL	0.079794795
CDA	Phenylalanine, tyrosine and tryptophan metabolism	CHOL	0.040235504
CDA	Phosphonate and phosphite metabolism	CHOL	0.230883965
CDA	Pi3k_akt_activation	CHOL	0.307621615
CDA	Pi3k_akt_mtor_signaling	CHOL	0.23647705
CDA	Porphyrin and chlorophyll metabolism	CHOL	0.108434223
CDA	Primary bile acid biosynthesis	CHOL	0.257079253
CDA	Propanoate metabolism	CHOL	0.165994117
CDA	Purine metabolism	CHOL	0.078969346
CDA	Pyrimidine metabolism	CHOL	-0.016658506
CDA	Pyruvate metabolism	CHOL	0.152554051
CDA	Regulation_of_autophagy	CHOL	0.029412015
CDA	Retinol metabolism	CHOL	0.381510674
CDA	Riboflavin metabolism	CHOL	0.002401628
CDA	Schmahl_pdgf_signaling	CHOL	0.191411128
CDA	Selenocompound metabolism	CHOL	0.196577891

CDA	Signaling_by_hippo	CHOL	-0.053535203
CDA	Sphingolipid metabolism	CHOL	0.116051783
CDA	Starch and sucrose metabo	CHOL	0.288840872
CDA	Steroid biosynthesis	CHOL	0.070579241
CDA	Steroid hormone biosynth	CHOL	0.147748335
CDA	Sulfur metabolism	CHOL	0.264145555
CDA	Synthesis and degradation	CHOL	0.589672972
CDA	T helper cell	CHOL	0.214192879
CDA	T helper1 (th1) cell	CHOL	0.228225066
CDA	T helper17 (th17) cell	CHOL	0.170390581
CDA	T helper2 (th2) cell	CHOL	0.193716265
CDA	T helper9 (th9) cell	CHOL	0.245100007
CDA	Taurine and hypotaurine r	CHOL	0.140122278
CDA	Terpenoid backbone biosy	CHOL	0.029133546
CDA	Tgf_beta_signaling_pathw	CHOL	0.018743523
CDA	Thiamine metabolism	CHOL	0.418529981
CDA	Tnfa_signaling_via_nfk	CHOL	0.066421951
CDA	Tryptophan metabolism	CHOL	0.10578924
CDA	Tumor endothelial cell	CHOL	-0.049818742
CDA	Tyrosine metabolism	CHOL	0.31529653
CDA	Ubiquinone and other ter	CHOL	0.24539403
CDA	Valine, leucine and isoleu	CHOL	-0.020451998
CDA	Valine, leucine and isoleu	CHOL	0.212700707
CDA	Vascular endothelial cell	CHOL	0.222578672
CDA	Vascular smooth muscle c	CHOL	0.104817072
CDA	Vegf_signaling_pathway	CHOL	0.523090753
CDA	Vitamin b6 metabolism	CHOL	0.261602461
CDA	Willert_wnt_signaling	CHOL	0.183964363
CDA	Wnt_beta_catenin_signali	CHOL	0.181974978
UCK1	Abnormal plasma cell	CHOL	0.25033424
UCK1	Activated b cell	CHOL	0.184842422
UCK1	Activated cd4+ t cell	CHOL	0.109730014
UCK1	Activated t cell	CHOL	0.122435199
UCK1	Alanine, aspartate and glu	CHOL	0.106652282
UCK1	Alcala_apoptosis	CHOL	0.477555245
UCK1	Alpha-linolenic acid meta	CHOL	-0.209178801
UCK1	Amino sugar and nucleoti	CHOL	0.052699467
UCK1	Ampk_pathway	CHOL	0.2643705
UCK1	Angiogenesis	CHOL	-0.335648099
UCK1	Arachidonic acid metabol	CHOL	-0.053473281
UCK1	Arginine and proline met	CHOL	0.115632927
UCK1	Arginine biosynthesis	CHOL	0.150614779
UCK1	Ascorbate and aldarate m	CHOL	-0.209304796

UCK1	Atypical memory b cell	CHOL	-0.043153548
UCK1	Ax1+siglec6+ dendritic ce	CHOL	-0.119546354
UCK1	B cell	CHOL	0.115476392
UCK1	B1 cell	CHOL	0.168933316
UCK1	Basal cell	CHOL	-0.439617431
UCK1	Beta-alanine metabolism	CHOL	-0.062560417
UCK1	Biosynthesis of unsaturate	CHOL	0.203170706
UCK1	Biotin metabolism	CHOL	0.005303608
UCK1	Butanoate metabolism	CHOL	0.304746484
UCK1	Caffeine metabolism	CHOL	-0.118737756
UCK1	Cancer stem cell	CHOL	-0.336218926
UCK1	Cancer stem-like cell	CHOL	-0.231919925
UCK1	Cd4+ cytotoxic t cell	CHOL	0.078901625
UCK1	Cd4+ memory t cell	CHOL	0.024742
UCK1	Cd4+ regulatory t cell	CHOL	0.169323244
UCK1	Cd4+ t helper cell	CHOL	0.112190443
UCK1	Cd4+cd25+ regulatory t c	CHOL	0.114895535
UCK1	Cd8+ cytotoxic t cell	CHOL	0.222003737
UCK1	Cd8+ regulatory t cell	CHOL	0.131455824
UCK1	Cell_cycle	CHOL	0.05190649
UCK1	Chandran_metastasis_top ⁵	CHOL	-0.174763963
UCK1	Citrate cycle (tca cycle)	CHOL	0.416328394
UCK1	Cysteine and methionine r	CHOL	0.038591426
UCK1	Cytokine induced killer c ϵ	CHOL	0.2754912
UCK1	D-arginine and d-ornithin	CHOL	0.012644398
UCK1	D-glutamine and d-glutan	CHOL	-0.149969796
UCK1	Dendritic cell	CHOL	0.057453911
UCK1	Dna_repair	CHOL	0.603521093
UCK1	Dna_replication	CHOL	0.425723549
UCK1	Double-negative memory	CHOL	0.098572201
UCK1	Drug metabolism - cytoch	CHOL	-0.241542291
UCK1	Drug metabolism - other (	CHOL	0.062980301
UCK1	E2f_targets	CHOL	0.126930702
UCK1	Ecm_receptor_interaction	CHOL	-0.452509908
UCK1	Effector cd4+ memory t (	CHOL	-0.037862057
UCK1	Effector cd8+ memory t (	CHOL	0.041554747
UCK1	Effector memory t cell	CHOL	0.00514211
UCK1	Effector regulatory t (treg	CHOL	0.052505462
UCK1	Elvidge_hif1a_targets_up	CHOL	-0.09683031
UCK1	Endothelial cell	CHOL	-0.274688551
UCK1	Eosinophil	CHOL	0.051077309
UCK1	Ether lipid metabolism	CHOL	-0.240172217
UCK1	Exhausted cd4+ t cell	CHOL	0.005908897

UCK1	Exhausted cd8+ t cell	CHOL	-0.061240828
UCK1	Exhausted t cell	CHOL	0.194554968
UCK1	Fat cell (adipocyte)	CHOL	0.26823098
UCK1	Fatty acid biosynthesis	CHOL	0.353417618
UCK1	Fatty acid degradation	CHOL	0.120362906
UCK1	Fatty acid elongation	CHOL	0.289559513
UCK1	Fibroblast	CHOL	-0.265597867
UCK1	Folate biosynthesis	CHOL	0.182001629
UCK1	Follicular b cell	CHOL	0.031961221
UCK1	Follicular dendritic cell	CHOL	0.040810683
UCK1	Follicular helper (tfh) t ce	CHOL	0.067042216
UCK1	Follicular t cell	CHOL	-0.108545361
UCK1	Foxp3+il-17+ t cell	CHOL	0.25045294
UCK1	Fructose and mannose me	CHOL	0.02224256
UCK1	G2m_checkpoint	CHOL	-0.046681665
UCK1	Galactose metabolism	CHOL	0.336329371
UCK1	Galie_tumor_stemness_ge	CHOL	0.025671901
UCK1	Glutathione metabolism	CHOL	0.039101419
UCK1	Glycerolipid metabolism	CHOL	0.088331107
UCK1	Glycerophospholipid metæ	CHOL	0.133414245
UCK1	Glycine, serine and threor	CHOL	0.202303551
UCK1	Glycolysis / gluconeogene	CHOL	0.229803654
UCK1	Glycosaminoglycan biosy1	CHOL	0.063639937
UCK1	Glycosaminoglycan biosy1	CHOL	0.099379509
UCK1	Glycosaminoglycan biosy1	CHOL	0.006264349
UCK1	Glycosaminoglycan degra	CHOL	0.113826464
UCK1	Glycosphingolipid biosyn1	CHOL	0.292287233
UCK1	Glycosphingolipid biosyn1	CHOL	0.007016891
UCK1	Glycosphingolipid biosyn1	CHOL	-0.254917545
UCK1	Glycosylphosphatidylinos:	CHOL	0.216945139
UCK1	Glyoxylate and dicarboxy	CHOL	0.319532418
UCK1	Granulocyte	CHOL	0.009355299
UCK1	Hedgehog_signaling	CHOL	-0.372996394
UCK1	Histidine metabolism	CHOL	-0.182954706
UCK1	Hypoxia	CHOL	-0.109083343
UCK1	Il-17ralpha t cell	CHOL	0.102846127
UCK1	Il2_stat5_signaling	CHOL	-0.014854199
UCK1	Il6_jak_stat3_signaling	CHOL	-0.127788584
UCK1	Immune_checkpoints_tunr	CHOL	-0.19943141
UCK1	Immune_inhibition_cytok	CHOL	-0.052970649
UCK1	Inositol phosphate metabo	CHOL	-0.264478881
UCK1	Interleukin_6_signaling	CHOL	-0.381580834
UCK1	Jaeger_metastasis_up	CHOL	-0.01754257

UCK1	Jain_nfkb_signaling	CHOL	0.2111691
UCK1	Kras_signaling_up	CHOL	-0.286295416
UCK1	Linoleic acid metabolism	CHOL	-0.357134106
UCK1	Lipoic acid metabolism	CHOL	0.180169292
UCK1	Lysine degradation	CHOL	0.110159755
UCK1	Lysosome	CHOL	0.134758287
UCK1	M1 macrophage	CHOL	-0.001432449
UCK1	M2 macrophage	CHOL	0.079083805
UCK1	Mannose type o-glycan bi	CHOL	0.200528988
UCK1	Mapk_signaling_pathway	CHOL	-0.335881051
UCK1	Mapk3_erk1_activation	CHOL	-0.300795755
UCK1	Marginal zone b cell	CHOL	-0.023000829
UCK1	Memory b cell	CHOL	0.083944017
UCK1	Mesenchymal cell	CHOL	-0.164497442
UCK1	Mesenchymal stem cell	CHOL	-0.260527975
UCK1	Metabolism of xenobiotic	CHOL	-0.122958743
UCK1	Migrating cancer stem cel	CHOL	-0.272989867
UCK1	Mitotic_spindle	CHOL	-0.444995838
UCK1	Monocyte	CHOL	0.019676231
UCK1	Mtor_signaling_pathway	CHOL	0.271572757
UCK1	Mtorc1_signaling	CHOL	0.19443837
UCK1	Mucin type o-glycan biosy	CHOL	-0.222326522
UCK1	Myc_targets_v1	CHOL	0.483901546
UCK1	Myeloid cell	CHOL	0.053014819
UCK1	N-glycan biosynthesis	CHOL	0.244624933
UCK1	Naive b cell	CHOL	0.104021724
UCK1	Naive cd4+ t cell	CHOL	-0.012130186
UCK1	Naive cd8+ t cell	CHOL	-0.042760385
UCK1	Natural killer cell	CHOL	0.157191392
UCK1	Natural killer t (nkt) cell	CHOL	0.306581111
UCK1	Natural regulatory t (treg)	CHOL	0.055156979
UCK1	Neomycin, kanamycin and	CHOL	-0.122781307
UCK1	Neutrophil	CHOL	-0.170142142
UCK1	Nicotinate and nicotinami	CHOL	0.255651122
UCK1	Nitrogen metabolism	CHOL	-0.141482185
UCK1	Nod_like_receptor_signal	CHOL	-0.158211487
UCK1	Notch_signaling	CHOL	-0.454125061
UCK1	One carbon pool by folate	CHOL	-0.014016157
UCK1	Other glycan degradation	CHOL	0.220808164
UCK1	Other types of o-glycan b	CHOL	0.280020719
UCK1	Oxidative phosphorylatio	CHOL	0.639339988
UCK1	P53_pathway	CHOL	0.114305029
UCK1	P53_signaling_pathway	CHOL	-0.161907426

UCK1	Pantothenate and coa bios	CHOL	0.265005264
UCK1	Pentose and glucuronate i	CHOL	-0.23168757
UCK1	Pentose phosphate pathwa	CHOL	0.358744765
UCK1	Pericyte	CHOL	-0.235599624
UCK1	Phenylalanine metabolism	CHOL	-0.007450176
UCK1	Phenylalanine, tyrosine ar	CHOL	0.194158646
UCK1	Phosphonate and phosphir	CHOL	0.096314679
UCK1	Pi3k_akt_activation	CHOL	-0.060736606
UCK1	Pi3k_akt_mtor_signaling	CHOL	0.454662909
UCK1	Porphyrin and chlorophyl	CHOL	0.188359361
UCK1	Primary bile acid biosynt	CHOL	-0.001078597
UCK1	Propanoate metabolism	CHOL	0.300386869
UCK1	Purine metabolism	CHOL	0.182159633
UCK1	Pyrimidine metabolism	CHOL	0.36774172
UCK1	Pyruvate metabolism	CHOL	0.269566099
UCK1	Regulation_of_autophagy	CHOL	0.504897716
UCK1	Retinol metabolism	CHOL	-0.152032428
UCK1	Riboflavin metabolism	CHOL	0.173322298
UCK1	Schmahl_pdgf_signaling	CHOL	-0.410316649
UCK1	Selenocompound metabol	CHOL	-0.015660526
UCK1	Signaling_by_hippo	CHOL	-0.410395631
UCK1	Sphingolipid metabolism	CHOL	-0.179933535
UCK1	Starch and sucrose metabo	CHOL	0.246473048
UCK1	Steroid biosynthesis	CHOL	0.06002549
UCK1	Steroid hormone biosynth	CHOL	-0.255017897
UCK1	Sulfur metabolism	CHOL	-0.156596131
UCK1	Synthesis and degradation	CHOL	0.176767986
UCK1	T helper cell	CHOL	0.11298157
UCK1	T helper1 (th1) cell	CHOL	0.240331124
UCK1	T helper17 (th17) cell	CHOL	0.027121375
UCK1	T helper2 (th2) cell	CHOL	0.113115432
UCK1	T helper9 (th9) cell	CHOL	0.181591749
UCK1	Taurine and hypotaurine r	CHOL	-0.281339169
UCK1	Terpenoid backbone biosy	CHOL	0.183673948
UCK1	Tgf_beta_signaling_pathw	CHOL	-0.490585547
UCK1	Thiamine metabolism	CHOL	0.329884938
UCK1	Tnfa_signaling_via_nfk	CHOL	-0.314090686
UCK1	Tryptophan metabolism	CHOL	0.180918935
UCK1	Tumor endothelial cell	CHOL	0.131594578
UCK1	Tyrosine metabolism	CHOL	-0.062560448
UCK1	Ubiquinone and other ter	CHOL	0.30481179
UCK1	Valine, leucine and isoleu	CHOL	0.053080652
UCK1	Valine, leucine and isoleu	CHOL	0.286943768

UCK1	Vascular endothelial cell	CHOL	-0.173338772
UCK1	Vascular smooth muscle c	CHOL	-0.300106972
UCK1	Vegf_signaling_pathway	CHOL	0.239685591
UCK1	Vitamin b6 metabolism	CHOL	0.21903279
UCK1	Willert_wnt_signaling	CHOL	0.001607851
UCK1	Wnt_beta_catenin_signali	CHOL	-0.253379197
UCK2	Abnormal plasma cell	CHOL	-0.237426555
UCK2	Activated b cell	CHOL	-0.221876947
UCK2	Activated cd4+ t cell	CHOL	-0.284095646
UCK2	Activated t cell	CHOL	-0.201302083
UCK2	Alanine, aspartate and glu	CHOL	-0.028863641
UCK2	Alcala_apoptosis	CHOL	0.061640783
UCK2	Alpha-linolenic acid meta	CHOL	-0.16399124
UCK2	Amino sugar and nucleoti	CHOL	0.113511226
UCK2	Ampk_pathway	CHOL	-0.114596422
UCK2	Angiogenesis	CHOL	0.161520028
UCK2	Arachidonic acid metabol	CHOL	-0.108235456
UCK2	Arginine and proline meta	CHOL	0.109981305
UCK2	Arginine biosynthesis	CHOL	-0.161532798
UCK2	Ascorbate and aldarate me	CHOL	0.109569998
UCK2	Atypical memory b cell	CHOL	-0.171850762
UCK2	Axl+siglec6+ dendritic ce	CHOL	-0.112666941
UCK2	B cell	CHOL	-0.264240255
UCK2	B1 cell	CHOL	-0.185608043
UCK2	Basal cell	CHOL	0.198840316
UCK2	Beta-alanine metabolism	CHOL	-0.022749088
UCK2	Biosynthesis of unsaturate	CHOL	-0.15880204
UCK2	Biotin metabolism	CHOL	0.350469355
UCK2	Butanoate metabolism	CHOL	-0.278062012
UCK2	Caffeine metabolism	CHOL	0.086532065
UCK2	Cancer stem cell	CHOL	-0.054871812
UCK2	Cancer stem-like cell	CHOL	0.276660499
UCK2	Cd4+ cytotoxic t cell	CHOL	-0.117729698
UCK2	Cd4+ memory t cell	CHOL	-0.186478978
UCK2	Cd4+ regulatory t cell	CHOL	-0.181483303
UCK2	Cd4+ t helper cell	CHOL	-0.203686663
UCK2	Cd4+cd25+ regulatory t c	CHOL	-0.195643289
UCK2	Cd8+ cytotoxic t cell	CHOL	-0.255868697
UCK2	Cd8+ regulatory t cell	CHOL	-0.111161416
UCK2	Cell_cycle	CHOL	0.253186475
UCK2	Chandran_metastasis_top5	CHOL	0.207231192
UCK2	Citrate cycle (tca cycle)	CHOL	-0.057158514
UCK2	Cysteine and methionine r	CHOL	0.056541484

UCK2	Cytokine induced killer cell	CHOL	-0.269405642
UCK2	D-arginine and d-ornithin	CHOL	-0.006867537
UCK2	D-glutamine and d-glutan	CHOL	-0.056813147
UCK2	Dendritic cell	CHOL	-0.263327225
UCK2	Dna_repair	CHOL	0.137777248
UCK2	Dna_replication	CHOL	0.01395674
UCK2	Double-negative memory	CHOL	-0.216998111
UCK2	Drug metabolism - cytoch	CHOL	0.015756954
UCK2	Drug metabolism - other	CHOL	0.101351122
UCK2	E2f_targets	CHOL	0.190673135
UCK2	Ecm_receptor_interaction	CHOL	0.120357577
UCK2	Effector cd4+ memory t (	CHOL	-0.185491224
UCK2	Effector cd8+ memory t (	CHOL	-0.037580189
UCK2	Effector memory t cell	CHOL	-0.149161779
UCK2	Effector regulatory t (treg	CHOL	-0.115604518
UCK2	Elvidge_hif1a_targets_up	CHOL	0.38003561
UCK2	Endothelial cell	CHOL	-0.117095983
UCK2	Eosinophil	CHOL	-0.145028602
UCK2	Ether lipid metabolism	CHOL	-0.15998525
UCK2	Exhausted cd4+ t cell	CHOL	-0.284001017
UCK2	Exhausted cd8+ t cell	CHOL	-0.141903464
UCK2	Exhausted t cell	CHOL	-0.228743457
UCK2	Fat cell (adipocyte)	CHOL	-0.372443565
UCK2	Fatty acid biosynthesis	CHOL	0.004219437
UCK2	Fatty acid degradation	CHOL	-0.054907508
UCK2	Fatty acid elongation	CHOL	-0.101205814
UCK2	Fibroblast	CHOL	-0.108493428
UCK2	Folate biosynthesis	CHOL	0.091382916
UCK2	Follicular b cell	CHOL	-0.249557287
UCK2	Follicular dendritic cell	CHOL	-0.263837168
UCK2	Follicular helper (tfh) t ce	CHOL	-0.30274601
UCK2	Follicular t cell	CHOL	-0.014953855
UCK2	Foxp3+il-17+ t cell	CHOL	-0.329389577
UCK2	Fructose and mannose me	CHOL	0.174999757
UCK2	G2m_checkpoint	CHOL	0.268944589
UCK2	Galactose metabolism	CHOL	0.094972056
UCK2	Galie_tumor_stemness_ge	CHOL	-0.089050164
UCK2	Glutathione metabolism	CHOL	0.090319734
UCK2	Glycerolipid metabolism	CHOL	-0.007355803
UCK2	Glycerophospholipid metæ	CHOL	-0.17769281
UCK2	Glycine, serine and threor	CHOL	-0.040231762
UCK2	Glycolysis / gluconeogene	CHOL	0.148502387
UCK2	Glycosaminoglycan biosy	CHOL	0.020806539

UCK2	Glycosaminoglycan biosyn	CHOL	-0.026711127
UCK2	Glycosaminoglycan biosyn	CHOL	0.114072425
UCK2	Glycosaminoglycan degra	CHOL	0.080134409
UCK2	Glycosphingolipid biosyn	CHOL	-0.213305178
UCK2	Glycosphingolipid biosyn	CHOL	0.044483925
UCK2	Glycosphingolipid biosyn	CHOL	0.16134754
UCK2	Glycosylphosphatidylinos	CHOL	0.22523259
UCK2	Glyoxylate and dicarboxy	CHOL	0.143927677
UCK2	Granulocyte	CHOL	-0.049679097
UCK2	Hedgehog_signaling	CHOL	0.010070902
UCK2	Histidine metabolism	CHOL	0.191408541
UCK2	Hypoxia	CHOL	-0.088829731
UCK2	Il-17alpha t cell	CHOL	-0.203314258
UCK2	Il2_stat5_signaling	CHOL	-0.165774618
UCK2	Il6_jak_stat3_signaling	CHOL	-0.095487977
UCK2	Immune_checkpoints_tunr	CHOL	0.104828809
UCK2	Immune_inhibition_cytok	CHOL	-0.210289198
UCK2	Inositol phosphate metabo	CHOL	-0.02217458
UCK2	Interleukin_6_signaling	CHOL	-0.046943162
UCK2	Jaeger_metastasis_up	CHOL	-0.030075278
UCK2	Jain_nfkb_signaling	CHOL	0.310099068
UCK2	Kras_signaling_up	CHOL	-0.108303489
UCK2	Linoleic acid metabolism	CHOL	-0.031266184
UCK2	Lipoic acid metabolism	CHOL	-0.063648706
UCK2	Lysine degradation	CHOL	-0.078085066
UCK2	Lysosome	CHOL	-0.02562089
UCK2	M1 macrophage	CHOL	-0.038097036
UCK2	M2 macrophage	CHOL	-0.290339759
UCK2	Mannose type o-glycan bi	CHOL	0.232365082
UCK2	Mapk_signaling_pathway	CHOL	-0.195242517
UCK2	Mapk3_erk1_activation	CHOL	-0.141572058
UCK2	Marginal zone b cell	CHOL	-0.15631027
UCK2	Memory b cell	CHOL	-0.153972249
UCK2	Mesenchymal cell	CHOL	0.01418862
UCK2	Mesenchymal stem cell	CHOL	-0.018071681
UCK2	Metabolism of xenobiotic	CHOL	-0.015381339
UCK2	Migrating cancer stem cel	CHOL	0.354358291
UCK2	Mitotic_spindle	CHOL	0.250546427
UCK2	Monocyte	CHOL	-0.173686342
UCK2	Mtor_signaling_pathway	CHOL	-0.334536633
UCK2	Mtorc1_signaling	CHOL	0.057341353
UCK2	Mucin type o-glycan bios	CHOL	-0.013198274
UCK2	Myc_targets_v1	CHOL	0.307070459

UCK2	Myeloid cell	CHOL	-0.198389179
UCK2	N-glycan biosynthesis	CHOL	0.06253935
UCK2	Naive b cell	CHOL	-0.248203243
UCK2	Naive cd4+ t cell	CHOL	-0.159045806
UCK2	Naive cd8+ t cell	CHOL	-0.088983054
UCK2	Natural killer cell	CHOL	-0.250484047
UCK2	Natural killer t (nkt) cell	CHOL	-0.164513951
UCK2	Natural regulatory t (treg) cell	CHOL	-0.185018468
UCK2	Neomycin, kanamycin and	CHOL	0.092326632
UCK2	Neutrophil	CHOL	-0.114307079
UCK2	Nicotinate and nicotinamide	CHOL	-0.458384456
UCK2	Nitrogen metabolism	CHOL	-0.004690489
UCK2	Nod_like_receptor_signaling	CHOL	-0.083011141
UCK2	Notch_signaling	CHOL	0.193586073
UCK2	One carbon pool by folate	CHOL	0.260858052
UCK2	Other glycan degradation	CHOL	0.074519898
UCK2	Other types of o-glycan biosynthesis	CHOL	0.179194434
UCK2	Oxidative phosphorylation	CHOL	-0.14289977
UCK2	P53_pathway	CHOL	-0.266168633
UCK2	P53_signaling_pathway	CHOL	0.011805364
UCK2	Pantothenate and coenzyme biosynthesis	CHOL	-0.450345986
UCK2	Pentose and glucuronate interconversions	CHOL	0.074649755
UCK2	Pentose phosphate pathway	CHOL	0.085881721
UCK2	Pericyte	CHOL	-0.072469393
UCK2	Phenylalanine metabolism	CHOL	0.09517633
UCK2	Phenylalanine, tyrosine and tryptophan metabolism	CHOL	0.028909145
UCK2	Phosphonate and phosphite metabolism	CHOL	-0.356718496
UCK2	Pi3k_akt_activation	CHOL	-0.25739522
UCK2	Pi3k_akt_mtor_signaling	CHOL	-0.212558299
UCK2	Porphyrin and chlorophyll metabolism	CHOL	0.05004288
UCK2	Primary bile acid biosynthesis	CHOL	-0.218358085
UCK2	Propanoate metabolism	CHOL	-0.074808675
UCK2	Purine metabolism	CHOL	0.4312112
UCK2	Pyrimidine metabolism	CHOL	0.318093683
UCK2	Pyruvate metabolism	CHOL	0.066248513
UCK2	Regulation_of_autophagy	CHOL	-0.282490596
UCK2	Retinol metabolism	CHOL	-0.062454189
UCK2	Riboflavin metabolism	CHOL	-0.024892205
UCK2	Schmahl_pdgf_signaling	CHOL	-0.116035877
UCK2	Selenocompound metabolism	CHOL	-0.1113738
UCK2	Signaling_by_hippo	CHOL	0.242035721
UCK2	Sphingolipid metabolism	CHOL	0.28775444
UCK2	Starch and sucrose metabolism	CHOL	-0.265296776

UCK2	Steroid biosynthesis	CHOL	0.201685228
UCK2	Steroid hormone biosynth	CHOL	0.115940141
UCK2	Sulfur metabolism	CHOL	-0.040454664
UCK2	Synthesis and degradation	CHOL	-0.366942541
UCK2	T helper cell	CHOL	-0.30813372
UCK2	T helper1 (th1) cell	CHOL	-0.281839016
UCK2	T helper17 (th17) cell	CHOL	-0.238487607
UCK2	T helper2 (th2) cell	CHOL	-0.266329861
UCK2	T helper9 (th9) cell	CHOL	-0.235268526
UCK2	Taurine and hypotaurine r	CHOL	0.036214697
UCK2	Terpenoid backbone biosy	CHOL	0.070763093
UCK2	Tgf_beta_signaling_pathw	CHOL	0.165371966
UCK2	Thiamine metabolism	CHOL	-0.232036685
UCK2	Tnfa_signaling_via_nfbk	CHOL	-0.002365714
UCK2	Tryptophan metabolism	CHOL	-0.081115662
UCK2	Tumor endothelial cell	CHOL	0.105303362
UCK2	Tyrosine metabolism	CHOL	0.077111856
UCK2	Ubiquinone and other terf	CHOL	0.103680882
UCK2	Valine, leucine and isoleu	CHOL	-0.078415345
UCK2	Valine, leucine and isoleu	CHOL	-0.141752978
UCK2	Vascular endothelial cell	CHOL	-0.18774814
UCK2	Vascular smooth muscle c	CHOL	-0.024128934
UCK2	Vegf_signaling_pathway	CHOL	-0.355151003
UCK2	Vitamin b6 metabolism	CHOL	0.034961964
UCK2	Willert_wnt_signaling	CHOL	0.085477373
UCK2	Wnt_beta_catenin_signali	CHOL	0.200160861
UCKL1	Abnormal plasma cell	CHOL	-0.042787917
UCKL1	Activated b cell	CHOL	0.147420762
UCKL1	Activated cd4+ t cell	CHOL	-0.03489355
UCKL1	Activated t cell	CHOL	0.010115571
UCKL1	Alanine, aspartate and glu	CHOL	-0.334868529
UCKL1	Alcala_apoptosis	CHOL	0.104933912
UCKL1	Alpha-linolenic acid meta	CHOL	-0.192863229
UCKL1	Amino sugar and nucleoti	CHOL	-0.345864622
UCKL1	Ampk_pathway	CHOL	0.009951086
UCKL1	Angiogenesis	CHOL	0.012554807
UCKL1	Arachidonic acid metabol:	CHOL	-0.089147687
UCKL1	Arginine and proline metæ	CHOL	-0.124706416
UCKL1	Arginine biosynthesis	CHOL	-0.303559709
UCKL1	Ascorbate and aldarate mε	CHOL	-0.408731095
UCKL1	Atypical memory b cell	CHOL	0.092812025
UCKL1	Axl+siglec6+ dendritic ce	CHOL	-0.100420176
UCKL1	B cell	CHOL	0.039286001

UCKL1	B1 cell	CHOL	0.141778055
UCKL1	Basal cell	CHOL	0.046364308
UCKL1	Beta-alanine metabolism	CHOL	-0.403116953
UCKL1	Biosynthesis of unsaturate	CHOL	-0.426031846
UCKL1	Biotin metabolism	CHOL	-0.003479953
UCKL1	Butanoate metabolism	CHOL	-0.36998801
UCKL1	Caffeine metabolism	CHOL	-0.408740512
UCKL1	Cancer stem cell	CHOL	-0.1141232
UCKL1	Cancer stem-like cell	CHOL	0.129343341
UCKL1	Cd4+ cytotoxic t cell	CHOL	0.115881943
UCKL1	Cd4+ memory t cell	CHOL	0.05316622
UCKL1	Cd4+ regulatory t cell	CHOL	0.059530228
UCKL1	Cd4+ t helper cell	CHOL	-0.056456836
UCKL1	Cd4+cd25+ regulatory t c	CHOL	-0.047531201
UCKL1	Cd8+ cytotoxic t cell	CHOL	0.026026453
UCKL1	Cd8+ regulatory t cell	CHOL	0.098216566
UCKL1	Cell_cycle	CHOL	0.124002855
UCKL1	Chandran_metastasis_top5	CHOL	-0.197865614
UCKL1	Citrate cycle (tca cycle)	CHOL	-0.220477116
UCKL1	Cysteine and methionine r	CHOL	-0.282202458
UCKL1	Cytokine induced killer c	CHOL	-0.027220495
UCKL1	D-arginine and d-ornithin	CHOL	-0.28382853
UCKL1	D-glutamine and d-glutan	CHOL	-0.364790243
UCKL1	Dendritic cell	CHOL	-0.048125127
UCKL1	Dna_repair	CHOL	0.364385365
UCKL1	Dna_replication	CHOL	0.058850994
UCKL1	Double-negative memory	CHOL	0.119902053
UCKL1	Drug metabolism - cytoch	CHOL	-0.377986056
UCKL1	Drug metabolism - other c	CHOL	-0.25908089
UCKL1	E2f_targets	CHOL	0.08713602
UCKL1	Ecm_receptor_interaction	CHOL	-0.207821649
UCKL1	Effector cd4+ memory t (	CHOL	-0.040448463
UCKL1	Effector cd8+ memory t (	CHOL	0.11975941
UCKL1	Effector memory t cell	CHOL	0.013915209
UCKL1	Effector regulatory t (treg	CHOL	0.005949423
UCKL1	Elvidge_hif1a_targets_up	CHOL	-0.100603827
UCKL1	Endothelial cell	CHOL	-0.130262615
UCKL1	Eosinophil	CHOL	0.044956911
UCKL1	Ether lipid metabolism	CHOL	-0.29015223
UCKL1	Exhausted cd4+ t cell	CHOL	-0.18392234
UCKL1	Exhausted cd8+ t cell	CHOL	-0.034495896
UCKL1	Exhausted t cell	CHOL	0.029131419
UCKL1	Fat cell (adipocyte)	CHOL	-0.394038818

UCKL1	Fatty acid biosynthesis	CHOL	-0.209307983
UCKL1	Fatty acid degradation	CHOL	-0.266373739
UCKL1	Fatty acid elongation	CHOL	-0.349935477
UCKL1	Fibroblast	CHOL	-0.127433732
UCKL1	Folate biosynthesis	CHOL	-0.171849019
UCKL1	Follicular b cell	CHOL	0.012054623
UCKL1	Follicular dendritic cell	CHOL	0.008587397
UCKL1	Follicular helper (tfh) t ce	CHOL	-0.051401857
UCKL1	Follicular t cell	CHOL	-0.046243667
UCKL1	Foxp3+il-17+ t cell	CHOL	0.146801334
UCKL1	Fructose and mannose me	CHOL	-0.212942504
UCKL1	G2m_checkpoint	CHOL	0.056624716
UCKL1	Galactose metabolism	CHOL	-0.150007803
UCKL1	Galie_tumor_stemness_ge	CHOL	0.045958976
UCKL1	Glutathione metabolism	CHOL	-0.101607086
UCKL1	Glycerolipid metabolism	CHOL	-0.128120176
UCKL1	Glycerophospholipid metæ	CHOL	0.044731878
UCKL1	Glycine, serine and threor	CHOL	-0.317620829
UCKL1	Glycolysis / gluconeogene	CHOL	-0.189576353
UCKL1	Glycosaminoglycan biosy1	CHOL	-0.019931977
UCKL1	Glycosaminoglycan biosy1	CHOL	-0.026896325
UCKL1	Glycosaminoglycan biosy1	CHOL	0.187400856
UCKL1	Glycosaminoglycan degra	CHOL	-0.319523752
UCKL1	Glycosphingolipid biosyn1	CHOL	-0.170834726
UCKL1	Glycosphingolipid biosyn1	CHOL	0.120216979
UCKL1	Glycosphingolipid biosyn1	CHOL	0.134668758
UCKL1	Glycosylphosphatidylinos:	CHOL	0.172765648
UCKL1	Glyoxylate and dicarboxy	CHOL	-0.143422396
UCKL1	Granulocyte	CHOL	0.031015144
UCKL1	Hedgehog_signaling	CHOL	-0.249072726
UCKL1	Histidine metabolism	CHOL	-0.202260915
UCKL1	Hypoxia	CHOL	-0.251262842
UCKL1	Il-17ralpha t cell	CHOL	-0.080773552
UCKL1	Il2_stat5_signaling	CHOL	-0.055491487
UCKL1	Il6_jak_stat3_signaling	CHOL	-0.117490758
UCKL1	Immune_checkpoints_tun:	CHOL	0.022906076
UCKL1	Immune_inhibition_cytok	CHOL	0.012356353
UCKL1	Inositol phosphate metabo	CHOL	-0.11891902
UCKL1	Interleukin_6_signaling	CHOL	-0.39398016
UCKL1	Jaeger_metastasis_up	CHOL	-0.243455273
UCKL1	Jain_nfkb_signaling	CHOL	0.076741146
UCKL1	Kras_signaling_up	CHOL	-0.206383079
UCKL1	Linoleic acid metabolism	CHOL	-0.318992596

UCKL1	Lipoic acid metabolism	CHOL	0.055852777
UCKL1	Lysine degradation	CHOL	-0.328722959
UCKL1	Lysosome	CHOL	-0.227537437
UCKL1	M1 macrophage	CHOL	-0.030583173
UCKL1	M2 macrophage	CHOL	-0.179350094
UCKL1	Mannose type o-glycan bi	CHOL	0.281741869
UCKL1	Mapk_signaling_pathway	CHOL	-0.297132125
UCKL1	Mapk3_erk1_activation	CHOL	-0.490213232
UCKL1	Marginal zone b cell	CHOL	0.139874121
UCKL1	Memory b cell	CHOL	0.201789848
UCKL1	Mesenchymal cell	CHOL	0.06418623
UCKL1	Mesenchymal stem cell	CHOL	-0.14739189
UCKL1	Metabolism of xenobiotic	CHOL	-0.3921293
UCKL1	Migrating cancer stem cel	CHOL	0.097453337
UCKL1	Mitotic_spindle	CHOL	-0.191019235
UCKL1	Monocyte	CHOL	-0.051154434
UCKL1	Mtor_signaling_pathway	CHOL	-0.482255749
UCKL1	Mtorc1_signaling	CHOL	-0.261888917
UCKL1	Mucin type o-glycan biosy	CHOL	-0.189734374
UCKL1	Myc_targets_v1	CHOL	0.263830203
UCKL1	Myeloid cell	CHOL	-0.060085675
UCKL1	N-glycan biosynthesis	CHOL	-0.156431038
UCKL1	Naive b cell	CHOL	0.107032623
UCKL1	Naive cd4+ t cell	CHOL	-0.004961289
UCKL1	Naive cd8+ t cell	CHOL	0.131106078
UCKL1	Natural killer cell	CHOL	0.035726269
UCKL1	Natural killer t (nkt) cell	CHOL	0.190837108
UCKL1	Natural regulatory t (treg)	CHOL	0.012438649
UCKL1	Neomycin, kanamycin and	CHOL	-0.164884939
UCKL1	Neutrophil	CHOL	-0.168193852
UCKL1	Nicotinate and nicotinami	CHOL	-0.47112038
UCKL1	Nitrogen metabolism	CHOL	-0.007363157
UCKL1	Nod_like_receptor_signal	CHOL	-0.060759929
UCKL1	Notch_signaling	CHOL	0.023896516
UCKL1	One carbon pool by folate	CHOL	-0.115086595
UCKL1	Other glycan degradation	CHOL	-0.060775219
UCKL1	Other types of o-glycan b	CHOL	0.315391113
UCKL1	Oxidative phosphorylatior	CHOL	0.047951412
UCKL1	P53_pathway	CHOL	-0.18410286
UCKL1	P53_signaling_pathway	CHOL	-0.257176754
UCKL1	Pantothenate and coa bios	CHOL	-0.433393834
UCKL1	Pentose and glucuronate i	CHOL	-0.467373446
UCKL1	Pentose phosphate pathwa	CHOL	-0.16531674

UCKL1	Pericyte	CHOL	-0.053467016
UCKL1	Phenylalanine metabolism	CHOL	-0.236917508
UCKL1	Phenylalanine, tyrosine ar	CHOL	-0.172824343
UCKL1	Phosphonate and phosphir	CHOL	-0.264629506
UCKL1	Pi3k_akt_activation	CHOL	-0.42724837
UCKL1	Pi3k_akt_mtor_signaling	CHOL	-0.178316636
UCKL1	Porphyrin and chlorophyl	CHOL	-0.334179829
UCKL1	Primary bile acid biosynt	CHOL	-0.449718089
UCKL1	Propanoate metabolism	CHOL	-0.357562831
UCKL1	Purine metabolism	CHOL	0.178937633
UCKL1	Pyrimidine metabolism	CHOL	0.297717491
UCKL1	Pyruvate metabolism	CHOL	-0.231127156
UCKL1	Regulation_of_autophagy	CHOL	-0.133931167
UCKL1	Retinol metabolism	CHOL	-0.449226505
UCKL1	Riboflavin metabolism	CHOL	-0.219490384
UCKL1	Schmahl_pdgf_signaling	CHOL	-0.341619276
UCKL1	Selenocompound metabol	CHOL	-0.220834343
UCKL1	Signaling_by_hippo	CHOL	-0.019548074
UCKL1	Sphingolipid metabolism	CHOL	-0.341898646
UCKL1	Starch and sucrose metabo	CHOL	-0.526246828
UCKL1	Steroid biosynthesis	CHOL	0.088553689
UCKL1	Steroid hormone biosynth	CHOL	-0.455675591
UCKL1	Sulfur metabolism	CHOL	0.008663008
UCKL1	Synthesis and degradation	CHOL	-0.41469956
UCKL1	T helper cell	CHOL	-0.007015187
UCKL1	T helper1 (th1) cell	CHOL	0.095377074
UCKL1	T helper17 (th17) cell	CHOL	0.107062774
UCKL1	T helper2 (th2) cell	CHOL	-0.020629674
UCKL1	T helper9 (th9) cell	CHOL	0.022917021
UCKL1	Taurine and hypotaurine r	CHOL	0.254611636
UCKL1	Terpenoid backbone biosy	CHOL	-0.262664715
UCKL1	Tgf_beta_signaling_pathw	CHOL	-0.118739634
UCKL1	Thiamine metabolism	CHOL	-0.182875068
UCKL1	Tnfa_signaling_via_nfkb	CHOL	-0.0768864
UCKL1	Tryptophan metabolism	CHOL	-0.29642525
UCKL1	Tumor endothelial cell	CHOL	0.00946006
UCKL1	Tyrosine metabolism	CHOL	-0.315651762
UCKL1	Ubiquinone and other ter	CHOL	-0.172500963
UCKL1	Valine, leucine and isoleu	CHOL	-0.306957225
UCKL1	Valine, leucine and isoleu	CHOL	-0.320971555
UCKL1	Vascular endothelial cell	CHOL	-0.221818335
UCKL1	Vascular smooth muscle c	CHOL	-0.032037439
UCKL1	Vegf_signaling_pathway	CHOL	-0.086733881

UCKL1	Vitamin b6 metabolism	CHOL	-0.252009801
UCKL1	Willert_wnt_signaling	CHOL	0.319730515
UCKL1	Wnt_beta_catenin_signali	CHOL	0.297884765
UPP1	Abnormal plasma cell	CHOL	-0.087500267
UPP1	Activated b cell	CHOL	0.304626147
UPP1	Activated cd4+ t cell	CHOL	0.309427734
UPP1	Activated t cell	CHOL	0.254352649
UPP1	Alanine, aspartate and glu	CHOL	0.071585904
UPP1	Alcala_apoptosis	CHOL	0.559712965
UPP1	Alpha-linolenic acid meta	CHOL	-0.283153534
UPP1	Amino sugar and nucleoti	CHOL	0.417899236
UPP1	Ampk_pathway	CHOL	0.059584649
UPP1	Angiogenesis	CHOL	-0.070550753
UPP1	Arachidonic acid metabol:	CHOL	0.314560238
UPP1	Arginine and proline metæ	CHOL	-0.089364238
UPP1	Arginine biosynthesis	CHOL	-0.079095689
UPP1	Ascorbate and aldarate mε	CHOL	-0.145860782
UPP1	Atypical memory b cell	CHOL	0.088684674
UPP1	Axl+siglecc6+ dendritic ce	CHOL	0.364887522
UPP1	B cell	CHOL	0.329719917
UPP1	B1 cell	CHOL	0.230172516
UPP1	Basal cell	CHOL	0.003257909
UPP1	Beta-alanine metabolism	CHOL	-0.005247955
UPP1	Biosynthesis of unsaturate	CHOL	0.138554405
UPP1	Biotin metabolism	CHOL	-0.208467473
UPP1	Butanoate metabolism	CHOL	0.060175082
UPP1	Caffeine metabolism	CHOL	-0.189902439
UPP1	Cancer stem cell	CHOL	-0.033765837
UPP1	Cancer stem-like cell	CHOL	0.02858964
UPP1	Cd4+ cytotoxic t cell	CHOL	0.313396084
UPP1	Cd4+ memory t cell	CHOL	0.202178001
UPP1	Cd4+ regulatory t cell	CHOL	0.3304091
UPP1	Cd4+ t helper cell	CHOL	0.189054719
UPP1	Cd4+cd25+ regulatory t c	CHOL	0.195172154
UPP1	Cd8+ cytotoxic t cell	CHOL	0.17147218
UPP1	Cd8+ regulatory t cell	CHOL	0.305147638
UPP1	Cell_cycle	CHOL	0.01858068
UPP1	Chandran_metastasis_top ⁵	CHOL	-0.294399284
UPP1	Citrate cycle (tca cycle)	CHOL	0.301733123
UPP1	Cysteine and methionine r	CHOL	0.026619649
UPP1	Cytokine induced killer cε	CHOL	0.053637708
UPP1	D-arginine and d-ornithin	CHOL	-0.146742751
UPP1	D-glutamine and d-glutan	CHOL	-0.217757848

UPP1	Dendritic cell	CHOL	0.379805792
UPP1	Dna_repair	CHOL	0.469043587
UPP1	Dna_replication	CHOL	0.378056946
UPP1	Double-negative memory	CHOL	0.22316877
UPP1	Drug metabolism - cytoch	CHOL	-0.092369564
UPP1	Drug metabolism - other	CHOL	0.189656389
UPP1	E2f_targets	CHOL	0.107249135
UPP1	Ecm_receptor_interaction	CHOL	-0.084125884
UPP1	Effector cd4+ memory t	CHOL	0.228063089
UPP1	Effector cd8+ memory t	CHOL	0.373161576
UPP1	Effector memory t cell	CHOL	0.232742426
UPP1	Effector regulatory t (treg	CHOL	0.280234372
UPP1	Elvidge_hif1a_targets_up	CHOL	-0.06454149
UPP1	Endothelial cell	CHOL	0.087851381
UPP1	Eosinophil	CHOL	0.385122838
UPP1	Ether lipid metabolism	CHOL	0.189842927
UPP1	Exhausted cd4+ t cell	CHOL	0.297791582
UPP1	Exhausted cd8+ t cell	CHOL	0.279662998
UPP1	Exhausted t cell	CHOL	0.28786695
UPP1	Fat cell (adipocyte)	CHOL	0.265524068
UPP1	Fatty acid biosynthesis	CHOL	0.108868326
UPP1	Fatty acid degradation	CHOL	-0.144046798
UPP1	Fatty acid elongation	CHOL	0.269716021
UPP1	Fibroblast	CHOL	0.09840047
UPP1	Folate biosynthesis	CHOL	-0.083921484
UPP1	Follicular b cell	CHOL	0.28390021
UPP1	Follicular dendritic cell	CHOL	0.199768694
UPP1	Follicular helper (tfh) t ce	CHOL	0.162142325
UPP1	Follicular t cell	CHOL	0.263380732
UPP1	Foxp3+il-17+ t cell	CHOL	0.304439769
UPP1	Fructose and mannose me	CHOL	0.353760186
UPP1	G2m_checkpoint	CHOL	-0.065914829
UPP1	Galactose metabolism	CHOL	0.47519454
UPP1	Galie_tumor_stemness_ge	CHOL	-0.08947359
UPP1	Glutathione metabolism	CHOL	0.36792444
UPP1	Glycerolipid metabolism	CHOL	-0.075246271
UPP1	Glycerophospholipid metæ	CHOL	0.268036651
UPP1	Glycine, serine and threor	CHOL	0.086989884
UPP1	Glycolysis / gluconeogene	CHOL	0.294380748
UPP1	Glycosaminoglycan biosy1	CHOL	0.409038652
UPP1	Glycosaminoglycan biosy1	CHOL	0.176615013
UPP1	Glycosaminoglycan biosy1	CHOL	0.142014051
UPP1	Glycosaminoglycan degra	CHOL	0.526084445

UPP1	Glycosphingolipid biosyn	CHOL	0.66869398
UPP1	Glycosphingolipid biosyn	CHOL	0.316624628
UPP1	Glycosphingolipid biosyn	CHOL	-0.025373977
UPP1	Glycosylphosphatidylinos	CHOL	-0.144477097
UPP1	Glyoxylate and dicarboxy	CHOL	0.029850222
UPP1	Granulocyte	CHOL	0.367938837
UPP1	Hedgehog_signaling	CHOL	-0.164415777
UPP1	Histidine metabolism	CHOL	-0.270936491
UPP1	Hypoxia	CHOL	0.237926854
UPP1	Il-17alpha t cell	CHOL	0.095033098
UPP1	Il2_stat5_signaling	CHOL	0.297808474
UPP1	Il6_jak_stat3_signaling	CHOL	0.185330033
UPP1	Immune_checkpoints_tun	CHOL	0.248208649
UPP1	Immune_inhibition_cytok	CHOL	0.235460265
UPP1	Inositol phosphate metabo	CHOL	-0.450562112
UPP1	Interleukin_6_signaling	CHOL	-0.121465327
UPP1	Jaeger_metastasis_up	CHOL	0.329126233
UPP1	Jain_nfkb_signaling	CHOL	-0.008751678
UPP1	Kras_signaling_up	CHOL	0.088316876
UPP1	Linoleic acid metabolism	CHOL	-0.396704717
UPP1	Lipoic acid metabolism	CHOL	0.207378164
UPP1	Lysine degradation	CHOL	-0.30782702
UPP1	Lysosome	CHOL	0.462413672
UPP1	M1 macrophage	CHOL	0.387769924
UPP1	M2 macrophage	CHOL	0.404221455
UPP1	Mannose type o-glycan bi	CHOL	-0.087424093
UPP1	Mapk_signaling_pathway	CHOL	-0.007784585
UPP1	Mapk3_erk1_activation	CHOL	-0.0075141
UPP1	Marginal zone b cell	CHOL	0.164775418
UPP1	Memory b cell	CHOL	0.202862658
UPP1	Mesenchymal cell	CHOL	0.193876422
UPP1	Mesenchymal stem cell	CHOL	0.102415133
UPP1	Metabolism of xenobiotic	CHOL	0.0870877
UPP1	Migrating cancer stem cel	CHOL	-0.176748704
UPP1	Mitotic_spindle	CHOL	-0.385134944
UPP1	Monocyte	CHOL	0.399252773
UPP1	Mtor_signaling_pathway	CHOL	0.080661315
UPP1	Mtorc1_signaling	CHOL	0.427998114
UPP1	Mucin type o-glycan biosy	CHOL	0.143428005
UPP1	Myc_targets_v1	CHOL	0.385539832
UPP1	Myeloid cell	CHOL	0.351748862
UPP1	N-glycan biosynthesis	CHOL	0.046550612
UPP1	Naive b cell	CHOL	0.174071276

UPP1	Naive cd4+ t cell	CHOL	0.185687709
UPP1	Naive cd8+ t cell	CHOL	0.141845246
UPP1	Natural killer cell	CHOL	0.316693607
UPP1	Natural killer t (nkt) cell	CHOL	0.414702763
UPP1	Natural regulatory t (treg)	CHOL	0.210792704
UPP1	Neomycin, kanamycin and	CHOL	0.113081081
UPP1	Neutrophil	CHOL	0.255696456
UPP1	Nicotinate and nicotinami	CHOL	0.214846429
UPP1	Nitrogen metabolism	CHOL	-0.420651503
UPP1	Nod_like_receptor_signal	CHOL	0.268348653
UPP1	Notch_signaling	CHOL	-0.349289221
UPP1	One carbon pool by folate	CHOL	0.120359022
UPP1	Other glycan degradation	CHOL	0.073333725
UPP1	Other types of o-glycan b	CHOL	0.072168016
UPP1	Oxidative phosphorylatio	CHOL	0.422963508
UPP1	P53_pathway	CHOL	0.465469345
UPP1	P53_signaling_pathway	CHOL	0.036911015
UPP1	Pantothenate and coa bios	CHOL	0.1987343
UPP1	Pentose and glucuronate i	CHOL	-0.018179772
UPP1	Pentose phosphate pathwa	CHOL	0.575970846
UPP1	Pericyte	CHOL	-0.022042099
UPP1	Phenylalanine metabolism	CHOL	0.131304646
UPP1	Phenylalanine, tyrosine ar	CHOL	0.122847778
UPP1	Phosphonate and phosphir	CHOL	0.226427532
UPP1	Pi3k_akt_activation	CHOL	-0.138008342
UPP1	Pi3k_akt_mtor_signaling	CHOL	0.444314462
UPP1	Porphyrin and chlorophyl	CHOL	0.170638807
UPP1	Primary bile acid biosynt	CHOL	0.012738882
UPP1	Propanoate metabolism	CHOL	0.063799153
UPP1	Purine metabolism	CHOL	0.148552192
UPP1	Pyrimidine metabolism	CHOL	0.257032281
UPP1	Pyruvate metabolism	CHOL	0.094440427
UPP1	Regulation_of_autophagy	CHOL	0.231897885
UPP1	Retinol metabolism	CHOL	-0.117950515
UPP1	Riboflavin metabolism	CHOL	0.147139746
UPP1	Schmahl_pdgf_signaling	CHOL	-0.207104014
UPP1	Selenocompound metabol	CHOL	-0.238852658
UPP1	Signaling_by_hippo	CHOL	-0.507728028
UPP1	Sphingolipid metabolism	CHOL	-0.047931001
UPP1	Starch and sucrose metab	CHOL	0.255752563
UPP1	Steroid biosynthesis	CHOL	-0.080240775
UPP1	Steroid hormone biosynth	CHOL	-0.135021837
UPP1	Sulfur metabolism	CHOL	-0.273792841

UPP1	Synthesis and degradation	CHOL	0.034017012
UPP1	T helper cell	CHOL	0.250176179
UPP1	T helper1 (th1) cell	CHOL	0.274971782
UPP1	T helper17 (th17) cell	CHOL	0.112990157
UPP1	T helper2 (th2) cell	CHOL	0.255277295
UPP1	T helper9 (th9) cell	CHOL	0.209576467
UPP1	Taurine and hypotaurine r	CHOL	-0.205171195
UPP1	Terpenoid backbone biosy	CHOL	0.081571533
UPP1	Tgf_beta_signaling_pathw	CHOL	-0.332122076
UPP1	Thiamine metabolism	CHOL	0.138486294
UPP1	Tnfa_signaling_via_nfkb	CHOL	0.141811542
UPP1	Tryptophan metabolism	CHOL	0.030090461
UPP1	Tumor endothelial cell	CHOL	0.145050113
UPP1	Tyrosine metabolism	CHOL	-0.020248907
UPP1	Ubiquinone and other ter	CHOL	0.066741046
UPP1	Valine, leucine and isoleu	CHOL	0.542278578
UPP1	Valine, leucine and isoleu	CHOL	-0.011595941
UPP1	Vascular endothelial cell	CHOL	0.126193439
UPP1	Vascular smooth muscle c	CHOL	-0.052142158
UPP1	Vegf_signaling_pathway	CHOL	0.265824806
UPP1	Vitamin b6 metabolism	CHOL	0.178620809
UPP1	Willert_wnt_signaling	CHOL	-0.347332242
UPP1	Wnt_beta_catenin_signali	CHOL	-0.475029868
UPP2	Abnormal plasma cell	CHOL	-0.152512005
UPP2	Activated b cell	CHOL	-0.290072827
UPP2	Activated cd4+ t cell	CHOL	-0.138222969
UPP2	Activated t cell	CHOL	-0.257930976
UPP2	Alanine, aspartate and glu	CHOL	0.562579996
UPP2	Alcala_apoptosis	CHOL	-0.158953593
UPP2	Alpha-linolenic acid meta	CHOL	0.503175063
UPP2	Amino sugar and nucleoti	CHOL	0.278849354
UPP2	Ampk_pathway	CHOL	0.136435679
UPP2	Angiogenesis	CHOL	-0.054294199
UPP2	Arachidonic acid metabol	CHOL	0.190017942
UPP2	Arginine and proline metæ	CHOL	0.573404249
UPP2	Arginine biosynthesis	CHOL	0.626603418
UPP2	Ascorbate and aldarate mε	CHOL	0.47530151
UPP2	Atypical memory b cell	CHOL	-0.096501437
UPP2	Axl+siglec6+ dendritic ce	CHOL	-0.271948959
UPP2	B cell	CHOL	-0.266260201
UPP2	B1 cell	CHOL	-0.282230393
UPP2	Basal cell	CHOL	-0.226191089
UPP2	Beta-alanine metabolism	CHOL	0.590247084

UPP2	Biosynthesis of unsaturate	CHOL	0.478862246
UPP2	Biotin metabolism	CHOL	-0.128690246
UPP2	Butanoate metabolism	CHOL	0.616239936
UPP2	Caffeine metabolism	CHOL	0.330024799
UPP2	Cancer stem cell	CHOL	-0.07924335
UPP2	Cancer stem-like cell	CHOL	-0.05558025
UPP2	Cd4+ cytotoxic t cell	CHOL	-0.308375665
UPP2	Cd4+ memory t cell	CHOL	-0.249322906
UPP2	Cd4+ regulatory t cell	CHOL	-0.241208792
UPP2	Cd4+ t helper cell	CHOL	-0.217145714
UPP2	Cd4+cd25+ regulatory t c	CHOL	-0.228974516
UPP2	Cd8+ cytotoxic t cell	CHOL	-0.151502793
UPP2	Cd8+ regulatory t cell	CHOL	-0.226163097
UPP2	Cell_cycle	CHOL	0.037685146
UPP2	Chandran_metastasis_top5	CHOL	0.165394197
UPP2	Citrate cycle (tca cycle)	CHOL	0.293872209
UPP2	Cysteine and methionine r	CHOL	0.532006477
UPP2	Cytokine induced killer cε	CHOL	-0.26671005
UPP2	D-arginine and d-ornithin	CHOL	0.571917332
UPP2	D-glutamine and d-glutan	CHOL	0.26168636
UPP2	Dendritic cell	CHOL	-0.140309747
UPP2	Dna_repair	CHOL	0.015706857
UPP2	Dna_replication	CHOL	0.065088404
UPP2	Double-negative memory	CHOL	-0.248654439
UPP2	Drug metabolism - cytoch	CHOL	0.527045005
UPP2	Drug metabolism - other (	CHOL	0.466204776
UPP2	E2f_targets	CHOL	0.191876382
UPP2	Ecm_receptor_interaction	CHOL	-0.107851829
UPP2	Effector cd4+ memory t (	CHOL	-0.188988867
UPP2	Effector cd8+ memory t (	CHOL	-0.412237796
UPP2	Effector memory t cell	CHOL	-0.213569493
UPP2	Effector regulatory t (treg	CHOL	-0.266138496
UPP2	Elvidge_hif1a_targets_up	CHOL	0.091850714
UPP2	Endothelial cell	CHOL	-0.145970649
UPP2	Eosinophil	CHOL	-0.220407029
UPP2	Ether lipid metabolism	CHOL	0.144455524
UPP2	Exhausted cd4+ t cell	CHOL	-0.238879399
UPP2	Exhausted cd8+ t cell	CHOL	-0.328557909
UPP2	Exhausted t cell	CHOL	-0.214948534
UPP2	Fat cell (adipocyte)	CHOL	0.554188735
UPP2	Fatty acid biosynthesis	CHOL	0.285351883
UPP2	Fatty acid degradation	CHOL	0.574624094
UPP2	Fatty acid elongation	CHOL	0.384762539

UPP2	Fibroblast	CHOL	-0.228547202
UPP2	Folate biosynthesis	CHOL	0.428553288
UPP2	Follicular b cell	CHOL	-0.229468713
UPP2	Follicular dendritic cell	CHOL	-0.193107571
UPP2	Follicular helper (tfh) t ce	CHOL	-0.119963883
UPP2	Follicular t cell	CHOL	-0.126754737
UPP2	Foxp3+il-17+ t cell	CHOL	-0.100222174
UPP2	Fructose and mannose me	CHOL	0.417297646
UPP2	G2m_checkpoint	CHOL	0.120921997
UPP2	Galactose metabolism	CHOL	0.094632468
UPP2	Galie_tumor_stemness_ge	CHOL	-0.238715324
UPP2	Glutathione metabolism	CHOL	0.334234028
UPP2	Glycerolipid metabolism	CHOL	0.424412248
UPP2	Glycerophospholipid metæ	CHOL	0.38394879
UPP2	Glycine, serine and threor	CHOL	0.607553751
UPP2	Glycolysis / gluconeogene	CHOL	0.380578435
UPP2	Glycosaminoglycan biosy1	CHOL	-0.253224139
UPP2	Glycosaminoglycan biosy1	CHOL	-0.264730096
UPP2	Glycosaminoglycan biosy1	CHOL	-0.105261153
UPP2	Glycosaminoglycan degra	CHOL	0.057095716
UPP2	Glycosphingolipid biosyn1	CHOL	-0.099149849
UPP2	Glycosphingolipid biosyn1	CHOL	-0.11493393
UPP2	Glycosphingolipid biosyn1	CHOL	0.166828771
UPP2	Glycosylphosphatidylinos:	CHOL	0.099334554
UPP2	Glyoxylate and dicarboxy	CHOL	0.375339349
UPP2	Granulocyte	CHOL	-0.239816181
UPP2	Hedgehog_signaling	CHOL	-0.232903755
UPP2	Histidine metabolism	CHOL	0.430553925
UPP2	Hypoxia	CHOL	-0.051754118
UPP2	Il-17ralpha t cell	CHOL	-0.226757325
UPP2	Il2_stat5_signaling	CHOL	-0.134279334
UPP2	Il6_jak_stat3_signaling	CHOL	-0.126586729
UPP2	Immune_checkpoints_tunr	CHOL	-0.113402172
UPP2	Immune_inhibition_cytok	CHOL	0.052456885
UPP2	Inositol phosphate metabo	CHOL	-0.18812977
UPP2	Interleukin_6_signaling	CHOL	-0.034739568
UPP2	Jaeger_metastasis_up	CHOL	0.181421005
UPP2	Jain_nfkb_signaling	CHOL	0.070891465
UPP2	Kras_signaling_up	CHOL	-0.128038392
UPP2	Linoleic acid metabolism	CHOL	0.426561574
UPP2	Lipoic acid metabolism	CHOL	-0.027779391
UPP2	Lysine degradation	CHOL	0.3319636
UPP2	Lysosome	CHOL	0.023185568

UPP2	M1 macrophage	CHOL	-0.256722317
UPP2	M2 macrophage	CHOL	0.063429347
UPP2	Mannose type o-glycan bi	CHOL	-0.025179136
UPP2	Mapk_signaling_pathway	CHOL	-0.230985613
UPP2	Mapk3_erk1_activation	CHOL	0.144046528
UPP2	Marginal zone b cell	CHOL	-0.274833208
UPP2	Memory b cell	CHOL	-0.404040183
UPP2	Mesenchymal cell	CHOL	-0.283795701
UPP2	Mesenchymal stem cell	CHOL	-0.265559663
UPP2	Metabolism of xenobiotic	CHOL	0.498293905
UPP2	Migrating cancer stem cel	CHOL	-0.225915557
UPP2	Mitotic_spindle	CHOL	-0.181488515
UPP2	Monocyte	CHOL	-0.243520923
UPP2	Mtor_signaling_pathway	CHOL	-0.0472355
UPP2	Mtorc1_signaling	CHOL	0.257527742
UPP2	Mucin type o-glycan biosy	CHOL	-0.079570881
UPP2	Myc_targets_v1	CHOL	-0.040599068
UPP2	Myeloid cell	CHOL	-0.229983086
UPP2	N-glycan biosynthesis	CHOL	0.081197082
UPP2	Naive b cell	CHOL	-0.208224018
UPP2	Naive cd4+ t cell	CHOL	-0.408571139
UPP2	Naive cd8+ t cell	CHOL	-0.550327534
UPP2	Natural killer cell	CHOL	-0.222061819
UPP2	Natural killer t (nkt) cell	CHOL	-0.354736339
UPP2	Natural regulatory t (treg)	CHOL	-0.254184633
UPP2	Neomycin, kanamycin and	CHOL	-0.287153567
UPP2	Neutrophil	CHOL	-0.034024993
UPP2	Nicotinate and nicotinami	CHOL	0.460869462
UPP2	Nitrogen metabolism	CHOL	0.423868433
UPP2	Nod_like_receptor_signal	CHOL	-0.138940588
UPP2	Notch_signaling	CHOL	-0.29226913
UPP2	One carbon pool by folate	CHOL	0.230399793
UPP2	Other glycan degradation	CHOL	0.074220914
UPP2	Other types of o-glycan b	CHOL	0.110583058
UPP2	Oxidative phosphorylatio	CHOL	0.259706799
UPP2	P53_pathway	CHOL	0.064897985
UPP2	P53_signaling_pathway	CHOL	-0.001808116
UPP2	Pantothenate and coa bios	CHOL	0.424129795
UPP2	Pentose and glucuronate i	CHOL	0.492097054
UPP2	Pentose phosphate pathwa	CHOL	0.095935347
UPP2	Pericyte	CHOL	-0.125154813
UPP2	Phenylalanine metabolism	CHOL	0.494970053
UPP2	Phenylalanine, tyrosine ar	CHOL	0.461374004

UPP2	Phosphonate and phosphir	CHOL	0.259477015
UPP2	Pi3k_akt_activation	CHOL	0.036415322
UPP2	Pi3k_akt_mtor_signaling	CHOL	0.035767089
UPP2	Porphyrin and chlorophyl	CHOL	0.48008245
UPP2	Primary bile acid biosynt	CHOL	0.692569082
UPP2	Propanoate metabolism	CHOL	0.367341571
UPP2	Purine metabolism	CHOL	-0.02272186
UPP2	Pyrimidine metabolism	CHOL	0.047321468
UPP2	Pyruvate metabolism	CHOL	0.400078504
UPP2	Regulation_of_autophagy	CHOL	-0.024277053
UPP2	Retinol metabolism	CHOL	0.554474101
UPP2	Riboflavin metabolism	CHOL	0.319484462
UPP2	Schmahl_pdgf_signaling	CHOL	-0.109814549
UPP2	Selenocompound metabol	CHOL	0.539235627
UPP2	Signaling_by_hippo	CHOL	-0.288964294
UPP2	Sphingolipid metabolism	CHOL	0.012445126
UPP2	Starch and sucrose metab	CHOL	0.282787354
UPP2	Steroid biosynthesis	CHOL	0.280404316
UPP2	Steroid hormone biosynth	CHOL	0.43816611
UPP2	Sulfur metabolism	CHOL	0.332180283
UPP2	Synthesis and degradation	CHOL	0.597071373
UPP2	T helper cell	CHOL	-0.145999162
UPP2	T helper1 (th1) cell	CHOL	-0.142928098
UPP2	T helper17 (th17) cell	CHOL	-0.187673617
UPP2	T helper2 (th2) cell	CHOL	-0.197994689
UPP2	T helper9 (th9) cell	CHOL	-0.240990804
UPP2	Taurine and hypotaurine r	CHOL	0.121092713
UPP2	Terpenoid backbone biosy	CHOL	0.490667524
UPP2	Tgf_beta_signaling_pathw	CHOL	-0.156482773
UPP2	Thiamine metabolism	CHOL	0.417147549
UPP2	Tnfa_signaling_via_nfb	CHOL	-0.128371715
UPP2	Tryptophan metabolism	CHOL	0.554711477
UPP2	Tumor endothelial cell	CHOL	0.261634212
UPP2	Tyrosine metabolism	CHOL	0.526426504
UPP2	Ubiquinone and other ter	CHOL	0.442841136
UPP2	Valine, leucine and isoleu	CHOL	0.262542673
UPP2	Valine, leucine and isoleu	CHOL	0.513863982
UPP2	Vascular endothelial cell	CHOL	0.003404636
UPP2	Vascular smooth muscle c	CHOL	-0.244879557
UPP2	Vegf_signaling_pathway	CHOL	0.181220126
UPP2	Vitamin b6 metabolism	CHOL	0.422397493
UPP2	Willert_wnt_signaling	CHOL	-0.159835043
UPP2	Wnt_beta_catenin_signali	CHOL	-0.357490671

CDA	Abnormal plasma cell	COAD	-0.057044041
CDA	Activated b cell	COAD	-0.020598547
CDA	Activated cd4+ t cell	COAD	0.115871201
CDA	Activated t cell	COAD	0.039425029
CDA	Alanine, aspartate and glu	COAD	-0.106447203
CDA	Alcala_apoptosis	COAD	0.001339355
CDA	Alpha-linolenic acid meta	COAD	0.240774025
CDA	Amino sugar and nucleoti	COAD	0.103247456
CDA	Ampk_pathway	COAD	-0.027470306
CDA	Angiogenesis	COAD	0.225613925
CDA	Arachidonic acid metabol	COAD	0.332971464
CDA	Arginine and proline metæ	COAD	0.114005698
CDA	Arginine biosynthesis	COAD	0.079713403
CDA	Ascorbate and aldarate mε	COAD	-0.007872764
CDA	Atypical memory b cell	COAD	0.062135449
CDA	Axl+siglec6+ dendritic ce	COAD	0.196617842
CDA	B cell	COAD	0.016042733
CDA	B1 cell	COAD	-0.087232156
CDA	Basal cell	COAD	0.402276506
CDA	Beta-alanine metabolism	COAD	0.028314762
CDA	Biosynthesis of unsaturate	COAD	0.086945851
CDA	Biotin metabolism	COAD	-0.126409364
CDA	Butanoate metabolism	COAD	-0.140427354
CDA	Caffeine metabolism	COAD	0.043483657
CDA	Cancer stem cell	COAD	0.114327569
CDA	Cancer stem-like cell	COAD	0.069157411
CDA	Cd4+ cytotoxic t cell	COAD	0.143948613
CDA	Cd4+ memory t cell	COAD	0.061869342
CDA	Cd4+ regulatory t cell	COAD	0.07490986
CDA	Cd4+ t helper cell	COAD	0.06060187
CDA	Cd4+cd25+ regulatory t c	COAD	0.056359496
CDA	Cd8+ cytotoxic t cell	COAD	0.048036634
CDA	Cd8+ regulatory t cell	COAD	0.03019444
CDA	Cell_cycle	COAD	-0.135060195
CDA	Chandran_metastasis_top5	COAD	-0.220784629
CDA	Citrate cycle (tca cycle)	COAD	-0.01009382
CDA	Cysteine and methionine r	COAD	-0.057030321
CDA	Cytokine induced killer cε	COAD	-0.009159667
CDA	D-arginine and d-ornithin	COAD	0.180024827
CDA	D-glutamine and d-glutan	COAD	-0.035877243
CDA	Dendritic cell	COAD	0.155035926
CDA	Dna_repair	COAD	-0.053747
CDA	Dna_replication	COAD	-0.133943257

CDA	Double-negative memory COAD	0.068138262
CDA	Drug metabolism - cytoch COAD	0.19993203
CDA	Drug metabolism - other (COAD	0.161495896
CDA	E2f_targets COAD	-0.181389852
CDA	Ecm_receptor_interaction COAD	0.158183214
CDA	Effector cd4+ memory t (COAD	0.054069248
CDA	Effector cd8+ memory t (COAD	0.139006178
CDA	Effector memory t cell COAD	0.062562007
CDA	Effector regulatory t (treg COAD	0.060087949
CDA	Elvidge_hif1a_targets_up COAD	0.021286794
CDA	Endothelial cell COAD	0.055901603
CDA	Eosinophil COAD	0.136900417
CDA	Ether lipid metabolism COAD	0.198676104
CDA	Exhausted cd4+ t cell COAD	0.094961815
CDA	Exhausted cd8+ t cell COAD	0.112201192
CDA	Exhausted t cell COAD	0.019076378
CDA	Fat cell (adipocyte) COAD	0.013247643
CDA	Fatty acid biosynthesis COAD	-0.009453478
CDA	Fatty acid degradation COAD	-0.082180292
CDA	Fatty acid elongation COAD	0.027204226
CDA	Fibroblast COAD	0.138934429
CDA	Folate biosynthesis COAD	0.133609228
CDA	Follicular b cell COAD	0.057723328
CDA	Follicular dendritic cell COAD	0.019371488
CDA	Follicular helper (tfh) t ce COAD	0.123887404
CDA	Follicular t cell COAD	0.024128295
CDA	Foxp3+il-17+ t cell COAD	0.003639647
CDA	Fructose and mannose me COAD	0.083538018
CDA	G2m_checkpoint COAD	-0.188671389
CDA	Galactose metabolism COAD	0.120587282
CDA	Galie_tumor_stemness_ge COAD	0.134884819
CDA	Glutathione metabolism COAD	0.235950085
CDA	Glycerolipid metabolism COAD	0.143551239
CDA	Glycerophospholipid metæ COAD	0.23966436
CDA	Glycine, serine and threor COAD	0.053818042
CDA	Glycolysis / gluconeogene COAD	0.053801607
CDA	Glycosaminoglycan biosy1 COAD	0.165649654
CDA	Glycosaminoglycan biosy1 COAD	0.065002873
CDA	Glycosaminoglycan biosy1 COAD	0.241197152
CDA	Glycosaminoglycan degra COAD	0.171415767
CDA	Glycosphingolipid biosyn1 COAD	0.220179217
CDA	Glycosphingolipid biosyn1 COAD	0.326917315
CDA	Glycosphingolipid biosyn1 COAD	0.203729442

CDA	Glycosylphosphatidylinos: COAD	-0.1018943
CDA	Glyoxylate and dicarboxy COAD	-0.173738219
CDA	Granulocyte COAD	0.12253639
CDA	Hedgehog_signaling COAD	0.053709795
CDA	Histidine metabolism COAD	0.081822807
CDA	Hypoxia COAD	0.235242646
CDA	Il-17ralpha t cell COAD	0.040203029
CDA	Il2_stat5_signaling COAD	0.192355946
CDA	Il6_jak_stat3_signaling COAD	0.229830206
CDA	Immune_checkpoints_tunr COAD	0.143343086
CDA	Immune_inhibition_cytok COAD	0.224795451
CDA	Inositol phosphate metabo COAD	0.008632321
CDA	Interleukin_6_signaling COAD	0.069124794
CDA	Jaeger_metastasis_up COAD	-0.014278119
CDA	Jain_nfkb_signaling COAD	-0.188084568
CDA	Kras_signaling_up COAD	0.176274671
CDA	Linoleic acid metabolism COAD	0.197593539
CDA	Lipoic acid metabolism COAD	-0.189728606
CDA	Lysine degradation COAD	-0.248238025
CDA	Lysosome COAD	0.253388689
CDA	M1 macrophage COAD	0.09643461
CDA	M2 macrophage COAD	0.08934748
CDA	Mannose type o-glycan bi COAD	-0.157833994
CDA	Mapk_signaling_pathway COAD	0.187775642
CDA	Mapk3_erk1_activation COAD	0.12439581
CDA	Marginal zone b cell COAD	-0.01427804
CDA	Memory b cell COAD	-0.025535077
CDA	Mesenchymal cell COAD	0.222644457
CDA	Mesenchymal stem cell COAD	0.141429344
CDA	Metabolism of xenobiotic: COAD	0.204526006
CDA	Migrating cancer stem cel COAD	0.093260201
CDA	Mitotic_spindle COAD	-0.078907432
CDA	Monocyte COAD	0.239005073
CDA	Mtor_signaling_pathway COAD	0.008618944
CDA	Mtorc1_signaling COAD	0.029848968
CDA	Mucin type o-glycan biosy COAD	0.067925076
CDA	Myc_targets_v1 COAD	-0.153781786
CDA	Myeloid cell COAD	0.110693411
CDA	N-glycan biosynthesis COAD	0.020300694
CDA	Naive b cell COAD	0.047192109
CDA	Naive cd4+ t cell COAD	0.020220048
CDA	Naive cd8+ t cell COAD	-0.071229708
CDA	Natural killer cell COAD	0.096401338

CDA	Natural killer t (nkt) cell	COAD	-0.101633201
CDA	Natural regulatory t (treg)	COAD	0.0420906
CDA	Neomycin, kanamycin and	COAD	0.150864943
CDA	Neutrophil	COAD	0.262600434
CDA	Nicotinate and nicotinami	COAD	0.123747532
CDA	Nitrogen metabolism	COAD	0.08401954
CDA	Nod_like_receptor_signal	COAD	0.177637799
CDA	Notch_signaling	COAD	0.090567071
CDA	One carbon pool by folate	COAD	-0.148321348
CDA	Other glycan degradation	COAD	-0.013726111
CDA	Other types of o-glycan b	COAD	-0.037347249
CDA	Oxidative phosphorylatio	COAD	0.050800105
CDA	P53_pathway	COAD	0.185488849
CDA	P53_signaling_pathway	COAD	-0.001618827
CDA	Pantothenate and coa bios	COAD	0.081201341
CDA	Pentose and glucuronate i	COAD	0.031182525
CDA	Pentose phosphate pathwa	COAD	0.064482672
CDA	Pericyte	COAD	0.181809527
CDA	Phenylalanine metabolism	COAD	0.231671544
CDA	Phenylalanine, tyrosine ar	COAD	0.084707221
CDA	Phosphonate and phosphir	COAD	0.00716772
CDA	Pi3k_akt_activation	COAD	0.049322109
CDA	Pi3k_akt_mtor_signaling	COAD	0.077076912
CDA	Porphyrin and chlorophyl	COAD	0.019404505
CDA	Primary bile acid biosynt	COAD	0.067770997
CDA	Propanoate metabolism	COAD	-0.185988305
CDA	Purine metabolism	COAD	-0.10852424
CDA	Pyrimidine metabolism	COAD	-0.103294167
CDA	Pyruvate metabolism	COAD	-0.098898706
CDA	Regulation_of_autophagy	COAD	0.054749867
CDA	Retinol metabolism	COAD	0.162501754
CDA	Riboflavin metabolism	COAD	0.003879582
CDA	Schmahl_pdgf_signaling	COAD	0.205985469
CDA	Selenocompound metabol	COAD	-0.133636528
CDA	Signaling_by_hippo	COAD	0.113610266
CDA	Sphingolipid metabolism	COAD	0.179063168
CDA	Starch and sucrose metabo	COAD	-0.00016976
CDA	Steroid biosynthesis	COAD	0.005774196
CDA	Steroid hormone biosynth	COAD	0.238426299
CDA	Sulfur metabolism	COAD	0.062693487
CDA	Synthesis and degradation	COAD	-0.101434718
CDA	T helper cell	COAD	0.123579694
CDA	T helper1 (th1) cell	COAD	0.118056003

CDA	T helper17 (th17) cell	COAD	0.136412745
CDA	T helper2 (th2) cell	COAD	0.123440846
CDA	T helper9 (th9) cell	COAD	0.097712718
CDA	Taurine and hypotaurine r	COAD	0.115650947
CDA	Terpenoid backbone biosy	COAD	-0.011647816
CDA	Tgf_beta_signaling_pathw	COAD	-0.001799039
CDA	Thiamine metabolism	COAD	0.266317778
CDA	Tnfa_signaling_via_nfkb	COAD	0.22194361
CDA	Tryptophan metabolism	COAD	-0.004828118
CDA	Tumor endothelial cell	COAD	0.093398154
CDA	Tyrosine metabolism	COAD	0.186836562
CDA	Ubiquinone and other terf	COAD	-0.010934926
CDA	Valine, leucine and isoleu	COAD	0.082154705
CDA	Valine, leucine and isoleu	COAD	-0.15011493
CDA	Vascular endothelial cell	COAD	0.134257758
CDA	Vascular smooth muscle c	COAD	0.107878541
CDA	Vegf_signaling_pathway	COAD	0.299172565
CDA	Vitamin b6 metabolism	COAD	0.019014144
CDA	Willert_wnt_signaling	COAD	0.000366078
CDA	Wnt_beta_catenin_signali	COAD	-0.031043265
UCK1	Abnormal plasma cell	COAD	0.087623792
UCK1	Activated b cell	COAD	0.00619824
UCK1	Activated cd4+ t cell	COAD	-0.033804618
UCK1	Activated t cell	COAD	-0.01525823
UCK1	Alanine, aspartate and glu	COAD	-0.009128512
UCK1	Alcala_apoptosis	COAD	0.01094114
UCK1	Alpha-linolenic acid meta	COAD	0.057096723
UCK1	Amino sugar and nucleoti	COAD	0.099972445
UCK1	Ampk_pathway	COAD	0.097216979
UCK1	Angiogenesis	COAD	0.081867141
UCK1	Arachidonic acid metabol:	COAD	0.124432965
UCK1	Arginine and proline metæ	COAD	0.078898933
UCK1	Arginine biosynthesis	COAD	0.035408959
UCK1	Ascorbate and aldarate mε	COAD	-0.062587087
UCK1	Atypical memory b cell	COAD	0.011214988
UCK1	Axl+siglec6+ dendritic ce	COAD	0.005968334
UCK1	B cell	COAD	-0.048087813
UCK1	B1 cell	COAD	0.035469974
UCK1	Basal cell	COAD	0.052371235
UCK1	Beta-alanine metabolism	COAD	-0.031616997
UCK1	Biosynthesis of unsaturate	COAD	-0.020722054
UCK1	Biotin metabolism	COAD	-0.112380534
UCK1	Butanoate metabolism	COAD	-0.070841374

UCK1	Caffeine metabolism	COAD	-0.136915734
UCK1	Cancer stem cell	COAD	-0.096514131
UCK1	Cancer stem-like cell	COAD	-0.164000754
UCK1	Cd4+ cytotoxic t cell	COAD	0.030060414
UCK1	Cd4+ memory t cell	COAD	0.069022313
UCK1	Cd4+ regulatory t cell	COAD	0.021690843
UCK1	Cd4+ t helper cell	COAD	-0.036741743
UCK1	Cd4+cd25+ regulatory t c	COAD	-0.03929939
UCK1	Cd8+ cytotoxic t cell	COAD	0.046659265
UCK1	Cd8+ regulatory t cell	COAD	-0.013444699
UCK1	Cell_cycle	COAD	-0.171069412
UCK1	Chandran_metastasis_top5	COAD	-0.317705065
UCK1	Citrate cycle (tca cycle)	COAD	-0.051235402
UCK1	Cysteine and methionine r	COAD	-0.018489903
UCK1	Cytokine induced killer c	COAD	0.079945312
UCK1	D-arginine and d-ornithin	COAD	-0.062406916
UCK1	D-glutamine and d-glutan	COAD	-0.167920589
UCK1	Dendritic cell	COAD	0.039405785
UCK1	Dna_repair	COAD	0.123385855
UCK1	Dna_replication	COAD	-0.003926732
UCK1	Double-negative memory	COAD	0.147248414
UCK1	Drug metabolism - cytoch	COAD	-0.021676643
UCK1	Drug metabolism - other c	COAD	0.00977921
UCK1	E2f_targets	COAD	-0.208311629
UCK1	Ecm_receptor_interaction	COAD	0.087369856
UCK1	Effector cd4+ memory t (	COAD	-0.111183237
UCK1	Effector cd8+ memory t (	COAD	0.046860598
UCK1	Effector memory t cell	COAD	-0.054140708
UCK1	Effector regulatory t (treg	COAD	-0.088866798
UCK1	Elvidge_hif1a_targets_up	COAD	-0.182248127
UCK1	Endothelial cell	COAD	-0.056649475
UCK1	Eosinophil	COAD	0.010948177
UCK1	Ether lipid metabolism	COAD	-0.083843625
UCK1	Exhausted cd4+ t cell	COAD	-0.117075784
UCK1	Exhausted cd8+ t cell	COAD	-0.052945458
UCK1	Exhausted t cell	COAD	0.006836038
UCK1	Fat cell (adipocyte)	COAD	0.221756248
UCK1	Fatty acid biosynthesis	COAD	-0.130484987
UCK1	Fatty acid degradation	COAD	-0.084097856
UCK1	Fatty acid elongation	COAD	-0.051291916
UCK1	Fibroblast	COAD	0.036010097
UCK1	Folate biosynthesis	COAD	0.116172406
UCK1	Follicular b cell	COAD	0.030673494

UCK1	Follicular dendritic cell	COAD	0.047983066
UCK1	Follicular helper (tfh) t ce	COAD	-0.005448289
UCK1	Follicular t cell	COAD	0.121565584
UCK1	Foxp3+il-17+ t cell	COAD	0.129441795
UCK1	Fructose and mannose me	COAD	0.179944864
UCK1	G2m_checkpoint	COAD	-0.234804012
UCK1	Galactose metabolism	COAD	0.194178418
UCK1	Galie_tumor_stemness_ge	COAD	0.126055117
UCK1	Glutathione metabolism	COAD	-0.025094434
UCK1	Glycerolipid metabolism	COAD	0.06439391
UCK1	Glycerophospholipid metæ	COAD	0.088909885
UCK1	Glycine, serine and threor	COAD	0.267333908
UCK1	Glycolysis / gluconeogene	COAD	0.074541058
UCK1	Glycosaminoglycan biosy	COAD	0.286644682
UCK1	Glycosaminoglycan biosy	COAD	0.113554279
UCK1	Glycosaminoglycan biosy	COAD	0.075799338
UCK1	Glycosaminoglycan degra	COAD	0.207857932
UCK1	Glycosphingolipid biosyn	COAD	0.213401493
UCK1	Glycosphingolipid biosyn	COAD	0.138745257
UCK1	Glycosphingolipid biosyn	COAD	0.050257427
UCK1	Glycosylphosphatidylinos	COAD	-0.090246704
UCK1	Glyoxylate and dicarboxy	COAD	0.089065126
UCK1	Granulocyte	COAD	-0.039287662
UCK1	Hedgehog_signaling	COAD	0.108707409
UCK1	Histidine metabolism	COAD	0.048611516
UCK1	Hypoxia	COAD	0.046868218
UCK1	Il-17alpha t cell	COAD	0.0079433
UCK1	Il2_stat5_signaling	COAD	-0.02236597
UCK1	Il6_jak_stat3_signaling	COAD	-0.060567353
UCK1	Immune_checkpoints_tun	COAD	0.01077748
UCK1	Immune_inhibition_cytok	COAD	-0.078590202
UCK1	Inositol phosphate metabo	COAD	-0.194573178
UCK1	Interleukin_6_signaling	COAD	-0.17902388
UCK1	Jaeger_metastasis_up	COAD	-0.029686801
UCK1	Jain_nfkb_signaling	COAD	-0.092317594
UCK1	Kras_signaling_up	COAD	-0.052296114
UCK1	Linoleic acid metabolism	COAD	0.025523275
UCK1	Lipoic acid metabolism	COAD	-0.051503467
UCK1	Lysine degradation	COAD	0.050246769
UCK1	Lysosome	COAD	0.169406586
UCK1	M1 macrophage	COAD	-0.062440765
UCK1	M2 macrophage	COAD	-0.030757628
UCK1	Mannose type o-glycan bi	COAD	0.223258753

UCK1	Mapk_signaling_pathway	COAD	0.024860508
UCK1	Mapk3_erk1_activation	COAD	-0.221048698
UCK1	Marginal zone b cell	COAD	-0.021980473
UCK1	Memory b cell	COAD	-0.014628761
UCK1	Mesenchymal cell	COAD	0.132147312
UCK1	Mesenchymal stem cell	COAD	0.002353066
UCK1	Metabolism of xenobiotic	COAD	0.054860962
UCK1	Migrating cancer stem cel	COAD	-0.162823353
UCK1	Mitotic_spindle	COAD	-0.134017997
UCK1	Monocyte	COAD	-0.044830249
UCK1	Mtor_signaling_pathway	COAD	0.094508514
UCK1	Mtorc1_signaling	COAD	-0.250330306
UCK1	Mucin type o-glycan bios	COAD	-0.203571052
UCK1	Myc_targets_v1	COAD	-0.183617326
UCK1	Myeloid cell	COAD	-0.007045823
UCK1	N-glycan biosynthesis	COAD	0.096052603
UCK1	Naive b cell	COAD	0.082869429
UCK1	Naive cd4+ t cell	COAD	-0.02572098
UCK1	Naive cd8+ t cell	COAD	0.012131117
UCK1	Natural killer cell	COAD	-9.42E-05
UCK1	Natural killer t (nkt) cell	COAD	-0.237258832
UCK1	Natural regulatory t (treg)	COAD	-0.047546532
UCK1	Neomycin, kanamycin and	COAD	0.152133205
UCK1	Neutrophil	COAD	-0.06838132
UCK1	Nicotinate and nicotinami	COAD	0.034842349
UCK1	Nitrogen metabolism	COAD	-0.072322019
UCK1	Nod_like_receptor_signal	COAD	-0.174503393
UCK1	Notch_signaling	COAD	0.125628478
UCK1	One carbon pool by folate	COAD	-0.133812999
UCK1	Other glycan degradation	COAD	0.234584252
UCK1	Other types of o-glycan b	COAD	0.36820025
UCK1	Oxidative phosphorylatio	COAD	0.084575246
UCK1	P53_pathway	COAD	0.042938538
UCK1	P53_signaling_pathway	COAD	-0.332192428
UCK1	Pantothenate and coa bios	COAD	-0.15737217
UCK1	Pentose and glucuronate i	COAD	-0.039144229
UCK1	Pentose phosphate pathwa	COAD	0.081999456
UCK1	Pericyte	COAD	0.075242472
UCK1	Phenylalanine metabolism	COAD	0.192757581
UCK1	Phenylalanine, tyrosine ar	COAD	-0.007462098
UCK1	Phosphonate and phosphir	COAD	-0.132633916
UCK1	Pi3k_akt_activation	COAD	-0.050685262
UCK1	Pi3k_akt_mtor_signaling	COAD	-0.1603396

UCK1	Porphyrin and chlorophyl	COAD	0.076139912
UCK1	Primary bile acid biosynt	COAD	0.181697393
UCK1	Propanoate metabolism	COAD	-0.216920376
UCK1	Purine metabolism	COAD	0.087862858
UCK1	Pyrimidine metabolism	COAD	0.113996779
UCK1	Pyruvate metabolism	COAD	-0.024890701
UCK1	Regulation_of_autophagy	COAD	-0.157166337
UCK1	Retinol metabolism	COAD	0.058154034
UCK1	Riboflavin metabolism	COAD	0.173424596
UCK1	Schmahl_pdgf_signaling	COAD	-0.206507087
UCK1	Selenocompound metabol	COAD	-0.090539345
UCK1	Signaling_by_hippo	COAD	-0.225849419
UCK1	Sphingolipid metabolism	COAD	-0.091143039
UCK1	Starch and sucrose metabo	COAD	-0.032024786
UCK1	Steroid biosynthesis	COAD	-0.043557746
UCK1	Steroid hormone biosynth	COAD	0.059469722
UCK1	Sulfur metabolism	COAD	-0.130165354
UCK1	Synthesis and degradation	COAD	-0.010612978
UCK1	T helper cell	COAD	0.001495176
UCK1	T helper1 (th1) cell	COAD	-0.041378714
UCK1	T helper17 (th17) cell	COAD	-0.076347821
UCK1	T helper2 (th2) cell	COAD	0.005208805
UCK1	T helper9 (th9) cell	COAD	0.006233595
UCK1	Taurine and hypotaurine r	COAD	0.149120974
UCK1	Terpenoid backbone biosy	COAD	-0.199952335
UCK1	Tgf_beta_signaling_pathw	COAD	-0.039022345
UCK1	Thiamine metabolism	COAD	0.13106498
UCK1	Tnfa_signaling_via_nfk	COAD	-0.095120243
UCK1	Tryptophan metabolism	COAD	0.026611705
UCK1	Tumor endothelial cell	COAD	0.10677595
UCK1	Tyrosine metabolism	COAD	0.279866453
UCK1	Ubiquinone and other ter	COAD	-0.053746656
UCK1	Valine, leucine and isoleu	COAD	0.090966837
UCK1	Valine, leucine and isoleu	COAD	-0.097580349
UCK1	Vascular endothelial cell	COAD	0.202621206
UCK1	Vascular smooth muscle c	COAD	0.141843308
UCK1	Vegf_signaling_pathway	COAD	-0.0074724
UCK1	Vitamin b6 metabolism	COAD	-0.067148468
UCK1	Willert_wnt_signaling	COAD	-0.119718871
UCK1	Wnt_beta_catenin_signali	COAD	0.239908214
UCK2	Abnormal plasma cell	COAD	-0.037515144
UCK2	Activated b cell	COAD	0.007265665
UCK2	Activated cd4+ t cell	COAD	-0.08902414

UCK2	Activated t cell	COAD	-0.014391703
UCK2	Alanine, aspartate and glu	COAD	0.378639499
UCK2	Alcala_apoptosis	COAD	0.398516648
UCK2	Alpha-linolenic acid meta	COAD	0.014450829
UCK2	Amino sugar and nucleoti	COAD	0.270697896
UCK2	Ampk_pathway	COAD	0.315381994
UCK2	Angiogenesis	COAD	0.031183292
UCK2	Arachidonic acid metabol:	COAD	-0.004722948
UCK2	Arginine and proline metæ	COAD	0.459386957
UCK2	Arginine biosynthesis	COAD	0.332594905
UCK2	Ascorbate and aldarate mε	COAD	0.088990657
UCK2	Atypical memory b cell	COAD	-0.069053936
UCK2	Axl+siglec6+ dendritic ce	COAD	-0.15862387
UCK2	B cell	COAD	-0.038601554
UCK2	B1 cell	COAD	0.08643163
UCK2	Basal cell	COAD	0.07587472
UCK2	Beta-alanine metabolism	COAD	0.161361976
UCK2	Biosynthesis of unsaturate	COAD	0.28904489
UCK2	Biotin metabolism	COAD	0.111594523
UCK2	Butanoate metabolism	COAD	0.150613365
UCK2	Caffeine metabolism	COAD	-0.027629303
UCK2	Cancer stem cell	COAD	-0.137087917
UCK2	Cancer stem-like cell	COAD	-0.091063659
UCK2	Cd4+ cytotoxic t cell	COAD	-0.050606356
UCK2	Cd4+ memory t cell	COAD	-0.025472846
UCK2	Cd4+ regulatory t cell	COAD	-0.072236481
UCK2	Cd4+ t helper cell	COAD	-0.11677849
UCK2	Cd4+cd25+ regulatory t c	COAD	-0.093253144
UCK2	Cd8+ cytotoxic t cell	COAD	0.040570454
UCK2	Cd8+ regulatory t cell	COAD	0.009723266
UCK2	Cell_cycle	COAD	0.343786348
UCK2	Chandran_metastasis_top5	COAD	0.179641128
UCK2	Citrate cycle (tca cycle)	COAD	0.381456545
UCK2	Cysteine and methionine r	COAD	0.413876227
UCK2	Cytokine induced killer cε	COAD	0.031015534
UCK2	D-arginine and d-ornithin	COAD	-0.018465095
UCK2	D-glutamine and d-glutan	COAD	0.177053502
UCK2	Dendritic cell	COAD	-0.067409774
UCK2	Dna_repair	COAD	0.494422599
UCK2	Dna_replication	COAD	0.452919808
UCK2	Double-negative memory	COAD	-0.039807418
UCK2	Drug metabolism - cytoch	COAD	-0.046149105
UCK2	Drug metabolism - other ε	COAD	0.317888115

UCK2	E2f_targets	COAD	0.371775308
UCK2	Ecm_receptor_interaction	COAD	-0.003517936
UCK2	Effector cd4+ memory t (	COAD	-0.164419483
UCK2	Effector cd8+ memory t (	COAD	-0.033476938
UCK2	Effector memory t cell	COAD	-0.120851331
UCK2	Effector regulatory t (treg	COAD	-0.191651113
UCK2	Elvidge_hif1a_targets_up	COAD	0.334521847
UCK2	Endothelial cell	COAD	-0.048198456
UCK2	Eosinophil	COAD	-0.039822088
UCK2	Ether lipid metabolism	COAD	-0.06982001
UCK2	Exhausted cd4+ t cell	COAD	-0.112694082
UCK2	Exhausted cd8+ t cell	COAD	-0.06746413
UCK2	Exhausted t cell	COAD	0.022338301
UCK2	Fat cell (adipocyte)	COAD	0.156735378
UCK2	Fatty acid biosynthesis	COAD	0.234588646
UCK2	Fatty acid degradation	COAD	0.129111571
UCK2	Fatty acid elongation	COAD	0.326959654
UCK2	Fibroblast	COAD	-0.153024661
UCK2	Folate biosynthesis	COAD	0.305259307
UCK2	Follicular b cell	COAD	-0.04922127
UCK2	Follicular dendritic cell	COAD	0.002948711
UCK2	Follicular helper (tfh) t ce	COAD	-0.065839185
UCK2	Follicular t cell	COAD	0.125164005
UCK2	Foxp3+il-17+ t cell	COAD	0.190290868
UCK2	Fructose and mannose me	COAD	0.377377769
UCK2	G2m_checkpoint	COAD	0.337214185
UCK2	Galactose metabolism	COAD	0.30477135
UCK2	Galie_tumor_stemness_ge	COAD	0.038148248
UCK2	Glutathione metabolism	COAD	0.244762928
UCK2	Glycerolipid metabolism	COAD	0.123287797
UCK2	Glycerophospholipid metæ	COAD	0.025177927
UCK2	Glycine, serine and threor	COAD	0.436901064
UCK2	Glycolysis / gluconeogene	COAD	0.401343618
UCK2	Glycosaminoglycan biosy1	COAD	0.031248418
UCK2	Glycosaminoglycan biosy1	COAD	0.001947941
UCK2	Glycosaminoglycan biosy1	COAD	0.096457459
UCK2	Glycosaminoglycan degra	COAD	-0.054404375
UCK2	Glycosphingolipid biosyn1	COAD	-0.091845115
UCK2	Glycosphingolipid biosyn1	COAD	0.01850412
UCK2	Glycosphingolipid biosyn1	COAD	-0.049840023
UCK2	Glycosylphosphatidylinos:	COAD	0.101650764
UCK2	Glyoxylate and dicarboxy	COAD	0.377566658
UCK2	Granulocyte	COAD	-0.083433605

UCK2	Hedgehog_signaling	COAD	-0.075047036
UCK2	Histidine metabolism	COAD	0.245019898
UCK2	Hypoxia	COAD	0.061958557
UCK2	Il-17alpha t cell	COAD	0.006824075
UCK2	Il2_stat5_signaling	COAD	-0.002519662
UCK2	Il6_jak_stat3_signaling	COAD	-0.112297501
UCK2	Immune_checkpoints_tun	COAD	0.030171778
UCK2	Immune_inhibition_cytok	COAD	-0.065492738
UCK2	Inositol phosphate metabo	COAD	-0.145544738
UCK2	Interleukin_6_signaling	COAD	-0.058185391
UCK2	Jaeger_metastasis_up	COAD	0.228951726
UCK2	Jain_nfkb_signaling	COAD	0.422672985
UCK2	Kras_signaling_up	COAD	-0.071669558
UCK2	Linoleic acid metabolism	COAD	-0.016390649
UCK2	Lipoic acid metabolism	COAD	0.098867648
UCK2	Lysine degradation	COAD	0.328329727
UCK2	Lysosome	COAD	-0.040344747
UCK2	M1 macrophage	COAD	-0.065909621
UCK2	M2 macrophage	COAD	-0.087715295
UCK2	Mannose type o-glycan bi	COAD	0.152358034
UCK2	Mapk_signaling_pathway	COAD	-0.050348603
UCK2	Mapk3_erk1_activation	COAD	-0.004021194
UCK2	Marginal zone b cell	COAD	-0.038179138
UCK2	Memory b cell	COAD	-0.055689158
UCK2	Mesenchymal cell	COAD	-0.027824888
UCK2	Mesenchymal stem cell	COAD	-0.164584643
UCK2	Metabolism of xenobiotic	COAD	0.060610552
UCK2	Migrating cancer stem cel	COAD	-0.000438417
UCK2	Mitotic_spindle	COAD	0.113422488
UCK2	Monocyte	COAD	-0.109240197
UCK2	Mtor_signaling_pathway	COAD	-0.007849629
UCK2	Mtorc1_signaling	COAD	0.381182244
UCK2	Mucin type o-glycan biosy	COAD	-0.098451322
UCK2	Myc_targets_v1	COAD	0.422118163
UCK2	Myeloid cell	COAD	-0.081725558
UCK2	N-glycan biosynthesis	COAD	0.200614743
UCK2	Naive b cell	COAD	-0.04050391
UCK2	Naive cd4+ t cell	COAD	-0.168340342
UCK2	Naive cd8+ t cell	COAD	-0.116709975
UCK2	Natural killer cell	COAD	-0.011648214
UCK2	Natural killer t (nkt) cell	COAD	0.076006821
UCK2	Natural regulatory t (treg)	COAD	-0.108241958
UCK2	Neomycin, kanamycin and	COAD	0.163236719

UCK2	Neutrophil	COAD	-0.007722459
UCK2	Nicotinate and nicotinami	COAD	0.03621476
UCK2	Nitrogen metabolism	COAD	0.062462574
UCK2	Nod_like_receptor_signal	COAD	-0.112045747
UCK2	Notch_signaling	COAD	0.165849238
UCK2	One carbon pool by folate	COAD	0.429996778
UCK2	Other glycan degradation	COAD	0.030175036
UCK2	Other types of o-glycan b	COAD	0.097490339
UCK2	Oxidative phosphorylatior	COAD	0.312716611
UCK2	P53_pathway	COAD	0.150693031
UCK2	P53_signaling_pathway	COAD	0.056012915
UCK2	Pantothenate and coa bios	COAD	0.095288403
UCK2	Pentose and glucuronate i	COAD	0.072776229
UCK2	Pentose phosphate pathwa	COAD	0.369754299
UCK2	Pericyte	COAD	-0.150483506
UCK2	Phenylalanine metabolism	COAD	0.287636213
UCK2	Phenylalanine, tyrosine ar	COAD	0.251017284
UCK2	Phosphonate and phosphir	COAD	-0.020981052
UCK2	Pi3k_akt_activation	COAD	-0.14687351
UCK2	Pi3k_akt_mtor_signaling	COAD	0.088631928
UCK2	Porphyrin and chlorophyl	COAD	0.321333076
UCK2	Primary bile acid biosynt	COAD	0.075995372
UCK2	Propanoate metabolism	COAD	0.106848531
UCK2	Purine metabolism	COAD	0.579439026
UCK2	Pyrimidine metabolism	COAD	0.57184695
UCK2	Pyruvate metabolism	COAD	0.352721381
UCK2	Regulation_of_autophagy	COAD	-0.307523551
UCK2	Retinol metabolism	COAD	0.079739062
UCK2	Riboflavin metabolism	COAD	0.267348319
UCK2	Schmahl_pdgf_signaling	COAD	-0.287433965
UCK2	Selenocompound metabol	COAD	0.408447225
UCK2	Signaling_by_hippo	COAD	-0.058928799
UCK2	Sphingolipid metabolism	COAD	-0.070776147
UCK2	Starch and sucrose metabo	COAD	0.014676141
UCK2	Steroid biosynthesis	COAD	0.214621478
UCK2	Steroid hormone biosynth	COAD	0.019705741
UCK2	Sulfur metabolism	COAD	0.198086516
UCK2	Synthesis and degradation	COAD	0.218637948
UCK2	T helper cell	COAD	-0.074461333
UCK2	T helper1 (th1) cell	COAD	0.012582195
UCK2	T helper17 (th17) cell	COAD	-0.101680533
UCK2	T helper2 (th2) cell	COAD	-0.03788623
UCK2	T helper9 (th9) cell	COAD	-0.204424614

UCK2	Taurine and hypotaurine r	COAD	-0.026651151
UCK2	Terpenoid backbone biosy	COAD	0.277128935
UCK2	Tgf_beta_signaling_pathw	COAD	-0.071660912
UCK2	Thiamine metabolism	COAD	0.368277661
UCK2	Tnfa_signaling_via_nfk	COAD	-0.039721816
UCK2	Tryptophan metabolism	COAD	0.239001028
UCK2	Tumor endothelial cell	COAD	0.179196059
UCK2	Tyrosine metabolism	COAD	0.286196421
UCK2	Ubiquinone and other ter	COAD	0.355424382
UCK2	Valine, leucine and isoleu	COAD	0.135016041
UCK2	Valine, leucine and isoleu	COAD	0.182951329
UCK2	Vascular endothelial cell	COAD	0.049626777
UCK2	Vascular smooth muscle c	COAD	-0.081574426
UCK2	Vegf_signaling_pathway	COAD	-0.114318582
UCK2	Vitamin b6 metabolism	COAD	0.167548102
UCK2	Willert_wnt_signaling	COAD	0.185671128
UCK2	Wnt_beta_catenin_signali	COAD	0.124847987
UCKL1	Abnormal plasma cell	COAD	-0.128432243
UCKL1	Activated b cell	COAD	-0.287331296
UCKL1	Activated cd4+ t cell	COAD	-0.251393715
UCKL1	Activated t cell	COAD	-0.306638389
UCKL1	Alanine, aspartate and glu	COAD	-0.032354924
UCKL1	Alcala_apoptosis	COAD	-0.206679248
UCKL1	Alpha-linolenic acid meta	COAD	0.120351042
UCKL1	Amino sugar and nucleoti	COAD	-0.2399823
UCKL1	Ampk_pathway	COAD	0.167800153
UCKL1	Angiogenesis	COAD	-0.160614947
UCKL1	Arachidonic acid metabol	COAD	-0.058356846
UCKL1	Arginine and proline met	COAD	-0.021273563
UCKL1	Arginine biosynthesis	COAD	0.003561988
UCKL1	Ascorbate and aldarate m	COAD	-0.163265911
UCKL1	Atypical memory b cell	COAD	-0.101435618
UCKL1	Axl+siglec6+ dendritic ce	COAD	-0.326420702
UCKL1	B cell	COAD	-0.397958312
UCKL1	B1 cell	COAD	-0.135210142
UCKL1	Basal cell	COAD	-0.151611913
UCKL1	Beta-alanine metabolism	COAD	-0.332675439
UCKL1	Biosynthesis of unsaturate	COAD	0.007739322
UCKL1	Biotin metabolism	COAD	-0.189540556
UCKL1	Butanoate metabolism	COAD	-0.190419152
UCKL1	Caffeine metabolism	COAD	-0.166007348
UCKL1	Cancer stem cell	COAD	-0.36634068
UCKL1	Cancer stem-like cell	COAD	-0.387686028

UCKL1	Cd4+ cytotoxic t cell	COAD	-0.303444608
UCKL1	Cd4+ memory t cell	COAD	-0.153687053
UCKL1	Cd4+ regulatory t cell	COAD	-0.205673836
UCKL1	Cd4+ t helper cell	COAD	-0.294391396
UCKL1	Cd4+cd25+ regulatory t c	COAD	-0.296006737
UCKL1	Cd8+ cytotoxic t cell	COAD	-0.166754945
UCKL1	Cd8+ regulatory t cell	COAD	-0.293163907
UCKL1	Cell_cycle	COAD	-0.209425942
UCKL1	Chandran_metastasis_top5	COAD	-0.134970501
UCKL1	Citrate cycle (tca cycle)	COAD	-0.063020127
UCKL1	Cysteine and methionine r	COAD	-0.012948709
UCKL1	Cytokine induced killer ce	COAD	-0.194641099
UCKL1	D-arginine and d-ornithin	COAD	-0.060563869
UCKL1	D-glutamine and d-glutan	COAD	-0.027595263
UCKL1	Dendritic cell	COAD	-0.227688609
UCKL1	Dna_repair	COAD	0.073750193
UCKL1	Dna_replication	COAD	-0.031208501
UCKL1	Double-negative memory	COAD	-0.036712136
UCKL1	Drug metabolism - cytoch	COAD	-0.16219678
UCKL1	Drug metabolism - other c	COAD	-0.012955765
UCKL1	E2f_targets	COAD	-0.189911271
UCKL1	Ecm_receptor_interaction	COAD	-0.122359422
UCKL1	Effector cd4+ memory t (	COAD	-0.324204639
UCKL1	Effector cd8+ memory t (	COAD	-0.273871259
UCKL1	Effector memory t cell	COAD	-0.322130542
UCKL1	Effector regulatory t (treg	COAD	-0.319411732
UCKL1	Elvidge_hif1a_targets_up	COAD	-0.121381198
UCKL1	Endothelial cell	COAD	-0.386355301
UCKL1	Eosinophil	COAD	-0.239651766
UCKL1	Ether lipid metabolism	COAD	-0.216911347
UCKL1	Exhausted cd4+ t cell	COAD	-0.462387979
UCKL1	Exhausted cd8+ t cell	COAD	-0.411496916
UCKL1	Exhausted t cell	COAD	-0.280875262
UCKL1	Fat cell (adipocyte)	COAD	0.055470804
UCKL1	Fatty acid biosynthesis	COAD	-0.024377911
UCKL1	Fatty acid degradation	COAD	-0.169843488
UCKL1	Fatty acid elongation	COAD	-0.247344002
UCKL1	Fibroblast	COAD	-0.248908103
UCKL1	Folate biosynthesis	COAD	0.017440281
UCKL1	Follicular b cell	COAD	-0.214438557
UCKL1	Follicular dendritic cell	COAD	-0.1970542
UCKL1	Follicular helper (tfh) t ce	COAD	-0.225161535
UCKL1	Follicular t cell	COAD	-0.047588545

UCKL1	Foxp3+il-17+ t cell	COAD	0.003253849
UCKL1	Fructose and mannose me	COAD	0.017869051
UCKL1	G2m_checkpoint	COAD	-0.257752385
UCKL1	Galactose metabolism	COAD	-0.004423472
UCKL1	Galie_tumor_stemness_ge	COAD	0.053697842
UCKL1	Glutathione metabolism	COAD	-0.070272537
UCKL1	Glycerolipid metabolism	COAD	0.09565338
UCKL1	Glycerophospholipid metæ	COAD	0.233744213
UCKL1	Glycine, serine and threor	COAD	0.093591906
UCKL1	Glycolysis / gluconeogene	COAD	-0.013048752
UCKL1	Glycosaminoglycan biosy1	COAD	0.033822895
UCKL1	Glycosaminoglycan biosy1	COAD	-0.013331946
UCKL1	Glycosaminoglycan biosy1	COAD	-0.251357937
UCKL1	Glycosaminoglycan degra	COAD	-0.041286106
UCKL1	Glycosphingolipid biosyn1	COAD	-0.126509994
UCKL1	Glycosphingolipid biosyn1	COAD	-0.090303399
UCKL1	Glycosphingolipid biosyn1	COAD	-0.249082
UCKL1	Glycosylphosphatidylinos:	COAD	-0.032832255
UCKL1	Glyoxylate and dicarboxy	COAD	-0.004867693
UCKL1	Granulocyte	COAD	-0.286185655
UCKL1	Hedgehog_signaling	COAD	0.048990634
UCKL1	Histidine metabolism	COAD	-0.190800517
UCKL1	Hypoxia	COAD	-0.185285974
UCKL1	Il-17ralpha t cell	COAD	-0.251644477
UCKL1	Il2_stat5_signaling	COAD	-0.283971809
UCKL1	Il6_jak_stat3_signaling	COAD	-0.30929886
UCKL1	Immune_checkpoints_tunr	COAD	-0.30973891
UCKL1	Immune_inhibition_cytok	COAD	-0.170191165
UCKL1	Inositol phosphate metabo	COAD	-0.289052068
UCKL1	Interleukin_6_signaling	COAD	-0.327092169
UCKL1	Jaeger_metastasis_up	COAD	-0.289671181
UCKL1	Jain_nfkb_signaling	COAD	0.117051034
UCKL1	Kras_signaling_up	COAD	-0.334426251
UCKL1	Linoleic acid metabolism	COAD	0.042922331
UCKL1	Lipoic acid metabolism	COAD	-0.121309994
UCKL1	Lysine degradation	COAD	0.055982396
UCKL1	Lysosome	COAD	-0.114995365
UCKL1	M1 macrophage	COAD	-0.332723657
UCKL1	M2 macrophage	COAD	-0.373339736
UCKL1	Mannose type o-glycan bi	COAD	0.103127895
UCKL1	Mapk_signaling_pathway	COAD	-0.197309691
UCKL1	Mapk3_erk1_activation	COAD	-0.426273289
UCKL1	Marginal zone b cell	COAD	-0.326773836

UCKL1	Memory b cell	COAD	-0.340430171
UCKL1	Mesenchymal cell	COAD	-0.110328289
UCKL1	Mesenchymal stem cell	COAD	-0.283897474
UCKL1	Metabolism of xenobiotic	COAD	-0.115617954
UCKL1	Migrating cancer stem cel	COAD	-0.246954646
UCKL1	Mitotic_spindle	COAD	-0.19351169
UCKL1	Monocyte	COAD	-0.363055261
UCKL1	Mtor_signaling_pathway	COAD	0.013527532
UCKL1	Mtorc1_signaling	COAD	-0.316286774
UCKL1	Mucin type o-glycan biosy	COAD	-0.445674749
UCKL1	Myc_targets_v1	COAD	-0.10858481
UCKL1	Myeloid cell	COAD	-0.281702555
UCKL1	N-glycan biosynthesis	COAD	-0.120583136
UCKL1	Naive b cell	COAD	-0.087773336
UCKL1	Naive cd4+ t cell	COAD	-0.190342904
UCKL1	Naive cd8+ t cell	COAD	-0.068202372
UCKL1	Natural killer cell	COAD	-0.30424148
UCKL1	Natural killer t (nkt) cell	COAD	-0.421312461
UCKL1	Natural regulatory t (treg)	COAD	-0.333650858
UCKL1	Neomycin, kanamycin and	COAD	-0.030211473
UCKL1	Neutrophil	COAD	-0.319852191
UCKL1	Nicotinate and nicotinami	COAD	-0.082789075
UCKL1	Nitrogen metabolism	COAD	-0.320701622
UCKL1	Nod_like_receptor_signal	COAD	-0.275626556
UCKL1	Notch_signaling	COAD	-0.063322374
UCKL1	One carbon pool by folate	COAD	-0.206398618
UCKL1	Other glycan degradation	COAD	0.196374647
UCKL1	Other types of o-glycan b	COAD	0.529872034
UCKL1	Oxidative phosphorylatio	COAD	0.011274434
UCKL1	P53_pathway	COAD	-0.143294564
UCKL1	P53_signaling_pathway	COAD	-0.438195234
UCKL1	Pantothenate and coa bios	COAD	-0.435520993
UCKL1	Pentose and glucuronate i	COAD	-0.113289134
UCKL1	Pentose phosphate pathwa	COAD	0.110962193
UCKL1	Pericyte	COAD	-0.163145834
UCKL1	Phenylalanine metabolism	COAD	-0.062699628
UCKL1	Phenylalanine, tyrosine ar	COAD	-0.020220179
UCKL1	Phosphonate and phosphir	COAD	-0.094526447
UCKL1	Pi3k_akt_activation	COAD	-0.261933218
UCKL1	Pi3k_akt_mtor_signaling	COAD	-0.299572263
UCKL1	Porphyrin and chlorophyl	COAD	-0.134186726
UCKL1	Primary bile acid biosynt	COAD	0.17171663
UCKL1	Propanoate metabolism	COAD	-0.278490913

UCKL1	Purine metabolism	COAD	-0.024513511
UCKL1	Pyrimidine metabolism	COAD	0.094230747
UCKL1	Pyruvate metabolism	COAD	-0.006983544
UCKL1	Regulation_of_autophagy	COAD	-0.041615374
UCKL1	Retinol metabolism	COAD	-0.14260829
UCKL1	Riboflavin metabolism	COAD	0.073654928
UCKL1	Schmahl_pdgf_signaling	COAD	-0.441450521
UCKL1	Selenocompound metabol	COAD	-0.088005388
UCKL1	Signaling_by_hippo	COAD	-0.129848255
UCKL1	Sphingolipid metabolism	COAD	-0.334326872
UCKL1	Starch and sucrose metabo	COAD	-0.195606932
UCKL1	Steroid biosynthesis	COAD	0.170711714
UCKL1	Steroid hormone biosynth	COAD	-0.059867245
UCKL1	Sulfur metabolism	COAD	-0.226263476
UCKL1	Synthesis and degradation	COAD	-0.105225914
UCKL1	T helper cell	COAD	-0.28960537
UCKL1	T helper1 (th1) cell	COAD	-0.299375441
UCKL1	T helper17 (th17) cell	COAD	-0.241155036
UCKL1	T helper2 (th2) cell	COAD	-0.23957467
UCKL1	T helper9 (th9) cell	COAD	-0.178202936
UCKL1	Taurine and hypotaurine r	COAD	0.371374144
UCKL1	Terpenoid backbone biosy	COAD	-0.276408161
UCKL1	Tgf_beta_signaling_pathw	COAD	-0.237119651
UCKL1	Thiamine metabolism	COAD	-0.046052571
UCKL1	Tnfa_signaling_via_nfb	COAD	-0.277094602
UCKL1	Tryptophan metabolism	COAD	-0.215239389
UCKL1	Tumor endothelial cell	COAD	-0.05438912
UCKL1	Tyrosine metabolism	COAD	0.036822211
UCKL1	Ubiquinone and other ter	COAD	-0.277136489
UCKL1	Valine, leucine and isoleu	COAD	-0.216909285
UCKL1	Valine, leucine and isoleu	COAD	-0.287271976
UCKL1	Vascular endothelial cell	COAD	-0.005128287
UCKL1	Vascular smooth muscle c	COAD	-0.009559067
UCKL1	Vegf_signaling_pathway	COAD	-0.177526102
UCKL1	Vitamin b6 metabolism	COAD	0.119020909
UCKL1	Willert_wnt_signaling	COAD	-0.089733298
UCKL1	Wnt_beta_catenin_signali	COAD	0.276827871
UPP1	Abnormal plasma cell	COAD	-0.059262789
UPP1	Activated b cell	COAD	0.038081887
UPP1	Activated cd4+ t cell	COAD	0.21935721
UPP1	Activated t cell	COAD	0.213677779
UPP1	Alanine, aspartate and glu	COAD	-0.082849285
UPP1	Alcala_apoptosis	COAD	0.163849929

UPP1	Alpha-linolenic acid meta	COAD	0.032992926
UPP1	Amino sugar and nucleoti	COAD	0.263200002
UPP1	Ampk_pathway	COAD	0.041885
UPP1	Angiogenesis	COAD	0.196817938
UPP1	Arachidonic acid metabol	COAD	0.251788204
UPP1	Arginine and proline metε	COAD	0.075559014
UPP1	Arginine biosynthesis	COAD	0.123642201
UPP1	Ascorbate and aldarate mε	COAD	-0.093426426
UPP1	Atypical memory b cell	COAD	-0.012630315
UPP1	Axl+siglec6+ dendritic ce	COAD	0.167011545
UPP1	B cell	COAD	0.114366134
UPP1	B1 cell	COAD	-0.180692115
UPP1	Basal cell	COAD	0.413181311
UPP1	Beta-alanine metabolism	COAD	0.071711571
UPP1	Biosynthesis of unsaturate	COAD	-0.033368015
UPP1	Biotin metabolism	COAD	-0.069004226
UPP1	Butanoate metabolism	COAD	-0.161222029
UPP1	Caffeine metabolism	COAD	-0.002133286
UPP1	Cancer stem cell	COAD	0.105442275
UPP1	Cancer stem-like cell	COAD	0.0149559
UPP1	Cd4+ cytotoxic t cell	COAD	0.279767267
UPP1	Cd4+ memory t cell	COAD	0.123895194
UPP1	Cd4+ regulatory t cell	COAD	0.216417828
UPP1	Cd4+ t helper cell	COAD	0.205511382
UPP1	Cd4+cd25+ regulatory t c	COAD	0.210433275
UPP1	Cd8+ cytotoxic t cell	COAD	0.20638356
UPP1	Cd8+ regulatory t cell	COAD	0.191767903
UPP1	Cell_cycle	COAD	-0.13671051
UPP1	Chandran_metastasis_top5	COAD	-0.348381463
UPP1	Citrate cycle (tca cycle)	COAD	-0.010578699
UPP1	Cysteine and methionine r	COAD	-0.077881826
UPP1	Cytokine induced killer α	COAD	0.127157338
UPP1	D-arginine and d-ornithin	COAD	0.193852648
UPP1	D-glutamine and d-glutan	COAD	-0.01416857
UPP1	Dendritic cell	COAD	0.244178146
UPP1	Dna_repair	COAD	0.059713797
UPP1	Dna_replication	COAD	-0.052713624
UPP1	Double-negative memory	COAD	0.108262515
UPP1	Drug metabolism - cytoch	COAD	0.100969723
UPP1	Drug metabolism - other ε	COAD	0.18120358
UPP1	E2f_targets	COAD	-0.164765931
UPP1	Ecm_receptor_interaction	COAD	0.094876009
UPP1	Effector cd4+ memory t (	COAD	0.146869143

UPP1	Effector cd8+ memory t (	COAD	0.291421676
UPP1	Effector memory t cell	COAD	0.184891191
UPP1	Effector regulatory t (treg	COAD	0.185296483
UPP1	Elvidge_hif1a_targets_up	COAD	-0.133010405
UPP1	Endothelial cell	COAD	0.09959327
UPP1	Eosinophil	COAD	0.304577977
UPP1	Ether lipid metabolism	COAD	0.095793457
UPP1	Exhausted cd4+ t cell	COAD	0.267629531
UPP1	Exhausted cd8+ t cell	COAD	0.318000897
UPP1	Exhausted t cell	COAD	0.209786614
UPP1	Fat cell (adipocyte)	COAD	0.062253341
UPP1	Fatty acid biosynthesis	COAD	-0.187405794
UPP1	Fatty acid degradation	COAD	-0.085944653
UPP1	Fatty acid elongation	COAD	0.116130468
UPP1	Fibroblast	COAD	0.139752797
UPP1	Folate biosynthesis	COAD	0.105065389
UPP1	Follicular b cell	COAD	0.179595552
UPP1	Follicular dendritic cell	COAD	0.070401286
UPP1	Follicular helper (tfh) t ce	COAD	0.220685698
UPP1	Follicular t cell	COAD	0.171747526
UPP1	Foxp3+il-17+ t cell	COAD	0.064462638
UPP1	Fructose and mannose me	COAD	0.185887048
UPP1	G2m_checkpoint	COAD	-0.213844681
UPP1	Galactose metabolism	COAD	0.225669555
UPP1	Galie_tumor_stemness_ge	COAD	-0.04884169
UPP1	Glutathione metabolism	COAD	0.263614056
UPP1	Glycerolipid metabolism	COAD	0.03340979
UPP1	Glycerophospholipid met&	COAD	0.136641733
UPP1	Glycine, serine and threor	COAD	0.150156517
UPP1	Glycolysis / gluconeogene	COAD	0.105432518
UPP1	Glycosaminoglycan biosy	COAD	0.27974307
UPP1	Glycosaminoglycan biosy	COAD	0.057837072
UPP1	Glycosaminoglycan biosy	COAD	0.38068651
UPP1	Glycosaminoglycan degra	COAD	0.2349204
UPP1	Glycosphingolipid biosyn	COAD	0.29447676
UPP1	Glycosphingolipid biosyn	COAD	0.3295684
UPP1	Glycosphingolipid biosyn	COAD	0.26818064
UPP1	Glycosylphosphatidylinos:	COAD	-0.194409557
UPP1	Glyoxylate and dicarboxy	COAD	-0.064158945
UPP1	Granulocyte	COAD	0.253861458
UPP1	Hedgehog_signaling	COAD	-0.094569645
UPP1	Histidine metabolism	COAD	0.080176863
UPP1	Hypoxia	COAD	0.329277531

UPP1	Il-17alpha t cell	COAD	0.189711263
UPP1	Il2_stat5_signaling	COAD	0.287928185
UPP1	Il6_jak_stat3_signaling	COAD	0.359784864
UPP1	Immune_checkpoints_tur	COAD	0.295963404
UPP1	Immune_inhibition_cytok	COAD	0.399248157
UPP1	Inositol phosphate metabo	COAD	-0.113807589
UPP1	Interleukin_6_signaling	COAD	0.154280437
UPP1	Jaeger_metastasis_up	COAD	0.045877968
UPP1	Jain_nfkb_signaling	COAD	-0.282143504
UPP1	Kras_signaling_up	COAD	0.215605852
UPP1	Linoleic acid metabolism	COAD	0.002775237
UPP1	Lipoic acid metabolism	COAD	-0.116944339
UPP1	Lysine degradation	COAD	-0.342622684
UPP1	Lysosome	COAD	0.343362701
UPP1	M1 macrophage	COAD	0.268411388
UPP1	M2 macrophage	COAD	0.283892694
UPP1	Mannose type o-glycan bi	COAD	-0.049029412
UPP1	Mapk_signaling_pathway	COAD	0.195916373
UPP1	Mapk3_erk1_activation	COAD	0.187590037
UPP1	Marginal zone b cell	COAD	0.091940782
UPP1	Memory b cell	COAD	0.074782301
UPP1	Mesenchymal cell	COAD	0.242991686
UPP1	Mesenchymal stem cell	COAD	0.167611803
UPP1	Metabolism of xenobiotic	COAD	0.165418002
UPP1	Migrating cancer stem cel	COAD	0.067753268
UPP1	Mitotic_spindle	COAD	-0.17793209
UPP1	Monocyte	COAD	0.399097291
UPP1	Mtor_signaling_pathway	COAD	-0.022454655
UPP1	Mtorc1_signaling	COAD	0.101924887
UPP1	Mucin type o-glycan biosy	COAD	-0.008888374
UPP1	Myc_targets_v1	COAD	-0.16394517
UPP1	Myeloid cell	COAD	0.221986644
UPP1	N-glycan biosynthesis	COAD	-0.026035216
UPP1	Naive b cell	COAD	0.066809782
UPP1	Naive cd4+ t cell	COAD	-0.025599373
UPP1	Naive cd8+ t cell	COAD	-0.226864731
UPP1	Natural killer cell	COAD	0.270117471
UPP1	Natural killer t (nkt) cell	COAD	0.029587964
UPP1	Natural regulatory t (treg)	COAD	0.186663214
UPP1	Neomycin, kanamycin and	COAD	0.226294302
UPP1	Neutrophil	COAD	0.365621608
UPP1	Nicotinate and nicotinami	COAD	0.071779371
UPP1	Nitrogen metabolism	COAD	0.182983739

UPP1	Nod_like_receptor_signal: COAD	0.280795472
UPP1	Notch_signaling COAD	0.023220111
UPP1	One carbon pool by folate COAD	-0.104165487
UPP1	Other glycan degradation COAD	-0.008588861
UPP1	Other types of o-glycan b: COAD	-0.052252655
UPP1	Oxidative phosphorylation COAD	0.199481941
UPP1	P53_pathway COAD	0.291847498
UPP1	P53_signaling_pathway COAD	0.019059177
UPP1	Pantothenate and coa bios COAD	0.224148909
UPP1	Pentose and glucuronate in COAD	-0.071839898
UPP1	Pentose phosphate pathway COAD	0.053867493
UPP1	Pericyte COAD	0.117437259
UPP1	Phenylalanine metabolism COAD	0.21098694
UPP1	Phenylalanine, tyrosine ar COAD	0.076835623
UPP1	Phosphonate and phosphir COAD	-0.050072903
UPP1	Pi3k_akt_activation COAD	0.014679674
UPP1	Pi3k_akt_mtor_signaling COAD	0.178628159
UPP1	Porphyrin and chlorophyl COAD	0.171545449
UPP1	Primary bile acid biosynt# COAD	-0.09358614
UPP1	Propanoate metabolism COAD	-0.277726494
UPP1	Purine metabolism COAD	0.012026203
UPP1	Pyrimidine metabolism COAD	0.017831552
UPP1	Pyruvate metabolism COAD	-0.116318467
UPP1	Regulation_of_autophagy COAD	0.186038399
UPP1	Retinol metabolism COAD	0.071619652
UPP1	Riboflavin metabolism COAD	0.159222908
UPP1	Schmahl_pdgf_signaling COAD	0.124429868
UPP1	Selenocompound metabol COAD	-0.144390097
UPP1	Signaling_by_hippo COAD	-0.164058317
UPP1	Sphingolipid metabolism COAD	0.234527321
UPP1	Starch and sucrose metabo COAD	-0.017622966
UPP1	Steroid biosynthesis COAD	-0.083302342
UPP1	Steroid hormone biosynth COAD	0.101923345
UPP1	Sulfur metabolism COAD	0.005003881
UPP1	Synthesis and degradation COAD	-0.186368727
UPP1	T helper cell COAD	0.215959853
UPP1	T helper1 (th1) cell COAD	0.283205284
UPP1	T helper17 (th17) cell COAD	0.293781177
UPP1	T helper2 (th2) cell COAD	0.254336761
UPP1	T helper9 (th9) cell COAD	0.274498435
UPP1	Taurine and hypotaurine r COAD	-0.012091241
UPP1	Terpenoid backbone biosy COAD	-0.053896025
UPP1	Tgf_beta_signaling_pathw COAD	-0.146739333

UPP1	Thiamine metabolism	COAD	0.19706298
UPP1	Tnfa_signaling_via_nfk	COAD	0.394957263
UPP1	Tryptophan metabolism	COAD	0.114896914
UPP1	Tumor endothelial cell	COAD	0.173723354
UPP1	Tyrosine metabolism	COAD	0.129195803
UPP1	Ubiquinone and other ter	COAD	0.119778485
UPP1	Valine, leucine and isoleu	COAD	0.348785488
UPP1	Valine, leucine and isoleu	COAD	-0.115442443
UPP1	Vascular endothelial cell	COAD	0.134375902
UPP1	Vascular smooth muscle c	COAD	0.000827904
UPP1	Vegf_signaling_pathway	COAD	0.282236973
UPP1	Vitamin b6 metabolism	COAD	-0.018324921
UPP1	Willert_wnt_signaling	COAD	-0.065543616
UPP1	Wnt_beta_catenin_signali	COAD	-0.274234295
UPP2	Abnormal plasma cell	COAD	0.138380783
UPP2	Activated b cell	COAD	0.108113069
UPP2	Activated cd4+ t cell	COAD	0.049945099
UPP2	Activated t cell	COAD	0.129798557
UPP2	Alanine, aspartate and glu	COAD	0.028219415
UPP2	Alcala_apoptosis	COAD	0.13061939
UPP2	Alpha-linolenic acid meta	COAD	-0.085174712
UPP2	Amino sugar and nucleoti	COAD	0.004684444
UPP2	Ampk_pathway	COAD	0.136105799
UPP2	Angiogenesis	COAD	0.059811133
UPP2	Arachidonic acid metabol	COAD	-0.043262543
UPP2	Arginine and proline met	COAD	0.104506019
UPP2	Arginine biosynthesis	COAD	0.042459287
UPP2	Ascorbate and aldarate m	COAD	0.021381097
UPP2	Atypical memory b cell	COAD	0.133518118
UPP2	Axl+siglec6+ dendritic ce	COAD	0.100355063
UPP2	B cell	COAD	0.164659486
UPP2	B1 cell	COAD	0.087700061
UPP2	Basal cell	COAD	0.028836246
UPP2	Beta-alanine metabolism	COAD	0.051002934
UPP2	Biosynthesis of unsaturate	COAD	-0.025582898
UPP2	Biotin metabolism	COAD	0.045684373
UPP2	Butanoate metabolism	COAD	-0.027518396
UPP2	Caffeine metabolism	COAD	0.02113457
UPP2	Cancer stem cell	COAD	0.079251899
UPP2	Cancer stem-like cell	COAD	-0.061972639
UPP2	Cd4+ cytotoxic t cell	COAD	0.115709376
UPP2	Cd4+ memory t cell	COAD	0.116364144
UPP2	Cd4+ regulatory t cell	COAD	0.058140395

UPP2	Cd4+ t helper cell	COAD	0.086050888
UPP2	Cd4+cd25+ regulatory t c	COAD	0.089714408
UPP2	Cd8+ cytotoxic t cell	COAD	0.147509611
UPP2	Cd8+ regulatory t cell	COAD	0.159627862
UPP2	Cell_cycle	COAD	0.160722879
UPP2	Chandran_metastasis_top5	COAD	0.158134062
UPP2	Citrate cycle (tca cycle)	COAD	0.003437047
UPP2	Cysteine and methionine r	COAD	0.107717561
UPP2	Cytokine induced killer c	COAD	0.171055953
UPP2	D-arginine and d-ornithin	COAD	0.12929014
UPP2	D-glutamine and d-glutan	COAD	-0.003922978
UPP2	Dendritic cell	COAD	0.082118828
UPP2	Dna_repair	COAD	0.08526917
UPP2	Dna_replication	COAD	0.076254467
UPP2	Double-negative memory	COAD	0.088765344
UPP2	Drug metabolism - cytoch	COAD	0.056669633
UPP2	Drug metabolism - other c	COAD	0.024299503
UPP2	E2f_targets	COAD	0.069946053
UPP2	Ecm_receptor_interaction	COAD	0.097646376
UPP2	Effector cd4+ memory t (	COAD	0.070130081
UPP2	Effector cd8+ memory t (	COAD	0.082364579
UPP2	Effector memory t cell	COAD	0.092823632
UPP2	Effector regulatory t (treg	COAD	0.011958398
UPP2	Elvidge_hif1a_targets_up	COAD	0.04701651
UPP2	Endothelial cell	COAD	0.10265473
UPP2	Eosinophil	COAD	0.033086987
UPP2	Ether lipid metabolism	COAD	-0.008542538
UPP2	Exhausted cd4+ t cell	COAD	0.12399843
UPP2	Exhausted cd8+ t cell	COAD	0.104615508
UPP2	Exhausted t cell	COAD	0.154800003
UPP2	Fat cell (adipocyte)	COAD	0.073232522
UPP2	Fatty acid biosynthesis	COAD	0.085296356
UPP2	Fatty acid degradation	COAD	0.021903338
UPP2	Fatty acid elongation	COAD	0.094590792
UPP2	Fibroblast	COAD	0.051468482
UPP2	Folate biosynthesis	COAD	0.029252376
UPP2	Follicular b cell	COAD	0.124221504
UPP2	Follicular dendritic cell	COAD	0.151485748
UPP2	Follicular helper (tfh) t ce	COAD	0.09721763
UPP2	Follicular t cell	COAD	0.150404168
UPP2	Foxp3+il-17+ t cell	COAD	0.169342523
UPP2	Fructose and mannose me	COAD	-0.0225659
UPP2	G2m_checkpoint	COAD	0.121579912

UPP2	Galactose metabolism	COAD	-0.004548871
UPP2	Galie_tumor_stemness_ge	COAD	0.111548756
UPP2	Glutathione metabolism	COAD	-0.06637703
UPP2	Glycerolipid metabolism	COAD	0.039122248
UPP2	Glycerophospholipid metæ	COAD	-0.018450102
UPP2	Glycine, serine and threor	COAD	0.094679362
UPP2	Glycolysis / gluconeogene	COAD	0.025922619
UPP2	Glycosaminoglycan biosy1	COAD	-0.015651046
UPP2	Glycosaminoglycan biosy1	COAD	0.017616058
UPP2	Glycosaminoglycan biosy1	COAD	0.014693793
UPP2	Glycosaminoglycan degra	COAD	-0.047950765
UPP2	Glycosphingolipid biosyn1	COAD	-0.024812073
UPP2	Glycosphingolipid biosyn1	COAD	-0.056387979
UPP2	Glycosphingolipid biosyn1	COAD	-0.03884074
UPP2	Glycosylphosphatidylinos:	COAD	-0.02926858
UPP2	Glyoxylate and dicarboxy	COAD	0.003456355
UPP2	Granulocyte	COAD	0.02938993
UPP2	Hedgehog_signaling	COAD	0.065174697
UPP2	Histidine metabolism	COAD	0.213562267
UPP2	Hypoxia	COAD	0.033200776
UPP2	Il-17ralpha t cell	COAD	0.146240724
UPP2	Il2_stat5_signaling	COAD	0.075662764
UPP2	Il6_jak_stat3_signaling	COAD	-0.002173857
UPP2	Immune_checkpoints_tunr	COAD	0.01876346
UPP2	Immune_inhibition_cytok	COAD	-0.114626335
UPP2	Inositol phosphate metabo	COAD	0.120978235
UPP2	Interleukin_6_signaling	COAD	0.02544522
UPP2	Jaeger_metastasis_up	COAD	0.113734501
UPP2	Jain_nfkb_signaling	COAD	0.151793122
UPP2	Kras_signaling_up	COAD	0.123913727
UPP2	Linoleic acid metabolism	COAD	-0.008027026
UPP2	Lipoic acid metabolism	COAD	0.015195859
UPP2	Lysine degradation	COAD	0.174276548
UPP2	Lysosome	COAD	0.023164429
UPP2	M1 macrophage	COAD	0.073600603
UPP2	M2 macrophage	COAD	0.023638158
UPP2	Mannose type o-glycan bi	COAD	-0.005240172
UPP2	Mapk_signaling_pathway	COAD	0.075720657
UPP2	Mapk3_erk1_activation	COAD	0.048467324
UPP2	Marginal zone b cell	COAD	0.168791442
UPP2	Memory b cell	COAD	0.154504665
UPP2	Mesenchymal cell	COAD	0.012104094
UPP2	Mesenchymal stem cell	COAD	0.019335519

UPP2	Metabolism of xenobiotic	COAD	0.001225451
UPP2	Migrating cancer stem cel	COAD	0.096875252
UPP2	Mitotic_spindle	COAD	0.17249382
UPP2	Monocyte	COAD	0.053165802
UPP2	Mtor_signaling_pathway	COAD	0.075468894
UPP2	Mtorc1_signaling	COAD	0.052285672
UPP2	Mucin type o-glycan bios	COAD	0.041330469
UPP2	Myc_targets_v1	COAD	0.079048694
UPP2	Myeloid cell	COAD	0.090142227
UPP2	N-glycan biosynthesis	COAD	-0.032620858
UPP2	Naive b cell	COAD	0.098467103
UPP2	Naive cd4+ t cell	COAD	0.134950983
UPP2	Naive cd8+ t cell	COAD	0.23699386
UPP2	Natural killer cell	COAD	0.125258308
UPP2	Natural killer t (nkt) cell	COAD	0.195166192
UPP2	Natural regulatory t (treg)	COAD	0.113400494
UPP2	Neomycin, kanamycin an	COAD	0.094944521
UPP2	Neutrophil	COAD	0.019508211
UPP2	Nicotinate and nicotinami	COAD	0.117734509
UPP2	Nitrogen metabolism	COAD	-0.025295442
UPP2	Nod_like_receptor_signal	COAD	0.019568176
UPP2	Notch_signaling	COAD	0.157747238
UPP2	One carbon pool by folate	COAD	0.025279637
UPP2	Other glycan degradation	COAD	0.00365497
UPP2	Other types of o-glycan b	COAD	0.138660559
UPP2	Oxidative phosphorylatio	COAD	0.000161977
UPP2	P53_pathway	COAD	0.140738514
UPP2	P53_signaling_pathway	COAD	0.080351335
UPP2	Pantothenate and coa bios	COAD	-0.055131394
UPP2	Pentose and glucuronate i	COAD	0.003765365
UPP2	Pentose phosphate pathwa	COAD	0.025593062
UPP2	Pericyte	COAD	0.035081921
UPP2	Phenylalanine metabolism	COAD	0.09289806
UPP2	Phenylalanine, tyrosine ar	COAD	0.003323938
UPP2	Phosphonate and phosphir	COAD	-0.028115795
UPP2	Pi3k_akt_activation	COAD	0.10050705
UPP2	Pi3k_akt_mtor_signaling	COAD	0.09370982
UPP2	Porphyrin and chlorophyl	COAD	-0.012151924
UPP2	Primary bile acid biosynt	COAD	0.088696306
UPP2	Propanoate metabolism	COAD	0.046197885
UPP2	Purine metabolism	COAD	0.055171791
UPP2	Pyrimidine metabolism	COAD	0.100800072
UPP2	Pyruvate metabolism	COAD	0.023348639

UPP2	Regulation_of_autophagy	COAD	-0.250248771
UPP2	Retinol metabolism	COAD	-0.015594172
UPP2	Riboflavin metabolism	COAD	0.115736621
UPP2	Schmahl_pdgf_signaling	COAD	0.036289033
UPP2	Selenocompound metabolism	COAD	0.078704826
UPP2	Signaling_by_hippo	COAD	0.063920063
UPP2	Sphingolipid metabolism	COAD	-0.082874253
UPP2	Starch and sucrose metabolism	COAD	0.067695937
UPP2	Steroid biosynthesis	COAD	-0.042666663
UPP2	Steroid hormone biosynthesis	COAD	0.066484144
UPP2	Sulfur metabolism	COAD	0.033948191
UPP2	Synthesis and degradation	COAD	0.063608106
UPP2	T helper cell	COAD	0.124153406
UPP2	T helper1 (th1) cell	COAD	0.152009971
UPP2	T helper17 (th17) cell	COAD	-0.004250819
UPP2	T helper2 (th2) cell	COAD	0.057664213
UPP2	T helper9 (th9) cell	COAD	-0.057050113
UPP2	Taurine and hypotaurine metabolism	COAD	-0.039813784
UPP2	Terpenoid backbone biosynthesis	COAD	-0.012809852
UPP2	Tgf_beta_signaling_pathway	COAD	0.139496517
UPP2	Thiamine metabolism	COAD	0.011483809
UPP2	Tnfa_signaling_via_nfkB	COAD	0.040312703
UPP2	Tryptophan metabolism	COAD	0.028573538
UPP2	Tumor endothelial cell	COAD	0.077746236
UPP2	Tyrosine metabolism	COAD	0.061073744
UPP2	Ubiquinone and other terpenoids	COAD	-0.013061366
UPP2	Valine, leucine and isoleucine	COAD	-0.034388311
UPP2	Valine, leucine and isoleucine	COAD	-0.004016311
UPP2	Vascular endothelial cell	COAD	0.006771366
UPP2	Vascular smooth muscle cell	COAD	-0.005291015
UPP2	Vegf_signaling_pathway	COAD	0.008998672
UPP2	Vitamin b6 metabolism	COAD	0.024929194
UPP2	Willert_wnt_signaling	COAD	0.073373477
UPP2	Wnt_beta_catenin_signaling	COAD	0.16399013
CDA	Abnormal plasma cell	DLBC	0.078775448
CDA	Activated b cell	DLBC	0.245617552
CDA	Activated cd4+ t cell	DLBC	0.189499156
CDA	Activated t cell	DLBC	0.351267257
CDA	Alanine, aspartate and glutamate	DLBC	-0.113981356
CDA	Alcalal apoptosis	DLBC	0.085192039
CDA	Alpha-linolenic acid metabolism	DLBC	0.394634668
CDA	Amino sugar and nucleotide	DLBC	0.372606134
CDA	Ampk_pathway	DLBC	-0.579202889

CDA	Angiogenesis	DLBC	0.308358643
CDA	Arachidonic acid metabolism	DLBC	0.371512965
CDA	Arginine and proline metabolism	DLBC	0.218813463
CDA	Arginine biosynthesis	DLBC	0.182196169
CDA	Ascorbate and aldarate metabolism	DLBC	0.027977755
CDA	Atypical memory b cell	DLBC	-0.080802848
CDA	Axl+siglec6+ dendritic cell	DLBC	0.515239127
CDA	B cell	DLBC	-0.428725906
CDA	B1 cell	DLBC	0.281863468
CDA	Basal cell	DLBC	0.42732566
CDA	Beta-alanine metabolism	DLBC	0.136858071
CDA	Biosynthesis of unsaturated fatty acids	DLBC	0.348912919
CDA	Biotin metabolism	DLBC	-0.113573813
CDA	Butanoate metabolism	DLBC	-0.091933922
CDA	Caffeine metabolism	DLBC	0.182678885
CDA	Cancer stem cell	DLBC	0.455061901
CDA	Cancer stem-like cell	DLBC	0.316759727
CDA	Cd4+ cytotoxic t cell	DLBC	0.451806862
CDA	Cd4+ memory t cell	DLBC	0.091453599
CDA	Cd4+ regulatory t cell	DLBC	0.1071275
CDA	Cd4+ t helper cell	DLBC	0.291341103
CDA	Cd4+cd25+ regulatory t cell	DLBC	0.215072669
CDA	Cd8+ cytotoxic t cell	DLBC	0.354120286
CDA	Cd8+ regulatory t cell	DLBC	0.236129142
CDA	Cell cycle	DLBC	-0.291523318
CDA	Chandran_metastasis_top5	DLBC	-0.316482281
CDA	Citrate cycle (tca cycle)	DLBC	-0.033299059
CDA	Cysteine and methionine metabolism	DLBC	-0.098525663
CDA	Cytokine induced killer cell	DLBC	0.218530232
CDA	D-arginine and d-ornithine	DLBC	0.178585764
CDA	D-glutamine and d-glutamate	DLBC	-0.122485996
CDA	Dendritic cell	DLBC	0.523345517
CDA	Dna_repair	DLBC	-0.100449965
CDA	Dna_replication	DLBC	-0.331314375
CDA	Double-negative memory t cell	DLBC	-0.109290878
CDA	Drug metabolism - cytochrome p450	DLBC	0.209553116
CDA	Drug metabolism - other	DLBC	0.224479807
CDA	E2f_targets	DLBC	-0.342843604
CDA	Ecm_receptor_interaction	DLBC	0.161693022
CDA	Effector cd4+ memory t cell	DLBC	0.007013921
CDA	Effector cd8+ memory t cell	DLBC	0.379794626
CDA	Effector memory t cell	DLBC	0.279402741
CDA	Effector regulatory t cell (treg)	DLBC	-0.053430681

CDA	Elvidge_hif1a_targets_up	DLBC	-0.021039842
CDA	Endothelial cell	DLBC	0.160025347
CDA	Eosinophil	DLBC	0.619002896
CDA	Ether lipid metabolism	DLBC	0.3926222
CDA	Exhausted cd4+ t cell	DLBC	0.447691377
CDA	Exhausted cd8+ t cell	DLBC	0.371169492
CDA	Exhausted t cell	DLBC	0.307442954
CDA	Fat cell (adipocyte)	DLBC	0.260607194
CDA	Fatty acid biosynthesis	DLBC	-0.131933498
CDA	Fatty acid degradation	DLBC	0.12539675
CDA	Fatty acid elongation	DLBC	-0.012652267
CDA	Fibroblast	DLBC	0.374922081
CDA	Folate biosynthesis	DLBC	0.100717302
CDA	Follicular b cell	DLBC	-0.057648098
CDA	Follicular dendritic cell	DLBC	-0.002565382
CDA	Follicular helper (tfh) t cell	DLBC	0.38163299
CDA	Follicular t cell	DLBC	0.188930632
CDA	Foxp3+il-17+ t cell	DLBC	0.260120344
CDA	Fructose and mannose me	DLBC	0.175536092
CDA	G2m_checkpoint	DLBC	-0.317698849
CDA	Galactose metabolism	DLBC	0.343053591
CDA	Galie_tumor_stemness_ge	DLBC	-0.017350093
CDA	Glutathione metabolism	DLBC	0.321008322
CDA	Glycerolipid metabolism	DLBC	0.447081734
CDA	Glycerophospholipid met	DLBC	0.348318841
CDA	Glycine, serine and threor	DLBC	0.071808449
CDA	Glycolysis / gluconeogene	DLBC	0.243633943
CDA	Glycosaminoglycan biosyn	DLBC	0.550968573
CDA	Glycosaminoglycan biosyn	DLBC	0.530885627
CDA	Glycosaminoglycan biosyn	DLBC	0.109086105
CDA	Glycosaminoglycan degra	DLBC	0.641120605
CDA	Glycosphingolipid biosyn	DLBC	0.597708743
CDA	Glycosphingolipid biosyn	DLBC	0.692423408
CDA	Glycosphingolipid biosyn	DLBC	0.320724738
CDA	Glycosylphosphatidylinos	DLBC	-0.261604787
CDA	Glyoxylate and dicarboxy	DLBC	-0.088898091
CDA	Granulocyte	DLBC	0.640502998
CDA	Hedgehog_signaling	DLBC	0.101144942
CDA	Histidine metabolism	DLBC	0.441848367
CDA	Hypoxia	DLBC	0.498917361
CDA	Il-17ralpha t cell	DLBC	0.327133287
CDA	Il2_stat5_signaling	DLBC	0.570875322
CDA	Il6_jak_stat3_signaling	DLBC	0.493384889

CDA	Immune_checkpoints_tur	DLBC	0.481079284
CDA	Immune_inhibition_cytok	DLBC	0.566672752
CDA	Inositol phosphate metabo	DLBC	0.020506071
CDA	Interleukin_6_signaling	DLBC	0.098629062
CDA	Jaeger_metastasis_up	DLBC	-0.070286793
CDA	Jain_nfkb_signaling	DLBC	-0.252016291
CDA	Kras_signaling_up	DLBC	0.495703175
CDA	Linoleic acid metabolism	DLBC	0.188805477
CDA	Lipoic acid metabolism	DLBC	-0.230163349
CDA	Lysine degradation	DLBC	-0.199703484
CDA	Lysosome	DLBC	0.690316237
CDA	M1 macrophage	DLBC	0.461375979
CDA	M2 macrophage	DLBC	0.299861068
CDA	Mannose type o-glycan bi	DLBC	-0.016275346
CDA	Mapk_signaling_pathway	DLBC	0.135531465
CDA	Mapk3_erk1_activation	DLBC	-0.005852225
CDA	Marginal zone b cell	DLBC	-0.129382947
CDA	Memory b cell	DLBC	0.159941165
CDA	Mesenchymal cell	DLBC	0.4492945
CDA	Mesenchymal stem cell	DLBC	0.45434704
CDA	Metabolism of xenobiotic	DLBC	0.264656368
CDA	Migrating cancer stem cel	DLBC	0.294425414
CDA	Mitotic_spindle	DLBC	-0.277890011
CDA	Monocyte	DLBC	0.716763996
CDA	Mtor_signaling_pathway	DLBC	-0.092845666
CDA	Mtorc1_signaling	DLBC	0.11762548
CDA	Mucin type o-glycan biosy	DLBC	0.293656535
CDA	Myc_targets_v1	DLBC	-0.314409913
CDA	Myeloid cell	DLBC	0.462161206
CDA	N-glycan biosynthesis	DLBC	-0.058702637
CDA	Naive b cell	DLBC	-0.173748504
CDA	Naive cd4+ t cell	DLBC	0.178040454
CDA	Naive cd8+ t cell	DLBC	0.025660127
CDA	Natural killer cell	DLBC	0.413450958
CDA	Natural killer t (nkt) cell	DLBC	-0.054223861
CDA	Natural regulatory t (treg)	DLBC	0.243870971
CDA	Neomycin, kanamycin and	DLBC	0.54597143
CDA	Neutrophil	DLBC	0.715008346
CDA	Nicotinate and nicotinami	DLBC	0.46290584
CDA	Nitrogen metabolism	DLBC	0.152044936
CDA	Nod_like_receptor_signal	DLBC	0.296417936
CDA	Notch_signaling	DLBC	0.503955258
CDA	One carbon pool by folate	DLBC	-0.358458241

CDA	Other glycan degradation	DLBC	0.640634174
CDA	Other types of o-glycan b	DLBC	-0.030862804
CDA	Oxidative phosphorylatior	DLBC	0.096200968
CDA	P53_pathway	DLBC	0.451005877
CDA	P53_signaling_pathway	DLBC	-0.06656222
CDA	Pantothenate and coa bios	DLBC	0.406992122
CDA	Pentose and glucuronate i	DLBC	0.035309411
CDA	Pentose phosphate pathwa	DLBC	0.116032788
CDA	Pericyte	DLBC	0.249458362
CDA	Phenylalanine metabolism	DLBC	0.103493588
CDA	Phenylalanine, tyrosine ar	DLBC	-0.141573922
CDA	Phosphonate and phosphir	DLBC	0.128118904
CDA	Pi3k_akt_activation	DLBC	0.086092654
CDA	Pi3k_akt_mtor_signaling	DLBC	0.094047046
CDA	Porphyrin and chlorophyl	DLBC	0.017232877
CDA	Primary bile acid biosyntf	DLBC	0.557343373
CDA	Propanoate metabolism	DLBC	-0.151113755
CDA	Purine metabolism	DLBC	-0.216725833
CDA	Pyrimidine metabolism	DLBC	-0.233282777
CDA	Pyruvate metabolism	DLBC	0.108257882
CDA	Regulation_of_autophagy	DLBC	0.521712606
CDA	Retinol metabolism	DLBC	0.291554741
CDA	Riboflavin metabolism	DLBC	0.431397787
CDA	Schmahl_pdgf_signaling	DLBC	0.347740612
CDA	Selenocompound metabol	DLBC	-0.109092195
CDA	Signaling_by_hippo	DLBC	-0.20814446
CDA	Sphingolipid metabolism	DLBC	0.445045614
CDA	Starch and sucrose metabo	DLBC	0.30860583
CDA	Steroid biosynthesis	DLBC	0.208929107
CDA	Steroid hormone biosynth	DLBC	0.21852748
CDA	Sulfur metabolism	DLBC	0.108417947
CDA	Synthesis and degradation	DLBC	-0.07739851
CDA	T helper cell	DLBC	0.354851531
CDA	T helper1 (th1) cell	DLBC	0.434793175
CDA	T helper17 (th17) cell	DLBC	0.314052521
CDA	T helper2 (th2) cell	DLBC	0.278235357
CDA	T helper9 (th9) cell	DLBC	0.267089047
CDA	Taurine and hypotaurine r	DLBC	0.229859069
CDA	Terpenoid backbone biosy	DLBC	-0.057159735
CDA	Tgf_beta_signaling_pathw	DLBC	-0.180189427
CDA	Thiamine metabolism	DLBC	-0.041962966
CDA	Tnfa_signaling_via_nfkb	DLBC	0.614201978
CDA	Tryptophan metabolism	DLBC	0.371041977

CDA	Tumor endothelial cell	DLBC	0.396703546
CDA	Tyrosine metabolism	DLBC	0.137062836
CDA	Ubiquinone and other ter	DLBC	-0.033871974
CDA	Valine, leucine and isoleu	DLBC	0.38045442
CDA	Valine, leucine and isoleu	DLBC	-0.064825176
CDA	Vascular endothelial cell	DLBC	0.096272458
CDA	Vascular smooth muscle c	DLBC	0.320051795
CDA	Vegf_signaling_pathway	DLBC	0.217514758
CDA	Vitamin b6 metabolism	DLBC	0.032013868
CDA	Willert_wnt_signaling	DLBC	0.019328199
CDA	Wnt_beta_catenin_signali	DLBC	0.056364047
UCK1	Abnormal plasma cell	DLBC	-0.028047659
UCK1	Activated b cell	DLBC	0.109047073
UCK1	Activated cd4+ t cell	DLBC	-0.370629979
UCK1	Activated t cell	DLBC	-0.044772977
UCK1	Alanine, aspartate and glu	DLBC	-0.220241679
UCK1	Alcala_apoptosis	DLBC	0.292734985
UCK1	Alpha-linolenic acid meta	DLBC	0.71796766
UCK1	Amino sugar and nucleoti	DLBC	0.245666187
UCK1	Ampk_pathway	DLBC	-0.319940966
UCK1	Angiogenesis	DLBC	-0.01937734
UCK1	Arachidonic acid metabol	DLBC	0.574078899
UCK1	Arginine and proline met&	DLBC	0.396878274
UCK1	Arginine biosynthesis	DLBC	-0.081578277
UCK1	Ascorbate and aldarate me	DLBC	0.419575207
UCK1	Atypical memory b cell	DLBC	0.043421223
UCK1	Axl+siglec6+ dendritic ce	DLBC	-0.019545222
UCK1	B cell	DLBC	-0.291140264
UCK1	B1 cell	DLBC	0.04518105
UCK1	Basal cell	DLBC	0.389474857
UCK1	Beta-alanine metabolism	DLBC	0.498082285
UCK1	Biosynthesis of unsaturate	DLBC	0.255830438
UCK1	Biotin metabolism	DLBC	0.457846881
UCK1	Butanoate metabolism	DLBC	0.490629319
UCK1	Caffeine metabolism	DLBC	0.494800094
UCK1	Cancer stem cell	DLBC	-0.246158807
UCK1	Cancer stem-like cell	DLBC	0.037936961
UCK1	Cd4+ cytotoxic t cell	DLBC	-0.02474062
UCK1	Cd4+ memory t cell	DLBC	-0.131823864
UCK1	Cd4+ regulatory t cell	DLBC	-0.315305934
UCK1	Cd4+ t helper cell	DLBC	0.02472914
UCK1	Cd4+cd25+ regulatory t c	DLBC	-0.065646197
UCK1	Cd8+ cytotoxic t cell	DLBC	-0.038147978

UCK1	Cd8+ regulatory t cell	DLBC	-0.181079912
UCK1	Cell_cycle	DLBC	-0.657108977
UCK1	Chandran_metastasis_top5	DLBC	-0.707391701
UCK1	Citrate cycle (tca cycle)	DLBC	-0.132276238
UCK1	Cysteine and methionine r	DLBC	-0.160006543
UCK1	Cytokine induced killer cε	DLBC	0.127059682
UCK1	D-arginine and d-ornithin	DLBC	0.287168876
UCK1	D-glutamine and d-glutan	DLBC	-0.621633045
UCK1	Dendritic cell	DLBC	-0.087922308
UCK1	Dna_repair	DLBC	0.444305821
UCK1	Dna_replication	DLBC	-0.208923058
UCK1	Double-negative memory	DLBC	0.365753745
UCK1	Drug metabolism - cytoch	DLBC	0.584065352
UCK1	Drug metabolism - other (	DLBC	0.609586942
UCK1	E2f_targets	DLBC	-0.553914182
UCK1	Ecm_receptor_interaction	DLBC	-0.184437433
UCK1	Effector cd4+ memory t (	DLBC	-0.149320718
UCK1	Effector cd8+ memory t (	DLBC	-0.247162716
UCK1	Effector memory t cell	DLBC	-0.23158744
UCK1	Effector regulatory t (treg	DLBC	-0.443599952
UCK1	Elvidge_hif1a_targets_up	DLBC	-0.742667306
UCK1	Endothelial cell	DLBC	-0.278789929
UCK1	Eosinophil	DLBC	-0.144493564
UCK1	Ether lipid metabolism	DLBC	0.394960019
UCK1	Exhausted cd4+ t cell	DLBC	-0.123226338
UCK1	Exhausted cd8+ t cell	DLBC	-0.224712451
UCK1	Exhausted t cell	DLBC	0.054127871
UCK1	Fat cell (adipocyte)	DLBC	0.361076236
UCK1	Fatty acid biosynthesis	DLBC	-0.396778467
UCK1	Fatty acid degradation	DLBC	0.391103289
UCK1	Fatty acid elongation	DLBC	0.399230033
UCK1	Fibroblast	DLBC	-0.217499668
UCK1	Folate biosynthesis	DLBC	0.492360322
UCK1	Follicular b cell	DLBC	-0.062229479
UCK1	Follicular dendritic cell	DLBC	0.050343867
UCK1	Follicular helper (tfh) t ce	DLBC	-0.099147691
UCK1	Follicular t cell	DLBC	0.199003721
UCK1	Foxp3+il-17+ t cell	DLBC	-0.318785062
UCK1	Fructose and mannose me	DLBC	0.50966238
UCK1	G2m_checkpoint	DLBC	-0.715357075
UCK1	Galactose metabolism	DLBC	0.316875713
UCK1	Galie_tumor_stemness_ge	DLBC	-0.361878559
UCK1	Glutathione metabolism	DLBC	0.504420498

UCK1	Glycerolipid metabolism	DLBC	0.287087855
UCK1	Glycerophospholipid metabolism	DLBC	0.567927289
UCK1	Glycine, serine and threonine metabolism	DLBC	0.235240616
UCK1	Glycolysis / gluconeogenesis	DLBC	0.175508873
UCK1	Glycosaminoglycan biosynthesis	DLBC	0.2346161
UCK1	Glycosaminoglycan biosynthesis	DLBC	0.429213221
UCK1	Glycosaminoglycan biosynthesis	DLBC	-0.111587457
UCK1	Glycosaminoglycan degradation	DLBC	0.354466652
UCK1	Glycosphingolipid biosynthesis	DLBC	0.268859225
UCK1	Glycosphingolipid biosynthesis	DLBC	0.48231178
UCK1	Glycosphingolipid biosynthesis	DLBC	0.504172734
UCK1	Glycosylphosphatidylinositol biosynthesis	DLBC	0.342272255
UCK1	Glyoxylate and dicarboxylate metabolism	DLBC	0.32946094
UCK1	Granulocyte	DLBC	-0.212591396
UCK1	Hedgehog signaling	DLBC	-0.171867242
UCK1	Histidine metabolism	DLBC	0.397208056
UCK1	Hypoxia	DLBC	0.103783451
UCK1	IL-17Ralpha T cell	DLBC	-0.080653334
UCK1	IL2 STAT5 signaling	DLBC	-0.033315082
UCK1	IL6 JAK STAT3 signaling	DLBC	-0.365989906
UCK1	Immune checkpoints	DLBC	-0.075145615
UCK1	Immune inhibition	DLBC	0.06397909
UCK1	Inositol phosphate metabolism	DLBC	-0.559098661
UCK1	Interleukin_6 signaling	DLBC	-0.682707455
UCK1	Jaeger metastasis up	DLBC	-0.251663799
UCK1	Jain nfkb signaling	DLBC	-0.563579817
UCK1	Kras signaling up	DLBC	-0.208993147
UCK1	Linoleic acid metabolism	DLBC	0.584535266
UCK1	Lipoic acid metabolism	DLBC	0.37790307
UCK1	Lysine degradation	DLBC	-0.43583605
UCK1	Lysosome	DLBC	0.327688852
UCK1	M1 macrophage	DLBC	-0.284353843
UCK1	M2 macrophage	DLBC	-0.150851992
UCK1	Mannose type o-glycan biosynthesis	DLBC	0.209274879
UCK1	Mapk signaling pathway	DLBC	-0.527796438
UCK1	Mapk3 erk1 activation	DLBC	-0.735043994
UCK1	Marginal zone B cell	DLBC	-0.086592091
UCK1	Memory B cell	DLBC	-0.111667989
UCK1	Mesenchymal cell	DLBC	0.17352137
UCK1	Mesenchymal stem cell	DLBC	-0.168603742
UCK1	Metabolism of xenobiotics	DLBC	0.619901187
UCK1	Migrating cancer stem cell	DLBC	0.037147853
UCK1	Mitotic spindle	DLBC	-0.742623056

UCK1	Monocyte	DLBC	-0.075411301
UCK1	Mtor_signaling_pathway	DLBC	-0.533582059
UCK1	Mtorc1_signaling	DLBC	-0.230635741
UCK1	Mucin type o-glycan biosynthesis	DLBC	-0.257762162
UCK1	Myc_targets_v1	DLBC	-0.069197474
UCK1	Myeloid cell	DLBC	-0.226772836
UCK1	N-glycan biosynthesis	DLBC	-0.073503854
UCK1	Naive b cell	DLBC	-0.058308886
UCK1	Naive cd4+ t cell	DLBC	-0.157146355
UCK1	Naive cd8+ t cell	DLBC	-0.137183561
UCK1	Natural killer cell	DLBC	-0.065061531
UCK1	Natural killer t (nkt) cell	DLBC	-0.212335684
UCK1	Natural regulatory t (treg) cell	DLBC	-0.236111023
UCK1	Neomycin, kanamycin and streptomycin	DLBC	0.075232001
UCK1	Neutrophil	DLBC	-0.092376722
UCK1	Nicotinate and nicotinamide metabolism	DLBC	0.044562663
UCK1	Nitrogen metabolism	DLBC	-0.190132615
UCK1	Nod_like_receptor_signaling	DLBC	-0.457204232
UCK1	Notch_signaling	DLBC	0.250695809
UCK1	One carbon pool by folate	DLBC	-0.455335679
UCK1	Other glycan degradation	DLBC	0.361331484
UCK1	Other types of o-glycan biosynthesis	DLBC	0.165921467
UCK1	Oxidative phosphorylation	DLBC	0.575863365
UCK1	P53_pathway	DLBC	0.299163455
UCK1	P53_signaling_pathway	DLBC	-0.41520511
UCK1	Pantothenate and coenzyme a biosynthesis	DLBC	0.161865151
UCK1	Pentose and glucuronate interconversions	DLBC	0.559885121
UCK1	Pentose phosphate pathway	DLBC	0.324802094
UCK1	Pericyte	DLBC	-0.003287124
UCK1	Phenylalanine metabolism	DLBC	0.25337367
UCK1	Phenylalanine, tyrosine and tryptophan metabolism	DLBC	-0.032971311
UCK1	Phosphonate and phosphonate metabolism	DLBC	-0.207467927
UCK1	Pi3k_akt_activation	DLBC	-0.234987917
UCK1	Pi3k_akt_mtor_signaling	DLBC	-0.467460041
UCK1	Porphyrin and chlorophyll metabolism	DLBC	0.464141223
UCK1	Primary bile acid biosynthesis	DLBC	0.442797783
UCK1	Propanoate metabolism	DLBC	0.083786614
UCK1	Purine metabolism	DLBC	0.129948541
UCK1	Pyrimidine metabolism	DLBC	0.096267058
UCK1	Pyruvate metabolism	DLBC	0.292909531
UCK1	Regulation_of_autophagy	DLBC	0.10969247
UCK1	Retinol metabolism	DLBC	0.566115697
UCK1	Riboflavin metabolism	DLBC	0.503527908

UCK1	Schmahl_pdgf_signaling	DLBC	-0.119111241
UCK1	Selenocompound metabol	DLBC	-0.662376432
UCK1	Signaling_by_hippo	DLBC	-0.57774971
UCK1	Sphingolipid metabolism	DLBC	-0.110676537
UCK1	Starch and sucrose metabo	DLBC	0.29190215
UCK1	Steroid biosynthesis	DLBC	0.177782036
UCK1	Steroid hormone biosynth	DLBC	0.512187898
UCK1	Sulfur metabolism	DLBC	0.461587755
UCK1	Synthesis and degradation	DLBC	0.264174276
UCK1	T helper cell	DLBC	-0.171698849
UCK1	T helper1 (th1) cell	DLBC	-0.019609289
UCK1	T helper17 (th17) cell	DLBC	-0.335339533
UCK1	T helper2 (th2) cell	DLBC	-0.15220207
UCK1	T helper9 (th9) cell	DLBC	-0.003601693
UCK1	Taurine and hypotaurine r	DLBC	0.499492084
UCK1	Terpenoid backbone biosy	DLBC	0.303362618
UCK1	Tgf_beta_signaling_pathw	DLBC	-0.594513439
UCK1	Thiamine metabolism	DLBC	0.459068145
UCK1	Tnfa_signaling_via_nfkb	DLBC	-0.258153251
UCK1	Tryptophan metabolism	DLBC	0.41217155
UCK1	Tumor endothelial cell	DLBC	0.131988226
UCK1	Tyrosine metabolism	DLBC	0.478761428
UCK1	Ubiquinone and other terq	DLBC	0.517355146
UCK1	Valine, leucine and isoleu	DLBC	0.359821745
UCK1	Valine, leucine and isoleu	DLBC	0.228337504
UCK1	Vascular endothelial cell	DLBC	-0.144378314
UCK1	Vascular smooth muscle c	DLBC	-0.156020758
UCK1	Vegf_signaling_pathway	DLBC	-0.060537887
UCK1	Vitamin b6 metabolism	DLBC	0.354478156
UCK1	Willert_wnt_signaling	DLBC	0.14211732
UCK1	Wnt_beta_catenin_signali	DLBC	-0.3813535
UCK2	Abnormal plasma cell	DLBC	-0.209353674
UCK2	Activated b cell	DLBC	-0.354953107
UCK2	Activated cd4+ t cell	DLBC	0.083138889
UCK2	Activated t cell	DLBC	-0.133398872
UCK2	Alanine, aspartate and glu	DLBC	0.615017097
UCK2	Alcala_apoptosis	DLBC	0.390970947
UCK2	Alpha-linolenic acid meta	DLBC	0.026957633
UCK2	Amino sugar and nucleoti	DLBC	0.291721222
UCK2	Ampk_pathway	DLBC	0.18082507
UCK2	Angiogenesis	DLBC	0.043536328
UCK2	Arachidonic acid metaboli	DLBC	-0.01406284
UCK2	Arginine and proline metæ	DLBC	0.202539465

UCK2	Arginine biosynthesis	DLBC	0.515974254
UCK2	Ascorbate and aldarate me	DLBC	0.108337428
UCK2	Atypical memory b cell	DLBC	-0.231407435
UCK2	Axl+siglec6+ dendritic ce	DLBC	0.04735604
UCK2	B cell	DLBC	-0.072807949
UCK2	B1 cell	DLBC	-0.31269982
UCK2	Basal cell	DLBC	0.124588455
UCK2	Beta-alanine metabolism	DLBC	-0.087602951
UCK2	Biosynthesis of unsaturate	DLBC	0.218044113
UCK2	Biotin metabolism	DLBC	-0.17597899
UCK2	Butanoate metabolism	DLBC	0.058549522
UCK2	Caffeine metabolism	DLBC	-0.427986696
UCK2	Cancer stem cell	DLBC	0.217161437
UCK2	Cancer stem-like cell	DLBC	0.010188927
UCK2	Cd4+ cytotoxic t cell	DLBC	0.094584397
UCK2	Cd4+ memory t cell	DLBC	-0.13632156
UCK2	Cd4+ regulatory t cell	DLBC	-0.144322632
UCK2	Cd4+ t helper cell	DLBC	-0.15820796
UCK2	Cd4+cd25+ regulatory t c	DLBC	-0.098643064
UCK2	Cd8+ cytotoxic t cell	DLBC	0.07146276
UCK2	Cd8+ regulatory t cell	DLBC	0.125396541
UCK2	Cell_cycle	DLBC	0.405687333
UCK2	Chandran_metastasis_top5	DLBC	0.340558866
UCK2	Citrate cycle (tca cycle)	DLBC	0.529336697
UCK2	Cysteine and methionine r	DLBC	0.601403731
UCK2	Cytokine induced killer c	DLBC	-0.215148065
UCK2	D-arginine and d-ornithin	DLBC	0.010749088
UCK2	D-glutamine and d-glutan	DLBC	0.214699299
UCK2	Dendritic cell	DLBC	-0.223423504
UCK2	Dna_repair	DLBC	0.201954629
UCK2	Dna_replication	DLBC	0.418954313
UCK2	Double-negative memory	DLBC	-0.238261509
UCK2	Drug metabolism - cytoch	DLBC	-0.046492266
UCK2	Drug metabolism - other c	DLBC	0.092636754
UCK2	E2f_targets	DLBC	0.450308247
UCK2	Ecm_receptor_interaction	DLBC	0.155386296
UCK2	Effector cd4+ memory t (	DLBC	-0.040872389
UCK2	Effector cd8+ memory t (	DLBC	0.136823378
UCK2	Effector memory t cell	DLBC	-0.017049246
UCK2	Effector regulatory t (treg	DLBC	0.195954601
UCK2	Elvidge_hif1a_targets_up	DLBC	0.502305731
UCK2	Endothelial cell	DLBC	0.210542967
UCK2	Eosinophil	DLBC	0.065933474

UCK2	Ether lipid metabolism	DLBC	0.023357057
UCK2	Exhausted cd4+ t cell	DLBC	-0.160241137
UCK2	Exhausted cd8+ t cell	DLBC	0.00301345
UCK2	Exhausted t cell	DLBC	-0.120855712
UCK2	Fat cell (adipocyte)	DLBC	0.101590794
UCK2	Fatty acid biosynthesis	DLBC	0.310697034
UCK2	Fatty acid degradation	DLBC	0.211249398
UCK2	Fatty acid elongation	DLBC	0.19190275
UCK2	Fibroblast	DLBC	0.028351408
UCK2	Folate biosynthesis	DLBC	0.064814273
UCK2	Follicular b cell	DLBC	-0.414102475
UCK2	Follicular dendritic cell	DLBC	-0.312992503
UCK2	Follicular helper (tfh) t cell	DLBC	-0.172814875
UCK2	Follicular t cell	DLBC	-0.132422873
UCK2	Foxp3+il-17+ t cell	DLBC	-0.360410232
UCK2	Fructose and mannose metabolism	DLBC	0.189201376
UCK2	G2m_checkpoint	DLBC	0.440499583
UCK2	Galactose metabolism	DLBC	0.233353582
UCK2	Galie_tumor_stemness_genes	DLBC	0.079963276
UCK2	Glutathione metabolism	DLBC	0.115100713
UCK2	Glycerolipid metabolism	DLBC	0.271537045
UCK2	Glycerophospholipid metabolism	DLBC	-0.018140011
UCK2	Glycine, serine and threonine metabolism	DLBC	0.300089709
UCK2	Glycolysis / gluconeogenesis	DLBC	0.364650781
UCK2	Glycosaminoglycan biosynthesis	DLBC	-0.066118133
UCK2	Glycosaminoglycan biosynthesis	DLBC	-0.369103653
UCK2	Glycosaminoglycan biosynthesis	DLBC	0.018637012
UCK2	Glycosaminoglycan degradation	DLBC	-0.11966959
UCK2	Glycosphingolipid biosynthesis	DLBC	-0.233125951
UCK2	Glycosphingolipid biosynthesis	DLBC	-0.125829963
UCK2	Glycosphingolipid biosynthesis	DLBC	-0.226420468
UCK2	Glycosylphosphatidylinositol	DLBC	-0.173573164
UCK2	Glyoxylate and dicarboxylate metabolism	DLBC	0.216458145
UCK2	Granulocyte	DLBC	0.198354644
UCK2	Hedgehog_signaling	DLBC	-0.138577925
UCK2	Histidine metabolism	DLBC	0.081410267
UCK2	Hypoxia	DLBC	0.010938466
UCK2	Il-17alpha t cell	DLBC	-0.168870408
UCK2	Il2_stat5_signaling	DLBC	0.087341632
UCK2	Il6_jak_stat3_signaling	DLBC	0.153684989
UCK2	Immune_checkpoints_tumor	DLBC	0.237848011
UCK2	Immune_inhibition_cytokines	DLBC	0.076907666
UCK2	Inositol phosphate metabolism	DLBC	-0.014528068

UCK2	Interleukin_6_signaling	DLBC	0.219584325
UCK2	Jaeger_metastasis_up	DLBC	0.337419989
UCK2	Jain_nfkb_signaling	DLBC	0.570072795
UCK2	Kras_signaling_up	DLBC	0.222982518
UCK2	Linoleic acid metabolism	DLBC	0.006635073
UCK2	Lipoic acid metabolism	DLBC	-0.252522032
UCK2	Lysine degradation	DLBC	0.250042846
UCK2	Lysosome	DLBC	-0.119672002
UCK2	M1 macrophage	DLBC	0.20078085
UCK2	M2 macrophage	DLBC	0.301487117
UCK2	Mannose type o-glycan bi	DLBC	0.019251809
UCK2	Mapk_signaling_pathway	DLBC	0.08587871
UCK2	Mapk3_erk1_activation	DLBC	0.142031015
UCK2	Marginal zone b cell	DLBC	-0.091207409
UCK2	Memory b cell	DLBC	-0.283955598
UCK2	Mesenchymal cell	DLBC	0.079722891
UCK2	Mesenchymal stem cell	DLBC	0.041837757
UCK2	Metabolism of xenobiotic	DLBC	0.009049555
UCK2	Migrating cancer stem cel	DLBC	0.179519706
UCK2	Mitotic_spindle	DLBC	0.136191211
UCK2	Monocyte	DLBC	0.100905794
UCK2	Mtor_signaling_pathway	DLBC	-0.014217245
UCK2	Mtorc1_signaling	DLBC	0.588273267
UCK2	Mucin type o-glycan biosy	DLBC	-0.226372876
UCK2	Myc_targets_v1	DLBC	0.606746043
UCK2	Myeloid cell	DLBC	-0.014109833
UCK2	N-glycan biosynthesis	DLBC	-0.032983717
UCK2	Naive b cell	DLBC	-0.233554833
UCK2	Naive cd4+ t cell	DLBC	-0.145823407
UCK2	Naive cd8+ t cell	DLBC	-0.143896752
UCK2	Natural killer cell	DLBC	-0.02074468
UCK2	Natural killer t (nkt) cell	DLBC	0.161292391
UCK2	Natural regulatory t (treg)	DLBC	-0.195763898
UCK2	Neomycin, kanamycin an	DLBC	0.244784664
UCK2	Neutrophil	DLBC	0.190431868
UCK2	Nicotinate and nicotinami	DLBC	0.076621972
UCK2	Nitrogen metabolism	DLBC	0.307727662
UCK2	Nod_like_receptor_signal	DLBC	0.137114091
UCK2	Notch_signaling	DLBC	-0.118181458
UCK2	One carbon pool by folate	DLBC	0.578697501
UCK2	Other glycan degradation	DLBC	-0.188702189
UCK2	Other types of o-glycan b	DLBC	-0.121819866
UCK2	Oxidative phosphorylatior	DLBC	0.080465744

UCK2	P53_pathway	DLBC	0.050775847
UCK2	P53_signaling_pathway	DLBC	0.317322318
UCK2	Pantothenate and coa bios	DLBC	0.125871864
UCK2	Pentose and glucuronate i	DLBC	0.102704764
UCK2	Pentose phosphate pathwa	DLBC	0.027523884
UCK2	Pericyte	DLBC	-0.096268986
UCK2	Phenylalanine metabolism	DLBC	0.271321167
UCK2	Phenylalanine, tyrosine ar	DLBC	0.206382822
UCK2	Phosphonate and phosphir	DLBC	0.158472403
UCK2	Pi3k_akt_activation	DLBC	-0.123961606
UCK2	Pi3k_akt_mtor_signaling	DLBC	0.1906613
UCK2	Porphyrin and chlorophyl	DLBC	0.20153613
UCK2	Primary bile acid biosynt	DLBC	-0.064796112
UCK2	Propanoate metabolism	DLBC	0.127342937
UCK2	Purine metabolism	DLBC	0.464675367
UCK2	Pyrimidine metabolism	DLBC	0.520488253
UCK2	Pyruvate metabolism	DLBC	0.359308615
UCK2	Regulation_of_autophagy	DLBC	-0.126081871
UCK2	Retinol metabolism	DLBC	0.026073566
UCK2	Riboflavin metabolism	DLBC	0.003459578
UCK2	Schmahl_pdgf_signaling	DLBC	-0.404811977
UCK2	Selenocompound metabol	DLBC	0.440250008
UCK2	Signaling_by_hippo	DLBC	-0.006773968
UCK2	Sphingolipid metabolism	DLBC	-0.208099869
UCK2	Starch and sucrose metabo	DLBC	0.009361985
UCK2	Steroid biosynthesis	DLBC	0.228293356
UCK2	Steroid hormone biosynth	DLBC	0.064162239
UCK2	Sulfur metabolism	DLBC	-0.13868082
UCK2	Synthesis and degradation	DLBC	0.290851391
UCK2	T helper cell	DLBC	-0.117084685
UCK2	T helper1 (th1) cell	DLBC	-0.093328467
UCK2	T helper17 (th17) cell	DLBC	-0.028739311
UCK2	T helper2 (th2) cell	DLBC	-0.081303796
UCK2	T helper9 (th9) cell	DLBC	-0.018522607
UCK2	Taurine and hypotaurine r	DLBC	-0.269955911
UCK2	Terpenoid backbone biosy	DLBC	0.227586875
UCK2	Tgf_beta_signaling_pathw	DLBC	0.106366851
UCK2	Thiamine metabolism	DLBC	-0.013801207
UCK2	Tnfa_signaling_via_nfkb	DLBC	0.146698321
UCK2	Tryptophan metabolism	DLBC	0.023010619
UCK2	Tumor endothelial cell	DLBC	-0.063364054
UCK2	Tyrosine metabolism	DLBC	0.161583924
UCK2	Ubiquinone and other ter	DLBC	-0.026792428

UCK2	Valine, leucine and isoleu	DLBC	0.21785111
UCK2	Valine, leucine and isoleu	DLBC	0.186997207
UCK2	Vascular endothelial cell	DLBC	0.2318749
UCK2	Vascular smooth muscle c	DLBC	-0.036957376
UCK2	Vegf_signaling_pathway	DLBC	-0.166281402
UCK2	Vitamin b6 metabolism	DLBC	-0.00775558
UCK2	Willert_wnt_signaling	DLBC	0.479037776
UCK2	Wnt_beta_catenin_signali	DLBC	-0.176313281
UCKL1	Abnormal plasma cell	DLBC	-0.060304434
UCKL1	Activated b cell	DLBC	-0.214634822
UCKL1	Activated cd4+ t cell	DLBC	-0.285849189
UCKL1	Activated t cell	DLBC	-0.1626188
UCKL1	Alanine, aspartate and glu	DLBC	-0.209327539
UCKL1	Alcala_apoptosis	DLBC	0.241222187
UCKL1	Alpha-linolenic acid meta	DLBC	0.351993377
UCKL1	Amino sugar and nucleoti	DLBC	0.245356198
UCKL1	Ampk_pathway	DLBC	-0.120872782
UCKL1	Angiogenesis	DLBC	0.014703797
UCKL1	Arachidonic acid metabol	DLBC	0.422080983
UCKL1	Arginine and proline metæ	DLBC	0.284510989
UCKL1	Arginine biosynthesis	DLBC	-0.007842482
UCKL1	Ascorbate and aldarate mε	DLBC	0.232133637
UCKL1	Atypical memory b cell	DLBC	0.241984487
UCKL1	Axl+siglec6+ dendritic ce	DLBC	-0.136278506
UCKL1	B cell	DLBC	-0.026050364
UCKL1	B1 cell	DLBC	-0.191873403
UCKL1	Basal cell	DLBC	0.22174488
UCKL1	Beta-alanine metabolism	DLBC	0.185743021
UCKL1	Biosynthesis of unsaturate	DLBC	0.106253608
UCKL1	Biotin metabolism	DLBC	0.401450997
UCKL1	Butanoate metabolism	DLBC	0.41385624
UCKL1	Caffeine metabolism	DLBC	0.139392193
UCKL1	Cancer stem cell	DLBC	-0.19433257
UCKL1	Cancer stem-like cell	DLBC	-0.102958886
UCKL1	Cd4+ cytotoxic t cell	DLBC	-0.149983683
UCKL1	Cd4+ memory t cell	DLBC	-0.285691894
UCKL1	Cd4+ regulatory t cell	DLBC	-0.284499061
UCKL1	Cd4+ t helper cell	DLBC	-0.140134642
UCKL1	Cd4+cd25+ regulatory t c	DLBC	-0.152210877
UCKL1	Cd8+ cytotoxic t cell	DLBC	-0.171472835
UCKL1	Cd8+ regulatory t cell	DLBC	-0.323603068
UCKL1	Cell_cycle	DLBC	-0.317842613
UCKL1	Chandran_metastasis_topε	DLBC	-0.463005369

UCKL1	Citrate cycle (tca cycle)	DLBC	0.02272642
UCKL1	Cysteine and methionine r	DLBC	0.098337187
UCKL1	Cytokine induced killer c	DLBC	-0.060601686
UCKL1	D-arginine and d-ornithin	DLBC	0.158045313
UCKL1	D-glutamine and d-glutan	DLBC	-0.508184376
UCKL1	Dendritic cell	DLBC	-0.269285649
UCKL1	Dna_repair	DLBC	0.430111546
UCKL1	Dna_replication	DLBC	0.03469353
UCKL1	Double-negative memory	DLBC	0.208872524
UCKL1	Drug metabolism - cytoch	DLBC	0.441177467
UCKL1	Drug metabolism - other (	DLBC	0.502492708
UCKL1	E2f_targets	DLBC	-0.186103109
UCKL1	Ecm_receptor_interaction	DLBC	-0.120711265
UCKL1	Effector cd4+ memory t (	DLBC	-0.300607621
UCKL1	Effector cd8+ memory t (	DLBC	-0.249210823
UCKL1	Effector memory t cell	DLBC	-0.363206011
UCKL1	Effector regulatory t (treg	DLBC	-0.208537317
UCKL1	Elvidge_hif1a_targets_up	DLBC	-0.402045115
UCKL1	Endothelial cell	DLBC	-0.175500945
UCKL1	Eosinophil	DLBC	-0.257161422
UCKL1	Ether lipid metabolism	DLBC	0.15962823
UCKL1	Exhausted cd4+ t cell	DLBC	-0.290256049
UCKL1	Exhausted cd8+ t cell	DLBC	-0.281836462
UCKL1	Exhausted t cell	DLBC	-0.111669393
UCKL1	Fat cell (adipocyte)	DLBC	0.256057592
UCKL1	Fatty acid biosynthesis	DLBC	-0.260552485
UCKL1	Fatty acid degradation	DLBC	0.238000427
UCKL1	Fatty acid elongation	DLBC	0.340569274
UCKL1	Fibroblast	DLBC	-0.112866866
UCKL1	Folate biosynthesis	DLBC	0.301133317
UCKL1	Follicular b cell	DLBC	-0.095220102
UCKL1	Follicular dendritic cell	DLBC	-0.046962207
UCKL1	Follicular helper (tfh) t ce	DLBC	-0.261133571
UCKL1	Follicular t cell	DLBC	0.157092367
UCKL1	Foxp3+il-17+ t cell	DLBC	-0.363185751
UCKL1	Fructose and mannose me	DLBC	0.408405522
UCKL1	G2m_checkpoint	DLBC	-0.337157165
UCKL1	Galactose metabolism	DLBC	0.325047427
UCKL1	Galie_tumor_stemness_ge	DLBC	-0.352652551
UCKL1	Glutathione metabolism	DLBC	0.358003363
UCKL1	Glycerolipid metabolism	DLBC	0.044443472
UCKL1	Glycerophospholipid met	DLBC	0.280476111
UCKL1	Glycine, serine and threor	DLBC	0.290217511

UCKL1	Glycolysis / gluconeogene	DLBC	0.334725582
UCKL1	Glycosaminoglycan biosyn	DLBC	0.025475271
UCKL1	Glycosaminoglycan biosyn	DLBC	0.06666815
UCKL1	Glycosaminoglycan biosyn	DLBC	-0.00883816
UCKL1	Glycosaminoglycan degra	DLBC	0.005880583
UCKL1	Glycosphingolipid biosyn	DLBC	-0.182320034
UCKL1	Glycosphingolipid biosyn	DLBC	0.084429578
UCKL1	Glycosphingolipid biosyn	DLBC	0.487263298
UCKL1	Glycosylphosphatidylinos	DLBC	0.563420724
UCKL1	Glyoxylate and dicarboxy	DLBC	0.355989386
UCKL1	Granulocyte	DLBC	-0.248034214
UCKL1	Hedgehog_signaling	DLBC	-0.407806804
UCKL1	Histidine metabolism	DLBC	0.133815894
UCKL1	Hypoxia	DLBC	0.004542713
UCKL1	Il-17alpha t cell	DLBC	-0.232197084
UCKL1	Il2_stat5_signaling	DLBC	-0.197605341
UCKL1	Il6_jak_stat3_signaling	DLBC	-0.428758791
UCKL1	Immune_checkpoints_tur	DLBC	-0.103573083
UCKL1	Immune_inhibition_cytok	DLBC	-0.008090231
UCKL1	Inositol phosphate metabo	DLBC	-0.50257529
UCKL1	Interleukin_6_signaling	DLBC	-0.607172304
UCKL1	Jaeger_metastasis_up	DLBC	-0.066822886
UCKL1	Jain_nfkb_signaling	DLBC	-0.288415152
UCKL1	Kras_signaling_up	DLBC	-0.239989984
UCKL1	Linoleic acid metabolism	DLBC	0.474039276
UCKL1	Lipoic acid metabolism	DLBC	0.399783006
UCKL1	Lysine degradation	DLBC	-0.262307735
UCKL1	Lysosome	DLBC	-0.098680969
UCKL1	M1 macrophage	DLBC	-0.358808008
UCKL1	M2 macrophage	DLBC	-0.14459112
UCKL1	Mannose type o-glycan bi	DLBC	0.30281253
UCKL1	Mapk_signaling_pathway	DLBC	-0.502522424
UCKL1	Mapk3_erk1_activation	DLBC	-0.564853083
UCKL1	Marginal zone b cell	DLBC	-0.012814816
UCKL1	Memory b cell	DLBC	-0.294211621
UCKL1	Mesenchymal cell	DLBC	0.125198436
UCKL1	Mesenchymal stem cell	DLBC	-0.158436178
UCKL1	Metabolism of xenobiotic	DLBC	0.449196752
UCKL1	Migrating cancer stem cel	DLBC	0.226818208
UCKL1	Mitotic_spindle	DLBC	-0.573610909
UCKL1	Monocyte	DLBC	-0.219134618
UCKL1	Mtor_signaling_pathway	DLBC	-0.553536877
UCKL1	Mtorc1_signaling	DLBC	-0.017873849

UCKL1	Mucin type o-glycan biosynthesis	DLBC	-0.303835886
UCKL1	Myc_targets_v1	DLBC	0.198332113
UCKL1	Myeloid cell	DLBC	-0.330067669
UCKL1	N-glycan biosynthesis	DLBC	-0.027490175
UCKL1	Naive b cell	DLBC	0.083036314
UCKL1	Naive cd4+ t cell	DLBC	-0.233931962
UCKL1	Naive cd8+ t cell	DLBC	-0.157616749
UCKL1	Natural killer cell	DLBC	-0.190462503
UCKL1	Natural killer t (nkt) cell	DLBC	0.067808337
UCKL1	Natural regulatory t (treg) cell	DLBC	-0.336797135
UCKL1	Neomycin, kanamycin and streptomycin	DLBC	0.05308833
UCKL1	Neutrophil	DLBC	-0.161804319
UCKL1	Nicotinate and nicotinamide	DLBC	0.033326888
UCKL1	Nitrogen metabolism	DLBC	0.024984984
UCKL1	Nod_like_receptor_signaling	DLBC	-0.450585999
UCKL1	Notch_signaling	DLBC	0.020937671
UCKL1	One carbon pool by folate	DLBC	-0.067547783
UCKL1	Other glycan degradation	DLBC	0.005502748
UCKL1	Other types of o-glycan biosynthesis	DLBC	0.312494037
UCKL1	Oxidative phosphorylation	DLBC	0.536437903
UCKL1	P53_pathway	DLBC	0.092319654
UCKL1	P53_signaling_pathway	DLBC	-0.09537291
UCKL1	Pantothenate and coenzyme a biosynthesis	DLBC	0.170596334
UCKL1	Pentose and glucuronate interconversions	DLBC	0.389926449
UCKL1	Pentose phosphate pathway	DLBC	0.246147925
UCKL1	Pericyte	DLBC	0.037779204
UCKL1	Phenylalanine metabolism	DLBC	0.232795201
UCKL1	Phenylalanine, tyrosine and tryptophan	DLBC	-0.002503923
UCKL1	Phosphonate and phosphite	DLBC	0.022849908
UCKL1	Pi3k_akt_activation	DLBC	-0.376347092
UCKL1	Pi3k_akt_mtor_signaling	DLBC	-0.364567054
UCKL1	Porphyrin and chlorophyll biosynthesis	DLBC	0.465783266
UCKL1	Primary bile acid biosynthesis	DLBC	0.174232741
UCKL1	Propanoate metabolism	DLBC	0.226007647
UCKL1	Purine metabolism	DLBC	0.340323924
UCKL1	Pyrimidine metabolism	DLBC	0.378030935
UCKL1	Pyruvate metabolism	DLBC	0.320575472
UCKL1	Regulation_of_autophagy	DLBC	0.008398446
UCKL1	Retinol metabolism	DLBC	0.430204949
UCKL1	Riboflavin metabolism	DLBC	0.245270507
UCKL1	Schmahl_pdgf_signaling	DLBC	-0.408992633
UCKL1	Selenocompound metabolism	DLBC	-0.387927376
UCKL1	Signaling_by_hippo	DLBC	-0.53201911

UCLK1	Sphingolipid metabolism	DLBC	-0.351910015
UCLK1	Starch and sucrose metabo	DLBC	0.368850357
UCLK1	Steroid biosynthesis	DLBC	0.371521951
UCLK1	Steroid hormone biosynth	DLBC	0.442665182
UCLK1	Sulfur metabolism	DLBC	0.395511944
UCLK1	Synthesis and degradation	DLBC	0.436643272
UCLK1	T helper cell	DLBC	-0.255366185
UCLK1	T helper1 (th1) cell	DLBC	-0.22354222
UCLK1	T helper17 (th17) cell	DLBC	-0.432190982
UCLK1	T helper2 (th2) cell	DLBC	-0.338407826
UCLK1	T helper9 (th9) cell	DLBC	-0.191009421
UCLK1	Taurine and hypotaurine r	DLBC	0.172860652
UCLK1	Terpenoid backbone biosy	DLBC	0.445149281
UCLK1	Tgf_beta_signaling_pathw	DLBC	-0.538278188
UCLK1	Thiamine metabolism	DLBC	0.359991577
UCLK1	Tnfa_signaling_via_nfk	DLBC	-0.329913289
UCLK1	Tryptophan metabolism	DLBC	0.120140407
UCLK1	Tumor endothelial cell	DLBC	0.06906256
UCLK1	Tyrosine metabolism	DLBC	0.472614813
UCLK1	Ubiquinone and other ter	DLBC	0.567278694
UCLK1	Valine, leucine and isoleu	DLBC	0.090721955
UCLK1	Valine, leucine and isoleu	DLBC	0.281562175
UCLK1	Vascular endothelial cell	DLBC	-0.022845687
UCLK1	Vascular smooth muscle c	DLBC	-0.156105993
UCLK1	Vegf_signaling_pathway	DLBC	-0.189500733
UCLK1	Vitamin b6 metabolism	DLBC	0.300463787
UCLK1	Willert_wnt_signaling	DLBC	0.265712571
UCLK1	Wnt_beta_catenin_signali	DLBC	-0.396563808
UPP1	Abnormal plasma cell	DLBC	0.094125385
UPP1	Activated b cell	DLBC	-0.159849631
UPP1	Activated cd4+ t cell	DLBC	-0.311817411
UPP1	Activated t cell	DLBC	-0.152344385
UPP1	Alanine, aspartate and glu	DLBC	-0.103350238
UPP1	Alcala_apoptosis	DLBC	0.384303791
UPP1	Alpha-linolenic acid meta	DLBC	0.56474558
UPP1	Amino sugar and nucleoti	DLBC	0.522769241
UPP1	Ampk_pathway	DLBC	-0.580409487
UPP1	Angiogenesis	DLBC	0.446879899
UPP1	Arachidonic acid metabo	DLBC	0.656940816
UPP1	Arginine and proline met	DLBC	0.736175034
UPP1	Arginine biosynthesis	DLBC	0.206332706
UPP1	Ascorbate and aldarate m	DLBC	0.308877088
UPP1	Atypical memory b cell	DLBC	0.162651604

UPP1	Axl+siglec6+ dendritic ce	DLBC	0.022691613
UPP1	B cell	DLBC	-0.503591924
UPP1	B1 cell	DLBC	-0.196870874
UPP1	Basal cell	DLBC	0.719632684
UPP1	Beta-alanine metabolism	DLBC	0.493518977
UPP1	Biosynthesis of unsaturate	DLBC	0.423605982
UPP1	Biotin metabolism	DLBC	0.033313553
UPP1	Butanoate metabolism	DLBC	0.335413091
UPP1	Caffeine metabolism	DLBC	0.48156651
UPP1	Cancer stem cell	DLBC	0.117762701
UPP1	Cancer stem-like cell	DLBC	0.198595107
UPP1	Cd4+ cytotoxic t cell	DLBC	-0.024780942
UPP1	Cd4+ memory t cell	DLBC	-0.283316381
UPP1	Cd4+ regulatory t cell	DLBC	-0.294695936
UPP1	Cd4+ t helper cell	DLBC	-0.204501734
UPP1	Cd4+cd25+ regulatory t c	DLBC	-0.226417927
UPP1	Cd8+ cytotoxic t cell	DLBC	-0.116701613
UPP1	Cd8+ regulatory t cell	DLBC	-0.267614113
UPP1	Cell_cycle	DLBC	-0.478984451
UPP1	Chandran_metastasis_top5	DLBC	-0.67372782
UPP1	Citrate cycle (tca cycle)	DLBC	0.14935983
UPP1	Cysteine and methionine r	DLBC	0.080155049
UPP1	Cytokine induced killer cε	DLBC	-0.144621974
UPP1	D-arginine and d-ornithin	DLBC	0.477704557
UPP1	D-glutamine and d-glutan	DLBC	-0.541787869
UPP1	Dendritic cell	DLBC	0.042249971
UPP1	Dna_repair	DLBC	0.429488428
UPP1	Dna_replication	DLBC	-0.193465542
UPP1	Double-negative memory	DLBC	0.165764853
UPP1	Drug metabolism - cytoch	DLBC	0.631917656
UPP1	Drug metabolism - other ε	DLBC	0.678720458
UPP1	E2f_targets	DLBC	-0.417129026
UPP1	Ecm_receptor_interaction	DLBC	0.325513506
UPP1	Effector cd4+ memory t (	DLBC	-0.301016974
UPP1	Effector cd8+ memory t (	DLBC	-0.140646608
UPP1	Effector memory t cell	DLBC	-0.329637106
UPP1	Effector regulatory t (treg	DLBC	-0.400214224
UPP1	Elvidge_hif1a_targets_up	DLBC	-0.43498864
UPP1	Endothelial cell	DLBC	-0.014242082
UPP1	Eosinophil	DLBC	0.054386345
UPP1	Ether lipid metabolism	DLBC	0.290084232
UPP1	Exhausted cd4+ t cell	DLBC	-0.148761651
UPP1	Exhausted cd8+ t cell	DLBC	-0.197320133

UPP1	Exhausted t cell	DLBC	-0.199471638
UPP1	Fat cell (adipocyte)	DLBC	0.415655512
UPP1	Fatty acid biosynthesis	DLBC	-0.205490528
UPP1	Fatty acid degradation	DLBC	0.362008358
UPP1	Fatty acid elongation	DLBC	0.348868454
UPP1	Fibroblast	DLBC	0.27985537
UPP1	Folate biosynthesis	DLBC	0.454413607
UPP1	Follicular b cell	DLBC	-0.330561403
UPP1	Follicular dendritic cell	DLBC	-0.240335527
UPP1	Follicular helper (tfh) t ce	DLBC	-0.226920134
UPP1	Follicular t cell	DLBC	-0.09480078
UPP1	Foxp3+il-17+ t cell	DLBC	-0.246617599
UPP1	Fructose and mannose me	DLBC	0.614315881
UPP1	G2m_checkpoint	DLBC	-0.523182241
UPP1	Galactose metabolism	DLBC	0.611338672
UPP1	Galie_tumor_stemness_ge	DLBC	-0.361004139
UPP1	Glutathione metabolism	DLBC	0.672027148
UPP1	Glycerolipid metabolism	DLBC	0.324716079
UPP1	Glycerophospholipid metæ	DLBC	0.533917933
UPP1	Glycine, serine and threor	DLBC	0.522659335
UPP1	Glycolysis / gluconeogene	DLBC	0.574987541
UPP1	Glycosaminoglycan biosy	DLBC	0.447467914
UPP1	Glycosaminoglycan biosy	DLBC	0.366843846
UPP1	Glycosaminoglycan biosy	DLBC	-0.014876212
UPP1	Glycosaminoglycan degra	DLBC	0.470048826
UPP1	Glycosphingolipid biosyn	DLBC	0.295644469
UPP1	Glycosphingolipid biosyn	DLBC	0.592188425
UPP1	Glycosphingolipid biosyn	DLBC	0.633218
UPP1	Glycosylphosphatidylinos	DLBC	0.176265583
UPP1	Glyoxylate and dicarboxy	DLBC	0.34586342
UPP1	Granulocyte	DLBC	0.125271859
UPP1	Hedgehog_signaling	DLBC	-0.07838843
UPP1	Histidine metabolism	DLBC	0.534853623
UPP1	Hypoxia	DLBC	0.602826833
UPP1	Il-17alpha t cell	DLBC	-0.240384518
UPP1	Il2_stat5_signaling	DLBC	0.219325076
UPP1	Il6_jak_stat3_signaling	DLBC	-0.101074688
UPP1	Immune_checkpoints_turr	DLBC	0.2482243
UPP1	Immune_inhibition_cytok	DLBC	0.384792207
UPP1	Inositol phosphate metabo	DLBC	-0.493154033
UPP1	Interleukin_6_signaling	DLBC	-0.510488333
UPP1	Jaeger_metastasis_up	DLBC	0.102977466
UPP1	Jain_nfkb_signaling	DLBC	-0.455017715

UPP1	Kras_signaling_up	DLBC	0.246001758
UPP1	Linoleic acid metabolism	DLBC	0.457658817
UPP1	Lipoic acid metabolism	DLBC	0.15687657
UPP1	Lysine degradation	DLBC	-0.476592424
UPP1	Lysosome	DLBC	0.359564683
UPP1	M1 macrophage	DLBC	-0.001999664
UPP1	M2 macrophage	DLBC	-0.005564347
UPP1	Mannose type o-glycan bi	DLBC	0.005633963
UPP1	Mapk_signaling_pathway	DLBC	-0.324428615
UPP1	Mapk3_erk1_activation	DLBC	-0.550096927
UPP1	Marginal zone b cell	DLBC	-0.098306302
UPP1	Memory b cell	DLBC	-0.056325674
UPP1	Mesenchymal cell	DLBC	0.610895062
UPP1	Mesenchymal stem cell	DLBC	0.196193232
UPP1	Metabolism of xenobiotic	DLBC	0.697090353
UPP1	Migrating cancer stem cel	DLBC	0.559383978
UPP1	Mitotic_spindle	DLBC	-0.740696451
UPP1	Monocyte	DLBC	0.250350527
UPP1	Mtor_signaling_pathway	DLBC	-0.536670987
UPP1	Mtorc1_signaling	DLBC	0.21226527
UPP1	Mucin type o-glycan biosy	DLBC	-0.075215975
UPP1	Myc_targets_v1	DLBC	0.08199554
UPP1	Myeloid cell	DLBC	-0.161219394
UPP1	N-glycan biosynthesis	DLBC	-0.094583792
UPP1	Naive b cell	DLBC	-0.258415555
UPP1	Naive cd4+ t cell	DLBC	-0.338931412
UPP1	Naive cd8+ t cell	DLBC	-0.459719776
UPP1	Natural killer cell	DLBC	-0.102333359
UPP1	Natural killer t (nkt) cell	DLBC	-0.299428183
UPP1	Natural regulatory t (treg)	DLBC	-0.254250341
UPP1	Neomycin, kanamycin and	DLBC	0.392204455
UPP1	Neutrophil	DLBC	0.41399
UPP1	Nicotinate and nicotinami	DLBC	0.320378391
UPP1	Nitrogen metabolism	DLBC	0.193879396
UPP1	Nod_like_receptor_signal	DLBC	-0.231642212
UPP1	Notch_signaling	DLBC	0.54927584
UPP1	One carbon pool by folate	DLBC	-0.223728755
UPP1	Other glycan degradation	DLBC	0.363093637
UPP1	Other types of o-glycan b	DLBC	0.079168109
UPP1	Oxidative phosphorylatior	DLBC	0.681548706
UPP1	P53_pathway	DLBC	0.624176273
UPP1	P53_signaling_pathway	DLBC	-0.063364994
UPP1	Pantothenate and coa bios	DLBC	0.403758362

UPP1	Pentose and glucuronate i	DLBC	0.408465707
UPP1	Pentose phosphate pathwa	DLBC	0.399248321
UPP1	Pericyte	DLBC	0.319891309
UPP1	Phenylalanine metabolism	DLBC	0.402128599
UPP1	Phenylalanine, tyrosine ar	DLBC	-0.049021905
UPP1	Phosphonate and phosphir	DLBC	-0.026205354
UPP1	Pi3k_akt_activation	DLBC	-0.391255787
UPP1	Pi3k_akt_mtor_signaling	DLBC	-0.212793558
UPP1	Porphyrin and chlorophyl	DLBC	0.380316137
UPP1	Primary bile acid biosynt	DLBC	0.577903056
UPP1	Propanoate metabolism	DLBC	0.069895199
UPP1	Purine metabolism	DLBC	0.185830855
UPP1	Pyrimidine metabolism	DLBC	0.146708028
UPP1	Pyruvate metabolism	DLBC	0.421923619
UPP1	Regulation_of_autophagy	DLBC	0.27470392
UPP1	Retinol metabolism	DLBC	0.598937202
UPP1	Riboflavin metabolism	DLBC	0.491438329
UPP1	Schmahl_pdgf_signaling	DLBC	-0.094258238
UPP1	Selenocompound metabol	DLBC	-0.271554028
UPP1	Signaling_by_hippo	DLBC	-0.475087096
UPP1	Sphingolipid metabolism	DLBC	0.039726477
UPP1	Starch and sucrose metabo	DLBC	0.509182264
UPP1	Steroid biosynthesis	DLBC	0.457897822
UPP1	Steroid hormone biosynth	DLBC	0.682673716
UPP1	Sulfur metabolism	DLBC	0.614226261
UPP1	Synthesis and degradation	DLBC	0.323314865
UPP1	T helper cell	DLBC	-0.232604291
UPP1	T helper1 (th1) cell	DLBC	-0.06461421
UPP1	T helper17 (th17) cell	DLBC	-0.277251559
UPP1	T helper2 (th2) cell	DLBC	-0.250313919
UPP1	T helper9 (th9) cell	DLBC	-0.227448207
UPP1	Taurine and hypotaurine r	DLBC	0.383340558
UPP1	Terpenoid backbone biosy	DLBC	0.515059162
UPP1	Tgf_beta_signaling_pathw	DLBC	-0.474141468
UPP1	Thiamine metabolism	DLBC	0.468384458
UPP1	Tnfa_signaling_via_nfk	DLBC	0.212315789
UPP1	Tryptophan metabolism	DLBC	0.401728196
UPP1	Tumor endothelial cell	DLBC	0.460551276
UPP1	Tyrosine metabolism	DLBC	0.54539397
UPP1	Ubiquinone and other ter	DLBC	0.463898269
UPP1	Valine, leucine and isoleu	DLBC	0.635218097
UPP1	Valine, leucine and isoleu	DLBC	0.18904726
UPP1	Vascular endothelial cell	DLBC	0.039151665

UPP1	Vascular smooth muscle c	DLBC	0.157756488
UPP1	Vegf_signaling_pathway	DLBC	-0.154912437
UPP1	Vitamin b6 metabolism	DLBC	0.527260325
UPP1	Willert_wnt_signaling	DLBC	0.489175154
UPP1	Wnt_beta_catenin_signali	DLBC	-0.460099985
UPP2	Abnormal plasma cell	DLBC	-0.073173847
UPP2	Activated b cell	DLBC	0.216738659
UPP2	Activated cd4+ t cell	DLBC	0.06161316
UPP2	Activated t cell	DLBC	0.221727473
UPP2	Alanine, aspartate and glu	DLBC	-0.43880674
UPP2	Alcala_apoptosis	DLBC	-0.338907111
UPP2	Alpha-linolenic acid meta	DLBC	-0.207533879
UPP2	Amino sugar and nucleoti	DLBC	-0.195074375
UPP2	Ampk_pathway	DLBC	-0.253018581
UPP2	Angiogenesis	DLBC	-0.183237054
UPP2	Arachidonic acid metabol	DLBC	-0.191723075
UPP2	Arginine and proline metε	DLBC	-0.232982109
UPP2	Arginine biosynthesis	DLBC	-0.415383448
UPP2	Ascorbate and aldarate mε	DLBC	-0.352837511
UPP2	Atypical memory b cell	DLBC	0.156235151
UPP2	Axl+siglec6+ dendritic ce	DLBC	0.130566243
UPP2	B cell	DLBC	0.012387797
UPP2	B1 cell	DLBC	0.216406765
UPP2	Basal cell	DLBC	-0.108437633
UPP2	Beta-alanine metabolism	DLBC	-0.209628085
UPP2	Biosynthesis of unsaturate	DLBC	-0.374867566
UPP2	Biotin metabolism	DLBC	-0.202741676
UPP2	Butanoate metabolism	DLBC	-0.279961102
UPP2	Caffeine metabolism	DLBC	0.048816772
UPP2	Cancer stem cell	DLBC	0.049239812
UPP2	Cancer stem-like cell	DLBC	-0.015450495
UPP2	Cd4+ cytotoxic t cell	DLBC	0.058138739
UPP2	Cd4+ memory t cell	DLBC	0.26352061
UPP2	Cd4+ regulatory t cell	DLBC	0.072803125
UPP2	Cd4+ t helper cell	DLBC	0.197185148
UPP2	Cd4+cd25+ regulatory t c	DLBC	0.105581013
UPP2	Cd8+ cytotoxic t cell	DLBC	0.088776758
UPP2	Cd8+ regulatory t cell	DLBC	0.085357742
UPP2	Cell_cycle	DLBC	-0.076186907
UPP2	Chandran_metastasis_top ⁵	DLBC	0.038139112
UPP2	Citrate cycle (tca cycle)	DLBC	-0.409385419
UPP2	Cysteine and methionine r	DLBC	-0.288818583
UPP2	Cytokine induced killer cε	DLBC	0.163760995

UPP2	D-arginine and d-ornithin	DLBC	0.045277191
UPP2	D-glutamine and d-glutan	DLBC	-0.0165963
UPP2	Dendritic cell	DLBC	0.380599379
UPP2	Dna_repair	DLBC	-0.319913214
UPP2	Dna_replication	DLBC	-0.19381206
UPP2	Double-negative memory	DLBC	0.142886713
UPP2	Drug metabolism - cytoch	DLBC	-0.208557157
UPP2	Drug metabolism - other	DLBC	-0.338117271
UPP2	E2f_targets	DLBC	-0.118798878
UPP2	Ecm_receptor_interaction	DLBC	-0.139589004
UPP2	Effector cd4+ memory t	DLBC	0.153150148
UPP2	Effector cd8+ memory t	DLBC	0.096616142
UPP2	Effector memory t cell	DLBC	0.263754191
UPP2	Effector regulatory t (treg	DLBC	-0.009565944
UPP2	Elvidge_hif1a_targets_up	DLBC	0.082681607
UPP2	Endothelial cell	DLBC	-0.044665794
UPP2	Eosinophil	DLBC	0.192895084
UPP2	Ether lipid metabolism	DLBC	0.058621537
UPP2	Exhausted cd4+ t cell	DLBC	0.254465817
UPP2	Exhausted cd8+ t cell	DLBC	0.166144461
UPP2	Exhausted t cell	DLBC	0.153182458
UPP2	Fat cell (adipocyte)	DLBC	-0.160812546
UPP2	Fatty acid biosynthesis	DLBC	-0.098636541
UPP2	Fatty acid degradation	DLBC	-0.286707632
UPP2	Fatty acid elongation	DLBC	-0.491386115
UPP2	Fibroblast	DLBC	0.001129962
UPP2	Folate biosynthesis	DLBC	-0.189451024
UPP2	Follicular b cell	DLBC	0.367401229
UPP2	Follicular dendritic cell	DLBC	0.337338902
UPP2	Follicular helper (tfh) t ce	DLBC	0.235112816
UPP2	Follicular t cell	DLBC	0.066791607
UPP2	Foxp3+il-17+ t cell	DLBC	0.452109741
UPP2	Fructose and mannose me	DLBC	-0.424539947
UPP2	G2m_checkpoint	DLBC	-0.045523081
UPP2	Galactose metabolism	DLBC	-0.216919175
UPP2	Galie_tumor_stemness_ge	DLBC	-0.12730004
UPP2	Glutathione metabolism	DLBC	-0.284485264
UPP2	Glycerolipid metabolism	DLBC	-0.071647731
UPP2	Glycerophospholipid metæ	DLBC	-0.100517971
UPP2	Glycine, serine and threor	DLBC	-0.389763141
UPP2	Glycolysis / gluconeogene	DLBC	-0.246570057
UPP2	Glycosaminoglycan biosy	DLBC	-0.183001861
UPP2	Glycosaminoglycan biosy	DLBC	0.132573819

UPP2	Glycosaminoglycan biosyn	DLBC	-0.09486074
UPP2	Glycosaminoglycan degra	DLBC	-0.000599912
UPP2	Glycosphingolipid biosyn	DLBC	0.068707719
UPP2	Glycosphingolipid biosyn	DLBC	-0.046748344
UPP2	Glycosphingolipid biosyn	DLBC	-0.161941027
UPP2	Glycosylphosphatidylinos	DLBC	-0.091919711
UPP2	Glyoxylate and dicarboxy	DLBC	-0.349065055
UPP2	Granulocyte	DLBC	0.095102202
UPP2	Hedgehog_signaling	DLBC	-0.100297341
UPP2	Histidine metabolism	DLBC	-0.068239715
UPP2	Hypoxia	DLBC	-0.204251099
UPP2	Il-17ralpha t cell	DLBC	0.228188831
UPP2	Il2_stat5_signaling	DLBC	0.049712041
UPP2	Il6_jak_stat3_signaling	DLBC	0.143139932
UPP2	Immune_checkpoints_turr	DLBC	-0.085923996
UPP2	Immune_inhibition_cytok	DLBC	0.038091052
UPP2	Inositol phosphate metabo	DLBC	0.232959861
UPP2	Interleukin_6_signaling	DLBC	0.145164148
UPP2	Jaeger_metastasis_up	DLBC	-0.345506701
UPP2	Jain_nfkb_signaling	DLBC	-0.276546971
UPP2	Kras_signaling_up	DLBC	-0.105415497
UPP2	Linoleic acid metabolism	DLBC	-0.157403597
UPP2	Lipoic acid metabolism	DLBC	0.080133685
UPP2	Lysine degradation	DLBC	-0.149852129
UPP2	Lysosome	DLBC	0.106788848
UPP2	M1 macrophage	DLBC	0.024997103
UPP2	M2 macrophage	DLBC	-0.188983161
UPP2	Mannose type o-glycan bi	DLBC	-0.181450189
UPP2	Mapk_signaling_pathway	DLBC	0.034370003
UPP2	Mapk3_erk1_activation	DLBC	0.155506667
UPP2	Marginal zone b cell	DLBC	0.266249752
UPP2	Memory b cell	DLBC	0.39279857
UPP2	Mesenchymal cell	DLBC	-0.111901611
UPP2	Mesenchymal stem cell	DLBC	0.003788913
UPP2	Metabolism of xenobiotic	DLBC	-0.239158816
UPP2	Migrating cancer stem cel	DLBC	-0.098041454
UPP2	Mitotic_spindle	DLBC	-0.013328641
UPP2	Monocyte	DLBC	0.138254182
UPP2	Mtor_signaling_pathway	DLBC	0.120644897
UPP2	Mtorc1_signaling	DLBC	-0.275718805
UPP2	Mucin type o-glycan biosy	DLBC	0.15898153
UPP2	Myc_targets_v1	DLBC	-0.342179529
UPP2	Myeloid cell	DLBC	0.186826656

UPP2	N-glycan biosynthesis	DLBC	-0.105313933
UPP2	Naive b cell	DLBC	0.18994175
UPP2	Naive cd4+ t cell	DLBC	0.303589907
UPP2	Naive cd8+ t cell	DLBC	0.23319534
UPP2	Natural killer cell	DLBC	0.126279383
UPP2	Natural killer t (nkt) cell	DLBC	0.044225948
UPP2	Natural regulatory t (treg)	DLBC	0.173173984
UPP2	Neomycin, kanamycin and	DLBC	0.036370445
UPP2	Neutrophil	DLBC	0.041828223
UPP2	Nicotinate and nicotinami	DLBC	0.019800727
UPP2	Nitrogen metabolism	DLBC	-0.191790409
UPP2	Nod_like_receptor_signal	DLBC	0.121301381
UPP2	Notch_signaling	DLBC	-0.078521541
UPP2	One carbon pool by folate	DLBC	-0.27480669
UPP2	Other glycan degradation	DLBC	0.212648761
UPP2	Other types of o-glycan b	DLBC	-0.052196062
UPP2	Oxidative phosphorylatio	DLBC	-0.226346404
UPP2	P53_pathway	DLBC	-0.123318881
UPP2	P53_signaling_pathway	DLBC	-0.223011318
UPP2	Pantothenate and coa bios	DLBC	0.068972039
UPP2	Pentose and glucuronate i	DLBC	-0.347494444
UPP2	Pentose phosphate pathwa	DLBC	-0.207862082
UPP2	Pericyte	DLBC	-0.059188123
UPP2	Phenylalanine metabolism	DLBC	-0.346755276
UPP2	Phenylalanine, tyrosine ar	DLBC	-0.184386823
UPP2	Phosphonate and phosphir	DLBC	0.3411609
UPP2	Pi3k_akt_activation	DLBC	0.065344269
UPP2	Pi3k_akt_mtor_signaling	DLBC	-0.064775092
UPP2	Porphyrin and chlorophyl	DLBC	-0.445529082
UPP2	Primary bile acid biosynt	DLBC	0.1168253
UPP2	Propanoate metabolism	DLBC	-0.1584994
UPP2	Purine metabolism	DLBC	-0.312686358
UPP2	Pyrimidine metabolism	DLBC	-0.407404139
UPP2	Pyruvate metabolism	DLBC	-0.32784541
UPP2	Regulation_of_autophagy	DLBC	0.135161344
UPP2	Retinol metabolism	DLBC	-0.153430577
UPP2	Riboflavin metabolism	DLBC	0.036363427
UPP2	Schmahl_pdgf_signaling	DLBC	0.42341893
UPP2	Selenocompound metabol	DLBC	0.003538511
UPP2	Signaling_by_hippo	DLBC	-0.070576885
UPP2	Sphingolipid metabolism	DLBC	0.012022648
UPP2	Starch and sucrose metabo	DLBC	-0.161589648
UPP2	Steroid biosynthesis	DLBC	-0.199157494

UPP2	Steroid hormone biosynth	DLBC	-0.169413358
UPP2	Sulfur metabolism	DLBC	-0.119216457
UPP2	Synthesis and degradation	DLBC	-0.399673983
UPP2	T helper cell	DLBC	0.175436521
UPP2	T helper1 (th1) cell	DLBC	0.20349855
UPP2	T helper17 (th17) cell	DLBC	0.229087311
UPP2	T helper2 (th2) cell	DLBC	0.20679006
UPP2	T helper9 (th9) cell	DLBC	0.114395099
UPP2	Taurine and hypotaurine r	DLBC	0.134444558
UPP2	Terpenoid backbone biosy	DLBC	-0.355335962
UPP2	Tgf_beta_signaling_pathw	DLBC	-0.130515015
UPP2	Thiamine metabolism	DLBC	-0.277629881
UPP2	Tnfa_signaling_via_nfkb	DLBC	0.060226005
UPP2	Tryptophan metabolism	DLBC	-0.227025254
UPP2	Tumor endothelial cell	DLBC	-0.173981745
UPP2	Tyrosine metabolism	DLBC	-0.369473732
UPP2	Ubiquinone and other terq	DLBC	-0.189179836
UPP2	Valine, leucine and isoleu	DLBC	-0.180515845
UPP2	Valine, leucine and isoleu	DLBC	-0.319012873
UPP2	Vascular endothelial cell	DLBC	-0.120793506
UPP2	Vascular smooth muscle c	DLBC	0.102180346
UPP2	Vegf_signaling_pathway	DLBC	-0.004802373
UPP2	Vitamin b6 metabolism	DLBC	-0.253361378
UPP2	Willert_wnt_signaling	DLBC	-0.286587887
UPP2	Wnt_beta_catenin_signali	DLBC	0.051398496
CDA	Abnormal plasma cell	ESCA	-0.086610379
CDA	Activated b cell	ESCA	-0.078611461
CDA	Activated cd4+ t cell	ESCA	-0.097004008
CDA	Activated t cell	ESCA	-0.117422144
CDA	Alanine, aspartate and glu	ESCA	-0.128968802
CDA	Alcala_apoptosis	ESCA	0.016861187
CDA	Alpha-linolenic acid meta	ESCA	0.282684548
CDA	Amino sugar and nucleoti	ESCA	0.125324719
CDA	Ampk_pathway	ESCA	-0.036504574
CDA	Angiogenesis	ESCA	0.08341796
CDA	Arachidonic acid metabol:	ESCA	0.287012221
CDA	Arginine and proline metæ	ESCA	0.081876099
CDA	Arginine biosynthesis	ESCA	0.152689343
CDA	Ascorbate and aldarate mc	ESCA	-0.195818722
CDA	Atypical memory b cell	ESCA	0.008648234
CDA	Axl+siglec6+ dendritic ce	ESCA	0.019702617
CDA	B cell	ESCA	-0.163091109
CDA	B1 cell	ESCA	-0.118811552

CDA	Basal cell	ESCA	0.356788899
CDA	Beta-alanine metabolism	ESCA	0.145184823
CDA	Biosynthesis of unsaturate	ESCA	0.119229598
CDA	Biotin metabolism	ESCA	-0.107145383
CDA	Butanoate metabolism	ESCA	-0.087094359
CDA	Caffeine metabolism	ESCA	0.138485349
CDA	Cancer stem cell	ESCA	0.068615021
CDA	Cancer stem-like cell	ESCA	-0.184553473
CDA	Cd4+ cytotoxic t cell	ESCA	0.102801208
CDA	Cd4+ memory t cell	ESCA	-0.055363467
CDA	Cd4+ regulatory t cell	ESCA	-0.10791801
CDA	Cd4+ t helper cell	ESCA	-0.064305283
CDA	Cd4+cd25+ regulatory t c	ESCA	-0.072584269
CDA	Cd8+ cytotoxic t cell	ESCA	-0.009479049
CDA	Cd8+ regulatory t cell	ESCA	-0.086278991
CDA	Cell_cycle	ESCA	-0.079324915
CDA	Chandran_metastasis_top5	ESCA	-0.269027607
CDA	Citrate cycle (tca cycle)	ESCA	-0.014033531
CDA	Cysteine and methionine r	ESCA	-0.135689094
CDA	Cytokine induced killer c	ESCA	-0.096000633
CDA	D-arginine and d-ornithin	ESCA	0.062263809
CDA	D-glutamine and d-glutan	ESCA	0.106328041
CDA	Dendritic cell	ESCA	-0.02645804
CDA	Dna_repair	ESCA	0.00341815
CDA	Dna_replication	ESCA	-0.180781655
CDA	Double-negative memory	ESCA	-0.050055815
CDA	Drug metabolism - cytoch	ESCA	-0.053714786
CDA	Drug metabolism - other	ESCA	0.067071168
CDA	E2f_targets	ESCA	-0.174513096
CDA	Ecm_receptor_interaction	ESCA	0.050634972
CDA	Effector cd4+ memory t (	ESCA	-0.069425532
CDA	Effector cd8+ memory t (	ESCA	0.110374921
CDA	Effector memory t cell	ESCA	-0.070696023
CDA	Effector regulatory t (treg	ESCA	-0.112143289
CDA	Elvidge_hif1a_targets_up	ESCA	-0.057763126
CDA	Endothelial cell	ESCA	-0.099458183
CDA	Eosinophil	ESCA	0.031579264
CDA	Ether lipid metabolism	ESCA	0.230004616
CDA	Exhausted cd4+ t cell	ESCA	0.003939519
CDA	Exhausted cd8+ t cell	ESCA	0.045914506
CDA	Exhausted t cell	ESCA	-0.062883156
CDA	Fat cell (adipocyte)	ESCA	0.044829182
CDA	Fatty acid biosynthesis	ESCA	0.058206554

CDA	Fatty acid degradation	ESCA	-0.085577466
CDA	Fatty acid elongation	ESCA	0.274209521
CDA	Fibroblast	ESCA	0.031651484
CDA	Folate biosynthesis	ESCA	-0.035236462
CDA	Follicular b cell	ESCA	-0.039975411
CDA	Follicular dendritic cell	ESCA	0.020753818
CDA	Follicular helper (tfh) t ce	ESCA	0.020011525
CDA	Follicular t cell	ESCA	-0.000325213
CDA	Foxp3+il-17+ t cell	ESCA	-0.145376085
CDA	Fructose and mannose me	ESCA	0.105109102
CDA	G2m_checkpoint	ESCA	-0.159289577
CDA	Galactose metabolism	ESCA	0.077523508
CDA	Galie_tumor_stemness_ge	ESCA	0.223277273
CDA	Glutathione metabolism	ESCA	-0.029970153
CDA	Glycerolipid metabolism	ESCA	0.035124759
CDA	Glycerophospholipid metæ	ESCA	0.148118814
CDA	Glycine, serine and threor	ESCA	-0.012028849
CDA	Glycolysis / gluconeogene	ESCA	0.146773648
CDA	Glycosaminoglycan biosy	ESCA	0.02494584
CDA	Glycosaminoglycan biosy	ESCA	-0.027331556
CDA	Glycosaminoglycan biosy	ESCA	-0.086896912
CDA	Glycosaminoglycan degra	ESCA	-0.160711024
CDA	Glycosphingolipid biosyn	ESCA	-0.116099186
CDA	Glycosphingolipid biosyn	ESCA	-0.029669268
CDA	Glycosphingolipid biosyn	ESCA	0.087633781
CDA	Glycosylphosphatidylinos	ESCA	-0.195914548
CDA	Glyoxylate and dicarboxy	ESCA	-0.219866816
CDA	Granulocyte	ESCA	-0.068514382
CDA	Hedgehog_signaling	ESCA	0.090144392
CDA	Histidine metabolism	ESCA	0.138243721
CDA	Hypoxia	ESCA	0.362843461
CDA	Il-17ralpha t cell	ESCA	-0.037555845
CDA	Il2_stat5_signaling	ESCA	0.167596824
CDA	Il6_jak_stat3_signaling	ESCA	0.165539423
CDA	Immune_checkpoints_tur	ESCA	0.05507663
CDA	Immune_inhibition_cytok	ESCA	0.227243897
CDA	Inositol phosphate metabo	ESCA	-0.023025951
CDA	Interleukin_6_signaling	ESCA	0.016511685
CDA	Jaeger_metastasis_up	ESCA	-0.295523069
CDA	Jain_nfkb_signaling	ESCA	-0.068142113
CDA	Kras_signaling_up	ESCA	0.187386478
CDA	Linoleic acid metabolism	ESCA	0.22423633
CDA	Lipoic acid metabolism	ESCA	-0.262925013

CDA	Lysine degradation	ESCA	-0.229622706
CDA	Lysosome	ESCA	0.041782023
CDA	M1 macrophage	ESCA	0.008391218
CDA	M2 macrophage	ESCA	0.055548594
CDA	Mannose type o-glycan bi	ESCA	-0.257515254
CDA	Mapk_signaling_pathway	ESCA	0.185963261
CDA	Mapk3_erk1_activation	ESCA	0.155494919
CDA	Marginal zone b cell	ESCA	-0.033203573
CDA	Memory b cell	ESCA	-0.153960679
CDA	Mesenchymal cell	ESCA	0.032717436
CDA	Mesenchymal stem cell	ESCA	-0.057086487
CDA	Metabolism of xenobiotic	ESCA	-0.066017315
CDA	Migrating cancer stem cel	ESCA	0.293460579
CDA	Mitotic_spindle	ESCA	0.075512679
CDA	Monocyte	ESCA	0.222760499
CDA	Mtor_signaling_pathway	ESCA	0.164993845
CDA	Mtorc1_signaling	ESCA	0.069319337
CDA	Mucin type o-glycan biosy	ESCA	0.071837031
CDA	Myc_targets_v1	ESCA	-0.003814705
CDA	Myeloid cell	ESCA	-0.054556736
CDA	N-glycan biosynthesis	ESCA	-0.248885521
CDA	Naive b cell	ESCA	-0.025791765
CDA	Naive cd4+ t cell	ESCA	0.021566723
CDA	Naive cd8+ t cell	ESCA	-0.033387708
CDA	Natural killer cell	ESCA	-0.038732242
CDA	Natural killer t (nkt) cell	ESCA	-0.082623867
CDA	Natural regulatory t (treg)	ESCA	-0.033515854
CDA	Neomycin, kanamycin and	ESCA	0.250646116
CDA	Neutrophil	ESCA	0.323449364
CDA	Nicotinate and nicotinami	ESCA	0.110668935
CDA	Nitrogen metabolism	ESCA	0.090275112
CDA	Nod_like_receptor_signal	ESCA	0.249452927
CDA	Notch_signaling	ESCA	0.202334901
CDA	One carbon pool by folate	ESCA	-0.256392783
CDA	Other glycan degradation	ESCA	-0.190530812
CDA	Other types of o-glycan b	ESCA	-0.148090926
CDA	Oxidative phosphorylatio	ESCA	0.086886025
CDA	P53_pathway	ESCA	0.448102976
CDA	P53_signaling_pathway	ESCA	0.146336696
CDA	Pantothenate and coa bios	ESCA	0.072441301
CDA	Pentose and glucuronate i	ESCA	-0.18011303
CDA	Pentose phosphate pathwa	ESCA	0.069701697
CDA	Pericyte	ESCA	-0.106689739

CDA	Phenylalanine metabolism ESCA	0.164459971
CDA	Phenylalanine, tyrosine ar ESCA	-0.090040057
CDA	Phosphonate and phosphir ESCA	-0.210238436
CDA	Pi3k_akt_activation ESCA	-0.081337537
CDA	Pi3k_akt_mtor_signaling ESCA	0.265371179
CDA	Porphyrin and chlorophyl ESCA	-0.13681464
CDA	Primary bile acid biosynt ESCA	0.101356497
CDA	Propanoate metabolism ESCA	-0.182224726
CDA	Purine metabolism ESCA	-0.100353356
CDA	Pyrimidine metabolism ESCA	0.01965158
CDA	Pyruvate metabolism ESCA	-0.062676207
CDA	Regulation_of_autophagy ESCA	-0.007189891
CDA	Retinol metabolism ESCA	0.058893762
CDA	Riboflavin metabolism ESCA	-0.14388313
CDA	Schmahl_pdgf_signaling ESCA	0.2431041
CDA	Selenocompound metabol ESCA	-0.415355017
CDA	Signaling_by_hippo ESCA	0.140754768
CDA	Sphingolipid metabolism ESCA	0.126868555
CDA	Starch and sucrose metabo ESCA	0.202272933
CDA	Steroid biosynthesis ESCA	0.164124672
CDA	Steroid hormone biosynth ESCA	0.041206909
CDA	Sulfur metabolism ESCA	0.122157935
CDA	Synthesis and degradation ESCA	-0.000755004
CDA	T helper cell ESCA	-0.061402624
CDA	T helper1 (th1) cell ESCA	0.039958654
CDA	T helper17 (th17) cell ESCA	0.087937036
CDA	T helper2 (th2) cell ESCA	-0.034055292
CDA	T helper9 (th9) cell ESCA	-0.057054663
CDA	Taurine and hypotaurine r ESCA	-0.00866616
CDA	Terpenoid backbone biosy ESCA	0.262181693
CDA	Tgf_beta_signaling_pathw ESCA	0.127004346
CDA	Thiamine metabolism ESCA	0.01206357
CDA	Tnfa_signaling_via_nfkb ESCA	0.2520773
CDA	Tryptophan metabolism ESCA	-0.233539598
CDA	Tumor endothelial cell ESCA	0.357438669
CDA	Tyrosine metabolism ESCA	0.09477702
CDA	Ubiquinone and other ter ESCA	-0.162058917
CDA	Valine, leucine and isoleu ESCA	0.027042122
CDA	Valine, leucine and isoleu ESCA	-0.167797376
CDA	Vascular endothelial cell ESCA	-0.094022699
CDA	Vascular smooth muscle c ESCA	-0.036390476
CDA	Vegf_signaling_pathway ESCA	0.344849635
CDA	Vitamin b6 metabolism ESCA	-0.062645643

CDA	Willert_wnt_signaling	ESCA	-0.021705538
CDA	Wnt_beta_catenin_signali	ESCA	0.112199188
UCK1	Abnormal plasma cell	ESCA	0.15275427
UCK1	Activated b cell	ESCA	0.0318368
UCK1	Activated cd4+ t cell	ESCA	0.008497376
UCK1	Activated t cell	ESCA	0.047886817
UCK1	Alanine, aspartate and glu	ESCA	0.073479322
UCK1	Alcala_apoptosis	ESCA	0.20766314
UCK1	Alpha-linolenic acid meta	ESCA	-0.177117235
UCK1	Amino sugar and nucleoti	ESCA	-0.060348042
UCK1	Ampk_pathway	ESCA	0.028735792
UCK1	Angiogenesis	ESCA	-0.10154291
UCK1	Arachidonic acid metabol	ESCA	-0.08413856
UCK1	Arginine and proline metæ	ESCA	0.106572276
UCK1	Arginine biosynthesis	ESCA	-0.148730608
UCK1	Ascorbate and aldarate me	ESCA	-0.045471535
UCK1	Atypical memory b cell	ESCA	-0.138982627
UCK1	Axl+siglec6+ dendritic ce	ESCA	-0.067936424
UCK1	B cell	ESCA	-0.127531933
UCK1	B1 cell	ESCA	-0.036331095
UCK1	Basal cell	ESCA	0.137573539
UCK1	Beta-alanine metabolism	ESCA	-0.092325515
UCK1	Biosynthesis of unsaturate	ESCA	0.040938411
UCK1	Biotin metabolism	ESCA	-0.017580197
UCK1	Butanoate metabolism	ESCA	-0.05704146
UCK1	Caffeine metabolism	ESCA	-0.323372953
UCK1	Cancer stem cell	ESCA	-0.185777063
UCK1	Cancer stem-like cell	ESCA	-0.260924963
UCK1	Cd4+ cytotoxic t cell	ESCA	0.094588921
UCK1	Cd4+ memory t cell	ESCA	-0.027018844
UCK1	Cd4+ regulatory t cell	ESCA	0.096266119
UCK1	Cd4+ t helper cell	ESCA	0.021436371
UCK1	Cd4+cd25+ regulatory t c	ESCA	0.029421999
UCK1	Cd8+ cytotoxic t cell	ESCA	0.103554754
UCK1	Cd8+ regulatory t cell	ESCA	0.067037931
UCK1	Cell_cycle	ESCA	0.196524578
UCK1	Chandran_metastasis_topç	ESCA	-0.008360589
UCK1	Citrate cycle (tca cycle)	ESCA	0.023847995
UCK1	Cysteine and methionine r	ESCA	0.117640929
UCK1	Cytokine induced killer cæ	ESCA	0.080168042
UCK1	D-arginine and d-ornithin	ESCA	-0.027383425
UCK1	D-glutamine and d-glutan	ESCA	-0.037184767
UCK1	Dendritic cell	ESCA	-0.045126606

UCK1	Dna_repair	ESCA	0.289947405
UCK1	Dna_replication	ESCA	0.268024625
UCK1	Double-negative memory	ESCA	-0.039197543
UCK1	Drug metabolism - cytoch	ESCA	-0.087130707
UCK1	Drug metabolism - other	ESCA	0.10052242
UCK1	E2f_targets	ESCA	0.174212207
UCK1	Ecm_receptor_interaction	ESCA	-0.084826815
UCK1	Effector cd4+ memory t	(ESCA	-0.057803364
UCK1	Effector cd8+ memory t	(ESCA	0.032703348
UCK1	Effector memory t cell	ESCA	0.004702866
UCK1	Effector regulatory t (treg	ESCA	0.011824918
UCK1	Elvidge_hif1a_targets_up	ESCA	-0.094577553
UCK1	Endothelial cell	ESCA	-0.022115422
UCK1	Eosinophil	ESCA	-0.05447793
UCK1	Ether lipid metabolism	ESCA	-0.289378228
UCK1	Exhausted cd4+ t cell	ESCA	-0.063485997
UCK1	Exhausted cd8+ t cell	ESCA	-0.004630947
UCK1	Exhausted t cell	ESCA	0.053366603
UCK1	Fat cell (adipocyte)	ESCA	0.054472358
UCK1	Fatty acid biosynthesis	ESCA	-0.207059714
UCK1	Fatty acid degradation	ESCA	-0.100163446
UCK1	Fatty acid elongation	ESCA	0.05654315
UCK1	Fibroblast	ESCA	0.042785389
UCK1	Folate biosynthesis	ESCA	0.134237055
UCK1	Follicular b cell	ESCA	-0.0351837
UCK1	Follicular dendritic cell	ESCA	-0.110201266
UCK1	Follicular helper (tfh) t ce	ESCA	0.015885546
UCK1	Follicular t cell	ESCA	0.062423469
UCK1	Foxp3+il-17+ t cell	ESCA	0.040652648
UCK1	Fructose and mannose me	ESCA	-0.116106256
UCK1	G2m_checkpoint	ESCA	0.095934367
UCK1	Galactose metabolism	ESCA	-0.009888419
UCK1	Galie_tumor_stemness_ge	ESCA	0.062522629
UCK1	Glutathione metabolism	ESCA	0.157416705
UCK1	Glycerolipid metabolism	ESCA	-0.148838606
UCK1	Glycerophospholipid met&	ESCA	-0.194974431
UCK1	Glycine, serine and threor	ESCA	0.268804258
UCK1	Glycolysis / gluconeogene	ESCA	-0.026813614
UCK1	Glycosaminoglycan biosy	ESCA	0.156903465
UCK1	Glycosaminoglycan biosy	ESCA	0.084991497
UCK1	Glycosaminoglycan biosy	ESCA	-0.04783501
UCK1	Glycosaminoglycan degra	ESCA	-0.18782309
UCK1	Glycosphingolipid biosyn	ESCA	0.076609374

UCK1	Glycosphingolipid biosyn	ESCA	-0.018143055
UCK1	Glycosphingolipid biosyn	ESCA	-0.130421076
UCK1	Glycosylphosphatidylinos	ESCA	0.227697002
UCK1	Glyoxylate and dicarboxy	ESCA	0.134877345
UCK1	Granulocyte	ESCA	-0.076234616
UCK1	Hedgehog_signaling	ESCA	0.004913481
UCK1	Histidine metabolism	ESCA	-0.094894622
UCK1	Hypoxia	ESCA	0.028319918
UCK1	Il-17alpha t cell	ESCA	0.023759475
UCK1	Il2_stat5_signaling	ESCA	-0.078313268
UCK1	Il6_jak_stat3_signaling	ESCA	-0.125562641
UCK1	Immune_checkpoints_tur	ESCA	-0.052962842
UCK1	Immune_inhibition_cytok	ESCA	-0.047576304
UCK1	Inositol phosphate metabo	ESCA	-0.219108135
UCK1	Interleukin_6_signaling	ESCA	-0.224553699
UCK1	Jaeger_metastasis_up	ESCA	0.208734663
UCK1	Jain_nfkb_signaling	ESCA	0.07943127
UCK1	Kras_signaling_up	ESCA	-0.207112097
UCK1	Linoleic acid metabolism	ESCA	-0.216693735
UCK1	Lipoic acid metabolism	ESCA	-0.006495545
UCK1	Lysine degradation	ESCA	0.080490063
UCK1	Lysosome	ESCA	-0.176724809
UCK1	M1 macrophage	ESCA	0.009978654
UCK1	M2 macrophage	ESCA	-0.016336781
UCK1	Mannose type o-glycan bi	ESCA	0.234665799
UCK1	Mapk_signaling_pathway	ESCA	-0.152214599
UCK1	Mapk3_erk1_activation	ESCA	-0.223422252
UCK1	Marginal zone b cell	ESCA	-0.033584603
UCK1	Memory b cell	ESCA	0.006573999
UCK1	Mesenchymal cell	ESCA	0.106613562
UCK1	Mesenchymal stem cell	ESCA	-0.087124659
UCK1	Metabolism of xenobiotic	ESCA	-0.007538361
UCK1	Migrating cancer stem cel	ESCA	-0.130543115
UCK1	Mitotic_spindle	ESCA	-0.107209569
UCK1	Monocyte	ESCA	-0.0887994
UCK1	Mtor_signaling_pathway	ESCA	-0.044554041
UCK1	Mtorc1_signaling	ESCA	0.102537226
UCK1	Mucin type o-glycan biosy	ESCA	-0.330143351
UCK1	Myc_targets_v1	ESCA	0.152054095
UCK1	Myeloid cell	ESCA	-0.07135813
UCK1	N-glycan biosynthesis	ESCA	0.117163876
UCK1	Naive b cell	ESCA	-0.025510766
UCK1	Naive cd4+ t cell	ESCA	-0.066507277

UCK1	Naive cd8+ t cell	ESCA	-0.04262738
UCK1	Natural killer cell	ESCA	0.003523995
UCK1	Natural killer t (nkt) cell	ESCA	0.076778206
UCK1	Natural regulatory t (treg)	ESCA	0.009039364
UCK1	Neomycin, kanamycin and	ESCA	-0.037833428
UCK1	Neutrophil	ESCA	-0.230019078
UCK1	Nicotinate and nicotinamide	ESCA	-0.138749814
UCK1	Nitrogen metabolism	ESCA	-0.259587765
UCK1	Nod_like_receptor_signaling	ESCA	-0.164469526
UCK1	Notch_signaling	ESCA	-0.055440308
UCK1	One carbon pool by folate	ESCA	0.10175528
UCK1	Other glycan degradation	ESCA	-0.105053002
UCK1	Other types of o-glycan biosynthesis	ESCA	0.178655999
UCK1	Oxidative phosphorylation	ESCA	0.214658349
UCK1	P53_pathway	ESCA	0.038036351
UCK1	P53_signaling_pathway	ESCA	-0.04658623
UCK1	Pantothenate and coenzyme biosynthesis	ESCA	-0.159919523
UCK1	Pentose and glucuronate interconversions	ESCA	-0.039876118
UCK1	Pentose phosphate pathway	ESCA	0.022486442
UCK1	Pericyte	ESCA	-0.032679943
UCK1	Phenylalanine metabolism	ESCA	0.122145093
UCK1	Phenylalanine, tyrosine and tryptophan	ESCA	0.118826798
UCK1	Phosphonate and phosphite metabolism	ESCA	0.110878824
UCK1	Pi3k_akt_activation	ESCA	0.004812661
UCK1	Pi3k_akt_mtor_signaling	ESCA	0.023904927
UCK1	Porphyrin and chlorophyll biosynthesis	ESCA	0.128487717
UCK1	Primary bile acid biosynthesis	ESCA	-0.177111076
UCK1	Propanoate metabolism	ESCA	-0.141680363
UCK1	Purine metabolism	ESCA	0.178492905
UCK1	Pyrimidine metabolism	ESCA	0.216291715
UCK1	Pyruvate metabolism	ESCA	0.074026695
UCK1	Regulation_of_autophagy	ESCA	0.004101424
UCK1	Retinol metabolism	ESCA	-0.140832478
UCK1	Riboflavin metabolism	ESCA	0.11089667
UCK1	Schmahl_pdgf_signaling	ESCA	-0.139041361
UCK1	Selenocompound metabolism	ESCA	0.014825468
UCK1	Signaling_by_hippo	ESCA	-0.095193079
UCK1	Sphingolipid metabolism	ESCA	-0.260100446
UCK1	Starch and sucrose metabolism	ESCA	-0.155841717
UCK1	Steroid biosynthesis	ESCA	0.107112465
UCK1	Steroid hormone biosynthesis	ESCA	-0.166404037
UCK1	Sulfur metabolism	ESCA	-0.17160072
UCK1	Synthesis and degradation	ESCA	-0.047583905

UCK1	T helper cell	ESCA	-0.067175022
UCK1	T helper1 (th1) cell	ESCA	-0.043075366
UCK1	T helper17 (th17) cell	ESCA	-0.126132338
UCK1	T helper2 (th2) cell	ESCA	-0.114962012
UCK1	T helper9 (th9) cell	ESCA	0.002258575
UCK1	Taurine and hypotaurine r	ESCA	-0.062736206
UCK1	Terpenoid backbone biosy	ESCA	-0.099292984
UCK1	Tgf_beta_signaling_pathw	ESCA	-0.135126071
UCK1	Thiamine metabolism	ESCA	-0.065143053
UCK1	Tnfa_signaling_via_nfkb	ESCA	-0.125196793
UCK1	Tryptophan metabolism	ESCA	0.136159398
UCK1	Tumor endothelial cell	ESCA	0.101263069
UCK1	Tyrosine metabolism	ESCA	0.090516317
UCK1	Ubiquinone and other terp	ESCA	0.139974542
UCK1	Valine, leucine and isoleu	ESCA	0.089766977
UCK1	Valine, leucine and isoleu	ESCA	0.010804489
UCK1	Vascular endothelial cell	ESCA	-0.123140005
UCK1	Vascular smooth muscle c	ESCA	0.089461767
UCK1	Vegf_signaling_pathway	ESCA	-0.215242952
UCK1	Vitamin b6 metabolism	ESCA	0.121067113
UCK1	Willert_wnt_signaling	ESCA	-0.005016066
UCK1	Wnt_beta_catenin_signali	ESCA	0.160844499
UCK2	Abnormal plasma cell	ESCA	-0.187340806
UCK2	Activated b cell	ESCA	-0.267320988
UCK2	Activated cd4+ t cell	ESCA	-0.342790375
UCK2	Activated t cell	ESCA	-0.337670766
UCK2	Alanine, aspartate and glu	ESCA	0.284311465
UCK2	Alcala_apoptosis	ESCA	0.305804168
UCK2	Alpha-linolenic acid meta	ESCA	-0.106030129
UCK2	Amino sugar and nucleoti	ESCA	0.210011144
UCK2	Ampk_pathway	ESCA	0.214964269
UCK2	Angiogenesis	ESCA	-0.196263538
UCK2	Arachidonic acid metabol	ESCA	-0.205078696
UCK2	Arginine and proline metæ	ESCA	0.288827432
UCK2	Arginine biosynthesis	ESCA	0.069597622
UCK2	Ascorbate and aldarate mε	ESCA	0.111704156
UCK2	Atypical memory b cell	ESCA	-0.284820523
UCK2	Axl+siglec6+ dendritic ce	ESCA	-0.479187
UCK2	B cell	ESCA	-0.361760677
UCK2	B1 cell	ESCA	-0.229780015
UCK2	Basal cell	ESCA	0.010490814
UCK2	Beta-alanine metabolism	ESCA	-0.012836366
UCK2	Biosynthesis of unsaturate	ESCA	0.273672348

UCK2	Biotin metabolism	ESCA	0.133945896
UCK2	Butanoate metabolism	ESCA	0.14354873
UCK2	Caffeine metabolism	ESCA	-0.066306535
UCK2	Cancer stem cell	ESCA	-0.379863371
UCK2	Cancer stem-like cell	ESCA	-0.126715529
UCK2	Cd4+ cytotoxic t cell	ESCA	-0.390842011
UCK2	Cd4+ memory t cell	ESCA	-0.384288465
UCK2	Cd4+ regulatory t cell	ESCA	-0.328446332
UCK2	Cd4+ t helper cell	ESCA	-0.411245287
UCK2	Cd4+cd25+ regulatory t c	ESCA	-0.392610545
UCK2	Cd8+ cytotoxic t cell	ESCA	-0.278615004
UCK2	Cd8+ regulatory t cell	ESCA	-0.309215551
UCK2	Cell_cycle	ESCA	0.419566399
UCK2	Chandran_metastasis_top	ESCA	0.222254519
UCK2	Citrate cycle (tca cycle)	ESCA	0.313238349
UCK2	Cysteine and methionine r	ESCA	0.485159988
UCK2	Cytokine induced killer c	ESCA	-0.389170541
UCK2	D-arginine and d-ornithin	ESCA	0.099722459
UCK2	D-glutamine and d-glutan	ESCA	-0.024415648
UCK2	Dendritic cell	ESCA	-0.38330982
UCK2	Dna_repair	ESCA	0.527664682
UCK2	Dna_replication	ESCA	0.488580326
UCK2	Double-negative memory	ESCA	-0.319779338
UCK2	Drug metabolism - cytoch	ESCA	-0.077622989
UCK2	Drug metabolism - other	ESCA	0.372137072
UCK2	E2f_targets	ESCA	0.501523865
UCK2	Ecm_receptor_interaction	ESCA	-0.270634432
UCK2	Effector cd4+ memory t	ESCA	-0.434607179
UCK2	Effector cd8+ memory t	ESCA	-0.410780056
UCK2	Effector memory t cell	ESCA	-0.403478188
UCK2	Effector regulatory t (treg	ESCA	-0.344793743
UCK2	Elvidge_hif1a_targets_up	ESCA	0.308349393
UCK2	Endothelial cell	ESCA	-0.296912775
UCK2	Eosinophil	ESCA	-0.396788557
UCK2	Ether lipid metabolism	ESCA	-0.26850193
UCK2	Exhausted cd4+ t cell	ESCA	-0.477859051
UCK2	Exhausted cd8+ t cell	ESCA	-0.450895422
UCK2	Exhausted t cell	ESCA	-0.337966639
UCK2	Fat cell (adipocyte)	ESCA	-0.042163142
UCK2	Fatty acid biosynthesis	ESCA	-0.010631935
UCK2	Fatty acid degradation	ESCA	0.068759428
UCK2	Fatty acid elongation	ESCA	0.366944314
UCK2	Fibroblast	ESCA	-0.320595844

UCK2	Folate biosynthesis	ESCA	0.264952897
UCK2	Follicular b cell	ESCA	-0.401804825
UCK2	Follicular dendritic cell	ESCA	-0.306781566
UCK2	Follicular helper (tfh) t ce	ESCA	-0.367913328
UCK2	Follicular t cell	ESCA	-0.175570291
UCK2	Foxp3+il-17+ t cell	ESCA	-0.256898837
UCK2	Fructose and mannose me	ESCA	0.189710215
UCK2	G2m_checkpoint	ESCA	0.453729094
UCK2	Galactose metabolism	ESCA	0.249953663
UCK2	Galie_tumor_stemness_ge	ESCA	-0.295382058
UCK2	Glutathione metabolism	ESCA	0.378184001
UCK2	Glycerolipid metabolism	ESCA	0.019254269
UCK2	Glycerophospholipid metæ	ESCA	-0.073871932
UCK2	Glycine, serine and threor	ESCA	0.184186283
UCK2	Glycolysis / gluconeogene	ESCA	0.231439204
UCK2	Glycosaminoglycan biosy1	ESCA	-0.009021391
UCK2	Glycosaminoglycan biosy1	ESCA	0.091785196
UCK2	Glycosaminoglycan biosy1	ESCA	0.048302632
UCK2	Glycosaminoglycan degra	ESCA	-0.142883062
UCK2	Glycosphingolipid biosyn1	ESCA	-0.185840929
UCK2	Glycosphingolipid biosyn1	ESCA	-0.105985182
UCK2	Glycosphingolipid biosyn1	ESCA	-0.03956003
UCK2	Glycosylphosphatidylinos	ESCA	0.324647364
UCK2	Glyoxylate and dicarboxy	ESCA	0.322392121
UCK2	Granulocyte	ESCA	-0.326914311
UCK2	Hedgehog_signaling	ESCA	-0.312537442
UCK2	Histidine metabolism	ESCA	-0.099435636
UCK2	Hypoxia	ESCA	-0.079745733
UCK2	Il-17ralpha t cell	ESCA	-0.396675054
UCK2	Il2_stat5_signaling	ESCA	-0.379700277
UCK2	Il6_jak_stat3_signaling	ESCA	-0.389844778
UCK2	Immune_checkpoints_turr	ESCA	-0.260227151
UCK2	Immune_inhibition_cytok	ESCA	-0.317821608
UCK2	Inositol phosphate metabo	ESCA	-0.367758938
UCK2	Interleukin_6_signaling	ESCA	-0.312279836
UCK2	Jaeger_metastasis_up	ESCA	0.237855919
UCK2	Jain_nfkb_signaling	ESCA	0.520823032
UCK2	Kras_signaling_up	ESCA	-0.452338382
UCK2	Linoleic acid metabolism	ESCA	-0.150938167
UCK2	Lipoic acid metabolism	ESCA	0.214121323
UCK2	Lysine degradation	ESCA	0.321727663
UCK2	Lysosome	ESCA	-0.200876764
UCK2	M1 macrophage	ESCA	-0.366660842

UCK2	M2 macrophage	ESCA	-0.319796627
UCK2	Mannose type o-glycan bi	ESCA	0.152257477
UCK2	Mapk_signaling_pathway	ESCA	-0.294752507
UCK2	Mapk3_erk1_activation	ESCA	-0.161507969
UCK2	Marginal zone b cell	ESCA	-0.412800652
UCK2	Memory b cell	ESCA	-0.345931423
UCK2	Mesenchymal cell	ESCA	-0.166693688
UCK2	Mesenchymal stem cell	ESCA	-0.377158087
UCK2	Metabolism of xenobiotic	ESCA	0.035419902
UCK2	Migrating cancer stem cel	ESCA	0.026427631
UCK2	Mitotic_spindle	ESCA	0.010160773
UCK2	Monocyte	ESCA	-0.393852019
UCK2	Mtor_signaling_pathway	ESCA	-0.045500978
UCK2	Mtorc1_signaling	ESCA	0.439442764
UCK2	Mucin type o-glycan bios	ESCA	-0.199658114
UCK2	Myc_targets_v1	ESCA	0.580757032
UCK2	Myeloid cell	ESCA	-0.421913998
UCK2	N-glycan biosynthesis	ESCA	0.254356117
UCK2	Naive b cell	ESCA	-0.232162387
UCK2	Naive cd4+ t cell	ESCA	-0.449512365
UCK2	Naive cd8+ t cell	ESCA	-0.320294433
UCK2	Natural killer cell	ESCA	-0.417436162
UCK2	Natural killer t (nkt) cell	ESCA	-0.027354986
UCK2	Natural regulatory t (treg)	ESCA	-0.473144487
UCK2	Neomycin, kanamycin an	ESCA	0.045950667
UCK2	Neutrophil	ESCA	-0.266380538
UCK2	Nicotinate and nicotinami	ESCA	-0.152495364
UCK2	Nitrogen metabolism	ESCA	-0.06787834
UCK2	Nod_like_receptor_signal	ESCA	-0.291657949
UCK2	Notch_signaling	ESCA	-0.105381971
UCK2	One carbon pool by folate	ESCA	0.448172303
UCK2	Other glycan degradation	ESCA	0.014178871
UCK2	Other types of o-glycan b	ESCA	0.051834637
UCK2	Oxidative phosphorylatio	ESCA	0.348312041
UCK2	P53_pathway	ESCA	-0.009991808
UCK2	P53_signaling_pathway	ESCA	0.008905422
UCK2	Pantothenate and coa bios	ESCA	-0.029077606
UCK2	Pentose and glucuronate i	ESCA	0.170655083
UCK2	Pentose phosphate pathwa	ESCA	0.342471644
UCK2	Pericyte	ESCA	-0.259346742
UCK2	Phenylalanine metabolism	ESCA	-0.045847829
UCK2	Phenylalanine, tyrosine ar	ESCA	0.20524511
UCK2	Phosphonate and phosphir	ESCA	0.144757764

UCK2	Pi3k_akt_activation	ESCA	-0.059489024
UCK2	Pi3k_akt_mtor_signaling	ESCA	0.085984182
UCK2	Porphyrin and chlorophyl	ESCA	0.303745915
UCK2	Primary bile acid biosynt	ESCA	-0.188530383
UCK2	Propanoate metabolism	ESCA	0.099630355
UCK2	Purine metabolism	ESCA	0.576353383
UCK2	Pyrimidine metabolism	ESCA	0.582178614
UCK2	Pyruvate metabolism	ESCA	0.347123067
UCK2	Regulation_of_autophagy	ESCA	-0.192434264
UCK2	Retinol metabolism	ESCA	-0.092669522
UCK2	Riboflavin metabolism	ESCA	0.192031057
UCK2	Schmahl_pdgf_signaling	ESCA	-0.379097104
UCK2	Selenocompound metabol	ESCA	0.301997103
UCK2	Signaling_by_hippo	ESCA	-0.048595734
UCK2	Sphingolipid metabolism	ESCA	-0.087681241
UCK2	Starch and sucrose metabo	ESCA	0.012311698
UCK2	Steroid biosynthesis	ESCA	0.255309837
UCK2	Steroid hormone biosynth	ESCA	0.058374386
UCK2	Sulfur metabolism	ESCA	0.039241652
UCK2	Synthesis and degradation	ESCA	0.185432246
UCK2	T helper cell	ESCA	-0.408744661
UCK2	T helper1 (th1) cell	ESCA	-0.378109763
UCK2	T helper17 (th17) cell	ESCA	-0.356158685
UCK2	T helper2 (th2) cell	ESCA	-0.400443866
UCK2	T helper9 (th9) cell	ESCA	-0.374291025
UCK2	Taurine and hypotaurine r	ESCA	-0.159692251
UCK2	Terpenoid backbone biosy	ESCA	0.312244178
UCK2	Tgf_beta_signaling_pathw	ESCA	-0.269069726
UCK2	Thiamine metabolism	ESCA	0.102350201
UCK2	Tnfa_signaling_via_nfb	ESCA	-0.226594497
UCK2	Tryptophan metabolism	ESCA	0.060349561
UCK2	Tumor endothelial cell	ESCA	0.034523476
UCK2	Tyrosine metabolism	ESCA	-0.081667703
UCK2	Ubiquinone and other ter	ESCA	0.433605067
UCK2	Valine, leucine and isoleu	ESCA	-0.006642492
UCK2	Valine, leucine and isoleu	ESCA	0.202067044
UCK2	Vascular endothelial cell	ESCA	-0.250362023
UCK2	Vascular smooth muscle c	ESCA	-0.314839514
UCK2	Vegf_signaling_pathway	ESCA	-0.144445557
UCK2	Vitamin b6 metabolism	ESCA	0.215671209
UCK2	Willert_wnt_signaling	ESCA	0.104502544
UCK2	Wnt_beta_catenin_signali	ESCA	0.068520894
UCKL1	Abnormal plasma cell	ESCA	-0.302123378

UCKL1	Activated b cell	ESCA	-0.11428704
UCKL1	Activated cd4+ t cell	ESCA	-0.078318993
UCKL1	Activated t cell	ESCA	-0.053428853
UCKL1	Alanine, aspartate and glu	ESCA	0.016472862
UCKL1	Alcala_apoptosis	ESCA	-0.053059806
UCKL1	Alpha-linolenic acid meta	ESCA	-0.099481627
UCKL1	Amino sugar and nucleoti	ESCA	-0.136388751
UCKL1	Ampk_pathway	ESCA	0.118208321
UCKL1	Angiogenesis	ESCA	-0.123074499
UCKL1	Arachidonic acid metabol	ESCA	-0.260691807
UCKL1	Arginine and proline metæ	ESCA	-0.097479712
UCKL1	Arginine biosynthesis	ESCA	-0.045514832
UCKL1	Ascorbate and aldarate mε	ESCA	-0.081844905
UCKL1	Atypical memory b cell	ESCA	-0.039993943
UCKL1	Axl+siglec6+ dendritic ce	ESCA	-0.132209576
UCKL1	B cell	ESCA	-0.023270792
UCKL1	B1 cell	ESCA	-0.030465709
UCKL1	Basal cell	ESCA	-0.22315152
UCKL1	Beta-alanine metabolism	ESCA	-0.053675145
UCKL1	Biosynthesis of unsaturate	ESCA	-0.045932788
UCKL1	Biotin metabolism	ESCA	0.083086835
UCKL1	Butanoate metabolism	ESCA	0.06114307
UCKL1	Caffeine metabolism	ESCA	0.127026647
UCKL1	Cancer stem cell	ESCA	-0.139884205
UCKL1	Cancer stem-like cell	ESCA	0.069538517
UCKL1	Cd4+ cytotoxic t cell	ESCA	-0.219957677
UCKL1	Cd4+ memory t cell	ESCA	-0.127883495
UCKL1	Cd4+ regulatory t cell	ESCA	-0.017015634
UCKL1	Cd4+ t helper cell	ESCA	-0.036658866
UCKL1	Cd4+cd25+ regulatory t c	ESCA	-0.037192095
UCKL1	Cd8+ cytotoxic t cell	ESCA	-0.077883575
UCKL1	Cd8+ regulatory t cell	ESCA	-0.050964915
UCKL1	Cell_cycle	ESCA	-0.01824453
UCKL1	Chandran_metastasis_top5	ESCA	0.103249882
UCKL1	Citrate cycle (tca cycle)	ESCA	-0.011220132
UCKL1	Cysteine and methionine r	ESCA	0.023732294
UCKL1	Cytokine induced killer cε	ESCA	-0.108636006
UCKL1	D-arginine and d-ornithin	ESCA	0.050412229
UCKL1	D-glutamine and d-glutan	ESCA	-0.122859765
UCKL1	Dendritic cell	ESCA	-0.07298679
UCKL1	Dna_repair	ESCA	0.048905192
UCKL1	Dna_replication	ESCA	0.001324254
UCKL1	Double-negative memory	ESCA	-0.057782157

UCKL1	Drug metabolism - cytoch	ESCA	-0.130647681
UCKL1	Drug metabolism - other	ESCA	-0.064726297
UCKL1	E2f_targets	ESCA	0.038445071
UCKL1	Ecm_receptor_interaction	ESCA	-0.125714023
UCKL1	Effector cd4+ memory t	(ESCA	-0.047010921
UCKL1	Effector cd8+ memory t	(ESCA	-0.180015717
UCKL1	Effector memory t cell	ESCA	-0.082301571
UCKL1	Effector regulatory t (treg	ESCA	-0.059421588
UCKL1	Elvidge_hif1a_targets_up	ESCA	0.042999735
UCKL1	Endothelial cell	ESCA	-0.168692456
UCKL1	Eosinophil	ESCA	-0.097517833
UCKL1	Ether lipid metabolism	ESCA	-0.081463852
UCKL1	Exhausted cd4+ t cell	ESCA	-0.119491668
UCKL1	Exhausted cd8+ t cell	ESCA	-0.110305588
UCKL1	Exhausted t cell	ESCA	-0.028724224
UCKL1	Fat cell (adipocyte)	ESCA	0.059982149
UCKL1	Fatty acid biosynthesis	ESCA	0.047545982
UCKL1	Fatty acid degradation	ESCA	0.014584048
UCKL1	Fatty acid elongation	ESCA	-0.008652643
UCKL1	Fibroblast	ESCA	-0.167400966
UCKL1	Folate biosynthesis	ESCA	-0.102107991
UCKL1	Follicular b cell	ESCA	-0.091764327
UCKL1	Follicular dendritic cell	ESCA	-0.119168659
UCKL1	Follicular helper (tfh) t ce	ESCA	-0.155881015
UCKL1	Follicular t cell	ESCA	0.017835457
UCKL1	Foxp3+il-17+ t cell	ESCA	0.041036154
UCKL1	Fructose and mannose me	ESCA	0.023226882
UCKL1	G2m_checkpoint	ESCA	0.012309102
UCKL1	Galactose metabolism	ESCA	-0.019698079
UCKL1	Galie_tumor_stemness_ge	ESCA	-0.23576557
UCKL1	Glutathione metabolism	ESCA	-0.117158664
UCKL1	Glycerolipid metabolism	ESCA	0.075304925
UCKL1	Glycerophospholipid met	ESCA	-0.011805249
UCKL1	Glycine, serine and threor	ESCA	-0.048108267
UCKL1	Glycolysis / gluconeogene	ESCA	-0.016742085
UCKL1	Glycosaminoglycan biosy	ESCA	-0.135231543
UCKL1	Glycosaminoglycan biosy	ESCA	-0.185892208
UCKL1	Glycosaminoglycan biosy	ESCA	-0.110291322
UCKL1	Glycosaminoglycan degra	ESCA	-0.042841782
UCKL1	Glycosphingolipid biosyn	ESCA	-0.15304165
UCKL1	Glycosphingolipid biosyn	ESCA	-0.133043171
UCKL1	Glycosphingolipid biosyn	ESCA	-0.151979479
UCKL1	Glycosylphosphatidylinos	ESCA	0.051261517

UCKL1	Glyoxylate and dicarboxy	ESCA	0.014648179
UCKL1	Granulocyte	ESCA	-0.016734301
UCKL1	Hedgehog_signaling	ESCA	-0.256385626
UCKL1	Histidine metabolism	ESCA	-0.081101436
UCKL1	Hypoxia	ESCA	-0.253300289
UCKL1	Il-17alpha t cell	ESCA	-0.101126843
UCKL1	Il2_stat5_signaling	ESCA	-0.242688785
UCKL1	Il6_jak_stat3_signaling	ESCA	-0.149699449
UCKL1	Immune_checkpoints_turr	ESCA	-0.111373858
UCKL1	Immune_inhibition_cytok	ESCA	-0.084075684
UCKL1	Inositol phosphate metabo	ESCA	-0.118740797
UCKL1	Interleukin_6_signaling	ESCA	-0.193250329
UCKL1	Jaeger_metastasis_up	ESCA	-0.005425831
UCKL1	Jain_nfkb_signaling	ESCA	0.01329388
UCKL1	Kras_signaling_up	ESCA	-0.202049085
UCKL1	Linoleic acid metabolism	ESCA	-0.09834447
UCKL1	Lipoic acid metabolism	ESCA	0.082273491
UCKL1	Lysine degradation	ESCA	0.159367411
UCKL1	Lysosome	ESCA	-0.094200833
UCKL1	M1 macrophage	ESCA	-0.12286839
UCKL1	M2 macrophage	ESCA	-0.152139505
UCKL1	Mannose type o-glycan bi	ESCA	0.134872416
UCKL1	Mapk_signaling_pathway	ESCA	-0.263223207
UCKL1	Mapk3_erk1_activation	ESCA	-0.192292019
UCKL1	Marginal zone b cell	ESCA	-0.085133373
UCKL1	Memory b cell	ESCA	-0.116613357
UCKL1	Mesenchymal cell	ESCA	-0.168352698
UCKL1	Mesenchymal stem cell	ESCA	-0.082016376
UCKL1	Metabolism of xenobiotic	ESCA	-0.154089587
UCKL1	Migrating cancer stem cel	ESCA	-0.008403419
UCKL1	Mitotic_spindle	ESCA	-0.070488655
UCKL1	Monocyte	ESCA	-0.14911179
UCKL1	Mtor_signaling_pathway	ESCA	-0.244539365
UCKL1	Mtorc1_signaling	ESCA	-0.150256389
UCKL1	Mucin type o-glycan biosy	ESCA	-0.006270718
UCKL1	Myc_targets_v1	ESCA	0.038569195
UCKL1	Myeloid cell	ESCA	-0.079720868
UCKL1	N-glycan biosynthesis	ESCA	0.114643075
UCKL1	Naive b cell	ESCA	-0.140588347
UCKL1	Naive cd4+ t cell	ESCA	-0.11419051
UCKL1	Naive cd8+ t cell	ESCA	-0.117576408
UCKL1	Natural killer cell	ESCA	-0.080972603
UCKL1	Natural killer t (nkt) cell	ESCA	-0.004821589

UCKL1	Natural regulatory t (treg)	ESCA	-0.127454487
UCKL1	Neomycin, kanamycin and	ESCA	-0.207644346
UCKL1	Neutrophil	ESCA	-0.13291389
UCKL1	Nicotinate and nicotinami	ESCA	-0.190213555
UCKL1	Nitrogen metabolism	ESCA	0.034937994
UCKL1	Nod_like_receptor_signal	ESCA	-0.146701012
UCKL1	Notch_signaling	ESCA	-0.153940745
UCKL1	One carbon pool by folate	ESCA	0.113297545
UCKL1	Other glycan degradation	ESCA	0.096207648
UCKL1	Other types of o-glycan b	ESCA	0.306487809
UCKL1	Oxidative phosphorylatio	ESCA	-0.076732549
UCKL1	P53_pathway	ESCA	-0.260434885
UCKL1	P53_signaling_pathway	ESCA	-0.195008871
UCKL1	Pantothenate and coa bios	ESCA	0.04918298
UCKL1	Pentose and glucuronate i	ESCA	-0.105340579
UCKL1	Pentose phosphate pathwa	ESCA	-0.060917348
UCKL1	Pericyte	ESCA	-0.08012217
UCKL1	Phenylalanine metabolism	ESCA	-0.178782083
UCKL1	Phenylalanine, tyrosine ar	ESCA	0.035540197
UCKL1	Phosphonate and phosphir	ESCA	-0.01598928
UCKL1	Pi3k_akt_activation	ESCA	-0.232666753
UCKL1	Pi3k_akt_mtor_signaling	ESCA	-0.269328919
UCKL1	Porphyrin and chlorophyl	ESCA	-0.080070158
UCKL1	Primary bile acid biosynt	ESCA	-0.01246617
UCKL1	Propanoate metabolism	ESCA	0.0243971
UCKL1	Purine metabolism	ESCA	0.011159862
UCKL1	Pyrimidine metabolism	ESCA	0.06764057
UCKL1	Pyruvate metabolism	ESCA	0.039626125
UCKL1	Regulation_of_autophagy	ESCA	-0.015017903
UCKL1	Retinol metabolism	ESCA	-0.202038671
UCKL1	Riboflavin metabolism	ESCA	0.08654579
UCKL1	Schmahl_pdgf_signaling	ESCA	-0.308890501
UCKL1	Selenocompound metabol	ESCA	0.078584421
UCKL1	Signaling_by_hippo	ESCA	-0.026936206
UCKL1	Sphingolipid metabolism	ESCA	0.027963617
UCKL1	Starch and sucrose metabo	ESCA	-0.148874302
UCKL1	Steroid biosynthesis	ESCA	-0.054888971
UCKL1	Steroid hormone biosynth	ESCA	-0.16043318
UCKL1	Sulfur metabolism	ESCA	0.003120616
UCKL1	Synthesis and degradation	ESCA	0.024884116
UCKL1	T helper cell	ESCA	-0.065463543
UCKL1	T helper1 (th1) cell	ESCA	-0.03850751
UCKL1	T helper17 (th17) cell	ESCA	-0.126563233

UCKL1	T helper2 (th2) cell	ESCA	-0.052040974
UCKL1	T helper9 (th9) cell	ESCA	-0.022517167
UCKL1	Taurine and hypotaurine r	ESCA	0.143523198
UCKL1	Terpenoid backbone biosy	ESCA	-0.01668268
UCKL1	Tgf_beta_signaling_pathw	ESCA	-0.198652043
UCKL1	Thiamine metabolism	ESCA	0.173123366
UCKL1	Tnfa_signaling_via_nfk	ESCA	-0.233447553
UCKL1	Tryptophan metabolism	ESCA	-0.006600809
UCKL1	Tumor endothelial cell	ESCA	-0.20098625
UCKL1	Tyrosine metabolism	ESCA	-0.249316483
UCKL1	Ubiquinone and other ter	ESCA	0.055529983
UCKL1	Valine, leucine and isoleu	ESCA	-0.030311802
UCKL1	Valine, leucine and isoleu	ESCA	0.04990405
UCKL1	Vascular endothelial cell	ESCA	-0.054720504
UCKL1	Vascular smooth muscle c	ESCA	-0.131266666
UCKL1	Vegf_signaling_pathway	ESCA	-0.260706211
UCKL1	Vitamin b6 metabolism	ESCA	0.136024779
UCKL1	Willert_wnt_signaling	ESCA	-0.115476316
UCKL1	Wnt_beta_catenin_signali	ESCA	-0.069752012
UPP1	Abnormal plasma cell	ESCA	0.065920438
UPP1	Activated b cell	ESCA	-0.068086216
UPP1	Activated cd4+ t cell	ESCA	-0.078088001
UPP1	Activated t cell	ESCA	-0.096386848
UPP1	Alanine, aspartate and glu	ESCA	-0.089070198
UPP1	Alcala_apoptosis	ESCA	0.125725779
UPP1	Alpha-linolenic acid meta	ESCA	0.082473534
UPP1	Amino sugar and nucleoti	ESCA	0.208804414
UPP1	Ampk_pathway	ESCA	0.00235769
UPP1	Angiogenesis	ESCA	0.144538991
UPP1	Arachidonic acid metabol	ESCA	0.144926148
UPP1	Arginine and proline met	ESCA	0.042278615
UPP1	Arginine biosynthesis	ESCA	0.05163248
UPP1	Ascorbate and aldarate m	ESCA	-0.19815124
UPP1	Atypical memory b cell	ESCA	-0.093139732
UPP1	Axl+siglec6+ dendritic ce	ESCA	-0.089288194
UPP1	B cell	ESCA	-0.275478076
UPP1	B1 cell	ESCA	-0.282516851
UPP1	Basal cell	ESCA	0.524425122
UPP1	Beta-alanine metabolism	ESCA	-0.072549714
UPP1	Biosynthesis of unsaturate	ESCA	0.079146235
UPP1	Biotin metabolism	ESCA	-0.297110209
UPP1	Butanoate metabolism	ESCA	-0.221242474
UPP1	Caffeine metabolism	ESCA	-0.06137114

UPP1	Cancer stem cell	ESCA	-0.040972974
UPP1	Cancer stem-like cell	ESCA	-0.439894575
UPP1	Cd4+ cytotoxic t cell	ESCA	0.09016316
UPP1	Cd4+ memory t cell	ESCA	-0.062964088
UPP1	Cd4+ regulatory t cell	ESCA	-0.034837394
UPP1	Cd4+ t helper cell	ESCA	-0.095872322
UPP1	Cd4+cd25+ regulatory t c	ESCA	-0.081609482
UPP1	Cd8+ cytotoxic t cell	ESCA	0.030460529
UPP1	Cd8+ regulatory t cell	ESCA	-0.040731406
UPP1	Cell_cycle	ESCA	0.149476274
UPP1	Chandran_metastasis_top5	ESCA	-0.120445248
UPP1	Citrate cycle (tca cycle)	ESCA	0.018823104
UPP1	Cysteine and methionine r	ESCA	0.011844934
UPP1	Cytokine induced killer c	ESCA	-0.099690283
UPP1	D-arginine and d-ornithin	ESCA	0.12017812
UPP1	D-glutamine and d-glutan	ESCA	0.161118278
UPP1	Dendritic cell	ESCA	0.038602016
UPP1	Dna_repair	ESCA	0.139762334
UPP1	Dna_replication	ESCA	0.001030218
UPP1	Double-negative memory	ESCA	-0.152287133
UPP1	Drug metabolism - cytoch	ESCA	-0.145935087
UPP1	Drug metabolism - other c	ESCA	0.136989555
UPP1	E2f_targets	ESCA	-0.019703024
UPP1	Ecm_receptor_interaction	ESCA	0.130760236
UPP1	Effector cd4+ memory t (	ESCA	-0.154817552
UPP1	Effector cd8+ memory t (	ESCA	0.185083142
UPP1	Effector memory t cell	ESCA	-0.085483322
UPP1	Effector regulatory t (treg	ESCA	-0.043601106
UPP1	Elvidge_hif1a_targets_up	ESCA	-0.002904958
UPP1	Endothelial cell	ESCA	-0.072811138
UPP1	Eosinophil	ESCA	0.019742435
UPP1	Ether lipid metabolism	ESCA	0.009014656
UPP1	Exhausted cd4+ t cell	ESCA	0.022180199
UPP1	Exhausted cd8+ t cell	ESCA	0.04839946
UPP1	Exhausted t cell	ESCA	-0.039243301
UPP1	Fat cell (adipocyte)	ESCA	-0.145484714
UPP1	Fatty acid biosynthesis	ESCA	-0.257219675
UPP1	Fatty acid degradation	ESCA	-0.242642103
UPP1	Fatty acid elongation	ESCA	0.181736002
UPP1	Fibroblast	ESCA	0.113521888
UPP1	Folate biosynthesis	ESCA	-0.044840233
UPP1	Follicular b cell	ESCA	-0.046536666
UPP1	Follicular dendritic cell	ESCA	-0.091686931

UPP1	Follicular helper (tfh) t ce	ESCA	0.114896779
UPP1	Follicular t cell	ESCA	0.006981761
UPP1	Foxp3+il-17+ t cell	ESCA	-0.104445301
UPP1	Fructose and mannose me	ESCA	0.121482833
UPP1	G2m_checkpoint	ESCA	0.010738966
UPP1	Galactose metabolism	ESCA	0.199113771
UPP1	Galie_tumor_stemness_ge	ESCA	0.168101544
UPP1	Glutathione metabolism	ESCA	0.088278744
UPP1	Glycerolipid metabolism	ESCA	-0.178040554
UPP1	Glycerophospholipid metæ	ESCA	-0.008786287
UPP1	Glycine, serine and threor	ESCA	0.073210623
UPP1	Glycolysis / gluconeogene	ESCA	0.198746568
UPP1	Glycosaminoglycan biosy	ESCA	0.237323007
UPP1	Glycosaminoglycan biosy	ESCA	0.144351205
UPP1	Glycosaminoglycan biosy	ESCA	0.015490024
UPP1	Glycosaminoglycan degra	ESCA	-0.215125399
UPP1	Glycosphingolipid biosyn	ESCA	0.02310156
UPP1	Glycosphingolipid biosyn	ESCA	-0.157139566
UPP1	Glycosphingolipid biosyn	ESCA	-0.108137482
UPP1	Glycosylphosphatidylinos	ESCA	-0.064300727
UPP1	Glyoxylate and dicarboxy	ESCA	-0.166937519
UPP1	Granulocyte	ESCA	-0.033062945
UPP1	Hedgehog_signaling	ESCA	0.160870803
UPP1	Histidine metabolism	ESCA	-0.179224118
UPP1	Hypoxia	ESCA	0.581853344
UPP1	Il-17ralpha t cell	ESCA	-0.00048997
UPP1	Il2_stat5_signaling	ESCA	0.227538734
UPP1	Il6_jak_stat3_signaling	ESCA	0.177982526
UPP1	Immune_checkpoints_tur	ESCA	-0.036558572
UPP1	Immune_inhibition_cytok	ESCA	0.23670507
UPP1	Inositol phosphate metabo	ESCA	-0.120710978
UPP1	Interleukin_6_signaling	ESCA	0.069483022
UPP1	Jaeger_metastasis_up	ESCA	-0.10174339
UPP1	Jain_nfkb_signaling	ESCA	0.224203548
UPP1	Kras_signaling_up	ESCA	0.156444704
UPP1	Linoleic acid metabolism	ESCA	-0.001996358
UPP1	Lipoic acid metabolism	ESCA	-0.334132262
UPP1	Lysine degradation	ESCA	-0.217315054
UPP1	Lysosome	ESCA	-0.029265206
UPP1	M1 macrophage	ESCA	0.135697103
UPP1	M2 macrophage	ESCA	0.222595147
UPP1	Mannose type o-glycan bi	ESCA	-0.112489775
UPP1	Mapk_signaling_pathway	ESCA	0.317784272

UPP1	Mapk3_erk1_activation	ESCA	0.111810873
UPP1	Marginal zone b cell	ESCA	-0.107817178
UPP1	Memory b cell	ESCA	-0.065127696
UPP1	Mesenchymal cell	ESCA	0.15183335
UPP1	Mesenchymal stem cell	ESCA	-0.097269455
UPP1	Metabolism of xenobiotics	ESCA	-0.078815803
UPP1	Migrating cancer stem cell	ESCA	0.290399127
UPP1	Mitotic_spindle	ESCA	0.109309845
UPP1	Monocyte	ESCA	0.212886977
UPP1	Mtor_signaling_pathway	ESCA	0.32575655
UPP1	Mtorc1_signaling	ESCA	0.360400878
UPP1	Mucin type o-glycan biosynthesis	ESCA	-0.131009382
UPP1	Myc_targets_v1	ESCA	0.192598533
UPP1	Myeloid cell	ESCA	-0.013476212
UPP1	N-glycan biosynthesis	ESCA	-0.288855719
UPP1	Naive b cell	ESCA	-0.04718292
UPP1	Naive cd4+ t cell	ESCA	-0.08232209
UPP1	Naive cd8+ t cell	ESCA	-0.190610938
UPP1	Natural killer cell	ESCA	-0.026579169
UPP1	Natural killer t (nkt) cell	ESCA	-0.061318
UPP1	Natural regulatory t (treg) cell	ESCA	-0.000675726
UPP1	Neomycin, kanamycin and streptomycin	ESCA	0.448565068
UPP1	Neutrophil	ESCA	0.279393906
UPP1	Nicotinate and nicotinamide metabolism	ESCA	-0.082413312
UPP1	Nitrogen metabolism	ESCA	-0.210251532
UPP1	Nod_like_receptor_signaling	ESCA	0.370738395
UPP1	Notch_signaling	ESCA	0.273315242
UPP1	One carbon pool by folate	ESCA	-0.115713346
UPP1	Other glycan degradation	ESCA	-0.312261024
UPP1	Other types of o-glycan biosynthesis	ESCA	-0.259528934
UPP1	Oxidative phosphorylation	ESCA	0.163217456
UPP1	P53_pathway	ESCA	0.621153891
UPP1	P53_signaling_pathway	ESCA	0.321546012
UPP1	Pantothenate and coenzyme a biosynthesis	ESCA	-0.093789576
UPP1	Pentose and glucuronate interconversions	ESCA	-0.123868018
UPP1	Pentose phosphate pathway	ESCA	0.175111938
UPP1	Pericyte	ESCA	-0.075396738
UPP1	Phenylalanine metabolism	ESCA	0.100845199
UPP1	Phenylalanine, tyrosine and tryptophan metabolism	ESCA	-0.046129263
UPP1	Phosphonate and phosphite metabolism	ESCA	-0.068566318
UPP1	Pi3k_akt_activation	ESCA	0.103167994
UPP1	Pi3k_akt_mtor_signaling	ESCA	0.512013423
UPP1	Porphyryin and chlorophyll biosynthesis	ESCA	-0.05673118

UPP1	Primary bile acid biosynt	ESCA	-0.203032406
UPP1	Propanoate metabolism	ESCA	-0.270873899
UPP1	Purine metabolism	ESCA	0.02570701
UPP1	Pyrimidine metabolism	ESCA	0.16436883
UPP1	Pyruvate metabolism	ESCA	-0.121048947
UPP1	Regulation_of_autophagy	ESCA	0.013596475
UPP1	Retinol metabolism	ESCA	0.04226102
UPP1	Riboflavin metabolism	ESCA	-0.192394388
UPP1	Schmahl_pdgf_signaling	ESCA	0.210304001
UPP1	Selenocompound metabol	ESCA	-0.462630312
UPP1	Signaling_by_hippo	ESCA	0.1191346
UPP1	Sphingolipid metabolism	ESCA	-0.123484169
UPP1	Starch and sucrose metabo	ESCA	0.243191732
UPP1	Steroid biosynthesis	ESCA	0.154725079
UPP1	Steroid hormone biosynth	ESCA	-0.026836009
UPP1	Sulfur metabolism	ESCA	-0.139659519
UPP1	Synthesis and degradation	ESCA	-0.059648033
UPP1	T helper cell	ESCA	-0.129225303
UPP1	T helper1 (th1) cell	ESCA	0.04437681
UPP1	T helper17 (th17) cell	ESCA	0.1892035
UPP1	T helper2 (th2) cell	ESCA	-0.069552935
UPP1	T helper9 (th9) cell	ESCA	-0.075013148
UPP1	Taurine and hypotaurine r	ESCA	-0.288133409
UPP1	Terpenoid backbone biosy	ESCA	0.134694962
UPP1	Tgf_beta_signaling_pathw	ESCA	0.143709021
UPP1	Thiamine metabolism	ESCA	-0.202537545
UPP1	Tnfa_signaling_via_nfkb	ESCA	0.405767779
UPP1	Tryptophan metabolism	ESCA	-0.243136789
UPP1	Tumor endothelial cell	ESCA	0.515180519
UPP1	Tyrosine metabolism	ESCA	0.048719216
UPP1	Ubiquinone and other ter	ESCA	-0.021821061
UPP1	Valine, leucine and isoleu	ESCA	0.051294023
UPP1	Valine, leucine and isoleu	ESCA	-0.243315921
UPP1	Vascular endothelial cell	ESCA	-0.176602016
UPP1	Vascular smooth muscle c	ESCA	-0.070771584
UPP1	Vegf_signaling_pathway	ESCA	0.363965885
UPP1	Vitamin b6 metabolism	ESCA	-0.12458481
UPP1	Willert_wnt_signaling	ESCA	0.177660531
UPP1	Wnt_beta_catenin_signali	ESCA	0.156873842
UPP2	Abnormal plasma cell	ESCA	-0.045549525
UPP2	Activated b cell	ESCA	0.049280655
UPP2	Activated cd4+ t cell	ESCA	0.077679252
UPP2	Activated t cell	ESCA	0.078824568

UPP2	Alanine, aspartate and glu	ESCA	-0.145012226
UPP2	Alcala_apoptosis	ESCA	-0.217983814
UPP2	Alpha-linolenic acid meta	ESCA	-0.011722244
UPP2	Amino sugar and nucleoti	ESCA	-0.267748583
UPP2	Ampk_pathway	ESCA	-0.126464262
UPP2	Angiogenesis	ESCA	-0.056110065
UPP2	Arachidonic acid metabol	ESCA	-0.013759219
UPP2	Arginine and proline metæ	ESCA	-0.208528522
UPP2	Arginine biosynthesis	ESCA	-0.154433167
UPP2	Ascorbate and aldarate mε	ESCA	-0.02927952
UPP2	Atypical memory b cell	ESCA	0.103278343
UPP2	Axl+siglec6+ dendritic ce	ESCA	0.106703056
UPP2	B cell	ESCA	0.136427655
UPP2	B1 cell	ESCA	0.11089298
UPP2	Basal cell	ESCA	-0.117474297
UPP2	Beta-alanine metabolism	ESCA	-0.041330538
UPP2	Biosynthesis of unsaturate	ESCA	-0.222171264
UPP2	Biotin metabolism	ESCA	-0.035966598
UPP2	Butanoate metabolism	ESCA	-0.029652714
UPP2	Caffeine metabolism	ESCA	0.100033981
UPP2	Cancer stem cell	ESCA	0.099091288
UPP2	Cancer stem-like cell	ESCA	0.135082217
UPP2	Cd4+ cytotoxic t cell	ESCA	-0.00407943
UPP2	Cd4+ memory t cell	ESCA	0.031264036
UPP2	Cd4+ regulatory t cell	ESCA	0.058970247
UPP2	Cd4+ t helper cell	ESCA	0.09599773
UPP2	Cd4+cd25+ regulatory t c	ESCA	0.09281549
UPP2	Cd8+ cytotoxic t cell	ESCA	0.009736094
UPP2	Cd8+ regulatory t cell	ESCA	0.010503325
UPP2	Cell_cycle	ESCA	-0.295573913
UPP2	Chandran_metastasis_topç	ESCA	-0.105073037
UPP2	Citrate cycle (tca cycle)	ESCA	-0.149186954
UPP2	Cysteine and methionine r	ESCA	-0.181537039
UPP2	Cytokine induced killer cε	ESCA	0.078185652
UPP2	D-arginine and d-ornithin	ESCA	0.169729654
UPP2	D-glutamine and d-glutan	ESCA	-0.038546106
UPP2	Dendritic cell	ESCA	0.033291768
UPP2	Dna_repair	ESCA	-0.188338354
UPP2	Dna_replication	ESCA	-0.175533867
UPP2	Double-negative memory	ESCA	0.074788776
UPP2	Drug metabolism - cytoch	ESCA	0.002740401
UPP2	Drug metabolism - other ç	ESCA	-0.172350886
UPP2	E2f_targets	ESCA	-0.211088413

UPP2	Ecm_receptor_interaction ESCA	-0.096380527
UPP2	Effector cd4+ memory t (ESCA	0.115993227
UPP2	Effector cd8+ memory t (ESCA	-0.053103847
UPP2	Effector memory t cell ESCA	0.066698121
UPP2	Effector regulatory t (treg ESCA	0.059887132
UPP2	Elvidge_hif1a_targets_up ESCA	-0.207348929
UPP2	Endothelial cell ESCA	0.028109884
UPP2	Eosinophil ESCA	0.034385083
UPP2	Ether lipid metabolism ESCA	0.045492097
UPP2	Exhausted cd4+ t cell ESCA	0.095932696
UPP2	Exhausted cd8+ t cell ESCA	0.093729601
UPP2	Exhausted t cell ESCA	0.056425344
UPP2	Fat cell (adipocyte) ESCA	-0.041530862
UPP2	Fatty acid biosynthesis ESCA	-0.02707634
UPP2	Fatty acid degradation ESCA	-0.009610376
UPP2	Fatty acid elongation ESCA	-0.24173612
UPP2	Fibroblast ESCA	0.004453906
UPP2	Folate biosynthesis ESCA	-0.125375898
UPP2	Follicular b cell ESCA	0.088667648
UPP2	Follicular dendritic cell ESCA	0.043381313
UPP2	Follicular helper (tfh) t cell ESCA	0.043548743
UPP2	Follicular t cell ESCA	-0.053629997
UPP2	Foxp3+il-17+ t cell ESCA	0.020561754
UPP2	Fructose and mannose me ESCA	-0.191650707
UPP2	G2m_checkpoint ESCA	-0.241075383
UPP2	Galactose metabolism ESCA	-0.244452881
UPP2	Galie_tumor_stemness_ge ESCA	-0.032979914
UPP2	Glutathione metabolism ESCA	-0.248995651
UPP2	Glycerolipid metabolism ESCA	-0.040623433
UPP2	Glycerophospholipid met ESCA	-0.067882568
UPP2	Glycine, serine and threor ESCA	-0.172291524
UPP2	Glycolysis / gluconeogene ESCA	-0.205872181
UPP2	Glycosaminoglycan biosy ESCA	-0.076669533
UPP2	Glycosaminoglycan biosy ESCA	-0.03378496
UPP2	Glycosaminoglycan biosy ESCA	-0.09111894
UPP2	Glycosaminoglycan degra ESCA	-0.132121917
UPP2	Glycosphingolipid biosyn ESCA	-0.117953939
UPP2	Glycosphingolipid biosyn ESCA	-0.058491969
UPP2	Glycosphingolipid biosyn ESCA	0.030515216
UPP2	Glycosylphosphatidylinos ESCA	-0.130175692
UPP2	Glyoxylate and dicarboxy ESCA	-0.189858348
UPP2	Granulocyte ESCA	0.002210544
UPP2	Hedgehog_signaling ESCA	-0.018411618

UPP2	Histidine metabolism	ESCA	0.049239349
UPP2	Hypoxia	ESCA	-0.167436115
UPP2	Il-17alpha t cell	ESCA	0.038699731
UPP2	Il2_stat5_signaling	ESCA	-0.059848116
UPP2	Il6_jak_stat3_signaling	ESCA	-0.074102846
UPP2	Immune_checkpoints_tur	ESCA	-0.06175865
UPP2	Immune_inhibition_cytok	ESCA	-0.02528731
UPP2	Inositol phosphate metabo	ESCA	-0.080935411
UPP2	Interleukin_6_signaling	ESCA	-0.038309884
UPP2	Jaeger_metastasis_up	ESCA	-0.150530789
UPP2	Jain_nfkb_signaling	ESCA	-0.232218769
UPP2	Kras_signaling_up	ESCA	0.009984194
UPP2	Linoleic acid metabolism	ESCA	0.051667636
UPP2	Lipoic acid metabolism	ESCA	0.131105444
UPP2	Lysine degradation	ESCA	-0.147406431
UPP2	Lysosome	ESCA	-0.167277908
UPP2	M1 macrophage	ESCA	-0.010684794
UPP2	M2 macrophage	ESCA	-0.062663827
UPP2	Mannose type o-glycan bi	ESCA	-0.06965442
UPP2	Mapk_signaling_pathway	ESCA	-0.09753991
UPP2	Mapk3_erk1_activation	ESCA	-0.115970419
UPP2	Marginal zone b cell	ESCA	0.076083801
UPP2	Memory b cell	ESCA	0.017692791
UPP2	Mesenchymal cell	ESCA	-0.019891331
UPP2	Mesenchymal stem cell	ESCA	0.097225372
UPP2	Metabolism of xenobiotic	ESCA	-0.045685301
UPP2	Migrating cancer stem cel	ESCA	-0.186246554
UPP2	Mitotic_spindle	ESCA	-0.214415045
UPP2	Monocyte	ESCA	0.045166136
UPP2	Mtor_signaling_pathway	ESCA	-0.211565513
UPP2	Mtorc1_signaling	ESCA	-0.318365403
UPP2	Mucin type o-glycan biosy	ESCA	0.067311368
UPP2	Myc_targets_v1	ESCA	-0.20508714
UPP2	Myeloid cell	ESCA	0.034964023
UPP2	N-glycan biosynthesis	ESCA	-0.116513078
UPP2	Naive b cell	ESCA	0.044346431
UPP2	Naive cd4+ t cell	ESCA	0.069949225
UPP2	Naive cd8+ t cell	ESCA	0.105673349
UPP2	Natural killer cell	ESCA	0.048596659
UPP2	Natural killer t (nkt) cell	ESCA	0.027775452
UPP2	Natural regulatory t (treg)	ESCA	0.074738148
UPP2	Neomycin, kanamycin an	ESCA	-0.144605232
UPP2	Neutrophil	ESCA	0.041355483

UPP2	Nicotinate and nicotinami ESCA	0.048333238
UPP2	Nitrogen metabolism ESCA	0.119331109
UPP2	Nod_like_receptor_signal ESCA	-0.093952816
UPP2	Notch_signaling ESCA	-0.069350967
UPP2	One carbon pool by folate ESCA	-0.272025192
UPP2	Other glycan degradation ESCA	-0.005283938
UPP2	Other types of o-glycan b ESCA	-0.032351895
UPP2	Oxidative phosphorylatior ESCA	-0.161558755
UPP2	P53_pathway ESCA	-0.242659387
UPP2	P53_signaling_pathway ESCA	-0.258832904
UPP2	Pantothenate and coa bios ESCA	0.144456435
UPP2	Pentose and glucuronate i ESCA	-0.129406709
UPP2	Pentose phosphate pathwa ESCA	-0.234655611
UPP2	Pericyte ESCA	0.068079549
UPP2	Phenylalanine metabolism ESCA	-0.067652293
UPP2	Phenylalanine, tyrosine ar ESCA	-0.006153441
UPP2	Phosphonate and phosphir ESCA	-0.03000888
UPP2	Pi3k_akt_activation ESCA	-0.154352555
UPP2	Pi3k_akt_mtor_signaling ESCA	-0.335562219
UPP2	Porphyrin and chlorophyl ESCA	-0.191778384
UPP2	Primary bile acid biosyntf ESCA	0.179879351
UPP2	Propanoate metabolism ESCA	-0.005121885
UPP2	Purine metabolism ESCA	-0.206315891
UPP2	Pyrimidine metabolism ESCA	-0.192271587
UPP2	Pyruvate metabolism ESCA	-0.165100698
UPP2	Regulation_of_autophagy ESCA	0.082085126
UPP2	Retinol metabolism ESCA	0.004298119
UPP2	Riboflavin metabolism ESCA	0.063575537
UPP2	Schmahl_pdgf_signaling ESCA	0.061522707
UPP2	Selenocompound metabol ESCA	0.044133773
UPP2	Signaling_by_hippo ESCA	-0.165298588
UPP2	Sphingolipid metabolism ESCA	-0.011173313
UPP2	Starch and sucrose metabc ESCA	-0.172552757
UPP2	Steroid biosynthesis ESCA	-0.256624834
UPP2	Steroid hormone biosynth ESCA	0.054626415
UPP2	Sulfur metabolism ESCA	-0.029749693
UPP2	Synthesis and degradation ESCA	0.004462622
UPP2	T helper cell ESCA	0.108616534
UPP2	T helper1 (th1) cell ESCA	0.03989652
UPP2	T helper17 (th17) cell ESCA	0.071341244
UPP2	T helper2 (th2) cell ESCA	0.090894494
UPP2	T helper9 (th9) cell ESCA	0.08855084
UPP2	Taurine and hypotaurine r ESCA	0.094620018

UPP2	Terpenoid backbone biosy	ESCA	-0.171392954
UPP2	Tgf_beta_signaling_pathw	ESCA	-0.077928487
UPP2	Thiamine metabolism	ESCA	0.052816331
UPP2	Tnfa_signaling_via_nfk	ESCA	-0.054676102
UPP2	Tryptophan metabolism	ESCA	-0.004016442
UPP2	Tumor endothelial cell	ESCA	-0.125390836
UPP2	Tyrosine metabolism	ESCA	-0.065454448
UPP2	Ubiquinone and other ter	ESCA	-0.197939102
UPP2	Valine, leucine and isoleu	ESCA	0.017728009
UPP2	Valine, leucine and isoleu	ESCA	-0.050525327
UPP2	Vascular endothelial cell	ESCA	0.021780723
UPP2	Vascular smooth muscle c	ESCA	0.027027621
UPP2	Vegf_signaling_pathway	ESCA	-0.194087905
UPP2	Vitamin b6 metabolism	ESCA	-0.062809921
UPP2	Willert_wnt_signaling	ESCA	-0.104458229
UPP2	Wnt_beta_catenin_signali	ESCA	-0.091549309
CDA	Abnormal plasma cell	GBM	0.061127237
CDA	Activated b cell	GBM	0.282462405
CDA	Activated cd4+ t cell	GBM	0.239383566
CDA	Activated t cell	GBM	0.292163793
CDA	Alanine, aspartate and glu	GBM	-0.011912425
CDA	Alcala_apoptosis	GBM	0.245532067
CDA	Alpha-linolenic acid meta	GBM	0.036422532
CDA	Amino sugar and nucleoti	GBM	0.208275127
CDA	Ampk_pathway	GBM	-0.226605169
CDA	Angiogenesis	GBM	0.28778812
CDA	Arachidonic acid metabol	GBM	0.346825418
CDA	Arginine and proline met	GBM	0.317757972
CDA	Arginine biosynthesis	GBM	0.296925571
CDA	Ascorbate and aldarate m	GBM	-0.118734045
CDA	Atypical memory b cell	GBM	0.304153188
CDA	Axl+siglec6+ dendritic ce	GBM	0.299138408
CDA	B cell	GBM	0.336774862
CDA	B1 cell	GBM	0.137775717
CDA	Basal cell	GBM	0.309083646
CDA	Beta-alanine metabolism	GBM	0.185882709
CDA	Biosynthesis of unsaturate	GBM	0.057786753
CDA	Biotin metabolism	GBM	0.057820779
CDA	Butanoate metabolism	GBM	0.039158594
CDA	Caffeine metabolism	GBM	0.101152535
CDA	Cancer stem cell	GBM	0.204384145
CDA	Cancer stem-like cell	GBM	0.386991226
CDA	Cd4+ cytotoxic t cell	GBM	0.295094845

CDA	Cd4+ memory t cell	GBM	0.247206061
CDA	Cd4+ regulatory t cell	GBM	0.280595525
CDA	Cd4+ t helper cell	GBM	0.264009818
CDA	Cd4+cd25+ regulatory t c	GBM	0.284371438
CDA	Cd8+ cytotoxic t cell	GBM	0.335949444
CDA	Cd8+ regulatory t cell	GBM	0.345342841
CDA	Cell_cycle	GBM	-0.244806845
CDA	Chandran_metastasis_top5	GBM	-0.374250051
CDA	Citrate cycle (tca cycle)	GBM	0.167012602
CDA	Cysteine and methionine r	GBM	0.0983678
CDA	Cytokine induced killer cε	GBM	0.219647784
CDA	D-arginine and d-ornithin	GBM	0.012326759
CDA	D-glutamine and d-glutan	GBM	-0.053946696
CDA	Dendritic cell	GBM	0.294913444
CDA	Dna_repair	GBM	0.104954006
CDA	Dna_replication	GBM	-0.152714024
CDA	Double-negative memory	GBM	0.231482336
CDA	Drug metabolism - cytoch	GBM	0.230280804
CDA	Drug metabolism - other ε	GBM	0.235332828
CDA	E2f_targets	GBM	-0.215069887
CDA	Ecm_receptor_interaction	GBM	0.206418135
CDA	Effector cd4+ memory t (	GBM	0.199297535
CDA	Effector cd8+ memory t (	GBM	0.243873927
CDA	Effector memory t cell	GBM	0.25962076
CDA	Effector regulatory t (treg	GBM	0.28627537
CDA	Elvidge_hif1a_targets_up	GBM	0.119957521
CDA	Endothelial cell	GBM	0.435720235
CDA	Eosinophil	GBM	0.292851402
CDA	Ether lipid metabolism	GBM	0.103742713
CDA	Exhausted cd4+ t cell	GBM	0.18642343
CDA	Exhausted cd8+ t cell	GBM	0.230042472
CDA	Exhausted t cell	GBM	0.285237814
CDA	Fat cell (adipocyte)	GBM	0.340596307
CDA	Fatty acid biosynthesis	GBM	0.023535285
CDA	Fatty acid degradation	GBM	0.159744372
CDA	Fatty acid elongation	GBM	0.284758212
CDA	Fibroblast	GBM	0.361674676
CDA	Folate biosynthesis	GBM	0.194502358
CDA	Follicular b cell	GBM	0.250562664
CDA	Follicular dendritic cell	GBM	0.269237322
CDA	Follicular helper (tfh) t ce	GBM	0.266940739
CDA	Follicular t cell	GBM	0.214917209
CDA	Foxp3+il-17+ t cell	GBM	0.009674755

CDA	Fructose and mannose me	GBM	0.103902924
CDA	G2m_checkpoint	GBM	-0.296516376
CDA	Galactose metabolism	GBM	0.196949904
CDA	Galie_tumor_stemness_ge	GBM	0.022398286
CDA	Glutathione metabolism	GBM	0.298413972
CDA	Glycerolipid metabolism	GBM	0.047650812
CDA	Glycerophospholipid metæ	GBM	0.167566532
CDA	Glycine, serine and threor	GBM	0.123928703
CDA	Glycolysis / gluconeogene	GBM	0.148680393
CDA	Glycosaminoglycan biosy1	GBM	0.142989267
CDA	Glycosaminoglycan biosy1	GBM	0.0952365
CDA	Glycosaminoglycan biosy1	GBM	0.236103496
CDA	Glycosaminoglycan degra	GBM	0.254170572
CDA	Glycosphingolipid biosyn1	GBM	0.365284514
CDA	Glycosphingolipid biosyn1	GBM	0.398653179
CDA	Glycosphingolipid biosyn1	GBM	0.103010961
CDA	Glycosylphosphatidylinos	GBM	0.125200315
CDA	Glyoxylate and dicarboxy	GBM	0.185317962
CDA	Granulocyte	GBM	0.27281068
CDA	Hedgehog_signaling	GBM	-0.163168927
CDA	Histidine metabolism	GBM	0.195637848
CDA	Hypoxia	GBM	0.162496002
CDA	Il-17ralpha t cell	GBM	0.297343434
CDA	Il2_stat5_signaling	GBM	0.311780043
CDA	Il6_jak_stat3_signaling	GBM	0.247934187
CDA	Immune_checkpoints_tunr	GBM	0.131254594
CDA	Immune_inhibition_cytok	GBM	0.342305913
CDA	Inositol phosphate metabo	GBM	-0.090668202
CDA	Interleukin_6_signaling	GBM	-0.150993168
CDA	Jaeger_metastasis_up	GBM	0.097841937
CDA	Jain_nfkb_signaling	GBM	-0.181436161
CDA	Kras_signaling_up	GBM	0.306808919
CDA	Linoleic acid metabolism	GBM	0.005353871
CDA	Lipoic acid metabolism	GBM	0.065486068
CDA	Lysine degradation	GBM	-0.381470108
CDA	Lysosome	GBM	0.292170377
CDA	M1 macrophage	GBM	0.301691423
CDA	M2 macrophage	GBM	0.367821971
CDA	Mannose type o-glycan bi	GBM	-0.191210402
CDA	Mapk_signaling_pathway	GBM	0.158174855
CDA	Mapk3_erk1_activation	GBM	-0.026945901
CDA	Marginal zone b cell	GBM	0.285455811
CDA	Memory b cell	GBM	0.189670567

CDA	Mesenchymal cell	GBM	0.393345044
CDA	Mesenchymal stem cell	GBM	0.28395438
CDA	Metabolism of xenobiotic	GBM	0.276926214
CDA	Migrating cancer stem cel	GBM	0.094302638
CDA	Mitotic_spindle	GBM	-0.347487105
CDA	Monocyte	GBM	0.346407557
CDA	Mtor_signaling_pathway	GBM	-0.098811879
CDA	Mtorc1_signaling	GBM	0.128007543
CDA	Mucin type o-glycan biosy	GBM	0.093897316
CDA	Myc_targets_v1	GBM	0.038618798
CDA	Myeloid cell	GBM	0.291287212
CDA	N-glycan biosynthesis	GBM	0.184097222
CDA	Naive b cell	GBM	0.004249011
CDA	Naive cd4+ t cell	GBM	0.444888512
CDA	Naive cd8+ t cell	GBM	0.31803091
CDA	Natural killer cell	GBM	0.323665647
CDA	Natural killer t (nkt) cell	GBM	0.221857631
CDA	Natural regulatory t (treg)	GBM	0.246634192
CDA	Neomycin, kanamycin and	GBM	0.018987955
CDA	Neutrophil	GBM	0.365509368
CDA	Nicotinate and nicotinami	GBM	0.179653823
CDA	Nitrogen metabolism	GBM	0.068908115
CDA	Nod_like_receptor_signal	GBM	0.197080567
CDA	Notch_signaling	GBM	-0.039616126
CDA	One carbon pool by folate	GBM	-0.001015118
CDA	Other glycan degradation	GBM	0.187058581
CDA	Other types of o-glycan b	GBM	-0.12504619
CDA	Oxidative phosphorylatio	GBM	0.310080709
CDA	P53_pathway	GBM	0.345965266
CDA	P53_signaling_pathway	GBM	0.102034784
CDA	Pantothenate and coa bios	GBM	0.180367049
CDA	Pentose and glucuronate i	GBM	0.137815335
CDA	Pentose phosphate pathwa	GBM	0.184086287
CDA	Pericyte	GBM	0.399397628
CDA	Phenylalanine metabolism	GBM	0.226824659
CDA	Phenylalanine, tyrosine ar	GBM	0.099286138
CDA	Phosphonate and phosphir	GBM	0.014157082
CDA	Pi3k_akt_activation	GBM	0.091817646
CDA	Pi3k_akt_mtor_signaling	GBM	0.158568504
CDA	Porphyrin and chlorophyl	GBM	0.158711438
CDA	Primary bile acid biosynt	GBM	0.263208249
CDA	Propanoate metabolism	GBM	0.026860116
CDA	Purine metabolism	GBM	0.2591893

CDA	Pyrimidine metabolism	GBM	0.101300112
CDA	Pyruvate metabolism	GBM	0.119020793
CDA	Regulation_of_autophagy	GBM	0.145776777
CDA	Retinol metabolism	GBM	0.227061771
CDA	Riboflavin metabolism	GBM	0.255904302
CDA	Schmahl_pdgf_signaling	GBM	0.053538607
CDA	Selenocompound metabol	GBM	0.126118568
CDA	Signaling_by_hippo	GBM	-0.179331152
CDA	Sphingolipid metabolism	GBM	0.241056754
CDA	Starch and sucrose metabo	GBM	0.032418285
CDA	Steroid biosynthesis	GBM	0.046450912
CDA	Steroid hormone biosynth	GBM	0.24501781
CDA	Sulfur metabolism	GBM	0.316095624
CDA	Synthesis and degradation	GBM	0.000367706
CDA	T helper cell	GBM	0.368417005
CDA	T helper1 (th1) cell	GBM	0.326704025
CDA	T helper17 (th17) cell	GBM	0.295829789
CDA	T helper2 (th2) cell	GBM	0.339002476
CDA	T helper9 (th9) cell	GBM	0.382795212
CDA	Taurine and hypotaurine r	GBM	0.065174919
CDA	Terpenoid backbone biosy	GBM	0.099105227
CDA	Tgf_beta_signaling_pathw	GBM	0.030506768
CDA	Thiamine metabolism	GBM	0.198098474
CDA	Tnfa_signaling_via_nfkb	GBM	0.186439141
CDA	Tryptophan metabolism	GBM	0.311654631
CDA	Tumor endothelial cell	GBM	0.079810023
CDA	Tyrosine metabolism	GBM	0.303168067
CDA	Ubiquinone and other terp	GBM	0.217057234
CDA	Valine, leucine and isoleu	GBM	0.21632211
CDA	Valine, leucine and isoleu	GBM	0.076572729
CDA	Vascular endothelial cell	GBM	0.354529343
CDA	Vascular smooth muscle c	GBM	0.321263426
CDA	Vegf_signaling_pathway	GBM	0.129649781
CDA	Vitamin b6 metabolism	GBM	0.104860711
CDA	Willert_wnt_signaling	GBM	0.159934081
CDA	Wnt_beta_catenin_signali	GBM	-0.130105483
UCK1	Abnormal plasma cell	GBM	0.027626939
UCK1	Activated b cell	GBM	-0.157614195
UCK1	Activated cd4+ t cell	GBM	-0.210704764
UCK1	Activated t cell	GBM	-0.250129529
UCK1	Alanine, aspartate and glu	GBM	0.016645458
UCK1	Alcala_apoptosis	GBM	0.031646349
UCK1	Alpha-linolenic acid meta	GBM	0.089520157

UCK1	Amino sugar and nucleoti	GBM	-0.148335304
UCK1	Ampk_pathway	GBM	0.149913514
UCK1	Angiogenesis	GBM	-0.40715364
UCK1	Arachidonic acid metabol	GBM	-0.109189018
UCK1	Arginine and proline metε	GBM	0.034235938
UCK1	Arginine biosynthesis	GBM	-0.000495268
UCK1	Ascorbate and aldarate mε	GBM	0.061416833
UCK1	Atypical memory b cell	GBM	-0.303532071
UCK1	Axl+siglec6+ dendritic ce	GBM	-0.322328722
UCK1	B cell	GBM	-0.193137487
UCK1	B1 cell	GBM	-0.202110476
UCK1	Basal cell	GBM	-0.141150076
UCK1	Beta-alanine metabolism	GBM	0.005465265
UCK1	Biosynthesis of unsaturate	GBM	0.201722968
UCK1	Biotin metabolism	GBM	0.156886971
UCK1	Butanoate metabolism	GBM	0.248271527
UCK1	Caffeine metabolism	GBM	0.129841413
UCK1	Cancer stem cell	GBM	-0.368802346
UCK1	Cancer stem-like cell	GBM	-0.227083045
UCK1	Cd4+ cytotoxic t cell	GBM	-0.230223906
UCK1	Cd4+ memory t cell	GBM	-0.235436863
UCK1	Cd4+ regulatory t cell	GBM	-0.241746261
UCK1	Cd4+ t helper cell	GBM	-0.210300442
UCK1	Cd4+cd25+ regulatory t c	GBM	-0.258349924
UCK1	Cd8+ cytotoxic t cell	GBM	-0.198762723
UCK1	Cd8+ regulatory t cell	GBM	-0.224480862
UCK1	Cell_cycle	GBM	0.262485148
UCK1	Chandran_metastasis_top ⁵	GBM	-0.094053876
UCK1	Citrate cycle (tca cycle)	GBM	0.163474196
UCK1	Cysteine and methionine r	GBM	0.094683105
UCK1	Cytokine induced killer cε	GBM	-0.057519455
UCK1	D-arginine and d-ornithin	GBM	0.048188771
UCK1	D-glutamine and d-glutan	GBM	0.034170997
UCK1	Dendritic cell	GBM	-0.3675424
UCK1	Dna_repair	GBM	0.381793058
UCK1	Dna_replication	GBM	0.419715838
UCK1	Double-negative memory	GBM	-0.121812962
UCK1	Drug metabolism - cytoch	GBM	0.116835887
UCK1	Drug metabolism - other ε	GBM	0.184477516
UCK1	E2f_targets	GBM	0.313642989
UCK1	Ecm_receptor_interaction	GBM	-0.457507123
UCK1	Effector cd4+ memory t (	GBM	-0.267195899
UCK1	Effector cd8+ memory t (	GBM	-0.325318485

UCK1	Effector memory t cell	GBM	-0.207490886
UCK1	Effector regulatory t (treg	GBM	-0.399367706
UCK1	Elvidge_hif1a_targets_up	GBM	-0.100964031
UCK1	Endothelial cell	GBM	-0.299452444
UCK1	Eosinophil	GBM	-0.228386701
UCK1	Ether lipid metabolism	GBM	-0.054584092
UCK1	Exhausted cd4+ t cell	GBM	-0.177545357
UCK1	Exhausted cd8+ t cell	GBM	-0.25177091
UCK1	Exhausted t cell	GBM	-0.155417042
UCK1	Fat cell (adipocyte)	GBM	-0.119709714
UCK1	Fatty acid biosynthesis	GBM	-0.158416576
UCK1	Fatty acid degradation	GBM	0.085769491
UCK1	Fatty acid elongation	GBM	0.082192422
UCK1	Fibroblast	GBM	-0.410048772
UCK1	Folate biosynthesis	GBM	0.305477967
UCK1	Follicular b cell	GBM	-0.216661811
UCK1	Follicular dendritic cell	GBM	-0.362312459
UCK1	Follicular helper (tfh) t ce	GBM	-0.32963077
UCK1	Follicular t cell	GBM	-0.050165058
UCK1	Foxp3+il-17+ t cell	GBM	-0.088671967
UCK1	Fructose and mannose me	GBM	-0.057385853
UCK1	G2m_checkpoint	GBM	0.196798171
UCK1	Galactose metabolism	GBM	-0.10273836
UCK1	Galie_tumor_stemness_ge	GBM	-0.105311778
UCK1	Glutathione metabolism	GBM	0.022564601
UCK1	Glycerolipid metabolism	GBM	-0.144568425
UCK1	Glycerophospholipid metæ	GBM	-0.123066916
UCK1	Glycine, serine and threor	GBM	0.254988251
UCK1	Glycolysis / gluconeogene	GBM	0.011909923
UCK1	Glycosaminoglycan biosy1	GBM	-0.331784764
UCK1	Glycosaminoglycan biosy1	GBM	-0.412855189
UCK1	Glycosaminoglycan biosy1	GBM	-0.363267277
UCK1	Glycosaminoglycan degra	GBM	-0.328629115
UCK1	Glycosphingolipid biosyn1	GBM	-0.303184536
UCK1	Glycosphingolipid biosyn1	GBM	-0.37521366
UCK1	Glycosphingolipid biosyn1	GBM	-0.018078651
UCK1	Glycosylphosphatidylinos:	GBM	0.071398869
UCK1	Glyoxylate and dicarboxy	GBM	0.309493354
UCK1	Granulocyte	GBM	-0.316079093
UCK1	Hedgehog_signaling	GBM	-0.24413366
UCK1	Histidine metabolism	GBM	0.068066896
UCK1	Hypoxia	GBM	-0.263411436
UCK1	Il-17ralpha t cell	GBM	-0.214557979

UCK1	Il2_stat5_signaling	GBM	-0.380389227
UCK1	Il6_jak_stat3_signaling	GBM	-0.376268379
UCK1	Immune_checkpoints_tun	GBM	-0.267771162
UCK1	Immune_inhibition_cytok	GBM	-0.284029912
UCK1	Inositol phosphate metabo	GBM	-0.230452701
UCK1	Interleukin_6_signaling	GBM	-0.36381786
UCK1	Jaeger_metastasis_up	GBM	-0.061725672
UCK1	Jain_nfkb_signaling	GBM	0.079285705
UCK1	Kras_signaling_up	GBM	-0.39644134
UCK1	Linoleic acid metabolism	GBM	0.026297954
UCK1	Lipoic acid metabolism	GBM	0.178782708
UCK1	Lysine degradation	GBM	0.084341795
UCK1	Lysosome	GBM	-0.318358673
UCK1	M1 macrophage	GBM	-0.255636129
UCK1	M2 macrophage	GBM	-0.290071666
UCK1	Mannose type o-glycan bi	GBM	0.033048535
UCK1	Mapk_signaling_pathway	GBM	-0.395135015
UCK1	Mapk3_erk1_activation	GBM	-0.369070627
UCK1	Marginal zone b cell	GBM	-0.240123894
UCK1	Memory b cell	GBM	-0.23366543
UCK1	Mesenchymal cell	GBM	-0.29196005
UCK1	Mesenchymal stem cell	GBM	-0.349819701
UCK1	Metabolism of xenobiotic	GBM	0.141401474
UCK1	Migrating cancer stem cel	GBM	-0.201779364
UCK1	Mitotic_spindle	GBM	-0.046045924
UCK1	Monocyte	GBM	-0.262903204
UCK1	Mtor_signaling_pathway	GBM	-0.164131803
UCK1	Mtorc1_signaling	GBM	-0.057826036
UCK1	Mucin type o-glycan biosy	GBM	-0.421002416
UCK1	Myc_targets_v1	GBM	0.233873371
UCK1	Myeloid cell	GBM	-0.337922709
UCK1	N-glycan biosynthesis	GBM	-0.008238784
UCK1	Naive b cell	GBM	0.198165506
UCK1	Naive cd4+ t cell	GBM	-0.301056573
UCK1	Naive cd8+ t cell	GBM	-0.319984414
UCK1	Natural killer cell	GBM	-0.282233637
UCK1	Natural killer t (nkt) cell	GBM	-0.037498156
UCK1	Natural regulatory t (treg)	GBM	-0.273944563
UCK1	Neomycin, kanamycin an	GBM	-0.230085244
UCK1	Neutrophil	GBM	-0.290535081
UCK1	Nicotinate and nicotinami	GBM	0.019407785
UCK1	Nitrogen metabolism	GBM	0.107261589
UCK1	Nod_like_receptor_signal	GBM	-0.433733128

UCK1	Notch_signaling	GBM	-0.169042838
UCK1	One carbon pool by folate	GBM	0.151312857
UCK1	Other glycan degradation	GBM	-0.319084143
UCK1	Other types of o-glycan b	GBM	-0.169390712
UCK1	Oxidative phosphorylatior	GBM	0.199167173
UCK1	P53_pathway	GBM	-0.190947835
UCK1	P53_signaling_pathway	GBM	-0.131471567
UCK1	Pantothenate and coa bios	GBM	-0.197097087
UCK1	Pentose and glucuronate i	GBM	0.00761766
UCK1	Pentose phosphate pathwa	GBM	0.170303762
UCK1	Pericyte	GBM	-0.371677833
UCK1	Phenylalanine metabolism	GBM	-0.030791453
UCK1	Phenylalanine, tyrosine ar	GBM	0.100772186
UCK1	Phosphonate and phosphir	GBM	0.003566533
UCK1	Pi3k_akt_activation	GBM	-0.279319424
UCK1	Pi3k_akt_mtor_signaling	GBM	-0.200018822
UCK1	Porphyrin and chlorophyl	GBM	0.136040422
UCK1	Primary bile acid biosynt	GBM	-0.052043014
UCK1	Propanoate metabolism	GBM	0.047825517
UCK1	Purine metabolism	GBM	0.191777785
UCK1	Pyrimidine metabolism	GBM	0.277088645
UCK1	Pyruvate metabolism	GBM	0.207259052
UCK1	Regulation_of_autophagy	GBM	0.078452168
UCK1	Retinol metabolism	GBM	0.103928382
UCK1	Riboflavin metabolism	GBM	0.034335465
UCK1	Schmahl_pdgf_signaling	GBM	-0.147588095
UCK1	Selenocompound metabol	GBM	0.117798583
UCK1	Signaling_by_hippo	GBM	-0.235112156
UCK1	Sphingolipid metabolism	GBM	-0.215617894
UCK1	Starch and sucrose metabo	GBM	-0.27788388
UCK1	Steroid biosynthesis	GBM	0.206173093
UCK1	Steroid hormone biosynth	GBM	0.080628275
UCK1	Sulfur metabolism	GBM	-0.008996788
UCK1	Synthesis and degradation	GBM	0.262610351
UCK1	T helper cell	GBM	-0.30126298
UCK1	T helper1 (th1) cell	GBM	-0.27368919
UCK1	T helper17 (th17) cell	GBM	-0.35827019
UCK1	T helper2 (th2) cell	GBM	-0.247302054
UCK1	T helper9 (th9) cell	GBM	-0.229101444
UCK1	Taurine and hypotaurine r	GBM	-0.044331227
UCK1	Terpenoid backbone biosy	GBM	0.206402538
UCK1	Tgf_beta_signaling_pathw	GBM	-0.39097877
UCK1	Thiamine metabolism	GBM	0.255895339

UCK1	Tnfa_signaling_via_nfk	GBM	-0.326424529
UCK1	Tryptophan metabolism	GBM	0.00136193
UCK1	Tumor endothelial cell	GBM	-0.239185717
UCK1	Tyrosine metabolism	GBM	0.092495993
UCK1	Ubiquinone and other ter	GBM	0.113244646
UCK1	Valine, leucine and isoleu	GBM	-0.074817281
UCK1	Valine, leucine and isoleu	GBM	0.23114481
UCK1	Vascular endothelial cell	GBM	-0.345367478
UCK1	Vascular smooth muscle c	GBM	-0.327152067
UCK1	Vegf_signaling_pathway	GBM	-0.341014126
UCK1	Vitamin b6 metabolism	GBM	0.174818451
UCK1	Willert_wnt_signaling	GBM	0.030273678
UCK1	Wnt_beta_catenin_signali	GBM	-0.017476095
UCK2	Abnormal plasma cell	GBM	0.150925794
UCK2	Activated b cell	GBM	-0.10026731
UCK2	Activated cd4+ t cell	GBM	-0.164860444
UCK2	Activated t cell	GBM	0.150552766
UCK2	Alanine, aspartate and glu	GBM	-0.265517289
UCK2	Alcala_apoptosis	GBM	0.279233622
UCK2	Alpha-linolenic acid meta	GBM	-0.43982255
UCK2	Amino sugar and nucleoti	GBM	0.265005739
UCK2	Ampk_pathway	GBM	0.187141913
UCK2	Angiogenesis	GBM	0.114712955
UCK2	Arachidonic acid metabol	GBM	-0.272372304
UCK2	Arginine and proline metæ	GBM	-0.139311695
UCK2	Arginine biosynthesis	GBM	-0.14988674
UCK2	Ascorbate and aldarate me	GBM	-0.041650275
UCK2	Atypical memory b cell	GBM	0.200006103
UCK2	Axl+siglec6+ dendritic ce	GBM	-0.194618712
UCK2	B cell	GBM	-0.108696441
UCK2	B1 cell	GBM	-0.086282852
UCK2	Basal cell	GBM	0.11213414
UCK2	Beta-alanine metabolism	GBM	-0.296121541
UCK2	Biosynthesis of unsaturate	GBM	-0.138209839
UCK2	Biotin metabolism	GBM	-0.027653826
UCK2	Butanoate metabolism	GBM	-0.264171239
UCK2	Caffeine metabolism	GBM	-0.150775429
UCK2	Cancer stem cell	GBM	0.059540367
UCK2	Cancer stem-like cell	GBM	0.141304662
UCK2	Cd4+ cytotoxic t cell	GBM	-0.117051952
UCK2	Cd4+ memory t cell	GBM	0.136074144
UCK2	Cd4+ regulatory t cell	GBM	-0.032000269
UCK2	Cd4+ t helper cell	GBM	-0.140443786

UCK2	Cd4+cd25+ regulatory t c	GBM	-0.080046275
UCK2	Cd8+ cytotoxic t cell	GBM	0.110437632
UCK2	Cd8+ regulatory t cell	GBM	0.176515339
UCK2	Cell_cycle	GBM	0.565175676
UCK2	Chandran_metastasis_top5	GBM	0.212085916
UCK2	Citrate cycle (tca cycle)	GBM	0.137870498
UCK2	Cysteine and methionine r	GBM	0.111242391
UCK2	Cytokine induced killer c	GBM	-0.107046952
UCK2	D-arginine and d-ornithin	GBM	-0.342700652
UCK2	D-glutamine and d-glutan	GBM	-0.150345881
UCK2	Dendritic cell	GBM	-0.067233415
UCK2	Dna_repair	GBM	0.387137721
UCK2	Dna_replication	GBM	0.52844239
UCK2	Double-negative memory	GBM	0.075594454
UCK2	Drug metabolism - cytoch	GBM	-0.111123127
UCK2	Drug metabolism - other c	GBM	0.229281269
UCK2	E2f_targets	GBM	0.544138435
UCK2	Ecm_receptor_interaction	GBM	0.0752629
UCK2	Effector cd4+ memory t (	GBM	-0.149208042
UCK2	Effector cd8+ memory t (	GBM	-0.119906664
UCK2	Effector memory t cell	GBM	-0.111338786
UCK2	Effector regulatory t (treg	GBM	0.114527892
UCK2	Elvidge_hif1a_targets_up	GBM	0.237536103
UCK2	Endothelial cell	GBM	0.265843569
UCK2	Eosinophil	GBM	-0.140947043
UCK2	Ether lipid metabolism	GBM	-0.393387969
UCK2	Exhausted cd4+ t cell	GBM	-0.082752845
UCK2	Exhausted cd8+ t cell	GBM	-0.071535047
UCK2	Exhausted t cell	GBM	-0.030279225
UCK2	Fat cell (adipocyte)	GBM	0.042726801
UCK2	Fatty acid biosynthesis	GBM	-0.305266779
UCK2	Fatty acid degradation	GBM	-0.314027097
UCK2	Fatty acid elongation	GBM	-0.000552811
UCK2	Fibroblast	GBM	0.16123844
UCK2	Folate biosynthesis	GBM	0.020696731
UCK2	Follicular b cell	GBM	-0.114767678
UCK2	Follicular dendritic cell	GBM	0.029328157
UCK2	Follicular helper (tfh) t c	GBM	0.017595289
UCK2	Follicular t cell	GBM	0.172100621
UCK2	Foxp3+il-17+ t cell	GBM	-0.038963231
UCK2	Fructose and mannose me	GBM	0.062195505
UCK2	G2m_checkpoint	GBM	0.51567281
UCK2	Galactose metabolism	GBM	0.182840137

UCK2	Galie_tumor_stemness_ge	GBM	0.190904876
UCK2	Glutathione metabolism	GBM	0.153734927
UCK2	Glycerolipid metabolism	GBM	-0.142085807
UCK2	Glycerophospholipid metæ	GBM	-0.418829034
UCK2	Glycine, serine and threor	GBM	-0.221115084
UCK2	Glycolysis / gluconeogene	GBM	0.113517689
UCK2	Glycosaminoglycan biosy1	GBM	0.164760156
UCK2	Glycosaminoglycan biosy1	GBM	0.19166424
UCK2	Glycosaminoglycan biosy1	GBM	0.226079611
UCK2	Glycosaminoglycan degra	GBM	0.035707916
UCK2	Glycosphingolipid biosyn1	GBM	0.131826771
UCK2	Glycosphingolipid biosyn1	GBM	0.08139366
UCK2	Glycosphingolipid biosyn1	GBM	0.115450266
UCK2	Glycosylphosphatidylinos:	GBM	-0.073543817
UCK2	Glyoxylate and dicarboxy	GBM	0.101553601
UCK2	Granulocyte	GBM	-0.057331796
UCK2	Hedgehog_signaling	GBM	0.070255816
UCK2	Histidine metabolism	GBM	-0.455258804
UCK2	Hypoxia	GBM	0.123936615
UCK2	Il-17ralpha t cell	GBM	0.037358809
UCK2	Il2_stat5_signaling	GBM	0.044451188
UCK2	Il6_jak_stat3_signaling	GBM	-0.026610101
UCK2	Immune_checkpoints_tunr	GBM	0.067159323
UCK2	Immune_inhibition_cytok	GBM	0.022722033
UCK2	Inositol phosphate metabo	GBM	-0.276125044
UCK2	Interleukin_6_signaling	GBM	-0.180264297
UCK2	Jaeger_metastasis_up	GBM	0.440703681
UCK2	Jain_nfkb_signaling	GBM	0.454599258
UCK2	Kras_signaling_up	GBM	-0.034738776
UCK2	Linoleic acid metabolism	GBM	-0.426174242
UCK2	Lipoic acid metabolism	GBM	-0.041178161
UCK2	Lysine degradation	GBM	0.03213147
UCK2	Lysosome	GBM	-0.041928611
UCK2	M1 macrophage	GBM	-0.084886246
UCK2	M2 macrophage	GBM	0.005286045
UCK2	Mannose type o-glycan bi	GBM	0.087118352
UCK2	Mapk_signaling_pathway	GBM	-0.122763177
UCK2	Mapk3_erk1_activation	GBM	-0.171575395
UCK2	Marginal zone b cell	GBM	-0.084641978
UCK2	Memory b cell	GBM	-0.137902047
UCK2	Mesenchymal cell	GBM	0.30383295
UCK2	Mesenchymal stem cell	GBM	-0.099785582
UCK2	Metabolism of xenobiotic:	GBM	-0.041722794

UCK2	Migrating cancer stem cel	GBM	-0.022522703
UCK2	Mitotic_spindle	GBM	0.075900977
UCK2	Monocyte	GBM	-0.081053126
UCK2	Mtor_signaling_pathway	GBM	-0.019639977
UCK2	Mtorc1_signaling	GBM	0.394118242
UCK2	Mucin type o-glycan biosy	GBM	-0.000578239
UCK2	Myc_targets_v1	GBM	0.594955459
UCK2	Myeloid cell	GBM	-0.105674502
UCK2	N-glycan biosynthesis	GBM	0.480248325
UCK2	Naive b cell	GBM	-0.055231793
UCK2	Naive cd4+ t cell	GBM	-0.043064626
UCK2	Naive cd8+ t cell	GBM	-0.164444049
UCK2	Natural killer cell	GBM	-0.046577361
UCK2	Natural killer t (nkt) cell	GBM	0.29489305
UCK2	Natural regulatory t (treg)	GBM	-0.04537333
UCK2	Neomycin, kanamycin and	GBM	0.122198635
UCK2	Neutrophil	GBM	-0.030959213
UCK2	Nicotinate and nicotinami	GBM	-0.187119607
UCK2	Nitrogen metabolism	GBM	-0.33275306
UCK2	Nod_like_receptor_signal	GBM	-0.079901256
UCK2	Notch_signaling	GBM	0.001216031
UCK2	One carbon pool by folate	GBM	0.408424821
UCK2	Other glycan degradation	GBM	0.022103186
UCK2	Other types of o-glycan b	GBM	0.147289072
UCK2	Oxidative phosphorylatio	GBM	0.137354156
UCK2	P53_pathway	GBM	0.041797565
UCK2	P53_signaling_pathway	GBM	0.399175317
UCK2	Pantothenate and coa bios	GBM	0.115488238
UCK2	Pentose and glucuronate i	GBM	0.182222779
UCK2	Pentose phosphate pathwa	GBM	0.201726186
UCK2	Pericyte	GBM	0.154327175
UCK2	Phenylalanine metabolism	GBM	-0.241103511
UCK2	Phenylalanine, tyrosine ar	GBM	-0.249877264
UCK2	Phosphonate and phosphir	GBM	-0.273001906
UCK2	Pi3k_akt_activation	GBM	0.056593563
UCK2	Pi3k_akt_mtor_signaling	GBM	0.106526175
UCK2	Porphyrin and chlorophyl	GBM	0.130122982
UCK2	Primary bile acid biosynt	GBM	-0.444482939
UCK2	Propanoate metabolism	GBM	-0.236196014
UCK2	Purine metabolism	GBM	0.542599279
UCK2	Pyrimidine metabolism	GBM	0.49781436
UCK2	Pyruvate metabolism	GBM	-0.048206414
UCK2	Regulation_of_autophagy	GBM	-0.282667725

UCK2	Retinol metabolism	GBM	-0.179063301
UCK2	Riboflavin metabolism	GBM	0.187836165
UCK2	Schmahl_pdgf_signaling	GBM	-0.119352063
UCK2	Selenocompound metabol	GBM	0.206668706
UCK2	Signaling_by_hippo	GBM	-0.212316391
UCK2	Sphingolipid metabolism	GBM	-0.108954807
UCK2	Starch and sucrose metabo	GBM	-0.240233685
UCK2	Steroid biosynthesis	GBM	0.323957193
UCK2	Steroid hormone biosynth	GBM	-0.254764131
UCK2	Sulfur metabolism	GBM	0.199500711
UCK2	Synthesis and degradation	GBM	-0.148630749
UCK2	T helper cell	GBM	-0.11064443
UCK2	T helper1 (th1) cell	GBM	-0.078321067
UCK2	T helper17 (th17) cell	GBM	-0.035651837
UCK2	T helper2 (th2) cell	GBM	-0.038944211
UCK2	T helper9 (th9) cell	GBM	-0.006517793
UCK2	Taurine and hypotaurine r	GBM	-0.055243122
UCK2	Terpenoid backbone biosy	GBM	0.276093676
UCK2	Tgf_beta_signaling_pathw	GBM	0.192223647
UCK2	Thiamine metabolism	GBM	-0.182927861
UCK2	Tnfa_signaling_via_nfbk	GBM	0.05655554
UCK2	Tryptophan metabolism	GBM	-0.2229863
UCK2	Tumor endothelial cell	GBM	-0.043338258
UCK2	Tyrosine metabolism	GBM	-0.241740066
UCK2	Ubiquinone and other terp	GBM	0.061625176
UCK2	Valine, leucine and isoleu	GBM	0.01749023
UCK2	Valine, leucine and isoleu	GBM	-0.25067903
UCK2	Vascular endothelial cell	GBM	0.070741197
UCK2	Vascular smooth muscle c	GBM	0.072575044
UCK2	Vegf_signaling_pathway	GBM	-0.043015792
UCK2	Vitamin b6 metabolism	GBM	-0.378194088
UCK2	Willert_wnt_signaling	GBM	0.224535805
UCK2	Wnt_beta_catenin_signali	GBM	0.19815741
UCKL1	Abnormal plasma cell	GBM	-0.123504702
UCKL1	Activated b cell	GBM	-0.255304203
UCKL1	Activated cd4+ t cell	GBM	-0.33158648
UCKL1	Activated t cell	GBM	-0.181071636
UCKL1	Alanine, aspartate and glu	GBM	-0.148262159
UCKL1	Alcala_apoptosis	GBM	-0.050901699
UCKL1	Alpha-linolenic acid meta	GBM	-0.140239926
UCKL1	Amino sugar and nucleoti	GBM	-0.187193649
UCKL1	Ampk_pathway	GBM	0.280084746
UCKL1	Angiogenesis	GBM	-0.144506925

UCKL1	Arachidonic acid metabol: GBM	-0.192346485
UCKL1	Arginine and proline metæ GBM	-0.241820163
UCKL1	Arginine biosynthesis GBM	-0.173344418
UCKL1	Ascorbate and aldarate mε GBM	-0.203648421
UCKL1	Atypical memory b cell GBM	-0.155945264
UCKL1	Axl+siglec6+ dendritic ce GBM	-0.281920414
UCKL1	B cell GBM	-0.337314587
UCKL1	B1 cell GBM	-0.263820494
UCKL1	Basal cell GBM	-0.155559791
UCKL1	Beta-alanine metabolism GBM	-0.273253535
UCKL1	Biosynthesis of unsaturate GBM	-0.099158061
UCKL1	Biotin metabolism GBM	0.018806588
UCKL1	Butanoate metabolism GBM	-0.125569008
UCKL1	Caffeine metabolism GBM	-0.267180015
UCKL1	Cancer stem cell GBM	-0.248671937
UCKL1	Cancer stem-like cell GBM	-0.220951737
UCKL1	Cd4+ cytotoxic t cell GBM	-0.308919826
UCKL1	Cd4+ memory t cell GBM	-0.200730221
UCKL1	Cd4+ regulatory t cell GBM	-0.290343917
UCKL1	Cd4+ t helper cell GBM	-0.292405445
UCKL1	Cd4+cd25+ regulatory t c GBM	-0.286415957
UCKL1	Cd8+ cytotoxic t cell GBM	-0.11373959
UCKL1	Cd8+ regulatory t cell GBM	-0.11760058
UCKL1	Cell_cycle GBM	0.139370036
UCKL1	Chandran_metastasis_topδ GBM	-0.141784671
UCKL1	Citrate cycle (tca cycle) GBM	-0.020028818
UCKL1	Cysteine and methionine r GBM	0.175521471
UCKL1	Cytokine induced killer cε GBM	-0.118982993
UCKL1	D-arginine and d-ornithin GBM	-0.113663466
UCKL1	D-glutamine and d-glutan GBM	-0.029892155
UCKL1	Dendritic cell GBM	-0.255410726
UCKL1	Dna_repair GBM	0.286446568
UCKL1	Dna_replication GBM	0.160596232
UCKL1	Double-negative memory GBM	-0.029807989
UCKL1	Drug metabolism - cytoch GBM	-0.209653002
UCKL1	Drug metabolism - other ε GBM	-0.000369572
UCKL1	E2f_targets GBM	0.186885261
UCKL1	Ecm_receptor_interaction GBM	-0.225293237
UCKL1	Effector cd4+ memory t (GBM	-0.317410569
UCKL1	Effector cd8+ memory t (GBM	-0.337747824
UCKL1	Effector memory t cell GBM	-0.342418335
UCKL1	Effector regulatory t (treg GBM	-0.272841762
UCKL1	Elvidge_hif1a_targets_up GBM	-0.191845352

UCKL1	Endothelial cell	GBM	-0.125742704
UCKL1	Eosinophil	GBM	-0.283224687
UCKL1	Ether lipid metabolism	GBM	-0.19389518
UCKL1	Exhausted cd4+ t cell	GBM	-0.306823015
UCKL1	Exhausted cd8+ t cell	GBM	-0.278721373
UCKL1	Exhausted t cell	GBM	-0.204030816
UCKL1	Fat cell (adipocyte)	GBM	-0.157382233
UCKL1	Fatty acid biosynthesis	GBM	-0.152511334
UCKL1	Fatty acid degradation	GBM	-0.106984533
UCKL1	Fatty acid elongation	GBM	-0.094821887
UCKL1	Fibroblast	GBM	-0.29514754
UCKL1	Folate biosynthesis	GBM	-0.100153071
UCKL1	Follicular b cell	GBM	-0.364010468
UCKL1	Follicular dendritic cell	GBM	-0.199911839
UCKL1	Follicular helper (tfh) t ce	GBM	-0.289409713
UCKL1	Follicular t cell	GBM	-0.03399582
UCKL1	Foxp3+il-17+ t cell	GBM	-0.028236824
UCKL1	Fructose and mannose me	GBM	-0.197787558
UCKL1	G2m_checkpoint	GBM	0.09374314
UCKL1	Galactose metabolism	GBM	-0.18468755
UCKL1	Galie_tumor_stemness_ge	GBM	-0.216828284
UCKL1	Glutathione metabolism	GBM	-0.041985176
UCKL1	Glycerolipid metabolism	GBM	-0.181129894
UCKL1	Glycerophospholipid metæ	GBM	-0.037154285
UCKL1	Glycine, serine and threor	GBM	-0.057637306
UCKL1	Glycolysis / gluconeogene	GBM	-0.244089694
UCKL1	Glycosaminoglycan biosy1	GBM	-0.106525027
UCKL1	Glycosaminoglycan biosy1	GBM	-0.097565624
UCKL1	Glycosaminoglycan biosy1	GBM	-0.142033649
UCKL1	Glycosaminoglycan degra	GBM	-0.109352876
UCKL1	Glycosphingolipid biosyn1	GBM	-0.292333375
UCKL1	Glycosphingolipid biosyn1	GBM	-0.286517156
UCKL1	Glycosphingolipid biosyn1	GBM	0.043691371
UCKL1	Glycosylphosphatidylinos	GBM	0.211819401
UCKL1	Glyoxylate and dicarboxy	GBM	0.000605093
UCKL1	Granulocyte	GBM	-0.273624984
UCKL1	Hedgehog_signaling	GBM	-0.196145531
UCKL1	Histidine metabolism	GBM	-0.277227004
UCKL1	Hypoxia	GBM	-0.244744171
UCKL1	Il-17alpha t cell	GBM	-0.142113412
UCKL1	Il2_stat5_signaling	GBM	-0.26790145
UCKL1	Il6_jak_stat3_signaling	GBM	-0.26246374
UCKL1	Immune_checkpoints_turr	GBM	-0.297336362

UCKL1	Immune_inhibition_cytok	GBM	-0.147458385
UCKL1	Inositol phosphate metabo	GBM	-0.323104192
UCKL1	Interleukin_6_signaling	GBM	-0.330536492
UCKL1	Jaeger_metastasis_up	GBM	-0.245033197
UCKL1	Jain_nfkb_signaling	GBM	0.053029348
UCKL1	Kras_signaling_up	GBM	-0.406042103
UCKL1	Linoleic acid metabolism	GBM	-0.095250229
UCKL1	Lipoic acid metabolism	GBM	0.212853605
UCKL1	Lysine degradation	GBM	0.087574603
UCKL1	Lysosome	GBM	-0.276956065
UCKL1	M1 macrophage	GBM	-0.301641412
UCKL1	M2 macrophage	GBM	-0.289080689
UCKL1	Mannose type o-glycan bi	GBM	0.247784005
UCKL1	Mapk_signaling_pathway	GBM	-0.225424339
UCKL1	Mapk3_erk1_activation	GBM	-0.328380832
UCKL1	Marginal zone b cell	GBM	-0.224582305
UCKL1	Memory b cell	GBM	-0.317377679
UCKL1	Mesenchymal cell	GBM	-0.073595568
UCKL1	Mesenchymal stem cell	GBM	-0.36809886
UCKL1	Metabolism of xenobiotic	GBM	-0.140634813
UCKL1	Migrating cancer stem cel	GBM	-0.367643266
UCKL1	Mitotic_spindle	GBM	-0.095483513
UCKL1	Monocyte	GBM	-0.271995472
UCKL1	Mtor_signaling_pathway	GBM	-0.079951816
UCKL1	Mtorc1_signaling	GBM	-0.218665816
UCKL1	Mucin type o-glycan biosy	GBM	-0.378737279
UCKL1	Myc_targets_v1	GBM	0.150163606
UCKL1	Myeloid cell	GBM	-0.328083625
UCKL1	N-glycan biosynthesis	GBM	0.054150335
UCKL1	Naive b cell	GBM	-0.23308851
UCKL1	Naive cd4+ t cell	GBM	-0.356186189
UCKL1	Naive cd8+ t cell	GBM	-0.276133845
UCKL1	Natural killer cell	GBM	-0.27601055
UCKL1	Natural killer t (nkt) cell	GBM	0.039952969
UCKL1	Natural regulatory t (treg)	GBM	-0.312888477
UCKL1	Neomycin, kanamycin and	GBM	-0.325053001
UCKL1	Neutrophil	GBM	-0.272646045
UCKL1	Nicotinate and nicotinami	GBM	-0.135495482
UCKL1	Nitrogen metabolism	GBM	-0.228843071
UCKL1	Nod_like_receptor_signal	GBM	-0.294823096
UCKL1	Notch_signaling	GBM	0.070649938
UCKL1	One carbon pool by folate	GBM	0.112954526
UCKL1	Other glycan degradation	GBM	-0.061698068

UCKL1	Other types of o-glycan b	GBM	0.299677332
UCKL1	Oxidative phosphorylation	GBM	0.073735532
UCKL1	P53_pathway	GBM	-0.209614261
UCKL1	P53_signaling_pathway	GBM	-0.007208223
UCKL1	Pantothenate and coa biosynthesis	GBM	-0.048804492
UCKL1	Pentose and glucuronate interconversions	GBM	-0.113224973
UCKL1	Pentose phosphate pathway	GBM	-0.298852115
UCKL1	Pericyte	GBM	-0.150378412
UCKL1	Phenylalanine metabolism	GBM	-0.290259779
UCKL1	Phenylalanine, tyrosine and tryptophan metabolism	GBM	-0.084349582
UCKL1	Phosphonate and phosphite metabolism	GBM	-0.302037734
UCKL1	Pi3k_akt_activation	GBM	-0.385105272
UCKL1	Pi3k_akt_mtor_signaling	GBM	-0.258284727
UCKL1	Porphyrin and chlorophyll metabolism	GBM	-0.07456757
UCKL1	Primary bile acid biosynthesis	GBM	-0.330593262
UCKL1	Propanoate metabolism	GBM	-0.103737831
UCKL1	Purine metabolism	GBM	0.084080744
UCKL1	Pyrimidine metabolism	GBM	0.253292657
UCKL1	Pyruvate metabolism	GBM	-0.155922119
UCKL1	Regulation_of_autophagy	GBM	-0.14020329
UCKL1	Retinol metabolism	GBM	-0.128057888
UCKL1	Riboflavin metabolism	GBM	-0.062295939
UCKL1	Schmahl_pdgf_signaling	GBM	-0.491132587
UCKL1	Selenocompound metabolism	GBM	0.165819647
UCKL1	Signaling_by_hippo	GBM	-0.336675096
UCKL1	Sphingolipid metabolism	GBM	-0.351153425
UCKL1	Starch and sucrose metabolism	GBM	-0.256986187
UCKL1	Steroid biosynthesis	GBM	0.150974683
UCKL1	Steroid hormone biosynthesis	GBM	-0.183583588
UCKL1	Sulfur metabolism	GBM	0.052788491
UCKL1	Synthesis and degradation of ribonucleotides	GBM	-0.153211182
UCKL1	T helper cell	GBM	-0.299056919
UCKL1	T helper1 (th1) cell	GBM	-0.26658428
UCKL1	T helper17 (th17) cell	GBM	-0.263135362
UCKL1	T helper2 (th2) cell	GBM	-0.243903627
UCKL1	T helper9 (th9) cell	GBM	-0.230278855
UCKL1	Taurine and hypotaurine interconversions	GBM	0.277904375
UCKL1	Terpenoid backbone biosynthesis	GBM	-0.03135744
UCKL1	Tgf_beta_signaling_pathway	GBM	-0.220981876
UCKL1	Thiamine metabolism	GBM	-0.136021713
UCKL1	Tnfa_signaling_via_nfb	GBM	-0.225373076
UCKL1	Tryptophan metabolism	GBM	-0.281141493
UCKL1	Tumor endothelial cell	GBM	-0.042439177

UCKL1	Tyrosine metabolism	GBM	-0.261608616
UCKL1	Ubiquinone and other terpenoid	GBM	0.116538043
UCKL1	Valine, leucine and isoleucine	GBM	0.150236141
UCKL1	Valine, leucine and isoleucine	GBM	-0.097737763
UCKL1	Vascular endothelial cell	GBM	-0.122535449
UCKL1	Vascular smooth muscle cell	GBM	-0.170438016
UCKL1	Vegf_signaling_pathway	GBM	-0.154114698
UCKL1	Vitamin b6 metabolism	GBM	-0.288259421
UCKL1	Willert_wnt_signaling	GBM	0.046105665
UCKL1	Wnt_beta_catenin_signaling	GBM	0.065397361
UPP1	Abnormal plasma cell	GBM	0.078539856
UPP1	Activated b cell	GBM	0.585996602
UPP1	Activated cd4+ t cell	GBM	0.513107707
UPP1	Activated t cell	GBM	0.454302696
UPP1	Alanine, aspartate and glutamate	GBM	0.103586108
UPP1	Alcalal apoptosis	GBM	0.463315388
UPP1	Alpha-linolenic acid metabolism	GBM	0.187412101
UPP1	Amino sugar and nucleotide	GBM	0.614906825
UPP1	Ampk_pathway	GBM	-0.531523701
UPP1	Angiogenesis	GBM	0.410137509
UPP1	Arachidonic acid metabolism	GBM	0.470968912
UPP1	Arginine and proline metabolism	GBM	0.404232815
UPP1	Arginine biosynthesis	GBM	0.176764664
UPP1	Ascorbate and aldarate metabolism	GBM	-0.096189695
UPP1	Atypical memory b cell	GBM	0.350270915
UPP1	Axl+siglec6+ dendritic cell	GBM	0.530125442
UPP1	B cell	GBM	0.527967516
UPP1	B1 cell	GBM	0.23840182
UPP1	Basal cell	GBM	0.742995665
UPP1	Beta-alanine metabolism	GBM	0.228033233
UPP1	Biosynthesis of unsaturated	GBM	0.218146752
UPP1	Biotin metabolism	GBM	0.195337669
UPP1	Butanoate metabolism	GBM	-0.056600983
UPP1	Caffeine metabolism	GBM	-0.051232529
UPP1	Cancer stem cell	GBM	0.365769724
UPP1	Cancer stem-like cell	GBM	0.235553216
UPP1	Cd4+ cytotoxic t cell	GBM	0.48600294
UPP1	Cd4+ memory t cell	GBM	0.368494526
UPP1	Cd4+ regulatory t cell	GBM	0.508020118
UPP1	Cd4+ t helper cell	GBM	0.450785651
UPP1	Cd4+cd25+ regulatory t cell	GBM	0.490285146
UPP1	Cd8+ cytotoxic t cell	GBM	0.434470786
UPP1	Cd8+ regulatory t cell	GBM	0.375085365

UPP1	Cell_cycle	GBM	-0.293500268
UPP1	Chandran_metastasis_top	GBM	-0.393764826
UPP1	Citrate cycle (tca cycle)	GBM	0.171701145
UPP1	Cysteine and methionine r	GBM	0.313266374
UPP1	Cytokine induced killer c	GBM	0.204116174
UPP1	D-arginine and d-ornithin	GBM	-0.089363585
UPP1	D-glutamine and d-glutan	GBM	-0.187271233
UPP1	Dendritic cell	GBM	0.495994181
UPP1	Dna_repair	GBM	0.224819877
UPP1	Dna_replication	GBM	-0.122161065
UPP1	Double-negative memory	GBM	0.258852951
UPP1	Drug metabolism - cytoch	GBM	0.291232594
UPP1	Drug metabolism - other	GBM	0.387535789
UPP1	E2f_targets	GBM	-0.292349987
UPP1	Ecm_receptor_interaction	GBM	0.30128595
UPP1	Effector cd4+ memory t (	GBM	0.401915968
UPP1	Effector cd8+ memory t (	GBM	0.478650447
UPP1	Effector memory t cell	GBM	0.462705556
UPP1	Effector regulatory t (treg	GBM	0.431548385
UPP1	Elvidge_hif1a_targets_up	GBM	0.152708532
UPP1	Endothelial cell	GBM	0.224077654
UPP1	Eosinophil	GBM	0.529780485
UPP1	Ether lipid metabolism	GBM	0.116920398
UPP1	Exhausted cd4+ t cell	GBM	0.505092681
UPP1	Exhausted cd8+ t cell	GBM	0.543279449
UPP1	Exhausted t cell	GBM	0.420842825
UPP1	Fat cell (adipocyte)	GBM	0.234107568
UPP1	Fatty acid biosynthesis	GBM	0.02230498
UPP1	Fatty acid degradation	GBM	0.133356747
UPP1	Fatty acid elongation	GBM	0.426454839
UPP1	Fibroblast	GBM	0.376883706
UPP1	Folate biosynthesis	GBM	0.395310706
UPP1	Follicular b cell	GBM	0.325856225
UPP1	Follicular dendritic cell	GBM	0.262730286
UPP1	Follicular helper (tfh) t ce	GBM	0.486444374
UPP1	Follicular t cell	GBM	0.237497079
UPP1	Foxp3+il-17+ t cell	GBM	0.146005276
UPP1	Fructose and mannose me	GBM	0.501093169
UPP1	G2m_checkpoint	GBM	-0.445776443
UPP1	Galactose metabolism	GBM	0.552565096
UPP1	Galie_tumor_stemness_ge	GBM	-0.11506009
UPP1	Glutathione metabolism	GBM	0.529729257
UPP1	Glycerolipid metabolism	GBM	0.077693303

UPP1	Glycerophospholipid metabolism	GBM	0.207594803
UPP1	Glycine, serine and threonine metabolism	GBM	0.248166052
UPP1	Glycolysis / gluconeogenesis	GBM	0.443875964
UPP1	Glycosaminoglycan biosynthesis	GBM	0.347011787
UPP1	Glycosaminoglycan biosynthesis	GBM	0.085414075
UPP1	Glycosaminoglycan biosynthesis	GBM	0.423248093
UPP1	Glycosaminoglycan degradation	GBM	0.509419415
UPP1	Glycosphingolipid biosynthesis	GBM	0.549141867
UPP1	Glycosphingolipid biosynthesis	GBM	0.474721256
UPP1	Glycosphingolipid biosynthesis	GBM	-0.013775813
UPP1	Glycosylphosphatidylinositol signaling	GBM	0.42624394
UPP1	Glyoxylate and dicarboxylate metabolism	GBM	0.160107724
UPP1	Granulocyte	GBM	0.544379338
UPP1	Hedgehog signaling	GBM	-0.181356781
UPP1	Histidine metabolism	GBM	0.370052562
UPP1	Hypoxia	GBM	0.52844006
UPP1	IL-17 receptor signaling	GBM	0.406094687
UPP1	IL2 signaling	GBM	0.58699133
UPP1	IL6 signaling	GBM	0.569578105
UPP1	Immune checkpoints	GBM	0.509787057
UPP1	Immune inhibition	GBM	0.514530815
UPP1	Inositol phosphate metabolism	GBM	-0.231469448
UPP1	Interleukin 6 signaling	GBM	0.08579993
UPP1	Jaeger metastasis up	GBM	0.173329168
UPP1	Jain nfkb signaling	GBM	-0.087854024
UPP1	Kras signaling up	GBM	0.536877133
UPP1	Linoleic acid metabolism	GBM	0.107597987
UPP1	Lipoic acid metabolism	GBM	0.168729288
UPP1	Lysine degradation	GBM	-0.477451741
UPP1	Lysosome	GBM	0.541590282
UPP1	M1 macrophage	GBM	0.546600431
UPP1	M2 macrophage	GBM	0.560979563
UPP1	Mannose type o-glycan biosynthesis	GBM	0.021947974
UPP1	Mapk signaling pathway	GBM	0.035839882
UPP1	Mapk3 erk1 activation	GBM	0.022466381
UPP1	Marginal zone b cell	GBM	0.441332803
UPP1	Memory b cell	GBM	0.330823519
UPP1	Mesenchymal cell	GBM	0.502978797
UPP1	Mesenchymal stem cell	GBM	0.486208018
UPP1	Metabolism of xenobiotics	GBM	0.339715467
UPP1	Migrating cancer stem cell	GBM	0.52327263
UPP1	Mitotic spindle	GBM	-0.494984022
UPP1	Monocyte	GBM	0.628726315

UPP1	Mtor_signaling_pathway	GBM	-0.290204194
UPP1	Mtorc1_signaling	GBM	0.503457997
UPP1	Mucin type o-glycan biosynthesis	GBM	0.332236797
UPP1	Myc_targets_v1	GBM	0.047995152
UPP1	Myeloid cell	GBM	0.460960804
UPP1	N-glycan biosynthesis	GBM	0.415438519
UPP1	Naive b cell	GBM	-0.162222337
UPP1	Naive cd4+ t cell	GBM	0.27775788
UPP1	Naive cd8+ t cell	GBM	0.026950691
UPP1	Natural killer cell	GBM	0.509696265
UPP1	Natural killer t (nkt) cell	GBM	0.499575764
UPP1	Natural regulatory t (treg) cell	GBM	0.456762528
UPP1	Neomycin, kanamycin and spectinomycin	GBM	0.460288679
UPP1	Neutrophil	GBM	0.567973759
UPP1	Nicotinate and nicotinamide	GBM	0.561714893
UPP1	Nitrogen metabolism	GBM	0.191073778
UPP1	Nod_like_receptor_signaling	GBM	0.494148172
UPP1	Notch_signaling	GBM	0.038041565
UPP1	One carbon pool by folate	GBM	0.129845146
UPP1	Other glycan degradation	GBM	0.506978804
UPP1	Other types of o-glycan biosynthesis	GBM	0.118597896
UPP1	Oxidative phosphorylation	GBM	0.348714473
UPP1	P53_pathway	GBM	0.60226682
UPP1	P53_signaling_pathway	GBM	0.119405625
UPP1	Pantothenate and coenzyme a biosynthesis	GBM	0.313326674
UPP1	Pentose and glucuronate interconversions	GBM	0.28479314
UPP1	Pentose phosphate pathway	GBM	0.443587665
UPP1	Pericyte	GBM	0.246487094
UPP1	Phenylalanine metabolism	GBM	0.514825315
UPP1	Phenylalanine, tyrosine and tryptophan	GBM	0.15325551
UPP1	Phosphonate and phosphite	GBM	0.48266468
UPP1	Pi3k_akt_activation	GBM	0.011921248
UPP1	Pi3k_akt_mtor_signaling	GBM	0.467113209
UPP1	Porphyrin and chlorophyll biosynthesis	GBM	0.325022353
UPP1	Primary bile acid biosynthesis	GBM	0.44676425
UPP1	Propanoate metabolism	GBM	0.016208586
UPP1	Purine metabolism	GBM	0.205261113
UPP1	Pyrimidine metabolism	GBM	0.18151161
UPP1	Pyruvate metabolism	GBM	0.118993655
UPP1	Regulation_of_autophagy	GBM	0.231599176
UPP1	Retinol metabolism	GBM	0.142961125
UPP1	Riboflavin metabolism	GBM	0.474565948
UPP1	Schmahl_pdgf_signaling	GBM	0.159753386

UPP1	Selenocompound metabol	GBM	-0.233153163
UPP1	Signaling_by_hippo	GBM	-0.111161743
UPP1	Sphingolipid metabolism	GBM	0.194389026
UPP1	Starch and sucrose metabo	GBM	0.382254551
UPP1	Steroid biosynthesis	GBM	0.026506536
UPP1	Steroid hormone biosynth	GBM	0.300524884
UPP1	Sulfur metabolism	GBM	-0.001016805
UPP1	Synthesis and degradation	GBM	-0.032356123
UPP1	T helper cell	GBM	0.471838098
UPP1	T helper1 (th1) cell	GBM	0.483175499
UPP1	T helper17 (th17) cell	GBM	0.540801095
UPP1	T helper2 (th2) cell	GBM	0.555461107
UPP1	T helper9 (th9) cell	GBM	0.453622305
UPP1	Taurine and hypotaurine r	GBM	-0.250305317
UPP1	Terpenoid backbone biosy	GBM	-0.056334001
UPP1	Tgf_beta_signaling_pathw	GBM	-0.204326659
UPP1	Thiamine metabolism	GBM	0.315733687
UPP1	Tnfa_signaling_via_nfbk	GBM	0.551196068
UPP1	Tryptophan metabolism	GBM	0.428757432
UPP1	Tumor endothelial cell	GBM	0.216597914
UPP1	Tyrosine metabolism	GBM	0.44860785
UPP1	Ubiquinone and other ter	GBM	0.47138879
UPP1	Valine, leucine and isoleu	GBM	0.468210477
UPP1	Valine, leucine and isoleu	GBM	0.132059302
UPP1	Vascular endothelial cell	GBM	0.282243685
UPP1	Vascular smooth muscle c	GBM	0.069015683
UPP1	Vegf_signaling_pathway	GBM	0.016738818
UPP1	Vitamin b6 metabolism	GBM	0.149755065
UPP1	Willert_wnt_signaling	GBM	0.18477159
UPP1	Wnt_beta_catenin_signali	GBM	-0.373533629
UPP2	Abnormal plasma cell	GBM	-0.217772464
UPP2	Activated b cell	GBM	0.036725772
UPP2	Activated cd4+ t cell	GBM	0.036228023
UPP2	Activated t cell	GBM	-0.110658598
UPP2	Alanine, aspartate and glu	GBM	0.313792157
UPP2	Alcala_apoptosis	GBM	-0.065476746
UPP2	Alpha-linolenic acid meta	GBM	0.032315364
UPP2	Amino sugar and nucleoti	GBM	-0.181561243
UPP2	Ampk_pathway	GBM	-0.150265228
UPP2	Angiogenesis	GBM	-0.156567109
UPP2	Arachidonic acid metabo	GBM	0.127140901
UPP2	Arginine and proline met	GBM	0.15992592
UPP2	Arginine biosynthesis	GBM	0.322523118

UPP2	Ascorbate and aldarate me	GBM	0.051436818
UPP2	Atypical memory b cell	GBM	-0.145042174
UPP2	Axl+siglec6+ dendritic ce	GBM	-0.010068601
UPP2	B cell	GBM	0.018449987
UPP2	B1 cell	GBM	-0.058447783
UPP2	Basal cell	GBM	-0.139473419
UPP2	Beta-alanine metabolism	GBM	0.22232965
UPP2	Biosynthesis of unsaturate	GBM	-0.002409625
UPP2	Biotin metabolism	GBM	0.023070335
UPP2	Butanoate metabolism	GBM	0.251992068
UPP2	Caffeine metabolism	GBM	0.157736061
UPP2	Cancer stem cell	GBM	-0.23198783
UPP2	Cancer stem-like cell	GBM	-0.158646786
UPP2	Cd4+ cytotoxic t cell	GBM	0.016312867
UPP2	Cd4+ memory t cell	GBM	-0.182875023
UPP2	Cd4+ regulatory t cell	GBM	-0.038313963
UPP2	Cd4+ t helper cell	GBM	0.027009542
UPP2	Cd4+cd25+ regulatory t c	GBM	0.000350481
UPP2	Cd8+ cytotoxic t cell	GBM	-0.057318047
UPP2	Cd8+ regulatory t cell	GBM	-0.038730648
UPP2	Cell_cycle	GBM	-0.345796271
UPP2	Chandran_metastasis_top5	GBM	-0.188607421
UPP2	Citrate cycle (tca cycle)	GBM	0.014584679
UPP2	Cysteine and methionine r	GBM	0.075256207
UPP2	Cytokine induced killer c	GBM	-0.050610067
UPP2	D-arginine and d-ornithin	GBM	0.226897646
UPP2	D-glutamine and d-glutan	GBM	0.454430712
UPP2	Dendritic cell	GBM	-0.035791139
UPP2	Dna_repair	GBM	-0.236081369
UPP2	Dna_replication	GBM	-0.374805321
UPP2	Double-negative memory	GBM	-0.12658282
UPP2	Drug metabolism - cytoch	GBM	0.166619101
UPP2	Drug metabolism - other	GBM	0.044387897
UPP2	E2f_targets	GBM	-0.361873768
UPP2	Ecm_receptor_interaction	GBM	-0.243612333
UPP2	Effector cd4+ memory t (	GBM	0.03908319
UPP2	Effector cd8+ memory t (	GBM	0.002812496
UPP2	Effector memory t cell	GBM	-0.002969395
UPP2	Effector regulatory t (treg	GBM	-0.106796581
UPP2	Elvidge_hif1a_targets_up	GBM	-0.200717139
UPP2	Endothelial cell	GBM	-0.27215141
UPP2	Eosinophil	GBM	0.061493574
UPP2	Ether lipid metabolism	GBM	0.169909643

UPP2	Exhausted cd4+ t cell	GBM	-0.006716943
UPP2	Exhausted cd8+ t cell	GBM	-0.043949446
UPP2	Exhausted t cell	GBM	-0.024840436
UPP2	Fat cell (adipocyte)	GBM	0.051277509
UPP2	Fatty acid biosynthesis	GBM	0.178401345
UPP2	Fatty acid degradation	GBM	0.21405005
UPP2	Fatty acid elongation	GBM	0.073233008
UPP2	Fibroblast	GBM	-0.170597946
UPP2	Folate biosynthesis	GBM	0.090744352
UPP2	Follicular b cell	GBM	0.029399189
UPP2	Follicular dendritic cell	GBM	-0.051120244
UPP2	Follicular helper (tfh) t ce	GBM	-0.069778412
UPP2	Follicular t cell	GBM	-0.112203857
UPP2	Foxp3+il-17+ t cell	GBM	-0.270611043
UPP2	Fructose and mannose me	GBM	-0.204140273
UPP2	G2m_checkpoint	GBM	-0.383649461
UPP2	Galactose metabolism	GBM	-0.21767572
UPP2	Galie_tumor_stemness_ge	GBM	-0.265504706
UPP2	Glutathione metabolism	GBM	-0.050897285
UPP2	Glycerolipid metabolism	GBM	-0.050168066
UPP2	Glycerophospholipid metæ	GBM	0.075454758
UPP2	Glycine, serine and threor	GBM	0.058898194
UPP2	Glycolysis / gluconeogene	GBM	-0.064016115
UPP2	Glycosaminoglycan biosy1	GBM	-0.388570305
UPP2	Glycosaminoglycan biosy1	GBM	-0.275731961
UPP2	Glycosaminoglycan biosy1	GBM	-0.199596568
UPP2	Glycosaminoglycan degra	GBM	-0.164796673
UPP2	Glycosphingolipid biosyn1	GBM	-0.04525713
UPP2	Glycosphingolipid biosyn1	GBM	-0.045215606
UPP2	Glycosphingolipid biosyn1	GBM	-0.042264272
UPP2	Glycosylphosphatidylinos:	GBM	0.056944639
UPP2	Glyoxylate and dicarboxy	GBM	0.138463515
UPP2	Granulocyte	GBM	-0.029213649
UPP2	Hedgehog_signaling	GBM	-0.151673681
UPP2	Histidine metabolism	GBM	0.268805147
UPP2	Hypoxia	GBM	-0.133709916
UPP2	Il-17ralpha t cell	GBM	-0.114678041
UPP2	Il2_stat5_signaling	GBM	-0.113830905
UPP2	Il6_jak_stat3_signaling	GBM	-0.085429332
UPP2	Immune_checkpoints_tunr	GBM	-0.095474968
UPP2	Immune_inhibition_cytok	GBM	0.022414235
UPP2	Inositol phosphate metabo	GBM	0.062844609
UPP2	Interleukin_6_signaling	GBM	-0.1536341

UPP2	Jaeger_metastasis_up	GBM	-0.284008475
UPP2	Jain_nfkb_signaling	GBM	-0.317136343
UPP2	Kras_signaling_up	GBM	0.028233803
UPP2	Linoleic acid metabolism	GBM	0.165991409
UPP2	Lipoic acid metabolism	GBM	0.167058903
UPP2	Lysine degradation	GBM	-0.241463356
UPP2	Lysosome	GBM	-0.077395298
UPP2	M1 macrophage	GBM	0.03054054
UPP2	M2 macrophage	GBM	-0.009733958
UPP2	Mannose type o-glycan bi	GBM	-0.186050551
UPP2	Mapk_signaling_pathway	GBM	0.038647921
UPP2	Mapk3_erk1_activation	GBM	-0.002858797
UPP2	Marginal zone b cell	GBM	0.043061061
UPP2	Memory b cell	GBM	0.043592328
UPP2	Mesenchymal cell	GBM	-0.235953459
UPP2	Mesenchymal stem cell	GBM	-0.116491138
UPP2	Metabolism of xenobiotic	GBM	0.131980195
UPP2	Migrating cancer stem cel	GBM	-0.118342575
UPP2	Mitotic_spindle	GBM	-0.247319871
UPP2	Monocyte	GBM	0.008569426
UPP2	Mtor_signaling_pathway	GBM	-0.057314902
UPP2	Mtorc1_signaling	GBM	-0.229449959
UPP2	Mucin type o-glycan biosy	GBM	-0.075564295
UPP2	Myc_targets_v1	GBM	-0.192676668
UPP2	Myeloid cell	GBM	0.006881689
UPP2	N-glycan biosynthesis	GBM	-0.351863317
UPP2	Naive b cell	GBM	0.10755859
UPP2	Naive cd4+ t cell	GBM	0.077778647
UPP2	Naive cd8+ t cell	GBM	0.178899481
UPP2	Natural killer cell	GBM	-0.002497735
UPP2	Natural killer t (nkt) cell	GBM	-0.154444724
UPP2	Natural regulatory t (treg)	GBM	-0.044629513
UPP2	Neomycin, kanamycin an	GBM	-0.121869483
UPP2	Neutrophil	GBM	0.002486001
UPP2	Nicotinate and nicotinami	GBM	0.143336706
UPP2	Nitrogen metabolism	GBM	0.163922189
UPP2	Nod_like_receptor_signal	GBM	-0.011134286
UPP2	Notch_signaling	GBM	-0.319197415
UPP2	One carbon pool by folate	GBM	-0.373626916
UPP2	Other glycan degradation	GBM	-0.115143398
UPP2	Other types of o-glycan b	GBM	-0.302866685
UPP2	Oxidative phosphorylatio	GBM	0.177291342
UPP2	P53_pathway	GBM	-0.05799352

UPP2	P53_signaling_pathway	GBM	-0.264623169
UPP2	Pantothenate and coa bios	GBM	0.091629825
UPP2	Pentose and glucuronate i	GBM	-0.095613379
UPP2	Pentose phosphate pathwa	GBM	-0.135908353
UPP2	Pericyte	GBM	-0.1816613
UPP2	Phenylalanine metabolism	GBM	0.0585828
UPP2	Phenylalanine, tyrosine ar	GBM	0.330251962
UPP2	Phosphonate and phosphir	GBM	0.078935337
UPP2	Pi3k_akt_activation	GBM	0.013071539
UPP2	Pi3k_akt_mtor_signaling	GBM	-0.175991903
UPP2	Porphyrin and chlorophyl	GBM	-0.018573119
UPP2	Primary bile acid biosynt	GBM	0.250236278
UPP2	Propanoate metabolism	GBM	0.236594422
UPP2	Purine metabolism	GBM	-0.128125799
UPP2	Pyrimidine metabolism	GBM	-0.204518927
UPP2	Pyruvate metabolism	GBM	0.214636567
UPP2	Regulation_of_autophagy	GBM	0.304840039
UPP2	Retinol metabolism	GBM	0.207429896
UPP2	Riboflavin metabolism	GBM	0.045604437
UPP2	Schmahl_pdgf_signaling	GBM	0.058537265
UPP2	Selenocompound metabol	GBM	-0.087390939
UPP2	Signaling_by_hippo	GBM	-0.08884803
UPP2	Sphingolipid metabolism	GBM	0.032917214
UPP2	Starch and sucrose metabo	GBM	0.05646138
UPP2	Steroid biosynthesis	GBM	-0.15763794
UPP2	Steroid hormone biosynth	GBM	0.241296343
UPP2	Sulfur metabolism	GBM	-0.049752168
UPP2	Synthesis and degradation	GBM	0.19757396
UPP2	T helper cell	GBM	0.049910607
UPP2	T helper1 (th1) cell	GBM	0.025526701
UPP2	T helper17 (th17) cell	GBM	-0.035849485
UPP2	T helper2 (th2) cell	GBM	-0.073183178
UPP2	T helper9 (th9) cell	GBM	-0.070179139
UPP2	Taurine and hypotaurine r	GBM	0.142729546
UPP2	Terpenoid backbone biosy	GBM	-0.131101975
UPP2	Tgf_beta_signaling_pathw	GBM	-0.165604386
UPP2	Thiamine metabolism	GBM	0.218200318
UPP2	Tnfa_signaling_via_nfk	GBM	-0.12663673
UPP2	Tryptophan metabolism	GBM	0.132505217
UPP2	Tumor endothelial cell	GBM	-0.040039712
UPP2	Tyrosine metabolism	GBM	0.248301444
UPP2	Ubiquinone and other ter	GBM	0.065502352
UPP2	Valine, leucine and isoleu	GBM	-0.151435433

UPP2	Valine, leucine and isoleu	GBM	0.176111931
UPP2	Vascular endothelial cell	GBM	-0.184347072
UPP2	Vascular smooth muscle c	GBM	-0.097552303
UPP2	Vegf_signaling_pathway	GBM	-0.108396901
UPP2	Vitamin b6 metabolism	GBM	0.318313406
UPP2	Willert_wnt_signaling	GBM	-0.072524432
UPP2	Wnt_beta_catenin_signali	GBM	-0.346702762
CDA	Abnormal plasma cell	HNSC	0.079646997
CDA	Activated b cell	HNSC	-0.157818209
CDA	Activated cd4+ t cell	HNSC	-0.157052535
CDA	Activated t cell	HNSC	-0.187382367
CDA	Alanine, aspartate and glu	HNSC	-0.174779873
CDA	Alcala_apoptosis	HNSC	0.091073253
CDA	Alpha-linolenic acid meta	HNSC	0.317723226
CDA	Amino sugar and nucleoti	HNSC	0.357658938
CDA	Ampk_pathway	HNSC	-0.008209772
CDA	Angiogenesis	HNSC	0.30995359
CDA	Arachidonic acid metabol	HNSC	0.193973302
CDA	Arginine and proline met	HNSC	0.290351072
CDA	Arginine biosynthesis	HNSC	0.093836105
CDA	Ascorbate and aldarate m	HNSC	-0.204439794
CDA	Atypical memory b cell	HNSC	-0.164594999
CDA	Axl+siglec6+ dendritic ce	HNSC	-0.095228917
CDA	B cell	HNSC	-0.284942959
CDA	B1 cell	HNSC	-0.175530291
CDA	Basal cell	HNSC	0.443476324
CDA	Beta-alanine metabolism	HNSC	0.143678152
CDA	Biosynthesis of unsaturate	HNSC	0.125029238
CDA	Biotin metabolism	HNSC	-0.236643851
CDA	Butanoate metabolism	HNSC	-0.094377909
CDA	Caffeine metabolism	HNSC	0.047147846
CDA	Cancer stem cell	HNSC	-0.055951746
CDA	Cancer stem-like cell	HNSC	-0.308811296
CDA	Cd4+ cytotoxic t cell	HNSC	0.020007721
CDA	Cd4+ memory t cell	HNSC	-0.106718746
CDA	Cd4+ regulatory t cell	HNSC	-0.132246343
CDA	Cd4+ t helper cell	HNSC	-0.161887388
CDA	Cd4+cd25+ regulatory t c	HNSC	-0.154750059
CDA	Cd8+ cytotoxic t cell	HNSC	-0.094493438
CDA	Cd8+ regulatory t cell	HNSC	-0.127896908
CDA	Cell_cycle	HNSC	-0.318550446
CDA	Chandran_metastasis_top	HNSC	-0.157143699
CDA	Citrate cycle (tca cycle)	HNSC	0.12674591

CDA	Cysteine and methionine r	HNSC	-0.228057399
CDA	Cytokine induced killer c	HNSC	-0.06481717
CDA	D-arginine and d-ornithin	HNSC	-0.027721552
CDA	D-glutamine and d-glutan	HNSC	-0.181668836
CDA	Dendritic cell	HNSC	-0.006356311
CDA	Dna_repair	HNSC	-0.058526125
CDA	Dna_replication	HNSC	-0.365905161
CDA	Double-negative memory	HNSC	-0.220457526
CDA	Drug metabolism - cytoch	HNSC	-0.118942987
CDA	Drug metabolism - other c	HNSC	0.090084899
CDA	E2f_targets	HNSC	-0.356853734
CDA	Ecm_receptor_interaction	HNSC	0.248837401
CDA	Effector cd4+ memory t (	HNSC	-0.16866954
CDA	Effector cd8+ memory t (	HNSC	0.074993228
CDA	Effector memory t cell	HNSC	-0.149664787
CDA	Effector regulatory t (treg	HNSC	-0.127586637
CDA	Elvidge_hif1a_targets_up	HNSC	0.152847671
CDA	Endothelial cell	HNSC	-0.104993171
CDA	Eosinophil	HNSC	-0.07503318
CDA	Ether lipid metabolism	HNSC	0.311531917
CDA	Exhausted cd4+ t cell	HNSC	-0.033944963
CDA	Exhausted cd8+ t cell	HNSC	-0.031680471
CDA	Exhausted t cell	HNSC	-0.138872279
CDA	Fat cell (adipocyte)	HNSC	0.068531575
CDA	Fatty acid biosynthesis	HNSC	0.146905502
CDA	Fatty acid degradation	HNSC	-0.079233427
CDA	Fatty acid elongation	HNSC	0.326597561
CDA	Fibroblast	HNSC	0.137554089
CDA	Folate biosynthesis	HNSC	0.164009947
CDA	Follicular b cell	HNSC	-0.198975705
CDA	Follicular dendritic cell	HNSC	-0.195074649
CDA	Follicular helper (tfh) t c	HNSC	-0.079563568
CDA	Follicular t cell	HNSC	-0.138767775
CDA	Foxp3+il-17+ t cell	HNSC	-0.117413204
CDA	Fructose and mannose me	HNSC	0.318643064
CDA	G2m_checkpoint	HNSC	-0.25690342
CDA	Galactose metabolism	HNSC	0.32242166
CDA	Galie_tumor_stemness_ge	HNSC	0.224749721
CDA	Glutathione metabolism	HNSC	-0.056743857
CDA	Glycerolipid metabolism	HNSC	0.209072547
CDA	Glycerophospholipid met	HNSC	0.151930709
CDA	Glycine, serine and threor	HNSC	0.023658104
CDA	Glycolysis / gluconeogene	HNSC	0.15914911

CDA	Glycosaminoglycan biosyn	HNSC	0.188668964
CDA	Glycosaminoglycan biosyn	HNSC	0.172814704
CDA	Glycosaminoglycan biosyn	HNSC	-0.020131219
CDA	Glycosaminoglycan degra	HNSC	0.133863251
CDA	Glycosphingolipid biosyn	HNSC	0.06723152
CDA	Glycosphingolipid biosyn	HNSC	-0.105192173
CDA	Glycosphingolipid biosyn	HNSC	-0.067440693
CDA	Glycosylphosphatidylinos	HNSC	-0.078930564
CDA	Glyoxylate and dicarboxy	HNSC	-0.145362459
CDA	Granulocyte	HNSC	-0.017710996
CDA	Hedgehog_signaling	HNSC	0.062802848
CDA	Histidine metabolism	HNSC	0.134565379
CDA	Hypoxia	HNSC	0.406182689
CDA	Il-17alpha t cell	HNSC	-0.080484367
CDA	Il2_stat5_signaling	HNSC	0.171811135
CDA	Il6_jak_stat3_signaling	HNSC	0.195033658
CDA	Immune_checkpoints_tun	HNSC	0.091405142
CDA	Immune_inhibition_cytok	HNSC	0.229397689
CDA	Inositol phosphate metabo	HNSC	0.023962873
CDA	Interleukin_6_signaling	HNSC	0.044390174
CDA	Jaeger_metastasis_up	HNSC	-0.252666364
CDA	Jain_nfkb_signaling	HNSC	0.042777201
CDA	Kras_signaling_up	HNSC	0.285574296
CDA	Linoleic acid metabolism	HNSC	0.179821875
CDA	Lipoic acid metabolism	HNSC	-0.207549741
CDA	Lysine degradation	HNSC	-0.441159466
CDA	Lysosome	HNSC	0.244532915
CDA	M1 macrophage	HNSC	0.035846496
CDA	M2 macrophage	HNSC	0.141955177
CDA	Mannose type o-glycan bi	HNSC	-0.099434468
CDA	Mapk_signaling_pathway	HNSC	0.173927563
CDA	Mapk3_erk1_activation	HNSC	0.068033865
CDA	Marginal zone b cell	HNSC	-0.223934565
CDA	Memory b cell	HNSC	-0.21967472
CDA	Mesenchymal cell	HNSC	0.192510003
CDA	Mesenchymal stem cell	HNSC	-0.038290313
CDA	Metabolism of xenobiotic	HNSC	-0.119257977
CDA	Migrating cancer stem cel	HNSC	0.286583912
CDA	Mitotic_spindle	HNSC	-0.056387224
CDA	Monocyte	HNSC	0.182357492
CDA	Mtor_signaling_pathway	HNSC	0.272947534
CDA	Mtorc1_signaling	HNSC	0.219370708
CDA	Mucin type o-glycan bios	HNSC	0.16423239

CDA	Myc_targets_v1	HNSC	0.043855667
CDA	Myeloid cell	HNSC	-0.075898679
CDA	N-glycan biosynthesis	HNSC	-0.002708403
CDA	Naive b cell	HNSC	-0.100597403
CDA	Naive cd4+ t cell	HNSC	-0.058289518
CDA	Naive cd8+ t cell	HNSC	-0.159820639
CDA	Natural killer cell	HNSC	-0.066801082
CDA	Natural killer t (nkt) cell	HNSC	-0.25919096
CDA	Natural regulatory t (treg)	HNSC	-0.16653063
CDA	Neomycin, kanamycin and	HNSC	0.236202484
CDA	Neutrophil	HNSC	0.36621394
CDA	Nicotinate and nicotinami	HNSC	0.19438983
CDA	Nitrogen metabolism	HNSC	0.237856414
CDA	Nod_like_receptor_signal	HNSC	0.358235642
CDA	Notch_signaling	HNSC	0.338553041
CDA	One carbon pool by folate	HNSC	-0.203036587
CDA	Other glycan degradation	HNSC	0.096131445
CDA	Other types of o-glycan b	HNSC	-0.077489122
CDA	Oxidative phosphorylatio	HNSC	0.122255205
CDA	P53_pathway	HNSC	0.389183433
CDA	P53_signaling_pathway	HNSC	-0.190101557
CDA	Pantothenate and coa bios	HNSC	0.064482871
CDA	Pentose and glucuronate i	HNSC	-0.128795626
CDA	Pentose phosphate pathwa	HNSC	0.062299951
CDA	Pericyte	HNSC	0.137120443
CDA	Phenylalanine metabolism	HNSC	0.099413056
CDA	Phenylalanine, tyrosine ar	HNSC	-0.051481268
CDA	Phosphonate and phosphir	HNSC	-0.084130987
CDA	Pi3k_akt_activation	HNSC	0.187381242
CDA	Pi3k_akt_mtor_signaling	HNSC	0.26494344
CDA	Porphyrin and chlorophyl	HNSC	-0.091776525
CDA	Primary bile acid biosynt	HNSC	0.2510289
CDA	Propanoate metabolism	HNSC	-0.15973812
CDA	Purine metabolism	HNSC	-0.016795959
CDA	Pyrimidine metabolism	HNSC	-0.025677195
CDA	Pyruvate metabolism	HNSC	-0.017188302
CDA	Regulation_of_autophagy	HNSC	0.035208779
CDA	Retinol metabolism	HNSC	0.09235989
CDA	Riboflavin metabolism	HNSC	0.00720335
CDA	Schmahl_pdgf_signaling	HNSC	0.068877016
CDA	Selenocompound metabol	HNSC	-0.422605018
CDA	Signaling_by_hippo	HNSC	0.17776642
CDA	Sphingolipid metabolism	HNSC	0.382472609

CDA	Starch and sucrose metabo	HNSC	0.250931041
CDA	Steroid biosynthesis	HNSC	0.146451412
CDA	Steroid hormone biosynth	HNSC	0.019581101
CDA	Sulfur metabolism	HNSC	0.049755982
CDA	Synthesis and degradation	HNSC	0.100827589
CDA	T helper cell	HNSC	-0.082637874
CDA	T helper1 (th1) cell	HNSC	0.029265727
CDA	T helper17 (th17) cell	HNSC	0.099416426
CDA	T helper2 (th2) cell	HNSC	-0.029383202
CDA	T helper9 (th9) cell	HNSC	-0.113961556
CDA	Taurine and hypotaurine r	HNSC	-0.133743424
CDA	Terpenoid backbone biosy	HNSC	0.322706607
CDA	Tgf_beta_signaling_pathw	HNSC	0.188846364
CDA	Thiamine metabolism	HNSC	0.194687056
CDA	Tnfa_signaling_via_nfkB	HNSC	0.33576438
CDA	Tryptophan metabolism	HNSC	-0.215710721
CDA	Tumor endothelial cell	HNSC	0.577749021
CDA	Tyrosine metabolism	HNSC	0.119727911
CDA	Ubiquinone and other terp	HNSC	-0.029644277
CDA	Valine, leucine and isoleu	HNSC	-0.108940461
CDA	Valine, leucine and isoleu	HNSC	-0.189438052
CDA	Vascular endothelial cell	HNSC	-0.02275607
CDA	Vascular smooth muscle c	HNSC	-0.024997882
CDA	Vegf_signaling_pathway	HNSC	0.310750929
CDA	Vitamin b6 metabolism	HNSC	-0.226744038
CDA	Willert_wnt_signaling	HNSC	0.370995752
CDA	Wnt_beta_catenin_signali	HNSC	-0.028755805
UCK1	Abnormal plasma cell	HNSC	-0.075551925
UCK1	Activated b cell	HNSC	0.098070223
UCK1	Activated cd4+ t cell	HNSC	0.051324861
UCK1	Activated t cell	HNSC	0.144955302
UCK1	Alanine, aspartate and glu	HNSC	-0.089436175
UCK1	Alcala_apoptosis	HNSC	0.158515012
UCK1	Alpha-linolenic acid meta	HNSC	-0.15009871
UCK1	Amino sugar and nucleoti	HNSC	-0.081892269
UCK1	Ampk_pathway	HNSC	-0.006161521
UCK1	Angiogenesis	HNSC	-0.232724877
UCK1	Arachidonic acid metabol	HNSC	0.004511622
UCK1	Arginine and proline metε	HNSC	-0.130324811
UCK1	Arginine biosynthesis	HNSC	-0.174312587
UCK1	Ascorbate and aldarate mε	HNSC	-0.08271856
UCK1	Atypical memory b cell	HNSC	0.095122145
UCK1	Axl+siglec6+ dendritic ce	HNSC	-0.020820457

UCK1	B cell	HNSC	0.140155028
UCK1	B1 cell	HNSC	0.038675159
UCK1	Basal cell	HNSC	-0.21869456
UCK1	Beta-alanine metabolism	HNSC	-0.068969183
UCK1	Biosynthesis of unsaturate	HNSC	-0.061212921
UCK1	Biotin metabolism	HNSC	0.191772255
UCK1	Butanoate metabolism	HNSC	0.198829851
UCK1	Caffeine metabolism	HNSC	-0.079523498
UCK1	Cancer stem cell	HNSC	-0.193176812
UCK1	Cancer stem-like cell	HNSC	0.040723244
UCK1	Cd4+ cytotoxic t cell	HNSC	0.088983607
UCK1	Cd4+ memory t cell	HNSC	0.00659644
UCK1	Cd4+ regulatory t cell	HNSC	0.029658009
UCK1	Cd4+ t helper cell	HNSC	0.110966545
UCK1	Cd4+cd25+ regulatory t c	HNSC	0.098629045
UCK1	Cd8+ cytotoxic t cell	HNSC	0.172726118
UCK1	Cd8+ regulatory t cell	HNSC	0.100717415
UCK1	Cell_cycle	HNSC	-0.023961225
UCK1	Chandran_metastasis_top	HNSC	-0.258163783
UCK1	Citrate cycle (tca cycle)	HNSC	-0.068094395
UCK1	Cysteine and methionine r	HNSC	0.030063
UCK1	Cytokine induced killer c	HNSC	0.157369129
UCK1	D-arginine and d-ornithin	HNSC	0.064347259
UCK1	D-glutamine and d-glutan	HNSC	-0.219773729
UCK1	Dendritic cell	HNSC	0.021536075
UCK1	Dna_repair	HNSC	0.38061521
UCK1	Dna_replication	HNSC	0.337505467
UCK1	Double-negative memory	HNSC	0.219381971
UCK1	Drug metabolism - cytoch	HNSC	-0.04971091
UCK1	Drug metabolism - other	HNSC	0.100603827
UCK1	E2f_targets	HNSC	0.120990285
UCK1	Ecm_receptor_interaction	HNSC	-0.293358785
UCK1	Effector cd4+ memory t	(HNSC	-0.011528682
UCK1	Effector cd8+ memory t	(HNSC	-0.018944188
UCK1	Effector memory t cell	HNSC	0.033648537
UCK1	Effector regulatory t (treg	HNSC	-5.11E-05
UCK1	Elvidge_hif1a_targets_up	HNSC	-0.338651331
UCK1	Endothelial cell	HNSC	-0.052759163
UCK1	Eosinophil	HNSC	0.042355362
UCK1	Ether lipid metabolism	HNSC	-0.235264861
UCK1	Exhausted cd4+ t cell	HNSC	0.0010058
UCK1	Exhausted cd8+ t cell	HNSC	0.013770273
UCK1	Exhausted t cell	HNSC	0.169685571

UCK1	Fat cell (adipocyte)	HNSC	0.199814437
UCK1	Fatty acid biosynthesis	HNSC	-0.152449447
UCK1	Fatty acid degradation	HNSC	0.014431483
UCK1	Fatty acid elongation	HNSC	-0.024090156
UCK1	Fibroblast	HNSC	-0.182716763
UCK1	Folate biosynthesis	HNSC	0.080153385
UCK1	Follicular b cell	HNSC	0.054032955
UCK1	Follicular dendritic cell	HNSC	0.024322234
UCK1	Follicular helper (tfh) t cell	HNSC	0.021429589
UCK1	Follicular t cell	HNSC	0.221747298
UCK1	Foxp3+il-17+ t cell	HNSC	-0.055018633
UCK1	Fructose and mannose me	HNSC	-0.023847398
UCK1	G2m_checkpoint	HNSC	-0.117156452
UCK1	Galactose metabolism	HNSC	-0.048465175
UCK1	Galie_tumor_stemness_ge	HNSC	-0.27205777
UCK1	Glutathione metabolism	HNSC	0.052223092
UCK1	Glycerolipid metabolism	HNSC	-0.073868212
UCK1	Glycerophospholipid met	HNSC	0.034813562
UCK1	Glycine, serine and threo	HNSC	0.157548068
UCK1	Glycolysis / gluconeogene	HNSC	-0.094464007
UCK1	Glycosaminoglycan biosy	HNSC	-0.027996965
UCK1	Glycosaminoglycan biosy	HNSC	-0.036731681
UCK1	Glycosaminoglycan biosy	HNSC	-0.063637726
UCK1	Glycosaminoglycan degra	HNSC	-0.056855081
UCK1	Glycosphingolipid biosyn	HNSC	0.088127686
UCK1	Glycosphingolipid biosyn	HNSC	0.120049261
UCK1	Glycosphingolipid biosyn	HNSC	-0.036247606
UCK1	Glycosylphosphatidylinos	HNSC	0.184369558
UCK1	Glyoxylate and dicarboxy	HNSC	0.249839955
UCK1	Granulocyte	HNSC	0.022433741
UCK1	Hedgehog_signaling	HNSC	-0.3502692
UCK1	Histidine metabolism	HNSC	-0.086625483
UCK1	Hypoxia	HNSC	-0.280803821
UCK1	Il-17alpha t cell	HNSC	0.050280336
UCK1	Il2_stat5_signaling	HNSC	-0.164199732
UCK1	Il6_jak_stat3_signaling	HNSC	-0.194131156
UCK1	Immune_checkpoints_tur	HNSC	0.011938242
UCK1	Immune_inhibition_cytok	HNSC	-0.024461304
UCK1	Inositol phosphate metabo	HNSC	-0.387705994
UCK1	Interleukin_6_signaling	HNSC	-0.421909777
UCK1	Jaeger_metastasis_up	HNSC	-0.013299235
UCK1	Jain_nfkb_signaling	HNSC	-0.124127438
UCK1	Kras_signaling_up	HNSC	-0.298620496

UCK1	Linoleic acid metabolism	HNSC	-0.113731974
UCK1	Lipoic acid metabolism	HNSC	0.250588416
UCK1	Lysine degradation	HNSC	0.095636833
UCK1	Lysosome	HNSC	-0.056223758
UCK1	M1 macrophage	HNSC	-0.068866401
UCK1	M2 macrophage	HNSC	-0.070812532
UCK1	Mannose type o-glycan bi	HNSC	0.253402463
UCK1	Mapk_signaling_pathway	HNSC	-0.414568428
UCK1	Mapk3_erk1_activation	HNSC	-0.4120846
UCK1	Marginal zone b cell	HNSC	0.044255008
UCK1	Memory b cell	HNSC	0.071263845
UCK1	Mesenchymal cell	HNSC	-0.039294429
UCK1	Mesenchymal stem cell	HNSC	-0.076233193
UCK1	Metabolism of xenobiotic	HNSC	0.026451826
UCK1	Migrating cancer stem cel	HNSC	-0.331149984
UCK1	Mitotic_spindle	HNSC	-0.412224851
UCK1	Monocyte	HNSC	-0.051343601
UCK1	Mtor_signaling_pathway	HNSC	-0.375100787
UCK1	Mtorc1_signaling	HNSC	-0.26947143
UCK1	Mucin type o-glycan biosy	HNSC	-0.412998348
UCK1	Myc_targets_v1	HNSC	0.091062023
UCK1	Myeloid cell	HNSC	0.008900475
UCK1	N-glycan biosynthesis	HNSC	0.098222259
UCK1	Naive b cell	HNSC	0.074054973
UCK1	Naive cd4+ t cell	HNSC	-0.121071739
UCK1	Naive cd8+ t cell	HNSC	-0.097070256
UCK1	Natural killer cell	HNSC	0.091073481
UCK1	Natural killer t (nkt) cell	HNSC	0.264018939
UCK1	Natural regulatory t (treg)	HNSC	-0.024285729
UCK1	Neomycin, kanamycin and	HNSC	-0.215168562
UCK1	Neutrophil	HNSC	-0.181301243
UCK1	Nicotinate and nicotinami	HNSC	-0.118749409
UCK1	Nitrogen metabolism	HNSC	-0.271026073
UCK1	Nod_like_receptor_signal	HNSC	-0.332057919
UCK1	Notch_signaling	HNSC	-0.242190168
UCK1	One carbon pool by folate	HNSC	0.093800074
UCK1	Other glycan degradation	HNSC	0.142598191
UCK1	Other types of o-glycan b	HNSC	0.273703359
UCK1	Oxidative phosphorylatior	HNSC	0.306573864
UCK1	P53_pathway	HNSC	-0.143277735
UCK1	P53_signaling_pathway	HNSC	-0.143539979
UCK1	Pantothenate and coa bios	HNSC	0.069601615
UCK1	Pentose and glucuronate i	HNSC	-0.041991316

UCK1	Pentose phosphate pathwa	HNSC	0.021198372
UCK1	Pericyte	HNSC	-0.092841509
UCK1	Phenylalanine metabolism	HNSC	-0.068997285
UCK1	Phenylalanine, tyrosine ar	HNSC	0.062679099
UCK1	Phosphonate and phosphir	HNSC	0.033645187
UCK1	Pi3k_akt_activation	HNSC	-0.387631198
UCK1	Pi3k_akt_mtor_signaling	HNSC	-0.35278087
UCK1	Porphyrin and chlorophyl	HNSC	0.140954998
UCK1	Primary bile acid biosynt	HNSC	0.002146803
UCK1	Propanoate metabolism	HNSC	-0.020443273
UCK1	Purine metabolism	HNSC	0.166848643
UCK1	Pyrimidine metabolism	HNSC	0.254278593
UCK1	Pyruvate metabolism	HNSC	0.109396337
UCK1	Regulation_of_autophagy	HNSC	0.143424428
UCK1	Retinol metabolism	HNSC	-0.109725825
UCK1	Riboflavin metabolism	HNSC	0.291965414
UCK1	Schmahl_pdgf_signaling	HNSC	-0.340950276
UCK1	Selenocompound metabol	HNSC	0.008131222
UCK1	Signaling_by_hippo	HNSC	-0.492585032
UCK1	Sphingolipid metabolism	HNSC	-0.361130309
UCK1	Starch and sucrose metabo	HNSC	-0.215929175
UCK1	Steroid biosynthesis	HNSC	-0.109232208
UCK1	Steroid hormone biosynth	HNSC	-0.087026154
UCK1	Sulfur metabolism	HNSC	-0.08885551
UCK1	Synthesis and degradation	HNSC	0.152827738
UCK1	T helper cell	HNSC	0.029729533
UCK1	T helper1 (th1) cell	HNSC	0.050212466
UCK1	T helper17 (th17) cell	HNSC	-0.13751433
UCK1	T helper2 (th2) cell	HNSC	0.020150867
UCK1	T helper9 (th9) cell	HNSC	0.120943799
UCK1	Taurine and hypotaurine r	HNSC	0.211462706
UCK1	Terpenoid backbone biosy	HNSC	-0.121904643
UCK1	Tgf_beta_signaling_pathw	HNSC	-0.470104743
UCK1	Thiamine metabolism	HNSC	0.240483943
UCK1	Tnfa_signaling_via_nfkb	HNSC	-0.305387397
UCK1	Tryptophan metabolism	HNSC	0.201244769
UCK1	Tumor endothelial cell	HNSC	-0.226422062
UCK1	Tyrosine metabolism	HNSC	0.013045762
UCK1	Ubiquinone and other terç	HNSC	0.183822065
UCK1	Valine, leucine and isoleu	HNSC	0.255378145
UCK1	Valine, leucine and isoleu	HNSC	0.118907079
UCK1	Vascular endothelial cell	HNSC	-0.060766944
UCK1	Vascular smooth muscle c	HNSC	-0.117114193

UCK1	Vegf_signaling_pathway	HNSC	-0.383544161
UCK1	Vitamin b6 metabolism	HNSC	0.363495652
UCK1	Willert_wnt_signaling	HNSC	-0.139553158
UCK1	Wnt_beta_catenin_signali	HNSC	-0.251092505
UCK2	Abnormal plasma cell	HNSC	-0.235954357
UCK2	Activated b cell	HNSC	-0.198891432
UCK2	Activated cd4+ t cell	HNSC	-0.209444342
UCK2	Activated t cell	HNSC	-0.207189833
UCK2	Alanine, aspartate and glu	HNSC	0.311298135
UCK2	Alcala_apoptosis	HNSC	0.218448953
UCK2	Alpha-linolenic acid meta	HNSC	-0.198316356
UCK2	Amino sugar and nucleoti	HNSC	0.090863148
UCK2	Ampk_pathway	HNSC	-0.115498173
UCK2	Angiogenesis	HNSC	-0.141667161
UCK2	Arachidonic acid metaboli	HNSC	-0.109667667
UCK2	Arginine and proline metε	HNSC	0.036444124
UCK2	Arginine biosynthesis	HNSC	0.126411666
UCK2	Ascorbate and aldarate mε	HNSC	0.158651167
UCK2	Atypical memory b cell	HNSC	-0.130819127
UCK2	Axl+siglec6+ dendritic ce	HNSC	-0.29835532
UCK2	B cell	HNSC	-0.160219836
UCK2	B1 cell	HNSC	-0.236144257
UCK2	Basal cell	HNSC	-0.177797223
UCK2	Beta-alanine metabolism	HNSC	-0.065358181
UCK2	Biosynthesis of unsaturate	HNSC	0.055551026
UCK2	Biotin metabolism	HNSC	0.058088013
UCK2	Butanoate metabolism	HNSC	0.092945047
UCK2	Caffeine metabolism	HNSC	-0.012862273
UCK2	Cancer stem cell	HNSC	-0.114825972
UCK2	Cancer stem-like cell	HNSC	0.103916677
UCK2	Cd4+ cytotoxic t cell	HNSC	-0.238992245
UCK2	Cd4+ memory t cell	HNSC	-0.246300981
UCK2	Cd4+ regulatory t cell	HNSC	-0.247699401
UCK2	Cd4+ t helper cell	HNSC	-0.248640255
UCK2	Cd4+cd25+ regulatory t c	HNSC	-0.238168605
UCK2	Cd8+ cytotoxic t cell	HNSC	-0.188055958
UCK2	Cd8+ regulatory t cell	HNSC	-0.233297554
UCK2	Cell_cycle	HNSC	0.205762104
UCK2	Chandran_metastasis_top ⁵	HNSC	0.282470622
UCK2	Citrate cycle (tca cycle)	HNSC	0.232956291
UCK2	Cysteine and methionine r	HNSC	0.414182963
UCK2	Cytokine induced killer cε	HNSC	-0.316535234
UCK2	D-arginine and d-ornithin	HNSC	0.102980011

UCK2	D-glutamine and d-glutan	HNSC	0.111345622
UCK2	Dendritic cell	HNSC	-0.288963854
UCK2	Dna_repair	HNSC	0.358213898
UCK2	Dna_replication	HNSC	0.352476405
UCK2	Double-negative memory	HNSC	-0.143540433
UCK2	Drug metabolism - cytoch	HNSC	0.141433852
UCK2	Drug metabolism - other	HNSC	0.382330007
UCK2	E2f_targets	HNSC	0.359262998
UCK2	Ecm_receptor_interaction	HNSC	-0.261870063
UCK2	Effector cd4+ memory t	(HNSC	-0.272520371
UCK2	Effector cd8+ memory t	(HNSC	-0.271276476
UCK2	Effector memory t cell	HNSC	-0.257599932
UCK2	Effector regulatory t (treg	HNSC	-0.204953573
UCK2	Elvidge_hif1a_targets_up	HNSC	0.172515712
UCK2	Endothelial cell	HNSC	-0.180112207
UCK2	Eosinophil	HNSC	-0.223480597
UCK2	Ether lipid metabolism	HNSC	-0.261388943
UCK2	Exhausted cd4+ t cell	HNSC	-0.286772814
UCK2	Exhausted cd8+ t cell	HNSC	-0.257516883
UCK2	Exhausted t cell	HNSC	-0.194562934
UCK2	Fat cell (adipocyte)	HNSC	-0.057606987
UCK2	Fatty acid biosynthesis	HNSC	-0.002193803
UCK2	Fatty acid degradation	HNSC	-0.038826917
UCK2	Fatty acid elongation	HNSC	0.155768537
UCK2	Fibroblast	HNSC	-0.28192563
UCK2	Folate biosynthesis	HNSC	0.240205541
UCK2	Follicular b cell	HNSC	-0.274166652
UCK2	Follicular dendritic cell	HNSC	-0.133306971
UCK2	Follicular helper (tfh) t ce	HNSC	-0.262281986
UCK2	Follicular t cell	HNSC	-0.12071399
UCK2	Foxp3+il-17+ t cell	HNSC	-0.320009993
UCK2	Fructose and mannose me	HNSC	0.189612327
UCK2	G2m_checkpoint	HNSC	0.229665798
UCK2	Galactose metabolism	HNSC	0.033265592
UCK2	Galie_tumor_stemness_ge	HNSC	-0.223372016
UCK2	Glutathione metabolism	HNSC	0.295646061
UCK2	Glycerolipid metabolism	HNSC	0.010080653
UCK2	Glycerophospholipid metæ	HNSC	-0.003728623
UCK2	Glycine, serine and threor	HNSC	0.195278158
UCK2	Glycolysis / gluconeogene	HNSC	0.083453945
UCK2	Glycosaminoglycan biosy	HNSC	-0.153565175
UCK2	Glycosaminoglycan biosy	HNSC	-0.221009213
UCK2	Glycosaminoglycan biosy	HNSC	0.052349303

UCK2	Glycosaminoglycan degra	HNSC	-0.142549721
UCK2	Glycosphingolipid biosyn	HNSC	-0.243653951
UCK2	Glycosphingolipid biosyn	HNSC	-0.049041427
UCK2	Glycosphingolipid biosyn	HNSC	0.065708641
UCK2	Glycosylphosphatidylinos	HNSC	0.207710353
UCK2	Glyoxylate and dicarboxy	HNSC	0.296192845
UCK2	Granulocyte	HNSC	-0.164456315
UCK2	Hedgehog_signaling	HNSC	-0.174093652
UCK2	Histidine metabolism	HNSC	-0.215499933
UCK2	Hypoxia	HNSC	-0.107218502
UCK2	Il-17alpha t cell	HNSC	-0.247643736
UCK2	Il2_stat5_signaling	HNSC	-0.231842462
UCK2	Il6_jak_stat3_signaling	HNSC	-0.284819671
UCK2	Immune_checkpoints_tur	HNSC	-0.218587478
UCK2	Immune_inhibition_cytok	HNSC	-0.208567405
UCK2	Inositol phosphate metabo	HNSC	-0.300647505
UCK2	Interleukin_6_signaling	HNSC	-0.295394193
UCK2	Jaeger_metastasis_up	HNSC	0.141466857
UCK2	Jain_nfkb_signaling	HNSC	0.2886817
UCK2	Kras_signaling_up	HNSC	-0.307796379
UCK2	Linoleic acid metabolism	HNSC	-0.138799309
UCK2	Lipoic acid metabolism	HNSC	0.223044178
UCK2	Lysine degradation	HNSC	0.071207865
UCK2	Lysosome	HNSC	-0.272935566
UCK2	M1 macrophage	HNSC	-0.223671518
UCK2	M2 macrophage	HNSC	-0.191812151
UCK2	Mannose type o-glycan bi	HNSC	0.136468908
UCK2	Mapk_signaling_pathway	HNSC	-0.298425667
UCK2	Mapk3_erk1_activation	HNSC	-0.249573534
UCK2	Marginal zone b cell	HNSC	-0.218986726
UCK2	Memory b cell	HNSC	-0.218677019
UCK2	Mesenchymal cell	HNSC	-0.093130931
UCK2	Mesenchymal stem cell	HNSC	-0.255837075
UCK2	Metabolism of xenobiotic	HNSC	0.205548852
UCK2	Migrating cancer stem cel	HNSC	0.01601877
UCK2	Mitotic_spindle	HNSC	-0.132942889
UCK2	Monocyte	HNSC	-0.234354372
UCK2	Mtor_signaling_pathway	HNSC	-0.267686837
UCK2	Mtorc1_signaling	HNSC	0.303793572
UCK2	Mucin type o-glycan bios	HNSC	-0.172565156
UCK2	Myc_targets_v1	HNSC	0.501319464
UCK2	Myeloid cell	HNSC	-0.254841114
UCK2	N-glycan biosynthesis	HNSC	0.016097329

UCK2	Naive b cell	HNSC	-0.142435932
UCK2	Naive cd4+ t cell	HNSC	-0.308282511
UCK2	Naive cd8+ t cell	HNSC	-0.186774826
UCK2	Natural killer cell	HNSC	-0.248806101
UCK2	Natural killer t (nkt) cell	HNSC	0.111760333
UCK2	Natural regulatory t (treg)	HNSC	-0.260543409
UCK2	Neomycin, kanamycin and	HNSC	-0.013008778
UCK2	Neutrophil	HNSC	-0.149287448
UCK2	Nicotinate and nicotinami	HNSC	0.002190374
UCK2	Nitrogen metabolism	HNSC	-0.0943474
UCK2	Nod_like_receptor_signal	HNSC	-0.235059229
UCK2	Notch_signaling	HNSC	-0.120500091
UCK2	One carbon pool by folate	HNSC	0.444620242
UCK2	Other glycan degradation	HNSC	-0.113364381
UCK2	Other types of o-glycan b	HNSC	0.016322233
UCK2	Oxidative phosphorylatio	HNSC	0.260336996
UCK2	P53_pathway	HNSC	-0.15086323
UCK2	P53_signaling_pathway	HNSC	-0.09233885
UCK2	Pantothenate and coa bios	HNSC	-0.102635594
UCK2	Pentose and glucuronate i	HNSC	0.213567638
UCK2	Pentose phosphate pathwa	HNSC	0.234127171
UCK2	Pericyte	HNSC	-0.224697429
UCK2	Phenylalanine metabolism	HNSC	0.129351109
UCK2	Phenylalanine, tyrosine ar	HNSC	0.17010235
UCK2	Phosphonate and phosphir	HNSC	0.090323187
UCK2	Pi3k_akt_activation	HNSC	-0.284509443
UCK2	Pi3k_akt_mtor_signaling	HNSC	-0.212575107
UCK2	Porphyrin and chlorophyl	HNSC	0.310155084
UCK2	Primary bile acid biosynt	HNSC	-0.263717072
UCK2	Propanoate metabolism	HNSC	0.105667952
UCK2	Purine metabolism	HNSC	0.521240096
UCK2	Pyrimidine metabolism	HNSC	0.502121707
UCK2	Pyruvate metabolism	HNSC	0.224551055
UCK2	Regulation_of_autophagy	HNSC	-0.127023835
UCK2	Retinol metabolism	HNSC	0.046126303
UCK2	Riboflavin metabolism	HNSC	0.219050106
UCK2	Schmahl_pdgf_signaling	HNSC	-0.309246586
UCK2	Selenocompound metabol	HNSC	0.364778313
UCK2	Signaling_by_hippo	HNSC	-0.173026694
UCK2	Sphingolipid metabolism	HNSC	-0.25645034
UCK2	Starch and sucrose metabo	HNSC	-0.141025752
UCK2	Steroid biosynthesis	HNSC	0.187847917
UCK2	Steroid hormone biosynth	HNSC	0.187981527

UCK2	Sulfur metabolism	HNSC	0.011756601
UCK2	Synthesis and degradation	HNSC	0.155172834
UCK2	T helper cell	HNSC	-0.275751199
UCK2	T helper1 (th1) cell	HNSC	-0.239403895
UCK2	T helper17 (th17) cell	HNSC	-0.212433582
UCK2	T helper2 (th2) cell	HNSC	-0.264629611
UCK2	T helper9 (th9) cell	HNSC	-0.264322903
UCK2	Taurine and hypotaurine r	HNSC	-0.070647445
UCK2	Terpenoid backbone biosy	HNSC	0.12910073
UCK2	Tgf_beta_signaling_pathw	HNSC	-0.239994514
UCK2	Thiamine metabolism	HNSC	0.15801551
UCK2	Tnfa_signaling_via_nfkb	HNSC	-0.166682878
UCK2	Tryptophan metabolism	HNSC	0.001610715
UCK2	Tumor endothelial cell	HNSC	-0.153199933
UCK2	Tyrosine metabolism	HNSC	0.047697218
UCK2	Ubiquinone and other terç	HNSC	0.312681773
UCK2	Valine, leucine and isoleu	HNSC	0.158806569
UCK2	Valine, leucine and isoleu	HNSC	0.111030445
UCK2	Vascular endothelial cell	HNSC	-0.19668627
UCK2	Vascular smooth muscle c	HNSC	-0.072651456
UCK2	Vegf_signaling_pathway	HNSC	-0.333209209
UCK2	Vitamin b6 metabolism	HNSC	0.240144886
UCK2	Willert_wnt_signaling	HNSC	0.047788604
UCK2	Wnt_beta_catenin_signali	HNSC	-0.151517685
UCKL1	Abnormal plasma cell	HNSC	-0.115949094
UCKL1	Activated b cell	HNSC	-0.135667034
UCKL1	Activated cd4+ t cell	HNSC	-0.182386406
UCKL1	Activated t cell	HNSC	-0.124219683
UCKL1	Alanine, aspartate and glu	HNSC	0.014457989
UCKL1	Alcala_apoptosis	HNSC	0.136328876
UCKL1	Alpha-linolenic acid meta	HNSC	-0.080695472
UCKL1	Amino sugar and nucleoti	HNSC	-0.024197981
UCKL1	Ampk_pathway	HNSC	-0.053910056
UCKL1	Angiogenesis	HNSC	-0.217361555
UCKL1	Arachidonic acid metabol	HNSC	-0.078145419
UCKL1	Arginine and proline metæ	HNSC	-0.047627695
UCKL1	Arginine biosynthesis	HNSC	-0.082747927
UCKL1	Ascorbate and aldarate mε	HNSC	-0.137903064
UCKL1	Atypical memory b cell	HNSC	-0.051846589
UCKL1	Axl+siglec6+ dendritic ce	HNSC	-0.291207197
UCKL1	B cell	HNSC	-0.127013271
UCKL1	B1 cell	HNSC	-0.18379901
UCKL1	Basal cell	HNSC	-0.163966212

UCKL1	Beta-alanine metabolism	HNSC	-0.081501409
UCKL1	Biosynthesis of unsaturate	HNSC	-0.070680136
UCKL1	Biotin metabolism	HNSC	0.106219185
UCKL1	Butanoate metabolism	HNSC	0.203406124
UCKL1	Caffeine metabolism	HNSC	-0.12768209
UCKL1	Cancer stem cell	HNSC	-0.325672294
UCKL1	Cancer stem-like cell	HNSC	-0.119512338
UCKL1	Cd4+ cytotoxic t cell	HNSC	-0.155290334
UCKL1	Cd4+ memory t cell	HNSC	-0.195079714
UCKL1	Cd4+ regulatory t cell	HNSC	-0.225065568
UCKL1	Cd4+ t helper cell	HNSC	-0.1529804
UCKL1	Cd4+cd25+ regulatory t c	HNSC	-0.157400917
UCKL1	Cd8+ cytotoxic t cell	HNSC	-0.034072534
UCKL1	Cd8+ regulatory t cell	HNSC	-0.131756108
UCKL1	Cell_cycle	HNSC	-0.121981474
UCKL1	Chandran_metastasis_top5	HNSC	-0.154611287
UCKL1	Citrate cycle (tca cycle)	HNSC	0.088612242
UCKL1	Cysteine and methionine r	HNSC	0.05690944
UCKL1	Cytokine induced killer c	HNSC	-0.077610853
UCKL1	D-arginine and d-ornithin	HNSC	-0.021381742
UCKL1	D-glutamine and d-glutan	HNSC	-0.186252518
UCKL1	Dendritic cell	HNSC	-0.21482236
UCKL1	Dna_repair	HNSC	0.368576652
UCKL1	Dna_replication	HNSC	0.133953424
UCKL1	Double-negative memory	HNSC	0.007452309
UCKL1	Drug metabolism - cytoch	HNSC	-0.030788676
UCKL1	Drug metabolism - other c	HNSC	0.217342812
UCKL1	E2f_targets	HNSC	0.035110581
UCKL1	Ecm_receptor_interaction	HNSC	-0.342019595
UCKL1	Effector cd4+ memory t (	HNSC	-0.224045634
UCKL1	Effector cd8+ memory t (	HNSC	-0.223404735
UCKL1	Effector memory t cell	HNSC	-0.214803548
UCKL1	Effector regulatory t (treg	HNSC	-0.263274258
UCKL1	Elvidge_hif1a_targets_up	HNSC	-0.333313146
UCKL1	Endothelial cell	HNSC	-0.336039038
UCKL1	Eosinophil	HNSC	-0.191313646
UCKL1	Ether lipid metabolism	HNSC	-0.229784303
UCKL1	Exhausted cd4+ t cell	HNSC	-0.237377417
UCKL1	Exhausted cd8+ t cell	HNSC	-0.197977038
UCKL1	Exhausted t cell	HNSC	-0.066386912
UCKL1	Fat cell (adipocyte)	HNSC	0.16816985
UCKL1	Fatty acid biosynthesis	HNSC	-0.111714806
UCKL1	Fatty acid degradation	HNSC	0.030723786

UCKL1	Fatty acid elongation	HNSC	0.091818682
UCKL1	Fibroblast	HNSC	-0.282554362
UCKL1	Folate biosynthesis	HNSC	0.113764667
UCKL1	Follicular b cell	HNSC	-0.166166383
UCKL1	Follicular dendritic cell	HNSC	-0.160188013
UCKL1	Follicular helper (tfh) t ce	HNSC	-0.191460397
UCKL1	Follicular t cell	HNSC	0.023293702
UCKL1	Foxp3+il-17+ t cell	HNSC	-0.271116561
UCKL1	Fructose and mannose me	HNSC	0.174099994
UCKL1	G2m_checkpoint	HNSC	-0.185661351
UCKL1	Galactose metabolism	HNSC	-0.042624875
UCKL1	Galie_tumor_stemness_ge	HNSC	-0.388896652
UCKL1	Glutathione metabolism	HNSC	0.088170694
UCKL1	Glycerolipid metabolism	HNSC	-0.052388809
UCKL1	Glycerophospholipid metæ	HNSC	0.187012824
UCKL1	Glycine, serine and threor	HNSC	0.128493489
UCKL1	Glycolysis / gluconeogene	HNSC	0.004887503
UCKL1	Glycosaminoglycan biosy1	HNSC	-0.064149755
UCKL1	Glycosaminoglycan biosy1	HNSC	-0.188234938
UCKL1	Glycosaminoglycan biosy1	HNSC	-0.120115882
UCKL1	Glycosaminoglycan degra	HNSC	-0.133588843
UCKL1	Glycosphingolipid biosyn1	HNSC	-0.092483738
UCKL1	Glycosphingolipid biosyn1	HNSC	-0.094635527
UCKL1	Glycosphingolipid biosyn1	HNSC	-0.162695825
UCKL1	Glycosylphosphatidylinos:	HNSC	0.221514258
UCKL1	Glyoxylate and dicarboxy	HNSC	0.287621163
UCKL1	Granulocyte	HNSC	-0.173715416
UCKL1	Hedgehog_signaling	HNSC	-0.379793723
UCKL1	Histidine metabolism	HNSC	-0.210538017
UCKL1	Hypoxia	HNSC	-0.125875199
UCKL1	Il-17ralpha t cell	HNSC	-0.172813229
UCKL1	Il2_stat5_signaling	HNSC	-0.337248762
UCKL1	Il6_jak_stat3_signaling	HNSC	-0.331546412
UCKL1	Immune_checkpoints_tunr	HNSC	-0.184424116
UCKL1	Immune_inhibition_cytok	HNSC	-0.095986284
UCKL1	Inositol phosphate metabo	HNSC	-0.478688754
UCKL1	Interleukin_6_signaling	HNSC	-0.49904954
UCKL1	Jaeger_metastasis_up	HNSC	-0.116619935
UCKL1	Jain_nfkb_signaling	HNSC	-0.018036648
UCKL1	Kras_signaling_up	HNSC	-0.381915722
UCKL1	Linoleic acid metabolism	HNSC	-0.062358533
UCKL1	Lipoic acid metabolism	HNSC	0.32252719
UCKL1	Lysine degradation	HNSC	-0.169664375

UCKL1	Lysosome	HNSC	-0.164456046
UCKL1	M1 macrophage	HNSC	-0.2406469
UCKL1	M2 macrophage	HNSC	-0.225428419
UCKL1	Mannose type o-glycan bi	HNSC	0.17444122
UCKL1	Mapk_signaling_pathway	HNSC	-0.456067685
UCKL1	Mapk3_erk1_activation	HNSC	-0.523645638
UCKL1	Marginal zone b cell	HNSC	-0.209169437
UCKL1	Memory b cell	HNSC	-0.17832088
UCKL1	Mesenchymal cell	HNSC	-0.10885981
UCKL1	Mesenchymal stem cell	HNSC	-0.292773027
UCKL1	Metabolism of xenobiotic	HNSC	0.038706556
UCKL1	Migrating cancer stem cel	HNSC	-0.283687643
UCKL1	Mitotic_spindle	HNSC	-0.476614372
UCKL1	Monocyte	HNSC	-0.167399838
UCKL1	Mtor_signaling_pathway	HNSC	-0.453927828
UCKL1	Mtorc1_signaling	HNSC	-0.082252221
UCKL1	Mucin type o-glycan bios	HNSC	-0.407094903
UCKL1	Myc_targets_v1	HNSC	0.257930089
UCKL1	Myeloid cell	HNSC	-0.226900812
UCKL1	N-glycan biosynthesis	HNSC	-0.133258453
UCKL1	Naive b cell	HNSC	-0.06644571
UCKL1	Naive cd4+ t cell	HNSC	-0.32847599
UCKL1	Naive cd8+ t cell	HNSC	-0.245132006
UCKL1	Natural killer cell	HNSC	-0.148354499
UCKL1	Natural killer t (nkt) cell	HNSC	0.209757221
UCKL1	Natural regulatory t (treg)	HNSC	-0.297577732
UCKL1	Neomycin, kanamycin an	HNSC	-0.172026189
UCKL1	Neutrophil	HNSC	-0.207281263
UCKL1	Nicotinate and nicotinami	HNSC	-0.065676141
UCKL1	Nitrogen metabolism	HNSC	-0.276107076
UCKL1	Nod_like_receptor_signal	HNSC	-0.245995265
UCKL1	Notch_signaling	HNSC	-0.235416606
UCKL1	One carbon pool by folate	HNSC	0.088493978
UCKL1	Other glycan degradation	HNSC	0.117507265
UCKL1	Other types of o-glycan b	HNSC	0.190695464
UCKL1	Oxidative phosphorylatio	HNSC	0.400285472
UCKL1	P53_pathway	HNSC	-0.100211465
UCKL1	P53_signaling_pathway	HNSC	-0.304260736
UCKL1	Pantothenate and coa bios	HNSC	0.054424125
UCKL1	Pentose and glucuronate i	HNSC	-0.067529493
UCKL1	Pentose phosphate pathwa	HNSC	0.035245318
UCKL1	Pericyte	HNSC	-0.228681149
UCKL1	Phenylalanine metabolism	HNSC	-0.083588654

UCKL1	Phenylalanine, tyrosine ar	HNSC	0.117875259
UCKL1	Phosphonate and phosphir	HNSC	0.015876606
UCKL1	Pi3k_akt_activation	HNSC	-0.444580751
UCKL1	Pi3k_akt_mtor_signaling	HNSC	-0.363564604
UCKL1	Porphyrin and chlorophyl	HNSC	0.075187343
UCKL1	Primary bile acid biosynt	HNSC	0.015841921
UCKL1	Propanoate metabolism	HNSC	0.061062556
UCKL1	Purine metabolism	HNSC	0.158593794
UCKL1	Pyrimidine metabolism	HNSC	0.277751003
UCKL1	Pyruvate metabolism	HNSC	0.195006977
UCKL1	Regulation_of_autophagy	HNSC	0.193025563
UCKL1	Retinol metabolism	HNSC	-0.043809421
UCKL1	Riboflavin metabolism	HNSC	0.171660237
UCKL1	Schmahl_pdgf_signaling	HNSC	-0.462075404
UCKL1	Selenocompound metabol	HNSC	0.010150905
UCKL1	Signaling_by_hippo	HNSC	-0.429026843
UCKL1	Sphingolipid metabolism	HNSC	-0.425562261
UCKL1	Starch and sucrose metabo	HNSC	-0.161366932
UCKL1	Steroid biosynthesis	HNSC	0.093301968
UCKL1	Steroid hormone biosynth	HNSC	-0.051259467
UCKL1	Sulfur metabolism	HNSC	0.046377947
UCKL1	Synthesis and degradation	HNSC	0.273027779
UCKL1	T helper cell	HNSC	-0.210562295
UCKL1	T helper1 (th1) cell	HNSC	-0.152403073
UCKL1	T helper17 (th17) cell	HNSC	-0.212706763
UCKL1	T helper2 (th2) cell	HNSC	-0.173214386
UCKL1	T helper9 (th9) cell	HNSC	-0.125126281
UCKL1	Taurine and hypotaurine r	HNSC	0.227701743
UCKL1	Terpenoid backbone biosy	HNSC	0.051096472
UCKL1	Tgf_beta_signaling_pathw	HNSC	-0.464374324
UCKL1	Thiamine metabolism	HNSC	0.200767536
UCKL1	Tnfa_signaling_via_nfkb	HNSC	-0.221830902
UCKL1	Tryptophan metabolism	HNSC	-0.017993845
UCKL1	Tumor endothelial cell	HNSC	-0.04118964
UCKL1	Tyrosine metabolism	HNSC	-0.031097349
UCKL1	Ubiquinone and other ter	HNSC	0.27936057
UCKL1	Valine, leucine and isoleu	HNSC	0.118067154
UCKL1	Valine, leucine and isoleu	HNSC	0.145287625
UCKL1	Vascular endothelial cell	HNSC	-0.271131669
UCKL1	Vascular smooth muscle c	HNSC	-0.183526742
UCKL1	Vegf_signaling_pathway	HNSC	-0.417350828
UCKL1	Vitamin b6 metabolism	HNSC	0.116714068
UCKL1	Willert_wnt_signaling	HNSC	0.028855084

UCKL1	Wnt_beta_catenin_signali	HNSC	-0.313814616
UPP1	Abnormal plasma cell	HNSC	-0.093431564
UPP1	Activated b cell	HNSC	-0.200663084
UPP1	Activated cd4+ t cell	HNSC	-0.225387575
UPP1	Activated t cell	HNSC	-0.22455836
UPP1	Alanine, aspartate and glu	HNSC	-0.061440002
UPP1	Alcala_apoptosis	HNSC	0.304763625
UPP1	Alpha-linolenic acid meta	HNSC	0.247171854
UPP1	Amino sugar and nucleoti	HNSC	0.50025076
UPP1	Ampk_pathway	HNSC	-0.118551191
UPP1	Angiogenesis	HNSC	0.145307014
UPP1	Arachidonic acid metabol	HNSC	0.177948222
UPP1	Arginine and proline metæ	HNSC	0.286992527
UPP1	Arginine biosynthesis	HNSC	0.184924051
UPP1	Ascorbate and aldarate mε	HNSC	-0.139592545
UPP1	Atypical memory b cell	HNSC	-0.237632085
UPP1	Axl+siglec6+ dendritic ce	HNSC	-0.266536853
UPP1	B cell	HNSC	-0.348285782
UPP1	B1 cell	HNSC	-0.269583131
UPP1	Basal cell	HNSC	0.430791377
UPP1	Beta-alanine metabolism	HNSC	0.105766833
UPP1	Biosynthesis of unsaturate	HNSC	0.180610498
UPP1	Biotin metabolism	HNSC	-0.191167428
UPP1	Butanoate metabolism	HNSC	0.063779939
UPP1	Caffeine metabolism	HNSC	0.185185841
UPP1	Cancer stem cell	HNSC	-0.247942902
UPP1	Cancer stem-like cell	HNSC	-0.366564736
UPP1	Cd4+ cytotoxic t cell	HNSC	-0.047032201
UPP1	Cd4+ memory t cell	HNSC	-0.206222271
UPP1	Cd4+ regulatory t cell	HNSC	-0.24893831
UPP1	Cd4+ t helper cell	HNSC	-0.241242831
UPP1	Cd4+cd25+ regulatory t c	HNSC	-0.225669515
UPP1	Cd8+ cytotoxic t cell	HNSC	-0.078970944
UPP1	Cd8+ regulatory t cell	HNSC	-0.155450164
UPP1	Cell_cycle	HNSC	-0.22945085
UPP1	Chandran_metastasis_topε	HNSC	-0.093875724
UPP1	Citrate cycle (tca cycle)	HNSC	0.302678819
UPP1	Cysteine and methionine r	HNSC	-0.033296262
UPP1	Cytokine induced killer cε	HNSC	-0.173733274
UPP1	D-arginine and d-ornithin	HNSC	0.047535283
UPP1	D-glutamine and d-glutan	HNSC	-0.19156881
UPP1	Dendritic cell	HNSC	-0.133498598
UPP1	Dna_repair	HNSC	0.204931472

UPP1	Dna_replication	HNSC	-0.147300306
UPP1	Double-negative memory	HNSC	-0.241736182
UPP1	Drug metabolism - cytoch	HNSC	-0.013328053
UPP1	Drug metabolism - other	HNSC	0.345727199
UPP1	E2f_targets	HNSC	-0.166928173
UPP1	Ecm_receptor_interaction	HNSC	0.006176778
UPP1	Effector cd4+ memory t	(HNSC	-0.298235965
UPP1	Effector cd8+ memory t	(HNSC	-0.012626582
UPP1	Effector memory t cell	HNSC	-0.251956909
UPP1	Effector regulatory t (treg	HNSC	-0.238405465
UPP1	Elvidge_hif1a_targets_up	HNSC	0.200851186
UPP1	Endothelial cell	HNSC	-0.29964262
UPP1	Eosinophil	HNSC	-0.115149946
UPP1	Ether lipid metabolism	HNSC	0.17432989
UPP1	Exhausted cd4+ t cell	HNSC	-0.15282496
UPP1	Exhausted cd8+ t cell	HNSC	-0.134308321
UPP1	Exhausted t cell	HNSC	-0.145822643
UPP1	Fat cell (adipocyte)	HNSC	-0.030670827
UPP1	Fatty acid biosynthesis	HNSC	0.169552147
UPP1	Fatty acid degradation	HNSC	-0.005849056
UPP1	Fatty acid elongation	HNSC	0.404125148
UPP1	Fibroblast	HNSC	-0.099494366
UPP1	Folate biosynthesis	HNSC	0.353516138
UPP1	Follicular b cell	HNSC	-0.317266991
UPP1	Follicular dendritic cell	HNSC	-0.223601384
UPP1	Follicular helper (tfh) t ce	HNSC	-0.169088456
UPP1	Follicular t cell	HNSC	-0.080590718
UPP1	Foxp3+il-17+ t cell	HNSC	-0.273783593
UPP1	Fructose and mannose me	HNSC	0.483500651
UPP1	G2m_checkpoint	HNSC	-0.182447238
UPP1	Galactose metabolism	HNSC	0.477457211
UPP1	Galie_tumor_stemness_ge	HNSC	-0.009208182
UPP1	Glutathione metabolism	HNSC	0.123431502
UPP1	Glycerolipid metabolism	HNSC	0.244342469
UPP1	Glycerophospholipid metæ	HNSC	0.228823047
UPP1	Glycine, serine and threor	HNSC	0.249876691
UPP1	Glycolysis / gluconeogene	HNSC	0.256423169
UPP1	Glycosaminoglycan biosy	HNSC	0.030770502
UPP1	Glycosaminoglycan biosy	HNSC	-0.034005529
UPP1	Glycosaminoglycan biosy	HNSC	-0.029890318
UPP1	Glycosaminoglycan degra	HNSC	0.073886499
UPP1	Glycosphingolipid biosyn	HNSC	-0.065638674
UPP1	Glycosphingolipid biosyn	HNSC	-0.152146364

UPP1	Glycosphingolipid biosyn	HNSC	0.000637579
UPP1	Glycosylphosphatidylinos	HNSC	0.104052505
UPP1	Glyoxylate and dicarboxy	HNSC	0.117913915
UPP1	Granulocyte	HNSC	-0.069594226
UPP1	Hedgehog_signaling	HNSC	-0.181880718
UPP1	Histidine metabolism	HNSC	0.03943453
UPP1	Hypoxia	HNSC	0.297618223
UPP1	Il-17ralpha t cell	HNSC	-0.139437023
UPP1	Il2_stat5_signaling	HNSC	0.075905027
UPP1	Il6_jak_stat3_signaling	HNSC	0.098427133
UPP1	Immune_checkpoints_tur	HNSC	0.027134491
UPP1	Immune_inhibition_cytok	HNSC	0.204795158
UPP1	Inositol phosphate metabo	HNSC	-0.187449943
UPP1	Interleukin_6_signaling	HNSC	-0.145966019
UPP1	Jaeger_metastasis_up	HNSC	-0.303256543
UPP1	Jain_nfkb_signaling	HNSC	0.230976908
UPP1	Kras_signaling_up	HNSC	0.092233772
UPP1	Linoleic acid metabolism	HNSC	0.138189156
UPP1	Lipoic acid metabolism	HNSC	-0.086415451
UPP1	Lysine degradation	HNSC	-0.425435167
UPP1	Lysosome	HNSC	0.159218467
UPP1	M1 macrophage	HNSC	-0.063407139
UPP1	M2 macrophage	HNSC	0.096489247
UPP1	Mannose type o-glycan bi	HNSC	-0.077278367
UPP1	Mapk_signaling_pathway	HNSC	-0.054054056
UPP1	Mapk3_erk1_activation	HNSC	-0.065633638
UPP1	Marginal zone b cell	HNSC	-0.326066058
UPP1	Memory b cell	HNSC	-0.308591881
UPP1	Mesenchymal cell	HNSC	0.037663533
UPP1	Mesenchymal stem cell	HNSC	-0.251902403
UPP1	Metabolism of xenobiotic	HNSC	0.028677487
UPP1	Migrating cancer stem cel	HNSC	0.364179487
UPP1	Mitotic_spindle	HNSC	-0.195651613
UPP1	Monocyte	HNSC	0.150886142
UPP1	Mtor_signaling_pathway	HNSC	0.147748763
UPP1	Mtorc1_signaling	HNSC	0.422804356
UPP1	Mucin type o-glycan bios	HNSC	0.022919426
UPP1	Myc_targets_v1	HNSC	0.332243569
UPP1	Myeloid cell	HNSC	-0.170056878
UPP1	N-glycan biosynthesis	HNSC	0.052088317
UPP1	Naive b cell	HNSC	-0.139544777
UPP1	Naive cd4+ t cell	HNSC	-0.238066005
UPP1	Naive cd8+ t cell	HNSC	-0.341134603

UPP1	Natural killer cell	HNSC	-0.122330793
UPP1	Natural killer t (nkt) cell	HNSC	-0.082556277
UPP1	Natural regulatory t (treg)	HNSC	-0.23086645
UPP1	Neomycin, kanamycin and	HNSC	0.203931648
UPP1	Neutrophil	HNSC	0.339548292
UPP1	Nicotinate and nicotinami	HNSC	0.240981683
UPP1	Nitrogen metabolism	HNSC	0.133346728
UPP1	Nod_like_receptor_signal	HNSC	0.315976795
UPP1	Notch_signaling	HNSC	0.106303821
UPP1	One carbon pool by folate	HNSC	0.027672639
UPP1	Other glycan degradation	HNSC	0.143380759
UPP1	Other types of o-glycan b	HNSC	-0.07673349
UPP1	Oxidative phosphorylatio	HNSC	0.360826613
UPP1	P53_pathway	HNSC	0.4552339
UPP1	P53_signaling_pathway	HNSC	-0.179615662
UPP1	Pantothenate and coa bios	HNSC	0.120205237
UPP1	Pentose and glucuronate i	HNSC	0.038726967
UPP1	Pentose phosphate pathwa	HNSC	0.225779172
UPP1	Pericyte	HNSC	-0.071749599
UPP1	Phenylalanine metabolism	HNSC	0.159535438
UPP1	Phenylalanine, tyrosine ar	HNSC	0.05786333
UPP1	Phosphonate and phosphir	HNSC	-0.034854643
UPP1	Pi3k_akt_activation	HNSC	-0.049232162
UPP1	Pi3k_akt_mtor_signaling	HNSC	0.308364131
UPP1	Porphyrin and chlorophyl	HNSC	0.169392104
UPP1	Primary bile acid biosynt	HNSC	0.130798877
UPP1	Propanoate metabolism	HNSC	-0.056840034
UPP1	Purine metabolism	HNSC	0.203282689
UPP1	Pyrimidine metabolism	HNSC	0.259802456
UPP1	Pyruvate metabolism	HNSC	0.135654922
UPP1	Regulation_of_autophagy	HNSC	0.111429742
UPP1	Retinol metabolism	HNSC	0.1826038
UPP1	Riboflavin metabolism	HNSC	0.182234941
UPP1	Schmahl_pdgf_signaling	HNSC	-0.10685258
UPP1	Selenocompound metabol	HNSC	-0.335844741
UPP1	Signaling_by_hippo	HNSC	0.037762697
UPP1	Sphingolipid metabolism	HNSC	0.294145907
UPP1	Starch and sucrose metabo	HNSC	0.281608871
UPP1	Steroid biosynthesis	HNSC	0.284679914
UPP1	Steroid hormone biosynth	HNSC	0.176813215
UPP1	Sulfur metabolism	HNSC	0.057214395
UPP1	Synthesis and degradation	HNSC	0.259785053
UPP1	T helper cell	HNSC	-0.19512021

UPP1	T helper1 (th1) cell	HNSC	0.005508063
UPP1	T helper17 (th17) cell	HNSC	0.086037519
UPP1	T helper2 (th2) cell	HNSC	-0.104938824
UPP1	T helper9 (th9) cell	HNSC	-0.184209994
UPP1	Taurine and hypotaurine r	HNSC	-0.192195426
UPP1	Terpenoid backbone biosy	HNSC	0.412480129
UPP1	Tgf_beta_signaling_pathw	HNSC	-0.0750988
UPP1	Thiamine metabolism	HNSC	0.308154337
UPP1	Tnfa_signaling_via_nfkb	HNSC	0.272689825
UPP1	Tryptophan metabolism	HNSC	-0.157410315
UPP1	Tumor endothelial cell	HNSC	0.43929311
UPP1	Tyrosine metabolism	HNSC	0.178656173
UPP1	Ubiquinone and other terf	HNSC	0.190858358
UPP1	Valine, leucine and isoleu	HNSC	0.016897489
UPP1	Valine, leucine and isoleu	HNSC	-0.085803517
UPP1	Vascular endothelial cell	HNSC	-0.181153189
UPP1	Vascular smooth muscle c	HNSC	-0.200474173
UPP1	Vegf_signaling_pathway	HNSC	0.12543183
UPP1	Vitamin b6 metabolism	HNSC	-0.006716164
UPP1	Willert_wnt_signaling	HNSC	0.398088927
UPP1	Wnt_beta_catenin_signali	HNSC	-0.282464677
UPP2	Abnormal plasma cell	HNSC	0.006149774
UPP2	Activated b cell	HNSC	-0.053343292
UPP2	Activated cd4+ t cell	HNSC	-0.058162318
UPP2	Activated t cell	HNSC	-0.059456741
UPP2	Alanine, aspartate and glu	HNSC	-0.009585877
UPP2	Alcala_apoptosis	HNSC	-0.156049027
UPP2	Alpha-linolenic acid meta	HNSC	-0.029324265
UPP2	Amino sugar and nucleoti	HNSC	-0.102277676
UPP2	Ampk_pathway	HNSC	-0.026751824
UPP2	Angiogenesis	HNSC	-0.065828149
UPP2	Arachidonic acid metabol	HNSC	-0.03728045
UPP2	Arginine and proline metε	HNSC	-0.078249482
UPP2	Arginine biosynthesis	HNSC	-0.077108059
UPP2	Ascorbate and aldarate mε	HNSC	0.054030935
UPP2	Atypical memory b cell	HNSC	-0.005184178
UPP2	Axl+siglec6+ dendritic ce	HNSC	-0.005116219
UPP2	B cell	HNSC	-0.038531636
UPP2	B1 cell	HNSC	-0.070797991
UPP2	Basal cell	HNSC	-0.027134682
UPP2	Beta-alanine metabolism	HNSC	-0.034997379
UPP2	Biosynthesis of unsaturate	HNSC	-0.128762792
UPP2	Biotin metabolism	HNSC	-0.049813011

UPP2	Butanoate metabolism	HNSC	-0.03381327
UPP2	Caffeine metabolism	HNSC	-0.114893652
UPP2	Cancer stem cell	HNSC	-0.009645183
UPP2	Cancer stem-like cell	HNSC	0.019550871
UPP2	Cd4+ cytotoxic t cell	HNSC	-0.063896122
UPP2	Cd4+ memory t cell	HNSC	-0.036310661
UPP2	Cd4+ regulatory t cell	HNSC	-0.055090336
UPP2	Cd4+ t helper cell	HNSC	-0.055122428
UPP2	Cd4+cd25+ regulatory t c	HNSC	-0.057874296
UPP2	Cd8+ cytotoxic t cell	HNSC	-0.063369967
UPP2	Cd8+ regulatory t cell	HNSC	-0.071826218
UPP2	Cell_cycle	HNSC	-0.063405246
UPP2	Chandran_metastasis_top	HNSC	-0.014547147
UPP2	Citrate cycle (tca cycle)	HNSC	-0.093235443
UPP2	Cysteine and methionine r	HNSC	-0.032800215
UPP2	Cytokine induced killer c	HNSC	-0.033417883
UPP2	D-arginine and d-ornithin	HNSC	-0.008505039
UPP2	D-glutamine and d-glutan	HNSC	-0.028390103
UPP2	Dendritic cell	HNSC	-0.055494143
UPP2	Dna_repair	HNSC	-0.039332192
UPP2	Dna_replication	HNSC	-0.028613478
UPP2	Double-negative memory	HNSC	0.006700291
UPP2	Drug metabolism - cytoch	HNSC	0.087304156
UPP2	Drug metabolism - other	HNSC	0.008187033
UPP2	E2f_targets	HNSC	-0.06227053
UPP2	Ecm_receptor_interaction	HNSC	-0.048179019
UPP2	Effector cd4+ memory t (	HNSC	-0.067795486
UPP2	Effector cd8+ memory t (	HNSC	-0.102893955
UPP2	Effector memory t cell	HNSC	-0.059828548
UPP2	Effector regulatory t (treg	HNSC	-0.043994775
UPP2	Elvidge_hif1a_targets_up	HNSC	-0.159463501
UPP2	Endothelial cell	HNSC	-0.022740332
UPP2	Eosinophil	HNSC	-0.066698882
UPP2	Ether lipid metabolism	HNSC	-0.068622288
UPP2	Exhausted cd4+ t cell	HNSC	-0.067503635
UPP2	Exhausted cd8+ t cell	HNSC	-0.057399702
UPP2	Exhausted t cell	HNSC	-0.053585036
UPP2	Fat cell (adipocyte)	HNSC	0.068889785
UPP2	Fatty acid biosynthesis	HNSC	-0.096444053
UPP2	Fatty acid degradation	HNSC	-0.030144069
UPP2	Fatty acid elongation	HNSC	-0.103127664
UPP2	Fibroblast	HNSC	-0.022009537
UPP2	Folate biosynthesis	HNSC	-0.090149827

UPP2	Follicular b cell	HNSC	-0.032034967
UPP2	Follicular dendritic cell	HNSC	-0.056868471
UPP2	Follicular helper (tfh) t ce	HNSC	-0.063871844
UPP2	Follicular t cell	HNSC	-0.074744833
UPP2	Foxp3+il-17+ t cell	HNSC	-0.094381315
UPP2	Fructose and mannose me	HNSC	-0.071321907
UPP2	G2m_checkpoint	HNSC	-0.091512098
UPP2	Galactose metabolism	HNSC	-0.136185826
UPP2	Galie_tumor_stemness_ge	HNSC	-0.059549843
UPP2	Glutathione metabolism	HNSC	-0.031989355
UPP2	Glycerolipid metabolism	HNSC	-0.020230337
UPP2	Glycerophospholipid metæ	HNSC	0.03491277
UPP2	Glycine, serine and threor	HNSC	-0.033221244
UPP2	Glycolysis / gluconeogene	HNSC	-0.072779947
UPP2	Glycosaminoglycan biosy	HNSC	-0.037582165
UPP2	Glycosaminoglycan biosy	HNSC	-0.04345706
UPP2	Glycosaminoglycan biosy	HNSC	0.023986868
UPP2	Glycosaminoglycan degra	HNSC	-0.037753013
UPP2	Glycosphingolipid biosyn	HNSC	0.009430216
UPP2	Glycosphingolipid biosyn	HNSC	-0.027730421
UPP2	Glycosphingolipid biosyn	HNSC	-0.036401061
UPP2	Glycosylphosphatidylinos	HNSC	0.032284834
UPP2	Glyoxylate and dicarboxy	HNSC	-0.030522908
UPP2	Granulocyte	HNSC	-0.066200513
UPP2	Hedgehog_signaling	HNSC	-0.013350707
UPP2	Histidine metabolism	HNSC	-0.021484119
UPP2	Hypoxia	HNSC	-0.019114992
UPP2	Il-17ralpha t cell	HNSC	-0.063590596
UPP2	Il2_stat5_signaling	HNSC	-0.112464025
UPP2	Il6_jak_stat3_signaling	HNSC	-0.153225319
UPP2	Immune_checkpoints_tun	HNSC	-0.110445839
UPP2	Immune_inhibition_cytok	HNSC	-0.085825237
UPP2	Inositol phosphate metabo	HNSC	-0.089414467
UPP2	Interleukin_6_signaling	HNSC	-0.13753912
UPP2	Jaeger_metastasis_up	HNSC	0.000762958
UPP2	Jain_nfkb_signaling	HNSC	-0.13331383
UPP2	Kras_signaling_up	HNSC	-0.088707849
UPP2	Linoleic acid metabolism	HNSC	0.003874694
UPP2	Lipoic acid metabolism	HNSC	0.093680349
UPP2	Lysine degradation	HNSC	-0.018789397
UPP2	Lysosome	HNSC	-0.095181553
UPP2	M1 macrophage	HNSC	-0.070196213
UPP2	M2 macrophage	HNSC	-0.066568496

UPP2	Mannose type o-glycan bi	HNSC	0.055574343
UPP2	Mapk_signaling_pathway	HNSC	-0.060309648
UPP2	Mapk3_erk1_activation	HNSC	-0.145502993
UPP2	Marginal zone b cell	HNSC	-0.039332811
UPP2	Memory b cell	HNSC	-0.032768306
UPP2	Mesenchymal cell	HNSC	-0.011747695
UPP2	Mesenchymal stem cell	HNSC	-0.032785585
UPP2	Metabolism of xenobiotic	HNSC	0.077756521
UPP2	Migrating cancer stem cel	HNSC	-0.129455076
UPP2	Mitotic_spindle	HNSC	-0.096494849
UPP2	Monocyte	HNSC	-0.074261973
UPP2	Mtor_signaling_pathway	HNSC	-0.136904542
UPP2	Mtorc1_signaling	HNSC	-0.128808564
UPP2	Mucin type o-glycan bios	HNSC	-0.091365412
UPP2	Myc_targets_v1	HNSC	-0.057846012
UPP2	Myeloid cell	HNSC	-0.065416901
UPP2	N-glycan biosynthesis	HNSC	-0.125625212
UPP2	Naive b cell	HNSC	0.009281251
UPP2	Naive cd4+ t cell	HNSC	-0.083783335
UPP2	Naive cd8+ t cell	HNSC	-0.072022213
UPP2	Natural killer cell	HNSC	-0.066149869
UPP2	Natural killer t (nkt) cell	HNSC	-0.040912748
UPP2	Natural regulatory t (treg)	HNSC	-0.054224385
UPP2	Neomycin, kanamycin an	HNSC	-0.040401873
UPP2	Neutrophil	HNSC	-0.060573787
UPP2	Nicotinate and nicotinami	HNSC	-0.033846846
UPP2	Nitrogen metabolism	HNSC	-0.077995262
UPP2	Nod_like_receptor_signal	HNSC	-0.096752448
UPP2	Notch_signaling	HNSC	-0.012897369
UPP2	One carbon pool by folate	HNSC	-0.044580643
UPP2	Other glycan degradation	HNSC	-0.006167946
UPP2	Other types of o-glycan b	HNSC	0.030054465
UPP2	Oxidative phosphorylatio	HNSC	0.010083319
UPP2	P53_pathway	HNSC	-0.08235953
UPP2	P53_signaling_pathway	HNSC	-0.068400659
UPP2	Pantothenate and coa bios	HNSC	-0.056956602
UPP2	Pentose and glucuronate i	HNSC	0.043324075
UPP2	Pentose phosphate pathwa	HNSC	-0.103853065
UPP2	Pericyte	HNSC	-0.046727817
UPP2	Phenylalanine metabolism	HNSC	0.064010123
UPP2	Phenylalanine, tyrosine ar	HNSC	0.059759471
UPP2	Phosphonate and phosphir	HNSC	0.018790123
UPP2	Pi3k_akt_activation	HNSC	-0.079119321

UPP2	Pi3k_akt_mtor_signaling	HNSC	-0.196700622
UPP2	Porphyrin and chlorophyll	HNSC	0.017479902
UPP2	Primary bile acid biosyntn	HNSC	0.076531248
UPP2	Propanoate metabolism	HNSC	-0.029295721
UPP2	Purine metabolism	HNSC	-0.073755088
UPP2	Pyrimidine metabolism	HNSC	-0.04940808
UPP2	Pyruvate metabolism	HNSC	-0.045984704
UPP2	Regulation_of_autophagy	HNSC	-0.010815521
UPP2	Retinol metabolism	HNSC	0.094606916
UPP2	Riboflavin metabolism	HNSC	-0.049333706
UPP2	Schmahl_pdgf_signaling	HNSC	-0.092106691
UPP2	Selenocompound metabol	HNSC	-0.020139186
UPP2	Signaling_by_hippo	HNSC	-0.065086738
UPP2	Sphingolipid metabolism	HNSC	-0.166368953
UPP2	Starch and sucrose metabo	HNSC	-0.078247942
UPP2	Steroid biosynthesis	HNSC	-0.053444042
UPP2	Steroid hormone biosynth	HNSC	0.081541606
UPP2	Sulfur metabolism	HNSC	0.018453173
UPP2	Synthesis and degradation	HNSC	-0.046543302
UPP2	T helper cell	HNSC	-0.064470966
UPP2	T helper1 (th1) cell	HNSC	-0.099564607
UPP2	T helper17 (th17) cell	HNSC	-0.082784435
UPP2	T helper2 (th2) cell	HNSC	-0.064860867
UPP2	T helper9 (th9) cell	HNSC	-0.049005359
UPP2	Taurine and hypotaurine r	HNSC	0.102484444
UPP2	Terpenoid backbone biosy	HNSC	-0.069159631
UPP2	Tgf_beta_signaling_pathw	HNSC	-0.078287956
UPP2	Thiamine metabolism	HNSC	-0.108218223
UPP2	Tnfa_signaling_via_nfkb	HNSC	-0.068867858
UPP2	Tryptophan metabolism	HNSC	-0.039552213
UPP2	Tumor endothelial cell	HNSC	-0.027065067
UPP2	Tyrosine metabolism	HNSC	0.058406784
UPP2	Ubiquinone and other terf	HNSC	-0.013807966
UPP2	Valine, leucine and isoleu	HNSC	-0.041738676
UPP2	Valine, leucine and isoleu	HNSC	-0.007648376
UPP2	Vascular endothelial cell	HNSC	-0.053544632
UPP2	Vascular smooth muscle c	HNSC	0.033996726
UPP2	Vegf_signaling_pathway	HNSC	-0.094635918
UPP2	Vitamin b6 metabolism	HNSC	-0.039118634
UPP2	Willert_wnt_signaling	HNSC	-0.048976444
UPP2	Wnt_beta_catenin_signali	HNSC	-0.02481682
CDA	Abnormal plasma cell	KICH	0.259606351
CDA	Activated b cell	KICH	-0.00555249

CDA	Activated cd4+ t cell	KICH	-0.033035702
CDA	Activated t cell	KICH	-0.015787344
CDA	Alanine, aspartate and glu	KICH	-0.187824544
CDA	Alcala_apoptosis	KICH	-0.028109743
CDA	Alpha-linolenic acid meta	KICH	0.022714071
CDA	Amino sugar and nucleoti	KICH	-0.014993663
CDA	Ampk_pathway	KICH	0.108680642
CDA	Angiogenesis	KICH	0.088211655
CDA	Arachidonic acid metabol	KICH	0.161078072
CDA	Arginine and proline metε	KICH	-0.204421346
CDA	Arginine biosynthesis	KICH	-0.04763642
CDA	Ascorbate and aldarate mε	KICH	-0.273144292
CDA	Atypical memory b cell	KICH	0.073477683
CDA	Axl+siglec6+ dendritic ce	KICH	0.177752678
CDA	B cell	KICH	-0.034317351
CDA	B1 cell	KICH	0.009238497
CDA	Basal cell	KICH	0.234550036
CDA	Beta-alanine metabolism	KICH	-0.220822811
CDA	Biosynthesis of unsaturate	KICH	0.003075278
CDA	Biotin metabolism	KICH	-0.47811066
CDA	Butanoate metabolism	KICH	-0.184027053
CDA	Caffeine metabolism	KICH	0.132698848
CDA	Cancer stem cell	KICH	0.145420429
CDA	Cancer stem-like cell	KICH	0.186203223
CDA	Cd4+ cytotoxic t cell	KICH	0.140047387
CDA	Cd4+ memory t cell	KICH	0.042889622
CDA	Cd4+ regulatory t cell	KICH	-0.060649741
CDA	Cd4+ t helper cell	KICH	0.04675706
CDA	Cd4+cd25+ regulatory t c	KICH	0.013162323
CDA	Cd8+ cytotoxic t cell	KICH	0.105532077
CDA	Cd8+ regulatory t cell	KICH	0.004553089
CDA	Cell_cycle	KICH	-0.122504132
CDA	Chandran_metastasis_top ⁵	KICH	-0.16256193
CDA	Citrate cycle (tca cycle)	KICH	-0.26349109
CDA	Cysteine and methionine r	KICH	-0.11382041
CDA	Cytokine induced killer cε	KICH	0.163909834
CDA	D-arginine and d-ornithin	KICH	0.059994556
CDA	D-glutamine and d-glutan	KICH	-0.11025042
CDA	Dendritic cell	KICH	0.044804484
CDA	Dna_repair	KICH	0.074615028
CDA	Dna_replication	KICH	-0.081169497
CDA	Double-negative memory	KICH	0.212535239
CDA	Drug metabolism - cytoch	KICH	-0.120463926

CDA	Drug metabolism - other (KICH	-0.104103746
CDA	E2f_targets KICH	-0.101199588
CDA	Ecm_receptor_interaction KICH	0.086409149
CDA	Effector cd4+ memory t (KICH	0.048938761
CDA	Effector cd8+ memory t (KICH	0.14897323
CDA	Effector memory t cell KICH	0.102438962
CDA	Effector regulatory t (treg KICH	-0.051161787
CDA	Elvidge_hif1a_targets_up KICH	-0.275490542
CDA	Endothelial cell KICH	0.094227448
CDA	Eosinophil KICH	0.036246864
CDA	Ether lipid metabolism KICH	0.064606063
CDA	Exhausted cd4+ t cell KICH	0.089894089
CDA	Exhausted cd8+ t cell KICH	0.102224358
CDA	Exhausted t cell KICH	0.057974889
CDA	Fat cell (adipocyte) KICH	-0.158311656
CDA	Fatty acid biosynthesis KICH	-0.053816625
CDA	Fatty acid degradation KICH	-0.28801354
CDA	Fatty acid elongation KICH	-0.067657011
CDA	Fibroblast KICH	0.170305948
CDA	Folate biosynthesis KICH	-0.114595912
CDA	Follicular b cell KICH	0.218345356
CDA	Follicular dendritic cell KICH	0.003087922
CDA	Follicular helper (tfh) t ce KICH	0.08290397
CDA	Follicular t cell KICH	-0.075204854
CDA	Foxp3+il-17+ t cell KICH	-0.035487295
CDA	Fructose and mannose me KICH	-0.169603922
CDA	G2m_checkpoint KICH	-0.06859679
CDA	Galactose metabolism KICH	-0.049927467
CDA	Galie_tumor_stemness_ge KICH	0.009306685
CDA	Glutathione metabolism KICH	-0.321747843
CDA	Glycerolipid metabolism KICH	-0.049408134
CDA	Glycerophospholipid metæ KICH	0.363022479
CDA	Glycine, serine and threor KICH	-0.25070436
CDA	Glycolysis / gluconeogene KICH	-0.257548064
CDA	Glycosaminoglycan biosy1 KICH	0.195712785
CDA	Glycosaminoglycan biosy1 KICH	0.08098289
CDA	Glycosaminoglycan biosy1 KICH	0.39282195
CDA	Glycosaminoglycan degra KICH	-0.32747918
CDA	Glycosphingolipid biosyn1 KICH	0.085475678
CDA	Glycosphingolipid biosyn1 KICH	0.285722406
CDA	Glycosphingolipid biosyn1 KICH	0.281127206
CDA	Glycosylphosphatidylinos: KICH	-0.324529121
CDA	Glyoxylate and dicarboxy KICH	-0.409420313

CDA	Granulocyte	KICH	0.048883972
CDA	Hedgehog_signaling	KICH	0.249526775
CDA	Histidine metabolism	KICH	-0.187888344
CDA	Hypoxia	KICH	0.189285434
CDA	Il-17alpha t cell	KICH	0.041427296
CDA	Il2_stat5_signaling	KICH	0.13292533
CDA	Il6_jak_stat3_signaling	KICH	0.099085194
CDA	Immune_checkpoints_tun	KICH	-0.04002868
CDA	Immune_inhibition_cytok	KICH	0.134764872
CDA	Inositol phosphate metabo	KICH	-0.115718986
CDA	Interleukin_6_signaling	KICH	-0.072747211
CDA	Jaeger_metastasis_up	KICH	-0.130675814
CDA	Jain_nfkb_signaling	KICH	-0.380244851
CDA	Kras_signaling_up	KICH	-0.063806922
CDA	Linoleic acid metabolism	KICH	0.101707736
CDA	Lipoic acid metabolism	KICH	-0.226259724
CDA	Lysine degradation	KICH	-0.422593596
CDA	Lysosome	KICH	-0.225597489
CDA	M1 macrophage	KICH	0.000639285
CDA	M2 macrophage	KICH	-0.005989226
CDA	Mannose type o-glycan bi	KICH	0.25699717
CDA	Mapk_signaling_pathway	KICH	0.294730732
CDA	Mapk3_erk1_activation	KICH	0.044677783
CDA	Marginal zone b cell	KICH	-0.00225935
CDA	Memory b cell	KICH	0.152692305
CDA	Mesenchymal cell	KICH	0.134209949
CDA	Mesenchymal stem cell	KICH	0.180595611
CDA	Metabolism of xenobiotic	KICH	-0.117477609
CDA	Migrating cancer stem cel	KICH	-0.235261652
CDA	Mitotic_spindle	KICH	-0.108247876
CDA	Monocyte	KICH	0.056287299
CDA	Mtor_signaling_pathway	KICH	-0.004909219
CDA	Mtorc1_signaling	KICH	-0.154000686
CDA	Mucin type o-glycan bios	KICH	0.295178225
CDA	Myc_targets_v1	KICH	-0.050806398
CDA	Myeloid cell	KICH	0.03045396
CDA	N-glycan biosynthesis	KICH	-0.155939303
CDA	Naive b cell	KICH	-0.053114897
CDA	Naive cd4+ t cell	KICH	-0.008154254
CDA	Naive cd8+ t cell	KICH	0.113052912
CDA	Natural killer cell	KICH	0.060777391
CDA	Natural killer t (nkt) cell	KICH	-0.112930498
CDA	Natural regulatory t (treg)	KICH	-0.023987492

CDA	Neomycin, kanamycin and	KICH	0.051790126
CDA	Neutrophil	KICH	0.092266012
CDA	Nicotinate and nicotinami	KICH	-0.135801279
CDA	Nitrogen metabolism	KICH	0.192149598
CDA	Nod_like_receptor_signal	KICH	0.089378268
CDA	Notch_signaling	KICH	0.135051463
CDA	One carbon pool by folate	KICH	-0.222672086
CDA	Other glycan degradation	KICH	-0.32483192
CDA	Other types of o-glycan b	KICH	0.248614678
CDA	Oxidative phosphorylatio	KICH	-0.185682814
CDA	P53_pathway	KICH	0.062013028
CDA	P53_signaling_pathway	KICH	0.08575815
CDA	Pantothenate and coa bios	KICH	-0.418817678
CDA	Pentose and glucuronate i	KICH	-0.286723025
CDA	Pentose phosphate pathwa	KICH	-0.222284354
CDA	Pericyte	KICH	0.262177473
CDA	Phenylalanine metabolism	KICH	0.330763488
CDA	Phenylalanine, tyrosine ar	KICH	0.129277517
CDA	Phosphonate and phosphir	KICH	-0.085220558
CDA	Pi3k_akt_activation	KICH	-0.098235518
CDA	Pi3k_akt_mtor_signaling	KICH	-0.018862214
CDA	Porphyrin and chlorophyl	KICH	-0.322739885
CDA	Primary bile acid biosynt	KICH	-0.125349863
CDA	Propanoate metabolism	KICH	-0.352234254
CDA	Purine metabolism	KICH	-0.008498685
CDA	Pyrimidine metabolism	KICH	0.107732361
CDA	Pyruvate metabolism	KICH	-0.344767598
CDA	Regulation_of_autophagy	KICH	-0.455654354
CDA	Retinol metabolism	KICH	0.12911576
CDA	Riboflavin metabolism	KICH	-0.156225757
CDA	Schmahl_pdgf_signaling	KICH	-0.129766001
CDA	Selenocompound metabol	KICH	-0.057456161
CDA	Signaling_by_hippo	KICH	-0.072436845
CDA	Sphingolipid metabolism	KICH	-0.086296861
CDA	Starch and sucrose metabo	KICH	-0.234647859
CDA	Steroid biosynthesis	KICH	0.043200864
CDA	Steroid hormone biosynth	KICH	0.270219445
CDA	Sulfur metabolism	KICH	-0.252977246
CDA	Synthesis and degradation	KICH	-0.285966609
CDA	T helper cell	KICH	0.06839635
CDA	T helper1 (th1) cell	KICH	0.115170112
CDA	T helper17 (th17) cell	KICH	0.021074632
CDA	T helper2 (th2) cell	KICH	-0.013362153

CDA	T helper9 (th9) cell	KICH	-0.058260268
CDA	Taurine and hypotaurine r	KICH	-0.241587233
CDA	Terpenoid backbone biosy	KICH	-0.224992089
CDA	Tgf_beta_signaling_pathw	KICH	0.206801345
CDA	Thiamine metabolism	KICH	-0.212504328
CDA	Tnfa_signaling_via_nfkb	KICH	0.150661279
CDA	Tryptophan metabolism	KICH	-0.087882545
CDA	Tumor endothelial cell	KICH	0.108006788
CDA	Tyrosine metabolism	KICH	0.159900918
CDA	Ubiquinone and other terf	KICH	0.071355996
CDA	Valine, leucine and isoleu	KICH	-0.009817019
CDA	Valine, leucine and isoleu	KICH	-0.391228787
CDA	Vascular endothelial cell	KICH	0.124794215
CDA	Vascular smooth muscle c	KICH	0.149745574
CDA	Vegf_signaling_pathway	KICH	0.332751632
CDA	Vitamin b6 metabolism	KICH	-0.038977052
CDA	Willert_wnt_signaling	KICH	-0.048831477
CDA	Wnt_beta_catenin_signali	KICH	0.291015348
UCK1	Abnormal plasma cell	KICH	-0.167462361
UCK1	Activated b cell	KICH	-0.221713226
UCK1	Activated cd4+ t cell	KICH	-0.28431397
UCK1	Activated t cell	KICH	-0.328828011
UCK1	Alanine, aspartate and glu	KICH	-0.350483702
UCK1	Alcala_apoptosis	KICH	-0.289876045
UCK1	Alpha-linolenic acid meta	KICH	0.293992303
UCK1	Amino sugar and nucleoti	KICH	-0.219579509
UCK1	Ampk_pathway	KICH	0.146135929
UCK1	Angiogenesis	KICH	-0.354986139
UCK1	Arachidonic acid metabol:	KICH	0.311785127
UCK1	Arginine and proline metæ	KICH	-0.120803396
UCK1	Arginine biosynthesis	KICH	-0.171184469
UCK1	Ascorbate and aldarate mæ	KICH	-0.304142254
UCK1	Atypical memory b cell	KICH	-0.254700597
UCK1	Axl+siglec6+ dendritic ce	KICH	-0.216803209
UCK1	B cell	KICH	-0.427119556
UCK1	B1 cell	KICH	-0.271155594
UCK1	Basal cell	KICH	-0.019997442
UCK1	Beta-alanine metabolism	KICH	-0.154786833
UCK1	Biosynthesis of unsaturate	KICH	0.118222893
UCK1	Biotin metabolism	KICH	0.161059703
UCK1	Butanoate metabolism	KICH	0.029141709
UCK1	Caffeine metabolism	KICH	0.061404334
UCK1	Cancer stem cell	KICH	-0.343815212

UCK1	Cancer stem-like cell	KICH	-0.219938557
UCK1	Cd4+ cytotoxic t cell	KICH	-0.111493639
UCK1	Cd4+ memory t cell	KICH	-0.405947273
UCK1	Cd4+ regulatory t cell	KICH	-0.1552176
UCK1	Cd4+ t helper cell	KICH	-0.247411125
UCK1	Cd4+cd25+ regulatory t c	KICH	-0.27654911
UCK1	Cd8+ cytotoxic t cell	KICH	-0.217329967
UCK1	Cd8+ regulatory t cell	KICH	-0.255302058
UCK1	Cell_cycle	KICH	-0.231395001
UCK1	Chandran_metastasis_top5	KICH	-0.34289576
UCK1	Citrate cycle (tca cycle)	KICH	-0.038163719
UCK1	Cysteine and methionine r	KICH	-0.231145739
UCK1	Cytokine induced killer c	KICH	-0.053479708
UCK1	D-arginine and d-ornithin	KICH	0.07760858
UCK1	D-glutamine and d-glutan	KICH	-0.346841099
UCK1	Dendritic cell	KICH	-0.223698877
UCK1	Dna_repair	KICH	0.361484891
UCK1	Dna_replication	KICH	-0.036206978
UCK1	Double-negative memory	KICH	-0.357812123
UCK1	Drug metabolism - cytoch	KICH	-0.10762816
UCK1	Drug metabolism - other c	KICH	0.006367101
UCK1	E2f_targets	KICH	-0.177060764
UCK1	Ecm_receptor_interaction	KICH	-0.437421938
UCK1	Effector cd4+ memory t (	KICH	-0.368717652
UCK1	Effector cd8+ memory t (	KICH	-0.232193355
UCK1	Effector memory t cell	KICH	-0.277453634
UCK1	Effector regulatory t (treg	KICH	-0.297340775
UCK1	Elvidge_hif1a_targets_up	KICH	-0.438275513
UCK1	Endothelial cell	KICH	-0.325283921
UCK1	Eosinophil	KICH	-0.174328319
UCK1	Ether lipid metabolism	KICH	-0.014672932
UCK1	Exhausted cd4+ t cell	KICH	-0.42882478
UCK1	Exhausted cd8+ t cell	KICH	-0.238670558
UCK1	Exhausted t cell	KICH	-0.16051356
UCK1	Fat cell (adipocyte)	KICH	0.462677196
UCK1	Fatty acid biosynthesis	KICH	-0.021325564
UCK1	Fatty acid degradation	KICH	-0.0781327
UCK1	Fatty acid elongation	KICH	0.004677803
UCK1	Fibroblast	KICH	-0.310139408
UCK1	Folate biosynthesis	KICH	0.215553968
UCK1	Follicular b cell	KICH	-0.273528561
UCK1	Follicular dendritic cell	KICH	-0.178969879
UCK1	Follicular helper (tfh) t ce	KICH	-0.265959233

UCK1	Follicular t cell	KICH	0.020052899
UCK1	Foxp3+il-17+ t cell	KICH	0.035651617
UCK1	Fructose and mannose me	KICH	0.158879642
UCK1	G2m_checkpoint	KICH	-0.25772398
UCK1	Galactose metabolism	KICH	-0.046926675
UCK1	Galie_tumor_stemness_ge	KICH	-0.419105211
UCK1	Glutathione metabolism	KICH	-0.148715352
UCK1	Glycerolipid metabolism	KICH	-0.037151769
UCK1	Glycerophospholipid metæ	KICH	0.227445159
UCK1	Glycine, serine and threor	KICH	0.039130873
UCK1	Glycolysis / gluconeogene	KICH	-0.091055643
UCK1	Glycosaminoglycan biosyn	KICH	0.154012442
UCK1	Glycosaminoglycan biosyn	KICH	0.036300746
UCK1	Glycosaminoglycan biosyn	KICH	0.219408968
UCK1	Glycosaminoglycan degra	KICH	0.153772862
UCK1	Glycosphingolipid biosyn	KICH	-0.039155733
UCK1	Glycosphingolipid biosyn	KICH	0.020736447
UCK1	Glycosphingolipid biosyn	KICH	0.118619909
UCK1	Glycosylphosphatidylinos	KICH	0.147484772
UCK1	Glyoxylate and dicarboxy	KICH	-0.017549474
UCK1	Granulocyte	KICH	-0.234884837
UCK1	Hedgehog_signaling	KICH	-0.154502905
UCK1	Histidine metabolism	KICH	-0.1525497
UCK1	Hypoxia	KICH	-0.165360764
UCK1	Il-17ralpha t cell	KICH	-0.350964755
UCK1	Il2_stat5_signaling	KICH	-0.338344553
UCK1	Il6_jak_stat3_signaling	KICH	-0.297561431
UCK1	Immune_checkpoints_tun	KICH	-0.218129218
UCK1	Immune_inhibition_cytok	KICH	-0.083158924
UCK1	Inositol phosphate metabo	KICH	-0.346874159
UCK1	Interleukin_6_signaling	KICH	-0.578186082
UCK1	Jaeger_metastasis_up	KICH	-0.249107529
UCK1	Jain_nfkb_signaling	KICH	-0.2282355
UCK1	Kras_signaling_up	KICH	-0.373944902
UCK1	Linoleic acid metabolism	KICH	0.357382346
UCK1	Lipoic acid metabolism	KICH	0.052637105
UCK1	Lysine degradation	KICH	0.046554441
UCK1	Lysosome	KICH	-0.169706677
UCK1	M1 macrophage	KICH	-0.319046549
UCK1	M2 macrophage	KICH	-0.236426023
UCK1	Mannose type o-glycan bi	KICH	0.446232113
UCK1	Mapk_signaling_pathway	KICH	-0.347970715
UCK1	Mapk3_erk1_activation	KICH	-0.630985535

UCK1	Marginal zone b cell	KICH	-0.453184284
UCK1	Memory b cell	KICH	-0.465471493
UCK1	Mesenchymal cell	KICH	-0.195136012
UCK1	Mesenchymal stem cell	KICH	-0.320630892
UCK1	Metabolism of xenobiotics	KICH	0.002954827
UCK1	Migrating cancer stem cell	KICH	0.03559112
UCK1	Mitotic_spindle	KICH	-0.623564931
UCK1	Monocyte	KICH	-0.183347884
UCK1	Mtor_signaling_pathway	KICH	-0.381656136
UCK1	Mtorc1_signaling	KICH	-0.334156181
UCK1	Mucin type o-glycan biosynthesis	KICH	-0.196317445
UCK1	Myc_targets_v1	KICH	-0.171896943
UCK1	Myeloid cell	KICH	-0.280222727
UCK1	N-glycan biosynthesis	KICH	0.170854282
UCK1	Naive b cell	KICH	-0.195368777
UCK1	Naive cd4+ t cell	KICH	-0.304635441
UCK1	Naive cd8+ t cell	KICH	-0.170047342
UCK1	Natural killer cell	KICH	-0.214794792
UCK1	Natural killer t (nkt) cell	KICH	-0.236413195
UCK1	Natural regulatory t (treg) cell	KICH	-0.308630836
UCK1	Neomycin, kanamycin and streptomycin	KICH	-0.181349907
UCK1	Neutrophil	KICH	-0.160882169
UCK1	Nicotinate and nicotinamide	KICH	-0.234422006
UCK1	Nitrogen metabolism	KICH	-0.255966629
UCK1	Nod_like_receptor_signaling	KICH	-0.454043612
UCK1	Notch_signaling	KICH	-0.049083869
UCK1	One carbon pool by folate	KICH	-0.09389035
UCK1	Other glycan degradation	KICH	0.141608914
UCK1	Other types of o-glycan biosynthesis	KICH	0.465248254
UCK1	Oxidative phosphorylation	KICH	0.355987691
UCK1	P53_pathway	KICH	-0.07403891
UCK1	P53_signaling_pathway	KICH	-0.425366036
UCK1	Pantothenate and coa biosynthesis	KICH	-0.308379652
UCK1	Pentose and glucuronate interconversions	KICH	-0.394359089
UCK1	Pentose phosphate pathway	KICH	0.028300814
UCK1	Pericyte	KICH	-0.148888511
UCK1	Phenylalanine metabolism	KICH	-0.080396389
UCK1	Phenylalanine, tyrosine and tryptophan	KICH	0.242143444
UCK1	Phosphonate and phosphite metabolism	KICH	-0.110005768
UCK1	Pi3k_akt_activation	KICH	-0.459831302
UCK1	Pi3k_akt_mtor_signaling	KICH	-0.486608653
UCK1	Porphyrin and chlorophyll metabolism	KICH	0.169577998
UCK1	Primary bile acid biosynthesis	KICH	0.082198566

UCK1	Propanoate metabolism	KICH	-0.091763472
UCK1	Purine metabolism	KICH	-0.304498576
UCK1	Pyrimidine metabolism	KICH	-0.099366753
UCK1	Pyruvate metabolism	KICH	0.039523229
UCK1	Regulation_of_autophagy	KICH	-0.119922085
UCK1	Retinol metabolism	KICH	0.139224205
UCK1	Riboflavin metabolism	KICH	0.321037689
UCK1	Schmahl_pdgf_signaling	KICH	-0.148313772
UCK1	Selenocompound metabol	KICH	-0.411840968
UCK1	Signaling_by_hippo	KICH	-0.516055117
UCK1	Sphingolipid metabolism	KICH	-0.345414751
UCK1	Starch and sucrose metabo	KICH	-0.330305705
UCK1	Steroid biosynthesis	KICH	0.240379268
UCK1	Steroid hormone biosynth	KICH	0.003935271
UCK1	Sulfur metabolism	KICH	-0.418903534
UCK1	Synthesis and degradation	KICH	0.055470881
UCK1	T helper cell	KICH	-0.331317779
UCK1	T helper1 (th1) cell	KICH	-0.271803324
UCK1	T helper17 (th17) cell	KICH	-0.280809914
UCK1	T helper2 (th2) cell	KICH	-0.206408266
UCK1	T helper9 (th9) cell	KICH	-0.10457796
UCK1	Taurine and hypotaurine r	KICH	0.085134806
UCK1	Terpenoid backbone biosy	KICH	-0.053877521
UCK1	Tgf_beta_signaling_pathw	KICH	-0.461853508
UCK1	Thiamine metabolism	KICH	-0.020349456
UCK1	Tnfa_signaling_via_nfbk	KICH	-0.243779784
UCK1	Tryptophan metabolism	KICH	-0.107848821
UCK1	Tumor endothelial cell	KICH	-0.094292181
UCK1	Tyrosine metabolism	KICH	-0.037226458
UCK1	Ubiquinone and other terf	KICH	-0.267574629
UCK1	Valine, leucine and isoleu	KICH	0.098550228
UCK1	Valine, leucine and isoleu	KICH	0.003069398
UCK1	Vascular endothelial cell	KICH	-0.165842693
UCK1	Vascular smooth muscle c	KICH	-0.070170355
UCK1	Vegf_signaling_pathway	KICH	-0.204331767
UCK1	Vitamin b6 metabolism	KICH	0.204442525
UCK1	Willert_wnt_signaling	KICH	-0.20584753
UCK1	Wnt_beta_catenin_signali	KICH	0.083191405
UCK2	Abnormal plasma cell	KICH	0.196720603
UCK2	Activated b cell	KICH	0.54114089
UCK2	Activated cd4+ t cell	KICH	0.439743721
UCK2	Activated t cell	KICH	0.654832414
UCK2	Alanine, aspartate and glu	KICH	-0.127844042

UCK2	Alcala_apoptosis	KICH	0.304401313
UCK2	Alpha-linolenic acid meta	KICH	-0.325780119
UCK2	Amino sugar and nucleoti	KICH	0.233267117
UCK2	Ampk_pathway	KICH	-0.157056296
UCK2	Angiogenesis	KICH	0.497616975
UCK2	Arachidonic acid metabol	KICH	-0.062336185
UCK2	Arginine and proline metε	KICH	0.001328028
UCK2	Arginine biosynthesis	KICH	-0.4239833
UCK2	Ascorbate and aldarate mε	KICH	-0.194372162
UCK2	Atypical memory b cell	KICH	0.283548543
UCK2	Axl+siglec6+ dendritic ce	KICH	0.392111213
UCK2	B cell	KICH	0.33837442
UCK2	B1 cell	KICH	0.423863056
UCK2	Basal cell	KICH	0.667111109
UCK2	Beta-alanine metabolism	KICH	-0.107867495
UCK2	Biosynthesis of unsaturate	KICH	-0.287509636
UCK2	Biotin metabolism	KICH	-0.382066463
UCK2	Butanoate metabolism	KICH	-0.601866367
UCK2	Caffeine metabolism	KICH	-0.174925444
UCK2	Cancer stem cell	KICH	0.324655192
UCK2	Cancer stem-like cell	KICH	0.230591265
UCK2	Cd4+ cytotoxic t cell	KICH	0.401224769
UCK2	Cd4+ memory t cell	KICH	0.471340588
UCK2	Cd4+ regulatory t cell	KICH	0.549390601
UCK2	Cd4+ t helper cell	KICH	0.470693204
UCK2	Cd4+cd25+ regulatory t c	KICH	0.482210788
UCK2	Cd8+ cytotoxic t cell	KICH	0.377663612
UCK2	Cd8+ regulatory t cell	KICH	0.55310185
UCK2	Cell_cycle	KICH	0.396143298
UCK2	Chandran_metastasis_topε	KICH	0.059907325
UCK2	Citrate cycle (tca cycle)	KICH	-0.546209219
UCK2	Cysteine and methionine r	KICH	-0.015843656
UCK2	Cytokine induced killer cε	KICH	0.272384519
UCK2	D-arginine and d-ornithin	KICH	-0.083849323
UCK2	D-glutamine and d-glutan	KICH	-0.485057427
UCK2	Dendritic cell	KICH	0.511061277
UCK2	Dna_repair	KICH	0.180744142
UCK2	Dna_replication	KICH	0.46529107
UCK2	Double-negative memory	KICH	0.426191289
UCK2	Drug metabolism - cytoch	KICH	-0.184081514
UCK2	Drug metabolism - other ε	KICH	0.145816861
UCK2	E2f_targets	KICH	0.510173285
UCK2	Ecm_receptor_interaction	KICH	0.325009362

UCK2	Effector cd4+ memory t (KICH	0.387235829
UCK2	Effector cd8+ memory t (KICH	0.532360807
UCK2	Effector memory t cell KICH	0.473921535
UCK2	Effector regulatory t (treg KICH	0.505252751
UCK2	Elvidge_hif1a_targets_up KICH	0.0449682
UCK2	Endothelial cell KICH	0.46035714
UCK2	Eosinophil KICH	0.471019048
UCK2	Ether lipid metabolism KICH	-0.35513717
UCK2	Exhausted cd4+ t cell KICH	0.524708801
UCK2	Exhausted cd8+ t cell KICH	0.531607424
UCK2	Exhausted t cell KICH	0.449342138
UCK2	Fat cell (adipocyte) KICH	-0.300661622
UCK2	Fatty acid biosynthesis KICH	-0.497083736
UCK2	Fatty acid degradation KICH	-0.586341353
UCK2	Fatty acid elongation KICH	-0.493447732
UCK2	Fibroblast KICH	0.577273813
UCK2	Folate biosynthesis KICH	-0.429431609
UCK2	Follicular b cell KICH	0.203413329
UCK2	Follicular dendritic cell KICH	0.3865223
UCK2	Follicular helper (tfh) t ce KICH	0.611385049
UCK2	Follicular t cell KICH	0.42123252
UCK2	Foxp3+il-17+ t cell KICH	0.500707565
UCK2	Fructose and mannose me KICH	0.255932514
UCK2	G2m_checkpoint KICH	0.479021672
UCK2	Galactose metabolism KICH	0.186008136
UCK2	Galie_tumor_stemness_ge KICH	0.209620924
UCK2	Glutathione metabolism KICH	0.134833411
UCK2	Glycerolipid metabolism KICH	0.160624874
UCK2	Glycerophospholipid metæ KICH	-0.141572401
UCK2	Glycine, serine and threor KICH	0.051520211
UCK2	Glycolysis / gluconeogene KICH	-0.14661665
UCK2	Glycosaminoglycan biosy1 KICH	0.435979467
UCK2	Glycosaminoglycan biosy1 KICH	0.39508224
UCK2	Glycosaminoglycan biosy1 KICH	0.069691562
UCK2	Glycosaminoglycan degra KICH	-0.307246408
UCK2	Glycosphingolipid biosyn1 KICH	-0.124127235
UCK2	Glycosphingolipid biosyn1 KICH	-0.086096278
UCK2	Glycosphingolipid biosyn1 KICH	-0.106178736
UCK2	Glycosylphosphatidylinos: KICH	-0.545428856
UCK2	Glyoxylate and dicarboxy KICH	-0.322997549
UCK2	Granulocyte KICH	0.533636563
UCK2	Hedgehog_signaling KICH	-0.006210927
UCK2	Histidine metabolism KICH	0.06186985

UCK2	Hypoxia	KICH	0.337180626
UCK2	Il-17alpha t cell	KICH	0.436295947
UCK2	Il2_stat5_signaling	KICH	0.438122157
UCK2	Il6_jak_stat3_signaling	KICH	0.537258998
UCK2	Immune_checkpoints_tun	KICH	0.446949661
UCK2	Immune_inhibition_cytok	KICH	0.321826266
UCK2	Inositol phosphate metabo	KICH	-0.379698087
UCK2	Interleukin_6_signaling	KICH	0.272674605
UCK2	Jaeger_metastasis_up	KICH	0.405627824
UCK2	Jain_nfkb_signaling	KICH	0.060302723
UCK2	Kras_signaling_up	KICH	0.322450436
UCK2	Linoleic acid metabolism	KICH	-0.383154654
UCK2	Lipoic acid metabolism	KICH	-0.380147844
UCK2	Lysine degradation	KICH	-0.28873053
UCK2	Lysosome	KICH	-0.23182546
UCK2	M1 macrophage	KICH	0.459392261
UCK2	M2 macrophage	KICH	0.490200241
UCK2	Mannose type o-glycan bi	KICH	-0.149959964
UCK2	Mapk_signaling_pathway	KICH	0.356478744
UCK2	Mapk3_erk1_activation	KICH	0.088631103
UCK2	Marginal zone b cell	KICH	0.308486494
UCK2	Memory b cell	KICH	0.375215898
UCK2	Mesenchymal cell	KICH	0.732733563
UCK2	Mesenchymal stem cell	KICH	0.365221797
UCK2	Metabolism of xenobiotic	KICH	-0.182563281
UCK2	Migrating cancer stem cel	KICH	0.094664983
UCK2	Mitotic_spindle	KICH	0.383296704
UCK2	Monocyte	KICH	0.550082824
UCK2	Mtor_signaling_pathway	KICH	-0.179998053
UCK2	Mtorc1_signaling	KICH	0.260411767
UCK2	Mucin type o-glycan biosy	KICH	-0.308203787
UCK2	Myc_targets_v1	KICH	0.349815972
UCK2	Myeloid cell	KICH	0.430731496
UCK2	N-glycan biosynthesis	KICH	-0.396743932
UCK2	Naive b cell	KICH	-0.245497158
UCK2	Naive cd4+ t cell	KICH	0.25717791
UCK2	Naive cd8+ t cell	KICH	-0.039817112
UCK2	Natural killer cell	KICH	0.387719371
UCK2	Natural killer t (nkt) cell	KICH	0.403454158
UCK2	Natural regulatory t (treg)	KICH	0.506409451
UCK2	Neomycin, kanamycin an	KICH	0.483721644
UCK2	Neutrophil	KICH	0.495570284
UCK2	Nicotinate and nicotinami	KICH	0.299095375

UCK2	Nitrogen metabolism	KICH	-0.540989151
UCK2	Nod_like_receptor_signal	KICH	0.443537815
UCK2	Notch_signaling	KICH	0.110575519
UCK2	One carbon pool by folate	KICH	0.245202687
UCK2	Other glycan degradation	KICH	-0.420180203
UCK2	Other types of o-glycan b	KICH	0.133797593
UCK2	Oxidative phosphorylatio	KICH	-0.693141331
UCK2	P53_pathway	KICH	0.325050958
UCK2	P53_signaling_pathway	KICH	0.461585308
UCK2	Pantothenate and coa bios	KICH	0.151001507
UCK2	Pentose and glucuronate in	KICH	-0.087417081
UCK2	Pentose phosphate pathwa	KICH	-0.217426109
UCK2	Pericyte	KICH	0.444109321
UCK2	Phenylalanine metabolism	KICH	0.019267652
UCK2	Phenylalanine, tyrosine ar	KICH	-0.475294965
UCK2	Phosphonate and phosphir	KICH	-0.345660638
UCK2	Pi3k_akt_activation	KICH	0.090169444
UCK2	Pi3k_akt_mtor_signaling	KICH	0.3680812
UCK2	Porphyrin and chlorophyl	KICH	-0.352260405
UCK2	Primary bile acid biosynt	KICH	-0.314647916
UCK2	Propanoate metabolism	KICH	-0.591247976
UCK2	Purine metabolism	KICH	0.255805876
UCK2	Pyrimidine metabolism	KICH	0.350828581
UCK2	Pyruvate metabolism	KICH	-0.516175236
UCK2	Regulation_of_autophagy	KICH	-0.519779128
UCK2	Retinol metabolism	KICH	-0.583358548
UCK2	Riboflavin metabolism	KICH	0.092713085
UCK2	Schmahl_pdgf_signaling	KICH	-0.096523148
UCK2	Selenocompound metabol	KICH	-0.122090361
UCK2	Signaling_by_hippo	KICH	-0.189482821
UCK2	Sphingolipid metabolism	KICH	-0.25827807
UCK2	Starch and sucrose metabo	KICH	0.171866296
UCK2	Steroid biosynthesis	KICH	-0.447636213
UCK2	Steroid hormone biosynth	KICH	-0.495471598
UCK2	Sulfur metabolism	KICH	0.203871541
UCK2	Synthesis and degradation	KICH	-0.393179913
UCK2	T helper cell	KICH	0.474857145
UCK2	T helper1 (th1) cell	KICH	0.407981856
UCK2	T helper17 (th17) cell	KICH	0.480602258
UCK2	T helper2 (th2) cell	KICH	0.523112361
UCK2	T helper9 (th9) cell	KICH	0.282173878
UCK2	Taurine and hypotaurine r	KICH	0.174163054
UCK2	Terpenoid backbone biosy	KICH	-0.223855699

UCK2	Tgf_beta_signaling_pathw	KICH	0.083678482
UCK2	Thiamine metabolism	KICH	-0.077021935
UCK2	Tnfa_signaling_via_nfk	KICH	0.360674936
UCK2	Tryptophan metabolism	KICH	-0.305365395
UCK2	Tumor endothelial cell	KICH	0.401220165
UCK2	Tyrosine metabolism	KICH	-0.063936187
UCK2	Ubiquinone and other ter	KICH	-0.394913156
UCK2	Valine, leucine and isoleu	KICH	0.039534466
UCK2	Valine, leucine and isoleu	KICH	-0.532673761
UCK2	Vascular endothelial cell	KICH	0.092620879
UCK2	Vascular smooth muscle c	KICH	0.199707444
UCK2	Vegf_signaling_pathway	KICH	0.250709947
UCK2	Vitamin b6 metabolism	KICH	0.061782177
UCK2	Willert_wnt_signaling	KICH	0.474281193
UCK2	Wnt_beta_catenin_signali	KICH	0.231248069
UCKL1	Abnormal plasma cell	KICH	-0.053247499
UCKL1	Activated b cell	KICH	-0.064297999
UCKL1	Activated cd4+ t cell	KICH	-0.125350338
UCKL1	Activated t cell	KICH	-0.186524378
UCKL1	Alanine, aspartate and glu	KICH	-0.254570213
UCKL1	Alcala_apoptosis	KICH	-0.007598435
UCKL1	Alpha-linolenic acid meta	KICH	0.230473617
UCKL1	Amino sugar and nucleoti	KICH	-0.033904634
UCKL1	Ampk_pathway	KICH	0.079588089
UCKL1	Angiogenesis	KICH	-0.21787828
UCKL1	Arachidonic acid metabo	KICH	0.281786576
UCKL1	Arginine and proline met	KICH	-0.429353566
UCKL1	Arginine biosynthesis	KICH	-0.114894527
UCKL1	Ascorbate and aldarate m	KICH	-0.272826828
UCKL1	Atypical memory b cell	KICH	0.060906442
UCKL1	Axl+siglec6+ dendritic ce	KICH	-0.04289271
UCKL1	B cell	KICH	-0.212411549
UCKL1	B1 cell	KICH	-0.135651275
UCKL1	Basal cell	KICH	0.013268077
UCKL1	Beta-alanine metabolism	KICH	-0.223010327
UCKL1	Biosynthesis of unsaturate	KICH	-0.083022518
UCKL1	Biotin metabolism	KICH	-0.010191041
UCKL1	Butanoate metabolism	KICH	-0.13328621
UCKL1	Caffeine metabolism	KICH	0.429506593
UCKL1	Cancer stem cell	KICH	-0.067449219
UCKL1	Cancer stem-like cell	KICH	0.09124135
UCKL1	Cd4+ cytotoxic t cell	KICH	0.044891015
UCKL1	Cd4+ memory t cell	KICH	-0.172310859

UCKL1	Cd4+ regulatory t cell	KICH	-0.156475139
UCKL1	Cd4+ t helper cell	KICH	-0.067914186
UCKL1	Cd4+cd25+ regulatory t c	KICH	-0.092954042
UCKL1	Cd8+ cytotoxic t cell	KICH	-0.047530866
UCKL1	Cd8+ regulatory t cell	KICH	-0.086425424
UCKL1	Cell_cycle	KICH	-0.167897863
UCKL1	Chandran_metastasis_top	KICH	-0.348579325
UCKL1	Citrate cycle (tca cycle)	KICH	-0.088923454
UCKL1	Cysteine and methionine r	KICH	-0.239622517
UCKL1	Cytokine induced killer c	KICH	0.034632993
UCKL1	D-arginine and d-ornithin	KICH	-0.242426171
UCKL1	D-glutamine and d-glutan	KICH	-0.199364261
UCKL1	Dendritic cell	KICH	-0.057954061
UCKL1	Dna_repair	KICH	0.133830758
UCKL1	Dna_replication	KICH	-0.066055588
UCKL1	Double-negative memory	KICH	0.042051735
UCKL1	Drug metabolism - cytoch	KICH	-0.007783245
UCKL1	Drug metabolism - other	KICH	0.142622919
UCKL1	E2f_targets	KICH	-0.143131647
UCKL1	Ecm_receptor_interaction	KICH	-0.094974518
UCKL1	Effector cd4+ memory t (	KICH	-0.052942119
UCKL1	Effector cd8+ memory t (	KICH	-0.105001417
UCKL1	Effector memory t cell	KICH	-0.048803375
UCKL1	Effector regulatory t (treg	KICH	-0.202094155
UCKL1	Elvidge_hif1a_targets_up	KICH	-0.379760388
UCKL1	Endothelial cell	KICH	-0.043126413
UCKL1	Eosinophil	KICH	-0.082480895
UCKL1	Ether lipid metabolism	KICH	0.206437182
UCKL1	Exhausted cd4+ t cell	KICH	-0.184348532
UCKL1	Exhausted cd8+ t cell	KICH	-0.10970534
UCKL1	Exhausted t cell	KICH	-0.048581479
UCKL1	Fat cell (adipocyte)	KICH	0.162288622
UCKL1	Fatty acid biosynthesis	KICH	-0.014976198
UCKL1	Fatty acid degradation	KICH	-0.12936365
UCKL1	Fatty acid elongation	KICH	-0.038810242
UCKL1	Fibroblast	KICH	-0.059350108
UCKL1	Folate biosynthesis	KICH	-0.063900676
UCKL1	Follicular b cell	KICH	0.158669463
UCKL1	Follicular dendritic cell	KICH	-0.062780586
UCKL1	Follicular helper (tfh) t ce	KICH	-0.117874233
UCKL1	Follicular t cell	KICH	-0.035386012
UCKL1	Foxp3+il-17+ t cell	KICH	-0.159962284
UCKL1	Fructose and mannose me	KICH	-0.106046593

UCKL1	G2m_checkpoint	KICH	-0.154090226
UCKL1	Galactose metabolism	KICH	-0.257296175
UCKL1	Galie_tumor_stemness_ge	KICH	-0.218541673
UCKL1	Glutathione metabolism	KICH	-0.259288256
UCKL1	Glycerolipid metabolism	KICH	-0.267540013
UCKL1	Glycerophospholipid metæ	KICH	0.386738356
UCKL1	Glycine, serine and threor	KICH	-0.581342103
UCKL1	Glycolysis / gluconeogene	KICH	-0.169240873
UCKL1	Glycosaminoglycan biosy	KICH	0.102617149
UCKL1	Glycosaminoglycan biosy	KICH	-0.268195277
UCKL1	Glycosaminoglycan biosy	KICH	0.042327568
UCKL1	Glycosaminoglycan degra	KICH	-0.038381837
UCKL1	Glycosphingolipid biosyn	KICH	0.086912568
UCKL1	Glycosphingolipid biosyn	KICH	0.058360658
UCKL1	Glycosphingolipid biosyn	KICH	-0.013578857
UCKL1	Glycosylphosphatidylinos	KICH	-0.005197967
UCKL1	Glyoxylate and dicarboxy	KICH	-0.351065162
UCKL1	Granulocyte	KICH	-0.107758039
UCKL1	Hedgehog_signaling	KICH	0.059866635
UCKL1	Histidine metabolism	KICH	-0.294103323
UCKL1	Hypoxia	KICH	-0.075796223
UCKL1	Il-17alpha t cell	KICH	-0.127317467
UCKL1	Il2_stat5_signaling	KICH	-0.152751308
UCKL1	Il6_jak_stat3_signaling	KICH	-0.094658061
UCKL1	Immune_checkpoints_tun	KICH	-0.120260762
UCKL1	Immune_inhibition_cytok	KICH	0.147039034
UCKL1	Inositol phosphate metabo	KICH	-0.16609428
UCKL1	Interleukin_6_signaling	KICH	-0.276375448
UCKL1	Jaeger_metastasis_up	KICH	-0.285601109
UCKL1	Jain_nfkb_signaling	KICH	-0.014295511
UCKL1	Kras_signaling_up	KICH	-0.219066153
UCKL1	Linoleic acid metabolism	KICH	0.345128181
UCKL1	Lipoic acid metabolism	KICH	-0.040035142
UCKL1	Lysine degradation	KICH	-0.301139725
UCKL1	Lysosome	KICH	-0.179233182
UCKL1	M1 macrophage	KICH	-0.144681663
UCKL1	M2 macrophage	KICH	-0.059812667
UCKL1	Mannose type o-glycan bi	KICH	0.126048645
UCKL1	Mapk_signaling_pathway	KICH	-0.091601447
UCKL1	Mapk3_erk1_activation	KICH	-0.193468435
UCKL1	Marginal zone b cell	KICH	-0.207955222
UCKL1	Memory b cell	KICH	0.013524113
UCKL1	Mesenchymal cell	KICH	-0.070061435

UCKL1	Mesenchymal stem cell	KICH	0.016270427
UCKL1	Metabolism of xenobiotic	KICH	0.050812015
UCKL1	Migrating cancer stem cel	KICH	-0.158065871
UCKL1	Mitotic_spindle	KICH	-0.32724154
UCKL1	Monocyte	KICH	-0.110580634
UCKL1	Mtor_signaling_pathway	KICH	-0.176303899
UCKL1	Mtorc1_signaling	KICH	-0.365986573
UCKL1	Mucin type o-glycan bios	KICH	0.078929691
UCKL1	Myc_targets_v1	KICH	0.029446992
UCKL1	Myeloid cell	KICH	-0.082700017
UCKL1	N-glycan biosynthesis	KICH	-0.009392709
UCKL1	Naive b cell	KICH	-0.002339245
UCKL1	Naive cd4+ t cell	KICH	-0.066700107
UCKL1	Naive cd8+ t cell	KICH	-0.03423435
UCKL1	Natural killer cell	KICH	-0.103476288
UCKL1	Natural killer t (nkt) cell	KICH	-0.015670016
UCKL1	Natural regulatory t (treg)	KICH	-0.154225579
UCKL1	Neomycin, kanamycin an	KICH	-0.101757359
UCKL1	Neutrophil	KICH	-0.110917051
UCKL1	Nicotinate and nicotinami	KICH	-0.202000137
UCKL1	Nitrogen metabolism	KICH	0.044102035
UCKL1	Nod_like_receptor_signal	KICH	-0.137991569
UCKL1	Notch_signaling	KICH	-0.120501306
UCKL1	One carbon pool by folate	KICH	-0.494096641
UCKL1	Other glycan degradation	KICH	-0.049562469
UCKL1	Other types of o-glycan b	KICH	0.203717643
UCKL1	Oxidative phosphorylatio	KICH	0.08489478
UCKL1	P53_pathway	KICH	-0.109473483
UCKL1	P53_signaling_pathway	KICH	-0.159682303
UCKL1	Pantothenate and coa bios	KICH	-0.188827965
UCKL1	Pentose and glucuronate i	KICH	-0.225283487
UCKL1	Pentose phosphate pathwa	KICH	-0.089972406
UCKL1	Pericyte	KICH	0.106669193
UCKL1	Phenylalanine metabolism	KICH	0.10738716
UCKL1	Phenylalanine, tyrosine ar	KICH	0.218034486
UCKL1	Phosphonate and phosphir	KICH	-0.015261775
UCKL1	Pi3k_akt_activation	KICH	-0.293841039
UCKL1	Pi3k_akt_mtor_signaling	KICH	-0.236943094
UCKL1	Porphyrin and chlorophyl	KICH	-0.06870727
UCKL1	Primary bile acid biosynt	KICH	-0.155026555
UCKL1	Propanoate metabolism	KICH	-0.202859074
UCKL1	Purine metabolism	KICH	-0.087882849
UCKL1	Pyrimidine metabolism	KICH	0.008271216

UCKL1	Pyruvate metabolism	KICH	-0.156849284
UCKL1	Regulation_of_autophagy	KICH	-0.086040528
UCKL1	Retinol metabolism	KICH	0.192815852
UCKL1	Riboflavin metabolism	KICH	0.144690659
UCKL1	Schmahl_pdgf_signaling	KICH	-0.290691088
UCKL1	Selenocompound metabol	KICH	-0.200535771
UCKL1	Signaling_by_hippo	KICH	-0.196278187
UCKL1	Sphingolipid metabolism	KICH	-0.320563581
UCKL1	Starch and sucrose metabo	KICH	-0.409899392
UCKL1	Steroid biosynthesis	KICH	0.164584007
UCKL1	Steroid hormone biosynth	KICH	0.286110876
UCKL1	Sulfur metabolism	KICH	-0.318459869
UCKL1	Synthesis and degradation	KICH	-0.192260531
UCKL1	T helper cell	KICH	-0.157118569
UCKL1	T helper1 (th1) cell	KICH	-0.152135591
UCKL1	T helper17 (th17) cell	KICH	-0.184403229
UCKL1	T helper2 (th2) cell	KICH	-0.141343663
UCKL1	T helper9 (th9) cell	KICH	0.026174321
UCKL1	Taurine and hypotaurine r	KICH	-0.021911598
UCKL1	Terpenoid backbone biosy	KICH	-0.289281016
UCKL1	Tgf_beta_signaling_pathw	KICH	0.013924257
UCKL1	Thiamine metabolism	KICH	-0.121895062
UCKL1	Tnfa_signaling_via_nfk	KICH	-0.058049881
UCKL1	Tryptophan metabolism	KICH	-0.250340079
UCKL1	Tumor endothelial cell	KICH	0.103848476
UCKL1	Tyrosine metabolism	KICH	-0.053278384
UCKL1	Ubiquinone and other ter	KICH	-0.000680505
UCKL1	Valine, leucine and isoleu	KICH	0.21288155
UCKL1	Valine, leucine and isoleu	KICH	-0.218729924
UCKL1	Vascular endothelial cell	KICH	0.084535728
UCKL1	Vascular smooth muscle c	KICH	0.096314603
UCKL1	Vegf_signaling_pathway	KICH	0.212131785
UCKL1	Vitamin b6 metabolism	KICH	-0.334403776
UCKL1	Willert_wnt_signaling	KICH	-0.056886764
UCKL1	Wnt_beta_catenin_signali	KICH	0.201428378
UPP1	Abnormal plasma cell	KICH	-0.114239839
UPP1	Activated b cell	KICH	-0.125737457
UPP1	Activated cd4+ t cell	KICH	-0.127026596
UPP1	Activated t cell	KICH	-0.217544868
UPP1	Alanine, aspartate and glu	KICH	-0.282912405
UPP1	Alcala_apoptosis	KICH	-0.174093003
UPP1	Alpha-linolenic acid meta	KICH	0.430669723
UPP1	Amino sugar and nucleoti	KICH	0.022064196

UPP1	Ampk_pathway	KICH	0.255691221
UPP1	Angiogenesis	KICH	-0.100127243
UPP1	Arachidonic acid metabol	KICH	0.284721078
UPP1	Arginine and proline met	KICH	-0.220078484
UPP1	Arginine biosynthesis	KICH	-0.232816619
UPP1	Ascorbate and aldarate m	KICH	-0.465053963
UPP1	Atypical memory b cell	KICH	-0.036380413
UPP1	Axl+siglec6+ dendritic ce	KICH	-0.173887943
UPP1	B cell	KICH	-0.186686199
UPP1	B1 cell	KICH	-0.161040996
UPP1	Basal cell	KICH	0.037686479
UPP1	Beta-alanine metabolism	KICH	-0.36777719
UPP1	Biosynthesis of unsaturate	KICH	0.283223422
UPP1	Biotin metabolism	KICH	0.028641057
UPP1	Butanoate metabolism	KICH	0.056212607
UPP1	Caffeine metabolism	KICH	0.364173465
UPP1	Cancer stem cell	KICH	0.043825718
UPP1	Cancer stem-like cell	KICH	0.206213774
UPP1	Cd4+ cytotoxic t cell	KICH	0.018649467
UPP1	Cd4+ memory t cell	KICH	-0.209069664
UPP1	Cd4+ regulatory t cell	KICH	-0.198558938
UPP1	Cd4+ t helper cell	KICH	-0.135534485
UPP1	Cd4+cd25+ regulatory t c	KICH	-0.168346849
UPP1	Cd8+ cytotoxic t cell	KICH	-0.103958335
UPP1	Cd8+ regulatory t cell	KICH	-0.211424111
UPP1	Cell_cycle	KICH	-0.098638932
UPP1	Chandran_metastasis_top	KICH	-0.206110326
UPP1	Citrate cycle (tca cycle)	KICH	0.091899831
UPP1	Cysteine and methionine r	KICH	-0.225557096
UPP1	Cytokine induced killer c	KICH	0.038875625
UPP1	D-arginine and d-ornithin	KICH	0.103048202
UPP1	D-glutamine and d-glutan	KICH	-0.227914875
UPP1	Dendritic cell	KICH	-0.108121188
UPP1	Dna_repair	KICH	0.190130072
UPP1	Dna_replication	KICH	-0.03454544
UPP1	Double-negative memory	KICH	-0.023577749
UPP1	Drug metabolism - cytoch	KICH	-0.182117845
UPP1	Drug metabolism - other	KICH	-0.045970987
UPP1	E2f_targets	KICH	-0.089209337
UPP1	Ecm_receptor_interaction	KICH	-0.041116655
UPP1	Effector cd4+ memory t (	KICH	-0.177822236
UPP1	Effector cd8+ memory t (	KICH	-0.102313265
UPP1	Effector memory t cell	KICH	-0.075768031

UPP1	Effector regulatory t (treg	KICH	-0.207342815
UPP1	Elvidge_hif1a_targets_up	KICH	-0.329941438
UPP1	Endothelial cell	KICH	-0.098660402
UPP1	Eosinophil	KICH	-0.073797416
UPP1	Ether lipid metabolism	KICH	0.24245888
UPP1	Exhausted cd4+ t cell	KICH	0.022945272
UPP1	Exhausted cd8+ t cell	KICH	0.005483399
UPP1	Exhausted t cell	KICH	-0.044340021
UPP1	Fat cell (adipocyte)	KICH	0.466037515
UPP1	Fatty acid biosynthesis	KICH	0.368308615
UPP1	Fatty acid degradation	KICH	-0.054949256
UPP1	Fatty acid elongation	KICH	0.154648406
UPP1	Fibroblast	KICH	-0.022812822
UPP1	Folate biosynthesis	KICH	0.144623708
UPP1	Follicular b cell	KICH	-0.02779051
UPP1	Follicular dendritic cell	KICH	-0.229511298
UPP1	Follicular helper (tfh) t ce	KICH	-0.091417742
UPP1	Follicular t cell	KICH	-0.087515904
UPP1	Foxp3+il-17+ t cell	KICH	-0.166165941
UPP1	Fructose and mannose me	KICH	0.078801167
UPP1	G2m_checkpoint	KICH	-0.127206271
UPP1	Galactose metabolism	KICH	0.033520366
UPP1	Galie_tumor_stemness_ge	KICH	-0.369065119
UPP1	Glutathione metabolism	KICH	-0.175917331
UPP1	Glycerolipid metabolism	KICH	-0.207180595
UPP1	Glycerophospholipid metæ	KICH	0.406359222
UPP1	Glycine, serine and threor	KICH	-0.200941131
UPP1	Glycolysis / gluconeogene	KICH	0.028742306
UPP1	Glycosaminoglycan biosy	KICH	0.148632657
UPP1	Glycosaminoglycan biosy	KICH	-0.054428145
UPP1	Glycosaminoglycan biosy	KICH	0.439313801
UPP1	Glycosaminoglycan degra	KICH	0.193933659
UPP1	Glycosphingolipid biosyn	KICH	0.407895766
UPP1	Glycosphingolipid biosyn	KICH	0.311068754
UPP1	Glycosphingolipid biosyn	KICH	0.125500063
UPP1	Glycosylphosphatidylinos:	KICH	-0.204314108
UPP1	Glyoxylate and dicarboxy	KICH	-0.168650005
UPP1	Granulocyte	KICH	-0.093330996
UPP1	Hedgehog_signaling	KICH	0.128774995
UPP1	Histidine metabolism	KICH	-0.448997047
UPP1	Hypoxia	KICH	0.235548409
UPP1	Il-17ralpha t cell	KICH	-0.154533276
UPP1	Il2_stat5_signaling	KICH	-0.144951367

UPP1	Il6_jak_stat3_signaling	KICH	-0.141201626
UPP1	Immune_checkpoints_tun	KICH	0.044135861
UPP1	Immune_inhibition_cytok	KICH	0.096457089
UPP1	Inositol phosphate metabo	KICH	-0.033168155
UPP1	Interleukin_6_signaling	KICH	-0.362728004
UPP1	Jaeger_metastasis_up	KICH	0.10669297
UPP1	Jain_nfkb_signaling	KICH	-0.439925116
UPP1	Kras_signaling_up	KICH	-0.123659118
UPP1	Linoleic acid metabolism	KICH	0.387252016
UPP1	Lipoic acid metabolism	KICH	-0.167633887
UPP1	Lysine degradation	KICH	-0.248464654
UPP1	Lysosome	KICH	-0.030288807
UPP1	M1 macrophage	KICH	-0.123709983
UPP1	M2 macrophage	KICH	-0.173651791
UPP1	Mannose type o-glycan bi	KICH	0.063344642
UPP1	Mapk_signaling_pathway	KICH	0.034265328
UPP1	Mapk3_erk1_activation	KICH	-0.127357796
UPP1	Marginal zone b cell	KICH	-0.319821586
UPP1	Memory b cell	KICH	-0.12794783
UPP1	Mesenchymal cell	KICH	0.011129535
UPP1	Mesenchymal stem cell	KICH	0.037940038
UPP1	Metabolism of xenobiotic	KICH	-0.045852625
UPP1	Migrating cancer stem cel	KICH	-0.144243959
UPP1	Mitotic_spindle	KICH	-0.449700222
UPP1	Monocyte	KICH	-0.091650084
UPP1	Mtor_signaling_pathway	KICH	0.013858992
UPP1	Mtorc1_signaling	KICH	0.08939275
UPP1	Mucin type o-glycan biosy	KICH	0.158909426
UPP1	Myc_targets_v1	KICH	-0.083154134
UPP1	Myeloid cell	KICH	-0.128920293
UPP1	N-glycan biosynthesis	KICH	0.158529998
UPP1	Naive b cell	KICH	-0.026974162
UPP1	Naive cd4+ t cell	KICH	-0.070600859
UPP1	Naive cd8+ t cell	KICH	0.043481637
UPP1	Natural killer cell	KICH	-0.081786494
UPP1	Natural killer t (nkt) cell	KICH	-0.170548871
UPP1	Natural regulatory t (treg)	KICH	-0.185994012
UPP1	Neomycin, kanamycin and	KICH	-0.044913058
UPP1	Neutrophil	KICH	-0.058188855
UPP1	Nicotinate and nicotinami	KICH	-0.123885528
UPP1	Nitrogen metabolism	KICH	-0.042453236
UPP1	Nod_like_receptor_signal	KICH	-0.221377993
UPP1	Notch_signaling	KICH	-0.041630775

UPP1	One carbon pool by folate	KICH	-0.305818216
UPP1	Other glycan degradation	KICH	0.037103508
UPP1	Other types of o-glycan b	KICH	0.265490214
UPP1	Oxidative phosphorylation	KICH	0.318294264
UPP1	P53_pathway	KICH	-0.003533702
UPP1	P53_signaling_pathway	KICH	0.088170162
UPP1	Pantothenate and coa bios	KICH	-0.253573291
UPP1	Pentose and glucuronate i	KICH	-0.459409046
UPP1	Pentose phosphate pathwa	KICH	0.079497194
UPP1	Pericyte	KICH	0.20086908
UPP1	Phenylalanine metabolism	KICH	0.159982416
UPP1	Phenylalanine, tyrosine ar	KICH	0.318488851
UPP1	Phosphonate and phosphir	KICH	-0.159911799
UPP1	Pi3k_akt_activation	KICH	-0.347079886
UPP1	Pi3k_akt_mtor_signaling	KICH	-0.149479601
UPP1	Porphyrin and chlorophyl	KICH	-0.065714636
UPP1	Primary bile acid biosynt	KICH	0.097817371
UPP1	Propanoate metabolism	KICH	-0.070838703
UPP1	Purine metabolism	KICH	-0.188661629
UPP1	Pyrimidine metabolism	KICH	0.011046567
UPP1	Pyruvate metabolism	KICH	-0.076029901
UPP1	Regulation_of_autophagy	KICH	-0.16086753
UPP1	Retinol metabolism	KICH	0.392260875
UPP1	Riboflavin metabolism	KICH	0.000943113
UPP1	Schmahl_pdgf_signaling	KICH	-0.220259154
UPP1	Selenocompound metabol	KICH	-0.455174656
UPP1	Signaling_by_hippo	KICH	-0.184928378
UPP1	Sphingolipid metabolism	KICH	-0.129953907
UPP1	Starch and sucrose metabo	KICH	-0.032652218
UPP1	Steroid biosynthesis	KICH	0.459624884
UPP1	Steroid hormone biosynth	KICH	0.39568837
UPP1	Sulfur metabolism	KICH	-0.373750414
UPP1	Synthesis and degradation	KICH	0.018033228
UPP1	T helper cell	KICH	-0.199794618
UPP1	T helper1 (th1) cell	KICH	-0.14309317
UPP1	T helper17 (th17) cell	KICH	-0.126287776
UPP1	T helper2 (th2) cell	KICH	-0.217246333
UPP1	T helper9 (th9) cell	KICH	-0.176870791
UPP1	Taurine and hypotaurine r	KICH	-0.434492596
UPP1	Terpenoid backbone biosy	KICH	-0.061503796
UPP1	Tgf_beta_signaling_pathw	KICH	-0.08549473
UPP1	Thiamine metabolism	KICH	-0.256848542
UPP1	Tnfa_signaling_via_nfkb	KICH	-0.01754976

UPP1	Tryptophan metabolism	KICH	-0.063692957
UPP1	Tumor endothelial cell	KICH	0.028745429
UPP1	Tyrosine metabolism	KICH	0.163809873
UPP1	Ubiquinone and other ter	KICH	0.016385594
UPP1	Valine, leucine and isoleu	KICH	0.280707694
UPP1	Valine, leucine and isoleu	KICH	-0.086885237
UPP1	Vascular endothelial cell	KICH	0.057960785
UPP1	Vascular smooth muscle c	KICH	0.02440096
UPP1	Vegf_signaling_pathway	KICH	0.171467772
UPP1	Vitamin b6 metabolism	KICH	-0.038663139
UPP1	Willert_wnt_signaling	KICH	-0.163452595
UPP1	Wnt_beta_catenin_signali	KICH	0.164233284
UPP2	Abnormal plasma cell	KICH	0.090081839
UPP2	Activated b cell	KICH	-0.331184859
UPP2	Activated cd4+ t cell	KICH	-0.329481247
UPP2	Activated t cell	KICH	-0.344909453
UPP2	Alanine, aspartate and glu	KICH	0.139830612
UPP2	Alcala_apoptosis	KICH	-0.323554775
UPP2	Alpha-linolenic acid meta	KICH	-0.071062572
UPP2	Amino sugar and nucleoti	KICH	-0.269479347
UPP2	Ampk_pathway	KICH	0.067303228
UPP2	Angiogenesis	KICH	-0.192030922
UPP2	Arachidonic acid metabol	KICH	-0.22668214
UPP2	Arginine and proline met	KICH	0.21257808
UPP2	Arginine biosynthesis	KICH	0.20362967
UPP2	Ascorbate and aldarate m	KICH	0.388169992
UPP2	Atypical memory b cell	KICH	-0.210060499
UPP2	Axl+siglec6+ dendritic ce	KICH	-0.23693061
UPP2	B cell	KICH	-0.158800875
UPP2	B1 cell	KICH	-0.298664793
UPP2	Basal cell	KICH	-0.409289048
UPP2	Beta-alanine metabolism	KICH	0.176309661
UPP2	Biosynthesis of unsaturate	KICH	0.064344598
UPP2	Biotin metabolism	KICH	-0.077283021
UPP2	Butanoate metabolism	KICH	0.315467491
UPP2	Caffeine metabolism	KICH	-0.01160861
UPP2	Cancer stem cell	KICH	-0.199383509
UPP2	Cancer stem-like cell	KICH	-0.251756089
UPP2	Cd4+ cytotoxic t cell	KICH	-0.31336794
UPP2	Cd4+ memory t cell	KICH	-0.247334136
UPP2	Cd4+ regulatory t cell	KICH	-0.403844778
UPP2	Cd4+ t helper cell	KICH	-0.31624773
UPP2	Cd4+cd25+ regulatory t c	KICH	-0.323233541

UPP2	Cd8+ cytotoxic t cell	KICH	-0.205315693
UPP2	Cd8+ regulatory t cell	KICH	-0.335441182
UPP2	Cell_cycle	KICH	-0.116864919
UPP2	Chandran_metastasis_top5	KICH	0.047886218
UPP2	Citrate cycle (tca cycle)	KICH	0.228380387
UPP2	Cysteine and methionine r	KICH	0.177107945
UPP2	Cytokine induced killer c	KICH	-0.085664191
UPP2	D-arginine and d-ornithin	KICH	0.157534457
UPP2	D-glutamine and d-glutan	KICH	0.251923849
UPP2	Dendritic cell	KICH	-0.31063227
UPP2	Dna_repair	KICH	-0.135157378
UPP2	Dna_replication	KICH	-0.247612755
UPP2	Double-negative memory	KICH	-0.207909312
UPP2	Drug metabolism - cytoch	KICH	0.182434805
UPP2	Drug metabolism - other c	KICH	-0.037111351
UPP2	E2f_targets	KICH	-0.152569806
UPP2	Ecm_receptor_interaction	KICH	-0.179461629
UPP2	Effector cd4+ memory t (	KICH	-0.263161908
UPP2	Effector cd8+ memory t (	KICH	-0.307613225
UPP2	Effector memory t cell	KICH	-0.370654451
UPP2	Effector regulatory t (treg	KICH	-0.314482427
UPP2	Elvidge_hif1a_targets_up	KICH	-0.123371922
UPP2	Endothelial cell	KICH	-0.30839406
UPP2	Eosinophil	KICH	-0.356371405
UPP2	Ether lipid metabolism	KICH	0.068550147
UPP2	Exhausted cd4+ t cell	KICH	-0.274099378
UPP2	Exhausted cd8+ t cell	KICH	-0.337668197
UPP2	Exhausted t cell	KICH	-0.327476461
UPP2	Fat cell (adipocyte)	KICH	-0.130051506
UPP2	Fatty acid biosynthesis	KICH	0.226035993
UPP2	Fatty acid degradation	KICH	0.255433674
UPP2	Fatty acid elongation	KICH	0.195533795
UPP2	Fibroblast	KICH	-0.354938401
UPP2	Folate biosynthesis	KICH	0.021421493
UPP2	Follicular b cell	KICH	-0.102660189
UPP2	Follicular dendritic cell	KICH	-0.276602183
UPP2	Follicular helper (tfh) t ce	KICH	-0.302964109
UPP2	Follicular t cell	KICH	-0.317752883
UPP2	Foxp3+il-17+ t cell	KICH	-0.322310176
UPP2	Fructose and mannose me	KICH	-0.075502718
UPP2	G2m_checkpoint	KICH	-0.146235629
UPP2	Galactose metabolism	KICH	-0.113636066
UPP2	Galie_tumor_stemness_ge	KICH	-0.044465121

UPP2	Glutathione metabolism	KICH	-0.063482656
UPP2	Glycerolipid metabolism	KICH	-0.042623785
UPP2	Glycerophospholipid metabolism	KICH	-0.006151479
UPP2	Glycine, serine and threonine metabolism	KICH	0.196047153
UPP2	Glycolysis / gluconeogenesis	KICH	0.098553825
UPP2	Glycosaminoglycan biosynthesis	KICH	-0.383041522
UPP2	Glycosaminoglycan biosynthesis	KICH	-0.236977793
UPP2	Glycosaminoglycan biosynthesis	KICH	-0.299199921
UPP2	Glycosaminoglycan degradation	KICH	-0.156306457
UPP2	Glycosphingolipid biosynthesis	KICH	-0.366989709
UPP2	Glycosphingolipid biosynthesis	KICH	-0.206084328
UPP2	Glycosphingolipid biosynthesis	KICH	-0.116418657
UPP2	Glycosylphosphatidylinositol signaling	KICH	0.13025025
UPP2	Glyoxylate and dicarboxylate metabolism	KICH	0.151016778
UPP2	Granulocyte	KICH	-0.334468862
UPP2	Hedgehog signaling	KICH	0.071406012
UPP2	Histidine metabolism	KICH	0.153076429
UPP2	Hypoxia	KICH	-0.222494858
UPP2	IL-17Ralpha T cell	KICH	-0.202458621
UPP2	IL2_stat5_signaling	KICH	-0.226045317
UPP2	IL6_jak_stat3_signaling	KICH	-0.29756262
UPP2	Immune checkpoints	KICH	-0.512888763
UPP2	Immune inhibition	KICH	-0.270342942
UPP2	Inositol phosphate metabolism	KICH	0.179089148
UPP2	Interleukin_6_signaling	KICH	0.04205356
UPP2	Jaeger metastasis up	KICH	-0.248428584
UPP2	Jain_nfkB_signaling	KICH	0.045696933
UPP2	Kras_signaling_up	KICH	-0.266486492
UPP2	Linoleic acid metabolism	KICH	-0.019118709
UPP2	Lipoic acid metabolism	KICH	0.345226179
UPP2	Lysine degradation	KICH	0.230701265
UPP2	Lysosome	KICH	-0.065811963
UPP2	M1 macrophage	KICH	-0.264264939
UPP2	M2 macrophage	KICH	-0.311034217
UPP2	Mannose type O-glycan biosynthesis	KICH	-0.104316343
UPP2	Mapk_signaling_pathway	KICH	-0.127144316
UPP2	Mapk3_erk1_activation	KICH	0.149554925
UPP2	Marginal zone B cell	KICH	-0.022865865
UPP2	Memory B cell	KICH	-0.19378263
UPP2	Mesenchymal cell	KICH	-0.42272369
UPP2	Mesenchymal stem cell	KICH	-0.27007003
UPP2	Metabolism of xenobiotics	KICH	0.151806428
UPP2	Migrating cancer stem cell	KICH	-0.229114924

UPP2	Mitotic_spindle	KICH	0.066727589
UPP2	Monocyte	KICH	-0.37740174
UPP2	Mtor_signaling_pathway	KICH	0.201299918
UPP2	Mtorc1_signaling	KICH	-0.086636169
UPP2	Mucin type o-glycan biosynthesis	KICH	0.028732326
UPP2	Myc_targets_v1	KICH	-0.116006448
UPP2	Myeloid cell	KICH	-0.281570246
UPP2	N-glycan biosynthesis	KICH	-0.091053908
UPP2	Naive b cell	KICH	0.081246987
UPP2	Naive cd4+ t cell	KICH	-0.245120725
UPP2	Naive cd8+ t cell	KICH	-0.021828147
UPP2	Natural killer cell	KICH	-0.192814096
UPP2	Natural killer t (nkt) cell	KICH	-0.278588699
UPP2	Natural regulatory t (treg) cell	KICH	-0.358052489
UPP2	Neomycin, kanamycin and spectinomycin	KICH	-0.147790566
UPP2	Neutrophil	KICH	-0.353468831
UPP2	Nicotinate and nicotinamide metabolism	KICH	-0.151556459
UPP2	Nitrogen metabolism	KICH	0.184119131
UPP2	Nod_like_receptor_signaling	KICH	-0.145425226
UPP2	Notch_signaling	KICH	-0.081183724
UPP2	One carbon pool by folate	KICH	0.165689696
UPP2	Other glycan degradation	KICH	-0.117820419
UPP2	Other types of o-glycan biosynthesis	KICH	-0.363081245
UPP2	Oxidative phosphorylation	KICH	0.201279987
UPP2	P53_pathway	KICH	-0.192602218
UPP2	P53_signaling_pathway	KICH	0.00407779
UPP2	Pantothenate and coenzyme a biosynthesis	KICH	-0.024392772
UPP2	Pentose and glucuronate interconversions	KICH	0.307659142
UPP2	Pentose phosphate pathway	KICH	0.051589405
UPP2	Pericyte	KICH	-0.325897938
UPP2	Phenylalanine metabolism	KICH	0.121649261
UPP2	Phenylalanine, tyrosine and tryptophan metabolism	KICH	0.144156627
UPP2	Phosphonate and phosphite metabolism	KICH	0.249805486
UPP2	Pi3k_akt_activation	KICH	0.02040027
UPP2	Pi3k_akt_mtor_signaling	KICH	-0.201276152
UPP2	Porphyrin and chlorophyll metabolism	KICH	0.141842572
UPP2	Primary bile acid biosynthesis	KICH	0.129445761
UPP2	Propanoate metabolism	KICH	0.220321881
UPP2	Purine metabolism	KICH	-0.051775717
UPP2	Pyrimidine metabolism	KICH	-0.088778559
UPP2	Pyruvate metabolism	KICH	0.251398814
UPP2	Regulation_of_autophagy	KICH	0.154158932
UPP2	Retinol metabolism	KICH	0.276977928

UPP2	Riboflavin metabolism	KICH	-0.223709587
UPP2	Schmahl_pdgf_signaling	KICH	0.080730993
UPP2	Selenocompound metabolism	KICH	0.295499595
UPP2	Signaling_by_hippo	KICH	0.197143462
UPP2	Sphingolipid metabolism	KICH	0.06615098
UPP2	Starch and sucrose metabolism	KICH	-0.007244393
UPP2	Steroid biosynthesis	KICH	-0.032400642
UPP2	Steroid hormone biosynthesis	KICH	0.312525666
UPP2	Sulfur metabolism	KICH	0.075854168
UPP2	Synthesis and degradation	KICH	0.159110872
UPP2	T helper cell	KICH	-0.247985652
UPP2	T helper1 (th1) cell	KICH	-0.188074085
UPP2	T helper17 (th17) cell	KICH	-0.187558682
UPP2	T helper2 (th2) cell	KICH	-0.197738101
UPP2	T helper9 (th9) cell	KICH	-0.12005341
UPP2	Taurine and hypotaurine metabolism	KICH	-0.047413445
UPP2	Terpenoid backbone biosynthesis	KICH	0.246929865
UPP2	Tgf_beta_signaling_pathway	KICH	0.131008068
UPP2	Thiamine metabolism	KICH	0.090518821
UPP2	Tnfa_signaling_via_nfkB	KICH	-0.200495979
UPP2	Tryptophan metabolism	KICH	0.214915447
UPP2	Tumor endothelial cell	KICH	-0.140766672
UPP2	Tyrosine metabolism	KICH	0.195968662
UPP2	Ubiquinone and other terpenoids	KICH	0.527383786
UPP2	Valine, leucine and isoleucine	KICH	-0.310897702
UPP2	Valine, leucine and isoleucine	KICH	0.188896832
UPP2	Vascular endothelial cell	KICH	-0.21620229
UPP2	Vascular smooth muscle cell	KICH	-0.115888761
UPP2	Vegf_signaling_pathway	KICH	-0.192629774
UPP2	Vitamin b6 metabolism	KICH	0.012371921
UPP2	Willert_wnt_signaling	KICH	-0.325355926
UPP2	Wnt_beta_catenin_signaling	KICH	-0.128246886
CDA	Abnormal plasma cell	KIRC	0.08532682
CDA	Activated b cell	KIRC	-0.033895118
CDA	Activated cd4+ t cell	KIRC	-0.080947588
CDA	Activated t cell	KIRC	-0.08322702
CDA	Alanine, aspartate and glutamate	KIRC	-0.105349114
CDA	Alcala_apoptosis	KIRC	-0.041662079
CDA	Alpha-linolenic acid metabolism	KIRC	0.213128101
CDA	Amino sugar and nucleotide	KIRC	-0.026164211
CDA	Ampk_pathway	KIRC	-0.014397799
CDA	Angiogenesis	KIRC	0.229290719
CDA	Arachidonic acid metabolism	KIRC	0.215008486

CDA	Arginine and proline metabolism	KIRC	-0.01802673
CDA	Arginine biosynthesis	KIRC	0.06170027
CDA	Ascorbate and aldarate metabolism	KIRC	-0.162079266
CDA	Atypical memory B cell	KIRC	-0.066560656
CDA	Axl+siglec6+ dendritic cell	KIRC	0.056022649
CDA	B cell	KIRC	-0.096226004
CDA	B1 cell	KIRC	-0.02341312
CDA	Basal cell	KIRC	0.3752801
CDA	Beta-alanine metabolism	KIRC	-0.085527798
CDA	Biosynthesis of unsaturated fatty acids	KIRC	0.07591537
CDA	Biotin metabolism	KIRC	-0.043362654
CDA	Butanoate metabolism	KIRC	-0.120935408
CDA	Caffeine metabolism	KIRC	0.121940853
CDA	Cancer stem cell	KIRC	0.042569135
CDA	Cancer stem-like cell	KIRC	0.043196002
CDA	Cd4+ cytotoxic T cell	KIRC	0.034290088
CDA	Cd4+ memory T cell	KIRC	-0.080250284
CDA	Cd4+ regulatory T cell	KIRC	-0.037914292
CDA	Cd4+ T helper cell	KIRC	-0.084875953
CDA	Cd4+cd25+ regulatory T cell	KIRC	-0.084829914
CDA	Cd8+ cytotoxic T cell	KIRC	-0.036524974
CDA	Cd8+ regulatory T cell	KIRC	-0.094692169
CDA	Cell cycle	KIRC	-0.089601101
CDA	Chandran_metastasis_topology	KIRC	-0.293519091
CDA	Citrate cycle (TCA cycle)	KIRC	-0.114835486
CDA	Cysteine and methionine metabolism	KIRC	-0.133516058
CDA	Cytokine induced killer cell	KIRC	0.029689634
CDA	D-arginine and D-ornithine	KIRC	-0.061674636
CDA	D-glutamine and D-glutamate	KIRC	-0.258315373
CDA	Dendritic cell	KIRC	-0.031008435
CDA	DNA repair	KIRC	0.172120365
CDA	DNA replication	KIRC	-0.075391692
CDA	Double-negative memory T cell	KIRC	-0.024174946
CDA	Drug metabolism - cytochrome P450	KIRC	0.005361756
CDA	Drug metabolism - other	KIRC	0.127933564
CDA	E2F targets	KIRC	-0.122100024
CDA	ECM_receptor_interaction	KIRC	0.178864822
CDA	Effector CD4+ memory T cell	KIRC	-0.134546542
CDA	Effector CD8+ memory T cell	KIRC	-0.009779235
CDA	Effector memory T cell	KIRC	-0.088576841
CDA	Effector regulatory T cell (Treg)	KIRC	-0.0914679
CDA	Elvidge_hif1a_targets_up	KIRC	-0.126414008
CDA	Endothelial cell	KIRC	0.183277285

CDA	Eosinophil	KIRC	-0.044986465
CDA	Ether lipid metabolism	KIRC	-0.024172215
CDA	Exhausted cd4+ t cell	KIRC	-0.07522317
CDA	Exhausted cd8+ t cell	KIRC	-0.014572073
CDA	Exhausted t cell	KIRC	-0.107097105
CDA	Fat cell (adipocyte)	KIRC	-0.025187897
CDA	Fatty acid biosynthesis	KIRC	0.084293791
CDA	Fatty acid degradation	KIRC	-0.078622071
CDA	Fatty acid elongation	KIRC	0.013232342
CDA	Fibroblast	KIRC	0.123184563
CDA	Folate biosynthesis	KIRC	0.072340252
CDA	Follicular b cell	KIRC	-0.020776303
CDA	Follicular dendritic cell	KIRC	-0.055843754
CDA	Follicular helper (tfh) t ce	KIRC	-0.110920737
CDA	Follicular t cell	KIRC	-0.079991479
CDA	Foxp3+il-17+ t cell	KIRC	0.049770706
CDA	Fructose and mannose me	KIRC	-0.037997674
CDA	G2m_checkpoint	KIRC	-0.158560704
CDA	Galactose metabolism	KIRC	0.043563638
CDA	Galie_tumor_stemness_ge	KIRC	0.083525892
CDA	Glutathione metabolism	KIRC	0.111731351
CDA	Glycerolipid metabolism	KIRC	-0.057476474
CDA	Glycerophospholipid metæ	KIRC	0.112508012
CDA	Glycine, serine and threor	KIRC	-0.108379866
CDA	Glycolysis / gluconeogene	KIRC	-0.05880021
CDA	Glycosaminoglycan biosy	KIRC	0.258978649
CDA	Glycosaminoglycan biosy	KIRC	0.066549766
CDA	Glycosaminoglycan biosy	KIRC	0.230347063
CDA	Glycosaminoglycan degra	KIRC	0.104446535
CDA	Glycosphingolipid biosyn	KIRC	0.183813298
CDA	Glycosphingolipid biosyn	KIRC	0.127942278
CDA	Glycosphingolipid biosyn	KIRC	0.095031269
CDA	Glycosylphosphatidylinos:	KIRC	-0.065113062
CDA	Glyoxylate and dicarboxy	KIRC	-0.122614352
CDA	Granulocyte	KIRC	-0.063760545
CDA	Hedgehog_signaling	KIRC	-0.00816787
CDA	Histidine metabolism	KIRC	-0.102173327
CDA	Hypoxia	KIRC	0.231763012
CDA	Il-17alpha t cell	KIRC	-0.077219992
CDA	Il2_stat5_signaling	KIRC	0.157542166
CDA	Il6_jak_stat3_signaling	KIRC	0.047006858
CDA	Immune_checkpoints_tun	KIRC	-0.048274115
CDA	Immune_inhibition_cytok	KIRC	0.100084175

CDA	Inositol phosphate metabo	KIRC	-0.200346386
CDA	Interleukin_6_signaling	KIRC	-0.17496659
CDA	Jaeger_metastasis_up	KIRC	0.034360982
CDA	Jain_nfkb_signaling	KIRC	-0.230771254
CDA	Kras_signaling_up	KIRC	0.060096708
CDA	Linoleic acid metabolism	KIRC	0.145953382
CDA	Lipoic acid metabolism	KIRC	0.013841291
CDA	Lysine degradatation	KIRC	-0.262573154
CDA	Lysosome	KIRC	-0.053154344
CDA	M1 macrophage	KIRC	-0.069897527
CDA	M2 macrophage	KIRC	-0.065056254
CDA	Mannose type o-glycan bi	KIRC	-0.025486975
CDA	Mapk_signaling_pathway	KIRC	0.074053854
CDA	Mapk3_erk1_activation	KIRC	-0.100977186
CDA	Marginal zone b cell	KIRC	-0.036479185
CDA	Memory b cell	KIRC	-0.113668746
CDA	Mesenchymal cell	KIRC	0.182727499
CDA	Mesenchymal stem cell	KIRC	0.081359077
CDA	Metabolism of xenobiotic	KIRC	0.040698713
CDA	Migrating cancer stem cel	KIRC	0.135740656
CDA	Mitotic_spindle	KIRC	-0.193610864
CDA	Monocyte	KIRC	0.058327001
CDA	Mtor_signaling_pathway	KIRC	-0.071913552
CDA	Mtorc1_signaling	KIRC	0.005215189
CDA	Mucin type o-glycan biosy	KIRC	-0.101115112
CDA	Myc_targets_v1	KIRC	0.082258542
CDA	Myeloid cell	KIRC	-0.097583379
CDA	N-glycan biosynthesis	KIRC	0.049461241
CDA	Naive b cell	KIRC	-0.07273452
CDA	Naive cd4+ t cell	KIRC	0.04664553
CDA	Naive cd8+ t cell	KIRC	0.035906379
CDA	Natural killer cell	KIRC	-0.027024002
CDA	Natural killer t (nkt) cell	KIRC	0.049319065
CDA	Natural regulatory t (treg)	KIRC	-0.133725616
CDA	Neomycin, kanamycin an	KIRC	0.083624233
CDA	Neutrophil	KIRC	0.099814993
CDA	Nicotinate and nicotinami	KIRC	-0.185047296
CDA	Nitrogen metabolism	KIRC	0.144432794
CDA	Nod_like_receptor_signal	KIRC	-0.095860591
CDA	Notch_signaling	KIRC	0.176073861
CDA	One carbon pool by folate	KIRC	-0.193819735
CDA	Other glycan degradatation	KIRC	-0.16666967
CDA	Other types of o-glycan b	KIRC	0.087702629

CDA	Oxidative phosphorylation	KIRC	0.149115271
CDA	P53_pathway	KIRC	0.273202422
CDA	P53_signaling_pathway	KIRC	-0.010179367
CDA	Pantothenate and coa biosynthesis	KIRC	-0.144475649
CDA	Pentose and glucuronate interconversions	KIRC	-0.137998443
CDA	Pentose phosphate pathway	KIRC	0.048607254
CDA	Pericyte	KIRC	0.158244403
CDA	Phenylalanine metabolism	KIRC	0.084996756
CDA	Phenylalanine, tyrosine and tryptophan metabolism	KIRC	-0.029579957
CDA	Phosphonate and phosphoric acid metabolism	KIRC	-0.128547395
CDA	Pi3k_akt_activation	KIRC	0.01771278
CDA	Pi3k_akt_mtor_signaling	KIRC	0.061799952
CDA	Porphyrin and chlorophyll metabolism	KIRC	-0.072793844
CDA	Primary bile acid biosynthesis	KIRC	0.129181256
CDA	Propanoate metabolism	KIRC	-0.223306206
CDA	Purine metabolism	KIRC	0.164523798
CDA	Pyrimidine metabolism	KIRC	0.090603311
CDA	Pyruvate metabolism	KIRC	-0.101470741
CDA	Regulation_of_autophagy	KIRC	-0.043495845
CDA	Retinol metabolism	KIRC	0.019423301
CDA	Riboflavin metabolism	KIRC	0.047362472
CDA	Schmahl_pdgf_signaling	KIRC	-0.038348976
CDA	Selenocompound metabolism	KIRC	-0.170851082
CDA	Signaling_by_hippo	KIRC	-0.215460352
CDA	Sphingolipid metabolism	KIRC	-0.270088498
CDA	Starch and sucrose metabolism	KIRC	-0.022598942
CDA	Steroid biosynthesis	KIRC	0.06360605
CDA	Steroid hormone biosynthesis	KIRC	0.070462926
CDA	Sulfur metabolism	KIRC	0.051224139
CDA	Synthesis and degradation of ribonucleotides	KIRC	-0.123322476
CDA	T helper cell	KIRC	-0.066227299
CDA	T helper1 (th1) cell	KIRC	-0.088761652
CDA	T helper17 (th17) cell	KIRC	-0.038923397
CDA	T helper2 (th2) cell	KIRC	-0.068642093
CDA	T helper9 (th9) cell	KIRC	-0.030828568
CDA	Taurine and hypotaurine metabolism	KIRC	0.192622953
CDA	Terpenoid backbone biosynthesis	KIRC	-0.041782992
CDA	Tgf_beta_signaling_pathway	KIRC	0.000594603
CDA	Thiamine metabolism	KIRC	0.037250321
CDA	Tnfa_signaling_via_nfkB	KIRC	0.144333129
CDA	Tryptophan metabolism	KIRC	-0.070584317
CDA	Tumor endothelial cell	KIRC	0.249759563
CDA	Tyrosine metabolism	KIRC	0.16429472

CDA	Ubiquinone and other ter	KIRC	0.106427713
CDA	Valine, leucine and isoleu	KIRC	0.038806991
CDA	Valine, leucine and isoleu	KIRC	-0.17752038
CDA	Vascular endothelial cell	KIRC	0.208916546
CDA	Vascular smooth muscle c	KIRC	0.19049979
CDA	Vegf_signaling_pathway	KIRC	0.21494634
CDA	Vitamin b6 metabolism	KIRC	-0.057518932
CDA	Willert_wnt_signaling	KIRC	0.206451262
CDA	Wnt_beta_catenin_signali	KIRC	0.155398234
UCK1	Abnormal plasma cell	KIRC	-0.184852911
UCK1	Activated b cell	KIRC	-0.201508749
UCK1	Activated cd4+ t cell	KIRC	-0.33778925
UCK1	Activated t cell	KIRC	-0.174865648
UCK1	Alanine, aspartate and glu	KIRC	-0.126381235
UCK1	Alcala_apoptosis	KIRC	0.072918341
UCK1	Alpha-linolenic acid meta	KIRC	0.102926666
UCK1	Amino sugar and nucleoti	KIRC	-0.021685493
UCK1	Ampk_pathway	KIRC	0.063436816
UCK1	Angiogenesis	KIRC	-0.193334755
UCK1	Arachidonic acid metabo	KIRC	0.093434764
UCK1	Arginine and proline met	KIRC	0.074601829
UCK1	Arginine biosynthesis	KIRC	0.037280622
UCK1	Ascorbate and aldarate m	KIRC	-0.036725579
UCK1	Atypical memory b cell	KIRC	-0.064271482
UCK1	Ax1+siglec6+ dendritic ce	KIRC	-0.339042489
UCK1	B cell	KIRC	-0.266695129
UCK1	B1 cell	KIRC	-0.116307184
UCK1	Basal cell	KIRC	0.038357417
UCK1	Beta-alanine metabolism	KIRC	0.083929442
UCK1	Biosynthesis of unsaturate	KIRC	0.141604131
UCK1	Biotin metabolism	KIRC	-0.038232755
UCK1	Butanoate metabolism	KIRC	0.099122208
UCK1	Caffeine metabolism	KIRC	0.038883127
UCK1	Cancer stem cell	KIRC	-0.38926626
UCK1	Cancer stem-like cell	KIRC	-0.218348609
UCK1	Cd4+ cytotoxic t cell	KIRC	-0.089670583
UCK1	Cd4+ memory t cell	KIRC	-0.161490923
UCK1	Cd4+ regulatory t cell	KIRC	-0.282534402
UCK1	Cd4+ t helper cell	KIRC	-0.170330958
UCK1	Cd4+cd25+ regulatory t c	KIRC	-0.20723217
UCK1	Cd8+ cytotoxic t cell	KIRC	-0.036251965
UCK1	Cd8+ regulatory t cell	KIRC	-0.174111212
UCK1	Cell_cycle	KIRC	-0.255334616

UCK1	Chandran_metastasis_top	KIRC	-0.368273724
UCK1	Citrate cycle (tca cycle)	KIRC	0.120264026
UCK1	Cysteine and methionine	KIRC	-0.019767373
UCK1	Cytokine induced killer	KIRC	-0.133905688
UCK1	D-arginine and d-ornithin	KIRC	0.07319554
UCK1	D-glutamine and d-glutan	KIRC	-0.138235282
UCK1	Dendritic cell	KIRC	-0.317712321
UCK1	Dna_repair	KIRC	0.38887574
UCK1	Dna_replication	KIRC	0.025315463
UCK1	Double-negative memory	KIRC	-0.014971446
UCK1	Drug metabolism - cytoch	KIRC	0.118121085
UCK1	Drug metabolism - other	KIRC	0.217448752
UCK1	E2f_targets	KIRC	-0.202649483
UCK1	Ecm_receptor_interaction	KIRC	-0.308305818
UCK1	Effector cd4+ memory t	KIRC	-0.322268802
UCK1	Effector cd8+ memory t	KIRC	-0.238448062
UCK1	Effector memory t cell	KIRC	-0.236211218
UCK1	Effector regulatory t (treg	KIRC	-0.391570825
UCK1	Elvidge_hif1a_targets_up	KIRC	-0.172432968
UCK1	Endothelial cell	KIRC	-0.224351882
UCK1	Eosinophil	KIRC	-0.270632165
UCK1	Ether lipid metabolism	KIRC	-0.185847753
UCK1	Exhausted cd4+ t cell	KIRC	-0.299008904
UCK1	Exhausted cd8+ t cell	KIRC	-0.213163376
UCK1	Exhausted t cell	KIRC	-0.094803197
UCK1	Fat cell (adipocyte)	KIRC	0.296912669
UCK1	Fatty acid biosynthesis	KIRC	0.027596695
UCK1	Fatty acid degradation	KIRC	0.147092448
UCK1	Fatty acid elongation	KIRC	0.234307787
UCK1	Fibroblast	KIRC	-0.312652575
UCK1	Folate biosynthesis	KIRC	0.253607454
UCK1	Follicular b cell	KIRC	-0.253073086
UCK1	Follicular dendritic cell	KIRC	-0.315395092
UCK1	Follicular helper (tfh) t	KIRC	-0.214747996
UCK1	Follicular t cell	KIRC	0.034910367
UCK1	Foxp3+il-17+ t cell	KIRC	-0.145385227
UCK1	Fructose and mannose me	KIRC	0.095295283
UCK1	G2m_checkpoint	KIRC	-0.319245767
UCK1	Galactose metabolism	KIRC	0.024965349
UCK1	Galie_tumor_stemness_ge	KIRC	-0.185744259
UCK1	Glutathione metabolism	KIRC	0.175615032
UCK1	Glycerolipid metabolism	KIRC	0.123088315
UCK1	Glycerophospholipid met	KIRC	0.159376735

UCK1	Glycine, serine and threonine	KIRC	0.122049583
UCK1	Glycolysis / gluconeogenesis	KIRC	0.083045497
UCK1	Glycosaminoglycan biosynthesis	KIRC	-0.132035994
UCK1	Glycosaminoglycan biosynthesis	KIRC	-0.14875224
UCK1	Glycosaminoglycan biosynthesis	KIRC	-0.125017587
UCK1	Glycosaminoglycan degradation	KIRC	-0.039022689
UCK1	Glycosphingolipid biosynthesis	KIRC	-0.152565475
UCK1	Glycosphingolipid biosynthesis	KIRC	-0.096585416
UCK1	Glycosphingolipid biosynthesis	KIRC	-0.019550016
UCK1	Glycosylphosphatidylinositol	KIRC	0.091795158
UCK1	Glyoxylate and dicarboxylate	KIRC	0.174842493
UCK1	Granulocyte	KIRC	-0.277380623
UCK1	Hedgehog signaling	KIRC	-0.283780166
UCK1	Histidine metabolism	KIRC	0.078666341
UCK1	Hypoxia	KIRC	-0.189375887
UCK1	IL-17alpha T cell	KIRC	-0.146920138
UCK1	IL2_stat5_signaling	KIRC	-0.239503798
UCK1	IL6_jak_stat3_signaling	KIRC	-0.343792306
UCK1	Immune checkpoints	KIRC	-0.267004113
UCK1	Immune inhibition	KIRC	-0.118747667
UCK1	Inositol phosphate metabolism	KIRC	-0.38869825
UCK1	Interleukin_6_signaling	KIRC	-0.575704079
UCK1	Jaeger metastasis up	KIRC	-0.32111619
UCK1	Jain_nfkB_signaling	KIRC	-0.035563149
UCK1	Kras_signaling_up	KIRC	-0.422090788
UCK1	Linoleic acid metabolism	KIRC	0.117045475
UCK1	Lipoic acid metabolism	KIRC	0.165915433
UCK1	Lysine degradation	KIRC	0.044678482
UCK1	Lysosome	KIRC	-0.111260225
UCK1	M1 macrophage	KIRC	-0.35061139
UCK1	M2 macrophage	KIRC	-0.31407557
UCK1	Mannose type O-glycan biosynthesis	KIRC	0.136560847
UCK1	Mapk_signaling_pathway	KIRC	-0.326714491
UCK1	Mapk3_erk1_activation	KIRC	-0.529068447
UCK1	Marginal zone B cell	KIRC	-0.342229519
UCK1	Memory B cell	KIRC	-0.308822215
UCK1	Mesenchymal cell	KIRC	-0.068909603
UCK1	Mesenchymal stem cell	KIRC	-0.294715318
UCK1	Metabolism of xenobiotics	KIRC	0.234350911
UCK1	Migrating cancer stem cell	KIRC	-0.316646708
UCK1	Mitotic spindle	KIRC	-0.438074231
UCK1	Monocyte	KIRC	-0.188812835
UCK1	Mtor_signaling_pathway	KIRC	-0.187649707

UCK1	Mtorc1_signaling	KIRC	-0.207902291
UCK1	Mucin type o-glycan biosynthesis	KIRC	-0.424012501
UCK1	Myc_targets_v1	KIRC	0.088221608
UCK1	Myeloid cell	KIRC	-0.325466554
UCK1	N-glycan biosynthesis	KIRC	-0.116168553
UCK1	Naive b cell	KIRC	-0.095350342
UCK1	Naive cd4+ t cell	KIRC	-0.265731989
UCK1	Naive cd8+ t cell	KIRC	-0.164257772
UCK1	Natural killer cell	KIRC	-0.202991116
UCK1	Natural killer t (nkt) cell	KIRC	0.099069774
UCK1	Natural regulatory t (treg) cell	KIRC	-0.319165335
UCK1	Neomycin, kanamycin and streptomycin	KIRC	-0.265312238
UCK1	Neutrophil	KIRC	-0.30688015
UCK1	Nicotinate and nicotinamide metabolism	KIRC	-0.105706986
UCK1	Nitrogen metabolism	KIRC	-0.065510865
UCK1	Nod_like_receptor_signaling	KIRC	-0.392242574
UCK1	Notch_signaling	KIRC	-0.135817312
UCK1	One carbon pool by folate	KIRC	-0.066265878
UCK1	Other glycan degradation	KIRC	0.067024514
UCK1	Other types of o-glycan biosynthesis	KIRC	0.045341417
UCK1	Oxidative phosphorylation	KIRC	0.431189983
UCK1	P53_pathway	KIRC	0.08196148
UCK1	P53_signaling_pathway	KIRC	-0.329667926
UCK1	Pantothenate and coenzyme a biosynthesis	KIRC	-0.081038513
UCK1	Pentose and glucuronate interconversions	KIRC	-0.054112124
UCK1	Pentose phosphate pathway	KIRC	0.079030358
UCK1	Pericyte	KIRC	-0.168547896
UCK1	Phenylalanine metabolism	KIRC	0.194806073
UCK1	Phenylalanine, tyrosine and tryptophan metabolism	KIRC	0.209340482
UCK1	Phosphonate and phosphite metabolism	KIRC	-0.012368644
UCK1	Pi3k_akt_activation	KIRC	-0.442822909
UCK1	Pi3k_akt_mtor_signaling	KIRC	-0.25623637
UCK1	Porphyrim and chlorophyll biosynthesis	KIRC	0.063838355
UCK1	Primary bile acid biosynthesis	KIRC	0.126142592
UCK1	Propanoate metabolism	KIRC	-0.025981586
UCK1	Purine metabolism	KIRC	0.093452764
UCK1	Pyrimidine metabolism	KIRC	0.190397823
UCK1	Pyruvate metabolism	KIRC	0.167207482
UCK1	Regulation_of_autophagy	KIRC	0.043943252
UCK1	Retinol metabolism	KIRC	0.179571033
UCK1	Riboflavin metabolism	KIRC	0.166481871
UCK1	Schmahl_pdgf_signaling	KIRC	-0.18000249
UCK1	Selenocompound metabolism	KIRC	-0.174040273

UCK1	Signaling_by_hippo	KIRC	-0.36316352
UCK1	Sphingolipid metabolism	KIRC	-0.199049661
UCK1	Starch and sucrose metabo	KIRC	-0.206009181
UCK1	Steroid biosynthesis	KIRC	0.040470573
UCK1	Steroid hormone biosynth	KIRC	0.021122819
UCK1	Sulfur metabolism	KIRC	-0.018729317
UCK1	Synthesis and degradation	KIRC	0.175127033
UCK1	T helper cell	KIRC	-0.233790096
UCK1	T helper1 (th1) cell	KIRC	-0.185807939
UCK1	T helper17 (th17) cell	KIRC	-0.275313571
UCK1	T helper2 (th2) cell	KIRC	-0.214025992
UCK1	T helper9 (th9) cell	KIRC	-0.110143019
UCK1	Taurine and hypotaurine r	KIRC	0.000195435
UCK1	Terpenoid backbone biosy	KIRC	0.117811662
UCK1	Tgf_beta_signaling_pathw	KIRC	-0.368157183
UCK1	Thiamine metabolism	KIRC	0.303977659
UCK1	Tnfa_signaling_via_nfkB	KIRC	-0.265621937
UCK1	Tryptophan metabolism	KIRC	0.118364039
UCK1	Tumor endothelial cell	KIRC	-0.04234389
UCK1	Tyrosine metabolism	KIRC	0.26578286
UCK1	Ubiquinone and other terp	KIRC	0.002827757
UCK1	Valine, leucine and isoleu	KIRC	0.061484756
UCK1	Valine, leucine and isoleu	KIRC	0.123124799
UCK1	Vascular endothelial cell	KIRC	-0.089745761
UCK1	Vascular smooth muscle c	KIRC	-0.008403627
UCK1	Vegf_signaling_pathway	KIRC	-0.13696124
UCK1	Vitamin b6 metabolism	KIRC	0.044742598
UCK1	Willert_wnt_signaling	KIRC	-0.12975071
UCK1	Wnt_beta_catenin_signali	KIRC	-0.027542767
UCK2	Abnormal plasma cell	KIRC	0.250346146
UCK2	Activated b cell	KIRC	0.24541984
UCK2	Activated cd4+ t cell	KIRC	0.216003234
UCK2	Activated t cell	KIRC	0.213811486
UCK2	Alanine, aspartate and glu	KIRC	-0.164901396
UCK2	Alcala_apoptosis	KIRC	0.026007154
UCK2	Alpha-linolenic acid meta	KIRC	-0.094721649
UCK2	Amino sugar and nucleoti	KIRC	0.08213468
UCK2	Ampk_pathway	KIRC	-0.037311412
UCK2	Angiogenesis	KIRC	0.310781499
UCK2	Arachidonic acid metabol	KIRC	0.083719916
UCK2	Arginine and proline metε	KIRC	-0.102046802
UCK2	Arginine biosynthesis	KIRC	-0.362027928
UCK2	Ascorbate and aldarate mε	KIRC	-0.161874543

UCK2	Atypical memory b cell	KIRC	0.082636713
UCK2	Axl+siglec6+ dendritic ce	KIRC	0.180065834
UCK2	B cell	KIRC	0.045615889
UCK2	B1 cell	KIRC	0.210676157
UCK2	Basal cell	KIRC	0.514260679
UCK2	Beta-alanine metabolism	KIRC	-0.284687989
UCK2	Biosynthesis of unsaturate	KIRC	-0.215104381
UCK2	Biotin metabolism	KIRC	-0.253640772
UCK2	Butanoate metabolism	KIRC	-0.493428442
UCK2	Caffeine metabolism	KIRC	-0.095379715
UCK2	Cancer stem cell	KIRC	0.264697439
UCK2	Cancer stem-like cell	KIRC	0.023901411
UCK2	Cd4+ cytotoxic t cell	KIRC	0.1968695
UCK2	Cd4+ memory t cell	KIRC	0.167303368
UCK2	Cd4+ regulatory t cell	KIRC	0.318356724
UCK2	Cd4+ t helper cell	KIRC	0.137890551
UCK2	Cd4+cd25+ regulatory t c	KIRC	0.168454063
UCK2	Cd8+ cytotoxic t cell	KIRC	0.136730009
UCK2	Cd8+ regulatory t cell	KIRC	0.12424377
UCK2	Cell_cycle	KIRC	0.292798368
UCK2	Chandran_metastasis_top5	KIRC	0.007179233
UCK2	Citrate cycle (tca cycle)	KIRC	-0.356837282
UCK2	Cysteine and methionine r	KIRC	-0.155300931
UCK2	Cytokine induced killer ce	KIRC	0.248465101
UCK2	D-arginine and d-ornithin	KIRC	-0.106490508
UCK2	D-glutamine and d-glutan	KIRC	-0.445848657
UCK2	Dendritic cell	KIRC	0.294046719
UCK2	Dna_repair	KIRC	0.152930307
UCK2	Dna_replication	KIRC	0.302401847
UCK2	Double-negative memory	KIRC	0.125945362
UCK2	Drug metabolism - cytoch	KIRC	-0.220489237
UCK2	Drug metabolism - other c	KIRC	0.116984156
UCK2	E2f_targets	KIRC	0.336034771
UCK2	Ecm_receptor_interaction	KIRC	0.286490892
UCK2	Effector cd4+ memory t (	KIRC	0.128257423
UCK2	Effector cd8+ memory t (	KIRC	0.21569734
UCK2	Effector memory t cell	KIRC	0.148798665
UCK2	Effector regulatory t (treg	KIRC	0.205093278
UCK2	Elvidge_hif1a_targets_up	KIRC	0.030000471
UCK2	Endothelial cell	KIRC	0.208712075
UCK2	Eosinophil	KIRC	0.232531881
UCK2	Ether lipid metabolism	KIRC	-0.153265228
UCK2	Exhausted cd4+ t cell	KIRC	0.202571437

UCK2	Exhausted cd8+ t cell	KIRC	0.279790239
UCK2	Exhausted t cell	KIRC	0.120430853
UCK2	Fat cell (adipocyte)	KIRC	-0.354367563
UCK2	Fatty acid biosynthesis	KIRC	-0.297078351
UCK2	Fatty acid degradation	KIRC	-0.534642248
UCK2	Fatty acid elongation	KIRC	-0.334579879
UCK2	Fibroblast	KIRC	0.312358783
UCK2	Folate biosynthesis	KIRC	-0.168612857
UCK2	Follicular b cell	KIRC	0.170288644
UCK2	Follicular dendritic cell	KIRC	0.182078035
UCK2	Follicular helper (tfh) t ce	KIRC	0.214592273
UCK2	Follicular t cell	KIRC	0.155197617
UCK2	Foxp3+il-17+ t cell	KIRC	0.285640907
UCK2	Fructose and mannose me	KIRC	0.010152457
UCK2	G2m_checkpoint	KIRC	0.310852799
UCK2	Galactose metabolism	KIRC	0.191032536
UCK2	Galie_tumor_stemness_ge	KIRC	0.052374406
UCK2	Glutathione metabolism	KIRC	0.03049297
UCK2	Glycerolipid metabolism	KIRC	-0.212055883
UCK2	Glycerophospholipid metæ	KIRC	-0.078048387
UCK2	Glycine, serine and threor	KIRC	-0.172578527
UCK2	Glycolysis / gluconeogene	KIRC	-0.231677337
UCK2	Glycosaminoglycan biosy1	KIRC	0.498957973
UCK2	Glycosaminoglycan biosy1	KIRC	0.225562729
UCK2	Glycosaminoglycan biosy1	KIRC	0.41291767
UCK2	Glycosaminoglycan degra	KIRC	0.113160476
UCK2	Glycosphingolipid biosyn1	KIRC	0.091901525
UCK2	Glycosphingolipid biosyn1	KIRC	0.180200752
UCK2	Glycosphingolipid biosyn1	KIRC	0.032689479
UCK2	Glycosylphosphatidylinos:	KIRC	-0.188487128
UCK2	Glyoxylate and dicarboxy	KIRC	-0.365286098
UCK2	Granulocyte	KIRC	0.236294904
UCK2	Hedgehog_signaling	KIRC	0.055702987
UCK2	Histidine metabolism	KIRC	-0.189161708
UCK2	Hypoxia	KIRC	0.305310981
UCK2	Il-17ralpha t cell	KIRC	0.131382472
UCK2	Il2_stat5_signaling	KIRC	0.308260903
UCK2	Il6_jak_stat3_signaling	KIRC	0.336421022
UCK2	Immune_checkpoints_tunr	KIRC	0.119451106
UCK2	Immune_inhibition_cytok	KIRC	0.286730655
UCK2	Inositol phosphate metabo	KIRC	-0.242114548
UCK2	Interleukin_6_signaling	KIRC	0.131154957
UCK2	Jaeger_metastasis_up	KIRC	0.286402786

UCK2	Jain_nfkb_signaling	KIRC	0.061054425
UCK2	Kras_signaling_up	KIRC	0.167855892
UCK2	Linoleic acid metabolism	KIRC	-0.14996975
UCK2	Lipoic acid metabolism	KIRC	-0.367149078
UCK2	Lysine degradation	KIRC	-0.383206785
UCK2	Lysosome	KIRC	-0.060714223
UCK2	M1 macrophage	KIRC	0.188323361
UCK2	M2 macrophage	KIRC	0.209559593
UCK2	Mannose type o-glycan bi	KIRC	0.071011271
UCK2	Mapk_signaling_pathway	KIRC	0.176834695
UCK2	Mapk3_erk1_activation	KIRC	0.077278516
UCK2	Marginal zone b cell	KIRC	0.221652564
UCK2	Memory b cell	KIRC	0.066240112
UCK2	Mesenchymal cell	KIRC	0.553112896
UCK2	Mesenchymal stem cell	KIRC	0.205787347
UCK2	Metabolism of xenobiotic	KIRC	-0.206954932
UCK2	Migrating cancer stem cel	KIRC	0.105760082
UCK2	Mitotic_spindle	KIRC	0.091752393
UCK2	Monocyte	KIRC	0.32424652
UCK2	Mtor_signaling_pathway	KIRC	-0.233330282
UCK2	Mtorc1_signaling	KIRC	0.17756044
UCK2	Mucin type o-glycan biosy	KIRC	0.02691099
UCK2	Myc_targets_v1	KIRC	0.235546999
UCK2	Myeloid cell	KIRC	0.136226923
UCK2	N-glycan biosynthesis	KIRC	0.037604207
UCK2	Naive b cell	KIRC	0.076362578
UCK2	Naive cd4+ t cell	KIRC	0.146688933
UCK2	Naive cd8+ t cell	KIRC	-0.030697424
UCK2	Natural killer cell	KIRC	0.175592243
UCK2	Natural killer t (nkt) cell	KIRC	0.277562467
UCK2	Natural regulatory t (treg)	KIRC	0.176055222
UCK2	Neomycin, kanamycin and	KIRC	0.385359742
UCK2	Neutrophil	KIRC	0.293262933
UCK2	Nicotinate and nicotinami	KIRC	-0.098819154
UCK2	Nitrogen metabolism	KIRC	-0.395240462
UCK2	Nod_like_receptor_signal	KIRC	0.23039029
UCK2	Notch_signaling	KIRC	0.275513896
UCK2	One carbon pool by folate	KIRC	-0.018259462
UCK2	Other glycan degradation	KIRC	-0.070640807
UCK2	Other types of o-glycan b	KIRC	0.262582675
UCK2	Oxidative phosphorylatio	KIRC	-0.133623172
UCK2	P53_pathway	KIRC	0.229001694
UCK2	P53_signaling_pathway	KIRC	0.342514256

UCK2	Pantothenate and coa bios	KIRC	-0.158670607
UCK2	Pentose and glucuronate i	KIRC	-0.10887908
UCK2	Pentose phosphate pathwa	KIRC	0.019443987
UCK2	Pericyte	KIRC	0.217075816
UCK2	Phenylalanine metabolism	KIRC	-0.112145516
UCK2	Phenylalanine, tyrosine ar	KIRC	-0.193223844
UCK2	Phosphonate and phosphir	KIRC	-0.284143265
UCK2	Pi3k_akt_activation	KIRC	0.007248792
UCK2	Pi3k_akt_mtor_signaling	KIRC	0.128527345
UCK2	Porphyrin and chlorophyl	KIRC	-0.141413711
UCK2	Primary bile acid biosynt	KIRC	-0.224580807
UCK2	Propanoate metabolism	KIRC	-0.541509355
UCK2	Purine metabolism	KIRC	0.228713918
UCK2	Pyrimidine metabolism	KIRC	0.230058683
UCK2	Pyruvate metabolism	KIRC	-0.412042121
UCK2	Regulation_of_autophagy	KIRC	-0.441112298
UCK2	Retinol metabolism	KIRC	-0.24833245
UCK2	Riboflavin metabolism	KIRC	0.090525097
UCK2	Schmahl_pdgf_signaling	KIRC	-0.050074062
UCK2	Selenocompound metabol	KIRC	-0.201745058
UCK2	Signaling_by_hippo	KIRC	-0.162080652
UCK2	Sphingolipid metabolism	KIRC	-0.32146237
UCK2	Starch and sucrose metabo	KIRC	0.074123283
UCK2	Steroid biosynthesis	KIRC	-0.124116221
UCK2	Steroid hormone biosynth	KIRC	-0.163266183
UCK2	Sulfur metabolism	KIRC	-0.068951565
UCK2	Synthesis and degradation	KIRC	-0.447496262
UCK2	T helper cell	KIRC	0.164078857
UCK2	T helper1 (th1) cell	KIRC	0.10409411
UCK2	T helper17 (th17) cell	KIRC	0.319660236
UCK2	T helper2 (th2) cell	KIRC	0.221461441
UCK2	T helper9 (th9) cell	KIRC	0.141745212
UCK2	Taurine and hypotaurine r	KIRC	-0.027419882
UCK2	Terpenoid backbone biosy	KIRC	-0.301872609
UCK2	Tgf_beta_signaling_pathw	KIRC	0.080456669
UCK2	Thiamine metabolism	KIRC	-0.255793561
UCK2	Tnfa_signaling_via_nfb	KIRC	0.359045305
UCK2	Tryptophan metabolism	KIRC	-0.349132089
UCK2	Tumor endothelial cell	KIRC	0.293874556
UCK2	Tyrosine metabolism	KIRC	-0.220098618
UCK2	Ubiquinone and other ter	KIRC	-0.124014388
UCK2	Valine, leucine and isoleu	KIRC	0.170064252
UCK2	Valine, leucine and isoleu	KIRC	-0.513481023

UCK2	Vascular endothelial cell	KIRC	0.105034034
UCK2	Vascular smooth muscle c	KIRC	0.175634264
UCK2	Vegf_signaling_pathway	KIRC	0.143795859
UCK2	Vitamin b6 metabolism	KIRC	-0.098026091
UCK2	Willert_wnt_signaling	KIRC	0.296071081
UCK2	Wnt_beta_catenin_signali	KIRC	0.211361551
UCKL1	Abnormal plasma cell	KIRC	-0.096813228
UCKL1	Activated b cell	KIRC	-0.187534548
UCKL1	Activated cd4+ t cell	KIRC	-0.207800245
UCKL1	Activated t cell	KIRC	-0.195783127
UCKL1	Alanine, aspartate and glu	KIRC	-0.264773507
UCKL1	Alcala_apoptosis	KIRC	-0.254598997
UCKL1	Alpha-linolenic acid meta	KIRC	0.129714258
UCKL1	Amino sugar and nucleoti	KIRC	-0.177246
UCKL1	Ampk_pathway	KIRC	0.329424035
UCKL1	Angiogenesis	KIRC	-0.347506277
UCKL1	Arachidonic acid metabol	KIRC	-0.098318217
UCKL1	Arginine and proline metæ	KIRC	-0.282526643
UCKL1	Arginine biosynthesis	KIRC	-0.170402515
UCKL1	Ascorbate and aldarate me	KIRC	-0.229359417
UCKL1	Atypical memory b cell	KIRC	-0.101623049
UCKL1	Axl+siglec6+ dendritic ce	KIRC	-0.322097229
UCKL1	B cell	KIRC	-0.284425457
UCKL1	B1 cell	KIRC	-0.107350128
UCKL1	Basal cell	KIRC	-0.03379369
UCKL1	Beta-alanine metabolism	KIRC	-0.212722283
UCKL1	Biosynthesis of unsaturate	KIRC	-0.207999143
UCKL1	Biotin metabolism	KIRC	-0.088619478
UCKL1	Butanoate metabolism	KIRC	-0.13587045
UCKL1	Caffeine metabolism	KIRC	-0.163501689
UCKL1	Cancer stem cell	KIRC	-0.371928702
UCKL1	Cancer stem-like cell	KIRC	-0.242645111
UCKL1	Cd4+ cytotoxic t cell	KIRC	-0.132688331
UCKL1	Cd4+ memory t cell	KIRC	-0.131422828
UCKL1	Cd4+ regulatory t cell	KIRC	-0.182879152
UCKL1	Cd4+ t helper cell	KIRC	-0.20004957
UCKL1	Cd4+cd25+ regulatory t c	KIRC	-0.203717735
UCKL1	Cd8+ cytotoxic t cell	KIRC	-0.141718653
UCKL1	Cd8+ regulatory t cell	KIRC	-0.235220847
UCKL1	Cell_cycle	KIRC	-0.254217754
UCKL1	Chandran_metastasis_top5	KIRC	-0.175778827
UCKL1	Citrate cycle (tca cycle)	KIRC	-0.125455352
UCKL1	Cysteine and methionine r	KIRC	-0.095619366

UCKL1	Cytokine induced killer cell	KIRC	-0.134314612
UCKL1	D-arginine and d-ornithin	KIRC	-0.094938304
UCKL1	D-glutamine and d-glutan	KIRC	-0.153550987
UCKL1	Dendritic cell	KIRC	-0.251309151
UCKL1	Dna_repair	KIRC	0.124660754
UCKL1	Dna_replication	KIRC	-0.016672953
UCKL1	Double-negative memory	KIRC	-0.020971936
UCKL1	Drug metabolism - cytoch	KIRC	-0.142846114
UCKL1	Drug metabolism - other	KIRC	-0.127531541
UCKL1	E2f_targets	KIRC	-0.168610117
UCKL1	Ecm_receptor_interaction	KIRC	-0.289869494
UCKL1	Effector cd4+ memory t	KIRC	-0.24270151
UCKL1	Effector cd8+ memory t	KIRC	-0.134482518
UCKL1	Effector memory t cell	KIRC	-0.230428821
UCKL1	Effector regulatory t (treg)	KIRC	-0.31128275
UCKL1	Elvidge_hif1a_targets_up	KIRC	-0.216657086
UCKL1	Endothelial cell	KIRC	-0.332307265
UCKL1	Eosinophil	KIRC	-0.218494471
UCKL1	Ether lipid metabolism	KIRC	-0.047244716
UCKL1	Exhausted cd4+ t cell	KIRC	-0.302381675
UCKL1	Exhausted cd8+ t cell	KIRC	-0.175426226
UCKL1	Exhausted t cell	KIRC	-0.14983878
UCKL1	Fat cell (adipocyte)	KIRC	0.116936982
UCKL1	Fatty acid biosynthesis	KIRC	-0.018474007
UCKL1	Fatty acid degradation	KIRC	-0.116597315
UCKL1	Fatty acid elongation	KIRC	-0.136295124
UCKL1	Fibroblast	KIRC	-0.312524428
UCKL1	Folate biosynthesis	KIRC	-0.113414018
UCKL1	Follicular b cell	KIRC	-0.1916917
UCKL1	Follicular dendritic cell	KIRC	-0.159604108
UCKL1	Follicular helper (tfh) t	KIRC	-0.201163042
UCKL1	Follicular t cell	KIRC	0.030302576
UCKL1	Foxp3+il-17+ t cell	KIRC	-0.064764961
UCKL1	Fructose and mannose me	KIRC	-0.080956096
UCKL1	G2m_checkpoint	KIRC	-0.257101908
UCKL1	Galactose metabolism	KIRC	-0.176342522
UCKL1	Galie_tumor_stemness_ge	KIRC	-0.319406138
UCKL1	Glutathione metabolism	KIRC	-0.245761566
UCKL1	Glycerolipid metabolism	KIRC	0.0203226
UCKL1	Glycerophospholipid met	KIRC	0.298101499
UCKL1	Glycine, serine and threor	KIRC	-0.128778834
UCKL1	Glycolysis / gluconeogene	KIRC	-0.177973587
UCKL1	Glycosaminoglycan biosy	KIRC	-0.200102114

UCKL1	Glycosaminoglycan biosyn	KIRC	-0.312765119
UCKL1	Glycosaminoglycan biosyn	KIRC	-0.164401865
UCKL1	Glycosaminoglycan degra	KIRC	-0.041839615
UCKL1	Glycosphingolipid biosyn	KIRC	-0.269929729
UCKL1	Glycosphingolipid biosyn	KIRC	-0.261915842
UCKL1	Glycosphingolipid biosyn	KIRC	-0.314029319
UCKL1	Glycosylphosphatidylinos	KIRC	-0.067573495
UCKL1	Glyoxylate and dicarboxy	KIRC	-0.078610041
UCKL1	Granulocyte	KIRC	-0.243500535
UCKL1	Hedgehog_signaling	KIRC	-0.27483954
UCKL1	Histidine metabolism	KIRC	-0.207481186
UCKL1	Hypoxia	KIRC	-0.241273913
UCKL1	Il-17alpha t cell	KIRC	-0.177799759
UCKL1	Il2_stat5_signaling	KIRC	-0.366054294
UCKL1	Il6_jak_stat3_signaling	KIRC	-0.337546044
UCKL1	Immune_checkpoints_tur	KIRC	-0.303267832
UCKL1	Immune_inhibition_cytok	KIRC	-0.179329485
UCKL1	Inositol phosphate metabo	KIRC	-0.203186695
UCKL1	Interleukin_6_signaling	KIRC	-0.358414263
UCKL1	Jaeger_metastasis_up	KIRC	-0.439526575
UCKL1	Jain_nfkb_signaling	KIRC	-0.222620618
UCKL1	Kras_signaling_up	KIRC	-0.490880965
UCKL1	Linoleic acid metabolism	KIRC	0.209768192
UCKL1	Lipoic acid metabolism	KIRC	0.00497654
UCKL1	Lysine degradatation	KIRC	-0.069983519
UCKL1	Lysosome	KIRC	-0.226033894
UCKL1	M1 macrophage	KIRC	-0.24956677
UCKL1	M2 macrophage	KIRC	-0.319094769
UCKL1	Mannose type o-glycan bi	KIRC	0.109879451
UCKL1	Mapk_signaling_pathway	KIRC	-0.258675459
UCKL1	Mapk3_erk1_activation	KIRC	-0.330902775
UCKL1	Marginal zone b cell	KIRC	-0.313614252
UCKL1	Memory b cell	KIRC	-0.275764032
UCKL1	Mesenchymal cell	KIRC	-0.176776006
UCKL1	Mesenchymal stem cell	KIRC	-0.266768379
UCKL1	Metabolism of xenobiotic	KIRC	-0.109132459
UCKL1	Migrating cancer stem cel	KIRC	-0.1049918
UCKL1	Mitotic_spindle	KIRC	-0.286844113
UCKL1	Monocyte	KIRC	-0.18736231
UCKL1	Mtor_signaling_pathway	KIRC	-0.065244164
UCKL1	Mtorc1_signaling	KIRC	-0.356493187
UCKL1	Mucin type o-glycan bios	KIRC	-0.490233426
UCKL1	Myc_targets_v1	KIRC	-0.142688003

UCKL1	Myeloid cell	KIRC	-0.274090222
UCKL1	N-glycan biosynthesis	KIRC	-0.274943904
UCKL1	Naive b cell	KIRC	-0.060337432
UCKL1	Naive cd4+ t cell	KIRC	-0.24950098
UCKL1	Naive cd8+ t cell	KIRC	-0.045183322
UCKL1	Natural killer cell	KIRC	-0.217703815
UCKL1	Natural killer t (nkt) cell	KIRC	0.108182839
UCKL1	Natural regulatory t (treg)	KIRC	-0.239611112
UCKL1	Neomycin, kanamycin and	KIRC	-0.183623285
UCKL1	Neutrophil	KIRC	-0.269053641
UCKL1	Nicotinate and nicotinami	KIRC	-0.134569637
UCKL1	Nitrogen metabolism	KIRC	-0.32889145
UCKL1	Nod_like_receptor_signal	KIRC	-0.282985473
UCKL1	Notch_signaling	KIRC	-0.340666044
UCKL1	One carbon pool by folate	KIRC	-0.226714424
UCKL1	Other glycan degradation	KIRC	0.208102901
UCKL1	Other types of o-glycan b	KIRC	0.164402574
UCKL1	Oxidative phosphorylatio	KIRC	0.086466756
UCKL1	P53_pathway	KIRC	-0.163098727
UCKL1	P53_signaling_pathway	KIRC	-0.286170212
UCKL1	Pantothenate and coa bios	KIRC	-0.220568212
UCKL1	Pentose and glucuronate i	KIRC	-0.248021636
UCKL1	Pentose phosphate pathwa	KIRC	-0.190308875
UCKL1	Pericyte	KIRC	-0.21921828
UCKL1	Phenylalanine metabolism	KIRC	-0.14349193
UCKL1	Phenylalanine, tyrosine ar	KIRC	-0.050692117
UCKL1	Phosphonate and phosphir	KIRC	-0.046997525
UCKL1	Pi3k_akt_activation	KIRC	-0.297794892
UCKL1	Pi3k_akt_mtor_signaling	KIRC	-0.449372291
UCKL1	Porphyrin and chlorophyl	KIRC	-0.154544628
UCKL1	Primary bile acid biosynt	KIRC	-0.143444843
UCKL1	Propanoate metabolism	KIRC	-0.158462757
UCKL1	Purine metabolism	KIRC	-0.17228355
UCKL1	Pyrimidine metabolism	KIRC	-0.024351907
UCKL1	Pyruvate metabolism	KIRC	-0.091146791
UCKL1	Regulation_of_autophagy	KIRC	0.012238119
UCKL1	Retinol metabolism	KIRC	-0.099620489
UCKL1	Riboflavin metabolism	KIRC	-0.134416688
UCKL1	Schmahl_pdgf_signaling	KIRC	-0.304136676
UCKL1	Selenocompound metabol	KIRC	-0.187108299
UCKL1	Signaling_by_hippo	KIRC	-0.336246543
UCKL1	Sphingolipid metabolism	KIRC	-0.249562098
UCKL1	Starch and sucrose metabo	KIRC	-0.263996844

UCKL1	Steroid biosynthesis	KIRC	0.07781512
UCKL1	Steroid hormone biosynth	KIRC	-0.096441842
UCKL1	Sulfur metabolism	KIRC	-0.217668843
UCKL1	Synthesis and degradation	KIRC	-0.070578343
UCKL1	T helper cell	KIRC	-0.269550144
UCKL1	T helper1 (th1) cell	KIRC	-0.235070096
UCKL1	T helper17 (th17) cell	KIRC	-0.167879528
UCKL1	T helper2 (th2) cell	KIRC	-0.272821689
UCKL1	T helper9 (th9) cell	KIRC	-0.142012827
UCKL1	Taurine and hypotaurine r	KIRC	0.078007076
UCKL1	Terpenoid backbone biosy	KIRC	-0.218138083
UCKL1	Tgf_beta_signaling_pathw	KIRC	-0.371401218
UCKL1	Thiamine metabolism	KIRC	-0.039049226
UCKL1	Tnfa_signaling_via_nfb	KIRC	-0.236292945
UCKL1	Tryptophan metabolism	KIRC	-0.199285482
UCKL1	Tumor endothelial cell	KIRC	0.056370531
UCKL1	Tyrosine metabolism	KIRC	-0.11784381
UCKL1	Ubiquinone and other ter	KIRC	-0.074051143
UCKL1	Valine, leucine and isoleu	KIRC	-0.004656617
UCKL1	Valine, leucine and isoleu	KIRC	-0.137642234
UCKL1	Vascular endothelial cell	KIRC	-0.179905251
UCKL1	Vascular smooth muscle c	KIRC	-0.1072682
UCKL1	Vegf_signaling_pathway	KIRC	-0.200531791
UCKL1	Vitamin b6 metabolism	KIRC	-0.197508692
UCKL1	Willert_wnt_signaling	KIRC	-0.394505467
UCKL1	Wnt_beta_catenin_signali	KIRC	-0.041643222
UPP1	Abnormal plasma cell	KIRC	0.06848084
UPP1	Activated b cell	KIRC	-0.073999767
UPP1	Activated cd4+ t cell	KIRC	-0.169366647
UPP1	Activated t cell	KIRC	-0.143731458
UPP1	Alanine, aspartate and glu	KIRC	-0.214190253
UPP1	Alcala_apoptosis	KIRC	-0.009208929
UPP1	Alpha-linolenic acid meta	KIRC	0.303679406
UPP1	Amino sugar and nucleoti	KIRC	0.062140146
UPP1	Ampk_pathway	KIRC	0.101982781
UPP1	Angiogenesis	KIRC	-0.158167776
UPP1	Arachidonic acid metabol	KIRC	0.149681196
UPP1	Arginine and proline met	KIRC	-0.158226558
UPP1	Arginine biosynthesis	KIRC	-0.121035968
UPP1	Ascorbate and aldarate m	KIRC	-0.364603044
UPP1	Atypical memory b cell	KIRC	-0.18613962
UPP1	Axl+siglec6+ dendritic ce	KIRC	-0.134478466
UPP1	B cell	KIRC	-0.2939298

UPP1	B1 cell	KIRC	-0.097311177
UPP1	Basal cell	KIRC	0.382665583
UPP1	Beta-alanine metabolism	KIRC	-0.325106001
UPP1	Biosynthesis of unsaturate	KIRC	-0.080296461
UPP1	Biotin metabolism	KIRC	0.02169465
UPP1	Butanoate metabolism	KIRC	-0.232113051
UPP1	Caffeine metabolism	KIRC	0.113332623
UPP1	Cancer stem cell	KIRC	-0.319174435
UPP1	Cancer stem-like cell	KIRC	-0.206105464
UPP1	Cd4+ cytotoxic t cell	KIRC	-0.112376988
UPP1	Cd4+ memory t cell	KIRC	-0.083212066
UPP1	Cd4+ regulatory t cell	KIRC	-0.121005116
UPP1	Cd4+ t helper cell	KIRC	-0.21374482
UPP1	Cd4+cd25+ regulatory t c	KIRC	-0.192747909
UPP1	Cd8+ cytotoxic t cell	KIRC	-0.139822687
UPP1	Cd8+ regulatory t cell	KIRC	-0.149701647
UPP1	Cell_cycle	KIRC	0.026033774
UPP1	Chandran_metastasis_top5	KIRC	-0.178154055
UPP1	Citrate cycle (tca cycle)	KIRC	-0.039903759
UPP1	Cysteine and methionine r	KIRC	-0.046769415
UPP1	Cytokine induced killer c	KIRC	-0.026103699
UPP1	D-arginine and d-ornithin	KIRC	-0.269038933
UPP1	D-glutamine and d-glutan	KIRC	-0.333051856
UPP1	Dendritic cell	KIRC	-0.168784644
UPP1	Dna_repair	KIRC	0.44079787
UPP1	Dna_replication	KIRC	0.146214345
UPP1	Double-negative memory	KIRC	-0.007048363
UPP1	Drug metabolism - cytoch	KIRC	-0.185058619
UPP1	Drug metabolism - other	KIRC	0.165778429
UPP1	E2f_targets	KIRC	0.04373044
UPP1	Ecm_receptor_interaction	KIRC	-0.06460526
UPP1	Effector cd4+ memory t (	KIRC	-0.280720384
UPP1	Effector cd8+ memory t (	KIRC	-0.170168012
UPP1	Effector memory t cell	KIRC	-0.188905069
UPP1	Effector regulatory t (treg	KIRC	-0.302954523
UPP1	Elvidge_hif1a_targets_up	KIRC	0.169304869
UPP1	Endothelial cell	KIRC	-0.230959636
UPP1	Eosinophil	KIRC	-0.125204329
UPP1	Ether lipid metabolism	KIRC	-0.07524029
UPP1	Exhausted cd4+ t cell	KIRC	-0.213478688
UPP1	Exhausted cd8+ t cell	KIRC	-0.11865943
UPP1	Exhausted t cell	KIRC	-0.154917063
UPP1	Fat cell (adipocyte)	KIRC	0.144533048

UPP1	Fatty acid biosynthesis	KIRC	0.157157798
UPP1	Fatty acid degradation	KIRC	-0.248459968
UPP1	Fatty acid elongation	KIRC	-0.062416423
UPP1	Fibroblast	KIRC	-0.20077832
UPP1	Folate biosynthesis	KIRC	0.098946641
UPP1	Follicular b cell	KIRC	-0.133921794
UPP1	Follicular dendritic cell	KIRC	0.047448449
UPP1	Follicular helper (tfh) t ce	KIRC	-0.231413012
UPP1	Follicular t cell	KIRC	0.001075801
UPP1	Foxp3+il-17+ t cell	KIRC	-0.012967705
UPP1	Fructose and mannose me	KIRC	-0.135483303
UPP1	G2m_checkpoint	KIRC	-0.070323037
UPP1	Galactose metabolism	KIRC	0.039277725
UPP1	Galie_tumor_stemness_ge	KIRC	-0.122141026
UPP1	Glutathione metabolism	KIRC	0.141913848
UPP1	Glycerolipid metabolism	KIRC	-0.175495105
UPP1	Glycerophospholipid met&	KIRC	0.256303258
UPP1	Glycine, serine and threor	KIRC	-0.178105093
UPP1	Glycolysis / gluconeogene	KIRC	-0.173360673
UPP1	Glycosaminoglycan biosy	KIRC	0.163206718
UPP1	Glycosaminoglycan biosy	KIRC	0.03130296
UPP1	Glycosaminoglycan biosy	KIRC	0.267366195
UPP1	Glycosaminoglycan degra	KIRC	0.242967259
UPP1	Glycosphingolipid biosyn	KIRC	0.183382275
UPP1	Glycosphingolipid biosyn	KIRC	0.132990545
UPP1	Glycosphingolipid biosyn	KIRC	-0.121648259
UPP1	Glycosylphosphatidylinos	KIRC	0.092345348
UPP1	Glyoxylate and dicarboxy	KIRC	-0.101525213
UPP1	Granulocyte	KIRC	-0.253377943
UPP1	Hedgehog_signaling	KIRC	-0.345904965
UPP1	Histidine metabolism	KIRC	-0.467467358
UPP1	Hypoxia	KIRC	-0.118144017
UPP1	Il-17alpha t cell	KIRC	-0.145159161
UPP1	Il2_stat5_signaling	KIRC	-0.120974454
UPP1	Il6_jak_stat3_signaling	KIRC	-0.171538082
UPP1	Immune_checkpoints_tun	KIRC	-0.073845091
UPP1	Immune_inhibition_cytok	KIRC	0.060061033
UPP1	Inositol phosphate metabo	KIRC	-0.325307053
UPP1	Interleukin_6_signaling	KIRC	-0.383578451
UPP1	Jaeger_metastasis_up	KIRC	-0.015263647
UPP1	Jain_nfkb_signaling	KIRC	-0.213389188
UPP1	Kras_signaling_up	KIRC	-0.203817312
UPP1	Linoleic acid metabolism	KIRC	0.196982

UPP1	Lipoic acid metabolism	KIRC	-0.150071664
UPP1	Lysine degradation	KIRC	-0.357990362
UPP1	Lysosome	KIRC	0.069805916
UPP1	M1 macrophage	KIRC	-0.11224944
UPP1	M2 macrophage	KIRC	-0.222889831
UPP1	Mannose type o-glycan bi	KIRC	0.082550364
UPP1	Mapk_signaling_pathway	KIRC	-0.079649819
UPP1	Mapk3_erk1_activation	KIRC	-0.348811961
UPP1	Marginal zone b cell	KIRC	-0.276995778
UPP1	Memory b cell	KIRC	-0.198943227
UPP1	Mesenchymal cell	KIRC	0.096314384
UPP1	Mesenchymal stem cell	KIRC	-0.296409235
UPP1	Metabolism of xenobiotic	KIRC	-0.049485534
UPP1	Migrating cancer stem cel	KIRC	0.232641318
UPP1	Mitotic_spindle	KIRC	-0.381781963
UPP1	Monocyte	KIRC	-0.005099099
UPP1	Mtor_signaling_pathway	KIRC	-0.223615593
UPP1	Mtorc1_signaling	KIRC	0.139220091
UPP1	Mucin type o-glycan biosy	KIRC	-0.193410561
UPP1	Myc_targets_v1	KIRC	0.301097763
UPP1	Myeloid cell	KIRC	-0.27736932
UPP1	N-glycan biosynthesis	KIRC	0.104060881
UPP1	Naive b cell	KIRC	-0.038101338
UPP1	Naive cd4+ t cell	KIRC	-0.131920054
UPP1	Naive cd8+ t cell	KIRC	-0.074798839
UPP1	Natural killer cell	KIRC	-0.160853738
UPP1	Natural killer t (nkt) cell	KIRC	0.233242728
UPP1	Natural regulatory t (treg)	KIRC	-0.218583234
UPP1	Neomycin, kanamycin and	KIRC	0.048853816
UPP1	Neutrophil	KIRC	0.000439296
UPP1	Nicotinate and nicotinami	KIRC	-0.136016849
UPP1	Nitrogen metabolism	KIRC	-0.271999115
UPP1	Nod_like_receptor_signal	KIRC	-0.19189147
UPP1	Notch_signaling	KIRC	-0.128680363
UPP1	One carbon pool by folate	KIRC	-0.341094765
UPP1	Other glycan degradation	KIRC	0.157482027
UPP1	Other types of o-glycan b	KIRC	0.191670838
UPP1	Oxidative phosphorylatio	KIRC	0.387984331
UPP1	P53_pathway	KIRC	0.165342975
UPP1	P53_signaling_pathway	KIRC	0.068511784
UPP1	Pantothenate and coa bios	KIRC	-0.173029258
UPP1	Pentose and glucuronate i	KIRC	-0.310315309
UPP1	Pentose phosphate pathwa	KIRC	0.052409177

UPP1	Pericyte	KIRC	-0.23973906
UPP1	Phenylalanine metabolism	KIRC	-0.085437142
UPP1	Phenylalanine, tyrosine ar	KIRC	0.037736689
UPP1	Phosphonate and phosphir	KIRC	-0.071369889
UPP1	Pi3k_akt_activation	KIRC	-0.156695406
UPP1	Pi3k_akt_mtor_signaling	KIRC	-0.041153668
UPP1	Porphyrin and chlorophyl	KIRC	-0.058638081
UPP1	Primary bile acid biosynt	KIRC	-0.135180163
UPP1	Propanoate metabolism	KIRC	-0.284331931
UPP1	Purine metabolism	KIRC	0.274345467
UPP1	Pyrimidine metabolism	KIRC	0.324077592
UPP1	Pyruvate metabolism	KIRC	-0.07000373
UPP1	Regulation_of_autophagy	KIRC	0.044905599
UPP1	Retinol metabolism	KIRC	-0.097125874
UPP1	Riboflavin metabolism	KIRC	0.11254447
UPP1	Schmahl_pdgf_signaling	KIRC	-0.248654962
UPP1	Selenocompound metabol	KIRC	-0.170584764
UPP1	Signaling_by_hippo	KIRC	-0.422374392
UPP1	Sphingolipid metabolism	KIRC	-0.228752495
UPP1	Starch and sucrose metabo	KIRC	-0.133272059
UPP1	Steroid biosynthesis	KIRC	0.397705399
UPP1	Steroid hormone biosynth	KIRC	-0.077283854
UPP1	Sulfur metabolism	KIRC	-0.006951894
UPP1	Synthesis and degradation	KIRC	-0.10806458
UPP1	T helper cell	KIRC	-0.258372223
UPP1	T helper1 (th1) cell	KIRC	-0.239676335
UPP1	T helper17 (th17) cell	KIRC	-0.122906889
UPP1	T helper2 (th2) cell	KIRC	-0.222358461
UPP1	T helper9 (th9) cell	KIRC	-0.074601788
UPP1	Taurine and hypotaurine r	KIRC	0.104100664
UPP1	Terpenoid backbone biosy	KIRC	-0.047665517
UPP1	Tgf_beta_signaling_pathw	KIRC	-0.222083977
UPP1	Thiamine metabolism	KIRC	-0.071093687
UPP1	Tnfa_signaling_via_nfkb	KIRC	-0.031866312
UPP1	Tryptophan metabolism	KIRC	-0.278709342
UPP1	Tumor endothelial cell	KIRC	0.228782067
UPP1	Tyrosine metabolism	KIRC	0.071784946
UPP1	Ubiquinone and other ter	KIRC	0.188463157
UPP1	Valine, leucine and isoleu	KIRC	0.316394572
UPP1	Valine, leucine and isoleu	KIRC	-0.266205114
UPP1	Vascular endothelial cell	KIRC	-0.254619925
UPP1	Vascular smooth muscle c	KIRC	-0.055635524
UPP1	Vegf_signaling_pathway	KIRC	0.040450967

UPP1	Vitamin b6 metabolism	KIRC	-0.076969221
UPP1	Willert_wnt_signaling	KIRC	-0.039757397
UPP1	Wnt_beta_catenin_signali	KIRC	-0.04731835
UPP2	Abnormal plasma cell	KIRC	-0.099269122
UPP2	Activated b cell	KIRC	0.020059518
UPP2	Activated cd4+ t cell	KIRC	0.014814874
UPP2	Activated t cell	KIRC	0.038091937
UPP2	Alanine, aspartate and glu	KIRC	0.24583635
UPP2	Alcala_apoptosis	KIRC	0.128430431
UPP2	Alpha-linolenic acid meta	KIRC	0.116511924
UPP2	Amino sugar and nucleoti	KIRC	0.098883064
UPP2	Ampk_pathway	KIRC	-0.018353778
UPP2	Angiogenesis	KIRC	-0.026774226
UPP2	Arachidonic acid metabol	KIRC	0.201701844
UPP2	Arginine and proline metæ	KIRC	0.239131117
UPP2	Arginine biosynthesis	KIRC	0.202634847
UPP2	Ascorbate and aldarate mε	KIRC	0.291409848
UPP2	Atypical memory b cell	KIRC	0.167814101
UPP2	Axl+siglec6+ dendritic ce	KIRC	-0.060109448
UPP2	B cell	KIRC	0.127945477
UPP2	B1 cell	KIRC	0.038446471
UPP2	Basal cell	KIRC	-0.01714214
UPP2	Beta-alanine metabolism	KIRC	0.255711888
UPP2	Biosynthesis of unsaturate	KIRC	0.194095516
UPP2	Biotin metabolism	KIRC	-0.002501378
UPP2	Butanoate metabolism	KIRC	0.184153724
UPP2	Caffeine metabolism	KIRC	0.104067983
UPP2	Cancer stem cell	KIRC	-0.011642375
UPP2	Cancer stem-like cell	KIRC	0.060791698
UPP2	Cd4+ cytotoxic t cell	KIRC	0.003609589
UPP2	Cd4+ memory t cell	KIRC	0.029533109
UPP2	Cd4+ regulatory t cell	KIRC	-0.051733826
UPP2	Cd4+ t helper cell	KIRC	0.049381735
UPP2	Cd4+cd25+ regulatory t c	KIRC	0.028424932
UPP2	Cd8+ cytotoxic t cell	KIRC	0.046747047
UPP2	Cd8+ regulatory t cell	KIRC	0.01780978
UPP2	Cell_cycle	KIRC	-0.161041604
UPP2	Chandran_metastasis_top ⁵	KIRC	-0.04162705
UPP2	Citrate cycle (tca cycle)	KIRC	0.112862841
UPP2	Cysteine and methionine r	KIRC	0.232765459
UPP2	Cytokine induced killer cε	KIRC	-0.060862065
UPP2	D-arginine and d-ornithin	KIRC	0.312950292
UPP2	D-glutamine and d-glutan	KIRC	0.070509576

UPP2	Dendritic cell	KIRC	0.018239287
UPP2	Dna_repair	KIRC	-0.004456107
UPP2	Dna_replication	KIRC	-0.10485742
UPP2	Double-negative memory	KIRC	0.03809097
UPP2	Drug metabolism - cytoch	KIRC	0.378532176
UPP2	Drug metabolism - other	KIRC	0.297262595
UPP2	E2f_targets	KIRC	-0.120142642
UPP2	Ecm_receptor_interaction	KIRC	-0.141684054
UPP2	Effector cd4+ memory t (	KIRC	0.067437355
UPP2	Effector cd8+ memory t (	KIRC	-0.008484291
UPP2	Effector memory t cell	KIRC	0.035223374
UPP2	Effector regulatory t (treg	KIRC	-0.068727838
UPP2	Elvidge_hif1a_targets_up	KIRC	-0.104388156
UPP2	Endothelial cell	KIRC	-0.099194131
UPP2	Eosinophil	KIRC	0.00685514
UPP2	Ether lipid metabolism	KIRC	0.118595974
UPP2	Exhausted cd4+ t cell	KIRC	-0.013765966
UPP2	Exhausted cd8+ t cell	KIRC	0.005196636
UPP2	Exhausted t cell	KIRC	0.052985206
UPP2	Fat cell (adipocyte)	KIRC	0.017048779
UPP2	Fatty acid biosynthesis	KIRC	0.07095158
UPP2	Fatty acid degradation	KIRC	0.224804397
UPP2	Fatty acid elongation	KIRC	0.146334075
UPP2	Fibroblast	KIRC	-0.082152748
UPP2	Folate biosynthesis	KIRC	0.19837006
UPP2	Follicular b cell	KIRC	0.009479407
UPP2	Follicular dendritic cell	KIRC	-0.050041134
UPP2	Follicular helper (tfh) t ce	KIRC	0.060878316
UPP2	Follicular t cell	KIRC	0.05535761
UPP2	Foxp3+il-17+ t cell	KIRC	0.014094721
UPP2	Fructose and mannose me	KIRC	0.279695667
UPP2	G2m_checkpoint	KIRC	-0.183064102
UPP2	Galactose metabolism	KIRC	0.08936898
UPP2	Galie_tumor_stemness_ge	KIRC	-0.161982044
UPP2	Glutathione metabolism	KIRC	0.170006865
UPP2	Glycerolipid metabolism	KIRC	0.230465827
UPP2	Glycerophospholipid metæ	KIRC	0.135001969
UPP2	Glycine, serine and threor	KIRC	0.314621537
UPP2	Glycolysis / gluconeogene	KIRC	0.264104935
UPP2	Glycosaminoglycan biosy1	KIRC	-0.104324562
UPP2	Glycosaminoglycan biosy1	KIRC	-0.133735031
UPP2	Glycosaminoglycan biosy1	KIRC	-0.164965754
UPP2	Glycosaminoglycan degra	KIRC	0.056829208

UPP2	Glycosphingolipid biosyn	KIRC	-0.171039393
UPP2	Glycosphingolipid biosyn	KIRC	-0.08047398
UPP2	Glycosphingolipid biosyn	KIRC	0.135048585
UPP2	Glycosylphosphatidylinos	KIRC	-0.002277303
UPP2	Glyoxylate and dicarboxy	KIRC	0.208358935
UPP2	Granulocyte	KIRC	0.054328106
UPP2	Hedgehog_signaling	KIRC	-0.088113345
UPP2	Histidine metabolism	KIRC	0.269255303
UPP2	Hypoxia	KIRC	0.071346908
UPP2	Il-17alpha t cell	KIRC	0.04871868
UPP2	Il2_stat5_signaling	KIRC	0.044752964
UPP2	Il6_jak_stat3_signaling	KIRC	0.061485077
UPP2	Immune_checkpoints_tun	KIRC	-0.083612207
UPP2	Immune_inhibition_cytok	KIRC	0.031956303
UPP2	Inositol phosphate metabo	KIRC	-0.086417761
UPP2	Interleukin_6_signaling	KIRC	-0.061411127
UPP2	Jaeger_metastasis_up	KIRC	-0.028035662
UPP2	Jain_nfkb_signaling	KIRC	0.073153968
UPP2	Kras_signaling_up	KIRC	-0.033871799
UPP2	Linoleic acid metabolism	KIRC	0.18599766
UPP2	Lipoic acid metabolism	KIRC	0.088195704
UPP2	Lysine degradation	KIRC	0.082296141
UPP2	Lysosome	KIRC	0.054650293
UPP2	M1 macrophage	KIRC	0.009762295
UPP2	M2 macrophage	KIRC	4.32E-05
UPP2	Mannose type o-glycan bi	KIRC	-0.147299189
UPP2	Mapk_signaling_pathway	KIRC	-0.159947705
UPP2	Mapk3_erk1_activation	KIRC	-0.071601894
UPP2	Marginal zone b cell	KIRC	-0.019801235
UPP2	Memory b cell	KIRC	0.009925525
UPP2	Mesenchymal cell	KIRC	-0.150505915
UPP2	Mesenchymal stem cell	KIRC	0.025797569
UPP2	Metabolism of xenobiotic	KIRC	0.331299797
UPP2	Migrating cancer stem cel	KIRC	-0.046723414
UPP2	Mitotic_spindle	KIRC	-0.189456078
UPP2	Monocyte	KIRC	0.034365286
UPP2	Mtor_signaling_pathway	KIRC	-0.115762526
UPP2	Mtorc1_signaling	KIRC	0.024119415
UPP2	Mucin type o-glycan biosy	KIRC	-0.081357419
UPP2	Myc_targets_v1	KIRC	-0.034991104
UPP2	Myeloid cell	KIRC	0.049235041
UPP2	N-glycan biosynthesis	KIRC	-0.009751523
UPP2	Naive b cell	KIRC	0.046646815

UPP2	Naive cd4+ t cell	KIRC	-0.06577632
UPP2	Naive cd8+ t cell	KIRC	-0.089062603
UPP2	Natural killer cell	KIRC	0.037367798
UPP2	Natural killer t (nkt) cell	KIRC	-0.01027251
UPP2	Natural regulatory t (treg)	KIRC	-0.021359429
UPP2	Neomycin, kanamycin and	KIRC	-0.047243879
UPP2	Neutrophil	KIRC	0.071797085
UPP2	Nicotinate and nicotinami	KIRC	0.254223568
UPP2	Nitrogen metabolism	KIRC	0.105325094
UPP2	Nod_like_receptor_signal	KIRC	-0.007183347
UPP2	Notch_signaling	KIRC	-0.01680587
UPP2	One carbon pool by folate	KIRC	0.16051349
UPP2	Other glycan degradation	KIRC	0.019913984
UPP2	Other types of o-glycan b	KIRC	-0.063102733
UPP2	Oxidative phosphorylatio	KIRC	0.08800559
UPP2	P53_pathway	KIRC	0.068719072
UPP2	P53_signaling_pathway	KIRC	-0.031241041
UPP2	Pantothenate and coa bios	KIRC	0.176712342
UPP2	Pentose and glucuronate i	KIRC	0.332629943
UPP2	Pentose phosphate pathwa	KIRC	0.160502786
UPP2	Pericyte	KIRC	-0.024438528
UPP2	Phenylalanine metabolism	KIRC	0.304793921
UPP2	Phenylalanine, tyrosine ar	KIRC	0.141863114
UPP2	Phosphonate and phosphir	KIRC	0.106059828
UPP2	Pi3k_akt_activation	KIRC	-0.107048892
UPP2	Pi3k_akt_mtor_signaling	KIRC	0.01818665
UPP2	Porphyrin and chlorophyl	KIRC	0.312412167
UPP2	Primary bile acid biosynt	KIRC	0.282716296
UPP2	Propanoate metabolism	KIRC	0.137875345
UPP2	Purine metabolism	KIRC	-0.036884728
UPP2	Pyrimidine metabolism	KIRC	0.059932366
UPP2	Pyruvate metabolism	KIRC	0.18174605
UPP2	Regulation_of_autophagy	KIRC	-0.095812062
UPP2	Retinol metabolism	KIRC	0.308175517
UPP2	Riboflavin metabolism	KIRC	0.18254587
UPP2	Schmahl_pdgf_signaling	KIRC	0.044937789
UPP2	Selenocompound metabol	KIRC	0.086285439
UPP2	Signaling_by_hippo	KIRC	-0.095385211
UPP2	Sphingolipid metabolism	KIRC	0.064166609
UPP2	Starch and sucrose metab	KIRC	0.131913664
UPP2	Steroid biosynthesis	KIRC	0.029362302
UPP2	Steroid hormone biosynth	KIRC	0.367215108
UPP2	Sulfur metabolism	KIRC	0.16505882

UPP2	Synthesis and degradation	KIRC	0.099291308
UPP2	T helper cell	KIRC	0.089618733
UPP2	T helper1 (th1) cell	KIRC	0.124060453
UPP2	T helper17 (th17) cell	KIRC	0.041681514
UPP2	T helper2 (th2) cell	KIRC	0.074869394
UPP2	T helper9 (th9) cell	KIRC	0.007146897
UPP2	Taurine and hypotaurine r	KIRC	0.044812011
UPP2	Terpenoid backbone biosy	KIRC	0.110324765
UPP2	Tgf_beta_signaling_pathw	KIRC	-0.121826778
UPP2	Thiamine metabolism	KIRC	0.128536976
UPP2	Tnfa_signaling_via_nfkbc	KIRC	0.005999628
UPP2	Tryptophan metabolism	KIRC	0.238233691
UPP2	Tumor endothelial cell	KIRC	0.015257804
UPP2	Tyrosine metabolism	KIRC	0.305479259
UPP2	Ubiquinone and other terp	KIRC	0.136059713
UPP2	Valine, leucine and isoleu	KIRC	0.01553438
UPP2	Valine, leucine and isoleu	KIRC	0.166284271
UPP2	Vascular endothelial cell	KIRC	0.047741518
UPP2	Vascular smooth muscle c	KIRC	-0.082049293
UPP2	Vegf_signaling_pathway	KIRC	-0.133672324
UPP2	Vitamin b6 metabolism	KIRC	0.196374129
UPP2	Willert_wnt_signaling	KIRC	0.010177055
UPP2	Wnt_beta_catenin_signali	KIRC	-0.226186287
CDA	Abnormal plasma cell	KIRP	0.271606164
CDA	Activated b cell	KIRP	0.331431154
CDA	Activated cd4+ t cell	KIRP	0.340411904
CDA	Activated t cell	KIRP	0.373620291
CDA	Alanine, aspartate and glu	KIRP	-0.205075508
CDA	Alcala_apoptosis	KIRP	0.142639202
CDA	Alpha-linolenic acid meta	KIRP	0.287642438
CDA	Amino sugar and nucleoti	KIRP	0.116377805
CDA	Ampk_pathway	KIRP	-0.043624152
CDA	Angiogenesis	KIRP	0.280530526
CDA	Arachidonic acid metabol	KIRP	0.38534305
CDA	Arginine and proline metæ	KIRP	-0.021994783
CDA	Arginine biosynthesis	KIRP	-0.07214855
CDA	Ascorbate and aldarate mε	KIRP	-0.173343442
CDA	Atypical memory b cell	KIRP	0.20573206
CDA	Axl+siglec6+ dendritic ce	KIRP	0.2545066
CDA	B cell	KIRP	0.321769922
CDA	B1 cell	KIRP	0.345966329
CDA	Basal cell	KIRP	0.345798517
CDA	Beta-alanine metabolism	KIRP	-0.166563653

CDA	Biosynthesis of unsaturate	KIRP	-0.046521631
CDA	Biotin metabolism	KIRP	-0.153854494
CDA	Butanoate metabolism	KIRP	-0.306165975
CDA	Caffeine metabolism	KIRP	0.060613487
CDA	Cancer stem cell	KIRP	0.32751956
CDA	Cancer stem-like cell	KIRP	0.263384104
CDA	Cd4+ cytotoxic t cell	KIRP	0.422108691
CDA	Cd4+ memory t cell	KIRP	0.338047575
CDA	Cd4+ regulatory t cell	KIRP	0.372319085
CDA	Cd4+ t helper cell	KIRP	0.378111045
CDA	Cd4+cd25+ regulatory t c	KIRP	0.380844001
CDA	Cd8+ cytotoxic t cell	KIRP	0.340174229
CDA	Cd8+ regulatory t cell	KIRP	0.318915697
CDA	Cell_cycle	KIRP	-0.048463035
CDA	Chandran_metastasis_top5	KIRP	-0.269073194
CDA	Citrate cycle (tca cycle)	KIRP	-0.20247294
CDA	Cysteine and methionine r	KIRP	-0.169300648
CDA	Cytokine induced killer cε	KIRP	0.408951621
CDA	D-arginine and d-ornithin	KIRP	-0.16472074
CDA	D-glutamine and d-glutan	KIRP	-0.362701352
CDA	Dendritic cell	KIRP	0.391032702
CDA	Dna_repair	KIRP	0.025590424
CDA	Dna_replication	KIRP	-0.126977802
CDA	Double-negative memory	KIRP	0.293006892
CDA	Drug metabolism - cytoch	KIRP	-0.049774887
CDA	Drug metabolism - other c	KIRP	0.126408137
CDA	E2f_targets	KIRP	-0.084501343
CDA	Ecm_receptor_interaction	KIRP	0.267790584
CDA	Effector cd4+ memory t (	KIRP	0.308603093
CDA	Effector cd8+ memory t (	KIRP	0.378356977
CDA	Effector memory t cell	KIRP	0.394490627
CDA	Effector regulatory t (treg	KIRP	0.380236392
CDA	Elvidge_hif1a_targets_up	KIRP	-0.050747241
CDA	Endothelial cell	KIRP	0.418693484
CDA	Eosinophil	KIRP	0.397678492
CDA	Ether lipid metabolism	KIRP	0.169890038
CDA	Exhausted cd4+ t cell	KIRP	0.369545293
CDA	Exhausted cd8+ t cell	KIRP	0.415503627
CDA	Exhausted t cell	KIRP	0.335276542
CDA	Fat cell (adipocyte)	KIRP	-0.165609512
CDA	Fatty acid biosynthesis	KIRP	0.072318837
CDA	Fatty acid degradation	KIRP	-0.09636314
CDA	Fatty acid elongation	KIRP	-0.031053948

CDA	Fibroblast	KIRP	0.449711328
CDA	Folate biosynthesis	KIRP	-0.014487233
CDA	Follicular b cell	KIRP	0.414568986
CDA	Follicular dendritic cell	KIRP	0.244448362
CDA	Follicular helper (tfh) t ce	KIRP	0.329799615
CDA	Follicular t cell	KIRP	0.252891846
CDA	Foxp3+il-17+ t cell	KIRP	0.207089433
CDA	Fructose and mannose me	KIRP	0.147410719
CDA	G2m_checkpoint	KIRP	-0.049423651
CDA	Galactose metabolism	KIRP	0.065355546
CDA	Galie_tumor_stemness_ge	KIRP	0.034198947
CDA	Glutathione metabolism	KIRP	0.095524305
CDA	Glycerolipid metabolism	KIRP	0.078574521
CDA	Glycerophospholipid metæ	KIRP	0.171340237
CDA	Glycine, serine and threor	KIRP	-0.23217579
CDA	Glycolysis / gluconeogene	KIRP	-0.050599925
CDA	Glycosaminoglycan biosy1	KIRP	0.287008449
CDA	Glycosaminoglycan biosy1	KIRP	0.0640952
CDA	Glycosaminoglycan biosy1	KIRP	0.370219188
CDA	Glycosaminoglycan degra	KIRP	-0.029667833
CDA	Glycosphingolipid biosyn1	KIRP	0.325690346
CDA	Glycosphingolipid biosyn1	KIRP	0.290814652
CDA	Glycosphingolipid biosyn1	KIRP	0.261536724
CDA	Glycosylphosphatidylinos:	KIRP	-0.281145098
CDA	Glyoxylate and dicarboxy	KIRP	-0.19746663
CDA	Granulocyte	KIRP	0.327338466
CDA	Hedgehog_signaling	KIRP	0.038337609
CDA	Histidine metabolism	KIRP	-0.233753147
CDA	Hypoxia	KIRP	0.376695525
CDA	Il-17ralpha t cell	KIRP	0.345256426
CDA	Il2_stat5_signaling	KIRP	0.433258564
CDA	Il6_jak_stat3_signaling	KIRP	0.425551989
CDA	Immune_checkpoints_tunr	KIRP	0.32125331
CDA	Immune_inhibition_cytok	KIRP	0.463147587
CDA	Inositol phosphate metabo	KIRP	-0.041960378
CDA	Interleukin_6_signaling	KIRP	-0.021863058
CDA	Jaeger_metastasis_up	KIRP	0.012956548
CDA	Jain_nfkb_signaling	KIRP	-0.121816749
CDA	Kras_signaling_up	KIRP	0.376453337
CDA	Linoleic acid metabolism	KIRP	0.315349868
CDA	Lipoic acid metabolism	KIRP	0.018209272
CDA	Lysine degradation	KIRP	-0.414079209
CDA	Lysosome	KIRP	0.062652471

CDA	M1 macrophage	KIRP	0.39837337
CDA	M2 macrophage	KIRP	0.351802529
CDA	Mannose type o-glycan bi	KIRP	-0.161721776
CDA	Mapk_signaling_pathway	KIRP	0.306162904
CDA	Mapk3_erk1_activation	KIRP	0.027050142
CDA	Marginal zone b cell	KIRP	0.300287035
CDA	Memory b cell	KIRP	0.379919568
CDA	Mesenchymal cell	KIRP	0.35342222
CDA	Mesenchymal stem cell	KIRP	0.448847554
CDA	Metabolism of xenobiotic	KIRP	0.039822515
CDA	Migrating cancer stem cel	KIRP	0.164256928
CDA	Mitotic_spindle	KIRP	-0.214620927
CDA	Monocyte	KIRP	0.458362335
CDA	Mtor_signaling_pathway	KIRP	0.009574933
CDA	Mtorc1_signaling	KIRP	0.065447137
CDA	Mucin type o-glycan biosy	KIRP	-0.089618811
CDA	Myc_targets_v1	KIRP	-0.023992856
CDA	Myeloid cell	KIRP	0.368929741
CDA	N-glycan biosynthesis	KIRP	-0.044276349
CDA	Naive b cell	KIRP	0.292679775
CDA	Naive cd4+ t cell	KIRP	0.383978785
CDA	Naive cd8+ t cell	KIRP	0.406831583
CDA	Natural killer cell	KIRP	0.417892227
CDA	Natural killer t (nkt) cell	KIRP	0.312755302
CDA	Natural regulatory t (treg)	KIRP	0.377413155
CDA	Neomycin, kanamycin and	KIRP	0.302927516
CDA	Neutrophil	KIRP	0.501280281
CDA	Nicotinate and nicotinami	KIRP	-0.118614071
CDA	Nitrogen metabolism	KIRP	-0.009068112
CDA	Nod_like_receptor_signal	KIRP	0.417844293
CDA	Notch_signaling	KIRP	0.035424035
CDA	One carbon pool by folate	KIRP	-0.248983705
CDA	Other glycan degradation	KIRP	-0.13351666
CDA	Other types of o-glycan b	KIRP	-0.032934489
CDA	Oxidative phosphorylatio	KIRP	0.085299116
CDA	P53_pathway	KIRP	0.373376817
CDA	P53_signaling_pathway	KIRP	0.139835923
CDA	Pantothenate and coa bios	KIRP	0.076425564
CDA	Pentose and glucuronate i	KIRP	-0.146586063
CDA	Pentose phosphate pathwa	KIRP	0.01643855
CDA	Pericyte	KIRP	0.484934985
CDA	Phenylalanine metabolism	KIRP	-0.030641494
CDA	Phenylalanine, tyrosine ar	KIRP	-0.047926206

CDA	Phosphonate and phosphir	KIRP	-0.091413116
CDA	Pi3k_akt_activation	KIRP	-0.030109317
CDA	Pi3k_akt_mtor_signaling	KIRP	0.145915561
CDA	Porphyrin and chlorophyl	KIRP	-0.08908401
CDA	Primary bile acid biosynt	KIRP	-0.043459555
CDA	Propanoate metabolism	KIRP	-0.272472022
CDA	Purine metabolism	KIRP	0.095305904
CDA	Pyrimidine metabolism	KIRP	-0.054609281
CDA	Pyruvate metabolism	KIRP	-0.175398757
CDA	Regulation_of_autophagy	KIRP	-0.083007224
CDA	Retinol metabolism	KIRP	-0.054618155
CDA	Riboflavin metabolism	KIRP	0.003084957
CDA	Schmahl_pdgf_signaling	KIRP	0.058925495
CDA	Selenocompound metabol	KIRP	-0.264177005
CDA	Signaling_by_hippo	KIRP	-0.369443548
CDA	Sphingolipid metabolism	KIRP	-0.258958707
CDA	Starch and sucrose metab	KIRP	-0.024943018
CDA	Steroid biosynthesis	KIRP	-0.019100074
CDA	Steroid hormone biosynth	KIRP	-0.062392161
CDA	Sulfur metabolism	KIRP	-0.225406792
CDA	Synthesis and degradation	KIRP	-0.345528776
CDA	T helper cell	KIRP	0.359269395
CDA	T helper1 (th1) cell	KIRP	0.26162932
CDA	T helper17 (th17) cell	KIRP	0.384561967
CDA	T helper2 (th2) cell	KIRP	0.381631102
CDA	T helper9 (th9) cell	KIRP	0.496692036
CDA	Taurine and hypotaurine r	KIRP	0.151218956
CDA	Terpenoid backbone biosy	KIRP	-0.175045008
CDA	Tgf_beta_signaling_pathw	KIRP	-0.093856213
CDA	Thiamine metabolism	KIRP	-0.172328669
CDA	Tnfa_signaling_via_nfb	KIRP	0.394468851
CDA	Tryptophan metabolism	KIRP	-0.101999108
CDA	Tumor endothelial cell	KIRP	0.122321016
CDA	Tyrosine metabolism	KIRP	-0.029080037
CDA	Ubiquinone and other ter	KIRP	-0.162224205
CDA	Valine, leucine and isoleu	KIRP	0.161283683
CDA	Valine, leucine and isoleu	KIRP	-0.251661952
CDA	Vascular endothelial cell	KIRP	0.579047383
CDA	Vascular smooth muscle c	KIRP	0.407604402
CDA	Vegf_signaling_pathway	KIRP	0.384883159
CDA	Vitamin b6 metabolism	KIRP	-0.128251941
CDA	Willert_wnt_signaling	KIRP	-0.099274911
CDA	Wnt_beta_catenin_signali	KIRP	0.069465221

UCK1	Abnormal plasma cell	KIRP	-0.093568448
UCK1	Activated b cell	KIRP	0.02724922
UCK1	Activated cd4+ t cell	KIRP	-0.166660016
UCK1	Activated t cell	KIRP	-0.079497724
UCK1	Alanine, aspartate and glu	KIRP	-0.069486598
UCK1	Alcala_apoptosis	KIRP	0.063750137
UCK1	Alpha-linolenic acid meta	KIRP	0.224429186
UCK1	Amino sugar and nucleoti	KIRP	0.033284222
UCK1	Ampk_pathway	KIRP	0.048648608
UCK1	Angiogenesis	KIRP	-0.188534796
UCK1	Arachidonic acid metabol	KIRP	0.197009828
UCK1	Arginine and proline metε	KIRP	0.127014156
UCK1	Arginine biosynthesis	KIRP	-0.094330192
UCK1	Ascorbate and aldarate mε	KIRP	0.010996228
UCK1	Atypical memory b cell	KIRP	-0.051370829
UCK1	Axl+siglec6+ dendritic ce	KIRP	-0.106649101
UCK1	B cell	KIRP	-0.123563073
UCK1	B1 cell	KIRP	0.024465039
UCK1	Basal cell	KIRP	-0.205765401
UCK1	Beta-alanine metabolism	KIRP	0.045931805
UCK1	Biosynthesis of unsaturate	KIRP	0.083635483
UCK1	Biotin metabolism	KIRP	-0.069230089
UCK1	Butanoate metabolism	KIRP	0.090288665
UCK1	Caffeine metabolism	KIRP	-0.118715928
UCK1	Cancer stem cell	KIRP	-0.344526757
UCK1	Cancer stem-like cell	KIRP	-0.074381863
UCK1	Cd4+ cytotoxic t cell	KIRP	-0.013988603
UCK1	Cd4+ memory t cell	KIRP	-0.199899788
UCK1	Cd4+ regulatory t cell	KIRP	-0.060039598
UCK1	Cd4+ t helper cell	KIRP	-0.037968277
UCK1	Cd4+cd25+ regulatory t c	KIRP	-0.063258819
UCK1	Cd8+ cytotoxic t cell	KIRP	0.029546541
UCK1	Cd8+ regulatory t cell	KIRP	-0.023857992
UCK1	Cell_cycle	KIRP	-0.294471935
UCK1	Chandran_metastasis_top ⁵	KIRP	-0.37974389
UCK1	Citrate cycle (tca cycle)	KIRP	0.040105747
UCK1	Cysteine and methionine r	KIRP	-0.020381444
UCK1	Cytokine induced killer cε	KIRP	0.039498916
UCK1	D-arginine and d-ornithin	KIRP	0.207098477
UCK1	D-glutamine and d-glutan	KIRP	-0.394220318
UCK1	Dendritic cell	KIRP	-0.094858974
UCK1	Dna_repair	KIRP	0.351638826
UCK1	Dna_replication	KIRP	-0.000790438

UCK1	Double-negative memory KIRP	-0.001451499
UCK1	Drug metabolism - cytoch KIRP	0.164895145
UCK1	Drug metabolism - other (KIRP	0.238216628
UCK1	E2f_targets KIRP	-0.218469434
UCK1	Ecm_receptor_interaction KIRP	-0.331201663
UCK1	Effector cd4+ memory t (KIRP	-0.288859364
UCK1	Effector cd8+ memory t (KIRP	-0.040914968
UCK1	Effector memory t cell KIRP	-0.159001149
UCK1	Effector regulatory t (treg KIRP	-0.142311483
UCK1	Elvidge_hif1a_targets_up KIRP	-0.225081572
UCK1	Endothelial cell KIRP	-0.3362002
UCK1	Eosinophil KIRP	-0.034575045
UCK1	Ether lipid metabolism KIRP	0.002054148
UCK1	Exhausted cd4+ t cell KIRP	-0.225707945
UCK1	Exhausted cd8+ t cell KIRP	-0.150617466
UCK1	Exhausted t cell KIRP	0.061873304
UCK1	Fat cell (adipocyte) KIRP	0.19477579
UCK1	Fatty acid biosynthesis KIRP	-0.120651729
UCK1	Fatty acid degradation KIRP	0.016445349
UCK1	Fatty acid elongation KIRP	0.038851272
UCK1	Fibroblast KIRP	-0.268014628
UCK1	Folate biosynthesis KIRP	0.204091004
UCK1	Follicular b cell KIRP	-0.144403604
UCK1	Follicular dendritic cell KIRP	-0.102794248
UCK1	Follicular helper (tfh) t ce KIRP	-0.133580819
UCK1	Follicular t cell KIRP	0.12492067
UCK1	Foxp3+il-17+ t cell KIRP	-0.054159729
UCK1	Fructose and mannose me KIRP	0.108887547
UCK1	G2m_checkpoint KIRP	-0.348202225
UCK1	Galactose metabolism KIRP	0.072482978
UCK1	Galie_tumor_stemness_ge KIRP	-0.207188955
UCK1	Glutathione metabolism KIRP	0.117728753
UCK1	Glycerolipid metabolism KIRP	0.122248907
UCK1	Glycerophospholipid metε KIRP	0.248404559
UCK1	Glycine, serine and threor KIRP	0.186677854
UCK1	Glycolysis / gluconeogene KIRP	0.020101206
UCK1	Glycosaminoglycan biosy KIRP	0.105717042
UCK1	Glycosaminoglycan biosy KIRP	-0.01248155
UCK1	Glycosaminoglycan biosy KIRP	-0.029298341
UCK1	Glycosaminoglycan degra KIRP	0.039160768
UCK1	Glycosphingolipid biosyn KIRP	-0.02224991
UCK1	Glycosphingolipid biosyn KIRP	0.017704867
UCK1	Glycosphingolipid biosyn KIRP	0.100191972

UCK1	Glycosylphosphatidylinositol	KIRP	-0.068375462
UCK1	Glyoxylate and dicarboxylate	KIRP	0.126577075
UCK1	Granulocyte	KIRP	-0.021207728
UCK1	Hedgehog signaling	KIRP	-0.293374718
UCK1	Histidine metabolism	KIRP	0.211346024
UCK1	Hypoxia	KIRP	-0.168087291
UCK1	Il-17alpha t cell	KIRP	-0.053190808
UCK1	Il2_stat5_signaling	KIRP	-0.165524273
UCK1	Il6_jak_stat3_signaling	KIRP	-0.202059423
UCK1	Immune checkpoints tumor	KIRP	-0.221648895
UCK1	Immune inhibition cytokine	KIRP	0.09812748
UCK1	Inositol phosphate metabolism	KIRP	-0.396286225
UCK1	Interleukin_6_signaling	KIRP	-0.534500347
UCK1	Jaeger metastasis up	KIRP	-0.230223661
UCK1	Jain_nfkb_signaling	KIRP	-0.102598448
UCK1	Kras_signaling_up	KIRP	-0.245777365
UCK1	Linoleic acid metabolism	KIRP	0.206981921
UCK1	Lipoic acid metabolism	KIRP	0.312635938
UCK1	Lysine degradation	KIRP	0.033758276
UCK1	Lysosome	KIRP	0.045506114
UCK1	M1 macrophage	KIRP	-0.096997349
UCK1	M2 macrophage	KIRP	-0.028391825
UCK1	Mannose type o-glycan biosynthesis	KIRP	0.301661809
UCK1	Mapk_signaling_pathway	KIRP	-0.239076761
UCK1	Mapk3_erk1_activation	KIRP	-0.487118846
UCK1	Marginal zone b cell	KIRP	-0.206548631
UCK1	Memory b cell	KIRP	-0.072968902
UCK1	Mesenchymal cell	KIRP	-0.052338252
UCK1	Mesenchymal stem cell	KIRP	-0.265564495
UCK1	Metabolism of xenobiotics	KIRP	0.202826955
UCK1	Migrating cancer stem cell	KIRP	-0.295530861
UCK1	Mitotic_spindle	KIRP	-0.490460432
UCK1	Monocyte	KIRP	-0.021855023
UCK1	Mtor_signaling_pathway	KIRP	-0.192604226
UCK1	Mtorc1_signaling	KIRP	-0.180006603
UCK1	Mucin type o-glycan biosynthesis	KIRP	-0.512177794
UCK1	Myc_targets_v1	KIRP	0.018695874
UCK1	Myeloid cell	KIRP	-0.086834195
UCK1	N-glycan biosynthesis	KIRP	-0.146260127
UCK1	Naive b cell	KIRP	-0.038953973
UCK1	Naive cd4+ t cell	KIRP	-0.275030077
UCK1	Naive cd8+ t cell	KIRP	-0.222315531
UCK1	Natural killer cell	KIRP	-0.050592426

UCK1	Natural killer t (nkt) cell	KIRP	-0.174440477
UCK1	Natural regulatory t (treg)	KIRP	-0.14719403
UCK1	Neomycin, kanamycin and	KIRP	-0.062134267
UCK1	Neutrophil	KIRP	-0.086180089
UCK1	Nicotinate and nicotinami	KIRP	0.028752414
UCK1	Nitrogen metabolism	KIRP	-0.192268298
UCK1	Nod_like_receptor_signal	KIRP	-0.228675764
UCK1	Notch_signaling	KIRP	-0.119661192
UCK1	One carbon pool by folate	KIRP	-0.062895714
UCK1	Other glycan degradation	KIRP	0.003145793
UCK1	Other types of o-glycan b	KIRP	0.27861629
UCK1	Oxidative phosphorylatio	KIRP	0.369577293
UCK1	P53_pathway	KIRP	0.05891713
UCK1	P53_signaling_pathway	KIRP	-0.327584534
UCK1	Pantothenate and coa bios	KIRP	0.035749224
UCK1	Pentose and glucuronate i	KIRP	-0.023293741
UCK1	Pentose phosphate pathwa	KIRP	0.01464124
UCK1	Pericyte	KIRP	-0.139820433
UCK1	Phenylalanine metabolism	KIRP	0.200084056
UCK1	Phenylalanine, tyrosine ar	KIRP	0.122539631
UCK1	Phosphonate and phosphir	KIRP	-0.009578579
UCK1	Pi3k_akt_activation	KIRP	-0.393452665
UCK1	Pi3k_akt_mtor_signaling	KIRP	-0.246297644
UCK1	Porphyrin and chlorophyl	KIRP	0.114890443
UCK1	Primary bile acid biosynt	KIRP	0.165699265
UCK1	Propanoate metabolism	KIRP	-0.096765388
UCK1	Purine metabolism	KIRP	0.032095444
UCK1	Pyrimidine metabolism	KIRP	0.204963568
UCK1	Pyruvate metabolism	KIRP	0.093174416
UCK1	Regulation_of_autophagy	KIRP	-0.032807484
UCK1	Retinol metabolism	KIRP	0.158916752
UCK1	Riboflavin metabolism	KIRP	0.27475576
UCK1	Schmahl_pdgf_signaling	KIRP	-0.321671663
UCK1	Selenocompound metabol	KIRP	-0.134562921
UCK1	Signaling_by_hippo	KIRP	-0.490603442
UCK1	Sphingolipid metabolism	KIRP	-0.276051762
UCK1	Starch and sucrose metabo	KIRP	0.103618158
UCK1	Steroid biosynthesis	KIRP	0.111852424
UCK1	Steroid hormone biosynth	KIRP	0.0723075
UCK1	Sulfur metabolism	KIRP	-0.133745401
UCK1	Synthesis and degradation	KIRP	0.129660389
UCK1	T helper cell	KIRP	-0.091707662
UCK1	T helper1 (th1) cell	KIRP	0.046910024

UCK1	T helper17 (th17) cell	KIRP	-0.15653236
UCK1	T helper2 (th2) cell	KIRP	-0.171444722
UCK1	T helper9 (th9) cell	KIRP	-0.095221427
UCK1	Taurine and hypotaurine r	KIRP	0.013494809
UCK1	Terpenoid backbone biosy	KIRP	0.094635944
UCK1	Tgf_beta_signaling_pathw	KIRP	-0.400138826
UCK1	Thiamine metabolism	KIRP	0.235758342
UCK1	Tnfa_signaling_via_nfkb	KIRP	-0.205754761
UCK1	Tryptophan metabolism	KIRP	0.137991216
UCK1	Tumor endothelial cell	KIRP	-0.204388093
UCK1	Tyrosine metabolism	KIRP	0.228801431
UCK1	Ubiquinone and other terf	KIRP	-0.047072138
UCK1	Valine, leucine and isoleu	KIRP	0.225955575
UCK1	Valine, leucine and isoleu	KIRP	0.031278425
UCK1	Vascular endothelial cell	KIRP	-0.048689413
UCK1	Vascular smooth muscle c	KIRP	-0.123522809
UCK1	Vegf_signaling_pathway	KIRP	-0.009507032
UCK1	Vitamin b6 metabolism	KIRP	0.162951019
UCK1	Willert_wnt_signaling	KIRP	-0.118314403
UCK1	Wnt_beta_catenin_signali	KIRP	-0.093813588
UCK2	Abnormal plasma cell	KIRP	0.287534166
UCK2	Activated b cell	KIRP	0.11947253
UCK2	Activated cd4+ t cell	KIRP	0.153847538
UCK2	Activated t cell	KIRP	0.271936496
UCK2	Alanine, aspartate and glu	KIRP	0.127666001
UCK2	Alcala_apoptosis	KIRP	0.337575682
UCK2	Alpha-linolenic acid meta	KIRP	0.071104452
UCK2	Amino sugar and nucleoti	KIRP	0.331919985
UCK2	Ampk_pathway	KIRP	0.214745245
UCK2	Angiogenesis	KIRP	0.063172351
UCK2	Arachidonic acid metabol:	KIRP	0.231175434
UCK2	Arginine and proline metæ	KIRP	0.175779984
UCK2	Arginine biosynthesis	KIRP	-0.0357591
UCK2	Ascorbate and aldarate mε	KIRP	0.27050523
UCK2	Atypical memory b cell	KIRP	0.33818609
UCK2	Axl+siglec6+ dendritic ce	KIRP	-0.063643453
UCK2	B cell	KIRP	0.160244011
UCK2	B1 cell	KIRP	0.129224863
UCK2	Basal cell	KIRP	0.277701025
UCK2	Beta-alanine metabolism	KIRP	-0.062225104
UCK2	Biosynthesis of unsaturate	KIRP	0.121506397
UCK2	Biotin metabolism	KIRP	-0.196849599
UCK2	Butanoate metabolism	KIRP	-0.251909953

UCK2	Caffeine metabolism	KIRP	0.065082203
UCK2	Cancer stem cell	KIRP	0.115048162
UCK2	Cancer stem-like cell	KIRP	-0.227679931
UCK2	Cd4+ cytotoxic t cell	KIRP	0.095077459
UCK2	Cd4+ memory t cell	KIRP	0.178567048
UCK2	Cd4+ regulatory t cell	KIRP	0.156675592
UCK2	Cd4+ t helper cell	KIRP	0.112652912
UCK2	Cd4+cd25+ regulatory t c	KIRP	0.126335167
UCK2	Cd8+ cytotoxic t cell	KIRP	0.112898353
UCK2	Cd8+ regulatory t cell	KIRP	0.174702107
UCK2	Cell_cycle	KIRP	0.544277577
UCK2	Chandran_metastasis_top5	KIRP	0.385949783
UCK2	Citrate cycle (tca cycle)	KIRP	-0.125557004
UCK2	Cysteine and methionine r	KIRP	0.253905844
UCK2	Cytokine induced killer c	KIRP	0.177892737
UCK2	D-arginine and d-ornithin	KIRP	-0.106194251
UCK2	D-glutamine and d-glutan	KIRP	-0.28426491
UCK2	Dendritic cell	KIRP	0.064555692
UCK2	Dna_repair	KIRP	0.326252939
UCK2	Dna_replication	KIRP	0.445729288
UCK2	Double-negative memory	KIRP	0.19992597
UCK2	Drug metabolism - cytoch	KIRP	0.119212891
UCK2	Drug metabolism - other c	KIRP	0.369286002
UCK2	E2f_targets	KIRP	0.603084451
UCK2	Ecm_receptor_interaction	KIRP	0.215713424
UCK2	Effector cd4+ memory t (	KIRP	0.13597484
UCK2	Effector cd8+ memory t (	KIRP	-0.000367189
UCK2	Effector memory t cell	KIRP	0.158918016
UCK2	Effector regulatory t (treg	KIRP	0.157413647
UCK2	Elvidge_hif1a_targets_up	KIRP	0.430446973
UCK2	Endothelial cell	KIRP	0.236363661
UCK2	Eosinophil	KIRP	0.073434467
UCK2	Ether lipid metabolism	KIRP	-0.039823826
UCK2	Exhausted cd4+ t cell	KIRP	0.233569637
UCK2	Exhausted cd8+ t cell	KIRP	0.183612639
UCK2	Exhausted t cell	KIRP	0.154610257
UCK2	Fat cell (adipocyte)	KIRP	-0.125410531
UCK2	Fatty acid biosynthesis	KIRP	0.027925594
UCK2	Fatty acid degradation	KIRP	-0.107634004
UCK2	Fatty acid elongation	KIRP	0.094520186
UCK2	Fibroblast	KIRP	0.344146558
UCK2	Folate biosynthesis	KIRP	0.326527303
UCK2	Follicular b cell	KIRP	0.193065883

UCK2	Follicular dendritic cell	KIRP	0.073616125
UCK2	Follicular helper (tfh) t cell	KIRP	0.183469531
UCK2	Follicular t cell	KIRP	0.198691883
UCK2	Foxp3+il-17+ t cell	KIRP	0.298641141
UCK2	Fructose and mannose metabolism	KIRP	0.270430787
UCK2	G2m_checkpoint	KIRP	0.56997766
UCK2	Galactose metabolism	KIRP	0.159242599
UCK2	Galie_tumor_stemness_gene	KIRP	-0.172502438
UCK2	Glutathione metabolism	KIRP	0.419854939
UCK2	Glycerolipid metabolism	KIRP	0.244436622
UCK2	Glycerophospholipid metabolism	KIRP	-0.064229807
UCK2	Glycine, serine and threonine metabolism	KIRP	-0.096696912
UCK2	Glycolysis / gluconeogenesis	KIRP	0.041895912
UCK2	Glycosaminoglycan biosynthesis	KIRP	0.006199116
UCK2	Glycosaminoglycan biosynthesis	KIRP	-0.003477958
UCK2	Glycosaminoglycan biosynthesis	KIRP	0.31063373
UCK2	Glycosaminoglycan degradation	KIRP	-0.140626771
UCK2	Glycosphingolipid biosynthesis	KIRP	0.24143372
UCK2	Glycosphingolipid biosynthesis	KIRP	0.124631387
UCK2	Glycosphingolipid biosynthesis	KIRP	0.045821835
UCK2	Glycosylphosphatidylinositol biosynthesis	KIRP	0.006882068
UCK2	Glyoxylate and dicarboxylate metabolism	KIRP	-0.135274309
UCK2	Granulocyte	KIRP	0.048142743
UCK2	Hedgehog signaling	KIRP	0.084861786
UCK2	Histidine metabolism	KIRP	-0.349884091
UCK2	Hypoxia	KIRP	0.21994797
UCK2	Il-17alpha t cell	KIRP	0.093437661
UCK2	Il2_stat5_signaling	KIRP	0.19754091
UCK2	Il6_jak_stat3_signaling	KIRP	0.212476559
UCK2	Immune_checkpoints_tumor	KIRP	0.248312601
UCK2	Immune_inhibition_cytokines	KIRP	0.117611461
UCK2	Inositol phosphate metabolism	KIRP	-0.140023334
UCK2	Interleukin_6_signaling	KIRP	0.023509132
UCK2	Jaeger_metastasis_up	KIRP	0.507455032
UCK2	Jain_nfkb_signaling	KIRP	0.606010738
UCK2	Kras_signaling_up	KIRP	0.034155222
UCK2	Linoleic acid metabolism	KIRP	0.106264182
UCK2	Lipoic acid metabolism	KIRP	-0.020662361
UCK2	Lysine degradation	KIRP	-0.295457106
UCK2	Lysosome	KIRP	-0.057972119
UCK2	M1 macrophage	KIRP	0.122801778
UCK2	M2 macrophage	KIRP	0.028630222
UCK2	Mannose type o-glycan biosynthesis	KIRP	-0.189279686

UCK2	Mapk_signaling_pathway	KIRP	0.171852586
UCK2	Mapk3_erk1_activation	KIRP	0.206509352
UCK2	Marginal zone b cell	KIRP	0.089238136
UCK2	Memory b cell	KIRP	0.116709116
UCK2	Mesenchymal cell	KIRP	0.148624398
UCK2	Mesenchymal stem cell	KIRP	0.187027025
UCK2	Metabolism of xenobiotic	KIRP	0.276763871
UCK2	Migrating cancer stem cel	KIRP	-0.037783953
UCK2	Mitotic_spindle	KIRP	0.110979735
UCK2	Monocyte	KIRP	0.107062328
UCK2	Mtor_signaling_pathway	KIRP	0.039196109
UCK2	Mtorc1_signaling	KIRP	0.605230697
UCK2	Mucin type o-glycan bios	KIRP	0.055042512
UCK2	Myc_targets_v1	KIRP	0.646367031
UCK2	Myeloid cell	KIRP	0.062378
UCK2	N-glycan biosynthesis	KIRP	0.271691626
UCK2	Naive b cell	KIRP	0.214265336
UCK2	Naive cd4+ t cell	KIRP	0.172105319
UCK2	Naive cd8+ t cell	KIRP	0.088332477
UCK2	Natural killer cell	KIRP	0.10933207
UCK2	Natural killer t (nkt) cell	KIRP	0.352728764
UCK2	Natural regulatory t (treg)	KIRP	0.069521901
UCK2	Neomycin, kanamycin an	KIRP	0.212164412
UCK2	Neutrophil	KIRP	0.164174203
UCK2	Nicotinate and nicotinami	KIRP	-0.12032848
UCK2	Nitrogen metabolism	KIRP	-0.072307191
UCK2	Nod_like_receptor_signal	KIRP	0.212906934
UCK2	Notch_signaling	KIRP	0.068160983
UCK2	One carbon pool by folate	KIRP	0.327030382
UCK2	Other glycan degradation	KIRP	-0.070150716
UCK2	Other types of o-glycan b	KIRP	-0.206630017
UCK2	Oxidative phosphorylatio	KIRP	0.061318414
UCK2	P53_pathway	KIRP	0.199898979
UCK2	P53_signaling_pathway	KIRP	0.414667829
UCK2	Pantothenate and coa bios	KIRP	0.003656772
UCK2	Pentose and glucuronate i	KIRP	0.357724662
UCK2	Pentose phosphate pathwa	KIRP	0.40751549
UCK2	Pericyte	KIRP	0.277081354
UCK2	Phenylalanine metabolism	KIRP	0.048310848
UCK2	Phenylalanine, tyrosine ar	KIRP	0.124125626
UCK2	Phosphonate and phosphir	KIRP	0.067546284
UCK2	Pi3k_akt_activation	KIRP	-0.115834732
UCK2	Pi3k_akt_mtor_signaling	KIRP	0.313869491

UCK2	Porphyrin and chlorophyl	KIRP	0.290301543
UCK2	Primary bile acid biosynt	KIRP	-0.05840212
UCK2	Propanoate metabolism	KIRP	-0.258765708
UCK2	Purine metabolism	KIRP	0.575799841
UCK2	Pyrimidine metabolism	KIRP	0.458892849
UCK2	Pyruvate metabolism	KIRP	-0.036488543
UCK2	Regulation_of_autophagy	KIRP	-0.29419303
UCK2	Retinol metabolism	KIRP	0.222544987
UCK2	Riboflavin metabolism	KIRP	0.201602287
UCK2	Schmahl_pdgf_signaling	KIRP	-0.202263457
UCK2	Selenocompound metabol	KIRP	0.105152972
UCK2	Signaling_by_hippo	KIRP	-0.232494344
UCK2	Sphingolipid metabolism	KIRP	-0.262482835
UCK2	Starch and sucrose metabo	KIRP	-0.248779195
UCK2	Steroid biosynthesis	KIRP	0.268255605
UCK2	Steroid hormone biosynth	KIRP	0.335564937
UCK2	Sulfur metabolism	KIRP	-0.039041829
UCK2	Synthesis and degradation	KIRP	-0.342847553
UCK2	T helper cell	KIRP	0.080787188
UCK2	T helper1 (th1) cell	KIRP	-0.030022138
UCK2	T helper17 (th17) cell	KIRP	-0.002007494
UCK2	T helper2 (th2) cell	KIRP	0.097898299
UCK2	T helper9 (th9) cell	KIRP	0.217254276
UCK2	Taurine and hypotaurine r	KIRP	-0.130436134
UCK2	Terpenoid backbone biosy	KIRP	0.080191231
UCK2	Tgf_beta_signaling_pathw	KIRP	-0.00666294
UCK2	Thiamine metabolism	KIRP	-0.075380548
UCK2	Tnfa_signaling_via_nfkb	KIRP	0.106441487
UCK2	Tryptophan metabolism	KIRP	-0.003281971
UCK2	Tumor endothelial cell	KIRP	0.293168742
UCK2	Tyrosine metabolism	KIRP	0.013848807
UCK2	Ubiquinone and other ter	KIRP	0.132829339
UCK2	Valine, leucine and isoleu	KIRP	0.037742515
UCK2	Valine, leucine and isoleu	KIRP	-0.226014772
UCK2	Vascular endothelial cell	KIRP	0.403349731
UCK2	Vascular smooth muscle c	KIRP	0.342265485
UCK2	Vegf_signaling_pathway	KIRP	0.137674495
UCK2	Vitamin b6 metabolism	KIRP	0.122415109
UCK2	Willert_wnt_signaling	KIRP	0.137038016
UCK2	Wnt_beta_catenin_signali	KIRP	-0.000171962
UCKL1	Abnormal plasma cell	KIRP	-0.279232528
UCKL1	Activated b cell	KIRP	-0.283055427
UCKL1	Activated cd4+ t cell	KIRP	-0.309359568

UCKL1	Activated t cell	KIRP	-0.321832017
UCKL1	Alanine, aspartate and glu	KIRP	-0.301937818
UCKL1	Alcala_apoptosis	KIRP	-0.308206249
UCKL1	Alpha-linolenic acid meta	KIRP	0.017785369
UCKL1	Amino sugar and nucleoti	KIRP	-0.36252258
UCKL1	Ampk_pathway	KIRP	0.098692808
UCKL1	Angiogenesis	KIRP	-0.339748542
UCKL1	Arachidonic acid metabol	KIRP	-0.132508307
UCKL1	Arginine and proline metæ	KIRP	-0.330202404
UCKL1	Arginine biosynthesis	KIRP	-0.249148539
UCKL1	Ascorbate and aldarate mε	KIRP	-0.318019821
UCKL1	Atypical memory b cell	KIRP	-0.313016245
UCKL1	Axl+siglec6+ dendritic ce	KIRP	-0.301312741
UCKL1	B cell	KIRP	-0.394380157
UCKL1	B1 cell	KIRP	-0.281760387
UCKL1	Basal cell	KIRP	0.040520898
UCKL1	Beta-alanine metabolism	KIRP	-0.271931741
UCKL1	Biosynthesis of unsaturate	KIRP	-0.252510278
UCKL1	Biotin metabolism	KIRP	-0.018048892
UCKL1	Butanoate metabolism	KIRP	-0.094918791
UCKL1	Caffeine metabolism	KIRP	-0.230350284
UCKL1	Cancer stem cell	KIRP	-0.370316049
UCKL1	Cancer stem-like cell	KIRP	-0.102598596
UCKL1	Cd4+ cytotoxic t cell	KIRP	-0.311503215
UCKL1	Cd4+ memory t cell	KIRP	-0.244495295
UCKL1	Cd4+ regulatory t cell	KIRP	-0.283802676
UCKL1	Cd4+ t helper cell	KIRP	-0.266165983
UCKL1	Cd4+cd25+ regulatory t c	KIRP	-0.284050619
UCKL1	Cd8+ cytotoxic t cell	KIRP	-0.24367898
UCKL1	Cd8+ regulatory t cell	KIRP	-0.306200373
UCKL1	Cell_cycle	KIRP	-0.217884028
UCKL1	Chandran_metastasis_top5	KIRP	-0.262730386
UCKL1	Citrate cycle (tca cycle)	KIRP	-0.143888439
UCKL1	Cysteine and methionine r	KIRP	-0.336868465
UCKL1	Cytokine induced killer cε	KIRP	-0.238773361
UCKL1	D-arginine and d-ornithin	KIRP	0.032691706
UCKL1	D-glutamine and d-glutan	KIRP	-0.151022792
UCKL1	Dendritic cell	KIRP	-0.264220635
UCKL1	Dna_repair	KIRP	0.127650839
UCKL1	Dna_replication	KIRP	-0.041570391
UCKL1	Double-negative memory	KIRP	-0.170445538
UCKL1	Drug metabolism - cytoch	KIRP	-0.090193539
UCKL1	Drug metabolism - other ε	KIRP	-0.089410721

UCKL1	E2f_targets	KIRP	-0.070115113
UCKL1	Ecm_receptor_interaction	KIRP	-0.4179284
UCKL1	Effector cd4+ memory t (	KIRP	-0.318628716
UCKL1	Effector cd8+ memory t (	KIRP	-0.269144782
UCKL1	Effector memory t cell	KIRP	-0.329796408
UCKL1	Effector regulatory t (treg	KIRP	-0.317441637
UCKL1	Elvidge_hif1a_targets_up	KIRP	-0.415992752
UCKL1	Endothelial cell	KIRP	-0.384898714
UCKL1	Eosinophil	KIRP	-0.262523257
UCKL1	Ether lipid metabolism	KIRP	-0.195023528
UCKL1	Exhausted cd4+ t cell	KIRP	-0.480627239
UCKL1	Exhausted cd8+ t cell	KIRP	-0.366064228
UCKL1	Exhausted t cell	KIRP	-0.224907794
UCKL1	Fat cell (adipocyte)	KIRP	-0.070546762
UCKL1	Fatty acid biosynthesis	KIRP	-0.150857183
UCKL1	Fatty acid degradation	KIRP	-0.238072077
UCKL1	Fatty acid elongation	KIRP	-0.298406849
UCKL1	Fibroblast	KIRP	-0.444063827
UCKL1	Folate biosynthesis	KIRP	-0.256567166
UCKL1	Follicular b cell	KIRP	-0.297711181
UCKL1	Follicular dendritic cell	KIRP	-0.279905897
UCKL1	Follicular helper (tfh) t ce	KIRP	-0.372122312
UCKL1	Follicular t cell	KIRP	-0.092395856
UCKL1	Foxp3+il-17+ t cell	KIRP	-0.292069298
UCKL1	Fructose and mannose me	KIRP	-0.188125164
UCKL1	G2m_checkpoint	KIRP	-0.172074709
UCKL1	Galactose metabolism	KIRP	-0.281050933
UCKL1	Galie_tumor_stemness_ge	KIRP	-0.221375468
UCKL1	Glutathione metabolism	KIRP	-0.264035594
UCKL1	Glycerolipid metabolism	KIRP	-0.170999866
UCKL1	Glycerophospholipid metæ	KIRP	0.199009315
UCKL1	Glycine, serine and threor	KIRP	-0.153576306
UCKL1	Glycolysis / gluconeogene	KIRP	-0.255640836
UCKL1	Glycosaminoglycan biosy	KIRP	-0.197254325
UCKL1	Glycosaminoglycan biosy	KIRP	-0.271509883
UCKL1	Glycosaminoglycan biosy	KIRP	-0.327810077
UCKL1	Glycosaminoglycan degra	KIRP	-0.189966539
UCKL1	Glycosphingolipid biosyn	KIRP	-0.370852975
UCKL1	Glycosphingolipid biosyn	KIRP	-0.271514461
UCKL1	Glycosphingolipid biosyn	KIRP	-0.140330385
UCKL1	Glycosylphosphatidylinos	KIRP	-0.02471216
UCKL1	Glyoxylate and dicarboxy	KIRP	-0.124967344
UCKL1	Granulocyte	KIRP	-0.231427363

UCKL1	Hedgehog_signaling	KIRP	-0.37434278
UCKL1	Histidine metabolism	KIRP	-0.107327454
UCKL1	Hypoxia	KIRP	-0.419388219
UCKL1	Il-17alpha t cell	KIRP	-0.247838035
UCKL1	Il2_stat5_signaling	KIRP	-0.451128872
UCKL1	Il6_jak_stat3_signaling	KIRP	-0.47540809
UCKL1	Immune_checkpoints_tun	KIRP	-0.363762038
UCKL1	Immune_inhibition_cytok	KIRP	-0.200345339
UCKL1	Inositol phosphate metabo	KIRP	-0.348110097
UCKL1	Interleukin_6_signaling	KIRP	-0.530667683
UCKL1	Jaeger_metastasis_up	KIRP	-0.438055641
UCKL1	Jain_nfkb_signaling	KIRP	-0.218394412
UCKL1	Kras_signaling_up	KIRP	-0.472866077
UCKL1	Linoleic acid metabolism	KIRP	0.172735303
UCKL1	Lipoic acid metabolism	KIRP	0.236195269
UCKL1	Lysine degradation	KIRP	-0.054882086
UCKL1	Lysosome	KIRP	-0.309998717
UCKL1	M1 macrophage	KIRP	-0.299955459
UCKL1	M2 macrophage	KIRP	-0.286640505
UCKL1	Mannose type o-glycan bi	KIRP	0.20222678
UCKL1	Mapk_signaling_pathway	KIRP	-0.461185072
UCKL1	Mapk3_erk1_activation	KIRP	-0.560079212
UCKL1	Marginal zone b cell	KIRP	-0.319134762
UCKL1	Memory b cell	KIRP	-0.256227824
UCKL1	Mesenchymal cell	KIRP	-0.158537064
UCKL1	Mesenchymal stem cell	KIRP	-0.412859217
UCKL1	Metabolism of xenobiotic	KIRP	-0.135996846
UCKL1	Migrating cancer stem cel	KIRP	-0.234905255
UCKL1	Mitotic_spindle	KIRP	-0.246188287
UCKL1	Monocyte	KIRP	-0.278727106
UCKL1	Mtor_signaling_pathway	KIRP	-0.444419028
UCKL1	Mtorc1_signaling	KIRP	-0.515405896
UCKL1	Mucin type o-glycan biosy	KIRP	-0.487136801
UCKL1	Myc_targets_v1	KIRP	-0.122752502
UCKL1	Myeloid cell	KIRP	-0.310897041
UCKL1	N-glycan biosynthesis	KIRP	-0.443240481
UCKL1	Naive b cell	KIRP	-0.224289511
UCKL1	Naive cd4+ t cell	KIRP	-0.393439046
UCKL1	Naive cd8+ t cell	KIRP	-0.292299862
UCKL1	Natural killer cell	KIRP	-0.303522765
UCKL1	Natural killer t (nkt) cell	KIRP	-0.215827076
UCKL1	Natural regulatory t (treg)	KIRP	-0.254107346
UCKL1	Neomycin, kanamycin and	KIRP	-0.22746923

UCKL1	Neutrophil	KIRP	-0.296363058
UCKL1	Nicotinate and nicotinami	KIRP	-0.158605075
UCKL1	Nitrogen metabolism	KIRP	-0.364971845
UCKL1	Nod_like_receptor_signal	KIRP	-0.417986873
UCKL1	Notch_signaling	KIRP	-0.170598772
UCKL1	One carbon pool by folate	KIRP	-0.273918611
UCKL1	Other glycan degradation	KIRP	-0.161549936
UCKL1	Other types of o-glycan b	KIRP	0.228013076
UCKL1	Oxidative phosphorylatior	KIRP	0.07410922
UCKL1	P53_pathway	KIRP	-0.307980068
UCKL1	P53_signaling_pathway	KIRP	-0.355577858
UCKL1	Pantothenate and coa bios	KIRP	-0.276500575
UCKL1	Pentose and glucuronate i	KIRP	-0.297188966
UCKL1	Pentose phosphate pathwa	KIRP	-0.368191936
UCKL1	Pericyte	KIRP	-0.34165942
UCKL1	Phenylalanine metabolism	KIRP	-0.174330956
UCKL1	Phenylalanine, tyrosine ar	KIRP	-0.137946939
UCKL1	Phosphonate and phosphir	KIRP	-0.147634594
UCKL1	Pi3k_akt_activation	KIRP	-0.322994039
UCKL1	Pi3k_akt_mtor_signaling	KIRP	-0.550383257
UCKL1	Porphyrin and chlorophyl	KIRP	-0.264156917
UCKL1	Primary bile acid biosynt	KIRP	-0.190814226
UCKL1	Propanoate metabolism	KIRP	-0.177572837
UCKL1	Purine metabolism	KIRP	-0.301306519
UCKL1	Pyrimidine metabolism	KIRP	-0.00830395
UCKL1	Pyruvate metabolism	KIRP	-0.189502553
UCKL1	Regulation_of_autophagy	KIRP	-0.200399546
UCKL1	Retinol metabolism	KIRP	-0.156435762
UCKL1	Riboflavin metabolism	KIRP	-0.178187885
UCKL1	Schmahl_pdgf_signaling	KIRP	-0.382616697
UCKL1	Selenocompound metabol	KIRP	-0.337000167
UCKL1	Signaling_by_hippo	KIRP	-0.217898916
UCKL1	Sphingolipid metabolism	KIRP	-0.390189678
UCKL1	Starch and sucrose metabo	KIRP	-0.13032162
UCKL1	Steroid biosynthesis	KIRP	-0.028014381
UCKL1	Steroid hormone biosynth	KIRP	-0.151193083
UCKL1	Sulfur metabolism	KIRP	-0.281488122
UCKL1	Synthesis and degradation	KIRP	0.077524756
UCKL1	T helper cell	KIRP	-0.330213373
UCKL1	T helper1 (th1) cell	KIRP	-0.196183343
UCKL1	T helper17 (th17) cell	KIRP	-0.196966103
UCKL1	T helper2 (th2) cell	KIRP	-0.32045665
UCKL1	T helper9 (th9) cell	KIRP	-0.256254415

UCKL1	Taurine and hypotaurine r	KIRP	0.28412835
UCKL1	Terpenoid backbone biosy	KIRP	-0.164250674
UCKL1	Tgf_beta_signaling_pathw	KIRP	-0.212678761
UCKL1	Thiamine metabolism	KIRP	-0.065455436
UCKL1	Tnfa_signaling_via_nfkb	KIRP	-0.372014683
UCKL1	Tryptophan metabolism	KIRP	-0.251483711
UCKL1	Tumor endothelial cell	KIRP	-0.006666956
UCKL1	Tyrosine metabolism	KIRP	-0.130414525
UCKL1	Ubiquinone and other ter	KIRP	-0.158395422
UCKL1	Valine, leucine and isoleu	KIRP	-0.134907385
UCKL1	Valine, leucine and isoleu	KIRP	-0.161587502
UCKL1	Vascular endothelial cell	KIRP	-0.402804617
UCKL1	Vascular smooth muscle c	KIRP	-0.299618369
UCKL1	Vegf_signaling_pathway	KIRP	-0.272995374
UCKL1	Vitamin b6 metabolism	KIRP	-0.1723925
UCKL1	Willert_wnt_signaling	KIRP	0.033153028
UCKL1	Wnt_beta_catenin_signali	KIRP	0.052509476
UPP1	Abnormal plasma cell	KIRP	0.159390173
UPP1	Activated b cell	KIRP	0.156075042
UPP1	Activated cd4+ t cell	KIRP	0.087772774
UPP1	Activated t cell	KIRP	0.150219108
UPP1	Alanine, aspartate and glu	KIRP	-0.209145895
UPP1	Alcala_apoptosis	KIRP	0.067223042
UPP1	Alpha-linolenic acid meta	KIRP	0.069538248
UPP1	Amino sugar and nucleoti	KIRP	0.004523843
UPP1	Ampk_pathway	KIRP	0.067951438
UPP1	Angiogenesis	KIRP	0.112319263
UPP1	Arachidonic acid metabol	KIRP	0.136787673
UPP1	Arginine and proline met	KIRP	-0.044528925
UPP1	Arginine biosynthesis	KIRP	-0.133329387
UPP1	Ascorbate and aldarate m	KIRP	-0.274816272
UPP1	Atypical memory b cell	KIRP	-0.131383179
UPP1	Axl+siglec6+ dendritic ce	KIRP	0.146511403
UPP1	B cell	KIRP	0.010969736
UPP1	B1 cell	KIRP	0.165084312
UPP1	Basal cell	KIRP	0.330034731
UPP1	Beta-alanine metabolism	KIRP	-0.245430888
UPP1	Biosynthesis of unsaturate	KIRP	-0.229024883
UPP1	Biotin metabolism	KIRP	-0.128930174
UPP1	Butanoate metabolism	KIRP	-0.232043968
UPP1	Caffeine metabolism	KIRP	-0.195251518
UPP1	Cancer stem cell	KIRP	0.086984102
UPP1	Cancer stem-like cell	KIRP	0.14393814

UPP1	Cd4+ cytotoxic t cell	KIRP	0.231196547
UPP1	Cd4+ memory t cell	KIRP	0.083027435
UPP1	Cd4+ regulatory t cell	KIRP	0.130549698
UPP1	Cd4+ t helper cell	KIRP	0.136520985
UPP1	Cd4+cd25+ regulatory t c	KIRP	0.136764783
UPP1	Cd8+ cytotoxic t cell	KIRP	0.176297385
UPP1	Cd8+ regulatory t cell	KIRP	0.123817733
UPP1	Cell_cycle	KIRP	-0.018297467
UPP1	Chandran_metastasis_top5	KIRP	-0.260090822
UPP1	Citrate cycle (tca cycle)	KIRP	-0.130619949
UPP1	Cysteine and methionine r	KIRP	-0.187385296
UPP1	Cytokine induced killer ce	KIRP	0.216452553
UPP1	D-arginine and d-ornithin	KIRP	-0.206352139
UPP1	D-glutamine and d-glutan	KIRP	-0.35080907
UPP1	Dendritic cell	KIRP	0.107142978
UPP1	Dna_repair	KIRP	0.250147825
UPP1	Dna_replication	KIRP	0.095581712
UPP1	Double-negative memory	KIRP	0.114838553
UPP1	Drug metabolism - cytoch	KIRP	-0.073674526
UPP1	Drug metabolism - other c	KIRP	0.145336224
UPP1	E2f_targets	KIRP	0.03321161
UPP1	Ecm_receptor_interaction	KIRP	0.077721104
UPP1	Effector cd4+ memory t (	KIRP	0.017789852
UPP1	Effector cd8+ memory t (	KIRP	0.162278093
UPP1	Effector memory t cell	KIRP	0.13074
UPP1	Effector regulatory t (treg	KIRP	0.075442521
UPP1	Elvidge_hif1a_targets_up	KIRP	-0.099095404
UPP1	Endothelial cell	KIRP	0.118761257
UPP1	Eosinophil	KIRP	0.153695137
UPP1	Ether lipid metabolism	KIRP	-0.047683939
UPP1	Exhausted cd4+ t cell	KIRP	0.063896423
UPP1	Exhausted cd8+ t cell	KIRP	0.130216026
UPP1	Exhausted t cell	KIRP	0.16877981
UPP1	Fat cell (adipocyte)	KIRP	-0.015056453
UPP1	Fatty acid biosynthesis	KIRP	-0.087345576
UPP1	Fatty acid degradation	KIRP	-0.219799369
UPP1	Fatty acid elongation	KIRP	-0.126315153
UPP1	Fibroblast	KIRP	0.12403494
UPP1	Folate biosynthesis	KIRP	-0.018535439
UPP1	Follicular b cell	KIRP	0.103125883
UPP1	Follicular dendritic cell	KIRP	0.072726529
UPP1	Follicular helper (tfh) t ce	KIRP	-0.007411439
UPP1	Follicular t cell	KIRP	0.178413123

UPP1	Foxp3+il-17+ t cell	KIRP	0.013170354
UPP1	Fructose and mannose me	KIRP	0.100596045
UPP1	G2m_checkpoint	KIRP	-0.002425183
UPP1	Galactose metabolism	KIRP	0.109414969
UPP1	Galie_tumor_stemness_ge	KIRP	0.036980119
UPP1	Glutathione metabolism	KIRP	0.1443021
UPP1	Glycerolipid metabolism	KIRP	-0.110793037
UPP1	Glycerophospholipid metæ	KIRP	0.140058178
UPP1	Glycine, serine and threor	KIRP	-0.138877354
UPP1	Glycolysis / gluconeogene	KIRP	-0.130830028
UPP1	Glycosaminoglycan biosy1	KIRP	0.378836529
UPP1	Glycosaminoglycan biosy1	KIRP	0.18700639
UPP1	Glycosaminoglycan biosy1	KIRP	0.407293871
UPP1	Glycosaminoglycan degra	KIRP	0.082112585
UPP1	Glycosphingolipid biosyn1	KIRP	0.202838762
UPP1	Glycosphingolipid biosyn1	KIRP	0.213217451
UPP1	Glycosphingolipid biosyn1	KIRP	0.26526613
UPP1	Glycosylphosphatidylinos	KIRP	-0.153872124
UPP1	Glyoxylate and dicarboxy	KIRP	-0.164147011
UPP1	Granulocyte	KIRP	0.085233093
UPP1	Hedgehog_signaling	KIRP	-0.109125815
UPP1	Histidine metabolism	KIRP	-0.240111759
UPP1	Hypoxia	KIRP	0.215339444
UPP1	Il-17ralpha t cell	KIRP	0.127110132
UPP1	Il2_stat5_signaling	KIRP	0.215714774
UPP1	Il6_jak_stat3_signaling	KIRP	0.107586583
UPP1	Immune_checkpoints_tun	KIRP	0.096712055
UPP1	Immune_inhibition_cytok	KIRP	0.243453817
UPP1	Inositol phosphate metabo	KIRP	-0.265594774
UPP1	Interleukin_6_signaling	KIRP	-0.225787578
UPP1	Jaeger_metastasis_up	KIRP	-0.069450497
UPP1	Jain_nfkb_signaling	KIRP	-0.118852861
UPP1	Kras_signaling_up	KIRP	0.132189181
UPP1	Linoleic acid metabolism	KIRP	0.072742463
UPP1	Lipoic acid metabolism	KIRP	0.029559397
UPP1	Lysine degradation	KIRP	-0.398623766
UPP1	Lysosome	KIRP	0.029321788
UPP1	M1 macrophage	KIRP	0.117545589
UPP1	M2 macrophage	KIRP	0.092015854
UPP1	Mannose type o-glycan bi	KIRP	0.169823823
UPP1	Mapk_signaling_pathway	KIRP	0.122112464
UPP1	Mapk3_erk1_activation	KIRP	-0.233052203
UPP1	Marginal zone b cell	KIRP	0.109770575

UPP1	Memory b cell	KIRP	0.07925263
UPP1	Mesenchymal cell	KIRP	0.273571195
UPP1	Mesenchymal stem cell	KIRP	0.076881398
UPP1	Metabolism of xenobiotic	KIRP	0.029027641
UPP1	Migrating cancer stem cel	KIRP	0.225119115
UPP1	Mitotic_spindle	KIRP	-0.270261346
UPP1	Monocyte	KIRP	0.237320327
UPP1	Mtor_signaling_pathway	KIRP	-0.103742404
UPP1	Mtorc1_signaling	KIRP	0.035662679
UPP1	Mucin type o-glycan biosy	KIRP	-0.256330222
UPP1	Myc_targets_v1	KIRP	0.147093073
UPP1	Myeloid cell	KIRP	0.06061418
UPP1	N-glycan biosynthesis	KIRP	-0.075867346
UPP1	Naive b cell	KIRP	0.106720301
UPP1	Naive cd4+ t cell	KIRP	0.051870012
UPP1	Naive cd8+ t cell	KIRP	0.077505486
UPP1	Natural killer cell	KIRP	0.163836246
UPP1	Natural killer t (nkt) cell	KIRP	0.130644176
UPP1	Natural regulatory t (treg)	KIRP	0.099983814
UPP1	Neomycin, kanamycin and	KIRP	0.17805954
UPP1	Neutrophil	KIRP	0.249660942
UPP1	Nicotinate and nicotinami	KIRP	-0.119122971
UPP1	Nitrogen metabolism	KIRP	-0.162709375
UPP1	Nod_like_receptor_signal	KIRP	0.03377483
UPP1	Notch_signaling	KIRP	0.136196044
UPP1	One carbon pool by folate	KIRP	-0.196897574
UPP1	Other glycan degradation	KIRP	-0.141077883
UPP1	Other types of o-glycan b	KIRP	0.323571882
UPP1	Oxidative phosphorylatio	KIRP	0.176978769
UPP1	P53_pathway	KIRP	0.353130831
UPP1	P53_signaling_pathway	KIRP	0.041773825
UPP1	Pantothenate and coa bios	KIRP	-0.150050072
UPP1	Pentose and glucuronate i	KIRP	-0.195769646
UPP1	Pentose phosphate pathwa	KIRP	0.012784817
UPP1	Pericyte	KIRP	0.170234938
UPP1	Phenylalanine metabolism	KIRP	-0.101487812
UPP1	Phenylalanine, tyrosine ar	KIRP	-0.04859958
UPP1	Phosphonate and phosphir	KIRP	-0.263546648
UPP1	Pi3k_akt_activation	KIRP	-0.055041643
UPP1	Pi3k_akt_mtor_signaling	KIRP	0.01681972
UPP1	Porphyrin and chlorophyl	KIRP	-0.058157296
UPP1	Primary bile acid biosynt	KIRP	-0.138625418
UPP1	Propanoate metabolism	KIRP	-0.301499461

UPP1	Purine metabolism	KIRP	0.15014772
UPP1	Pyrimidine metabolism	KIRP	0.164637454
UPP1	Pyruvate metabolism	KIRP	-0.154821952
UPP1	Regulation_of_autophagy	KIRP	-0.173303588
UPP1	Retinol metabolism	KIRP	-0.119924298
UPP1	Riboflavin metabolism	KIRP	0.039030106
UPP1	Schmahl_pdgf_signaling	KIRP	-0.107495305
UPP1	Selenocompound metabol	KIRP	-0.309656797
UPP1	Signaling_by_hippo	KIRP	-0.416842555
UPP1	Sphingolipid metabolism	KIRP	-0.333832484
UPP1	Starch and sucrose metabo	KIRP	-0.027879697
UPP1	Steroid biosynthesis	KIRP	0.081029632
UPP1	Steroid hormone biosynth	KIRP	-0.140544237
UPP1	Sulfur metabolism	KIRP	-0.13277321
UPP1	Synthesis and degradation	KIRP	-0.187260804
UPP1	T helper cell	KIRP	0.053815695
UPP1	T helper1 (th1) cell	KIRP	0.097707272
UPP1	T helper17 (th17) cell	KIRP	0.127626222
UPP1	T helper2 (th2) cell	KIRP	0.034187784
UPP1	T helper9 (th9) cell	KIRP	0.235890794
UPP1	Taurine and hypotaurine r	KIRP	0.148903953
UPP1	Terpenoid backbone biosy	KIRP	-0.160611431
UPP1	Tgf_beta_signaling_pathw	KIRP	-0.140339089
UPP1	Thiamine metabolism	KIRP	-0.012113973
UPP1	Tnfa_signaling_via_nfkb	KIRP	0.210331698
UPP1	Tryptophan metabolism	KIRP	-0.185162773
UPP1	Tumor endothelial cell	KIRP	0.090741447
UPP1	Tyrosine metabolism	KIRP	-0.022858059
UPP1	Ubiquinone and other ter	KIRP	-0.121744734
UPP1	Valine, leucine and isoleu	KIRP	0.124888751
UPP1	Valine, leucine and isoleu	KIRP	-0.238887445
UPP1	Vascular endothelial cell	KIRP	0.230878804
UPP1	Vascular smooth muscle c	KIRP	0.138310591
UPP1	Vegf_signaling_pathway	KIRP	0.132631389
UPP1	Vitamin b6 metabolism	KIRP	-0.099323904
UPP1	Willert_wnt_signaling	KIRP	0.070479637
UPP1	Wnt_beta_catenin_signali	KIRP	0.185523562
UPP2	Abnormal plasma cell	KIRP	-0.119859097
UPP2	Activated b cell	KIRP	0.062994033
UPP2	Activated cd4+ t cell	KIRP	0.006275534
UPP2	Activated t cell	KIRP	-0.004653021
UPP2	Alanine, aspartate and glu	KIRP	0.225434919
UPP2	Alcala_apoptosis	KIRP	0.110109936

UPP2	Alpha-linolenic acid meta	KIRP	0.113527791
UPP2	Amino sugar and nucleoti	KIRP	0.012866627
UPP2	Ampk_pathway	KIRP	-0.083560684
UPP2	Angiogenesis	KIRP	-0.036726914
UPP2	Arachidonic acid metabol	KIRP	0.169768437
UPP2	Arginine and proline metε	KIRP	0.164072476
UPP2	Arginine biosynthesis	KIRP	0.168605555
UPP2	Ascorbate and aldarate mε	KIRP	0.177769442
UPP2	Atypical memory b cell	KIRP	0.154721683
UPP2	Axl+siglec6+ dendritic ce	KIRP	-0.104893189
UPP2	B cell	KIRP	0.155431817
UPP2	B1 cell	KIRP	0.054450827
UPP2	Basal cell	KIRP	-0.255260865
UPP2	Beta-alanine metabolism	KIRP	0.298337799
UPP2	Biosynthesis of unsaturate	KIRP	0.177246405
UPP2	Biotin metabolism	KIRP	0.015397184
UPP2	Butanoate metabolism	KIRP	0.363453994
UPP2	Caffeine metabolism	KIRP	0.168590475
UPP2	Cancer stem cell	KIRP	-0.066703073
UPP2	Cancer stem-like cell	KIRP	0.2841589
UPP2	Cd4+ cytotoxic t cell	KIRP	0.032390233
UPP2	Cd4+ memory t cell	KIRP	0.008558219
UPP2	Cd4+ regulatory t cell	KIRP	0.044811597
UPP2	Cd4+ t helper cell	KIRP	0.082555028
UPP2	Cd4+cd25+ regulatory t c	KIRP	0.068934882
UPP2	Cd8+ cytotoxic t cell	KIRP	0.071478179
UPP2	Cd8+ regulatory t cell	KIRP	0.028433717
UPP2	Cell_cycle	KIRP	-0.3136076
UPP2	Chandran_metastasis_top5	KIRP	-0.219995478
UPP2	Citrate cycle (tca cycle)	KIRP	0.267550913
UPP2	Cysteine and methionine r	KIRP	0.158502347
UPP2	Cytokine induced killer cε	KIRP	-0.026935273
UPP2	D-arginine and d-ornithin	KIRP	0.374746168
UPP2	D-glutamine and d-glutan	KIRP	0.230910845
UPP2	Dendritic cell	KIRP	0.092480754
UPP2	Dna_repair	KIRP	0.018462363
UPP2	Dna_replication	KIRP	-0.124654321
UPP2	Double-negative memory	KIRP	-0.027777075
UPP2	Drug metabolism - cytoch	KIRP	0.288743485
UPP2	Drug metabolism - other ε	KIRP	0.203813726
UPP2	E2f_targets	KIRP	-0.263063691
UPP2	Ecm_receptor_interaction	KIRP	-0.240538257
UPP2	Effector cd4+ memory t (	KIRP	0.020859011

UPP2	Effector cd8+ memory t (	KIRP	0.082963997
UPP2	Effector memory t cell	KIRP	0.062949677
UPP2	Effector regulatory t (treg	KIRP	0.011958664
UPP2	Elvidge_hif1a_targets_up	KIRP	-0.180303785
UPP2	Endothelial cell	KIRP	-0.224145788
UPP2	Eosinophil	KIRP	0.110408462
UPP2	Ether lipid metabolism	KIRP	0.252206798
UPP2	Exhausted cd4+ t cell	KIRP	-0.018876408
UPP2	Exhausted cd8+ t cell	KIRP	-0.00889148
UPP2	Exhausted t cell	KIRP	0.10303663
UPP2	Fat cell (adipocyte)	KIRP	0.226229464
UPP2	Fatty acid biosynthesis	KIRP	0.110062015
UPP2	Fatty acid degradation	KIRP	0.275529708
UPP2	Fatty acid elongation	KIRP	0.188975872
UPP2	Fibroblast	KIRP	-0.146780841
UPP2	Folate biosynthesis	KIRP	0.127716146
UPP2	Follicular b cell	KIRP	-0.03742648
UPP2	Follicular dendritic cell	KIRP	0.078098744
UPP2	Follicular helper (tfh) t ce	KIRP	0.163882873
UPP2	Follicular t cell	KIRP	-0.062006352
UPP2	Foxp3+il-17+ t cell	KIRP	-0.204373831
UPP2	Fructose and mannose me	KIRP	0.081531972
UPP2	G2m_checkpoint	KIRP	-0.352646178
UPP2	Galactose metabolism	KIRP	0.104750117
UPP2	Galie_tumor_stemness_ge	KIRP	-0.217825351
UPP2	Glutathione metabolism	KIRP	0.070113831
UPP2	Glycerolipid metabolism	KIRP	0.185790856
UPP2	Glycerophospholipid metæ	KIRP	0.25360469
UPP2	Glycine, serine and threor	KIRP	0.415773565
UPP2	Glycolysis / gluconeogene	KIRP	0.186566281
UPP2	Glycosaminoglycan biosy	KIRP	-0.10100803
UPP2	Glycosaminoglycan biosy	KIRP	-0.204663785
UPP2	Glycosaminoglycan biosy	KIRP	-0.262086391
UPP2	Glycosaminoglycan degra	KIRP	0.156738282
UPP2	Glycosphingolipid biosyn	KIRP	-0.172957096
UPP2	Glycosphingolipid biosyn	KIRP	-0.093115425
UPP2	Glycosphingolipid biosyn	KIRP	0.053929852
UPP2	Glycosylphosphatidylinos	KIRP	-0.100649817
UPP2	Glyoxylate and dicarboxy	KIRP	0.34412457
UPP2	Granulocyte	KIRP	0.181360897
UPP2	Hedgehog_signaling	KIRP	-0.20382523
UPP2	Histidine metabolism	KIRP	0.428991856
UPP2	Hypoxia	KIRP	-0.147760302

UPP2	Il-17alpha t cell	KIRP	0.06693912
UPP2	Il2_stat5_signaling	KIRP	-0.034383708
UPP2	Il6_jak_stat3_signaling	KIRP	0.018628993
UPP2	Immune_checkpoints_tur	KIRP	-0.039067883
UPP2	Immune_inhibition_cytok	KIRP	0.091010571
UPP2	Inositol phosphate metabo	KIRP	-0.146845375
UPP2	Interleukin_6_signaling	KIRP	-0.074365239
UPP2	Jaeger_metastasis_up	KIRP	-0.097554357
UPP2	Jain_nfkb_signaling	KIRP	-0.167523054
UPP2	Kras_signaling_up	KIRP	-0.017817525
UPP2	Linoleic acid metabolism	KIRP	0.123743235
UPP2	Lipoic acid metabolism	KIRP	0.101478291
UPP2	Lysine degradation	KIRP	0.247072058
UPP2	Lysosome	KIRP	0.205898546
UPP2	M1 macrophage	KIRP	0.026744041
UPP2	M2 macrophage	KIRP	0.1887529
UPP2	Mannose type o-glycan bi	KIRP	-0.002007017
UPP2	Mapk_signaling_pathway	KIRP	-0.244174614
UPP2	Mapk3_erk1_activation	KIRP	-0.153880257
UPP2	Marginal zone b cell	KIRP	-0.004564684
UPP2	Memory b cell	KIRP	0.001828662
UPP2	Mesenchymal cell	KIRP	-0.10040894
UPP2	Mesenchymal stem cell	KIRP	-0.037400147
UPP2	Metabolism of xenobiotic	KIRP	0.197285333
UPP2	Migrating cancer stem cel	KIRP	-0.097328787
UPP2	Mitotic_spindle	KIRP	-0.252566252
UPP2	Monocyte	KIRP	0.091331545
UPP2	Mtor_signaling_pathway	KIRP	-0.099568475
UPP2	Mtorc1_signaling	KIRP	-0.139873369
UPP2	Mucin type o-glycan biosy	KIRP	-0.070787287
UPP2	Myc_targets_v1	KIRP	-0.145651042
UPP2	Myeloid cell	KIRP	0.123829848
UPP2	N-glycan biosynthesis	KIRP	-0.254447621
UPP2	Naive b cell	KIRP	-0.043524675
UPP2	Naive cd4+ t cell	KIRP	-0.065594113
UPP2	Naive cd8+ t cell	KIRP	-0.105958172
UPP2	Natural killer cell	KIRP	0.080372478
UPP2	Natural killer t (nkt) cell	KIRP	-0.070188293
UPP2	Natural regulatory t (treg)	KIRP	0.057781851
UPP2	Neomycin, kanamycin an	KIRP	-0.12525888
UPP2	Neutrophil	KIRP	0.075299415
UPP2	Nicotinate and nicotinami	KIRP	0.378537999
UPP2	Nitrogen metabolism	KIRP	0.054739119

UPP2	Nod_like_receptor_signal	KIRP	-0.104970171
UPP2	Notch_signaling	KIRP	-0.302957135
UPP2	One carbon pool by folate	KIRP	0.102810196
UPP2	Other glycan degradation	KIRP	0.168223398
UPP2	Other types of o-glycan b	KIRP	-0.024415739
UPP2	Oxidative phosphorylatio	KIRP	0.230460429
UPP2	P53_pathway	KIRP	0.049549026
UPP2	P53_signaling_pathway	KIRP	-0.207022755
UPP2	Pantothenate and coa bios	KIRP	0.242535223
UPP2	Pentose and glucuronate i	KIRP	0.17378482
UPP2	Pentose phosphate pathwa	KIRP	-0.013553896
UPP2	Pericyte	KIRP	-0.080598382
UPP2	Phenylalanine metabolism	KIRP	0.351695994
UPP2	Phenylalanine, tyrosine ar	KIRP	0.17439168
UPP2	Phosphonate and phosphir	KIRP	0.09633721
UPP2	Pi3k_akt_activation	KIRP	-0.167187775
UPP2	Pi3k_akt_mtor_signaling	KIRP	0.028648133
UPP2	Porphyrin and chlorophyl	KIRP	0.222333386
UPP2	Primary bile acid biosynt	KIRP	0.293714264
UPP2	Propanoate metabolism	KIRP	0.266714749
UPP2	Purine metabolism	KIRP	-0.074489496
UPP2	Pyrimidine metabolism	KIRP	0.009840096
UPP2	Pyruvate metabolism	KIRP	0.271722189
UPP2	Regulation_of_autophagy	KIRP	0.168260283
UPP2	Retinol metabolism	KIRP	0.23912049
UPP2	Riboflavin metabolism	KIRP	0.221676906
UPP2	Schmahl_pdgf_signaling	KIRP	0.000875275
UPP2	Selenocompound metabol	KIRP	0.215155905
UPP2	Signaling_by_hippo	KIRP	-0.043680345
UPP2	Sphingolipid metabolism	KIRP	0.137323833
UPP2	Starch and sucrose metabo	KIRP	0.219370155
UPP2	Steroid biosynthesis	KIRP	0.044177438
UPP2	Steroid hormone biosynth	KIRP	0.168483142
UPP2	Sulfur metabolism	KIRP	0.208245429
UPP2	Synthesis and degradation	KIRP	0.320620533
UPP2	T helper cell	KIRP	0.13251447
UPP2	T helper1 (th1) cell	KIRP	0.265476966
UPP2	T helper17 (th17) cell	KIRP	0.065114994
UPP2	T helper2 (th2) cell	KIRP	0.126206202
UPP2	T helper9 (th9) cell	KIRP	-0.068834341
UPP2	Taurine and hypotaurine r	KIRP	0.011630153
UPP2	Terpenoid backbone biosy	KIRP	0.041979978
UPP2	Tgf_beta_signaling_pathw	KIRP	-0.28856078

UPP2	Thiamine metabolism	KIRP	0.345986314
UPP2	Tnfa_signaling_via_nfkB	KIRP	-0.02821982
UPP2	Tryptophan metabolism	KIRP	0.300311028
UPP2	Tumor endothelial cell	KIRP	-0.232009053
UPP2	Tyrosine metabolism	KIRP	0.253679762
UPP2	Ubiquinone and other ter	KIRP	0.156116623
UPP2	Valine, leucine and isoleu	KIRP	0.289564871
UPP2	Valine, leucine and isoleu	KIRP	0.309095912
UPP2	Vascular endothelial cell	KIRP	-0.218964391
UPP2	Vascular smooth muscle c	KIRP	-0.232653949
UPP2	Vegf_signaling_pathway	KIRP	-0.061976961
UPP2	Vitamin b6 metabolism	KIRP	0.237582074
UPP2	Willert_wnt_signaling	KIRP	-0.198209515
UPP2	Wnt_beta_catenin_signali	KIRP	-0.300740215
CDA	Abnormal plasma cell	LGG	-0.168453838
CDA	Activated b cell	LGG	0.291999146
CDA	Activated cd4+ t cell	LGG	0.064607219
CDA	Activated t cell	LGG	0.157545298
CDA	Alanine, aspartate and glu	LGG	-0.127583076
CDA	Alcala_apoptosis	LGG	0.226748752
CDA	Alpha-linolenic acid meta	LGG	0.050704627
CDA	Amino sugar and nucleoti	LGG	0.113415184
CDA	Ampk_pathway	LGG	-0.063043531
CDA	Angiogenesis	LGG	0.305232016
CDA	Arachidonic acid metabol	LGG	0.223438419
CDA	Arginine and proline met	LGG	0.124474497
CDA	Arginine biosynthesis	LGG	0.090073379
CDA	Ascorbate and aldarate m	LGG	-0.075344494
CDA	Atypical memory b cell	LGG	0.201784582
CDA	Axl+siglec6+ dendritic ce	LGG	0.187790358
CDA	B cell	LGG	0.14535876
CDA	B1 cell	LGG	0.092978455
CDA	Basal cell	LGG	0.350033051
CDA	Beta-alanine metabolism	LGG	0.066097909
CDA	Biosynthesis of unsaturate	LGG	0.012944863
CDA	Biotin metabolism	LGG	-0.089515587
CDA	Butanoate metabolism	LGG	-0.037831838
CDA	Caffeine metabolism	LGG	0.043844324
CDA	Cancer stem cell	LGG	0.204816079
CDA	Cancer stem-like cell	LGG	0.338595463
CDA	Cd4+ cytotoxic t cell	LGG	0.176113153
CDA	Cd4+ memory t cell	LGG	0.135111268
CDA	Cd4+ regulatory t cell	LGG	0.152476785

CDA	Cd4+ t helper cell	LGG	0.10247538
CDA	Cd4+cd25+ regulatory t c	LGG	0.116523219
CDA	Cd8+ cytotoxic t cell	LGG	0.175663509
CDA	Cd8+ regulatory t cell	LGG	0.110644608
CDA	Cell_cycle	LGG	-0.067980516
CDA	Chandran_metastasis_top5	LGG	-0.197641162
CDA	Citrate cycle (tca cycle)	LGG	0.104092511
CDA	Cysteine and methionine r	LGG	0.074130344
CDA	Cytokine induced killer c	LGG	0.181728809
CDA	D-arginine and d-ornithin	LGG	0.062290662
CDA	D-glutamine and d-glutan	LGG	-0.218896231
CDA	Dendritic cell	LGG	0.133094328
CDA	Dna_repair	LGG	0.159055768
CDA	Dna_replication	LGG	-0.02463665
CDA	Double-negative memory	LGG	0.163319779
CDA	Drug metabolism - cytoch	LGG	0.129916252
CDA	Drug metabolism - other c	LGG	0.205299097
CDA	E2f_targets	LGG	-0.056095555
CDA	Ecm_receptor_interaction	LGG	0.19941855
CDA	Effector cd4+ memory t (	LGG	0.006525496
CDA	Effector cd8+ memory t (	LGG	0.129659202
CDA	Effector memory t cell	LGG	0.056621707
CDA	Effector regulatory t (treg	LGG	0.141684467
CDA	Elvidge_hif1a_targets_up	LGG	0.004537842
CDA	Endothelial cell	LGG	0.307793697
CDA	Eosinophil	LGG	0.120955688
CDA	Ether lipid metabolism	LGG	-0.069691395
CDA	Exhausted cd4+ t cell	LGG	0.056820654
CDA	Exhausted cd8+ t cell	LGG	0.17030368
CDA	Exhausted t cell	LGG	0.140404921
CDA	Fat cell (adipocyte)	LGG	0.189929338
CDA	Fatty acid biosynthesis	LGG	0.22285347
CDA	Fatty acid degradation	LGG	0.135315815
CDA	Fatty acid elongation	LGG	0.096489853
CDA	Fibroblast	LGG	0.282014512
CDA	Folate biosynthesis	LGG	0.050095545
CDA	Follicular b cell	LGG	0.10981937
CDA	Follicular dendritic cell	LGG	0.103352441
CDA	Follicular helper (tfh) t ce	LGG	0.107375582
CDA	Follicular t cell	LGG	0.145653616
CDA	Foxp3+il-17+ t cell	LGG	-0.061124207
CDA	Fructose and mannose me	LGG	0.174952286
CDA	G2m_checkpoint	LGG	-0.095262496

CDA	Galactose metabolism	LGG	0.254522586
CDA	Galie_tumor_stemness_ge	LGG	0.051304873
CDA	Glutathione metabolism	LGG	0.26396717
CDA	Glycerolipid metabolism	LGG	0.002897773
CDA	Glycerophospholipid metæ	LGG	-0.004934038
CDA	Glycine, serine and threor	LGG	0.104029755
CDA	Glycolysis / gluconeogene	LGG	0.157282366
CDA	Glycosaminoglycan biosy	LGG	0.269493095
CDA	Glycosaminoglycan biosy	LGG	-0.145719321
CDA	Glycosaminoglycan biosy	LGG	0.088633511
CDA	Glycosaminoglycan degra	LGG	0.171262233
CDA	Glycosphingolipid biosyn	LGG	0.105713718
CDA	Glycosphingolipid biosyn	LGG	0.181543725
CDA	Glycosphingolipid biosyn	LGG	0.024769045
CDA	Glycosylphosphatidylinos	LGG	0.039852772
CDA	Glyoxylate and dicarboxy	LGG	0.103169306
CDA	Granulocyte	LGG	0.133092869
CDA	Hedgehog_signaling	LGG	0.011482172
CDA	Histidine metabolism	LGG	0.00028493
CDA	Hypoxia	LGG	0.320044073
CDA	Il-17ralpha t cell	LGG	0.170072608
CDA	Il2_stat5_signaling	LGG	0.262403058
CDA	Il6_jak_stat3_signaling	LGG	0.17002286
CDA	Immune_checkpoints_tur	LGG	0.040779218
CDA	Immune_inhibition_cytok	LGG	0.143703012
CDA	Inositol phosphate metabo	LGG	-0.155111407
CDA	Interleukin_6_signaling	LGG	-0.003545566
CDA	Jaeger_metastasis_up	LGG	0.060274893
CDA	Jain_nfkb_signaling	LGG	0.071089654
CDA	Kras_signaling_up	LGG	0.153757415
CDA	Linoleic acid metabolism	LGG	-0.036941634
CDA	Lipoic acid metabolism	LGG	0.090485995
CDA	Lysine degradation	LGG	-0.083390527
CDA	Lysosome	LGG	0.201813909
CDA	M1 macrophage	LGG	0.142852292
CDA	M2 macrophage	LGG	0.164562301
CDA	Mannose type o-glycan bi	LGG	-0.070005726
CDA	Mapk_signaling_pathway	LGG	0.041346169
CDA	Mapk3_erk1_activation	LGG	-0.060791858
CDA	Marginal zone b cell	LGG	0.060535321
CDA	Memory b cell	LGG	0.011526994
CDA	Mesenchymal cell	LGG	0.286990605
CDA	Mesenchymal stem cell	LGG	0.282581644

CDA	Metabolism of xenobiotic	LGG	0.149620914
CDA	Migrating cancer stem cel	LGG	0.077613052
CDA	Mitotic_spindle	LGG	-0.193767733
CDA	Monocyte	LGG	0.202762895
CDA	Mtor_signaling_pathway	LGG	-0.078508903
CDA	Mtorc1_signaling	LGG	0.113602855
CDA	Mucin type o-glycan bios	LGG	-0.106278828
CDA	Myc_targets_v1	LGG	0.064293361
CDA	Myeloid cell	LGG	0.163101309
CDA	N-glycan biosynthesis	LGG	0.04193159
CDA	Naive b cell	LGG	-0.159277016
CDA	Naive cd4+ t cell	LGG	0.151377099
CDA	Naive cd8+ t cell	LGG	0.115693784
CDA	Natural killer cell	LGG	0.158206518
CDA	Natural killer t (nkt) cell	LGG	0.23724259
CDA	Natural regulatory t (treg)	LGG	0.167354636
CDA	Neomycin, kanamycin an	LGG	0.061053452
CDA	Neutrophil	LGG	0.234783651
CDA	Nicotinate and nicotinami	LGG	0.095451689
CDA	Nitrogen metabolism	LGG	0.053098409
CDA	Nod_like_receptor_signal	LGG	0.024530673
CDA	Notch_signaling	LGG	0.03419581
CDA	One carbon pool by folate	LGG	0.004252546
CDA	Other glycan degradation	LGG	0.175052712
CDA	Other types of o-glycan b	LGG	0.062862422
CDA	Oxidative phosphorylatio	LGG	0.252304527
CDA	P53_pathway	LGG	0.372158535
CDA	P53_signaling_pathway	LGG	0.147052444
CDA	Pantothenate and coa bios	LGG	0.055363239
CDA	Pentose and glucuronate i	LGG	-0.012512624
CDA	Pentose phosphate pathwa	LGG	0.120975845
CDA	Pericyte	LGG	0.471689696
CDA	Phenylalanine metabolism	LGG	0.100192734
CDA	Phenylalanine, tyrosine ar	LGG	-0.045900675
CDA	Phosphonate and phosphir	LGG	-0.126491261
CDA	Pi3k_akt_activation	LGG	-0.036907438
CDA	Pi3k_akt_mtor_signaling	LGG	0.057902994
CDA	Porphyrin and chlorophyl	LGG	0.111635234
CDA	Primary bile acid biosynt	LGG	0.028401844
CDA	Propanoate metabolism	LGG	0.049151428
CDA	Purine metabolism	LGG	0.072688189
CDA	Pyrimidine metabolism	LGG	0.086594695
CDA	Pyruvate metabolism	LGG	0.064936283

CDA	Regulation_of_autophagy	LGG	-0.102666881
CDA	Retinol metabolism	LGG	0.008089238
CDA	Riboflavin metabolism	LGG	0.118355027
CDA	Schmahl_pdgf_signaling	LGG	0.037565068
CDA	Selenocompound metabol	LGG	0.069263679
CDA	Signaling_by_hippo	LGG	-0.195012612
CDA	Sphingolipid metabolism	LGG	-0.030589965
CDA	Starch and sucrose metabo	LGG	0.139174093
CDA	Steroid biosynthesis	LGG	0.085479031
CDA	Steroid hormone biosynth	LGG	0.043572723
CDA	Sulfur metabolism	LGG	0.168011509
CDA	Synthesis and degradation	LGG	-0.011815016
CDA	T helper cell	LGG	0.232950292
CDA	T helper1 (th1) cell	LGG	0.15261037
CDA	T helper17 (th17) cell	LGG	0.08694344
CDA	T helper2 (th2) cell	LGG	0.155267506
CDA	T helper9 (th9) cell	LGG	0.170632498
CDA	Taurine and hypotaurine r	LGG	0.060618809
CDA	Terpenoid backbone biosy	LGG	-0.006653767
CDA	Tgf_beta_signaling_pathw	LGG	-0.102340683
CDA	Thiamine metabolism	LGG	0.044395361
CDA	Tnfa_signaling_via_nfkb	LGG	0.161582041
CDA	Tryptophan metabolism	LGG	0.134378301
CDA	Tumor endothelial cell	LGG	0.095470585
CDA	Tyrosine metabolism	LGG	0.148074153
CDA	Ubiquinone and other terp	LGG	0.210504692
CDA	Valine, leucine and isoleu	LGG	0.251868527
CDA	Valine, leucine and isoleu	LGG	0.032107531
CDA	Vascular endothelial cell	LGG	0.405761285
CDA	Vascular smooth muscle c	LGG	0.277290094
CDA	Vegf_signaling_pathway	LGG	0.052505736
CDA	Vitamin b6 metabolism	LGG	-0.036847541
CDA	Willert_wnt_signaling	LGG	0.047073352
CDA	Wnt_beta_catenin_signali	LGG	-0.019130912
UCK1	Abnormal plasma cell	LGG	0.020949849
UCK1	Activated b cell	LGG	-0.170414847
UCK1	Activated cd4+ t cell	LGG	-0.148154145
UCK1	Activated t cell	LGG	-0.217924977
UCK1	Alanine, aspartate and glu	LGG	-0.074186628
UCK1	Alcala_apoptosis	LGG	0.227386551
UCK1	Alpha-linolenic acid meta	LGG	0.130030037
UCK1	Amino sugar and nucleoti	LGG	-0.115772403
UCK1	Ampk_pathway	LGG	0.089673158

UCK1	Angiogenesis	LGG	-0.338779391
UCK1	Arachidonic acid metabolism	LGG	0.150913243
UCK1	Arginine and proline metabolism	LGG	-0.005239305
UCK1	Arginine biosynthesis	LGG	-0.119583899
UCK1	Ascorbate and aldarate metabolism	LGG	0.234654017
UCK1	Atypical memory b cell	LGG	-0.119032167
UCK1	Axl+siglec6+ dendritic cell	LGG	-0.21441044
UCK1	B cell	LGG	-0.111820371
UCK1	B1 cell	LGG	-0.29957839
UCK1	Basal cell	LGG	-0.054706034
UCK1	Beta-alanine metabolism	LGG	0.0942759
UCK1	Biosynthesis of unsaturated fatty acids	LGG	0.103425954
UCK1	Biotin metabolism	LGG	-0.007932775
UCK1	Butanoate metabolism	LGG	0.187761811
UCK1	Caffeine metabolism	LGG	0.102336986
UCK1	Cancer stem cell	LGG	-0.219200598
UCK1	Cancer stem-like cell	LGG	-0.133368513
UCK1	Cd4+ cytotoxic t cell	LGG	-0.15837851
UCK1	Cd4+ memory t cell	LGG	-0.289968611
UCK1	Cd4+ regulatory t cell	LGG	-0.046524133
UCK1	Cd4+ t helper cell	LGG	-0.13161294
UCK1	Cd4+cd25+ regulatory t cell	LGG	-0.150181373
UCK1	Cd8+ cytotoxic t cell	LGG	-0.221254575
UCK1	Cd8+ regulatory t cell	LGG	-0.346688145
UCK1	Cell_cycle	LGG	0.001891978
UCK1	Chandran_metastasis_top5	LGG	-0.133020812
UCK1	Citrate cycle (tca cycle)	LGG	0.017245373
UCK1	Cysteine and methionine metabolism	LGG	0.130690565
UCK1	Cytokine induced killer cell	LGG	-0.153175722
UCK1	D-arginine and d-ornithine	LGG	0.182487959
UCK1	D-glutamine and d-glutamate	LGG	0.006203022
UCK1	Dendritic cell	LGG	-0.150707746
UCK1	Dna_repair	LGG	0.46546583
UCK1	Dna_replication	LGG	0.185518271
UCK1	Double-negative memory t cell	LGG	-0.083047032
UCK1	Drug metabolism - cytochrome p450	LGG	0.147003596
UCK1	Drug metabolism - other	LGG	0.426027609
UCK1	E2f_targets	LGG	0.047521405
UCK1	Ecm_receptor_interaction	LGG	-0.417768419
UCK1	Effector cd4+ memory t cell	LGG	-0.226669713
UCK1	Effector cd8+ memory t cell	LGG	-0.26068851
UCK1	Effector memory t cell	LGG	-0.002732719
UCK1	Effector regulatory t cell (treg)	LGG	-0.154581179

UCK1	Elvidge_hif1a_targets_up	LGG	-0.34577477
UCK1	Endothelial cell	LGG	-0.204655576
UCK1	Eosinophil	LGG	-0.049909766
UCK1	Ether lipid metabolism	LGG	-0.060567017
UCK1	Exhausted cd4+ t cell	LGG	-0.220684447
UCK1	Exhausted cd8+ t cell	LGG	-0.179899101
UCK1	Exhausted t cell	LGG	-0.125679782
UCK1	Fat cell (adipocyte)	LGG	0.012456395
UCK1	Fatty acid biosynthesis	LGG	-0.076931046
UCK1	Fatty acid degradation	LGG	0.253333328
UCK1	Fatty acid elongation	LGG	0.037874525
UCK1	Fibroblast	LGG	-0.254651606
UCK1	Folate biosynthesis	LGG	0.224806656
UCK1	Follicular b cell	LGG	-0.108940481
UCK1	Follicular dendritic cell	LGG	-0.163799953
UCK1	Follicular helper (tfh) t cell	LGG	-0.189787254
UCK1	Follicular t cell	LGG	-0.10515113
UCK1	Foxp3+il-17+ t cell	LGG	-0.045130335
UCK1	Fructose and mannose me	LGG	0.165744095
UCK1	G2m_checkpoint	LGG	-0.038228539
UCK1	Galactose metabolism	LGG	-0.036160158
UCK1	Galie_tumor_stemness_ge	LGG	-0.002470648
UCK1	Glutathione metabolism	LGG	0.161865317
UCK1	Glycerolipid metabolism	LGG	0.044412204
UCK1	Glycerophospholipid metæ	LGG	-0.114044114
UCK1	Glycine, serine and threor	LGG	0.374916028
UCK1	Glycolysis / gluconeogene	LGG	0.023330356
UCK1	Glycosaminoglycan biosy	LGG	-0.07043335
UCK1	Glycosaminoglycan biosy	LGG	-0.286228609
UCK1	Glycosaminoglycan biosy	LGG	-0.158035553
UCK1	Glycosaminoglycan degra	LGG	-0.202184837
UCK1	Glycosphingolipid biosyn	LGG	-0.325239054
UCK1	Glycosphingolipid biosyn	LGG	-0.288426753
UCK1	Glycosphingolipid biosyn	LGG	0.056976678
UCK1	Glycosylphosphatidylinos	LGG	0.094125212
UCK1	Glyoxylate and dicarboxy	LGG	0.294079177
UCK1	Granulocyte	LGG	-0.084178716
UCK1	Hedgehog_signaling	LGG	-0.261991758
UCK1	Histidine metabolism	LGG	0.075122088
UCK1	Hypoxia	LGG	-0.241272102
UCK1	Il-17ralpha t cell	LGG	-0.291146482
UCK1	Il2_stat5_signaling	LGG	-0.257285038
UCK1	Il6_jak_stat3_signaling	LGG	-0.284429238

UCK1	Immune_checkpoints_tur	LGG	-0.322384798
UCK1	Immune_inhibition_cytok	LGG	0.012691275
UCK1	Inositol phosphate metabo	LGG	-0.338765656
UCK1	Interleukin_6_signaling	LGG	-0.382151267
UCK1	Jaeger_metastasis_up	LGG	-0.155464069
UCK1	Jain_nfkb_signaling	LGG	0.080339526
UCK1	Kras_signaling_up	LGG	-0.35049926
UCK1	Linoleic acid metabolism	LGG	0.027355826
UCK1	Lipoic acid metabolism	LGG	0.337612833
UCK1	Lysine degradation	LGG	0.198958414
UCK1	Lysosome	LGG	-0.161307083
UCK1	M1 macrophage	LGG	-0.084821764
UCK1	M2 macrophage	LGG	-0.104810495
UCK1	Mannose type o-glycan bi	LGG	0.137951851
UCK1	Mapk_signaling_pathway	LGG	-0.426272241
UCK1	Mapk3_erk1_activation	LGG	-0.396800086
UCK1	Marginal zone b cell	LGG	0.003383795
UCK1	Memory b cell	LGG	-0.124333067
UCK1	Mesenchymal cell	LGG	-0.096577548
UCK1	Mesenchymal stem cell	LGG	-0.198161974
UCK1	Metabolism of xenobiotic	LGG	0.215412138
UCK1	Migrating cancer stem cel	LGG	-0.132218641
UCK1	Mitotic_spindle	LGG	-0.228552164
UCK1	Monocyte	LGG	-0.126310356
UCK1	Mtor_signaling_pathway	LGG	-0.108228289
UCK1	Mtorc1_signaling	LGG	-0.137329587
UCK1	Mucin type o-glycan biosy	LGG	-0.497073908
UCK1	Myc_targets_v1	LGG	0.308049509
UCK1	Myeloid cell	LGG	-0.126878152
UCK1	N-glycan biosynthesis	LGG	-0.156805845
UCK1	Naive b cell	LGG	0.234033226
UCK1	Naive cd4+ t cell	LGG	-0.080628943
UCK1	Naive cd8+ t cell	LGG	-0.092531515
UCK1	Natural killer cell	LGG	-0.149882514
UCK1	Natural killer t (nkt) cell	LGG	0.108261548
UCK1	Natural regulatory t (treg)	LGG	-0.189665181
UCK1	Neomycin, kanamycin and	LGG	-0.23096775
UCK1	Neutrophil	LGG	-0.117946098
UCK1	Nicotinate and nicotinami	LGG	-0.063848921
UCK1	Nitrogen metabolism	LGG	-0.030813682
UCK1	Nod_like_receptor_signal	LGG	-0.213402227
UCK1	Notch_signaling	LGG	0.148331144
UCK1	One carbon pool by folate	LGG	0.244935624

UCK1	Other glycan degradation	LGG	-0.052968112
UCK1	Other types of o-glycan b	LGG	0.300354387
UCK1	Oxidative phosphorylatior	LGG	0.292926125
UCK1	P53_pathway	LGG	-0.037901161
UCK1	P53_signaling_pathway	LGG	-0.117741214
UCK1	Pantothenate and coa bios	LGG	-0.282998579
UCK1	Pentose and glucuronate i	LGG	0.136891435
UCK1	Pentose phosphate pathwa	LGG	0.284891151
UCK1	Pericyte	LGG	-0.211163201
UCK1	Phenylalanine metabolism	LGG	-0.188556383
UCK1	Phenylalanine, tyrosine ar	LGG	-0.07080854
UCK1	Phosphonate and phosphir	LGG	-0.129757492
UCK1	Pi3k_akt_activation	LGG	-0.196140538
UCK1	Pi3k_akt_mtor_signaling	LGG	-0.380295279
UCK1	Porphyrin and chlorophyl	LGG	0.268247307
UCK1	Primary bile acid biosynt	LGG	-0.004081775
UCK1	Propanoate metabolism	LGG	0.070000912
UCK1	Purine metabolism	LGG	0.216611571
UCK1	Pyrimidine metabolism	LGG	0.38456404
UCK1	Pyruvate metabolism	LGG	0.117220543
UCK1	Regulation_of_autophagy	LGG	-0.032320053
UCK1	Retinol metabolism	LGG	0.111779999
UCK1	Riboflavin metabolism	LGG	0.126778711
UCK1	Schmahl_pdgf_signaling	LGG	-0.06639845
UCK1	Selenocompound metabol	LGG	0.066259584
UCK1	Signaling_by_hippo	LGG	-0.09921075
UCK1	Sphingolipid metabolism	LGG	-0.269092441
UCK1	Starch and sucrose metabo	LGG	-0.143785845
UCK1	Steroid biosynthesis	LGG	0.085712392
UCK1	Steroid hormone biosynth	LGG	0.120833271
UCK1	Sulfur metabolism	LGG	0.34445311
UCK1	Synthesis and degradation	LGG	0.144632622
UCK1	T helper cell	LGG	-0.221003084
UCK1	T helper1 (th1) cell	LGG	-0.200335731
UCK1	T helper17 (th17) cell	LGG	-0.256335594
UCK1	T helper2 (th2) cell	LGG	-0.129581567
UCK1	T helper9 (th9) cell	LGG	-0.182778734
UCK1	Taurine and hypotaurine r	LGG	0.051132072
UCK1	Terpenoid backbone biosy	LGG	0.188804765
UCK1	Tgf_beta_signaling_pathw	LGG	-0.118879216
UCK1	Thiamine metabolism	LGG	0.156437162
UCK1	Tnfa_signaling_via_nfkb	LGG	-0.277464756
UCK1	Tryptophan metabolism	LGG	0.053646372

UCK1	Tumor endothelial cell	LGG	0.052948505
UCK1	Tyrosine metabolism	LGG	-0.071471987
UCK1	Ubiquinone and other ter	LGG	0.147252508
UCK1	Valine, leucine and isoleu	LGG	0.141288072
UCK1	Valine, leucine and isoleu	LGG	0.262018559
UCK1	Vascular endothelial cell	LGG	-0.173654247
UCK1	Vascular smooth muscle c	LGG	-0.223710236
UCK1	Vegf_signaling_pathway	LGG	-0.153189399
UCK1	Vitamin b6 metabolism	LGG	-0.00475429
UCK1	Willert_wnt_signaling	LGG	0.238676984
UCK1	Wnt_beta_catenin_signali	LGG	0.111362095
UCK2	Abnormal plasma cell	LGG	0.138970893
UCK2	Activated b cell	LGG	-0.19358943
UCK2	Activated cd4+ t cell	LGG	-0.185043391
UCK2	Activated t cell	LGG	0.178990549
UCK2	Alanine, aspartate and glu	LGG	-0.29401354
UCK2	Alcala_apoptosis	LGG	0.057597114
UCK2	Alpha-linolenic acid meta	LGG	-0.543525789
UCK2	Amino sugar and nucleoti	LGG	-0.140808083
UCK2	Ampk_pathway	LGG	0.318810928
UCK2	Angiogenesis	LGG	0.053948585
UCK2	Arachidonic acid metabol	LGG	-0.52684426
UCK2	Arginine and proline metæ	LGG	-0.409044322
UCK2	Arginine biosynthesis	LGG	-0.214935427
UCK2	Ascorbate and aldarate mε	LGG	-0.203922958
UCK2	Atypical memory b cell	LGG	0.152544113
UCK2	Axl+siglec6+ dendritic ce	LGG	-0.383468873
UCK2	B cell	LGG	-0.209644415
UCK2	B1 cell	LGG	-0.078259368
UCK2	Basal cell	LGG	-0.184941833
UCK2	Beta-alanine metabolism	LGG	-0.479275099
UCK2	Biosynthesis of unsaturate	LGG	-0.227503345
UCK2	Biotin metabolism	LGG	0.175836826
UCK2	Butanoate metabolism	LGG	-0.352274388
UCK2	Caffeine metabolism	LGG	-0.020827695
UCK2	Cancer stem cell	LGG	0.057609101
UCK2	Cancer stem-like cell	LGG	-0.092163221
UCK2	Cd4+ cytotoxic t cell	LGG	-0.2639699
UCK2	Cd4+ memory t cell	LGG	0.152300524
UCK2	Cd4+ regulatory t cell	LGG	-0.117433345
UCK2	Cd4+ t helper cell	LGG	-0.189591961
UCK2	Cd4+cd25+ regulatory t c	LGG	-0.160822518
UCK2	Cd8+ cytotoxic t cell	LGG	-0.027996589

UCK2	Cd8+ regulatory t cell	LGG	-0.033164663
UCK2	Cell_cycle	LGG	0.532297314
UCK2	Chandran_metastasis_top5	LGG	0.420320842
UCK2	Citrate cycle (tca cycle)	LGG	-0.067167963
UCK2	Cysteine and methionine r	LGG	-0.433087276
UCK2	Cytokine induced killer cε	LGG	0.048028354
UCK2	D-arginine and d-ornithin	LGG	-0.188246031
UCK2	D-glutamine and d-glutan	LGG	-0.127271334
UCK2	Dendritic cell	LGG	-0.202375927
UCK2	Dna_repair	LGG	0.33681688
UCK2	Dna_replication	LGG	0.413678929
UCK2	Double-negative memory	LGG	0.166499327
UCK2	Drug metabolism - cytoch	LGG	-0.487111872
UCK2	Drug metabolism - other c	LGG	-0.061042112
UCK2	E2f_targets	LGG	0.502995417
UCK2	Ecm_receptor_interaction	LGG	0.008307678
UCK2	Effector cd4+ memory t (	LGG	-0.178093108
UCK2	Effector cd8+ memory t (	LGG	-0.299240984
UCK2	Effector memory t cell	LGG	-0.259185259
UCK2	Effector regulatory t (treg	LGG	-0.022219847
UCK2	Elvidge_hif1a_targets_up	LGG	0.212591909
UCK2	Endothelial cell	LGG	0.058718045
UCK2	Eosinophil	LGG	-0.235557493
UCK2	Ether lipid metabolism	LGG	-0.469316449
UCK2	Exhausted cd4+ t cell	LGG	-0.164965627
UCK2	Exhausted cd8+ t cell	LGG	-0.160088117
UCK2	Exhausted t cell	LGG	-0.165717281
UCK2	Fat cell (adipocyte)	LGG	-0.281876317
UCK2	Fatty acid biosynthesis	LGG	-0.165570588
UCK2	Fatty acid degradation	LGG	-0.46538456
UCK2	Fatty acid elongation	LGG	-0.312574403
UCK2	Fibroblast	LGG	0.047824366
UCK2	Folate biosynthesis	LGG	-0.182437245
UCK2	Follicular b cell	LGG	-0.211201112
UCK2	Follicular dendritic cell	LGG	0.112372457
UCK2	Follicular helper (tfh) t ce	LGG	-0.161378513
UCK2	Follicular t cell	LGG	0.008914333
UCK2	Foxp3+il-17+ t cell	LGG	0.200025516
UCK2	Fructose and mannose me	LGG	-0.279098885
UCK2	G2m_checkpoint	LGG	0.553307642
UCK2	Galactose metabolism	LGG	-0.098772477
UCK2	Galie_tumor_stemness_ge	LGG	0.155017547
UCK2	Glutathione metabolism	LGG	-0.301954479

UCK2	Glycerolipid metabolism	LGG	-0.287515267
UCK2	Glycerophospholipid metabolism	LGG	-0.433896436
UCK2	Glycine, serine and threonine metabolism	LGG	-0.346410204
UCK2	Glycolysis / gluconeogenesis	LGG	-0.296514657
UCK2	Glycosaminoglycan biosynthesis	LGG	0.13582071
UCK2	Glycosaminoglycan biosynthesis	LGG	-0.05793195
UCK2	Glycosaminoglycan biosynthesis	LGG	-0.264934033
UCK2	Glycosaminoglycan degradation	LGG	-0.147358061
UCK2	Glycosphingolipid biosynthesis	LGG	-0.088882322
UCK2	Glycosphingolipid biosynthesis	LGG	-0.177552996
UCK2	Glycosphingolipid biosynthesis	LGG	-0.247932742
UCK2	Glycosylphosphatidylinositol biosynthesis	LGG	-0.095880376
UCK2	Glyoxylate and dicarboxylate metabolism	LGG	0.023810056
UCK2	Granulocyte	LGG	-0.201803885
UCK2	Hedgehog signaling	LGG	0.24066887
UCK2	Histidine metabolism	LGG	-0.472031819
UCK2	Hypoxia	LGG	-0.161257785
UCK2	IL-17Ralpha T cell	LGG	0.010290124
UCK2	IL2_stat5_signaling	LGG	-0.157932444
UCK2	IL6_jak_stat3_signaling	LGG	-0.120084612
UCK2	Immune checkpoints	LGG	-0.177099354
UCK2	Immune inhibition	LGG	-0.249271872
UCK2	Inositol phosphate metabolism	LGG	-0.249454699
UCK2	Interleukin_6_signaling	LGG	-0.052548526
UCK2	Jaeger metastasis up	LGG	0.133978868
UCK2	Jain_nfkb_signaling	LGG	0.500933766
UCK2	Kras_signaling_up	LGG	-0.191154569
UCK2	Linoleic acid metabolism	LGG	-0.496708081
UCK2	Lipoic acid metabolism	LGG	-0.005111118
UCK2	Lysine degradation	LGG	0.09541302
UCK2	Lysosome	LGG	-0.244634793
UCK2	M1 macrophage	LGG	-0.27512354
UCK2	M2 macrophage	LGG	-0.184238646
UCK2	Mannose type o-glycan biosynthesis	LGG	-0.064618716
UCK2	Mapk_signaling_pathway	LGG	-0.198107482
UCK2	Mapk3_erk1_activation	LGG	-0.109000657
UCK2	Marginal zone B cell	LGG	-0.171163336
UCK2	Memory B cell	LGG	-0.059760033
UCK2	Mesenchymal cell	LGG	0.057979608
UCK2	Mesenchymal stem cell	LGG	-0.129892331
UCK2	Metabolism of xenobiotics	LGG	-0.44645932
UCK2	Migrating cancer stem cell	LGG	-0.390505083
UCK2	Mitotic spindle	LGG	0.377993056

UCK2	Monocyte	LGG	-0.268019168
UCK2	Mtor_signaling_pathway	LGG	0.119445115
UCK2	Mtorc1_signaling	LGG	0.07905279
UCK2	Mucin type o-glycan biosynthesis	LGG	-0.101711013
UCK2	Myc_targets_v1	LGG	0.52665915
UCK2	Myeloid cell	LGG	-0.215300627
UCK2	N-glycan biosynthesis	LGG	0.283902146
UCK2	Naive b cell	LGG	0.070064394
UCK2	Naive cd4+ t cell	LGG	-0.115080677
UCK2	Naive cd8+ t cell	LGG	-0.000131776
UCK2	Natural killer cell	LGG	-0.117196019
UCK2	Natural killer t (nkt) cell	LGG	0.10423659
UCK2	Natural regulatory t (treg) cell	LGG	-0.147130947
UCK2	Neomycin, kanamycin and streptomycin resistance	LGG	-0.304847246
UCK2	Neutrophil	LGG	-0.178120808
UCK2	Nicotinate and nicotinamide metabolism	LGG	-0.297352736
UCK2	Nitrogen metabolism	LGG	-0.409137763
UCK2	Nod_like_receptor_signaling	LGG	-0.228175485
UCK2	Notch_signaling	LGG	-0.155373017
UCK2	One carbon pool by folate	LGG	0.386203341
UCK2	Other glycan degradation	LGG	-0.04861007
UCK2	Other types of o-glycan biosynthesis	LGG	-0.060116332
UCK2	Oxidative phosphorylation	LGG	-0.122346894
UCK2	P53_pathway	LGG	-0.087636192
UCK2	P53_signaling_pathway	LGG	0.474895577
UCK2	Pantothenate and coenzyme a biosynthesis	LGG	-0.187373246
UCK2	Pentose and glucuronate interconversions	LGG	-0.222086842
UCK2	Pentose phosphate pathway	LGG	-0.247686824
UCK2	Pericyte	LGG	0.171217102
UCK2	Phenylalanine metabolism	LGG	-0.378976818
UCK2	Phenylalanine, tyrosine and tryptophan metabolism	LGG	-0.272823544
UCK2	Phosphonate and phosphonate metabolism	LGG	-0.311619657
UCK2	Pi3k_akt_activation	LGG	0.262693015
UCK2	Pi3k_akt_mtor_signaling	LGG	0.019436877
UCK2	Porphyrin and chlorophyll metabolism	LGG	-0.153625172
UCK2	Primary bile acid biosynthesis	LGG	-0.575559875
UCK2	Propanoate metabolism	LGG	-0.240711757
UCK2	Purine metabolism	LGG	0.440029793
UCK2	Pyrimidine metabolism	LGG	0.479073514
UCK2	Pyruvate metabolism	LGG	-0.227533304
UCK2	Regulation_of_autophagy	LGG	-0.440133045
UCK2	Retinol metabolism	LGG	-0.506301552
UCK2	Riboflavin metabolism	LGG	-0.102841797

UCK2	Schmahl_pdgf_signaling	LGG	-0.264175733
UCK2	Selenocompound metabol	LGG	0.156116762
UCK2	Signaling_by_hippo	LGG	-0.231202814
UCK2	Sphingolipid metabolism	LGG	-0.006649257
UCK2	Starch and sucrose metabo	LGG	-0.446450316
UCK2	Steroid biosynthesis	LGG	0.246503738
UCK2	Steroid hormone biosynth	LGG	-0.19101515
UCK2	Sulfur metabolism	LGG	-0.045246104
UCK2	Synthesis and degradation	LGG	-0.377108479
UCK2	T helper cell	LGG	-0.146114633
UCK2	T helper1 (th1) cell	LGG	-0.240348545
UCK2	T helper17 (th17) cell	LGG	-0.179657138
UCK2	T helper2 (th2) cell	LGG	-0.321106864
UCK2	T helper9 (th9) cell	LGG	-0.200173843
UCK2	Taurine and hypotaurine r	LGG	0.024488275
UCK2	Terpenoid backbone biosy	LGG	0.204620443
UCK2	Tgf_beta_signaling_pathw	LGG	0.133120105
UCK2	Thiamine metabolism	LGG	-0.345928776
UCK2	Tnfa_signaling_via_nfkb	LGG	-0.081865282
UCK2	Tryptophan metabolism	LGG	-0.427494786
UCK2	Tumor endothelial cell	LGG	0.026552573
UCK2	Tyrosine metabolism	LGG	-0.46207828
UCK2	Ubiquinone and other ter	LGG	0.102111772
UCK2	Valine, leucine and isoleu	LGG	-0.213817867
UCK2	Valine, leucine and isoleu	LGG	-0.440130069
UCK2	Vascular endothelial cell	LGG	0.107627757
UCK2	Vascular smooth muscle c	LGG	-0.029674052
UCK2	Vegf_signaling_pathway	LGG	-0.202265621
UCK2	Vitamin b6 metabolism	LGG	-0.240191286
UCK2	Willert_wnt_signaling	LGG	-0.017175274
UCK2	Wnt_beta_catenin_signali	LGG	0.432031801
UCKL1	Abnormal plasma cell	LGG	-0.196348822
UCKL1	Activated b cell	LGG	-0.067736333
UCKL1	Activated cd4+ t cell	LGG	-0.189718113
UCKL1	Activated t cell	LGG	-0.00946172
UCKL1	Alanine, aspartate and glu	LGG	-0.370844036
UCKL1	Alcala_apoptosis	LGG	0.005054792
UCKL1	Alpha-linolenic acid meta	LGG	-0.055184671
UCKL1	Amino sugar and nucleoti	LGG	0.013219919
UCKL1	Ampk_pathway	LGG	0.268559584
UCKL1	Angiogenesis	LGG	-0.021590198
UCKL1	Arachidonic acid metabo	LGG	-0.025953026
UCKL1	Arginine and proline met	LGG	-0.384328387

UCKL1	Arginine biosynthesis	LGG	-0.412355538
UCKL1	Ascorbate and aldarate me	LGG	-0.291224839
UCKL1	Atypical memory b cell	LGG	0.042892026
UCKL1	Axl+siglec6+ dendritic ce	LGG	-0.182652699
UCKL1	B cell	LGG	-0.184532828
UCKL1	B1 cell	LGG	-0.109983426
UCKL1	Basal cell	LGG	0.13923565
UCKL1	Beta-alanine metabolism	LGG	-0.36326101
UCKL1	Biosynthesis of unsaturate	LGG	-0.277444828
UCKL1	Biotin metabolism	LGG	-0.07669604
UCKL1	Butanoate metabolism	LGG	-0.335047996
UCKL1	Caffeine metabolism	LGG	-0.132172224
UCKL1	Cancer stem cell	LGG	-0.113086387
UCKL1	Cancer stem-like cell	LGG	-0.029758675
UCKL1	Cd4+ cytotoxic t cell	LGG	-0.129600095
UCKL1	Cd4+ memory t cell	LGG	-0.021604056
UCKL1	Cd4+ regulatory t cell	LGG	-0.053112706
UCKL1	Cd4+ t helper cell	LGG	-0.126812681
UCKL1	Cd4+cd25+ regulatory t c	LGG	-0.118795768
UCKL1	Cd8+ cytotoxic t cell	LGG	-0.108648799
UCKL1	Cd8+ regulatory t cell	LGG	-0.18290722
UCKL1	Cell_cycle	LGG	0.079558548
UCKL1	Chandran_metastasis_top5	LGG	-0.188911327
UCKL1	Citrate cycle (tca cycle)	LGG	-0.352256606
UCKL1	Cysteine and methionine r	LGG	-0.139618453
UCKL1	Cytokine induced killer c	LGG	-0.036267418
UCKL1	D-arginine and d-ornithin	LGG	-0.006496437
UCKL1	D-glutamine and d-glutan	LGG	-0.337169661
UCKL1	Dendritic cell	LGG	-0.105780183
UCKL1	Dna_repair	LGG	0.405797646
UCKL1	Dna_replication	LGG	0.228810919
UCKL1	Double-negative memory	LGG	0.184521555
UCKL1	Drug metabolism - cytoch	LGG	-0.176688206
UCKL1	Drug metabolism - other	LGG	0.12786625
UCKL1	E2f_targets	LGG	0.167735686
UCKL1	Ecm_receptor_interaction	LGG	-0.086698856
UCKL1	Effector cd4+ memory t (	LGG	-0.196418032
UCKL1	Effector cd8+ memory t (	LGG	-0.164615671
UCKL1	Effector memory t cell	LGG	-0.190172716
UCKL1	Effector regulatory t (treg	LGG	-0.074271196
UCKL1	Elvidge_hif1a_targets_up	LGG	-0.416600225
UCKL1	Endothelial cell	LGG	-0.06406041
UCKL1	Eosinophil	LGG	-0.072023503

UCKL1	Ether lipid metabolism	LGG	-0.193378683
UCKL1	Exhausted cd4+ t cell	LGG	-0.351860616
UCKL1	Exhausted cd8+ t cell	LGG	-0.112064458
UCKL1	Exhausted t cell	LGG	-0.055017919
UCKL1	Fat cell (adipocyte)	LGG	-0.127971226
UCKL1	Fatty acid biosynthesis	LGG	-0.139281629
UCKL1	Fatty acid degradation	LGG	-0.205253007
UCKL1	Fatty acid elongation	LGG	-0.2854833
UCKL1	Fibroblast	LGG	-0.073205296
UCKL1	Folate biosynthesis	LGG	-0.119170163
UCKL1	Follicular b cell	LGG	-0.119922008
UCKL1	Follicular dendritic cell	LGG	-0.12047272
UCKL1	Follicular helper (tfh) t cell	LGG	-0.109379412
UCKL1	Follicular t cell	LGG	0.056760441
UCKL1	Foxp3+il-17+ t cell	LGG	0.055889868
UCKL1	Fructose and mannose metabolism	LGG	0.003782381
UCKL1	G2m_checkpoint	LGG	0.075653796
UCKL1	Galactose metabolism	LGG	0.047360711
UCKL1	Galie_tumor_stemness_genes	LGG	-0.220515151
UCKL1	Glutathione metabolism	LGG	-0.047140508
UCKL1	Glycerolipid metabolism	LGG	-0.284049168
UCKL1	Glycerophospholipid metabolism	LGG	-0.177320903
UCKL1	Glycine, serine and threonine metabolism	LGG	-0.090527493
UCKL1	Glycolysis / gluconeogenesis	LGG	-0.270371416
UCKL1	Glycosaminoglycan biosynthesis	LGG	0.205335108
UCKL1	Glycosaminoglycan biosynthesis	LGG	-0.344659891
UCKL1	Glycosaminoglycan biosynthesis	LGG	-0.170962066
UCKL1	Glycosaminoglycan degradation	LGG	0.048901161
UCKL1	Glycosphingolipid biosynthesis	LGG	-0.346590802
UCKL1	Glycosphingolipid biosynthesis	LGG	-0.227755174
UCKL1	Glycosphingolipid biosynthesis	LGG	-0.210718414
UCKL1	Glycosylphosphatidylinositol	LGG	0.170461771
UCKL1	Glyoxylate and dicarboxylate metabolism	LGG	-0.018863984
UCKL1	Granulocyte	LGG	-0.043126828
UCKL1	Hedgehog signaling	LGG	-0.272196127
UCKL1	Histidine metabolism	LGG	-0.248169265
UCKL1	Hypoxia	LGG	-0.103277827
UCKL1	Il-17alpha t cell	LGG	-0.112359869
UCKL1	Il2_stat5_signaling	LGG	-0.138368839
UCKL1	Il6_jak_stat3_signaling	LGG	-0.112598396
UCKL1	Immune_checkpoints_tumor	LGG	-0.180527327
UCKL1	Immune_inhibition_cytokines	LGG	0.039248857
UCKL1	Inositol phosphate metabolism	LGG	-0.575563623

UCKL1	Interleukin_6_signaling	LGG	-0.331401567
UCKL1	Jaeger_metastasis_up	LGG	-0.081388574
UCKL1	Jain_nfkb_signaling	LGG	0.202580077
UCKL1	Kras_signaling_up	LGG	-0.353801307
UCKL1	Linoleic acid metabolism	LGG	-0.038162954
UCKL1	Lipoic acid metabolism	LGG	0.281802636
UCKL1	Lysine degradation	LGG	-0.0218328
UCKL1	Lysosome	LGG	-0.07218124
UCKL1	M1 macrophage	LGG	-0.147232629
UCKL1	M2 macrophage	LGG	-0.110965289
UCKL1	Mannose type o-glycan bi	LGG	0.214940359
UCKL1	Mapk_signaling_pathway	LGG	-0.456337967
UCKL1	Mapk3_erk1_activation	LGG	-0.431009352
UCKL1	Marginal zone b cell	LGG	-0.136526854
UCKL1	Memory b cell	LGG	-0.162420915
UCKL1	Mesenchymal cell	LGG	0.096035794
UCKL1	Mesenchymal stem cell	LGG	-0.147135503
UCKL1	Metabolism of xenobiotic	LGG	-0.126133601
UCKL1	Migrating cancer stem cel	LGG	-0.101997386
UCKL1	Mitotic_spindle	LGG	-0.170832123
UCKL1	Monocyte	LGG	-0.069074134
UCKL1	Mtor_signaling_pathway	LGG	-0.281676296
UCKL1	Mtorc1_signaling	LGG	-0.316117183
UCKL1	Mucin type o-glycan bios	LGG	-0.491295482
UCKL1	Myc_targets_v1	LGG	0.158035405
UCKL1	Myeloid cell	LGG	-0.156741255
UCKL1	N-glycan biosynthesis	LGG	-0.020370994
UCKL1	Naive b cell	LGG	-0.10031499
UCKL1	Naive cd4+ t cell	LGG	-0.303780474
UCKL1	Naive cd8+ t cell	LGG	-0.166128999
UCKL1	Natural killer cell	LGG	-0.100120505
UCKL1	Natural killer t (nkt) cell	LGG	0.259426456
UCKL1	Natural regulatory t (treg)	LGG	-0.148119874
UCKL1	Neomycin, kanamycin an	LGG	-0.129446193
UCKL1	Neutrophil	LGG	-0.080456419
UCKL1	Nicotinate and nicotinami	LGG	-0.13492534
UCKL1	Nitrogen metabolism	LGG	-0.332598922
UCKL1	Nod_like_receptor_signal	LGG	-0.210555951
UCKL1	Notch_signaling	LGG	-0.089244089
UCKL1	One carbon pool by folate	LGG	0.233933
UCKL1	Other glycan degradation	LGG	0.322588083
UCKL1	Other types of o-glycan b	LGG	0.443763296
UCKL1	Oxidative phosphorylatior	LGG	0.073812648

UCKL1	P53_pathway	LGG	0.026214496
UCKL1	P53_signaling_pathway	LGG	0.171430071
UCKL1	Pantothenate and coa bios	LGG	-0.192460341
UCKL1	Pentose and glucuronate i	LGG	-0.177387397
UCKL1	Pentose phosphate pathwa	LGG	-0.070256786
UCKL1	Pericyte	LGG	-0.009610168
UCKL1	Phenylalanine metabolism	LGG	-0.126685038
UCKL1	Phenylalanine, tyrosine ar	LGG	-0.207537542
UCKL1	Phosphonate and phosphir	LGG	-0.454115239
UCKL1	Pi3k_akt_activation	LGG	-0.387405217
UCKL1	Pi3k_akt_mtor_signaling	LGG	-0.346388767
UCKL1	Porphyrin and chlorophyl	LGG	-0.15435773
UCKL1	Primary bile acid biosynt	LGG	-0.326639762
UCKL1	Propanoate metabolism	LGG	-0.371849494
UCKL1	Purine metabolism	LGG	0.037633698
UCKL1	Pyrimidine metabolism	LGG	0.336028407
UCKL1	Pyruvate metabolism	LGG	-0.28889497
UCKL1	Regulation_of_autophagy	LGG	-0.228493408
UCKL1	Retinol metabolism	LGG	-0.202516914
UCKL1	Riboflavin metabolism	LGG	0.063093791
UCKL1	Schmahl_pdgf_signaling	LGG	-0.261850639
UCKL1	Selenocompound metabol	LGG	-0.048869583
UCKL1	Signaling_by_hippo	LGG	-0.413346393
UCKL1	Sphingolipid metabolism	LGG	-0.358369133
UCKL1	Starch and sucrose metabo	LGG	-0.14396703
UCKL1	Steroid biosynthesis	LGG	0.139593108
UCKL1	Steroid hormone biosynth	LGG	-0.122844485
UCKL1	Sulfur metabolism	LGG	-0.126379517
UCKL1	Synthesis and degradation	LGG	-0.331821449
UCKL1	T helper cell	LGG	-0.267167198
UCKL1	T helper1 (th1) cell	LGG	-0.153142368
UCKL1	T helper17 (th17) cell	LGG	-0.174047763
UCKL1	T helper2 (th2) cell	LGG	-0.088133413
UCKL1	T helper9 (th9) cell	LGG	-0.105666848
UCKL1	Taurine and hypotaurine r	LGG	0.313914106
UCKL1	Terpenoid backbone biosy	LGG	-0.123768885
UCKL1	Tgf_beta_signaling_pathw	LGG	-0.337600129
UCKL1	Thiamine metabolism	LGG	-0.134877245
UCKL1	Tnfa_signaling_via_nfkb	LGG	-0.090371257
UCKL1	Tryptophan metabolism	LGG	-0.252962405
UCKL1	Tumor endothelial cell	LGG	0.188244304
UCKL1	Tyrosine metabolism	LGG	-0.189400078
UCKL1	Ubiquinone and other ter	LGG	0.189415596

UCKL1	Valine, leucine and isoleu	LGG	0.217131228
UCKL1	Valine, leucine and isoleu	LGG	-0.278944567
UCKL1	Vascular endothelial cell	LGG	-0.023107628
UCKL1	Vascular smooth muscle c	LGG	-0.186542942
UCKL1	Vegf_signaling_pathway	LGG	-0.309866562
UCKL1	Vitamin b6 metabolism	LGG	-0.198260701
UCKL1	Willert_wnt_signaling	LGG	-0.071489948
UCKL1	Wnt_beta_catenin_signali	LGG	0.19623854
UPP1	Abnormal plasma cell	LGG	0.117296417
UPP1	Activated b cell	LGG	0.665381652
UPP1	Activated cd4+ t cell	LGG	0.510465849
UPP1	Activated t cell	LGG	0.49553064
UPP1	Alanine, aspartate and glu	LGG	-0.087911275
UPP1	Alcala_apoptosis	LGG	0.277216884
UPP1	Alpha-linolenic acid meta	LGG	0.270546734
UPP1	Amino sugar and nucleoti	LGG	0.52105798
UPP1	Ampk_pathway	LGG	-0.165410381
UPP1	Angiogenesis	LGG	0.571410076
UPP1	Arachidonic acid metabol	LGG	0.418595427
UPP1	Arginine and proline metæ	LGG	0.281770859
UPP1	Arginine biosynthesis	LGG	-0.144501231
UPP1	Ascorbate and aldarate mε	LGG	-0.28695692
UPP1	Atypical memory b cell	LGG	-0.025807732
UPP1	Axl+siglec6+ dendritic ce	LGG	0.647668536
UPP1	B cell	LGG	0.528838603
UPP1	B1 cell	LGG	0.425892963
UPP1	Basal cell	LGG	0.717177679
UPP1	Beta-alanine metabolism	LGG	0.118042175
UPP1	Biosynthesis of unsaturate	LGG	-0.162553976
UPP1	Biotin metabolism	LGG	-0.043435496
UPP1	Butanoate metabolism	LGG	-0.251222088
UPP1	Caffeine metabolism	LGG	0.093359658
UPP1	Cancer stem cell	LGG	0.491272342
UPP1	Cancer stem-like cell	LGG	0.450037511
UPP1	Cd4+ cytotoxic t cell	LGG	0.584495624
UPP1	Cd4+ memory t cell	LGG	0.287976121
UPP1	Cd4+ regulatory t cell	LGG	0.447946752
UPP1	Cd4+ t helper cell	LGG	0.524577111
UPP1	Cd4+cd25+ regulatory t c	LGG	0.525581544
UPP1	Cd8+ cytotoxic t cell	LGG	0.457770286
UPP1	Cd8+ regulatory t cell	LGG	0.455016699
UPP1	Cell_cycle	LGG	-0.027253038
UPP1	Chandran_metastasis_topç	LGG	-0.541653815

UPP1	Citrate cycle (tca cycle)	LGG	-0.109872332
UPP1	Cysteine and methionine r	LGG	0.168690328
UPP1	Cytokine induced killer c	LGG	0.44726993
UPP1	D-arginine and d-ornithin	LGG	-0.105923625
UPP1	D-glutamine and d-glutan	LGG	-0.4695738
UPP1	Dendritic cell	LGG	0.572971881
UPP1	Dna_repair	LGG	0.134984011
UPP1	Dna_replication	LGG	0.147001204
UPP1	Double-negative memory	LGG	0.290307406
UPP1	Drug metabolism - cytoch	LGG	0.181302001
UPP1	Drug metabolism - other c	LGG	0.183579249
UPP1	E2f_targets	LGG	0.017677385
UPP1	Ecm_receptor_interaction	LGG	0.509561792
UPP1	Effector cd4+ memory t (	LGG	0.456770242
UPP1	Effector cd8+ memory t (	LGG	0.621068401
UPP1	Effector memory t cell	LGG	0.306836227
UPP1	Effector regulatory t (treg	LGG	0.469688943
UPP1	Elvidge_hif1a_targets_up	LGG	0.185708425
UPP1	Endothelial cell	LGG	0.536959637
UPP1	Eosinophil	LGG	0.529742318
UPP1	Ether lipid metabolism	LGG	0.240316093
UPP1	Exhausted cd4+ t cell	LGG	0.461933074
UPP1	Exhausted cd8+ t cell	LGG	0.586501107
UPP1	Exhausted t cell	LGG	0.574225467
UPP1	Fat cell (adipocyte)	LGG	0.084122118
UPP1	Fatty acid biosynthesis	LGG	-0.179170368
UPP1	Fatty acid degradation	LGG	-0.021307057
UPP1	Fatty acid elongation	LGG	0.040784125
UPP1	Fibroblast	LGG	0.536124569
UPP1	Folate biosynthesis	LGG	0.00139806
UPP1	Follicular b cell	LGG	0.358524751
UPP1	Follicular dendritic cell	LGG	0.042011527
UPP1	Follicular helper (tfh) t c	LGG	0.436701742
UPP1	Follicular t cell	LGG	0.427870897
UPP1	Foxp3+il-17+ t cell	LGG	-0.197979071
UPP1	Fructose and mannose me	LGG	0.395732966
UPP1	G2m_checkpoint	LGG	-0.088379054
UPP1	Galactose metabolism	LGG	0.53677453
UPP1	Galie_tumor_stemness_ge	LGG	-0.246571144
UPP1	Glutathione metabolism	LGG	0.579444871
UPP1	Glycerolipid metabolism	LGG	-0.162579292
UPP1	Glycerophospholipid met	LGG	0.231240898
UPP1	Glycine, serine and threor	LGG	0.104486489

UPP1	Glycolysis / gluconeogene	LGG	0.165553682
UPP1	Glycosaminoglycan biosyn	LGG	0.352173661
UPP1	Glycosaminoglycan biosyn	LGG	0.226147144
UPP1	Glycosaminoglycan biosyn	LGG	0.553219653
UPP1	Glycosaminoglycan degra	LGG	0.461805743
UPP1	Glycosphingolipid biosyn	LGG	0.274268989
UPP1	Glycosphingolipid biosyn	LGG	0.503614234
UPP1	Glycosphingolipid biosyn	LGG	0.102577366
UPP1	Glycosylphosphatidylinos	LGG	0.300285796
UPP1	Glyoxylate and dicarboxy	LGG	-0.279813648
UPP1	Granulocyte	LGG	0.574214088
UPP1	Hedgehog_signaling	LGG	-0.261538124
UPP1	Histidine metabolism	LGG	0.237507185
UPP1	Hypoxia	LGG	0.522920214
UPP1	Il-17alpha t cell	LGG	0.447761158
UPP1	Il2_stat5_signaling	LGG	0.61373496
UPP1	Il6_jak_stat3_signaling	LGG	0.57312498
UPP1	Immune_checkpoints_tur	LGG	0.517362493
UPP1	Immune_inhibition_cytok	LGG	0.403327111
UPP1	Inositol phosphate metabo	LGG	-0.235928287
UPP1	Interleukin_6_signaling	LGG	0.313207312
UPP1	Jaeger_metastasis_up	LGG	0.470966363
UPP1	Jain_nfkb_signaling	LGG	0.004011602
UPP1	Kras_signaling_up	LGG	0.517681739
UPP1	Linoleic acid metabolism	LGG	0.082285115
UPP1	Lipoic acid metabolism	LGG	-0.100192219
UPP1	Lysine degradation	LGG	-0.473676059
UPP1	Lysosome	LGG	0.512919163
UPP1	M1 macrophage	LGG	0.513698972
UPP1	M2 macrophage	LGG	0.4832285
UPP1	Mannose type o-glycan bi	LGG	0.369760077
UPP1	Mapk_signaling_pathway	LGG	0.151138727
UPP1	Mapk3_erk1_activation	LGG	0.124729612
UPP1	Marginal zone b cell	LGG	0.365733806
UPP1	Memory b cell	LGG	0.343623788
UPP1	Mesenchymal cell	LGG	0.658046448
UPP1	Mesenchymal stem cell	LGG	0.566574332
UPP1	Metabolism of xenobiotic	LGG	0.179509593
UPP1	Migrating cancer stem cel	LGG	0.491534409
UPP1	Mitotic_spindle	LGG	-0.238140886
UPP1	Monocyte	LGG	0.665160477
UPP1	Mtor_signaling_pathway	LGG	-0.388821297
UPP1	Mtorc1_signaling	LGG	0.310452532

UPP1	Mucin type o-glycan biosynthesis	LGG	0.195011248
UPP1	Myc_targets_v1	LGG	-0.082517093
UPP1	Myeloid cell	LGG	0.47231005
UPP1	N-glycan biosynthesis	LGG	0.270391983
UPP1	Naive b cell	LGG	-0.329413048
UPP1	Naive cd4+ t cell	LGG	0.139672312
UPP1	Naive cd8+ t cell	LGG	-0.418931794
UPP1	Natural killer cell	LGG	0.52538969
UPP1	Natural killer t (nkt) cell	LGG	0.418914648
UPP1	Natural regulatory t (treg) cell	LGG	0.480009956
UPP1	Neomycin, kanamycin and streptomycin	LGG	0.550411846
UPP1	Neutrophil	LGG	0.558905558
UPP1	Nicotinate and nicotinamide metabolism	LGG	0.567297216
UPP1	Nitrogen metabolism	LGG	0.166441816
UPP1	Nod_like_receptor_signaling	LGG	0.329355553
UPP1	Notch_signaling	LGG	0.269166995
UPP1	One carbon pool by folate	LGG	-0.100527606
UPP1	Other glycan degradation	LGG	0.356499569
UPP1	Other types of o-glycan biosynthesis	LGG	0.352844555
UPP1	Oxidative phosphorylation	LGG	0.085306777
UPP1	P53_pathway	LGG	0.440792716
UPP1	P53_signaling_pathway	LGG	0.152870195
UPP1	Pantothenate and coa biosynthesis	LGG	0.386936668
UPP1	Pentose and glucuronate interconversions	LGG	-0.039210454
UPP1	Pentose phosphate pathway	LGG	0.259082714
UPP1	Pericyte	LGG	0.438367251
UPP1	Phenylalanine metabolism	LGG	0.448791056
UPP1	Phenylalanine, tyrosine and tryptophan metabolism	LGG	0.080998216
UPP1	Phosphonate and phosphite metabolism	LGG	0.196389491
UPP1	Pi3k_akt_activation	LGG	-0.425079826
UPP1	Pi3k_akt_mtor_signaling	LGG	0.412870727
UPP1	Porphyrin and chlorophyll metabolism	LGG	0.008831098
UPP1	Primary bile acid biosynthesis	LGG	0.401846883
UPP1	Propanoate metabolism	LGG	-0.295363248
UPP1	Purine metabolism	LGG	0.013596016
UPP1	Pyrimidine metabolism	LGG	0.12298721
UPP1	Pyruvate metabolism	LGG	-0.147580848
UPP1	Regulation_of_autophagy	LGG	-0.011624502
UPP1	Retinol metabolism	LGG	0.092938838
UPP1	Riboflavin metabolism	LGG	0.415934545
UPP1	Schmahl_pdgf_signaling	LGG	-0.126536513
UPP1	Selenocompound metabolism	LGG	-0.237521123
UPP1	Signaling_by_hippo	LGG	-0.093712214

UPP1	Sphingolipid metabolism	LGG	-0.100327367
UPP1	Starch and sucrose metabo	LGG	0.570700985
UPP1	Steroid biosynthesis	LGG	-0.171483325
UPP1	Steroid hormone biosynth	LGG	-0.173689609
UPP1	Sulfur metabolism	LGG	-0.116969409
UPP1	Synthesis and degradation	LGG	-0.117587291
UPP1	T helper cell	LGG	0.379930882
UPP1	T helper1 (th1) cell	LGG	0.590668714
UPP1	T helper17 (th17) cell	LGG	0.5297183
UPP1	T helper2 (th2) cell	LGG	0.628947974
UPP1	T helper9 (th9) cell	LGG	0.581358131
UPP1	Taurine and hypotaurine r	LGG	-0.338584513
UPP1	Terpenoid backbone biosy	LGG	-0.320829794
UPP1	Tgf_beta_signaling_pathw	LGG	-0.233333342
UPP1	Thiamine metabolism	LGG	0.131155193
UPP1	Tnfa_signaling_via_nfk	LGG	0.500107549
UPP1	Tryptophan metabolism	LGG	0.238432568
UPP1	Tumor endothelial cell	LGG	0.162534082
UPP1	Tyrosine metabolism	LGG	0.355186907
UPP1	Ubiquinone and other ter	LGG	0.204649788
UPP1	Valine, leucine and isoleu	LGG	0.435063522
UPP1	Valine, leucine and isoleu	LGG	-0.052521312
UPP1	Vascular endothelial cell	LGG	0.45948343
UPP1	Vascular smooth muscle c	LGG	0.132247339
UPP1	Vegf_signaling_pathway	LGG	0.22088721
UPP1	Vitamin b6 metabolism	LGG	0.008617736
UPP1	Willert_wnt_signaling	LGG	0.056313049
UPP1	Wnt_beta_catenin_signali	LGG	-0.290738213
UPP2	Abnormal plasma cell	LGG	-0.068541492
UPP2	Activated b cell	LGG	-0.192872869
UPP2	Activated cd4+ t cell	LGG	-0.066596022
UPP2	Activated t cell	LGG	-0.425756357
UPP2	Alanine, aspartate and glu	LGG	0.402562361
UPP2	Alcala_apoptosis	LGG	-0.090388446
UPP2	Alpha-linolenic acid meta	LGG	0.261483825
UPP2	Amino sugar and nucleoti	LGG	-0.233832128
UPP2	Ampk_pathway	LGG	-0.200790086
UPP2	Angiogenesis	LGG	-0.328413595
UPP2	Arachidonic acid metabo	LGG	0.185311577
UPP2	Arginine and proline met	LGG	0.304652722
UPP2	Arginine biosynthesis	LGG	0.37762537
UPP2	Ascorbate and aldarate m	LGG	0.210192559
UPP2	Atypical memory b cell	LGG	-0.136028686

UPP2	Axl+siglec6+ dendritic ce	LGG	0.027800096
UPP2	B cell	LGG	-0.099840828
UPP2	B1 cell	LGG	-0.193316626
UPP2	Basal cell	LGG	-0.220146628
UPP2	Beta-alanine metabolism	LGG	0.340940093
UPP2	Biosynthesis of unsaturate	LGG	0.211536563
UPP2	Biotin metabolism	LGG	-0.25340701
UPP2	Butanoate metabolism	LGG	0.478166062
UPP2	Caffeine metabolism	LGG	-0.096135835
UPP2	Cancer stem cell	LGG	-0.308579777
UPP2	Cancer stem-like cell	LGG	-0.223664622
UPP2	Cd4+ cytotoxic t cell	LGG	-0.050865898
UPP2	Cd4+ memory t cell	LGG	-0.330456403
UPP2	Cd4+ regulatory t cell	LGG	-0.112240138
UPP2	Cd4+ t helper cell	LGG	-0.08261367
UPP2	Cd4+cd25+ regulatory t c	LGG	-0.1208193
UPP2	Cd8+ cytotoxic t cell	LGG	-0.177472796
UPP2	Cd8+ regulatory t cell	LGG	-0.223500281
UPP2	Cell_cycle	LGG	-0.482025609
UPP2	Chandran_metastasis_top	LGG	-0.119506909
UPP2	Citrate cycle (tca cycle)	LGG	0.190176851
UPP2	Cysteine and methionine r	LGG	0.287542958
UPP2	Cytokine induced killer c	LGG	-0.23007679
UPP2	D-arginine and d-ornithin	LGG	0.075958304
UPP2	D-glutamine and d-glutan	LGG	0.519146019
UPP2	Dendritic cell	LGG	-0.083252454
UPP2	Dna_repair	LGG	-0.332884463
UPP2	Dna_replication	LGG	-0.475748632
UPP2	Double-negative memory	LGG	-0.349252319
UPP2	Drug metabolism - cytoch	LGG	0.277596915
UPP2	Drug metabolism - other	LGG	0.064335876
UPP2	E2f_targets	LGG	-0.500649303
UPP2	Ecm_receptor_interaction	LGG	-0.282834333
UPP2	Effector cd4+ memory t	LGG	-0.076597008
UPP2	Effector cd8+ memory t	LGG	-0.023991545
UPP2	Effector memory t cell	LGG	0.012030578
UPP2	Effector regulatory t (treg)	LGG	-0.201094497
UPP2	Elvidge_hif1a_targets_up	LGG	-0.284274536
UPP2	Endothelial cell	LGG	-0.336096049
UPP2	Eosinophil	LGG	-0.044681211
UPP2	Ether lipid metabolism	LGG	0.251725091
UPP2	Exhausted cd4+ t cell	LGG	-0.045723516
UPP2	Exhausted cd8+ t cell	LGG	-0.146198629

UPP2	Exhausted t cell	LGG	-0.147398867
UPP2	Fat cell (adipocyte)	LGG	0.241137976
UPP2	Fatty acid biosynthesis	LGG	0.166090373
UPP2	Fatty acid degradation	LGG	0.315878641
UPP2	Fatty acid elongation	LGG	0.224529252
UPP2	Fibroblast	LGG	-0.262547307
UPP2	Folate biosynthesis	LGG	0.098625384
UPP2	Follicular b cell	LGG	-0.049411958
UPP2	Follicular dendritic cell	LGG	-0.018528144
UPP2	Follicular helper (tfh) t ce	LGG	-0.100534493
UPP2	Follicular t cell	LGG	-0.263658412
UPP2	Foxp3+il-17+ t cell	LGG	-0.281033645
UPP2	Fructose and mannose me	LGG	0.063409716
UPP2	G2m_checkpoint	LGG	-0.497280911
UPP2	Galactose metabolism	LGG	-0.193809345
UPP2	Galie_tumor_stemness_ge	LGG	0.029023212
UPP2	Glutathione metabolism	LGG	0.003055228
UPP2	Glycerolipid metabolism	LGG	0.349813236
UPP2	Glycerophospholipid metæ	LGG	0.29722019
UPP2	Glycine, serine and threor	LGG	0.277026866
UPP2	Glycolysis / gluconeogene	LGG	0.173628646
UPP2	Glycosaminoglycan biosy	LGG	-0.317830215
UPP2	Glycosaminoglycan biosy	LGG	0.025685509
UPP2	Glycosaminoglycan biosy	LGG	-0.004183904
UPP2	Glycosaminoglycan degra	LGG	-0.209208549
UPP2	Glycosphingolipid biosyn	LGG	-0.146624095
UPP2	Glycosphingolipid biosyn	LGG	-0.095958379
UPP2	Glycosphingolipid biosyn	LGG	0.462953983
UPP2	Glycosylphosphatidylinos	LGG	-0.294586824
UPP2	Glyoxylate and dicarboxy	LGG	0.115758333
UPP2	Granulocyte	LGG	-0.109966272
UPP2	Hedgehog_signaling	LGG	-0.024463291
UPP2	Histidine metabolism	LGG	0.246218286
UPP2	Hypoxia	LGG	-0.115717684
UPP2	Il-17alpha t cell	LGG	-0.290160996
UPP2	Il2_stat5_signaling	LGG	-0.19172076
UPP2	Il6_jak_stat3_signaling	LGG	-0.193236503
UPP2	Immune_checkpoints_turr	LGG	-0.139967377
UPP2	Immune_inhibition_cytok	LGG	0.07207108
UPP2	Inositol phosphate metabo	LGG	0.374111446
UPP2	Interleukin_6_signaling	LGG	-0.15681473
UPP2	Jaeger_metastasis_up	LGG	-0.364911404
UPP2	Jain_nfkb_signaling	LGG	-0.394586361

UPP2	Kras_signaling_up	LGG	-0.085615397
UPP2	Linoleic acid metabolism	LGG	0.304839475
UPP2	Lipoic acid metabolism	LGG	-0.030793191
UPP2	Lysine degradation	LGG	0.004057817
UPP2	Lysosome	LGG	-0.190008282
UPP2	M1 macrophage	LGG	-0.042599246
UPP2	M2 macrophage	LGG	-0.054021823
UPP2	Mannose type o-glycan bi	LGG	-0.013391462
UPP2	Mapk_signaling_pathway	LGG	0.232759078
UPP2	Mapk3_erk1_activation	LGG	0.075470393
UPP2	Marginal zone b cell	LGG	-0.064056345
UPP2	Memory b cell	LGG	-0.124185165
UPP2	Mesenchymal cell	LGG	-0.307540702
UPP2	Mesenchymal stem cell	LGG	-0.180934912
UPP2	Metabolism of xenobiotic	LGG	0.307306949
UPP2	Migrating cancer stem cel	LGG	-0.039084615
UPP2	Mitotic_spindle	LGG	-0.244505899
UPP2	Monocyte	LGG	-0.09599012
UPP2	Mtor_signaling_pathway	LGG	0.207669141
UPP2	Mtorc1_signaling	LGG	-0.201567234
UPP2	Mucin type o-glycan biosy	LGG	0.022384502
UPP2	Myc_targets_v1	LGG	-0.285670047
UPP2	Myeloid cell	LGG	-0.072300149
UPP2	N-glycan biosynthesis	LGG	-0.501731364
UPP2	Naive b cell	LGG	0.123661983
UPP2	Naive cd4+ t cell	LGG	0.093517795
UPP2	Naive cd8+ t cell	LGG	0.208162746
UPP2	Natural killer cell	LGG	-0.167660893
UPP2	Natural killer t (nkt) cell	LGG	-0.334931344
UPP2	Natural regulatory t (treg)	LGG	-0.125972494
UPP2	Neomycin, kanamycin and	LGG	0.002677256
UPP2	Neutrophil	LGG	-0.098951553
UPP2	Nicotinate and nicotinami	LGG	-0.012112605
UPP2	Nitrogen metabolism	LGG	0.295375394
UPP2	Nod_like_receptor_signal	LGG	0.137949218
UPP2	Notch_signaling	LGG	0.068081645
UPP2	One carbon pool by folate	LGG	-0.317561809
UPP2	Other glycan degradation	LGG	-0.337960362
UPP2	Other types of o-glycan b	LGG	-0.141460534
UPP2	Oxidative phosphorylatior	LGG	0.172105995
UPP2	P53_pathway	LGG	-0.196084334
UPP2	P53_signaling_pathway	LGG	-0.573578923
UPP2	Pantothenate and coa bios	LGG	-0.111119939

UPP2	Pentose and glucuronate i	LGG	0.137746279
UPP2	Pentose phosphate pathwa	LGG	0.1125435
UPP2	Pericyte	LGG	-0.340117091
UPP2	Phenylalanine metabolism	LGG	0.127757559
UPP2	Phenylalanine, tyrosine ar	LGG	0.267374771
UPP2	Phosphonate and phosphir	LGG	0.190981552
UPP2	Pi3k_akt_activation	LGG	0.028896567
UPP2	Pi3k_akt_mtor_signaling	LGG	-0.20244271
UPP2	Porphyrin and chlorophyl	LGG	0.116543128
UPP2	Primary bile acid biosynt	LGG	0.329405709
UPP2	Propanoate metabolism	LGG	0.273327706
UPP2	Purine metabolism	LGG	-0.242821977
UPP2	Pyrimidine metabolism	LGG	-0.397709924
UPP2	Pyruvate metabolism	LGG	0.304887245
UPP2	Regulation_of_autophagy	LGG	0.299792364
UPP2	Retinol metabolism	LGG	0.365952497
UPP2	Riboflavin metabolism	LGG	-0.124487999
UPP2	Schmahl_pdgf_signaling	LGG	0.186378449
UPP2	Selenocompound metabol	LGG	-0.079703853
UPP2	Signaling_by_hippo	LGG	0.153235698
UPP2	Sphingolipid metabolism	LGG	-0.109525703
UPP2	Starch and sucrose metabo	LGG	0.092421169
UPP2	Steroid biosynthesis	LGG	-0.233039747
UPP2	Steroid hormone biosynth	LGG	0.264179252
UPP2	Sulfur metabolism	LGG	0.053333031
UPP2	Synthesis and degradation	LGG	0.433864536
UPP2	T helper cell	LGG	-0.072021828
UPP2	T helper1 (th1) cell	LGG	-0.065321018
UPP2	T helper17 (th17) cell	LGG	-0.079303384
UPP2	T helper2 (th2) cell	LGG	-0.030081219
UPP2	T helper9 (th9) cell	LGG	-0.091567426
UPP2	Taurine and hypotaurine r	LGG	0.076539535
UPP2	Terpenoid backbone biosy	LGG	-0.01226199
UPP2	Tgf_beta_signaling_pathw	LGG	0.067271926
UPP2	Thiamine metabolism	LGG	0.225882696
UPP2	Tnfa_signaling_via_nfk	LGG	-0.130084332
UPP2	Tryptophan metabolism	LGG	0.139016708
UPP2	Tumor endothelial cell	LGG	0.091593226
UPP2	Tyrosine metabolism	LGG	0.237802207
UPP2	Ubiquinone and other ter	LGG	-0.288728978
UPP2	Valine, leucine and isoleu	LGG	-0.120792776
UPP2	Valine, leucine and isoleu	LGG	0.356731913
UPP2	Vascular endothelial cell	LGG	-0.269705254

UPP2	Vascular smooth muscle c	LGG	0.071407968
UPP2	Vegf_signaling_pathway	LGG	0.274645488
UPP2	Vitamin b6 metabolism	LGG	0.171727635
UPP2	Willert_wnt_signaling	LGG	0.040727943
UPP2	Wnt_beta_catenin_signali	LGG	-0.230845627
CDA	Abnormal plasma cell	LIHC	0.007133724
CDA	Activated b cell	LIHC	-0.023916478
CDA	Activated cd4+ t cell	LIHC	0.096719617
CDA	Activated t cell	LIHC	-0.010498253
CDA	Alanine, aspartate and glu	LIHC	0.150937646
CDA	Alcala_apoptosis	LIHC	-0.082056449
CDA	Alpha-linolenic acid meta	LIHC	0.324882432
CDA	Amino sugar and nucleoti	LIHC	0.246976833
CDA	Ampk_pathway	LIHC	0.100481079
CDA	Angiogenesis	LIHC	0.177392922
CDA	Arachidonic acid metabo	LIHC	0.315723927
CDA	Arginine and proline met	LIHC	0.142299801
CDA	Arginine biosynthesis	LIHC	0.206871748
CDA	Ascorbate and aldarate m	LIHC	0.149169864
CDA	Atypical memory b cell	LIHC	-0.073889819
CDA	Axl+siglec6+ dendritic ce	LIHC	0.256435139
CDA	B cell	LIHC	0.092105297
CDA	B1 cell	LIHC	0.016851788
CDA	Basal cell	LIHC	0.174750378
CDA	Beta-alanine metabolism	LIHC	0.222770987
CDA	Biosynthesis of unsaturate	LIHC	0.209170296
CDA	Biotin metabolism	LIHC	0.110044421
CDA	Butanoate metabolism	LIHC	0.187761061
CDA	Caffeine metabolism	LIHC	0.368840672
CDA	Cancer stem cell	LIHC	0.022234191
CDA	Cancer stem-like cell	LIHC	-0.084484425
CDA	Cd4+ cytotoxic t cell	LIHC	0.082618175
CDA	Cd4+ memory t cell	LIHC	0.004268653
CDA	Cd4+ regulatory t cell	LIHC	0.166874571
CDA	Cd4+ t helper cell	LIHC	0.058018915
CDA	Cd4+cd25+ regulatory t c	LIHC	0.053867863
CDA	Cd8+ cytotoxic t cell	LIHC	0.032177164
CDA	Cd8+ regulatory t cell	LIHC	-0.019710354
CDA	Cell_cycle	LIHC	-0.269067933
CDA	Chandran_metastasis_top	LIHC	-0.359624656
CDA	Citrate cycle (tca cycle)	LIHC	0.11482456
CDA	Cysteine and methionine r	LIHC	0.225041664
CDA	Cytokine induced killer c	LIHC	-0.032332156

CDA	D-arginine and d-ornithin	LIHC	0.179115833
CDA	D-glutamine and d-glutan	LIHC	0.184797427
CDA	Dendritic cell	LIHC	0.121827945
CDA	Dna_repair	LIHC	-0.16672988
CDA	Dna_replication	LIHC	-0.157706736
CDA	Double-negative memory	LIHC	-0.054654988
CDA	Drug metabolism - cytoch	LIHC	0.174269062
CDA	Drug metabolism - other	LIHC	0.222153159
CDA	E2f_targets	LIHC	-0.197946469
CDA	Ecm_receptor_interaction	LIHC	0.124552285
CDA	Effector cd4+ memory t	LIHC	0.033348743
CDA	Effector cd8+ memory t	LIHC	0.05611873
CDA	Effector memory t cell	LIHC	0.028663867
CDA	Effector regulatory t (treg	LIHC	0.08586618
CDA	Elvidge_hif1a_targets_up	LIHC	-0.018448278
CDA	Endothelial cell	LIHC	0.095649971
CDA	Eosinophil	LIHC	0.175886149
CDA	Ether lipid metabolism	LIHC	0.056289738
CDA	Exhausted cd4+ t cell	LIHC	0.098830195
CDA	Exhausted cd8+ t cell	LIHC	0.097515882
CDA	Exhausted t cell	LIHC	0.009778451
CDA	Fat cell (adipocyte)	LIHC	0.194910332
CDA	Fatty acid biosynthesis	LIHC	0.144549978
CDA	Fatty acid degradation	LIHC	0.189629385
CDA	Fatty acid elongation	LIHC	0.191616691
CDA	Fibroblast	LIHC	0.113492815
CDA	Folate biosynthesis	LIHC	0.340938288
CDA	Follicular b cell	LIHC	0.029957733
CDA	Follicular dendritic cell	LIHC	-0.095484804
CDA	Follicular helper (tfh) t ce	LIHC	0.00897445
CDA	Follicular t cell	LIHC	-0.033693354
CDA	Foxp3+il-17+ t cell	LIHC	0.09798393
CDA	Fructose and mannose me	LIHC	0.218503252
CDA	G2m_checkpoint	LIHC	-0.225856029
CDA	Galactose metabolism	LIHC	0.275372213
CDA	Galie_tumor_stemness_ge	LIHC	-0.096428888
CDA	Glutathione metabolism	LIHC	0.216805769
CDA	Glycerolipid metabolism	LIHC	0.403042957
CDA	Glycerophospholipid met	LIHC	0.174621975
CDA	Glycine, serine and threor	LIHC	0.219514379
CDA	Glycolysis / gluconeogene	LIHC	0.229845482
CDA	Glycosaminoglycan biosy	LIHC	0.152416471
CDA	Glycosaminoglycan biosy	LIHC	-0.268456814

CDA	Glycosaminoglycan biosyn	LIHC	0.008710903
CDA	Glycosaminoglycan degra	LIHC	0.064890832
CDA	Glycosphingolipid biosyn	LIHC	0.087985653
CDA	Glycosphingolipid biosyn	LIHC	0.206167947
CDA	Glycosphingolipid biosyn	LIHC	0.179755849
CDA	Glycosylphosphatidylinos	LIHC	-0.102447341
CDA	Glyoxylate and dicarboxy	LIHC	0.134793919
CDA	Granulocyte	LIHC	0.148069375
CDA	Hedgehog_signaling	LIHC	-0.147386099
CDA	Histidine metabolism	LIHC	0.243016711
CDA	Hypoxia	LIHC	0.30046283
CDA	Il-17alpha t cell	LIHC	0.021676907
CDA	Il2_stat5_signaling	LIHC	0.17522217
CDA	Il6_jak_stat3_signaling	LIHC	0.231154876
CDA	Immune_checkpoints_turr	LIHC	0.002480635
CDA	Immune_inhibition_cytok	LIHC	0.279834103
CDA	Inositol phosphate metabo	LIHC	-0.025842034
CDA	Interleukin_6_signaling	LIHC	0.11180266
CDA	Jaeger_metastasis_up	LIHC	0.098770284
CDA	Jain_nfkb_signaling	LIHC	-0.357537627
CDA	Kras_signaling_up	LIHC	0.25580821
CDA	Linoleic acid metabolism	LIHC	0.263104564
CDA	Lipoic acid metabolism	LIHC	-0.172672832
CDA	Lysine degradation	LIHC	0.069300972
CDA	Lysosome	LIHC	0.140491975
CDA	M1 macrophage	LIHC	0.183487561
CDA	M2 macrophage	LIHC	0.227872612
CDA	Mannose type o-glycan bi	LIHC	0.015509919
CDA	Mapk_signaling_pathway	LIHC	0.053853133
CDA	Mapk3_erk1_activation	LIHC	0.111595332
CDA	Marginal zone b cell	LIHC	0.194126572
CDA	Memory b cell	LIHC	-0.033842215
CDA	Mesenchymal cell	LIHC	0.032843717
CDA	Mesenchymal stem cell	LIHC	0.209845228
CDA	Metabolism of xenobiotic	LIHC	0.22301582
CDA	Migrating cancer stem cel	LIHC	-0.027983752
CDA	Mitotic_spindle	LIHC	-0.203604187
CDA	Monocyte	LIHC	0.195675662
CDA	Mtor_signaling_pathway	LIHC	0.085364826
CDA	Mtorc1_signaling	LIHC	0.049769991
CDA	Mucin type o-glycan biosy	LIHC	0.02519881
CDA	Myc_targets_v1	LIHC	-0.292641296
CDA	Myeloid cell	LIHC	0.130035031

CDA	N-glycan biosynthesis	LIHC	0.109315091
CDA	Naive b cell	LIHC	0.027994932
CDA	Naive cd4+ t cell	LIHC	-0.129930422
CDA	Naive cd8+ t cell	LIHC	-0.249322708
CDA	Natural killer cell	LIHC	0.04374618
CDA	Natural killer t (nkt) cell	LIHC	-0.116553901
CDA	Natural regulatory t (treg)	LIHC	0.128586382
CDA	Neomycin, kanamycin and	LIHC	0.363879752
CDA	Neutrophil	LIHC	0.337632155
CDA	Nicotinate and nicotinami	LIHC	0.354066638
CDA	Nitrogen metabolism	LIHC	0.004399497
CDA	Nod_like_receptor_signal	LIHC	0.082657913
CDA	Notch_signaling	LIHC	0.146518742
CDA	One carbon pool by folate	LIHC	0.116034747
CDA	Other glycan degradation	LIHC	0.083680289
CDA	Other types of o-glycan b	LIHC	-0.013222343
CDA	Oxidative phosphorylatio	LIHC	0.134319983
CDA	P53_pathway	LIHC	0.262414608
CDA	P53_signaling_pathway	LIHC	0.049471375
CDA	Pantothenate and coa bios	LIHC	0.285150113
CDA	Pentose and glucuronate i	LIHC	0.224393066
CDA	Pentose phosphate pathwa	LIHC	0.137787535
CDA	Pericyte	LIHC	0.052216677
CDA	Phenylalanine metabolism	LIHC	0.148930276
CDA	Phenylalanine, tyrosine ar	LIHC	0.266446616
CDA	Phosphonate and phosphir	LIHC	0.05418152
CDA	Pi3k_akt_activation	LIHC	-0.012988078
CDA	Pi3k_akt_mtor_signaling	LIHC	0.090138868
CDA	Porphyrin and chlorophyl	LIHC	0.107188871
CDA	Primary bile acid biosynt	LIHC	0.158630228
CDA	Propanoate metabolism	LIHC	0.205319327
CDA	Purine metabolism	LIHC	-0.057192166
CDA	Pyrimidine metabolism	LIHC	-0.147226923
CDA	Pyruvate metabolism	LIHC	0.262654398
CDA	Regulation_of_autophagy	LIHC	0.132826394
CDA	Retinol metabolism	LIHC	0.237903608
CDA	Riboflavin metabolism	LIHC	0.188468102
CDA	Schmahl_pdgf_signaling	LIHC	0.21625035
CDA	Selenocompound metabol	LIHC	0.064151916
CDA	Signaling_by_hippo	LIHC	-0.197293678
CDA	Sphingolipid metabolism	LIHC	-0.011084494
CDA	Starch and sucrose metabo	LIHC	0.381513512
CDA	Steroid biosynthesis	LIHC	-0.040074828

CDA	Steroid hormone biosynth	LIHC	0.210311129
CDA	Sulfur metabolism	LIHC	0.090901718
CDA	Synthesis and degradation	LIHC	0.210685369
CDA	T helper cell	LIHC	0.038861375
CDA	T helper1 (th1) cell	LIHC	0.058968905
CDA	T helper17 (th17) cell	LIHC	0.041013436
CDA	T helper2 (th2) cell	LIHC	0.058565807
CDA	T helper9 (th9) cell	LIHC	0.07178423
CDA	Taurine and hypotaurine r	LIHC	0.045119561
CDA	Terpenoid backbone biosy	LIHC	0.073650998
CDA	Tgf_beta_signaling_pathw	LIHC	-0.100882588
CDA	Thiamine metabolism	LIHC	0.44765811
CDA	Tnfa_signaling_via_nfk	LIHC	0.231209432
CDA	Tryptophan metabolism	LIHC	0.260641164
CDA	Tumor endothelial cell	LIHC	-0.005565449
CDA	Tyrosine metabolism	LIHC	0.148625025
CDA	Ubiquinone and other ter	LIHC	0.255528173
CDA	Valine, leucine and isoleu	LIHC	0.497297091
CDA	Valine, leucine and isoleu	LIHC	0.181104881
CDA	Vascular endothelial cell	LIHC	0.228823346
CDA	Vascular smooth muscle c	LIHC	0.139280472
CDA	Vegf_signaling_pathway	LIHC	0.051209829
CDA	Vitamin b6 metabolism	LIHC	0.145289406
CDA	Willert_wnt_signaling	LIHC	0.066256959
CDA	Wnt_beta_catenin_signali	LIHC	-0.460788692
UCK1	Abnormal plasma cell	LIHC	-0.146788485
UCK1	Activated b cell	LIHC	0.003795513
UCK1	Activated cd4+ t cell	LIHC	-0.082768344
UCK1	Activated t cell	LIHC	0.032316536
UCK1	Alanine, aspartate and glu	LIHC	-0.182795116
UCK1	Alcala_apoptosis	LIHC	0.089633203
UCK1	Alpha-linolenic acid meta	LIHC	0.106046368
UCK1	Amino sugar and nucleoti	LIHC	-0.032272365
UCK1	Ampk_pathway	LIHC	0.055855543
UCK1	Angiogenesis	LIHC	-0.172600301
UCK1	Arachidonic acid metabol	LIHC	0.012179166
UCK1	Arginine and proline met	LIHC	-0.106470809
UCK1	Arginine biosynthesis	LIHC	-0.092087065
UCK1	Ascorbate and aldarate m	LIHC	-0.156015007
UCK1	Atypical memory b cell	LIHC	-0.025119119
UCK1	Axl+siglec6+ dendritic ce	LIHC	-0.098809229
UCK1	B cell	LIHC	-0.10801338
UCK1	B1 cell	LIHC	0.018495601

UCK1	Basal cell	LIHC	0.007373677
UCK1	Beta-alanine metabolism	LIHC	-0.118670471
UCK1	Biosynthesis of unsaturate	LIHC	0.060918126
UCK1	Biotin metabolism	LIHC	-0.013997895
UCK1	Butanoate metabolism	LIHC	0.075643876
UCK1	Caffeine metabolism	LIHC	-0.199676063
UCK1	Cancer stem cell	LIHC	-0.258823314
UCK1	Cancer stem-like cell	LIHC	-0.244200874
UCK1	Cd4+ cytotoxic t cell	LIHC	-0.032869998
UCK1	Cd4+ memory t cell	LIHC	-0.00817982
UCK1	Cd4+ regulatory t cell	LIHC	-0.03771094
UCK1	Cd4+ t helper cell	LIHC	-0.003568324
UCK1	Cd4+cd25+ regulatory t c	LIHC	-0.008771457
UCK1	Cd8+ cytotoxic t cell	LIHC	0.085355937
UCK1	Cd8+ regulatory t cell	LIHC	0.029633447
UCK1	Cell_cycle	LIHC	0.068482862
UCK1	Chandran_metastasis_top5	LIHC	-0.184235035
UCK1	Citrate cycle (tca cycle)	LIHC	-0.136627039
UCK1	Cysteine and methionine r	LIHC	-0.180140395
UCK1	Cytokine induced killer c	LIHC	0.068535605
UCK1	D-arginine and d-ornithin	LIHC	0.010695557
UCK1	D-glutamine and d-glutan	LIHC	-0.161253186
UCK1	Dendritic cell	LIHC	-0.141468371
UCK1	Dna_repair	LIHC	0.336278003
UCK1	Dna_replication	LIHC	0.2267865
UCK1	Double-negative memory	LIHC	0.126146009
UCK1	Drug metabolism - cytoch	LIHC	-0.084014477
UCK1	Drug metabolism - other	LIHC	0.087245013
UCK1	E2f_targets	LIHC	0.104413221
UCK1	Ecm_receptor_interaction	LIHC	-0.298930656
UCK1	Effector cd4+ memory t (	LIHC	-0.156909884
UCK1	Effector cd8+ memory t (	LIHC	-0.158464322
UCK1	Effector memory t cell	LIHC	-0.104736649
UCK1	Effector regulatory t (treg	LIHC	-0.13776247
UCK1	Elvidge_hif1a_targets_up	LIHC	-0.194267205
UCK1	Endothelial cell	LIHC	-0.238117987
UCK1	Eosinophil	LIHC	-0.094671465
UCK1	Ether lipid metabolism	LIHC	-0.02751041
UCK1	Exhausted cd4+ t cell	LIHC	-0.14542755
UCK1	Exhausted cd8+ t cell	LIHC	-0.126064688
UCK1	Exhausted t cell	LIHC	0.112826038
UCK1	Fat cell (adipocyte)	LIHC	0.109036945
UCK1	Fatty acid biosynthesis	LIHC	0.036734998

UCK1	Fatty acid degradation	LIHC	-0.004771028
UCK1	Fatty acid elongation	LIHC	0.1511439
UCK1	Fibroblast	LIHC	-0.27732547
UCK1	Folate biosynthesis	LIHC	-0.036703863
UCK1	Follicular b cell	LIHC	-0.088458198
UCK1	Follicular dendritic cell	LIHC	-0.024158401
UCK1	Follicular helper (tfh) t ce	LIHC	-0.043307708
UCK1	Follicular t cell	LIHC	0.196334559
UCK1	Foxp3+il-17+ t cell	LIHC	0.039179104
UCK1	Fructose and mannose me	LIHC	0.03989832
UCK1	G2m_checkpoint	LIHC	0.040720878
UCK1	Galactose metabolism	LIHC	-0.030427027
UCK1	Galie_tumor_stemness_ge	LIHC	-0.198267523
UCK1	Glutathione metabolism	LIHC	0.024866021
UCK1	Glycerolipid metabolism	LIHC	0.04742331
UCK1	Glycerophospholipid metæ	LIHC	0.188437783
UCK1	Glycine, serine and threor	LIHC	0.008448148
UCK1	Glycolysis / gluconeogene	LIHC	-0.034618774
UCK1	Glycosaminoglycan biosy	LIHC	-0.016454887
UCK1	Glycosaminoglycan biosy	LIHC	0.066456202
UCK1	Glycosaminoglycan biosy	LIHC	0.030085867
UCK1	Glycosaminoglycan degra	LIHC	-0.209611145
UCK1	Glycosphingolipid biosyn	LIHC	-0.037059396
UCK1	Glycosphingolipid biosyn	LIHC	0.005625873
UCK1	Glycosphingolipid biosyn	LIHC	0.053982291
UCK1	Glycosylphosphatidylinos	LIHC	0.059456918
UCK1	Glyoxylate and dicarboxy	LIHC	-0.072997646
UCK1	Granulocyte	LIHC	-0.160503951
UCK1	Hedgehog_signaling	LIHC	-0.361828974
UCK1	Histidine metabolism	LIHC	-0.104507234
UCK1	Hypoxia	LIHC	-0.205179173
UCK1	Il-17ralpha t cell	LIHC	0.053201942
UCK1	Il2_stat5_signaling	LIHC	-0.162519021
UCK1	Il6_jak_stat3_signaling	LIHC	-0.223345509
UCK1	Immune_checkpoints_tur	LIHC	-0.097316862
UCK1	Immune_inhibition_cytok	LIHC	0.021743109
UCK1	Inositol phosphate metabo	LIHC	-0.180386541
UCK1	Interleukin_6_signaling	LIHC	-0.400773004
UCK1	Jaeger_metastasis_up	LIHC	-0.102093804
UCK1	Jain_nfkb_signaling	LIHC	-0.063109623
UCK1	Kras_signaling_up	LIHC	-0.261201434
UCK1	Linoleic acid metabolism	LIHC	-0.029125858
UCK1	Lipoic acid metabolism	LIHC	0.080331078

UCK1	Lysine degradation	LIHC	-0.017221505
UCK1	Lysosome	LIHC	-0.083964099
UCK1	M1 macrophage	LIHC	-0.16512845
UCK1	M2 macrophage	LIHC	-0.131380087
UCK1	Mannose type o-glycan bi	LIHC	0.288155371
UCK1	Mapk_signaling_pathway	LIHC	-0.310391483
UCK1	Mapk3_erk1_activation	LIHC	-0.414226128
UCK1	Marginal zone b cell	LIHC	-0.131706794
UCK1	Memory b cell	LIHC	-0.07231265
UCK1	Mesenchymal cell	LIHC	-0.118145094
UCK1	Mesenchymal stem cell	LIHC	-0.301822862
UCK1	Metabolism of xenobiotic	LIHC	-0.062951953
UCK1	Migrating cancer stem cel	LIHC	-0.093737093
UCK1	Mitotic_spindle	LIHC	-0.237797713
UCK1	Monocyte	LIHC	-0.109268045
UCK1	Mtor_signaling_pathway	LIHC	-0.079801905
UCK1	Mtorc1_signaling	LIHC	-0.030761535
UCK1	Mucin type o-glycan bios	LIHC	-0.276285418
UCK1	Myc_targets_v1	LIHC	0.193996881
UCK1	Myeloid cell	LIHC	-0.165706408
UCK1	N-glycan biosynthesis	LIHC	-0.047268081
UCK1	Naive b cell	LIHC	0.002607528
UCK1	Naive cd4+ t cell	LIHC	-0.293913405
UCK1	Naive cd8+ t cell	LIHC	-0.237348954
UCK1	Natural killer cell	LIHC	-0.008192117
UCK1	Natural killer t (nkt) cell	LIHC	-0.066431264
UCK1	Natural regulatory t (treg)	LIHC	-0.087497035
UCK1	Neomycin, kanamycin an	LIHC	0.021583385
UCK1	Neutrophil	LIHC	-0.132202823
UCK1	Nicotinate and nicotinami	LIHC	-0.088672009
UCK1	Nitrogen metabolism	LIHC	-0.023099873
UCK1	Nod_like_receptor_signal	LIHC	-0.230022285
UCK1	Notch_signaling	LIHC	-0.101838006
UCK1	One carbon pool by folate	LIHC	-0.099567959
UCK1	Other glycan degradation	LIHC	-0.101308912
UCK1	Other types of o-glycan b	LIHC	0.235147559
UCK1	Oxidative phosphorylatio	LIHC	0.227317461
UCK1	P53_pathway	LIHC	0.026861951
UCK1	P53_signaling_pathway	LIHC	-0.136788191
UCK1	Pantothenate and coa bios	LIHC	0.083549908
UCK1	Pentose and glucuronate i	LIHC	-0.171182692
UCK1	Pentose phosphate pathwa	LIHC	0.048153058
UCK1	Pericyte	LIHC	-0.236901222

UCK1	Phenylalanine metabolism	LIHC	-0.10258016
UCK1	Phenylalanine, tyrosine ar	LIHC	0.020355171
UCK1	Phosphonate and phosphir	LIHC	-0.153829263
UCK1	Pi3k_akt_activation	LIHC	-0.251472546
UCK1	Pi3k_akt_mtor_signaling	LIHC	-0.052210746
UCK1	Porphyrin and chlorophyl	LIHC	-0.024365104
UCK1	Primary bile acid biosynt#	LIHC	-0.07242157
UCK1	Propanoate metabolism	LIHC	-0.083143017
UCK1	Purine metabolism	LIHC	0.173374308
UCK1	Pyrimidine metabolism	LIHC	0.244600594
UCK1	Pyruvate metabolism	LIHC	0.027173644
UCK1	Regulation_of_autophagy	LIHC	-0.092107934
UCK1	Retinol metabolism	LIHC	-0.046310498
UCK1	Riboflavin metabolism	LIHC	0.185683961
UCK1	Schmahl_pdgf_signaling	LIHC	-0.181991715
UCK1	Selenocompound metabol	LIHC	-0.20821473
UCK1	Signaling_by_hippo	LIHC	-0.26535552
UCK1	Sphingolipid metabolism	LIHC	-0.226404209
UCK1	Starch and sucrose metabo	LIHC	0.006009826
UCK1	Steroid biosynthesis	LIHC	0.25013962
UCK1	Steroid hormone biosynth	LIHC	-0.104130587
UCK1	Sulfur metabolism	LIHC	-0.190245316
UCK1	Synthesis and degradation	LIHC	0.149554776
UCK1	T helper cell	LIHC	-0.059159973
UCK1	T helper1 (th1) cell	LIHC	0.009164751
UCK1	T helper17 (th17) cell	LIHC	-0.094254063
UCK1	T helper2 (th2) cell	LIHC	-0.037767767
UCK1	T helper9 (th9) cell	LIHC	0.035722501
UCK1	Taurine and hypotaurine r	LIHC	0.0191887
UCK1	Terpenoid backbone biosy	LIHC	0.199643953
UCK1	Tgf_beta_signaling_pathw	LIHC	-0.318566463
UCK1	Thiamine metabolism	LIHC	0.086142178
UCK1	Tnfa_signaling_via_nfkb	LIHC	-0.255824275
UCK1	Tryptophan metabolism	LIHC	-0.037704435
UCK1	Tumor endothelial cell	LIHC	-0.062549759
UCK1	Tyrosine metabolism	LIHC	-0.029793224
UCK1	Ubiquinone and other ter#	LIHC	-0.056770917
UCK1	Valine, leucine and isoleu	LIHC	-0.01711382
UCK1	Valine, leucine and isoleu	LIHC	-0.034005337
UCK1	Vascular endothelial cell	LIHC	-0.189343656
UCK1	Vascular smooth muscle c	LIHC	-0.179060009
UCK1	Vegf_signaling_pathway	LIHC	-0.023818902
UCK1	Vitamin b6 metabolism	LIHC	0.136896763

UCK1	Willert_wnt_signaling	LIHC	-0.100787951
UCK1	Wnt_beta_catenin_signali	LIHC	-0.072107321
UCK2	Abnormal plasma cell	LIHC	0.069338457
UCK2	Activated b cell	LIHC	0.041997353
UCK2	Activated cd4+ t cell	LIHC	-0.040070902
UCK2	Activated t cell	LIHC	0.058220651
UCK2	Alanine, aspartate and glu	LIHC	-0.106884888
UCK2	Alcala_apoptosis	LIHC	0.404619923
UCK2	Alpha-linolenic acid meta	LIHC	-0.227974913
UCK2	Amino sugar and nucleoti	LIHC	0.110036479
UCK2	Ampk_pathway	LIHC	0.161636589
UCK2	Angiogenesis	LIHC	-0.142587415
UCK2	Arachidonic acid metabol	LIHC	-0.123245896
UCK2	Arginine and proline metæ	LIHC	-0.173169531
UCK2	Arginine biosynthesis	LIHC	-0.248284188
UCK2	Ascorbate and aldarate me	LIHC	-0.040031673
UCK2	Atypical memory b cell	LIHC	-0.104725855
UCK2	Axl+siglec6+ dendritic ce	LIHC	-0.246883916
UCK2	B cell	LIHC	0.009160395
UCK2	B1 cell	LIHC	-0.053348048
UCK2	Basal cell	LIHC	0.191352537
UCK2	Beta-alanine metabolism	LIHC	-0.304894548
UCK2	Biosynthesis of unsaturate	LIHC	-0.172398338
UCK2	Biotin metabolism	LIHC	-0.269562409
UCK2	Butanoate metabolism	LIHC	-0.265571661
UCK2	Caffeine metabolism	LIHC	-0.266424381
UCK2	Cancer stem cell	LIHC	-0.00917308
UCK2	Cancer stem-like cell	LIHC	0.022894723
UCK2	Cd4+ cytotoxic t cell	LIHC	-0.073217077
UCK2	Cd4+ memory t cell	LIHC	-0.098703813
UCK2	Cd4+ regulatory t cell	LIHC	-0.145384239
UCK2	Cd4+ t helper cell	LIHC	-0.052478947
UCK2	Cd4+cd25+ regulatory t c	LIHC	-0.033637618
UCK2	Cd8+ cytotoxic t cell	LIHC	-0.016059548
UCK2	Cd8+ regulatory t cell	LIHC	-0.035254193
UCK2	Cell_cycle	LIHC	0.546731869
UCK2	Chandran_metastasis_topç	LIHC	0.333441514
UCK2	Citrate cycle (tca cycle)	LIHC	-0.213440158
UCK2	Cysteine and methionine r	LIHC	0.084972233
UCK2	Cytokine induced killer ç	LIHC	0.050764844
UCK2	D-arginine and d-ornithin	LIHC	-0.097844587
UCK2	D-glutamine and d-glutan	LIHC	-0.172536131
UCK2	Dendritic cell	LIHC	-0.086651041

UCK2	Dna_repair	LIHC	0.436929729
UCK2	Dna_replication	LIHC	0.526138687
UCK2	Double-negative memory	LIHC	0.060520138
UCK2	Drug metabolism - cytoch	LIHC	-0.212864165
UCK2	Drug metabolism - other	LIHC	0.049376976
UCK2	E2f_targets	LIHC	0.556582678
UCK2	Ecm_receptor_interaction	LIHC	-0.240699778
UCK2	Effector cd4+ memory t	LIHC	-0.153639083
UCK2	Effector cd8+ memory t	LIHC	-0.021018105
UCK2	Effector memory t cell	LIHC	-0.106388362
UCK2	Effector regulatory t (treg	LIHC	-0.08670067
UCK2	Elvidge_hif1a_targets_up	LIHC	0.322743273
UCK2	Endothelial cell	LIHC	-0.147626401
UCK2	Eosinophil	LIHC	0.045831633
UCK2	Ether lipid metabolism	LIHC	0.040089839
UCK2	Exhausted cd4+ t cell	LIHC	0.046401776
UCK2	Exhausted cd8+ t cell	LIHC	-0.005107959
UCK2	Exhausted t cell	LIHC	0.024890364
UCK2	Fat cell (adipocyte)	LIHC	-0.373613052
UCK2	Fatty acid biosynthesis	LIHC	-0.04209465
UCK2	Fatty acid degradation	LIHC	-0.311436466
UCK2	Fatty acid elongation	LIHC	-0.023254447
UCK2	Fibroblast	LIHC	-0.239956438
UCK2	Folate biosynthesis	LIHC	-0.163718297
UCK2	Follicular b cell	LIHC	-0.063267492
UCK2	Follicular dendritic cell	LIHC	-0.064900623
UCK2	Follicular helper (tfh) t ce	LIHC	-0.088738867
UCK2	Follicular t cell	LIHC	0.13453027
UCK2	Foxp3+il-17+ t cell	LIHC	-0.195798537
UCK2	Fructose and mannose me	LIHC	0.15949526
UCK2	G2m_checkpoint	LIHC	0.531034126
UCK2	Galactose metabolism	LIHC	0.010669535
UCK2	Galie_tumor_stemness_ge	LIHC	-0.28644582
UCK2	Glutathione metabolism	LIHC	0.034804504
UCK2	Glycerolipid metabolism	LIHC	-0.178755218
UCK2	Glycerophospholipid met&	LIHC	-0.03720661
UCK2	Glycine, serine and threor	LIHC	-0.217489444
UCK2	Glycolysis / gluconeogene	LIHC	-0.109071555
UCK2	Glycosaminoglycan biosy	LIHC	-0.123895029
UCK2	Glycosaminoglycan biosy	LIHC	-0.165358071
UCK2	Glycosaminoglycan biosy	LIHC	0.118288393
UCK2	Glycosaminoglycan degra	LIHC	-0.151404232
UCK2	Glycosphingolipid biosyn	LIHC	-0.054389128

UCK2	Glycosphingolipid biosyn	LIHC	0.085605945
UCK2	Glycosphingolipid biosyn	LIHC	0.107123159
UCK2	Glycosylphosphatidylinos	LIHC	0.107764381
UCK2	Glyoxylate and dicarboxy	LIHC	-0.160321981
UCK2	Granulocyte	LIHC	0.015514903
UCK2	Hedgehog_signaling	LIHC	-0.187625747
UCK2	Histidine metabolism	LIHC	-0.361371606
UCK2	Hypoxia	LIHC	-0.0917527
UCK2	Il-17alpha t cell	LIHC	-0.018356286
UCK2	Il2_stat5_signaling	LIHC	-0.07293958
UCK2	Il6_jak_stat3_signaling	LIHC	-0.134992407
UCK2	Immune_checkpoints_tur	LIHC	-0.016197042
UCK2	Immune_inhibition_cytok	LIHC	-0.092088603
UCK2	Inositol phosphate metabo	LIHC	-0.22326642
UCK2	Interleukin_6_signaling	LIHC	-0.292707125
UCK2	Jaeger_metastasis_up	LIHC	0.41848123
UCK2	Jain_nfkb_signaling	LIHC	0.444810937
UCK2	Kras_signaling_up	LIHC	-0.246259416
UCK2	Linoleic acid metabolism	LIHC	-0.206057563
UCK2	Lipoic acid metabolism	LIHC	-0.007517298
UCK2	Lysine degradation	LIHC	-0.262818856
UCK2	Lysosome	LIHC	-0.120624873
UCK2	M1 macrophage	LIHC	-0.091940437
UCK2	M2 macrophage	LIHC	-0.167824
UCK2	Mannose type o-glycan bi	LIHC	0.135949264
UCK2	Mapk_signaling_pathway	LIHC	-0.287002669
UCK2	Mapk3_erk1_activation	LIHC	-0.260687286
UCK2	Marginal zone b cell	LIHC	-0.192008472
UCK2	Memory b cell	LIHC	0.073369152
UCK2	Mesenchymal cell	LIHC	-0.026764667
UCK2	Mesenchymal stem cell	LIHC	-0.165062058
UCK2	Metabolism of xenobiotic	LIHC	-0.207489414
UCK2	Migrating cancer stem cel	LIHC	0.138129591
UCK2	Mitotic_spindle	LIHC	0.167937589
UCK2	Monocyte	LIHC	0.02321921
UCK2	Mtor_signaling_pathway	LIHC	-0.168131113
UCK2	Mtorc1_signaling	LIHC	0.468977484
UCK2	Mucin type o-glycan bios	LIHC	-0.20914977
UCK2	Myc_targets_v1	LIHC	0.644541396
UCK2	Myeloid cell	LIHC	-0.117345636
UCK2	N-glycan biosynthesis	LIHC	-0.058776664
UCK2	Naive b cell	LIHC	0.19988873
UCK2	Naive cd4+ t cell	LIHC	-0.19865262

UCK2	Naive cd8+ t cell	LIHC	-0.158421851
UCK2	Natural killer cell	LIHC	-0.07940243
UCK2	Natural killer t (nkt) cell	LIHC	0.307493744
UCK2	Natural regulatory t (treg)	LIHC	-0.131962501
UCK2	Neomycin, kanamycin and	LIHC	-0.065000636
UCK2	Neutrophil	LIHC	0.073864967
UCK2	Nicotinate and nicotinami	LIHC	-0.20894933
UCK2	Nitrogen metabolism	LIHC	-0.23026946
UCK2	Nod_like_receptor_signal	LIHC	-0.031793808
UCK2	Notch_signaling	LIHC	-0.115064478
UCK2	One carbon pool by folate	LIHC	-0.002920347
UCK2	Other glycan degradation	LIHC	-0.213169429
UCK2	Other types of o-glycan b	LIHC	0.022010147
UCK2	Oxidative phosphorylatio	LIHC	0.043717319
UCK2	P53_pathway	LIHC	-0.031409064
UCK2	P53_signaling_pathway	LIHC	0.160028008
UCK2	Pantothenate and coa bios	LIHC	-0.004929106
UCK2	Pentose and glucuronate i	LIHC	-0.027637934
UCK2	Pentose phosphate pathwa	LIHC	0.272812831
UCK2	Pericyte	LIHC	-0.222043403
UCK2	Phenylalanine metabolism	LIHC	-0.206006375
UCK2	Phenylalanine, tyrosine ar	LIHC	-0.153275717
UCK2	Phosphonate and phosphir	LIHC	-0.247820778
UCK2	Pi3k_akt_activation	LIHC	-0.283152812
UCK2	Pi3k_akt_mtor_signaling	LIHC	0.12011244
UCK2	Porphyrin and chlorophyl	LIHC	-0.029197472
UCK2	Primary bile acid biosynt	LIHC	-0.294166915
UCK2	Propanoate metabolism	LIHC	-0.307554414
UCK2	Purine metabolism	LIHC	0.416247166
UCK2	Pyrimidine metabolism	LIHC	0.564037231
UCK2	Pyruvate metabolism	LIHC	-0.135915268
UCK2	Regulation_of_autophagy	LIHC	-0.182002321
UCK2	Retinol metabolism	LIHC	-0.13949403
UCK2	Riboflavin metabolism	LIHC	0.008772143
UCK2	Schmahl_pdgf_signaling	LIHC	-0.374552615
UCK2	Selenocompound metabol	LIHC	0.014278171
UCK2	Signaling_by_hippo	LIHC	-0.163023791
UCK2	Sphingolipid metabolism	LIHC	-0.085088405
UCK2	Starch and sucrose metabo	LIHC	-0.254103772
UCK2	Steroid biosynthesis	LIHC	0.140496012
UCK2	Steroid hormone biosynth	LIHC	-0.145952808
UCK2	Sulfur metabolism	LIHC	-0.141971812
UCK2	Synthesis and degradation	LIHC	-0.262818952

UCK2	T helper cell	LIHC	-0.136049407
UCK2	T helper1 (th1) cell	LIHC	-0.068022512
UCK2	T helper17 (th17) cell	LIHC	-0.009209076
UCK2	T helper2 (th2) cell	LIHC	-0.054566836
UCK2	T helper9 (th9) cell	LIHC	-0.049797339
UCK2	Taurine and hypotaurine r	LIHC	-0.160312141
UCK2	Terpenoid backbone biosy	LIHC	0.085312781
UCK2	Tgf_beta_signaling_pathw	LIHC	-0.177463322
UCK2	Thiamine metabolism	LIHC	-0.170406196
UCK2	Tnfa_signaling_via_nfkb	LIHC	-0.096269066
UCK2	Tryptophan metabolism	LIHC	-0.295080396
UCK2	Tumor endothelial cell	LIHC	0.11710054
UCK2	Tyrosine metabolism	LIHC	-0.30829791
UCK2	Ubiquinone and other terp	LIHC	-0.123641473
UCK2	Valine, leucine and isoleu	LIHC	0.015875348
UCK2	Valine, leucine and isoleu	LIHC	-0.320191063
UCK2	Vascular endothelial cell	LIHC	-0.259316223
UCK2	Vascular smooth muscle c	LIHC	-0.250571066
UCK2	Vegf_signaling_pathway	LIHC	-0.218554636
UCK2	Vitamin b6 metabolism	LIHC	-0.008160399
UCK2	Willert_wnt_signaling	LIHC	0.091314272
UCK2	Wnt_beta_catenin_signali	LIHC	0.110933626
UCKL1	Abnormal plasma cell	LIHC	-0.136208751
UCKL1	Activated b cell	LIHC	-0.013372934
UCKL1	Activated cd4+ t cell	LIHC	-0.127436126
UCKL1	Activated t cell	LIHC	-0.019552221
UCKL1	Alanine, aspartate and glu	LIHC	-0.173439415
UCKL1	Alcala_apoptosis	LIHC	0.173654771
UCKL1	Alpha-linolenic acid meta	LIHC	-0.164947819
UCKL1	Amino sugar and nucleoti	LIHC	-0.177861705
UCKL1	Ampk_pathway	LIHC	0.193937535
UCKL1	Angiogenesis	LIHC	-0.364883986
UCKL1	Arachidonic acid metabol	LIHC	-0.228151896
UCKL1	Arginine and proline metæ	LIHC	-0.106695396
UCKL1	Arginine biosynthesis	LIHC	-0.121663209
UCKL1	Ascorbate and aldarate mε	LIHC	-0.237241369
UCKL1	Atypical memory b cell	LIHC	-0.100452909
UCKL1	Axl+siglec6+ dendritic ce	LIHC	-0.313062298
UCKL1	B cell	LIHC	-0.139534241
UCKL1	B1 cell	LIHC	-0.080574509
UCKL1	Basal cell	LIHC	-0.035480767
UCKL1	Beta-alanine metabolism	LIHC	-0.288614796
UCKL1	Biosynthesis of unsaturate	LIHC	-0.139165186

UCKL1	Biotin metabolism	LIHC	-0.112323803
UCKL1	Butanoate metabolism	LIHC	-0.117625757
UCKL1	Caffeine metabolism	LIHC	-0.330371167
UCKL1	Cancer stem cell	LIHC	-0.201147485
UCKL1	Cancer stem-like cell	LIHC	-0.083206447
UCKL1	Cd4+ cytotoxic t cell	LIHC	-0.196841351
UCKL1	Cd4+ memory t cell	LIHC	-0.085231361
UCKL1	Cd4+ regulatory t cell	LIHC	-0.115780219
UCKL1	Cd4+ t helper cell	LIHC	-0.099436322
UCKL1	Cd4+cd25+ regulatory t c	LIHC	-0.098302433
UCKL1	Cd8+ cytotoxic t cell	LIHC	-0.01715927
UCKL1	Cd8+ regulatory t cell	LIHC	-0.015566189
UCKL1	Cell_cycle	LIHC	0.307241957
UCKL1	Chandran_metastasis_top5	LIHC	-0.021425175
UCKL1	Citrate cycle (tca cycle)	LIHC	-0.205139384
UCKL1	Cysteine and methionine r	LIHC	-0.125017342
UCKL1	Cytokine induced killer c	LIHC	-0.06012665
UCKL1	D-arginine and d-ornithin	LIHC	-0.064383227
UCKL1	D-glutamine and d-glutan	LIHC	-0.130856952
UCKL1	Dendritic cell	LIHC	-0.241792422
UCKL1	Dna_repair	LIHC	0.402241523
UCKL1	Dna_replication	LIHC	0.394856427
UCKL1	Double-negative memory	LIHC	0.132334057
UCKL1	Drug metabolism - cytoch	LIHC	-0.228481196
UCKL1	Drug metabolism - other c	LIHC	-0.060357535
UCKL1	E2f_targets	LIHC	0.35189034
UCKL1	Ecm_receptor_interaction	LIHC	-0.365816609
UCKL1	Effector cd4+ memory t (	LIHC	-0.218564643
UCKL1	Effector cd8+ memory t (	LIHC	-0.241511539
UCKL1	Effector memory t cell	LIHC	-0.185008
UCKL1	Effector regulatory t (treg	LIHC	-0.162371008
UCKL1	Elvidge_hif1a_targets_up	LIHC	-0.236079321
UCKL1	Endothelial cell	LIHC	-0.259757028
UCKL1	Eosinophil	LIHC	-0.176536093
UCKL1	Ether lipid metabolism	LIHC	-0.095063807
UCKL1	Exhausted cd4+ t cell	LIHC	-0.209869478
UCKL1	Exhausted cd8+ t cell	LIHC	-0.19325864
UCKL1	Exhausted t cell	LIHC	-0.00026036
UCKL1	Fat cell (adipocyte)	LIHC	-0.080599941
UCKL1	Fatty acid biosynthesis	LIHC	-0.161342515
UCKL1	Fatty acid degradation	LIHC	-0.178069377
UCKL1	Fatty acid elongation	LIHC	-0.034697968
UCKL1	Fibroblast	LIHC	-0.386587288

UCKL1	Folate biosynthesis	LIHC	-0.243592044
UCKL1	Follicular b cell	LIHC	-0.113976207
UCKL1	Follicular dendritic cell	LIHC	-0.082918276
UCKL1	Follicular helper (tfh) t ce	LIHC	-0.162100813
UCKL1	Follicular t cell	LIHC	0.080873713
UCKL1	Foxp3+il-17+ t cell	LIHC	-0.089021366
UCKL1	Fructose and mannose me	LIHC	-0.081464787
UCKL1	G2m_checkpoint	LIHC	0.289279657
UCKL1	Galactose metabolism	LIHC	-0.256063357
UCKL1	Galie_tumor_stemness_ge	LIHC	-0.303538801
UCKL1	Glutathione metabolism	LIHC	-0.126222131
UCKL1	Glycerolipid metabolism	LIHC	-0.234841931
UCKL1	Glycerophospholipid metæ	LIHC	-0.06381787
UCKL1	Glycine, serine and threor	LIHC	-0.124211612
UCKL1	Glycolysis / gluconeogene	LIHC	-0.212760978
UCKL1	Glycosaminoglycan biosy	LIHC	-0.159503118
UCKL1	Glycosaminoglycan biosy	LIHC	-0.092502598
UCKL1	Glycosaminoglycan biosy	LIHC	-0.102293507
UCKL1	Glycosaminoglycan degra	LIHC	-0.27270455
UCKL1	Glycosphingolipid biosyn	LIHC	-0.224344114
UCKL1	Glycosphingolipid biosyn	LIHC	-0.08939639
UCKL1	Glycosphingolipid biosyn	LIHC	-0.092034673
UCKL1	Glycosylphosphatidylinos	LIHC	0.257580288
UCKL1	Glyoxylate and dicarboxy	LIHC	-0.081824222
UCKL1	Granulocyte	LIHC	-0.185345465
UCKL1	Hedgehog_signaling	LIHC	-0.335923608
UCKL1	Histidine metabolism	LIHC	-0.296121393
UCKL1	Hypoxia	LIHC	-0.309343778
UCKL1	Il-17alpha t cell	LIHC	-0.08231237
UCKL1	Il2_stat5_signaling	LIHC	-0.343616475
UCKL1	Il6_jak_stat3_signaling	LIHC	-0.40293522
UCKL1	Immune_checkpoints_turr	LIHC	-0.121065051
UCKL1	Immune_inhibition_cytok	LIHC	-0.175026859
UCKL1	Inositol phosphate metabo	LIHC	-0.247158952
UCKL1	Interleukin_6_signaling	LIHC	-0.415318033
UCKL1	Jaeger_metastasis_up	LIHC	-0.020009539
UCKL1	Jain_nfkb_signaling	LIHC	0.213116279
UCKL1	Kras_signaling_up	LIHC	-0.427480756
UCKL1	Linoleic acid metabolism	LIHC	-0.210597132
UCKL1	Lipoic acid metabolism	LIHC	0.046078303
UCKL1	Lysine degradation	LIHC	-0.107204508
UCKL1	Lysosome	LIHC	-0.227118065
UCKL1	M1 macrophage	LIHC	-0.238903581

UCKL1	M2 macrophage	LIHC	-0.249169067
UCKL1	Mannose type o-glycan bi	LIHC	0.167619397
UCKL1	Mapk_signaling_pathway	LIHC	-0.407335809
UCKL1	Mapk3_erk1_activation	LIHC	-0.302737343
UCKL1	Marginal zone b cell	LIHC	-0.202699494
UCKL1	Memory b cell	LIHC	-0.049415705
UCKL1	Mesenchymal cell	LIHC	-0.199592589
UCKL1	Mesenchymal stem cell	LIHC	-0.354730113
UCKL1	Metabolism of xenobiotic	LIHC	-0.230958895
UCKL1	Migrating cancer stem cel	LIHC	0.098603423
UCKL1	Mitotic_spindle	LIHC	0.080139861
UCKL1	Monocyte	LIHC	-0.219014272
UCKL1	Mtor_signaling_pathway	LIHC	-0.242290597
UCKL1	Mtorc1_signaling	LIHC	-0.087082925
UCKL1	Mucin type o-glycan bios	LIHC	-0.284982814
UCKL1	Myc_targets_v1	LIHC	0.360079585
UCKL1	Myeloid cell	LIHC	-0.236045346
UCKL1	N-glycan biosynthesis	LIHC	-0.139956954
UCKL1	Naive b cell	LIHC	0.154207621
UCKL1	Naive cd4+ t cell	LIHC	-0.267205239
UCKL1	Naive cd8+ t cell	LIHC	-0.176998178
UCKL1	Natural killer cell	LIHC	-0.150574839
UCKL1	Natural killer t (nkt) cell	LIHC	0.08539695
UCKL1	Natural regulatory t (treg)	LIHC	-0.177721443
UCKL1	Neomycin, kanamycin an	LIHC	-0.161040387
UCKL1	Neutrophil	LIHC	-0.263968405
UCKL1	Nicotinate and nicotinami	LIHC	-0.3134781
UCKL1	Nitrogen metabolism	LIHC	-0.197982168
UCKL1	Nod_like_receptor_signal	LIHC	-0.267793378
UCKL1	Notch_signaling	LIHC	-0.197732411
UCKL1	One carbon pool by folate	LIHC	-0.168114503
UCKL1	Other glycan degradation	LIHC	-0.138618688
UCKL1	Other types of o-glycan b	LIHC	0.174963479
UCKL1	Oxidative phosphorylatio	LIHC	0.033704079
UCKL1	P53_pathway	LIHC	-0.242423323
UCKL1	P53_signaling_pathway	LIHC	-0.139163333
UCKL1	Pantothenate and coa bios	LIHC	-0.02431465
UCKL1	Pentose and glucuronate i	LIHC	-0.223362608
UCKL1	Pentose phosphate pathwa	LIHC	-0.02539771
UCKL1	Pericyte	LIHC	-0.304113518
UCKL1	Phenylalanine metabolism	LIHC	-0.292306859
UCKL1	Phenylalanine, tyrosine ar	LIHC	-0.099261004
UCKL1	Phosphonate and phosphir	LIHC	-0.223292426

UCKL1	Pi3k_akt_activation	LIHC	-0.200453609
UCKL1	Pi3k_akt_mtor_signaling	LIHC	-0.113559313
UCKL1	Porphyrin and chlorophyl	LIHC	-0.260808598
UCKL1	Primary bile acid biosynt	LIHC	-0.203765064
UCKL1	Propanoate metabolism	LIHC	-0.190892668
UCKL1	Purine metabolism	LIHC	0.051981884
UCKL1	Pyrimidine metabolism	LIHC	0.322685897
UCKL1	Pyruvate metabolism	LIHC	-0.187044948
UCKL1	Regulation_of_autophagy	LIHC	-0.107395771
UCKL1	Retinol metabolism	LIHC	-0.209523987
UCKL1	Riboflavin metabolism	LIHC	0.029670234
UCKL1	Schmahl_pdgf_signaling	LIHC	-0.392636635
UCKL1	Selenocompound metabol	LIHC	-0.1755859
UCKL1	Signaling_by_hippo	LIHC	-0.165792236
UCKL1	Sphingolipid metabolism	LIHC	-0.154047923
UCKL1	Starch and sucrose metabo	LIHC	-0.294343824
UCKL1	Steroid biosynthesis	LIHC	0.154001558
UCKL1	Steroid hormone biosynth	LIHC	-0.234088703
UCKL1	Sulfur metabolism	LIHC	-0.185034856
UCKL1	Synthesis and degradation	LIHC	-0.025215145
UCKL1	T helper cell	LIHC	-0.209480153
UCKL1	T helper1 (th1) cell	LIHC	-0.123154853
UCKL1	T helper17 (th17) cell	LIHC	-0.194971979
UCKL1	T helper2 (th2) cell	LIHC	-0.177078768
UCKL1	T helper9 (th9) cell	LIHC	-0.106046232
UCKL1	Taurine and hypotaurine r	LIHC	-0.029926144
UCKL1	Terpenoid backbone biosy	LIHC	0.117267154
UCKL1	Tgf_beta_signaling_pathw	LIHC	-0.212727329
UCKL1	Thiamine metabolism	LIHC	-0.239771537
UCKL1	Tnfa_signaling_via_nfkb	LIHC	-0.354951878
UCKL1	Tryptophan metabolism	LIHC	-0.201361261
UCKL1	Tumor endothelial cell	LIHC	0.037349416
UCKL1	Tyrosine metabolism	LIHC	-0.226554521
UCKL1	Ubiquinone and other ter	LIHC	-0.119184754
UCKL1	Valine, leucine and isoleu	LIHC	-0.168545283
UCKL1	Valine, leucine and isoleu	LIHC	-0.188281241
UCKL1	Vascular endothelial cell	LIHC	-0.362362665
UCKL1	Vascular smooth muscle c	LIHC	-0.238799492
UCKL1	Vegf_signaling_pathway	LIHC	-0.237327897
UCKL1	Vitamin b6 metabolism	LIHC	0.062033334
UCKL1	Willert_wnt_signaling	LIHC	0.101661342
UCKL1	Wnt_beta_catenin_signali	LIHC	-0.006499205
UPP1	Abnormal plasma cell	LIHC	0.125500947

UPP1	Activated b cell	LIHC	0.253827342
UPP1	Activated cd4+ t cell	LIHC	0.177555391
UPP1	Activated t cell	LIHC	0.192995208
UPP1	Alanine, aspartate and glu	LIHC	-0.185317645
UPP1	Alcala_apoptosis	LIHC	0.402625214
UPP1	Alpha-linolenic acid meta	LIHC	0.067419808
UPP1	Amino sugar and nucleoti	LIHC	0.303421984
UPP1	Ampk_pathway	LIHC	-0.096032478
UPP1	Angiogenesis	LIHC	0.283648633
UPP1	Arachidonic acid metabol	LIHC	0.327878971
UPP1	Arginine and proline meta	LIHC	0.014946226
UPP1	Arginine biosynthesis	LIHC	-0.303836582
UPP1	Ascorbate and aldarate mε	LIHC	-0.292881064
UPP1	Atypical memory b cell	LIHC	-0.144235609
UPP1	Axl+siglec6+ dendritic ce	LIHC	0.352046928
UPP1	B cell	LIHC	0.263431822
UPP1	B1 cell	LIHC	0.13223987
UPP1	Basal cell	LIHC	0.576316923
UPP1	Beta-alanine metabolism	LIHC	-0.265095758
UPP1	Biosynthesis of unsaturate	LIHC	-0.183936422
UPP1	Biotin metabolism	LIHC	-0.283241153
UPP1	Butanoate metabolism	LIHC	-0.282863077
UPP1	Caffeine metabolism	LIHC	-0.22170008
UPP1	Cancer stem cell	LIHC	0.121160743
UPP1	Cancer stem-like cell	LIHC	0.132118477
UPP1	Cd4+ cytotoxic t cell	LIHC	0.299868428
UPP1	Cd4+ memory t cell	LIHC	0.095053271
UPP1	Cd4+ regulatory t cell	LIHC	0.106121014
UPP1	Cd4+ t helper cell	LIHC	0.205734345
UPP1	Cd4+cd25+ regulatory t c	LIHC	0.218218822
UPP1	Cd8+ cytotoxic t cell	LIHC	0.153598299
UPP1	Cd8+ regulatory t cell	LIHC	0.11013343
UPP1	Cell_cycle	LIHC	0.03441925
UPP1	Chandran_metastasis_top5	LIHC	-0.350284335
UPP1	Citrate cycle (tca cycle)	LIHC	-0.113175166
UPP1	Cysteine and methionine r	LIHC	-0.049985737
UPP1	Cytokine induced killer cε	LIHC	0.271651415
UPP1	D-arginine and d-ornithin	LIHC	-0.250245778
UPP1	D-glutamine and d-glutan	LIHC	-0.249274397
UPP1	Dendritic cell	LIHC	0.210964026
UPP1	Dna_repair	LIHC	0.078563316
UPP1	Dna_replication	LIHC	0.118022496
UPP1	Double-negative memory	LIHC	0.193933744

UPP1	Drug metabolism - cytoch	LIHC	-0.233412591
UPP1	Drug metabolism - other	LIHC	-0.005626096
UPP1	E2f_targets	LIHC	0.07994098
UPP1	Ecm_receptor_interaction	LIHC	0.145700533
UPP1	Effector cd4+ memory t	LIHC	0.017779034
UPP1	Effector cd8+ memory t	LIHC	0.293667236
UPP1	Effector memory t cell	LIHC	0.112024485
UPP1	Effector regulatory t (treg)	LIHC	0.18743936
UPP1	Elvidge_hif1a_targets_up	LIHC	0.126411048
UPP1	Endothelial cell	LIHC	0.151822969
UPP1	Eosinophil	LIHC	0.389332184
UPP1	Ether lipid metabolism	LIHC	0.241162581
UPP1	Exhausted cd4+ t cell	LIHC	0.301930754
UPP1	Exhausted cd8+ t cell	LIHC	0.319565114
UPP1	Exhausted t cell	LIHC	0.236357349
UPP1	Fat cell (adipocyte)	LIHC	-0.141166361
UPP1	Fatty acid biosynthesis	LIHC	-0.154700472
UPP1	Fatty acid degradation	LIHC	-0.360725073
UPP1	Fatty acid elongation	LIHC	-0.005903725
UPP1	Fibroblast	LIHC	0.113341881
UPP1	Folate biosynthesis	LIHC	-0.130537228
UPP1	Follicular b cell	LIHC	0.147804513
UPP1	Follicular dendritic cell	LIHC	0.05671143
UPP1	Follicular helper (tfh) t ce	LIHC	-0.002666931
UPP1	Follicular t cell	LIHC	0.249740317
UPP1	Foxp3+il-17+ t cell	LIHC	-0.203795841
UPP1	Fructose and mannose me	LIHC	0.405993867
UPP1	G2m_checkpoint	LIHC	0.04112457
UPP1	Galactose metabolism	LIHC	0.393360258
UPP1	Galie_tumor_stemness_ge	LIHC	-0.171150274
UPP1	Glutathione metabolism	LIHC	0.195870096
UPP1	Glycerolipid metabolism	LIHC	-0.029475426
UPP1	Glycerophospholipid met	LIHC	0.264879963
UPP1	Glycine, serine and threor	LIHC	-0.222056061
UPP1	Glycolysis / gluconeogene	LIHC	0.104434763
UPP1	Glycosaminoglycan biosy	LIHC	0.437786322
UPP1	Glycosaminoglycan biosy	LIHC	-0.09137149
UPP1	Glycosaminoglycan biosy	LIHC	0.286905541
UPP1	Glycosaminoglycan degra	LIHC	0.087095226
UPP1	Glycosphingolipid biosyn	LIHC	0.251412754
UPP1	Glycosphingolipid biosyn	LIHC	0.313654941
UPP1	Glycosphingolipid biosyn	LIHC	0.33820107
UPP1	Glycosylphosphatidylinos	LIHC	-0.189283853

UPP1	Glyoxylate and dicarboxy	LIHC	-0.297282026
UPP1	Granulocyte	LIHC	0.303446626
UPP1	Hedgehog_signaling	LIHC	0.008936536
UPP1	Histidine metabolism	LIHC	-0.300268505
UPP1	Hypoxia	LIHC	0.44494274
UPP1	Il-17alpha t cell	LIHC	0.197926891
UPP1	Il2_stat5_signaling	LIHC	0.274168319
UPP1	Il6_jak_stat3_signaling	LIHC	0.171241977
UPP1	Immune_checkpoints_turr	LIHC	0.343399238
UPP1	Immune_inhibition_cytok	LIHC	0.357094054
UPP1	Inositol phosphate metabo	LIHC	-0.227023261
UPP1	Interleukin_6_signaling	LIHC	-0.170855859
UPP1	Jaeger_metastasis_up	LIHC	0.234700629
UPP1	Jain_nfkb_signaling	LIHC	-0.171149275
UPP1	Kras_signaling_up	LIHC	0.188537193
UPP1	Linoleic acid metabolism	LIHC	-0.03215839
UPP1	Lipoic acid metabolism	LIHC	-0.173355883
UPP1	Lysine degradation	LIHC	-0.498391317
UPP1	Lysosome	LIHC	0.239590767
UPP1	M1 macrophage	LIHC	0.246045952
UPP1	M2 macrophage	LIHC	0.197524006
UPP1	Mannose type o-glycan bi	LIHC	0.151533893
UPP1	Mapk_signaling_pathway	LIHC	0.03931473
UPP1	Mapk3_erk1_activation	LIHC	-0.249556768
UPP1	Marginal zone b cell	LIHC	0.094838811
UPP1	Memory b cell	LIHC	0.233933223
UPP1	Mesenchymal cell	LIHC	0.319918146
UPP1	Mesenchymal stem cell	LIHC	0.202779596
UPP1	Metabolism of xenobiotic	LIHC	-0.130903799
UPP1	Migrating cancer stem cel	LIHC	0.136859474
UPP1	Mitotic_spindle	LIHC	-0.175298011
UPP1	Monocyte	LIHC	0.429708021
UPP1	Mtor_signaling_pathway	LIHC	-0.140928873
UPP1	Mtorc1_signaling	LIHC	0.234284976
UPP1	Mucin type o-glycan biosy	LIHC	-0.012921229
UPP1	Myc_targets_v1	LIHC	0.183704959
UPP1	Myeloid cell	LIHC	0.194448556
UPP1	N-glycan biosynthesis	LIHC	-0.26425092
UPP1	Naive b cell	LIHC	0.301971589
UPP1	Naive cd4+ t cell	LIHC	-0.0927815
UPP1	Naive cd8+ t cell	LIHC	-0.063945897
UPP1	Natural killer cell	LIHC	0.196875658
UPP1	Natural killer t (nkt) cell	LIHC	0.252032726

UPP1	Natural regulatory t (treg) LIHC	0.187802291
UPP1	Neomycin, kanamycin and LIHC	0.32854773
UPP1	Neutrophil LIHC	0.413719877
UPP1	Nicotinate and nicotinami LIHC	-0.095935013
UPP1	Nitrogen metabolism LIHC	-0.397525763
UPP1	Nod_like_receptor_signal LIHC	0.17877697
UPP1	Notch_signaling LIHC	0.214695085
UPP1	One carbon pool by folate LIHC	-0.078201866
UPP1	Other glycan degradation LIHC	-0.109060331
UPP1	Other types of o-glycan b LIHC	0.07140888
UPP1	Oxidative phosphorylation LIHC	0.193595045
UPP1	P53_pathway LIHC	0.369054434
UPP1	P53_signaling_pathway LIHC	-0.062078634
UPP1	Pantothenate and coa bios LIHC	-0.077883152
UPP1	Pentose and glucuronate in LIHC	-0.167153876
UPP1	Pentose phosphate pathway LIHC	0.283606233
UPP1	Pericyte LIHC	0.033170395
UPP1	Phenylalanine metabolism LIHC	-0.116123009
UPP1	Phenylalanine, tyrosine ar LIHC	0.079757408
UPP1	Phosphonate and phosphir LIHC	-0.299272051
UPP1	Pi3k_akt_activation LIHC	-0.398897723
UPP1	Pi3k_akt_mtor_signaling LIHC	0.137422828
UPP1	Porphyrin and chlorophyll LIHC	-0.129632854
UPP1	Primary bile acid biosynt LIHC	-0.341473076
UPP1	Propanoate metabolism LIHC	-0.331819471
UPP1	Purine metabolism LIHC	0.139099005
UPP1	Pyrimidine metabolism LIHC	0.085968682
UPP1	Pyruvate metabolism LIHC	-0.169677541
UPP1	Regulation_of_autophagy LIHC	0.002666718
UPP1	Retinol metabolism LIHC	-0.244148422
UPP1	Riboflavin metabolism LIHC	-0.050969456
UPP1	Schmahl_pdgf_signaling LIHC	-0.257757021
UPP1	Selenocompound metabol LIHC	-0.34495367
UPP1	Signaling_by_hippo LIHC	-0.25981857
UPP1	Sphingolipid metabolism LIHC	-0.130664806
UPP1	Starch and sucrose metabo LIHC	0.178310261
UPP1	Steroid biosynthesis LIHC	-0.22170554
UPP1	Steroid hormone biosynth LIHC	-0.23541241
UPP1	Sulfur metabolism LIHC	-0.350812004
UPP1	Synthesis and degradation LIHC	-0.174896833
UPP1	T helper cell LIHC	0.093683801
UPP1	T helper1 (th1) cell LIHC	0.152404704
UPP1	T helper17 (th17) cell LIHC	0.13486779

UPP1	T helper2 (th2) cell	LIHC	0.214264183
UPP1	T helper9 (th9) cell	LIHC	0.245918716
UPP1	Taurine and hypotaurine r	LIHC	0.101293834
UPP1	Terpenoid backbone biosy	LIHC	-0.120365433
UPP1	Tgf_beta_signaling_pathw	LIHC	-0.145141999
UPP1	Thiamine metabolism	LIHC	0.096691187
UPP1	Tnfa_signaling_via_nfkB	LIHC	0.234906318
UPP1	Tryptophan metabolism	LIHC	-0.305355429
UPP1	Tumor endothelial cell	LIHC	0.194823349
UPP1	Tyrosine metabolism	LIHC	-0.270489839
UPP1	Ubiquinone and other ter	LIHC	0.013820958
UPP1	Valine, leucine and isoleu	LIHC	0.479420641
UPP1	Valine, leucine and isoleu	LIHC	-0.342671918
UPP1	Vascular endothelial cell	LIHC	0.015747975
UPP1	Vascular smooth muscle c	LIHC	0.09795392
UPP1	Vegf_signaling_pathway	LIHC	0.148684832
UPP1	Vitamin b6 metabolism	LIHC	-0.153681755
UPP1	Willert_wnt_signaling	LIHC	0.20307442
UPP1	Wnt_beta_catenin_signali	LIHC	-0.274363899
UPP2	Abnormal plasma cell	LIHC	-0.022429269
UPP2	Activated b cell	LIHC	0.026509664
UPP2	Activated cd4+ t cell	LIHC	0.118158188
UPP2	Activated t cell	LIHC	0.083819901
UPP2	Alanine, aspartate and glu	LIHC	0.344709668
UPP2	Alcala_apoptosis	LIHC	-0.056036358
UPP2	Alpha-linolenic acid meta	LIHC	0.391008107
UPP2	Amino sugar and nucleoti	LIHC	0.112267679
UPP2	Ampk_pathway	LIHC	-0.060166582
UPP2	Angiogenesis	LIHC	0.101325008
UPP2	Arachidonic acid metaboli	LIHC	0.320581295
UPP2	Arginine and proline met	LIHC	0.346412576
UPP2	Arginine biosynthesis	LIHC	0.452279943
UPP2	Ascorbate and aldarate me	LIHC	0.321646821
UPP2	Atypical memory b cell	LIHC	0.115165382
UPP2	Axl+siglec6+ dendritic ce	LIHC	0.111652659
UPP2	B cell	LIHC	0.133226489
UPP2	B1 cell	LIHC	0.088969976
UPP2	Basal cell	LIHC	-0.06053342
UPP2	Beta-alanine metabolism	LIHC	0.389962044
UPP2	Biosynthesis of unsaturate	LIHC	0.297349002
UPP2	Biotin metabolism	LIHC	0.297858879
UPP2	Butanoate metabolism	LIHC	0.358246072
UPP2	Caffeine metabolism	LIHC	0.353805659

UPP2	Cancer stem cell	LIHC	0.031761999
UPP2	Cancer stem-like cell	LIHC	-0.082792825
UPP2	Cd4+ cytotoxic t cell	LIHC	0.065112098
UPP2	Cd4+ memory t cell	LIHC	0.090149981
UPP2	Cd4+ regulatory t cell	LIHC	0.288119483
UPP2	Cd4+ t helper cell	LIHC	0.136507018
UPP2	Cd4+cd25+ regulatory t c	LIHC	0.122087813
UPP2	Cd8+ cytotoxic t cell	LIHC	0.111422507
UPP2	Cd8+ regulatory t cell	LIHC	0.08499025
UPP2	Cell_cycle	LIHC	-0.27755849
UPP2	Chandran_metastasis_top5	LIHC	-0.232025227
UPP2	Citrate cycle (tca cycle)	LIHC	0.345181882
UPP2	Cysteine and methionine r	LIHC	0.369076716
UPP2	Cytokine induced killer c	LIHC	0.014743947
UPP2	D-arginine and d-ornithin	LIHC	0.2986638
UPP2	D-glutamine and d-glutan	LIHC	0.264161418
UPP2	Dendritic cell	LIHC	0.126116371
UPP2	Dna_repair	LIHC	-0.108031814
UPP2	Dna_replication	LIHC	-0.239591197
UPP2	Double-negative memory	LIHC	-0.016511427
UPP2	Drug metabolism - cytoch	LIHC	0.384972799
UPP2	Drug metabolism - other	LIHC	0.352338826
UPP2	E2f_targets	LIHC	-0.253583068
UPP2	Ecm_receptor_interaction	LIHC	0.0801742
UPP2	Effector cd4+ memory t (	LIHC	0.113846608
UPP2	Effector cd8+ memory t (	LIHC	0.006687234
UPP2	Effector memory t cell	LIHC	0.123398176
UPP2	Effector regulatory t (treg	LIHC	0.175227571
UPP2	Elvidge_hif1a_targets_up	LIHC	0.011937201
UPP2	Endothelial cell	LIHC	0.089989389
UPP2	Eosinophil	LIHC	0.076390747
UPP2	Ether lipid metabolism	LIHC	-0.004830034
UPP2	Exhausted cd4+ t cell	LIHC	0.09016314
UPP2	Exhausted cd8+ t cell	LIHC	0.068674522
UPP2	Exhausted t cell	LIHC	0.084947085
UPP2	Fat cell (adipocyte)	LIHC	0.331537446
UPP2	Fatty acid biosynthesis	LIHC	0.157001578
UPP2	Fatty acid degradation	LIHC	0.364344613
UPP2	Fatty acid elongation	LIHC	0.202126967
UPP2	Fibroblast	LIHC	0.133636508
UPP2	Folate biosynthesis	LIHC	0.424160024
UPP2	Follicular b cell	LIHC	0.057395204
UPP2	Follicular dendritic cell	LIHC	0.033592422

UPP2	Follicular helper (tfh) t ce	LIHC	0.167881046
UPP2	Follicular t cell	LIHC	-0.044016756
UPP2	Foxp3+il-17+ t cell	LIHC	0.26393891
UPP2	Fructose and mannose me	LIHC	0.064904086
UPP2	G2m_checkpoint	LIHC	-0.316676395
UPP2	Galactose metabolism	LIHC	0.156620707
UPP2	Galie_tumor_stemness_ge	LIHC	-0.038866397
UPP2	Glutathione metabolism	LIHC	0.315222194
UPP2	Glycerolipid metabolism	LIHC	0.463365649
UPP2	Glycerophospholipid met	LIHC	0.189787499
UPP2	Glycine, serine and threo	LIHC	0.435090493
UPP2	Glycolysis / gluconeogene	LIHC	0.273285503
UPP2	Glycosaminoglycan biosyn	LIHC	-0.036989343
UPP2	Glycosaminoglycan biosyn	LIHC	-0.229570649
UPP2	Glycosaminoglycan biosyn	LIHC	-0.026357418
UPP2	Glycosaminoglycan degra	LIHC	0.040582554
UPP2	Glycosphingolipid biosyn	LIHC	0.146574183
UPP2	Glycosphingolipid biosyn	LIHC	0.108933094
UPP2	Glycosphingolipid biosyn	LIHC	-0.108549508
UPP2	Glycosylphosphatidylinos	LIHC	-0.141165688
UPP2	Glyoxylate and dicarboxy	LIHC	0.373893442
UPP2	Granulocyte	LIHC	0.071110085
UPP2	Hedgehog_signaling	LIHC	-0.179669679
UPP2	Histidine metabolism	LIHC	0.388987313
UPP2	Hypoxia	LIHC	0.142172305
UPP2	Il-17ralpha t cell	LIHC	0.087309737
UPP2	Il2_stat5_signaling	LIHC	0.169808694
UPP2	Il6_jak_stat3_signaling	LIHC	0.182874342
UPP2	Immune_checkpoints_tur	LIHC	0.020687103
UPP2	Immune_inhibition_cytok	LIHC	0.19001447
UPP2	Inositol phosphate metabo	LIHC	-0.051859224
UPP2	Interleukin_6_signaling	LIHC	0.157889693
UPP2	Jaeger_metastasis_up	LIHC	-0.031656265
UPP2	Jain_nfkb_signaling	LIHC	-0.279085152
UPP2	Kras_signaling_up	LIHC	0.215885423
UPP2	Linoleic acid metabolism	LIHC	0.415899847
UPP2	Lipoic acid metabolism	LIHC	-0.034382884
UPP2	Lysine degradation	LIHC	0.231094731
UPP2	Lysosome	LIHC	0.092541384
UPP2	M1 macrophage	LIHC	0.134706125
UPP2	M2 macrophage	LIHC	0.279118008
UPP2	Mannose type o-glycan bi	LIHC	-0.180586482
UPP2	Mapk_signaling_pathway	LIHC	0.010251395

UPP2	Mapk3_erk1_activation	LIHC	0.140402773
UPP2	Marginal zone b cell	LIHC	0.216756448
UPP2	Memory b cell	LIHC	-0.097104807
UPP2	Mesenchymal cell	LIHC	0.023514219
UPP2	Mesenchymal stem cell	LIHC	0.160740987
UPP2	Metabolism of xenobiotics	LIHC	0.392612891
UPP2	Migrating cancer stem cell	LIHC	-0.132328673
UPP2	Mitotic_spindle	LIHC	-0.273670214
UPP2	Monocyte	LIHC	0.096387573
UPP2	Mtor_signaling_pathway	LIHC	-0.039113592
UPP2	Mtorc1_signaling	LIHC	0.09050644
UPP2	Mucin type o-glycan biosynthesis	LIHC	-0.031939072
UPP2	Myc_targets_v1	LIHC	-0.204198071
UPP2	Myeloid cell	LIHC	0.17780823
UPP2	N-glycan biosynthesis	LIHC	0.098284889
UPP2	Naive b cell	LIHC	-0.077360882
UPP2	Naive cd4+ t cell	LIHC	0.089854503
UPP2	Naive cd8+ t cell	LIHC	-0.005876989
UPP2	Natural killer cell	LIHC	0.130731985
UPP2	Natural killer t (nkt) cell	LIHC	-0.064148407
UPP2	Natural regulatory t (treg) cell	LIHC	0.187114648
UPP2	Neomycin, kanamycin and streptomycin	LIHC	0.109199945
UPP2	Neutrophil	LIHC	0.149138136
UPP2	Nicotinate and nicotinamide	LIHC	0.402556382
UPP2	Nitrogen metabolism	LIHC	0.2767287
UPP2	Nod_like_receptor_signaling	LIHC	0.073615884
UPP2	Notch_signaling	LIHC	-0.030095571
UPP2	One carbon pool by folate	LIHC	0.27720312
UPP2	Other glycan degradation	LIHC	0.066828296
UPP2	Other types of o-glycan biosynthesis	LIHC	-0.143303087
UPP2	Oxidative phosphorylation	LIHC	0.224011097
UPP2	P53_pathway	LIHC	0.226080516
UPP2	P53_signaling_pathway	LIHC	0.184812147
UPP2	Pantothenate and coenzyme a biosynthesis	LIHC	0.255055884
UPP2	Pentose and glucuronate interconversions	LIHC	0.352385453
UPP2	Pentose phosphate pathway	LIHC	0.078656071
UPP2	Pericyte	LIHC	0.127331589
UPP2	Phenylalanine metabolism	LIHC	0.351724005
UPP2	Phenylalanine, tyrosine and tryptophan metabolism	LIHC	0.335054085
UPP2	Phosphonate and phosphite metabolism	LIHC	0.216051674
UPP2	Pi3k_akt_activation	LIHC	0.164597957
UPP2	Pi3k_akt_mtor_signaling	LIHC	0.009877059
UPP2	Porphyryn and chlorophyll biosynthesis	LIHC	0.319493283

UPP2	Primary bile acid biosynt	LIHC	0.379927285
UPP2	Propanoate metabolism	LIHC	0.440246551
UPP2	Purine metabolism	LIHC	0.028928794
UPP2	Pyrimidine metabolism	LIHC	-0.127342182
UPP2	Pyruvate metabolism	LIHC	0.405690284
UPP2	Regulation_of_autophagy	LIHC	0.287640529
UPP2	Retinol metabolism	LIHC	0.380975546
UPP2	Riboflavin metabolism	LIHC	0.192087875
UPP2	Schmahl_pdgf_signaling	LIHC	0.291198474
UPP2	Selenocompound metabol	LIHC	0.200815852
UPP2	Signaling_by_hippo	LIHC	-0.141733964
UPP2	Sphingolipid metabolism	LIHC	-0.105161719
UPP2	Starch and sucrose metabo	LIHC	0.292501931
UPP2	Steroid biosynthesis	LIHC	0.11091022
UPP2	Steroid hormone biosynth	LIHC	0.38486099
UPP2	Sulfur metabolism	LIHC	0.256493112
UPP2	Synthesis and degradation	LIHC	0.345065671
UPP2	T helper cell	LIHC	0.180603526
UPP2	T helper1 (th1) cell	LIHC	0.187702334
UPP2	T helper17 (th17) cell	LIHC	0.098392236
UPP2	T helper2 (th2) cell	LIHC	0.119196843
UPP2	T helper9 (th9) cell	LIHC	0.125488403
UPP2	Taurine and hypotaurine r	LIHC	0.027192677
UPP2	Terpenoid backbone biosy	LIHC	0.03018453
UPP2	Tgf_beta_signaling_pathw	LIHC	-0.053303812
UPP2	Thiamine metabolism	LIHC	0.231509164
UPP2	Tnfa_signaling_via_nfkb	LIHC	0.147751876
UPP2	Tryptophan metabolism	LIHC	0.47728444
UPP2	Tumor endothelial cell	LIHC	-0.137097228
UPP2	Tyrosine metabolism	LIHC	0.378447861
UPP2	Ubiquinone and other ter	LIHC	0.294862921
UPP2	Valine, leucine and isoleu	LIHC	0.393210363
UPP2	Valine, leucine and isoleu	LIHC	0.442421478
UPP2	Vascular endothelial cell	LIHC	0.285213508
UPP2	Vascular smooth muscle c	LIHC	0.131375755
UPP2	Vegf_signaling_pathway	LIHC	0.084347513
UPP2	Vitamin b6 metabolism	LIHC	0.171232089
UPP2	Willert_wnt_signaling	LIHC	0.094538749
UPP2	Wnt_beta_catenin_signali	LIHC	-0.373485855
CDA	Abnormal plasma cell	LUAD	-0.143566506
CDA	Activated b cell	LUAD	0.137308761
CDA	Activated cd4+ t cell	LUAD	0.212912448
CDA	Activated t cell	LUAD	0.266628858

CDA	Alanine, aspartate and glu	LUAD	-0.055364773
CDA	Alcala_apoptosis	LUAD	0.234506939
CDA	Alpha-linolenic acid meta	LUAD	-0.096722783
CDA	Amino sugar and nucleoti	LUAD	0.289265115
CDA	Ampk_pathway	LUAD	-0.093108854
CDA	Angiogenesis	LUAD	0.318392252
CDA	Arachidonic acid metabol	LUAD	0.115402904
CDA	Arginine and proline meta	LUAD	0.027238245
CDA	Arginine biosynthesis	LUAD	0.039201572
CDA	Ascorbate and aldarate me	LUAD	-0.046797521
CDA	Atypical memory b cell	LUAD	0.042863829
CDA	Axl+siglec6+ dendritic ce	LUAD	0.202660581
CDA	B cell	LUAD	0.094133625
CDA	B1 cell	LUAD	0.032926104
CDA	Basal cell	LUAD	0.510750945
CDA	Beta-alanine metabolism	LUAD	-0.094106069
CDA	Biosynthesis of unsaturate	LUAD	0.033523423
CDA	Biotin metabolism	LUAD	-0.041501357
CDA	Butanoate metabolism	LUAD	-0.309995337
CDA	Caffeine metabolism	LUAD	0.037599124
CDA	Cancer stem cell	LUAD	0.200177051
CDA	Cancer stem-like cell	LUAD	0.026453584
CDA	Cd4+ cytotoxic t cell	LUAD	0.268204945
CDA	Cd4+ memory t cell	LUAD	0.10313361
CDA	Cd4+ regulatory t cell	LUAD	0.281074961
CDA	Cd4+ t helper cell	LUAD	0.191970576
CDA	Cd4+cd25+ regulatory t c	LUAD	0.221086901
CDA	Cd8+ cytotoxic t cell	LUAD	0.24629
CDA	Cd8+ regulatory t cell	LUAD	0.203583163
CDA	Cell_cycle	LUAD	0.130853337
CDA	Chandran_metastasis_top	LUAD	-0.046795957
CDA	Citrate cycle (tca cycle)	LUAD	-0.007378
CDA	Cysteine and methionine r	LUAD	0.072163189
CDA	Cytokine induced killer c	LUAD	0.08871469
CDA	D-arginine and d-ornithin	LUAD	-0.006362622
CDA	D-glutamine and d-glutan	LUAD	0.01050498
CDA	Dendritic cell	LUAD	0.225729877
CDA	Dna_repair	LUAD	0.110486324
CDA	Dna_replication	LUAD	0.109716484
CDA	Double-negative memory	LUAD	0.043546661
CDA	Drug metabolism - cytoch	LUAD	-0.031620435
CDA	Drug metabolism - other	LUAD	0.198579361
CDA	E2f_targets	LUAD	0.069396504

CDA	Ecm_receptor_interaction LUAD	0.270766587
CDA	Effector cd4+ memory t (LUAD	0.132591034
CDA	Effector cd8+ memory t (LUAD	0.264777129
CDA	Effector memory t cell LUAD	0.167039826
CDA	Effector regulatory t (treg LUAD	0.190157443
CDA	Elvidge_hif1a_targets_up LUAD	-0.00248433
CDA	Endothelial cell LUAD	0.161691636
CDA	Eosinophil LUAD	0.261309409
CDA	Ether lipid metabolism LUAD	0.033548406
CDA	Exhausted cd4+ t cell LUAD	0.305458442
CDA	Exhausted cd8+ t cell LUAD	0.332793873
CDA	Exhausted t cell LUAD	0.224885991
CDA	Fat cell (adipocyte) LUAD	0.111507584
CDA	Fatty acid biosynthesis LUAD	0.033799311
CDA	Fatty acid degradation LUAD	-0.207874111
CDA	Fatty acid elongation LUAD	0.09245347
CDA	Fibroblast LUAD	0.270731859
CDA	Folate biosynthesis LUAD	-0.00221117
CDA	Follicular b cell LUAD	0.127155001
CDA	Follicular dendritic cell LUAD	0.052172349
CDA	Follicular helper (tfh) t ce LUAD	0.212190667
CDA	Follicular t cell LUAD	0.258280244
CDA	Foxp3+il-17+ t cell LUAD	0.226511229
CDA	Fructose and mannose me LUAD	0.237514411
CDA	G2m_checkpoint LUAD	0.045776174
CDA	Galactose metabolism LUAD	0.422876478
CDA	Galie_tumor_stemness_ge LUAD	0.158530459
CDA	Glutathione metabolism LUAD	0.109869016
CDA	Glycerolipid metabolism LUAD	-0.002973114
CDA	Glycerophospholipid metæ LUAD	-0.07189171
CDA	Glycine, serine and threor LUAD	0.025074632
CDA	Glycolysis / gluconeogene LUAD	0.174040308
CDA	Glycosaminoglycan biosy1 LUAD	0.305409295
CDA	Glycosaminoglycan biosy1 LUAD	-0.074474666
CDA	Glycosaminoglycan biosy1 LUAD	0.150304121
CDA	Glycosaminoglycan degra LUAD	0.14613304
CDA	Glycosphingolipid biosyn1 LUAD	0.102608392
CDA	Glycosphingolipid biosyn1 LUAD	0.24438755
CDA	Glycosphingolipid biosyn1 LUAD	0.198267443
CDA	Glycosylphosphatidylinos: LUAD	-0.190783453
CDA	Glyoxylate and dicarboxy LUAD	-0.088308026
CDA	Granulocyte LUAD	0.251316024
CDA	Hedgehog_signaling LUAD	-0.012144099

CDA	Histidine metabolism	LUAD	-0.102616626
CDA	Hypoxia	LUAD	0.407528223
CDA	Il-17alpha t cell	LUAD	0.180352091
CDA	Il2_stat5_signaling	LUAD	0.346575812
CDA	Il6_jak_stat3_signaling	LUAD	0.354803159
CDA	Immune_checkpoints_tur	LUAD	0.30371217
CDA	Immune_inhibition_cytok	LUAD	0.325925441
CDA	Inositol phosphate metabo	LUAD	-0.113977272
CDA	Interleukin_6_signaling	LUAD	0.068200418
CDA	Jaeger_metastasis_up	LUAD	0.194431102
CDA	Jain_nfkb_signaling	LUAD	0.045149307
CDA	Kras_signaling_up	LUAD	0.301150036
CDA	Linoleic acid metabolism	LUAD	-0.087067232
CDA	Lipoic acid metabolism	LUAD	-0.01603538
CDA	Lysine degradation	LUAD	-0.32028651
CDA	Lysosome	LUAD	0.141782053
CDA	M1 macrophage	LUAD	0.274108908
CDA	M2 macrophage	LUAD	0.253010763
CDA	Mannose type o-glycan bi	LUAD	-0.19102778
CDA	Mapk_signaling_pathway	LUAD	0.161346744
CDA	Mapk3_erk1_activation	LUAD	0.163315705
CDA	Marginal zone b cell	LUAD	0.05862105
CDA	Memory b cell	LUAD	0.081661145
CDA	Mesenchymal cell	LUAD	0.324982102
CDA	Mesenchymal stem cell	LUAD	0.217154715
CDA	Metabolism of xenobiotic	LUAD	-0.011788572
CDA	Migrating cancer stem cel	LUAD	0.32856846
CDA	Mitotic_spindle	LUAD	0.063215094
CDA	Monocyte	LUAD	0.385635753
CDA	Mtor_signaling_pathway	LUAD	0.087010999
CDA	Mtorc1_signaling	LUAD	0.173875813
CDA	Mucin type o-glycan biosy	LUAD	0.089492633
CDA	Myc_targets_v1	LUAD	0.108036078
CDA	Myeloid cell	LUAD	0.232294636
CDA	N-glycan biosynthesis	LUAD	-0.068807227
CDA	Naive b cell	LUAD	0.014272539
CDA	Naive cd4+ t cell	LUAD	0.13312622
CDA	Naive cd8+ t cell	LUAD	0.024928589
CDA	Natural killer cell	LUAD	0.240691035
CDA	Natural killer t (nkt) cell	LUAD	0.22021183
CDA	Natural regulatory t (treg)	LUAD	0.169357284
CDA	Neomycin, kanamycin and	LUAD	0.257407064
CDA	Neutrophil	LUAD	0.398310552

CDA	Nicotinate and nicotinami LUAD	0.118081568
CDA	Nitrogen metabolism LUAD	-0.068719614
CDA	Nod_like_receptor_signal: LUAD	0.302843699
CDA	Notch_signaling LUAD	0.123298372
CDA	One carbon pool by folate LUAD	0.017425061
CDA	Other glycan degradation LUAD	-0.06397321
CDA	Other types of o-glycan b: LUAD	-0.096181563
CDA	Oxidative phosphorylatior LUAD	0.055402307
CDA	P53_pathway LUAD	0.280584634
CDA	P53_signaling_pathway LUAD	0.257837947
CDA	Pantothenate and coa bios LUAD	-0.0586336
CDA	Pentose and glucuronate i LUAD	0.039870502
CDA	Pentose phosphate pathwa LUAD	0.290710088
CDA	Pericyte LUAD	0.236122661
CDA	Phenylalanine metabolism LUAD	0.114923966
CDA	Phenylalanine, tyrosine ar LUAD	0.053078669
CDA	Phosphonate and phosphir LUAD	0.053800397
CDA	Pi3k_akt_activation LUAD	0.035782385
CDA	Pi3k_akt_mtor_signaling LUAD	0.264019483
CDA	Porphyrin and chlorophyl LUAD	0.02302513
CDA	Primary bile acid biosyntfl LUAD	-0.002464705
CDA	Propanoate metabolism LUAD	-0.251407028
CDA	Purine metabolism LUAD	0.070499233
CDA	Pyrimidine metabolism LUAD	0.155975377
CDA	Pyruvate metabolism LUAD	-0.158365752
CDA	Regulation_of_autophagy LUAD	0.061739298
CDA	Retinol metabolism LUAD	-0.022248805
CDA	Riboflavin metabolism LUAD	0.085557149
CDA	Schmahl_pdgf_signaling LUAD	0.214216609
CDA	Selenocompound metabol LUAD	-0.220332015
CDA	Signaling_by_hippo LUAD	-0.073626792
CDA	Sphingolipid metabolism LUAD	-0.110808455
CDA	Starch and sucrose metabo LUAD	0.232079361
CDA	Steroid biosynthesis LUAD	-0.180717052
CDA	Steroid hormone biosynth LUAD	0.05386376
CDA	Sulfur metabolism LUAD	0.024016984
CDA	Synthesis and degradation LUAD	-0.309025001
CDA	T helper cell LUAD	0.247886458
CDA	T helper1 (th1) cell LUAD	0.329189224
CDA	T helper17 (th17) cell LUAD	0.227138767
CDA	T helper2 (th2) cell LUAD	0.264363368
CDA	T helper9 (th9) cell LUAD	0.187122494
CDA	Taurine and hypotaurine r LUAD	-0.243417817

CDA	Terpenoid backbone biosy	LUAD	-0.125225539
CDA	Tgf_beta_signaling_pathw	LUAD	-0.02288884
CDA	Thiamine metabolism	LUAD	-0.03394615
CDA	Tnfa_signaling_via_nfk	LUAD	0.38966197
CDA	Tryptophan metabolism	LUAD	-0.108019888
CDA	Tumor endothelial cell	LUAD	0.262329831
CDA	Tyrosine metabolism	LUAD	0.101835936
CDA	Ubiquinone and other ter	LUAD	0.047056817
CDA	Valine, leucine and isoleu	LUAD	0.118308404
CDA	Valine, leucine and isoleu	LUAD	-0.292631125
CDA	Vascular endothelial cell	LUAD	0.10174881
CDA	Vascular smooth muscle c	LUAD	0.102778477
CDA	Vegf_signaling_pathway	LUAD	0.167919989
CDA	Vitamin b6 metabolism	LUAD	0.102283192
CDA	Willert_wnt_signaling	LUAD	0.113777473
CDA	Wnt_beta_catenin_signali	LUAD	-0.054610876
UCK1	Abnormal plasma cell	LUAD	0.127876046
UCK1	Activated b cell	LUAD	0.005046679
UCK1	Activated cd4+ t cell	LUAD	-0.027278716
UCK1	Activated t cell	LUAD	-0.028683283
UCK1	Alanine, aspartate and glu	LUAD	-0.09135772
UCK1	Alcala_apoptosis	LUAD	0.054316065
UCK1	Alpha-linolenic acid meta	LUAD	0.000712442
UCK1	Amino sugar and nucleoti	LUAD	0.058865833
UCK1	Ampk_pathway	LUAD	-0.004786912
UCK1	Angiogenesis	LUAD	-0.231494882
UCK1	Arachidonic acid metabol	LUAD	0.02686539
UCK1	Arginine and proline met	LUAD	-0.021774221
UCK1	Arginine biosynthesis	LUAD	-0.097069943
UCK1	Ascorbate and aldarate m	LUAD	-0.026868327
UCK1	Atypical memory b cell	LUAD	0.007486098
UCK1	Axl+siglec6+ dendritic ce	LUAD	-0.090473057
UCK1	B cell	LUAD	-0.027899435
UCK1	B1 cell	LUAD	-0.008129753
UCK1	Basal cell	LUAD	-0.085898792
UCK1	Beta-alanine metabolism	LUAD	-0.098528232
UCK1	Biosynthesis of unsaturate	LUAD	0.020942326
UCK1	Biotin metabolism	LUAD	0.031675216
UCK1	Butanoate metabolism	LUAD	0.089666743
UCK1	Caffeine metabolism	LUAD	-0.150307857
UCK1	Cancer stem cell	LUAD	-0.162056201
UCK1	Cancer stem-like cell	LUAD	-0.096593578
UCK1	Cd4+ cytotoxic t cell	LUAD	-0.009603776

UCK1	Cd4+ memory t cell	LUAD	-0.030731153
UCK1	Cd4+ regulatory t cell	LUAD	-0.051656129
UCK1	Cd4+ t helper cell	LUAD	-0.015011058
UCK1	Cd4+cd25+ regulatory t c	LUAD	-0.031411467
UCK1	Cd8+ cytotoxic t cell	LUAD	0.00876621
UCK1	Cd8+ regulatory t cell	LUAD	-0.021011015
UCK1	Cell_cycle	LUAD	-0.011507025
UCK1	Chandran_metastasis_top5	LUAD	-0.23674366
UCK1	Citrate cycle (tca cycle)	LUAD	0.006974802
UCK1	Cysteine and methionine r	LUAD	0.012195073
UCK1	Cytokine induced killer c	LUAD	0.077750461
UCK1	D-arginine and d-ornithin	LUAD	0.022697583
UCK1	D-glutamine and d-glutan	LUAD	-0.148039044
UCK1	Dendritic cell	LUAD	-0.040743645
UCK1	Dna_repair	LUAD	0.235344817
UCK1	Dna_replication	LUAD	0.147973278
UCK1	Double-negative memory	LUAD	0.065232826
UCK1	Drug metabolism - cytoch	LUAD	-0.023998484
UCK1	Drug metabolism - other c	LUAD	0.090214295
UCK1	E2f_targets	LUAD	0.003304197
UCK1	Ecm_receptor_interaction	LUAD	-0.254620581
UCK1	Effector cd4+ memory t (	LUAD	-0.066653342
UCK1	Effector cd8+ memory t (	LUAD	-0.044263687
UCK1	Effector memory t cell	LUAD	-0.058867442
UCK1	Effector regulatory t (treg	LUAD	-0.07281117
UCK1	Elvidge_hif1a_targets_up	LUAD	-0.16535375
UCK1	Endothelial cell	LUAD	-0.111279084
UCK1	Eosinophil	LUAD	-0.033436467
UCK1	Ether lipid metabolism	LUAD	-0.110381312
UCK1	Exhausted cd4+ t cell	LUAD	-0.029991987
UCK1	Exhausted cd8+ t cell	LUAD	-0.034290197
UCK1	Exhausted t cell	LUAD	0.007558979
UCK1	Fat cell (adipocyte)	LUAD	0.093060463
UCK1	Fatty acid biosynthesis	LUAD	-0.035735377
UCK1	Fatty acid degradation	LUAD	0.058780469
UCK1	Fatty acid elongation	LUAD	0.102518843
UCK1	Fibroblast	LUAD	-0.1390183
UCK1	Folate biosynthesis	LUAD	0.182524991
UCK1	Follicular b cell	LUAD	-0.031777244
UCK1	Follicular dendritic cell	LUAD	-0.053770291
UCK1	Follicular helper (tfh) t ce	LUAD	-0.019736219
UCK1	Follicular t cell	LUAD	0.053316564
UCK1	Foxp3+il-17+ t cell	LUAD	0.004778687

UCK1	Fructose and mannose me	LUAD	0.024773649
UCK1	G2m_checkpoint	LUAD	-0.080332568
UCK1	Galactose metabolism	LUAD	-0.029092574
UCK1	Galie_tumor_stemness_ge	LUAD	-0.140697679
UCK1	Glutathione metabolism	LUAD	0.128041741
UCK1	Glycerolipid metabolism	LUAD	0.044864612
UCK1	Glycerophospholipid metæ	LUAD	0.010377275
UCK1	Glycine, serine and threor	LUAD	0.159116555
UCK1	Glycolysis / gluconeogene	LUAD	-0.026295501
UCK1	Glycosaminoglycan biosy1	LUAD	-0.030927586
UCK1	Glycosaminoglycan biosy1	LUAD	-0.021956342
UCK1	Glycosaminoglycan biosy1	LUAD	-0.047407253
UCK1	Glycosaminoglycan degra	LUAD	0.006114015
UCK1	Glycosphingolipid biosyn1	LUAD	0.032652903
UCK1	Glycosphingolipid biosyn1	LUAD	0.000578641
UCK1	Glycosphingolipid biosyn1	LUAD	0.010955597
UCK1	Glycosylphosphatidylinos	LUAD	0.061889367
UCK1	Glyoxylate and dicarboxy	LUAD	0.118937033
UCK1	Granulocyte	LUAD	-0.031392343
UCK1	Hedgehog_signaling	LUAD	-0.177464258
UCK1	Histidine metabolism	LUAD	-0.018003588
UCK1	Hypoxia	LUAD	-0.144027239
UCK1	Il-17ralpha t cell	LUAD	-0.032985629
UCK1	Il2_stat5_signaling	LUAD	-0.171282379
UCK1	Il6_jak_stat3_signaling	LUAD	-0.110131029
UCK1	Immune_checkpoints_tunr	LUAD	0.007369203
UCK1	Immune_inhibition_cytok	LUAD	-0.040393514
UCK1	Inositol phosphate metabo	LUAD	-0.235491902
UCK1	Interleukin_6_signaling	LUAD	-0.316502052
UCK1	Jaeger_metastasis_up	LUAD	-0.072886526
UCK1	Jain_nfkb_signaling	LUAD	-0.044308453
UCK1	Kras_signaling_up	LUAD	-0.186858085
UCK1	Linoleic acid metabolism	LUAD	-0.046329685
UCK1	Lipoic acid metabolism	LUAD	0.133756586
UCK1	Lysine degradation	LUAD	-0.004524708
UCK1	Lysosome	LUAD	-0.049865415
UCK1	M1 macrophage	LUAD	-0.056171127
UCK1	M2 macrophage	LUAD	-0.072241072
UCK1	Mannose type o-glycan bi	LUAD	0.1848987
UCK1	Mapk_signaling_pathway	LUAD	-0.192720054
UCK1	Mapk3_erk1_activation	LUAD	-0.318018678
UCK1	Marginal zone b cell	LUAD	-0.073308329
UCK1	Memory b cell	LUAD	-0.013008886

UCK1	Mesenchymal cell	LUAD	-0.055133694
UCK1	Mesenchymal stem cell	LUAD	-0.137835051
UCK1	Metabolism of xenobiotic	LUAD	0.025305639
UCK1	Migrating cancer stem cel	LUAD	-0.156357879
UCK1	Mitotic_spindle	LUAD	-0.251361475
UCK1	Monocyte	LUAD	-0.029951806
UCK1	Mtor_signaling_pathway	LUAD	-0.12412052
UCK1	Mtorc1_signaling	LUAD	-0.060398015
UCK1	Mucin type o-glycan biosy	LUAD	-0.214002532
UCK1	Myc_targets_v1	LUAD	0.02319429
UCK1	Myeloid cell	LUAD	-0.065690153
UCK1	N-glycan biosynthesis	LUAD	0.067896604
UCK1	Naive b cell	LUAD	0.072310067
UCK1	Naive cd4+ t cell	LUAD	-0.128426468
UCK1	Naive cd8+ t cell	LUAD	-0.086843198
UCK1	Natural killer cell	LUAD	-0.035165651
UCK1	Natural killer t (nkt) cell	LUAD	0.125977586
UCK1	Natural regulatory t (treg)	LUAD	-0.102482761
UCK1	Neomycin, kanamycin and	LUAD	-0.141240171
UCK1	Neutrophil	LUAD	-0.082537486
UCK1	Nicotinate and nicotinami	LUAD	0.083160522
UCK1	Nitrogen metabolism	LUAD	-0.024537314
UCK1	Nod_like_receptor_signal	LUAD	-0.138791868
UCK1	Notch_signaling	LUAD	-0.104159313
UCK1	One carbon pool by folate	LUAD	0.01618795
UCK1	Other glycan degradation	LUAD	0.06378407
UCK1	Other types of o-glycan b	LUAD	0.17951721
UCK1	Oxidative phosphorylatio	LUAD	0.275804106
UCK1	P53_pathway	LUAD	0.037226842
UCK1	P53_signaling_pathway	LUAD	-0.118959482
UCK1	Pantothenate and coa bios	LUAD	0.055867928
UCK1	Pentose and glucuronate i	LUAD	0.027159595
UCK1	Pentose phosphate pathwa	LUAD	0.036500269
UCK1	Pericyte	LUAD	-0.084776709
UCK1	Phenylalanine metabolism	LUAD	-0.080077073
UCK1	Phenylalanine, tyrosine ar	LUAD	-0.007682019
UCK1	Phosphonate and phosphir	LUAD	0.042729998
UCK1	Pi3k_akt_activation	LUAD	-0.187150947
UCK1	Pi3k_akt_mtor_signaling	LUAD	-0.092588277
UCK1	Porphyrin and chlorophyl	LUAD	0.09085253
UCK1	Primary bile acid biosynt	LUAD	0.119122656
UCK1	Propanoate metabolism	LUAD	-0.031454898
UCK1	Purine metabolism	LUAD	0.076662985

UCK1	Pyrimidine metabolism	LUAD	0.130243407
UCK1	Pyruvate metabolism	LUAD	0.082082597
UCK1	Regulation_of_autophagy	LUAD	0.046443147
UCK1	Retinol metabolism	LUAD	-0.030055252
UCK1	Riboflavin metabolism	LUAD	0.179602855
UCK1	Schmahl_pdgf_signaling	LUAD	-0.223117997
UCK1	Selenocompound metabol	LUAD	-0.104754961
UCK1	Signaling_by_hippo	LUAD	-0.243934004
UCK1	Sphingolipid metabolism	LUAD	-0.101262132
UCK1	Starch and sucrose metabo	LUAD	-0.156771772
UCK1	Steroid biosynthesis	LUAD	0.085110539
UCK1	Steroid hormone biosynth	LUAD	-0.073150503
UCK1	Sulfur metabolism	LUAD	-0.099105079
UCK1	Synthesis and degradation	LUAD	0.133903146
UCK1	T helper cell	LUAD	-0.054075781
UCK1	T helper1 (th1) cell	LUAD	-0.044529881
UCK1	T helper17 (th17) cell	LUAD	-0.060825788
UCK1	T helper2 (th2) cell	LUAD	-0.047083487
UCK1	T helper9 (th9) cell	LUAD	-0.016464592
UCK1	Taurine and hypotaurine r	LUAD	0.019005269
UCK1	Terpenoid backbone biosy	LUAD	0.016043965
UCK1	Tgf_beta_signaling_pathw	LUAD	-0.320184733
UCK1	Thiamine metabolism	LUAD	0.170413767
UCK1	Tnfa_signaling_via_nfkb	LUAD	-0.194652554
UCK1	Tryptophan metabolism	LUAD	0.070650062
UCK1	Tumor endothelial cell	LUAD	-0.10447605
UCK1	Tyrosine metabolism	LUAD	0.009650885
UCK1	Ubiquinone and other terp	LUAD	0.054985113
UCK1	Valine, leucine and isoleu	LUAD	0.081094921
UCK1	Valine, leucine and isoleu	LUAD	0.100557887
UCK1	Vascular endothelial cell	LUAD	-0.098355259
UCK1	Vascular smooth muscle c	LUAD	-0.141136018
UCK1	Vegf_signaling_pathway	LUAD	-0.132079238
UCK1	Vitamin b6 metabolism	LUAD	0.019172172
UCK1	Willert_wnt_signaling	LUAD	-0.129539264
UCK1	Wnt_beta_catenin_signali	LUAD	-0.085615299
UCK2	Abnormal plasma cell	LUAD	0.136753611
UCK2	Activated b cell	LUAD	-0.091174639
UCK2	Activated cd4+ t cell	LUAD	-0.115802381
UCK2	Activated t cell	LUAD	-0.026298528
UCK2	Alanine, aspartate and glu	LUAD	0.285152795
UCK2	Alcala_apoptosis	LUAD	0.294611089
UCK2	Alpha-linolenic acid meta	LUAD	-0.525303187

UCK2	Amino sugar and nucleoti	LUAD	0.132270405
UCK2	Ampk_pathway	LUAD	0.348255018
UCK2	Angiogenesis	LUAD	0.022693027
UCK2	Arachidonic acid metabol	LUAD	-0.359978099
UCK2	Arginine and proline metε	LUAD	0.169810968
UCK2	Arginine biosynthesis	LUAD	-0.040806485
UCK2	Ascorbate and aldarate mε	LUAD	0.236682691
UCK2	Atypical memory b cell	LUAD	-0.088947205
UCK2	Axl+siglec6+ dendritic ce	LUAD	-0.365818921
UCK2	B cell	LUAD	-0.164046017
UCK2	B1 cell	LUAD	-0.122203838
UCK2	Basal cell	LUAD	0.061809658
UCK2	Beta-alanine metabolism	LUAD	-0.094786249
UCK2	Biosynthesis of unsaturate	LUAD	0.027201261
UCK2	Biotin metabolism	LUAD	-0.149013963
UCK2	Butanoate metabolism	LUAD	-0.132547317
UCK2	Caffeine metabolism	LUAD	-0.249657132
UCK2	Cancer stem cell	LUAD	0.035101246
UCK2	Cancer stem-like cell	LUAD	-0.082511995
UCK2	Cd4+ cytotoxic t cell	LUAD	-0.123410897
UCK2	Cd4+ memory t cell	LUAD	-0.148303138
UCK2	Cd4+ regulatory t cell	LUAD	-0.126878952
UCK2	Cd4+ t helper cell	LUAD	-0.16015168
UCK2	Cd4+cd25+ regulatory t c	LUAD	-0.129039338
UCK2	Cd8+ cytotoxic t cell	LUAD	0.02237142
UCK2	Cd8+ regulatory t cell	LUAD	0.009154462
UCK2	Cell_cycle	LUAD	0.558082565
UCK2	Chandran_metastasis_top ⁵	LUAD	0.407080221
UCK2	Citrate cycle (tca cycle)	LUAD	0.324558901
UCK2	Cysteine and methionine r	LUAD	0.34957341
UCK2	Cytokine induced killer cε	LUAD	0.037956303
UCK2	D-arginine and d-ornithin	LUAD	-0.085887035
UCK2	D-glutamine and d-glutan	LUAD	-0.27726484
UCK2	Dendritic cell	LUAD	-0.320335992
UCK2	Dna_repair	LUAD	0.359439119
UCK2	Dna_replication	LUAD	0.503819438
UCK2	Double-negative memory	LUAD	-0.038105493
UCK2	Drug metabolism - cytoch	LUAD	-0.08970695
UCK2	Drug metabolism - other ε	LUAD	0.278417274
UCK2	E2f_targets	LUAD	0.565819768
UCK2	Ecm_receptor_interaction	LUAD	-0.107270574
UCK2	Effector cd4+ memory t (	LUAD	-0.23099503
UCK2	Effector cd8+ memory t (	LUAD	-0.16026103

UCK2	Effector memory t cell	LUAD	-0.175019908
UCK2	Effector regulatory t (treg	LUAD	-0.176619415
UCK2	Elvidge_hif1a_targets_up	LUAD	0.412982786
UCK2	Endothelial cell	LUAD	0.027637714
UCK2	Eosinophil	LUAD	-0.230714172
UCK2	Ether lipid metabolism	LUAD	-0.435633849
UCK2	Exhausted cd4+ t cell	LUAD	0.001451448
UCK2	Exhausted cd8+ t cell	LUAD	-0.039713774
UCK2	Exhausted t cell	LUAD	-0.04114772
UCK2	Fat cell (adipocyte)	LUAD	0.271124524
UCK2	Fatty acid biosynthesis	LUAD	-0.109087827
UCK2	Fatty acid degradation	LUAD	-0.267847437
UCK2	Fatty acid elongation	LUAD	0.156372028
UCK2	Fibroblast	LUAD	-0.178364255
UCK2	Folate biosynthesis	LUAD	0.266204258
UCK2	Follicular b cell	LUAD	-0.189414043
UCK2	Follicular dendritic cell	LUAD	-0.182959475
UCK2	Follicular helper (tfh) t ce	LUAD	-0.094921019
UCK2	Follicular t cell	LUAD	0.071703565
UCK2	Foxp3+il-17+ t cell	LUAD	-0.017356847
UCK2	Fructose and mannose me	LUAD	0.142433626
UCK2	G2m_checkpoint	LUAD	0.576542502
UCK2	Galactose metabolism	LUAD	0.116332083
UCK2	Galie_tumor_stemness_ge	LUAD	-0.30852451
UCK2	Glutathione metabolism	LUAD	0.184369616
UCK2	Glycerolipid metabolism	LUAD	0.001392004
UCK2	Glycerophospholipid metæ	LUAD	-0.416554558
UCK2	Glycine, serine and threor	LUAD	0.129903099
UCK2	Glycolysis / gluconeogene	LUAD	0.232991901
UCK2	Glycosaminoglycan biosy	LUAD	-0.035812615
UCK2	Glycosaminoglycan biosy	LUAD	0.017084134
UCK2	Glycosaminoglycan biosy	LUAD	0.115529777
UCK2	Glycosaminoglycan degra	LUAD	-0.233184356
UCK2	Glycosphingolipid biosyn	LUAD	-0.278545474
UCK2	Glycosphingolipid biosyn	LUAD	0.092971851
UCK2	Glycosphingolipid biosyn	LUAD	0.31440905
UCK2	Glycosylphosphatidylinos	LUAD	-0.019215439
UCK2	Glyoxylate and dicarboxy	LUAD	0.186386399
UCK2	Granulocyte	LUAD	-0.198422126
UCK2	Hedgehog_signaling	LUAD	-0.21639013
UCK2	Histidine metabolism	LUAD	-0.275179031
UCK2	Hypoxia	LUAD	0.159895216
UCK2	Il-17ralpha t cell	LUAD	-0.085341926

UCK2	Il2_stat5_signaling	LUAD	-0.137789928
UCK2	Il6_jak_stat3_signaling	LUAD	-0.181645134
UCK2	Immune_checkpoints_tunr	LUAD	-0.182741535
UCK2	Immune_inhibition_cytok	LUAD	-0.072903055
UCK2	Inositol phosphate metabo	LUAD	-0.277486261
UCK2	Interleukin_6_signaling	LUAD	-0.122992341
UCK2	Jaeger_metastasis_up	LUAD	0.487135592
UCK2	Jain_nfkb_signaling	LUAD	0.479653095
UCK2	Kras_signaling_up	LUAD	-0.190232687
UCK2	Linoleic acid metabolism	LUAD	-0.405194871
UCK2	Lipoic acid metabolism	LUAD	0.028400338
UCK2	Lysine degradation	LUAD	0.16349306
UCK2	Lysosome	LUAD	-0.351784838
UCK2	M1 macrophage	LUAD	-0.20540862
UCK2	M2 macrophage	LUAD	-0.194059787
UCK2	Mannose type o-glycan bi	LUAD	0.102759134
UCK2	Mapk_signaling_pathway	LUAD	-0.246472203
UCK2	Mapk3_erk1_activation	LUAD	-0.058226348
UCK2	Marginal zone b cell	LUAD	-0.182219189
UCK2	Memory b cell	LUAD	-0.21389388
UCK2	Mesenchymal cell	LUAD	0.049653539
UCK2	Mesenchymal stem cell	LUAD	-0.16557961
UCK2	Metabolism of xenobiotic	LUAD	-0.036705317
UCK2	Migrating cancer stem cel	LUAD	0.085657398
UCK2	Mitotic_spindle	LUAD	0.257121663
UCK2	Monocyte	LUAD	-0.190796537
UCK2	Mtor_signaling_pathway	LUAD	-0.146500667
UCK2	Mtorc1_signaling	LUAD	0.553032006
UCK2	Mucin type o-glycan biosy	LUAD	-0.071709188
UCK2	Myc_targets_v1	LUAD	0.523022768
UCK2	Myeloid cell	LUAD	-0.219370395
UCK2	N-glycan biosynthesis	LUAD	0.318580735
UCK2	Naive b cell	LUAD	0.04519534
UCK2	Naive cd4+ t cell	LUAD	-0.311443449
UCK2	Naive cd8+ t cell	LUAD	-0.354836033
UCK2	Natural killer cell	LUAD	-0.111444598
UCK2	Natural killer t (nkt) cell	LUAD	0.122650537
UCK2	Natural regulatory t (treg)	LUAD	-0.2053168
UCK2	Neomycin, kanamycin and	LUAD	0.038528879
UCK2	Neutrophil	LUAD	-0.045053627
UCK2	Nicotinate and nicotinami	LUAD	-0.07647314
UCK2	Nitrogen metabolism	LUAD	-0.063675399
UCK2	Nod_like_receptor_signal	LUAD	-0.133722192

UCK2	Notch_signaling	LUAD	-0.273480441
UCK2	One carbon pool by folate	LUAD	0.418618543
UCK2	Other glycan degradation	LUAD	-0.233535953
UCK2	Other types of o-glycan b	LUAD	-0.005853015
UCK2	Oxidative phosphorylatior	LUAD	0.200133759
UCK2	P53_pathway	LUAD	-0.25279623
UCK2	P53_signaling_pathway	LUAD	0.319883647
UCK2	Pantothenate and coa bios	LUAD	-0.037992613
UCK2	Pentose and glucuronate i	LUAD	0.287883172
UCK2	Pentose phosphate pathwa	LUAD	0.300615291
UCK2	Pericyte	LUAD	-0.133570694
UCK2	Phenylalanine metabolism	LUAD	0.157957053
UCK2	Phenylalanine, tyrosine ar	LUAD	0.321299777
UCK2	Phosphonate and phosphir	LUAD	0.136515566
UCK2	Pi3k_akt_activation	LUAD	-0.107412276
UCK2	Pi3k_akt_mtor_signaling	LUAD	0.307075343
UCK2	Porphyrin and chlorophyl	LUAD	0.2230575
UCK2	Primary bile acid biosynt	LUAD	-0.39294131
UCK2	Propanoate metabolism	LUAD	-0.08868579
UCK2	Purine metabolism	LUAD	0.374999283
UCK2	Pyrimidine metabolism	LUAD	0.418519757
UCK2	Pyruvate metabolism	LUAD	0.150772769
UCK2	Regulation_of_autophagy	LUAD	0.207623976
UCK2	Retinol metabolism	LUAD	0.029205106
UCK2	Riboflavin metabolism	LUAD	0.325323807
UCK2	Schmahl_pdgf_signaling	LUAD	-0.19365795
UCK2	Selenocompound metabol	LUAD	0.250887292
UCK2	Signaling_by_hippo	LUAD	0.006892485
UCK2	Sphingolipid metabolism	LUAD	0.012139092
UCK2	Starch and sucrose metabo	LUAD	-0.088982455
UCK2	Steroid biosynthesis	LUAD	0.009094361
UCK2	Steroid hormone biosynth	LUAD	0.110919237
UCK2	Sulfur metabolism	LUAD	0.004696188
UCK2	Synthesis and degradation	LUAD	-0.076588018
UCK2	T helper cell	LUAD	-0.242584903
UCK2	T helper1 (th1) cell	LUAD	-0.136614826
UCK2	T helper17 (th17) cell	LUAD	-0.098356122
UCK2	T helper2 (th2) cell	LUAD	-0.161923289
UCK2	T helper9 (th9) cell	LUAD	-0.106079472
UCK2	Taurine and hypotaurine r	LUAD	-0.278784207
UCK2	Terpenoid backbone biosy	LUAD	0.228866769
UCK2	Tgf_beta_signaling_pathw	LUAD	-0.085340843
UCK2	Thiamine metabolism	LUAD	-0.202468972

UCK2	Tnfa_signaling_via_nfk	LUAD	-0.080695541
UCK2	Tryptophan metabolism	LUAD	-0.107203045
UCK2	Tumor endothelial cell	LUAD	0.200840312
UCK2	Tyrosine metabolism	LUAD	-0.072499531
UCK2	Ubiquinone and other ter	LUAD	0.05287024
UCK2	Valine, leucine and isoleu	LUAD	-0.045815995
UCK2	Valine, leucine and isoleu	LUAD	-0.206623712
UCK2	Vascular endothelial cell	LUAD	-0.152469981
UCK2	Vascular smooth muscle c	LUAD	-0.133369173
UCK2	Vegf_signaling_pathway	LUAD	-0.342028154
UCK2	Vitamin b6 metabolism	LUAD	0.235320878
UCK2	Willert_wnt_signaling	LUAD	0.385175526
UCK2	Wnt_beta_catenin_signali	LUAD	0.067741758
UCKL1	Abnormal plasma cell	LUAD	-0.008031928
UCKL1	Activated b cell	LUAD	-0.120503199
UCKL1	Activated cd4+ t cell	LUAD	-0.164998514
UCKL1	Activated t cell	LUAD	-0.176287375
UCKL1	Alanine, aspartate and glu	LUAD	0.051114542
UCKL1	Alcala_apoptosis	LUAD	-0.063333357
UCKL1	Alpha-linolenic acid meta	LUAD	0.034886194
UCKL1	Amino sugar and nucleoti	LUAD	-0.063515929
UCKL1	Ampk_pathway	LUAD	0.31850675
UCKL1	Angiogenesis	LUAD	-0.23944715
UCKL1	Arachidonic acid metabol	LUAD	-0.075310052
UCKL1	Arginine and proline meta	LUAD	0.006883689
UCKL1	Arginine biosynthesis	LUAD	-0.00841768
UCKL1	Ascorbate and aldarate m	LUAD	-0.088754521
UCKL1	Atypical memory b cell	LUAD	-0.053212043
UCKL1	Axl+siglec6+ dendritic ce	LUAD	-0.253722188
UCKL1	B cell	LUAD	-0.174969263
UCKL1	B1 cell	LUAD	-0.120992613
UCKL1	Basal cell	LUAD	-0.241393924
UCKL1	Beta-alanine metabolism	LUAD	-0.137148847
UCKL1	Biosynthesis of unsaturate	LUAD	-0.136236823
UCKL1	Biotin metabolism	LUAD	-0.031311388
UCKL1	Butanoate metabolism	LUAD	0.04361964
UCKL1	Caffeine metabolism	LUAD	-0.187844624
UCKL1	Cancer stem cell	LUAD	-0.29011456
UCKL1	Cancer stem-like cell	LUAD	-0.224793689
UCKL1	Cd4+ cytotoxic t cell	LUAD	-0.174826685
UCKL1	Cd4+ memory t cell	LUAD	-0.123573639
UCKL1	Cd4+ regulatory t cell	LUAD	-0.197746206
UCKL1	Cd4+ t helper cell	LUAD	-0.186552184

UCKL1	Cd4+cd25+ regulatory t c	LUAD	-0.188700854
UCKL1	Cd8+ cytotoxic t cell	LUAD	-0.129881645
UCKL1	Cd8+ regulatory t cell	LUAD	-0.139726592
UCKL1	Cell_cycle	LUAD	-0.024265267
UCKL1	Chandran_metastasis_top5	LUAD	-0.088563428
UCKL1	Citrate cycle (tca cycle)	LUAD	0.105793773
UCKL1	Cysteine and methionine r	LUAD	0.044000479
UCKL1	Cytokine induced killer c	LUAD	-0.095063439
UCKL1	D-arginine and d-ornithin	LUAD	-0.039666689
UCKL1	D-glutamine and d-glutan	LUAD	-0.22428945
UCKL1	Dendritic cell	LUAD	-0.213042933
UCKL1	Dna_repair	LUAD	0.176200174
UCKL1	Dna_replication	LUAD	0.085057725
UCKL1	Double-negative memory	LUAD	0.046529433
UCKL1	Drug metabolism - cytoch	LUAD	-0.105304893
UCKL1	Drug metabolism - other c	LUAD	-0.015787351
UCKL1	E2f_targets	LUAD	0.03863871
UCKL1	Ecm_receptor_interaction	LUAD	-0.238338349
UCKL1	Effector cd4+ memory t (	LUAD	-0.188361666
UCKL1	Effector cd8+ memory t (	LUAD	-0.168964487
UCKL1	Effector memory t cell	LUAD	-0.19408348
UCKL1	Effector regulatory t (treg	LUAD	-0.225299579
UCKL1	Elvidge_hif1a_targets_up	LUAD	-0.15859739
UCKL1	Endothelial cell	LUAD	-0.292265344
UCKL1	Eosinophil	LUAD	-0.203040721
UCKL1	Ether lipid metabolism	LUAD	-0.09213445
UCKL1	Exhausted cd4+ t cell	LUAD	-0.248714751
UCKL1	Exhausted cd8+ t cell	LUAD	-0.221774714
UCKL1	Exhausted t cell	LUAD	-0.136607992
UCKL1	Fat cell (adipocyte)	LUAD	0.002691464
UCKL1	Fatty acid biosynthesis	LUAD	-0.09626599
UCKL1	Fatty acid degradation	LUAD	-0.02693862
UCKL1	Fatty acid elongation	LUAD	-0.083583475
UCKL1	Fibroblast	LUAD	-0.253466199
UCKL1	Folate biosynthesis	LUAD	0.030147739
UCKL1	Follicular b cell	LUAD	-0.161490636
UCKL1	Follicular dendritic cell	LUAD	-0.108781452
UCKL1	Follicular helper (tfh) t ce	LUAD	-0.163311147
UCKL1	Follicular t cell	LUAD	0.029592109
UCKL1	Foxp3+il-17+ t cell	LUAD	-0.109131282
UCKL1	Fructose and mannose me	LUAD	0.103214523
UCKL1	G2m_checkpoint	LUAD	-0.014838619
UCKL1	Galactose metabolism	LUAD	-0.124245113

UCKL1	Galie_tumor_stemness_ge	LUAD	-0.298334868
UCKL1	Glutathione metabolism	LUAD	-0.053706287
UCKL1	Glycerolipid metabolism	LUAD	0.101134094
UCKL1	Glycerophospholipid met	LUAD	0.146988444
UCKL1	Glycine, serine and threor	LUAD	0.068286132
UCKL1	Glycolysis / gluconeogene	LUAD	-0.062055379
UCKL1	Glycosaminoglycan biosy	LUAD	-0.101008991
UCKL1	Glycosaminoglycan biosy	LUAD	-0.130144641
UCKL1	Glycosaminoglycan biosy	LUAD	-0.150285673
UCKL1	Glycosaminoglycan degra	LUAD	-0.091929823
UCKL1	Glycosphingolipid biosyn	LUAD	-0.16143154
UCKL1	Glycosphingolipid biosyn	LUAD	-0.23248036
UCKL1	Glycosphingolipid biosyn	LUAD	-0.140798099
UCKL1	Glycosylphosphatidylinos	LUAD	0.07744307
UCKL1	Glyoxylate and dicarboxy	LUAD	0.167319797
UCKL1	Granulocyte	LUAD	-0.195774882
UCKL1	Hedgehog_signaling	LUAD	-0.198616059
UCKL1	Histidine metabolism	LUAD	-0.090152564
UCKL1	Hypoxia	LUAD	-0.151315912
UCKL1	Il-17ralpha t cell	LUAD	-0.1802104
UCKL1	Il2_stat5_signaling	LUAD	-0.293189205
UCKL1	Il6_jak_stat3_signaling	LUAD	-0.254515229
UCKL1	Immune_checkpoints_tur	LUAD	-0.215097271
UCKL1	Immune_inhibition_cytok	LUAD	-0.135816361
UCKL1	Inositol phosphate metabo	LUAD	-0.141668783
UCKL1	Interleukin_6_signaling	LUAD	-0.22331114
UCKL1	Jaeger_metastasis_up	LUAD	-0.101920376
UCKL1	Jain_nfkb_signaling	LUAD	0.047688842
UCKL1	Kras_signaling_up	LUAD	-0.339552976
UCKL1	Linoleic acid metabolism	LUAD	0.062106606
UCKL1	Lipoic acid metabolism	LUAD	0.006089085
UCKL1	Lysine degradation	LUAD	0.141098089
UCKL1	Lysosome	LUAD	-0.17762446
UCKL1	M1 macrophage	LUAD	-0.227692999
UCKL1	M2 macrophage	LUAD	-0.209271385
UCKL1	Mannose type o-glycan bi	LUAD	0.19283609
UCKL1	Mapk_signaling_pathway	LUAD	-0.250721694
UCKL1	Mapk3_erk1_activation	LUAD	-0.267658794
UCKL1	Marginal zone b cell	LUAD	-0.17654818
UCKL1	Memory b cell	LUAD	-0.204613591
UCKL1	Mesenchymal cell	LUAD	-0.167884254
UCKL1	Mesenchymal stem cell	LUAD	-0.262461213
UCKL1	Metabolism of xenobiotic	LUAD	-0.078298053

UCKL1	Migrating cancer stem cel	LUAD	-0.267935516
UCKL1	Mitotic_spindle	LUAD	-0.125204927
UCKL1	Monocyte	LUAD	-0.209675395
UCKL1	Mtor_signaling_pathway	LUAD	-0.116290549
UCKL1	Mtorc1_signaling	LUAD	-0.111958449
UCKL1	Mucin type o-glycan bios	LUAD	-0.281977035
UCKL1	Myc_targets_v1	LUAD	-0.002974977
UCKL1	Myeloid cell	LUAD	-0.223377561
UCKL1	N-glycan biosynthesis	LUAD	0.004942905
UCKL1	Naive b cell	LUAD	0.009504023
UCKL1	Naive cd4+ t cell	LUAD	-0.277402463
UCKL1	Naive cd8+ t cell	LUAD	-0.164170672
UCKL1	Natural killer cell	LUAD	-0.182231356
UCKL1	Natural killer t (nkt) cell	LUAD	0.008450282
UCKL1	Natural regulatory t (treg)	LUAD	-0.236458861
UCKL1	Neomycin, kanamycin an	LUAD	-0.157944294
UCKL1	Neutrophil	LUAD	-0.2316044
UCKL1	Nicotinate and nicotinami	LUAD	-0.029920961
UCKL1	Nitrogen metabolism	LUAD	-0.12877623
UCKL1	Nod_like_receptor_signal	LUAD	-0.244857836
UCKL1	Notch_signaling	LUAD	-0.176314185
UCKL1	One carbon pool by folate	LUAD	0.080872974
UCKL1	Other glycan degradation	LUAD	0.154369304
UCKL1	Other types of o-glycan b	LUAD	0.253607469
UCKL1	Oxidative phosphorylatio	LUAD	0.141300887
UCKL1	P53_pathway	LUAD	-0.185793126
UCKL1	P53_signaling_pathway	LUAD	-0.245497301
UCKL1	Pantothenate and coa bios	LUAD	-0.049914217
UCKL1	Pentose and glucuronate i	LUAD	-0.105440495
UCKL1	Pentose phosphate pathwa	LUAD	-0.076264926
UCKL1	Pericyte	LUAD	-0.214453232
UCKL1	Phenylalanine metabolism	LUAD	-0.052298793
UCKL1	Phenylalanine, tyrosine ar	LUAD	0.017043618
UCKL1	Phosphonate and phosphir	LUAD	-0.130716479
UCKL1	Pi3k_akt_activation	LUAD	-0.245423492
UCKL1	Pi3k_akt_mtor_signaling	LUAD	-0.208100466
UCKL1	Porphyrin and chlorophyl	LUAD	-0.026949206
UCKL1	Primary bile acid biosynt	LUAD	-0.091198407
UCKL1	Propanoate metabolism	LUAD	-0.016194108
UCKL1	Purine metabolism	LUAD	0.039378314
UCKL1	Pyrimidine metabolism	LUAD	0.1214396
UCKL1	Pyruvate metabolism	LUAD	0.152409524
UCKL1	Regulation_of_autophagy	LUAD	-0.028666516

UCKL1	Retinol metabolism	LUAD	-0.126533306
UCKL1	Riboflavin metabolism	LUAD	0.059061382
UCKL1	Schmahl_pdgf_signaling	LUAD	-0.359124748
UCKL1	Selenocompound metabol	LUAD	0.024401041
UCKL1	Signaling_by_hippo	LUAD	-0.271148604
UCKL1	Sphingolipid metabolism	LUAD	-0.172984054
UCKL1	Starch and sucrose metabo	LUAD	-0.282839696
UCKL1	Steroid biosynthesis	LUAD	0.098676254
UCKL1	Steroid hormone biosynth	LUAD	-0.130280839
UCKL1	Sulfur metabolism	LUAD	-0.09721351
UCKL1	Synthesis and degradation	LUAD	0.116706788
UCKL1	T helper cell	LUAD	-0.227607091
UCKL1	T helper1 (th1) cell	LUAD	-0.217514955
UCKL1	T helper17 (th17) cell	LUAD	-0.154929522
UCKL1	T helper2 (th2) cell	LUAD	-0.203929697
UCKL1	T helper9 (th9) cell	LUAD	-0.165499148
UCKL1	Taurine and hypotaurine r	LUAD	0.123622348
UCKL1	Terpenoid backbone biosy	LUAD	0.028536566
UCKL1	Tgf_beta_signaling_pathw	LUAD	-0.28141473
UCKL1	Thiamine metabolism	LUAD	-0.017720214
UCKL1	Tnfa_signaling_via_nfkb	LUAD	-0.236750762
UCKL1	Tryptophan metabolism	LUAD	-0.015168955
UCKL1	Tumor endothelial cell	LUAD	0.024848765
UCKL1	Tyrosine metabolism	LUAD	-0.075217766
UCKL1	Ubiquinone and other terp	LUAD	0.054696386
UCKL1	Valine, leucine and isoleu	LUAD	0.091772499
UCKL1	Valine, leucine and isoleu	LUAD	0.038096258
UCKL1	Vascular endothelial cell	LUAD	-0.156160326
UCKL1	Vascular smooth muscle c	LUAD	-0.124444817
UCKL1	Vegf_signaling_pathway	LUAD	-0.134610331
UCKL1	Vitamin b6 metabolism	LUAD	-0.038165872
UCKL1	Willert_wnt_signaling	LUAD	-0.102681759
UCKL1	Wnt_beta_catenin_signali	LUAD	0.0674535
UPP1	Abnormal plasma cell	LUAD	-0.223104358
UPP1	Activated b cell	LUAD	0.119232359
UPP1	Activated cd4+ t cell	LUAD	0.185113841
UPP1	Activated t cell	LUAD	0.21793567
UPP1	Alanine, aspartate and glu	LUAD	-0.044743426
UPP1	Alcala_apoptosis	LUAD	0.233710955
UPP1	Alpha-linolenic acid meta	LUAD	-0.001088756
UPP1	Amino sugar and nucleoti	LUAD	0.360431004
UPP1	Ampk_pathway	LUAD	-0.160307764
UPP1	Angiogenesis	LUAD	0.221307495

UPP1	Arachidonic acid metabolism	LUAD	0.078804399
UPP1	Arginine and proline metabolism	LUAD	-0.004124146
UPP1	Arginine biosynthesis	LUAD	0.004148505
UPP1	Ascorbate and aldarate metabolism	LUAD	-0.138315613
UPP1	Atypical memory b cell	LUAD	0.005885771
UPP1	Axl+siglec6+ dendritic cell	LUAD	0.165010343
UPP1	B cell	LUAD	0.086644636
UPP1	B1 cell	LUAD	-0.044977815
UPP1	Basal cell	LUAD	0.322511685
UPP1	Beta-alanine metabolism	LUAD	-0.213634091
UPP1	Biosynthesis of unsaturated fatty acids	LUAD	0.196471152
UPP1	Biotin metabolism	LUAD	-0.00085838
UPP1	Butanoate metabolism	LUAD	-0.171749216
UPP1	Caffeine metabolism	LUAD	0.037199453
UPP1	Cancer stem cell	LUAD	0.123994221
UPP1	Cancer stem-like cell	LUAD	-0.009856344
UPP1	Cd4+ cytotoxic t cell	LUAD	0.136518994
UPP1	Cd4+ memory t cell	LUAD	0.032833898
UPP1	Cd4+ regulatory t cell	LUAD	0.240965177
UPP1	Cd4+ t helper cell	LUAD	0.152772765
UPP1	Cd4+cd25+ regulatory t cell	LUAD	0.173969744
UPP1	Cd8+ cytotoxic t cell	LUAD	0.185405671
UPP1	Cd8+ regulatory t cell	LUAD	0.139380778
UPP1	Cell cycle	LUAD	0.095602643
UPP1	Chandran_metastasis_top50	LUAD	-0.221714767
UPP1	Citrate cycle (tricarballic acid cycle)	LUAD	-0.00567617
UPP1	Cysteine and methionine metabolism	LUAD	0.159042204
UPP1	Cytokine induced killer cell	LUAD	0.025168664
UPP1	D-arginine and d-ornithine	LUAD	-0.018242771
UPP1	D-glutamine and d-glutamate	LUAD	0.098597564
UPP1	Dendritic cell	LUAD	0.225142708
UPP1	Dna_repair	LUAD	0.221963817
UPP1	Dna_replication	LUAD	0.193547334
UPP1	Double-negative memory t cell	LUAD	-0.001924815
UPP1	Drug metabolism - cytochrome p450	LUAD	-0.103006633
UPP1	Drug metabolism - other	LUAD	0.20155628
UPP1	E2f_targets	LUAD	0.090964301
UPP1	Ecm_receptor_interaction	LUAD	0.12212521
UPP1	Effector cd4+ memory t cell	LUAD	0.099288925
UPP1	Effector cd8+ memory t cell	LUAD	0.22355094
UPP1	Effector memory t cell	LUAD	0.124682581
UPP1	Effector regulatory t (treg)	LUAD	0.166553492
UPP1	Elvidge_hif1a_targets_up	LUAD	-0.030798156

UPP1	Endothelial cell	LUAD	0.049240897
UPP1	Eosinophil	LUAD	0.29065698
UPP1	Ether lipid metabolism	LUAD	-0.006877082
UPP1	Exhausted cd4+ t cell	LUAD	0.280617043
UPP1	Exhausted cd8+ t cell	LUAD	0.312829931
UPP1	Exhausted t cell	LUAD	0.181078516
UPP1	Fat cell (adipocyte)	LUAD	0.076025558
UPP1	Fatty acid biosynthesis	LUAD	-0.090382449
UPP1	Fatty acid degradation	LUAD	-0.190125934
UPP1	Fatty acid elongation	LUAD	0.226504659
UPP1	Fibroblast	LUAD	0.200445966
UPP1	Folate biosynthesis	LUAD	-0.111665489
UPP1	Follicular b cell	LUAD	0.088591609
UPP1	Follicular dendritic cell	LUAD	-0.016141815
UPP1	Follicular helper (tfh) t ce	LUAD	0.169676619
UPP1	Follicular t cell	LUAD	0.230709135
UPP1	Foxp3+il-17+ t cell	LUAD	0.19560712
UPP1	Fructose and mannose me	LUAD	0.252709672
UPP1	G2m_checkpoint	LUAD	-0.000602623
UPP1	Galactose metabolism	LUAD	0.400614824
UPP1	Galie_tumor_stemness_ge	LUAD	0.051262017
UPP1	Glutathione metabolism	LUAD	0.140428666
UPP1	Glycerolipid metabolism	LUAD	-0.065725724
UPP1	Glycerophospholipid metæ	LUAD	0.012930777
UPP1	Glycine, serine and threor	LUAD	0.14514636
UPP1	Glycolysis / gluconeogene	LUAD	0.161735368
UPP1	Glycosaminoglycan biosy1	LUAD	0.264833031
UPP1	Glycosaminoglycan biosy1	LUAD	-0.021374802
UPP1	Glycosaminoglycan biosy1	LUAD	0.212661819
UPP1	Glycosaminoglycan degra	LUAD	0.18086945
UPP1	Glycosphingolipid biosyn1	LUAD	0.125778477
UPP1	Glycosphingolipid biosyn1	LUAD	0.248121492
UPP1	Glycosphingolipid biosyn1	LUAD	0.19103135
UPP1	Glycosylphosphatidylinos	LUAD	-0.092831696
UPP1	Glyoxylate and dicarboxy	LUAD	-0.046275079
UPP1	Granulocyte	LUAD	0.313128604
UPP1	Hedgehog_signaling	LUAD	-0.140749844
UPP1	Histidine metabolism	LUAD	-0.162604673
UPP1	Hypoxia	LUAD	0.363590127
UPP1	Il-17ralpha t cell	LUAD	0.114596253
UPP1	Il2_stat5_signaling	LUAD	0.303502982
UPP1	Il6_jak_stat3_signaling	LUAD	0.374787118
UPP1	Immune_checkpoints_turr	LUAD	0.374931607

UPP1	Immune_inhibition_cytok	LUAD	0.365629814
UPP1	Inositol phosphate metabo	LUAD	-0.242705874
UPP1	Interleukin_6_signaling	LUAD	-0.084994096
UPP1	Jaeger_metastasis_up	LUAD	0.212059523
UPP1	Jain_nfkb_signaling	LUAD	0.037294787
UPP1	Kras_signaling_up	LUAD	0.280481667
UPP1	Linoleic acid metabolism	LUAD	-0.0803542
UPP1	Lipoic acid metabolism	LUAD	-0.00091271
UPP1	Lysine degradation	LUAD	-0.369275975
UPP1	Lysosome	LUAD	0.23661898
UPP1	M1 macrophage	LUAD	0.319513917
UPP1	M2 macrophage	LUAD	0.267644265
UPP1	Mannose type o-glycan bi	LUAD	-0.055691847
UPP1	Mapk_signaling_pathway	LUAD	0.087308869
UPP1	Mapk3_erk1_activation	LUAD	-0.016502095
UPP1	Marginal zone b cell	LUAD	0.027232304
UPP1	Memory b cell	LUAD	0.086844884
UPP1	Mesenchymal cell	LUAD	0.248421795
UPP1	Mesenchymal stem cell	LUAD	0.126936664
UPP1	Metabolism of xenobiotic	LUAD	-0.070854678
UPP1	Migrating cancer stem cel	LUAD	0.19617476
UPP1	Mitotic_spindle	LUAD	-0.12491581
UPP1	Monocyte	LUAD	0.395993173
UPP1	Mtor_signaling_pathway	LUAD	0.034471665
UPP1	Mtorc1_signaling	LUAD	0.207165119
UPP1	Mucin type o-glycan biosy	LUAD	0.153897356
UPP1	Myc_targets_v1	LUAD	0.108568095
UPP1	Myeloid cell	LUAD	0.215070271
UPP1	N-glycan biosynthesis	LUAD	0.019856909
UPP1	Naive b cell	LUAD	-0.068925629
UPP1	Naive cd4+ t cell	LUAD	0.034771539
UPP1	Naive cd8+ t cell	LUAD	-0.08377183
UPP1	Natural killer cell	LUAD	0.201847742
UPP1	Natural killer t (nkt) cell	LUAD	0.280357247
UPP1	Natural regulatory t (treg)	LUAD	0.107493706
UPP1	Neomycin, kanamycin and	LUAD	0.150478382
UPP1	Neutrophil	LUAD	0.399596866
UPP1	Nicotinate and nicotinami	LUAD	0.304418607
UPP1	Nitrogen metabolism	LUAD	-0.235923221
UPP1	Nod_like_receptor_signal	LUAD	0.309701924
UPP1	Notch_signaling	LUAD	0.134222757
UPP1	One carbon pool by folate	LUAD	-0.040193487
UPP1	Other glycan degradation	LUAD	0.089844902

UPP1	Other types of o-glycan b	LUAD	0.013973824
UPP1	Oxidative phosphorylation	LUAD	0.223227021
UPP1	P53_pathway	LUAD	0.32174454
UPP1	P53_signaling_pathway	LUAD	0.274808925
UPP1	Pantothenate and coa biosynthesis	LUAD	0.02795007
UPP1	Pentose and glucuronate interconversions	LUAD	-0.018049957
UPP1	Pentose phosphate pathway	LUAD	0.234981791
UPP1	Pericyte	LUAD	0.124443406
UPP1	Phenylalanine metabolism	LUAD	-0.084383195
UPP1	Phenylalanine, tyrosine and tryptophan metabolism	LUAD	0.00656985
UPP1	Phosphonate and phosphite metabolism	LUAD	-0.056257121
UPP1	Pi3k_akt_activation	LUAD	0.015683131
UPP1	Pi3k_akt_mtor_signaling	LUAD	0.198043788
UPP1	Porphyrin and chlorophyll metabolism	LUAD	0.0187669
UPP1	Primary bile acid biosynthesis	LUAD	0.142491871
UPP1	Propanoate metabolism	LUAD	-0.262789375
UPP1	Purine metabolism	LUAD	0.146725611
UPP1	Pyrimidine metabolism	LUAD	0.293327982
UPP1	Pyruvate metabolism	LUAD	-0.096306691
UPP1	Regulation_of_autophagy	LUAD	0.049412488
UPP1	Retinol metabolism	LUAD	-0.084390879
UPP1	Riboflavin metabolism	LUAD	0.181399974
UPP1	Schmahl_pdgf_signaling	LUAD	0.079023829
UPP1	Selenocompound metabolism	LUAD	-0.240788465
UPP1	Signaling_by_hippo	LUAD	-0.31372538
UPP1	Sphingolipid metabolism	LUAD	-0.018997864
UPP1	Starch and sucrose metabolism	LUAD	0.21723239
UPP1	Steroid biosynthesis	LUAD	0.04007449
UPP1	Steroid hormone biosynthesis	LUAD	-0.071203282
UPP1	Sulfur metabolism	LUAD	0.073386786
UPP1	Synthesis and degradation of ribonucleotides	LUAD	-0.158607544
UPP1	T helper cell	LUAD	0.214973868
UPP1	T helper1 (th1) cell	LUAD	0.318798408
UPP1	T helper17 (th17) cell	LUAD	0.24100308
UPP1	T helper2 (th2) cell	LUAD	0.208714366
UPP1	T helper9 (th9) cell	LUAD	0.108581214
UPP1	Taurine and hypotaurine metabolism	LUAD	-0.180146371
UPP1	Terpenoid backbone biosynthesis	LUAD	-0.073562352
UPP1	Tgf_beta_signaling_pathway	LUAD	-0.182175334
UPP1	Thiamine metabolism	LUAD	-0.01194509
UPP1	Tnfa_signaling_via_nfkappaB	LUAD	0.375704962
UPP1	Tryptophan metabolism	LUAD	-0.048955593
UPP1	Tumor endothelial cell	LUAD	0.322718445

UPP1	Tyrosine metabolism	LUAD	-0.02771273
UPP1	Ubiquinone and other ter	LUAD	0.09798515
UPP1	Valine, leucine and isoleu	LUAD	0.270671869
UPP1	Valine, leucine and isoleu	LUAD	-0.186359704
UPP1	Vascular endothelial cell	LUAD	-0.079637594
UPP1	Vascular smooth muscle c	LUAD	-0.089592908
UPP1	Vegf_signaling_pathway	LUAD	0.104302499
UPP1	Vitamin b6 metabolism	LUAD	0.133261389
UPP1	Willert_wnt_signaling	LUAD	0.099654164
UPP1	Wnt_beta_catenin_signali	LUAD	-0.313426765
UPP2	Abnormal plasma cell	LUAD	-0.051105646
UPP2	Activated b cell	LUAD	-0.004226987
UPP2	Activated cd4+ t cell	LUAD	0.020380309
UPP2	Activated t cell	LUAD	-0.047680188
UPP2	Alanine, aspartate and glu	LUAD	-0.181790236
UPP2	Alcala_apoptosis	LUAD	-0.220367225
UPP2	Alpha-linolenic acid meta	LUAD	0.137720397
UPP2	Amino sugar and nucleoti	LUAD	-0.082995104
UPP2	Ampk_pathway	LUAD	-0.175117573
UPP2	Angiogenesis	LUAD	-0.016502338
UPP2	Arachidonic acid metaboli	LUAD	0.196379044
UPP2	Arginine and proline met&	LUAD	-0.147760468
UPP2	Arginine biosynthesis	LUAD	-0.117310894
UPP2	Ascorbate and aldarate m&	LUAD	0.046159076
UPP2	Atypical memory b cell	LUAD	0.123282894
UPP2	Axl+siglec6+ dendritic ce	LUAD	0.115806928
UPP2	B cell	LUAD	0.076838895
UPP2	B1 cell	LUAD	-0.013404596
UPP2	Basal cell	LUAD	0.043011105
UPP2	Beta-alanine metabolism	LUAD	-0.037006443
UPP2	Biosynthesis of unsaturate	LUAD	-0.124837656
UPP2	Biotin metabolism	LUAD	-0.056558502
UPP2	Butanoate metabolism	LUAD	-0.022743413
UPP2	Caffeine metabolism	LUAD	0.178846388
UPP2	Cancer stem cell	LUAD	0.060046065
UPP2	Cancer stem-like cell	LUAD	0.124167783
UPP2	Cd4+ cytotoxic t cell	LUAD	-0.018108663
UPP2	Cd4+ memory t cell	LUAD	0.03636254
UPP2	Cd4+ regulatory t cell	LUAD	-0.011972423
UPP2	Cd4+ t helper cell	LUAD	0.019385786
UPP2	Cd4+cd25+ regulatory t c	LUAD	-0.002056498
UPP2	Cd8+ cytotoxic t cell	LUAD	-0.086426655
UPP2	Cd8+ regulatory t cell	LUAD	-0.079522694

UPP2	Cell_cycle	LUAD	-0.207824446
UPP2	Chandran_metastasis_top	LUAD	-0.244293552
UPP2	Citrate cycle (tca cycle)	LUAD	-0.2135667
UPP2	Cysteine and methionine r	LUAD	-0.193361665
UPP2	Cytokine induced killer c	LUAD	-0.034404888
UPP2	D-arginine and d-ornithin	LUAD	0.009425939
UPP2	D-glutamine and d-glutan	LUAD	-0.001725625
UPP2	Dendritic cell	LUAD	0.05009376
UPP2	Dna_repair	LUAD	-0.134388282
UPP2	Dna_replication	LUAD	-0.168029374
UPP2	Double-negative memory	LUAD	0.035706185
UPP2	Drug metabolism - cytoch	LUAD	0.18144041
UPP2	Drug metabolism - other	LUAD	0.061314001
UPP2	E2f_targets	LUAD	-0.21640964
UPP2	Ecm_receptor_interaction	LUAD	0.024768632
UPP2	Effector cd4+ memory t	(LUAD	0.066939298
UPP2	Effector cd8+ memory t	(LUAD	0.01688109
UPP2	Effector memory t cell	LUAD	0.024052245
UPP2	Effector regulatory t (treg	LUAD	0.014123578
UPP2	Elvidge_hif1a_targets_up	LUAD	-0.255261524
UPP2	Endothelial cell	LUAD	-0.063544486
UPP2	Eosinophil	LUAD	0.051976777
UPP2	Ether lipid metabolism	LUAD	0.107693803
UPP2	Exhausted cd4+ t cell	LUAD	-0.02351257
UPP2	Exhausted cd8+ t cell	LUAD	0.011353567
UPP2	Exhausted t cell	LUAD	-0.05599154
UPP2	Fat cell (adipocyte)	LUAD	-0.084403927
UPP2	Fatty acid biosynthesis	LUAD	-0.061574151
UPP2	Fatty acid degradation	LUAD	0.052828171
UPP2	Fatty acid elongation	LUAD	-0.114373479
UPP2	Fibroblast	LUAD	0.103116447
UPP2	Folate biosynthesis	LUAD	-0.135538593
UPP2	Follicular b cell	LUAD	0.057346154
UPP2	Follicular dendritic cell	LUAD	0.005354059
UPP2	Follicular helper (tfh) t ce	LUAD	0.009348427
UPP2	Follicular t cell	LUAD	-0.109821343
UPP2	Foxp3+il-17+ t cell	LUAD	-0.035596287
UPP2	Fructose and mannose me	LUAD	-0.051822386
UPP2	G2m_checkpoint	LUAD	-0.247237159
UPP2	Galactose metabolism	LUAD	-0.101900045
UPP2	Galie_tumor_stemness_ge	LUAD	0.12980148
UPP2	Glutathione metabolism	LUAD	-0.036192682
UPP2	Glycerolipid metabolism	LUAD	-0.000398143

UPP2	Glycerophospholipid metabolism	LUAD	0.085832879
UPP2	Glycine, serine and threonine metabolism	LUAD	-0.028485489
UPP2	Glycolysis / gluconeogenesis	LUAD	-0.097384088
UPP2	Glycosaminoglycan biosynthesis	LUAD	0.012228566
UPP2	Glycosaminoglycan biosynthesis	LUAD	0.037201101
UPP2	Glycosaminoglycan biosynthesis	LUAD	0.023351379
UPP2	Glycosaminoglycan degradation	LUAD	0.07737546
UPP2	Glycosphingolipid biosynthesis	LUAD	0.023610951
UPP2	Glycosphingolipid biosynthesis	LUAD	0.029658318
UPP2	Glycosphingolipid biosynthesis	LUAD	0.064391691
UPP2	Glycosylphosphatidylinositol signaling	LUAD	-0.060752181
UPP2	Glyoxylate and dicarboxylate metabolism	LUAD	-0.146952637
UPP2	Granulocyte	LUAD	0.040761569
UPP2	Hedgehog signaling	LUAD	0.034076319
UPP2	Histidine metabolism	LUAD	0.054928597
UPP2	Hypoxia	LUAD	-0.093959854
UPP2	IL-17 receptor signaling	LUAD	-0.029081908
UPP2	IL2/STAT5 signaling	LUAD	-0.018582451
UPP2	IL6/JAK/STAT3 signaling	LUAD	0.019961711
UPP2	Immune checkpoints	LUAD	0.047629088
UPP2	Immune inhibition	LUAD	0.033649714
UPP2	Inositol phosphate metabolism	LUAD	-0.097475432
UPP2	Interleukin_6 signaling	LUAD	-0.121950109
UPP2	Jaeger metastasis up	LUAD	-0.151280126
UPP2	Jain_nfkB signaling	LUAD	-0.294625059
UPP2	Kras signaling up	LUAD	0.057559977
UPP2	Linoleic acid metabolism	LUAD	0.177975822
UPP2	Lipoic acid metabolism	LUAD	0.051100146
UPP2	Lysine degradation	LUAD	-0.181727313
UPP2	Lysosome	LUAD	0.069070124
UPP2	M1 macrophage	LUAD	0.034114433
UPP2	M2 macrophage	LUAD	0.02351671
UPP2	Mannose type o-glycan biosynthesis	LUAD	0.010727853
UPP2	Mapk signaling pathway	LUAD	-0.028646271
UPP2	Mapk3_erk1 activation	LUAD	-0.158832543
UPP2	Marginal zone b cell	LUAD	0.04550755
UPP2	Memory b cell	LUAD	0.060229907
UPP2	Mesenchymal cell	LUAD	0.079658148
UPP2	Mesenchymal stem cell	LUAD	0.075647055
UPP2	Metabolism of xenobiotics	LUAD	0.148478348
UPP2	Migrating cancer stem cell	LUAD	0.023103565
UPP2	Mitotic spindle	LUAD	-0.218643438
UPP2	Monocyte	LUAD	0.036918951

UPP2	Mtor_signaling_pathway	LUAD	-0.07970753
UPP2	Mtorc1_signaling	LUAD	-0.236797722
UPP2	Mucin type o-glycan biosynthesis	LUAD	0.061693289
UPP2	Myc_targets_v1	LUAD	-0.207143937
UPP2	Myeloid cell	LUAD	0.024226882
UPP2	N-glycan biosynthesis	LUAD	-0.197599474
UPP2	Naive b cell	LUAD	0.047372426
UPP2	Naive cd4+ t cell	LUAD	0.039105361
UPP2	Naive cd8+ t cell	LUAD	0.082889561
UPP2	Natural killer cell	LUAD	-0.03665661
UPP2	Natural killer t (nkt) cell	LUAD	-0.104022063
UPP2	Natural regulatory t (treg) cell	LUAD	0.022925343
UPP2	Neomycin, kanamycin and streptomycin	LUAD	-0.064453576
UPP2	Neutrophil	LUAD	0.030616069
UPP2	Nicotinate and nicotinamide	LUAD	0.110769456
UPP2	Nitrogen metabolism	LUAD	-0.015459097
UPP2	Nod_like_receptor_signaling	LUAD	-0.000811069
UPP2	Notch_signaling	LUAD	0.091911757
UPP2	One carbon pool by folate	LUAD	-0.175172492
UPP2	Other glycan degradation	LUAD	0.069843183
UPP2	Other types of o-glycan biosynthesis	LUAD	0.014461389
UPP2	Oxidative phosphorylation	LUAD	-0.053637955
UPP2	P53_pathway	LUAD	0.034178382
UPP2	P53_signaling_pathway	LUAD	-0.046482038
UPP2	Pantothenate and coenzyme a biosynthesis	LUAD	0.065828357
UPP2	Pentose and glucuronate interconversions	LUAD	0.037007265
UPP2	Pentose phosphate pathway	LUAD	-0.136018668
UPP2	Pericyte	LUAD	0.083691781
UPP2	Phenylalanine metabolism	LUAD	-0.080900681
UPP2	Phenylalanine, tyrosine and tryptophan	LUAD	-0.122467043
UPP2	Phosphonate and phosphite metabolism	LUAD	-0.029257261
UPP2	Pi3k_akt_activation	LUAD	-0.108726466
UPP2	Pi3k_akt_mtor_signaling	LUAD	-0.266164727
UPP2	Porphyrin and chlorophyll metabolism	LUAD	0.004687181
UPP2	Primary bile acid biosynthesis	LUAD	0.224501773
UPP2	Propanoate metabolism	LUAD	-0.096782694
UPP2	Purine metabolism	LUAD	-0.195982465
UPP2	Pyrimidine metabolism	LUAD	-0.139578614
UPP2	Pyruvate metabolism	LUAD	-0.154826526
UPP2	Regulation_of_autophagy	LUAD	-0.110612899
UPP2	Retinol metabolism	LUAD	0.176704052
UPP2	Riboflavin metabolism	LUAD	-0.081456737
UPP2	Schmahl_pdgf_signaling	LUAD	-0.017060231

UPP2	Selenocompound metabol	LUAD	-0.165544061
UPP2	Signaling_by_hippo	LUAD	-0.050015424
UPP2	Sphingolipid metabolism	LUAD	-0.092885334
UPP2	Starch and sucrose metabo	LUAD	-0.01017109
UPP2	Steroid biosynthesis	LUAD	-0.05610708
UPP2	Steroid hormone biosynth	LUAD	0.110223532
UPP2	Sulfur metabolism	LUAD	-0.021055062
UPP2	Synthesis and degradation	LUAD	0.042757132
UPP2	T helper cell	LUAD	0.049840851
UPP2	T helper1 (th1) cell	LUAD	-0.030346124
UPP2	T helper17 (th17) cell	LUAD	0.012959781
UPP2	T helper2 (th2) cell	LUAD	0.018282062
UPP2	T helper9 (th9) cell	LUAD	-0.00793314
UPP2	Taurine and hypotaurine r	LUAD	0.210914012
UPP2	Terpenoid backbone biosy	LUAD	-0.162133214
UPP2	Tgf_beta_signaling_pathw	LUAD	-0.03272472
UPP2	Thiamine metabolism	LUAD	0.037382669
UPP2	Tnfa_signaling_via_nfbk	LUAD	-0.012550658
UPP2	Tryptophan metabolism	LUAD	-0.030501102
UPP2	Tumor endothelial cell	LUAD	-0.034712643
UPP2	Tyrosine metabolism	LUAD	0.083645745
UPP2	Ubiquinone and other ter	LUAD	-0.012745483
UPP2	Valine, leucine and isoleu	LUAD	-0.070926324
UPP2	Valine, leucine and isoleu	LUAD	-0.038593371
UPP2	Vascular endothelial cell	LUAD	-0.071086287
UPP2	Vascular smooth muscle c	LUAD	0.105367673
UPP2	Vegf_signaling_pathway	LUAD	-0.03567463
UPP2	Vitamin b6 metabolism	LUAD	-0.097293174
UPP2	Willert_wnt_signaling	LUAD	-0.181146626
UPP2	Wnt_beta_catenin_signali	LUAD	-0.059166406
CDA	Abnormal plasma cell	LUSC	-0.011967063
CDA	Activated b cell	LUSC	0.170316439
CDA	Activated cd4+ t cell	LUSC	0.200898483
CDA	Activated t cell	LUSC	0.177698972
CDA	Alanine, aspartate and glu	LUSC	-0.014406644
CDA	Alcala_apoptosis	LUSC	0.168143748
CDA	Alpha-linolenic acid meta	LUSC	0.114049508
CDA	Amino sugar and nucleoti	LUSC	0.2008689
CDA	Ampk_pathway	LUSC	-0.17669152
CDA	Angiogenesis	LUSC	0.287791409
CDA	Arachidonic acid metabo	LUSC	0.137982584
CDA	Arginine and proline met	LUSC	0.07048195
CDA	Arginine biosynthesis	LUSC	0.096070631

CDA	Ascorbate and aldarate me	LUSC	-0.252830508
CDA	Atypical memory b cell	LUSC	0.142601414
CDA	Axl+siglec6+ dendritic ce	LUSC	0.258230645
CDA	B cell	LUSC	0.161926474
CDA	B1 cell	LUSC	0.110582791
CDA	Basal cell	LUSC	0.001693539
CDA	Beta-alanine metabolism	LUSC	0.093233022
CDA	Biosynthesis of unsaturate	LUSC	0.074132642
CDA	Biotin metabolism	LUSC	0.054764297
CDA	Butanoate metabolism	LUSC	-0.234250806
CDA	Caffeine metabolism	LUSC	0.116277776
CDA	Cancer stem cell	LUSC	0.191304402
CDA	Cancer stem-like cell	LUSC	0.145147154
CDA	Cd4+ cytotoxic t cell	LUSC	0.280522408
CDA	Cd4+ memory t cell	LUSC	0.150332363
CDA	Cd4+ regulatory t cell	LUSC	0.198541895
CDA	Cd4+ t helper cell	LUSC	0.198183748
CDA	Cd4+cd25+ regulatory t c	LUSC	0.198116864
CDA	Cd8+ cytotoxic t cell	LUSC	0.173549278
CDA	Cd8+ regulatory t cell	LUSC	0.181591687
CDA	Cell_cycle	LUSC	-0.220376663
CDA	Chandran_metastasis_top5	LUSC	-0.225869853
CDA	Citrate cycle (tca cycle)	LUSC	0.009666386
CDA	Cysteine and methionine r	LUSC	-0.063828185
CDA	Cytokine induced killer c	LUSC	0.146533318
CDA	D-arginine and d-ornithin	LUSC	0.083334472
CDA	D-glutamine and d-glutan	LUSC	0.014459488
CDA	Dendritic cell	LUSC	0.286014163
CDA	Dna_repair	LUSC	-0.079928949
CDA	Dna_replication	LUSC	-0.184953171
CDA	Double-negative memory	LUSC	0.096086293
CDA	Drug metabolism - cytoch	LUSC	-0.190752588
CDA	Drug metabolism - other	LUSC	-0.044306737
CDA	E2f_targets	LUSC	-0.214830398
CDA	Ecm_receptor_interaction	LUSC	0.236368599
CDA	Effector cd4+ memory t (	LUSC	0.154392987
CDA	Effector cd8+ memory t (	LUSC	0.295976773
CDA	Effector memory t cell	LUSC	0.178241038
CDA	Effector regulatory t (treg	LUSC	0.217320679
CDA	Elvidge_hif1a_targets_up	LUSC	0.02725896
CDA	Endothelial cell	LUSC	0.210007146
CDA	Eosinophil	LUSC	0.255700233
CDA	Ether lipid metabolism	LUSC	0.152215424

CDA	Exhausted cd4+ t cell	LUSC	0.248791213
CDA	Exhausted cd8+ t cell	LUSC	0.267381434
CDA	Exhausted t cell	LUSC	0.190550755
CDA	Fat cell (adipocyte)	LUSC	0.090170429
CDA	Fatty acid biosynthesis	LUSC	0.102147241
CDA	Fatty acid degradation	LUSC	-0.151422795
CDA	Fatty acid elongation	LUSC	0.097064621
CDA	Fibroblast	LUSC	0.286934071
CDA	Folate biosynthesis	LUSC	0.040576363
CDA	Follicular b cell	LUSC	0.124987585
CDA	Follicular dendritic cell	LUSC	0.097089869
CDA	Follicular helper (tfh) t ce	LUSC	0.218609182
CDA	Follicular t cell	LUSC	0.176469436
CDA	Foxp3+il-17+ t cell	LUSC	0.131066118
CDA	Fructose and mannose me	LUSC	0.069777009
CDA	G2m_checkpoint	LUSC	-0.217506434
CDA	Galactose metabolism	LUSC	0.1760939
CDA	Galie_tumor_stemness_ge	LUSC	0.191421198
CDA	Glutathione metabolism	LUSC	-0.026946535
CDA	Glycerolipid metabolism	LUSC	0.083593998
CDA	Glycerophospholipid metæ	LUSC	-0.004545493
CDA	Glycine, serine and threor	LUSC	0.015320555
CDA	Glycolysis / gluconeogene	LUSC	0.026408931
CDA	Glycosaminoglycan biosy	LUSC	0.235675478
CDA	Glycosaminoglycan biosy	LUSC	-0.025107098
CDA	Glycosaminoglycan biosy	LUSC	0.135232609
CDA	Glycosaminoglycan degra	LUSC	0.248084378
CDA	Glycosphingolipid biosyn	LUSC	0.280459403
CDA	Glycosphingolipid biosyn	LUSC	0.282608083
CDA	Glycosphingolipid biosyn	LUSC	-0.000450005
CDA	Glycosylphosphatidylinos	LUSC	-0.256869853
CDA	Glyoxylate and dicarboxy	LUSC	-0.104695391
CDA	Granulocyte	LUSC	0.280394046
CDA	Hedgehog_signaling	LUSC	0.037917013
CDA	Histidine metabolism	LUSC	0.141101003
CDA	Hypoxia	LUSC	0.23463107
CDA	Il-17ralpha t cell	LUSC	0.207788392
CDA	Il2_stat5_signaling	LUSC	0.300906852
CDA	Il6_jak_stat3_signaling	LUSC	0.28889341
CDA	Immune_checkpoints_tur	LUSC	0.220386727
CDA	Immune_inhibition_cytok	LUSC	0.284549506
CDA	Inositol phosphate metabo	LUSC	-0.062661877
CDA	Interleukin_6_signaling	LUSC	0.084788867

CDA	Jaeger_metastasis_up	LUSC	-0.003383635
CDA	Jain_nfkb_signaling	LUSC	-0.134339579
CDA	Kras_signaling_up	LUSC	0.304800334
CDA	Linoleic acid metabolism	LUSC	-0.018036769
CDA	Lipoic acid metabolism	LUSC	-0.182305798
CDA	Lysine degradation	LUSC	-0.301499483
CDA	Lysosome	LUSC	0.285551004
CDA	M1 macrophage	LUSC	0.255152154
CDA	M2 macrophage	LUSC	0.27617509
CDA	Mannose type o-glycan bi	LUSC	-0.154194867
CDA	Mapk_signaling_pathway	LUSC	0.186866279
CDA	Mapk3_erk1_activation	LUSC	0.119870364
CDA	Marginal zone b cell	LUSC	0.129508277
CDA	Memory b cell	LUSC	0.092641454
CDA	Mesenchymal cell	LUSC	0.289335817
CDA	Mesenchymal stem cell	LUSC	0.256030986
CDA	Metabolism of xenobiotic	LUSC	-0.146079021
CDA	Migrating cancer stem cel	LUSC	0.162766108
CDA	Mitotic_spindle	LUSC	-0.092483196
CDA	Monocyte	LUSC	0.358728653
CDA	Mtor_signaling_pathway	LUSC	-0.0462728
CDA	Mtorc1_signaling	LUSC	0.036963749
CDA	Mucin type o-glycan biosy	LUSC	0.122285624
CDA	Myc_targets_v1	LUSC	-0.086246796
CDA	Myeloid cell	LUSC	0.221810707
CDA	N-glycan biosynthesis	LUSC	0.040721064
CDA	Naive b cell	LUSC	0.032950503
CDA	Naive cd4+ t cell	LUSC	0.152648374
CDA	Naive cd8+ t cell	LUSC	0.102069294
CDA	Natural killer cell	LUSC	0.236641581
CDA	Natural killer t (nkt) cell	LUSC	0.097281504
CDA	Natural regulatory t (treg)	LUSC	0.143312303
CDA	Neomycin, kanamycin and	LUSC	0.199182806
CDA	Neutrophil	LUSC	0.358994752
CDA	Nicotinate and nicotinami	LUSC	0.129205083
CDA	Nitrogen metabolism	LUSC	0.01855182
CDA	Nod_like_receptor_signal	LUSC	0.270970868
CDA	Notch_signaling	LUSC	0.12123687
CDA	One carbon pool by folate	LUSC	-0.105911522
CDA	Other glycan degradation	LUSC	0.170654673
CDA	Other types of o-glycan b	LUSC	0.020111416
CDA	Oxidative phosphorylatior	LUSC	0.022400889
CDA	P53_pathway	LUSC	0.190718962

CDA	P53_signaling_pathway	LUSC	-0.022864217
CDA	Pantothenate and coa bios	LUSC	0.017362009
CDA	Pentose and glucuronate i	LUSC	-0.180293443
CDA	Pentose phosphate pathwa	LUSC	0.011389967
CDA	Pericyte	LUSC	0.314988328
CDA	Phenylalanine metabolism	LUSC	0.141224894
CDA	Phenylalanine, tyrosine ar	LUSC	0.031379502
CDA	Phosphonate and phosphir	LUSC	-0.243230174
CDA	Pi3k_akt_activation	LUSC	-0.020206891
CDA	Pi3k_akt_mtor_signaling	LUSC	0.035716192
CDA	Porphyrin and chlorophyl	LUSC	-0.138129424
CDA	Primary bile acid biosynt	LUSC	0.14448841
CDA	Propanoate metabolism	LUSC	-0.166600845
CDA	Purine metabolism	LUSC	-0.019163217
CDA	Pyrimidine metabolism	LUSC	-0.03933788
CDA	Pyruvate metabolism	LUSC	-0.057363368
CDA	Regulation_of_autophagy	LUSC	-0.104414693
CDA	Retinol metabolism	LUSC	-0.135503582
CDA	Riboflavin metabolism	LUSC	0.184585126
CDA	Schmahl_pdgf_signaling	LUSC	0.179690018
CDA	Selenocompound metabol	LUSC	-0.195805727
CDA	Signaling_by_hippo	LUSC	0.055578576
CDA	Sphingolipid metabolism	LUSC	0.185537759
CDA	Starch and sucrose metabo	LUSC	0.104463247
CDA	Steroid biosynthesis	LUSC	-0.025924439
CDA	Steroid hormone biosynth	LUSC	-0.151740156
CDA	Sulfur metabolism	LUSC	0.064521877
CDA	Synthesis and degradation	LUSC	-0.186991518
CDA	T helper cell	LUSC	0.256363475
CDA	T helper1 (th1) cell	LUSC	0.288990129
CDA	T helper17 (th17) cell	LUSC	0.282132345
CDA	T helper2 (th2) cell	LUSC	0.239242803
CDA	T helper9 (th9) cell	LUSC	0.198392729
CDA	Taurine and hypotaurine r	LUSC	-0.092347893
CDA	Terpenoid backbone biosy	LUSC	-0.028364871
CDA	Tgf_beta_signaling_pathw	LUSC	0.052047243
CDA	Thiamine metabolism	LUSC	0.142281239
CDA	Tnfa_signaling_via_nfbk	LUSC	0.292980935
CDA	Tryptophan metabolism	LUSC	0.007343073
CDA	Tumor endothelial cell	LUSC	0.273800951
CDA	Tyrosine metabolism	LUSC	0.037169831
CDA	Ubiquinone and other ter	LUSC	-0.01076795
CDA	Valine, leucine and isoleu	LUSC	0.273854881

CDA	Valine, leucine and isoleu	LUSC	-0.161772442
CDA	Vascular endothelial cell	LUSC	0.245937825
CDA	Vascular smooth muscle c	LUSC	0.163717198
CDA	Vegf_signaling_pathway	LUSC	0.119254715
CDA	Vitamin b6 metabolism	LUSC	0.016348647
CDA	Willert_wnt_signaling	LUSC	0.079689309
CDA	Wnt_beta_catenin_signali	LUSC	-0.072976677
UCK1	Abnormal plasma cell	LUSC	0.065656489
UCK1	Activated b cell	LUSC	-0.037793778
UCK1	Activated cd4+ t cell	LUSC	-0.041037411
UCK1	Activated t cell	LUSC	-0.026944155
UCK1	Alanine, aspartate and glu	LUSC	-0.080870428
UCK1	Alcala_apoptosis	LUSC	0.042548216
UCK1	Alpha-linolenic acid meta	LUSC	-0.097736082
UCK1	Amino sugar and nucleoti	LUSC	-0.079911948
UCK1	Ampk_pathway	LUSC	0.062935972
UCK1	Angiogenesis	LUSC	-0.271514251
UCK1	Arachidonic acid metabol	LUSC	-0.040443349
UCK1	Arginine and proline metæ	LUSC	-0.100006382
UCK1	Arginine biosynthesis	LUSC	-0.099300381
UCK1	Ascorbate and aldarate me	LUSC	-0.027645136
UCK1	Atypical memory b cell	LUSC	-0.054203247
UCK1	Axl+siglec6+ dendritic ce	LUSC	-0.015242196
UCK1	B cell	LUSC	-0.09545193
UCK1	B1 cell	LUSC	-0.023102262
UCK1	Basal cell	LUSC	-0.124755017
UCK1	Beta-alanine metabolism	LUSC	-0.153306994
UCK1	Biosynthesis of unsaturate	LUSC	-0.012230027
UCK1	Biotin metabolism	LUSC	0.009159642
UCK1	Butanoate metabolism	LUSC	0.008249685
UCK1	Caffeine metabolism	LUSC	-0.172185941
UCK1	Cancer stem cell	LUSC	-0.167160572
UCK1	Cancer stem-like cell	LUSC	-0.03845718
UCK1	Cd4+ cytotoxic t cell	LUSC	-2.66E-06
UCK1	Cd4+ memory t cell	LUSC	-0.073951632
UCK1	Cd4+ regulatory t cell	LUSC	-0.025075726
UCK1	Cd4+ t helper cell	LUSC	-0.008729254
UCK1	Cd4+cd25+ regulatory t c	LUSC	-0.008159978
UCK1	Cd8+ cytotoxic t cell	LUSC	0.030231421
UCK1	Cd8+ regulatory t cell	LUSC	0.050875029
UCK1	Cell_cycle	LUSC	0.132014071
UCK1	Chandran_metastasis_topç	LUSC	-0.007016606
UCK1	Citrate cycle (tca cycle)	LUSC	-0.015864695

UCK1	Cysteine and methionine r	LUSC	-0.055902983
UCK1	Cytokine induced killer c	LUSC	0.089522845
UCK1	D-arginine and d-ornithin	LUSC	0.013827234
UCK1	D-glutamine and d-glutan	LUSC	-0.035534116
UCK1	Dendritic cell	LUSC	-0.102885514
UCK1	Dna_repair	LUSC	0.164711119
UCK1	Dna_replication	LUSC	0.201318243
UCK1	Double-negative memory	LUSC	-0.024228022
UCK1	Drug metabolism - cytoch	LUSC	-0.062793987
UCK1	Drug metabolism - other c	LUSC	0.021156323
UCK1	E2f_targets	LUSC	0.100556993
UCK1	Ecm_receptor_interaction	LUSC	-0.238189828
UCK1	Effector cd4+ memory t (	LUSC	-0.051636907
UCK1	Effector cd8+ memory t (	LUSC	-0.10064673
UCK1	Effector memory t cell	LUSC	-0.036123077
UCK1	Effector regulatory t (treg	LUSC	-0.069957319
UCK1	Elvidge_hif1a_targets_up	LUSC	0.000732267
UCK1	Endothelial cell	LUSC	-0.144992052
UCK1	Eosinophil	LUSC	-0.116567451
UCK1	Ether lipid metabolism	LUSC	-0.154673393
UCK1	Exhausted cd4+ t cell	LUSC	-0.042437592
UCK1	Exhausted cd8+ t cell	LUSC	-0.084075358
UCK1	Exhausted t cell	LUSC	0.040298445
UCK1	Fat cell (adipocyte)	LUSC	-0.015071467
UCK1	Fatty acid biosynthesis	LUSC	-0.047004009
UCK1	Fatty acid degradation	LUSC	-0.046553462
UCK1	Fatty acid elongation	LUSC	-0.003955969
UCK1	Fibroblast	LUSC	-0.179102246
UCK1	Folate biosynthesis	LUSC	0.155153075
UCK1	Follicular b cell	LUSC	-0.08284111
UCK1	Follicular dendritic cell	LUSC	-0.069196864
UCK1	Follicular helper (tfh) t ce	LUSC	-0.072202807
UCK1	Follicular t cell	LUSC	0.072161953
UCK1	Foxp3+il-17+ t cell	LUSC	0.003283054
UCK1	Fructose and mannose me	LUSC	-0.133742507
UCK1	G2m_checkpoint	LUSC	0.049498202
UCK1	Galactose metabolism	LUSC	-0.040334151
UCK1	Galie_tumor_stemness_ge	LUSC	-0.096648521
UCK1	Glutathione metabolism	LUSC	0.04649044
UCK1	Glycerolipid metabolism	LUSC	0.125208198
UCK1	Glycerophospholipid met	LUSC	-0.032188787
UCK1	Glycine, serine and threor	LUSC	0.012454082
UCK1	Glycolysis / gluconeogene	LUSC	-0.095103168

UCK1	Glycosaminoglycan biosyn	LUSC	-0.136438631
UCK1	Glycosaminoglycan biosyn	LUSC	-0.040788337
UCK1	Glycosaminoglycan biosyn	LUSC	-0.061098042
UCK1	Glycosaminoglycan degra	LUSC	-0.118541004
UCK1	Glycosphingolipid biosyn	LUSC	0.012752632
UCK1	Glycosphingolipid biosyn	LUSC	-0.014580572
UCK1	Glycosphingolipid biosyn	LUSC	-0.013885167
UCK1	Glycosylphosphatidylinos	LUSC	0.113746202
UCK1	Glyoxylate and dicarboxy	LUSC	0.044110293
UCK1	Granulocyte	LUSC	-0.118031355
UCK1	Hedgehog_signaling	LUSC	-0.052510993
UCK1	Histidine metabolism	LUSC	-0.075485164
UCK1	Hypoxia	LUSC	-0.191366311
UCK1	Il-17alpha t cell	LUSC	-0.019782516
UCK1	Il2_stat5_signaling	LUSC	-0.166179229
UCK1	Il6_jak_stat3_signaling	LUSC	-0.219367735
UCK1	Immune_checkpoints_tun	LUSC	-0.082955347
UCK1	Immune_inhibition_cytok	LUSC	-0.216670896
UCK1	Inositol phosphate metabo	LUSC	-0.039130093
UCK1	Interleukin_6_signaling	LUSC	-0.265120809
UCK1	Jaeger_metastasis_up	LUSC	0.03076713
UCK1	Jain_nfkb_signaling	LUSC	-0.035880573
UCK1	Kras_signaling_up	LUSC	-0.19237409
UCK1	Linoleic acid metabolism	LUSC	-0.079165435
UCK1	Lipoic acid metabolism	LUSC	0.044553112
UCK1	Lysine degradation	LUSC	0.1051866
UCK1	Lysosome	LUSC	-0.114686846
UCK1	M1 macrophage	LUSC	-0.111248832
UCK1	M2 macrophage	LUSC	-0.089488447
UCK1	Mannose type o-glycan bi	LUSC	0.215984537
UCK1	Mapk_signaling_pathway	LUSC	-0.185023481
UCK1	Mapk3_erk1_activation	LUSC	-0.231682589
UCK1	Marginal zone b cell	LUSC	-0.04998032
UCK1	Memory b cell	LUSC	-0.076239855
UCK1	Mesenchymal cell	LUSC	-0.089128794
UCK1	Mesenchymal stem cell	LUSC	-0.149928188
UCK1	Metabolism of xenobiotic	LUSC	-0.028081477
UCK1	Migrating cancer stem cel	LUSC	-0.113130404
UCK1	Mitotic_spindle	LUSC	-0.088307441
UCK1	Monocyte	LUSC	-0.14648479
UCK1	Mtor_signaling_pathway	LUSC	-0.140620009
UCK1	Mtorc1_signaling	LUSC	-0.081544295
UCK1	Mucin type o-glycan bios	LUSC	-0.278455602

UCK1	Myc_targets_v1	LUSC	0.036238427
UCK1	Myeloid cell	LUSC	-0.099208999
UCK1	N-glycan biosynthesis	LUSC	0.118589067
UCK1	Naive b cell	LUSC	-0.05733627
UCK1	Naive cd4+ t cell	LUSC	-0.082329602
UCK1	Naive cd8+ t cell	LUSC	-0.050604813
UCK1	Natural killer cell	LUSC	-0.040833032
UCK1	Natural killer t (nkt) cell	LUSC	0.014011991
UCK1	Natural regulatory t (treg)	LUSC	-0.105812293
UCK1	Neomycin, kanamycin and	LUSC	-0.044164977
UCK1	Neutrophil	LUSC	-0.250830929
UCK1	Nicotinate and nicotinami	LUSC	-0.027258765
UCK1	Nitrogen metabolism	LUSC	-0.034026157
UCK1	Nod_like_receptor_signal	LUSC	-0.295083045
UCK1	Notch_signaling	LUSC	-0.082167873
UCK1	One carbon pool by folate	LUSC	0.080155698
UCK1	Other glycan degradation	LUSC	-0.05634034
UCK1	Other types of o-glycan b	LUSC	0.079147521
UCK1	Oxidative phosphorylatio	LUSC	0.080675518
UCK1	P53_pathway	LUSC	-0.123459885
UCK1	P53_signaling_pathway	LUSC	-0.227723731
UCK1	Pantothenate and coa bios	LUSC	-0.196238329
UCK1	Pentose and glucuronate i	LUSC	-0.016578644
UCK1	Pentose phosphate pathwa	LUSC	0.029223436
UCK1	Pericyte	LUSC	-0.146652808
UCK1	Phenylalanine metabolism	LUSC	-0.067138953
UCK1	Phenylalanine, tyrosine ar	LUSC	0.065745978
UCK1	Phosphonate and phosphir	LUSC	0.165668956
UCK1	Pi3k_akt_activation	LUSC	-0.109514962
UCK1	Pi3k_akt_mtor_signaling	LUSC	-0.049975783
UCK1	Porphyrin and chlorophyl	LUSC	0.085833654
UCK1	Primary bile acid biosynt	LUSC	-0.121825441
UCK1	Propanoate metabolism	LUSC	-0.088378331
UCK1	Purine metabolism	LUSC	0.034216961
UCK1	Pyrimidine metabolism	LUSC	0.113964091
UCK1	Pyruvate metabolism	LUSC	0.085921789
UCK1	Regulation_of_autophagy	LUSC	0.08450738
UCK1	Retinol metabolism	LUSC	-0.072744159
UCK1	Riboflavin metabolism	LUSC	0.124978259
UCK1	Schmahl_pdgf_signaling	LUSC	-0.060494229
UCK1	Selenocompound metabol	LUSC	0.011545368
UCK1	Signaling_by_hippo	LUSC	-0.101506476
UCK1	Sphingolipid metabolism	LUSC	0.022480229

UCK1	Starch and sucrose metabo	LUSC	-0.107462003
UCK1	Steroid biosynthesis	LUSC	0.050525496
UCK1	Steroid hormone biosynth	LUSC	-0.114127747
UCK1	Sulfur metabolism	LUSC	-0.224078704
UCK1	Synthesis and degradation	LUSC	-0.005854592
UCK1	T helper cell	LUSC	-0.063537567
UCK1	T helper1 (th1) cell	LUSC	-0.076444563
UCK1	T helper17 (th17) cell	LUSC	-0.183673254
UCK1	T helper2 (th2) cell	LUSC	-0.116146723
UCK1	T helper9 (th9) cell	LUSC	-0.038520095
UCK1	Taurine and hypotaurine r	LUSC	0.017557779
UCK1	Terpenoid backbone biosy	LUSC	-0.147275585
UCK1	Tgf_beta_signaling_pathw	LUSC	-0.133413598
UCK1	Thiamine metabolism	LUSC	0.15944611
UCK1	Tnfa_signaling_via_nfk	LUSC	-0.258351226
UCK1	Tryptophan metabolism	LUSC	-0.034197638
UCK1	Tumor endothelial cell	LUSC	-0.023000932
UCK1	Tyrosine metabolism	LUSC	-0.040642009
UCK1	Ubiquinone and other ter	LUSC	0.043547041
UCK1	Valine, leucine and isoleu	LUSC	-0.149571752
UCK1	Valine, leucine and isoleu	LUSC	-0.007193079
UCK1	Vascular endothelial cell	LUSC	-0.145854524
UCK1	Vascular smooth muscle c	LUSC	-0.028996528
UCK1	Vegf_signaling_pathway	LUSC	-0.239239352
UCK1	Vitamin b6 metabolism	LUSC	0.073255802
UCK1	Willert_wnt_signaling	LUSC	-0.037746818
UCK1	Wnt_beta_catenin_signali	LUSC	0.007605571
UCK2	Abnormal plasma cell	LUSC	-0.068219599
UCK2	Activated b cell	LUSC	-0.288678472
UCK2	Activated cd4+ t cell	LUSC	-0.218522413
UCK2	Activated t cell	LUSC	-0.172740674
UCK2	Alanine, aspartate and glu	LUSC	0.375174906
UCK2	Alcala_apoptosis	LUSC	0.293438217
UCK2	Alpha-linolenic acid meta	LUSC	-0.332516465
UCK2	Amino sugar and nucleoti	LUSC	0.078453109
UCK2	Ampk_pathway	LUSC	0.188027213
UCK2	Angiogenesis	LUSC	-0.252174668
UCK2	Arachidonic acid metaboli	LUSC	-0.182300264
UCK2	Arginine and proline met	LUSC	0.193473466
UCK2	Arginine biosynthesis	LUSC	0.068703008
UCK2	Ascorbate and aldarate m	LUSC	0.199334315
UCK2	Atypical memory b cell	LUSC	-0.222045969
UCK2	Axl+siglec6+ dendritic ce	LUSC	-0.36227671

UCK2	B cell	LUSC	-0.292511384
UCK2	B1 cell	LUSC	-0.275014534
UCK2	Basal cell	LUSC	0.025315484
UCK2	Beta-alanine metabolism	LUSC	0.035475744
UCK2	Biosynthesis of unsaturate	LUSC	0.154172113
UCK2	Biotin metabolism	LUSC	0.123883763
UCK2	Butanoate metabolism	LUSC	0.127735749
UCK2	Caffeine metabolism	LUSC	-0.274669601
UCK2	Cancer stem cell	LUSC	-0.226185755
UCK2	Cancer stem-like cell	LUSC	-0.193402586
UCK2	Cd4+ cytotoxic t cell	LUSC	-0.28822294
UCK2	Cd4+ memory t cell	LUSC	-0.268176708
UCK2	Cd4+ regulatory t cell	LUSC	-0.173309953
UCK2	Cd4+ t helper cell	LUSC	-0.205810504
UCK2	Cd4+cd25+ regulatory t c	LUSC	-0.188377048
UCK2	Cd8+ cytotoxic t cell	LUSC	-0.116624041
UCK2	Cd8+ regulatory t cell	LUSC	-0.127072474
UCK2	Cell_cycle	LUSC	0.483981238
UCK2	Chandran_metastasis_top	LUSC	0.379728994
UCK2	Citrate cycle (tca cycle)	LUSC	0.388326224
UCK2	Cysteine and methionine r	LUSC	0.355757661
UCK2	Cytokine induced killer c	LUSC	-0.15677162
UCK2	D-arginine and d-ornithin	LUSC	-0.09985347
UCK2	D-glutamine and d-glutan	LUSC	0.113819874
UCK2	Dendritic cell	LUSC	-0.322758501
UCK2	Dna_repair	LUSC	0.435454318
UCK2	Dna_replication	LUSC	0.503543349
UCK2	Double-negative memory	LUSC	-0.233789527
UCK2	Drug metabolism - cytoch	LUSC	0.0348399
UCK2	Drug metabolism - other	LUSC	0.326826074
UCK2	E2f_targets	LUSC	0.515425846
UCK2	Ecm_receptor_interaction	LUSC	-0.283380391
UCK2	Effector cd4+ memory t	LUSC	-0.245072727
UCK2	Effector cd8+ memory t	LUSC	-0.354747345
UCK2	Effector memory t cell	LUSC	-0.238017312
UCK2	Effector regulatory t (treg	LUSC	-0.201902028
UCK2	Elvidge_hif1a_targets_up	LUSC	0.397535902
UCK2	Endothelial cell	LUSC	-0.244243148
UCK2	Eosinophil	LUSC	-0.274661314
UCK2	Ether lipid metabolism	LUSC	-0.323016818
UCK2	Exhausted cd4+ t cell	LUSC	-0.193678817
UCK2	Exhausted cd8+ t cell	LUSC	-0.23923373
UCK2	Exhausted t cell	LUSC	-0.15746765

UCK2	Fat cell (adipocyte)	LUSC	-0.057865597
UCK2	Fatty acid biosynthesis	LUSC	-0.01320659
UCK2	Fatty acid degradation	LUSC	0.079428144
UCK2	Fatty acid elongation	LUSC	0.258245457
UCK2	Fibroblast	LUSC	-0.283653576
UCK2	Folate biosynthesis	LUSC	0.281374329
UCK2	Follicular b cell	LUSC	-0.299803325
UCK2	Follicular dendritic cell	LUSC	-0.295568976
UCK2	Follicular helper (tfh) t cell	LUSC	-0.217923491
UCK2	Follicular t cell	LUSC	-0.185901867
UCK2	Foxp3+il-17+ t cell	LUSC	-0.114619959
UCK2	Fructose and mannose me	LUSC	0.162448984
UCK2	G2m_checkpoint	LUSC	0.46518356
UCK2	Galactose metabolism	LUSC	0.063518956
UCK2	Galie_tumor_stemness_ge	LUSC	-0.25541099
UCK2	Glutathione metabolism	LUSC	0.283864144
UCK2	Glycerolipid metabolism	LUSC	0.090011378
UCK2	Glycerophospholipid met	LUSC	-0.238437588
UCK2	Glycine, serine and threo	LUSC	0.210009942
UCK2	Glycolysis / gluconeogene	LUSC	0.245293218
UCK2	Glycosaminoglycan biosy	LUSC	-0.239370475
UCK2	Glycosaminoglycan biosy	LUSC	-0.126583022
UCK2	Glycosaminoglycan biosy	LUSC	0.009894105
UCK2	Glycosaminoglycan degra	LUSC	-0.284977557
UCK2	Glycosphingolipid biosyn	LUSC	-0.249839153
UCK2	Glycosphingolipid biosyn	LUSC	-0.158695595
UCK2	Glycosphingolipid biosyn	LUSC	0.040857862
UCK2	Glycosylphosphatidylinos	LUSC	0.298352151
UCK2	Glyoxylate and dicarboxy	LUSC	0.338689128
UCK2	Granulocyte	LUSC	-0.244747774
UCK2	Hedgehog_signaling	LUSC	-0.167414911
UCK2	Histidine metabolism	LUSC	-0.124674889
UCK2	Hypoxia	LUSC	-0.099955008
UCK2	Il-17alpha t cell	LUSC	-0.199569302
UCK2	Il2_stat5_signaling	LUSC	-0.213187794
UCK2	Il6_jak_stat3_signaling	LUSC	-0.250481691
UCK2	Immune_checkpoints_tur	LUSC	-0.142341127
UCK2	Immune_inhibition_cytok	LUSC	-0.226445467
UCK2	Inositol phosphate metabo	LUSC	-0.272816084
UCK2	Interleukin_6_signaling	LUSC	-0.26639186
UCK2	Jaeger_metastasis_up	LUSC	0.302069665
UCK2	Jain_nfkb_signaling	LUSC	0.480299314
UCK2	Kras_signaling_up	LUSC	-0.272039489

UCK2	Linoleic acid metabolism	LUSC	-0.33054908
UCK2	Lipoic acid metabolism	LUSC	0.184393345
UCK2	Lysine degradation	LUSC	0.328229272
UCK2	Lysosome	LUSC	-0.310150244
UCK2	M1 macrophage	LUSC	-0.22370794
UCK2	M2 macrophage	LUSC	-0.214996273
UCK2	Mannose type o-glycan bi	LUSC	0.150133546
UCK2	Mapk_signaling_pathway	LUSC	-0.330688913
UCK2	Mapk3_erk1_activation	LUSC	-0.213049764
UCK2	Marginal zone b cell	LUSC	-0.262898041
UCK2	Memory b cell	LUSC	-0.222085846
UCK2	Mesenchymal cell	LUSC	-0.197599866
UCK2	Mesenchymal stem cell	LUSC	-0.307976351
UCK2	Metabolism of xenobiotic	LUSC	0.095861878
UCK2	Migrating cancer stem cel	LUSC	0.228372817
UCK2	Mitotic_spindle	LUSC	0.036305595
UCK2	Monocyte	LUSC	-0.292760239
UCK2	Mtor_signaling_pathway	LUSC	-0.125128911
UCK2	Mtorc1_signaling	LUSC	0.451584685
UCK2	Mucin type o-glycan biosy	LUSC	-0.203183888
UCK2	Myc_targets_v1	LUSC	0.568758934
UCK2	Myeloid cell	LUSC	-0.284916459
UCK2	N-glycan biosynthesis	LUSC	0.147007645
UCK2	Naive b cell	LUSC	-0.234469405
UCK2	Naive cd4+ t cell	LUSC	-0.33792651
UCK2	Naive cd8+ t cell	LUSC	-0.386993837
UCK2	Natural killer cell	LUSC	-0.243926527
UCK2	Natural killer t (nkt) cell	LUSC	0.067017463
UCK2	Natural regulatory t (treg)	LUSC	-0.274901731
UCK2	Neomycin, kanamycin and	LUSC	-0.059986687
UCK2	Neutrophil	LUSC	-0.25259297
UCK2	Nicotinate and nicotinami	LUSC	-0.041016598
UCK2	Nitrogen metabolism	LUSC	-0.032537588
UCK2	Nod_like_receptor_signal	LUSC	-0.255298696
UCK2	Notch_signaling	LUSC	-0.067660913
UCK2	One carbon pool by folate	LUSC	0.419041186
UCK2	Other glycan degradation	LUSC	-0.289252611
UCK2	Other types of o-glycan b	LUSC	-0.118948143
UCK2	Oxidative phosphorylatior	LUSC	0.328326773
UCK2	P53_pathway	LUSC	-0.130762171
UCK2	P53_signaling_pathway	LUSC	-0.017271519
UCK2	Pantothenate and coa bios	LUSC	-0.134565633
UCK2	Pentose and glucuronate in	LUSC	0.198582442

UCK2	Pentose phosphate pathwa	LUSC	0.331151126
UCK2	Pericyte	LUSC	-0.278832316
UCK2	Phenylalanine metabolism	LUSC	0.096849186
UCK2	Phenylalanine, tyrosine ar	LUSC	0.185908163
UCK2	Phosphonate and phosphir	LUSC	0.21232486
UCK2	Pi3k_akt_activation	LUSC	-0.0578389
UCK2	Pi3k_akt_mtor_signaling	LUSC	0.098643434
UCK2	Porphyrin and chlorophyl	LUSC	0.30745695
UCK2	Primary bile acid biosynt	LUSC	-0.228027153
UCK2	Propanoate metabolism	LUSC	0.229184596
UCK2	Purine metabolism	LUSC	0.491480086
UCK2	Pyrimidine metabolism	LUSC	0.525322394
UCK2	Pyruvate metabolism	LUSC	0.410446645
UCK2	Regulation_of_autophagy	LUSC	0.177488131
UCK2	Retinol metabolism	LUSC	-0.034153846
UCK2	Riboflavin metabolism	LUSC	0.204327031
UCK2	Schmahl_pdgf_signaling	LUSC	-0.233873535
UCK2	Selenocompound metabol	LUSC	0.225411672
UCK2	Signaling_by_hippo	LUSC	0.03240503
UCK2	Sphingolipid metabolism	LUSC	-0.158045013
UCK2	Starch and sucrose metabo	LUSC	-0.086731568
UCK2	Steroid biosynthesis	LUSC	0.233448211
UCK2	Steroid hormone biosynth	LUSC	0.041747611
UCK2	Sulfur metabolism	LUSC	-0.043201004
UCK2	Synthesis and degradation	LUSC	0.027827799
UCK2	T helper cell	LUSC	-0.2747965
UCK2	T helper1 (th1) cell	LUSC	-0.249361954
UCK2	T helper17 (th17) cell	LUSC	-0.24002028
UCK2	T helper2 (th2) cell	LUSC	-0.287103802
UCK2	T helper9 (th9) cell	LUSC	-0.254325722
UCK2	Taurine and hypotaurine r	LUSC	-0.179731461
UCK2	Terpenoid backbone biosy	LUSC	0.233935865
UCK2	Tgf_beta_signaling_pathw	LUSC	-0.189500453
UCK2	Thiamine metabolism	LUSC	0.07460535
UCK2	Tnfa_signaling_via_nfkb	LUSC	-0.232005414
UCK2	Tryptophan metabolism	LUSC	0.087203524
UCK2	Tumor endothelial cell	LUSC	-0.058793019
UCK2	Tyrosine metabolism	LUSC	-0.037796718
UCK2	Ubiquinone and other ter	LUSC	0.265050576
UCK2	Valine, leucine and isoleu	LUSC	-0.06343152
UCK2	Valine, leucine and isoleu	LUSC	0.221390092
UCK2	Vascular endothelial cell	LUSC	-0.287377843
UCK2	Vascular smooth muscle c	LUSC	-0.215759336

UCK2	Vegf_signaling_pathway	LUSC	-0.355966963
UCK2	Vitamin b6 metabolism	LUSC	0.298772341
UCK2	Willert_wnt_signaling	LUSC	0.235417811
UCK2	Wnt_beta_catenin_signali	LUSC	-0.049052039
UCKL1	Abnormal plasma cell	LUSC	-0.158396906
UCKL1	Activated b cell	LUSC	-0.156770887
UCKL1	Activated cd4+ t cell	LUSC	-0.190361094
UCKL1	Activated t cell	LUSC	-0.177660828
UCKL1	Alanine, aspartate and glu	LUSC	-0.076176433
UCKL1	Alcala_apoptosis	LUSC	-0.166776626
UCKL1	Alpha-linolenic acid meta	LUSC	-0.071144313
UCKL1	Amino sugar and nucleoti	LUSC	-0.15999878
UCKL1	Ampk_pathway	LUSC	0.200981603
UCKL1	Angiogenesis	LUSC	-0.203493017
UCKL1	Arachidonic acid metaboli	LUSC	-0.184444555
UCKL1	Arginine and proline met&	LUSC	-0.190691256
UCKL1	Arginine biosynthesis	LUSC	-0.053768688
UCKL1	Ascorbate and aldarate m&	LUSC	-0.18914673
UCKL1	Atypical memory b cell	LUSC	-0.080610821
UCKL1	Axl+siglec6+ dendritic ce	LUSC	-0.26839261
UCKL1	B cell	LUSC	-0.175696245
UCKL1	B1 cell	LUSC	-0.145686864
UCKL1	Basal cell	LUSC	-0.081291178
UCKL1	Beta-alanine metabolism	LUSC	-0.180364332
UCKL1	Biosynthesis of unsaturate	LUSC	-0.218127867
UCKL1	Biotin metabolism	LUSC	-0.013147691
UCKL1	Butanoate metabolism	LUSC	-0.012728825
UCKL1	Caffeine metabolism	LUSC	-0.13366265
UCKL1	Cancer stem cell	LUSC	-0.322452973
UCKL1	Cancer stem-like cell	LUSC	-0.20729566
UCKL1	Cd4+ cytotoxic t cell	LUSC	-0.191034084
UCKL1	Cd4+ memory t cell	LUSC	-0.171835323
UCKL1	Cd4+ regulatory t cell	LUSC	-0.216774299
UCKL1	Cd4+ t helper cell	LUSC	-0.189333444
UCKL1	Cd4+cd25+ regulatory t c	LUSC	-0.198946148
UCKL1	Cd8+ cytotoxic t cell	LUSC	-0.135813289
UCKL1	Cd8+ regulatory t cell	LUSC	-0.168055225
UCKL1	Cell_cycle	LUSC	-0.055967137
UCKL1	Chandran_metastasis_top&	LUSC	-0.116016848
UCKL1	Citrate cycle (tca cycle)	LUSC	-0.052579684
UCKL1	Cysteine and methionine r	LUSC	-0.080396707
UCKL1	Cytokine induced killer &	LUSC	-0.158860873
UCKL1	D-arginine and d-ornithin	LUSC	-0.091223

UCKL1	D-glutamine and d-glutan	LUSC	-0.16069384
UCKL1	Dendritic cell	LUSC	-0.197034216
UCKL1	Dna_repair	LUSC	0.113580063
UCKL1	Dna_replication	LUSC	0.014156245
UCKL1	Double-negative memory	LUSC	-0.072478029
UCKL1	Drug metabolism - cytoch	LUSC	-0.177573217
UCKL1	Drug metabolism - other	LUSC	-0.078218047
UCKL1	E2f_targets	LUSC	-0.0026903
UCKL1	Ecm_receptor_interaction	LUSC	-0.185036521
UCKL1	Effector cd4+ memory t	LUSC	-0.183943093
UCKL1	Effector cd8+ memory t	LUSC	-0.169614599
UCKL1	Effector memory t cell	LUSC	-0.199403528
UCKL1	Effector regulatory t (treg	LUSC	-0.214920368
UCKL1	Elvidge_hif1a_targets_up	LUSC	-0.237148838
UCKL1	Endothelial cell	LUSC	-0.311572925
UCKL1	Eosinophil	LUSC	-0.194873434
UCKL1	Ether lipid metabolism	LUSC	-0.163746355
UCKL1	Exhausted cd4+ t cell	LUSC	-0.223951015
UCKL1	Exhausted cd8+ t cell	LUSC	-0.19883923
UCKL1	Exhausted t cell	LUSC	-0.14826482
UCKL1	Fat cell (adipocyte)	LUSC	0.049997525
UCKL1	Fatty acid biosynthesis	LUSC	-0.107618414
UCKL1	Fatty acid degradation	LUSC	-0.134545346
UCKL1	Fatty acid elongation	LUSC	-0.052327617
UCKL1	Fibroblast	LUSC	-0.236371574
UCKL1	Folate biosynthesis	LUSC	-0.05402119
UCKL1	Follicular b cell	LUSC	-0.150295601
UCKL1	Follicular dendritic cell	LUSC	-0.14998651
UCKL1	Follicular helper (tfh) t ce	LUSC	-0.203441873
UCKL1	Follicular t cell	LUSC	-0.010125168
UCKL1	Foxp3+il-17+ t cell	LUSC	-0.177764047
UCKL1	Fructose and mannose me	LUSC	0.045080671
UCKL1	G2m_checkpoint	LUSC	-0.035005087
UCKL1	Galactose metabolism	LUSC	-0.135651541
UCKL1	Galie_tumor_stemness_ge	LUSC	-0.271494165
UCKL1	Glutathione metabolism	LUSC	-0.161613163
UCKL1	Glycerolipid metabolism	LUSC	-0.074849894
UCKL1	Glycerophospholipid metæ	LUSC	-0.005321547
UCKL1	Glycine, serine and threor	LUSC	-0.078832369
UCKL1	Glycolysis / gluconeogene	LUSC	-0.164484619
UCKL1	Glycosaminoglycan biosy	LUSC	-0.067236924
UCKL1	Glycosaminoglycan biosy	LUSC	-0.125867496
UCKL1	Glycosaminoglycan biosy	LUSC	-0.196069697

UCKL1	Glycosaminoglycan degra	LUSC	-0.208098447
UCKL1	Glycosphingolipid biosyn	LUSC	-0.209218041
UCKL1	Glycosphingolipid biosyn	LUSC	-0.234321312
UCKL1	Glycosphingolipid biosyn	LUSC	-0.25046351
UCKL1	Glycosylphosphatidylinos	LUSC	0.04601684
UCKL1	Glyoxylate and dicarboxy	LUSC	-0.016270834
UCKL1	Granulocyte	LUSC	-0.196805522
UCKL1	Hedgehog_signaling	LUSC	-0.203872639
UCKL1	Histidine metabolism	LUSC	-0.147900426
UCKL1	Hypoxia	LUSC	-0.184275642
UCKL1	Il-17alpha t cell	LUSC	-0.211441735
UCKL1	Il2_stat5_signaling	LUSC	-0.30062603
UCKL1	Il6_jak_stat3_signaling	LUSC	-0.242826969
UCKL1	Immune_checkpoints_tur	LUSC	-0.262755213
UCKL1	Immune_inhibition_cytok	LUSC	-0.157131551
UCKL1	Inositol phosphate metabo	LUSC	-0.226599199
UCKL1	Interleukin_6_signaling	LUSC	-0.277904804
UCKL1	Jaeger_metastasis_up	LUSC	-0.265661473
UCKL1	Jain_nfkb_signaling	LUSC	0.04402475
UCKL1	Kras_signaling_up	LUSC	-0.289325996
UCKL1	Linoleic acid metabolism	LUSC	-0.019459486
UCKL1	Lipoic acid metabolism	LUSC	0.007507564
UCKL1	Lysine degradation	LUSC	-0.071330501
UCKL1	Lysosome	LUSC	-0.228463163
UCKL1	M1 macrophage	LUSC	-0.259216531
UCKL1	M2 macrophage	LUSC	-0.234363211
UCKL1	Mannose type o-glycan bi	LUSC	0.107048378
UCKL1	Mapk_signaling_pathway	LUSC	-0.264826587
UCKL1	Mapk3_erk1_activation	LUSC	-0.269113476
UCKL1	Marginal zone b cell	LUSC	-0.199275486
UCKL1	Memory b cell	LUSC	-0.236194379
UCKL1	Mesenchymal cell	LUSC	-0.203186782
UCKL1	Mesenchymal stem cell	LUSC	-0.207775272
UCKL1	Metabolism of xenobiotic	LUSC	-0.164759793
UCKL1	Migrating cancer stem cel	LUSC	-0.193884843
UCKL1	Mitotic_spindle	LUSC	-0.051505488
UCKL1	Monocyte	LUSC	-0.178972438
UCKL1	Mtor_signaling_pathway	LUSC	-0.199018416
UCKL1	Mtorc1_signaling	LUSC	-0.234351398
UCKL1	Mucin type o-glycan bios	LUSC	-0.298511514
UCKL1	Myc_targets_v1	LUSC	-0.026712546
UCKL1	Myeloid cell	LUSC	-0.219411522
UCKL1	N-glycan biosynthesis	LUSC	-0.211274438

UCKL1	Naive b cell	LUSC	-0.088572485
UCKL1	Naive cd4+ t cell	LUSC	-0.265208702
UCKL1	Naive cd8+ t cell	LUSC	-0.133194489
UCKL1	Natural killer cell	LUSC	-0.19169363
UCKL1	Natural killer t (nkt) cell	LUSC	0.005328421
UCKL1	Natural regulatory t (treg)	LUSC	-0.232271352
UCKL1	Neomycin, kanamycin and	LUSC	-0.120920327
UCKL1	Neutrophil	LUSC	-0.176950513
UCKL1	Nicotinate and nicotinami	LUSC	-0.201310168
UCKL1	Nitrogen metabolism	LUSC	-0.209370896
UCKL1	Nod_like_receptor_signal	LUSC	-0.18586902
UCKL1	Notch_signaling	LUSC	-0.143719264
UCKL1	One carbon pool by folate	LUSC	-0.010098284
UCKL1	Other glycan degradation	LUSC	0.018895716
UCKL1	Other types of o-glycan b	LUSC	0.08769212
UCKL1	Oxidative phosphorylatio	LUSC	0.066441258
UCKL1	P53_pathway	LUSC	-0.170606337
UCKL1	P53_signaling_pathway	LUSC	-0.211596864
UCKL1	Pantothenate and coa bios	LUSC	-0.042779401
UCKL1	Pentose and glucuronate i	LUSC	-0.170463247
UCKL1	Pentose phosphate pathwa	LUSC	-0.15397981
UCKL1	Pericyte	LUSC	-0.173068911
UCKL1	Phenylalanine metabolism	LUSC	-0.103853464
UCKL1	Phenylalanine, tyrosine ar	LUSC	-0.030233056
UCKL1	Phosphonate and phosphir	LUSC	-0.107934933
UCKL1	Pi3k_akt_activation	LUSC	-0.300602401
UCKL1	Pi3k_akt_mtor_signaling	LUSC	-0.324711911
UCKL1	Porphyrin and chlorophyl	LUSC	-0.171133166
UCKL1	Primary bile acid biosynt	LUSC	-0.07375928
UCKL1	Propanoate metabolism	LUSC	-0.138633774
UCKL1	Purine metabolism	LUSC	-0.054968937
UCKL1	Pyrimidine metabolism	LUSC	0.060287633
UCKL1	Pyruvate metabolism	LUSC	-0.047512181
UCKL1	Regulation_of_autophagy	LUSC	-0.019937399
UCKL1	Retinol metabolism	LUSC	-0.163131855
UCKL1	Riboflavin metabolism	LUSC	-0.157156302
UCKL1	Schmahl_pdgf_signaling	LUSC	-0.35445499
UCKL1	Selenocompound metabol	LUSC	-0.11389905
UCKL1	Signaling_by_hippo	LUSC	-0.129499401
UCKL1	Sphingolipid metabolism	LUSC	-0.333276176
UCKL1	Starch and sucrose metabo	LUSC	-0.227816983
UCKL1	Steroid biosynthesis	LUSC	-0.033321457
UCKL1	Steroid hormone biosynth	LUSC	-0.148132422

UCKL1	Sulfur metabolism	LUSC	-0.130565612
UCKL1	Synthesis and degradation	LUSC	0.058429943
UCKL1	T helper cell	LUSC	-0.21562607
UCKL1	T helper1 (th1) cell	LUSC	-0.177821952
UCKL1	T helper17 (th17) cell	LUSC	-0.200086695
UCKL1	T helper2 (th2) cell	LUSC	-0.191866202
UCKL1	T helper9 (th9) cell	LUSC	-0.141886642
UCKL1	Taurine and hypotaurine r	LUSC	0.120795516
UCKL1	Terpenoid backbone biosy	LUSC	-0.051207836
UCKL1	Tgf_beta_signaling_pathw	LUSC	-0.332866342
UCKL1	Thiamine metabolism	LUSC	-0.019880194
UCKL1	Tnfa_signaling_via_nfkb	LUSC	-0.165387604
UCKL1	Tryptophan metabolism	LUSC	-0.189592667
UCKL1	Tumor endothelial cell	LUSC	-0.046104546
UCKL1	Tyrosine metabolism	LUSC	-0.14745934
UCKL1	Ubiquinone and other terç	LUSC	-0.066409623
UCKL1	Valine, leucine and isoleu	LUSC	-0.089057171
UCKL1	Valine, leucine and isoleu	LUSC	-0.057834113
UCKL1	Vascular endothelial cell	LUSC	-0.184881384
UCKL1	Vascular smooth muscle c	LUSC	-0.200056624
UCKL1	Vegf_signaling_pathway	LUSC	-0.140585235
UCKL1	Vitamin b6 metabolism	LUSC	-0.133097872
UCKL1	Willert_wnt_signaling	LUSC	-0.129727744
UCKL1	Wnt_beta_catenin_signali	LUSC	-0.004218975
UPP1	Abnormal plasma cell	LUSC	-0.212076042
UPP1	Activated b cell	LUSC	0.036495332
UPP1	Activated cd4+ t cell	LUSC	0.060416971
UPP1	Activated t cell	LUSC	0.017271617
UPP1	Alanine, aspartate and glu	LUSC	0.123709996
UPP1	Alcala_apoptosis	LUSC	0.203446859
UPP1	Alpha-linolenic acid meta	LUSC	0.107719597
UPP1	Amino sugar and nucleoti	LUSC	0.454800345
UPP1	Ampk_pathway	LUSC	-0.215827287
UPP1	Angiogenesis	LUSC	0.315571011
UPP1	Arachidonic acid metabol	LUSC	0.248004792
UPP1	Arginine and proline metæ	LUSC	0.248660306
UPP1	Arginine biosynthesis	LUSC	0.249966461
UPP1	Ascorbate and aldarate mε	LUSC	-0.036793289
UPP1	Atypical memory b cell	LUSC	0.024444958
UPP1	Axl+siglec6+ dendritic ce	LUSC	0.08185895
UPP1	B cell	LUSC	0.019518877
UPP1	B1 cell	LUSC	-0.098824403
UPP1	Basal cell	LUSC	0.338678062

UPP1	Beta-alanine metabolism	LUSC	0.101752592
UPP1	Biosynthesis of unsaturate	LUSC	0.196178187
UPP1	Biotin metabolism	LUSC	0.047858622
UPP1	Butanoate metabolism	LUSC	-0.067651184
UPP1	Caffeine metabolism	LUSC	0.20522534
UPP1	Cancer stem cell	LUSC	0.112747367
UPP1	Cancer stem-like cell	LUSC	-0.095018344
UPP1	Cd4+ cytotoxic t cell	LUSC	0.124217402
UPP1	Cd4+ memory t cell	LUSC	0.045750858
UPP1	Cd4+ regulatory t cell	LUSC	0.051956816
UPP1	Cd4+ t helper cell	LUSC	0.018471326
UPP1	Cd4+cd25+ regulatory t c	LUSC	0.028027218
UPP1	Cd8+ cytotoxic t cell	LUSC	0.024065983
UPP1	Cd8+ regulatory t cell	LUSC	-0.000388794
UPP1	Cell_cycle	LUSC	-0.093259843
UPP1	Chandran_metastasis_top ⁵	LUSC	-0.221925752
UPP1	Citrate cycle (tca cycle)	LUSC	0.206956886
UPP1	Cysteine and methionine r	LUSC	0.080262828
UPP1	Cytokine induced killer c α	LUSC	-0.113909291
UPP1	D-arginine and d-ornithin	LUSC	0.060795318
UPP1	D-glutamine and d-glutan	LUSC	0.108663287
UPP1	Dendritic cell	LUSC	0.18024145
UPP1	Dna_repair	LUSC	0.109274458
UPP1	Dna_replication	LUSC	-0.05362262
UPP1	Double-negative memory	LUSC	-0.020408763
UPP1	Drug metabolism - cytoch	LUSC	0.054708764
UPP1	Drug metabolism - other c	LUSC	0.279990987
UPP1	E2f_targets	LUSC	-0.111527907
UPP1	Ecm_receptor_interaction	LUSC	0.150348272
UPP1	Effector cd4+ memory t (	LUSC	-0.013530882
UPP1	Effector cd8+ memory t (	LUSC	0.193456745
UPP1	Effector memory t cell	LUSC	0.014896673
UPP1	Effector regulatory t (treg	LUSC	0.050870858
UPP1	Elvidge_hif1a_targets_up	LUSC	0.129340918
UPP1	Endothelial cell	LUSC	0.036524473
UPP1	Eosinophil	LUSC	0.166876782
UPP1	Ether lipid metabolism	LUSC	0.123120503
UPP1	Exhausted cd4+ t cell	LUSC	0.12567313
UPP1	Exhausted cd8+ t cell	LUSC	0.116437203
UPP1	Exhausted t cell	LUSC	0.00847168
UPP1	Fat cell (adipocyte)	LUSC	0.05927082
UPP1	Fatty acid biosynthesis	LUSC	-0.005445767
UPP1	Fatty acid degradation	LUSC	-0.027200138

UPP1	Fatty acid elongation	LUSC	0.212598587
UPP1	Fibroblast	LUSC	0.166027856
UPP1	Folate biosynthesis	LUSC	0.257193568
UPP1	Follicular b cell	LUSC	-0.025737416
UPP1	Follicular dendritic cell	LUSC	0.022295619
UPP1	Follicular helper (tfh) t ce	LUSC	0.094121189
UPP1	Follicular t cell	LUSC	-0.010766009
UPP1	Foxp3+il-17+ t cell	LUSC	0.007865838
UPP1	Fructose and mannose me	LUSC	0.337336824
UPP1	G2m_checkpoint	LUSC	-0.150214115
UPP1	Galactose metabolism	LUSC	0.398943426
UPP1	Galie_tumor_stemness_ge	LUSC	0.099883115
UPP1	Glutathione metabolism	LUSC	0.231151176
UPP1	Glycerolipid metabolism	LUSC	0.13927328
UPP1	Glycerophospholipid metæ	LUSC	0.151296701
UPP1	Glycine, serine and threor	LUSC	0.201983755
UPP1	Glycolysis / gluconeogene	LUSC	0.263587257
UPP1	Glycosaminoglycan biosy1	LUSC	0.219058789
UPP1	Glycosaminoglycan biosy1	LUSC	-0.03552106
UPP1	Glycosaminoglycan biosy1	LUSC	0.151789793
UPP1	Glycosaminoglycan degra	LUSC	0.233673851
UPP1	Glycosphingolipid biosyn1	LUSC	0.212489117
UPP1	Glycosphingolipid biosyn1	LUSC	0.247945163
UPP1	Glycosphingolipid biosyn1	LUSC	0.192776292
UPP1	Glycosylphosphatidylinos	LUSC	-0.037246983
UPP1	Glyoxylate and dicarboxy	LUSC	0.041362093
UPP1	Granulocyte	LUSC	0.161498292
UPP1	Hedgehog_signaling	LUSC	-0.109013423
UPP1	Histidine metabolism	LUSC	0.070342032
UPP1	Hypoxia	LUSC	0.404739055
UPP1	Il-17ralpha t cell	LUSC	0.079250567
UPP1	Il2_stat5_signaling	LUSC	0.291484918
UPP1	Il6_jak_stat3_signaling	LUSC	0.290883663
UPP1	Immune_checkpoints_tun	LUSC	0.1807493
UPP1	Immune_inhibition_cytok	LUSC	0.297802582
UPP1	Inositol phosphate metabo	LUSC	-0.169497695
UPP1	Interleukin_6_signaling	LUSC	0.013598764
UPP1	Jaeger_metastasis_up	LUSC	-0.024169596
UPP1	Jain_nfkb_signaling	LUSC	-0.01256249
UPP1	Kras_signaling_up	LUSC	0.260185338
UPP1	Linoleic acid metabolism	LUSC	0.019966167
UPP1	Lipoic acid metabolism	LUSC	-0.073156869
UPP1	Lysine degradation	LUSC	-0.278606109

UPP1	Lysosome	LUSC	0.268907883
UPP1	M1 macrophage	LUSC	0.199902039
UPP1	M2 macrophage	LUSC	0.235507295
UPP1	Mannose type o-glycan bi	LUSC	-0.134910796
UPP1	Mapk_signaling_pathway	LUSC	0.183041598
UPP1	Mapk3_erk1_activation	LUSC	0.098390097
UPP1	Marginal zone b cell	LUSC	-0.038769722
UPP1	Memory b cell	LUSC	-0.006016596
UPP1	Mesenchymal cell	LUSC	0.211117659
UPP1	Mesenchymal stem cell	LUSC	0.085197695
UPP1	Metabolism of xenobiotic	LUSC	0.102920256
UPP1	Migrating cancer stem cel	LUSC	0.287028734
UPP1	Mitotic_spindle	LUSC	-0.169074467
UPP1	Monocyte	LUSC	0.323557724
UPP1	Mtor_signaling_pathway	LUSC	-0.056775534
UPP1	Mtorc1_signaling	LUSC	0.31385644
UPP1	Mucin type o-glycan bios	LUSC	0.254179919
UPP1	Myc_targets_v1	LUSC	0.101193802
UPP1	Myeloid cell	LUSC	0.081167761
UPP1	N-glycan biosynthesis	LUSC	0.178462982
UPP1	Naive b cell	LUSC	-0.057326995
UPP1	Naive cd4+ t cell	LUSC	0.014666729
UPP1	Naive cd8+ t cell	LUSC	-0.161641387
UPP1	Natural killer cell	LUSC	0.062169744
UPP1	Natural killer t (nkt) cell	LUSC	0.071404964
UPP1	Natural regulatory t (treg)	LUSC	0.045688634
UPP1	Neomycin, kanamycin an	LUSC	0.288018645
UPP1	Neutrophil	LUSC	0.382431862
UPP1	Nicotinate and nicotinami	LUSC	0.204996264
UPP1	Nitrogen metabolism	LUSC	0.121040402
UPP1	Nod_like_receptor_signal	LUSC	0.336623357
UPP1	Notch_signaling	LUSC	0.139114752
UPP1	One carbon pool by folate	LUSC	-0.069924949
UPP1	Other glycan degradation	LUSC	0.101214976
UPP1	Other types of o-glycan b	LUSC	-0.02354711
UPP1	Oxidative phosphorylatio	LUSC	0.252323886
UPP1	P53_pathway	LUSC	0.484410391
UPP1	P53_signaling_pathway	LUSC	0.165441608
UPP1	Pantothenate and coa bios	LUSC	0.071259805
UPP1	Pentose and glucuronate i	LUSC	0.064378466
UPP1	Pentose phosphate pathwa	LUSC	0.300655052
UPP1	Pericyte	LUSC	0.132212016
UPP1	Phenylalanine metabolism	LUSC	0.241515642

UPP1	Phenylalanine, tyrosine ar	LUSC	-0.007973437
UPP1	Phosphonate and phosphir	LUSC	-0.101329267
UPP1	Pi3k_akt_activation	LUSC	0.030129457
UPP1	Pi3k_akt_mtor_signaling	LUSC	0.276388739
UPP1	Porphyrin and chlorophyl	LUSC	0.14508568
UPP1	Primary bile acid biosynt	LUSC	0.118199014
UPP1	Propanoate metabolism	LUSC	-0.10143269
UPP1	Purine metabolism	LUSC	0.206017959
UPP1	Pyrimidine metabolism	LUSC	0.202090685
UPP1	Pyruvate metabolism	LUSC	0.006696571
UPP1	Regulation_of_autophagy	LUSC	0.007861558
UPP1	Retinol metabolism	LUSC	0.114537731
UPP1	Riboflavin metabolism	LUSC	0.207681324
UPP1	Schmahl_pdgf_signaling	LUSC	0.118461889
UPP1	Selenocompound metabol	LUSC	-0.287531709
UPP1	Signaling_by_hippo	LUSC	-0.02616083
UPP1	Sphingolipid metabolism	LUSC	0.188911533
UPP1	Starch and sucrose metab	LUSC	0.275544427
UPP1	Steroid biosynthesis	LUSC	0.226213513
UPP1	Steroid hormone biosynth	LUSC	0.147676993
UPP1	Sulfur metabolism	LUSC	0.135234453
UPP1	Synthesis and degradation	LUSC	-0.100082534
UPP1	T helper cell	LUSC	0.097892014
UPP1	T helper1 (th1) cell	LUSC	0.163380521
UPP1	T helper17 (th17) cell	LUSC	0.278499839
UPP1	T helper2 (th2) cell	LUSC	0.113242302
UPP1	T helper9 (th9) cell	LUSC	-0.005229236
UPP1	Taurine and hypotaurine r	LUSC	-0.213476981
UPP1	Terpenoid backbone biosy	LUSC	0.202630006
UPP1	Tgf_beta_signaling_pathw	LUSC	-0.070910033
UPP1	Thiamine metabolism	LUSC	0.194776951
UPP1	Tnfa_signaling_via_nfk	LUSC	0.40679186
UPP1	Tryptophan metabolism	LUSC	0.05060572
UPP1	Tumor endothelial cell	LUSC	0.351200554
UPP1	Tyrosine metabolism	LUSC	0.189966683
UPP1	Ubiquinone and other ter	LUSC	0.138020516
UPP1	Valine, leucine and isoleu	LUSC	0.278118086
UPP1	Valine, leucine and isoleu	LUSC	-0.061131549
UPP1	Vascular endothelial cell	LUSC	0.076705752
UPP1	Vascular smooth muscle c	LUSC	-0.010475319
UPP1	Vegf_signaling_pathway	LUSC	0.180746668
UPP1	Vitamin b6 metabolism	LUSC	0.086227333
UPP1	Willert_wnt_signaling	LUSC	0.045407489

UPP1	Wnt_beta_catenin_signali	LUSC	-0.181190202
UPP2	Abnormal plasma cell	LUSC	0.025151788
UPP2	Activated b cell	LUSC	-0.034305962
UPP2	Activated cd4+ t cell	LUSC	-0.053530454
UPP2	Activated t cell	LUSC	-0.06841996
UPP2	Alanine, aspartate and glu	LUSC	-0.142715729
UPP2	Alcala_apoptosis	LUSC	-0.243496392
UPP2	Alpha-linolenic acid meta	LUSC	0.047187358
UPP2	Amino sugar and nucleoti	LUSC	-0.090923896
UPP2	Ampk_pathway	LUSC	-0.102510011
UPP2	Angiogenesis	LUSC	0.071700629
UPP2	Arachidonic acid metabol:	LUSC	0.001393352
UPP2	Arginine and proline metæ	LUSC	-0.126973626
UPP2	Arginine biosynthesis	LUSC	-0.164066619
UPP2	Ascorbate and aldarate mε	LUSC	0.036895887
UPP2	Atypical memory b cell	LUSC	0.000539056
UPP2	Axl+siglec6+ dendritic ce	LUSC	0.025477777
UPP2	B cell	LUSC	-0.00023069
UPP2	B1 cell	LUSC	-0.075866612
UPP2	Basal cell	LUSC	-0.018938161
UPP2	Beta-alanine metabolism	LUSC	-0.012233406
UPP2	Biosynthesis of unsaturate	LUSC	-0.117300835
UPP2	Biotin metabolism	LUSC	0.005037548
UPP2	Butanoate metabolism	LUSC	-0.018138399
UPP2	Caffeine metabolism	LUSC	0.03797765
UPP2	Cancer stem cell	LUSC	0.009913632
UPP2	Cancer stem-like cell	LUSC	0.039101494
UPP2	Cd4+ cytotoxic t cell	LUSC	-0.039250514
UPP2	Cd4+ memory t cell	LUSC	-0.030493611
UPP2	Cd4+ regulatory t cell	LUSC	-0.048807298
UPP2	Cd4+ t helper cell	LUSC	-0.054726583
UPP2	Cd4+cd25+ regulatory t c	LUSC	-0.060271069
UPP2	Cd8+ cytotoxic t cell	LUSC	-0.090140897
UPP2	Cd8+ regulatory t cell	LUSC	-0.078292972
UPP2	Cell_cycle	LUSC	-0.222713275
UPP2	Chandran_metastasis_topε	LUSC	-0.163948243
UPP2	Citrate cycle (tca cycle)	LUSC	-0.133865511
UPP2	Cysteine and methionine r	LUSC	-0.185770871
UPP2	Cytokine induced killer cε	LUSC	0.000660422
UPP2	D-arginine and d-ornithin	LUSC	0.031021531
UPP2	D-glutamine and d-glutan	LUSC	-0.170584048
UPP2	Dendritic cell	LUSC	-0.035131837
UPP2	Dna_repair	LUSC	-0.142195682

UPP2	Dna_replication	LUSC	-0.225542315
UPP2	Double-negative memory	LUSC	-0.003571948
UPP2	Drug metabolism - cytoch	LUSC	0.059987846
UPP2	Drug metabolism - other	LUSC	-0.059855481
UPP2	E2f_targets	LUSC	-0.249888037
UPP2	Ecm_receptor_interaction	LUSC	0.025029122
UPP2	Effector cd4+ memory t	LUSC	-0.050184576
UPP2	Effector cd8+ memory t	LUSC	-0.018887401
UPP2	Effector memory t cell	LUSC	-0.035942262
UPP2	Effector regulatory t (treg)	LUSC	-0.02991022
UPP2	Elvidge_hif1a_targets_up	LUSC	-0.239383783
UPP2	Endothelial cell	LUSC	-0.003446453
UPP2	Eosinophil	LUSC	-0.04683479
UPP2	Ether lipid metabolism	LUSC	0.043507321
UPP2	Exhausted cd4+ t cell	LUSC	-0.049742181
UPP2	Exhausted cd8+ t cell	LUSC	-0.056154798
UPP2	Exhausted t cell	LUSC	-0.082740336
UPP2	Fat cell (adipocyte)	LUSC	0.010631542
UPP2	Fatty acid biosynthesis	LUSC	-0.024577925
UPP2	Fatty acid degradation	LUSC	0.038616325
UPP2	Fatty acid elongation	LUSC	-0.102244741
UPP2	Fibroblast	LUSC	0.017903383
UPP2	Folate biosynthesis	LUSC	-0.107535241
UPP2	Follicular b cell	LUSC	-0.016873826
UPP2	Follicular dendritic cell	LUSC	-0.055784156
UPP2	Follicular helper (tfh) t ce	LUSC	-0.039410424
UPP2	Follicular t cell	LUSC	-0.125590096
UPP2	Foxp3+il-17+ t cell	LUSC	-0.066150642
UPP2	Fructose and mannose me	LUSC	-0.104315224
UPP2	G2m_checkpoint	LUSC	-0.260247787
UPP2	Galactose metabolism	LUSC	-0.164928851
UPP2	Galie_tumor_stemness_ge	LUSC	0.019274956
UPP2	Glutathione metabolism	LUSC	-0.114729833
UPP2	Glycerolipid metabolism	LUSC	-0.019881015
UPP2	Glycerophospholipid metæ	LUSC	0.046698055
UPP2	Glycine, serine and threor	LUSC	-0.074527289
UPP2	Glycolysis / gluconeogene	LUSC	-0.13563608
UPP2	Glycosaminoglycan biosy	LUSC	0.067963045
UPP2	Glycosaminoglycan biosy	LUSC	0.088272229
UPP2	Glycosaminoglycan biosy	LUSC	0.015930023
UPP2	Glycosaminoglycan degra	LUSC	0.063312104
UPP2	Glycosphingolipid biosyn	LUSC	-0.001316
UPP2	Glycosphingolipid biosyn	LUSC	-0.03211679

UPP2	Glycosphingolipid biosyn	LUSC	2.76E-05
UPP2	Glycosylphosphatidylinos	LUSC	-0.043475942
UPP2	Glyoxylate and dicarboxy	LUSC	-0.124618722
UPP2	Granulocyte	LUSC	-0.030318963
UPP2	Hedgehog signaling	LUSC	0.023639454
UPP2	Histidine metabolism	LUSC	0.001361533
UPP2	Hypoxia	LUSC	-0.015155376
UPP2	Il-17alpha t cell	LUSC	-0.070196519
UPP2	Il2_stat5_signaling	LUSC	-0.075387646
UPP2	Il6_jak_stat3_signaling	LUSC	-0.081969362
UPP2	Immune_checkpoints_tur	LUSC	-0.05556719
UPP2	Immune_inhibition_cytok	LUSC	-0.033889831
UPP2	Inositol phosphate metabo	LUSC	-0.025954016
UPP2	Interleukin_6_signaling	LUSC	-0.11129148
UPP2	Jaeger_metastasis_up	LUSC	-0.123268559
UPP2	Jain_nfkb_signaling	LUSC	-0.234517135
UPP2	Kras_signaling_up	LUSC	-0.002888298
UPP2	Linoleic acid metabolism	LUSC	0.112681336
UPP2	Lipoic acid metabolism	LUSC	0.100390079
UPP2	Lysine degradation	LUSC	-0.114176886
UPP2	Lysosome	LUSC	-0.00327433
UPP2	M1 macrophage	LUSC	-0.033647487
UPP2	M2 macrophage	LUSC	-0.03742663
UPP2	Mannose type o-glycan bi	LUSC	0.038178509
UPP2	Mapk_signaling_pathway	LUSC	-0.024938137
UPP2	Mapk3_erk1_activation	LUSC	-0.136277256
UPP2	Marginal zone b cell	LUSC	-0.042484109
UPP2	Memory b cell	LUSC	0.010008954
UPP2	Mesenchymal cell	LUSC	0.038981921
UPP2	Mesenchymal stem cell	LUSC	0.018508896
UPP2	Metabolism of xenobiotic	LUSC	0.037950403
UPP2	Migrating cancer stem cel	LUSC	-0.144772763
UPP2	Mitotic_spindle	LUSC	-0.192858069
UPP2	Monocyte	LUSC	-0.035466955
UPP2	Mtor_signaling_pathway	LUSC	-0.039797213
UPP2	Mtorc1_signaling	LUSC	-0.21156815
UPP2	Mucin type o-glycan bios	LUSC	0.02006081
UPP2	Myc_targets_v1	LUSC	-0.235550782
UPP2	Myeloid cell	LUSC	-0.024368843
UPP2	N-glycan biosynthesis	LUSC	-0.050329311
UPP2	Naive b cell	LUSC	0.008058708
UPP2	Naive cd4+ t cell	LUSC	-0.014179787
UPP2	Naive cd8+ t cell	LUSC	0.022039434

UPP2	Natural killer cell	LUSC	-0.035614361
UPP2	Natural killer t (nkt) cell	LUSC	-0.136675418
UPP2	Natural regulatory t (treg)	LUSC	-0.0341184
UPP2	Neomycin, kanamycin and	LUSC	-0.098407179
UPP2	Neutrophil	LUSC	-0.012176274
UPP2	Nicotinate and nicotinami	LUSC	-0.062065367
UPP2	Nitrogen metabolism	LUSC	0.053808581
UPP2	Nod_like_receptor_signal	LUSC	-0.04780711
UPP2	Notch_signaling	LUSC	0.028032374
UPP2	One carbon pool by folate	LUSC	-0.210569369
UPP2	Other glycan degradation	LUSC	0.010624742
UPP2	Other types of o-glycan b	LUSC	0.080782236
UPP2	Oxidative phosphorylatio	LUSC	-0.050370217
UPP2	P53_pathway	LUSC	-0.082122603
UPP2	P53_signaling_pathway	LUSC	-0.038408965
UPP2	Pantothenate and coa bios	LUSC	0.10097267
UPP2	Pentose and glucuronate i	LUSC	0.042360795
UPP2	Pentose phosphate pathwa	LUSC	-0.209064198
UPP2	Pericyte	LUSC	0.072278922
UPP2	Phenylalanine metabolism	LUSC	-0.126411752
UPP2	Phenylalanine, tyrosine ar	LUSC	-0.075111763
UPP2	Phosphonate and phosphir	LUSC	-0.013014541
UPP2	Pi3k_akt_activation	LUSC	-0.004206192
UPP2	Pi3k_akt_mtor_signaling	LUSC	-0.144890647
UPP2	Porphyrin and chlorophyl	LUSC	-0.042074021
UPP2	Primary bile acid biosynt	LUSC	0.137772468
UPP2	Propanoate metabolism	LUSC	-0.030250523
UPP2	Purine metabolism	LUSC	-0.20870463
UPP2	Pyrimidine metabolism	LUSC	-0.199956918
UPP2	Pyruvate metabolism	LUSC	-0.102612561
UPP2	Regulation_of_autophagy	LUSC	0.011180918
UPP2	Retinol metabolism	LUSC	0.058943733
UPP2	Riboflavin metabolism	LUSC	-0.085401215
UPP2	Schmahl_pdgf_signaling	LUSC	-0.050182817
UPP2	Selenocompound metabol	LUSC	-0.064642546
UPP2	Signaling_by_hippo	LUSC	-0.096412979
UPP2	Sphingolipid metabolism	LUSC	-0.039497788
UPP2	Starch and sucrose metabo	LUSC	0.001228122
UPP2	Steroid biosynthesis	LUSC	-0.151747854
UPP2	Steroid hormone biosynth	LUSC	0.068404541
UPP2	Sulfur metabolism	LUSC	0.050834575
UPP2	Synthesis and degradation	LUSC	0.017529681
UPP2	T helper cell	LUSC	-0.045143989

UPP2	T helper1 (th1) cell	LUSC	-0.067746922
UPP2	T helper17 (th17) cell	LUSC	-0.039059038
UPP2	T helper2 (th2) cell	LUSC	-0.020766387
UPP2	T helper9 (th9) cell	LUSC	-0.035479514
UPP2	Taurine and hypotaurine r	LUSC	0.113302898
UPP2	Terpenoid backbone biosy	LUSC	0.017844938
UPP2	Tgf_beta_signaling_pathw	LUSC	0.009155326
UPP2	Thiamine metabolism	LUSC	-0.056518773
UPP2	Tnfa_signaling_via_nfkb	LUSC	-0.075941899
UPP2	Tryptophan metabolism	LUSC	-0.035827086
UPP2	Tumor endothelial cell	LUSC	-0.071851472
UPP2	Tyrosine metabolism	LUSC	-0.022843482
UPP2	Ubiquinone and other terf	LUSC	-0.036178366
UPP2	Valine, leucine and isoleu	LUSC	-0.101176812
UPP2	Valine, leucine and isoleu	LUSC	-0.008089165
UPP2	Vascular endothelial cell	LUSC	-0.000275122
UPP2	Vascular smooth muscle c	LUSC	0.050671043
UPP2	Vegf_signaling_pathway	LUSC	0.02954772
UPP2	Vitamin b6 metabolism	LUSC	-0.12978807
UPP2	Willert_wnt_signaling	LUSC	-0.049139394
UPP2	Wnt_beta_catenin_signali	LUSC	0.018802693
CDA	Abnormal plasma cell	MESO	0.34068338
CDA	Activated b cell	MESO	0.168288823
CDA	Activated cd4+ t cell	MESO	0.155818359
CDA	Activated t cell	MESO	0.226388765
CDA	Alanine, aspartate and glu	MESO	-0.303739764
CDA	Alcala_apoptosis	MESO	-0.057431552
CDA	Alpha-linolenic acid meta	MESO	-0.123388066
CDA	Amino sugar and nucleoti	MESO	-0.068374339
CDA	Ampk_pathway	MESO	0.015817643
CDA	Angiogenesis	MESO	0.423068819
CDA	Arachidonic acid metaboli	MESO	-0.118294925
CDA	Arginine and proline metε	MESO	0.120285103
CDA	Arginine biosynthesis	MESO	0.19810102
CDA	Ascorbate and aldarate mε	MESO	-0.281281905
CDA	Atypical memory b cell	MESO	0.109837188
CDA	Axl+siglec6+ dendritic ce	MESO	0.266239618
CDA	B cell	MESO	0.246381423
CDA	B1 cell	MESO	0.17195278
CDA	Basal cell	MESO	0.081207256
CDA	Beta-alanine metabolism	MESO	-0.423774732
CDA	Biosynthesis of unsaturate	MESO	0.237265033
CDA	Biotin metabolism	MESO	-0.162900612

CDA	Butanoate metabolism	MESO	-0.083385014
CDA	Caffeine metabolism	MESO	-0.122852444
CDA	Cancer stem cell	MESO	0.291648867
CDA	Cancer stem-like cell	MESO	0.407292615
CDA	Cd4+ cytotoxic t cell	MESO	0.220608774
CDA	Cd4+ memory t cell	MESO	0.205006472
CDA	Cd4+ regulatory t cell	MESO	0.286877785
CDA	Cd4+ t helper cell	MESO	0.181037832
CDA	Cd4+cd25+ regulatory t c	MESO	0.216475254
CDA	Cd8+ cytotoxic t cell	MESO	0.163796404
CDA	Cd8+ regulatory t cell	MESO	0.102240526
CDA	Cell_cycle	MESO	0.306901551
CDA	Chandran_metastasis_top	MESO	-0.195215328
CDA	Citrate cycle (tca cycle)	MESO	-0.150512676
CDA	Cysteine and methionine r	MESO	-0.175279044
CDA	Cytokine induced killer c	MESO	0.268073681
CDA	D-arginine and d-ornithin	MESO	0.004635804
CDA	D-glutamine and d-glutan	MESO	-0.222876837
CDA	Dendritic cell	MESO	0.326207297
CDA	Dna_repair	MESO	0.148496893
CDA	Dna_replication	MESO	0.239415755
CDA	Double-negative memory	MESO	0.167025878
CDA	Drug metabolism - cytoch	MESO	-0.222824298
CDA	Drug metabolism - other	MESO	0.140680301
CDA	E2f_targets	MESO	0.296158361
CDA	Ecm_receptor_interaction	MESO	0.412541009
CDA	Effector cd4+ memory t (	MESO	0.159552093
CDA	Effector cd8+ memory t (	MESO	0.216940774
CDA	Effector memory t cell	MESO	0.169844938
CDA	Effector regulatory t (treg	MESO	0.313405973
CDA	Elvidge_hif1a_targets_up	MESO	-0.062146583
CDA	Endothelial cell	MESO	0.56207879
CDA	Eosinophil	MESO	0.197996236
CDA	Ether lipid metabolism	MESO	-0.135257331
CDA	Exhausted cd4+ t cell	MESO	0.265845115
CDA	Exhausted cd8+ t cell	MESO	0.219872238
CDA	Exhausted t cell	MESO	0.076986805
CDA	Fat cell (adipocyte)	MESO	0.02680925
CDA	Fatty acid biosynthesis	MESO	-0.309386394
CDA	Fatty acid degradation	MESO	-0.232184952
CDA	Fatty acid elongation	MESO	0.106194069
CDA	Fibroblast	MESO	0.47350659
CDA	Folate biosynthesis	MESO	0.058015705

CDA	Follicular b cell	MESO	0.190181418
CDA	Follicular dendritic cell	MESO	0.224217652
CDA	Follicular helper (tfh) t ce	MESO	0.208472979
CDA	Follicular t cell	MESO	0.077341462
CDA	Foxp3+il-17+ t cell	MESO	0.194719165
CDA	Fructose and mannose me	MESO	-0.106551251
CDA	G2m_checkpoint	MESO	0.27765635
CDA	Galactose metabolism	MESO	0.065428841
CDA	Galie_tumor_stemness_ge	MESO	0.14955527
CDA	Glutathione metabolism	MESO	0.241801482
CDA	Glycerolipid metabolism	MESO	0.217438168
CDA	Glycerophospholipid metæ	MESO	-0.049480619
CDA	Glycine, serine and threor	MESO	0.255686221
CDA	Glycolysis / gluconeogene	MESO	-0.305226845
CDA	Glycosaminoglycan biosyn	MESO	0.520933571
CDA	Glycosaminoglycan biosyn	MESO	0.337784727
CDA	Glycosaminoglycan biosyn	MESO	0.240874219
CDA	Glycosaminoglycan degra	MESO	0.335771739
CDA	Glycosphingolipid biosyn	MESO	0.243036365
CDA	Glycosphingolipid biosyn	MESO	0.273414514
CDA	Glycosphingolipid biosyn	MESO	-0.018638923
CDA	Glycosylphosphatidylinos	MESO	-0.100792703
CDA	Glyoxylate and dicarboxy	MESO	-0.071384438
CDA	Granulocyte	MESO	0.25159542
CDA	Hedgehog_signaling	MESO	0.306052601
CDA	Histidine metabolism	MESO	-0.445057272
CDA	Hypoxia	MESO	0.152541281
CDA	Il-17alpha t cell	MESO	0.205646065
CDA	Il2_stat5_signaling	MESO	0.376345758
CDA	Il6_jak_stat3_signaling	MESO	0.093449134
CDA	Immune_checkpoints_tun	MESO	0.232881407
CDA	Immune_inhibition_cytok	MESO	0.2525311
CDA	Inositol phosphate metabo	MESO	-0.256094827
CDA	Interleukin_6_signaling	MESO	-0.133274234
CDA	Jaeger_metastasis_up	MESO	0.28001467
CDA	Jain_nfkb_signaling	MESO	-0.031936676
CDA	Kras_signaling_up	MESO	0.345529515
CDA	Linoleic acid metabolism	MESO	-0.284665906
CDA	Lipoic acid metabolism	MESO	-0.113161445
CDA	Lysine degradation	MESO	-0.074672618
CDA	Lysosome	MESO	0.147968557
CDA	M1 macrophage	MESO	0.191921219
CDA	M2 macrophage	MESO	0.341586474

CDA	Mannose type o-glycan bi	MESO	0.136957423
CDA	Mapk_signaling_pathway	MESO	0.203215147
CDA	Mapk3_erk1_activation	MESO	-0.037753105
CDA	Marginal zone b cell	MESO	0.143199313
CDA	Memory b cell	MESO	0.127681753
CDA	Mesenchymal cell	MESO	0.559218866
CDA	Mesenchymal stem cell	MESO	0.44873512
CDA	Metabolism of xenobiotic	MESO	-0.206607919
CDA	Migrating cancer stem cel	MESO	-0.100550942
CDA	Mitotic_spindle	MESO	0.119135132
CDA	Monocyte	MESO	0.19334056
CDA	Mtor_signaling_pathway	MESO	-0.223169661
CDA	Mtorc1_signaling	MESO	0.123093295
CDA	Mucin type o-glycan bios	MESO	-0.166181407
CDA	Myc_targets_v1	MESO	0.128097452
CDA	Myeloid cell	MESO	0.201058878
CDA	N-glycan biosynthesis	MESO	0.012273456
CDA	Naive b cell	MESO	0.170995172
CDA	Naive cd4+ t cell	MESO	0.246918081
CDA	Naive cd8+ t cell	MESO	0.159114493
CDA	Natural killer cell	MESO	0.142427462
CDA	Natural killer t (nkt) cell	MESO	0.159051389
CDA	Natural regulatory t (treg)	MESO	0.286405361
CDA	Neomycin, kanamycin an	MESO	0.160996153
CDA	Neutrophil	MESO	0.203080558
CDA	Nicotinate and nicotinami	MESO	-0.065058369
CDA	Nitrogen metabolism	MESO	-0.035217851
CDA	Nod_like_receptor_signal	MESO	-0.038199213
CDA	Notch_signaling	MESO	0.31865087
CDA	One carbon pool by folate	MESO	0.098124423
CDA	Other glycan degradation	MESO	-0.1190696
CDA	Other types of o-glycan b	MESO	0.107713872
CDA	Oxidative phosphorylatio	MESO	0.071931668
CDA	P53_pathway	MESO	-0.008246623
CDA	P53_signaling_pathway	MESO	0.10615931
CDA	Pantothenate and coa bios	MESO	-0.114753087
CDA	Pentose and glucuronate i	MESO	-0.030247141
CDA	Pentose phosphate pathwa	MESO	0.000577042
CDA	Pericyte	MESO	0.600804452
CDA	Phenylalanine metabolism	MESO	-0.223564666
CDA	Phenylalanine, tyrosine ar	MESO	-0.204565193
CDA	Phosphonate and phosphir	MESO	0.057112706
CDA	Pi3k_akt_activation	MESO	0.05384117

CDA	Pi3k_akt_mtor_signaling	MESO	-0.00227417
CDA	Porphyrin and chlorophyl	MESO	-0.061157328
CDA	Primary bile acid biosynt	MESO	-0.16745099
CDA	Propanoate metabolism	MESO	-0.291201541
CDA	Purine metabolism	MESO	0.293347068
CDA	Pyrimidine metabolism	MESO	0.186799711
CDA	Pyruvate metabolism	MESO	-0.17046449
CDA	Regulation_of_autophagy	MESO	-0.062463121
CDA	Retinol metabolism	MESO	-0.333778955
CDA	Riboflavin metabolism	MESO	0.023353101
CDA	Schmahl_pdgf_signaling	MESO	0.046984665
CDA	Selenocompound metabol	MESO	-0.036268775
CDA	Signaling_by_hippo	MESO	-0.173773322
CDA	Sphingolipid metabolism	MESO	-0.028020032
CDA	Starch and sucrose metabo	MESO	-0.186234158
CDA	Steroid biosynthesis	MESO	0.020900885
CDA	Steroid hormone biosynth	MESO	-0.245676184
CDA	Sulfur metabolism	MESO	-0.106912488
CDA	Synthesis and degradation	MESO	0.164920239
CDA	T helper cell	MESO	0.230667991
CDA	T helper1 (th1) cell	MESO	0.071063679
CDA	T helper17 (th17) cell	MESO	0.173243535
CDA	T helper2 (th2) cell	MESO	0.196276626
CDA	T helper9 (th9) cell	MESO	0.208189237
CDA	Taurine and hypotaurine r	MESO	0.126187705
CDA	Terpenoid backbone biosy	MESO	0.142445087
CDA	Tgf_beta_signaling_pathw	MESO	0.188011091
CDA	Thiamine metabolism	MESO	-0.024145597
CDA	Tnfa_signaling_via_nfkb	MESO	0.091761444
CDA	Tryptophan metabolism	MESO	-0.027396551
CDA	Tumor endothelial cell	MESO	0.17216334
CDA	Tyrosine metabolism	MESO	-0.219951033
CDA	Ubiquinone and other terp	MESO	0.108229342
CDA	Valine, leucine and isoleu	MESO	0.050268279
CDA	Valine, leucine and isoleu	MESO	-0.298734636
CDA	Vascular endothelial cell	MESO	0.575653832
CDA	Vascular smooth muscle c	MESO	0.494792509
CDA	Vegf_signaling_pathway	MESO	0.241249699
CDA	Vitamin b6 metabolism	MESO	-0.169853206
CDA	Willert_wnt_signaling	MESO	0.253003558
CDA	Wnt_beta_catenin_signali	MESO	0.370892262
UCK1	Abnormal plasma cell	MESO	-0.105946548
UCK1	Activated b cell	MESO	-0.184195513

UCK1	Activated cd4+ t cell	MESO	-0.287621312
UCK1	Activated t cell	MESO	-0.222852094
UCK1	Alanine, aspartate and glu	MESO	-0.128505709
UCK1	Alcala_apoptosis	MESO	-0.027803075
UCK1	Alpha-linolenic acid meta	MESO	0.083436425
UCK1	Amino sugar and nucleoti	MESO	-0.141708885
UCK1	Ampk_pathway	MESO	0.046207908
UCK1	Angiogenesis	MESO	-0.327017388
UCK1	Arachidonic acid metabol	MESO	0.27448466
UCK1	Arginine and proline metε	MESO	0.102473938
UCK1	Arginine biosynthesis	MESO	-0.190130585
UCK1	Ascorbate and aldarate mε	MESO	0.13859218
UCK1	Atypical memory b cell	MESO	-0.271737389
UCK1	Axl+siglec6+ dendritic ce	MESO	-0.152791076
UCK1	B cell	MESO	-0.333813188
UCK1	B1 cell	MESO	-0.179285747
UCK1	Basal cell	MESO	0.000763318
UCK1	Beta-alanine metabolism	MESO	0.07931165
UCK1	Biosynthesis of unsaturate	MESO	-0.221710615
UCK1	Biotin metabolism	MESO	0.22820795
UCK1	Butanoate metabolism	MESO	0.288135689
UCK1	Caffeine metabolism	MESO	0.006884242
UCK1	Cancer stem cell	MESO	-0.434492253
UCK1	Cancer stem-like cell	MESO	-0.350032942
UCK1	Cd4+ cytotoxic t cell	MESO	-0.208689219
UCK1	Cd4+ memory t cell	MESO	-0.283357413
UCK1	Cd4+ regulatory t cell	MESO	-0.202320302
UCK1	Cd4+ t helper cell	MESO	-0.236284677
UCK1	Cd4+cd25+ regulatory t c	MESO	-0.234485091
UCK1	Cd8+ cytotoxic t cell	MESO	-0.220234057
UCK1	Cd8+ regulatory t cell	MESO	-0.275178682
UCK1	Cell_cycle	MESO	-0.131840916
UCK1	Chandran_metastasis_top ⁵	MESO	-0.171459781
UCK1	Citrate cycle (tca cycle)	MESO	-0.012281914
UCK1	Cysteine and methionine r	MESO	-0.061374773
UCK1	Cytokine induced killer cε	MESO	-0.205795491
UCK1	D-arginine and d-ornithin	MESO	0.17109904
UCK1	D-glutamine and d-glutan	MESO	-0.351976712
UCK1	Dendritic cell	MESO	-0.375600497
UCK1	Dna_repair	MESO	0.312793827
UCK1	Dna_replication	MESO	0.14198155
UCK1	Double-negative memory	MESO	-0.18305261
UCK1	Drug metabolism - cytoch	MESO	0.105685904

UCK1	Drug metabolism - other (MESO	0.289610165
UCK1	E2f_targets MESO	-0.068225082
UCK1	Ecm_receptor_interaction MESO	-0.331775743
UCK1	Effector cd4+ memory t (MESO	-0.334516437
UCK1	Effector cd8+ memory t (MESO	-0.288283946
UCK1	Effector memory t cell MESO	-0.331893663
UCK1	Effector regulatory t (treg MESO	-0.284459253
UCK1	Elvidge_hif1a_targets_up MESO	-0.46941424
UCK1	Endothelial cell MESO	-0.428953666
UCK1	Eosinophil MESO	-0.240248513
UCK1	Ether lipid metabolism MESO	-0.10549156
UCK1	Exhausted cd4+ t cell MESO	-0.333128185
UCK1	Exhausted cd8+ t cell MESO	-0.308027085
UCK1	Exhausted t cell MESO	-0.139443854
UCK1	Fat cell (adipocyte) MESO	-0.050840336
UCK1	Fatty acid biosynthesis MESO	-0.005802148
UCK1	Fatty acid degradation MESO	0.038691994
UCK1	Fatty acid elongation MESO	-0.077591429
UCK1	Fibroblast MESO	-0.362561942
UCK1	Folate biosynthesis MESO	0.257971986
UCK1	Follicular b cell MESO	-0.308522246
UCK1	Follicular dendritic cell MESO	-0.161891292
UCK1	Follicular helper (tfh) t cell MESO	-0.320489252
UCK1	Follicular t cell MESO	-0.052279672
UCK1	Foxp3+il-17+ t cell MESO	-0.225705769
UCK1	Fructose and mannose me MESO	0.14912136
UCK1	G2m_checkpoint MESO	-0.162775595
UCK1	Galactose metabolism MESO	0.000473689
UCK1	Galie_tumor_stemness_ge MESO	-0.166512477
UCK1	Glutathione metabolism MESO	0.021540313
UCK1	Glycerolipid metabolism MESO	-0.004788029
UCK1	Glycerophospholipid metæ MESO	-0.019241664
UCK1	Glycine, serine and threor MESO	0.070890131
UCK1	Glycolysis / gluconeogene MESO	0.018448202
UCK1	Glycosaminoglycan biosy1 MESO	-0.160424052
UCK1	Glycosaminoglycan biosy1 MESO	0.01351894
UCK1	Glycosaminoglycan biosy1 MESO	0.006639279
UCK1	Glycosaminoglycan degra MESO	-0.275077414
UCK1	Glycosphingolipid biosyn1 MESO	-0.130540702
UCK1	Glycosphingolipid biosyn1 MESO	-0.048080016
UCK1	Glycosphingolipid biosyn1 MESO	0.092489673
UCK1	Glycosylphosphatidylinos: MESO	0.186049386
UCK1	Glyoxylate and dicarboxy MESO	0.057005457

UCK1	Granulocyte	MESO	-0.304762782
UCK1	Hedgehog_signaling	MESO	-0.251430192
UCK1	Histidine metabolism	MESO	0.243550607
UCK1	Hypoxia	MESO	-0.197585595
UCK1	Il-17alpha t cell	MESO	-0.255698157
UCK1	Il2_stat5_signaling	MESO	-0.369380444
UCK1	Il6_jak_stat3_signaling	MESO	-0.414191422
UCK1	Immune_checkpoints_tun	MESO	-0.270735197
UCK1	Immune_inhibition_cytok	MESO	-0.138293945
UCK1	Inositol phosphate metabo	MESO	-0.272363138
UCK1	Interleukin_6_signaling	MESO	-0.588220885
UCK1	Jaeger_metastasis_up	MESO	-0.193469972
UCK1	Jain_nfkb_signaling	MESO	-0.215593507
UCK1	Kras_signaling_up	MESO	-0.436836239
UCK1	Linoleic acid metabolism	MESO	0.134992596
UCK1	Lipoic acid metabolism	MESO	0.247618234
UCK1	Lysine degradation	MESO	0.028357175
UCK1	Lysosome	MESO	-0.18602496
UCK1	M1 macrophage	MESO	-0.320095058
UCK1	M2 macrophage	MESO	-0.313609278
UCK1	Mannose type o-glycan bi	MESO	0.172339976
UCK1	Mapk_signaling_pathway	MESO	-0.387656393
UCK1	Mapk3_erk1_activation	MESO	-0.600695396
UCK1	Marginal zone b cell	MESO	-0.266459479
UCK1	Memory b cell	MESO	-0.235775718
UCK1	Mesenchymal cell	MESO	-0.214395489
UCK1	Mesenchymal stem cell	MESO	-0.45479545
UCK1	Metabolism of xenobiotic	MESO	0.260220483
UCK1	Migrating cancer stem cel	MESO	-0.17252451
UCK1	Mitotic_spindle	MESO	-0.269124819
UCK1	Monocyte	MESO	-0.271414453
UCK1	Mtor_signaling_pathway	MESO	-0.100455682
UCK1	Mtorc1_signaling	MESO	-0.322066054
UCK1	Mucin type o-glycan biosy	MESO	-0.362388811
UCK1	Myc_targets_v1	MESO	0.009164059
UCK1	Myeloid cell	MESO	-0.355473177
UCK1	N-glycan biosynthesis	MESO	-0.205276196
UCK1	Naive b cell	MESO	-0.245719271
UCK1	Naive cd4+ t cell	MESO	-0.397865699
UCK1	Naive cd8+ t cell	MESO	-0.178882012
UCK1	Natural killer cell	MESO	-0.256080538
UCK1	Natural killer t (nkt) cell	MESO	-0.283233954
UCK1	Natural regulatory t (treg)	MESO	-0.254404752

UCK1	Neomycin, kanamycin and	MESO	-0.128354146
UCK1	Neutrophil	MESO	-0.324011343
UCK1	Nicotinate and nicotinami	MESO	-0.085147333
UCK1	Nitrogen metabolism	MESO	0.061631873
UCK1	Nod_like_receptor_signal	MESO	-0.42231536
UCK1	Notch_signaling	MESO	-0.2251824
UCK1	One carbon pool by folate	MESO	-0.03325559
UCK1	Other glycan degradation	MESO	-0.068418511
UCK1	Other types of o-glycan b	MESO	0.150204421
UCK1	Oxidative phosphorylatio	MESO	0.227254137
UCK1	P53_pathway	MESO	0.083109753
UCK1	P53_signaling_pathway	MESO	-0.110217309
UCK1	Pantothenate and coa bios	MESO	-0.083932704
UCK1	Pentose and glucuronate i	MESO	0.123146579
UCK1	Pentose phosphate pathwa	MESO	0.070637554
UCK1	Pericyte	MESO	-0.322409211
UCK1	Phenylalanine metabolism	MESO	0.127244741
UCK1	Phenylalanine, tyrosine ar	MESO	0.187286606
UCK1	Phosphonate and phosphir	MESO	-0.08564447
UCK1	Pi3k_akt_activation	MESO	-0.34959175
UCK1	Pi3k_akt_mtor_signaling	MESO	-0.31160085
UCK1	Porphyrin and chlorophyl	MESO	0.270759511
UCK1	Primary bile acid biosynt	MESO	-0.009969473
UCK1	Propanoate metabolism	MESO	-0.106850074
UCK1	Purine metabolism	MESO	-0.02415511
UCK1	Pyrimidine metabolism	MESO	0.124650062
UCK1	Pyruvate metabolism	MESO	0.086684533
UCK1	Regulation_of_autophagy	MESO	0.042532019
UCK1	Retinol metabolism	MESO	0.298659092
UCK1	Riboflavin metabolism	MESO	0.105719052
UCK1	Schmahl_pdgf_signaling	MESO	-0.226209678
UCK1	Selenocompound metabol	MESO	-0.32625173
UCK1	Signaling_by_hippo	MESO	-0.287200113
UCK1	Sphingolipid metabolism	MESO	-0.268002501
UCK1	Starch and sucrose metab	MESO	-0.186810812
UCK1	Steroid biosynthesis	MESO	-0.132042438
UCK1	Steroid hormone biosynth	MESO	0.293455659
UCK1	Sulfur metabolism	MESO	0.028698292
UCK1	Synthesis and degradation	MESO	0.271494462
UCK1	T helper cell	MESO	-0.281546818
UCK1	T helper1 (th1) cell	MESO	-0.195672503
UCK1	T helper17 (th17) cell	MESO	-0.332308284
UCK1	T helper2 (th2) cell	MESO	-0.241765523

UCK1	T helper9 (th9) cell	MESO	-0.159248744
UCK1	Taurine and hypotaurine r	MESO	0.116832606
UCK1	Terpenoid backbone biosy	MESO	-0.074513358
UCK1	Tgf_beta_signaling_pathw	MESO	-0.349281965
UCK1	Thiamine metabolism	MESO	0.159258547
UCK1	Tnfa_signaling_via_nfkb	MESO	-0.255862285
UCK1	Tryptophan metabolism	MESO	0.000101721
UCK1	Tumor endothelial cell	MESO	-0.162041028
UCK1	Tyrosine metabolism	MESO	0.154441434
UCK1	Ubiquinone and other terf	MESO	0.09986335
UCK1	Valine, leucine and isoleu	MESO	0.07939967
UCK1	Valine, leucine and isoleu	MESO	0.071979498
UCK1	Vascular endothelial cell	MESO	-0.302809245
UCK1	Vascular smooth muscle c	MESO	-0.280359757
UCK1	Vegf_signaling_pathway	MESO	-0.308698334
UCK1	Vitamin b6 metabolism	MESO	0.286332245
UCK1	Willert_wnt_signaling	MESO	-0.310410409
UCK1	Wnt_beta_catenin_signali	MESO	0.008310079
UCK2	Abnormal plasma cell	MESO	0.364008614
UCK2	Activated b cell	MESO	0.077226434
UCK2	Activated cd4+ t cell	MESO	0.103342552
UCK2	Activated t cell	MESO	0.184645556
UCK2	Alanine, aspartate and glu	MESO	0.0331104
UCK2	Alcala_apoptosis	MESO	0.163788479
UCK2	Alpha-linolenic acid meta	MESO	-0.312371603
UCK2	Amino sugar and nucleoti	MESO	0.126507997
UCK2	Ampk_pathway	MESO	0.25082099
UCK2	Angiogenesis	MESO	0.373945555
UCK2	Arachidonic acid metabol	MESO	-0.340261041
UCK2	Arginine and proline metæ	MESO	0.047794461
UCK2	Arginine biosynthesis	MESO	0.252181933
UCK2	Ascorbate and aldarate mε	MESO	-0.095114643
UCK2	Atypical memory b cell	MESO	0.140278
UCK2	Axl+siglec6+ dendritic ce	MESO	-0.000867779
UCK2	B cell	MESO	0.037293487
UCK2	B1 cell	MESO	0.121929938
UCK2	Basal cell	MESO	0.180660512
UCK2	Beta-alanine metabolism	MESO	-0.375340087
UCK2	Biosynthesis of unsaturate	MESO	0.335750372
UCK2	Biotin metabolism	MESO	-0.216116707
UCK2	Butanoate metabolism	MESO	-0.385568864
UCK2	Caffeine metabolism	MESO	-0.035508411
UCK2	Cancer stem cell	MESO	0.284059962

UCK2	Cancer stem-like cell	MESO	0.227154527
UCK2	Cd4+ cytotoxic t cell	MESO	0.158162848
UCK2	Cd4+ memory t cell	MESO	0.096259929
UCK2	Cd4+ regulatory t cell	MESO	0.108486729
UCK2	Cd4+ t helper cell	MESO	0.063798144
UCK2	Cd4+cd25+ regulatory t c	MESO	0.09789536
UCK2	Cd8+ cytotoxic t cell	MESO	0.11527388
UCK2	Cd8+ regulatory t cell	MESO	0.144546719
UCK2	Cell_cycle	MESO	0.493450093
UCK2	Chandran_metastasis_top5	MESO	0.243786796
UCK2	Citrate cycle (tca cycle)	MESO	-0.056487177
UCK2	Cysteine and methionine r	MESO	0.025335951
UCK2	Cytokine induced killer c	MESO	0.128767758
UCK2	D-arginine and d-ornithin	MESO	-0.101855579
UCK2	D-glutamine and d-glutan	MESO	0.018491883
UCK2	Dendritic cell	MESO	0.126523284
UCK2	Dna_repair	MESO	0.169493164
UCK2	Dna_replication	MESO	0.342947898
UCK2	Double-negative memory	MESO	0.087030966
UCK2	Drug metabolism - cytoch	MESO	-0.308215274
UCK2	Drug metabolism - other c	MESO	0.180652562
UCK2	E2f_targets	MESO	0.521690943
UCK2	Ecm_receptor_interaction	MESO	0.402933657
UCK2	Effector cd4+ memory t (	MESO	0.052614383
UCK2	Effector cd8+ memory t (	MESO	0.192619847
UCK2	Effector memory t cell	MESO	0.081095153
UCK2	Effector regulatory t (treg	MESO	0.126706486
UCK2	Elvidge_hif1a_targets_up	MESO	0.418523226
UCK2	Endothelial cell	MESO	0.440606267
UCK2	Eosinophil	MESO	0.099388598
UCK2	Ether lipid metabolism	MESO	-0.305413584
UCK2	Exhausted cd4+ t cell	MESO	0.183533144
UCK2	Exhausted cd8+ t cell	MESO	0.15789577
UCK2	Exhausted t cell	MESO	0.082331526
UCK2	Fat cell (adipocyte)	MESO	0.07831921
UCK2	Fatty acid biosynthesis	MESO	-0.178774171
UCK2	Fatty acid degradation	MESO	-0.400668851
UCK2	Fatty acid elongation	MESO	0.177287108
UCK2	Fibroblast	MESO	0.345340594
UCK2	Folate biosynthesis	MESO	-0.072787679
UCK2	Follicular b cell	MESO	0.100409664
UCK2	Follicular dendritic cell	MESO	0.072811467
UCK2	Follicular helper (tfh) t ce	MESO	0.200033049

UCK2	Follicular t cell	MESO	0.111960755
UCK2	Foxp3+il-17+ t cell	MESO	0.161995137
UCK2	Fructose and mannose me	MESO	0.071214779
UCK2	G2m_checkpoint	MESO	0.541828877
UCK2	Galactose metabolism	MESO	0.105259283
UCK2	Galie_tumor_stemness_ge	MESO	0.092700856
UCK2	Glutathione metabolism	MESO	0.029419975
UCK2	Glycerolipid metabolism	MESO	0.305782778
UCK2	Glycerophospholipid metæ	MESO	0.035401069
UCK2	Glycine, serine and threor	MESO	0.146981561
UCK2	Glycolysis / gluconeogene	MESO	-0.145832167
UCK2	Glycosaminoglycan biosyn	MESO	0.349397149
UCK2	Glycosaminoglycan biosyn	MESO	0.164606117
UCK2	Glycosaminoglycan biosyn	MESO	0.311286532
UCK2	Glycosaminoglycan degra	MESO	0.115162844
UCK2	Glycosphingolipid biosyn	MESO	0.067530872
UCK2	Glycosphingolipid biosyn	MESO	-0.003326303
UCK2	Glycosphingolipid biosyn	MESO	0.197281787
UCK2	Glycosylphosphatidylinos	MESO	-0.190737518
UCK2	Glyoxylate and dicarboxy	MESO	-0.159083224
UCK2	Granulocyte	MESO	0.098471529
UCK2	Hedgehog_signaling	MESO	0.276396126
UCK2	Histidine metabolism	MESO	-0.311631616
UCK2	Hypoxia	MESO	0.293897821
UCK2	Il-17ralpha t cell	MESO	0.120837051
UCK2	Il2_stat5_signaling	MESO	0.370708978
UCK2	Il6_jak_stat3_signaling	MESO	0.08837986
UCK2	Immune_checkpoints_tun	MESO	0.116095445
UCK2	Immune_inhibition_cytok	MESO	0.116649119
UCK2	Inositol phosphate metabo	MESO	-0.113998992
UCK2	Interleukin_6_signaling	MESO	0.033919443
UCK2	Jaeger_metastasis_up	MESO	0.371087179
UCK2	Jain_nfkb_signaling	MESO	0.392302451
UCK2	Kras_signaling_up	MESO	0.203221047
UCK2	Linoleic acid metabolism	MESO	-0.378986822
UCK2	Lipoic acid metabolism	MESO	-0.426312526
UCK2	Lysine degradation	MESO	-0.109218393
UCK2	Lysosome	MESO	-0.019803637
UCK2	M1 macrophage	MESO	0.050381178
UCK2	M2 macrophage	MESO	0.09871802
UCK2	Mannose type o-glycan bi	MESO	0.448658566
UCK2	Mapk_signaling_pathway	MESO	0.361347625
UCK2	Mapk3_erk1_activation	MESO	0.066855311

UCK2	Marginal zone b cell	MESO	-0.013632876
UCK2	Memory b cell	MESO	-0.053219301
UCK2	Mesenchymal cell	MESO	0.492305432
UCK2	Mesenchymal stem cell	MESO	0.373276094
UCK2	Metabolism of xenobiotics	MESO	-0.272222455
UCK2	Migrating cancer stem cell	MESO	-0.07166529
UCK2	Mitotic_spindle	MESO	0.332699263
UCK2	Monocyte	MESO	0.082422295
UCK2	Mtor_signaling_pathway	MESO	-0.046879993
UCK2	Mtorc1_signaling	MESO	0.4600603
UCK2	Mucin type o-glycan biosynthesis	MESO	-0.044562157
UCK2	Myc_targets_v1	MESO	0.493531019
UCK2	Myeloid cell	MESO	0.109633613
UCK2	N-glycan biosynthesis	MESO	0.022157574
UCK2	Naive b cell	MESO	0.243792924
UCK2	Naive cd4+ t cell	MESO	0.031591438
UCK2	Naive cd8+ t cell	MESO	-0.069911634
UCK2	Natural killer cell	MESO	0.08937982
UCK2	Natural killer t (nkt) cell	MESO	0.192560695
UCK2	Natural regulatory t (treg) cell	MESO	0.104715529
UCK2	Neomycin, kanamycin and streptomycin	MESO	0.336056982
UCK2	Neutrophil	MESO	0.135660872
UCK2	Nicotinate and nicotinamide	MESO	0.080591665
UCK2	Nitrogen metabolism	MESO	0.078819895
UCK2	Nod_like_receptor_signaling	MESO	-0.012740572
UCK2	Notch_signaling	MESO	0.201352681
UCK2	One carbon pool by folate	MESO	0.299765075
UCK2	Other glycan degradation	MESO	-0.352503929
UCK2	Other types of o-glycan biosynthesis	MESO	0.15229447
UCK2	Oxidative phosphorylation	MESO	-0.018758263
UCK2	P53_pathway	MESO	0.047555334
UCK2	P53_signaling_pathway	MESO	0.264498876
UCK2	Pantothenate and coa biosynthesis	MESO	-0.263132093
UCK2	Pentose and glucuronate interconversions	MESO	0.093189257
UCK2	Pentose phosphate pathway	MESO	0.102965755
UCK2	Pericyte	MESO	0.402509418
UCK2	Phenylalanine metabolism	MESO	-0.101722061
UCK2	Phenylalanine, tyrosine and tryptophan	MESO	-0.089853872
UCK2	Phosphonate and phosphite	MESO	0.073473831
UCK2	Pi3k_akt_activation	MESO	0.058342574
UCK2	Pi3k_akt_mtor_signaling	MESO	0.316271145
UCK2	Porphyrin and chlorophyll biosynthesis	MESO	0.130070311
UCK2	Primary bile acid biosynthesis	MESO	-0.350689636

UCK2	Propanoate metabolism	MESO	-0.362797259
UCK2	Purine metabolism	MESO	0.563672675
UCK2	Pyrimidine metabolism	MESO	0.421839084
UCK2	Pyruvate metabolism	MESO	-0.173616805
UCK2	Regulation_of_autophagy	MESO	-0.09022624
UCK2	Retinol metabolism	MESO	-0.370696846
UCK2	Riboflavin metabolism	MESO	0.214557704
UCK2	Schmahl_pdgf_signaling	MESO	0.109519192
UCK2	Selenocompound metabol	MESO	0.116310866
UCK2	Signaling_by_hippo	MESO	-0.094592478
UCK2	Sphingolipid metabolism	MESO	-0.048917434
UCK2	Starch and sucrose metabo	MESO	-0.072423821
UCK2	Steroid biosynthesis	MESO	0.296536121
UCK2	Steroid hormone biosynth	MESO	-0.187830651
UCK2	Sulfur metabolism	MESO	-0.345334739
UCK2	Synthesis and degradation	MESO	-0.083759207
UCK2	T helper cell	MESO	0.129280756
UCK2	T helper1 (th1) cell	MESO	-0.000711321
UCK2	T helper17 (th17) cell	MESO	0.088838792
UCK2	T helper2 (th2) cell	MESO	0.120696202
UCK2	T helper9 (th9) cell	MESO	0.061693459
UCK2	Taurine and hypotaurine r	MESO	-0.248857013
UCK2	Terpenoid backbone biosy	MESO	0.217457539
UCK2	Tgf_beta_signaling_pathw	MESO	0.225474665
UCK2	Thiamine metabolism	MESO	-0.179147051
UCK2	Tnfa_signaling_via_nfbk	MESO	0.206267291
UCK2	Tryptophan metabolism	MESO	-0.193999653
UCK2	Tumor endothelial cell	MESO	0.41733172
UCK2	Tyrosine metabolism	MESO	-0.345011593
UCK2	Ubiquinone and other terf	MESO	-0.184163424
UCK2	Valine, leucine and isoleu	MESO	0.098187612
UCK2	Valine, leucine and isoleu	MESO	-0.387601699
UCK2	Vascular endothelial cell	MESO	0.359621861
UCK2	Vascular smooth muscle c	MESO	0.394023242
UCK2	Vegf_signaling_pathway	MESO	0.276031536
UCK2	Vitamin b6 metabolism	MESO	-0.093592124
UCK2	Willert_wnt_signaling	MESO	0.468561589
UCK2	Wnt_beta_catenin_signali	MESO	0.278795717
UCKL1	Abnormal plasma cell	MESO	0.15016443
UCKL1	Activated b cell	MESO	-0.021029045
UCKL1	Activated cd4+ t cell	MESO	-0.10417097
UCKL1	Activated t cell	MESO	-0.000246901
UCKL1	Alanine, aspartate and glu	MESO	-0.096015326

UCKL1	Alcala_apoptosis	MESO	0.221404608
UCKL1	Alpha-linolenic acid meta	MESO	0.182090974
UCKL1	Amino sugar and nucleoti	MESO	-0.110175206
UCKL1	Ampk_pathway	MESO	0.036386226
UCKL1	Angiogenesis	MESO	-0.261143075
UCKL1	Arachidonic acid metabol	MESO	0.247113116
UCKL1	Arginine and proline metε	MESO	-0.005521142
UCKL1	Arginine biosynthesis	MESO	-0.022176997
UCKL1	Ascorbate and aldarate mε	MESO	-0.075301885
UCKL1	Atypical memory b cell	MESO	-0.004830326
UCKL1	Axl+siglec6+ dendritic ce	MESO	-0.152688912
UCKL1	B cell	MESO	-0.087412081
UCKL1	B1 cell	MESO	0.014813737
UCKL1	Basal cell	MESO	0.156753108
UCKL1	Beta-alanine metabolism	MESO	0.011971729
UCKL1	Biosynthesis of unsaturate	MESO	-0.043612501
UCKL1	Biotin metabolism	MESO	0.052618985
UCKL1	Butanoate metabolism	MESO	0.290625718
UCKL1	Caffeine metabolism	MESO	-0.092153991
UCKL1	Cancer stem cell	MESO	-0.236670042
UCKL1	Cancer stem-like cell	MESO	-0.035702919
UCKL1	Cd4+ cytotoxic t cell	MESO	0.001960173
UCKL1	Cd4+ memory t cell	MESO	-0.030796518
UCKL1	Cd4+ regulatory t cell	MESO	-0.012169541
UCKL1	Cd4+ t helper cell	MESO	0.012128462
UCKL1	Cd4+cd25+ regulatory t c	MESO	0.013737686
UCKL1	Cd8+ cytotoxic t cell	MESO	0.12129968
UCKL1	Cd8+ regulatory t cell	MESO	0.003438034
UCKL1	Cell_cycle	MESO	0.000593877
UCKL1	Chandran_metastasis_topε	MESO	-0.29686628
UCKL1	Citrate cycle (tca cycle)	MESO	0.014378717
UCKL1	Cysteine and methionine r	MESO	-0.08193181
UCKL1	Cytokine induced killer cε	MESO	0.174930318
UCKL1	D-arginine and d-ornithin	MESO	0.050912531
UCKL1	D-glutamine and d-glutan	MESO	-0.332936071
UCKL1	Dendritic cell	MESO	-0.101432703
UCKL1	Dna_repair	MESO	0.410674852
UCKL1	Dna_replication	MESO	0.212625173
UCKL1	Double-negative memory	MESO	0.0415226
UCKL1	Drug metabolism - cytoch	MESO	-0.025176889
UCKL1	Drug metabolism - other ε	MESO	0.229557869
UCKL1	E2f_targets	MESO	0.057092759
UCKL1	Ecm_receptor_interaction	MESO	-0.28802903

UCKL1	Effector cd4+ memory t (MESO	-0.139223299
UCKL1	Effector cd8+ memory t (MESO	-0.124986463
UCKL1	Effector memory t cell MESO	-0.057634936
UCKL1	Effector regulatory t (treg MESO	-0.11730779
UCKL1	Elvidge_hif1a_targets_up MESO	-0.331969701
UCKL1	Endothelial cell MESO	-0.221460268
UCKL1	Eosinophil MESO	-0.069012283
UCKL1	Ether lipid metabolism MESO	0.090737734
UCKL1	Exhausted cd4+ t cell MESO	-0.048115675
UCKL1	Exhausted cd8+ t cell MESO	-0.018315148
UCKL1	Exhausted t cell MESO	0.135827055
UCKL1	Fat cell (adipocyte) MESO	-0.026131401
UCKL1	Fatty acid biosynthesis MESO	-0.287001973
UCKL1	Fatty acid degradation MESO	-0.034557148
UCKL1	Fatty acid elongation MESO	0.059783844
UCKL1	Fibroblast MESO	-0.252009118
UCKL1	Folate biosynthesis MESO	0.233337074
UCKL1	Follicular b cell MESO	-0.104463972
UCKL1	Follicular dendritic cell MESO	-0.175166355
UCKL1	Follicular helper (tfh) t ce MESO	0.013117929
UCKL1	Follicular t cell MESO	0.29256411
UCKL1	Foxp3+il-17+ t cell MESO	0.052292197
UCKL1	Fructose and mannose me MESO	0.176882553
UCKL1	G2m_checkpoint MESO	-0.050519665
UCKL1	Galactose metabolism MESO	-0.035331299
UCKL1	Galie_tumor_stemness_ge MESO	-0.317381529
UCKL1	Glutathione metabolism MESO	0.20362833
UCKL1	Glycerolipid metabolism MESO	-0.006267031
UCKL1	Glycerophospholipid met& MESO	0.079783154
UCKL1	Glycine, serine and threor MESO	0.075855551
UCKL1	Glycolysis / gluconeogene MESO	-0.015379614
UCKL1	Glycosaminoglycan biosy MESO	-0.173267571
UCKL1	Glycosaminoglycan biosy MESO	-0.038862793
UCKL1	Glycosaminoglycan biosy MESO	-0.26969545
UCKL1	Glycosaminoglycan degra MESO	-0.196788396
UCKL1	Glycosphingolipid biosyn MESO	-0.195641829
UCKL1	Glycosphingolipid biosyn MESO	-0.227898265
UCKL1	Glycosphingolipid biosyn MESO	-0.057822279
UCKL1	Glycosylphosphatidylinos: MESO	0.001575969
UCKL1	Glyoxylate and dicarboxy MESO	0.069604344
UCKL1	Granulocyte MESO	-0.12182876
UCKL1	Hedgehog_signaling MESO	-0.22513943
UCKL1	Histidine metabolism MESO	-0.033663656

UCKL1	Hypoxia	MESO	-0.094896072
UCKL1	Il-17alpha t cell	MESO	0.055722533
UCKL1	Il2_stat5_signaling	MESO	-0.140245577
UCKL1	Il6_jak_stat3_signaling	MESO	-0.18609094
UCKL1	Immune_checkpoints_tun	MESO	-0.025963146
UCKL1	Immune_inhibition_cytok	MESO	-0.008610656
UCKL1	Inositol_phosphate_metabc	MESO	-0.451750269
UCKL1	Interleukin_6_signaling	MESO	-0.486946564
UCKL1	Jaeger_metastasis_up	MESO	-0.139362411
UCKL1	Jain_nfkb_signaling	MESO	-0.100114465
UCKL1	Kras_signaling_up	MESO	-0.275771658
UCKL1	Linoleic acid metabolism	MESO	0.167847215
UCKL1	Lipoic acid metabolism	MESO	0.118464109
UCKL1	Lysine degradation	MESO	-0.142281478
UCKL1	Lysosome	MESO	-0.146639792
UCKL1	M1 macrophage	MESO	-0.048371839
UCKL1	M2 macrophage	MESO	-0.110871585
UCKL1	Mannose type o-glycan bi	MESO	-0.135193883
UCKL1	Mapk_signaling_pathway	MESO	-0.203793327
UCKL1	Mapk3_erk1_activation	MESO	-0.410944742
UCKL1	Marginal zone b cell	MESO	-0.183969536
UCKL1	Memory b cell	MESO	-0.08665299
UCKL1	Mesenchymal cell	MESO	-0.063168617
UCKL1	Mesenchymal stem cell	MESO	-0.217332992
UCKL1	Metabolism of xenobiotic	MESO	0.125444279
UCKL1	Migrating cancer stem cel	MESO	-0.115227925
UCKL1	Mitotic_spindle	MESO	-0.293935485
UCKL1	Monocyte	MESO	-0.095546059
UCKL1	Mtor_signaling_pathway	MESO	-0.415564252
UCKL1	Mtorc1_signaling	MESO	-0.097054593
UCKL1	Mucin type o-glycan biosy	MESO	-0.525645603
UCKL1	Myc_targets_v1	MESO	0.243109765
UCKL1	Myeloid cell	MESO	-0.117209261
UCKL1	N-glycan biosynthesis	MESO	-0.319010419
UCKL1	Naive b cell	MESO	0.034401388
UCKL1	Naive cd4+ t cell	MESO	-0.149998575
UCKL1	Naive cd8+ t cell	MESO	-0.091448096
UCKL1	Natural killer cell	MESO	0.005064139
UCKL1	Natural killer t (nkt) cell	MESO	0.075143298
UCKL1	Natural regulatory t (treg)	MESO	-0.05242179
UCKL1	Neomycin, kanamycin an	MESO	-0.152342821
UCKL1	Neutrophil	MESO	-0.075801199
UCKL1	Nicotinate and nicotinami	MESO	-0.149050979

UCKL1	Nitrogen metabolism	MESO	0.012280524
UCKL1	Nod_like_receptor_signal	MESO	-0.259929741
UCKL1	Notch_signaling	MESO	-0.078313847
UCKL1	One carbon pool by folate	MESO	0.121376038
UCKL1	Other glycan degradation	MESO	-0.160244298
UCKL1	Other types of o-glycan b	MESO	-0.219879775
UCKL1	Oxidative phosphorylatio	MESO	0.308218009
UCKL1	P53_pathway	MESO	0.088454064
UCKL1	P53_signaling_pathway	MESO	-0.073714506
UCKL1	Pantothenate and coa bios	MESO	0.091599221
UCKL1	Pentose and glucuronate in	MESO	0.019007449
UCKL1	Pentose phosphate pathwa	MESO	0.148362988
UCKL1	Pericyte	MESO	-0.069231537
UCKL1	Phenylalanine metabolism	MESO	-0.009663622
UCKL1	Phenylalanine, tyrosine ar	MESO	0.148419399
UCKL1	Phosphonate and phosphir	MESO	-0.033892366
UCKL1	Pi3k_akt_activation	MESO	-0.251395915
UCKL1	Pi3k_akt_mtor_signaling	MESO	-0.124101616
UCKL1	Porphyrin and chlorophyl	MESO	0.003589024
UCKL1	Primary bile acid biosynt	MESO	-0.147773346
UCKL1	Propanoate metabolism	MESO	-0.136333133
UCKL1	Purine metabolism	MESO	0.196399011
UCKL1	Pyrimidine metabolism	MESO	0.260922252
UCKL1	Pyruvate metabolism	MESO	0.05202165
UCKL1	Regulation_of_autophagy	MESO	0.025342332
UCKL1	Retinol metabolism	MESO	0.069274243
UCKL1	Riboflavin metabolism	MESO	0.26927898
UCKL1	Schmahl_pdgf_signaling	MESO	-0.335005449
UCKL1	Selenocompound metabol	MESO	-0.378363521
UCKL1	Signaling_by_hippo	MESO	-0.274703771
UCKL1	Sphingolipid metabolism	MESO	-0.427240352
UCKL1	Starch and sucrose metabo	MESO	-0.090745093
UCKL1	Steroid biosynthesis	MESO	-0.00726774
UCKL1	Steroid hormone biosynth	MESO	0.063259289
UCKL1	Sulfur metabolism	MESO	0.028776555
UCKL1	Synthesis and degradation	MESO	0.32693646
UCKL1	T helper cell	MESO	-0.040722807
UCKL1	T helper1 (th1) cell	MESO	0.005928841
UCKL1	T helper17 (th17) cell	MESO	-0.141359976
UCKL1	T helper2 (th2) cell	MESO	-0.079116995
UCKL1	T helper9 (th9) cell	MESO	0.071521879
UCKL1	Taurine and hypotaurine r	MESO	0.261336325
UCKL1	Terpenoid backbone biosy	MESO	0.150541489

UCKL1	Tgf_beta_signaling_pathw	MESO	-0.219975321
UCKL1	Thiamine metabolism	MESO	0.221078776
UCKL1	Tnfa_signaling_via_nfkb	MESO	-0.195553197
UCKL1	Tryptophan metabolism	MESO	0.003223211
UCKL1	Tumor endothelial cell	MESO	-0.098373992
UCKL1	Tyrosine metabolism	MESO	0.078126559
UCKL1	Ubiquinone and other terf	MESO	0.12748636
UCKL1	Valine, leucine and isoleu	MESO	0.099175674
UCKL1	Valine, leucine and isoleu	MESO	0.016408323
UCKL1	Vascular endothelial cell	MESO	-0.119133075
UCKL1	Vascular smooth muscle c	MESO	-0.159388044
UCKL1	Vegf_signaling_pathway	MESO	-0.059633167
UCKL1	Vitamin b6 metabolism	MESO	0.030116151
UCKL1	Willert_wnt_signaling	MESO	0.041064485
UCKL1	Wnt_beta_catenin_signali	MESO	-0.009269374
UPP1	Abnormal plasma cell	MESO	0.274864157
UPP1	Activated b cell	MESO	0.333586781
UPP1	Activated cd4+ t cell	MESO	0.334779212
UPP1	Activated t cell	MESO	0.385961272
UPP1	Alanine, aspartate and glu	MESO	0.141744806
UPP1	Alcala_apoptosis	MESO	0.245086528
UPP1	Alpha-linolenic acid meta	MESO	0.20628219
UPP1	Amino sugar and nucleoti	MESO	0.440976635
UPP1	Ampk_pathway	MESO	-0.165056882
UPP1	Angiogenesis	MESO	0.343098281
UPP1	Arachidonic acid metaboli	MESO	0.274784402
UPP1	Arginine and proline met	MESO	0.376135828
UPP1	Arginine biosynthesis	MESO	0.351483816
UPP1	Ascorbate and aldarate m	MESO	0.058598087
UPP1	Atypical memory b cell	MESO	0.229446891
UPP1	Axl+siglec6+ dendritic ce	MESO	0.294305121
UPP1	B cell	MESO	0.287531941
UPP1	B1 cell	MESO	0.308513941
UPP1	Basal cell	MESO	0.490493559
UPP1	Beta-alanine metabolism	MESO	-0.050009791
UPP1	Biosynthesis of unsaturate	MESO	0.318415145
UPP1	Biotin metabolism	MESO	-0.051089131
UPP1	Butanoate metabolism	MESO	0.065479226
UPP1	Caffeine metabolism	MESO	-0.067055241
UPP1	Cancer stem cell	MESO	0.206482552
UPP1	Cancer stem-like cell	MESO	0.136279952
UPP1	Cd4+ cytotoxic t cell	MESO	0.47079328
UPP1	Cd4+ memory t cell	MESO	0.294517304

UPP1	Cd4+ regulatory t cell	MESO	0.31475176
UPP1	Cd4+ t helper cell	MESO	0.280779112
UPP1	Cd4+cd25+ regulatory t c	MESO	0.312294275
UPP1	Cd8+ cytotoxic t cell	MESO	0.37883793
UPP1	Cd8+ regulatory t cell	MESO	0.368801386
UPP1	Cell_cycle	MESO	0.160031034
UPP1	Chandran_metastasis_top	MESO	-0.181601965
UPP1	Citrate cycle (tca cycle)	MESO	-0.005352749
UPP1	Cysteine and methionine r	MESO	0.210774751
UPP1	Cytokine induced killer c	MESO	0.177652759
UPP1	D-arginine and d-ornithin	MESO	-0.015874993
UPP1	D-glutamine and d-glutan	MESO	-0.225499677
UPP1	Dendritic cell	MESO	0.401090938
UPP1	Dna_repair	MESO	0.210209833
UPP1	Dna_replication	MESO	0.174592306
UPP1	Double-negative memory	MESO	0.233784932
UPP1	Drug metabolism - cytoch	MESO	0.043528163
UPP1	Drug metabolism - other	MESO	0.381537134
UPP1	E2f_targets	MESO	0.158894472
UPP1	Ecm_receptor_interaction	MESO	0.159850901
UPP1	Effector cd4+ memory t (	MESO	0.223307909
UPP1	Effector cd8+ memory t (	MESO	0.494470785
UPP1	Effector memory t cell	MESO	0.283143045
UPP1	Effector regulatory t (treg	MESO	0.251830579
UPP1	Elvidge_hif1a_targets_up	MESO	0.18507747
UPP1	Endothelial cell	MESO	0.217241802
UPP1	Eosinophil	MESO	0.453657354
UPP1	Ether lipid metabolism	MESO	0.225718407
UPP1	Exhausted cd4+ t cell	MESO	0.36128975
UPP1	Exhausted cd8+ t cell	MESO	0.409516046
UPP1	Exhausted t cell	MESO	0.342271741
UPP1	Fat cell (adipocyte)	MESO	0.215780189
UPP1	Fatty acid biosynthesis	MESO	0.024213191
UPP1	Fatty acid degradation	MESO	-0.142347283
UPP1	Fatty acid elongation	MESO	0.163197681
UPP1	Fibroblast	MESO	0.217657073
UPP1	Folate biosynthesis	MESO	0.306079567
UPP1	Follicular b cell	MESO	0.245483974
UPP1	Follicular dendritic cell	MESO	0.255721749
UPP1	Follicular helper (tfh) t ce	MESO	0.423051544
UPP1	Follicular t cell	MESO	0.347141578
UPP1	Foxp3+il-17+ t cell	MESO	0.201100561
UPP1	Fructose and mannose me	MESO	0.444443002

UPP1	G2m_checkpoint	MESO	0.109373391
UPP1	Galactose metabolism	MESO	0.558454827
UPP1	Galie_tumor_stemness_ge	MESO	-0.287220724
UPP1	Glutathione metabolism	MESO	0.46783752
UPP1	Glycerolipid metabolism	MESO	0.596316221
UPP1	Glycerophospholipid met&	MESO	0.449422197
UPP1	Glycine, serine and threor	MESO	0.312594634
UPP1	Glycolysis / gluconeogene	MESO	0.221533266
UPP1	Glycosaminoglycan biosy	MESO	0.217070645
UPP1	Glycosaminoglycan biosy	MESO	-0.06084276
UPP1	Glycosaminoglycan biosy	MESO	0.260657252
UPP1	Glycosaminoglycan degra	MESO	0.225441629
UPP1	Glycosphingolipid biosyn	MESO	0.388363595
UPP1	Glycosphingolipid biosyn	MESO	0.333087285
UPP1	Glycosphingolipid biosyn	MESO	0.220242471
UPP1	Glycosylphosphatidylinos	MESO	-0.063993602
UPP1	Glyoxylate and dicarboxy	MESO	0.079320823
UPP1	Granulocyte	MESO	0.390670635
UPP1	Hedgehog_signaling	MESO	-0.092976809
UPP1	Histidine metabolism	MESO	-0.033576052
UPP1	Hypoxia	MESO	0.571273326
UPP1	Il-17alpha t cell	MESO	0.329340916
UPP1	Il2_stat5_signaling	MESO	0.500571902
UPP1	Il6_jak_stat3_signaling	MESO	0.413876844
UPP1	Immune_checkpoints_tun	MESO	0.377386028
UPP1	Immune_inhibition_cytok	MESO	0.50964602
UPP1	Inositol phosphate metabo	MESO	-0.242866335
UPP1	Interleukin_6_signaling	MESO	-0.060137714
UPP1	Jaeger_metastasis_up	MESO	0.335013509
UPP1	Jain_nfkb_signaling	MESO	0.129469272
UPP1	Kras_signaling_up	MESO	0.360524276
UPP1	Linoleic acid metabolism	MESO	0.083292532
UPP1	Lipoic acid metabolism	MESO	-0.21832635
UPP1	Lysine degradation	MESO	-0.374324771
UPP1	Lysosome	MESO	0.41562971
UPP1	M1 macrophage	MESO	0.422908576
UPP1	M2 macrophage	MESO	0.420840236
UPP1	Mannose type o-glycan bi	MESO	0.121171031
UPP1	Mapk_signaling_pathway	MESO	0.320757926
UPP1	Mapk3_erk1_activation	MESO	-0.039923121
UPP1	Marginal zone b cell	MESO	0.136059545
UPP1	Memory b cell	MESO	0.143168847
UPP1	Mesenchymal cell	MESO	0.254241192

UPP1	Mesenchymal stem cell	MESO	0.313789088
UPP1	Metabolism of xenobiotic	MESO	0.099785975
UPP1	Migrating cancer stem cel	MESO	-0.006036955
UPP1	Mitotic_spindle	MESO	-0.11873714
UPP1	Monocyte	MESO	0.535498753
UPP1	Mtor_signaling_pathway	MESO	-0.164272878
UPP1	Mtorc1_signaling	MESO	0.507121848
UPP1	Mucin type o-glycan bios	MESO	0.022553657
UPP1	Myc_targets_v1	MESO	0.254546874
UPP1	Myeloid cell	MESO	0.38111251
UPP1	N-glycan biosynthesis	MESO	0.044112785
UPP1	Naive b cell	MESO	0.355984507
UPP1	Naive cd4+ t cell	MESO	-0.007694276
UPP1	Naive cd8+ t cell	MESO	-0.135077994
UPP1	Natural killer cell	MESO	0.417735254
UPP1	Natural killer t (nkt) cell	MESO	0.354419547
UPP1	Natural regulatory t (treg)	MESO	0.356405466
UPP1	Neomycin, kanamycin an	MESO	0.576728565
UPP1	Neutrophil	MESO	0.589775134
UPP1	Nicotinate and nicotinami	MESO	0.271413667
UPP1	Nitrogen metabolism	MESO	0.095346122
UPP1	Nod_like_receptor_signal	MESO	0.273943019
UPP1	Notch_signaling	MESO	0.135380205
UPP1	One carbon pool by folate	MESO	0.086452136
UPP1	Other glycan degradation	MESO	0.097439594
UPP1	Other types of o-glycan b	MESO	0.027790979
UPP1	Oxidative phosphorylatio	MESO	0.267247639
UPP1	P53_pathway	MESO	0.510667686
UPP1	P53_signaling_pathway	MESO	0.205057193
UPP1	Pantothenate and coa bios	MESO	0.138521055
UPP1	Pentose and glucuronate i	MESO	0.256784389
UPP1	Pentose phosphate pathwa	MESO	0.440994044
UPP1	Pericyte	MESO	0.256359398
UPP1	Phenylalanine metabolism	MESO	0.343266299
UPP1	Phenylalanine, tyrosine ar	MESO	0.240292108
UPP1	Phosphonate and phosphir	MESO	0.38206071
UPP1	Pi3k_akt_activation	MESO	-0.294150325
UPP1	Pi3k_akt_mtor_signaling	MESO	0.280408217
UPP1	Porphyrin and chlorophyl	MESO	0.291691448
UPP1	Primary bile acid biosynt	MESO	-0.100527159
UPP1	Propanoate metabolism	MESO	-0.280822214
UPP1	Purine metabolism	MESO	0.249153132
UPP1	Pyrimidine metabolism	MESO	0.267376499

UPP1	Pyruvate metabolism	MESO	0.016960937
UPP1	Regulation_of_autophagy	MESO	-0.038676942
UPP1	Retinol metabolism	MESO	0.025533081
UPP1	Riboflavin metabolism	MESO	0.342781537
UPP1	Schmahl_pdgf_signaling	MESO	0.068009744
UPP1	Selenocompound metabol	MESO	-0.027894259
UPP1	Signaling_by_hippo	MESO	-0.217230972
UPP1	Sphingolipid metabolism	MESO	0.238278302
UPP1	Starch and sucrose metabo	MESO	0.371061337
UPP1	Steroid biosynthesis	MESO	0.439390771
UPP1	Steroid hormone biosynth	MESO	0.143340273
UPP1	Sulfur metabolism	MESO	-0.101826149
UPP1	Synthesis and degradation	MESO	0.318948322
UPP1	T helper cell	MESO	0.35851889
UPP1	T helper1 (th1) cell	MESO	0.387720727
UPP1	T helper17 (th17) cell	MESO	0.416964233
UPP1	T helper2 (th2) cell	MESO	0.42074389
UPP1	T helper9 (th9) cell	MESO	0.335261462
UPP1	Taurine and hypotaurine r	MESO	-0.11579969
UPP1	Terpenoid backbone biosy	MESO	0.231883209
UPP1	Tgf_beta_signaling_pathw	MESO	-0.122632999
UPP1	Thiamine metabolism	MESO	0.076953409
UPP1	Tnfa_signaling_via_nfk	MESO	0.444990054
UPP1	Tryptophan metabolism	MESO	0.171787501
UPP1	Tumor endothelial cell	MESO	0.315035105
UPP1	Tyrosine metabolism	MESO	0.087543227
UPP1	Ubiquinone and other ter	MESO	0.054973269
UPP1	Valine, leucine and isoleu	MESO	0.491389278
UPP1	Valine, leucine and isoleu	MESO	-0.152827859
UPP1	Vascular endothelial cell	MESO	0.241767167
UPP1	Vascular smooth muscle c	MESO	0.23917403
UPP1	Vegf_signaling_pathway	MESO	0.370226838
UPP1	Vitamin b6 metabolism	MESO	0.031898531
UPP1	Willert_wnt_signaling	MESO	0.350788755
UPP1	Wnt_beta_catenin_signali	MESO	-0.021360336
UPP2	Abnormal plasma cell	MESO	-0.14920227
UPP2	Activated b cell	MESO	-0.058284393
UPP2	Activated cd4+ t cell	MESO	-0.094042775
UPP2	Activated t cell	MESO	-0.097617293
UPP2	Alanine, aspartate and glu	MESO	-0.143761327
UPP2	Alcala_apoptosis	MESO	-0.165284837
UPP2	Alpha-linolenic acid meta	MESO	0.030436007
UPP2	Amino sugar and nucleoti	MESO	-0.14123226

UPP2	Ampk_pathway	MESO	-0.040591832
UPP2	Angiogenesis	MESO	-0.254710683
UPP2	Arachidonic acid metabolism	MESO	0.094200485
UPP2	Arginine and proline metabolism	MESO	-0.211458359
UPP2	Arginine biosynthesis	MESO	-0.243026743
UPP2	Ascorbate and aldarate metabolism	MESO	-0.105560564
UPP2	Atypical memory B cell	MESO	-0.140645216
UPP2	Axl+siglec6+ dendritic cell	MESO	-0.105131119
UPP2	B cell	MESO	-0.058715981
UPP2	B1 cell	MESO	-0.044624088
UPP2	Basal cell	MESO	-0.248533814
UPP2	Beta-alanine metabolism	MESO	0.119783379
UPP2	Biosynthesis of unsaturated fatty acids	MESO	-0.355189167
UPP2	Biotin metabolism	MESO	-0.039469517
UPP2	Butanoate metabolism	MESO	0.124951619
UPP2	Caffeine metabolism	MESO	-0.019733919
UPP2	Cancer stem cell	MESO	-0.229346522
UPP2	Cancer stem-like cell	MESO	-0.111642485
UPP2	Cd4+ cytotoxic T cell	MESO	-0.062583569
UPP2	Cd4+ memory T cell	MESO	-0.13015553
UPP2	Cd4+ regulatory T cell	MESO	-0.01947323
UPP2	Cd4+ T helper cell	MESO	-0.021293274
UPP2	Cd4+cd25+ regulatory T cell	MESO	-0.029492876
UPP2	Cd8+ cytotoxic T cell	MESO	-0.038653345
UPP2	Cd8+ regulatory T cell	MESO	-0.075735514
UPP2	Cell cycle	MESO	-0.157528139
UPP2	Chandran_metastasis_top5	MESO	-0.102737707
UPP2	Citrate cycle (TCA cycle)	MESO	-0.142639378
UPP2	Cysteine and methionine metabolism	MESO	-0.130301849
UPP2	Cytokine induced killer cell	MESO	-0.041836523
UPP2	D-arginine and D-ornithine	MESO	0.062981636
UPP2	D-glutamine and D-glutamate	MESO	-0.201110359
UPP2	Dendritic cell	MESO	-0.151103479
UPP2	DNA repair	MESO	-0.065701043
UPP2	DNA replication	MESO	-0.192447798
UPP2	Double-negative memory T cell	MESO	-0.0471405
UPP2	Drug metabolism - cytochrome P450	MESO	-0.000312894
UPP2	Drug metabolism - other	MESO	-0.041456723
UPP2	E2f targets	MESO	-0.203469943
UPP2	ECM receptor interaction	MESO	-0.194786827
UPP2	Effector CD4+ memory T cell	MESO	-0.08860191
UPP2	Effector CD8+ memory T cell	MESO	-0.131737333
UPP2	Effector memory T cell	MESO	-0.061267149

UPP2	Effector regulatory t (treg)	MESO	-0.050050139
UPP2	Elvidge_hif1a_targets_up	MESO	-0.417306362
UPP2	Endothelial cell	MESO	-0.208673365
UPP2	Eosinophil	MESO	-0.13537017
UPP2	Ether lipid metabolism	MESO	0.088126928
UPP2	Exhausted cd4+ t cell	MESO	-0.062325702
UPP2	Exhausted cd8+ t cell	MESO	-0.059994622
UPP2	Exhausted t cell	MESO	0.005024168
UPP2	Fat cell (adipocyte)	MESO	-0.212779041
UPP2	Fatty acid biosynthesis	MESO	-0.012795926
UPP2	Fatty acid degradation	MESO	0.024856382
UPP2	Fatty acid elongation	MESO	-0.186609615
UPP2	Fibroblast	MESO	-0.109057897
UPP2	Folate biosynthesis	MESO	-0.07523309
UPP2	Follicular b cell	MESO	-0.115902366
UPP2	Follicular dendritic cell	MESO	-0.167839175
UPP2	Follicular helper (tfh) t ce	MESO	-0.106976086
UPP2	Follicular t cell	MESO	0.148439688
UPP2	Foxp3+il-17+ t cell	MESO	0.01701935
UPP2	Fructose and mannose me	MESO	-0.156352965
UPP2	G2m_checkpoint	MESO	-0.222951419
UPP2	Galactose metabolism	MESO	-0.237128331
UPP2	Galie_tumor_stemness_ge	MESO	-0.138254382
UPP2	Glutathione metabolism	MESO	-0.021034509
UPP2	Glycerolipid metabolism	MESO	-0.257835435
UPP2	Glycerophospholipid metæ	MESO	0.013532245
UPP2	Glycine, serine and threor	MESO	-0.165014724
UPP2	Glycolysis / gluconeogene	MESO	-0.163039667
UPP2	Glycosaminoglycan biosy	MESO	-0.100897959
UPP2	Glycosaminoglycan biosy	MESO	-0.052646674
UPP2	Glycosaminoglycan biosy	MESO	-0.204159686
UPP2	Glycosaminoglycan degra	MESO	-0.185986977
UPP2	Glycosphingolipid biosyn	MESO	-0.012337796
UPP2	Glycosphingolipid biosyn	MESO	-0.120029189
UPP2	Glycosphingolipid biosyn	MESO	-0.025193139
UPP2	Glycosylphosphatidylinos	MESO	-0.12302397
UPP2	Glyoxylate and dicarboxy	MESO	-0.028786989
UPP2	Granulocyte	MESO	-0.122136989
UPP2	Hedgehog_signaling	MESO	-0.103154715
UPP2	Histidine metabolism	MESO	0.019760688
UPP2	Hypoxia	MESO	-0.226610358
UPP2	Il-17ralpha t cell	MESO	-0.074224095
UPP2	Il2_stat5_signaling	MESO	-0.239782983

UPP2	Il6_jak_stat3_signaling	MESO	-0.218761249
UPP2	Immune_checkpoints_tun	MESO	-0.213367167
UPP2	Immune_inhibition_cytok	MESO	-0.115831513
UPP2	Inositol phosphate metabo	MESO	-0.093605467
UPP2	Interleukin_6_signaling	MESO	-0.183231923
UPP2	Jaeger_metastasis_up	MESO	-0.097665052
UPP2	Jain_nfkb_signaling	MESO	-0.141295433
UPP2	Kras_signaling_up	MESO	-0.260621789
UPP2	Linoleic acid metabolism	MESO	0.090427464
UPP2	Lipoic acid metabolism	MESO	0.257012912
UPP2	Lysine degradation	MESO	-0.020800964
UPP2	Lysosome	MESO	-0.110896571
UPP2	M1 macrophage	MESO	-0.084037244
UPP2	M2 macrophage	MESO	-0.130896049
UPP2	Mannose type o-glycan bi	MESO	-0.130568537
UPP2	Mapk_signaling_pathway	MESO	-0.184097516
UPP2	Mapk3_erk1_activation	MESO	-0.183417941
UPP2	Marginal zone b cell	MESO	-0.130302364
UPP2	Memory b cell	MESO	-0.040578562
UPP2	Mesenchymal cell	MESO	-0.123041996
UPP2	Mesenchymal stem cell	MESO	-0.16255115
UPP2	Metabolism of xenobiotic	MESO	0.016337459
UPP2	Migrating cancer stem cel	MESO	-0.102468225
UPP2	Mitotic_spindle	MESO	-0.190148948
UPP2	Monocyte	MESO	-0.149466845
UPP2	Mtor_signaling_pathway	MESO	0.051760746
UPP2	Mtorc1_signaling	MESO	-0.35519632
UPP2	Mucin type o-glycan biosy	MESO	-0.278990008
UPP2	Myc_targets_v1	MESO	-0.184459335
UPP2	Myeloid cell	MESO	-0.132572142
UPP2	N-glycan biosynthesis	MESO	-0.283204483
UPP2	Naive b cell	MESO	-0.158781789
UPP2	Naive cd4+ t cell	MESO	-0.018237344
UPP2	Naive cd8+ t cell	MESO	0.080497136
UPP2	Natural killer cell	MESO	-0.07580278
UPP2	Natural killer t (nkt) cell	MESO	-0.100399849
UPP2	Natural regulatory t (treg)	MESO	-0.057815205
UPP2	Neomycin, kanamycin and	MESO	-0.243950569
UPP2	Neutrophil	MESO	-0.220090452
UPP2	Nicotinate and nicotinami	MESO	-0.133503069
UPP2	Nitrogen metabolism	MESO	-0.048620443
UPP2	Nod_like_receptor_signal	MESO	-0.209427126
UPP2	Notch_signaling	MESO	-0.155083218

UPP2	One carbon pool by folate	MESO	-0.086666139
UPP2	Other glycan degradation	MESO	0.099794573
UPP2	Other types of o-glycan b	MESO	0.054665807
UPP2	Oxidative phosphorylation	MESO	-0.017539216
UPP2	P53_pathway	MESO	-0.140245624
UPP2	P53_signaling_pathway	MESO	-0.118661418
UPP2	Pantothenate and coa bios	MESO	0.184175995
UPP2	Pentose and glucuronate i	MESO	-0.046909512
UPP2	Pentose phosphate pathwa	MESO	-0.209307031
UPP2	Pericyte	MESO	-0.099348481
UPP2	Phenylalanine metabolism	MESO	0.006746008
UPP2	Phenylalanine, tyrosine ar	MESO	-0.107671844
UPP2	Phosphonate and phosphir	MESO	-0.061196816
UPP2	Pi3k_akt_activation	MESO	-0.061277783
UPP2	Pi3k_akt_mtor_signaling	MESO	-0.247196823
UPP2	Porphyrin and chlorophyl	MESO	-0.246750222
UPP2	Primary bile acid biosynt	MESO	0.103099685
UPP2	Propanoate metabolism	MESO	-0.046816371
UPP2	Purine metabolism	MESO	-0.190469358
UPP2	Pyrimidine metabolism	MESO	-0.107586544
UPP2	Pyruvate metabolism	MESO	-0.129973288
UPP2	Regulation_of_autophagy	MESO	-0.058450968
UPP2	Retinol metabolism	MESO	-0.025583592
UPP2	Riboflavin metabolism	MESO	-0.040642491
UPP2	Schmahl_pdgf_signaling	MESO	-0.24070301
UPP2	Selenocompound metabol	MESO	-0.262296057
UPP2	Signaling_by_hippo	MESO	-0.090551765
UPP2	Sphingolipid metabolism	MESO	-0.257774982
UPP2	Starch and sucrose metabo	MESO	-0.03895977
UPP2	Steroid biosynthesis	MESO	-0.346778375
UPP2	Steroid hormone biosynth	MESO	-0.054693999
UPP2	Sulfur metabolism	MESO	0.000437745
UPP2	Synthesis and degradation	MESO	0.081205092
UPP2	T helper cell	MESO	-0.082704119
UPP2	T helper1 (th1) cell	MESO	-0.049580337
UPP2	T helper17 (th17) cell	MESO	-0.128377314
UPP2	T helper2 (th2) cell	MESO	-0.155191673
UPP2	T helper9 (th9) cell	MESO	-0.024973189
UPP2	Taurine and hypotaurine r	MESO	0.261022582
UPP2	Terpenoid backbone biosy	MESO	-0.034168987
UPP2	Tgf_beta_signaling_pathw	MESO	-0.095132138
UPP2	Thiamine metabolism	MESO	0.01116981
UPP2	Tnfa_signaling_via_nfkb	MESO	-0.274581267

UPP2	Tryptophan metabolism	MESO	-0.096596566
UPP2	Tumor endothelial cell	MESO	-0.276337606
UPP2	Tyrosine metabolism	MESO	0.063610673
UPP2	Ubiquinone and other ter	MESO	0.060588529
UPP2	Valine, leucine and isoleu	MESO	0.127589665
UPP2	Valine, leucine and isoleu	MESO	0.014251604
UPP2	Vascular endothelial cell	MESO	-0.026701616
UPP2	Vascular smooth muscle c	MESO	-0.05187858
UPP2	Vegf_signaling_pathway	MESO	-0.136411523
UPP2	Vitamin b6 metabolism	MESO	-0.055835587
UPP2	Willert_wnt_signaling	MESO	-0.302403589
UPP2	Wnt_beta_catenin_signali	MESO	-0.02514599
CDA	Abnormal plasma cell	OV	0.156219771
CDA	Activated b cell	OV	-0.00571874
CDA	Activated cd4+ t cell	OV	0.024441281
CDA	Activated t cell	OV	0.031831703
CDA	Alanine, aspartate and glu	OV	-0.172673292
CDA	Alcala_apoptosis	OV	0.031469101
CDA	Alpha-linolenic acid meta	OV	0.011087669
CDA	Amino sugar and nucleoti	OV	0.081371952
CDA	Ampk_pathway	OV	-0.139869359
CDA	Angiogenesis	OV	0.276284749
CDA	Arachidonic acid metabol	OV	0.228743469
CDA	Arginine and proline metæ	OV	0.148998269
CDA	Arginine biosynthesis	OV	0.019933608
CDA	Ascorbate and aldarate mæ	OV	-0.09179793
CDA	Atypical memory b cell	OV	0.031715462
CDA	Axl+siglec6+ dendritic ce	OV	0.235304263
CDA	B cell	OV	-0.013282588
CDA	B1 cell	OV	-0.05041242
CDA	Basal cell	OV	0.367511162
CDA	Beta-alanine metabolism	OV	0.036997177
CDA	Biosynthesis of unsaturate	OV	0.043422485
CDA	Biotin metabolism	OV	-0.096006554
CDA	Butanoate metabolism	OV	-0.141311915
CDA	Caffeine metabolism	OV	-0.0459187
CDA	Cancer stem cell	OV	0.195028955
CDA	Cancer stem-like cell	OV	-0.039290328
CDA	Cd4+ cytotoxic t cell	OV	0.104975759
CDA	Cd4+ memory t cell	OV	-0.013029887
CDA	Cd4+ regulatory t cell	OV	0.046969541
CDA	Cd4+ t helper cell	OV	0.028922387
CDA	Cd4+cd25+ regulatory t c	OV	0.037040203

CDA	Cd8+ cytotoxic t cell	OV	0.008396146
CDA	Cd8+ regulatory t cell	OV	0.113741669
CDA	Cell_cycle	OV	-0.111816506
CDA	Chandran_metastasis_top5	OV	-0.201603409
CDA	Citrate cycle (tca cycle)	OV	-0.110925273
CDA	Cysteine and methionine r	OV	-0.11247666
CDA	Cytokine induced killer c	OV	0.087283167
CDA	D-arginine and d-ornithin	OV	0.064439171
CDA	D-glutamine and d-glutan	OV	-0.070415023
CDA	Dendritic cell	OV	0.097841205
CDA	Dna_repair	OV	-0.023518939
CDA	Dna_replication	OV	-0.091995964
CDA	Double-negative memory	OV	-0.061894707
CDA	Drug metabolism - cytoch	OV	0.124303367
CDA	Drug metabolism - other c	OV	0.073271846
CDA	E2f_targets	OV	-0.13482608
CDA	Ecm_receptor_interaction	OV	0.153391566
CDA	Effector cd4+ memory t (	OV	0.029264859
CDA	Effector cd8+ memory t (	OV	0.08966623
CDA	Effector memory t cell	OV	0.044886541
CDA	Effector regulatory t (treg	OV	0.054810545
CDA	Elvidge_hif1a_targets_up	OV	-0.014179981
CDA	Endothelial cell	OV	0.24187073
CDA	Eosinophil	OV	0.089238455
CDA	Ether lipid metabolism	OV	0.028141838
CDA	Exhausted cd4+ t cell	OV	0.069621225
CDA	Exhausted cd8+ t cell	OV	0.075322956
CDA	Exhausted t cell	OV	-0.006805802
CDA	Fat cell (adipocyte)	OV	0.260391631
CDA	Fatty acid biosynthesis	OV	-0.100446342
CDA	Fatty acid degradation	OV	-0.0336444
CDA	Fatty acid elongation	OV	0.046353805
CDA	Fibroblast	OV	0.227394285
CDA	Folate biosynthesis	OV	0.073016749
CDA	Follicular b cell	OV	0.051147372
CDA	Follicular dendritic cell	OV	0.132715009
CDA	Follicular helper (tfh) t ce	OV	0.001690312
CDA	Follicular t cell	OV	0.126921568
CDA	Foxp3+il-17+ t cell	OV	-0.059587949
CDA	Fructose and mannose me	OV	0.012867913
CDA	G2m_checkpoint	OV	-0.152470291
CDA	Galactose metabolism	OV	0.097638163
CDA	Galie_tumor_stemness_ge	OV	0.320415688

CDA	Glutathione metabolism	OV	0.059392601
CDA	Glycerolipid metabolism	OV	-0.048975787
CDA	Glycerophospholipid metabolism	OV	-0.10718367
CDA	Glycine, serine and threonine	OV	-0.014797011
CDA	Glycolysis / gluconeogenesis	OV	0.056508334
CDA	Glycosaminoglycan biosynthesis	OV	0.341583518
CDA	Glycosaminoglycan biosynthesis	OV	0.179607675
CDA	Glycosaminoglycan biosynthesis	OV	0.065041779
CDA	Glycosaminoglycan degradation	OV	0.073530181
CDA	Glycosphingolipid biosynthesis	OV	0.11909697
CDA	Glycosphingolipid biosynthesis	OV	0.230598044
CDA	Glycosphingolipid biosynthesis	OV	0.123734973
CDA	Glycosylphosphatidylinositol	OV	-0.104051215
CDA	Glyoxylate and dicarboxylate	OV	-0.121090171
CDA	Granulocyte	OV	0.079180649
CDA	Hedgehog signaling	OV	0.2498658
CDA	Histidine metabolism	OV	0.152905984
CDA	Hypoxia	OV	0.233480589
CDA	Il-17alpha T cell	OV	0.008254278
CDA	Il2_stat5_signaling	OV	0.196203664
CDA	Il6_jak_stat3_signaling	OV	0.110486292
CDA	Immune checkpoints	OV	0.015065271
CDA	Immune inhibition	OV	0.073203846
CDA	Inositol phosphate metabolism	OV	-0.114811585
CDA	Interleukin_6 signaling	OV	-0.158749588
CDA	Jaeger metastasis up	OV	0.064766219
CDA	Jain_nfkb_signaling	OV	-0.247144132
CDA	Kras signaling up	OV	0.254528838
CDA	Linoleic acid metabolism	OV	0.018836679
CDA	Lipoic acid metabolism	OV	-0.101599255
CDA	Lysine degradation	OV	-0.235194695
CDA	Lysosome	OV	0.071827722
CDA	M1 macrophage	OV	0.054122336
CDA	M2 macrophage	OV	0.143448606
CDA	Mannose type o-glycan biosynthesis	OV	0.04748343
CDA	Mapk signaling pathway	OV	0.255646215
CDA	Mapk3_erk1_activation	OV	-0.131339406
CDA	Marginal zone B cell	OV	-0.016421974
CDA	Memory B cell	OV	-0.020100089
CDA	Mesenchymal cell	OV	0.310396004
CDA	Mesenchymal stem cell	OV	0.15580228
CDA	Metabolism of xenobiotics	OV	0.148949286
CDA	Migrating cancer stem cell	OV	-0.060491907

CDA	Mitotic_spindle	OV	-0.165395705
CDA	Monocyte	OV	0.165311903
CDA	Mtor_signaling_pathway	OV	-0.180042592
CDA	Mtorc1_signaling	OV	0.0521893
CDA	Mucin type o-glycan biosynthesis	OV	0.162451321
CDA	Myc_targets_v1	OV	-0.045868681
CDA	Myeloid cell	OV	0.070723329
CDA	N-glycan biosynthesis	OV	0.024048138
CDA	Naive b cell	OV	-0.13317974
CDA	Naive cd4+ t cell	OV	0.101576054
CDA	Naive cd8+ t cell	OV	0.131432528
CDA	Natural killer cell	OV	0.053870721
CDA	Natural killer t (nkt) cell	OV	-0.011610545
CDA	Natural regulatory t (treg) cell	OV	0.050610632
CDA	Neomycin, kanamycin and spectinomycin	OV	0.121035107
CDA	Neutrophil	OV	0.171748426
CDA	Nicotinate and nicotinamide metabolism	OV	0.011404267
CDA	Nitrogen metabolism	OV	0.120463944
CDA	Nod_like_receptor_signaling	OV	0.03750654
CDA	Notch_signaling	OV	0.179001983
CDA	One carbon pool by folate	OV	-0.098937852
CDA	Other glycan degradation	OV	-0.078814716
CDA	Other types of o-glycan biosynthesis	OV	-0.087868342
CDA	Oxidative phosphorylation	OV	0.018728775
CDA	P53_pathway	OV	0.180496751
CDA	P53_signaling_pathway	OV	-0.018653584
CDA	Pantothenate and coenzyme a biosynthesis	OV	0.06627101
CDA	Pentose and glucuronate interconversions	OV	0.075979148
CDA	Pentose phosphate pathway	OV	0.135908685
CDA	Pericyte	OV	0.234753452
CDA	Phenylalanine metabolism	OV	0.083379407
CDA	Phenylalanine, tyrosine and tryptophan metabolism	OV	-0.090567271
CDA	Phosphonate and phosphite metabolism	OV	-0.127723492
CDA	Pi3k_akt_activation	OV	0.020420786
CDA	Pi3k_akt_mtor_signaling	OV	0.043663401
CDA	Porphyrin and chlorophyll metabolism	OV	-0.025290304
CDA	Primary bile acid biosynthesis	OV	0.178316684
CDA	Propanoate metabolism	OV	-0.128896512
CDA	Purine metabolism	OV	0.002596383
CDA	Pyrimidine metabolism	OV	-0.057311542
CDA	Pyruvate metabolism	OV	-0.122292706
CDA	Regulation_of_autophagy	OV	-0.052256911
CDA	Retinol metabolism	OV	0.171328219

CDA	Riboflavin metabolism	OV	0.135243865
CDA	Schmahl_pdgf_signaling	OV	0.033263167
CDA	Selenocompound metabolism	OV	-0.024949796
CDA	Signaling_by_hippo	OV	0.064105252
CDA	Sphingolipid metabolism	OV	-0.049896805
CDA	Starch and sucrose metabolism	OV	0.001260664
CDA	Steroid biosynthesis	OV	-0.070971523
CDA	Steroid hormone biosynthesis	OV	0.058672391
CDA	Sulfur metabolism	OV	0.167347976
CDA	Synthesis and degradation	OV	-0.152524403
CDA	T helper cell	OV	0.071675826
CDA	T helper1 (th1) cell	OV	0.038041764
CDA	T helper17 (th17) cell	OV	0.060429
CDA	T helper2 (th2) cell	OV	0.090424615
CDA	T helper9 (th9) cell	OV	0.044423706
CDA	Taurine and hypotaurine metabolism	OV	0.023903961
CDA	Terpenoid backbone biosynthesis	OV	-0.077777384
CDA	Tgf_beta_signaling_pathway	OV	0.150348728
CDA	Thiamine metabolism	OV	0.054611417
CDA	Tnfa_signaling_via_nfkB	OV	0.105589726
CDA	Tryptophan metabolism	OV	-0.044954059
CDA	Tumor endothelial cell	OV	0.189118354
CDA	Tyrosine metabolism	OV	0.171793469
CDA	Ubiquinone and other terpenoids	OV	-0.009479656
CDA	Valine, leucine and isoleucine	OV	0.218034143
CDA	Valine, leucine and isoleucine	OV	-0.090022703
CDA	Vascular endothelial cell	OV	0.131903194
CDA	Vascular smooth muscle cell	OV	0.16275905
CDA	Vegf_signaling_pathway	OV	0.140500841
CDA	Vitamin b6 metabolism	OV	-0.120210239
CDA	Willert_wnt_signaling	OV	0.292298304
CDA	Wnt_beta_catenin_signaling	OV	0.167818388
UCK1	Abnormal plasma cell	OV	0.008664648
UCK1	Activated b cell	OV	-0.022030586
UCK1	Activated cd4+ t cell	OV	-0.032874429
UCK1	Activated t cell	OV	-0.017684296
UCK1	Alanine, aspartate and glutamate	OV	-0.080466655
UCK1	Alcaline apoptosis	OV	-0.042522995
UCK1	Alpha-linolenic acid metabolism	OV	0.025368307
UCK1	Amino sugar and nucleotide	OV	0.128642403
UCK1	Ampk_pathway	OV	0.126203748
UCK1	Angiogenesis	OV	0.008602527
UCK1	Arachidonic acid metabolism	OV	0.150587925

UCK1	Arginine and proline metabolism	OV	0.077900462
UCK1	Arginine biosynthesis	OV	0.050972043
UCK1	Ascorbate and aldarate metabolism	OV	0.044121798
UCK1	Atypical memory B cell	OV	0.084668022
UCK1	Axl+siglec6+ dendritic cell	OV	0.019817724
UCK1	B cell	OV	-0.090932751
UCK1	B1 cell	OV	-0.011901482
UCK1	Basal cell	OV	-0.027394435
UCK1	Beta-alanine metabolism	OV	0.046532521
UCK1	Biosynthesis of unsaturated fatty acids	OV	0.260120996
UCK1	Biotin metabolism	OV	0.004724412
UCK1	Butanoate metabolism	OV	0.14547429
UCK1	Caffeine metabolism	OV	0.045449494
UCK1	Cancer stem cell	OV	-0.113064468
UCK1	Cancer stem-like cell	OV	-0.004107125
UCK1	Cd4+ cytotoxic T cell	OV	-0.02620358
UCK1	Cd4+ memory T cell	OV	-0.046511913
UCK1	Cd4+ regulatory T cell	OV	-0.020925602
UCK1	Cd4+ T helper cell	OV	-0.029494622
UCK1	Cd4+cd25+ regulatory T cell	OV	-0.029263839
UCK1	Cd8+ cytotoxic T cell	OV	-0.02765963
UCK1	Cd8+ regulatory T cell	OV	-0.000559534
UCK1	Cell cycle	OV	0.127012799
UCK1	Chandran_metastasis_top50	OV	-0.187314063
UCK1	Citrate cycle (TCA cycle)	OV	0.117536475
UCK1	Cysteine and methionine metabolism	OV	0.026007906
UCK1	Cytokine induced killer cell	OV	-0.06477035
UCK1	D-arginine and D-ornithine	OV	0.041952914
UCK1	D-glutamine and D-glutamate	OV	-0.033914699
UCK1	Dendritic cell	OV	-0.046787687
UCK1	DNA repair	OV	0.253254237
UCK1	DNA replication	OV	0.261742883
UCK1	Double-negative memory T cell	OV	0.003821759
UCK1	Drug metabolism - cytochrome P450	OV	0.000362958
UCK1	Drug metabolism - other	OV	0.155631474
UCK1	E2f targets	OV	0.133351254
UCK1	ECM_receptor_interaction	OV	-0.039929968
UCK1	Effector CD4+ memory T cell	OV	-0.054190304
UCK1	Effector CD8+ memory T cell	OV	-0.059423243
UCK1	Effector memory T cell	OV	-0.038204951
UCK1	Effector regulatory T (Treg) cell	OV	-0.043449215
UCK1	Elvidge_hif1a_targets_up	OV	0.012629968
UCK1	Endothelial cell	OV	-0.019707748

UCK1	Eosinophil	OV	-0.031718933
UCK1	Ether lipid metabolism	OV	-0.046684476
UCK1	Exhausted cd4+ t cell	OV	0.016240025
UCK1	Exhausted cd8+ t cell	OV	-0.055033423
UCK1	Exhausted t cell	OV	-0.007066945
UCK1	Fat cell (adipocyte)	OV	0.114465553
UCK1	Fatty acid biosynthesis	OV	0.045021597
UCK1	Fatty acid degradation	OV	0.175256358
UCK1	Fatty acid elongation	OV	0.163085266
UCK1	Fibroblast	OV	-0.031308244
UCK1	Folate biosynthesis	OV	0.213008045
UCK1	Follicular b cell	OV	-0.101685177
UCK1	Follicular dendritic cell	OV	-0.038169093
UCK1	Follicular helper (tfh) t cell	OV	-0.050431932
UCK1	Follicular t cell	OV	0.033198584
UCK1	Foxp3+il-17+ t cell	OV	0.031301746
UCK1	Fructose and mannose metabolism	OV	0.058190744
UCK1	G2m_checkpoint	OV	0.094398684
UCK1	Galactose metabolism	OV	0.124593365
UCK1	Galie_tumor_stemness_gene	OV	0.016972129
UCK1	Glutathione metabolism	OV	0.162173219
UCK1	Glycerolipid metabolism	OV	0.073026097
UCK1	Glycerophospholipid metabolism	OV	-0.143815158
UCK1	Glycine, serine and threonine metabolism	OV	0.146735774
UCK1	Glycolysis / gluconeogenesis	OV	0.154839261
UCK1	Glycosaminoglycan biosynthesis	OV	0.021234612
UCK1	Glycosaminoglycan biosynthesis	OV	0.013459522
UCK1	Glycosaminoglycan biosynthesis	OV	-0.143078186
UCK1	Glycosaminoglycan degradation	OV	0.068407011
UCK1	Glycosphingolipid biosynthesis	OV	0.127011226
UCK1	Glycosphingolipid biosynthesis	OV	0.137606795
UCK1	Glycosphingolipid biosynthesis	OV	0.062360521
UCK1	Glycosylphosphatidylinositol	OV	0.1022826
UCK1	Glyoxylate and dicarboxylate metabolism	OV	0.078735637
UCK1	Granulocyte	OV	-0.030763085
UCK1	Hedgehog_signaling	OV	-0.151186614
UCK1	Histidine metabolism	OV	-0.023891945
UCK1	Hypoxia	OV	-0.024251189
UCK1	Il-17alpha t cell	OV	-0.019469517
UCK1	Il2_stat5_signaling	OV	-0.055537002
UCK1	Il6_jak_stat3_signaling	OV	-0.073134159
UCK1	Immune_checkpoints_tumor	OV	-0.074240807
UCK1	Immune_inhibition_cytokines	OV	-0.015700334

UCK1	Inositol phosphate metabo	OV	-0.08418647
UCK1	Interleukin_6_signaling	OV	-0.238306159
UCK1	Jaeger_metastasis_up	OV	0.118923241
UCK1	Jain_nfkb_signaling	OV	-0.15187615
UCK1	Kras_signaling_up	OV	-0.069939854
UCK1	Linoleic acid metabolism	OV	-0.048625046
UCK1	Lipoic acid metabolism	OV	0.079958738
UCK1	Lysine degradatation	OV	-0.028162654
UCK1	Lysosome	OV	-0.002140879
UCK1	M1 macrophage	OV	-0.051167719
UCK1	M2 macrophage	OV	-0.035289554
UCK1	Mannose type o-glycan bi	OV	0.163644306
UCK1	Mapk_signaling_pathway	OV	-0.066848173
UCK1	Mapk3_erk1_activation	OV	-0.173098856
UCK1	Marginal zone b cell	OV	0.0072753
UCK1	Memory b cell	OV	-0.053902749
UCK1	Mesenchymal cell	OV	0.01976319
UCK1	Mesenchymal stem cell	OV	-0.075986885
UCK1	Metabolism of xenobiotic	OV	0.080251884
UCK1	Migrating cancer stem cel	OV	-0.093779498
UCK1	Mitotic_spindle	OV	-0.060306141
UCK1	Monocyte	OV	-0.012694473
UCK1	Mtor_signaling_pathway	OV	0.075695308
UCK1	Mtorc1_signaling	OV	0.042279366
UCK1	Mucin type o-glycan biosy	OV	-0.106869011
UCK1	Myc_targets_v1	OV	0.095429528
UCK1	Myeloid cell	OV	-0.037611381
UCK1	N-glycan biosynthesis	OV	0.224323755
UCK1	Naive b cell	OV	-0.033780155
UCK1	Naive cd4+ t cell	OV	-0.134351297
UCK1	Naive cd8+ t cell	OV	-0.240005837
UCK1	Natural killer cell	OV	-0.03730029
UCK1	Natural killer t (nkt) cell	OV	0.01192803
UCK1	Natural regulatory t (treg)	OV	-0.082328948
UCK1	Neomycin, kanamycin and	OV	-0.018282623
UCK1	Neutrophil	OV	-0.023252372
UCK1	Nicotinate and nicotinami	OV	0.084004397
UCK1	Nitrogen metabolism	OV	-0.009864711
UCK1	Nod_like_receptor_signal	OV	-0.092239233
UCK1	Notch_signaling	OV	-0.158919446
UCK1	One carbon pool by folate	OV	0.05995994
UCK1	Other glycan degradatation	OV	0.031655716
UCK1	Other types of o-glycan b	OV	0.081811187

UCK1	Oxidative phosphorylation	OV	0.155366875
UCK1	P53_pathway	OV	0.087581535
UCK1	P53_signaling_pathway	OV	0.013541635
UCK1	Pantothenate and coa biosynthesis	OV	0.049754512
UCK1	Pentose and glucuronate interconversions	OV	0.04510011
UCK1	Pentose phosphate pathway	OV	0.106552322
UCK1	Pericyte	OV	-0.01877257
UCK1	Phenylalanine metabolism	OV	0.059794647
UCK1	Phenylalanine, tyrosine and tryptophan metabolism	OV	0.001336145
UCK1	Phosphonate and phosphite metabolism	OV	0.071899576
UCK1	Pi3k_akt_activation	OV	-0.10683737
UCK1	Pi3k_akt_mtor_signaling	OV	0.060212161
UCK1	Porphyrin and chlorophyll metabolism	OV	0.075267527
UCK1	Primary bile acid biosynthesis	OV	0.104894698
UCK1	Propanoate metabolism	OV	-0.032770426
UCK1	Purine metabolism	OV	0.141440258
UCK1	Pyrimidine metabolism	OV	0.230186105
UCK1	Pyruvate metabolism	OV	0.191575911
UCK1	Regulation_of_autophagy	OV	0.061195155
UCK1	Retinol metabolism	OV	0.203708031
UCK1	Riboflavin metabolism	OV	0.117708115
UCK1	Schmahl_pdgf_signaling	OV	-0.048777497
UCK1	Selenocompound metabolism	OV	-0.216966754
UCK1	Signaling_by_hippo	OV	-0.118361108
UCK1	Sphingolipid metabolism	OV	0.070747297
UCK1	Starch and sucrose metabolism	OV	-0.067016431
UCK1	Steroid biosynthesis	OV	0.252027796
UCK1	Steroid hormone biosynthesis	OV	0.023768576
UCK1	Sulfur metabolism	OV	-0.072093574
UCK1	Synthesis and degradation of ribonucleotides	OV	0.220249663
UCK1	T helper cell	OV	-0.06466113
UCK1	T helper1 (th1) cell	OV	-0.061562976
UCK1	T helper17 (th17) cell	OV	-0.052297691
UCK1	T helper2 (th2) cell	OV	-0.035297204
UCK1	T helper9 (th9) cell	OV	-0.043420576
UCK1	Taurine and hypotaurine metabolism	OV	0.050259033
UCK1	Terpenoid backbone biosynthesis	OV	0.044973069
UCK1	Tgf_beta_signaling_pathway	OV	-0.137900744
UCK1	Thiamine metabolism	OV	0.157180734
UCK1	Tnfa_signaling_via_nfkB	OV	-0.04549528
UCK1	Tryptophan metabolism	OV	0.135935487
UCK1	Tumor endothelial cell	OV	-0.014391511
UCK1	Tyrosine metabolism	OV	0.161138085

UCK1	Ubiquinone and other ter	OV	0.002954214
UCK1	Valine, leucine and isoleu	OV	0.030457564
UCK1	Valine, leucine and isoleu	OV	0.051065448
UCK1	Vascular endothelial cell	OV	0.01263601
UCK1	Vascular smooth muscle c	OV	0.013649319
UCK1	Vegf_signaling_pathway	OV	0.051932151
UCK1	Vitamin b6 metabolism	OV	-0.077707461
UCK1	Willert_wnt_signaling	OV	-0.045751225
UCK1	Wnt_beta_catenin_signali	OV	-0.06119248
UCK2	Abnormal plasma cell	OV	-0.079319994
UCK2	Activated b cell	OV	0.01324205
UCK2	Activated cd4+ t cell	OV	-0.043609076
UCK2	Activated t cell	OV	-0.005728281
UCK2	Alanine, aspartate and glu	OV	0.275641662
UCK2	Alcala_apoptosis	OV	0.284067531
UCK2	Alpha-linolenic acid meta	OV	0.081085792
UCK2	Amino sugar and nucleoti	OV	0.289558344
UCK2	Ampk_pathway	OV	0.06891779
UCK2	Angiogenesis	OV	-0.111833909
UCK2	Arachidonic acid metaboli	OV	0.014020093
UCK2	Arginine and proline metæ	OV	0.299120371
UCK2	Arginine biosynthesis	OV	0.147420219
UCK2	Ascorbate and aldarate mε	OV	0.280479943
UCK2	Atypical memory b cell	OV	0.031160852
UCK2	Axl+siglec6+ dendritic ce	OV	-0.229645962
UCK2	B cell	OV	-0.018445646
UCK2	B1 cell	OV	-0.034286682
UCK2	Basal cell	OV	-0.043448052
UCK2	Beta-alanine metabolism	OV	0.169203693
UCK2	Biosynthesis of unsaturate	OV	0.264524011
UCK2	Biotin metabolism	OV	0.110964734
UCK2	Butanoate metabolism	OV	0.236904418
UCK2	Caffeine metabolism	OV	-0.005635151
UCK2	Cancer stem cell	OV	-0.173364797
UCK2	Cancer stem-like cell	OV	0.105089884
UCK2	Cd4+ cytotoxic t cell	OV	-0.166699787
UCK2	Cd4+ memory t cell	OV	-0.021043229
UCK2	Cd4+ regulatory t cell	OV	-0.124812149
UCK2	Cd4+ t helper cell	OV	-0.06963232
UCK2	Cd4+cd25+ regulatory t c	OV	-0.069112229
UCK2	Cd8+ cytotoxic t cell	OV	0.022214607
UCK2	Cd8+ regulatory t cell	OV	-0.005286023
UCK2	Cell_cycle	OV	0.264807186

UCK2	Chandran_metastasis_top ² OV	0.004580771
UCK2	Citrate cycle (tca cycle) OV	0.205833629
UCK2	Cysteine and methionine r OV	0.343366589
UCK2	Cytokine induced killer c α OV	-0.107518555
UCK2	D-arginine and d-ornithin OV	0.102566419
UCK2	D-glutamine and d-glutan OV	0.024141446
UCK2	Dendritic cell OV	-0.081669367
UCK2	Dna_repair OV	0.40919119
UCK2	Dna_replication OV	0.398503887
UCK2	Double-negative memory OV	0.072339217
UCK2	Drug metabolism - cytoch OV	0.235239605
UCK2	Drug metabolism - other ϵ OV	0.467756323
UCK2	E2f_targets OV	0.360007615
UCK2	Ecm_receptor_interaction OV	-0.250151412
UCK2	Effector cd4+ memory t (OV	-0.079343375
UCK2	Effector cd8+ memory t (OV	-0.191639982
UCK2	Effector memory t cell OV	-0.038076555
UCK2	Effector regulatory t (treg OV	-0.13072474
UCK2	Elvidge_hif1a_targets_up OV	0.272108318
UCK2	Endothelial cell OV	-0.059675587
UCK2	Eosinophil OV	-0.055513862
UCK2	Ether lipid metabolism OV	0.038717559
UCK2	Exhausted cd4+ t cell OV	-0.032485794
UCK2	Exhausted cd8+ t cell OV	-0.074838359
UCK2	Exhausted t cell OV	-0.014944306
UCK2	Fat cell (adipocyte) OV	-0.041503606
UCK2	Fatty acid biosynthesis OV	0.114738481
UCK2	Fatty acid degradation OV	0.237697396
UCK2	Fatty acid elongation OV	0.372951954
UCK2	Fibroblast OV	-0.150224335
UCK2	Folate biosynthesis OV	0.222143641
UCK2	Follicular b cell OV	-0.099881969
UCK2	Follicular dendritic cell OV	-0.128282216
UCK2	Follicular helper (tfh) t c ϵ OV	-0.053527432
UCK2	Follicular t cell OV	-0.035285114
UCK2	Foxp3+il-17+ t cell OV	-0.001581886
UCK2	Fructose and mannose me OV	0.262343301
UCK2	G2m_checkpoint OV	0.2500774
UCK2	Galactose metabolism OV	0.21719633
UCK2	Galie_tumor_stemness_ge OV	-0.210976592
UCK2	Glutathione metabolism OV	0.361155549
UCK2	Glycerolipid metabolism OV	0.03636603
UCK2	Glycerophospholipid met ϵ OV	-0.027806719

UCK2	Glycine, serine and threor	OV	0.251539433
UCK2	Glycolysis / gluconeogene	OV	0.296328485
UCK2	Glycosaminoglycan biosy	OV	-0.058999552
UCK2	Glycosaminoglycan biosy	OV	-0.141558833
UCK2	Glycosaminoglycan biosy	OV	0.043411846
UCK2	Glycosaminoglycan degra	OV	0.084722684
UCK2	Glycosphingolipid biosyn	OV	0.04617002
UCK2	Glycosphingolipid biosyn	OV	-0.011597056
UCK2	Glycosphingolipid biosyn	OV	0.05920742
UCK2	Glycosylphosphatidylinos	OV	0.263955567
UCK2	Glyoxylate and dicarboxy	OV	0.336180924
UCK2	Granulocyte	OV	-0.045602382
UCK2	Hedgehog_signaling	OV	-0.247827196
UCK2	Histidine metabolism	OV	0.007120522
UCK2	Hypoxia	OV	-0.045432205
UCK2	Il-17alpha t cell	OV	-0.001084854
UCK2	Il2_stat5_signaling	OV	-0.045544449
UCK2	Il6_jak_stat3_signaling	OV	-0.04327853
UCK2	Immune_checkpoints_tun	OV	-0.046313594
UCK2	Immune_inhibition_cytok	OV	0.047793816
UCK2	Inositol phosphate metabo	OV	-0.234839524
UCK2	Interleukin_6_signaling	OV	-0.142319916
UCK2	Jaeger_metastasis_up	OV	0.115093727
UCK2	Jain_nfkb_signaling	OV	0.343126012
UCK2	Kras_signaling_up	OV	-0.157171278
UCK2	Linoleic acid metabolism	OV	0.052587353
UCK2	Lipoic acid metabolism	OV	0.099948267
UCK2	Lysine degradation	OV	-0.006296846
UCK2	Lysosome	OV	0.045971469
UCK2	M1 macrophage	OV	-0.037185992
UCK2	M2 macrophage	OV	-0.069693984
UCK2	Mannose type o-glycan bi	OV	0.087653221
UCK2	Mapk_signaling_pathway	OV	-0.236609128
UCK2	Mapk3_erk1_activation	OV	0.050003549
UCK2	Marginal zone b cell	OV	0.008303678
UCK2	Memory b cell	OV	-0.077887486
UCK2	Mesenchymal cell	OV	-0.014085789
UCK2	Mesenchymal stem cell	OV	-0.16055054
UCK2	Metabolism of xenobiotic	OV	0.280617244
UCK2	Migrating cancer stem cel	OV	-0.062728619
UCK2	Mitotic_spindle	OV	-0.129446032
UCK2	Monocyte	OV	-0.057394916
UCK2	Mtor_signaling_pathway	OV	-0.077694227

UCK2	Mtorc1_signaling	OV	0.374599542
UCK2	Mucin type o-glycan biosynthesis	OV	-0.176091843
UCK2	Myc_targets_v1	OV	0.465121161
UCK2	Myeloid cell	OV	-0.089250555
UCK2	N-glycan biosynthesis	OV	0.183082936
UCK2	Naive b cell	OV	0.115761092
UCK2	Naive cd4+ t cell	OV	-0.238162329
UCK2	Naive cd8+ t cell	OV	-0.251110204
UCK2	Natural killer cell	OV	-0.03510552
UCK2	Natural killer t (nkt) cell	OV	0.238708895
UCK2	Natural regulatory t (treg) cell	OV	-0.210076047
UCK2	Neomycin, kanamycin and spectinomycin	OV	-0.005993546
UCK2	Neutrophil	OV	-0.008538149
UCK2	Nicotinate and nicotinamide metabolism	OV	0.175164239
UCK2	Nitrogen metabolism	OV	0.00892677
UCK2	Nod_like_receptor_signaling	OV	-0.028083003
UCK2	Notch_signaling	OV	-0.067018276
UCK2	One carbon pool by folate	OV	0.277243965
UCK2	Other glycan degradation	OV	0.056666868
UCK2	Other types of o-glycan biosynthesis	OV	-0.049919339
UCK2	Oxidative phosphorylation	OV	0.296616166
UCK2	P53_pathway	OV	0.029373163
UCK2	P53_signaling_pathway	OV	0.073629071
UCK2	Pantothenate and coenzyme a biosynthesis	OV	0.127250293
UCK2	Pentose and glucuronate interconversions	OV	0.402770063
UCK2	Pentose phosphate pathway	OV	0.307626742
UCK2	Pericyte	OV	-0.136212422
UCK2	Phenylalanine metabolism	OV	0.126069842
UCK2	Phenylalanine, tyrosine and tryptophan metabolism	OV	0.132023355
UCK2	Phosphonate and phosphite metabolism	OV	0.209391306
UCK2	Pi3k_akt_activation	OV	0.025022021
UCK2	Pi3k_akt_mtor_signaling	OV	0.173677077
UCK2	Porphyrim and chlorophyll biosynthesis	OV	0.336812678
UCK2	Primary bile acid biosynthesis	OV	0.160494341
UCK2	Propanoate metabolism	OV	0.140175632
UCK2	Purine metabolism	OV	0.564967066
UCK2	Pyrimidine metabolism	OV	0.546142308
UCK2	Pyruvate metabolism	OV	0.305137723
UCK2	Regulation_of_autophagy	OV	0.017731413
UCK2	Retinol metabolism	OV	0.156907778
UCK2	Riboflavin metabolism	OV	0.301097811
UCK2	Schmahl_pdgf_signaling	OV	-0.253140733
UCK2	Selenocompound metabolism	OV	0.338336643

UCK2	Signaling_by_hippo	OV	-0.192700795
UCK2	Sphingolipid metabolism	OV	-0.130903639
UCK2	Starch and sucrose metabo	OV	-0.00714994
UCK2	Steroid biosynthesis	OV	0.269102004
UCK2	Steroid hormone biosynth	OV	0.189596519
UCK2	Sulfur metabolism	OV	0.186295795
UCK2	Synthesis and degradation	OV	0.23684183
UCK2	T helper cell	OV	-0.05327387
UCK2	T helper1 (th1) cell	OV	-0.026527722
UCK2	T helper17 (th17) cell	OV	-0.088122985
UCK2	T helper2 (th2) cell	OV	-0.070121513
UCK2	T helper9 (th9) cell	OV	-0.062041801
UCK2	Taurine and hypotaurine r	OV	-0.048485428
UCK2	Terpenoid backbone biosy	OV	0.291486655
UCK2	Tgf_beta_signaling_pathw	OV	-0.126665506
UCK2	Thiamine metabolism	OV	0.137022582
UCK2	Tnfa_signaling_via_nfk	OV	-0.056723618
UCK2	Tryptophan metabolism	OV	0.209072044
UCK2	Tumor endothelial cell	OV	0.034371577
UCK2	Tyrosine metabolism	OV	0.137734266
UCK2	Ubiquinone and other ter	OV	0.279664858
UCK2	Valine, leucine and isoleu	OV	0.076660088
UCK2	Valine, leucine and isoleu	OV	0.221088312
UCK2	Vascular endothelial cell	OV	-0.074929475
UCK2	Vascular smooth muscle c	OV	-0.140482443
UCK2	Vegf_signaling_pathway	OV	-0.116953288
UCK2	Vitamin b6 metabolism	OV	0.095148959
UCK2	Willert_wnt_signaling	OV	0.185724345
UCK2	Wnt_beta_catenin_signali	OV	-0.110184993
UCKL1	Abnormal plasma cell	OV	-0.101000919
UCKL1	Activated b cell	OV	-0.103608393
UCKL1	Activated cd4+ t cell	OV	-0.147743863
UCKL1	Activated t cell	OV	-0.17055377
UCKL1	Alanine, aspartate and glu	OV	0.02661654
UCKL1	Alcala_apoptosis	OV	-0.156087767
UCKL1	Alpha-linolenic acid meta	OV	0.074411788
UCKL1	Amino sugar and nucleoti	OV	-0.066922794
UCKL1	Ampk_pathway	OV	0.242863511
UCKL1	Angiogenesis	OV	-0.250908814
UCKL1	Arachidonic acid metabol	OV	-0.136825676
UCKL1	Arginine and proline met	OV	-0.136738388
UCKL1	Arginine biosynthesis	OV	-0.016081236
UCKL1	Ascorbate and aldarate m	OV	-0.007698057

UCKL1	Atypical memory b cell	OV	-0.11835764
UCKL1	Ax1+siglecd6+ dendritic ce	OV	-0.164989845
UCKL1	B cell	OV	-0.213624498
UCKL1	B1 cell	OV	-0.090045183
UCKL1	Basal cell	OV	-0.234641096
UCKL1	Beta-alanine metabolism	OV	-0.185883516
UCKL1	Biosynthesis of unsaturate	OV	-0.155459327
UCKL1	Biotin metabolism	OV	0.055565216
UCKL1	Butanoate metabolism	OV	0.03251111
UCKL1	Caffeine metabolism	OV	-0.132548714
UCKL1	Cancer stem cell	OV	-0.259953807
UCKL1	Cancer stem-like cell	OV	-0.189438248
UCKL1	Cd4+ cytotoxic t cell	OV	-0.177202559
UCKL1	Cd4+ memory t cell	OV	-0.13125752
UCKL1	Cd4+ regulatory t cell	OV	-0.188603582
UCKL1	Cd4+ t helper cell	OV	-0.159011538
UCKL1	Cd4+cd25+ regulatory t c	OV	-0.164208659
UCKL1	Cd8+ cytotoxic t cell	OV	-0.141786154
UCKL1	Cd8+ regulatory t cell	OV	-0.148902791
UCKL1	Cell_cycle	OV	0.029441135
UCKL1	Chandran_metastasis_top5	OV	-0.067807398
UCKL1	Citrate cycle (tca cycle)	OV	0.047556705
UCKL1	Cysteine and methionine r	OV	0.078630924
UCKL1	Cytokine induced killer ce	OV	-0.122249028
UCKL1	D-arginine and d-ornithin	OV	-0.124625184
UCKL1	D-glutamine and d-glutan	OV	-0.028413801
UCKL1	Dendritic cell	OV	-0.180061175
UCKL1	Dna_repair	OV	0.049787896
UCKL1	Dna_replication	OV	0.005840318
UCKL1	Double-negative memory	OV	0.032023675
UCKL1	Drug metabolism - cytoch	OV	-0.102375964
UCKL1	Drug metabolism - other c	OV	-0.020672293
UCKL1	E2f_targets	OV	0.051354402
UCKL1	Ecm_receptor_interaction	OV	-0.161751518
UCKL1	Effector cd4+ memory t (	OV	-0.155883691
UCKL1	Effector cd8+ memory t (	OV	-0.178746263
UCKL1	Effector memory t cell	OV	-0.185504256
UCKL1	Effector regulatory t (treg	OV	-0.180913452
UCKL1	Elvidge_hif1a_targets_up	OV	-0.109478867
UCKL1	Endothelial cell	OV	-0.235906758
UCKL1	Eosinophil	OV	-0.185891209
UCKL1	Ether lipid metabolism	OV	-0.032926876
UCKL1	Exhausted cd4+ t cell	OV	-0.237258494

UCKL1	Exhausted cd8+ t cell	OV	-0.216464823
UCKL1	Exhausted t cell	OV	-0.123575398
UCKL1	Fat cell (adipocyte)	OV	-0.079397636
UCKL1	Fatty acid biosynthesis	OV	-0.022022692
UCKL1	Fatty acid degradation	OV	0.016904581
UCKL1	Fatty acid elongation	OV	-0.118216519
UCKL1	Fibroblast	OV	-0.196684711
UCKL1	Folate biosynthesis	OV	-0.020595858
UCKL1	Follicular b cell	OV	-0.133866239
UCKL1	Follicular dendritic cell	OV	-0.195712193
UCKL1	Follicular helper (tfh) t cell	OV	-0.170658762
UCKL1	Follicular t cell	OV	-0.109792645
UCKL1	Foxp3+il-17+ t cell	OV	-0.094366051
UCKL1	Fructose and mannose me	OV	-0.050638755
UCKL1	G2m_checkpoint	OV	-0.002647542
UCKL1	Galactose metabolism	OV	-0.048997203
UCKL1	Galie_tumor_stemness_ge	OV	-0.227283073
UCKL1	Glutathione metabolism	OV	-0.103689525
UCKL1	Glycerolipid metabolism	OV	-0.016250089
UCKL1	Glycerophospholipid metæ	OV	0.170234885
UCKL1	Glycine, serine and threor	OV	0.082120384
UCKL1	Glycolysis / gluconeogene	OV	-0.052146866
UCKL1	Glycosaminoglycan biosy1	OV	-0.237762061
UCKL1	Glycosaminoglycan biosy1	OV	-0.235627716
UCKL1	Glycosaminoglycan biosy1	OV	-0.141227078
UCKL1	Glycosaminoglycan degra	OV	-0.123733894
UCKL1	Glycosphingolipid biosyn1	OV	-0.095966637
UCKL1	Glycosphingolipid biosyn1	OV	-0.071860219
UCKL1	Glycosphingolipid biosyn1	OV	-0.110461956
UCKL1	Glycosylphosphatidylinos:	OV	0.052383149
UCKL1	Glyoxylate and dicarboxy	OV	0.089282648
UCKL1	Granulocyte	OV	-0.188800306
UCKL1	Hedgehog_signaling	OV	-0.160086386
UCKL1	Histidine metabolism	OV	-0.180231375
UCKL1	Hypoxia	OV	-0.190038329
UCKL1	Il-17ralpha t cell	OV	-0.141962794
UCKL1	Il2_stat5_signaling	OV	-0.242040848
UCKL1	Il6_jak_stat3_signaling	OV	-0.189572579
UCKL1	Immune_checkpoints_tunr	OV	-0.178530577
UCKL1	Immune_inhibition_cytok	OV	-0.1369791
UCKL1	Inositol phosphate metabo	OV	-0.036512899
UCKL1	Interleukin_6_signaling	OV	-0.122874272
UCKL1	Jaeger_metastasis_up	OV	-0.123777063

UCKL1	Jain_nfkb_signaling	OV	0.051825897
UCKL1	Kras_signaling_up	OV	-0.280355413
UCKL1	Linoleic acid metabolism	OV	0.009260601
UCKL1	Lipoic acid metabolism	OV	0.122667876
UCKL1	Lysine degradation	OV	0.037278136
UCKL1	Lysosome	OV	-0.178062063
UCKL1	M1 macrophage	OV	-0.192080055
UCKL1	M2 macrophage	OV	-0.174030301
UCKL1	Mannose type o-glycan bi	OV	-0.06225524
UCKL1	Mapk_signaling_pathway	OV	-0.172365705
UCKL1	Mapk3_erk1_activation	OV	-0.163636287
UCKL1	Marginal zone b cell	OV	-0.096701099
UCKL1	Memory b cell	OV	-0.122913337
UCKL1	Mesenchymal cell	OV	-0.235272268
UCKL1	Mesenchymal stem cell	OV	-0.208752497
UCKL1	Metabolism of xenobiotic	OV	-0.117693404
UCKL1	Migrating cancer stem cel	OV	-0.181873729
UCKL1	Mitotic_spindle	OV	-0.014431658
UCKL1	Monocyte	OV	-0.211206627
UCKL1	Mtor_signaling_pathway	OV	-0.073667518
UCKL1	Mtorc1_signaling	OV	-0.185074841
UCKL1	Mucin type o-glycan biosy	OV	-0.182569134
UCKL1	Myc_targets_v1	OV	-0.067043619
UCKL1	Myeloid cell	OV	-0.18571369
UCKL1	N-glycan biosynthesis	OV	-0.134400333
UCKL1	Naive b cell	OV	0.026050394
UCKL1	Naive cd4+ t cell	OV	-0.189992811
UCKL1	Naive cd8+ t cell	OV	-0.206670476
UCKL1	Natural killer cell	OV	-0.190269049
UCKL1	Natural killer t (nkt) cell	OV	-0.103222802
UCKL1	Natural regulatory t (treg)	OV	-0.22748047
UCKL1	Neomycin, kanamycin and	OV	0.014485159
UCKL1	Neutrophil	OV	-0.222448983
UCKL1	Nicotinate and nicotinami	OV	-0.081422117
UCKL1	Nitrogen metabolism	OV	-0.101618908
UCKL1	Nod_like_receptor_signal	OV	-0.170876291
UCKL1	Notch_signaling	OV	-0.06430255
UCKL1	One carbon pool by folate	OV	0.012187417
UCKL1	Other glycan degradation	OV	-0.050420745
UCKL1	Other types of o-glycan b	OV	0.068819796
UCKL1	Oxidative phosphorylatio	OV	0.009963467
UCKL1	P53_pathway	OV	-0.177404643
UCKL1	P53_signaling_pathway	OV	-0.150099257

UCKL1	Pantothenate and coa bios	OV	-0.121932722
UCKL1	Pentose and glucuronate i	OV	-0.082592031
UCKL1	Pentose phosphate pathwa	OV	-0.089507878
UCKL1	Pericyte	OV	-0.203379888
UCKL1	Phenylalanine metabolism	OV	-0.113917249
UCKL1	Phenylalanine, tyrosine ar	OV	-0.04449146
UCKL1	Phosphonate and phosphir	OV	-0.099655351
UCKL1	Pi3k_akt_activation	OV	-0.217525146
UCKL1	Pi3k_akt_mtor_signaling	OV	-0.129994894
UCKL1	Porphyrin and chlorophyl	OV	-0.012606645
UCKL1	Primary bile acid biosynt	OV	-0.129104918
UCKL1	Propanoate metabolism	OV	0.072238048
UCKL1	Purine metabolism	OV	-0.028132648
UCKL1	Pyrimidine metabolism	OV	0.00390557
UCKL1	Pyruvate metabolism	OV	0.057416706
UCKL1	Regulation_of_autophagy	OV	0.025218597
UCKL1	Retinol metabolism	OV	-0.195567195
UCKL1	Riboflavin metabolism	OV	-0.018379134
UCKL1	Schmahl_pdgf_signaling	OV	-0.160520929
UCKL1	Selenocompound metabol	OV	0.042966182
UCKL1	Signaling_by_hippo	OV	-0.107721505
UCKL1	Sphingolipid metabolism	OV	-0.16280883
UCKL1	Starch and sucrose metabo	OV	-0.044220046
UCKL1	Steroid biosynthesis	OV	-0.067470826
UCKL1	Steroid hormone biosynth	OV	-0.158348425
UCKL1	Sulfur metabolism	OV	-0.128856184
UCKL1	Synthesis and degradation	OV	0.056380174
UCKL1	T helper cell	OV	-0.205559581
UCKL1	T helper1 (th1) cell	OV	-0.180802268
UCKL1	T helper17 (th17) cell	OV	-0.136854319
UCKL1	T helper2 (th2) cell	OV	-0.19005309
UCKL1	T helper9 (th9) cell	OV	-0.154244396
UCKL1	Taurine and hypotaurine r	OV	0.085684711
UCKL1	Terpenoid backbone biosy	OV	-0.081699253
UCKL1	Tgf_beta_signaling_pathw	OV	-0.182287485
UCKL1	Thiamine metabolism	OV	0.103233188
UCKL1	Tnfa_signaling_via_nfk	OV	-0.170327305
UCKL1	Tryptophan metabolism	OV	-0.07110942
UCKL1	Tumor endothelial cell	OV	-0.044795289
UCKL1	Tyrosine metabolism	OV	-0.128854274
UCKL1	Ubiquinone and other ter	OV	0.044526235
UCKL1	Valine, leucine and isoleu	OV	-0.124891564
UCKL1	Valine, leucine and isoleu	OV	-0.011290015

UCKL1	Vascular endothelial cell	OV	-0.125600209
UCKL1	Vascular smooth muscle c	OV	-0.142179241
UCKL1	Vegf_signaling_pathway	OV	-0.085621786
UCKL1	Vitamin b6 metabolism	OV	-0.000479998
UCKL1	Willert_wnt_signaling	OV	-0.12781825
UCKL1	Wnt_beta_catenin_signali	OV	-0.05889456
UPP1	Abnormal plasma cell	OV	0.042068347
UPP1	Activated b cell	OV	0.416258722
UPP1	Activated cd4+ t cell	OV	0.469224722
UPP1	Activated t cell	OV	0.414628548
UPP1	Alanine, aspartate and glu	OV	0.023986946
UPP1	Alcala_apoptosis	OV	0.373478156
UPP1	Alpha-linolenic acid meta	OV	0.090073172
UPP1	Amino sugar and nucleoti	OV	0.523308092
UPP1	Ampk_pathway	OV	-0.11512027
UPP1	Angiogenesis	OV	0.319144398
UPP1	Arachidonic acid metabol	OV	0.365207968
UPP1	Arginine and proline meta	OV	0.182311398
UPP1	Arginine biosynthesis	OV	0.130711352
UPP1	Ascorbate and aldarate me	OV	-0.130671823
UPP1	Atypical memory b cell	OV	0.229493451
UPP1	Axl+siglec6+ dendritic ce	OV	0.398420258
UPP1	B cell	OV	0.364450725
UPP1	B1 cell	OV	0.282434436
UPP1	Basal cell	OV	0.424087717
UPP1	Beta-alanine metabolism	OV	0.06711771
UPP1	Biosynthesis of unsaturate	OV	0.241957874
UPP1	Biotin metabolism	OV	0.120163697
UPP1	Butanoate metabolism	OV	-0.018545953
UPP1	Caffeine metabolism	OV	0.005076613
UPP1	Cancer stem cell	OV	0.247100543
UPP1	Cancer stem-like cell	OV	0.262067566
UPP1	Cd4+ cytotoxic t cell	OV	0.436612265
UPP1	Cd4+ memory t cell	OV	0.34438337
UPP1	Cd4+ regulatory t cell	OV	0.3991669
UPP1	Cd4+ t helper cell	OV	0.413514835
UPP1	Cd4+cd25+ regulatory t c	OV	0.427338492
UPP1	Cd8+ cytotoxic t cell	OV	0.449348113
UPP1	Cd8+ regulatory t cell	OV	0.41605863
UPP1	Cell_cycle	OV	-0.007581539
UPP1	Chandran_metastasis_top5	OV	-0.296848503
UPP1	Citrate cycle (tca cycle)	OV	0.327539476
UPP1	Cysteine and methionine r	OV	0.081907065

UPP1	Cytokine induced killer cell	OV	0.170458897
UPP1	D-arginine and d-ornithin	OV	0.131575817
UPP1	D-glutamine and d-glutan	OV	-0.042613425
UPP1	Dendritic cell	OV	0.501632376
UPP1	Dna_repair	OV	0.206028677
UPP1	Dna_replication	OV	0.108823052
UPP1	Double-negative memory	OV	0.202951184
UPP1	Drug metabolism - cytoch	OV	0.029009666
UPP1	Drug metabolism - other	OV	0.268785682
UPP1	E2f_targets	OV	0.02577488
UPP1	Ecm_receptor_interaction	OV	0.169195908
UPP1	Effector cd4+ memory t	OV	0.40235609
UPP1	Effector cd8+ memory t	OV	0.433351078
UPP1	Effector memory t cell	OV	0.405647017
UPP1	Effector regulatory t (treg	OV	0.383528205
UPP1	Elvidge_hif1a_targets_up	OV	0.193058433
UPP1	Endothelial cell	OV	0.267725024
UPP1	Eosinophil	OV	0.511328414
UPP1	Ether lipid metabolism	OV	0.102824882
UPP1	Exhausted cd4+ t cell	OV	0.510027605
UPP1	Exhausted cd8+ t cell	OV	0.441215558
UPP1	Exhausted t cell	OV	0.406262245
UPP1	Fat cell (adipocyte)	OV	0.020999863
UPP1	Fatty acid biosynthesis	OV	0.112511334
UPP1	Fatty acid degradation	OV	0.166430402
UPP1	Fatty acid elongation	OV	0.233383918
UPP1	Fibroblast	OV	0.340350198
UPP1	Folate biosynthesis	OV	0.169062425
UPP1	Follicular b cell	OV	0.354216468
UPP1	Follicular dendritic cell	OV	0.170856109
UPP1	Follicular helper (tfh) t	OV	0.404018231
UPP1	Follicular t cell	OV	0.380905875
UPP1	Foxp3+il-17+ t cell	OV	0.364271499
UPP1	Fructose and mannose me	OV	0.331102487
UPP1	G2m_checkpoint	OV	-0.06270477
UPP1	Galactose metabolism	OV	0.379175416
UPP1	Galie_tumor_stemness_ge	OV	0.164644804
UPP1	Glutathione metabolism	OV	0.355932782
UPP1	Glycerolipid metabolism	OV	0.073612071
UPP1	Glycerophospholipid met	OV	0.003731763
UPP1	Glycine, serine and threor	OV	0.150501328
UPP1	Glycolysis / gluconeogene	OV	0.349523636
UPP1	Glycosaminoglycan biosy	OV	0.191455629

UPP1	Glycosaminoglycan biosyn	OV	-0.008507975
UPP1	Glycosaminoglycan biosyn	OV	0.261432736
UPP1	Glycosaminoglycan degra	OV	0.176399915
UPP1	Glycosphingolipid biosyn	OV	0.434751066
UPP1	Glycosphingolipid biosyn	OV	0.528549015
UPP1	Glycosphingolipid biosyn	OV	0.318032605
UPP1	Glycosylphosphatidylinos	OV	0.055965933
UPP1	Glyoxylate and dicarboxy	OV	0.19624978
UPP1	Granulocyte	OV	0.485816609
UPP1	Hedgehog_signaling	OV	-0.146122892
UPP1	Histidine metabolism	OV	0.15640284
UPP1	Hypoxia	OV	0.429095789
UPP1	Il-17ralpha t cell	OV	0.423168862
UPP1	Il2_stat5_signaling	OV	0.509145467
UPP1	Il6_jak_stat3_signaling	OV	0.518685156
UPP1	Immune_checkpoints_tun	OV	0.503434124
UPP1	Immune_inhibition_cytok	OV	0.532320335
UPP1	Inositol phosphate metabo	OV	-0.123448794
UPP1	Interleukin_6_signaling	OV	0.034518372
UPP1	Jaeger_metastasis_up	OV	0.335221943
UPP1	Jain_nfkb_signaling	OV	-0.157713007
UPP1	Kras_signaling_up	OV	0.45434405
UPP1	Linoleic acid metabolism	OV	-0.11483947
UPP1	Lipoic acid metabolism	OV	-0.116260954
UPP1	Lysine degradation	OV	-0.422622464
UPP1	Lysosome	OV	0.434321339
UPP1	M1 macrophage	OV	0.496084963
UPP1	M2 macrophage	OV	0.498779338
UPP1	Mannose type o-glycan bi	OV	-0.052217595
UPP1	Mapk_signaling_pathway	OV	0.203875436
UPP1	Mapk3_erk1_activation	OV	0.140858414
UPP1	Marginal zone b cell	OV	0.393087843
UPP1	Memory b cell	OV	0.342557081
UPP1	Mesenchymal cell	OV	0.273548554
UPP1	Mesenchymal stem cell	OV	0.409353213
UPP1	Metabolism of xenobiotic	OV	0.111340775
UPP1	Migrating cancer stem cel	OV	0.232055378
UPP1	Mitotic_spindle	OV	-0.213499542
UPP1	Monocyte	OV	0.575083263
UPP1	Mtor_signaling_pathway	OV	-0.075261655
UPP1	Mtorc1_signaling	OV	0.458436787
UPP1	Mucin type o-glycan bios	OV	0.135004257
UPP1	Myc_targets_v1	OV	0.057916248

UPP1	Myeloid cell	OV	0.479089672
UPP1	N-glycan biosynthesis	OV	0.380021288
UPP1	Naive b cell	OV	0.220432483
UPP1	Naive cd4+ t cell	OV	0.218974907
UPP1	Naive cd8+ t cell	OV	-0.079577918
UPP1	Natural killer cell	OV	0.481292562
UPP1	Natural killer t (nkt) cell	OV	0.434875226
UPP1	Natural regulatory t (treg)	OV	0.359431196
UPP1	Neomycin, kanamycin and	OV	0.080919447
UPP1	Neutrophil	OV	0.593886285
UPP1	Nicotinate and nicotinamide	OV	0.376262321
UPP1	Nitrogen metabolism	OV	-0.072743191
UPP1	Nod_like_receptor_signaling	OV	0.46862173
UPP1	Notch_signaling	OV	0.024667423
UPP1	One carbon pool by folate	OV	-0.101772539
UPP1	Other glycan degradation	OV	0.20240377
UPP1	Other types of o-glycan biosynthesis	OV	-0.07157705
UPP1	Oxidative phosphorylation	OV	0.364377024
UPP1	P53_pathway	OV	0.45958034
UPP1	P53_signaling_pathway	OV	0.199975703
UPP1	Pantothenate and coenzyme biosynthesis	OV	0.272940638
UPP1	Pentose and glucuronate interconversions	OV	0.125414942
UPP1	Pentose phosphate pathway	OV	0.297571294
UPP1	Pericyte	OV	0.28794062
UPP1	Phenylalanine metabolism	OV	0.248949449
UPP1	Phenylalanine, tyrosine and tryptophan	OV	0.218845797
UPP1	Phosphonate and phosphite metabolism	OV	0.288052502
UPP1	Pi3k_akt_activation	OV	-0.103878063
UPP1	Pi3k_akt_mtor_signaling	OV	0.422772236
UPP1	Porphyrin and chlorophyll biosynthesis	OV	0.220574222
UPP1	Primary bile acid biosynthesis	OV	0.386208799
UPP1	Propanoate metabolism	OV	-0.082392627
UPP1	Purine metabolism	OV	0.219091599
UPP1	Pyrimidine metabolism	OV	0.261517147
UPP1	Pyruvate metabolism	OV	0.268684125
UPP1	Regulation_of_autophagy	OV	0.26611151
UPP1	Retinol metabolism	OV	0.071824203
UPP1	Riboflavin metabolism	OV	0.322776907
UPP1	Schmahl_pdgf_signaling	OV	0.080133511
UPP1	Selenocompound metabolism	OV	-0.242366556
UPP1	Signaling_by_hippo	OV	-0.229576483
UPP1	Sphingolipid metabolism	OV	0.337635679
UPP1	Starch and sucrose metabolism	OV	0.140446704

UPP1	Steroid biosynthesis	OV	0.475152756
UPP1	Steroid hormone biosynth	OV	0.046774596
UPP1	Sulfur metabolism	OV	0.221761196
UPP1	Synthesis and degradation	OV	0.075581631
UPP1	T helper cell	OV	0.440784262
UPP1	T helper1 (th1) cell	OV	0.459572837
UPP1	T helper17 (th17) cell	OV	0.442854868
UPP1	T helper2 (th2) cell	OV	0.376635412
UPP1	T helper9 (th9) cell	OV	0.377719225
UPP1	Taurine and hypotaurine r	OV	-0.12927437
UPP1	Terpenoid backbone biosy	OV	0.165707311
UPP1	Tgf_beta_signaling_pathw	OV	-0.079611018
UPP1	Thiamine metabolism	OV	0.100927792
UPP1	Tnfa_signaling_via_nfbk	OV	0.442792401
UPP1	Tryptophan metabolism	OV	0.264033294
UPP1	Tumor endothelial cell	OV	0.062676159
UPP1	Tyrosine metabolism	OV	0.196461652
UPP1	Ubiquinone and other terf	OV	0.190705064
UPP1	Valine, leucine and isoleu	OV	0.309811345
UPP1	Valine, leucine and isoleu	OV	0.062319748
UPP1	Vascular endothelial cell	OV	0.35667025
UPP1	Vascular smooth muscle c	OV	0.030961279
UPP1	Vegf_signaling_pathway	OV	0.239801799
UPP1	Vitamin b6 metabolism	OV	0.17512667
UPP1	Willert_wnt_signaling	OV	0.327590304
UPP1	Wnt_beta_catenin_signali	OV	-0.38043545
UPP2	Abnormal plasma cell	OV	-0.215338606
UPP2	Activated b cell	OV	-0.010169096
UPP2	Activated cd4+ t cell	OV	-0.07540879
UPP2	Activated t cell	OV	-0.118450092
UPP2	Alanine, aspartate and glu	OV	-0.006126566
UPP2	Alcala_apoptosis	OV	-0.060909197
UPP2	Alpha-linolenic acid meta	OV	-0.028648545
UPP2	Amino sugar and nucleoti	OV	-0.073577143
UPP2	Ampk_pathway	OV	-0.123268325
UPP2	Angiogenesis	OV	-0.191358273
UPP2	Arachidonic acid metabol	OV	-0.065781069
UPP2	Arginine and proline metæ	OV	-0.100903956
UPP2	Arginine biosynthesis	OV	-0.075511374
UPP2	Ascorbate and aldarate mε	OV	0.052653446
UPP2	Atypical memory b cell	OV	-0.169497312
UPP2	Axl+siglec6+ dendritic ce	OV	-0.074667379
UPP2	B cell	OV	0.010797228

UPP2	B1 cell	OV	-0.04755533
UPP2	Basal cell	OV	-0.132926282
UPP2	Beta-alanine metabolism	OV	0.120363359
UPP2	Biosynthesis of unsaturate	OV	-0.227307835
UPP2	Biotin metabolism	OV	0.056758454
UPP2	Butanoate metabolism	OV	0.143111729
UPP2	Caffeine metabolism	OV	0.011851152
UPP2	Cancer stem cell	OV	-0.205999663
UPP2	Cancer stem-like cell	OV	-0.102832264
UPP2	Cd4+ cytotoxic t cell	OV	-0.034384616
UPP2	Cd4+ memory t cell	OV	-0.122918539
UPP2	Cd4+ regulatory t cell	OV	-0.095409655
UPP2	Cd4+ t helper cell	OV	-0.073953297
UPP2	Cd4+cd25+ regulatory t c	OV	-0.08356795
UPP2	Cd8+ cytotoxic t cell	OV	-0.045045874
UPP2	Cd8+ regulatory t cell	OV	-0.10222477
UPP2	Cell_cycle	OV	-0.092624657
UPP2	Chandran_metastasis_top5	OV	0.043209654
UPP2	Citrate cycle (tca cycle)	OV	-0.00105213
UPP2	Cysteine and methionine r	OV	0.026975784
UPP2	Cytokine induced killer c	OV	-0.126927346
UPP2	D-arginine and d-ornithin	OV	-0.005814455
UPP2	D-glutamine and d-glutan	OV	0.110753446
UPP2	Dendritic cell	OV	-0.060090937
UPP2	Dna_repair	OV	-0.06117297
UPP2	Dna_replication	OV	-0.078573848
UPP2	Double-negative memory	OV	-0.071131933
UPP2	Drug metabolism - cytoch	OV	-0.007960498
UPP2	Drug metabolism - other c	OV	-0.015470694
UPP2	E2f_targets	OV	-0.061868289
UPP2	Ecm_receptor_interaction	OV	-0.233481624
UPP2	Effector cd4+ memory t (	OV	-0.068223645
UPP2	Effector cd8+ memory t (	OV	-0.030274692
UPP2	Effector memory t cell	OV	-0.121140948
UPP2	Effector regulatory t (treg	OV	-0.085366246
UPP2	Elvidge_hif1a_targets_up	OV	-0.135283187
UPP2	Endothelial cell	OV	-0.227545949
UPP2	Eosinophil	OV	-0.042078665
UPP2	Ether lipid metabolism	OV	0.034302795
UPP2	Exhausted cd4+ t cell	OV	-0.054925502
UPP2	Exhausted cd8+ t cell	OV	-0.045635657
UPP2	Exhausted t cell	OV	-0.052993745
UPP2	Fat cell (adipocyte)	OV	-0.162757546

UPP2	Fatty acid biosynthesis	OV	0.069162087
UPP2	Fatty acid degradation	OV	0.127678292
UPP2	Fatty acid elongation	OV	-0.021828107
UPP2	Fibroblast	OV	-0.224883282
UPP2	Folate biosynthesis	OV	-0.053533783
UPP2	Follicular b cell	OV	-0.027911178
UPP2	Follicular dendritic cell	OV	-0.0649746
UPP2	Follicular helper (tfh) t ce	OV	-0.082586573
UPP2	Follicular t cell	OV	-0.043505009
UPP2	Foxp3+il-17+ t cell	OV	-0.114029187
UPP2	Fructose and mannose me	OV	-0.045375142
UPP2	G2m_checkpoint	OV	-0.095612959
UPP2	Galactose metabolism	OV	-0.095073976
UPP2	Galie_tumor_stemness_ge	OV	-0.195924283
UPP2	Glutathione metabolism	OV	-0.049308901
UPP2	Glycerolipid metabolism	OV	-0.025101714
UPP2	Glycerophospholipid metæ	OV	0.041312994
UPP2	Glycine, serine and threor	OV	0.012270973
UPP2	Glycolysis / gluconeogene	OV	-0.069220753
UPP2	Glycosaminoglycan biosy	OV	-0.257828127
UPP2	Glycosaminoglycan biosy	OV	-0.164170118
UPP2	Glycosaminoglycan biosy	OV	-0.140746588
UPP2	Glycosaminoglycan degra	OV	0.011308052
UPP2	Glycosphingolipid biosyn	OV	-0.170606206
UPP2	Glycosphingolipid biosyn	OV	-0.178204871
UPP2	Glycosphingolipid biosyn	OV	-0.070017311
UPP2	Glycosylphosphatidylinos	OV	-0.05815702
UPP2	Glyoxylate and dicarboxy	OV	0.037941775
UPP2	Granulocyte	OV	-0.068793272
UPP2	Hedgehog_signaling	OV	-0.102219006
UPP2	Histidine metabolism	OV	0.010536129
UPP2	Hypoxia	OV	-0.134428948
UPP2	Il-17alpha t cell	OV	-0.108251755
UPP2	Il2_stat5_signaling	OV	-0.170557825
UPP2	Il6_jak_stat3_signaling	OV	-0.097917026
UPP2	Immune_checkpoints_tun	OV	-0.055130252
UPP2	Immune_inhibition_cytok	OV	-0.104855908
UPP2	Inositol phosphate metabo	OV	-0.006796702
UPP2	Interleukin_6_signaling	OV	0.049911176
UPP2	Jaeger_metastasis_up	OV	-0.243054969
UPP2	Jain_nfkb_signaling	OV	0.018981577
UPP2	Kras_signaling_up	OV	-0.190841061
UPP2	Linoleic acid metabolism	OV	0.002713558

UPP2	Lipoic acid metabolism	OV	0.104916927
UPP2	Lysine degradation	OV	-0.028808114
UPP2	Lysosome	OV	-0.093096116
UPP2	M1 macrophage	OV	-0.033325407
UPP2	M2 macrophage	OV	-0.082056786
UPP2	Mannose type o-glycan bi	OV	-0.075094728
UPP2	Mapk_signaling_pathway	OV	-0.160135146
UPP2	Mapk3_erk1_activation	OV	0.068874518
UPP2	Marginal zone b cell	OV	-0.067663067
UPP2	Memory b cell	OV	-0.033316515
UPP2	Mesenchymal cell	OV	-0.253648671
UPP2	Mesenchymal stem cell	OV	-0.172034265
UPP2	Metabolism of xenobiotic	OV	0.016994804
UPP2	Migrating cancer stem cel	OV	0.01784168
UPP2	Mitotic_spindle	OV	-0.120155792
UPP2	Monocyte	OV	-0.060340479
UPP2	Mtor_signaling_pathway	OV	0.061183588
UPP2	Mtorc1_signaling	OV	-0.105032939
UPP2	Mucin type o-glycan bios	OV	-0.145001027
UPP2	Myc_targets_v1	OV	-0.020072682
UPP2	Myeloid cell	OV	-0.071932788
UPP2	N-glycan biosynthesis	OV	-0.172813911
UPP2	Naive b cell	OV	-0.058155293
UPP2	Naive cd4+ t cell	OV	-0.030895306
UPP2	Naive cd8+ t cell	OV	0.005998546
UPP2	Natural killer cell	OV	-0.091540411
UPP2	Natural killer t (nkt) cell	OV	0.024381078
UPP2	Natural regulatory t (treg)	OV	-0.094763504
UPP2	Neomycin, kanamycin and	OV	-0.074144812
UPP2	Neutrophil	OV	-0.076296208
UPP2	Nicotinate and nicotinami	OV	0.035456401
UPP2	Nitrogen metabolism	OV	0.015725396
UPP2	Nod_like_receptor_signal	OV	-0.012100402
UPP2	Notch_signaling	OV	-0.179964819
UPP2	One carbon pool by folate	OV	0.016226481
UPP2	Other glycan degradation	OV	-0.033962131
UPP2	Other types of o-glycan b	OV	-0.044536171
UPP2	Oxidative phosphorylatior	OV	-0.018366207
UPP2	P53_pathway	OV	-0.005899694
UPP2	P53_signaling_pathway	OV	-0.006940647
UPP2	Pantothenate and coa bios	OV	-0.033366899
UPP2	Pentose and glucuronate i	OV	-0.000612136
UPP2	Pentose phosphate pathwa	OV	-0.031388417

UPP2	Pericyte	OV	-0.227259068
UPP2	Phenylalanine metabolism	OV	0.003876596
UPP2	Phenylalanine, tyrosine ar	OV	-0.079781488
UPP2	Phosphonate and phosphir	OV	0.046314105
UPP2	Pi3k_akt_activation	OV	0.010556128
UPP2	Pi3k_akt_mtor_signaling	OV	-0.151207499
UPP2	Porphyrin and chlorophyl	OV	0.043440125
UPP2	Primary bile acid biosynt	OV	0.015878214
UPP2	Propanoate metabolism	OV	0.200208262
UPP2	Purine metabolism	OV	-0.070232163
UPP2	Pyrimidine metabolism	OV	-0.058115742
UPP2	Pyruvate metabolism	OV	0.06477364
UPP2	Regulation_of_autophagy	OV	-0.006959279
UPP2	Retinol metabolism	OV	-0.080560263
UPP2	Riboflavin metabolism	OV	-0.096995777
UPP2	Schmahl_pdgf_signaling	OV	-0.035626426
UPP2	Selenocompound metabol	OV	0.009399377
UPP2	Signaling_by_hippo	OV	-0.107275809
UPP2	Sphingolipid metabolism	OV	-0.170234737
UPP2	Starch and sucrose metabo	OV	-0.024293794
UPP2	Steroid biosynthesis	OV	-0.056971505
UPP2	Steroid hormone biosynth	OV	0.077276228
UPP2	Sulfur metabolism	OV	-0.114037957
UPP2	Synthesis and degradation	OV	0.080693229
UPP2	T helper cell	OV	-0.108693773
UPP2	T helper1 (th1) cell	OV	-0.057422793
UPP2	T helper17 (th17) cell	OV	-0.069236045
UPP2	T helper2 (th2) cell	OV	-0.088779668
UPP2	T helper9 (th9) cell	OV	-0.083902735
UPP2	Taurine and hypotaurine r	OV	-0.11193907
UPP2	Terpenoid backbone biosy	OV	0.057277815
UPP2	Tgf_beta_signaling_pathw	OV	-0.223559853
UPP2	Thiamine metabolism	OV	0.020801931
UPP2	Tnfa_signaling_via_nfkb	OV	-0.057831641
UPP2	Tryptophan metabolism	OV	-0.034400091
UPP2	Tumor endothelial cell	OV	0.043504757
UPP2	Tyrosine metabolism	OV	-0.047176181
UPP2	Ubiquinone and other ter	OV	0.052416258
UPP2	Valine, leucine and isoleu	OV	-0.028463516
UPP2	Valine, leucine and isoleu	OV	0.182672771
UPP2	Vascular endothelial cell	OV	-0.157263552
UPP2	Vascular smooth muscle c	OV	-0.210830383
UPP2	Vegf_signaling_pathway	OV	-0.115955515

UPP2	Vitamin b6 metabolism	OV	0.003315229
UPP2	Willert_wnt_signaling	OV	-0.17359732
UPP2	Wnt_beta_catenin_signali	OV	-0.081705411
CDA	Abnormal plasma cell	PAAD	-0.239072143
CDA	Activated b cell	PAAD	0.030483452
CDA	Activated cd4+ t cell	PAAD	0.118229104
CDA	Activated t cell	PAAD	0.093419203
CDA	Alanine, aspartate and glu	PAAD	-0.143729474
CDA	Alcala_apoptosis	PAAD	0.243744165
CDA	Alpha-linolenic acid meta	PAAD	0.00414388
CDA	Amino sugar and nucleoti	PAAD	0.225931992
CDA	Ampk_pathway	PAAD	0.087003196
CDA	Angiogenesis	PAAD	0.342976282
CDA	Arachidonic acid metabol	PAAD	0.211241884
CDA	Arginine and proline metε	PAAD	-0.045807204
CDA	Arginine biosynthesis	PAAD	-0.042889897
CDA	Ascorbate and aldarate mε	PAAD	0.005474138
CDA	Atypical memory b cell	PAAD	0.083798681
CDA	Axl+siglec6+ dendritic ce	PAAD	0.280430456
CDA	B cell	PAAD	0.04717026
CDA	B1 cell	PAAD	-0.095764992
CDA	Basal cell	PAAD	0.637726044
CDA	Beta-alanine metabolism	PAAD	-0.155797237
CDA	Biosynthesis of unsaturate	PAAD	-0.051977207
CDA	Biotin metabolism	PAAD	-0.29119274
CDA	Butanoate metabolism	PAAD	-0.347209092
CDA	Caffeine metabolism	PAAD	0.166648441
CDA	Cancer stem cell	PAAD	0.32989767
CDA	Cancer stem-like cell	PAAD	0.086774691
CDA	Cd4+ cytotoxic t cell	PAAD	0.158284049
CDA	Cd4+ memory t cell	PAAD	-0.003141129
CDA	Cd4+ regulatory t cell	PAAD	0.167121922
CDA	Cd4+ t helper cell	PAAD	0.045336448
CDA	Cd4+cd25+ regulatory t c	PAAD	0.077752483
CDA	Cd8+ cytotoxic t cell	PAAD	0.026866375
CDA	Cd8+ regulatory t cell	PAAD	-0.063859392
CDA	Cell_cycle	PAAD	0.267908602
CDA	Chandran_metastasis_top ⁵	PAAD	-0.007519192
CDA	Citrate cycle (tca cycle)	PAAD	-0.126698631
CDA	Cysteine and methionine r	PAAD	-0.088964525
CDA	Cytokine induced killer cε	PAAD	-0.21885056
CDA	D-arginine and d-ornithin	PAAD	-0.044594994
CDA	D-glutamine and d-glutan	PAAD	-0.189136232

CDA	Dendritic cell	PAAD	0.140244574
CDA	Dna_repair	PAAD	0.113368171
CDA	Dna_replication	PAAD	0.06136313
CDA	Double-negative memory	PAAD	0.035043972
CDA	Drug metabolism - cytoch	PAAD	0.085532357
CDA	Drug metabolism - other	PAAD	0.254306495
CDA	E2f_targets	PAAD	0.139280326
CDA	Ecm_receptor_interaction	PAAD	0.358334752
CDA	Effector cd4+ memory t	PAAD	0.024080331
CDA	Effector cd8+ memory t	PAAD	0.167333298
CDA	Effector memory t cell	PAAD	0.00656489
CDA	Effector regulatory t (treg)	PAAD	0.087814071
CDA	Elvidge_hif1a_targets_up	PAAD	-0.126331268
CDA	Endothelial cell	PAAD	0.183433849
CDA	Eosinophil	PAAD	0.164968552
CDA	Ether lipid metabolism	PAAD	0.154231373
CDA	Exhausted cd4+ t cell	PAAD	0.277676671
CDA	Exhausted cd8+ t cell	PAAD	0.288684174
CDA	Exhausted t cell	PAAD	0.01772223
CDA	Fat cell (adipocyte)	PAAD	-0.161520113
CDA	Fatty acid biosynthesis	PAAD	-0.211336483
CDA	Fatty acid degradation	PAAD	-0.403481595
CDA	Fatty acid elongation	PAAD	0.022299326
CDA	Fibroblast	PAAD	0.251618235
CDA	Folate biosynthesis	PAAD	-0.008704318
CDA	Follicular b cell	PAAD	0.039932377
CDA	Follicular dendritic cell	PAAD	0.025364334
CDA	Follicular helper (tfh) t ce	PAAD	0.124994039
CDA	Follicular t cell	PAAD	0.048337135
CDA	Foxp3+il-17+ t cell	PAAD	0.045675621
CDA	Fructose and mannose me	PAAD	0.217767246
CDA	G2m_checkpoint	PAAD	0.186468104
CDA	Galactose metabolism	PAAD	0.349901122
CDA	Galie_tumor_stemness_ge	PAAD	0.324041713
CDA	Glutathione metabolism	PAAD	0.141706063
CDA	Glycerolipid metabolism	PAAD	0.058311185
CDA	Glycerophospholipid met	PAAD	0.136188688
CDA	Glycine, serine and threor	PAAD	-0.327127455
CDA	Glycolysis / gluconeogene	PAAD	0.298969494
CDA	Glycosaminoglycan biosy	PAAD	0.288345158
CDA	Glycosaminoglycan biosy	PAAD	-0.007593322
CDA	Glycosaminoglycan biosy	PAAD	0.404523708
CDA	Glycosaminoglycan degra	PAAD	-0.040407168

CDA	Glycosphingolipid biosyn	PAAD	-0.038293022
CDA	Glycosphingolipid biosyn	PAAD	0.250548416
CDA	Glycosphingolipid biosyn	PAAD	0.437592629
CDA	Glycosylphosphatidylinos	PAAD	-0.309406076
CDA	Glyoxylate and dicarboxy	PAAD	-0.291100472
CDA	Granulocyte	PAAD	0.152652387
CDA	Hedgehog_signaling	PAAD	0.135232705
CDA	Histidine metabolism	PAAD	-0.045747696
CDA	Hypoxia	PAAD	0.513281428
CDA	Il-17alpha t cell	PAAD	-0.011401193
CDA	Il2_stat5_signaling	PAAD	0.322858573
CDA	Il6_jak_stat3_signaling	PAAD	0.282368029
CDA	Immune_checkpoints_tun	PAAD	0.370359319
CDA	Immune_inhibition_cytok	PAAD	0.199891694
CDA	Inositol phosphate metabo	PAAD	-0.152308894
CDA	Interleukin_6_signaling	PAAD	-0.058861235
CDA	Jaeger_metastasis_up	PAAD	0.424087665
CDA	Jain_nfkb_signaling	PAAD	-0.012030965
CDA	Kras_signaling_up	PAAD	0.32115931
CDA	Linoleic acid metabolism	PAAD	0.034501979
CDA	Lipoic acid metabolism	PAAD	-0.368037131
CDA	Lysine degradation	PAAD	-0.387532442
CDA	Lysosome	PAAD	0.036593897
CDA	M1 macrophage	PAAD	0.184745349
CDA	M2 macrophage	PAAD	0.140556307
CDA	Mannose type o-glycan bi	PAAD	-0.255066238
CDA	Mapk_signaling_pathway	PAAD	0.215765039
CDA	Mapk3_erk1_activation	PAAD	0.024762899
CDA	Marginal zone b cell	PAAD	0.052026281
CDA	Memory b cell	PAAD	-0.010330818
CDA	Mesenchymal cell	PAAD	0.357899208
CDA	Mesenchymal stem cell	PAAD	0.244656302
CDA	Metabolism of xenobiotic	PAAD	0.144619757
CDA	Migrating cancer stem cel	PAAD	0.358252766
CDA	Mitotic_spindle	PAAD	0.306058328
CDA	Monocyte	PAAD	0.326924218
CDA	Mtor_signaling_pathway	PAAD	-0.047776377
CDA	Mtorc1_signaling	PAAD	0.309010812
CDA	Mucin type o-glycan biosy	PAAD	0.267130929
CDA	Myc_targets_v1	PAAD	0.14270463
CDA	Myeloid cell	PAAD	0.132518211
CDA	N-glycan biosynthesis	PAAD	-0.054034722
CDA	Naive b cell	PAAD	0.064840908

CDA	Naive cd4+ t cell	PAAD	-0.054644997
CDA	Naive cd8+ t cell	PAAD	-0.120310147
CDA	Natural killer cell	PAAD	0.045765452
CDA	Natural killer t (nkt) cell	PAAD	0.190317638
CDA	Natural regulatory t (treg)	PAAD	0.119371664
CDA	Neomycin, kanamycin and	PAAD	0.443161694
CDA	Neutrophil	PAAD	0.391724987
CDA	Nicotinate and nicotinami	PAAD	-0.062342656
CDA	Nitrogen metabolism	PAAD	0.075711907
CDA	Nod_like_receptor_signal	PAAD	0.217160729
CDA	Notch_signaling	PAAD	0.413578917
CDA	One carbon pool by folate	PAAD	-0.09620036
CDA	Other glycan degradation	PAAD	-0.224122758
CDA	Other types of o-glycan b	PAAD	0.084623388
CDA	Oxidative phosphorylatio	PAAD	-0.008775457
CDA	P53_pathway	PAAD	0.388694021
CDA	P53_signaling_pathway	PAAD	0.384466903
CDA	Pantothenate and coa bios	PAAD	-0.224875244
CDA	Pentose and glucuronate i	PAAD	0.083338145
CDA	Pentose phosphate pathwa	PAAD	0.295996674
CDA	Pericyte	PAAD	0.106637943
CDA	Phenylalanine metabolism	PAAD	0.077883283
CDA	Phenylalanine, tyrosine ar	PAAD	-0.112967416
CDA	Phosphonate and phosphir	PAAD	0.164133914
CDA	Pi3k_akt_activation	PAAD	0.234701773
CDA	Pi3k_akt_mtor_signaling	PAAD	0.329891812
CDA	Porphyrin and chlorophyl	PAAD	0.025019446
CDA	Primary bile acid biosynt	PAAD	-0.25943022
CDA	Propanoate metabolism	PAAD	-0.419888682
CDA	Purine metabolism	PAAD	-0.013453215
CDA	Pyrimidine metabolism	PAAD	0.119099115
CDA	Pyruvate metabolism	PAAD	-0.271840932
CDA	Regulation_of_autophagy	PAAD	-0.25512246
CDA	Retinol metabolism	PAAD	0.076076796
CDA	Riboflavin metabolism	PAAD	-0.015211845
CDA	Schmahl_pdgf_signaling	PAAD	0.247249807
CDA	Selenocompound metabol	PAAD	-0.356228404
CDA	Signaling_by_hippo	PAAD	0.125847295
CDA	Sphingolipid metabolism	PAAD	-0.157876375
CDA	Starch and sucrose metab	PAAD	0.203859579
CDA	Steroid biosynthesis	PAAD	0.044255158
CDA	Steroid hormone biosynth	PAAD	0.193071896
CDA	Sulfur metabolism	PAAD	0.042239946

CDA	Synthesis and degradation	PAAD	-0.276558162
CDA	T helper cell	PAAD	0.0214609
CDA	T helper1 (th1) cell	PAAD	0.139518666
CDA	T helper17 (th17) cell	PAAD	0.137410627
CDA	T helper2 (th2) cell	PAAD	0.118463147
CDA	T helper9 (th9) cell	PAAD	0.113706053
CDA	Taurine and hypotaurine r	PAAD	-0.068943691
CDA	Terpenoid backbone biosy	PAAD	-0.048310473
CDA	Tgf_beta_signaling_pathw	PAAD	0.206978859
CDA	Thiamine metabolism	PAAD	0.160580065
CDA	Tnfa_signaling_via_nfkb	PAAD	0.397299388
CDA	Tryptophan metabolism	PAAD	-0.330563491
CDA	Tumor endothelial cell	PAAD	0.394793274
CDA	Tyrosine metabolism	PAAD	-0.003578636
CDA	Ubiquinone and other ter	PAAD	-0.117322415
CDA	Valine, leucine and isoleu	PAAD	0.06314287
CDA	Valine, leucine and isoleu	PAAD	-0.418926703
CDA	Vascular endothelial cell	PAAD	0.045596354
CDA	Vascular smooth muscle c	PAAD	0.196452033
CDA	Vegf_signaling_pathway	PAAD	0.424804039
CDA	Vitamin b6 metabolism	PAAD	-0.270570603
CDA	Willert_wnt_signaling	PAAD	0.364456302
CDA	Wnt_beta_catenin_signali	PAAD	0.107469646
UCK1	Abnormal plasma cell	PAAD	0.291658056
UCK1	Activated b cell	PAAD	-0.098049096
UCK1	Activated cd4+ t cell	PAAD	-0.209376443
UCK1	Activated t cell	PAAD	-0.205121176
UCK1	Alanine, aspartate and glu	PAAD	0.031057883
UCK1	Alcala_apoptosis	PAAD	-0.128632939
UCK1	Alpha-linolenic acid meta	PAAD	-0.295854692
UCK1	Amino sugar and nucleoti	PAAD	-0.24013284
UCK1	Ampk_pathway	PAAD	-0.003968124
UCK1	Angiogenesis	PAAD	-0.268163656
UCK1	Arachidonic acid metaboli	PAAD	-0.384744153
UCK1	Arginine and proline metæ	PAAD	-0.028432634
UCK1	Arginine biosynthesis	PAAD	-0.11400424
UCK1	Ascorbate and aldarate mε	PAAD	-0.35947548
UCK1	Atypical memory b cell	PAAD	-0.082856971
UCK1	Axl+siglec6+ dendritic ce	PAAD	-0.338930398
UCK1	B cell	PAAD	-0.238329425
UCK1	B1 cell	PAAD	-0.062891222
UCK1	Basal cell	PAAD	-0.459707991
UCK1	Beta-alanine metabolism	PAAD	-0.079261584

UCK1	Biosynthesis of unsaturate	PAAD	-0.038342778
UCK1	Biotin metabolism	PAAD	0.164768052
UCK1	Butanoate metabolism	PAAD	0.16623687
UCK1	Caffeine metabolism	PAAD	-0.308661686
UCK1	Cancer stem cell	PAAD	-0.452459944
UCK1	Cancer stem-like cell	PAAD	-0.399979831
UCK1	Cd4+ cytotoxic t cell	PAAD	-0.186133787
UCK1	Cd4+ memory t cell	PAAD	-0.100603538
UCK1	Cd4+ regulatory t cell	PAAD	-0.189204476
UCK1	Cd4+ t helper cell	PAAD	-0.126688363
UCK1	Cd4+cd25+ regulatory t c	PAAD	-0.143163066
UCK1	Cd8+ cytotoxic t cell	PAAD	-0.072613841
UCK1	Cd8+ regulatory t cell	PAAD	-0.023780723
UCK1	Cell_cycle	PAAD	-0.204708518
UCK1	Chandran_metastasis_top5	PAAD	-0.326956732
UCK1	Citrate cycle (tca cycle)	PAAD	0.103207293
UCK1	Cysteine and methionine r	PAAD	-0.12451276
UCK1	Cytokine induced killer cε	PAAD	0.246986522
UCK1	D-arginine and d-ornithin	PAAD	0.061884274
UCK1	D-glutamine and d-glutan	PAAD	-0.009376582
UCK1	Dendritic cell	PAAD	-0.224055213
UCK1	Dna_repair	PAAD	0.194255991
UCK1	Dna_replication	PAAD	0.020534689
UCK1	Double-negative memory	PAAD	-0.039074127
UCK1	Drug metabolism - cytoch	PAAD	-0.370114088
UCK1	Drug metabolism - other (	PAAD	-0.239406976
UCK1	E2f_targets	PAAD	-0.139344333
UCK1	Ecm_receptor_interaction	PAAD	-0.40697741
UCK1	Effector cd4+ memory t (	PAAD	-0.133502553
UCK1	Effector cd8+ memory t (	PAAD	-0.205793704
UCK1	Effector memory t cell	PAAD	-0.128003507
UCK1	Effector regulatory t (treg	PAAD	-0.165646175
UCK1	Elvidge_hif1a_targets_up	PAAD	-0.144720292
UCK1	Endothelial cell	PAAD	-0.244101473
UCK1	Eosinophil	PAAD	-0.251153605
UCK1	Ether lipid metabolism	PAAD	-0.454656899
UCK1	Exhausted cd4+ t cell	PAAD	-0.363888494
UCK1	Exhausted cd8+ t cell	PAAD	-0.414716696
UCK1	Exhausted t cell	PAAD	-0.078332125
UCK1	Fat cell (adipocyte)	PAAD	0.106905289
UCK1	Fatty acid biosynthesis	PAAD	0.060563222
UCK1	Fatty acid degradation	PAAD	0.123927284
UCK1	Fatty acid elongation	PAAD	0.115582285

UCK1	Fibroblast	PAAD	-0.215913348
UCK1	Folate biosynthesis	PAAD	0.233177524
UCK1	Follicular b cell	PAAD	-0.139885291
UCK1	Follicular dendritic cell	PAAD	-0.095871835
UCK1	Follicular helper (tfh) t ce	PAAD	-0.192338932
UCK1	Follicular t cell	PAAD	-0.006202423
UCK1	Foxp3+il-17+ t cell	PAAD	-0.186100378
UCK1	Fructose and mannose me	PAAD	-0.184943638
UCK1	G2m_checkpoint	PAAD	-0.296276094
UCK1	Galactose metabolism	PAAD	-0.2190159
UCK1	Galie_tumor_stemness_ge	PAAD	-0.373114785
UCK1	Glutathione metabolism	PAAD	-0.145880016
UCK1	Glycerolipid metabolism	PAAD	-0.302983417
UCK1	Glycerophospholipid metæ	PAAD	-0.186528899
UCK1	Glycine, serine and threor	PAAD	0.3936336
UCK1	Glycolysis / gluconeogene	PAAD	-0.29771643
UCK1	Glycosaminoglycan biosy1	PAAD	0.06975783
UCK1	Glycosaminoglycan biosy1	PAAD	0.140092241
UCK1	Glycosaminoglycan biosy1	PAAD	-0.418107862
UCK1	Glycosaminoglycan degra	PAAD	0.12440889
UCK1	Glycosphingolipid biosyn1	PAAD	0.276409626
UCK1	Glycosphingolipid biosyn1	PAAD	-0.15182003
UCK1	Glycosphingolipid biosyn1	PAAD	-0.441888923
UCK1	Glycosylphosphatidylinos:	PAAD	0.346145272
UCK1	Glyoxylate and dicarboxy	PAAD	0.286142063
UCK1	Granulocyte	PAAD	-0.233243226
UCK1	Hedgehog_signaling	PAAD	-0.130418755
UCK1	Histidine metabolism	PAAD	-0.170205634
UCK1	Hypoxia	PAAD	-0.368497868
UCK1	Il-17ralpha t cell	PAAD	-0.125569158
UCK1	Il2_stat5_signaling	PAAD	-0.436510282
UCK1	Il6_jak_stat3_signaling	PAAD	-0.436580445
UCK1	Immune_checkpoints_tunr	PAAD	-0.319287766
UCK1	Immune_inhibition_cytok	PAAD	-0.256304679
UCK1	Inositol phosphate metabo	PAAD	-0.302034265
UCK1	Interleukin_6_signaling	PAAD	-0.295338289
UCK1	Jaeger_metastasis_up	PAAD	-0.287261686
UCK1	Jain_nfkb_signaling	PAAD	-0.06238198
UCK1	Kras_signaling_up	PAAD	-0.456229254
UCK1	Linoleic acid metabolism	PAAD	-0.366105473
UCK1	Lipoic acid metabolism	PAAD	0.280880634
UCK1	Lysine degradation	PAAD	0.26253402
UCK1	Lysosome	PAAD	0.084870642

UCK1	M1 macrophage	PAAD	-0.278755763
UCK1	M2 macrophage	PAAD	-0.125287052
UCK1	Mannose type o-glycan bi	PAAD	0.513866456
UCK1	Mapk_signaling_pathway	PAAD	-0.376295358
UCK1	Mapk3_erk1_activation	PAAD	-0.390937888
UCK1	Marginal zone b cell	PAAD	-0.160511226
UCK1	Memory b cell	PAAD	-0.135396741
UCK1	Mesenchymal cell	PAAD	-0.200287027
UCK1	Mesenchymal stem cell	PAAD	-0.309615
UCK1	Metabolism of xenobiotic	PAAD	-0.330518831
UCK1	Migrating cancer stem cel	PAAD	-0.385383031
UCK1	Mitotic_spindle	PAAD	-0.490559974
UCK1	Monocyte	PAAD	-0.386252315
UCK1	Mtor_signaling_pathway	PAAD	0.021341546
UCK1	Mtorc1_signaling	PAAD	-0.33661393
UCK1	Mucin type o-glycan biosy	PAAD	-0.694234912
UCK1	Myc_targets_v1	PAAD	-0.05388154
UCK1	Myeloid cell	PAAD	-0.230588348
UCK1	N-glycan biosynthesis	PAAD	0.086031536
UCK1	Naive b cell	PAAD	-0.163965855
UCK1	Naive cd4+ t cell	PAAD	-0.142417551
UCK1	Naive cd8+ t cell	PAAD	-0.002985609
UCK1	Natural killer cell	PAAD	-0.128919899
UCK1	Natural killer t (nkt) cell	PAAD	-0.316510759
UCK1	Natural regulatory t (treg)	PAAD	-0.233234809
UCK1	Neomycin, kanamycin and	PAAD	-0.468866203
UCK1	Neutrophil	PAAD	-0.460643504
UCK1	Nicotinate and nicotinami	PAAD	-0.108678843
UCK1	Nitrogen metabolism	PAAD	-0.302102104
UCK1	Nod_like_receptor_signal	PAAD	-0.439813012
UCK1	Notch_signaling	PAAD	-0.508816705
UCK1	One carbon pool by folate	PAAD	-0.226903698
UCK1	Other glycan degradation	PAAD	0.244340699
UCK1	Other types of o-glycan b	PAAD	0.252376687
UCK1	Oxidative phosphorylatio	PAAD	0.305235462
UCK1	P53_pathway	PAAD	-0.362335861
UCK1	P53_signaling_pathway	PAAD	-0.557357238
UCK1	Pantothenate and coa bios	PAAD	0.22946486
UCK1	Pentose and glucuronate i	PAAD	-0.389826671
UCK1	Pentose phosphate pathwa	PAAD	-0.200274273
UCK1	Pericyte	PAAD	-0.040889344
UCK1	Phenylalanine metabolism	PAAD	-0.089894888
UCK1	Phenylalanine, tyrosine ar	PAAD	0.210483632

UCK1	Phosphonate and phosphir	PAAD	-0.217657081
UCK1	Pi3k_akt_activation	PAAD	-0.274556749
UCK1	Pi3k_akt_mtor_signaling	PAAD	-0.294674154
UCK1	Porphyrin and chlorophyl	PAAD	-0.152670334
UCK1	Primary bile acid biosynt	PAAD	0.263083501
UCK1	Propanoate metabolism	PAAD	0.123674184
UCK1	Purine metabolism	PAAD	-0.032440835
UCK1	Pyrimidine metabolism	PAAD	0.032767774
UCK1	Pyruvate metabolism	PAAD	0.158478114
UCK1	Regulation_of_autophagy	PAAD	0.29630838
UCK1	Retinol metabolism	PAAD	-0.307084136
UCK1	Riboflavin metabolism	PAAD	-0.012098335
UCK1	Schmahl_pdgf_signaling	PAAD	-0.429608535
UCK1	Selenocompound metabol	PAAD	-0.084039117
UCK1	Signaling_by_hippo	PAAD	-0.338101457
UCK1	Sphingolipid metabolism	PAAD	-0.102886073
UCK1	Starch and sucrose metab	PAAD	-0.148533105
UCK1	Steroid biosynthesis	PAAD	-0.1628077
UCK1	Steroid hormone biosynth	PAAD	-0.461892748
UCK1	Sulfur metabolism	PAAD	-0.305798357
UCK1	Synthesis and degradation	PAAD	0.068473147
UCK1	T helper cell	PAAD	-0.127762017
UCK1	T helper1 (th1) cell	PAAD	-0.246000606
UCK1	T helper17 (th17) cell	PAAD	-0.339557175
UCK1	T helper2 (th2) cell	PAAD	-0.240827292
UCK1	T helper9 (th9) cell	PAAD	-0.175705129
UCK1	Taurine and hypotaurine r	PAAD	-0.086105759
UCK1	Terpenoid backbone biosy	PAAD	-0.042096079
UCK1	Tgf_beta_signaling_pathw	PAAD	-0.402250078
UCK1	Thiamine metabolism	PAAD	0.098964554
UCK1	Tnfa_signaling_via_nfb	PAAD	-0.558999376
UCK1	Tryptophan metabolism	PAAD	0.130476479
UCK1	Tumor endothelial cell	PAAD	-0.146002973
UCK1	Tyrosine metabolism	PAAD	0.050881642
UCK1	Ubiquinone and other ter	PAAD	0.252624596
UCK1	Valine, leucine and isoleu	PAAD	0.111978554
UCK1	Valine, leucine and isoleu	PAAD	0.262166277
UCK1	Vascular endothelial cell	PAAD	-0.057349183
UCK1	Vascular smooth muscle c	PAAD	-0.204456211
UCK1	Vegf_signaling_pathway	PAAD	-0.370803398
UCK1	Vitamin b6 metabolism	PAAD	0.442950345
UCK1	Willert_wnt_signaling	PAAD	-0.259804907
UCK1	Wnt_beta_catenin_signali	PAAD	-0.037266589

UCK2	Abnormal plasma cell	PAAD	-0.364656546
UCK2	Activated b cell	PAAD	-0.138737212
UCK2	Activated cd4+ t cell	PAAD	-0.136672118
UCK2	Activated t cell	PAAD	-0.076036764
UCK2	Alanine, aspartate and glu	PAAD	0.202458965
UCK2	Alcala_apoptosis	PAAD	0.482652071
UCK2	Alpha-linolenic acid meta	PAAD	0.249844506
UCK2	Amino sugar and nucleoti	PAAD	0.477027513
UCK2	Ampk_pathway	PAAD	0.164169178
UCK2	Angiogenesis	PAAD	-0.012654223
UCK2	Arachidonic acid metabol	PAAD	0.260062099
UCK2	Arginine and proline met	PAAD	0.407501274
UCK2	Arginine biosynthesis	PAAD	0.132950829
UCK2	Ascorbate and aldarate m	PAAD	0.228265159
UCK2	Atypical memory b cell	PAAD	-0.10383039
UCK2	Axl+siglec6+ dendritic ce	PAAD	-0.016572843
UCK2	B cell	PAAD	-0.082967576
UCK2	B1 cell	PAAD	-0.167417723
UCK2	Basal cell	PAAD	0.445255653
UCK2	Beta-alanine metabolism	PAAD	0.086533555
UCK2	Biosynthesis of unsaturate	PAAD	0.191319357
UCK2	Biotin metabolism	PAAD	-0.043409388
UCK2	Butanoate metabolism	PAAD	0.036094549
UCK2	Caffeine metabolism	PAAD	0.277112692
UCK2	Cancer stem cell	PAAD	0.036957093
UCK2	Cancer stem-like cell	PAAD	0.168963459
UCK2	Cd4+ cytotoxic t cell	PAAD	-0.153507481
UCK2	Cd4+ memory t cell	PAAD	-0.204241161
UCK2	Cd4+ regulatory t cell	PAAD	-0.15682765
UCK2	Cd4+ t helper cell	PAAD	-0.242397356
UCK2	Cd4+cd25+ regulatory t c	PAAD	-0.220282044
UCK2	Cd8+ cytotoxic t cell	PAAD	-0.15813577
UCK2	Cd8+ regulatory t cell	PAAD	-0.242892932
UCK2	Cell_cycle	PAAD	0.369055108
UCK2	Chandran_metastasis_top	PAAD	0.228256287
UCK2	Citrate cycle (tca cycle)	PAAD	0.238172709
UCK2	Cysteine and methionine r	PAAD	0.360112426
UCK2	Cytokine induced killer c	PAAD	-0.441423194
UCK2	D-arginine and d-ornithin	PAAD	-0.152421316
UCK2	D-glutamine and d-glutan	PAAD	-0.296801379
UCK2	Dendritic cell	PAAD	-0.131651072
UCK2	Dna_repair	PAAD	0.403574727
UCK2	Dna_replication	PAAD	0.419786707

UCK2	Double-negative memory PAAD	-0.127645448
UCK2	Drug metabolism - cytoch PAAD	0.222261827
UCK2	Drug metabolism - other (PAAD	0.548961775
UCK2	E2f_targets PAAD	0.420720345
UCK2	Ecm_receptor_interaction PAAD	0.003659076
UCK2	Effector cd4+ memory t (PAAD	-0.281947807
UCK2	Effector cd8+ memory t (PAAD	-0.183880941
UCK2	Effector memory t cell PAAD	-0.238429322
UCK2	Effector regulatory t (treg PAAD	-0.236221724
UCK2	Elvidge_hif1a_targets_up PAAD	0.242452877
UCK2	Endothelial cell PAAD	-0.105437118
UCK2	Eosinophil PAAD	-0.066120557
UCK2	Ether lipid metabolism PAAD	0.142029497
UCK2	Exhausted cd4+ t cell PAAD	-0.069584766
UCK2	Exhausted cd8+ t cell PAAD	0.045399916
UCK2	Exhausted t cell PAAD	-0.1938541
UCK2	Fat cell (adipocyte) PAAD	-0.101768259
UCK2	Fatty acid biosynthesis PAAD	0.094862148
UCK2	Fatty acid degradation PAAD	-0.032447365
UCK2	Fatty acid elongation PAAD	0.248218295
UCK2	Fibroblast PAAD	-0.168363268
UCK2	Folate biosynthesis PAAD	0.109177991
UCK2	Follicular b cell PAAD	-0.165953695
UCK2	Follicular dendritic cell PAAD	-0.200150016
UCK2	Follicular helper (tfh) t ce PAAD	-0.129114466
UCK2	Follicular t cell PAAD	-0.086888617
UCK2	Foxp3+il-17+ t cell PAAD	-0.12786612
UCK2	Fructose and mannose me PAAD	0.452758073
UCK2	G2m_checkpoint PAAD	0.41872806
UCK2	Galactose metabolism PAAD	0.312161757
UCK2	Galie_tumor_stemness_ge PAAD	-0.078869022
UCK2	Glutathione metabolism PAAD	0.448470108
UCK2	Glycerolipid metabolism PAAD	0.244369515
UCK2	Glycerophospholipid metæ PAAD	0.223834917
UCK2	Glycine, serine and threor PAAD	-0.092229927
UCK2	Glycolysis / gluconeogene PAAD	0.455535921
UCK2	Glycosaminoglycan biosy1 PAAD	-0.069500764
UCK2	Glycosaminoglycan biosy1 PAAD	-0.336015329
UCK2	Glycosaminoglycan biosy1 PAAD	0.339132397
UCK2	Glycosaminoglycan degra PAAD	-0.040712974
UCK2	Glycosphingolipid biosyn1 PAAD	-0.325126285
UCK2	Glycosphingolipid biosyn1 PAAD	-0.026162
UCK2	Glycosphingolipid biosyn1 PAAD	0.352822906

UCK2	Glycosylphosphatidylinositol	PAAD	0.037107891
UCK2	Glyoxylate and dicarboxylate	PAAD	0.21584459
UCK2	Granulocyte	PAAD	-0.08861276
UCK2	Hedgehog signaling	PAAD	-0.335348892
UCK2	Histidine metabolism	PAAD	0.15412835
UCK2	Hypoxia	PAAD	0.23108456
UCK2	Il-17alpha t cell	PAAD	-0.209393788
UCK2	Il2_stat5_signaling	PAAD	0.083922514
UCK2	Il6_jak_stat3_signaling	PAAD	0.015115912
UCK2	Immune_checkpoints_tumor	PAAD	0.055878744
UCK2	Immune_inhibition_cytokine	PAAD	0.07190589
UCK2	Inositol phosphate metabolism	PAAD	-0.285586222
UCK2	Interleukin_6_signaling	PAAD	-0.264755404
UCK2	Jaeger_metastasis_up	PAAD	0.312789149
UCK2	Jain_nfkb_signaling	PAAD	0.434374445
UCK2	Kras_signaling_up	PAAD	-0.002225883
UCK2	Linoleic acid metabolism	PAAD	0.239892362
UCK2	Lipoic acid metabolism	PAAD	0.019027219
UCK2	Lysine degradation	PAAD	-0.080143051
UCK2	Lysosome	PAAD	-0.131724886
UCK2	M1 macrophage	PAAD	-0.041346236
UCK2	M2 macrophage	PAAD	-0.172961777
UCK2	Mannose type o-glycan biosynthesis	PAAD	-0.186914679
UCK2	Mapk_signaling_pathway	PAAD	-0.128223935
UCK2	Mapk3_erk1_activation	PAAD	-0.156225288
UCK2	Marginal zone b cell	PAAD	-0.144705425
UCK2	Memory b cell	PAAD	-0.137812048
UCK2	Mesenchymal cell	PAAD	-0.00380625
UCK2	Mesenchymal stem cell	PAAD	-0.091893832
UCK2	Metabolism of xenobiotics	PAAD	0.317615221
UCK2	Migrating cancer stem cell	PAAD	0.385031411
UCK2	Mitotic_spindle	PAAD	0.131735944
UCK2	Monocyte	PAAD	0.097310233
UCK2	Mtor_signaling_pathway	PAAD	-0.28636167
UCK2	Mtorc1_signaling	PAAD	0.582240396
UCK2	Mucin type o-glycan biosynthesis	PAAD	0.277176961
UCK2	Myc_targets_v1	PAAD	0.546621018
UCK2	Myeloid cell	PAAD	-0.167570838
UCK2	N-glycan biosynthesis	PAAD	0.208245999
UCK2	Naive b cell	PAAD	-0.050817453
UCK2	Naive cd4+ t cell	PAAD	-0.269713026
UCK2	Naive cd8+ t cell	PAAD	-0.403437264
UCK2	Natural killer cell	PAAD	-0.211108496

UCK2	Natural killer t (nkt) cell	PAAD	0.262622652
UCK2	Natural regulatory t (treg)	PAAD	-0.198676155
UCK2	Neomycin, kanamycin and	PAAD	0.309576852
UCK2	Neutrophil	PAAD	0.209629897
UCK2	Nicotinate and nicotinami	PAAD	-0.042512786
UCK2	Nitrogen metabolism	PAAD	0.223933695
UCK2	Nod_like_receptor_signal	PAAD	0.064637726
UCK2	Notch_signaling	PAAD	0.414417241
UCK2	One carbon pool by folate	PAAD	0.467612238
UCK2	Other glycan degradation	PAAD	-0.069345553
UCK2	Other types of o-glycan b	PAAD	-0.10098712
UCK2	Oxidative phosphorylatio	PAAD	0.335728876
UCK2	P53_pathway	PAAD	0.436759164
UCK2	P53_signaling_pathway	PAAD	0.480981802
UCK2	Pantothenate and coa bios	PAAD	-0.065492562
UCK2	Pentose and glucuronate i	PAAD	0.309782401
UCK2	Pentose phosphate pathwa	PAAD	0.456295608
UCK2	Pericyte	PAAD	-0.225751818
UCK2	Phenylalanine metabolism	PAAD	0.174055014
UCK2	Phenylalanine, tyrosine ar	PAAD	-0.021731803
UCK2	Phosphonate and phosphir	PAAD	0.177348927
UCK2	Pi3k_akt_activation	PAAD	-0.144024587
UCK2	Pi3k_akt_mtor_signaling	PAAD	0.291446964
UCK2	Porphyrin and chlorophyl	PAAD	0.381557051
UCK2	Primary bile acid biosynt	PAAD	-0.288067482
UCK2	Propanoate metabolism	PAAD	-0.033951827
UCK2	Purine metabolism	PAAD	0.519644417
UCK2	Pyrimidine metabolism	PAAD	0.533973753
UCK2	Pyruvate metabolism	PAAD	0.202167174
UCK2	Regulation_of_autophagy	PAAD	-0.019110128
UCK2	Retinol metabolism	PAAD	0.107045608
UCK2	Riboflavin metabolism	PAAD	0.458522909
UCK2	Schmahl_pdgf_signaling	PAAD	-0.060359571
UCK2	Selenocompound metabol	PAAD	-0.027475522
UCK2	Signaling_by_hippo	PAAD	-0.034170283
UCK2	Sphingolipid metabolism	PAAD	-0.092221688
UCK2	Starch and sucrose metabo	PAAD	0.036802597
UCK2	Steroid biosynthesis	PAAD	0.399435138
UCK2	Steroid hormone biosynth	PAAD	0.306915132
UCK2	Sulfur metabolism	PAAD	0.295896843
UCK2	Synthesis and degradation	PAAD	0.087595919
UCK2	T helper cell	PAAD	-0.249607368
UCK2	T helper1 (th1) cell	PAAD	-0.11257141

UCK2	T helper17 (th17) cell	PAAD	-0.012845868
UCK2	T helper2 (th2) cell	PAAD	-0.089313202
UCK2	T helper9 (th9) cell	PAAD	-0.164782544
UCK2	Taurine and hypotaurine r	PAAD	-0.014051294
UCK2	Terpenoid backbone biosy	PAAD	0.437467723
UCK2	Tgf_beta_signaling_pathw	PAAD	-0.122646905
UCK2	Thiamine metabolism	PAAD	0.248385851
UCK2	Tnfa_signaling_via_nfkb	PAAD	0.252842604
UCK2	Tryptophan metabolism	PAAD	-0.15994067
UCK2	Tumor endothelial cell	PAAD	0.278192813
UCK2	Tyrosine metabolism	PAAD	0.059167451
UCK2	Ubiquinone and other terf	PAAD	0.133143372
UCK2	Valine, leucine and isoleu	PAAD	0.133428188
UCK2	Valine, leucine and isoleu	PAAD	-0.042618464
UCK2	Vascular endothelial cell	PAAD	-0.203485553
UCK2	Vascular smooth muscle c	PAAD	-0.090249643
UCK2	Vegf_signaling_pathway	PAAD	0.051495427
UCK2	Vitamin b6 metabolism	PAAD	-0.111590397
UCK2	Willert_wnt_signaling	PAAD	0.355392179
UCK2	Wnt_beta_catenin_signali	PAAD	-0.079424713
UCKL1	Abnormal plasma cell	PAAD	-0.272788095
UCKL1	Activated b cell	PAAD	-0.337899594
UCKL1	Activated cd4+ t cell	PAAD	-0.479537075
UCKL1	Activated t cell	PAAD	-0.422811866
UCKL1	Alanine, aspartate and glu	PAAD	0.010613852
UCKL1	Alcala_apoptosis	PAAD	0.064970191
UCKL1	Alpha-linolenic acid meta	PAAD	-0.11188003
UCKL1	Amino sugar and nucleoti	PAAD	-0.054480533
UCKL1	Ampk_pathway	PAAD	0.439027738
UCKL1	Angiogenesis	PAAD	-0.420490405
UCKL1	Arachidonic acid metabol:	PAAD	-0.243640181
UCKL1	Arginine and proline metæ	PAAD	-0.10611337
UCKL1	Arginine biosynthesis	PAAD	-0.054017945
UCKL1	Ascorbate and aldarate mε	PAAD	-0.195609848
UCKL1	Atypical memory b cell	PAAD	-0.252072666
UCKL1	Axl+siglec6+ dendritic ce	PAAD	-0.529456384
UCKL1	B cell	PAAD	-0.463905826
UCKL1	B1 cell	PAAD	-0.33835037
UCKL1	Basal cell	PAAD	-0.003136028
UCKL1	Beta-alanine metabolism	PAAD	-0.387315265
UCKL1	Biosynthesis of unsaturate	PAAD	-0.075127416
UCKL1	Biotin metabolism	PAAD	0.026608453
UCKL1	Butanoate metabolism	PAAD	-0.028325805

UCKL1	Caffeine metabolism	PAAD	-0.052725484
UCKL1	Cancer stem cell	PAAD	-0.643241965
UCKL1	Cancer stem-like cell	PAAD	-0.583877948
UCKL1	Cd4+ cytotoxic t cell	PAAD	-0.513716091
UCKL1	Cd4+ memory t cell	PAAD	-0.374937531
UCKL1	Cd4+ regulatory t cell	PAAD	-0.471202459
UCKL1	Cd4+ t helper cell	PAAD	-0.504251711
UCKL1	Cd4+cd25+ regulatory t c	PAAD	-0.513739167
UCKL1	Cd8+ cytotoxic t cell	PAAD	-0.403281464
UCKL1	Cd8+ regulatory t cell	PAAD	-0.430715068
UCKL1	Cell_cycle	PAAD	0.092151817
UCKL1	Chandran_metastasis_top5	PAAD	-0.163942242
UCKL1	Citrate cycle (tca cycle)	PAAD	0.056742568
UCKL1	Cysteine and methionine r	PAAD	0.009297304
UCKL1	Cytokine induced killer c	PAAD	-0.291204914
UCKL1	D-arginine and d-ornithin	PAAD	-0.189972639
UCKL1	D-glutamine and d-glutan	PAAD	-0.158911942
UCKL1	Dendritic cell	PAAD	-0.488936145
UCKL1	Dna_repair	PAAD	0.523746191
UCKL1	Dna_replication	PAAD	0.289061398
UCKL1	Double-negative memory	PAAD	-0.196910737
UCKL1	Drug metabolism - cytoch	PAAD	-0.306091513
UCKL1	Drug metabolism - other c	PAAD	0.16155309
UCKL1	E2f_targets	PAAD	0.162764614
UCKL1	Ecm_receptor_interaction	PAAD	-0.460449203
UCKL1	Effector cd4+ memory t (	PAAD	-0.502936217
UCKL1	Effector cd8+ memory t (	PAAD	-0.489129542
UCKL1	Effector memory t cell	PAAD	-0.503495792
UCKL1	Effector regulatory t (treg	PAAD	-0.560137593
UCKL1	Elvidge_hif1a_targets_up	PAAD	-0.304886297
UCKL1	Endothelial cell	PAAD	-0.609809155
UCKL1	Eosinophil	PAAD	-0.522932563
UCKL1	Ether lipid metabolism	PAAD	-0.315576075
UCKL1	Exhausted cd4+ t cell	PAAD	-0.537177264
UCKL1	Exhausted cd8+ t cell	PAAD	-0.502408914
UCKL1	Exhausted t cell	PAAD	-0.401021996
UCKL1	Fat cell (adipocyte)	PAAD	-0.118084962
UCKL1	Fatty acid biosynthesis	PAAD	-0.025224085
UCKL1	Fatty acid degradation	PAAD	-0.20934603
UCKL1	Fatty acid elongation	PAAD	-0.013103659
UCKL1	Fibroblast	PAAD	-0.531668424
UCKL1	Folate biosynthesis	PAAD	0.125381331
UCKL1	Follicular b cell	PAAD	-0.387337313

UCKL1	Follicular dendritic cell	PAAD	-0.317392802
UCKL1	Follicular helper (tfh) t cell	PAAD	-0.44435212
UCKL1	Follicular t cell	PAAD	-0.113115266
UCKL1	Foxp3+il-17+ t cell	PAAD	-0.319659706
UCKL1	Fructose and mannose metabolism	PAAD	0.260060152
UCKL1	G2m_checkpoint	PAAD	-0.004284959
UCKL1	Galactose metabolism	PAAD	-0.044193849
UCKL1	Galie_tumor_stemness_gene	PAAD	-0.558694308
UCKL1	Glutathione metabolism	PAAD	-0.098603262
UCKL1	Glycerolipid metabolism	PAAD	-0.083461312
UCKL1	Glycerophospholipid metabolism	PAAD	0.342711352
UCKL1	Glycine, serine and threonine	PAAD	-0.0016505
UCKL1	Glycolysis / gluconeogenesis	PAAD	-0.028641263
UCKL1	Glycosaminoglycan biosynthesis	PAAD	0.039724993
UCKL1	Glycosaminoglycan biosynthesis	PAAD	-0.22357933
UCKL1	Glycosaminoglycan biosynthesis	PAAD	-0.247798623
UCKL1	Glycosaminoglycan degradation	PAAD	-0.053842804
UCKL1	Glycosphingolipid biosynthesis	PAAD	-0.311617307
UCKL1	Glycosphingolipid biosynthesis	PAAD	-0.341133913
UCKL1	Glycosphingolipid biosynthesis	PAAD	-0.260753022
UCKL1	Glycosylphosphatidylinositol	PAAD	0.31917478
UCKL1	Glyoxylate and dicarboxylate	PAAD	0.234926363
UCKL1	Granulocyte	PAAD	-0.550029473
UCKL1	Hedgehog_signaling	PAAD	-0.409819482
UCKL1	Histidine metabolism	PAAD	-0.39087482
UCKL1	Hypoxia	PAAD	-0.133432137
UCKL1	Il-17alpha t cell	PAAD	-0.476904715
UCKL1	Il2_stat5_signaling	PAAD	-0.537532782
UCKL1	Il6_jak_stat3_signaling	PAAD	-0.565049378
UCKL1	Immune_checkpoints_tumor	PAAD	-0.442113553
UCKL1	Immune_inhibition_cytokine	PAAD	-0.372336742
UCKL1	Inositol phosphate metabolism	PAAD	-0.45380021
UCKL1	Interleukin_6_signaling	PAAD	-0.622129224
UCKL1	Jaeger_metastasis_up	PAAD	-0.272029636
UCKL1	Jain_nfkb_signaling	PAAD	0.31881162
UCKL1	Kras_signaling_up	PAAD	-0.608458555
UCKL1	Linoleic acid metabolism	PAAD	-0.177886207
UCKL1	Lipoic acid metabolism	PAAD	0.230492688
UCKL1	Lysine degradation	PAAD	-0.085995293
UCKL1	Lysosome	PAAD	-0.11622947
UCKL1	M1 macrophage	PAAD	-0.553389495
UCKL1	M2 macrophage	PAAD	-0.521983802
UCKL1	Mannose type o-glycan biosynthesis	PAAD	0.337994809

UCKL1	Mapk_signaling_pathway	PAAD	-0.484622291
UCKL1	Mapk3_erk1_activation	PAAD	-0.541572608
UCKL1	Marginal zone b cell	PAAD	-0.470099665
UCKL1	Memory b cell	PAAD	-0.38576039
UCKL1	Mesenchymal cell	PAAD	-0.39618626
UCKL1	Mesenchymal stem cell	PAAD	-0.601062236
UCKL1	Metabolism of xenobiotic	PAAD	-0.192355456
UCKL1	Migrating cancer stem cel	PAAD	-0.015814095
UCKL1	Mitotic_spindle	PAAD	-0.276412405
UCKL1	Monocyte	PAAD	-0.441984639
UCKL1	Mtor_signaling_pathway	PAAD	-0.254595473
UCKL1	Mtorc1_signaling	PAAD	-0.010104435
UCKL1	Mucin type o-glycan bios	PAAD	-0.486452102
UCKL1	Myc_targets_v1	PAAD	0.246475471
UCKL1	Myeloid cell	PAAD	-0.572414228
UCKL1	N-glycan biosynthesis	PAAD	-0.130295555
UCKL1	Naive b cell	PAAD	-0.301111397
UCKL1	Naive cd4+ t cell	PAAD	-0.553470624
UCKL1	Naive cd8+ t cell	PAAD	-0.344970784
UCKL1	Natural killer cell	PAAD	-0.519006342
UCKL1	Natural killer t (nkt) cell	PAAD	-0.100155989
UCKL1	Natural regulatory t (treg)	PAAD	-0.53391435
UCKL1	Neomycin, kanamycin an	PAAD	-0.130769126
UCKL1	Neutrophil	PAAD	-0.464947638
UCKL1	Nicotinate and nicotinami	PAAD	-0.245553292
UCKL1	Nitrogen metabolism	PAAD	-0.243515498
UCKL1	Nod_like_receptor_signal	PAAD	-0.505947868
UCKL1	Notch_signaling	PAAD	-0.206529994
UCKL1	One carbon pool by folate	PAAD	-0.008216039
UCKL1	Other glycan degradation	PAAD	0.398712451
UCKL1	Other types of o-glycan b	PAAD	0.373931365
UCKL1	Oxidative phosphorylatio	PAAD	0.445871648
UCKL1	P53_pathway	PAAD	0.148724345
UCKL1	P53_signaling_pathway	PAAD	-0.060845056
UCKL1	Pantothenate and coa bios	PAAD	-0.095903576
UCKL1	Pentose and glucuronate i	PAAD	-0.132270594
UCKL1	Pentose phosphate pathwa	PAAD	0.156660275
UCKL1	Pericyte	PAAD	-0.492853749
UCKL1	Phenylalanine metabolism	PAAD	0.030212496
UCKL1	Phenylalanine, tyrosine ar	PAAD	0.194771886
UCKL1	Phosphonate and phosphir	PAAD	-0.180686171
UCKL1	Pi3k_akt_activation	PAAD	-0.50817641
UCKL1	Pi3k_akt_mtor_signaling	PAAD	-0.150329259

UCKL1	Porphyrin and chlorophyl	PAAD	0.05438351
UCKL1	Primary bile acid biosynt	PAAD	-0.238739705
UCKL1	Propanoate metabolism	PAAD	-0.19097271
UCKL1	Purine metabolism	PAAD	0.160357909
UCKL1	Pyrimidine metabolism	PAAD	0.389376538
UCKL1	Pyruvate metabolism	PAAD	0.130718929
UCKL1	Regulation_of_autophagy	PAAD	0.225968607
UCKL1	Retinol metabolism	PAAD	-0.185084025
UCKL1	Riboflavin metabolism	PAAD	0.106385673
UCKL1	Schmahl_pdgf_signaling	PAAD	-0.500232398
UCKL1	Selenocompound metabol	PAAD	-0.302784485
UCKL1	Signaling_by_hippo	PAAD	-0.533892034
UCKL1	Sphingolipid metabolism	PAAD	-0.283664045
UCKL1	Starch and sucrose metabo	PAAD	-0.328672672
UCKL1	Steroid biosynthesis	PAAD	0.099324575
UCKL1	Steroid hormone biosynth	PAAD	-0.189248752
UCKL1	Sulfur metabolism	PAAD	-0.057201805
UCKL1	Synthesis and degradation	PAAD	-0.057584525
UCKL1	T helper cell	PAAD	-0.493540345
UCKL1	T helper1 (th1) cell	PAAD	-0.50424412
UCKL1	T helper17 (th17) cell	PAAD	-0.468044325
UCKL1	T helper2 (th2) cell	PAAD	-0.470206749
UCKL1	T helper9 (th9) cell	PAAD	-0.41375169
UCKL1	Taurine and hypotaurine r	PAAD	-0.02117492
UCKL1	Terpenoid backbone biosy	PAAD	0.176712611
UCKL1	Tgf_beta_signaling_pathw	PAAD	-0.665710221
UCKL1	Thiamine metabolism	PAAD	0.127516047
UCKL1	Tnfa_signaling_via_nfkb	PAAD	-0.340040607
UCKL1	Tryptophan metabolism	PAAD	-0.326149303
UCKL1	Tumor endothelial cell	PAAD	0.009445184
UCKL1	Tyrosine metabolism	PAAD	-0.012235753
UCKL1	Ubiquinone and other ter	PAAD	0.204869597
UCKL1	Valine, leucine and isoleu	PAAD	0.11560737
UCKL1	Valine, leucine and isoleu	PAAD	-0.075824464
UCKL1	Vascular endothelial cell	PAAD	-0.430302956
UCKL1	Vascular smooth muscle c	PAAD	-0.399622114
UCKL1	Vegf_signaling_pathway	PAAD	-0.267725262
UCKL1	Vitamin b6 metabolism	PAAD	0.209733542
UCKL1	Willert_wnt_signaling	PAAD	-0.221449941
UCKL1	Wnt_beta_catenin_signali	PAAD	0.060324964
UPP1	Abnormal plasma cell	PAAD	-0.252984292
UPP1	Activated b cell	PAAD	0.100461883
UPP1	Activated cd4+ t cell	PAAD	0.113430719

UPP1	Activated t cell	PAAD	0.104606611
UPP1	Alanine, aspartate and glu	PAAD	-0.238996655
UPP1	Alcala_apoptosis	PAAD	0.372493938
UPP1	Alpha-linolenic acid meta	PAAD	-0.025487627
UPP1	Amino sugar and nucleoti	PAAD	0.344054201
UPP1	Ampk_pathway	PAAD	0.069171558
UPP1	Angiogenesis	PAAD	0.218302874
UPP1	Arachidonic acid metabol	PAAD	0.183415889
UPP1	Arginine and proline met	PAAD	0.039789023
UPP1	Arginine biosynthesis	PAAD	-0.095074079
UPP1	Ascorbate and aldarate m	PAAD	-0.138917832
UPP1	Atypical memory b cell	PAAD	0.011667374
UPP1	Axl+siglec6+ dendritic ce	PAAD	0.171258721
UPP1	B cell	PAAD	0.044502392
UPP1	B1 cell	PAAD	-0.036327578
UPP1	Basal cell	PAAD	0.503437054
UPP1	Beta-alanine metabolism	PAAD	-0.22320392
UPP1	Biosynthesis of unsaturate	PAAD	-0.09969767
UPP1	Biotin metabolism	PAAD	-0.265495774
UPP1	Butanoate metabolism	PAAD	-0.285920634
UPP1	Caffeine metabolism	PAAD	-0.008358259
UPP1	Cancer stem cell	PAAD	0.143965481
UPP1	Cancer stem-like cell	PAAD	0.001515354
UPP1	Cd4+ cytotoxic t cell	PAAD	0.103992408
UPP1	Cd4+ memory t cell	PAAD	-0.017501371
UPP1	Cd4+ regulatory t cell	PAAD	0.198878585
UPP1	Cd4+ t helper cell	PAAD	0.026091271
UPP1	Cd4+cd25+ regulatory t c	PAAD	0.057412468
UPP1	Cd8+ cytotoxic t cell	PAAD	0.028884206
UPP1	Cd8+ regulatory t cell	PAAD	-0.074694121
UPP1	Cell_cycle	PAAD	0.170411436
UPP1	Chandran_metastasis_top5	PAAD	-0.231765128
UPP1	Citrate cycle (tca cycle)	PAAD	-0.080680374
UPP1	Cysteine and methionine r	PAAD	-0.041678949
UPP1	Cytokine induced killer c	PAAD	-0.170524391
UPP1	D-arginine and d-ornithin	PAAD	-0.194197486
UPP1	D-glutamine and d-glutan	PAAD	-0.355445972
UPP1	Dendritic cell	PAAD	0.166620674
UPP1	Dna_repair	PAAD	0.323955182
UPP1	Dna_replication	PAAD	0.223734548
UPP1	Double-negative memory	PAAD	0.047308039
UPP1	Drug metabolism - cytoch	PAAD	-0.034949054
UPP1	Drug metabolism - other	PAAD	0.294031089

UPP1	E2f_targets	PAAD	0.145513236
UPP1	Ecm_receptor_interaction	PAAD	0.198500605
UPP1	Effector cd4+ memory t (	PAAD	-0.039282158
UPP1	Effector cd8+ memory t (	PAAD	0.154686881
UPP1	Effector memory t cell	PAAD	-0.017563173
UPP1	Effector regulatory t (treg	PAAD	0.053477311
UPP1	Elvidge_hif1a_targets_up	PAAD	-0.236372929
UPP1	Endothelial cell	PAAD	0.092680847
UPP1	Eosinophil	PAAD	0.187362628
UPP1	Ether lipid metabolism	PAAD	-0.069481727
UPP1	Exhausted cd4+ t cell	PAAD	0.144229182
UPP1	Exhausted cd8+ t cell	PAAD	0.224907683
UPP1	Exhausted t cell	PAAD	0.065013496
UPP1	Fat cell (adipocyte)	PAAD	0.047334929
UPP1	Fatty acid biosynthesis	PAAD	-0.201587168
UPP1	Fatty acid degradation	PAAD	-0.339419898
UPP1	Fatty acid elongation	PAAD	-0.027558605
UPP1	Fibroblast	PAAD	0.141690297
UPP1	Folate biosynthesis	PAAD	-0.067014536
UPP1	Follicular b cell	PAAD	0.04786118
UPP1	Follicular dendritic cell	PAAD	0.017792222
UPP1	Follicular helper (tfh) t ce	PAAD	0.08673053
UPP1	Follicular t cell	PAAD	0.20397667
UPP1	Foxp3+il-17+ t cell	PAAD	0.073246594
UPP1	Fructose and mannose me	PAAD	0.321174183
UPP1	G2m_checkpoint	PAAD	0.065791334
UPP1	Galactose metabolism	PAAD	0.412398307
UPP1	Galie_tumor_stemness_ge	PAAD	0.015802889
UPP1	Glutathione metabolism	PAAD	0.254804778
UPP1	Glycerolipid metabolism	PAAD	0.062377955
UPP1	Glycerophospholipid metæ	PAAD	0.227529032
UPP1	Glycine, serine and threor	PAAD	-0.08185224
UPP1	Glycolysis / gluconeogene	PAAD	0.244624822
UPP1	Glycosaminoglycan biosy1	PAAD	0.392408421
UPP1	Glycosaminoglycan biosy1	PAAD	-0.063718701
UPP1	Glycosaminoglycan biosy1	PAAD	0.365012123
UPP1	Glycosaminoglycan degra	PAAD	0.263914796
UPP1	Glycosphingolipid biosyn1	PAAD	-0.01379002
UPP1	Glycosphingolipid biosyn1	PAAD	0.187921149
UPP1	Glycosphingolipid biosyn1	PAAD	0.199532172
UPP1	Glycosylphosphatidylinos	PAAD	-0.192404235
UPP1	Glyoxylate and dicarboxy	PAAD	-0.085542967
UPP1	Granulocyte	PAAD	0.156486681

UPP1	Hedgehog_signaling	PAAD	-0.091445489
UPP1	Histidine metabolism	PAAD	-0.129233255
UPP1	Hypoxia	PAAD	0.517245227
UPP1	Il-17alpha t cell	PAAD	-0.036388225
UPP1	Il2_stat5_signaling	PAAD	0.269726488
UPP1	Il6_jak_stat3_signaling	PAAD	0.216380404
UPP1	Immune_checkpoints_tun	PAAD	0.254047075
UPP1	Immune_inhibition_cytok	PAAD	0.248471949
UPP1	Inositol phosphate metabo	PAAD	-0.389431107
UPP1	Interleukin_6_signaling	PAAD	-0.219335982
UPP1	Jaeger_metastasis_up	PAAD	0.266573152
UPP1	Jain_nfkb_signaling	PAAD	0.147034975
UPP1	Kras_signaling_up	PAAD	0.156429483
UPP1	Linoleic acid metabolism	PAAD	-0.0334497
UPP1	Lipoic acid metabolism	PAAD	-0.230343518
UPP1	Lysine degradation	PAAD	-0.3723462
UPP1	Lysosome	PAAD	0.279336476
UPP1	M1 macrophage	PAAD	0.164344513
UPP1	M2 macrophage	PAAD	0.158130545
UPP1	Mannose type o-glycan bi	PAAD	-0.034868451
UPP1	Mapk_signaling_pathway	PAAD	0.080711226
UPP1	Mapk3_erk1_activation	PAAD	-0.160431109
UPP1	Marginal zone b cell	PAAD	0.020488146
UPP1	Memory b cell	PAAD	0.033859934
UPP1	Mesenchymal cell	PAAD	0.322023555
UPP1	Mesenchymal stem cell	PAAD	0.149854563
UPP1	Metabolism of xenobiotic	PAAD	0.044675513
UPP1	Migrating cancer stem cel	PAAD	0.105041658
UPP1	Mitotic_spindle	PAAD	-0.085148823
UPP1	Monocyte	PAAD	0.367088844
UPP1	Mtor_signaling_pathway	PAAD	-0.132761332
UPP1	Mtorc1_signaling	PAAD	0.280689145
UPP1	Mucin type o-glycan biosy	PAAD	-0.083596248
UPP1	Myc_targets_v1	PAAD	0.225677197
UPP1	Myeloid cell	PAAD	0.109646935
UPP1	N-glycan biosynthesis	PAAD	-0.085447232
UPP1	Naive b cell	PAAD	0.035253601
UPP1	Naive cd4+ t cell	PAAD	-0.076282519
UPP1	Naive cd8+ t cell	PAAD	-0.101704866
UPP1	Natural killer cell	PAAD	0.037402168
UPP1	Natural killer t (nkt) cell	PAAD	0.267377444
UPP1	Natural regulatory t (treg)	PAAD	0.062099224
UPP1	Neomycin, kanamycin and	PAAD	0.440325564

UPP1	Neutrophil	PAAD	0.377295692
UPP1	Nicotinate and nicotinami	PAAD	-0.074019215
UPP1	Nitrogen metabolism	PAAD	-0.062737658
UPP1	Nod_like_receptor_signal	PAAD	0.167877201
UPP1	Notch_signaling	PAAD	0.314582494
UPP1	One carbon pool by folate	PAAD	-0.071661311
UPP1	Other glycan degradation	PAAD	0.242661424
UPP1	Other types of o-glycan b	PAAD	0.311417796
UPP1	Oxidative phosphorylatior	PAAD	0.237232906
UPP1	P53_pathway	PAAD	0.608100564
UPP1	P53_signaling_pathway	PAAD	0.275826813
UPP1	Pantothenate and coa bios	PAAD	-0.143893851
UPP1	Pentose and glucuronate i	PAAD	-0.039429279
UPP1	Pentose phosphate pathwa	PAAD	0.341228144
UPP1	Pericyte	PAAD	0.088291696
UPP1	Phenylalanine metabolism	PAAD	0.211304166
UPP1	Phenylalanine, tyrosine ar	PAAD	0.014532598
UPP1	Phosphonate and phosphir	PAAD	-0.031702463
UPP1	Pi3k_akt_activation	PAAD	-0.089854061
UPP1	Pi3k_akt_mtor_signaling	PAAD	0.269694258
UPP1	Porphyrin and chlorophyl	PAAD	0.040967108
UPP1	Primary bile acid biosynt	PAAD	-0.2846687
UPP1	Propanoate metabolism	PAAD	-0.459694905
UPP1	Purine metabolism	PAAD	0.088835651
UPP1	Pyrimidine metabolism	PAAD	0.264143376
UPP1	Pyruvate metabolism	PAAD	-0.186874401
UPP1	Regulation_of_autophagy	PAAD	-0.056352112
UPP1	Retinol metabolism	PAAD	-0.058988201
UPP1	Riboflavin metabolism	PAAD	0.144810572
UPP1	Schmahl_pdgf_signaling	PAAD	-0.00356645
UPP1	Selenocompound metabol	PAAD	-0.517348196
UPP1	Signaling_by_hippo	PAAD	-0.259443707
UPP1	Sphingolipid metabolism	PAAD	-0.251767424
UPP1	Starch and sucrose metabo	PAAD	0.182100146
UPP1	Steroid biosynthesis	PAAD	0.171614245
UPP1	Steroid hormone biosynth	PAAD	0.051147835
UPP1	Sulfur metabolism	PAAD	-0.22162628
UPP1	Synthesis and degradation	PAAD	-0.130612758
UPP1	T helper cell	PAAD	0.012611752
UPP1	T helper1 (th1) cell	PAAD	0.113248305
UPP1	T helper17 (th17) cell	PAAD	0.151604065
UPP1	T helper2 (th2) cell	PAAD	0.106313056
UPP1	T helper9 (th9) cell	PAAD	0.088723577

UPP1	Taurine and hypotaurine r	PAAD	0.110460119
UPP1	Terpenoid backbone biosy	PAAD	-0.024618825
UPP1	Tgf_beta_signaling_pathw	PAAD	-0.148182034
UPP1	Thiamine metabolism	PAAD	0.000464438
UPP1	Tnfa_signaling_via_nfkb	PAAD	0.39725477
UPP1	Tryptophan metabolism	PAAD	-0.193715251
UPP1	Tumor endothelial cell	PAAD	0.231520061
UPP1	Tyrosine metabolism	PAAD	0.040103449
UPP1	Ubiquinone and other ter	PAAD	-0.074970864
UPP1	Valine, leucine and isoleu	PAAD	0.290136935
UPP1	Valine, leucine and isoleu	PAAD	-0.390941399
UPP1	Vascular endothelial cell	PAAD	0.079781921
UPP1	Vascular smooth muscle c	PAAD	0.044434237
UPP1	Vegf_signaling_pathway	PAAD	0.247657355
UPP1	Vitamin b6 metabolism	PAAD	-0.12565122
UPP1	Willert_wnt_signaling	PAAD	0.175570454
UPP1	Wnt_beta_catenin_signali	PAAD	0.172699087
UPP2	Abnormal plasma cell	PAAD	0.005810387
UPP2	Activated b cell	PAAD	-0.121847733
UPP2	Activated cd4+ t cell	PAAD	-0.165648979
UPP2	Activated t cell	PAAD	-0.209838116
UPP2	Alanine, aspartate and glu	PAAD	-0.063531159
UPP2	Alcala_apoptosis	PAAD	-0.227957619
UPP2	Alpha-linolenic acid meta	PAAD	-0.0789803
UPP2	Amino sugar and nucleoti	PAAD	-0.194255199
UPP2	Ampk_pathway	PAAD	-0.011363402
UPP2	Angiogenesis	PAAD	-0.116923501
UPP2	Arachidonic acid metabol	PAAD	-0.183436588
UPP2	Arginine and proline met	PAAD	-0.204385904
UPP2	Arginine biosynthesis	PAAD	-0.222477543
UPP2	Ascorbate and aldarate m	PAAD	-0.170722867
UPP2	Atypical memory b cell	PAAD	-0.131084261
UPP2	Axl+siglec6+ dendritic ce	PAAD	-0.235874102
UPP2	B cell	PAAD	-0.213536837
UPP2	B1 cell	PAAD	-0.085704979
UPP2	Basal cell	PAAD	-0.205982744
UPP2	Beta-alanine metabolism	PAAD	-0.165145017
UPP2	Biosynthesis of unsaturate	PAAD	-0.14428692
UPP2	Biotin metabolism	PAAD	-0.098016657
UPP2	Butanoate metabolism	PAAD	0.065725824
UPP2	Caffeine metabolism	PAAD	-0.095030362
UPP2	Cancer stem cell	PAAD	-0.241280446
UPP2	Cancer stem-like cell	PAAD	-0.272642326

UPP2	Cd4+ cytotoxic t cell	PAAD	-0.184823556
UPP2	Cd4+ memory t cell	PAAD	-0.127261053
UPP2	Cd4+ regulatory t cell	PAAD	-0.142036296
UPP2	Cd4+ t helper cell	PAAD	-0.15402666
UPP2	Cd4+cd25+ regulatory t c	PAAD	-0.16543321
UPP2	Cd8+ cytotoxic t cell	PAAD	-0.185076848
UPP2	Cd8+ regulatory t cell	PAAD	-0.141918572
UPP2	Cell_cycle	PAAD	-0.139464123
UPP2	Chandran_metastasis_top5	PAAD	-0.135869061
UPP2	Citrate cycle (tca cycle)	PAAD	-0.062695504
UPP2	Cysteine and methionine r	PAAD	-0.211600225
UPP2	Cytokine induced killer ce	PAAD	0.01493799
UPP2	D-arginine and d-ornithin	PAAD	0.173304086
UPP2	D-glutamine and d-glutan	PAAD	0.000852381
UPP2	Dendritic cell	PAAD	-0.168360755
UPP2	Dna_repair	PAAD	0.013012968
UPP2	Dna_replication	PAAD	-0.116002146
UPP2	Double-negative memory	PAAD	-0.103319012
UPP2	Drug metabolism - cytoch	PAAD	-0.183987801
UPP2	Drug metabolism - other c	PAAD	-0.131922654
UPP2	E2f_targets	PAAD	-0.122105187
UPP2	Ecm_receptor_interaction	PAAD	-0.214978624
UPP2	Effector cd4+ memory t (	PAAD	-0.129380798
UPP2	Effector cd8+ memory t (	PAAD	-0.147327166
UPP2	Effector memory t cell	PAAD	-0.140262917
UPP2	Effector regulatory t (treg	PAAD	-0.13410276
UPP2	Elvidge_hif1a_targets_up	PAAD	-0.214046469
UPP2	Endothelial cell	PAAD	-0.164040971
UPP2	Eosinophil	PAAD	-0.163950435
UPP2	Ether lipid metabolism	PAAD	-0.079993459
UPP2	Exhausted cd4+ t cell	PAAD	-0.204855118
UPP2	Exhausted cd8+ t cell	PAAD	-0.217849024
UPP2	Exhausted t cell	PAAD	-0.16335682
UPP2	Fat cell (adipocyte)	PAAD	-0.033576108
UPP2	Fatty acid biosynthesis	PAAD	-0.013892681
UPP2	Fatty acid degradation	PAAD	-0.112595521
UPP2	Fatty acid elongation	PAAD	-0.057588802
UPP2	Fibroblast	PAAD	-0.146846618
UPP2	Folate biosynthesis	PAAD	-0.024556328
UPP2	Follicular b cell	PAAD	-0.150013572
UPP2	Follicular dendritic cell	PAAD	-0.094115598
UPP2	Follicular helper (tfh) t ce	PAAD	-0.189462422
UPP2	Follicular t cell	PAAD	-0.191523886

UPP2	Foxp3+il-17+ t cell	PAAD	-0.085715652
UPP2	Fructose and mannose me	PAAD	-0.153077777
UPP2	G2m_checkpoint	PAAD	-0.189528485
UPP2	Galactose metabolism	PAAD	-0.252201558
UPP2	Galie_tumor_stemness_ge	PAAD	-0.202935222
UPP2	Glutathione metabolism	PAAD	-0.164642459
UPP2	Glycerolipid metabolism	PAAD	-0.194505647
UPP2	Glycerophospholipid metæ	PAAD	0.020249976
UPP2	Glycine, serine and threor	PAAD	0.019907174
UPP2	Glycolysis / gluconeogene	PAAD	-0.233464337
UPP2	Glycosaminoglycan biosyn	PAAD	0.015867723
UPP2	Glycosaminoglycan biosyn	PAAD	0.049226109
UPP2	Glycosaminoglycan biosyn	PAAD	-0.248097354
UPP2	Glycosaminoglycan degra	PAAD	-0.020610219
UPP2	Glycosphingolipid biosyn	PAAD	0.02661905
UPP2	Glycosphingolipid biosyn	PAAD	-0.041671507
UPP2	Glycosphingolipid biosyn	PAAD	-0.188943928
UPP2	Glycosylphosphatidylinos	PAAD	0.091720276
UPP2	Glyoxylate and dicarboxy	PAAD	0.010087215
UPP2	Granulocyte	PAAD	-0.175508702
UPP2	Hedgehog_signaling	PAAD	0.067916381
UPP2	Histidine metabolism	PAAD	-0.217367466
UPP2	Hypoxia	PAAD	-0.146485013
UPP2	Il-17ralpha t cell	PAAD	-0.166701985
UPP2	Il2_stat5_signaling	PAAD	-0.283470581
UPP2	Il6_jak_stat3_signaling	PAAD	-0.249245474
UPP2	Immune_checkpoints_tun	PAAD	-0.162580105
UPP2	Immune_inhibition_cytok	PAAD	-0.143720154
UPP2	Inositol phosphate metabo	PAAD	-0.117648015
UPP2	Interleukin_6_signaling	PAAD	-0.11973154
UPP2	Jaeger_metastasis_up	PAAD	-0.192951563
UPP2	Jain_nfkb_signaling	PAAD	-0.095768559
UPP2	Kras_signaling_up	PAAD	-0.194072497
UPP2	Linoleic acid metabolism	PAAD	-0.0626803
UPP2	Lipoic acid metabolism	PAAD	0.08877697
UPP2	Lysine degradation	PAAD	-0.06571808
UPP2	Lysosome	PAAD	0.000521679
UPP2	M1 macrophage	PAAD	-0.199826131
UPP2	M2 macrophage	PAAD	-0.080048746
UPP2	Mannose type o-glycan bi	PAAD	0.216242414
UPP2	Mapk_signaling_pathway	PAAD	-0.136258856
UPP2	Mapk3_erk1_activation	PAAD	-0.138260438
UPP2	Marginal zone b cell	PAAD	-0.153486

UPP2	Memory b cell	PAAD	-0.110248652
UPP2	Mesenchymal cell	PAAD	-0.09864526
UPP2	Mesenchymal stem cell	PAAD	-0.172352192
UPP2	Metabolism of xenobiotics	PAAD	-0.177666083
UPP2	Migrating cancer stem cell	PAAD	-0.270145908
UPP2	Mitotic_spindle	PAAD	-0.222401997
UPP2	Monocyte	PAAD	-0.209372619
UPP2	Mtor_signaling_pathway	PAAD	-0.015192391
UPP2	Mtorc1_signaling	PAAD	-0.21127104
UPP2	Mucin type o-glycan biosynthesis	PAAD	-0.334430181
UPP2	Myc_targets_v1	PAAD	-0.144357622
UPP2	Myeloid cell	PAAD	-0.171025244
UPP2	N-glycan biosynthesis	PAAD	-0.174868777
UPP2	Naive b cell	PAAD	-0.143142924
UPP2	Naive cd4+ t cell	PAAD	-0.12642248
UPP2	Naive cd8+ t cell	PAAD	-0.006085828
UPP2	Natural killer cell	PAAD	-0.163325575
UPP2	Natural killer t (nkt) cell	PAAD	-0.2263368
UPP2	Natural regulatory t (treg) cell	PAAD	-0.155500969
UPP2	Neomycin, kanamycin and streptomycin	PAAD	-0.217041063
UPP2	Neutrophil	PAAD	-0.225025268
UPP2	Nicotinate and nicotinamide	PAAD	-0.145108082
UPP2	Nitrogen metabolism	PAAD	-0.203954159
UPP2	Nod_like_receptor_signaling	PAAD	-0.145194722
UPP2	Notch_signaling	PAAD	-0.239697632
UPP2	One carbon pool by folate	PAAD	-0.230506301
UPP2	Other glycan degradation	PAAD	0.087993586
UPP2	Other types of o-glycan biosynthesis	PAAD	0.125540621
UPP2	Oxidative phosphorylation	PAAD	0.036354412
UPP2	P53_pathway	PAAD	-0.194565341
UPP2	P53_signaling_pathway	PAAD	-0.211876032
UPP2	Pantothenate and coenzyme a biosynthesis	PAAD	-0.024559226
UPP2	Pentose and glucuronate interconversions	PAAD	-0.141135381
UPP2	Pentose phosphate pathway	PAAD	-0.150488014
UPP2	Pericyte	PAAD	-0.089194878
UPP2	Phenylalanine metabolism	PAAD	-0.119335052
UPP2	Phenylalanine, tyrosine and tryptophan	PAAD	0.083635412
UPP2	Phosphonate and phosphite metabolism	PAAD	-0.111601289
UPP2	Pi3k_akt_activation	PAAD	-0.169715173
UPP2	Pi3k_akt_mtor_signaling	PAAD	-0.231228925
UPP2	Porphyrin and chlorophyll metabolism	PAAD	-0.136148286
UPP2	Primary bile acid biosynthesis	PAAD	0.117745272
UPP2	Propanoate metabolism	PAAD	-0.062973489

UPP2	Purine metabolism	PAAD	-0.183682168
UPP2	Pyrimidine metabolism	PAAD	-0.069457891
UPP2	Pyruvate metabolism	PAAD	-0.042319535
UPP2	Regulation_of_autophagy	PAAD	0.079355576
UPP2	Retinol metabolism	PAAD	-0.082919182
UPP2	Riboflavin metabolism	PAAD	-0.141390583
UPP2	Schmahl_pdgf_signaling	PAAD	-0.102297882
UPP2	Selenocompound metabol	PAAD	-0.141818616
UPP2	Signaling_by_hippo	PAAD	-0.162176032
UPP2	Sphingolipid metabolism	PAAD	-0.108164524
UPP2	Starch and sucrose metabo	PAAD	-0.119009291
UPP2	Steroid biosynthesis	PAAD	-0.035718699
UPP2	Steroid hormone biosynth	PAAD	-0.152897958
UPP2	Sulfur metabolism	PAAD	-0.122814383
UPP2	Synthesis and degradation	PAAD	0.062431238
UPP2	T helper cell	PAAD	-0.13860204
UPP2	T helper1 (th1) cell	PAAD	-0.215087789
UPP2	T helper17 (th17) cell	PAAD	-0.183721821
UPP2	T helper2 (th2) cell	PAAD	-0.195209972
UPP2	T helper9 (th9) cell	PAAD	-0.17938234
UPP2	Taurine and hypotaurine r	PAAD	-0.039803518
UPP2	Terpenoid backbone biosy	PAAD	-0.03742563
UPP2	Tgf_beta_signaling_pathw	PAAD	-0.147390548
UPP2	Thiamine metabolism	PAAD	-0.074061945
UPP2	Tnfa_signaling_via_nfb	PAAD	-0.20669818
UPP2	Tryptophan metabolism	PAAD	-0.035119384
UPP2	Tumor endothelial cell	PAAD	-0.047676558
UPP2	Tyrosine metabolism	PAAD	-0.059864053
UPP2	Ubiquinone and other ter	PAAD	0.053513703
UPP2	Valine, leucine and isoleu	PAAD	-0.050417458
UPP2	Valine, leucine and isoleu	PAAD	-0.019741974
UPP2	Vascular endothelial cell	PAAD	-0.065261066
UPP2	Vascular smooth muscle c	PAAD	-0.151450218
UPP2	Vegf_signaling_pathway	PAAD	-0.175708775
UPP2	Vitamin b6 metabolism	PAAD	0.082862988
UPP2	Willert_wnt_signaling	PAAD	-0.195438947
UPP2	Wnt_beta_catenin_signali	PAAD	-0.056770056
CDA	Abnormal plasma cell	PCPG	-0.090791943
CDA	Activated b cell	PCPG	0.236295076
CDA	Activated cd4+ t cell	PCPG	0.107102359
CDA	Activated t cell	PCPG	0.222435531
CDA	Alanine, aspartate and glu	PCPG	-0.189059466
CDA	Alcala_apoptosis	PCPG	0.173532786

CDA	Alpha-linolenic acid meta	PCPG	0.077834848
CDA	Amino sugar and nucleoti	PCPG	-0.071146305
CDA	Ampk_pathway	PCPG	-0.048807417
CDA	Angiogenesis	PCPG	0.543728007
CDA	Arachidonic acid metabol	PCPG	0.428975959
CDA	Arginine and proline met	PCPG	0.118205034
CDA	Arginine biosynthesis	PCPG	-0.232572096
CDA	Ascorbate and aldarate m	PCPG	-0.289441063
CDA	Atypical memory b cell	PCPG	-0.036872908
CDA	Axl+siglec6+ dendritic ce	PCPG	0.376169827
CDA	B cell	PCPG	0.334569642
CDA	B1 cell	PCPG	0.197573544
CDA	Basal cell	PCPG	0.638813162
CDA	Beta-alanine metabolism	PCPG	0.106279113
CDA	Biosynthesis of unsaturate	PCPG	-0.333413312
CDA	Biotin metabolism	PCPG	-0.35783726
CDA	Butanoate metabolism	PCPG	-0.334851662
CDA	Caffeine metabolism	PCPG	0.148361257
CDA	Cancer stem cell	PCPG	0.515003739
CDA	Cancer stem-like cell	PCPG	0.382672833
CDA	Cd4+ cytotoxic t cell	PCPG	0.475710973
CDA	Cd4+ memory t cell	PCPG	-0.006178824
CDA	Cd4+ regulatory t cell	PCPG	0.213406906
CDA	Cd4+ t helper cell	PCPG	0.183150883
CDA	Cd4+cd25+ regulatory t c	PCPG	0.172318945
CDA	Cd8+ cytotoxic t cell	PCPG	0.266045952
CDA	Cd8+ regulatory t cell	PCPG	-0.003135127
CDA	Cell_cycle	PCPG	-0.239417572
CDA	Chandran_metastasis_top5	PCPG	-0.539501503
CDA	Citrate cycle (tca cycle)	PCPG	-0.302278746
CDA	Cysteine and methionine r	PCPG	-0.183581615
CDA	Cytokine induced killer c	PCPG	0.073674775
CDA	D-arginine and d-ornithin	PCPG	0.120924461
CDA	D-glutamine and d-glutan	PCPG	-0.697228708
CDA	Dendritic cell	PCPG	0.309597983
CDA	Dna_repair	PCPG	0.03001016
CDA	Dna_replication	PCPG	-0.188873112
CDA	Double-negative memory	PCPG	0.047458343
CDA	Drug metabolism - cytoch	PCPG	0.021492611
CDA	Drug metabolism - other	PCPG	0.248954824
CDA	E2f_targets	PCPG	-0.339318336
CDA	Ecm_receptor_interaction	PCPG	0.476230122
CDA	Effector cd4+ memory t (	PCPG	-0.014000425

CDA	Effector cd8+ memory t (	PCPG	0.429071057
CDA	Effector memory t cell	PCPG	0.059613882
CDA	Effector regulatory t (treg	PCPG	0.274940507
CDA	Elvidge_hif1a_targets_up	PCPG	-0.533094243
CDA	Endothelial cell	PCPG	0.673134218
CDA	Eosinophil	PCPG	0.294362997
CDA	Ether lipid metabolism	PCPG	-0.042144982
CDA	Exhausted cd4+ t cell	PCPG	0.324083348
CDA	Exhausted cd8+ t cell	PCPG	0.296580515
CDA	Exhausted t cell	PCPG	0.068371587
CDA	Fat cell (adipocyte)	PCPG	0.11340781
CDA	Fatty acid biosynthesis	PCPG	-0.110658353
CDA	Fatty acid degradation	PCPG	-0.261279585
CDA	Fatty acid elongation	PCPG	-0.280639262
CDA	Fibroblast	PCPG	0.474006023
CDA	Folate biosynthesis	PCPG	-0.171472927
CDA	Follicular b cell	PCPG	0.171668576
CDA	Follicular dendritic cell	PCPG	0.116376395
CDA	Follicular helper (tfh) t ce	PCPG	0.25021273
CDA	Follicular t cell	PCPG	0.080529921
CDA	Foxp3+il-17+ t cell	PCPG	-0.274245446
CDA	Fructose and mannose me	PCPG	0.283711786
CDA	G2m_checkpoint	PCPG	-0.361681297
CDA	Galactose metabolism	PCPG	0.283974715
CDA	Galie_tumor_stemness_ge	PCPG	0.349841102
CDA	Glutathione metabolism	PCPG	0.189653878
CDA	Glycerolipid metabolism	PCPG	-0.046032269
CDA	Glycerophospholipid metæ	PCPG	0.26512459
CDA	Glycine, serine and threor	PCPG	-0.018218784
CDA	Glycolysis / gluconeogene	PCPG	0.090309726
CDA	Glycosaminoglycan biosy	PCPG	0.527150113
CDA	Glycosaminoglycan biosy	PCPG	0.187171871
CDA	Glycosaminoglycan biosy	PCPG	0.479128549
CDA	Glycosaminoglycan degra	PCPG	0.188343154
CDA	Glycosphingolipid biosyn	PCPG	0.151335821
CDA	Glycosphingolipid biosyn	PCPG	0.453259617
CDA	Glycosphingolipid biosyn	PCPG	0.410260575
CDA	Glycosylphosphatidylinos	PCPG	-0.381783813
CDA	Glyoxylate and dicarboxy	PCPG	-0.173850804
CDA	Granulocyte	PCPG	0.224811998
CDA	Hedgehog_signaling	PCPG	0.292029383
CDA	Histidine metabolism	PCPG	-0.077241097
CDA	Hypoxia	PCPG	0.553259009

CDA	Il-17alpha t cell	PCPG	0.066226369
CDA	Il2_stat5_signaling	PCPG	0.347641288
CDA	Il6_jak_stat3_signaling	PCPG	0.203714507
CDA	Immune_checkpoints_tur	PCPG	-0.058925092
CDA	Immune_inhibition_cytok	PCPG	0.240989465
CDA	Inositol phosphate metabo	PCPG	-0.178865158
CDA	Interleukin_6_signaling	PCPG	-0.052571128
CDA	Jaeger_metastasis_up	PCPG	0.128392295
CDA	Jain_nfkb_signaling	PCPG	0.049838823
CDA	Kras_signaling_up	PCPG	0.287694908
CDA	Linoleic acid metabolism	PCPG	0.188238001
CDA	Lipoic acid metabolism	PCPG	-0.116064587
CDA	Lysine degradation	PCPG	-0.470103503
CDA	Lysosome	PCPG	-0.094324417
CDA	M1 macrophage	PCPG	0.202550493
CDA	M2 macrophage	PCPG	0.254480895
CDA	Mannose type o-glycan bi	PCPG	0.08216997
CDA	Mapk_signaling_pathway	PCPG	0.177174425
CDA	Mapk3_erk1_activation	PCPG	-0.079015193
CDA	Marginal zone b cell	PCPG	0.334702234
CDA	Memory b cell	PCPG	-0.024222454
CDA	Mesenchymal cell	PCPG	0.570647743
CDA	Mesenchymal stem cell	PCPG	0.460298198
CDA	Metabolism of xenobiotic	PCPG	0.063730531
CDA	Migrating cancer stem cel	PCPG	-0.206919057
CDA	Mitotic_spindle	PCPG	-0.302686246
CDA	Monocyte	PCPG	0.364050759
CDA	Mtor_signaling_pathway	PCPG	-0.111036484
CDA	Mtorc1_signaling	PCPG	-0.097457052
CDA	Mucin type o-glycan biosy	PCPG	-0.021977015
CDA	Myc_targets_v1	PCPG	0.088398484
CDA	Myeloid cell	PCPG	0.223587033
CDA	N-glycan biosynthesis	PCPG	-0.075990198
CDA	Naive b cell	PCPG	-0.039097387
CDA	Naive cd4+ t cell	PCPG	0.364064184
CDA	Naive cd8+ t cell	PCPG	0.014157637
CDA	Natural killer cell	PCPG	0.226705487
CDA	Natural killer t (nkt) cell	PCPG	0.250281994
CDA	Natural regulatory t (treg)	PCPG	0.177701427
CDA	Neomycin, kanamycin an	PCPG	0.316526319
CDA	Neutrophil	PCPG	0.306965864
CDA	Nicotinate and nicotinami	PCPG	-0.11931492
CDA	Nitrogen metabolism	PCPG	0.241543481

CDA	Nod_like_receptor_signal	PCPG	0.071884116
CDA	Notch_signaling	PCPG	0.620373587
CDA	One carbon pool by folate	PCPG	-0.227202049
CDA	Other glycan degradation	PCPG	-0.354850757
CDA	Other types of o-glycan b	PCPG	0.383279641
CDA	Oxidative phosphorylation	PCPG	0.204734354
CDA	P53_pathway	PCPG	0.468120213
CDA	P53_signaling_pathway	PCPG	0.065290201
CDA	Pantothenate and coa bios	PCPG	0.380999827
CDA	Pentose and glucuronate i	PCPG	-0.189895188
CDA	Pentose phosphate pathwa	PCPG	0.021323762
CDA	Pericyte	PCPG	0.601885045
CDA	Phenylalanine metabolism	PCPG	0.253300065
CDA	Phenylalanine, tyrosine ar	PCPG	-0.178659376
CDA	Phosphonate and phosphir	PCPG	-0.190075035
CDA	Pi3k_akt_activation	PCPG	-0.119480906
CDA	Pi3k_akt_mtor_signaling	PCPG	-0.139235433
CDA	Porphyrin and chlorophyl	PCPG	-0.066399013
CDA	Primary bile acid biosynt	PCPG	-0.079679005
CDA	Propanoate metabolism	PCPG	-0.296554019
CDA	Purine metabolism	PCPG	0.066209989
CDA	Pyrimidine metabolism	PCPG	-0.07983216
CDA	Pyruvate metabolism	PCPG	-0.32199333
CDA	Regulation_of_autophagy	PCPG	-0.127769737
CDA	Retinol metabolism	PCPG	0.012384238
CDA	Riboflavin metabolism	PCPG	-0.173642491
CDA	Schmahl_pdgf_signaling	PCPG	0.258177777
CDA	Selenocompound metabol	PCPG	-0.32400976
CDA	Signaling_by_hippo	PCPG	-0.05694278
CDA	Sphingolipid metabolism	PCPG	-0.553326623
CDA	Starch and sucrose metabo	PCPG	0.332508126
CDA	Steroid biosynthesis	PCPG	-0.272008603
CDA	Steroid hormone biosynth	PCPG	-0.086080294
CDA	Sulfur metabolism	PCPG	-0.084258374
CDA	Synthesis and degradation	PCPG	-0.290567808
CDA	T helper cell	PCPG	0.255180066
CDA	T helper1 (th1) cell	PCPG	0.11379945
CDA	T helper17 (th17) cell	PCPG	0.348019934
CDA	T helper2 (th2) cell	PCPG	0.3520792
CDA	T helper9 (th9) cell	PCPG	0.179634106
CDA	Taurine and hypotaurine r	PCPG	0.35699739
CDA	Terpenoid backbone biosy	PCPG	-0.238499131
CDA	Tgf_beta_signaling_pathw	PCPG	0.409261843

CDA	Thiamine metabolism	PCPG	-0.142748806
CDA	Tnfa_signaling_via_nfk	PCPG	0.19430267
CDA	Tryptophan metabolism	PCPG	-0.079479269
CDA	Tumor endothelial cell	PCPG	0.089747578
CDA	Tyrosine metabolism	PCPG	-0.010827838
CDA	Ubiquinone and other ter	PCPG	-0.070772376
CDA	Valine, leucine and isoleu	PCPG	0.449994126
CDA	Valine, leucine and isoleu	PCPG	-0.278895961
CDA	Vascular endothelial cell	PCPG	0.653956697
CDA	Vascular smooth muscle c	PCPG	0.612840747
CDA	Vegf_signaling_pathway	PCPG	0.494736396
CDA	Vitamin b6 metabolism	PCPG	-0.253943475
CDA	Willert_wnt_signaling	PCPG	0.554125583
CDA	Wnt_beta_catenin_signali	PCPG	0.64165308
UCK1	Abnormal plasma cell	PCPG	-0.084116264
UCK1	Activated b cell	PCPG	-0.029988088
UCK1	Activated cd4+ t cell	PCPG	-0.328014397
UCK1	Activated t cell	PCPG	-0.151778123
UCK1	Alanine, aspartate and glu	PCPG	-0.279758271
UCK1	Alcala_apoptosis	PCPG	0.058019882
UCK1	Alpha-linolenic acid meta	PCPG	0.374236784
UCK1	Amino sugar and nucleoti	PCPG	-0.176186816
UCK1	Ampk_pathway	PCPG	0.115683846
UCK1	Angiogenesis	PCPG	-0.216118299
UCK1	Arachidonic acid metabol	PCPG	0.333432841
UCK1	Arginine and proline met	PCPG	-0.102626157
UCK1	Arginine biosynthesis	PCPG	-0.353602209
UCK1	Ascorbate and aldarate m	PCPG	-0.045650413
UCK1	Atypical memory b cell	PCPG	-0.016705658
UCK1	Axl+siglec6+ dendritic ce	PCPG	-0.220715384
UCK1	B cell	PCPG	-0.29094016
UCK1	B1 cell	PCPG	0.081999454
UCK1	Basal cell	PCPG	0.053731115
UCK1	Beta-alanine metabolism	PCPG	-0.144878423
UCK1	Biosynthesis of unsaturate	PCPG	0.11512583
UCK1	Biotin metabolism	PCPG	-0.028333025
UCK1	Butanoate metabolism	PCPG	-0.074453005
UCK1	Caffeine metabolism	PCPG	0.128181876
UCK1	Cancer stem cell	PCPG	-0.336043057
UCK1	Cancer stem-like cell	PCPG	-0.244279189
UCK1	Cd4+ cytotoxic t cell	PCPG	-0.184846361
UCK1	Cd4+ memory t cell	PCPG	-0.196582612
UCK1	Cd4+ regulatory t cell	PCPG	-0.162971072

UCK1	Cd4+ t helper cell	PCPG	-0.163744552
UCK1	Cd4+cd25+ regulatory t c	PCPG	-0.204304295
UCK1	Cd8+ cytotoxic t cell	PCPG	-0.067763609
UCK1	Cd8+ regulatory t cell	PCPG	-0.195493895
UCK1	Cell_cycle	PCPG	-0.151586651
UCK1	Chandran_metastasis_top5	PCPG	-0.392859613
UCK1	Citrate cycle (tca cycle)	PCPG	-0.238268
UCK1	Cysteine and methionine r	PCPG	-0.129743376
UCK1	Cytokine induced killer c	PCPG	-0.023037388
UCK1	D-arginine and d-ornithin	PCPG	0.014489193
UCK1	D-glutamine and d-glutan	PCPG	-0.36078591
UCK1	Dendritic cell	PCPG	-0.253369555
UCK1	Dna_repair	PCPG	0.474937276
UCK1	Dna_replication	PCPG	0.238946509
UCK1	Double-negative memory	PCPG	0.06146977
UCK1	Drug metabolism - cytoch	PCPG	0.163764778
UCK1	Drug metabolism - other c	PCPG	0.318738857
UCK1	E2f_targets	PCPG	0.010294081
UCK1	Ecm_receptor_interaction	PCPG	-0.353935625
UCK1	Effector cd4+ memory t (	PCPG	-0.325107569
UCK1	Effector cd8+ memory t (	PCPG	-0.29272981
UCK1	Effector memory t cell	PCPG	-0.192425877
UCK1	Effector regulatory t (treg	PCPG	-0.27750904
UCK1	Elvidge_hif1a_targets_up	PCPG	-0.383054754
UCK1	Endothelial cell	PCPG	-0.216700714
UCK1	Eosinophil	PCPG	-0.196392805
UCK1	Ether lipid metabolism	PCPG	0.092117978
UCK1	Exhausted cd4+ t cell	PCPG	-0.351100849
UCK1	Exhausted cd8+ t cell	PCPG	-0.335107964
UCK1	Exhausted t cell	PCPG	-0.092998695
UCK1	Fat cell (adipocyte)	PCPG	0.057308257
UCK1	Fatty acid biosynthesis	PCPG	-0.17986214
UCK1	Fatty acid degradation	PCPG	-0.073861068
UCK1	Fatty acid elongation	PCPG	0.02620288
UCK1	Fibroblast	PCPG	-0.251315576
UCK1	Folate biosynthesis	PCPG	0.260675815
UCK1	Follicular b cell	PCPG	-0.228846173
UCK1	Follicular dendritic cell	PCPG	-0.135371819
UCK1	Follicular helper (tfh) t ce	PCPG	-0.219495947
UCK1	Follicular t cell	PCPG	-0.162310352
UCK1	Foxp3+il-17+ t cell	PCPG	0.05543352
UCK1	Fructose and mannose me	PCPG	0.018305263
UCK1	G2m_checkpoint	PCPG	-0.168281904

UCK1	Galactose metabolism	PCPG	-0.036042625
UCK1	Galie_tumor_stemness_ge	PCPG	-0.169574286
UCK1	Glutathione metabolism	PCPG	0.09505696
UCK1	Glycerolipid metabolism	PCPG	0.005484882
UCK1	Glycerophospholipid met&	PCPG	0.41468726
UCK1	Glycine, serine and threor	PCPG	-0.090606163
UCK1	Glycolysis / gluconeogene	PCPG	-0.056222915
UCK1	Glycosaminoglycan biosyn	PCPG	-0.091799966
UCK1	Glycosaminoglycan biosyn	PCPG	-0.291935722
UCK1	Glycosaminoglycan biosyn	PCPG	-0.054441891
UCK1	Glycosaminoglycan degra	PCPG	-0.126040328
UCK1	Glycosphingolipid biosyn	PCPG	-0.349236181
UCK1	Glycosphingolipid biosyn	PCPG	-0.183525523
UCK1	Glycosphingolipid biosyn	PCPG	-0.112333832
UCK1	Glycosylphosphatidylinos	PCPG	-0.143061177
UCK1	Glyoxylate and dicarboxy	PCPG	-0.06397533
UCK1	Granulocyte	PCPG	-0.225133195
UCK1	Hedgehog_signaling	PCPG	-0.30150499
UCK1	Histidine metabolism	PCPG	0.00675241
UCK1	Hypoxia	PCPG	-0.180752908
UCK1	Il-17ralpha t cell	PCPG	-0.200108284
UCK1	Il2_stat5_signaling	PCPG	-0.230928249
UCK1	Il6_jak_stat3_signaling	PCPG	-0.304114547
UCK1	Immune_checkpoints_tun	PCPG	-0.127975769
UCK1	Immune_inhibition_cytok	PCPG	-0.047732943
UCK1	Inositol phosphate metabo	PCPG	-0.451148228
UCK1	Interleukin_6_signaling	PCPG	-0.52950231
UCK1	Jaeger_metastasis_up	PCPG	-0.311780621
UCK1	Jain_nfkb_signaling	PCPG	0.131899564
UCK1	Kras_signaling_up	PCPG	-0.375577355
UCK1	Linoleic acid metabolism	PCPG	0.41686692
UCK1	Lipoic acid metabolism	PCPG	0.323698837
UCK1	Lysine degradation	PCPG	-0.044245378
UCK1	Lysosome	PCPG	-0.250457189
UCK1	M1 macrophage	PCPG	-0.304095529
UCK1	M2 macrophage	PCPG	-0.24865307
UCK1	Mannose type o-glycan bi	PCPG	-0.032440072
UCK1	Mapk_signaling_pathway	PCPG	-0.421910818
UCK1	Mapk3_erk1_activation	PCPG	-0.527950264
UCK1	Marginal zone b cell	PCPG	-0.232637224
UCK1	Memory b cell	PCPG	-0.069864299
UCK1	Mesenchymal cell	PCPG	-0.168218778
UCK1	Mesenchymal stem cell	PCPG	-0.343014832

UCK1	Metabolism of xenobiotic:PCPG	0.252499984
UCK1	Migrating cancer stem cel PCPG	-0.206046153
UCK1	Mitotic_spindle PCPG	-0.460139007
UCK1	Monocyte PCPG	-0.215578214
UCK1	Mtor_signaling_pathway PCPG	-0.377464526
UCK1	Mtorc1_signaling PCPG	-0.354790696
UCK1	Mucin type o-glycan bios:PCPG	-0.287968152
UCK1	Myc_targets_v1 PCPG	0.150312721
UCK1	Myeloid cell PCPG	-0.318777953
UCK1	N-glycan biosynthesis PCPG	-0.289656394
UCK1	Naive b cell PCPG	-0.037692511
UCK1	Naive cd4+ t cell PCPG	-0.217306077
UCK1	Naive cd8+ t cell PCPG	-0.21600562
UCK1	Natural killer cell PCPG	-0.243903595
UCK1	Natural killer t (nkt) cell PCPG	-0.128198712
UCK1	Natural regulatory t (treg)PCPG	-0.227297352
UCK1	Neomycin, kanamycin an(PCPG	-0.056178915
UCK1	Neutrophil PCPG	-0.213260389
UCK1	Nicotinate and nicotinami PCPG	-0.178206912
UCK1	Nitrogen metabolism PCPG	-0.231325143
UCK1	Nod_like_receptor_signal:PCPG	-0.36919665
UCK1	Notch_signaling PCPG	-0.13694779
UCK1	One carbon pool by folate PCPG	-0.002584497
UCK1	Other glycan degradation PCPG	-0.289773238
UCK1	Other types of o-glycan b:PCPG	0.096562221
UCK1	Oxidative phosphorylatior PCPG	0.34804179
UCK1	P53_pathway PCPG	-0.025508053
UCK1	P53_signaling_pathway PCPG	-0.20558198
UCK1	Pantothenate and coa bios PCPG	-0.097170636
UCK1	Pentose and glucuronate i:PCPG	0.086014249
UCK1	Pentose phosphate pathwa PCPG	-0.03921155
UCK1	Pericyte PCPG	-0.164332651
UCK1	Phenylalanine metabolism PCPG	0.178059445
UCK1	Phenylalanine, tyrosine ar PCPG	0.217110047
UCK1	Phosphonate and phosphir PCPG	0.036971069
UCK1	Pi3k_akt_activation PCPG	-0.464246585
UCK1	Pi3k_akt_mtor_signaling PCPG	-0.27478143
UCK1	Porphyrin and chlorophyl PCPG	0.141044796
UCK1	Primary bile acid biosyntf PCPG	0.140541865
UCK1	Propanoate metabolism PCPG	-0.281893153
UCK1	Purine metabolism PCPG	-0.092523489
UCK1	Pyrimidine metabolism PCPG	0.241796014
UCK1	Pyruvate metabolism PCPG	0.007820031

UCK1	Regulation_of_autophagy	PCPG	-0.287841012
UCK1	Retinol metabolism	PCPG	0.208886656
UCK1	Riboflavin metabolism	PCPG	0.179300617
UCK1	Schmahl_pdgf_signaling	PCPG	-0.315823203
UCK1	Selenocompound metabol	PCPG	-0.1095879
UCK1	Signaling_by_hippo	PCPG	-0.368689576
UCK1	Sphingolipid metabolism	PCPG	-0.455559689
UCK1	Starch and sucrose metabo	PCPG	0.015431357
UCK1	Steroid biosynthesis	PCPG	0.027310745
UCK1	Steroid hormone biosynth	PCPG	0.102840395
UCK1	Sulfur metabolism	PCPG	-0.02203039
UCK1	Synthesis and degradation	PCPG	-0.107564935
UCK1	T helper cell	PCPG	-0.206468137
UCK1	T helper1 (th1) cell	PCPG	-0.153625195
UCK1	T helper17 (th17) cell	PCPG	-0.273108182
UCK1	T helper2 (th2) cell	PCPG	-0.151994558
UCK1	T helper9 (th9) cell	PCPG	-0.022096989
UCK1	Taurine and hypotaurine r	PCPG	0.119136814
UCK1	Terpenoid backbone biosy	PCPG	-0.045642965
UCK1	Tgf_beta_signaling_pathw	PCPG	-0.401468303
UCK1	Thiamine metabolism	PCPG	0.190914443
UCK1	Tnfa_signaling_via_nfkb	PCPG	-0.314736041
UCK1	Tryptophan metabolism	PCPG	-0.035611302
UCK1	Tumor endothelial cell	PCPG	0.022739274
UCK1	Tyrosine metabolism	PCPG	0.159287328
UCK1	Ubiquinone and other ter	PCPG	0.096330282
UCK1	Valine, leucine and isoleu	PCPG	0.042823096
UCK1	Valine, leucine and isoleu	PCPG	-0.146103977
UCK1	Vascular endothelial cell	PCPG	-0.166024102
UCK1	Vascular smooth muscle c	PCPG	-0.123972757
UCK1	Vegf_signaling_pathway	PCPG	-0.008069839
UCK1	Vitamin b6 metabolism	PCPG	0.167762102
UCK1	Willert_wnt_signaling	PCPG	-0.011297484
UCK1	Wnt_beta_catenin_signali	PCPG	0.004964147
UCK2	Abnormal plasma cell	PCPG	0.050765585
UCK2	Activated b cell	PCPG	0.216378761
UCK2	Activated cd4+ t cell	PCPG	0.234012737
UCK2	Activated t cell	PCPG	0.32993193
UCK2	Alanine, aspartate and glu	PCPG	0.156565852
UCK2	Alcala_apoptosis	PCPG	0.289829757
UCK2	Alpha-linolenic acid meta	PCPG	-0.251316468
UCK2	Amino sugar and nucleoti	PCPG	0.201766616
UCK2	Ampk_pathway	PCPG	0.00488345

UCK2	Angiogenesis	PCPG	0.371989922
UCK2	Arachidonic acid metabolism	PCPG	-0.105096838
UCK2	Arginine and proline metabolism	PCPG	0.192866499
UCK2	Arginine biosynthesis	PCPG	0.16682043
UCK2	Ascorbate and aldarate metabolism	PCPG	-0.119039749
UCK2	Atypical memory b cell	PCPG	0.132217542
UCK2	Axl+siglec6+ dendritic cell	PCPG	0.160370948
UCK2	B cell	PCPG	0.252152403
UCK2	B1 cell	PCPG	0.139327996
UCK2	Basal cell	PCPG	0.219961229
UCK2	Beta-alanine metabolism	PCPG	-0.126602366
UCK2	Biosynthesis of unsaturated fatty acids	PCPG	-0.165269764
UCK2	Biotin metabolism	PCPG	-0.113615322
UCK2	Butanoate metabolism	PCPG	-0.244080573
UCK2	Caffeine metabolism	PCPG	0.11691523
UCK2	Cancer stem cell	PCPG	0.322561275
UCK2	Cancer stem-like cell	PCPG	0.263053141
UCK2	Cd4+ cytotoxic t cell	PCPG	0.240560532
UCK2	Cd4+ memory t cell	PCPG	0.14998447
UCK2	Cd4+ regulatory t cell	PCPG	0.261967365
UCK2	Cd4+ t helper cell	PCPG	0.187794211
UCK2	Cd4+cd25+ regulatory t cell	PCPG	0.229915885
UCK2	Cd8+ cytotoxic t cell	PCPG	0.155130311
UCK2	Cd8+ regulatory t cell	PCPG	0.253908789
UCK2	Cell_cycle	PCPG	0.149134781
UCK2	Chandran_metastasis_top5	PCPG	0.19186211
UCK2	Citrate cycle (tca cycle)	PCPG	0.059323516
UCK2	Cysteine and methionine metabolism	PCPG	0.027779947
UCK2	Cytokine induced killer cell	PCPG	0.142619051
UCK2	D-arginine and d-ornithine	PCPG	0.026893073
UCK2	D-glutamine and d-glutamate	PCPG	-0.11536895
UCK2	Dendritic cell	PCPG	0.307370172
UCK2	Dna_repair	PCPG	-0.18180615
UCK2	Dna_replication	PCPG	-0.099841341
UCK2	Double-negative memory t cell	PCPG	0.061889224
UCK2	Drug metabolism - cytochrome p450	PCPG	-0.288516511
UCK2	Drug metabolism - other cytochrome p450	PCPG	-0.045711684
UCK2	E2f_targets	PCPG	0.119218123
UCK2	Ecm_receptor_interaction	PCPG	0.411841668
UCK2	Effector cd4+ memory t cell	PCPG	0.212830473
UCK2	Effector cd8+ memory t cell	PCPG	0.256013093
UCK2	Effector memory t cell	PCPG	0.162795127
UCK2	Effector regulatory t (treg) cell	PCPG	0.299092528

UCK2	Elvidge_hif1a_targets_up	PCPG	0.228530403
UCK2	Endothelial cell	PCPG	0.262052042
UCK2	Eosinophil	PCPG	0.2761825
UCK2	Ether lipid metabolism	PCPG	-0.098294823
UCK2	Exhausted cd4+ t cell	PCPG	0.367234874
UCK2	Exhausted cd8+ t cell	PCPG	0.373743728
UCK2	Exhausted t cell	PCPG	0.223724693
UCK2	Fat cell (adipocyte)	PCPG	0.098809462
UCK2	Fatty acid biosynthesis	PCPG	-0.069504403
UCK2	Fatty acid degradation	PCPG	-0.246697764
UCK2	Fatty acid elongation	PCPG	-0.126992854
UCK2	Fibroblast	PCPG	0.224206875
UCK2	Folate biosynthesis	PCPG	-0.294472609
UCK2	Follicular b cell	PCPG	0.315590298
UCK2	Follicular dendritic cell	PCPG	0.19780994
UCK2	Follicular helper (tfh) t ce	PCPG	0.312921688
UCK2	Follicular t cell	PCPG	0.284415696
UCK2	Foxp3+il-17+ t cell	PCPG	0.077634842
UCK2	Fructose and mannose me	PCPG	0.136251478
UCK2	G2m_checkpoint	PCPG	0.238836915
UCK2	Galactose metabolism	PCPG	0.215707707
UCK2	Galie_tumor_stemness_ge	PCPG	0.048983316
UCK2	Glutathione metabolism	PCPG	-0.109729603
UCK2	Glycerolipid metabolism	PCPG	-0.019586758
UCK2	Glycerophospholipid metæ	PCPG	-0.084993887
UCK2	Glycine, serine and threor	PCPG	-0.08745689
UCK2	Glycolysis / gluconeogene	PCPG	0.008463162
UCK2	Glycosaminoglycan biosy	PCPG	0.224939247
UCK2	Glycosaminoglycan biosy	PCPG	0.070498121
UCK2	Glycosaminoglycan biosy	PCPG	0.300783816
UCK2	Glycosaminoglycan degra	PCPG	0.15354806
UCK2	Glycosphingolipid biosyn	PCPG	0.148271889
UCK2	Glycosphingolipid biosyn	PCPG	0.335881358
UCK2	Glycosphingolipid biosyn	PCPG	0.142639557
UCK2	Glycosylphosphatidylinos	PCPG	-0.105725492
UCK2	Glyoxylate and dicarboxy	PCPG	-0.103661272
UCK2	Granulocyte	PCPG	0.25593889
UCK2	Hedgehog_signaling	PCPG	0.24742004
UCK2	Histidine metabolism	PCPG	-0.200163282
UCK2	Hypoxia	PCPG	0.443461012
UCK2	Il-17ralpha t cell	PCPG	0.175511861
UCK2	Il2_stat5_signaling	PCPG	0.479784716
UCK2	Il6_jak_stat3_signaling	PCPG	0.469373113

UCK2	Immune_checkpoints_tur	PCPG	0.300383888
UCK2	Immune_inhibition_cytok	PCPG	0.151729337
UCK2	Inositol phosphate metabo	PCPG	0.170977694
UCK2	Interleukin_6_signaling	PCPG	0.425831971
UCK2	Jaeger_metastasis_up	PCPG	0.548597819
UCK2	Jain_nfkb_signaling	PCPG	0.057253584
UCK2	Kras_signaling_up	PCPG	0.344262912
UCK2	Linoleic acid metabolism	PCPG	-0.1602665
UCK2	Lipoic acid metabolism	PCPG	-0.415261519
UCK2	Lysine degradation	PCPG	-0.187848241
UCK2	Lysosome	PCPG	0.180824841
UCK2	M1 macrophage	PCPG	0.218490919
UCK2	M2 macrophage	PCPG	0.239164066
UCK2	Mannose type o-glycan bi	PCPG	0.069448843
UCK2	Mapk_signaling_pathway	PCPG	0.440651613
UCK2	Mapk3_erk1_activation	PCPG	0.359481925
UCK2	Marginal zone b cell	PCPG	0.224550129
UCK2	Memory b cell	PCPG	0.150545534
UCK2	Mesenchymal cell	PCPG	0.271709674
UCK2	Mesenchymal stem cell	PCPG	0.323475394
UCK2	Metabolism of xenobiotic	PCPG	-0.281451476
UCK2	Migrating cancer stem cel	PCPG	0.101947262
UCK2	Mitotic_spindle	PCPG	0.298282235
UCK2	Monocyte	PCPG	0.301474814
UCK2	Mtor_signaling_pathway	PCPG	0.00338815
UCK2	Mtorc1_signaling	PCPG	0.296162422
UCK2	Mucin type o-glycan biosy	PCPG	0.431682022
UCK2	Myc_targets_v1	PCPG	0.198639699
UCK2	Myeloid cell	PCPG	0.287631768
UCK2	N-glycan biosynthesis	PCPG	0.159321963
UCK2	Naive b cell	PCPG	0.132867896
UCK2	Naive cd4+ t cell	PCPG	0.147360624
UCK2	Naive cd8+ t cell	PCPG	-0.003952735
UCK2	Natural killer cell	PCPG	0.323760621
UCK2	Natural killer t (nkt) cell	PCPG	0.201402815
UCK2	Natural regulatory t (treg)	PCPG	0.213092703
UCK2	Neomycin, kanamycin and	PCPG	0.240260461
UCK2	Neutrophil	PCPG	0.292104391
UCK2	Nicotinate and nicotinami	PCPG	-0.057752949
UCK2	Nitrogen metabolism	PCPG	0.275324375
UCK2	Nod_like_receptor_signal	PCPG	0.319031645
UCK2	Notch_signaling	PCPG	0.327647562
UCK2	One carbon pool by folate	PCPG	0.160872333

UCK2	Other glycan degradation	PCPG	0.130681252
UCK2	Other types of o-glycan b	PCPG	0.091005817
UCK2	Oxidative phosphorylatior	PCPG	-0.012668338
UCK2	P53_pathway	PCPG	0.332337509
UCK2	P53_signaling_pathway	PCPG	0.363798831
UCK2	Pantothenate and coa bios	PCPG	-0.021199657
UCK2	Pentose and glucuronate i	PCPG	-0.062813405
UCK2	Pentose phosphate pathwa	PCPG	-0.026432003
UCK2	Pericyte	PCPG	0.293428611
UCK2	Phenylalanine metabolism	PCPG	-0.154242223
UCK2	Phenylalanine, tyrosine ar	PCPG	-0.020104652
UCK2	Phosphonate and phosphir	PCPG	-0.154777089
UCK2	Pi3k_akt_activation	PCPG	0.137940783
UCK2	Pi3k_akt_mtor_signaling	PCPG	0.357120432
UCK2	Porphyrin and chlorophyl	PCPG	-0.051907068
UCK2	Primary bile acid biosynt	PCPG	-0.32062874
UCK2	Propanoate metabolism	PCPG	-0.212240419
UCK2	Purine metabolism	PCPG	0.19797999
UCK2	Pyrimidine metabolism	PCPG	0.076056141
UCK2	Pyruvate metabolism	PCPG	-0.118896749
UCK2	Regulation_of_autophagy	PCPG	-0.034960334
UCK2	Retinol metabolism	PCPG	-0.172560856
UCK2	Riboflavin metabolism	PCPG	-0.022385878
UCK2	Schmahl_pdgf_signaling	PCPG	0.324933697
UCK2	Selenocompound metabol	PCPG	-0.218631163
UCK2	Signaling_by_hippo	PCPG	0.233828823
UCK2	Sphingolipid metabolism	PCPG	0.127813913
UCK2	Starch and sucrose metabo	PCPG	0.143610341
UCK2	Steroid biosynthesis	PCPG	-0.151195559
UCK2	Steroid hormone biosynth	PCPG	-0.186808362
UCK2	Sulfur metabolism	PCPG	-0.189239685
UCK2	Synthesis and degradation	PCPG	-0.15918552
UCK2	T helper cell	PCPG	0.245115043
UCK2	T helper1 (th1) cell	PCPG	0.183023958
UCK2	T helper17 (th17) cell	PCPG	0.300961843
UCK2	T helper2 (th2) cell	PCPG	0.195695277
UCK2	T helper9 (th9) cell	PCPG	0.099337768
UCK2	Taurine and hypotaurine r	PCPG	0.036834616
UCK2	Terpenoid backbone biosy	PCPG	-0.098674729
UCK2	Tgf_beta_signaling_pathw	PCPG	0.367550936
UCK2	Thiamine metabolism	PCPG	-0.2903666
UCK2	Tnfa_signaling_via_nfkb	PCPG	0.434729911
UCK2	Tryptophan metabolism	PCPG	-0.068107766

UCK2	Tumor endothelial cell	PCPG	0.182847463
UCK2	Tyrosine metabolism	PCPG	-0.295410544
UCK2	Ubiquinone and other ter	PCPG	-0.241405941
UCK2	Valine, leucine and isoleu	PCPG	0.256599339
UCK2	Valine, leucine and isoleu	PCPG	-0.23390425
UCK2	Vascular endothelial cell	PCPG	0.247636681
UCK2	Vascular smooth muscle c	PCPG	0.143632431
UCK2	Vegf_signaling_pathway	PCPG	0.333975635
UCK2	Vitamin b6 metabolism	PCPG	-0.161781945
UCK2	Willert_wnt_signaling	PCPG	0.228194924
UCK2	Wnt_beta_catenin_signali	PCPG	0.234320707
UCKL1	Abnormal plasma cell	PCPG	-0.152249947
UCKL1	Activated b cell	PCPG	-0.017708728
UCKL1	Activated cd4+ t cell	PCPG	-0.265162338
UCKL1	Activated t cell	PCPG	-0.213767711
UCKL1	Alanine, aspartate and glu	PCPG	0.032215404
UCKL1	Alcala_apoptosis	PCPG	0.122919367
UCKL1	Alpha-linolenic acid meta	PCPG	0.202543082
UCKL1	Amino sugar and nucleoti	PCPG	0.115809059
UCKL1	Ampk_pathway	PCPG	0.280352225
UCKL1	Angiogenesis	PCPG	-0.158450638
UCKL1	Arachidonic acid metabol	PCPG	0.18492295
UCKL1	Arginine and proline metæ	PCPG	-0.022405693
UCKL1	Arginine biosynthesis	PCPG	-0.200010658
UCKL1	Ascorbate and aldarate mε	PCPG	-0.037055916
UCKL1	Atypical memory b cell	PCPG	-0.177961483
UCKL1	Axl+siglec6+ dendritic ce	PCPG	-0.180055206
UCKL1	B cell	PCPG	-0.188754327
UCKL1	B1 cell	PCPG	0.054894846
UCKL1	Basal cell	PCPG	-0.083048458
UCKL1	Beta-alanine metabolism	PCPG	-0.057690858
UCKL1	Biosynthesis of unsaturate	PCPG	-0.077370912
UCKL1	Biotin metabolism	PCPG	-0.156951111
UCKL1	Butanoate metabolism	PCPG	0.140476126
UCKL1	Caffeine metabolism	PCPG	-0.021143439
UCKL1	Cancer stem cell	PCPG	-0.274770477
UCKL1	Cancer stem-like cell	PCPG	-0.278628228
UCKL1	Cd4+ cytotoxic t cell	PCPG	-0.244280788
UCKL1	Cd4+ memory t cell	PCPG	-0.195198407
UCKL1	Cd4+ regulatory t cell	PCPG	-0.262905118
UCKL1	Cd4+ t helper cell	PCPG	-0.238388699
UCKL1	Cd4+cd25+ regulatory t c	PCPG	-0.247409335
UCKL1	Cd8+ cytotoxic t cell	PCPG	-0.176438968

UCKL1	Cd8+ regulatory t cell	PCPG	-0.235076938
UCKL1	Cell_cycle	PCPG	0.077510616
UCKL1	Chandran_metastasis_top5	PCPG	-0.065112277
UCKL1	Citrate cycle (tea cycle)	PCPG	0.021129699
UCKL1	Cysteine and methionine r	PCPG	-0.047066145
UCKL1	Cytokine induced killer cε	PCPG	-0.185895543
UCKL1	D-arginine and d-ornithin	PCPG	-0.090618438
UCKL1	D-glutamine and d-glutan	PCPG	-0.261262468
UCKL1	Dendritic cell	PCPG	-0.248624899
UCKL1	Dna_repair	PCPG	0.31389231
UCKL1	Dna_replication	PCPG	0.25829742
UCKL1	Double-negative memory	PCPG	-0.017214273
UCKL1	Drug metabolism - cytoch	PCPG	0.061292931
UCKL1	Drug metabolism - other (	PCPG	0.17921345
UCKL1	E2f_targets	PCPG	0.165845512
UCKL1	Ecm_receptor_interaction	PCPG	-0.154952002
UCKL1	Effector cd4+ memory t (	PCPG	-0.30696966
UCKL1	Effector cd8+ memory t (	PCPG	-0.237037206
UCKL1	Effector memory t cell	PCPG	-0.311576924
UCKL1	Effector regulatory t (treg	PCPG	-0.277487005
UCKL1	Elvidge_hif1a_targets_up	PCPG	-0.210459026
UCKL1	Endothelial cell	PCPG	-0.158921049
UCKL1	Eosinophil	PCPG	-0.224302564
UCKL1	Ether lipid metabolism	PCPG	0.153647273
UCKL1	Exhausted cd4+ t cell	PCPG	-0.251676236
UCKL1	Exhausted cd8+ t cell	PCPG	-0.282460363
UCKL1	Exhausted t cell	PCPG	-0.202051051
UCKL1	Fat cell (adipocyte)	PCPG	0.060445424
UCKL1	Fatty acid biosynthesis	PCPG	-0.110923305
UCKL1	Fatty acid degradation	PCPG	0.014507113
UCKL1	Fatty acid elongation	PCPG	0.02211383
UCKL1	Fibroblast	PCPG	-0.252710851
UCKL1	Folate biosynthesis	PCPG	0.014661955
UCKL1	Follicular b cell	PCPG	-0.376243488
UCKL1	Follicular dendritic cell	PCPG	-0.235230837
UCKL1	Follicular helper (tfh) t ce	PCPG	-0.312928949
UCKL1	Follicular t cell	PCPG	-0.128216378
UCKL1	Foxp3+il-17+ t cell	PCPG	-0.21512392
UCKL1	Fructose and mannose me	PCPG	0.218130472
UCKL1	G2m_checkpoint	PCPG	0.044772705
UCKL1	Galactose metabolism	PCPG	0.109178237
UCKL1	Galie_tumor_stemness_ge	PCPG	-0.083646292
UCKL1	Glutathione metabolism	PCPG	0.078778104

UCKL1	Glycerolipid metabolism	PCPG	-0.117445954	
UCKL1	Glycerophospholipid metabolism	PCPG	0.13675917	
UCKL1	Glycine, serine and threonine metabolism	PCPG	0.009496028	
UCKL1	Glycolysis / gluconeogenesis	PCPG	0.040007147	
UCKL1	Glycosaminoglycan biosynthesis	PCPG	-0.129255792	
UCKL1	Glycosaminoglycan biosynthesis	PCPG	-0.096994088	
UCKL1	Glycosaminoglycan biosynthesis	PCPG	0.074483478	
UCKL1	Glycosaminoglycan degradation	PCPG	0.064102347	
UCKL1	Glycosphingolipid biosynthesis	PCPG	-0.052404185	
UCKL1	Glycosphingolipid biosynthesis	PCPG	-0.026387496	
UCKL1	Glycosphingolipid biosynthesis	PCPG	0.012699434	
UCKL1	Glycosylphosphatidylinositol biosynthesis	PCPG	0.090425368	
UCKL1	Glyoxylate and dicarboxylate metabolism	PCPG	0.160046038	
UCKL1	Granulocyte	PCPG	-0.238970788	
UCKL1	Hedgehog signaling	PCPG	-0.208170604	
UCKL1	Histidine metabolism	PCPG	-0.023615451	
UCKL1	Hypoxia	PCPG	-0.13536594	
UCKL1	IL-17Ralpha T cell	PCPG	-0.208458198	
UCKL1	IL2 STAT5 signaling	PCPG	-0.275750962	
UCKL1	IL6 JAK STAT3 signaling	PCPG	-0.338408419	
UCKL1	Immune checkpoints	turnover	PCPG	-0.238164563
UCKL1	Immune inhibition	cytokine	PCPG	-0.188557015
UCKL1	Inositol phosphate metabolism	PCPG	-0.384394012	
UCKL1	Interleukin_6 signaling	PCPG	-0.413734552	
UCKL1	Jaeger metastasis up	PCPG	-0.20374336	
UCKL1	Jain nfkb signaling	PCPG	0.213480732	
UCKL1	Kras signaling up	PCPG	-0.366793873	
UCKL1	Linoleic acid metabolism	PCPG	0.197290338	
UCKL1	Lipoic acid metabolism	PCPG	0.064219324	
UCKL1	Lysine degradation	PCPG	0.098817525	
UCKL1	Lysosome	PCPG	0.040776841	
UCKL1	M1 macrophage	PCPG	-0.241268911	
UCKL1	M2 macrophage	PCPG	-0.256844448	
UCKL1	Mannose type o-glycan biosynthesis	PCPG	0.175535171	
UCKL1	Mapk signaling pathway	PCPG	-0.310105917	
UCKL1	Mapk3 erk1 activation	PCPG	-0.213193837	
UCKL1	Marginal zone B cell	PCPG	-0.305384342	
UCKL1	Memory B cell	PCPG	-0.240752281	
UCKL1	Mesenchymal cell	PCPG	-0.168357623	
UCKL1	Mesenchymal stem cell	PCPG	-0.296721827	
UCKL1	Metabolism of xenobiotics	PCPG	0.144091457	
UCKL1	Migrating cancer stem cell	PCPG	-0.21128619	
UCKL1	Mitotic spindle	PCPG	-0.204721326	

UCKL1	Monocyte	PCPG	-0.234305077
UCKL1	Mtor_signaling_pathway	PCPG	-0.029475583
UCKL1	Mtorc1_signaling	PCPG	-0.147009304
UCKL1	Mucin type o-glycan biosynthesis	PCPG	-0.369651773
UCKL1	Myc_targets_v1	PCPG	0.287599383
UCKL1	Myeloid cell	PCPG	-0.304482009
UCKL1	N-glycan biosynthesis	PCPG	-0.04581274
UCKL1	Naive b cell	PCPG	-0.022553582
UCKL1	Naive cd4+ t cell	PCPG	-0.194632979
UCKL1	Naive cd8+ t cell	PCPG	-0.257002549
UCKL1	Natural killer cell	PCPG	-0.29520392
UCKL1	Natural killer t (nkt) cell	PCPG	-0.069020344
UCKL1	Natural regulatory t (treg) cell	PCPG	-0.281831549
UCKL1	Neomycin, kanamycin and streptomycin resistance	PCPG	-0.003524914
UCKL1	Neutrophil	PCPG	-0.228445027
UCKL1	Nicotinate and nicotinamide metabolism	PCPG	-0.038853687
UCKL1	Nitrogen metabolism	PCPG	-0.188526584
UCKL1	Nod_like_receptor_signaling	PCPG	-0.295365459
UCKL1	Notch_signaling	PCPG	-0.083427949
UCKL1	One carbon pool by folate	PCPG	0.044107021
UCKL1	Other glycan degradation	PCPG	0.010639034
UCKL1	Other types of o-glycan biosynthesis	PCPG	0.251137044
UCKL1	Oxidative phosphorylation	PCPG	0.233062803
UCKL1	P53_pathway	PCPG	-0.079524028
UCKL1	P53_signaling_pathway	PCPG	-0.109141755
UCKL1	Pantothenate and coenzyme a biosynthesis	PCPG	0.019707456
UCKL1	Pentose and glucuronate interconversions	PCPG	0.240965088
UCKL1	Pentose phosphate pathway	PCPG	0.024035457
UCKL1	Pericyte	PCPG	-0.217496866
UCKL1	Phenylalanine metabolism	PCPG	0.029581585
UCKL1	Phenylalanine, tyrosine and tryptophan metabolism	PCPG	0.124070476
UCKL1	Phosphonate and phosphonate metabolism	PCPG	-0.095861708
UCKL1	Pi3k_akt_activation	PCPG	-0.167959563
UCKL1	Pi3k_akt_mtor_signaling	PCPG	-0.218525222
UCKL1	Porphyrin and chlorophyll metabolism	PCPG	0.191842206
UCKL1	Primary bile acid biosynthesis	PCPG	0.013207212
UCKL1	Propanoate metabolism	PCPG	0.004189996
UCKL1	Purine metabolism	PCPG	0.089194613
UCKL1	Pyrimidine metabolism	PCPG	0.304390126
UCKL1	Pyruvate metabolism	PCPG	0.01932532
UCKL1	Regulation_of_autophagy	PCPG	0.044457665
UCKL1	Retinol metabolism	PCPG	0.037428199
UCKL1	Riboflavin metabolism	PCPG	0.085485456

UCKL1	Schmahl_pdgf_signaling	PCPG	-0.172359148
UCKL1	Selenocompound metabol	PCPG	-0.05108992
UCKL1	Signaling_by_hippo	PCPG	-0.307552762
UCKL1	Sphingolipid metabolism	PCPG	-0.148661286
UCKL1	Starch and sucrose metabo	PCPG	0.011055133
UCKL1	Steroid biosynthesis	PCPG	-0.044049026
UCKL1	Steroid hormone biosynth	PCPG	8.56E-05
UCKL1	Sulfur metabolism	PCPG	-0.103355495
UCKL1	Synthesis and degradation	PCPG	0.040759407
UCKL1	T helper cell	PCPG	-0.228516004
UCKL1	T helper1 (th1) cell	PCPG	-0.310595726
UCKL1	T helper17 (th17) cell	PCPG	-0.320390372
UCKL1	T helper2 (th2) cell	PCPG	-0.212500795
UCKL1	T helper9 (th9) cell	PCPG	-0.156194007
UCKL1	Taurine and hypotaurine r	PCPG	0.221806221
UCKL1	Terpenoid backbone biosy	PCPG	0.13781073
UCKL1	Tgf_beta_signaling_pathw	PCPG	-0.144799755
UCKL1	Thiamine metabolism	PCPG	0.111241004
UCKL1	Tnfa_signaling_via_nfb	PCPG	-0.260737903
UCKL1	Tryptophan metabolism	PCPG	-0.111805771
UCKL1	Tumor endothelial cell	PCPG	0.068943178
UCKL1	Tyrosine metabolism	PCPG	0.027160348
UCKL1	Ubiquinone and other ter	PCPG	0.271211253
UCKL1	Valine, leucine and isoleu	PCPG	0.043308004
UCKL1	Valine, leucine and isoleu	PCPG	0.049831344
UCKL1	Vascular endothelial cell	PCPG	-0.107785234
UCKL1	Vascular smooth muscle c	PCPG	-0.099701111
UCKL1	Vegf_signaling_pathway	PCPG	0.073556533
UCKL1	Vitamin b6 metabolism	PCPG	0.007304725
UCKL1	Willert_wnt_signaling	PCPG	0.048753956
UCKL1	Wnt_beta_catenin_signali	PCPG	-0.015351297
UPP1	Abnormal plasma cell	PCPG	0.171260174
UPP1	Activated b cell	PCPG	0.306821138
UPP1	Activated cd4+ t cell	PCPG	0.342865776
UPP1	Activated t cell	PCPG	0.443143411
UPP1	Alanine, aspartate and glu	PCPG	-0.005421273
UPP1	Alcala_apoptosis	PCPG	0.392409722
UPP1	Alpha-linolenic acid meta	PCPG	0.188575741
UPP1	Amino sugar and nucleoti	PCPG	0.227259894
UPP1	Ampk_pathway	PCPG	-0.08152876
UPP1	Angiogenesis	PCPG	0.316701224
UPP1	Arachidonic acid metabol	PCPG	0.368362124
UPP1	Arginine and proline metæ	PCPG	0.376126893

UPP1	Arginine biosynthesis	PCPG	0.179588355
UPP1	Ascorbate and aldarate me	PCPG	0.038839706
UPP1	Atypical memory b cell	PCPG	0.223107209
UPP1	Axl+siglec6+ dendritic ce	PCPG	0.333559447
UPP1	B cell	PCPG	0.275056448
UPP1	B1 cell	PCPG	0.068355436
UPP1	Basal cell	PCPG	0.449884031
UPP1	Beta-alanine metabolism	PCPG	-0.061879199
UPP1	Biosynthesis of unsaturate	PCPG	0.097699741
UPP1	Biotin metabolism	PCPG	0.010548637
UPP1	Butanoate metabolism	PCPG	-0.238555888
UPP1	Caffeine metabolism	PCPG	0.027821011
UPP1	Cancer stem cell	PCPG	0.230209552
UPP1	Cancer stem-like cell	PCPG	0.087296786
UPP1	Cd4+ cytotoxic t cell	PCPG	0.357191147
UPP1	Cd4+ memory t cell	PCPG	0.408223636
UPP1	Cd4+ regulatory t cell	PCPG	0.359760018
UPP1	Cd4+ t helper cell	PCPG	0.344718162
UPP1	Cd4+cd25+ regulatory t c	PCPG	0.340588053
UPP1	Cd8+ cytotoxic t cell	PCPG	0.306238059
UPP1	Cd8+ regulatory t cell	PCPG	0.336434685
UPP1	Cell_cycle	PCPG	-0.117161491
UPP1	Chandran_metastasis_top5	PCPG	-0.292051853
UPP1	Citrate cycle (tca cycle)	PCPG	-0.116634857
UPP1	Cysteine and methionine r	PCPG	0.079041369
UPP1	Cytokine induced killer c	PCPG	0.363086966
UPP1	D-arginine and d-ornithin	PCPG	0.116100017
UPP1	D-glutamine and d-glutan	PCPG	-0.113881182
UPP1	Dendritic cell	PCPG	0.437881585
UPP1	Dna_repair	PCPG	0.176054127
UPP1	Dna_replication	PCPG	-0.022309192
UPP1	Double-negative memory	PCPG	0.389493595
UPP1	Drug metabolism - cytoch	PCPG	0.170983873
UPP1	Drug metabolism - other	PCPG	0.346939401
UPP1	E2f_targets	PCPG	-0.114513108
UPP1	Ecm_receptor_interaction	PCPG	0.181616071
UPP1	Effector cd4+ memory t (	PCPG	0.281284576
UPP1	Effector cd8+ memory t (	PCPG	0.255613
UPP1	Effector memory t cell	PCPG	0.372154925
UPP1	Effector regulatory t (treg	PCPG	0.220669179
UPP1	Elvidge_hif1a_targets_up	PCPG	0.018039588
UPP1	Endothelial cell	PCPG	0.185410207
UPP1	Eosinophil	PCPG	0.466009494

UPP1	Ether lipid metabolism	PCPG	-0.059585395
UPP1	Exhausted cd4+ t cell	PCPG	0.295366954
UPP1	Exhausted cd8+ t cell	PCPG	0.414168857
UPP1	Exhausted t cell	PCPG	0.482711164
UPP1	Fat cell (adipocyte)	PCPG	0.174203771
UPP1	Fatty acid biosynthesis	PCPG	-0.05675529
UPP1	Fatty acid degradation	PCPG	-0.121908097
UPP1	Fatty acid elongation	PCPG	0.057007675
UPP1	Fibroblast	PCPG	0.251977118
UPP1	Folate biosynthesis	PCPG	0.206259665
UPP1	Follicular b cell	PCPG	0.45972831
UPP1	Follicular dendritic cell	PCPG	0.305950559
UPP1	Follicular helper (tfh) t ce	PCPG	0.418685657
UPP1	Follicular t cell	PCPG	0.447565064
UPP1	Foxp3+il-17+ t cell	PCPG	0.236080199
UPP1	Fructose and mannose me	PCPG	0.144062708
UPP1	G2m_checkpoint	PCPG	-0.12255676
UPP1	Galactose metabolism	PCPG	0.269021567
UPP1	Galie_tumor_stemness_ge	PCPG	-0.069839466
UPP1	Glutathione metabolism	PCPG	0.306050728
UPP1	Glycerolipid metabolism	PCPG	0.26932092
UPP1	Glycerophospholipid met&	PCPG	0.273208984
UPP1	Glycine, serine and threor	PCPG	0.073379361
UPP1	Glycolysis / gluconeogene	PCPG	0.045173349
UPP1	Glycosaminoglycan biosyn	PCPG	0.279903351
UPP1	Glycosaminoglycan biosyn	PCPG	-0.086408439
UPP1	Glycosaminoglycan biosyn	PCPG	0.098368051
UPP1	Glycosaminoglycan degra	PCPG	0.23444508
UPP1	Glycosphingolipid biosyn	PCPG	0.006366046
UPP1	Glycosphingolipid biosyn	PCPG	0.228008628
UPP1	Glycosphingolipid biosyn	PCPG	0.077266934
UPP1	Glycosylphosphatidylinos	PCPG	-0.222806872
UPP1	Glyoxylate and dicarboxy	PCPG	-0.044402561
UPP1	Granulocyte	PCPG	0.406754457
UPP1	Hedgehog_signaling	PCPG	-0.155051009
UPP1	Histidine metabolism	PCPG	0.196753071
UPP1	Hypoxia	PCPG	0.295941734
UPP1	Il-17ralpha t cell	PCPG	0.325730413
UPP1	Il2_stat5_signaling	PCPG	0.561208143
UPP1	Il6_jak_stat3_signaling	PCPG	0.49690342
UPP1	Immune_checkpoints_tur	PCPG	0.401189
UPP1	Immune_inhibition_cytok	PCPG	0.537474848
UPP1	Inositol phosphate metabo	PCPG	-0.219479004

UPP1	Interleukin_6_signaling	PCPG	0.11899059
UPP1	Jaeger_metastasis_up	PCPG	0.157482649
UPP1	Jain_nfkb_signaling	PCPG	-0.205400655
UPP1	Kras_signaling_up	PCPG	0.419701328
UPP1	Linoleic acid metabolism	PCPG	0.181131854
UPP1	Lipoic acid metabolism	PCPG	-0.214031428
UPP1	Lysine degradation	PCPG	-0.384493598
UPP1	Lysosome	PCPG	0.198603293
UPP1	M1 macrophage	PCPG	0.372066572
UPP1	M2 macrophage	PCPG	0.348166011
UPP1	Mannose type o-glycan bi	PCPG	-0.128030242
UPP1	Mapk_signaling_pathway	PCPG	0.308942223
UPP1	Mapk3_erk1_activation	PCPG	-0.123909749
UPP1	Marginal zone b cell	PCPG	0.279670087
UPP1	Memory b cell	PCPG	0.416319273
UPP1	Mesenchymal cell	PCPG	0.345509947
UPP1	Mesenchymal stem cell	PCPG	0.265666484
UPP1	Metabolism of xenobiotic	PCPG	0.198771789
UPP1	Migrating cancer stem cel	PCPG	0.227909183
UPP1	Mitotic_spindle	PCPG	-0.197755682
UPP1	Monocyte	PCPG	0.501559308
UPP1	Mtor_signaling_pathway	PCPG	-0.254397614
UPP1	Mtorc1_signaling	PCPG	0.225785331
UPP1	Mucin type o-glycan biosy	PCPG	0.053313105
UPP1	Myc_targets_v1	PCPG	0.207686682
UPP1	Myeloid cell	PCPG	0.351858732
UPP1	N-glycan biosynthesis	PCPG	0.056232287
UPP1	Naive b cell	PCPG	0.180490269
UPP1	Naive cd4+ t cell	PCPG	0.093884885
UPP1	Naive cd8+ t cell	PCPG	0.040650772
UPP1	Natural killer cell	PCPG	0.435257654
UPP1	Natural killer t (nkt) cell	PCPG	0.280732462
UPP1	Natural regulatory t (treg)	PCPG	0.299591654
UPP1	Neomycin, kanamycin an	PCPG	0.099774925
UPP1	Neutrophil	PCPG	0.528549746
UPP1	Nicotinate and nicotinami	PCPG	0.122593536
UPP1	Nitrogen metabolism	PCPG	0.048881915
UPP1	Nod_like_receptor_signal	PCPG	0.443245276
UPP1	Notch_signaling	PCPG	0.153396785
UPP1	One carbon pool by folate	PCPG	-0.075373193
UPP1	Other glycan degradation	PCPG	0.187791987
UPP1	Other types of o-glycan b	PCPG	0.089143762
UPP1	Oxidative phosphorylatior	PCPG	0.25620479

UPP1	P53_pathway	PCPG	0.469779991
UPP1	P53_signaling_pathway	PCPG	0.243153173
UPP1	Pantothenate and coa bios	PCPG	-0.088541589
UPP1	Pentose and glucuronate i	PCPG	0.031926592
UPP1	Pentose phosphate pathwa	PCPG	0.163336442
UPP1	Pericyte	PCPG	0.309754432
UPP1	Phenylalanine metabolism	PCPG	0.340992393
UPP1	Phenylalanine, tyrosine ar	PCPG	0.191944653
UPP1	Phosphonate and phosphir	PCPG	-0.045751726
UPP1	Pi3k_akt_activation	PCPG	-0.224441407
UPP1	Pi3k_akt_mtor_signaling	PCPG	0.250086306
UPP1	Porphyrin and chlorophyl	PCPG	0.176084481
UPP1	Primary bile acid biosynt	PCPG	0.132872999
UPP1	Propanoate metabolism	PCPG	-0.336254853
UPP1	Purine metabolism	PCPG	0.095857842
UPP1	Pyrimidine metabolism	PCPG	0.113778136
UPP1	Pyruvate metabolism	PCPG	-0.058345636
UPP1	Regulation_of_autophagy	PCPG	-0.274823595
UPP1	Retinol metabolism	PCPG	0.238495031
UPP1	Riboflavin metabolism	PCPG	0.27565632
UPP1	Schmahl_pdgf_signaling	PCPG	0.046518753
UPP1	Selenocompound metabol	PCPG	-0.282658074
UPP1	Signaling_by_hippo	PCPG	-0.12875629
UPP1	Sphingolipid metabolism	PCPG	-0.14974233
UPP1	Starch and sucrose metabo	PCPG	0.087201885
UPP1	Steroid biosynthesis	PCPG	0.153711013
UPP1	Steroid hormone biosynth	PCPG	0.251978613
UPP1	Sulfur metabolism	PCPG	-0.097119034
UPP1	Synthesis and degradation	PCPG	-0.027745733
UPP1	T helper cell	PCPG	0.366184453
UPP1	T helper1 (th1) cell	PCPG	0.461265564
UPP1	T helper17 (th17) cell	PCPG	0.39341089
UPP1	T helper2 (th2) cell	PCPG	0.419303223
UPP1	T helper9 (th9) cell	PCPG	0.3677887
UPP1	Taurine and hypotaurine r	PCPG	0.011412504
UPP1	Terpenoid backbone biosy	PCPG	0.0157366
UPP1	Tgf_beta_signaling_pathw	PCPG	-0.05704482
UPP1	Thiamine metabolism	PCPG	-0.012612837
UPP1	Tnfa_signaling_via_nfkb	PCPG	0.504664792
UPP1	Tryptophan metabolism	PCPG	0.182411406
UPP1	Tumor endothelial cell	PCPG	0.125234498
UPP1	Tyrosine metabolism	PCPG	0.323846627
UPP1	Ubiquinone and other ter	PCPG	-0.016966933

UPP1	Valine, leucine and isoleu	PCPG	0.321215473
UPP1	Valine, leucine and isoleu	PCPG	-0.208289027
UPP1	Vascular endothelial cell	PCPG	0.207953534
UPP1	Vascular smooth muscle c	PCPG	0.201984917
UPP1	Vegf_signaling_pathway	PCPG	0.281237932
UPP1	Vitamin b6 metabolism	PCPG	0.020603903
UPP1	Willert_wnt_signaling	PCPG	0.213537583
UPP1	Wnt_beta_catenin_signali	PCPG	0.084504516
UPP2	Abnormal plasma cell	PCPG	-0.143478675
UPP2	Activated b cell	PCPG	0.089808884
UPP2	Activated cd4+ t cell	PCPG	0.046381364
UPP2	Activated t cell	PCPG	-0.07782552
UPP2	Alanine, aspartate and glu	PCPG	-0.088641796
UPP2	Alcala_apoptosis	PCPG	-0.274083387
UPP2	Alpha-linolenic acid meta	PCPG	-0.018429445
UPP2	Amino sugar and nucleoti	PCPG	-0.102797971
UPP2	Ampk_pathway	PCPG	-0.024850497
UPP2	Angiogenesis	PCPG	0.006793055
UPP2	Arachidonic acid metabol:	PCPG	0.006641105
UPP2	Arginine and proline metæ	PCPG	-0.170963366
UPP2	Arginine biosynthesis	PCPG	-0.076297043
UPP2	Ascorbate and aldarate mε	PCPG	-0.149317136
UPP2	Atypical memory b cell	PCPG	0.023347902
UPP2	Axl+siglec6+ dendritic ce	PCPG	-0.026643066
UPP2	B cell	PCPG	-0.086312777
UPP2	B1 cell	PCPG	0.07077576
UPP2	Basal cell	PCPG	-0.054094663
UPP2	Beta-alanine metabolism	PCPG	-0.097158919
UPP2	Biosynthesis of unsaturate	PCPG	-0.175364855
UPP2	Biotin metabolism	PCPG	-0.260142146
UPP2	Butanoate metabolism	PCPG	-0.134803568
UPP2	Caffeine metabolism	PCPG	0.055376089
UPP2	Cancer stem cell	PCPG	0.06737413
UPP2	Cancer stem-like cell	PCPG	0.153563801
UPP2	Cd4+ cytotoxic t cell	PCPG	0.021081713
UPP2	Cd4+ memory t cell	PCPG	-0.048275299
UPP2	Cd4+ regulatory t cell	PCPG	0.004149711
UPP2	Cd4+ t helper cell	PCPG	-0.036819716
UPP2	Cd4+cd25+ regulatory t c	PCPG	-0.027452891
UPP2	Cd8+ cytotoxic t cell	PCPG	-0.134512831
UPP2	Cd8+ regulatory t cell	PCPG	0.035392936
UPP2	Cell_cycle	PCPG	0.026034945
UPP2	Chandran_metastasis_topç	PCPG	-0.081236591

UPP2	Citrate cycle (tca cycle)	PCPG	-0.270010852
UPP2	Cysteine and methionine r	PCPG	-0.240542597
UPP2	Cytokine induced killer c	PCPG	-0.148474764
UPP2	D-arginine and d-ornithin	PCPG	0.086552798
UPP2	D-glutamine and d-glutan	PCPG	0.036164807
UPP2	Dendritic cell	PCPG	0.038575569
UPP2	Dna_repair	PCPG	-0.18162759
UPP2	Dna_replication	PCPG	-0.144811186
UPP2	Double-negative memory	PCPG	-0.084743809
UPP2	Drug metabolism - cytoch	PCPG	0.007864933
UPP2	Drug metabolism - other (	PCPG	0.02447701
UPP2	E2f_targets	PCPG	-0.119294361
UPP2	Ecm_receptor_interaction	PCPG	0.014661753
UPP2	Effector cd4+ memory t (	PCPG	0.021204962
UPP2	Effector cd8+ memory t (	PCPG	-0.012832177
UPP2	Effector memory t cell	PCPG	0.035413509
UPP2	Effector regulatory t (treg	PCPG	0.040512187
UPP2	Elvidge_hif1a_targets_up	PCPG	-0.204055395
UPP2	Endothelial cell	PCPG	0.012434846
UPP2	Eosinophil	PCPG	0.048535452
UPP2	Ether lipid metabolism	PCPG	-0.060961411
UPP2	Exhausted cd4+ t cell	PCPG	-0.022761733
UPP2	Exhausted cd8+ t cell	PCPG	-0.037349425
UPP2	Exhausted t cell	PCPG	-0.033761174
UPP2	Fat cell (adipocyte)	PCPG	-0.166620299
UPP2	Fatty acid biosynthesis	PCPG	-0.109009649
UPP2	Fatty acid degradation	PCPG	-0.124121195
UPP2	Fatty acid elongation	PCPG	-0.075428702
UPP2	Fibroblast	PCPG	0.000122187
UPP2	Folate biosynthesis	PCPG	-0.022190588
UPP2	Follicular b cell	PCPG	0.033228912
UPP2	Follicular dendritic cell	PCPG	0.003024479
UPP2	Follicular helper (tfh) t ce	PCPG	-0.002817332
UPP2	Follicular t cell	PCPG	-0.057664369
UPP2	Foxp3+il-17+ t cell	PCPG	-0.153410512
UPP2	Fructose and mannose me	PCPG	0.007866143
UPP2	G2m_checkpoint	PCPG	-0.054304392
UPP2	Galactose metabolism	PCPG	-0.075223897
UPP2	Galie_tumor_stemness_ge	PCPG	0.062883131
UPP2	Glutathione metabolism	PCPG	0.021742619
UPP2	Glycerolipid metabolism	PCPG	-0.099076978
UPP2	Glycerophospholipid met	PCPG	0.054346757
UPP2	Glycine, serine and threor	PCPG	-0.084125114

UPP2	Glycolysis / gluconeogene	PCPG	-0.105154549
UPP2	Glycosaminoglycan biosyn	PCPG	0.002703524
UPP2	Glycosaminoglycan biosyn	PCPG	-0.099130856
UPP2	Glycosaminoglycan biosyn	PCPG	0.01216824
UPP2	Glycosaminoglycan degra	PCPG	-0.164204037
UPP2	Glycosphingolipid biosyn	PCPG	-0.016707868
UPP2	Glycosphingolipid biosyn	PCPG	-0.079752901
UPP2	Glycosphingolipid biosyn	PCPG	0.008163863
UPP2	Glycosylphosphatidylinos	PCPG	-0.113649432
UPP2	Glyoxylate and dicarboxy	PCPG	-0.216289927
UPP2	Granulocyte	PCPG	0.055793319
UPP2	Hedgehog_signaling	PCPG	0.086308549
UPP2	Histidine metabolism	PCPG	-0.184193231
UPP2	Hypoxia	PCPG	0.019887299
UPP2	Il-17alpha t cell	PCPG	-0.096869443
UPP2	Il2_stat5_signaling	PCPG	-0.050293938
UPP2	Il6_jak_stat3_signaling	PCPG	-0.032673732
UPP2	Immune_checkpoints_tur	PCPG	-0.025173234
UPP2	Immune_inhibition_cytok	PCPG	0.015206334
UPP2	Inositol phosphate metabo	PCPG	0.07883076
UPP2	Interleukin_6_signaling	PCPG	0.056104012
UPP2	Jaeger_metastasis_up	PCPG	0.017406225
UPP2	Jain_nfkb_signaling	PCPG	-0.307375769
UPP2	Kras_signaling_up	PCPG	0.074032355
UPP2	Linoleic acid metabolism	PCPG	0.038903137
UPP2	Lipoic acid metabolism	PCPG	-0.119547056
UPP2	Lysine degradation	PCPG	-0.152945864
UPP2	Lysosome	PCPG	-0.111274897
UPP2	M1 macrophage	PCPG	0.024021662
UPP2	M2 macrophage	PCPG	0.052442181
UPP2	Mannose type o-glycan bi	PCPG	0.121063329
UPP2	Mapk_signaling_pathway	PCPG	0.113536236
UPP2	Mapk3_erk1_activation	PCPG	0.139653108
UPP2	Marginal zone b cell	PCPG	-0.028022209
UPP2	Memory b cell	PCPG	-0.030892531
UPP2	Mesenchymal cell	PCPG	0.004066221
UPP2	Mesenchymal stem cell	PCPG	-0.021535749
UPP2	Metabolism of xenobiotic	PCPG	-0.061424514
UPP2	Migrating cancer stem cel	PCPG	0.050330184
UPP2	Mitotic_spindle	PCPG	-0.008522712
UPP2	Monocyte	PCPG	-0.026649348
UPP2	Mtor_signaling_pathway	PCPG	0.235151911
UPP2	Mtorc1_signaling	PCPG	-0.123977252

UPP2	Mucin type o-glycan biosynthesis	PCPG	0.181654111
UPP2	Myc_targets_v1	PCPG	-0.153048248
UPP2	Myeloid cell	PCPG	0.02842574
UPP2	N-glycan biosynthesis	PCPG	-0.071646496
UPP2	Naive b cell	PCPG	0.049661041
UPP2	Naive cd4+ t cell	PCPG	-0.066195185
UPP2	Naive cd8+ t cell	PCPG	-0.04473625
UPP2	Natural killer cell	PCPG	0.013404499
UPP2	Natural killer t (nkt) cell	PCPG	-0.207605173
UPP2	Natural regulatory t (treg) cell	PCPG	0.034095871
UPP2	Neomycin, kanamycin and streptomycin	PCPG	0.12414032
UPP2	Neutrophil	PCPG	0.007261663
UPP2	Nicotinate and nicotinamide	PCPG	0.012253762
UPP2	Nitrogen metabolism	PCPG	0.167623162
UPP2	Nod_like_receptor_signaling	PCPG	0.043022166
UPP2	Notch_signaling	PCPG	-0.107494641
UPP2	One carbon pool by folate	PCPG	-0.3693758
UPP2	Other glycan degradation	PCPG	-0.161258883
UPP2	Other types of o-glycan biosynthesis	PCPG	0.018611481
UPP2	Oxidative phosphorylation	PCPG	-0.123061987
UPP2	P53_pathway	PCPG	-0.173429901
UPP2	P53_signaling_pathway	PCPG	-0.126774701
UPP2	Pantothenate and coenzyme a biosynthesis	PCPG	-0.101332121
UPP2	Pentose and glucuronate interconversions	PCPG	-0.083770754
UPP2	Pentose phosphate pathway	PCPG	0.049253879
UPP2	Pericyte	PCPG	0.018615845
UPP2	Phenylalanine metabolism	PCPG	-0.077145297
UPP2	Phenylalanine, tyrosine and tryptophan	PCPG	-0.039402726
UPP2	Phosphonate and phosphite	PCPG	0.052541487
UPP2	Pi3k_akt_activation	PCPG	0.069104334
UPP2	Pi3k_akt_mtor_signaling	PCPG	0.058153766
UPP2	Porphyrin and chlorophyll biosynthesis	PCPG	-0.282700405
UPP2	Primary bile acid biosynthesis	PCPG	0.075048834
UPP2	Propanoate metabolism	PCPG	-0.174314118
UPP2	Purine metabolism	PCPG	-0.079509422
UPP2	Pyrimidine metabolism	PCPG	-0.08068702
UPP2	Pyruvate metabolism	PCPG	-0.36918905
UPP2	Regulation_of_autophagy	PCPG	0.202408005
UPP2	Retinol metabolism	PCPG	-0.106246541
UPP2	Riboflavin metabolism	PCPG	-0.198908033
UPP2	Schmahl_pdgf_signaling	PCPG	0.158354422
UPP2	Selenocompound metabolism	PCPG	-0.115712696
UPP2	Signaling_by_hippo	PCPG	0.076409001

UPP2	Sphingolipid metabolism	PCPG	-0.138872991
UPP2	Starch and sucrose metabo	PCPG	0.004960664
UPP2	Steroid biosynthesis	PCPG	-0.113514298
UPP2	Steroid hormone biosynth	PCPG	-0.027898045
UPP2	Sulfur metabolism	PCPG	-0.133948201
UPP2	Synthesis and degradation	PCPG	-0.0204187
UPP2	T helper cell	PCPG	0.022781839
UPP2	T helper1 (th1) cell	PCPG	-0.024326924
UPP2	T helper17 (th17) cell	PCPG	-0.020842583
UPP2	T helper2 (th2) cell	PCPG	-0.016430533
UPP2	T helper9 (th9) cell	PCPG	-0.031206178
UPP2	Taurine and hypotaurine r	PCPG	-0.115953481
UPP2	Terpenoid backbone biosy	PCPG	0.014992334
UPP2	Tgf_beta_signaling_pathw	PCPG	0.014632247
UPP2	Thiamine metabolism	PCPG	0.003745137
UPP2	Tnfa_signaling_via_nfk	PCPG	0.030286959
UPP2	Tryptophan metabolism	PCPG	-0.115493492
UPP2	Tumor endothelial cell	PCPG	-0.172376828
UPP2	Tyrosine metabolism	PCPG	-0.072396114
UPP2	Ubiquinone and other ter	PCPG	-0.139763752
UPP2	Valine, leucine and isoleu	PCPG	-0.160986741
UPP2	Valine, leucine and isoleu	PCPG	-0.131443349
UPP2	Vascular endothelial cell	PCPG	-0.033711524
UPP2	Vascular smooth muscle c	PCPG	-0.030495314
UPP2	Vegf_signaling_pathway	PCPG	0.053902569
UPP2	Vitamin b6 metabolism	PCPG	-0.063965522
UPP2	Willert_wnt_signaling	PCPG	-0.107394537
UPP2	Wnt_beta_catenin_signali	PCPG	0.053880609
CDA	Abnormal plasma cell	PRAD	0.157670809
CDA	Activated b cell	PRAD	0.343913943
CDA	Activated cd4+ t cell	PRAD	0.206491082
CDA	Activated t cell	PRAD	0.197991153
CDA	Alanine, aspartate and glu	PRAD	-0.222826116
CDA	Alcala_apoptosis	PRAD	-0.003596236
CDA	Alpha-linolenic acid meta	PRAD	-0.044420818
CDA	Amino sugar and nucleoti	PRAD	-0.13715927
CDA	Ampk_pathway	PRAD	-0.282012624
CDA	Angiogenesis	PRAD	0.517908719
CDA	Arachidonic acid metabo	PRAD	0.251697528
CDA	Arginine and proline met	PRAD	0.031654785
CDA	Arginine biosynthesis	PRAD	0.073873986
CDA	Ascorbate and aldarate m	PRAD	-0.207180023
CDA	Atypical memory b cell	PRAD	0.136772941

CDA	Axl+siglec6+ dendritic ce	PRAD	0.47773658
CDA	B cell	PRAD	0.307309163
CDA	B1 cell	PRAD	0.191204964
CDA	Basal cell	PRAD	0.305415338
CDA	Beta-alanine metabolism	PRAD	0.023287141
CDA	Biosynthesis of unsaturate	PRAD	-0.142320728
CDA	Biotin metabolism	PRAD	-0.262666638
CDA	Butanoate metabolism	PRAD	-0.160705617
CDA	Caffeine metabolism	PRAD	0.123473514
CDA	Cancer stem cell	PRAD	0.410648351
CDA	Cancer stem-like cell	PRAD	0.308823044
CDA	Cd4+ cytotoxic t cell	PRAD	0.429490265
CDA	Cd4+ memory t cell	PRAD	0.174099609
CDA	Cd4+ regulatory t cell	PRAD	0.280743225
CDA	Cd4+ t helper cell	PRAD	0.266934914
CDA	Cd4+cd25+ regulatory t c	PRAD	0.263071007
CDA	Cd8+ cytotoxic t cell	PRAD	0.17878468
CDA	Cd8+ regulatory t cell	PRAD	0.13974791
CDA	Cell_cycle	PRAD	-0.302057704
CDA	Chandran_metastasis_top	PRAD	-0.38050189
CDA	Citrate cycle (tca cycle)	PRAD	-0.234344293
CDA	Cysteine and methionine r	PRAD	-0.288541355
CDA	Cytokine induced killer ce	PRAD	0.377331317
CDA	D-arginine and d-ornithin	PRAD	-0.052587469
CDA	D-glutamine and d-glutan	PRAD	-0.254167716
CDA	Dendritic cell	PRAD	0.411420512
CDA	Dna_repair	PRAD	-0.062646563
CDA	Dna_replication	PRAD	-0.186934393
CDA	Double-negative memory	PRAD	0.204909552
CDA	Drug metabolism - cytoch	PRAD	0.152013375
CDA	Drug metabolism - other	PRAD	0.061667286
CDA	E2f_targets	PRAD	-0.253411887
CDA	Ecm_receptor_interaction	PRAD	0.455328935
CDA	Effector cd4+ memory t (	PRAD	0.176795707
CDA	Effector cd8+ memory t (	PRAD	0.380799508
CDA	Effector memory t cell	PRAD	0.239426084
CDA	Effector regulatory t (treg	PRAD	0.274972586
CDA	Elvidge_hif1a_targets_up	PRAD	-0.230804445
CDA	Endothelial cell	PRAD	0.610394003
CDA	Eosinophil	PRAD	0.324069166
CDA	Ether lipid metabolism	PRAD	0.10229395
CDA	Exhausted cd4+ t cell	PRAD	0.367546367
CDA	Exhausted cd8+ t cell	PRAD	0.382980649

CDA	Exhausted t cell	PRAD	0.238822011
CDA	Fat cell (adipocyte)	PRAD	0.094109191
CDA	Fatty acid biosynthesis	PRAD	0.012598268
CDA	Fatty acid degradation	PRAD	-0.021493048
CDA	Fatty acid elongation	PRAD	-0.048681204
CDA	Fibroblast	PRAD	0.577722136
CDA	Folate biosynthesis	PRAD	0.018473341
CDA	Follicular b cell	PRAD	0.259196337
CDA	Follicular dendritic cell	PRAD	0.13165912
CDA	Follicular helper (tfh) t ce	PRAD	0.264277967
CDA	Follicular t cell	PRAD	0.192293994
CDA	Foxp3+il-17+ t cell	PRAD	-0.010726639
CDA	Fructose and mannose me	PRAD	-0.087823207
CDA	G2m_checkpoint	PRAD	-0.320191048
CDA	Galactose metabolism	PRAD	0.07759281
CDA	Galie_tumor_stemness_ge	PRAD	0.34982985
CDA	Glutathione metabolism	PRAD	0.142532971
CDA	Glycerolipid metabolism	PRAD	0.105881163
CDA	Glycerophospholipid metæ	PRAD	0.26440703
CDA	Glycine, serine and threor	PRAD	-0.049485069
CDA	Glycolysis / gluconeogene	PRAD	-0.091447684
CDA	Glycosaminoglycan biosy	PRAD	0.469655327
CDA	Glycosaminoglycan biosy	PRAD	0.057726302
CDA	Glycosaminoglycan biosy	PRAD	0.334825084
CDA	Glycosaminoglycan degra	PRAD	0.062356062
CDA	Glycosphingolipid biosyn	PRAD	0.225489162
CDA	Glycosphingolipid biosyn	PRAD	0.112390558
CDA	Glycosphingolipid biosyn	PRAD	0.050024067
CDA	Glycosylphosphatidylinos	PRAD	-0.396395584
CDA	Glyoxylate and dicarboxy	PRAD	-0.29322445
CDA	Granulocyte	PRAD	0.308933061
CDA	Hedgehog_signaling	PRAD	0.177386916
CDA	Histidine metabolism	PRAD	0.18210482
CDA	Hypoxia	PRAD	0.263267318
CDA	Il-17alpha t cell	PRAD	0.214388052
CDA	Il2_stat5_signaling	PRAD	0.326814977
CDA	Il6_jak_stat3_signaling	PRAD	0.231143753
CDA	Immune_checkpoints_turr	PRAD	0.193736058
CDA	Immune_inhibition_cytok	PRAD	0.344886383
CDA	Inositol phosphate metabo	PRAD	-0.142686958
CDA	Interleukin_6_signaling	PRAD	0.023366866
CDA	Jaeger_metastasis_up	PRAD	0.107235613
CDA	Jain_nfkb_signaling	PRAD	-0.289290458

CDA	Kras_signaling_up	PRAD	0.360203681
CDA	Linoleic acid metabolism	PRAD	-0.085901409
CDA	Lipoic acid metabolism	PRAD	-0.1668617
CDA	Lysine degradation	PRAD	-0.381363588
CDA	Lysosome	PRAD	-0.016824105
CDA	M1 macrophage	PRAD	0.301181849
CDA	M2 macrophage	PRAD	0.346145823
CDA	Mannose type o-glycan bi	PRAD	-0.275553898
CDA	Mapk_signaling_pathway	PRAD	0.274855298
CDA	Mapk3_erk1_activation	PRAD	0.005699611
CDA	Marginal zone b cell	PRAD	0.20972358
CDA	Memory b cell	PRAD	0.183322106
CDA	Mesenchymal cell	PRAD	0.605652786
CDA	Mesenchymal stem cell	PRAD	0.517474038
CDA	Metabolism of xenobiotic	PRAD	0.141563028
CDA	Migrating cancer stem cel	PRAD	-0.165778454
CDA	Mitotic_spindle	PRAD	-0.249578214
CDA	Monocyte	PRAD	0.455874044
CDA	Mtor_signaling_pathway	PRAD	-0.163474539
CDA	Mtorc1_signaling	PRAD	-0.253805674
CDA	Mucin type o-glycan biosy	PRAD	-0.169959072
CDA	Myc_targets_v1	PRAD	-0.226421335
CDA	Myeloid cell	PRAD	0.347731332
CDA	N-glycan biosynthesis	PRAD	-0.321791828
CDA	Naive b cell	PRAD	0.050551941
CDA	Naive cd4+ t cell	PRAD	0.299183078
CDA	Naive cd8+ t cell	PRAD	0.147489498
CDA	Natural killer cell	PRAD	0.313044109
CDA	Natural killer t (nkt) cell	PRAD	0.051252371
CDA	Natural regulatory t (treg)	PRAD	0.125824833
CDA	Neomycin, kanamycin and	PRAD	0.103865555
CDA	Neutrophil	PRAD	0.345778576
CDA	Nicotinate and nicotinami	PRAD	0.125617936
CDA	Nitrogen metabolism	PRAD	0.014340228
CDA	Nod_like_receptor_signal	PRAD	0.098201977
CDA	Notch_signaling	PRAD	0.229925322
CDA	One carbon pool by folate	PRAD	-0.337286479
CDA	Other glycan degradation	PRAD	-0.209780892
CDA	Other types of o-glycan b	PRAD	-0.020314307
CDA	Oxidative phosphorylatior	PRAD	0.120269622
CDA	P53_pathway	PRAD	0.223748441
CDA	P53_signaling_pathway	PRAD	-0.127874785
CDA	Pantothenate and coa bios	PRAD	0.019307533

CDA	Pentose and glucuronate i	PRAD	-0.216477259
CDA	Pentose phosphate pathwa	PRAD	-0.093617579
CDA	Pericyte	PRAD	0.60640212
CDA	Phenylalanine metabolism	PRAD	0.254258362
CDA	Phenylalanine, tyrosine ar	PRAD	-0.030358278
CDA	Phosphonate and phosphir	PRAD	-0.057588384
CDA	Pi3k_akt_activation	PRAD	0.144172687
CDA	Pi3k_akt_mtor_signaling	PRAD	-0.138966378
CDA	Porphyrin and chlorophyl	PRAD	-0.158454789
CDA	Primary bile acid biosynt	PRAD	0.162761434
CDA	Propanoate metabolism	PRAD	-0.329898005
CDA	Purine metabolism	PRAD	-0.08995166
CDA	Pyrimidine metabolism	PRAD	-0.215984626
CDA	Pyruvate metabolism	PRAD	-0.198267022
CDA	Regulation_of_autophagy	PRAD	-0.271878481
CDA	Retinol metabolism	PRAD	0.117221412
CDA	Riboflavin metabolism	PRAD	-0.099321613
CDA	Schmahl_pdgf_signaling	PRAD	0.061330272
CDA	Selenocompound metabol	PRAD	-0.30867163
CDA	Signaling_by_hippo	PRAD	-0.234488289
CDA	Sphingolipid metabolism	PRAD	-0.387545836
CDA	Starch and sucrose metabo	PRAD	-0.02452635
CDA	Steroid biosynthesis	PRAD	-0.182513259
CDA	Steroid hormone biosynth	PRAD	0.06396145
CDA	Sulfur metabolism	PRAD	-0.256374146
CDA	Synthesis and degradation	PRAD	-0.017335145
CDA	T helper cell	PRAD	0.374037646
CDA	T helper1 (th1) cell	PRAD	0.216715183
CDA	T helper17 (th17) cell	PRAD	0.245925889
CDA	T helper2 (th2) cell	PRAD	0.35071044
CDA	T helper9 (th9) cell	PRAD	0.277854398
CDA	Taurine and hypotaurine r	PRAD	0.125099305
CDA	Terpenoid backbone biosy	PRAD	-0.329073324
CDA	Tgf_beta_signaling_pathw	PRAD	0.178074533
CDA	Thiamine metabolism	PRAD	0.054184297
CDA	Tnfa_signaling_via_nfk	PRAD	0.135888641
CDA	Tryptophan metabolism	PRAD	0.103275552
CDA	Tumor endothelial cell	PRAD	0.043362247
CDA	Tyrosine metabolism	PRAD	0.180161485
CDA	Ubiquinone and other ter	PRAD	-0.186678406
CDA	Valine, leucine and isoleu	PRAD	0.12437462
CDA	Valine, leucine and isoleu	PRAD	-0.194567352
CDA	Vascular endothelial cell	PRAD	0.674925606

CDA	Vascular smooth muscle c	PRAD	0.489737005
CDA	Vegf_signaling_pathway	PRAD	0.307414036
CDA	Vitamin b6 metabolism	PRAD	-0.165356148
CDA	Willert_wnt_signaling	PRAD	0.02084247
CDA	Wnt_beta_catenin_signali	PRAD	0.150972221
UCK1	Abnormal plasma cell	PRAD	-0.090493226
UCK1	Activated b cell	PRAD	-0.033307408
UCK1	Activated cd4+ t cell	PRAD	-0.297821186
UCK1	Activated t cell	PRAD	-0.158532942
UCK1	Alanine, aspartate and glu	PRAD	-0.244982041
UCK1	Alcala_apoptosis	PRAD	0.188585805
UCK1	Alpha-linolenic acid meta	PRAD	-0.012467189
UCK1	Amino sugar and nucleoti	PRAD	-0.038087447
UCK1	Ampk_pathway	PRAD	0.002961047
UCK1	Angiogenesis	PRAD	-0.096536256
UCK1	Arachidonic acid metabol	PRAD	0.10175642
UCK1	Arginine and proline met&	PRAD	-0.031554531
UCK1	Arginine biosynthesis	PRAD	-0.087373643
UCK1	Ascorbate and aldarate m&	PRAD	-0.074773061
UCK1	Atypical memory b cell	PRAD	-0.08779115
UCK1	Axl+siglec6+ dendritic ce	PRAD	-0.198083863
UCK1	B cell	PRAD	-0.23903941
UCK1	B1 cell	PRAD	-0.04412618
UCK1	Basal cell	PRAD	0.030882405
UCK1	Beta-alanine metabolism	PRAD	-0.165048759
UCK1	Biosynthesis of unsaturate	PRAD	0.108538563
UCK1	Biotin metabolism	PRAD	-0.046007699
UCK1	Butanoate metabolism	PRAD	-0.118491314
UCK1	Caffeine metabolism	PRAD	-0.05845495
UCK1	Cancer stem cell	PRAD	-0.309976562
UCK1	Cancer stem-like cell	PRAD	-0.225649345
UCK1	Cd4+ cytotoxic t cell	PRAD	-0.181626464
UCK1	Cd4+ memory t cell	PRAD	-0.155826048
UCK1	Cd4+ regulatory t cell	PRAD	-0.130877296
UCK1	Cd4+ t helper cell	PRAD	-0.168336622
UCK1	Cd4+cd25+ regulatory t c	PRAD	-0.175366125
UCK1	Cd8+ cytotoxic t cell	PRAD	-0.085527647
UCK1	Cd8+ regulatory t cell	PRAD	-0.174643436
UCK1	Cell_cycle	PRAD	-0.066415004
UCK1	Chandran_metastasis_top5	PRAD	-0.247254041
UCK1	Citrate cycle (tca cycle)	PRAD	-0.055525604
UCK1	Cysteine and methionine r	PRAD	-0.023610516
UCK1	Cytokine induced killer c&	PRAD	-0.056221715

UCK1	D-arginine and d-ornithin	PRAD	0.077184585
UCK1	D-glutamine and d-glutan	PRAD	-0.356245619
UCK1	Dendritic cell	PRAD	-0.19693213
UCK1	Dna_repair	PRAD	0.498076869
UCK1	Dna_replication	PRAD	0.23220765
UCK1	Double-negative memory	PRAD	0.035933445
UCK1	Drug metabolism - cytoch	PRAD	0.137844762
UCK1	Drug metabolism - other	PRAD	0.289023084
UCK1	E2f_targets	PRAD	0.038434047
UCK1	Ecm_receptor_interaction	PRAD	-0.244726324
UCK1	Effector cd4+ memory t	PRAD	-0.288045773
UCK1	Effector cd8+ memory t	PRAD	-0.273201947
UCK1	Effector memory t cell	PRAD	-0.234232791
UCK1	Effector regulatory t (treg	PRAD	-0.252886477
UCK1	Elvidge_hif1a_targets_up	PRAD	-0.251071293
UCK1	Endothelial cell	PRAD	-0.267988985
UCK1	Eosinophil	PRAD	-0.191652579
UCK1	Ether lipid metabolism	PRAD	-0.104855302
UCK1	Exhausted cd4+ t cell	PRAD	-0.299510983
UCK1	Exhausted cd8+ t cell	PRAD	-0.188353709
UCK1	Exhausted t cell	PRAD	-0.057300887
UCK1	Fat cell (adipocyte)	PRAD	0.015125486
UCK1	Fatty acid biosynthesis	PRAD	-0.144912691
UCK1	Fatty acid degradation	PRAD	-0.123351462
UCK1	Fatty acid elongation	PRAD	0.300930213
UCK1	Fibroblast	PRAD	-0.197217371
UCK1	Folate biosynthesis	PRAD	0.207567456
UCK1	Follicular b cell	PRAD	-0.24353163
UCK1	Follicular dendritic cell	PRAD	-0.208277056
UCK1	Follicular helper (tfh) t ce	PRAD	-0.194481267
UCK1	Follicular t cell	PRAD	0.046373876
UCK1	Foxp3+il-17+ t cell	PRAD	-0.065933653
UCK1	Fructose and mannose me	PRAD	0.18603139
UCK1	G2m_checkpoint	PRAD	-0.121320616
UCK1	Galactose metabolism	PRAD	0.087668337
UCK1	Galie_tumor_stemness_ge	PRAD	-0.351121094
UCK1	Glutathione metabolism	PRAD	0.190629905
UCK1	Glycerolipid metabolism	PRAD	0.131452591
UCK1	Glycerophospholipid metæ	PRAD	0.260139668
UCK1	Glycine, serine and threor	PRAD	0.132501904
UCK1	Glycolysis / gluconeogene	PRAD	0.052003063
UCK1	Glycosaminoglycan biosy	PRAD	0.101644688
UCK1	Glycosaminoglycan biosy	PRAD	-0.234383707

UCK1	Glycosaminoglycan biosyn	PRAD	0.120081646
UCK1	Glycosaminoglycan degra	PRAD	-0.143682415
UCK1	Glycosphingolipid biosyn	PRAD	-0.085288207
UCK1	Glycosphingolipid biosyn	PRAD	-0.11797063
UCK1	Glycosphingolipid biosyn	PRAD	-0.150779276
UCK1	Glycosylphosphatidylinos	PRAD	-0.053378745
UCK1	Glyoxylate and dicarboxy	PRAD	0.016207954
UCK1	Granulocyte	PRAD	-0.1894102
UCK1	Hedgehog_signaling	PRAD	-0.447845247
UCK1	Histidine metabolism	PRAD	-0.006539458
UCK1	Hypoxia	PRAD	-0.169999238
UCK1	Il-17alpha t cell	PRAD	-0.167217982
UCK1	Il2_stat5_signaling	PRAD	-0.269271241
UCK1	Il6_jak_stat3_signaling	PRAD	-0.313186911
UCK1	Immune_checkpoints_tunr	PRAD	-0.172170204
UCK1	Immune_inhibition_cytok	PRAD	-0.053007495
UCK1	Inositol phosphate metabo	PRAD	-0.489162422
UCK1	Interleukin_6_signaling	PRAD	-0.57464784
UCK1	Jaeger_metastasis_up	PRAD	-0.098965638
UCK1	Jain_nfkb_signaling	PRAD	-0.053687302
UCK1	Kras_signaling_up	PRAD	-0.374328515
UCK1	Linoleic acid metabolism	PRAD	0.132445847
UCK1	Lipoic acid metabolism	PRAD	0.227095713
UCK1	Lysine degradation	PRAD	-0.300682541
UCK1	Lysosome	PRAD	-0.076831466
UCK1	M1 macrophage	PRAD	-0.272620479
UCK1	M2 macrophage	PRAD	-0.213617379
UCK1	Mannose type o-glycan bi	PRAD	-0.062605202
UCK1	Mapk_signaling_pathway	PRAD	-0.350646211
UCK1	Mapk3_erk1_activation	PRAD	-0.559744863
UCK1	Marginal zone b cell	PRAD	-0.251206228
UCK1	Memory b cell	PRAD	-0.197862571
UCK1	Mesenchymal cell	PRAD	-0.066233838
UCK1	Mesenchymal stem cell	PRAD	-0.27777436
UCK1	Metabolism of xenobiotic	PRAD	0.196461322
UCK1	Migrating cancer stem cel	PRAD	-0.228731998
UCK1	Mitotic_spindle	PRAD	-0.463989288
UCK1	Monocyte	PRAD	-0.122522941
UCK1	Mtor_signaling_pathway	PRAD	-0.321881656
UCK1	Mtorc1_signaling	PRAD	-0.046675901
UCK1	Mucin type o-glycan biosy	PRAD	-0.600139117
UCK1	Myc_targets_v1	PRAD	0.179824815
UCK1	Myeloid cell	PRAD	-0.276855337

UCK1	N-glycan biosynthesis	PRAD	-0.201496809
UCK1	Naive b cell	PRAD	-0.100719597
UCK1	Naive cd4+ t cell	PRAD	-0.393653495
UCK1	Naive cd8+ t cell	PRAD	-0.353249859
UCK1	Natural killer cell	PRAD	-0.230837172
UCK1	Natural killer t (nkt) cell	PRAD	0.071058152
UCK1	Natural regulatory t (treg)	PRAD	-0.268183873
UCK1	Neomycin, kanamycin and	PRAD	-0.127648623
UCK1	Neutrophil	PRAD	-0.230809269
UCK1	Nicotinate and nicotinami	PRAD	-0.134633906
UCK1	Nitrogen metabolism	PRAD	-0.193100452
UCK1	Nod_like_receptor_signal	PRAD	-0.290819227
UCK1	Notch_signaling	PRAD	-0.136357312
UCK1	One carbon pool by folate	PRAD	0.020569838
UCK1	Other glycan degradation	PRAD	-0.090354668
UCK1	Other types of o-glycan b	PRAD	0.108118264
UCK1	Oxidative phosphorylatio	PRAD	0.514428541
UCK1	P53_pathway	PRAD	0.078545483
UCK1	P53_signaling_pathway	PRAD	-0.164035344
UCK1	Pantothenate and coa bios	PRAD	-0.155000573
UCK1	Pentose and glucuronate i	PRAD	-0.077011272
UCK1	Pentose phosphate pathwa	PRAD	0.138562857
UCK1	Pericyte	PRAD	-0.099755224
UCK1	Phenylalanine metabolism	PRAD	0.185979772
UCK1	Phenylalanine, tyrosine ar	PRAD	0.114700998
UCK1	Phosphonate and phosphir	PRAD	-0.141869642
UCK1	Pi3k_akt_activation	PRAD	-0.421941197
UCK1	Pi3k_akt_mtor_signaling	PRAD	-0.1531314
UCK1	Porphyrin and chlorophyl	PRAD	0.16188121
UCK1	Primary bile acid biosynt	PRAD	0.040747862
UCK1	Propanoate metabolism	PRAD	-0.364889155
UCK1	Purine metabolism	PRAD	0.086907261
UCK1	Pyrimidine metabolism	PRAD	0.298858327
UCK1	Pyruvate metabolism	PRAD	0.026567393
UCK1	Regulation_of_autophagy	PRAD	-0.047838123
UCK1	Retinol metabolism	PRAD	0.115256112
UCK1	Riboflavin metabolism	PRAD	0.180225558
UCK1	Schmahl_pdgf_signaling	PRAD	-0.427253232
UCK1	Selenocompound metabol	PRAD	-0.416460909
UCK1	Signaling_by_hippo	PRAD	-0.55757613
UCK1	Sphingolipid metabolism	PRAD	-0.371533783
UCK1	Starch and sucrose metabo	PRAD	-0.219782361
UCK1	Steroid biosynthesis	PRAD	0.097205403

UCK1	Steroid hormone biosynth	PRAD	0.163673813
UCK1	Sulfur metabolism	PRAD	-0.143388451
UCK1	Synthesis and degradation	PRAD	-0.113589575
UCK1	T helper cell	PRAD	-0.227006414
UCK1	T helper1 (th1) cell	PRAD	-0.163291164
UCK1	T helper17 (th17) cell	PRAD	-0.298144935
UCK1	T helper2 (th2) cell	PRAD	-0.185699125
UCK1	T helper9 (th9) cell	PRAD	-0.105474171
UCK1	Taurine and hypotaurine r	PRAD	0.093200327
UCK1	Terpenoid backbone biosy	PRAD	-0.025597449
UCK1	Tgf_beta_signaling_pathw	PRAD	-0.45796008
UCK1	Thiamine metabolism	PRAD	0.326857344
UCK1	Tnfa_signaling_via_nfkb	PRAD	-0.264103078
UCK1	Tryptophan metabolism	PRAD	-0.15522051
UCK1	Tumor endothelial cell	PRAD	0.073545334
UCK1	Tyrosine metabolism	PRAD	0.155598407
UCK1	Ubiquinone and other terq	PRAD	0.098713821
UCK1	Valine, leucine and isoleu	PRAD	0.097285029
UCK1	Valine, leucine and isoleu	PRAD	-0.218482957
UCK1	Vascular endothelial cell	PRAD	-0.099518661
UCK1	Vascular smooth muscle c	PRAD	-0.122438729
UCK1	Vegf_signaling_pathway	PRAD	-0.087105182
UCK1	Vitamin b6 metabolism	PRAD	0.072603927
UCK1	Willert_wnt_signaling	PRAD	-0.134264913
UCK1	Wnt_beta_catenin_signali	PRAD	-0.217710278
UCK2	Abnormal plasma cell	PRAD	-0.422567983
UCK2	Activated b cell	PRAD	-0.163348594
UCK2	Activated cd4+ t cell	PRAD	-0.320930057
UCK2	Activated t cell	PRAD	-0.068789814
UCK2	Alanine, aspartate and glu	PRAD	0.310687182
UCK2	Alcala_apoptosis	PRAD	0.27434959
UCK2	Alpha-linolenic acid meta	PRAD	-0.131690882
UCK2	Amino sugar and nucleoti	PRAD	0.175677739
UCK2	Ampk_pathway	PRAD	0.388057338
UCK2	Angiogenesis	PRAD	-0.131694507
UCK2	Arachidonic acid metabol:	PRAD	-0.19305738
UCK2	Arginine and proline metæ	PRAD	-0.094722494
UCK2	Arginine biosynthesis	PRAD	-0.015855823
UCK2	Ascorbate and aldarate mc	PRAD	0.217587679
UCK2	Atypical memory b cell	PRAD	-0.237892033
UCK2	Axl+siglec6+ dendritic ce	PRAD	-0.292212643
UCK2	B cell	PRAD	-0.237334654
UCK2	B1 cell	PRAD	-0.070681279

UCK2	Basal cell	PRAD	-0.41075982
UCK2	Beta-alanine metabolism	PRAD	-0.222740575
UCK2	Biosynthesis of unsaturate	PRAD	0.043453089
UCK2	Biotin metabolism	PRAD	0.22855214
UCK2	Butanoate metabolism	PRAD	-0.0286298
UCK2	Caffeine metabolism	PRAD	-0.386215741
UCK2	Cancer stem cell	PRAD	-0.388462219
UCK2	Cancer stem-like cell	PRAD	-0.356824348
UCK2	Cd4+ cytotoxic t cell	PRAD	-0.336133553
UCK2	Cd4+ memory t cell	PRAD	-0.164953726
UCK2	Cd4+ regulatory t cell	PRAD	-0.162721927
UCK2	Cd4+ t helper cell	PRAD	-0.213238631
UCK2	Cd4+cd25+ regulatory t c	PRAD	-0.20147498
UCK2	Cd8+ cytotoxic t cell	PRAD	-0.180065514
UCK2	Cd8+ regulatory t cell	PRAD	-0.120967377
UCK2	Cell_cycle	PRAD	0.399164304
UCK2	Chandran_metastasis_top5	PRAD	0.35848154
UCK2	Citrate cycle (tca cycle)	PRAD	0.270384399
UCK2	Cysteine and methionine r	PRAD	0.270988735
UCK2	Cytokine induced killer c	PRAD	-0.330717084
UCK2	D-arginine and d-ornithin	PRAD	0.028653135
UCK2	D-glutamine and d-glutan	PRAD	0.049656984
UCK2	Dendritic cell	PRAD	-0.306405828
UCK2	Dna_repair	PRAD	0.436795149
UCK2	Dna_replication	PRAD	0.357486862
UCK2	Double-negative memory	PRAD	-0.109369303
UCK2	Drug metabolism - cytoch	PRAD	-0.096627769
UCK2	Drug metabolism - other (	PRAD	0.26355847
UCK2	E2f_targets	PRAD	0.427839958
UCK2	Ecm_receptor_interaction	PRAD	-0.288989309
UCK2	Effector cd4+ memory t (	PRAD	-0.213872768
UCK2	Effector cd8+ memory t (	PRAD	-0.333252923
UCK2	Effector memory t cell	PRAD	-0.214494902
UCK2	Effector regulatory t (treg	PRAD	-0.185969545
UCK2	Elvidge_hif1a_targets_up	PRAD	0.205013791
UCK2	Endothelial cell	PRAD	-0.320311904
UCK2	Eosinophil	PRAD	-0.230683914
UCK2	Ether lipid metabolism	PRAD	-0.224694133
UCK2	Exhausted cd4+ t cell	PRAD	-0.358083749
UCK2	Exhausted cd8+ t cell	PRAD	-0.347029837
UCK2	Exhausted t cell	PRAD	-0.136588153
UCK2	Fat cell (adipocyte)	PRAD	-0.223228023
UCK2	Fatty acid biosynthesis	PRAD	0.066251603

UCK2	Fatty acid degradation	PRAD	-0.183870156
UCK2	Fatty acid elongation	PRAD	0.136345185
UCK2	Fibroblast	PRAD	-0.340098203
UCK2	Folate biosynthesis	PRAD	0.24744248
UCK2	Follicular b cell	PRAD	-0.219940154
UCK2	Follicular dendritic cell	PRAD	-0.124619552
UCK2	Follicular helper (tfh) t ce	PRAD	-0.300010276
UCK2	Follicular t cell	PRAD	0.005495012
UCK2	Foxp3+il-17+ t cell	PRAD	-0.093837682
UCK2	Fructose and mannose me	PRAD	0.205738687
UCK2	G2m_checkpoint	PRAD	0.375236372
UCK2	Galactose metabolism	PRAD	0.012117085
UCK2	Galie_tumor_stemness_ge	PRAD	-0.331112279
UCK2	Glutathione metabolism	PRAD	-0.096640896
UCK2	Glycerolipid metabolism	PRAD	0.069874738
UCK2	Glycerophospholipid metæ	PRAD	-0.177136743
UCK2	Glycine, serine and threor	PRAD	0.019417271
UCK2	Glycolysis / gluconeogene	PRAD	0.098677826
UCK2	Glycosaminoglycan biosy1	PRAD	-0.119700939
UCK2	Glycosaminoglycan biosy1	PRAD	-0.278901428
UCK2	Glycosaminoglycan biosy1	PRAD	-0.070966222
UCK2	Glycosaminoglycan degra	PRAD	-0.063949263
UCK2	Glycosphingolipid biosyn1	PRAD	-0.369467389
UCK2	Glycosphingolipid biosyn1	PRAD	-0.24892798
UCK2	Glycosphingolipid biosyn1	PRAD	-0.31310564
UCK2	Glycosylphosphatidylinos:	PRAD	0.213914386
UCK2	Glyoxylate and dicarboxy	PRAD	0.330693926
UCK2	Granulocyte	PRAD	-0.273826294
UCK2	Hedgehog_signaling	PRAD	-0.18961621
UCK2	Histidine metabolism	PRAD	-0.314337807
UCK2	Hypoxia	PRAD	-0.237409733
UCK2	Il-17ralpha t cell	PRAD	-0.198024686
UCK2	Il2_stat5_signaling	PRAD	-0.193096204
UCK2	Il6_jak_stat3_signaling	PRAD	-0.21042465
UCK2	Immune_checkpoints_tur	PRAD	-0.204286236
UCK2	Immune_inhibition_cytok	PRAD	-0.206180606
UCK2	Inositol phosphate metabo	PRAD	-0.381325243
UCK2	Interleukin_6_signaling	PRAD	-0.231585547
UCK2	Jaeger_metastasis_up	PRAD	0.227182472
UCK2	Jain_nfkb_signaling	PRAD	0.503027031
UCK2	Kras_signaling_up	PRAD	-0.264154209
UCK2	Linoleic acid metabolism	PRAD	0.045776574
UCK2	Lipoic acid metabolism	PRAD	0.097605962

UCK2	Lysine degradation	PRAD	0.019577213
UCK2	Lysosome	PRAD	-0.24360644
UCK2	M1 macrophage	PRAD	-0.187957332
UCK2	M2 macrophage	PRAD	-0.200117041
UCK2	Mannose type o-glycan bi	PRAD	0.083743322
UCK2	Mapk_signaling_pathway	PRAD	-0.356639518
UCK2	Mapk3_erk1_activation	PRAD	-0.135794612
UCK2	Marginal zone b cell	PRAD	-0.183835547
UCK2	Memory b cell	PRAD	-0.2074452
UCK2	Mesenchymal cell	PRAD	-0.327796915
UCK2	Mesenchymal stem cell	PRAD	-0.40744708
UCK2	Metabolism of xenobiotic	PRAD	-0.052250266
UCK2	Migrating cancer stem cel	PRAD	-0.10133501
UCK2	Mitotic_spindle	PRAD	0.061831452
UCK2	Monocyte	PRAD	-0.293028895
UCK2	Mtor_signaling_pathway	PRAD	0.012329041
UCK2	Mtorc1_signaling	PRAD	0.322261722
UCK2	Mucin type o-glycan biosy	PRAD	-0.085206853
UCK2	Myc_targets_v1	PRAD	0.620874834
UCK2	Myeloid cell	PRAD	-0.31302584
UCK2	N-glycan biosynthesis	PRAD	0.221324814
UCK2	Naive b cell	PRAD	-0.277914052
UCK2	Naive cd4+ t cell	PRAD	-0.267880415
UCK2	Naive cd8+ t cell	PRAD	-0.313133511
UCK2	Natural killer cell	PRAD	-0.281174852
UCK2	Natural killer t (nkt) cell	PRAD	0.196755901
UCK2	Natural regulatory t (treg)	PRAD	-0.198843461
UCK2	Neomycin, kanamycin and	PRAD	-0.154547891
UCK2	Neutrophil	PRAD	-0.283993834
UCK2	Nicotinate and nicotinami	PRAD	-0.248755475
UCK2	Nitrogen metabolism	PRAD	-0.059521362
UCK2	Nod_like_receptor_signal	PRAD	-0.140210222
UCK2	Notch_signaling	PRAD	-0.24258733
UCK2	One carbon pool by folate	PRAD	0.378491398
UCK2	Other glycan degradation	PRAD	-0.100844348
UCK2	Other types of o-glycan b	PRAD	0.245079656
UCK2	Oxidative phosphorylatio	PRAD	0.220932485
UCK2	P53_pathway	PRAD	-0.145455112
UCK2	P53_signaling_pathway	PRAD	0.19254998
UCK2	Pantothenate and coa bios	PRAD	-0.140534032
UCK2	Pentose and glucuronate i	PRAD	0.336354429
UCK2	Pentose phosphate pathwa	PRAD	0.324676608
UCK2	Pericyte	PRAD	-0.398518296

UCK2	Phenylalanine metabolism	PRAD	-0.222231737
UCK2	Phenylalanine, tyrosine ar	PRAD	-0.093992711
UCK2	Phosphonate and phosphir	PRAD	-0.104390543
UCK2	Pi3k_akt_activation	PRAD	-0.271061896
UCK2	Pi3k_akt_mtor_signaling	PRAD	0.127983079
UCK2	Porphyrin and chlorophyl	PRAD	0.281348713
UCK2	Primary bile acid biosynt	PRAD	0.035098153
UCK2	Propanoate metabolism	PRAD	-0.047490512
UCK2	Purine metabolism	PRAD	0.512180279
UCK2	Pyrimidine metabolism	PRAD	0.51450907
UCK2	Pyruvate metabolism	PRAD	0.127168711
UCK2	Regulation_of_autophagy	PRAD	0.0766635
UCK2	Retinol metabolism	PRAD	-0.056638176
UCK2	Riboflavin metabolism	PRAD	0.136242822
UCK2	Schmahl_pdgf_signaling	PRAD	-0.251532205
UCK2	Selenocompound metabol	PRAD	0.209615238
UCK2	Signaling_by_hippo	PRAD	-0.079299846
UCK2	Sphingolipid metabolism	PRAD	-0.150122376
UCK2	Starch and sucrose metabo	PRAD	-0.205342907
UCK2	Steroid biosynthesis	PRAD	-0.029200936
UCK2	Steroid hormone biosynth	PRAD	0.158692276
UCK2	Sulfur metabolism	PRAD	0.168636928
UCK2	Synthesis and degradation	PRAD	-0.211809409
UCK2	T helper cell	PRAD	-0.296706699
UCK2	T helper1 (th1) cell	PRAD	-0.205745931
UCK2	T helper17 (th17) cell	PRAD	-0.333536418
UCK2	T helper2 (th2) cell	PRAD	-0.294697614
UCK2	T helper9 (th9) cell	PRAD	-0.278894761
UCK2	Taurine and hypotaurine r	PRAD	-0.079671486
UCK2	Terpenoid backbone biosy	PRAD	0.098195512
UCK2	Tgf_beta_signaling_pathw	PRAD	-0.239706847
UCK2	Thiamine metabolism	PRAD	0.232853174
UCK2	Tnfa_signaling_via_nfkb	PRAD	-0.152576744
UCK2	Tryptophan metabolism	PRAD	-0.179745589
UCK2	Tumor endothelial cell	PRAD	0.031727242
UCK2	Tyrosine metabolism	PRAD	-0.086440974
UCK2	Ubiquinone and other ter	PRAD	0.134949056
UCK2	Valine, leucine and isoleu	PRAD	0.087783558
UCK2	Valine, leucine and isoleu	PRAD	-0.099272645
UCK2	Vascular endothelial cell	PRAD	-0.169238571
UCK2	Vascular smooth muscle c	PRAD	-0.296165388
UCK2	Vegf_signaling_pathway	PRAD	-0.275630759
UCK2	Vitamin b6 metabolism	PRAD	0.218034929

UCK2	Willert_wnt_signaling	PRAD	0.192891658
UCK2	Wnt_beta_catenin_signali	PRAD	-0.057401608
UCKL1	Abnormal plasma cell	PRAD	-0.267768219
UCKL1	Activated b cell	PRAD	-0.133541946
UCKL1	Activated cd4+ t cell	PRAD	-0.275027134
UCKL1	Activated t cell	PRAD	-0.123651476
UCKL1	Alanine, aspartate and glu	PRAD	-0.190297631
UCKL1	Alcala_apoptosis	PRAD	0.130946267
UCKL1	Alpha-linolenic acid meta	PRAD	-0.136756051
UCKL1	Amino sugar and nucleoti	PRAD	-0.132025281
UCKL1	Ampk_pathway	PRAD	0.189810702
UCKL1	Angiogenesis	PRAD	-0.180401299
UCKL1	Arachidonic acid metabol	PRAD	-0.114127575
UCKL1	Arginine and proline metæ	PRAD	-0.287323666
UCKL1	Arginine biosynthesis	PRAD	-0.198253878
UCKL1	Ascorbate and aldarate me	PRAD	-0.181460886
UCKL1	Atypical memory b cell	PRAD	-0.175371153
UCKL1	Axl+siglec6+ dendritic ce	PRAD	-0.325999252
UCKL1	B cell	PRAD	-0.27406669
UCKL1	B1 cell	PRAD	-0.094403815
UCKL1	Basal cell	PRAD	-0.065296459
UCKL1	Beta-alanine metabolism	PRAD	-0.367982322
UCKL1	Biosynthesis of unsaturate	PRAD	-0.192779622
UCKL1	Biotin metabolism	PRAD	-0.057278417
UCKL1	Butanoate metabolism	PRAD	-0.27707083
UCKL1	Caffeine metabolism	PRAD	-0.284099142
UCKL1	Cancer stem cell	PRAD	-0.325080198
UCKL1	Cancer stem-like cell	PRAD	-0.367887464
UCKL1	Cd4+ cytotoxic t cell	PRAD	-0.247536127
UCKL1	Cd4+ memory t cell	PRAD	-0.142731239
UCKL1	Cd4+ regulatory t cell	PRAD	-0.15154034
UCKL1	Cd4+ t helper cell	PRAD	-0.192609172
UCKL1	Cd4+cd25+ regulatory t c	PRAD	-0.187573238
UCKL1	Cd8+ cytotoxic t cell	PRAD	-0.150428922
UCKL1	Cd8+ regulatory t cell	PRAD	-0.163856744
UCKL1	Cell_cycle	PRAD	0.016224518
UCKL1	Chandran_metastasis_topç	PRAD	-0.010831611
UCKL1	Citrate cycle (tca cycle)	PRAD	-0.074460094
UCKL1	Cysteine and methionine r	PRAD	-0.093219619
UCKL1	Cytokine induced killer cæ	PRAD	-0.236020727
UCKL1	D-arginine and d-ornithin	PRAD	-0.069682041
UCKL1	D-glutamine and d-glutan	PRAD	-0.272751453
UCKL1	Dendritic cell	PRAD	-0.215956298

UCKL1	Dna_repair	PRAD	0.373835165
UCKL1	Dna_replication	PRAD	0.244042534
UCKL1	Double-negative memory	PRAD	-0.020133841
UCKL1	Drug metabolism - cytoch	PRAD	-0.236864707
UCKL1	Drug metabolism - other	PRAD	0.031382979
UCKL1	E2f_targets	PRAD	0.146993151
UCKL1	Ecm_receptor_interaction	PRAD	-0.20501396
UCKL1	Effector cd4+ memory t	PRAD	-0.232789108
UCKL1	Effector cd8+ memory t	PRAD	-0.23648607
UCKL1	Effector memory t cell	PRAD	-0.230785966
UCKL1	Effector regulatory t (treg)	PRAD	-0.206707286
UCKL1	Elvidge_hif1a_targets_up	PRAD	-0.274244557
UCKL1	Endothelial cell	PRAD	-0.331826123
UCKL1	Eosinophil	PRAD	-0.180707398
UCKL1	Ether lipid metabolism	PRAD	-0.105853758
UCKL1	Exhausted cd4+ t cell	PRAD	-0.321208597
UCKL1	Exhausted cd8+ t cell	PRAD	-0.205259403
UCKL1	Exhausted t cell	PRAD	-0.105025906
UCKL1	Fat cell (adipocyte)	PRAD	-0.190770897
UCKL1	Fatty acid biosynthesis	PRAD	-0.042586018
UCKL1	Fatty acid degradation	PRAD	-0.293321137
UCKL1	Fatty acid elongation	PRAD	0.023491728
UCKL1	Fibroblast	PRAD	-0.273145592
UCKL1	Folate biosynthesis	PRAD	-0.062063162
UCKL1	Follicular b cell	PRAD	-0.205431053
UCKL1	Follicular dendritic cell	PRAD	-0.236361764
UCKL1	Follicular helper (tfh) t ce	PRAD	-0.252377139
UCKL1	Follicular t cell	PRAD	0.072766926
UCKL1	Foxp3+il-17+ t cell	PRAD	-0.116236508
UCKL1	Fructose and mannose me	PRAD	0.083647033
UCKL1	G2m_checkpoint	PRAD	0.030215227
UCKL1	Galactose metabolism	PRAD	-0.082958461
UCKL1	Galie_tumor_stemness_ge	PRAD	-0.34990236
UCKL1	Glutathione metabolism	PRAD	-0.18838946
UCKL1	Glycerolipid metabolism	PRAD	-0.062716275
UCKL1	Glycerophospholipid metæ	PRAD	0.090730766
UCKL1	Glycine, serine and threor	PRAD	-0.131495472
UCKL1	Glycolysis / gluconeogene	PRAD	-0.168897203
UCKL1	Glycosaminoglycan biosy1	PRAD	-0.114015564
UCKL1	Glycosaminoglycan biosy1	PRAD	-0.242816668
UCKL1	Glycosaminoglycan biosy1	PRAD	-0.124999974
UCKL1	Glycosaminoglycan degra	PRAD	-0.207263681
UCKL1	Glycosphingolipid biosyn1	PRAD	-0.284805636

UCKL1	Glycosphingolipid biosyn	PRAD	-0.260346102
UCKL1	Glycosphingolipid biosyn	PRAD	-0.258219932
UCKL1	Glycosylphosphatidylinos	PRAD	-0.018793009
UCKL1	Glyoxylate and dicarboxy	PRAD	0.055615506
UCKL1	Granulocyte	PRAD	-0.251532892
UCKL1	Hedgehog_signaling	PRAD	-0.271157177
UCKL1	Histidine metabolism	PRAD	-0.258726556
UCKL1	Hypoxia	PRAD	-0.206501137
UCKL1	Il-17alpha t cell	PRAD	-0.179835875
UCKL1	Il2_stat5_signaling	PRAD	-0.323683874
UCKL1	Il6_jak_stat3_signaling	PRAD	-0.282984134
UCKL1	Immune_checkpoints_tur	PRAD	-0.069523546
UCKL1	Immune_inhibition_cytok	PRAD	-0.100974624
UCKL1	Inositol phosphate metabo	PRAD	-0.386114437
UCKL1	Interleukin_6_signaling	PRAD	-0.421333236
UCKL1	Jaeger_metastasis_up	PRAD	-0.1569182
UCKL1	Jain_nfkb_signaling	PRAD	0.043609967
UCKL1	Kras_signaling_up	PRAD	-0.387154626
UCKL1	Linoleic acid metabolism	PRAD	0.028421451
UCKL1	Lipoic acid metabolism	PRAD	0.094061341
UCKL1	Lysine degradation	PRAD	-0.252947828
UCKL1	Lysosome	PRAD	-0.272025854
UCKL1	M1 macrophage	PRAD	-0.203137232
UCKL1	M2 macrophage	PRAD	-0.221125702
UCKL1	Mannose type o-glycan bi	PRAD	0.112009134
UCKL1	Mapk_signaling_pathway	PRAD	-0.340082709
UCKL1	Mapk3_erk1_activation	PRAD	-0.369970942
UCKL1	Marginal zone b cell	PRAD	-0.241000934
UCKL1	Memory b cell	PRAD	-0.262162931
UCKL1	Mesenchymal cell	PRAD	-0.209350115
UCKL1	Mesenchymal stem cell	PRAD	-0.310613654
UCKL1	Metabolism of xenobiotic	PRAD	-0.166729948
UCKL1	Migrating cancer stem cel	PRAD	-0.195312935
UCKL1	Mitotic_spindle	PRAD	-0.185721256
UCKL1	Monocyte	PRAD	-0.198373312
UCKL1	Mtor_signaling_pathway	PRAD	-0.261873921
UCKL1	Mtorc1_signaling	PRAD	-0.154921653
UCKL1	Mucin type o-glycan biosy	PRAD	-0.460128521
UCKL1	Myc_targets_v1	PRAD	0.224983933
UCKL1	Myeloid cell	PRAD	-0.277212118
UCKL1	N-glycan biosynthesis	PRAD	-0.184744837
UCKL1	Naive b cell	PRAD	-0.228898023
UCKL1	Naive cd4+ t cell	PRAD	-0.320252699

UCKL1	Naive cd8+ t cell	PRAD	-0.245864873
UCKL1	Natural killer cell	PRAD	-0.244985279
UCKL1	Natural killer t (nkt) cell	PRAD	0.183233027
UCKL1	Natural regulatory t (treg)	PRAD	-0.209686141
UCKL1	Neomycin, kanamycin and	PRAD	-0.255667524
UCKL1	Neutrophil	PRAD	-0.280414839
UCKL1	Nicotinate and nicotinami	PRAD	-0.301131256
UCKL1	Nitrogen metabolism	PRAD	-0.311040231
UCKL1	Nod_like_receptor_signal	PRAD	-0.168894716
UCKL1	Notch_signaling	PRAD	-0.232353034
UCKL1	One carbon pool by folate	PRAD	0.045703723
UCKL1	Other glycan degradation	PRAD	0.0386562
UCKL1	Other types of o-glycan b	PRAD	0.257273671
UCKL1	Oxidative phosphorylatio	PRAD	0.211201645
UCKL1	P53_pathway	PRAD	-0.105224655
UCKL1	P53_signaling_pathway	PRAD	-0.236241859
UCKL1	Pantothenate and coa bios	PRAD	-0.331951486
UCKL1	Pentose and glucuronate i	PRAD	-0.169310582
UCKL1	Pentose phosphate pathwa	PRAD	0.127018612
UCKL1	Pericyte	PRAD	-0.289295641
UCKL1	Phenylalanine metabolism	PRAD	-0.146089913
UCKL1	Phenylalanine, tyrosine ar	PRAD	-0.14763392
UCKL1	Phosphonate and phosphir	PRAD	-0.212152704
UCKL1	Pi3k_akt_activation	PRAD	-0.429047506
UCKL1	Pi3k_akt_mtor_signaling	PRAD	-0.32276657
UCKL1	Porphyrin and chlorophyl	PRAD	-0.055913943
UCKL1	Primary bile acid biosynt	PRAD	-0.224831708
UCKL1	Propanoate metabolism	PRAD	-0.301545648
UCKL1	Purine metabolism	PRAD	0.110047721
UCKL1	Pyrimidine metabolism	PRAD	0.308970417
UCKL1	Pyruvate metabolism	PRAD	-0.119299178
UCKL1	Regulation_of_autophagy	PRAD	-0.062196708
UCKL1	Retinol metabolism	PRAD	-0.244968074
UCKL1	Riboflavin metabolism	PRAD	-0.082265604
UCKL1	Schmahl_pdgf_signaling	PRAD	-0.435318379
UCKL1	Selenocompound metabol	PRAD	-0.320446096
UCKL1	Signaling_by_hippo	PRAD	-0.390445819
UCKL1	Sphingolipid metabolism	PRAD	-0.336763658
UCKL1	Starch and sucrose metabo	PRAD	-0.294438145
UCKL1	Steroid biosynthesis	PRAD	0.008690405
UCKL1	Steroid hormone biosynth	PRAD	-0.064704283
UCKL1	Sulfur metabolism	PRAD	-0.326052017
UCKL1	Synthesis and degradation	PRAD	-0.21119837

UCKL1	T helper cell	PRAD	-0.268141408
UCKL1	T helper1 (th1) cell	PRAD	-0.187257383
UCKL1	T helper17 (th17) cell	PRAD	-0.296408663
UCKL1	T helper2 (th2) cell	PRAD	-0.243520172
UCKL1	T helper9 (th9) cell	PRAD	-0.183108506
UCKL1	Taurine and hypotaurine r	PRAD	0.179455666
UCKL1	Terpenoid backbone biosy	PRAD	-0.073043512
UCKL1	Tgf_beta_signaling_pathw	PRAD	-0.36940811
UCKL1	Thiamine metabolism	PRAD	0.141401158
UCKL1	Tnfa_signaling_via_nfkb	PRAD	-0.167245378
UCKL1	Tryptophan metabolism	PRAD	-0.304362417
UCKL1	Tumor endothelial cell	PRAD	0.106669686
UCKL1	Tyrosine metabolism	PRAD	-0.210396945
UCKL1	Ubiquinone and other terp	PRAD	-0.054883779
UCKL1	Valine, leucine and isoleu	PRAD	-0.05929317
UCKL1	Valine, leucine and isoleu	PRAD	-0.275915051
UCKL1	Vascular endothelial cell	PRAD	-0.13878749
UCKL1	Vascular smooth muscle c	PRAD	-0.216133124
UCKL1	Vegf_signaling_pathway	PRAD	-0.258495342
UCKL1	Vitamin b6 metabolism	PRAD	0.012683438
UCKL1	Willert_wnt_signaling	PRAD	-0.183795199
UCKL1	Wnt_beta_catenin_signali	PRAD	-0.004167438
UPP1	Abnormal plasma cell	PRAD	0.193588477
UPP1	Activated b cell	PRAD	0.42316685
UPP1	Activated cd4+ t cell	PRAD	0.272396815
UPP1	Activated t cell	PRAD	0.244449021
UPP1	Alanine, aspartate and glu	PRAD	-0.258509713
UPP1	Alcala_apoptosis	PRAD	0.044064457
UPP1	Alpha-linolenic acid meta	PRAD	0.056348113
UPP1	Amino sugar and nucleoti	PRAD	-0.161568294
UPP1	Ampk_pathway	PRAD	-0.38206186
UPP1	Angiogenesis	PRAD	0.485969347
UPP1	Arachidonic acid metabol	PRAD	0.342533936
UPP1	Arginine and proline metæ	PRAD	0.074433568
UPP1	Arginine biosynthesis	PRAD	0.094143077
UPP1	Ascorbate and aldarate mε	PRAD	-0.205155632
UPP1	Atypical memory b cell	PRAD	0.165822787
UPP1	Axl+siglec6+ dendritic ce	PRAD	0.524938596
UPP1	B cell	PRAD	0.323426669
UPP1	B1 cell	PRAD	0.25899042
UPP1	Basal cell	PRAD	0.512481343
UPP1	Beta-alanine metabolism	PRAD	0.00038648
UPP1	Biosynthesis of unsaturate	PRAD	-0.219194569

UPP1	Biotin metabolism	PRAD	-0.300956553
UPP1	Butanoate metabolism	PRAD	-0.203276489
UPP1	Caffeine metabolism	PRAD	0.158552458
UPP1	Cancer stem cell	PRAD	0.474806012
UPP1	Cancer stem-like cell	PRAD	0.333361982
UPP1	Cd4+ cytotoxic t cell	PRAD	0.478138715
UPP1	Cd4+ memory t cell	PRAD	0.225443628
UPP1	Cd4+ regulatory t cell	PRAD	0.278206631
UPP1	Cd4+ t helper cell	PRAD	0.291625623
UPP1	Cd4+cd25+ regulatory t c	PRAD	0.28826601
UPP1	Cd8+ cytotoxic t cell	PRAD	0.29476294
UPP1	Cd8+ regulatory t cell	PRAD	0.243554877
UPP1	Cell_cycle	PRAD	-0.311068363
UPP1	Chandran_metastasis_top5	PRAD	-0.459647853
UPP1	Citrate cycle (tca cycle)	PRAD	-0.286918114
UPP1	Cysteine and methionine r	PRAD	-0.22113033
UPP1	Cytokine induced killer cε	PRAD	0.379247132
UPP1	D-arginine and d-ornithin	PRAD	-0.066921949
UPP1	D-glutamine and d-glutan	PRAD	-0.369030119
UPP1	Dendritic cell	PRAD	0.503775499
UPP1	Dna_repair	PRAD	-0.022061201
UPP1	Dna_replication	PRAD	-0.169139836
UPP1	Double-negative memory	PRAD	0.249679613
UPP1	Drug metabolism - cytoch	PRAD	0.167462148
UPP1	Drug metabolism - other (	PRAD	0.109365194
UPP1	E2f_targets	PRAD	-0.268840056
UPP1	Ecm_receptor_interaction	PRAD	0.381979993
UPP1	Effector cd4+ memory t (	PRAD	0.212933651
UPP1	Effector cd8+ memory t (	PRAD	0.426920224
UPP1	Effector memory t cell	PRAD	0.261008866
UPP1	Effector regulatory t (treg	PRAD	0.242735681
UPP1	Elvidge_hif1a_targets_up	PRAD	-0.20553831
UPP1	Endothelial cell	PRAD	0.52797022
UPP1	Eosinophil	PRAD	0.40510912
UPP1	Ether lipid metabolism	PRAD	0.211253849
UPP1	Exhausted cd4+ t cell	PRAD	0.375961477
UPP1	Exhausted cd8+ t cell	PRAD	0.506956487
UPP1	Exhausted t cell	PRAD	0.319833868
UPP1	Fat cell (adipocyte)	PRAD	0.103570152
UPP1	Fatty acid biosynthesis	PRAD	0.056579546
UPP1	Fatty acid degradation	PRAD	-0.049997077
UPP1	Fatty acid elongation	PRAD	-0.146770855
UPP1	Fibroblast	PRAD	0.492881873

UPP1	Folate biosynthesis	PRAD	-0.056444985
UPP1	Follicular b cell	PRAD	0.329239412
UPP1	Follicular dendritic cell	PRAD	0.089491584
UPP1	Follicular helper (tfh) t ce	PRAD	0.37413234
UPP1	Follicular t cell	PRAD	0.318719961
UPP1	Foxp3+il-17+ t cell	PRAD	0.008526912
UPP1	Fructose and mannose me	PRAD	-0.002577459
UPP1	G2m_checkpoint	PRAD	-0.371253704
UPP1	Galactose metabolism	PRAD	0.080871144
UPP1	Galie_tumor_stemness_ge	PRAD	0.236194727
UPP1	Glutathione metabolism	PRAD	0.168290552
UPP1	Glycerolipid metabolism	PRAD	0.041489756
UPP1	Glycerophospholipid metæ	PRAD	0.380642562
UPP1	Glycine, serine and threor	PRAD	0.004068276
UPP1	Glycolysis / gluconeogene	PRAD	-0.115390034
UPP1	Glycosaminoglycan biosy1	PRAD	0.445027745
UPP1	Glycosaminoglycan biosy1	PRAD	-0.012309844
UPP1	Glycosaminoglycan biosy1	PRAD	0.3556241
UPP1	Glycosaminoglycan degra	PRAD	0.014704596
UPP1	Glycosphingolipid biosyn1	PRAD	0.087018362
UPP1	Glycosphingolipid biosyn1	PRAD	0.079928167
UPP1	Glycosphingolipid biosyn1	PRAD	0.131183251
UPP1	Glycosylphosphatidylinos:	PRAD	-0.399407056
UPP1	Glyoxylate and dicarboxy	PRAD	-0.271700807
UPP1	Granulocyte	PRAD	0.332943075
UPP1	Hedgehog_signaling	PRAD	0.044185548
UPP1	Histidine metabolism	PRAD	0.234730035
UPP1	Hypoxia	PRAD	0.489722655
UPP1	Il-17alpha t cell	PRAD	0.260552355
UPP1	Il2_stat5_signaling	PRAD	0.490307243
UPP1	Il6_jak_stat3_signaling	PRAD	0.422519703
UPP1	Immune_checkpoints_tunr	PRAD	0.248469369
UPP1	Immune_inhibition_cytok	PRAD	0.58866498
UPP1	Inositol phosphate metabo	PRAD	-0.23058921
UPP1	Interleukin_6_signaling	PRAD	0.116480552
UPP1	Jaeger_metastasis_up	PRAD	0.012538657
UPP1	Jain_nfkb_signaling	PRAD	-0.368376709
UPP1	Kras_signaling_up	PRAD	0.38236348
UPP1	Linoleic acid metabolism	PRAD	0.056798607
UPP1	Lipoic acid metabolism	PRAD	-0.274398328
UPP1	Lysine degradation	PRAD	-0.530026542
UPP1	Lysosome	PRAD	-0.038649182
UPP1	M1 macrophage	PRAD	0.364293838

UPP1	M2 macrophage	PRAD	0.440052619
UPP1	Mannose type o-glycan bi	PRAD	-0.311234721
UPP1	Mapk_signaling_pathway	PRAD	0.387858499
UPP1	Mapk3_erk1_activation	PRAD	-0.020359529
UPP1	Marginal zone b cell	PRAD	0.195676395
UPP1	Memory b cell	PRAD	0.165218397
UPP1	Mesenchymal cell	PRAD	0.624175397
UPP1	Mesenchymal stem cell	PRAD	0.523871685
UPP1	Metabolism of xenobiotic	PRAD	0.182750944
UPP1	Migrating cancer stem cel	PRAD	-0.151748486
UPP1	Mitotic_spindle	PRAD	-0.407049861
UPP1	Monocyte	PRAD	0.610781269
UPP1	Mtor_signaling_pathway	PRAD	-0.352754833
UPP1	Mtorc1_signaling	PRAD	-0.236269325
UPP1	Mucin type o-glycan bios	PRAD	-0.280679549
UPP1	Myc_targets_v1	PRAD	-0.199221687
UPP1	Myeloid cell	PRAD	0.376400258
UPP1	N-glycan biosynthesis	PRAD	-0.437337891
UPP1	Naive b cell	PRAD	0.069273999
UPP1	Naive cd4+ t cell	PRAD	0.231976681
UPP1	Naive cd8+ t cell	PRAD	0.096856438
UPP1	Natural killer cell	PRAD	0.39832529
UPP1	Natural killer t (nkt) cell	PRAD	0.248856945
UPP1	Natural regulatory t (treg)	PRAD	0.133877995
UPP1	Neomycin, kanamycin an	PRAD	0.165030798
UPP1	Neutrophil	PRAD	0.486082385
UPP1	Nicotinate and nicotinami	PRAD	0.206201723
UPP1	Nitrogen metabolism	PRAD	-0.138280668
UPP1	Nod_like_receptor_signal	PRAD	0.272086998
UPP1	Notch_signaling	PRAD	0.224065728
UPP1	One carbon pool by folate	PRAD	-0.427105096
UPP1	Other glycan degradation	PRAD	-0.163393714
UPP1	Other types of o-glycan b	PRAD	-0.065173374
UPP1	Oxidative phosphorylatio	PRAD	0.158703585
UPP1	P53_pathway	PRAD	0.485123286
UPP1	P53_signaling_pathway	PRAD	-0.029988052
UPP1	Pantothenate and coa bios	PRAD	-0.078091368
UPP1	Pentose and glucuronate i	PRAD	-0.295277043
UPP1	Pentose phosphate pathwa	PRAD	-0.086901645
UPP1	Pericyte	PRAD	0.550692992
UPP1	Phenylalanine metabolism	PRAD	0.308069358
UPP1	Phenylalanine, tyrosine ar	PRAD	0.019696988
UPP1	Phosphonate and phosphir	PRAD	-0.15332343

UPP1	Pi3k_akt_activation	PRAD	0.004177983
UPP1	Pi3k_akt_mtor_signaling	PRAD	-0.209279884
UPP1	Porphyrin and chlorophyl	PRAD	-0.121720842
UPP1	Primary bile acid biosynt	PRAD	0.157015356
UPP1	Propanoate metabolism	PRAD	-0.390454689
UPP1	Purine metabolism	PRAD	-0.148545526
UPP1	Pyrimidine metabolism	PRAD	-0.192276886
UPP1	Pyruvate metabolism	PRAD	-0.206355669
UPP1	Regulation_of_autophagy	PRAD	-0.266624488
UPP1	Retinol metabolism	PRAD	0.157284232
UPP1	Riboflavin metabolism	PRAD	-0.102531075
UPP1	Schmahl_pdgf_signaling	PRAD	0.074566577
UPP1	Selenocompound metabol	PRAD	-0.452537571
UPP1	Signaling_by_hippo	PRAD	-0.343703469
UPP1	Sphingolipid metabolism	PRAD	-0.424717391
UPP1	Starch and sucrose metabo	PRAD	0.025409592
UPP1	Steroid biosynthesis	PRAD	-0.088952821
UPP1	Steroid hormone biosynth	PRAD	0.126010754
UPP1	Sulfur metabolism	PRAD	-0.344830272
UPP1	Synthesis and degradation	PRAD	0.021978071
UPP1	T helper cell	PRAD	0.432169775
UPP1	T helper1 (th1) cell	PRAD	0.311368942
UPP1	T helper17 (th17) cell	PRAD	0.379018328
UPP1	T helper2 (th2) cell	PRAD	0.477017154
UPP1	T helper9 (th9) cell	PRAD	0.373704862
UPP1	Taurine and hypotaurine r	PRAD	0.219470803
UPP1	Terpenoid backbone biosy	PRAD	-0.362153187
UPP1	Tgf_beta_signaling_pathw	PRAD	0.078985829
UPP1	Thiamine metabolism	PRAD	0.089348655
UPP1	Tnfa_signaling_via_nfb	PRAD	0.473224674
UPP1	Tryptophan metabolism	PRAD	0.111617945
UPP1	Tumor endothelial cell	PRAD	0.056911302
UPP1	Tyrosine metabolism	PRAD	0.193165185
UPP1	Ubiquinone and other ter	PRAD	-0.263460508
UPP1	Valine, leucine and isoleu	PRAD	0.211293917
UPP1	Valine, leucine and isoleu	PRAD	-0.256760337
UPP1	Vascular endothelial cell	PRAD	0.645906512
UPP1	Vascular smooth muscle c	PRAD	0.415928343
UPP1	Vegf_signaling_pathway	PRAD	0.36731481
UPP1	Vitamin b6 metabolism	PRAD	-0.172138024
UPP1	Willert_wnt_signaling	PRAD	0.042654777
UPP1	Wnt_beta_catenin_signali	PRAD	0.131147273
UPP2	Abnormal plasma cell	PRAD	0.08590379

UPP2	Activated b cell	PRAD	0.022320421
UPP2	Activated cd4+ t cell	PRAD	0.000879412
UPP2	Activated t cell	PRAD	-0.019093274
UPP2	Alanine, aspartate and glu	PRAD	-0.156006374
UPP2	Alcala_apoptosis	PRAD	-0.173880064
UPP2	Alpha-linolenic acid meta	PRAD	-0.160095367
UPP2	Amino sugar and nucleoti	PRAD	-0.229023012
UPP2	Ampk_pathway	PRAD	-0.010187105
UPP2	Angiogenesis	PRAD	0.00863002
UPP2	Arachidonic acid metabol	PRAD	-0.113858148
UPP2	Arginine and proline meta	PRAD	-0.12273647
UPP2	Arginine biosynthesis	PRAD	-0.003262307
UPP2	Ascorbate and aldarate mε	PRAD	-0.098288122
UPP2	Atypical memory b cell	PRAD	0.078207142
UPP2	Axl+siglec6+ dendritic ce	PRAD	-0.018763817
UPP2	B cell	PRAD	-0.016884609
UPP2	B1 cell	PRAD	-0.057477697
UPP2	Basal cell	PRAD	0.093419087
UPP2	Beta-alanine metabolism	PRAD	0.02725
UPP2	Biosynthesis of unsaturate	PRAD	-0.100514241
UPP2	Biotin metabolism	PRAD	-0.125739311
UPP2	Butanoate metabolism	PRAD	-0.094774149
UPP2	Caffeine metabolism	PRAD	0.046761463
UPP2	Cancer stem cell	PRAD	0.045409565
UPP2	Cancer stem-like cell	PRAD	0.060426886
UPP2	Cd4+ cytotoxic t cell	PRAD	0.045233759
UPP2	Cd4+ memory t cell	PRAD	-0.050680901
UPP2	Cd4+ regulatory t cell	PRAD	-0.009378304
UPP2	Cd4+ t helper cell	PRAD	-0.010928363
UPP2	Cd4+cd25+ regulatory t c	PRAD	-0.013732591
UPP2	Cd8+ cytotoxic t cell	PRAD	-0.009301162
UPP2	Cd8+ regulatory t cell	PRAD	0.024471528
UPP2	Cell_cycle	PRAD	0.01122151
UPP2	Chandran_metastasis_top5	PRAD	-0.076074232
UPP2	Citrate cycle (tca cycle)	PRAD	-0.224076157
UPP2	Cysteine and methionine r	PRAD	-0.081560925
UPP2	Cytokine induced killer cε	PRAD	0.036797563
UPP2	D-arginine and d-ornithin	PRAD	-0.005026086
UPP2	D-glutamine and d-glutan	PRAD	0.018367925
UPP2	Dendritic cell	PRAD	0.023142455
UPP2	Dna_repair	PRAD	-0.011736539
UPP2	Dna_replication	PRAD	0.08223612
UPP2	Double-negative memory	PRAD	-0.027042118

UPP2	Drug metabolism - cytochPRAD	0.037977648
UPP2	Drug metabolism - other (PRAD	-0.041217824
UPP2	E2f_targets PRAD	0.036452943
UPP2	Ecm_receptor_interaction PRAD	0.028122392
UPP2	Effector cd4+ memory t (PRAD	-0.043100182
UPP2	Effector cd8+ memory t (PRAD	0.028721648
UPP2	Effector memory t cell PRAD	-0.037991938
UPP2	Effector regulatory t (treg PRAD	-0.022608529
UPP2	Elvidge_hif1a_targets_up PRAD	-0.234652453
UPP2	Endothelial cell PRAD	0.068843657
UPP2	Eosinophil PRAD	-0.036177464
UPP2	Ether lipid metabolism PRAD	-0.05137047
UPP2	Exhausted cd4+ t cell PRAD	-0.030221388
UPP2	Exhausted cd8+ t cell PRAD	0.015775666
UPP2	Exhausted t cell PRAD	0.01204998
UPP2	Fat cell (adipocyte) PRAD	-0.078710935
UPP2	Fatty acid biosynthesis PRAD	-0.028053304
UPP2	Fatty acid degradation PRAD	0.025134592
UPP2	Fatty acid elongation PRAD	-0.050004586
UPP2	Fibroblast PRAD	0.068459112
UPP2	Folate biosynthesis PRAD	-0.144770213
UPP2	Follicular b cell PRAD	-0.028449405
UPP2	Follicular dendritic cell PRAD	-0.05112366
UPP2	Follicular helper (tfh) t ce PRAD	0.073322603
UPP2	Follicular t cell PRAD	-0.02962154
UPP2	Foxp3+il-17+ t cell PRAD	-0.010016135
UPP2	Fructose and mannose me PRAD	-0.107821517
UPP2	G2m_checkpoint PRAD	-0.006534544
UPP2	Galactose metabolism PRAD	-0.195863281
UPP2	Galie_tumor_stemness_ge PRAD	0.038013844
UPP2	Glutathione metabolism PRAD	-0.010118846
UPP2	Glycerolipid metabolism PRAD	0.037949403
UPP2	Glycerophospholipid metæ PRAD	0.08173133
UPP2	Glycine, serine and threor PRAD	0.073003689
UPP2	Glycolysis / gluconeogene PRAD	-0.113988668
UPP2	Glycosaminoglycan biosy1 PRAD	-0.030171378
UPP2	Glycosaminoglycan biosy1 PRAD	-0.011004592
UPP2	Glycosaminoglycan biosy1 PRAD	-0.000388385
UPP2	Glycosaminoglycan degra PRAD	-0.210465606
UPP2	Glycosphingolipid biosyn1 PRAD	-0.03039286
UPP2	Glycosphingolipid biosyn1 PRAD	-0.11380449
UPP2	Glycosphingolipid biosyn1 PRAD	-0.044913385
UPP2	Glycosylphosphatidylinos: PRAD	-0.185468697

UPP2	Glyoxylate and dicarboxy	PRAD	-0.230141853
UPP2	Granulocyte	PRAD	0.041602912
UPP2	Hedgehog_signaling	PRAD	-0.129627703
UPP2	Histidine metabolism	PRAD	0.113594247
UPP2	Hypoxia	PRAD	-0.026265374
UPP2	Il-17alpha t cell	PRAD	-0.033337899
UPP2	Il2_stat5_signaling	PRAD	-0.056971387
UPP2	Il6_jak_stat3_signaling	PRAD	-0.045379886
UPP2	Immune_checkpoints_turr	PRAD	-0.009404966
UPP2	Immune_inhibition_cytok	PRAD	0.087412718
UPP2	Inositol phosphate metabo	PRAD	0.049927452
UPP2	Interleukin_6_signaling	PRAD	-0.065246519
UPP2	Jaeger_metastasis_up	PRAD	0.007651474
UPP2	Jain_nfkb_signaling	PRAD	-0.145653559
UPP2	Kras_signaling_up	PRAD	-0.05116175
UPP2	Linoleic acid metabolism	PRAD	-0.145856919
UPP2	Lipoic acid metabolism	PRAD	0.074811581
UPP2	Lysine degradation	PRAD	-0.062522814
UPP2	Lysosome	PRAD	-0.152447549
UPP2	M1 macrophage	PRAD	-0.020888554
UPP2	M2 macrophage	PRAD	0.018916325
UPP2	Mannose type o-glycan bi	PRAD	-0.145248937
UPP2	Mapk_signaling_pathway	PRAD	0.021896245
UPP2	Mapk3_erk1_activation	PRAD	-0.02390645
UPP2	Marginal zone b cell	PRAD	-0.041098879
UPP2	Memory b cell	PRAD	-0.048708665
UPP2	Mesenchymal cell	PRAD	0.077220062
UPP2	Mesenchymal stem cell	PRAD	0.040633879
UPP2	Metabolism of xenobiotic	PRAD	0.027006712
UPP2	Migrating cancer stem cel	PRAD	-0.167190676
UPP2	Mitotic_spindle	PRAD	-0.066405534
UPP2	Monocyte	PRAD	0.009622326
UPP2	Mtor_signaling_pathway	PRAD	-0.053142023
UPP2	Mtorc1_signaling	PRAD	-0.163174512
UPP2	Mucin type o-glycan biosy	PRAD	-0.2084239
UPP2	Myc_targets_v1	PRAD	-0.128347427
UPP2	Myeloid cell	PRAD	0.0129417
UPP2	N-glycan biosynthesis	PRAD	-0.274619224
UPP2	Naive b cell	PRAD	-0.048271727
UPP2	Naive cd4+ t cell	PRAD	-0.047631205
UPP2	Naive cd8+ t cell	PRAD	-0.025072428
UPP2	Natural killer cell	PRAD	0.012636477
UPP2	Natural killer t (nkt) cell	PRAD	-0.085934834

UPP2	Natural regulatory t (treg) PRAD	-0.05700438
UPP2	Neomycin, kanamycin and PRAD	-0.046885519
UPP2	Neutrophil PRAD	-0.004886167
UPP2	Nicotinate and nicotinami PRAD	-0.002839164
UPP2	Nitrogen metabolism PRAD	-0.088015783
UPP2	Nod_like_receptor_signal PRAD	0.000540518
UPP2	Notch_signaling PRAD	0.016089081
UPP2	One carbon pool by folate PRAD	-0.104196944
UPP2	Other glycan degradation PRAD	-0.148618815
UPP2	Other types of o-glycan b PRAD	-0.056228671
UPP2	Oxidative phosphorylatior PRAD	0.011941036
UPP2	P53_pathway PRAD	0.058636083
UPP2	P53_signaling_pathway PRAD	0.044923781
UPP2	Pantothenate and coa bios PRAD	-0.11467535
UPP2	Pentose and glucuronate in PRAD	-0.199090802
UPP2	Pentose phosphate pathwa PRAD	-0.16926564
UPP2	Pericyte PRAD	0.115642033
UPP2	Phenylalanine metabolism PRAD	0.089988869
UPP2	Phenylalanine, tyrosine ar PRAD	0.013765546
UPP2	Phosphonate and phosphir PRAD	0.063119989
UPP2	Pi3k_akt_activation PRAD	0.026544986
UPP2	Pi3k_akt_mtor_signaling PRAD	-0.229829603
UPP2	Porphyrin and chlorophyl PRAD	-0.066433603
UPP2	Primary bile acid biosynt PRAD	0.00114401
UPP2	Propanoate metabolism PRAD	-0.177426556
UPP2	Purine metabolism PRAD	-0.166925351
UPP2	Pyrimidine metabolism PRAD	-0.038709975
UPP2	Pyruvate metabolism PRAD	-0.123031468
UPP2	Regulation_of_autophagy PRAD	-0.074580894
UPP2	Retinol metabolism PRAD	0.030912801
UPP2	Riboflavin metabolism PRAD	-0.145165197
UPP2	Schmahl_pdgf_signaling PRAD	-0.093204991
UPP2	Selenocompound metabol PRAD	-0.198568291
UPP2	Signaling_by_hippo PRAD	-0.098397779
UPP2	Sphingolipid metabolism PRAD	-0.140187873
UPP2	Starch and sucrose metab PRAD	-0.10590453
UPP2	Steroid biosynthesis PRAD	0.038527804
UPP2	Steroid hormone biosynth PRAD	0.005794607
UPP2	Sulfur metabolism PRAD	-0.163120737
UPP2	Synthesis and degradation PRAD	-0.008350867
UPP2	T helper cell PRAD	-0.001338193
UPP2	T helper1 (th1) cell PRAD	-0.007449135
UPP2	T helper17 (th17) cell PRAD	0.047537435

UPP2	T helper2 (th2) cell	PRAD	0.040920339
UPP2	T helper9 (th9) cell	PRAD	0.030938596
UPP2	Taurine and hypotaurine r	PRAD	0.061126956
UPP2	Terpenoid backbone biosy	PRAD	-0.147766994
UPP2	Tgf_beta_signaling_pathw	PRAD	-0.020406251
UPP2	Thiamine metabolism	PRAD	-0.075916164
UPP2	Tnfa_signaling_via_nfkB	PRAD	0.019764411
UPP2	Tryptophan metabolism	PRAD	-0.114560399
UPP2	Tumor endothelial cell	PRAD	0.144329195
UPP2	Tyrosine metabolism	PRAD	0.044941307
UPP2	Ubiquinone and other terq	PRAD	-0.059633411
UPP2	Valine, leucine and isoleu	PRAD	-0.058651258
UPP2	Valine, leucine and isoleu	PRAD	-0.096761343
UPP2	Vascular endothelial cell	PRAD	0.004238197
UPP2	Vascular smooth muscle c	PRAD	-0.028065742
UPP2	Vegf_signaling_pathway	PRAD	0.01972954
UPP2	Vitamin b6 metabolism	PRAD	-0.142870509
UPP2	Willert_wnt_signaling	PRAD	-0.154614923
UPP2	Wnt_beta_catenin_signali	PRAD	-0.049007989
CDA	Abnormal plasma cell	READ	-0.082351882
CDA	Activated b cell	READ	-0.114089826
CDA	Activated cd4+ t cell	READ	0.071584927
CDA	Activated t cell	READ	-0.00953352
CDA	Alanine, aspartate and glu	READ	0.095314452
CDA	Alcala_apoptosis	READ	0.06388352
CDA	Alpha-linolenic acid meta	READ	0.209881257
CDA	Amino sugar and nucleoti	READ	0.132937627
CDA	Ampk_pathway	READ	-0.006898838
CDA	Angiogenesis	READ	0.12870057
CDA	Arachidonic acid metabol	READ	0.338602173
CDA	Arginine and proline metæ	READ	0.140324519
CDA	Arginine biosynthesis	READ	0.103449056
CDA	Ascorbate and aldarate mε	READ	-0.022268247
CDA	Atypical memory b cell	READ	-0.032950414
CDA	Axl+siglec6+ dendritic ce	READ	0.120376664
CDA	B cell	READ	-0.026658618
CDA	B1 cell	READ	-0.188202928
CDA	Basal cell	READ	0.452588166
CDA	Beta-alanine metabolism	READ	0.068092639
CDA	Biosynthesis of unsaturate	READ	0.097255603
CDA	Biotin metabolism	READ	-0.1550778
CDA	Butanoate metabolism	READ	-0.041932141
CDA	Caffeine metabolism	READ	0.058866751

CDA	Cancer stem cell	READ	0.058916702
CDA	Cancer stem-like cell	READ	-0.024086283
CDA	Cd4+ cytotoxic t cell	READ	0.124288839
CDA	Cd4+ memory t cell	READ	-0.046067418
CDA	Cd4+ regulatory t cell	READ	0.018303788
CDA	Cd4+ t helper cell	READ	-0.026184539
CDA	Cd4+cd25+ regulatory t c	READ	-0.019233013
CDA	Cd8+ cytotoxic t cell	READ	0.092111633
CDA	Cd8+ regulatory t cell	READ	-0.011089854
CDA	Cell_cycle	READ	-0.054764171
CDA	Chandran_metastasis_top5	READ	-0.141335507
CDA	Citrate cycle (tca cycle)	READ	0.028929784
CDA	Cysteine and methionine r	READ	0.051895547
CDA	Cytokine induced killer c	READ	-0.046505765
CDA	D-arginine and d-ornithin	READ	0.238524288
CDA	D-glutamine and d-glutan	READ	0.190823891
CDA	Dendritic cell	READ	0.095098084
CDA	Dna_repair	READ	0.02187143
CDA	Dna_replication	READ	-0.089213159
CDA	Double-negative memory	READ	-0.094407589
CDA	Drug metabolism - cytoch	READ	0.171772267
CDA	Drug metabolism - other	READ	0.15598395
CDA	E2f_targets	READ	-0.140228773
CDA	Ecm_receptor_interaction	READ	0.103209265
CDA	Effector cd4+ memory t (	READ	-0.039583664
CDA	Effector cd8+ memory t (	READ	0.086340189
CDA	Effector memory t cell	READ	-0.02662916
CDA	Effector regulatory t (treg	READ	0.017091719
CDA	Elvidge_hif1a_targets_up	READ	-0.046008749
CDA	Endothelial cell	READ	0.013853029
CDA	Eosinophil	READ	0.108934374
CDA	Ether lipid metabolism	READ	0.201751512
CDA	Exhausted cd4+ t cell	READ	0.056669711
CDA	Exhausted cd8+ t cell	READ	0.092938151
CDA	Exhausted t cell	READ	-0.022229322
CDA	Fat cell (adipocyte)	READ	-0.144652052
CDA	Fatty acid biosynthesis	READ	0.000606365
CDA	Fatty acid degradation	READ	-0.052033219
CDA	Fatty acid elongation	READ	0.176721502
CDA	Fibroblast	READ	0.090039151
CDA	Folate biosynthesis	READ	0.21308808
CDA	Follicular b cell	READ	-0.076769279
CDA	Follicular dendritic cell	READ	0.012993718

CDA	Follicular helper (tfh) t ce	READ	0.056906751
CDA	Follicular t cell	READ	-0.050227887
CDA	Foxp3+il-17+ t cell	READ	-0.036449333
CDA	Fructose and mannose me	READ	0.090558054
CDA	G2m_checkpoint	READ	-0.179372975
CDA	Galactose metabolism	READ	0.202701028
CDA	Galie_tumor_stemness_ge	READ	0.28444433
CDA	Glutathione metabolism	READ	0.322723037
CDA	Glycerolipid metabolism	READ	0.189461753
CDA	Glycerophospholipid metæ	READ	0.21886589
CDA	Glycine, serine and threor	READ	0.158138015
CDA	Glycolysis / gluconeogene	READ	0.058617694
CDA	Glycosaminoglycan biosy	READ	0.18182782
CDA	Glycosaminoglycan biosy	READ	0.211870906
CDA	Glycosaminoglycan biosy	READ	0.199854507
CDA	Glycosaminoglycan degra	READ	0.061848532
CDA	Glycosphingolipid biosyn	READ	0.1779827
CDA	Glycosphingolipid biosyn	READ	0.264720626
CDA	Glycosphingolipid biosyn	READ	0.078749069
CDA	Glycosylphosphatidylinos	READ	-0.113736769
CDA	Glyoxylate and dicarboxy	READ	-0.063804132
CDA	Granulocyte	READ	0.09292725
CDA	Hedgehog_signaling	READ	0.147862152
CDA	Histidine metabolism	READ	-0.002163732
CDA	Hypoxia	READ	0.170185448
CDA	Il-17ralpha t cell	READ	-0.039112062
CDA	Il2_stat5_signaling	READ	0.058382631
CDA	Il6_jak_stat3_signaling	READ	0.118019477
CDA	Immune_checkpoints_tur	READ	0.076254576
CDA	Immune_inhibition_cytok	READ	0.075704028
CDA	Inositol phosphate metabo	READ	-0.069656599
CDA	Interleukin_6_signaling	READ	-0.082144567
CDA	Jaeger_metastasis_up	READ	0.001182421
CDA	Jain_nfkb_signaling	READ	-0.092768564
CDA	Kras_signaling_up	READ	0.102315636
CDA	Linoleic acid metabolism	READ	0.239076691
CDA	Lipoic acid metabolism	READ	-0.051160016
CDA	Lysine degradation	READ	-0.08972343
CDA	Lysosome	READ	0.322301152
CDA	M1 macrophage	READ	0.074267643
CDA	M2 macrophage	READ	0.108702376
CDA	Mannose type o-glycan bi	READ	-0.065713328
CDA	Mapk_signaling_pathway	READ	0.074714526

CDA	Mapk3_erk1_activation	READ	0.066714254
CDA	Marginal zone b cell	READ	-0.051544033
CDA	Memory b cell	READ	-0.037363193
CDA	Mesenchymal cell	READ	0.144301011
CDA	Mesenchymal stem cell	READ	0.058432137
CDA	Metabolism of xenobiotics	READ	0.208588293
CDA	Migrating cancer stem cell	READ	0.085273403
CDA	Mitotic_spindle	READ	-0.118850336
CDA	Monocyte	READ	0.172802323
CDA	Mtor_signaling_pathway	READ	0.081228576
CDA	Mtorc1_signaling	READ	0.054392215
CDA	Mucin type o-glycan biosynthesis	READ	0.009365188
CDA	Myc_targets_v1	READ	-0.050872938
CDA	Myeloid cell	READ	0.063673726
CDA	N-glycan biosynthesis	READ	-0.00999656
CDA	Naive b cell	READ	-0.157198807
CDA	Naive cd4+ t cell	READ	-0.043535028
CDA	Naive cd8+ t cell	READ	-0.136499475
CDA	Natural killer cell	READ	0.066260921
CDA	Natural killer t (nkt) cell	READ	-0.053332698
CDA	Natural regulatory t (treg) cell	READ	0.019904489
CDA	Neomycin, kanamycin and streptomycin	READ	0.28820918
CDA	Neutrophil	READ	0.234396705
CDA	Nicotinate and nicotinamide	READ	-0.051535986
CDA	Nitrogen metabolism	READ	0.126681761
CDA	Nod_like_receptor_signaling	READ	0.067890457
CDA	Notch_signaling	READ	0.024117686
CDA	One carbon pool by folate	READ	-0.016953793
CDA	Other glycan degradation	READ	0.063509788
CDA	Other types of o-glycan biosynthesis	READ	0.029306455
CDA	Oxidative phosphorylation	READ	0.18458512
CDA	P53_pathway	READ	0.232592366
CDA	P53_signaling_pathway	READ	0.124571886
CDA	Pantothenate and coenzyme a biosynthesis	READ	0.027943953
CDA	Pentose and glucuronate interconversions	READ	0.084839672
CDA	Pentose phosphate pathway	READ	0.274837065
CDA	Pericyte	READ	0.101302472
CDA	Phenylalanine metabolism	READ	0.177776008
CDA	Phenylalanine, tyrosine and tryptophan metabolism	READ	-0.019313867
CDA	Phosphonate and phosphite metabolism	READ	0.063521228
CDA	Pi3k_akt_activation	READ	-0.021977382
CDA	Pi3k_akt_mtor_signaling	READ	0.139376684
CDA	Porphyryin and chlorophyll biosynthesis	READ	0.105568065

CDA	Primary bile acid biosynt	READ	0.086802401
CDA	Propanoate metabolism	READ	-0.071572642
CDA	Purine metabolism	READ	-0.032832082
CDA	Pyrimidine metabolism	READ	0.01542627
CDA	Pyruvate metabolism	READ	-0.065905325
CDA	Regulation_of_autophagy	READ	-0.014450396
CDA	Retinol metabolism	READ	0.108796852
CDA	Riboflavin metabolism	READ	0.125615914
CDA	Schmahl_pdgf_signaling	READ	0.133979312
CDA	Selenocompound metabol	READ	0.033965102
CDA	Signaling_by_hippo	READ	0.002975497
CDA	Sphingolipid metabolism	READ	0.191576686
CDA	Starch and sucrose metabo	READ	0.081190037
CDA	Steroid biosynthesis	READ	0.058999033
CDA	Steroid hormone biosynth	READ	0.27400817
CDA	Sulfur metabolism	READ	0.119271833
CDA	Synthesis and degradation	READ	-0.095893507
CDA	T helper cell	READ	0.048264318
CDA	T helper1 (th1) cell	READ	0.075997396
CDA	T helper17 (th17) cell	READ	-0.031355675
CDA	T helper2 (th2) cell	READ	0.022876871
CDA	T helper9 (th9) cell	READ	-0.054271545
CDA	Taurine and hypotaurine r	READ	0.148300165
CDA	Terpenoid backbone biosy	READ	-0.031712411
CDA	Tgf_beta_signaling_pathw	READ	0.063905704
CDA	Thiamine metabolism	READ	0.305051189
CDA	Tnfa_signaling_via_nfkb	READ	0.116746572
CDA	Tryptophan metabolism	READ	-0.035858593
CDA	Tumor endothelial cell	READ	0.187122962
CDA	Tyrosine metabolism	READ	0.151220327
CDA	Ubiquinone and other ter	READ	0.041231322
CDA	Valine, leucine and isoleu	READ	0.025885342
CDA	Valine, leucine and isoleu	READ	-0.057546969
CDA	Vascular endothelial cell	READ	0.039870852
CDA	Vascular smooth muscle c	READ	0.076957183
CDA	Vegf_signaling_pathway	READ	0.301243384
CDA	Vitamin b6 metabolism	READ	0.073877815
CDA	Willert_wnt_signaling	READ	0.074574259
CDA	Wnt_beta_catenin_signali	READ	-0.041768923
UCK1	Abnormal plasma cell	READ	0.130172803
UCK1	Activated b cell	READ	0.102856289
UCK1	Activated cd4+ t cell	READ	0.143366115
UCK1	Activated t cell	READ	0.194686927

UCK1	Alanine, aspartate and glu	READ	-0.021439733
UCK1	Alcala_apoptosis	READ	0.106366102
UCK1	Alpha-linolenic acid meta	READ	0.17421045
UCK1	Amino sugar and nucleoti	READ	0.245840172
UCK1	Ampk_pathway	READ	0.008760821
UCK1	Angiogenesis	READ	0.180298857
UCK1	Arachidonic acid metabol	READ	0.29551437
UCK1	Arginine and proline metæ	READ	0.079723624
UCK1	Arginine biosynthesis	READ	0.044504792
UCK1	Ascorbate and aldarate mε	READ	-0.13016952
UCK1	Atypical memory b cell	READ	-0.019047836
UCK1	Axl+siglec6+ dendritic ce	READ	0.212354727
UCK1	B cell	READ	0.031305562
UCK1	B1 cell	READ	0.089913475
UCK1	Basal cell	READ	0.210592097
UCK1	Beta-alanine metabolism	READ	0.025834995
UCK1	Biosynthesis of unsaturate	READ	0.004557318
UCK1	Biotin metabolism	READ	-0.204531518
UCK1	Butanoate metabolism	READ	-0.02565839
UCK1	Caffeine metabolism	READ	-0.136390192
UCK1	Cancer stem cell	READ	-0.01428481
UCK1	Cancer stem-like cell	READ	-0.111238252
UCK1	Cd4+ cytotoxic t cell	READ	0.231790345
UCK1	Cd4+ memory t cell	READ	0.110078756
UCK1	Cd4+ regulatory t cell	READ	0.177188042
UCK1	Cd4+ t helper cell	READ	0.147211252
UCK1	Cd4+cd25+ regulatory t c	READ	0.13568733
UCK1	Cd8+ cytotoxic t cell	READ	0.218557326
UCK1	Cd8+ regulatory t cell	READ	0.103480807
UCK1	Cell_cycle	READ	-0.128171161
UCK1	Chandran_metastasis_topç	READ	-0.323786858
UCK1	Citrate cycle (tca cycle)	READ	-0.112874282
UCK1	Cysteine and methionine r	READ	-0.010554746
UCK1	Cytokine induced killer cε	READ	0.214632914
UCK1	D-arginine and d-ornithin	READ	-0.035750432
UCK1	D-glutamine and d-glutan	READ	-0.318964545
UCK1	Dendritic cell	READ	0.188477702
UCK1	Dna_repair	READ	0.119862734
UCK1	Dna_replication	READ	0.00357382
UCK1	Double-negative memory	READ	0.174590574
UCK1	Drug metabolism - cytoch	READ	0.081176491
UCK1	Drug metabolism - other ε	READ	0.157800971
UCK1	E2f_targets	READ	-0.232923256

UCK1	Ecm_receptor_interaction	READ	0.14886106
UCK1	Effector cd4+ memory t	(READ	0.024454883
UCK1	Effector cd8+ memory t	(READ	0.169854514
UCK1	Effector memory t cell	READ	0.077742817
UCK1	Effector regulatory t (treg	READ	0.109782165
UCK1	Elvidge_hif1a_targets_up	READ	-0.290866632
UCK1	Endothelial cell	READ	0.04403776
UCK1	Eosinophil	READ	0.208035975
UCK1	Ether lipid metabolism	READ	0.043330827
UCK1	Exhausted cd4+ t cell	READ	0.056412768
UCK1	Exhausted cd8+ t cell	READ	0.070698866
UCK1	Exhausted t cell	READ	0.161641646
UCK1	Fat cell (adipocyte)	READ	0.199502027
UCK1	Fatty acid biosynthesis	READ	-0.239979608
UCK1	Fatty acid degradation	READ	-0.142909751
UCK1	Fatty acid elongation	READ	0.076819579
UCK1	Fibroblast	READ	0.150079278
UCK1	Folate biosynthesis	READ	0.22348936
UCK1	Follicular b cell	READ	0.120018107
UCK1	Follicular dendritic cell	READ	0.143787964
UCK1	Follicular helper (tfh) t ce	READ	0.162209882
UCK1	Follicular t cell	READ	0.13468507
UCK1	Foxp3+il-17+ t cell	READ	0.0970956
UCK1	Fructose and mannose me	READ	0.207015018
UCK1	G2m_checkpoint	READ	-0.277648788
UCK1	Galactose metabolism	READ	0.231617984
UCK1	Galie_tumor_stemness_ge	READ	0.119676431
UCK1	Glutathione metabolism	READ	0.095951132
UCK1	Glycerolipid metabolism	READ	-0.004800229
UCK1	Glycerophospholipid metæ	READ	0.145985828
UCK1	Glycine, serine and threor	READ	0.286432005
UCK1	Glycolysis / gluconeogene	READ	0.041701071
UCK1	Glycosaminoglycan biosy	READ	0.409687438
UCK1	Glycosaminoglycan biosy	READ	0.182399159
UCK1	Glycosaminoglycan biosy	READ	0.183428268
UCK1	Glycosaminoglycan degra	READ	0.245278855
UCK1	Glycosphingolipid biosyn	READ	0.321900727
UCK1	Glycosphingolipid biosyn	READ	0.241949868
UCK1	Glycosphingolipid biosyn	READ	0.17964381
UCK1	Glycosylphosphatidylinos	READ	-0.113498922
UCK1	Glyoxylate and dicarboxy	READ	0.015128693
UCK1	Granulocyte	READ	0.15798243
UCK1	Hedgehog_signaling	READ	0.051265768

UCK1	Histidine metabolism	READ	0.133163403
UCK1	Hypoxia	READ	0.171768507
UCK1	Il-17alpha t cell	READ	0.123463891
UCK1	Il2_stat5_signaling	READ	0.129616406
UCK1	Il6_jak_stat3_signaling	READ	0.12819649
UCK1	Immune_checkpoints_tun	READ	0.106201204
UCK1	Immune_inhibition_cytok	READ	0.137537253
UCK1	Inositol phosphate metabo	READ	-0.303465667
UCK1	Interleukin_6_signaling	READ	-0.1543513
UCK1	Jaeger_metastasis_up	READ	0.067231153
UCK1	Jain_nfkb_signaling	READ	-0.239104422
UCK1	Kras_signaling_up	READ	0.076512813
UCK1	Linoleic acid metabolism	READ	0.13846084
UCK1	Lipoic acid metabolism	READ	0.009454705
UCK1	Lysine degradation	READ	-0.123312171
UCK1	Lysosome	READ	0.28085153
UCK1	M1 macrophage	READ	0.145758831
UCK1	M2 macrophage	READ	0.175060084
UCK1	Mannose type o-glycan bi	READ	0.267033462
UCK1	Mapk_signaling_pathway	READ	0.081251434
UCK1	Mapk3_erk1_activation	READ	-0.182451718
UCK1	Marginal zone b cell	READ	0.081369277
UCK1	Memory b cell	READ	0.077645384
UCK1	Mesenchymal cell	READ	0.254480841
UCK1	Mesenchymal stem cell	READ	0.101384344
UCK1	Metabolism of xenobiotic	READ	0.146339608
UCK1	Migrating cancer stem cel	READ	-0.263116676
UCK1	Mitotic_spindle	READ	-0.275540203
UCK1	Monocyte	READ	0.153296198
UCK1	Mtor_signaling_pathway	READ	0.034460554
UCK1	Mtorc1_signaling	READ	-0.199772464
UCK1	Mucin type o-glycan biosy	READ	-0.178972125
UCK1	Myc_targets_v1	READ	-0.186904428
UCK1	Myeloid cell	READ	0.145622026
UCK1	N-glycan biosynthesis	READ	0.039656689
UCK1	Naive b cell	READ	0.060731596
UCK1	Naive cd4+ t cell	READ	-0.035236598
UCK1	Naive cd8+ t cell	READ	-0.073670234
UCK1	Natural killer cell	READ	0.159565172
UCK1	Natural killer t (nkt) cell	READ	-0.242831923
UCK1	Natural regulatory t (treg)	READ	0.106070391
UCK1	Neomycin, kanamycin an	READ	0.225505347
UCK1	Neutrophil	READ	0.148647835

UCK1	Nicotinate and nicotinami	READ	0.104564007
UCK1	Nitrogen metabolism	READ	0.015102061
UCK1	Nod_like_receptor_signal	READ	-0.033613416
UCK1	Notch_signaling	READ	0.193005038
UCK1	One carbon pool by folate	READ	-0.157264185
UCK1	Other glycan degradation	READ	0.241415344
UCK1	Other types of o-glycan b	READ	0.358792851
UCK1	Oxidative phosphorylatio	READ	0.213836827
UCK1	P53_pathway	READ	0.121547297
UCK1	P53_signaling_pathway	READ	-0.244459719
UCK1	Pantothenate and coa bios	READ	0.035640661
UCK1	Pentose and glucuronate i	READ	-0.008055324
UCK1	Pentose phosphate pathwa	READ	0.083102802
UCK1	Pericyte	READ	0.186257553
UCK1	Phenylalanine metabolism	READ	0.284214892
UCK1	Phenylalanine, tyrosine ar	READ	-0.021984247
UCK1	Phosphonate and phosphir	READ	-0.027165202
UCK1	Pi3k_akt_activation	READ	-0.110352868
UCK1	Pi3k_akt_mtor_signaling	READ	-0.092098607
UCK1	Porphyrin and chlorophyl	READ	0.165494984
UCK1	Primary bile acid biosynt	READ	0.213809028
UCK1	Propanoate metabolism	READ	-0.25703532
UCK1	Purine metabolism	READ	0.099989542
UCK1	Pyrimidine metabolism	READ	0.124487497
UCK1	Pyruvate metabolism	READ	-0.024786606
UCK1	Regulation_of_autophagy	READ	-0.0304567
UCK1	Retinol metabolism	READ	0.077330509
UCK1	Riboflavin metabolism	READ	0.357074073
UCK1	Schmahl_pdgf_signaling	READ	-0.052234795
UCK1	Selenocompound metabol	READ	-0.249583637
UCK1	Signaling_by_hippo	READ	-0.2495426
UCK1	Sphingolipid metabolism	READ	-0.019728833
UCK1	Starch and sucrose metabo	READ	0.047623959
UCK1	Steroid biosynthesis	READ	-0.119990381
UCK1	Steroid hormone biosynth	READ	0.218485627
UCK1	Sulfur metabolism	READ	-0.13062799
UCK1	Synthesis and degradation	READ	-0.030563095
UCK1	T helper cell	READ	0.174230089
UCK1	T helper1 (th1) cell	READ	0.084522761
UCK1	T helper17 (th17) cell	READ	0.070815168
UCK1	T helper2 (th2) cell	READ	0.211118039
UCK1	T helper9 (th9) cell	READ	0.164291509
UCK1	Taurine and hypotaurine r	READ	0.217895524

UCK1	Terpenoid backbone biosy	READ	-0.133276512
UCK1	Tgf_beta_signaling_pathw	READ	-0.038392348
UCK1	Thiamine metabolism	READ	0.294601588
UCK1	Tnfa_signaling_via_nfkb	READ	0.021815248
UCK1	Tryptophan metabolism	READ	0.081043965
UCK1	Tumor endothelial cell	READ	0.083551981
UCK1	Tyrosine metabolism	READ	0.32661661
UCK1	Ubiquinone and other terf	READ	-0.012545604
UCK1	Valine, leucine and isoleu	READ	0.213917056
UCK1	Valine, leucine and isoleu	READ	-0.157854606
UCK1	Vascular endothelial cell	READ	0.207229028
UCK1	Vascular smooth muscle c	READ	0.28376049
UCK1	Vegf_signaling_pathway	READ	0.095501639
UCK1	Vitamin b6 metabolism	READ	-0.05769188
UCK1	Willert_wnt_signaling	READ	-0.053712125
UCK1	Wnt_beta_catenin_signali	READ	0.072920416
UCK2	Abnormal plasma cell	READ	0.008707269
UCK2	Activated b cell	READ	0.013756135
UCK2	Activated cd4+ t cell	READ	-0.037114736
UCK2	Activated t cell	READ	0.066825225
UCK2	Alanine, aspartate and glu	READ	0.202866182
UCK2	Alcala_apoptosis	READ	0.314090949
UCK2	Alpha-linolenic acid meta	READ	-0.131425745
UCK2	Amino sugar and nucleoti	READ	0.075479138
UCK2	Ampk_pathway	READ	0.283415777
UCK2	Angiogenesis	READ	0.016552447
UCK2	Arachidonic acid metabol	READ	-0.148093258
UCK2	Arginine and proline metε	READ	0.306890367
UCK2	Arginine biosynthesis	READ	0.142417877
UCK2	Ascorbate and aldarate mε	READ	0.050358809
UCK2	Atypical memory b cell	READ	0.018253673
UCK2	Axl+siglec6+ dendritic ce	READ	-0.095734485
UCK2	B cell	READ	0.029013635
UCK2	B1 cell	READ	0.025565878
UCK2	Basal cell	READ	0.048655619
UCK2	Beta-alanine metabolism	READ	0.101801278
UCK2	Biosynthesis of unsaturate	READ	0.226212
UCK2	Biotin metabolism	READ	0.05968913
UCK2	Butanoate metabolism	READ	0.033611928
UCK2	Caffeine metabolism	READ	0.041482844
UCK2	Cancer stem cell	READ	-0.037301315
UCK2	Cancer stem-like cell	READ	-0.029007806
UCK2	Cd4+ cytotoxic t cell	READ	-0.035055332

UCK2	Cd4+ memory t cell	READ	0.064203014
UCK2	Cd4+ regulatory t cell	READ	-0.053805592
UCK2	Cd4+ t helper cell	READ	-0.052726483
UCK2	Cd4+cd25+ regulatory t c	READ	-0.027871277
UCK2	Cd8+ cytotoxic t cell	READ	0.025717529
UCK2	Cd8+ regulatory t cell	READ	0.020734637
UCK2	Cell_cycle	READ	0.360286326
UCK2	Chandran_metastasis_top5	READ	0.296696932
UCK2	Citrate cycle (tca cycle)	READ	0.148636913
UCK2	Cysteine and methionine r	READ	0.251835078
UCK2	Cytokine induced killer cε	READ	0.071326401
UCK2	D-arginine and d-ornithin	READ	-0.058879155
UCK2	D-glutamine and d-glutan	READ	-0.076023059
UCK2	Dendritic cell	READ	0.00805261
UCK2	Dna_repair	READ	0.395163197
UCK2	Dna_replication	READ	0.416953975
UCK2	Double-negative memory	READ	0.031755189
UCK2	Drug metabolism - cytoch	READ	-0.12355404
UCK2	Drug metabolism - other ε	READ	0.198068799
UCK2	E2f_targets	READ	0.391414008
UCK2	Ecm_receptor_interaction	READ	-0.004880095
UCK2	Effector cd4+ memory t (	READ	-0.051203491
UCK2	Effector cd8+ memory t (	READ	-0.034422747
UCK2	Effector memory t cell	READ	-0.041864019
UCK2	Effector regulatory t (treg	READ	-0.093620157
UCK2	Elvidge_hif1a_targets_up	READ	0.264571222
UCK2	Endothelial cell	READ	0.082416654
UCK2	Eosinophil	READ	-0.005310834
UCK2	Ether lipid metabolism	READ	-0.170071767
UCK2	Exhausted cd4+ t cell	READ	-0.072507319
UCK2	Exhausted cd8+ t cell	READ	-0.041092283
UCK2	Exhausted t cell	READ	0.075366274
UCK2	Fat cell (adipocyte)	READ	0.166342967
UCK2	Fatty acid biosynthesis	READ	0.258224815
UCK2	Fatty acid degradation	READ	0.002368881
UCK2	Fatty acid elongation	READ	0.20567576
UCK2	Fibroblast	READ	-0.106844797
UCK2	Folate biosynthesis	READ	0.089701278
UCK2	Follicular b cell	READ	0.026703682
UCK2	Follicular dendritic cell	READ	0.089282327
UCK2	Follicular helper (tfh) t cε	READ	0.003081163
UCK2	Follicular t cell	READ	0.155253779
UCK2	Foxp3+il-17+ t cell	READ	0.167370887

UCK2	Fructose and mannose me	READ	0.249359055
UCK2	G2m_checkpoint	READ	0.380663999
UCK2	Galactose metabolism	READ	0.095302204
UCK2	Galie_tumor_stemness_ge	READ	-0.002930927
UCK2	Glutathione metabolism	READ	0.089197253
UCK2	Glycerolipid metabolism	READ	0.059980562
UCK2	Glycerophospholipid metæ	READ	-0.118614562
UCK2	Glycine, serine and threor	READ	0.196000815
UCK2	Glycolysis / gluconeogene	READ	0.23810796
UCK2	Glycosaminoglycan biosy1	READ	-0.023125307
UCK2	Glycosaminoglycan biosy1	READ	-0.112347204
UCK2	Glycosaminoglycan biosy1	READ	0.131087419
UCK2	Glycosaminoglycan degra	READ	-0.206062849
UCK2	Glycosphingolipid biosyn1	READ	-0.134896394
UCK2	Glycosphingolipid biosyn1	READ	-0.007874131
UCK2	Glycosphingolipid biosyn1	READ	0.008438464
UCK2	Glycosylphosphatidylinos	READ	0.053358471
UCK2	Glyoxylate and dicarboxy	READ	0.268492426
UCK2	Granulocyte	READ	-0.052697706
UCK2	Hedgehog_signaling	READ	-0.102425423
UCK2	Histidine metabolism	READ	0.137141647
UCK2	Hypoxia	READ	0.014959155
UCK2	Il-17ralpha t cell	READ	0.068527147
UCK2	Il2_stat5_signaling	READ	0.046431497
UCK2	Il6_jak_stat3_signaling	READ	-0.093049386
UCK2	Immune_checkpoints_tunr	READ	0.066597125
UCK2	Immune_inhibition_cytok	READ	-0.039733721
UCK2	Inositol phosphate metabo	READ	-0.121573964
UCK2	Interleukin_6_signaling	READ	0.011894465
UCK2	Jaeger_metastasis_up	READ	0.225676979
UCK2	Jain_nfkb_signaling	READ	0.258965282
UCK2	Kras_signaling_up	READ	-0.060821288
UCK2	Linoleic acid metabolism	READ	-0.08786323
UCK2	Lipoic acid metabolism	READ	-0.024220474
UCK2	Lysine degradation	READ	0.260061227
UCK2	Lysosome	READ	-0.257418438
UCK2	M1 macrophage	READ	-0.01749115
UCK2	M2 macrophage	READ	-0.057249844
UCK2	Mannose type o-glycan bi	READ	0.279120272
UCK2	Mapk_signaling_pathway	READ	-0.1072239
UCK2	Mapk3_erk1_activation	READ	0.06182126
UCK2	Marginal zone b cell	READ	0.082220816
UCK2	Memory b cell	READ	0.044586481

UCK2	Mesenchymal cell	READ	-0.043922914
UCK2	Mesenchymal stem cell	READ	-0.089515432
UCK2	Metabolism of xenobiotic	READ	-0.08149556
UCK2	Migrating cancer stem cel	READ	0.026789695
UCK2	Mitotic_spindle	READ	0.184762738
UCK2	Monocyte	READ	-0.065158301
UCK2	Mtor_signaling_pathway	READ	-0.060757422
UCK2	Mtorc1_signaling	READ	0.330878659
UCK2	Mucin type o-glycan biosy	READ	-0.05707606
UCK2	Myc_targets_v1	READ	0.377310558
UCK2	Myeloid cell	READ	-0.051377593
UCK2	N-glycan biosynthesis	READ	-0.000855175
UCK2	Naive b cell	READ	0.056293103
UCK2	Naive cd4+ t cell	READ	-0.173316785
UCK2	Naive cd8+ t cell	READ	-0.174231793
UCK2	Natural killer cell	READ	0.031853669
UCK2	Natural killer t (nkt) cell	READ	0.086711302
UCK2	Natural regulatory t (treg)	READ	-0.025716269
UCK2	Neomycin, kanamycin and	READ	0.062092136
UCK2	Neutrophil	READ	0.045461902
UCK2	Nicotinate and nicotinami	READ	-0.129723892
UCK2	Nitrogen metabolism	READ	0.162223923
UCK2	Nod_like_receptor_signal	READ	-0.070340368
UCK2	Notch_signaling	READ	0.023590802
UCK2	One carbon pool by folate	READ	0.443717435
UCK2	Other glycan degradation	READ	-0.239042426
UCK2	Other types of o-glycan b	READ	-0.077450407
UCK2	Oxidative phosphorylatio	READ	0.239546945
UCK2	P53_pathway	READ	-0.03045361
UCK2	P53_signaling_pathway	READ	0.037529861
UCK2	Pantothenate and coa bios	READ	0.035482053
UCK2	Pentose and glucuronate i	READ	0.014730981
UCK2	Pentose phosphate pathwa	READ	0.149344092
UCK2	Pericyte	READ	-0.075333115
UCK2	Phenylalanine metabolism	READ	0.129009192
UCK2	Phenylalanine, tyrosine ar	READ	0.082703281
UCK2	Phosphonate and phosphir	READ	-0.115289621
UCK2	Pi3k_akt_activation	READ	-0.240545694
UCK2	Pi3k_akt_mtor_signaling	READ	0.077180995
UCK2	Porphyrin and chlorophyl	READ	0.24486159
UCK2	Primary bile acid biosynt	READ	-0.117863827
UCK2	Propanoate metabolism	READ	0.082821153
UCK2	Purine metabolism	READ	0.466645945

UCK2	Pyrimidine metabolism	READ	0.458911667
UCK2	Pyruvate metabolism	READ	0.202759026
UCK2	Regulation_of_autophagy	READ	-0.257222169
UCK2	Retinol metabolism	READ	-0.034319348
UCK2	Riboflavin metabolism	READ	0.201161013
UCK2	Schmahl_pdgf_signaling	READ	-0.211045259
UCK2	Selenocompound metabol	READ	0.186984362
UCK2	Signaling_by_hippo	READ	-0.034144501
UCK2	Sphingolipid metabolism	READ	-0.293644092
UCK2	Starch and sucrose metabo	READ	-0.052018643
UCK2	Steroid biosynthesis	READ	0.169464144
UCK2	Steroid hormone biosynth	READ	-0.043560268
UCK2	Sulfur metabolism	READ	0.035660128
UCK2	Synthesis and degradation	READ	0.118937658
UCK2	T helper cell	READ	-0.018836849
UCK2	T helper1 (th1) cell	READ	0.019276212
UCK2	T helper17 (th17) cell	READ	0.070416825
UCK2	T helper2 (th2) cell	READ	0.07208467
UCK2	T helper9 (th9) cell	READ	-0.123457583
UCK2	Taurine and hypotaurine r	READ	-0.230256573
UCK2	Terpenoid backbone biosy	READ	0.271033719
UCK2	Tgf_beta_signaling_pathw	READ	-0.077649537
UCK2	Thiamine metabolism	READ	0.177415442
UCK2	Tnfa_signaling_via_nfkb	READ	-0.05103762
UCK2	Tryptophan metabolism	READ	0.129421248
UCK2	Tumor endothelial cell	READ	0.133682258
UCK2	Tyrosine metabolism	READ	0.035142914
UCK2	Ubiquinone and other terp	READ	0.287396602
UCK2	Valine, leucine and isoleu	READ	0.037105778
UCK2	Valine, leucine and isoleu	READ	0.064551779
UCK2	Vascular endothelial cell	READ	0.039888924
UCK2	Vascular smooth muscle c	READ	-0.078532412
UCK2	Vegf_signaling_pathway	READ	-0.122827672
UCK2	Vitamin b6 metabolism	READ	-0.080656256
UCK2	Willert_wnt_signaling	READ	0.178477327
UCK2	Wnt_beta_catenin_signali	READ	-0.018077946
UCKL1	Abnormal plasma cell	READ	-0.209162125
UCKL1	Activated b cell	READ	-0.327006718
UCKL1	Activated cd4+ t cell	READ	-0.156088604
UCKL1	Activated t cell	READ	-0.115886484
UCKL1	Alanine, aspartate and glu	READ	0.031252002
UCKL1	Alcala_apoptosis	READ	-0.156334948
UCKL1	Alpha-linolenic acid meta	READ	0.160952608

UCKL1	Amino sugar and nucleoti	READ	-0.100513189
UCKL1	Ampk_pathway	READ	0.257705778
UCKL1	Angiogenesis	READ	-0.07957529
UCKL1	Arachidonic acid metabol	READ	0.132148983
UCKL1	Arginine and proline metε	READ	-0.020689763
UCKL1	Arginine biosynthesis	READ	0.123990736
UCKL1	Ascorbate and aldarate mε	READ	-0.140390193
UCKL1	Atypical memory b cell	READ	-0.210313857
UCKL1	Axl+siglec6+ dendritic ce	READ	-0.197369082
UCKL1	B cell	READ	-0.353942916
UCKL1	B1 cell	READ	-0.175498694
UCKL1	Basal cell	READ	-0.064814707
UCKL1	Beta-alanine metabolism	READ	-0.175091906
UCKL1	Biosynthesis of unsaturate	READ	-0.079530837
UCKL1	Biotin metabolism	READ	-0.152752901
UCKL1	Butanoate metabolism	READ	-0.120325356
UCKL1	Caffeine metabolism	READ	-0.12497054
UCKL1	Cancer stem cell	READ	-0.312404824
UCKL1	Cancer stem-like cell	READ	-0.121994143
UCKL1	Cd4+ cytotoxic t cell	READ	-0.180595764
UCKL1	Cd4+ memory t cell	READ	-0.046607047
UCKL1	Cd4+ regulatory t cell	READ	0.00625394
UCKL1	Cd4+ t helper cell	READ	-0.103383016
UCKL1	Cd4+cd25+ regulatory t c	READ	-0.117873143
UCKL1	Cd8+ cytotoxic t cell	READ	-0.02307782
UCKL1	Cd8+ regulatory t cell	READ	-0.209262538
UCKL1	Cell_cycle	READ	-0.191394881
UCKL1	Chandran_metastasis_top ⁵	READ	-0.185132896
UCKL1	Citrate cycle (tca cycle)	READ	-0.098627816
UCKL1	Cysteine and methionine r	READ	-0.023679167
UCKL1	Cytokine induced killer cε	READ	-0.031410506
UCKL1	D-arginine and d-ornithin	READ	-0.147834738
UCKL1	D-glutamine and d-glutan	READ	-0.043956698
UCKL1	Dendritic cell	READ	-0.099438014
UCKL1	Dna_repair	READ	0.090370058
UCKL1	Dna_replication	READ	-0.076611158
UCKL1	Double-negative memory	READ	0.046837698
UCKL1	Drug metabolism - cytoch	READ	-0.08497802
UCKL1	Drug metabolism - other ε	READ	0.069251699
UCKL1	E2f_targets	READ	-0.219468361
UCKL1	Ecm_receptor_interaction	READ	-0.093274074
UCKL1	Effector cd4+ memory t (	READ	-0.225944182
UCKL1	Effector cd8+ memory t (	READ	-0.155639915

UCKL1	Effector memory t cell	READ	-0.203002348
UCKL1	Effector regulatory t (treg	READ	-0.119447144
UCKL1	Elvidge_hif1a_targets_up	READ	-0.265876494
UCKL1	Endothelial cell	READ	-0.308566623
UCKL1	Eosinophil	READ	-0.088528765
UCKL1	Ether lipid metabolism	READ	-0.052673763
UCKL1	Exhausted cd4+ t cell	READ	-0.37034639
UCKL1	Exhausted cd8+ t cell	READ	-0.326849095
UCKL1	Exhausted t cell	READ	-0.139005159
UCKL1	Fat cell (adipocyte)	READ	-0.110758452
UCKL1	Fatty acid biosynthesis	READ	-0.117946963
UCKL1	Fatty acid degradation	READ	-0.192819457
UCKL1	Fatty acid elongation	READ	-0.224603929
UCKL1	Fibroblast	READ	-0.204381405
UCKL1	Folate biosynthesis	READ	0.040246836
UCKL1	Follicular b cell	READ	-0.182424669
UCKL1	Follicular dendritic cell	READ	-0.227301509
UCKL1	Follicular helper (tfh) t ce	READ	-0.09714042
UCKL1	Follicular t cell	READ	0.027184099
UCKL1	Foxp3+il-17+ t cell	READ	0.104310772
UCKL1	Fructose and mannose me	READ	0.190175223
UCKL1	G2m_checkpoint	READ	-0.27759958
UCKL1	Galactose metabolism	READ	0.065719596
UCKL1	Galie_tumor_stemness_ge	READ	-0.035064944
UCKL1	Glutathione metabolism	READ	0.115486942
UCKL1	Glycerolipid metabolism	READ	0.159763787
UCKL1	Glycerophospholipid metæ	READ	0.327946902
UCKL1	Glycine, serine and threor	READ	0.163104056
UCKL1	Glycolysis / gluconeogene	READ	0.035223833
UCKL1	Glycosaminoglycan biosy	READ	0.218124614
UCKL1	Glycosaminoglycan biosy	READ	0.173920242
UCKL1	Glycosaminoglycan biosy	READ	-0.111094975
UCKL1	Glycosaminoglycan degra	READ	0.110341501
UCKL1	Glycosphingolipid biosyn	READ	0.036866388
UCKL1	Glycosphingolipid biosyn	READ	0.112183948
UCKL1	Glycosphingolipid biosyn	READ	-0.09627828
UCKL1	Glycosylphosphatidylinos	READ	-0.09307129
UCKL1	Glyoxylate and dicarboxy	READ	-0.010475524
UCKL1	Granulocyte	READ	-0.156432901
UCKL1	Hedgehog_signaling	READ	0.03128824
UCKL1	Histidine metabolism	READ	-0.033460578
UCKL1	Hypoxia	READ	-0.158130075
UCKL1	Il-17ralpha t cell	READ	-0.080823596

UCKL1	Il2_stat5_signaling	READ	-0.153622186
UCKL1	Il6_jak_stat3_signaling	READ	-0.140258493
UCKL1	Immune_checkpoints_tunr	READ	-0.191799134
UCKL1	Immune_inhibition_cytok	READ	0.019110545
UCKL1	Inositol phosphate metabo	READ	-0.332485329
UCKL1	Interleukin_6_signaling	READ	-0.24683229
UCKL1	Jaeger_metastasis_up	READ	-0.290964644
UCKL1	Jain_nfkb_signaling	READ	0.003383028
UCKL1	Kras_signaling_up	READ	-0.256300796
UCKL1	Linoleic acid metabolism	READ	0.056399356
UCKL1	Lipoic acid metabolism	READ	-0.093596918
UCKL1	Lysine degradation	READ	0.005309362
UCKL1	Lysosome	READ	-0.023511218
UCKL1	M1 macrophage	READ	-0.222541079
UCKL1	M2 macrophage	READ	-0.216992016
UCKL1	Mannose type o-glycan bi	READ	0.233626726
UCKL1	Mapk_signaling_pathway	READ	-0.142847525
UCKL1	Mapk3_erk1_activation	READ	-0.266488352
UCKL1	Marginal zone b cell	READ	-0.274641696
UCKL1	Memory b cell	READ	-0.339729169
UCKL1	Mesenchymal cell	READ	0.036901517
UCKL1	Mesenchymal stem cell	READ	-0.169968372
UCKL1	Metabolism of xenobiotic	READ	0.018893999
UCKL1	Migrating cancer stem cel	READ	-0.372398232
UCKL1	Mitotic_spindle	READ	-0.244519266
UCKL1	Monocyte	READ	-0.246857382
UCKL1	Mtor_signaling_pathway	READ	0.067562359
UCKL1	Mtorc1_signaling	READ	-0.327216402
UCKL1	Mucin type o-glycan biosy	READ	-0.414294662
UCKL1	Myc_targets_v1	READ	-0.18599686
UCKL1	Myeloid cell	READ	-0.173672535
UCKL1	N-glycan biosynthesis	READ	-0.091370284
UCKL1	Naive b cell	READ	-0.117339565
UCKL1	Naive cd4+ t cell	READ	-0.203582602
UCKL1	Naive cd8+ t cell	READ	-0.163703569
UCKL1	Natural killer cell	READ	-0.190212866
UCKL1	Natural killer t (nkt) cell	READ	-0.500356353
UCKL1	Natural regulatory t (treg)	READ	-0.153437217
UCKL1	Neomycin, kanamycin an	READ	0.06907101
UCKL1	Neutrophil	READ	-0.228577279
UCKL1	Nicotinate and nicotinami	READ	-0.071738555
UCKL1	Nitrogen metabolism	READ	-0.340796086
UCKL1	Nod_like_receptor_signal	READ	-0.157892693

UCKL1	Notch_signaling	READ	-0.02969136
UCKL1	One carbon pool by folate	READ	-0.193968178
UCKL1	Other glycan degradation	READ	0.161835032
UCKL1	Other types of o-glycan b	READ	0.455130438
UCKL1	Oxidative phosphorylatior	READ	0.001535785
UCKL1	P53_pathway	READ	-0.047872352
UCKL1	P53_signaling_pathway	READ	-0.290267639
UCKL1	Pantothenate and coa bios	READ	-0.290731363
UCKL1	Pentose and glucuronate i	READ	-0.119772157
UCKL1	Pentose phosphate pathwa	READ	0.124128465
UCKL1	Pericyte	READ	-0.080910703
UCKL1	Phenylalanine metabolism	READ	0.02907441
UCKL1	Phenylalanine, tyrosine ar	READ	-0.086919533
UCKL1	Phosphonate and phosphir	READ	-0.202087455
UCKL1	Pi3k_akt_activation	READ	-0.148317324
UCKL1	Pi3k_akt_mtor_signaling	READ	-0.3187405
UCKL1	Porphyrin and chlorophyl	READ	-0.037395159
UCKL1	Primary bile acid biosynt	READ	0.112272507
UCKL1	Propanoate metabolism	READ	-0.346631378
UCKL1	Purine metabolism	READ	0.020927926
UCKL1	Pyrimidine metabolism	READ	0.097170537
UCKL1	Pyruvate metabolism	READ	-0.045042861
UCKL1	Regulation_of_autophagy	READ	0.00828603
UCKL1	Retinol metabolism	READ	-0.077154747
UCKL1	Riboflavin metabolism	READ	0.148944071
UCKL1	Schmahl_pdgf_signaling	READ	-0.460211451
UCKL1	Selenocompound metabol	READ	-0.010920481
UCKL1	Signaling_by_hippo	READ	-0.168347865
UCKL1	Sphingolipid metabolism	READ	-0.194023056
UCKL1	Starch and sucrose metabo	READ	-0.128751531
UCKL1	Steroid biosynthesis	READ	0.045683007
UCKL1	Steroid hormone biosynth	READ	-0.028086511
UCKL1	Sulfur metabolism	READ	-0.170225642
UCKL1	Synthesis and degradation	READ	-0.150180909
UCKL1	T helper cell	READ	-0.173681484
UCKL1	T helper1 (th1) cell	READ	-0.197663801
UCKL1	T helper17 (th17) cell	READ	-0.042691679
UCKL1	T helper2 (th2) cell	READ	-0.042841058
UCKL1	T helper9 (th9) cell	READ	0.111851414
UCKL1	Taurine and hypotaurine r	READ	0.384370412
UCKL1	Terpenoid backbone biosy	READ	-0.368221645
UCKL1	Tgf_beta_signaling_pathw	READ	-0.257400473
UCKL1	Thiamine metabolism	READ	0.002125246

UCKL1	Tnfa_signaling_via_nfk	READ	-0.162665443
UCKL1	Tryptophan metabolism	READ	-0.069589434
UCKL1	Tumor endothelial cell	READ	-0.1252811
UCKL1	Tyrosine metabolism	READ	0.124335477
UCKL1	Ubiquinone and other ter	READ	-0.159684502
UCKL1	Valine, leucine and isoleu	READ	0.067572928
UCKL1	Valine, leucine and isoleu	READ	-0.282819232
UCKL1	Vascular endothelial cell	READ	0.101132221
UCKL1	Vascular smooth muscle c	READ	0.073113204
UCKL1	Vegf_signaling_pathway	READ	0.028535603
UCKL1	Vitamin b6 metabolism	READ	0.073682127
UCKL1	Willert_wnt_signaling	READ	-0.174265246
UCKL1	Wnt_beta_catenin_signali	READ	0.168248863
UPP1	Abnormal plasma cell	READ	-0.067153101
UPP1	Activated b cell	READ	-0.105995739
UPP1	Activated cd4+ t cell	READ	0.246602775
UPP1	Activated t cell	READ	0.136236815
UPP1	Alanine, aspartate and glu	READ	-0.159521558
UPP1	Alcala_apoptosis	READ	0.118617413
UPP1	Alpha-linolenic acid meta	READ	0.049466413
UPP1	Amino sugar and nucleoti	READ	0.284007671
UPP1	Ampk_pathway	READ	-0.084552873
UPP1	Angiogenesis	READ	0.241724905
UPP1	Arachidonic acid metabol	READ	0.369410149
UPP1	Arginine and proline metæ	READ	0.009256739
UPP1	Arginine biosynthesis	READ	0.011104955
UPP1	Ascorbate and aldarate mε	READ	-0.136380393
UPP1	Atypical memory b cell	READ	-0.084552833
UPP1	Axl+siglec6+ dendritic ce	READ	0.158950281
UPP1	B cell	READ	0.009409734
UPP1	B1 cell	READ	-0.331907933
UPP1	Basal cell	READ	0.515347979
UPP1	Beta-alanine metabolism	READ	-0.069108027
UPP1	Biosynthesis of unsaturate	READ	-0.039395235
UPP1	Biotin metabolism	READ	-0.159168756
UPP1	Butanoate metabolism	READ	-0.209886754
UPP1	Caffeine metabolism	READ	-0.137888417
UPP1	Cancer stem cell	READ	0.064797457
UPP1	Cancer stem-like cell	READ	-0.031755431
UPP1	Cd4+ cytotoxic t cell	READ	0.194405579
UPP1	Cd4+ memory t cell	READ	0.060185746
UPP1	Cd4+ regulatory t cell	READ	0.227434322
UPP1	Cd4+ t helper cell	READ	0.151019015

UPP1	Cd4+cd25+ regulatory t c	READ	0.153282408
UPP1	Cd8+ cytotoxic t cell	READ	0.077372962
UPP1	Cd8+ regulatory t cell	READ	0.028833548
UPP1	Cell_cycle	READ	-0.218584713
UPP1	Chandran_metastasis_top ⁵	READ	-0.315765133
UPP1	Citrate cycle (tca cycle)	READ	-0.024650965
UPP1	Cysteine and methionine r	READ	0.062722977
UPP1	Cytokine induced killer c α	READ	0.035003678
UPP1	D-arginine and d-ornithin	READ	0.085409618
UPP1	D-glutamine and d-glutan	READ	-0.087045561
UPP1	Dendritic cell	READ	0.250369233
UPP1	Dna_repair	READ	0.086115415
UPP1	Dna_replication	READ	-0.065827673
UPP1	Double-negative memory	READ	0.02341086
UPP1	Drug metabolism - cytoch	READ	0.087830269
UPP1	Drug metabolism - other c	READ	0.201345642
UPP1	E2f_targets	READ	-0.222432273
UPP1	Ecm_receptor_interaction	READ	0.153214233
UPP1	Effector cd4+ memory t (	READ	0.080970499
UPP1	Effector cd8+ memory t (	READ	0.21752345
UPP1	Effector memory t cell	READ	0.106903939
UPP1	Effector regulatory t (treg	READ	0.212740504
UPP1	Elvidge_hif1a_targets_up	READ	-0.121147065
UPP1	Endothelial cell	READ	0.124606613
UPP1	Eosinophil	READ	0.361776976
UPP1	Ether lipid metabolism	READ	0.080522456
UPP1	Exhausted cd4+ t cell	READ	0.134451834
UPP1	Exhausted cd8+ t cell	READ	0.156544196
UPP1	Exhausted t cell	READ	0.094115668
UPP1	Fat cell (adipocyte)	READ	0.021888888
UPP1	Fatty acid biosynthesis	READ	-0.176471591
UPP1	Fatty acid degradation	READ	-0.156155471
UPP1	Fatty acid elongation	READ	0.15286665
UPP1	Fibroblast	READ	0.224377258
UPP1	Folate biosynthesis	READ	0.213856721
UPP1	Follicular b cell	READ	0.075288506
UPP1	Follicular dendritic cell	READ	0.056345788
UPP1	Follicular helper (tfh) t c α	READ	0.160278459
UPP1	Follicular t cell	READ	0.009307596
UPP1	Foxp3+il-17+ t cell	READ	-0.033978156
UPP1	Fructose and mannose me	READ	0.143480596
UPP1	G2m_checkpoint	READ	-0.327221415
UPP1	Galactose metabolism	READ	0.306574899

UPP1	Galie_tumor_stemness_ge	READ	0.117744701
UPP1	Glutathione metabolism	READ	0.348381258
UPP1	Glycerolipid metabolism	READ	0.039850289
UPP1	Glycerophospholipid metæ	READ	0.127196508
UPP1	Glycine, serine and threor	READ	0.169953824
UPP1	Glycolysis / gluconeogene	READ	0.047296473
UPP1	Glycosaminoglycan biosy	READ	0.440394152
UPP1	Glycosaminoglycan biosy	READ	0.18003096
UPP1	Glycosaminoglycan biosy	READ	0.29747997
UPP1	Glycosaminoglycan degra	READ	0.24113301
UPP1	Glycosphingolipid biosyn	READ	0.344439624
UPP1	Glycosphingolipid biosyn	READ	0.290674797
UPP1	Glycosphingolipid biosyn	READ	0.145449673
UPP1	Glycosylphosphatidylinos	READ	-0.146080039
UPP1	Glyoxylate and dicarboxy	READ	-0.003517201
UPP1	Granulocyte	READ	0.34082396
UPP1	Hedgehog_signaling	READ	-0.016943744
UPP1	Histidine metabolism	READ	-0.052651057
UPP1	Hypoxia	READ	0.194340131
UPP1	Il-17ralpha t cell	READ	0.069252973
UPP1	Il2_stat5_signaling	READ	0.15584394
UPP1	Il6_jak_stat3_signaling	READ	0.238223119
UPP1	Immune_checkpoints_tur	READ	0.235463013
UPP1	Immune_inhibition_cytok	READ	0.306871296
UPP1	Inositol phosphate metabo	READ	-0.364852494
UPP1	Interleukin_6_signaling	READ	-0.098965172
UPP1	Jaeger_metastasis_up	READ	0.029952977
UPP1	Jain_nfkb_signaling	READ	-0.311027447
UPP1	Kras_signaling_up	READ	0.142409137
UPP1	Linoleic acid metabolism	READ	0.050559033
UPP1	Lipoic acid metabolism	READ	0.041907783
UPP1	Lysine degradation	READ	-0.287309509
UPP1	Lysosome	READ	0.368373102
UPP1	M1 macrophage	READ	0.281986895
UPP1	M2 macrophage	READ	0.325055331
UPP1	Mannose type o-glycan bi	READ	0.104644916
UPP1	Mapk_signaling_pathway	READ	0.022355123
UPP1	Mapk3_erk1_activation	READ	-0.0499913
UPP1	Marginal zone b cell	READ	0.036871226
UPP1	Memory b cell	READ	0.042173802
UPP1	Mesenchymal cell	READ	0.345867364
UPP1	Mesenchymal stem cell	READ	0.205494858
UPP1	Metabolism of xenobiotic	READ	0.183716346

UPP1	Migrating cancer stem cel	READ	-0.206952065
UPP1	Mitotic_spindle	READ	-0.337427226
UPP1	Monocyte	READ	0.349013409
UPP1	Mtor_signaling_pathway	READ	-0.01967077
UPP1	Mtorc1_signaling	READ	-0.010978849
UPP1	Mucin type o-glycan biosy	READ	-0.177227454
UPP1	Myc_targets_v1	READ	-0.154021131
UPP1	Myeloid cell	READ	0.233714997
UPP1	N-glycan biosynthesis	READ	0.008512532
UPP1	Naive b cell	READ	-0.059166237
UPP1	Naive cd4+ t cell	READ	-0.044628853
UPP1	Naive cd8+ t cell	READ	-0.259542433
UPP1	Natural killer cell	READ	0.16833741
UPP1	Natural killer t (nkt) cell	READ	-0.143427481
UPP1	Natural regulatory t (treg)	READ	0.158995342
UPP1	Neomycin, kanamycin an	READ	0.174883812
UPP1	Neutrophil	READ	0.382732521
UPP1	Nicotinate and nicotinami	READ	-0.03191467
UPP1	Nitrogen metabolism	READ	0.081879526
UPP1	Nod_like_receptor_signal	READ	0.14024878
UPP1	Notch_signaling	READ	0.062988426
UPP1	One carbon pool by folate	READ	-0.11293042
UPP1	Other glycan degradation	READ	0.133993669
UPP1	Other types of o-glycan b	READ	0.088262854
UPP1	Oxidative phosphorylatio	READ	0.333064913
UPP1	P53_pathway	READ	0.103080822
UPP1	P53_signaling_pathway	READ	-0.215770369
UPP1	Pantothenate and coa bios	READ	0.155453679
UPP1	Pentose and glucuronate i	READ	0.050462673
UPP1	Pentose phosphate pathwa	READ	0.213030134
UPP1	Pericyte	READ	0.232826565
UPP1	Phenylalanine metabolism	READ	0.173123192
UPP1	Phenylalanine, tyrosine ar	READ	0.028469664
UPP1	Phosphonate and phosphir	READ	-0.152172362
UPP1	Pi3k_akt_activation	READ	-0.171753801
UPP1	Pi3k_akt_mtor_signaling	READ	-0.057927833
UPP1	Porphyrin and chlorophyl	READ	0.18064784
UPP1	Primary bile acid biosynt	READ	-0.096616459
UPP1	Propanoate metabolism	READ	-0.285482252
UPP1	Purine metabolism	READ	0.071605734
UPP1	Pyrimidine metabolism	READ	0.102223009
UPP1	Pyruvate metabolism	READ	-0.112304516
UPP1	Regulation_of_autophagy	READ	0.128369067

UPP1	Retinol metabolism	READ	0.07319642
UPP1	Riboflavin metabolism	READ	0.289571445
UPP1	Schmahl_pdgf_signaling	READ	-0.126083257
UPP1	Selenocompound metabol	READ	-0.219101997
UPP1	Signaling_by_hippo	READ	-0.22221134
UPP1	Sphingolipid metabolism	READ	0.085321397
UPP1	Starch and sucrose metabo	READ	0.018641497
UPP1	Steroid biosynthesis	READ	-0.084921364
UPP1	Steroid hormone biosynth	READ	0.140164584
UPP1	Sulfur metabolism	READ	-0.139587185
UPP1	Synthesis and degradation	READ	-0.248452422
UPP1	T helper cell	READ	0.127379595
UPP1	T helper1 (th1) cell	READ	0.089974987
UPP1	T helper17 (th17) cell	READ	0.151489977
UPP1	T helper2 (th2) cell	READ	0.22384767
UPP1	T helper9 (th9) cell	READ	0.200312907
UPP1	Taurine and hypotaurine r	READ	0.06806603
UPP1	Terpenoid backbone biosy	READ	-0.170402955
UPP1	Tgf_beta_signaling_pathw	READ	-0.127502916
UPP1	Thiamine metabolism	READ	0.255465266
UPP1	Tnfa_signaling_via_nfkb	READ	0.117201549
UPP1	Tryptophan metabolism	READ	0.052686648
UPP1	Tumor endothelial cell	READ	0.010050547
UPP1	Tyrosine metabolism	READ	0.190512881
UPP1	Ubiquinone and other terf	READ	0.172970559
UPP1	Valine, leucine and isoleu	READ	0.445716125
UPP1	Valine, leucine and isoleu	READ	-0.215038899
UPP1	Vascular endothelial cell	READ	0.291908377
UPP1	Vascular smooth muscle c	READ	0.213143932
UPP1	Vegf_signaling_pathway	READ	0.175386437
UPP1	Vitamin b6 metabolism	READ	-0.008398219
UPP1	Willert_wnt_signaling	READ	0.061881677
UPP1	Wnt_beta_catenin_signali	READ	-0.178006798
UPP2	Abnormal plasma cell	READ	0.349916154
UPP2	Activated b cell	READ	0.031305165
UPP2	Activated cd4+ t cell	READ	0.02295182
UPP2	Activated t cell	READ	0.049880315
UPP2	Alanine, aspartate and glu	READ	0.210224625
UPP2	Alcala_apoptosis	READ	-0.005254539
UPP2	Alpha-linolenic acid meta	READ	0.134353132
UPP2	Amino sugar and nucleoti	READ	0.093514001
UPP2	Ampk_pathway	READ	-0.023250931
UPP2	Angiogenesis	READ	0.226583106

UPP2	Arachidonic acid metabolism	READ	0.132626862
UPP2	Arginine and proline metabolism	READ	0.204754592
UPP2	Arginine biosynthesis	READ	0.225515826
UPP2	Ascorbate and aldarate metabolism	READ	0.20819872
UPP2	Atypical memory b cell	READ	0.208083649
UPP2	Axl+siglec6+ dendritic cell	READ	0.288742671
UPP2	B cell	READ	0.179054104
UPP2	B1 cell	READ	-0.013372766
UPP2	Basal cell	READ	0.062844636
UPP2	Beta-alanine metabolism	READ	0.292796551
UPP2	Biosynthesis of unsaturated fatty acids	READ	0.150976165
UPP2	Biotin metabolism	READ	0.039879406
UPP2	Butanoate metabolism	READ	0.055332196
UPP2	Caffeine metabolism	READ	0.113851641
UPP2	Cancer stem cell	READ	0.230839436
UPP2	Cancer stem-like cell	READ	-0.031960666
UPP2	Cd4+ cytotoxic t cell	READ	0.215048174
UPP2	Cd4+ memory t cell	READ	0.076778652
UPP2	Cd4+ regulatory t cell	READ	0.020019336
UPP2	Cd4+ t helper cell	READ	0.055145063
UPP2	Cd4+cd25+ regulatory t cell	READ	0.053123009
UPP2	Cd8+ cytotoxic t cell	READ	0.130242983
UPP2	Cd8+ regulatory t cell	READ	0.123771228
UPP2	Cell cycle	READ	-0.042652668
UPP2	Chandran_metastasis_topography	READ	0.064898863
UPP2	Citrate cycle (tca cycle)	READ	0.021566056
UPP2	Cysteine and methionine metabolism	READ	0.12989333
UPP2	Cytokine induced killer cell	READ	0.249106447
UPP2	D-arginine and d-ornithine	READ	0.171411664
UPP2	D-glutamine and d-glutamate	READ	0.134145836
UPP2	Dendritic cell	READ	0.144285893
UPP2	Dna_repair	READ	-0.064981282
UPP2	Dna_replication	READ	-0.175127314
UPP2	Double-negative memory t cell	READ	0.025021495
UPP2	Drug metabolism - cytochrome p450	READ	0.222467027
UPP2	Drug metabolism - other	READ	0.150999707
UPP2	E2f_targets	READ	-0.202407146
UPP2	Ecm_receptor_interaction	READ	0.246502908
UPP2	Effector cd4+ memory t cell	READ	0.045249722
UPP2	Effector cd8+ memory t cell	READ	0.150103877
UPP2	Effector memory t cell	READ	0.064373143
UPP2	Effector regulatory t (treg) cell	READ	0.00241802
UPP2	Elvidge_hif1a_targets_upregulated	READ	-0.005090792

UPP2	Endothelial cell	READ	0.181070917
UPP2	Eosinophil	READ	0.021832369
UPP2	Ether lipid metabolism	READ	0.109981652
UPP2	Exhausted cd4+ t cell	READ	0.138764022
UPP2	Exhausted cd8+ t cell	READ	0.133302191
UPP2	Exhausted t cell	READ	0.1382534
UPP2	Fat cell (adipocyte)	READ	0.204838634
UPP2	Fatty acid biosynthesis	READ	0.050240812
UPP2	Fatty acid degradation	READ	0.110905709
UPP2	Fatty acid elongation	READ	0.160329467
UPP2	Fibroblast	READ	0.189143964
UPP2	Folate biosynthesis	READ	0.110287161
UPP2	Follicular b cell	READ	0.131239669
UPP2	Follicular dendritic cell	READ	0.217155708
UPP2	Follicular helper (tfh) t ce	READ	0.156818245
UPP2	Follicular t cell	READ	0.068729482
UPP2	Foxp3+il-17+ t cell	READ	0.111186445
UPP2	Fructose and mannose me	READ	-0.068592628
UPP2	G2m_checkpoint	READ	-0.136865829
UPP2	Galactose metabolism	READ	0.019113514
UPP2	Galie_tumor_stemness_ge	READ	0.219286405
UPP2	Glutathione metabolism	READ	0.017010663
UPP2	Glycerolipid metabolism	READ	0.172409278
UPP2	Glycerophospholipid metæ	READ	0.166500979
UPP2	Glycine, serine and threor	READ	0.287381395
UPP2	Glycolysis / gluconeogene	READ	-0.025334774
UPP2	Glycosaminoglycan biosy1	READ	0.085576253
UPP2	Glycosaminoglycan biosy1	READ	0.118489617
UPP2	Glycosaminoglycan biosy1	READ	0.057119773
UPP2	Glycosaminoglycan degra	READ	0.006958613
UPP2	Glycosphingolipid biosyn1	READ	0.124082173
UPP2	Glycosphingolipid biosyn1	READ	0.079201327
UPP2	Glycosphingolipid biosyn1	READ	0.12747258
UPP2	Glycosylphosphatidylinos	READ	-0.08606503
UPP2	Glyoxylate and dicarboxy	READ	0.085126226
UPP2	Granulocyte	READ	0.039392519
UPP2	Hedgehog_signaling	READ	0.229372893
UPP2	Histidine metabolism	READ	0.394406899
UPP2	Hypoxia	READ	0.237921629
UPP2	Il-17alpha t cell	READ	0.078202065
UPP2	Il2_stat5_signaling	READ	0.204981509
UPP2	Il6_jak_stat3_signaling	READ	0.059885351
UPP2	Immune_checkpoints_turr	READ	-0.015897231

UPP2	Immune_inhibition_cytok	READ	-0.148302894
UPP2	Inositol phosphate metabo	READ	0.128869658
UPP2	Interleukin_6_signaling	READ	-0.002525699
UPP2	Jaeger_metastasis_up	READ	0.219762021
UPP2	Jain_nfkb_signaling	READ	0.052104403
UPP2	Kras_signaling_up	READ	0.26672114
UPP2	Linoleic acid metabolism	READ	0.202888805
UPP2	Lipoic acid metabolism	READ	-0.016370658
UPP2	Lysine degradation	READ	0.211226836
UPP2	Lysosome	READ	0.199572867
UPP2	M1 macrophage	READ	0.095125251
UPP2	M2 macrophage	READ	0.097440554
UPP2	Mannose type o-glycan bi	READ	-0.032634589
UPP2	Mapk_signaling_pathway	READ	0.203730919
UPP2	Mapk3_erk1_activation	READ	-0.040852798
UPP2	Marginal zone b cell	READ	0.145278795
UPP2	Memory b cell	READ	0.198919183
UPP2	Mesenchymal cell	READ	0.120667914
UPP2	Mesenchymal stem cell	READ	0.136108003
UPP2	Metabolism of xenobiotic	READ	0.164412223
UPP2	Migrating cancer stem cel	READ	-0.119131338
UPP2	Mitotic_spindle	READ	0.0540062
UPP2	Monocyte	READ	0.112802728
UPP2	Mtor_signaling_pathway	READ	0.136876966
UPP2	Mtorc1_signaling	READ	0.022130824
UPP2	Mucin type o-glycan biosy	READ	0.205751726
UPP2	Myc_targets_v1	READ	-0.062126504
UPP2	Myeloid cell	READ	0.113041927
UPP2	N-glycan biosynthesis	READ	-0.01155779
UPP2	Naive b cell	READ	-0.072346367
UPP2	Naive cd4+ t cell	READ	0.248052375
UPP2	Naive cd8+ t cell	READ	0.276534822
UPP2	Natural killer cell	READ	0.179818052
UPP2	Natural killer t (nkt) cell	READ	0.094565195
UPP2	Natural regulatory t (treg)	READ	0.063951059
UPP2	Neomycin, kanamycin and	READ	0.089007985
UPP2	Neutrophil	READ	0.096355278
UPP2	Nicotinate and nicotinami	READ	0.273327994
UPP2	Nitrogen metabolism	READ	0.214989875
UPP2	Nod_like_receptor_signal	READ	-0.039509269
UPP2	Notch_signaling	READ	0.319955749
UPP2	One carbon pool by folate	READ	-0.051581088
UPP2	Other glycan degradation	READ	0.0302658

UPP2	Other types of o-glycan b	READ	0.103206146
UPP2	Oxidative phosphorylation	READ	0.064056314
UPP2	P53_pathway	READ	0.263290865
UPP2	P53_signaling_pathway	READ	0.036070711
UPP2	Pantothenate and coa bios	READ	0.051723596
UPP2	Pentose and glucuronate i	READ	0.219066519
UPP2	Pentose phosphate pathwa	READ	0.00917451
UPP2	Pericyte	READ	0.228777676
UPP2	Phenylalanine metabolism	READ	0.278298436
UPP2	Phenylalanine, tyrosine ar	READ	0.079217549
UPP2	Phosphonate and phosphir	READ	0.166797231
UPP2	Pi3k_akt_activation	READ	0.21562978
UPP2	Pi3k_akt_mtor_signaling	READ	0.082184318
UPP2	Porphyrin and chlorophyl	READ	0.031829634
UPP2	Primary bile acid biosynt	READ	0.356320767
UPP2	Propanoate metabolism	READ	0.15373232
UPP2	Purine metabolism	READ	-0.03225056
UPP2	Pyrimidine metabolism	READ	-0.053533311
UPP2	Pyruvate metabolism	READ	0.121103328
UPP2	Regulation_of_autophagy	READ	-0.307273274
UPP2	Retinol metabolism	READ	0.233372483
UPP2	Riboflavin metabolism	READ	0.244307149
UPP2	Schmahl_pdgf_signaling	READ	0.219661045
UPP2	Selenocompound metabol	READ	0.093557384
UPP2	Signaling_by_hippo	READ	0.20264824
UPP2	Sphingolipid metabolism	READ	0.053347774
UPP2	Starch and sucrose metabo	READ	0.207016502
UPP2	Steroid biosynthesis	READ	0.063538981
UPP2	Steroid hormone biosynth	READ	0.395034424
UPP2	Sulfur metabolism	READ	-0.00656747
UPP2	Synthesis and degradation	READ	0.163007384
UPP2	T helper cell	READ	0.187637005
UPP2	T helper1 (th1) cell	READ	0.152349968
UPP2	T helper17 (th17) cell	READ	0.006755765
UPP2	T helper2 (th2) cell	READ	0.054818977
UPP2	T helper9 (th9) cell	READ	-0.144356618
UPP2	Taurine and hypotaurine r	READ	0.132787836
UPP2	Terpenoid backbone biosy	READ	0.122930597
UPP2	Tgf_beta_signaling_pathw	READ	0.281169392
UPP2	Thiamine metabolism	READ	0.143635382
UPP2	Tnfa_signaling_via_nfk	READ	0.107901808
UPP2	Tryptophan metabolism	READ	0.15506279
UPP2	Tumor endothelial cell	READ	0.147174939

UPP2	Tyrosine metabolism	READ	0.232770844
UPP2	Ubiquinone and other ter	READ	0.055387273
UPP2	Valine, leucine and isoleu	READ	-0.086726466
UPP2	Valine, leucine and isoleu	READ	0.105963027
UPP2	Vascular endothelial cell	READ	0.059992667
UPP2	Vascular smooth muscle c	READ	0.217861825
UPP2	Vegf_signaling_pathway	READ	0.128360342
UPP2	Vitamin b6 metabolism	READ	0.146027183
UPP2	Willert_wnt_signaling	READ	0.245663596
UPP2	Wnt_beta_catenin_signali	READ	0.250959037
CDA	Abnormal plasma cell	SARC	-0.210701312
CDA	Activated b cell	SARC	0.334728243
CDA	Activated cd4+ t cell	SARC	0.304314501
CDA	Activated t cell	SARC	0.314125082
CDA	Alanine, aspartate and glu	SARC	-0.102284525
CDA	Alcala_apoptosis	SARC	0.317045229
CDA	Alpha-linolenic acid meta	SARC	0.26034565
CDA	Amino sugar and nucleoti	SARC	0.327412386
CDA	Ampk_pathway	SARC	-0.421687193
CDA	Angiogenesis	SARC	0.347073463
CDA	Arachidonic acid metabol	SARC	0.462458148
CDA	Arginine and proline met	SARC	0.127220342
CDA	Arginine biosynthesis	SARC	0.030077243
CDA	Ascorbate and aldarate m	SARC	-0.155499181
CDA	Atypical memory b cell	SARC	0.313064566
CDA	Axl+siglec6+ dendritic ce	SARC	0.29635271
CDA	B cell	SARC	0.34718586
CDA	B1 cell	SARC	0.197461638
CDA	Basal cell	SARC	0.438088713
CDA	Beta-alanine metabolism	SARC	-0.044479962
CDA	Biosynthesis of unsaturate	SARC	-0.101959816
CDA	Biotin metabolism	SARC	-0.204287363
CDA	Butanoate metabolism	SARC	-0.219672736
CDA	Caffeine metabolism	SARC	0.144185403
CDA	Cancer stem cell	SARC	0.374996922
CDA	Cancer stem-like cell	SARC	0.311446834
CDA	Cd4+ cytotoxic t cell	SARC	0.283245288
CDA	Cd4+ memory t cell	SARC	0.209133711
CDA	Cd4+ regulatory t cell	SARC	0.366647146
CDA	Cd4+ t helper cell	SARC	0.316428337
CDA	Cd4+cd25+ regulatory t c	SARC	0.33709066
CDA	Cd8+ cytotoxic t cell	SARC	0.306169835
CDA	Cd8+ regulatory t cell	SARC	0.336759534

CDA	Cell_cycle	SARC	-0.252236065
CDA	Chandran_metastasis_top	SARC	-0.25028212
CDA	Citrate cycle (tca cycle)	SARC	-0.080444188
CDA	Cysteine and methionine r	SARC	-0.079234654
CDA	Cytokine induced killer c	SARC	0.054717724
CDA	D-arginine and d-ornithin	SARC	0.187000427
CDA	D-glutamine and d-glutan	SARC	-0.155391862
CDA	Dendritic cell	SARC	0.424059492
CDA	Dna_repair	SARC	0.229733781
CDA	Dna_replication	SARC	-0.143673565
CDA	Double-negative memory	SARC	0.270999947
CDA	Drug metabolism - cytoch	SARC	0.187146099
CDA	Drug metabolism - other	SARC	0.285292664
CDA	E2f_targets	SARC	-0.22276531
CDA	Ecm_receptor_interaction	SARC	0.042634193
CDA	Effector cd4+ memory t (	SARC	0.22043227
CDA	Effector cd8+ memory t (	SARC	0.337595449
CDA	Effector memory t cell	SARC	0.282266452
CDA	Effector regulatory t (treg	SARC	0.350917707
CDA	Elvidge_hif1a_targets_up	SARC	0.066904087
CDA	Endothelial cell	SARC	0.317549709
CDA	Eosinophil	SARC	0.402161282
CDA	Ether lipid metabolism	SARC	0.300438217
CDA	Exhausted cd4+ t cell	SARC	0.193973359
CDA	Exhausted cd8+ t cell	SARC	0.304665252
CDA	Exhausted t cell	SARC	0.283919816
CDA	Fat cell (adipocyte)	SARC	0.138167042
CDA	Fatty acid biosynthesis	SARC	6.00E-05
CDA	Fatty acid degradation	SARC	-0.078069157
CDA	Fatty acid elongation	SARC	-0.015686879
CDA	Fibroblast	SARC	0.418737799
CDA	Folate biosynthesis	SARC	0.194547627
CDA	Follicular b cell	SARC	0.330413364
CDA	Follicular dendritic cell	SARC	0.366956309
CDA	Follicular helper (tfh) t ce	SARC	0.291167874
CDA	Follicular t cell	SARC	0.175869428
CDA	Foxp3+il-17+ t cell	SARC	0.120573924
CDA	Fructose and mannose me	SARC	0.181646073
CDA	G2m_checkpoint	SARC	-0.257693142
CDA	Galactose metabolism	SARC	0.278820895
CDA	Galie_tumor_stemness_ge	SARC	0.167410136
CDA	Glutathione metabolism	SARC	0.385579807
CDA	Glycerolipid metabolism	SARC	-0.105422465

CDA	Glycerophospholipid metabolism	SARC	0.261216796
CDA	Glycine, serine and threonine metabolism	SARC	-0.039609726
CDA	Glycolysis / gluconeogenesis	SARC	0.070996806
CDA	Glycosaminoglycan biosynthesis	SARC	0.344262599
CDA	Glycosaminoglycan biosynthesis	SARC	0.159643071
CDA	Glycosaminoglycan biosynthesis	SARC	0.150257621
CDA	Glycosaminoglycan degradation	SARC	0.359022462
CDA	Glycosphingolipid biosynthesis	SARC	0.249613788
CDA	Glycosphingolipid biosynthesis	SARC	0.359009292
CDA	Glycosphingolipid biosynthesis	SARC	0.148708105
CDA	Glycosylphosphatidylinositol signaling	SARC	-0.042631262
CDA	Glyoxylate and dicarboxylate metabolism	SARC	-0.087447842
CDA	Granulocyte	SARC	0.407392745
CDA	Hedgehog signaling	SARC	-0.25424391
CDA	Histidine metabolism	SARC	-0.024298839
CDA	Hypoxia	SARC	0.176269642
CDA	IL-17-producing T cell	SARC	0.264377349
CDA	IL2-stat5 signaling	SARC	0.384747513
CDA	IL6-jak-stat3 signaling	SARC	0.375181162
CDA	Immune checkpoints	SARC	0.292061579
CDA	Immune inhibition	SARC	0.390982303
CDA	Inositol phosphate metabolism	SARC	-0.305452062
CDA	Interleukin_6 signaling	SARC	-0.125025877
CDA	Jaeger metastasis up	SARC	0.000879829
CDA	Jain_nfkB signaling	SARC	-0.052949295
CDA	Kras signaling up	SARC	0.36642164
CDA	Linoleic acid metabolism	SARC	0.225998656
CDA	Lipoic acid metabolism	SARC	-0.040813995
CDA	Lysine degradation	SARC	-0.46147445
CDA	Lysosome	SARC	0.3849955
CDA	M1 macrophage	SARC	0.407224278
CDA	M2 macrophage	SARC	0.417586469
CDA	Mannose type o-glycan biosynthesis	SARC	0.037776964
CDA	Mapk signaling pathway	SARC	0.080295493
CDA	Mapk3_erk1 activation	SARC	-0.135429798
CDA	Marginal zone B cell	SARC	0.255447134
CDA	Memory B cell	SARC	0.300368495
CDA	Mesenchymal cell	SARC	0.36904247
CDA	Mesenchymal stem cell	SARC	0.331190056
CDA	Metabolism of xenobiotics	SARC	0.224812307
CDA	Migrating cancer stem cell	SARC	0.064499667
CDA	Mitotic spindle	SARC	-0.343708205
CDA	Monocyte	SARC	0.441923635

CDA	Mtor_signaling_pathway	SARC	-0.090663598
CDA	Mtorc1_signaling	SARC	0.135592104
CDA	Mucin type o-glycan biosy	SARC	0.251820747
CDA	Myc_targets_v1	SARC	0.115100629
CDA	Myeloid cell	SARC	0.404372534
CDA	N-glycan biosynthesis	SARC	0.224390179
CDA	Naive b cell	SARC	0.269888516
CDA	Naive cd4+ t cell	SARC	0.37070827
CDA	Naive cd8+ t cell	SARC	0.216385504
CDA	Natural killer cell	SARC	0.342135659
CDA	Natural killer t (nkt) cell	SARC	0.281470031
CDA	Natural regulatory t (treg)	SARC	0.335252281
CDA	Neomycin, kanamycin and	SARC	0.226684591
CDA	Neutrophil	SARC	0.458568909
CDA	Nicotinate and nicotinami	SARC	0.266322618
CDA	Nitrogen metabolism	SARC	-0.28588272
CDA	Nod_like_receptor_signal	SARC	0.374940477
CDA	Notch_signaling	SARC	0.214652109
CDA	One carbon pool by folate	SARC	-0.291976402
CDA	Other glycan degradation	SARC	0.320436196
CDA	Other types of o-glycan b	SARC	0.285814302
CDA	Oxidative phosphorylatio	SARC	0.199742947
CDA	P53_pathway	SARC	0.365633546
CDA	P53_signaling_pathway	SARC	0.01344191
CDA	Pantothenate and coa bios	SARC	0.21168334
CDA	Pentose and glucuronate i	SARC	0.172216927
CDA	Pentose phosphate pathwa	SARC	0.166392439
CDA	Pericyte	SARC	0.40066854
CDA	Phenylalanine metabolism	SARC	0.05091199
CDA	Phenylalanine, tyrosine ar	SARC	0.139722768
CDA	Phosphonate and phosphir	SARC	0.022938355
CDA	Pi3k_akt_activation	SARC	-0.063009372
CDA	Pi3k_akt_mtor_signaling	SARC	0.178686035
CDA	Porphyrin and chlorophyl	SARC	0.183808494
CDA	Primary bile acid biosynt	SARC	0.273216528
CDA	Propanoate metabolism	SARC	-0.277452162
CDA	Purine metabolism	SARC	0.20496078
CDA	Pyrimidine metabolism	SARC	0.191304023
CDA	Pyruvate metabolism	SARC	-0.169429323
CDA	Regulation_of_autophagy	SARC	-0.034091998
CDA	Retinol metabolism	SARC	0.267430792
CDA	Riboflavin metabolism	SARC	0.277486331
CDA	Schmahl_pdgf_signaling	SARC	-0.173597854

CDA	Selenocompound metabol	SARC	0.043854673
CDA	Signaling_by_hippo	SARC	-0.30674287
CDA	Sphingolipid metabolism	SARC	0.198663363
CDA	Starch and sucrose metabo	SARC	-0.088082761
CDA	Steroid biosynthesis	SARC	0.155566023
CDA	Steroid hormone biosynth	SARC	0.301404862
CDA	Sulfur metabolism	SARC	0.10541157
CDA	Synthesis and degradation	SARC	-0.137162008
CDA	T helper cell	SARC	0.369432161
CDA	T helper1 (th1) cell	SARC	0.370622954
CDA	T helper17 (th17) cell	SARC	0.308040616
CDA	T helper2 (th2) cell	SARC	0.364905713
CDA	T helper9 (th9) cell	SARC	0.331886855
CDA	Taurine and hypotaurine r	SARC	-0.051098907
CDA	Terpenoid backbone biosy	SARC	-0.032454774
CDA	Tgf_beta_signaling_pathw	SARC	-0.06062229
CDA	Thiamine metabolism	SARC	0.271103294
CDA	Tnfa_signaling_via_nfbk	SARC	0.317441402
CDA	Tryptophan metabolism	SARC	0.027611653
CDA	Tumor endothelial cell	SARC	0.278612406
CDA	Tyrosine metabolism	SARC	0.261010414
CDA	Ubiquinone and other ter	SARC	-0.034915405
CDA	Valine, leucine and isoleu	SARC	0.245351462
CDA	Valine, leucine and isoleu	SARC	-0.228081021
CDA	Vascular endothelial cell	SARC	0.355494683
CDA	Vascular smooth muscle c	SARC	-0.118012824
CDA	Vegf_signaling_pathway	SARC	0.227607706
CDA	Vitamin b6 metabolism	SARC	0.240064458
CDA	Willert_wnt_signaling	SARC	0.251392484
CDA	Wnt_beta_catenin_signali	SARC	0.001346315
UCK1	Abnormal plasma cell	SARC	0.043406726
UCK1	Activated b cell	SARC	-0.028941639
UCK1	Activated cd4+ t cell	SARC	-0.12008767
UCK1	Activated t cell	SARC	-0.057642816
UCK1	Alanine, aspartate and glu	SARC	0.008869984
UCK1	Alcala_apoptosis	SARC	0.158686406
UCK1	Alpha-linolenic acid meta	SARC	0.274509203
UCK1	Amino sugar and nucleoti	SARC	0.031288307
UCK1	Ampk_pathway	SARC	0.156978013
UCK1	Angiogenesis	SARC	-0.160413339
UCK1	Arachidonic acid metabo	SARC	0.169540614
UCK1	Arginine and proline met	SARC	0.181984593
UCK1	Arginine biosynthesis	SARC	-0.078069328

UCK1	Ascorbate and aldarate me	SARC	0.26470477
UCK1	Atypical memory b cell	SARC	-0.105454274
UCK1	Axl+siglec6+ dendritic ce	SARC	-0.052538981
UCK1	B cell	SARC	-0.121703911
UCK1	B1 cell	SARC	-0.022276768
UCK1	Basal cell	SARC	0.059144512
UCK1	Beta-alanine metabolism	SARC	0.196817001
UCK1	Biosynthesis of unsaturate	SARC	0.241531277
UCK1	Biotin metabolism	SARC	0.073633328
UCK1	Butanoate metabolism	SARC	0.392459036
UCK1	Caffeine metabolism	SARC	0.021245534
UCK1	Cancer stem cell	SARC	-0.326136919
UCK1	Cancer stem-like cell	SARC	-0.274541508
UCK1	Cd4+ cytotoxic t cell	SARC	0.069818177
UCK1	Cd4+ memory t cell	SARC	-0.040198386
UCK1	Cd4+ regulatory t cell	SARC	-0.11880416
UCK1	Cd4+ t helper cell	SARC	-0.045089838
UCK1	Cd4+cd25+ regulatory t c	SARC	-0.07132292
UCK1	Cd8+ cytotoxic t cell	SARC	0.002823543
UCK1	Cd8+ regulatory t cell	SARC	-0.080036451
UCK1	Cell_cycle	SARC	-0.054187274
UCK1	Chandran_metastasis_top5	SARC	-0.268607043
UCK1	Citrate cycle (tca cycle)	SARC	0.246855546
UCK1	Cysteine and methionine r	SARC	0.064171622
UCK1	Cytokine induced killer c	SARC	0.046917486
UCK1	D-arginine and d-ornithin	SARC	0.088439185
UCK1	D-glutamine and d-glutan	SARC	-0.355974995
UCK1	Dendritic cell	SARC	-0.117720306
UCK1	Dna_repair	SARC	0.264412873
UCK1	Dna_replication	SARC	0.25995014
UCK1	Double-negative memory	SARC	0.011597968
UCK1	Drug metabolism - cytoch	SARC	0.325947061
UCK1	Drug metabolism - other	SARC	0.339708829
UCK1	E2f_targets	SARC	0.052332499
UCK1	Ecm_receptor_interaction	SARC	-0.148825302
UCK1	Effector cd4+ memory t (	SARC	-0.119064737
UCK1	Effector cd8+ memory t (	SARC	-0.067493363
UCK1	Effector memory t cell	SARC	-0.08177808
UCK1	Effector regulatory t (treg	SARC	-0.207710096
UCK1	Elvidge_hif1a_targets_up	SARC	-0.228144161
UCK1	Endothelial cell	SARC	-0.29880592
UCK1	Eosinophil	SARC	-0.073197643
UCK1	Ether lipid metabolism	SARC	-0.062152538

UCK1	Exhausted cd4+ t cell	SARC	-0.056722991
UCK1	Exhausted cd8+ t cell	SARC	-0.097433572
UCK1	Exhausted t cell	SARC	0.003049112
UCK1	Fat cell (adipocyte)	SARC	0.176347065
UCK1	Fatty acid biosynthesis	SARC	0.030937239
UCK1	Fatty acid degradation	SARC	0.317900428
UCK1	Fatty acid elongation	SARC	0.248981572
UCK1	Fibroblast	SARC	-0.22057966
UCK1	Folate biosynthesis	SARC	0.405115504
UCK1	Follicular b cell	SARC	-0.113086871
UCK1	Follicular dendritic cell	SARC	-0.168504685
UCK1	Follicular helper (tfh) t ce	SARC	-0.078222616
UCK1	Follicular t cell	SARC	0.074047609
UCK1	Foxp3+il-17+ t cell	SARC	-0.071554489
UCK1	Fructose and mannose me	SARC	0.197655517
UCK1	G2m_checkpoint	SARC	-0.061523457
UCK1	Galactose metabolism	SARC	0.109763186
UCK1	Galie_tumor_stemness_ge	SARC	-0.250866336
UCK1	Glutathione metabolism	SARC	0.165784983
UCK1	Glycerolipid metabolism	SARC	0.236217401
UCK1	Glycerophospholipid metæ	SARC	0.218788122
UCK1	Glycine, serine and threor	SARC	0.351625168
UCK1	Glycolysis / gluconeogene	SARC	0.281067477
UCK1	Glycosaminoglycan biosy1	SARC	-0.135212357
UCK1	Glycosaminoglycan biosy1	SARC	-0.293516808
UCK1	Glycosaminoglycan biosy1	SARC	-0.084206244
UCK1	Glycosaminoglycan degra	SARC	-0.00979515
UCK1	Glycosphingolipid biosyn1	SARC	0.046188457
UCK1	Glycosphingolipid biosyn1	SARC	-0.003226612
UCK1	Glycosphingolipid biosyn1	SARC	-0.005207551
UCK1	Glycosylphosphatidylinos:	SARC	0.135159162
UCK1	Glyoxylate and dicarboxy	SARC	0.350020451
UCK1	Granulocyte	SARC	-0.124436805
UCK1	Hedgehog_signaling	SARC	-0.217725715
UCK1	Histidine metabolism	SARC	0.25760612
UCK1	Hypoxia	SARC	0.022137944
UCK1	Il-17ralpha t cell	SARC	-0.026450336
UCK1	Il2_stat5_signaling	SARC	-0.136484625
UCK1	Il6_jak_stat3_signaling	SARC	-0.146201857
UCK1	Immune_checkpoints_tunr	SARC	0.05338649
UCK1	Immune_inhibition_cytok	SARC	-0.002657536
UCK1	Inositol phosphate metabo	SARC	-0.18546984
UCK1	Interleukin_6_signaling	SARC	-0.344982409

UCK1	Jaeger_metastasis_up	SARC	0.018618942
UCK1	Jain_nfkb_signaling	SARC	0.050197777
UCK1	Kras_signaling_up	SARC	-0.206435189
UCK1	Linoleic acid metabolism	SARC	0.231882988
UCK1	Lipoic acid metabolism	SARC	0.128293406
UCK1	Lysine degradation	SARC	0.109165047
UCK1	Lysosome	SARC	-0.040387871
UCK1	M1 macrophage	SARC	-0.101309294
UCK1	M2 macrophage	SARC	-0.109263192
UCK1	Mannose type o-glycan bi	SARC	0.051755246
UCK1	Mapk_signaling_pathway	SARC	-0.220571979
UCK1	Mapk3_erk1_activation	SARC	-0.364294141
UCK1	Marginal zone b cell	SARC	-0.142023927
UCK1	Memory b cell	SARC	-0.071762582
UCK1	Mesenchymal cell	SARC	-0.246298442
UCK1	Mesenchymal stem cell	SARC	-0.190833654
UCK1	Metabolism of xenobiotic	SARC	0.394117688
UCK1	Migrating cancer stem cel	SARC	0.044042992
UCK1	Mitotic_spindle	SARC	-0.265152608
UCK1	Monocyte	SARC	-0.052645354
UCK1	Mtor_signaling_pathway	SARC	-0.105423061
UCK1	Mtorc1_signaling	SARC	-0.026164808
UCK1	Mucin type o-glycan biosy	SARC	-0.375870311
UCK1	Myc_targets_v1	SARC	0.103459262
UCK1	Myeloid cell	SARC	-0.144784555
UCK1	N-glycan biosynthesis	SARC	-0.192620361
UCK1	Naive b cell	SARC	-0.059584206
UCK1	Naive cd4+ t cell	SARC	-0.236725746
UCK1	Naive cd8+ t cell	SARC	-0.201422644
UCK1	Natural killer cell	SARC	-0.070104586
UCK1	Natural killer t (nkt) cell	SARC	-0.002879839
UCK1	Natural regulatory t (treg)	SARC	-0.10905441
UCK1	Neomycin, kanamycin and	SARC	0.029641656
UCK1	Neutrophil	SARC	-0.098378798
UCK1	Nicotinate and nicotinami	SARC	0.009343347
UCK1	Nitrogen metabolism	SARC	0.086161228
UCK1	Nod_like_receptor_signal	SARC	-0.165980999
UCK1	Notch_signaling	SARC	-0.242325177
UCK1	One carbon pool by folate	SARC	0.300569021
UCK1	Other glycan degradation	SARC	-0.035215454
UCK1	Other types of o-glycan b	SARC	-0.080208033
UCK1	Oxidative phosphorylatio	SARC	0.458520092
UCK1	P53_pathway	SARC	-0.001308252

UCK1	P53_signaling_pathway	SARC	-0.27983722
UCK1	Pantothenate and coa bios	SARC	-0.068638779
UCK1	Pentose and glucuronate i	SARC	0.127677798
UCK1	Pentose phosphate pathwa	SARC	0.169223135
UCK1	Pericyte	SARC	-0.240388971
UCK1	Phenylalanine metabolism	SARC	0.384958215
UCK1	Phenylalanine, tyrosine ar	SARC	0.152996583
UCK1	Phosphonate and phosphir	SARC	0.104390908
UCK1	Pi3k_akt_activation	SARC	-0.205463133
UCK1	Pi3k_akt_mtor_signaling	SARC	-0.075542279
UCK1	Porphyrin and chlorophyl	SARC	0.241557186
UCK1	Primary bile acid biosynt	SARC	0.098929456
UCK1	Propanoate metabolism	SARC	0.137956275
UCK1	Purine metabolism	SARC	0.055504612
UCK1	Pyrimidine metabolism	SARC	0.108834435
UCK1	Pyruvate metabolism	SARC	0.400488736
UCK1	Regulation_of_autophagy	SARC	0.195340211
UCK1	Retinol metabolism	SARC	0.229858536
UCK1	Riboflavin metabolism	SARC	0.078429478
UCK1	Schmahl_pdgf_signaling	SARC	-0.171014667
UCK1	Selenocompound metabol	SARC	-0.315481627
UCK1	Signaling_by_hippo	SARC	-0.320220914
UCK1	Sphingolipid metabolism	SARC	-0.274764372
UCK1	Starch and sucrose metabo	SARC	0.245444568
UCK1	Steroid biosynthesis	SARC	0.094162093
UCK1	Steroid hormone biosynth	SARC	0.140242143
UCK1	Sulfur metabolism	SARC	-0.113619517
UCK1	Synthesis and degradation	SARC	0.354118413
UCK1	T helper cell	SARC	-0.102481863
UCK1	T helper1 (th1) cell	SARC	-0.067747402
UCK1	T helper17 (th17) cell	SARC	-0.086663094
UCK1	T helper2 (th2) cell	SARC	-0.04831613
UCK1	T helper9 (th9) cell	SARC	-0.053431276
UCK1	Taurine and hypotaurine r	SARC	0.081442632
UCK1	Terpenoid backbone biosy	SARC	0.106192967
UCK1	Tgf_beta_signaling_pathw	SARC	-0.451645896
UCK1	Thiamine metabolism	SARC	0.28495376
UCK1	Tnfa_signaling_via_nfk	SARC	-0.123203378
UCK1	Tryptophan metabolism	SARC	0.299644963
UCK1	Tumor endothelial cell	SARC	-0.064056041
UCK1	Tyrosine metabolism	SARC	0.330685137
UCK1	Ubiquinone and other ter	SARC	0.291941973
UCK1	Valine, leucine and isoleu	SARC	0.172214763

UCK1	Valine, leucine and isoleu	SARC	0.279266096
UCK1	Vascular endothelial cell	SARC	-0.141982403
UCK1	Vascular smooth muscle c	SARC	0.208350541
UCK1	Vegf_signaling_pathway	SARC	-0.157857558
UCK1	Vitamin b6 metabolism	SARC	0.153539857
UCK1	Willert_wnt_signaling	SARC	-0.12520227
UCK1	Wnt_beta_catenin_signali	SARC	-0.310791873
UCK2	Abnormal plasma cell	SARC	-0.033630918
UCK2	Activated b cell	SARC	0.179279787
UCK2	Activated cd4+ t cell	SARC	0.172960949
UCK2	Activated t cell	SARC	0.146475964
UCK2	Alanine, aspartate and glu	SARC	-0.011437709
UCK2	Alcala_apoptosis	SARC	0.368722701
UCK2	Alpha-linolenic acid meta	SARC	-0.186361552
UCK2	Amino sugar and nucleoti	SARC	0.452371533
UCK2	Ampk_pathway	SARC	-0.158299631
UCK2	Angiogenesis	SARC	0.205485013
UCK2	Arachidonic acid metabol	SARC	0.004032904
UCK2	Arginine and proline metæ	SARC	0.114124609
UCK2	Arginine biosynthesis	SARC	-0.015591267
UCK2	Ascorbate and aldarate me	SARC	0.052568066
UCK2	Atypical memory b cell	SARC	0.253494666
UCK2	Axl+siglec6+ dendritic ce	SARC	-0.052835087
UCK2	B cell	SARC	0.125324906
UCK2	B1 cell	SARC	0.049852681
UCK2	Basal cell	SARC	0.312141309
UCK2	Beta-alanine metabolism	SARC	-0.247711143
UCK2	Biosynthesis of unsaturate	SARC	0.041408288
UCK2	Biotin metabolism	SARC	0.070328889
UCK2	Butanoate metabolism	SARC	-0.267977316
UCK2	Caffeine metabolism	SARC	0.024527703
UCK2	Cancer stem cell	SARC	0.175529114
UCK2	Cancer stem-like cell	SARC	0.27934984
UCK2	Cd4+ cytotoxic t cell	SARC	0.078264085
UCK2	Cd4+ memory t cell	SARC	0.061786469
UCK2	Cd4+ regulatory t cell	SARC	0.195709221
UCK2	Cd4+ t helper cell	SARC	0.13271431
UCK2	Cd4+cd25+ regulatory t c	SARC	0.144518768
UCK2	Cd8+ cytotoxic t cell	SARC	0.126573258
UCK2	Cd8+ regulatory t cell	SARC	0.142203719
UCK2	Cell_cycle	SARC	0.244560827
UCK2	Chandran_metastasis_topç	SARC	0.171075986
UCK2	Citrate cycle (tca cycle)	SARC	0.125474413

UCK2	Cysteine and methionine r	SARC	0.377561858
UCK2	Cytokine induced killer c	SARC	-0.042091968
UCK2	D-arginine and d-ornithin	SARC	0.006100522
UCK2	D-glutamine and d-glutan	SARC	-0.115807394
UCK2	Dendritic cell	SARC	0.168968076
UCK2	Dna_repair	SARC	0.436139459
UCK2	Dna_replication	SARC	0.324815861
UCK2	Double-negative memory	SARC	0.053972165
UCK2	Drug metabolism - cytoch	SARC	-0.167756248
UCK2	Drug metabolism - other c	SARC	0.409010913
UCK2	E2f_targets	SARC	0.297641634
UCK2	Ecm_receptor_interaction	SARC	0.012183083
UCK2	Effector cd4+ memory t (	SARC	0.068714883
UCK2	Effector cd8+ memory t (	SARC	0.149843347
UCK2	Effector memory t cell	SARC	0.104108719
UCK2	Effector regulatory t (treg	SARC	0.208740684
UCK2	Elvidge_hif1a_targets_up	SARC	0.308314957
UCK2	Endothelial cell	SARC	0.072386903
UCK2	Eosinophil	SARC	0.185361248
UCK2	Ether lipid metabolism	SARC	-0.159285842
UCK2	Exhausted cd4+ t cell	SARC	0.10443377
UCK2	Exhausted cd8+ t cell	SARC	0.137035965
UCK2	Exhausted t cell	SARC	0.120393458
UCK2	Fat cell (adipocyte)	SARC	-0.229791249
UCK2	Fatty acid biosynthesis	SARC	-0.032008543
UCK2	Fatty acid degradation	SARC	-0.313560023
UCK2	Fatty acid elongation	SARC	0.193083226
UCK2	Fibroblast	SARC	0.172981098
UCK2	Folate biosynthesis	SARC	0.178402261
UCK2	Follicular b cell	SARC	0.060074764
UCK2	Follicular dendritic cell	SARC	0.086632412
UCK2	Follicular helper (tfh) t ce	SARC	0.179297757
UCK2	Follicular t cell	SARC	0.104025669
UCK2	Foxp3+il-17+ t cell	SARC	0.158761908
UCK2	Fructose and mannose me	SARC	0.388796067
UCK2	G2m_checkpoint	SARC	0.257316407
UCK2	Galactose metabolism	SARC	0.327461053
UCK2	Galie_tumor_stemness_ge	SARC	0.113095401
UCK2	Glutathione metabolism	SARC	0.390666762
UCK2	Glycerolipid metabolism	SARC	0.038912861
UCK2	Glycerophospholipid met	SARC	-0.082532681
UCK2	Glycine, serine and threor	SARC	0.049802244
UCK2	Glycolysis / gluconeogene	SARC	0.218036822

UCK2	Glycosaminoglycan biosyn	SARC	0.244710381
UCK2	Glycosaminoglycan biosyn	SARC	0.164753269
UCK2	Glycosaminoglycan biosyn	SARC	0.335727548
UCK2	Glycosaminoglycan degra	SARC	0.160125541
UCK2	Glycosphingolipid biosyn	SARC	0.158531852
UCK2	Glycosphingolipid biosyn	SARC	0.064906549
UCK2	Glycosphingolipid biosyn	SARC	0.024323541
UCK2	Glycosylphosphatidylinos	SARC	0.179539887
UCK2	Glyoxylate and dicarboxy	SARC	0.076283473
UCK2	Granulocyte	SARC	0.268457933
UCK2	Hedgehog_signaling	SARC	-0.121030595
UCK2	Histidine metabolism	SARC	-0.359338567
UCK2	Hypoxia	SARC	0.294561057
UCK2	Il-17alpha t cell	SARC	0.110451052
UCK2	Il2_stat5_signaling	SARC	0.219784534
UCK2	Il6_jak_stat3_signaling	SARC	0.175974431
UCK2	Immune_checkpoints_tun	SARC	0.21729763
UCK2	Immune_inhibition_cytok	SARC	0.202967993
UCK2	Inositol phosphate metabo	SARC	-0.393749596
UCK2	Interleukin_6_signaling	SARC	-0.15624322
UCK2	Jaeger_metastasis_up	SARC	0.376520863
UCK2	Jain_nfkb_signaling	SARC	0.46071811
UCK2	Kras_signaling_up	SARC	0.094545976
UCK2	Linoleic acid metabolism	SARC	-0.184720533
UCK2	Lipoic acid metabolism	SARC	-0.173402149
UCK2	Lysine degradation	SARC	-0.267908561
UCK2	Lysosome	SARC	0.184039471
UCK2	M1 macrophage	SARC	0.190849574
UCK2	M2 macrophage	SARC	0.160452359
UCK2	Mannose type o-glycan bi	SARC	0.0766184
UCK2	Mapk_signaling_pathway	SARC	-0.029184412
UCK2	Mapk3_erk1_activation	SARC	-0.123379429
UCK2	Marginal zone b cell	SARC	0.049563499
UCK2	Memory b cell	SARC	0.080807448
UCK2	Mesenchymal cell	SARC	0.257013002
UCK2	Mesenchymal stem cell	SARC	0.145143695
UCK2	Metabolism of xenobiotic	SARC	-0.076336551
UCK2	Migrating cancer stem cel	SARC	0.257457594
UCK2	Mitotic_spindle	SARC	-0.027679552
UCK2	Monocyte	SARC	0.214876674
UCK2	Mtor_signaling_pathway	SARC	-0.180280424
UCK2	Mtorc1_signaling	SARC	0.54656769
UCK2	Mucin type o-glycan bios	SARC	0.143072329

UCK2	Myc_targets_v1	SARC	0.579333457
UCK2	Myeloid cell	SARC	0.171568485
UCK2	N-glycan biosynthesis	SARC	0.416898638
UCK2	Naive b cell	SARC	0.076880053
UCK2	Naive cd4+ t cell	SARC	0.066902387
UCK2	Naive cd8+ t cell	SARC	-0.119337523
UCK2	Natural killer cell	SARC	0.175171766
UCK2	Natural killer t (nkt) cell	SARC	0.341853597
UCK2	Natural regulatory t (treg)	SARC	0.147583208
UCK2	Neomycin, kanamycin and	SARC	0.315472435
UCK2	Neutrophil	SARC	0.289120797
UCK2	Nicotinate and nicotinami	SARC	0.018945526
UCK2	Nitrogen metabolism	SARC	-0.032735232
UCK2	Nod_like_receptor_signal	SARC	0.184629498
UCK2	Notch_signaling	SARC	0.123686243
UCK2	One carbon pool by folate	SARC	0.00887871
UCK2	Other glycan degradation	SARC	0.121157969
UCK2	Other types of o-glycan b	SARC	0.267232785
UCK2	Oxidative phosphorylatio	SARC	0.189609064
UCK2	P53_pathway	SARC	0.125998095
UCK2	P53_signaling_pathway	SARC	0.030759223
UCK2	Pantothenate and coa bios	SARC	0.142251277
UCK2	Pentose and glucuronate in	SARC	0.298167642
UCK2	Pentose phosphate pathwa	SARC	0.322301191
UCK2	Pericyte	SARC	0.188177277
UCK2	Phenylalanine metabolism	SARC	-0.232198196
UCK2	Phenylalanine, tyrosine ar	SARC	0.139566044
UCK2	Phosphonate and phosphir	SARC	0.051999104
UCK2	Pi3k_akt_activation	SARC	-0.119912345
UCK2	Pi3k_akt_mtor_signaling	SARC	0.242230381
UCK2	Porphyrin and chlorophyl	SARC	0.333484697
UCK2	Primary bile acid biosynt	SARC	-0.047625672
UCK2	Propanoate metabolism	SARC	-0.280385015
UCK2	Purine metabolism	SARC	0.556835533
UCK2	Pyrimidine metabolism	SARC	0.571103211
UCK2	Pyruvate metabolism	SARC	-0.061881479
UCK2	Regulation_of_autophagy	SARC	-0.054477805
UCK2	Retinol metabolism	SARC	-0.101551433
UCK2	Riboflavin metabolism	SARC	0.325146182
UCK2	Schmahl_pdgf_signaling	SARC	-0.138428974
UCK2	Selenocompound metabol	SARC	0.152761107
UCK2	Signaling_by_hippo	SARC	-0.09221921
UCK2	Sphingolipid metabolism	SARC	0.027998979

UCK2	Starch and sucrose metabo	SARC	0.004339082
UCK2	Steroid biosynthesis	SARC	0.322703682
UCK2	Steroid hormone biosynth	SARC	0.000393875
UCK2	Sulfur metabolism	SARC	0.072651352
UCK2	Synthesis and degradation	SARC	-0.013392635
UCK2	T helper cell	SARC	0.136901815
UCK2	T helper1 (th1) cell	SARC	0.161751882
UCK2	T helper17 (th17) cell	SARC	0.178718385
UCK2	T helper2 (th2) cell	SARC	0.073013061
UCK2	T helper9 (th9) cell	SARC	0.133003808
UCK2	Taurine and hypotaurine r	SARC	-0.19240933
UCK2	Terpenoid backbone biosy	SARC	0.329104902
UCK2	Tgf_beta_signaling_pathw	SARC	-0.077579748
UCK2	Thiamine metabolism	SARC	0.337601629
UCK2	Tnfa_signaling_via_nfkb	SARC	0.233037123
UCK2	Tryptophan metabolism	SARC	-0.249661164
UCK2	Tumor endothelial cell	SARC	0.410087952
UCK2	Tyrosine metabolism	SARC	-0.259634927
UCK2	Ubiquinone and other terp	SARC	0.047532173
UCK2	Valine, leucine and isoleu	SARC	0.365740449
UCK2	Valine, leucine and isoleu	SARC	-0.224304581
UCK2	Vascular endothelial cell	SARC	0.011293221
UCK2	Vascular smooth muscle c	SARC	-0.218606314
UCK2	Vegf_signaling_pathway	SARC	0.143447805
UCK2	Vitamin b6 metabolism	SARC	0.173213186
UCK2	Willert_wnt_signaling	SARC	0.355338923
UCK2	Wnt_beta_catenin_signali	SARC	0.086855101
UCKL1	Abnormal plasma cell	SARC	-0.07477958
UCKL1	Activated b cell	SARC	0.055854551
UCKL1	Activated cd4+ t cell	SARC	-0.029442355
UCKL1	Activated t cell	SARC	0.031167968
UCKL1	Alanine, aspartate and glu	SARC	-0.000365791
UCKL1	Alcala_apoptosis	SARC	0.249473632
UCKL1	Alpha-linolenic acid meta	SARC	0.043697839
UCKL1	Amino sugar and nucleoti	SARC	-0.011369323
UCKL1	Ampk_pathway	SARC	-0.053591214
UCKL1	Angiogenesis	SARC	-0.106333411
UCKL1	Arachidonic acid metabol	SARC	0.162627122
UCKL1	Arginine and proline metε	SARC	-0.011693806
UCKL1	Arginine biosynthesis	SARC	0.067241542
UCKL1	Ascorbate and aldarate mε	SARC	-0.163540018
UCKL1	Atypical memory b cell	SARC	0.074646722
UCKL1	Axl+siglec6+ dendritic ce	SARC	-0.085285514

UCKL1	B cell	SARC	-0.001774754
UCKL1	B1 cell	SARC	0.009932137
UCKL1	Basal cell	SARC	0.056751778
UCKL1	Beta-alanine metabolism	SARC	-0.144234409
UCKL1	Biosynthesis of unsaturate	SARC	-0.122106477
UCKL1	Biotin metabolism	SARC	-0.108066371
UCKL1	Butanoate metabolism	SARC	-0.002174108
UCKL1	Caffeine metabolism	SARC	-0.143965155
UCKL1	Cancer stem cell	SARC	-0.087612223
UCKL1	Cancer stem-like cell	SARC	-0.051034234
UCKL1	Cd4+ cytotoxic t cell	SARC	-0.045448899
UCKL1	Cd4+ memory t cell	SARC	-0.017193089
UCKL1	Cd4+ regulatory t cell	SARC	0.041998956
UCKL1	Cd4+ t helper cell	SARC	0.013053989
UCKL1	Cd4+cd25+ regulatory t c	SARC	0.015147789
UCKL1	Cd8+ cytotoxic t cell	SARC	0.042682386
UCKL1	Cd8+ regulatory t cell	SARC	0.025146981
UCKL1	Cell_cycle	SARC	-0.073603617
UCKL1	Chandran_metastasis_top	SARC	-0.099910982
UCKL1	Citrate cycle (tca cycle)	SARC	0.084640794
UCKL1	Cysteine and methionine r	SARC	0.034466296
UCKL1	Cytokine induced killer c	SARC	0.012520659
UCKL1	D-arginine and d-ornithin	SARC	0.118129418
UCKL1	D-glutamine and d-glutan	SARC	-0.24424301
UCKL1	Dendritic cell	SARC	0.002752507
UCKL1	Dna_repair	SARC	0.336541633
UCKL1	Dna_replication	SARC	0.034199329
UCKL1	Double-negative memory	SARC	0.129544013
UCKL1	Drug metabolism - cytoch	SARC	-0.024928828
UCKL1	Drug metabolism - other	SARC	0.151954371
UCKL1	E2f_targets	SARC	-0.01076313
UCKL1	Ecm_receptor_interaction	SARC	-0.354450842
UCKL1	Effector cd4+ memory t (	SARC	-0.069752276
UCKL1	Effector cd8+ memory t (	SARC	-0.038980836
UCKL1	Effector memory t cell	SARC	-0.02507581
UCKL1	Effector regulatory t (treg	SARC	0.001767964
UCKL1	Elvidge_hif1a_targets_up	SARC	-0.173972213
UCKL1	Endothelial cell	SARC	-0.112135317
UCKL1	Eosinophil	SARC	-0.001627546
UCKL1	Ether lipid metabolism	SARC	0.031471049
UCKL1	Exhausted cd4+ t cell	SARC	-0.124670807
UCKL1	Exhausted cd8+ t cell	SARC	-0.045474756
UCKL1	Exhausted t cell	SARC	0.064236683

UCKL1	Fat cell (adipocyte)	SARC	0.089182976
UCKL1	Fatty acid biosynthesis	SARC	-0.111656325
UCKL1	Fatty acid degradation	SARC	-0.01212392
UCKL1	Fatty acid elongation	SARC	0.08581294
UCKL1	Fibroblast	SARC	-0.122869094
UCKL1	Folate biosynthesis	SARC	0.073482223
UCKL1	Follicular b cell	SARC	0.051108617
UCKL1	Follicular dendritic cell	SARC	0.018778386
UCKL1	Follicular helper (tfh) t ce	SARC	-0.017079775
UCKL1	Follicular t cell	SARC	0.132445838
UCKL1	Foxp3+il-17+ t cell	SARC	0.082842148
UCKL1	Fructose and mannose me	SARC	0.18637735
UCKL1	G2m_checkpoint	SARC	-0.088674184
UCKL1	Galactose metabolism	SARC	0.085854939
UCKL1	Galie_tumor_stemness_ge	SARC	-0.071076456
UCKL1	Glutathione metabolism	SARC	0.131296728
UCKL1	Glycerolipid metabolism	SARC	-0.085717316
UCKL1	Glycerophospholipid metæ	SARC	0.130736107
UCKL1	Glycine, serine and threor	SARC	0.070535678
UCKL1	Glycolysis / gluconeogene	SARC	0.103006715
UCKL1	Glycosaminoglycan biosy1	SARC	0.053366077
UCKL1	Glycosaminoglycan biosy1	SARC	0.041218312
UCKL1	Glycosaminoglycan biosy1	SARC	-0.077997844
UCKL1	Glycosaminoglycan degra	SARC	-0.081732738
UCKL1	Glycosphingolipid biosyn1	SARC	-0.145719142
UCKL1	Glycosphingolipid biosyn1	SARC	-0.003780404
UCKL1	Glycosphingolipid biosyn1	SARC	-0.049617175
UCKL1	Glycosylphosphatidylinos:	SARC	0.038102887
UCKL1	Glyoxylate and dicarboxy	SARC	0.201137224
UCKL1	Granulocyte	SARC	0.017294522
UCKL1	Hedgehog_signaling	SARC	-0.264694768
UCKL1	Histidine metabolism	SARC	-0.101423629
UCKL1	Hypoxia	SARC	-0.077228396
UCKL1	Il-17alpha t cell	SARC	0.003331857
UCKL1	Il2_stat5_signaling	SARC	-0.107224885
UCKL1	Il6_jak_stat3_signaling	SARC	-0.066839376
UCKL1	Immune_checkpoints_tur	SARC	-0.027473947
UCKL1	Immune_inhibition_cytok	SARC	0.055936475
UCKL1	Inositol phosphate metabo	SARC	-0.396654875
UCKL1	Interleukin_6_signaling	SARC	-0.421253818
UCKL1	Jaeger_metastasis_up	SARC	-0.114147723
UCKL1	Jain_nfkb_signaling	SARC	0.089603471
UCKL1	Kras_signaling_up	SARC	-0.102784045

UCKL1	Linoleic acid metabolism	SARC	0.103997913
UCKL1	Lipoic acid metabolism	SARC	0.15452357
UCKL1	Lysine degradation	SARC	-0.184177304
UCKL1	Lysosome	SARC	0.009981455
UCKL1	M1 macrophage	SARC	-0.013163962
UCKL1	M2 macrophage	SARC	0.01784371
UCKL1	Mannose type o-glycan bi	SARC	0.079417401
UCKL1	Mapk_signaling_pathway	SARC	-0.312451958
UCKL1	Mapk3_erk1_activation	SARC	-0.340144423
UCKL1	Marginal zone b cell	SARC	-0.002948069
UCKL1	Memory b cell	SARC	-0.024523482
UCKL1	Mesenchymal cell	SARC	0.019405768
UCKL1	Mesenchymal stem cell	SARC	-0.187260106
UCKL1	Metabolism of xenobiotic	SARC	0.073874818
UCKL1	Migrating cancer stem cel	SARC	-0.083759631
UCKL1	Mitotic_spindle	SARC	-0.296106747
UCKL1	Monocyte	SARC	0.03321819
UCKL1	Mtor_signaling_pathway	SARC	-0.258528288
UCKL1	Mtorc1_signaling	SARC	-0.011999337
UCKL1	Mucin type o-glycan biosy	SARC	-0.271168535
UCKL1	Myc_targets_v1	SARC	0.232995569
UCKL1	Myeloid cell	SARC	-0.013676594
UCKL1	N-glycan biosynthesis	SARC	-0.097658975
UCKL1	Naive b cell	SARC	0.047497687
UCKL1	Naive cd4+ t cell	SARC	0.014334468
UCKL1	Naive cd8+ t cell	SARC	0.094219899
UCKL1	Natural killer cell	SARC	-0.000714518
UCKL1	Natural killer t (nkt) cell	SARC	0.133493892
UCKL1	Natural regulatory t (treg)	SARC	-0.017678861
UCKL1	Neomycin, kanamycin and	SARC	0.141170889
UCKL1	Neutrophil	SARC	0.02663741
UCKL1	Nicotinate and nicotinami	SARC	-0.106951517
UCKL1	Nitrogen metabolism	SARC	-0.197551067
UCKL1	Nod_like_receptor_signal	SARC	-0.031524044
UCKL1	Notch_signaling	SARC	0.032879564
UCKL1	One carbon pool by folate	SARC	-0.05517583
UCKL1	Other glycan degradation	SARC	0.053117077
UCKL1	Other types of o-glycan b	SARC	0.146060178
UCKL1	Oxidative phosphorylatior	SARC	0.285389119
UCKL1	P53_pathway	SARC	0.041939452
UCKL1	P53_signaling_pathway	SARC	-0.210068151
UCKL1	Pantothenate and coa bios	SARC	-0.01950856
UCKL1	Pentose and glucuronate in	SARC	-0.008653547

UCKL1	Pentose phosphate pathwa	SARC	0.109197126
UCKL1	Pericyte	SARC	-0.040821337
UCKL1	Phenylalanine metabolism	SARC	-0.034029045
UCKL1	Phenylalanine, tyrosine ar	SARC	0.245343374
UCKL1	Phosphonate and phosphir	SARC	-0.04190835
UCKL1	Pi3k_akt_activation	SARC	-0.299165564
UCKL1	Pi3k_akt_mtor_signaling	SARC	-0.142852187
UCKL1	Porphyrin and chlorophyl	SARC	0.075145705
UCKL1	Primary bile acid biosynt	SARC	0.041648103
UCKL1	Propanoate metabolism	SARC	-0.02816436
UCKL1	Purine metabolism	SARC	0.123997454
UCKL1	Pyrimidine metabolism	SARC	0.235182674
UCKL1	Pyruvate metabolism	SARC	0.036466245
UCKL1	Regulation_of_autophagy	SARC	-0.063584531
UCKL1	Retinol metabolism	SARC	0.020952143
UCKL1	Riboflavin metabolism	SARC	0.083176784
UCKL1	Schmahl_pdgf_signaling	SARC	-0.343590414
UCKL1	Selenocompound metabol	SARC	0.025653217
UCKL1	Signaling_by_hippo	SARC	-0.381581011
UCKL1	Sphingolipid metabolism	SARC	-0.215601094
UCKL1	Starch and sucrose metabo	SARC	-0.167365754
UCKL1	Steroid biosynthesis	SARC	0.136024315
UCKL1	Steroid hormone biosynth	SARC	0.007056998
UCKL1	Sulfur metabolism	SARC	-0.034190662
UCKL1	Synthesis and degradation	SARC	0.090329635
UCKL1	T helper cell	SARC	-0.028207428
UCKL1	T helper1 (th1) cell	SARC	-0.007297593
UCKL1	T helper17 (th17) cell	SARC	-0.036866758
UCKL1	T helper2 (th2) cell	SARC	0.007961872
UCKL1	T helper9 (th9) cell	SARC	0.041130435
UCKL1	Taurine and hypotaurine r	SARC	0.167109747
UCKL1	Terpenoid backbone biosy	SARC	0.009231636
UCKL1	Tgf_beta_signaling_pathw	SARC	-0.309477958
UCKL1	Thiamine metabolism	SARC	0.170177889
UCKL1	Tnfa_signaling_via_nfkb	SARC	-0.038627404
UCKL1	Tryptophan metabolism	SARC	-0.077335471
UCKL1	Tumor endothelial cell	SARC	0.074660559
UCKL1	Tyrosine metabolism	SARC	0.059897017
UCKL1	Ubiquinone and other terç	SARC	0.101872971
UCKL1	Valine, leucine and isoleu	SARC	0.056051244
UCKL1	Valine, leucine and isoleu	SARC	-0.024824815
UCKL1	Vascular endothelial cell	SARC	-0.094409297
UCKL1	Vascular smooth muscle c	SARC	-0.327825888

UCKL1	Vegf_signaling_pathway	SARC	-0.116909149
UCKL1	Vitamin b6 metabolism	SARC	0.088539193
UCKL1	Willert_wnt_signaling	SARC	0.049936303
UCKL1	Wnt_beta_catenin_signali	SARC	0.057210941
UPP1	Abnormal plasma cell	SARC	-0.235529179
UPP1	Activated b cell	SARC	0.468473815
UPP1	Activated cd4+ t cell	SARC	0.450809795
UPP1	Activated t cell	SARC	0.399367564
UPP1	Alanine, aspartate and glu	SARC	-0.085726514
UPP1	Alcala_apoptosis	SARC	0.467343655
UPP1	Alpha-linolenic acid meta	SARC	0.246786121
UPP1	Amino sugar and nucleoti	SARC	0.518561051
UPP1	Ampk_pathway	SARC	-0.239155324
UPP1	Angiogenesis	SARC	0.303052885
UPP1	Arachidonic acid metaboli	SARC	0.368705905
UPP1	Arginine and proline metæ	SARC	0.262915363
UPP1	Arginine biosynthesis	SARC	0.014571652
UPP1	Ascorbate and aldarate mε	SARC	0.075573895
UPP1	Atypical memory b cell	SARC	0.380974947
UPP1	Axl+siglec6+ dendritic ce	SARC	0.323859112
UPP1	B cell	SARC	0.400313809
UPP1	B1 cell	SARC	0.331054036
UPP1	Basal cell	SARC	0.380963534
UPP1	Beta-alanine metabolism	SARC	0.020565632
UPP1	Biosynthesis of unsaturate	SARC	0.024690994
UPP1	Biotin metabolism	SARC	0.01356874
UPP1	Butanoate metabolism	SARC	-0.055520338
UPP1	Caffeine metabolism	SARC	0.024890912
UPP1	Cancer stem cell	SARC	0.180669069
UPP1	Cancer stem-like cell	SARC	0.205223812
UPP1	Cd4+ cytotoxic t cell	SARC	0.461340778
UPP1	Cd4+ memory t cell	SARC	0.333068628
UPP1	Cd4+ regulatory t cell	SARC	0.431670543
UPP1	Cd4+ t helper cell	SARC	0.449390279
UPP1	Cd4+cd25+ regulatory t c	SARC	0.446348952
UPP1	Cd8+ cytotoxic t cell	SARC	0.437784668
UPP1	Cd8+ regulatory t cell	SARC	0.361172425
UPP1	Cell_cycle	SARC	-0.083425603
UPP1	Chandran_metastasis_top5	SARC	-0.258544914
UPP1	Citrate cycle (tca cycle)	SARC	0.267380166
UPP1	Cysteine and methionine r	SARC	0.305064073
UPP1	Cytokine induced killer cε	SARC	0.128580901
UPP1	D-arginine and d-ornithin	SARC	0.187099094

UPP1	D-glutamine and d-glutan	SARC	-0.33984659
UPP1	Dendritic cell	SARC	0.429724638
UPP1	Dna_repair	SARC	0.354002655
UPP1	Dna_replication	SARC	0.181255786
UPP1	Double-negative memory	SARC	0.316426321
UPP1	Drug metabolism - cytoch	SARC	0.200766334
UPP1	Drug metabolism - other	SARC	0.472126959
UPP1	E2f_targets	SARC	-0.002874208
UPP1	Ecm_receptor_interaction	SARC	0.064635675
UPP1	Effector cd4+ memory t (	SARC	0.367278842
UPP1	Effector cd8+ memory t (	SARC	0.468694915
UPP1	Effector memory t cell	SARC	0.417587794
UPP1	Effector regulatory t (treg	SARC	0.420823254
UPP1	Elvidge_hif1a_targets_up	SARC	0.118062468
UPP1	Endothelial cell	SARC	0.119545013
UPP1	Eosinophil	SARC	0.512334373
UPP1	Ether lipid metabolism	SARC	0.196733417
UPP1	Exhausted cd4+ t cell	SARC	0.433767019
UPP1	Exhausted cd8+ t cell	SARC	0.454698039
UPP1	Exhausted t cell	SARC	0.429565822
UPP1	Fat cell (adipocyte)	SARC	0.007755532
UPP1	Fatty acid biosynthesis	SARC	0.119295979
UPP1	Fatty acid degradation	SARC	0.048380718
UPP1	Fatty acid elongation	SARC	0.134442188
UPP1	Fibroblast	SARC	0.321410258
UPP1	Folate biosynthesis	SARC	0.410350908
UPP1	Follicular b cell	SARC	0.34217378
UPP1	Follicular dendritic cell	SARC	0.193077956
UPP1	Follicular helper (tfh) t ce	SARC	0.440288664
UPP1	Follicular t cell	SARC	0.277925084
UPP1	Foxp3+il-17+ t cell	SARC	0.20129692
UPP1	Fructose and mannose me	SARC	0.454223792
UPP1	G2m_checkpoint	SARC	-0.107740714
UPP1	Galactose metabolism	SARC	0.50255402
UPP1	Galie_tumor_stemness_ge	SARC	-0.083606286
UPP1	Glutathione metabolism	SARC	0.551076933
UPP1	Glycerolipid metabolism	SARC	0.190724792
UPP1	Glycerophospholipid metæ	SARC	0.296072378
UPP1	Glycine, serine and threor	SARC	0.317996332
UPP1	Glycolysis / gluconeogene	SARC	0.404914637
UPP1	Glycosaminoglycan biosy	SARC	0.202793291
UPP1	Glycosaminoglycan biosy	SARC	-0.052302197
UPP1	Glycosaminoglycan biosy	SARC	0.159381395

UPP1	Glycosaminoglycan degra	SARC	0.324872507
UPP1	Glycosphingolipid biosyn	SARC	0.38480341
UPP1	Glycosphingolipid biosyn	SARC	0.298794091
UPP1	Glycosphingolipid biosyn	SARC	0.104386472
UPP1	Glycosylphosphatidylinos	SARC	0.046870741
UPP1	Glyoxylate and dicarboxy	SARC	0.24885996
UPP1	Granulocyte	SARC	0.52514069
UPP1	Hedgehog_signaling	SARC	-0.404838017
UPP1	Histidine metabolism	SARC	-0.03130921
UPP1	Hypoxia	SARC	0.452240698
UPP1	Il-17alpha t cell	SARC	0.402652946
UPP1	Il2_stat5_signaling	SARC	0.489180978
UPP1	Il6_jak_stat3_signaling	SARC	0.438431482
UPP1	Immune_checkpoints_tur	SARC	0.567852546
UPP1	Immune_inhibition_cytok	SARC	0.486513428
UPP1	Inositol phosphate metabo	SARC	-0.265341249
UPP1	Interleukin_6_signaling	SARC	-0.044800508
UPP1	Jaeger_metastasis_up	SARC	0.309138556
UPP1	Jain_nfkb_signaling	SARC	0.157999819
UPP1	Kras_signaling_up	SARC	0.40780661
UPP1	Linoleic acid metabolism	SARC	0.138506008
UPP1	Lipoic acid metabolism	SARC	-0.14445801
UPP1	Lysine degradation	SARC	-0.351586325
UPP1	Lysosome	SARC	0.51347806
UPP1	M1 macrophage	SARC	0.519280801
UPP1	M2 macrophage	SARC	0.455969544
UPP1	Mannose type o-glycan bi	SARC	-0.228143519
UPP1	Mapk_signaling_pathway	SARC	0.054759933
UPP1	Mapk3_erk1_activation	SARC	-0.055874756
UPP1	Marginal zone b cell	SARC	0.324389278
UPP1	Memory b cell	SARC	0.383678043
UPP1	Mesenchymal cell	SARC	0.117683114
UPP1	Mesenchymal stem cell	SARC	0.382682666
UPP1	Metabolism of xenobiotic	SARC	0.320611742
UPP1	Migrating cancer stem cel	SARC	0.263639289
UPP1	Mitotic_spindle	SARC	-0.26136281
UPP1	Monocyte	SARC	0.547765745
UPP1	Mtor_signaling_pathway	SARC	-0.080026476
UPP1	Mtorc1_signaling	SARC	0.455773857
UPP1	Mucin type o-glycan bios	SARC	0.039526798
UPP1	Myc_targets_v1	SARC	0.219923663
UPP1	Myeloid cell	SARC	0.457565429
UPP1	N-glycan biosynthesis	SARC	0.266216145

UPP1	Naive b cell	SARC	0.068716283
UPP1	Naive cd4+ t cell	SARC	0.261323386
UPP1	Naive cd8+ t cell	SARC	0.003495457
UPP1	Natural killer cell	SARC	0.467839809
UPP1	Natural killer t (nkt) cell	SARC	0.495097252
UPP1	Natural regulatory t (treg)	SARC	0.434354993
UPP1	Neomycin, kanamycin and	SARC	0.513840998
UPP1	Neutrophil	SARC	0.550073421
UPP1	Nicotinate and nicotinami	SARC	0.352435896
UPP1	Nitrogen metabolism	SARC	-0.116148632
UPP1	Nod_like_receptor_signal	SARC	0.427081567
UPP1	Notch_signaling	SARC	-0.027529265
UPP1	One carbon pool by folate	SARC	-0.080139251
UPP1	Other glycan degradation	SARC	0.391087187
UPP1	Other types of o-glycan b	SARC	0.187356239
UPP1	Oxidative phosphorylatio	SARC	0.474343022
UPP1	P53_pathway	SARC	0.42669691
UPP1	P53_signaling_pathway	SARC	-0.108634065
UPP1	Pantothenate and coa bios	SARC	0.400427348
UPP1	Pentose and glucuronate i	SARC	0.308296725
UPP1	Pentose phosphate pathwa	SARC	0.417874775
UPP1	Pericyte	SARC	0.194737098
UPP1	Phenylalanine metabolism	SARC	0.251213024
UPP1	Phenylalanine, tyrosine ar	SARC	0.350651405
UPP1	Phosphonate and phosphir	SARC	0.27525494
UPP1	Pi3k_akt_activation	SARC	-0.11472214
UPP1	Pi3k_akt_mtor_signaling	SARC	0.425581319
UPP1	Porphyrin and chlorophyl	SARC	0.360173049
UPP1	Primary bile acid biosynt	SARC	0.287890307
UPP1	Propanoate metabolism	SARC	-0.185879071
UPP1	Purine metabolism	SARC	0.204687289
UPP1	Pyrimidine metabolism	SARC	0.275461274
UPP1	Pyruvate metabolism	SARC	0.136969781
UPP1	Regulation_of_autophagy	SARC	0.337637633
UPP1	Retinol metabolism	SARC	0.220348136
UPP1	Riboflavin metabolism	SARC	0.465857513
UPP1	Schmahl_pdgf_signaling	SARC	-0.07321762
UPP1	Selenocompound metabol	SARC	-0.12729204
UPP1	Signaling_by_hippo	SARC	-0.304780041
UPP1	Sphingolipid metabolism	SARC	0.157234393
UPP1	Starch and sucrose metabo	SARC	0.386842988
UPP1	Steroid biosynthesis	SARC	0.199598497
UPP1	Steroid hormone biosynth	SARC	0.312234886

UPP1	Sulfur metabolism	SARC	-0.079355577
UPP1	Synthesis and degradation	SARC	0.152800738
UPP1	T helper cell	SARC	0.428318448
UPP1	T helper1 (th1) cell	SARC	0.463410709
UPP1	T helper17 (th17) cell	SARC	0.454344074
UPP1	T helper2 (th2) cell	SARC	0.42012222
UPP1	T helper9 (th9) cell	SARC	0.413512109
UPP1	Taurine and hypotaurine r	SARC	0.045150929
UPP1	Terpenoid backbone biosy	SARC	0.145561125
UPP1	Tgf_beta_signaling_pathw	SARC	-0.347004874
UPP1	Thiamine metabolism	SARC	0.40558146
UPP1	Tnfa_signaling_via_nfkb	SARC	0.474664635
UPP1	Tryptophan metabolism	SARC	0.164510782
UPP1	Tumor endothelial cell	SARC	0.369374241
UPP1	Tyrosine metabolism	SARC	0.222891092
UPP1	Ubiquinone and other terç	SARC	0.142078827
UPP1	Valine, leucine and isoleu	SARC	0.53630865
UPP1	Valine, leucine and isoleu	SARC	-0.062829623
UPP1	Vascular endothelial cell	SARC	0.292955277
UPP1	Vascular smooth muscle c	SARC	-0.087904817
UPP1	Vegf_signaling_pathway	SARC	0.23034053
UPP1	Vitamin b6 metabolism	SARC	0.257202359
UPP1	Willert_wnt_signaling	SARC	0.132264083
UPP1	Wnt_beta_catenin_signali	SARC	-0.334825881
UPP2	Abnormal plasma cell	SARC	0.03503837
UPP2	Activated b cell	SARC	-0.216178993
UPP2	Activated cd4+ t cell	SARC	-0.262873134
UPP2	Activated t cell	SARC	-0.251793352
UPP2	Alanine, aspartate and glu	SARC	0.01594163
UPP2	Alcala_apoptosis	SARC	-0.257216677
UPP2	Alpha-linolenic acid meta	SARC	-0.188935226
UPP2	Amino sugar and nucleoti	SARC	-0.223446444
UPP2	Ampk_pathway	SARC	0.11488292
UPP2	Angiogenesis	SARC	-0.056415717
UPP2	Arachidonic acid metabol	SARC	-0.134620371
UPP2	Arginine and proline metæ	SARC	-0.221947486
UPP2	Arginine biosynthesis	SARC	-0.086028125
UPP2	Ascorbate and aldarate mæ	SARC	-0.09043432
UPP2	Atypical memory b cell	SARC	-0.197610747
UPP2	Axl+siglec6+ dendritic ce	SARC	-0.206708195
UPP2	B cell	SARC	-0.239162872
UPP2	B1 cell	SARC	-0.239796223
UPP2	Basal cell	SARC	-0.19380602

UPP2	Beta-alanine metabolism	SARC	-0.192187654
UPP2	Biosynthesis of unsaturate	SARC	-0.16182776
UPP2	Biotin metabolism	SARC	-0.01716564
UPP2	Butanoate metabolism	SARC	-0.070530299
UPP2	Caffeine metabolism	SARC	-0.162390271
UPP2	Cancer stem cell	SARC	-0.119927132
UPP2	Cancer stem-like cell	SARC	-0.178261733
UPP2	Cd4+ cytotoxic t cell	SARC	-0.297636058
UPP2	Cd4+ memory t cell	SARC	-0.249032888
UPP2	Cd4+ regulatory t cell	SARC	-0.196114966
UPP2	Cd4+ t helper cell	SARC	-0.252985866
UPP2	Cd4+cd25+ regulatory t c	SARC	-0.246244445
UPP2	Cd8+ cytotoxic t cell	SARC	-0.27224562
UPP2	Cd8+ regulatory t cell	SARC	-0.209251449
UPP2	Cell_cycle	SARC	-0.016726547
UPP2	Chandran_metastasis_top5	SARC	0.111333232
UPP2	Citrate cycle (tca cycle)	SARC	-0.192602582
UPP2	Cysteine and methionine r	SARC	-0.132281783
UPP2	Cytokine induced killer c	SARC	-0.147281335
UPP2	D-arginine and d-ornithin	SARC	-0.070474346
UPP2	D-glutamine and d-glutan	SARC	0.095804261
UPP2	Dendritic cell	SARC	-0.216433507
UPP2	Dna_repair	SARC	-0.093506813
UPP2	Dna_replication	SARC	-0.110306928
UPP2	Double-negative memory	SARC	-0.20783417
UPP2	Drug metabolism - cytoch	SARC	-0.106836323
UPP2	Drug metabolism - other	SARC	-0.198653945
UPP2	E2f_targets	SARC	-0.06450255
UPP2	Ecm_receptor_interaction	SARC	-0.139122047
UPP2	Effector cd4+ memory t (	SARC	-0.243420185
UPP2	Effector cd8+ memory t (	SARC	-0.266706655
UPP2	Effector memory t cell	SARC	-0.255850733
UPP2	Effector regulatory t (treg	SARC	-0.208476217
UPP2	Elvidge_hif1a_targets_up	SARC	-0.207176214
UPP2	Endothelial cell	SARC	-0.125976102
UPP2	Eosinophil	SARC	-0.257063454
UPP2	Ether lipid metabolism	SARC	-0.094262676
UPP2	Exhausted cd4+ t cell	SARC	-0.295130111
UPP2	Exhausted cd8+ t cell	SARC	-0.27293441
UPP2	Exhausted t cell	SARC	-0.231913653
UPP2	Fat cell (adipocyte)	SARC	0.023012498
UPP2	Fatty acid biosynthesis	SARC	-0.09864464
UPP2	Fatty acid degradation	SARC	-0.130520893

UPP2	Fatty acid elongation	SARC	-0.093844414
UPP2	Fibroblast	SARC	-0.147660394
UPP2	Folate biosynthesis	SARC	-0.200438755
UPP2	Follicular b cell	SARC	-0.130663951
UPP2	Follicular dendritic cell	SARC	-0.11071723
UPP2	Follicular helper (tfh) t ce	SARC	-0.219650496
UPP2	Follicular t cell	SARC	-0.075197597
UPP2	Foxp3+il-17+ t cell	SARC	-0.135596464
UPP2	Fructose and mannose me	SARC	-0.197430147
UPP2	G2m_checkpoint	SARC	-0.040746184
UPP2	Galactose metabolism	SARC	-0.215916063
UPP2	Galie_tumor_stemness_ge	SARC	0.068852809
UPP2	Glutathione metabolism	SARC	-0.180317437
UPP2	Glycerolipid metabolism	SARC	-0.215478061
UPP2	Glycerophospholipid metæ	SARC	-0.196652471
UPP2	Glycine, serine and threor	SARC	-0.122120223
UPP2	Glycolysis / gluconeogene	SARC	-0.234249177
UPP2	Glycosaminoglycan biosy1	SARC	0.013473729
UPP2	Glycosaminoglycan biosy1	SARC	0.240838716
UPP2	Glycosaminoglycan biosy1	SARC	-0.022002549
UPP2	Glycosaminoglycan degra	SARC	-0.11695051
UPP2	Glycosphingolipid biosyn1	SARC	-0.065697214
UPP2	Glycosphingolipid biosyn1	SARC	-0.025873029
UPP2	Glycosphingolipid biosyn1	SARC	0.032110623
UPP2	Glycosylphosphatidylinos:	SARC	0.028572248
UPP2	Glyoxylate and dicarboxy	SARC	-0.175067862
UPP2	Granulocyte	SARC	-0.236330499
UPP2	Hedgehog_signaling	SARC	0.165478329
UPP2	Histidine metabolism	SARC	-0.126914464
UPP2	Hypoxia	SARC	-0.203532801
UPP2	Il-17ralpha t cell	SARC	-0.273837854
UPP2	Il2_stat5_signaling	SARC	-0.252593303
UPP2	Il6_jak_stat3_signaling	SARC	-0.236171586
UPP2	Immune_checkpoints_tunr	SARC	-0.261143827
UPP2	Immune_inhibition_cytok	SARC	-0.250047405
UPP2	Inositol phosphate metabo	SARC	-0.067337756
UPP2	Interleukin_6_signaling	SARC	-0.062106804
UPP2	Jaeger_metastasis_up	SARC	-0.207690059
UPP2	Jain_nfkb_signaling	SARC	0.005549929
UPP2	Kras_signaling_up	SARC	-0.182338899
UPP2	Linoleic acid metabolism	SARC	-0.079010367
UPP2	Lipoic acid metabolism	SARC	0.073773408
UPP2	Lysine degradation	SARC	0.052071585

UPP2	Lysosome	SARC	-0.133519148
UPP2	M1 macrophage	SARC	-0.23307995
UPP2	M2 macrophage	SARC	-0.210361567
UPP2	Mannose type o-glycan bi	SARC	0.132660225
UPP2	Mapk_signaling_pathway	SARC	-0.166551869
UPP2	Mapk3_erk1_activation	SARC	-0.004937344
UPP2	Marginal zone b cell	SARC	-0.184750267
UPP2	Memory b cell	SARC	-0.222351199
UPP2	Mesenchymal cell	SARC	-0.00114025
UPP2	Mesenchymal stem cell	SARC	-0.254502993
UPP2	Metabolism of xenobiotic	SARC	-0.161893365
UPP2	Migrating cancer stem cel	SARC	-0.24755123
UPP2	Mitotic_spindle	SARC	-0.021226451
UPP2	Monocyte	SARC	-0.253658946
UPP2	Mtor_signaling_pathway	SARC	-0.129407153
UPP2	Mtorc1_signaling	SARC	-0.182604251
UPP2	Mucin type o-glycan bios	SARC	-0.027398509
UPP2	Myc_targets_v1	SARC	-0.050980423
UPP2	Myeloid cell	SARC	-0.234633727
UPP2	N-glycan biosynthesis	SARC	-0.069734222
UPP2	Naive b cell	SARC	-0.091866337
UPP2	Naive cd4+ t cell	SARC	-0.129622941
UPP2	Naive cd8+ t cell	SARC	-0.016616135
UPP2	Natural killer cell	SARC	-0.261661033
UPP2	Natural killer t (nkt) cell	SARC	-0.267634652
UPP2	Natural regulatory t (treg)	SARC	-0.237793279
UPP2	Neomycin, kanamycin and	SARC	-0.150244501
UPP2	Neutrophil	SARC	-0.227267362
UPP2	Nicotinate and nicotinami	SARC	-0.184695409
UPP2	Nitrogen metabolism	SARC	-0.044278594
UPP2	Nod_like_receptor_signal	SARC	-0.209020549
UPP2	Notch_signaling	SARC	0.116863243
UPP2	One carbon pool by folate	SARC	-0.078440734
UPP2	Other glycan degradation	SARC	-0.119273196
UPP2	Other types of o-glycan b	SARC	0.034045328
UPP2	Oxidative phosphorylatio	SARC	-0.152524022
UPP2	P53_pathway	SARC	-0.179967834
UPP2	P53_signaling_pathway	SARC	-0.116647076
UPP2	Pantothenate and coa bios	SARC	-0.140996329
UPP2	Pentose and glucuronate in	SARC	-0.088344075
UPP2	Pentose phosphate pathwa	SARC	-0.180575025
UPP2	Pericyte	SARC	-0.05001859
UPP2	Phenylalanine metabolism	SARC	-0.228135694

UPP2	Phenylalanine, tyrosine ar	SARC	-0.072110448
UPP2	Phosphonate and phosphir	SARC	-0.052553453
UPP2	Pi3k_akt_activation	SARC	0.000779772
UPP2	Pi3k_akt_mtor_signaling	SARC	-0.293935908
UPP2	Porphyrin and chlorophyl	SARC	-0.168768473
UPP2	Primary bile acid biosynt	SARC	0.10406345
UPP2	Propanoate metabolism	SARC	-0.013923442
UPP2	Purine metabolism	SARC	-0.183304857
UPP2	Pyrimidine metabolism	SARC	-0.083525263
UPP2	Pyruvate metabolism	SARC	-0.172166077
UPP2	Regulation_of_autophagy	SARC	-0.075045746
UPP2	Retinol metabolism	SARC	-0.051807065
UPP2	Riboflavin metabolism	SARC	-0.144125348
UPP2	Schmahl_pdgf_signaling	SARC	-0.075786202
UPP2	Selenocompound metabol	SARC	0.026721372
UPP2	Signaling_by_hippo	SARC	0.031125756
UPP2	Sphingolipid metabolism	SARC	-0.083873278
UPP2	Starch and sucrose metabo	SARC	-0.232211829
UPP2	Steroid biosynthesis	SARC	-0.132175699
UPP2	Steroid hormone biosynth	SARC	-0.04554516
UPP2	Sulfur metabolism	SARC	-0.079482784
UPP2	Synthesis and degradation	SARC	-0.161944589
UPP2	T helper cell	SARC	-0.223338897
UPP2	T helper1 (th1) cell	SARC	-0.244082111
UPP2	T helper17 (th17) cell	SARC	-0.219531009
UPP2	T helper2 (th2) cell	SARC	-0.219484354
UPP2	T helper9 (th9) cell	SARC	-0.241546743
UPP2	Taurine and hypotaurine r	SARC	0.055679798
UPP2	Terpenoid backbone biosy	SARC	-0.093375907
UPP2	Tgf_beta_signaling_pathw	SARC	0.171752536
UPP2	Thiamine metabolism	SARC	-0.093280279
UPP2	Tnfa_signaling_via_nfkb	SARC	-0.211874526
UPP2	Tryptophan metabolism	SARC	-0.212273505
UPP2	Tumor endothelial cell	SARC	-0.110815022
UPP2	Tyrosine metabolism	SARC	-0.152405989
UPP2	Ubiquinone and other ter	SARC	-0.108267789
UPP2	Valine, leucine and isoleu	SARC	-0.145146073
UPP2	Valine, leucine and isoleu	SARC	-0.071366354
UPP2	Vascular endothelial cell	SARC	-0.11438009
UPP2	Vascular smooth muscle c	SARC	-0.199417948
UPP2	Vegf_signaling_pathway	SARC	-0.112451381
UPP2	Vitamin b6 metabolism	SARC	-0.039071891
UPP2	Willert_wnt_signaling	SARC	0.006421236

UPP2	Wnt_beta_catenin_signali	SARC	0.199628667
CDA	Abnormal plasma cell	SKCM	0.298247119
CDA	Activated b cell	SKCM	0.010544528
CDA	Activated cd4+ t cell	SKCM	-0.111123761
CDA	Activated t cell	SKCM	-0.022509107
CDA	Alanine, aspartate and glu	SKCM	-0.025224841
CDA	Alcala_apoptosis	SKCM	0.082552148
CDA	Alpha-linolenic acid meta	SKCM	0.844874697
CDA	Amino sugar and nucleoti	SKCM	-0.005257515
CDA	Ampk_pathway	SKCM	-0.211690331
CDA	Angiogenesis	SKCM	0.306441228
CDA	Arachidonic acid metabol:	SKCM	0.842425389
CDA	Arginine and proline metæ	SKCM	0.50657755
CDA	Arginine biosynthesis	SKCM	0.532468454
CDA	Ascorbate and aldarate me	SKCM	0.426700289
CDA	Atypical memory b cell	SKCM	-0.117311242
CDA	Axl+siglec6+ dendritic ce	SKCM	0.405427877
CDA	B cell	SKCM	-0.110244226
CDA	B1 cell	SKCM	0.129921166
CDA	Basal cell	SKCM	0.90244209
CDA	Beta-alanine metabolism	SKCM	0.410454377
CDA	Biosynthesis of unsaturate	SKCM	0.142203212
CDA	Biotin metabolism	SKCM	-0.298089231
CDA	Butanoate metabolism	SKCM	0.112894418
CDA	Caffeine metabolism	SKCM	0.191411168
CDA	Cancer stem cell	SKCM	0.460784249
CDA	Cancer stem-like cell	SKCM	0.103444632
CDA	Cd4+ cytotoxic t cell	SKCM	0.223645719
CDA	Cd4+ memory t cell	SKCM	0.042322075
CDA	Cd4+ regulatory t cell	SKCM	0.073512498
CDA	Cd4+ t helper cell	SKCM	0.053006218
CDA	Cd4+cd25+ regulatory t c	SKCM	0.030562636
CDA	Cd8+ cytotoxic t cell	SKCM	0.129746513
CDA	Cd8+ regulatory t cell	SKCM	-0.056020522
CDA	Cell_cycle	SKCM	-0.43137878
CDA	Chandran_metastasis_top	SKCM	-0.480785163
CDA	Citrate cycle (tca cycle)	SKCM	-0.126256698
CDA	Cysteine and methionine r	SKCM	-0.293954939
CDA	Cytokine induced killer cæ	SKCM	0.012595952
CDA	D-arginine and d-ornithin	SKCM	-0.080720841
CDA	D-glutamine and d-glutan	SKCM	-0.201919803
CDA	Dendritic cell	SKCM	0.178396973
CDA	Dna_repair	SKCM	-0.201592659

CDA	Dna_replication	SKCM	-0.385689005
CDA	Double-negative memory	SKCM	0.002032689
CDA	Drug metabolism - cytoch	SKCM	0.549796572
CDA	Drug metabolism - other	SKCM	0.424549293
CDA	E2f_targets	SKCM	-0.531094661
CDA	Ecm_receptor_interaction	SKCM	0.346335763
CDA	Effector cd4+ memory t (	SKCM	-0.045447079
CDA	Effector cd8+ memory t (	SKCM	0.138699284
CDA	Effector memory t cell	SKCM	-0.003562067
CDA	Effector regulatory t (treg	SKCM	-0.161851588
CDA	Elvidge_hif1a_targets_up	SKCM	-0.267685052
CDA	Endothelial cell	SKCM	0.078749506
CDA	Eosinophil	SKCM	0.252322398
CDA	Ether lipid metabolism	SKCM	0.724314199
CDA	Exhausted cd4+ t cell	SKCM	-0.189426208
CDA	Exhausted cd8+ t cell	SKCM	-0.042940234
CDA	Exhausted t cell	SKCM	0.022668736
CDA	Fat cell (adipocyte)	SKCM	0.236112897
CDA	Fatty acid biosynthesis	SKCM	-0.123631486
CDA	Fatty acid degradation	SKCM	0.16214335
CDA	Fatty acid elongation	SKCM	0.374624559
CDA	Fibroblast	SKCM	0.156414054
CDA	Folate biosynthesis	SKCM	0.16772035
CDA	Follicular b cell	SKCM	0.185859755
CDA	Follicular dendritic cell	SKCM	-0.196563779
CDA	Follicular helper (tfh) t ce	SKCM	0.016309583
CDA	Follicular t cell	SKCM	0.062579201
CDA	Foxp3+il-17+ t cell	SKCM	0.208304244
CDA	Fructose and mannose me	SKCM	0.301930663
CDA	G2m_checkpoint	SKCM	-0.441645375
CDA	Galactose metabolism	SKCM	0.287966178
CDA	Galie_tumor_stemness_ge	SKCM	0.395092667
CDA	Glutathione metabolism	SKCM	0.390273769
CDA	Glycerolipid metabolism	SKCM	0.429589971
CDA	Glycerophospholipid metæ	SKCM	0.484842798
CDA	Glycine, serine and threor	SKCM	0.208542062
CDA	Glycolysis / gluconeogene	SKCM	0.212761249
CDA	Glycosaminoglycan biosy	SKCM	0.187538608
CDA	Glycosaminoglycan biosy	SKCM	0.211657198
CDA	Glycosaminoglycan biosy	SKCM	0.060724637
CDA	Glycosaminoglycan degra	SKCM	0.35522914
CDA	Glycosphingolipid biosyn	SKCM	0.014130953
CDA	Glycosphingolipid biosyn	SKCM	0.306433048

CDA	Glycosphingolipid biosyn	SKCM	0.635610665
CDA	Glycosylphosphatidylinos	SKCM	-0.078821442
CDA	Glyoxylate and dicarboxy	SKCM	-0.10683499
CDA	Granulocyte	SKCM	-0.085839877
CDA	Hedgehog_signaling	SKCM	0.095028589
CDA	Histidine metabolism	SKCM	0.584478346
CDA	Hypoxia	SKCM	0.461827229
CDA	Il-17ralpha t cell	SKCM	0.078864654
CDA	Il2_stat5_signaling	SKCM	0.3477627
CDA	Il6_jak_stat3_signaling	SKCM	0.246943656
CDA	Immune_checkpoints_tun	SKCM	0.100262089
CDA	Immune_inhibition_cytok	SKCM	0.420731818
CDA	Inositol phosphate metabo	SKCM	-0.199876539
CDA	Interleukin_6_signaling	SKCM	-0.199774316
CDA	Jaeger_metastasis_up	SKCM	-0.386363432
CDA	Jain_nfkb_signaling	SKCM	-0.301001822
CDA	Kras_signaling_up	SKCM	0.374999545
CDA	Linoleic acid metabolism	SKCM	0.808072857
CDA	Lipoic acid metabolism	SKCM	-0.224537348
CDA	Lysine degradation	SKCM	-0.170692812
CDA	Lysosome	SKCM	0.113192854
CDA	M1 macrophage	SKCM	0.042110852
CDA	M2 macrophage	SKCM	0.300707198
CDA	Mannose type o-glycan bi	SKCM	-0.111806174
CDA	Mapk_signaling_pathway	SKCM	0.258416587
CDA	Mapk3_erk1_activation	SKCM	-0.227622183
CDA	Marginal zone b cell	SKCM	-0.152483929
CDA	Memory b cell	SKCM	-0.147140221
CDA	Mesenchymal cell	SKCM	0.212470585
CDA	Mesenchymal stem cell	SKCM	0.213733872
CDA	Metabolism of xenobiotic	SKCM	0.50582322
CDA	Migrating cancer stem cel	SKCM	0.475265781
CDA	Mitotic_spindle	SKCM	-0.339408987
CDA	Monocyte	SKCM	0.344020664
CDA	Mtor_signaling_pathway	SKCM	-0.024024504
CDA	Mtorc1_signaling	SKCM	-0.106640964
CDA	Mucin type o-glycan bios	SKCM	0.028918518
CDA	Myc_targets_v1	SKCM	-0.284173947
CDA	Myeloid cell	SKCM	0.091067423
CDA	N-glycan biosynthesis	SKCM	-0.151840896
CDA	Naive b cell	SKCM	0.596174259
CDA	Naive cd4+ t cell	SKCM	0.225019498
CDA	Naive cd8+ t cell	SKCM	0.191223019

CDA	Natural killer cell	SKCM	0.040189005
CDA	Natural killer t (nkt) cell	SKCM	-0.507063203
CDA	Natural regulatory t (treg)	SKCM	0.028729212
CDA	Neomycin, kanamycin and	SKCM	0.170069719
CDA	Neutrophil	SKCM	0.676404627
CDA	Nicotinate and nicotinami	SKCM	0.206322016
CDA	Nitrogen metabolism	SKCM	0.390407148
CDA	Nod_like_receptor_signal	SKCM	0.263904873
CDA	Notch_signaling	SKCM	0.458550489
CDA	One carbon pool by folate	SKCM	-0.420172719
CDA	Other glycan degradation	SKCM	0.056411771
CDA	Other types of o-glycan b	SKCM	-0.172042976
CDA	Oxidative phosphorylatio	SKCM	0.098233284
CDA	P53_pathway	SKCM	0.722412507
CDA	P53_signaling_pathway	SKCM	0.183252224
CDA	Pantothenate and coa bios	SKCM	-0.020613459
CDA	Pentose and glucuronate i	SKCM	0.218507111
CDA	Pentose phosphate pathwa	SKCM	0.194211833
CDA	Pericyte	SKCM	0.159517259
CDA	Phenylalanine metabolism	SKCM	0.427147467
CDA	Phenylalanine, tyrosine ar	SKCM	0.035691855
CDA	Phosphonate and phosphir	SKCM	-0.039075818
CDA	Pi3k_akt_activation	SKCM	-0.024637267
CDA	Pi3k_akt_mtor_signaling	SKCM	0.056130744
CDA	Porphyrin and chlorophyl	SKCM	0.170212817
CDA	Primary bile acid biosynt	SKCM	0.337648681
CDA	Propanoate metabolism	SKCM	-0.233124257
CDA	Purine metabolism	SKCM	-0.09418368
CDA	Pyrimidine metabolism	SKCM	-0.199280571
CDA	Pyruvate metabolism	SKCM	0.022896691
CDA	Regulation_of_autophagy	SKCM	-0.278515223
CDA	Retinol metabolism	SKCM	0.664579138
CDA	Riboflavin metabolism	SKCM	-0.030619819
CDA	Schmahl_pdgf_signaling	SKCM	0.05204333
CDA	Selenocompound metabol	SKCM	-0.371560311
CDA	Signaling_by_hippo	SKCM	-0.246244029
CDA	Sphingolipid metabolism	SKCM	0.513800449
CDA	Starch and sucrose metabo	SKCM	0.011218787
CDA	Steroid biosynthesis	SKCM	0.453169438
CDA	Steroid hormone biosynth	SKCM	0.54125723
CDA	Sulfur metabolism	SKCM	0.070037905
CDA	Synthesis and degradation	SKCM	0.010437636
CDA	T helper cell	SKCM	0.134774253

CDA	T helper1 (th1) cell	SKCM	0.093922678
CDA	T helper17 (th17) cell	SKCM	0.230537579
CDA	T helper2 (th2) cell	SKCM	0.224350528
CDA	T helper9 (th9) cell	SKCM	0.226871908
CDA	Taurine and hypotaurine r	SKCM	0.121131621
CDA	Terpenoid backbone biosy	SKCM	0.02257631
CDA	Tgf_beta_signaling_pathw	SKCM	-0.099953952
CDA	Thiamine metabolism	SKCM	0.016676135
CDA	Tnfa_signaling_via_nfkb	SKCM	0.367287623
CDA	Tryptophan metabolism	SKCM	0.213080864
CDA	Tumor endothelial cell	SKCM	0.849933058
CDA	Tyrosine metabolism	SKCM	0.437412854
CDA	Ubiquinone and other terf	SKCM	-0.089937402
CDA	Valine, leucine and isoleu	SKCM	0.161675041
CDA	Valine, leucine and isoleu	SKCM	-0.051045821
CDA	Vascular endothelial cell	SKCM	0.352764139
CDA	Vascular smooth muscle c	SKCM	0.283167961
CDA	Vegf_signaling_pathway	SKCM	0.464945206
CDA	Vitamin b6 metabolism	SKCM	0.184549787
CDA	Willert_wnt_signaling	SKCM	0.189849055
CDA	Wnt_beta_catenin_signali	SKCM	0.259100873
UCK1	Abnormal plasma cell	SKCM	-0.292214224
UCK1	Activated b cell	SKCM	-0.0559295
UCK1	Activated cd4+ t cell	SKCM	-0.307093789
UCK1	Activated t cell	SKCM	-0.080376735
UCK1	Alanine, aspartate and glu	SKCM	-0.115072021
UCK1	Alcala_apoptosis	SKCM	0.15856055
UCK1	Alpha-linolenic acid meta	SKCM	0.032085083
UCK1	Amino sugar and nucleoti	SKCM	0.073343999
UCK1	Ampk_pathway	SKCM	0.123748314
UCK1	Angiogenesis	SKCM	-0.207246005
UCK1	Arachidonic acid metabol:	SKCM	0.110094659
UCK1	Arginine and proline metæ	SKCM	0.279626341
UCK1	Arginine biosynthesis	SKCM	0.227563031
UCK1	Ascorbate and aldarate mε	SKCM	0.259427847
UCK1	Atypical memory b cell	SKCM	0.067951072
UCK1	Axl+siglec6+ dendritic ce	SKCM	-0.003947117
UCK1	B cell	SKCM	-0.267312424
UCK1	B1 cell	SKCM	0.020904058
UCK1	Basal cell	SKCM	-0.02031705
UCK1	Beta-alanine metabolism	SKCM	0.074240747
UCK1	Biosynthesis of unsaturate	SKCM	0.08224518
UCK1	Biotin metabolism	SKCM	0.04566795

UCK1	Butanoate metabolism	SKCM	0.181151442
UCK1	Caffeine metabolism	SKCM	0.238391337
UCK1	Cancer stem cell	SKCM	-0.394992688
UCK1	Cancer stem-like cell	SKCM	-0.190026227
UCK1	Cd4+ cytotoxic t cell	SKCM	-0.096026887
UCK1	Cd4+ memory t cell	SKCM	0.030448635
UCK1	Cd4+ regulatory t cell	SKCM	-0.090890455
UCK1	Cd4+ t helper cell	SKCM	-0.102165278
UCK1	Cd4+cd25+ regulatory t c	SKCM	-0.123279726
UCK1	Cd8+ cytotoxic t cell	SKCM	-0.053759087
UCK1	Cd8+ regulatory t cell	SKCM	-0.117357366
UCK1	Cell_cycle	SKCM	-0.215475222
UCK1	Chandran_metastasis_top5	SKCM	-0.150421673
UCK1	Citrate cycle (tca cycle)	SKCM	0.194021341
UCK1	Cysteine and methionine r	SKCM	0.208653195
UCK1	Cytokine induced killer c	SKCM	-0.14994858
UCK1	D-arginine and d-ornithin	SKCM	-0.018039548
UCK1	D-glutamine and d-glutan	SKCM	-0.266578591
UCK1	Dendritic cell	SKCM	-0.125955239
UCK1	Dna_repair	SKCM	0.373279778
UCK1	Dna_replication	SKCM	0.159645707
UCK1	Double-negative memory	SKCM	0.041014117
UCK1	Drug metabolism - cytoch	SKCM	0.405749417
UCK1	Drug metabolism - other	SKCM	0.45377554
UCK1	E2f_targets	SKCM	-0.136602566
UCK1	Ecm_receptor_interaction	SKCM	-0.278412694
UCK1	Effector cd4+ memory t (	SKCM	-0.210818338
UCK1	Effector cd8+ memory t (	SKCM	-0.192374589
UCK1	Effector memory t cell	SKCM	-0.139490462
UCK1	Effector regulatory t (treg	SKCM	-0.375483014
UCK1	Elvidge_hif1a_targets_up	SKCM	-0.154519079
UCK1	Endothelial cell	SKCM	-0.412069295
UCK1	Eosinophil	SKCM	-0.187427198
UCK1	Ether lipid metabolism	SKCM	-0.103030379
UCK1	Exhausted cd4+ t cell	SKCM	-0.349698748
UCK1	Exhausted cd8+ t cell	SKCM	-0.250157997
UCK1	Exhausted t cell	SKCM	-0.027704105
UCK1	Fat cell (adipocyte)	SKCM	0.334649897
UCK1	Fatty acid biosynthesis	SKCM	-0.125198401
UCK1	Fatty acid degradation	SKCM	0.145271241
UCK1	Fatty acid elongation	SKCM	0.218788847
UCK1	Fibroblast	SKCM	-0.31546395
UCK1	Folate biosynthesis	SKCM	0.230020503

UCK1	Follicular b cell	SKCM	-0.171403021
UCK1	Follicular dendritic cell	SKCM	-0.113476076
UCK1	Follicular helper (tfh) t ce	SKCM	-0.043464285
UCK1	Follicular t cell	SKCM	0.091717998
UCK1	Foxp3+il-17+ t cell	SKCM	0.17578139
UCK1	Fructose and mannose me	SKCM	0.328573461
UCK1	G2m_checkpoint	SKCM	-0.204464484
UCK1	Galactose metabolism	SKCM	0.170012016
UCK1	Galie_tumor_stemness_ge	SKCM	-0.120872893
UCK1	Glutathione metabolism	SKCM	0.34842036
UCK1	Glycerolipid metabolism	SKCM	0.31631139
UCK1	Glycerophospholipid metæ	SKCM	0.168574439
UCK1	Glycine, serine and threor	SKCM	0.374530349
UCK1	Glycolysis / gluconeogene	SKCM	0.31598044
UCK1	Glycosaminoglycan biosy	SKCM	0.061230124
UCK1	Glycosaminoglycan biosy	SKCM	-0.112867178
UCK1	Glycosaminoglycan biosy	SKCM	0.022871415
UCK1	Glycosaminoglycan degra	SKCM	0.055081158
UCK1	Glycosphingolipid biosyn	SKCM	-0.139448475
UCK1	Glycosphingolipid biosyn	SKCM	0.272183342
UCK1	Glycosphingolipid biosyn	SKCM	0.096557123
UCK1	Glycosylphosphatidylinos	SKCM	-0.029031971
UCK1	Glyoxylate and dicarboxy	SKCM	0.233226485
UCK1	Granulocyte	SKCM	-0.276681871
UCK1	Hedgehog_signaling	SKCM	-0.101360574
UCK1	Histidine metabolism	SKCM	0.078972363
UCK1	Hypoxia	SKCM	0.072348012
UCK1	Il-17alpha t cell	SKCM	-0.024495838
UCK1	Il2_stat5_signaling	SKCM	-0.134382546
UCK1	Il6_jak_stat3_signaling	SKCM	-0.187767955
UCK1	Immune_checkpoints_tun	SKCM	-0.123461921
UCK1	Immune_inhibition_cytok	SKCM	-0.070869513
UCK1	Inositol phosphate metabo	SKCM	-0.355335585
UCK1	Interleukin_6_signaling	SKCM	-0.430425071
UCK1	Jaeger_metastasis_up	SKCM	-0.145088088
UCK1	Jain_nfkb_signaling	SKCM	-0.154097947
UCK1	Kras_signaling_up	SKCM	-0.351569076
UCK1	Linoleic acid metabolism	SKCM	0.100278556
UCK1	Lipoic acid metabolism	SKCM	-0.083328255
UCK1	Lysine degradation	SKCM	0.138979943
UCK1	Lysosome	SKCM	0.068691507
UCK1	M1 macrophage	SKCM	-0.250806685
UCK1	M2 macrophage	SKCM	-0.257994738

UCK1	Mannose type o-glycan bi	SKCM	0.256360415
UCK1	Mapk_signaling_pathway	SKCM	-0.141122119
UCK1	Mapk3_erk1_activation	SKCM	-0.36717798
UCK1	Marginal zone b cell	SKCM	-0.30957039
UCK1	Memory b cell	SKCM	-0.231190765
UCK1	Mesenchymal cell	SKCM	-0.073017067
UCK1	Mesenchymal stem cell	SKCM	-0.448439431
UCK1	Metabolism of xenobiotic	SKCM	0.468784735
UCK1	Migrating cancer stem cel	SKCM	-0.187828263
UCK1	Mitotic_spindle	SKCM	-0.246843263
UCK1	Monocyte	SKCM	-0.178787374
UCK1	Mtor_signaling_pathway	SKCM	-0.095176208
UCK1	Mtorc1_signaling	SKCM	-0.165532965
UCK1	Mucin type o-glycan bios	SKCM	-0.212650738
UCK1	Myc_targets_v1	SKCM	0.031281665
UCK1	Myeloid cell	SKCM	-0.248808203
UCK1	N-glycan biosynthesis	SKCM	0.083207829
UCK1	Naive b cell	SKCM	-0.142292902
UCK1	Naive cd4+ t cell	SKCM	-0.231582395
UCK1	Naive cd8+ t cell	SKCM	-0.36247035
UCK1	Natural killer cell	SKCM	-0.099483794
UCK1	Natural killer t (nkt) cell	SKCM	-0.335646995
UCK1	Natural regulatory t (treg)	SKCM	-0.170396614
UCK1	Neomycin, kanamycin and	SKCM	-0.064496642
UCK1	Neutrophil	SKCM	-0.157510279
UCK1	Nicotinate and nicotinami	SKCM	0.078908445
UCK1	Nitrogen metabolism	SKCM	-0.13619474
UCK1	Nod_like_receptor_signal	SKCM	-0.359497574
UCK1	Notch_signaling	SKCM	0.067664843
UCK1	One carbon pool by folate	SKCM	-0.060344964
UCK1	Other glycan degradation	SKCM	0.089458443
UCK1	Other types of o-glycan b	SKCM	0.191872711
UCK1	Oxidative phosphorylatio	SKCM	0.470510245
UCK1	P53_pathway	SKCM	0.021208598
UCK1	P53_signaling_pathway	SKCM	-0.431821512
UCK1	Pantothenate and coa bios	SKCM	-0.014898049
UCK1	Pentose and glucuronate i	SKCM	0.183740691
UCK1	Pentose phosphate pathwa	SKCM	0.438339312
UCK1	Pericyte	SKCM	-0.274384325
UCK1	Phenylalanine metabolism	SKCM	0.383364237
UCK1	Phenylalanine, tyrosine ar	SKCM	0.372549226
UCK1	Phosphonate and phosphir	SKCM	0.047901996
UCK1	Pi3k_akt_activation	SKCM	-0.142583434

UCK1	Pi3k_akt_mtor_signaling	SKCM	-0.018744858
UCK1	Porphyrin and chlorophyl	SKCM	0.490372182
UCK1	Primary bile acid biosyntn	SKCM	0.108696256
UCK1	Propanoate metabolism	SKCM	-0.178496871
UCK1	Purine metabolism	SKCM	0.306791645
UCK1	Pyrimidine metabolism	SKCM	0.165055445
UCK1	Pyruvate metabolism	SKCM	0.176180138
UCK1	Regulation_of_autophagy	SKCM	-0.268256395
UCK1	Retinol metabolism	SKCM	0.276047538
UCK1	Riboflavin metabolism	SKCM	0.415943247
UCK1	Schmahl_pdgf_signaling	SKCM	-0.036435667
UCK1	Selenocompound metabol	SKCM	0.04936159
UCK1	Signaling_by_hippo	SKCM	-0.280419919
UCK1	Sphingolipid metabolism	SKCM	0.084997274
UCK1	Starch and sucrose metabo	SKCM	-0.08327508
UCK1	Steroid biosynthesis	SKCM	0.124828803
UCK1	Steroid hormone biosynth	SKCM	0.308495479
UCK1	Sulfur metabolism	SKCM	-0.045736825
UCK1	Synthesis and degradation	SKCM	0.049061232
UCK1	T helper cell	SKCM	-0.092165702
UCK1	T helper1 (th1) cell	SKCM	-0.120886823
UCK1	T helper17 (th17) cell	SKCM	-0.164141085
UCK1	T helper2 (th2) cell	SKCM	-0.074271827
UCK1	T helper9 (th9) cell	SKCM	-0.015916388
UCK1	Taurine and hypotaurine r	SKCM	0.156605305
UCK1	Terpenoid backbone biosy	SKCM	-0.03772352
UCK1	Tgf_beta_signaling_pathw	SKCM	-0.268991781
UCK1	Thiamine metabolism	SKCM	0.506536824
UCK1	Tnfa_signaling_via_nfkb	SKCM	-0.214056229
UCK1	Tryptophan metabolism	SKCM	0.270501259
UCK1	Tumor endothelial cell	SKCM	0.008133705
UCK1	Tyrosine metabolism	SKCM	0.492200136
UCK1	Ubiquinone and other terp	SKCM	0.255253198
UCK1	Valine, leucine and isoleu	SKCM	0.328435606
UCK1	Valine, leucine and isoleu	SKCM	0.104197825
UCK1	Vascular endothelial cell	SKCM	0.182529199
UCK1	Vascular smooth muscle c	SKCM	0.19483503
UCK1	Vegf_signaling_pathway	SKCM	-0.038821355
UCK1	Vitamin b6 metabolism	SKCM	0.316551656
UCK1	Willert_wnt_signaling	SKCM	-0.186747408
UCK1	Wnt_beta_catenin_signali	SKCM	0.241306386
UCK2	Abnormal plasma cell	SKCM	-0.086203576
UCK2	Activated b cell	SKCM	-0.115577164

UCK2	Activated cd4+ t cell	SKCM	-0.160517785
UCK2	Activated t cell	SKCM	-0.157593113
UCK2	Alanine, aspartate and glu	SKCM	0.042701894
UCK2	Alcala_apoptosis	SKCM	-0.123466229
UCK2	Alpha-linolenic acid meta	SKCM	-0.236364476
UCK2	Amino sugar and nucleoti	SKCM	0.097152858
UCK2	Ampk_pathway	SKCM	0.086392119
UCK2	Angiogenesis	SKCM	0.045986504
UCK2	Arachidonic acid metabol:	SKCM	-0.183716767
UCK2	Arginine and proline metæ	SKCM	0.047141823
UCK2	Arginine biosynthesis	SKCM	0.113011312
UCK2	Ascorbate and aldarate mε	SKCM	0.042665523
UCK2	Atypical memory b cell	SKCM	-0.036728454
UCK2	Axl+siglec6+ dendritic ce	SKCM	-0.238020223
UCK2	B cell	SKCM	-0.157740833
UCK2	B1 cell	SKCM	-0.199276173
UCK2	Basal cell	SKCM	-0.148389843
UCK2	Beta-alanine metabolism	SKCM	-0.078516161
UCK2	Biosynthesis of unsaturate	SKCM	-0.06136167
UCK2	Biotin metabolism	SKCM	0.051518168
UCK2	Butanoate metabolism	SKCM	0.067678339
UCK2	Caffeine metabolism	SKCM	0.054003448
UCK2	Cancer stem cell	SKCM	-0.176773462
UCK2	Cancer stem-like cell	SKCM	0.000259056
UCK2	Cd4+ cytotoxic t cell	SKCM	-0.196564272
UCK2	Cd4+ memory t cell	SKCM	-0.14702999
UCK2	Cd4+ regulatory t cell	SKCM	-0.129861282
UCK2	Cd4+ t helper cell	SKCM	-0.204325151
UCK2	Cd4+cd25+ regulatory t c	SKCM	-0.205717644
UCK2	Cd8+ cytotoxic t cell	SKCM	-0.229923491
UCK2	Cd8+ regulatory t cell	SKCM	-0.170454695
UCK2	Cell_cycle	SKCM	0.159970608
UCK2	Chandran_metastasis_top ⁵	SKCM	0.233142642
UCK2	Citrate cycle (tca cycle)	SKCM	0.197228177
UCK2	Cysteine and methionine r	SKCM	0.301194158
UCK2	Cytokine induced killer cε	SKCM	-0.226847431
UCK2	D-arginine and d-ornithin	SKCM	0.016619296
UCK2	D-glutamine and d-glutan	SKCM	-0.005260917
UCK2	Dendritic cell	SKCM	-0.123489196
UCK2	Dna_repair	SKCM	0.021012174
UCK2	Dna_replication	SKCM	0.204549585
UCK2	Double-negative memory	SKCM	-0.141352571
UCK2	Drug metabolism - cytoch	SKCM	0.020121909

UCK2	Drug metabolism - other (SKCM	0.174646161
UCK2	E2f_targets SKCM	0.246397559
UCK2	Ecm_receptor_interaction SKCM	-0.102184819
UCK2	Effector cd4+ memory t (SKCM	-0.204831947
UCK2	Effector cd8+ memory t (SKCM	-0.174819245
UCK2	Effector memory t cell SKCM	-0.160257038
UCK2	Effector regulatory t (treg SKCM	-0.042941614
UCK2	Elvidge_hif1a_targets_up SKCM	0.077372179
UCK2	Endothelial cell SKCM	0.009045878
UCK2	Eosinophil SKCM	-0.151482088
UCK2	Ether lipid metabolism SKCM	-0.202528259
UCK2	Exhausted cd4+ t cell SKCM	-0.253790986
UCK2	Exhausted cd8+ t cell SKCM	-0.295124054
UCK2	Exhausted t cell SKCM	-0.191104381
UCK2	Fat cell (adipocyte) SKCM	0.139060375
UCK2	Fatty acid biosynthesis SKCM	0.092026344
UCK2	Fatty acid degradation SKCM	0.057922685
UCK2	Fatty acid elongation SKCM	-0.040888315
UCK2	Fibroblast SKCM	-0.048910043
UCK2	Folate biosynthesis SKCM	-0.010209714
UCK2	Follicular b cell SKCM	-0.207784721
UCK2	Follicular dendritic cell SKCM	0.067055825
UCK2	Follicular helper (tfh) t ce SKCM	-0.192340079
UCK2	Follicular t cell SKCM	-0.23538407
UCK2	Foxp3+il-17+ t cell SKCM	-0.154810566
UCK2	Fructose and mannose me SKCM	0.087855579
UCK2	G2m_checkpoint SKCM	0.232506289
UCK2	Galactose metabolism SKCM	0.067947704
UCK2	Galie_tumor_stemness_ge SKCM	-0.260687398
UCK2	Glutathione metabolism SKCM	0.096658892
UCK2	Glycerolipid metabolism SKCM	0.091008862
UCK2	Glycerophospholipid metæ SKCM	-0.073591134
UCK2	Glycine, serine and threor SKCM	0.076121552
UCK2	Glycolysis / gluconeogene SKCM	0.121357496
UCK2	Glycosaminoglycan biosy1 SKCM	-0.04065183
UCK2	Glycosaminoglycan biosy1 SKCM	-0.076783177
UCK2	Glycosaminoglycan biosy1 SKCM	-0.071546502
UCK2	Glycosaminoglycan degra SKCM	-0.007716073
UCK2	Glycosphingolipid biosyn1 SKCM	-0.061366518
UCK2	Glycosphingolipid biosyn1 SKCM	0.129530527
UCK2	Glycosphingolipid biosyn1 SKCM	0.042795851
UCK2	Glycosylphosphatidylinos: SKCM	-0.045932348
UCK2	Glyoxylate and dicarboxy SKCM	0.08682144

UCK2	Granulocyte	SKCM	-0.114443332
UCK2	Hedgehog_signaling	SKCM	-0.108726171
UCK2	Histidine metabolism	SKCM	-0.150235711
UCK2	Hypoxia	SKCM	0.01622938
UCK2	Il-17alpha t cell	SKCM	-0.20793903
UCK2	Il2_stat5_signaling	SKCM	-0.168456283
UCK2	Il6_jak_stat3_signaling	SKCM	-0.21276455
UCK2	Immune_checkpoints_tun	SKCM	-0.329666047
UCK2	Immune_inhibition_cytok	SKCM	-0.232118182
UCK2	Inositol phosphate metabo	SKCM	-0.046339245
UCK2	Interleukin_6_signaling	SKCM	-0.051697471
UCK2	Jaeger_metastasis_up	SKCM	0.288068985
UCK2	Jain_nfkb_signaling	SKCM	0.224697673
UCK2	Kras_signaling_up	SKCM	-0.194126483
UCK2	Linoleic acid metabolism	SKCM	-0.164564442
UCK2	Lipoic acid metabolism	SKCM	0.036438147
UCK2	Lysine degradation	SKCM	0.133755034
UCK2	Lysosome	SKCM	-0.091383284
UCK2	M1 macrophage	SKCM	-0.1474227
UCK2	M2 macrophage	SKCM	-0.103337261
UCK2	Mannose type o-glycan bi	SKCM	0.100846959
UCK2	Mapk_signaling_pathway	SKCM	-0.108829797
UCK2	Mapk3_erk1_activation	SKCM	-0.030004581
UCK2	Marginal zone b cell	SKCM	-0.18282555
UCK2	Memory b cell	SKCM	-0.115984704
UCK2	Mesenchymal cell	SKCM	0.131967653
UCK2	Mesenchymal stem cell	SKCM	-0.195284143
UCK2	Metabolism of xenobiotic	SKCM	0.047554651
UCK2	Migrating cancer stem cel	SKCM	-0.166343237
UCK2	Mitotic_spindle	SKCM	0.074214506
UCK2	Monocyte	SKCM	-0.219891785
UCK2	Mtor_signaling_pathway	SKCM	0.127169492
UCK2	Mtorc1_signaling	SKCM	0.151089665
UCK2	Mucin type o-glycan bios	SKCM	0.074344621
UCK2	Myc_targets_v1	SKCM	0.268334284
UCK2	Myeloid cell	SKCM	-0.186589165
UCK2	N-glycan biosynthesis	SKCM	0.209498853
UCK2	Naive b cell	SKCM	-0.222518018
UCK2	Naive cd4+ t cell	SKCM	-0.145424381
UCK2	Naive cd8+ t cell	SKCM	-0.20958199
UCK2	Natural killer cell	SKCM	-0.197834662
UCK2	Natural killer t (nkt) cell	SKCM	-0.130419512
UCK2	Natural regulatory t (treg)	SKCM	-0.176134702

UCK2	Neomycin, kanamycin and	SKCM	0.063366079
UCK2	Neutrophil	SKCM	-0.172773951
UCK2	Nicotinate and nicotinami	SKCM	-0.082570591
UCK2	Nitrogen metabolism	SKCM	-0.036914509
UCK2	Nod_like_receptor_signal	SKCM	-0.294187947
UCK2	Notch_signaling	SKCM	-0.030531928
UCK2	One carbon pool by folate	SKCM	0.215685756
UCK2	Other glycan degradation	SKCM	-0.040249127
UCK2	Other types of o-glycan b	SKCM	0.147337282
UCK2	Oxidative phosphorylatio	SKCM	0.077124835
UCK2	P53_pathway	SKCM	-0.162911312
UCK2	P53_signaling_pathway	SKCM	0.041832643
UCK2	Pantothenate and coa bios	SKCM	0.051006837
UCK2	Pentose and glucuronate in	SKCM	0.084811067
UCK2	Pentose phosphate pathwa	SKCM	0.11225005
UCK2	Pericyte	SKCM	-0.145895157
UCK2	Phenylalanine metabolism	SKCM	0.004563539
UCK2	Phenylalanine, tyrosine ar	SKCM	0.003746411
UCK2	Phosphonate and phosphir	SKCM	-0.051853119
UCK2	Pi3k_akt_activation	SKCM	0.14536675
UCK2	Pi3k_akt_mtor_signaling	SKCM	-0.057149201
UCK2	Porphyrin and chlorophyl	SKCM	0.113994341
UCK2	Primary bile acid biosynt	SKCM	-0.060664894
UCK2	Propanoate metabolism	SKCM	0.01569431
UCK2	Purine metabolism	SKCM	0.426692098
UCK2	Pyrimidine metabolism	SKCM	0.309635178
UCK2	Pyruvate metabolism	SKCM	0.121920801
UCK2	Regulation_of_autophagy	SKCM	-0.252380561
UCK2	Retinol metabolism	SKCM	-0.017208252
UCK2	Riboflavin metabolism	SKCM	0.058538402
UCK2	Schmahl_pdgf_signaling	SKCM	-0.149229776
UCK2	Selenocompound metabol	SKCM	0.195602433
UCK2	Signaling_by_hippo	SKCM	-0.007567407
UCK2	Sphingolipid metabolism	SKCM	-0.000401951
UCK2	Starch and sucrose metabo	SKCM	0.023477606
UCK2	Steroid biosynthesis	SKCM	0.073403072
UCK2	Steroid hormone biosynth	SKCM	0.015348746
UCK2	Sulfur metabolism	SKCM	-0.104379521
UCK2	Synthesis and degradation	SKCM	0.108811688
UCK2	T helper cell	SKCM	-0.197154324
UCK2	T helper1 (th1) cell	SKCM	-0.217991176
UCK2	T helper17 (th17) cell	SKCM	-0.215448836
UCK2	T helper2 (th2) cell	SKCM	-0.217816422

UCK2	T helper9 (th9) cell	SKCM	-0.234892455
UCK2	Taurine and hypotaurine r	SKCM	-2.78E-05
UCK2	Terpenoid backbone biosy	SKCM	0.06406484
UCK2	Tgf_beta_signaling_pathw	SKCM	0.024244483
UCK2	Thiamine metabolism	SKCM	0.061507732
UCK2	Tnfa_signaling_via_nfkb	SKCM	-0.237710443
UCK2	Tryptophan metabolism	SKCM	-0.074512639
UCK2	Tumor endothelial cell	SKCM	-0.131770508
UCK2	Tyrosine metabolism	SKCM	0.037950813
UCK2	Ubiquinone and other terp	SKCM	0.113472596
UCK2	Valine, leucine and isoleu	SKCM	0.096337961
UCK2	Valine, leucine and isoleu	SKCM	0.033245202
UCK2	Vascular endothelial cell	SKCM	0.079300655
UCK2	Vascular smooth muscle c	SKCM	0.156727317
UCK2	Vegf_signaling_pathway	SKCM	-0.130885419
UCK2	Vitamin b6 metabolism	SKCM	-0.03719909
UCK2	Willert_wnt_signaling	SKCM	-0.179201503
UCK2	Wnt_beta_catenin_signali	SKCM	0.032098458
UCKL1	Abnormal plasma cell	SKCM	-0.028577374
UCKL1	Activated b cell	SKCM	-0.111248395
UCKL1	Activated cd4+ t cell	SKCM	-0.084845023
UCKL1	Activated t cell	SKCM	-0.061848449
UCKL1	Alanine, aspartate and glu	SKCM	-0.041745956
UCKL1	Alcala_apoptosis	SKCM	-0.155806673
UCKL1	Alpha-linolenic acid meta	SKCM	-0.073370477
UCKL1	Amino sugar and nucleoti	SKCM	-0.161686793
UCKL1	Ampk_pathway	SKCM	0.250337395
UCKL1	Angiogenesis	SKCM	-0.278994561
UCKL1	Arachidonic acid metabol:	SKCM	-0.075599791
UCKL1	Arginine and proline meta	SKCM	-0.193707212
UCKL1	Arginine biosynthesis	SKCM	-0.102062366
UCKL1	Ascorbate and aldarate me	SKCM	-0.189083224
UCKL1	Atypical memory b cell	SKCM	-0.094263033
UCKL1	Axl+siglec6+ dendritic ce	SKCM	-0.126239673
UCKL1	B cell	SKCM	-0.166606816
UCKL1	B1 cell	SKCM	-0.096565832
UCKL1	Basal cell	SKCM	-0.09131387
UCKL1	Beta-alanine metabolism	SKCM	-0.184595167
UCKL1	Biosynthesis of unsaturate	SKCM	-0.258498869
UCKL1	Biotin metabolism	SKCM	-0.029605122
UCKL1	Butanoate metabolism	SKCM	-0.202882044
UCKL1	Caffeine metabolism	SKCM	-0.136974455
UCKL1	Cancer stem cell	SKCM	-0.213171293

UCKL1	Cancer stem-like cell	SKCM	-0.209406323
UCKL1	Cd4+ cytotoxic t cell	SKCM	-0.056575402
UCKL1	Cd4+ memory t cell	SKCM	-0.038413765
UCKL1	Cd4+ regulatory t cell	SKCM	-0.104416194
UCKL1	Cd4+ t helper cell	SKCM	-0.085574412
UCKL1	Cd4+cd25+ regulatory t c	SKCM	-0.088384677
UCKL1	Cd8+ cytotoxic t cell	SKCM	-0.067003109
UCKL1	Cd8+ regulatory t cell	SKCM	-0.031989494
UCKL1	Cell_cycle	SKCM	0.053808288
UCKL1	Chandran_metastasis_top5	SKCM	0.003011869
UCKL1	Citrate cycle (tca cycle)	SKCM	-0.037589773
UCKL1	Cysteine and methionine r	SKCM	-0.065895483
UCKL1	Cytokine induced killer c	SKCM	-0.029413149
UCKL1	D-arginine and d-ornithin	SKCM	-0.08910923
UCKL1	D-glutamine and d-glutan	SKCM	0.040022211
UCKL1	Dendritic cell	SKCM	-0.179703487
UCKL1	Dna_repair	SKCM	0.074335513
UCKL1	Dna_replication	SKCM	0.075674963
UCKL1	Double-negative memory	SKCM	0.010631643
UCKL1	Drug metabolism - cytoch	SKCM	-0.091899072
UCKL1	Drug metabolism - other c	SKCM	0.02574719
UCKL1	E2f_targets	SKCM	0.072107834
UCKL1	Ecm_receptor_interaction	SKCM	-0.179560108
UCKL1	Effector cd4+ memory t (	SKCM	-0.06192244
UCKL1	Effector cd8+ memory t (	SKCM	-0.107923997
UCKL1	Effector memory t cell	SKCM	-0.085086026
UCKL1	Effector regulatory t (treg	SKCM	-0.024987101
UCKL1	Elvidge_hif1a_targets_up	SKCM	-0.098392009
UCKL1	Endothelial cell	SKCM	-0.186684441
UCKL1	Eosinophil	SKCM	-0.143481629
UCKL1	Ether lipid metabolism	SKCM	-0.091893988
UCKL1	Exhausted cd4+ t cell	SKCM	-0.111906396
UCKL1	Exhausted cd8+ t cell	SKCM	-0.111464737
UCKL1	Exhausted t cell	SKCM	-0.05325254
UCKL1	Fat cell (adipocyte)	SKCM	0.053559582
UCKL1	Fatty acid biosynthesis	SKCM	-0.078904313
UCKL1	Fatty acid degradation	SKCM	-0.189437535
UCKL1	Fatty acid elongation	SKCM	-0.186608634
UCKL1	Fibroblast	SKCM	-0.296477088
UCKL1	Folate biosynthesis	SKCM	-0.162019795
UCKL1	Follicular b cell	SKCM	-0.117381652
UCKL1	Follicular dendritic cell	SKCM	-0.066417225
UCKL1	Follicular helper (tfh) t ce	SKCM	-0.1416617

UCKL1	Follicular t cell	SKCM	0.016771577
UCKL1	Foxp3+il-17+ t cell	SKCM	-0.140043099
UCKL1	Fructose and mannose me	SKCM	-0.016279804
UCKL1	G2m_checkpoint	SKCM	0.032270418
UCKL1	Galactose metabolism	SKCM	-0.110096011
UCKL1	Galie_tumor_stemness_ge	SKCM	-0.276647587
UCKL1	Glutathione metabolism	SKCM	-0.132072031
UCKL1	Glycerolipid metabolism	SKCM	0.057635543
UCKL1	Glycerophospholipid metæ	SKCM	0.030957558
UCKL1	Glycine, serine and threor	SKCM	-0.002028493
UCKL1	Glycolysis / gluconeogene	SKCM	-0.057355767
UCKL1	Glycosaminoglycan biosyn	SKCM	-0.015098672
UCKL1	Glycosaminoglycan biosyn	SKCM	-0.196349512
UCKL1	Glycosaminoglycan biosyn	SKCM	-0.091932044
UCKL1	Glycosaminoglycan degra	SKCM	-0.203055551
UCKL1	Glycosphingolipid biosyn	SKCM	-0.095677263
UCKL1	Glycosphingolipid biosyn	SKCM	-0.16115343
UCKL1	Glycosphingolipid biosyn	SKCM	-0.123299318
UCKL1	Glycosylphosphatidylinos	SKCM	-0.147838325
UCKL1	Glyoxylate and dicarboxy	SKCM	-0.094206877
UCKL1	Granulocyte	SKCM	-0.152268494
UCKL1	Hedgehog_signaling	SKCM	-0.217018742
UCKL1	Histidine metabolism	SKCM	-0.145040675
UCKL1	Hypoxia	SKCM	-0.173875558
UCKL1	Il-17ralpha t cell	SKCM	-0.092258766
UCKL1	Il2_stat5_signaling	SKCM	-0.18982721
UCKL1	Il6_jak_stat3_signaling	SKCM	-0.203301487
UCKL1	Immune_checkpoints_tun	SKCM	-0.248712525
UCKL1	Immune_inhibition_cytok	SKCM	-0.223270856
UCKL1	Inositol phosphate metabo	SKCM	-0.131518103
UCKL1	Interleukin_6_signaling	SKCM	-0.202825525
UCKL1	Jaeger_metastasis_up	SKCM	-0.101505192
UCKL1	Jain_nfkb_signaling	SKCM	0.202055603
UCKL1	Kras_signaling_up	SKCM	-0.276157801
UCKL1	Linoleic acid metabolism	SKCM	-0.011919858
UCKL1	Lipoic acid metabolism	SKCM	0.090329887
UCKL1	Lysine degradation	SKCM	0.03825228
UCKL1	Lysosome	SKCM	-0.310565859
UCKL1	M1 macrophage	SKCM	-0.222721671
UCKL1	M2 macrophage	SKCM	-0.194044024
UCKL1	Mannose type o-glycan bi	SKCM	0.212518317
UCKL1	Mapk_signaling_pathway	SKCM	-0.086458321
UCKL1	Mapk3_erk1_activation	SKCM	-0.13108188

UCKL1	Marginal zone b cell	SKCM	-0.138822198
UCKL1	Memory b cell	SKCM	-0.124239823
UCKL1	Mesenchymal cell	SKCM	-0.085187406
UCKL1	Mesenchymal stem cell	SKCM	-0.245589599
UCKL1	Metabolism of xenobiotics	SKCM	-0.073339602
UCKL1	Migrating cancer stem cell	SKCM	-0.136294188
UCKL1	Mitotic_spindle	SKCM	-0.059693391
UCKL1	Monocyte	SKCM	-0.166441406
UCKL1	Mtor_signaling_pathway	SKCM	-0.039781843
UCKL1	Mtorc1_signaling	SKCM	-0.168119769
UCKL1	Mucin type o-glycan biosynthesis	SKCM	-0.151316198
UCKL1	Myc_targets_v1	SKCM	0.103617137
UCKL1	Myeloid cell	SKCM	-0.173808595
UCKL1	N-glycan biosynthesis	SKCM	-0.150804597
UCKL1	Naive b cell	SKCM	-0.087011419
UCKL1	Naive cd4+ t cell	SKCM	-0.183168344
UCKL1	Naive cd8+ t cell	SKCM	-0.112484695
UCKL1	Natural killer cell	SKCM	-0.122183043
UCKL1	Natural killer t (nkt) cell	SKCM	0.028300799
UCKL1	Natural regulatory t (treg) cell	SKCM	-0.12132012
UCKL1	Neomycin, kanamycin and streptomycin	SKCM	0.034766843
UCKL1	Neutrophil	SKCM	-0.242563279
UCKL1	Nicotinate and nicotinamide metabolism	SKCM	-0.192584207
UCKL1	Nitrogen metabolism	SKCM	-0.175529117
UCKL1	Nod_like_receptor_signaling	SKCM	-0.228573833
UCKL1	Notch_signaling	SKCM	-0.042772686
UCKL1	One carbon pool by folate	SKCM	0.021031692
UCKL1	Other glycan degradation	SKCM	-0.115117824
UCKL1	Other types of o-glycan biosynthesis	SKCM	0.158806916
UCKL1	Oxidative phosphorylation	SKCM	0.040950565
UCKL1	P53_pathway	SKCM	-0.153742013
UCKL1	P53_signaling_pathway	SKCM	-0.062762349
UCKL1	Pantothenate and coa biosynthesis	SKCM	-0.150655944
UCKL1	Pentose and glucuronate interconversions	SKCM	-0.291318747
UCKL1	Pentose phosphate pathway	SKCM	0.036462391
UCKL1	Pericyte	SKCM	-0.242856479
UCKL1	Phenylalanine metabolism	SKCM	0.009996736
UCKL1	Phenylalanine, tyrosine and tryptophan metabolism	SKCM	-0.017867002
UCKL1	Phosphonate and phosphonate metabolism	SKCM	-0.159065449
UCKL1	Pi3k_akt_activation	SKCM	-0.032375655
UCKL1	Pi3k_akt_mtor_signaling	SKCM	-0.175043314
UCKL1	Porphyrin and chlorophyll metabolism	SKCM	-0.142918336
UCKL1	Primary bile acid biosynthesis	SKCM	-0.068760992

UCKL1	Propanoate metabolism	SKCM	-0.168296109
UCKL1	Purine metabolism	SKCM	0.070110603
UCKL1	Pyrimidine metabolism	SKCM	0.142630585
UCKL1	Pyruvate metabolism	SKCM	-0.14339444
UCKL1	Regulation_of_autophagy	SKCM	-0.031965732
UCKL1	Retinol metabolism	SKCM	-0.120114156
UCKL1	Riboflavin metabolism	SKCM	-0.1217746
UCKL1	Schmahl_pdgf_signaling	SKCM	-0.233932152
UCKL1	Selenocompound metabol	SKCM	0.028170547
UCKL1	Signaling_by_hippo	SKCM	-0.178707396
UCKL1	Sphingolipid metabolism	SKCM	-0.155576928
UCKL1	Starch and sucrose metabo	SKCM	-0.205735883
UCKL1	Steroid biosynthesis	SKCM	-0.085396035
UCKL1	Steroid hormone biosynth	SKCM	-0.156823411
UCKL1	Sulfur metabolism	SKCM	-0.160197227
UCKL1	Synthesis and degradation	SKCM	-0.121207618
UCKL1	T helper cell	SKCM	-0.180070654
UCKL1	T helper1 (th1) cell	SKCM	-0.112635449
UCKL1	T helper17 (th17) cell	SKCM	-0.153098515
UCKL1	T helper2 (th2) cell	SKCM	-0.153953524
UCKL1	T helper9 (th9) cell	SKCM	-0.085491038
UCKL1	Taurine and hypotaurine r	SKCM	0.071170155
UCKL1	Terpenoid backbone biosy	SKCM	-0.107011514
UCKL1	Tgf_beta_signaling_pathw	SKCM	-0.136964045
UCKL1	Thiamine metabolism	SKCM	-0.133982979
UCKL1	Tnfa_signaling_via_nfb	SKCM	-0.227631264
UCKL1	Tryptophan metabolism	SKCM	-0.143007987
UCKL1	Tumor endothelial cell	SKCM	-0.079633102
UCKL1	Tyrosine metabolism	SKCM	0.001065122
UCKL1	Ubiquinone and other ter	SKCM	-0.130961226
UCKL1	Valine, leucine and isoleu	SKCM	0.059617267
UCKL1	Valine, leucine and isoleu	SKCM	-0.158322858
UCKL1	Vascular endothelial cell	SKCM	-0.142039969
UCKL1	Vascular smooth muscle c	SKCM	-0.158228914
UCKL1	Vegf_signaling_pathway	SKCM	-0.171030846
UCKL1	Vitamin b6 metabolism	SKCM	-0.191812855
UCKL1	Willert_wnt_signaling	SKCM	-0.145518095
UCKL1	Wnt_beta_catenin_signali	SKCM	0.038637809
UPP1	Abnormal plasma cell	SKCM	-0.206098907
UPP1	Activated b cell	SKCM	0.074525502
UPP1	Activated cd4+ t cell	SKCM	-0.041544218
UPP1	Activated t cell	SKCM	0.057943584
UPP1	Alanine, aspartate and glu	SKCM	0.169671222

UPP1	Alcala_apoptosis	SKCM	0.369640804
UPP1	Alpha-linolenic acid meta	SKCM	0.040761774
UPP1	Amino sugar and nucleoti	SKCM	0.522959248
UPP1	Ampk_pathway	SKCM	0.166123981
UPP1	Angiogenesis	SKCM	0.009397344
UPP1	Arachidonic acid metabol	SKCM	0.028722624
UPP1	Arginine and proline metæ	SKCM	0.374478973
UPP1	Arginine biosynthesis	SKCM	0.293462703
UPP1	Ascorbate and aldarate me	SKCM	0.120405569
UPP1	Atypical memory b cell	SKCM	0.037666985
UPP1	Axl+siglec6+ dendritic ce	SKCM	0.069525956
UPP1	B cell	SKCM	-0.058898136
UPP1	B1 cell	SKCM	0.062165694
UPP1	Basal cell	SKCM	0.012425445
UPP1	Beta-alanine metabolism	SKCM	0.170709132
UPP1	Biosynthesis of unsaturate	SKCM	0.336046704
UPP1	Biotin metabolism	SKCM	0.320018231
UPP1	Butanoate metabolism	SKCM	0.29973771
UPP1	Caffeine metabolism	SKCM	0.017557531
UPP1	Cancer stem cell	SKCM	-0.121372459
UPP1	Cancer stem-like cell	SKCM	-0.122477093
UPP1	Cd4+ cytotoxic t cell	SKCM	0.157444912
UPP1	Cd4+ memory t cell	SKCM	0.066903356
UPP1	Cd4+ regulatory t cell	SKCM	0.068629638
UPP1	Cd4+ t helper cell	SKCM	0.008195467
UPP1	Cd4+cd25+ regulatory t c	SKCM	0.006691894
UPP1	Cd8+ cytotoxic t cell	SKCM	0.064682072
UPP1	Cd8+ regulatory t cell	SKCM	0.035880884
UPP1	Cell_cycle	SKCM	0.009751533
UPP1	Chandran_metastasis_top	SKCM	-0.099076215
UPP1	Citrate cycle (tca cycle)	SKCM	0.452942697
UPP1	Cysteine and methionine r	SKCM	0.242374299
UPP1	Cytokine induced killer c	SKCM	-0.067288949
UPP1	D-arginine and d-ornithin	SKCM	0.075946139
UPP1	D-glutamine and d-glutan	SKCM	-0.145098678
UPP1	Dendritic cell	SKCM	0.08578039
UPP1	Dna_repair	SKCM	0.413821014
UPP1	Dna_replication	SKCM	0.264667175
UPP1	Double-negative memory	SKCM	0.037511022
UPP1	Drug metabolism - cytoch	SKCM	0.134464868
UPP1	Drug metabolism - other	SKCM	0.448743138
UPP1	E2f_targets	SKCM	0.044566118
UPP1	Ecm_receptor_interaction	SKCM	-0.038336551

UPP1	Effector cd4+ memory t (SKCM	-0.076189841
UPP1	Effector cd8+ memory t (SKCM	0.125831948
UPP1	Effector memory t cell SKCM	-0.003981693
UPP1	Effector regulatory t (treg SKCM	-0.085475576
UPP1	Elvidge_hif1a_targets_up SKCM	0.260594655
UPP1	Endothelial cell SKCM	-0.202445562
UPP1	Eosinophil SKCM	0.133741391
UPP1	Ether lipid metabolism SKCM	0.019826572
UPP1	Exhausted cd4+ t cell SKCM	-0.038295392
UPP1	Exhausted cd8+ t cell SKCM	0.04846286
UPP1	Exhausted t cell SKCM	0.088719009
UPP1	Fat cell (adipocyte) SKCM	0.157310021
UPP1	Fatty acid biosynthesis SKCM	0.307048729
UPP1	Fatty acid degradation SKCM	0.299014147
UPP1	Fatty acid elongation SKCM	0.409957268
UPP1	Fibroblast SKCM	-0.065282712
UPP1	Folate biosynthesis SKCM	0.592243889
UPP1	Follicular b cell SKCM	-0.049868841
UPP1	Follicular dendritic cell SKCM	-0.079321006
UPP1	Follicular helper (tfh) t ce SKCM	0.168331596
UPP1	Follicular t cell SKCM	0.082940828
UPP1	Foxp3+il-17+ t cell SKCM	0.180156408
UPP1	Fructose and mannose me SKCM	0.615961284
UPP1	G2m_checkpoint SKCM	0.01940682
UPP1	Galactose metabolism SKCM	0.500989593
UPP1	Galie_tumor_stemness_ge SKCM	-0.138556771
UPP1	Glutathione metabolism SKCM	0.514815846
UPP1	Glycerolipid metabolism SKCM	0.342070286
UPP1	Glycerophospholipid metæ SKCM	0.216190901
UPP1	Glycine, serine and threor SKCM	0.370170544
UPP1	Glycolysis / gluconeogene SKCM	0.52156857
UPP1	Glycosaminoglycan biosy1 SKCM	0.089785348
UPP1	Glycosaminoglycan biosy1 SKCM	-0.152299566
UPP1	Glycosaminoglycan biosy1 SKCM	0.245505417
UPP1	Glycosaminoglycan degra SKCM	0.292863072
UPP1	Glycosphingolipid biosyn1 SKCM	0.28746127
UPP1	Glycosphingolipid biosyn1 SKCM	0.423919192
UPP1	Glycosphingolipid biosyn1 SKCM	0.215356533
UPP1	Glycosylphosphatidylinos: SKCM	-0.021260385
UPP1	Glyoxylate and dicarboxy SKCM	0.373228127
UPP1	Granulocyte SKCM	0.039221174
UPP1	Hedgehog_signaling SKCM	-0.019208763
UPP1	Histidine metabolism SKCM	0.040164536

UPP1	Hypoxia	SKCM	0.397751228
UPP1	Il-17alpha t cell	SKCM	0.053847057
UPP1	Il2_stat5_signaling	SKCM	0.313186267
UPP1	Il6_jak_stat3_signaling	SKCM	0.191802819
UPP1	Immune_checkpoints_tun	SKCM	0.183958479
UPP1	Immune_inhibition_cytok	SKCM	0.215926828
UPP1	Inositol phosphate metabo	SKCM	-0.184842704
UPP1	Interleukin_6_signaling	SKCM	-0.051794904
UPP1	Jaeger_metastasis_up	SKCM	0.223441343
UPP1	Jain_nfkb_signaling	SKCM	0.078931521
UPP1	Kras_signaling_up	SKCM	-0.025108445
UPP1	Linoleic acid metabolism	SKCM	-0.075778402
UPP1	Lipoic acid metabolism	SKCM	-0.235736682
UPP1	Lysine degradation	SKCM	0.048011868
UPP1	Lysosome	SKCM	0.533243062
UPP1	M1 macrophage	SKCM	0.104628846
UPP1	M2 macrophage	SKCM	0.078764912
UPP1	Mannose type o-glycan bi	SKCM	0.322468587
UPP1	Mapk_signaling_pathway	SKCM	0.128958731
UPP1	Mapk3_erk1_activation	SKCM	0.029949559
UPP1	Marginal zone b cell	SKCM	-0.082799124
UPP1	Memory b cell	SKCM	-0.092242324
UPP1	Mesenchymal cell	SKCM	-0.09838623
UPP1	Mesenchymal stem cell	SKCM	-0.0704221
UPP1	Metabolism of xenobiotic	SKCM	0.26115445
UPP1	Migrating cancer stem cel	SKCM	0.003850667
UPP1	Mitotic_spindle	SKCM	-0.104404524
UPP1	Monocyte	SKCM	0.196664888
UPP1	Mtor_signaling_pathway	SKCM	0.104041341
UPP1	Mtorc1_signaling	SKCM	0.475866455
UPP1	Mucin type o-glycan biosy	SKCM	0.175585966
UPP1	Myc_targets_v1	SKCM	0.209063588
UPP1	Myeloid cell	SKCM	0.006110157
UPP1	N-glycan biosynthesis	SKCM	0.322310695
UPP1	Naive b cell	SKCM	-0.087492705
UPP1	Naive cd4+ t cell	SKCM	-0.263157602
UPP1	Naive cd8+ t cell	SKCM	-0.419461486
UPP1	Natural killer cell	SKCM	0.074254176
UPP1	Natural killer t (nkt) cell	SKCM	-0.144086911
UPP1	Natural regulatory t (treg)	SKCM	0.009864457
UPP1	Neomycin, kanamycin and	SKCM	0.213263865
UPP1	Neutrophil	SKCM	0.23417465
UPP1	Nicotinate and nicotinami	SKCM	0.278239618

UPP1	Nitrogen metabolism	SKCM	-0.06300577
UPP1	Nod_like_receptor_signal	SKCM	0.078731708
UPP1	Notch_signaling	SKCM	0.147464472
UPP1	One carbon pool by folate	SKCM	-0.017595754
UPP1	Other glycan degradation	SKCM	0.317316217
UPP1	Other types of o-glycan b	SKCM	0.092348467
UPP1	Oxidative phosphorylatio	SKCM	0.52505649
UPP1	P53_pathway	SKCM	0.195728325
UPP1	P53_signaling_pathway	SKCM	-0.072212207
UPP1	Pantothenate and coa bios	SKCM	0.241618549
UPP1	Pentose and glucuronate in	SKCM	0.379023801
UPP1	Pentose phosphate pathwa	SKCM	0.660882777
UPP1	Pericyte	SKCM	-0.089222439
UPP1	Phenylalanine metabolism	SKCM	0.296356624
UPP1	Phenylalanine, tyrosine ar	SKCM	0.400076229
UPP1	Phosphonate and phosphir	SKCM	0.259985832
UPP1	Pi3k_akt_activation	SKCM	-0.060639025
UPP1	Pi3k_akt_mtor_signaling	SKCM	0.407937427
UPP1	Porphyrin and chlorophyl	SKCM	0.5308731
UPP1	Primary bile acid biosynt	SKCM	0.047712506
UPP1	Propanoate metabolism	SKCM	0.083227397
UPP1	Purine metabolism	SKCM	0.495242997
UPP1	Pyrimidine metabolism	SKCM	0.426746975
UPP1	Pyruvate metabolism	SKCM	0.391590668
UPP1	Regulation_of_autophagy	SKCM	0.065977912
UPP1	Retinol metabolism	SKCM	0.125132466
UPP1	Riboflavin metabolism	SKCM	0.477761933
UPP1	Schmahl_pdgf_signaling	SKCM	-0.025086527
UPP1	Selenocompound metabol	SKCM	0.036821648
UPP1	Signaling_by_hippo	SKCM	-0.187092793
UPP1	Sphingolipid metabolism	SKCM	0.337065689
UPP1	Starch and sucrose metabo	SKCM	0.274670059
UPP1	Steroid biosynthesis	SKCM	0.434769206
UPP1	Steroid hormone biosynth	SKCM	0.096104651
UPP1	Sulfur metabolism	SKCM	0.032292719
UPP1	Synthesis and degradation	SKCM	0.305235764
UPP1	T helper cell	SKCM	0.121949108
UPP1	T helper1 (th1) cell	SKCM	0.091247409
UPP1	T helper17 (th17) cell	SKCM	0.143155968
UPP1	T helper2 (th2) cell	SKCM	0.082564562
UPP1	T helper9 (th9) cell	SKCM	0.051191052
UPP1	Taurine and hypotaurine r	SKCM	-0.037022384
UPP1	Terpenoid backbone biosy	SKCM	0.301368124

UPP1	Tgf_beta_signaling_pathw	SKCM	-0.380447904
UPP1	Thiamine metabolism	SKCM	0.508879469
UPP1	Tnfa_signaling_via_nfk	SKCM	0.330709997
UPP1	Tryptophan metabolism	SKCM	0.343116245
UPP1	Tumor endothelial cell	SKCM	-0.037053999
UPP1	Tyrosine metabolism	SKCM	0.276439304
UPP1	Ubiquinone and other ter	SKCM	0.510851846
UPP1	Valine, leucine and isoleu	SKCM	0.529540608
UPP1	Valine, leucine and isoleu	SKCM	0.290051097
UPP1	Vascular endothelial cell	SKCM	0.207673478
UPP1	Vascular smooth muscle c	SKCM	0.019637598
UPP1	Vegf_signaling_pathway	SKCM	0.182273619
UPP1	Vitamin b6 metabolism	SKCM	0.430349481
UPP1	Willert_wnt_signaling	SKCM	-0.10663214
UPP1	Wnt_beta_catenin_signali	SKCM	-0.006678888
UPP2	Abnormal plasma cell	SKCM	0.168829447
UPP2	Activated b cell	SKCM	0.055160479
UPP2	Activated cd4+ t cell	SKCM	0.058237541
UPP2	Activated t cell	SKCM	0.023961969
UPP2	Alanine, aspartate and glu	SKCM	-0.08560438
UPP2	Alcala_apoptosis	SKCM	-0.196434442
UPP2	Alpha-linolenic acid meta	SKCM	-0.110917519
UPP2	Amino sugar and nucleoti	SKCM	-0.243779011
UPP2	Ampk_pathway	SKCM	-0.070651674
UPP2	Angiogenesis	SKCM	0.046340544
UPP2	Arachidonic acid metabol	SKCM	-0.094204636
UPP2	Arginine and proline met	SKCM	-0.247226121
UPP2	Arginine biosynthesis	SKCM	-0.248282399
UPP2	Ascorbate and aldarate m	SKCM	-0.238705769
UPP2	Atypical memory b cell	SKCM	0.00120868
UPP2	Axl+siglec6+ dendritic ce	SKCM	-0.003377666
UPP2	B cell	SKCM	0.098951963
UPP2	B1 cell	SKCM	-0.031952279
UPP2	Basal cell	SKCM	-0.124722238
UPP2	Beta-alanine metabolism	SKCM	-0.074737465
UPP2	Biosynthesis of unsaturate	SKCM	-0.141060972
UPP2	Biotin metabolism	SKCM	-0.047530668
UPP2	Butanoate metabolism	SKCM	-0.228191909
UPP2	Caffeine metabolism	SKCM	-0.082659985
UPP2	Cancer stem cell	SKCM	0.046535373
UPP2	Cancer stem-like cell	SKCM	0.198366476
UPP2	Cd4+ cytotoxic t cell	SKCM	-0.01687241
UPP2	Cd4+ memory t cell	SKCM	-0.025073118

UPP2	Cd4+ regulatory t cell	SKCM	0.038835818
UPP2	Cd4+ t helper cell	SKCM	0.053102496
UPP2	Cd4+cd25+ regulatory t c	SKCM	0.055277804
UPP2	Cd8+ cytotoxic t cell	SKCM	-0.007147651
UPP2	Cd8+ regulatory t cell	SKCM	0.014247049
UPP2	Cell_cycle	SKCM	-0.009471615
UPP2	Chandran_metastasis_top	SKCM	-0.046350683
UPP2	Citrate cycle (tca cycle)	SKCM	-0.313919661
UPP2	Cysteine and methionine r	SKCM	-0.149746396
UPP2	Cytokine induced killer c	SKCM	0.162143521
UPP2	D-arginine and d-ornithin	SKCM	0.067205606
UPP2	D-glutamine and d-glutan	SKCM	0.001489901
UPP2	Dendritic cell	SKCM	0.034839832
UPP2	Dna_repair	SKCM	-0.15079769
UPP2	Dna_replication	SKCM	-0.067267947
UPP2	Double-negative memory	SKCM	-0.011960709
UPP2	Drug metabolism - cytoch	SKCM	-0.182645397
UPP2	Drug metabolism - other	SKCM	-0.264138124
UPP2	E2f_targets	SKCM	-0.051159986
UPP2	Ecm_receptor_interaction	SKCM	0.031363028
UPP2	Effector cd4+ memory t (	SKCM	0.05824302
UPP2	Effector cd8+ memory t (	SKCM	-0.008462475
UPP2	Effector memory t cell	SKCM	0.035913917
UPP2	Effector regulatory t (treg	SKCM	0.068616509
UPP2	Elvidge_hif1a_targets_up	SKCM	-0.2477875
UPP2	Endothelial cell	SKCM	0.155724717
UPP2	Eosinophil	SKCM	0.020208368
UPP2	Ether lipid metabolism	SKCM	-0.113649961
UPP2	Exhausted cd4+ t cell	SKCM	0.136024513
UPP2	Exhausted cd8+ t cell	SKCM	0.116822348
UPP2	Exhausted t cell	SKCM	0.018266685
UPP2	Fat cell (adipocyte)	SKCM	-0.01413821
UPP2	Fatty acid biosynthesis	SKCM	-0.184607827
UPP2	Fatty acid degradation	SKCM	-0.241592785
UPP2	Fatty acid elongation	SKCM	-0.200905576
UPP2	Fibroblast	SKCM	0.097853271
UPP2	Folate biosynthesis	SKCM	-0.278467546
UPP2	Follicular b cell	SKCM	0.057312178
UPP2	Follicular dendritic cell	SKCM	0.107953532
UPP2	Follicular helper (tfh) t ce	SKCM	-0.079540712
UPP2	Follicular t cell	SKCM	-0.009242855
UPP2	Foxp3+il-17+ t cell	SKCM	-0.083052883
UPP2	Fructose and mannose me	SKCM	-0.185593521

UPP2	G2m_checkpoint	SKCM	-0.078245867
UPP2	Galactose metabolism	SKCM	-0.216219101
UPP2	Galie_tumor_stemness_ge	SKCM	0.090735025
UPP2	Glutathione metabolism	SKCM	-0.226216053
UPP2	Glycerolipid metabolism	SKCM	-0.25011666
UPP2	Glycerophospholipid metæ	SKCM	-0.122077649
UPP2	Glycine, serine and threor	SKCM	-0.141013224
UPP2	Glycolysis / gluconeogene	SKCM	-0.229851111
UPP2	Glycosaminoglycan biosy	SKCM	0.059627441
UPP2	Glycosaminoglycan biosy	SKCM	0.055688579
UPP2	Glycosaminoglycan biosy	SKCM	-0.070424728
UPP2	Glycosaminoglycan degra	SKCM	-0.113185959
UPP2	Glycosphingolipid biosyn	SKCM	-0.019677716
UPP2	Glycosphingolipid biosyn	SKCM	-0.270133435
UPP2	Glycosphingolipid biosyn	SKCM	-0.213981675
UPP2	Glycosylphosphatidylinos	SKCM	-0.095744288
UPP2	Glyoxylate and dicarboxy	SKCM	-0.232065683
UPP2	Granulocyte	SKCM	0.084081284
UPP2	Hedgehog_signaling	SKCM	-0.019401215
UPP2	Histidine metabolism	SKCM	-0.122402693
UPP2	Hypoxia	SKCM	-0.102049945
UPP2	Il-17alpha t cell	SKCM	0.011971046
UPP2	Il2_stat5_signaling	SKCM	-0.070473941
UPP2	Il6_jak_stat3_signaling	SKCM	0.01524555
UPP2	Immune_checkpoints_tun	SKCM	0.011585926
UPP2	Immune_inhibition_cytok	SKCM	-0.017107126
UPP2	Inositol phosphate metabo	SKCM	-0.017201915
UPP2	Interleukin_6_signaling	SKCM	0.039661683
UPP2	Jaeger_metastasis_up	SKCM	-0.002762219
UPP2	Jain_nfkb_signaling	SKCM	-0.042470779
UPP2	Kras_signaling_up	SKCM	0.058093601
UPP2	Linoleic acid metabolism	SKCM	-0.10885261
UPP2	Lipoic acid metabolism	SKCM	0.144323448
UPP2	Lysine degradation	SKCM	-0.132417629
UPP2	Lysosome	SKCM	-0.198207543
UPP2	M1 macrophage	SKCM	0.043380827
UPP2	M2 macrophage	SKCM	-0.019130129
UPP2	Mannose type o-glycan bi	SKCM	-0.181801445
UPP2	Mapk_signaling_pathway	SKCM	0.010831379
UPP2	Mapk3_erk1_activation	SKCM	0.021772311
UPP2	Marginal zone b cell	SKCM	0.18545435
UPP2	Memory b cell	SKCM	0.084916352
UPP2	Mesenchymal cell	SKCM	0.169811903

UPP2	Mesenchymal stem cell	SKCM	0.14289666
UPP2	Metabolism of xenobiotic	SKCM	-0.182703626
UPP2	Migrating cancer stem cel	SKCM	0.052161233
UPP2	Mitotic_spindle	SKCM	-0.008075882
UPP2	Monocyte	SKCM	0.000815138
UPP2	Mtor_signaling_pathway	SKCM	-0.077473554
UPP2	Mtorc1_signaling	SKCM	-0.274422478
UPP2	Mucin type o-glycan bios	SKCM	-0.211177299
UPP2	Myc_targets_v1	SKCM	-0.189231415
UPP2	Myeloid cell	SKCM	0.063982846
UPP2	N-glycan biosynthesis	SKCM	-0.186007815
UPP2	Naive b cell	SKCM	-0.031373213
UPP2	Naive cd4+ t cell	SKCM	0.055174146
UPP2	Naive cd8+ t cell	SKCM	0.126578149
UPP2	Natural killer cell	SKCM	0.044631455
UPP2	Natural killer t (nkt) cell	SKCM	0.118906322
UPP2	Natural regulatory t (treg)	SKCM	0.066689933
UPP2	Neomycin, kanamycin and	SKCM	-0.058955595
UPP2	Neutrophil	SKCM	-0.109795141
UPP2	Nicotinate and nicotinami	SKCM	-0.174635521
UPP2	Nitrogen metabolism	SKCM	-0.082580158
UPP2	Nod_like_receptor_signal	SKCM	0.007634138
UPP2	Notch_signaling	SKCM	-0.012832367
UPP2	One carbon pool by folate	SKCM	-0.013566261
UPP2	Other glycan degradation	SKCM	-0.088801946
UPP2	Other types of o-glycan b	SKCM	0.097718078
UPP2	Oxidative phosphorylatio	SKCM	-0.202390635
UPP2	P53_pathway	SKCM	-0.111159027
UPP2	P53_signaling_pathway	SKCM	0.046368491
UPP2	Pantothenate and coa bios	SKCM	-0.058064629
UPP2	Pentose and glucuronate in	SKCM	-0.250230819
UPP2	Pentose phosphate pathwa	SKCM	-0.238335272
UPP2	Pericyte	SKCM	0.192836117
UPP2	Phenylalanine metabolism	SKCM	-0.099961226
UPP2	Phenylalanine, tyrosine ar	SKCM	-0.119143649
UPP2	Phosphonate and phosphir	SKCM	-0.065851636
UPP2	Pi3k_akt_activation	SKCM	0.110519
UPP2	Pi3k_akt_mtor_signaling	SKCM	-0.115610849
UPP2	Porphyrin and chlorophyl	SKCM	-0.391159423
UPP2	Primary bile acid biosynt	SKCM	0.090963233
UPP2	Propanoate metabolism	SKCM	-0.090893453
UPP2	Purine metabolism	SKCM	-0.274226023
UPP2	Pyrimidine metabolism	SKCM	-0.151127224

UPP2	Pyruvate metabolism	SKCM	-0.311226906
UPP2	Regulation_of_autophagy	SKCM	0.059353549
UPP2	Retinol metabolism	SKCM	-0.148245044
UPP2	Riboflavin metabolism	SKCM	-0.147992116
UPP2	Schmahl_pdgf_signaling	SKCM	0.02794136
UPP2	Selenocompound metabol	SKCM	-0.068131159
UPP2	Signaling_by_hippo	SKCM	-0.018580291
UPP2	Sphingolipid metabolism	SKCM	-0.29913896
UPP2	Starch and sucrose metabo	SKCM	-0.01029386
UPP2	Steroid biosynthesis	SKCM	-0.250748647
UPP2	Steroid hormone biosynth	SKCM	-0.11817991
UPP2	Sulfur metabolism	SKCM	-0.087431022
UPP2	Synthesis and degradation	SKCM	-0.206569326
UPP2	T helper cell	SKCM	0.010443121
UPP2	T helper1 (th1) cell	SKCM	-0.026171037
UPP2	T helper17 (th17) cell	SKCM	-0.031248879
UPP2	T helper2 (th2) cell	SKCM	-0.02373133
UPP2	T helper9 (th9) cell	SKCM	-0.049657169
UPP2	Taurine and hypotaurine r	SKCM	0.030826656
UPP2	Terpenoid backbone biosy	SKCM	-0.268181007
UPP2	Tgf_beta_signaling_pathw	SKCM	0.153910336
UPP2	Thiamine metabolism	SKCM	-0.138749328
UPP2	Tnfa_signaling_via_nfk	SKCM	-0.020469034
UPP2	Tryptophan metabolism	SKCM	-0.112191369
UPP2	Tumor endothelial cell	SKCM	-0.103425121
UPP2	Tyrosine metabolism	SKCM	-0.157176315
UPP2	Ubiquinone and other ter	SKCM	-0.16495405
UPP2	Valine, leucine and isoleu	SKCM	-0.045586875
UPP2	Valine, leucine and isoleu	SKCM	-0.150985739
UPP2	Vascular endothelial cell	SKCM	-0.023265353
UPP2	Vascular smooth muscle c	SKCM	0.063175423
UPP2	Vegf_signaling_pathway	SKCM	-0.053664918
UPP2	Vitamin b6 metabolism	SKCM	-0.077224015
UPP2	Willert_wnt_signaling	SKCM	-0.062851985
UPP2	Wnt_beta_catenin_signali	SKCM	-0.018117153
CDA	Abnormal plasma cell	STAD	-0.1323989
CDA	Activated b cell	STAD	-0.183365942
CDA	Activated cd4+ t cell	STAD	-0.179320782
CDA	Activated t cell	STAD	-0.225247467
CDA	Alanine, aspartate and glu	STAD	-0.057625084
CDA	Alcala_apoptosis	STAD	-0.021180655
CDA	Alpha-linolenic acid meta	STAD	0.204173727
CDA	Amino sugar and nucleoti	STAD	0.057684912

CDA	Ampk_pathway	STAD	-0.090955414
CDA	Angiogenesis	STAD	0.199968565
CDA	Arachidonic acid metabolism	STAD	0.29892398
CDA	Arginine and proline metabolism	STAD	0.127798994
CDA	Arginine biosynthesis	STAD	0.116255555
CDA	Ascorbate and aldarate metabolism	STAD	-0.002424913
CDA	Atypical memory b cell	STAD	-0.109967456
CDA	Axl+siglec6+ dendritic cell	STAD	0.030481775
CDA	B cell	STAD	-0.215660309
CDA	B1 cell	STAD	-0.22067601
CDA	Basal cell	STAD	0.527971062
CDA	Beta-alanine metabolism	STAD	-0.074047834
CDA	Biosynthesis of unsaturated fatty acids	STAD	0.146776384
CDA	Biotin metabolism	STAD	-0.199641008
CDA	Butanoate metabolism	STAD	-0.153707183
CDA	Caffeine metabolism	STAD	0.084856826
CDA	Cancer stem cell	STAD	0.133066057
CDA	Cancer stem-like cell	STAD	-0.083897325
CDA	Cd4+ cytotoxic t cell	STAD	-0.056087886
CDA	Cd4+ memory t cell	STAD	-0.185623514
CDA	Cd4+ regulatory t cell	STAD	-0.145377299
CDA	Cd4+ t helper cell	STAD	-0.219293342
CDA	Cd4+cd25+ regulatory t cell	STAD	-0.210030293
CDA	Cd8+ cytotoxic t cell	STAD	-0.170836621
CDA	Cd8+ regulatory t cell	STAD	-0.253910753
CDA	Cell_cycle	STAD	-0.037975933
CDA	Chandran_metastasis_top5	STAD	-0.166492013
CDA	Citrate cycle (tca cycle)	STAD	-0.013180148
CDA	Cysteine and methionine metabolism	STAD	-0.014476898
CDA	Cytokine induced killer cell	STAD	-0.252894928
CDA	D-arginine and d-ornithine	STAD	0.110449102
CDA	D-glutamine and d-glutamate	STAD	-0.08463681
CDA	Dendritic cell	STAD	-0.095805964
CDA	Dna_repair	STAD	0.064399278
CDA	Dna_replication	STAD	-0.061817682
CDA	Double-negative memory t cell	STAD	-0.178593155
CDA	Drug metabolism - cytochrome p450	STAD	0.035284027
CDA	Drug metabolism - other	STAD	0.180517124
CDA	E2f_targets	STAD	-0.06113923
CDA	Ecm_receptor_interaction	STAD	0.114754657
CDA	Effector cd4+ memory t cell	STAD	-0.219725284
CDA	Effector cd8+ memory t cell	STAD	-0.055346641
CDA	Effector memory t cell	STAD	-0.199786782

CDA	Effector regulatory t (treg)	STAD	-0.175658343
CDA	Elvidge_hif1a_targets_up	STAD	-0.028121162
CDA	Endothelial cell	STAD	-0.059723043
CDA	Eosinophil	STAD	-0.065218355
CDA	Ether lipid metabolism	STAD	0.120398829
CDA	Exhausted cd4+ t cell	STAD	-0.118066218
CDA	Exhausted cd8+ t cell	STAD	-0.098146355
CDA	Exhausted t cell	STAD	-0.22947451
CDA	Fat cell (adipocyte)	STAD	0.096498893
CDA	Fatty acid biosynthesis	STAD	0.001650325
CDA	Fatty acid degradation	STAD	-0.170012998
CDA	Fatty acid elongation	STAD	0.165569171
CDA	Fibroblast	STAD	0.075708408
CDA	Folate biosynthesis	STAD	0.115996594
CDA	Follicular b cell	STAD	-0.211626543
CDA	Follicular dendritic cell	STAD	-0.175647182
CDA	Follicular helper (tfh) t ce	STAD	-0.142212977
CDA	Follicular t cell	STAD	-0.16778171
CDA	Foxp3+il-17+ t cell	STAD	-0.120397331
CDA	Fructose and mannose me	STAD	0.046991961
CDA	G2m_checkpoint	STAD	-0.070833843
CDA	Galactose metabolism	STAD	0.128506458
CDA	Galie_tumor_stemness_ge	STAD	0.192126702
CDA	Glutathione metabolism	STAD	0.149699389
CDA	Glycerolipid metabolism	STAD	0.061396489
CDA	Glycerophospholipid metæ	STAD	0.101067314
CDA	Glycine, serine and threor	STAD	0.061154029
CDA	Glycolysis / gluconeogene	STAD	0.032093518
CDA	Glycosaminoglycan biosyn	STAD	0.149567938
CDA	Glycosaminoglycan biosyn	STAD	0.018763161
CDA	Glycosaminoglycan biosyn	STAD	0.132297935
CDA	Glycosaminoglycan degra	STAD	0.008768385
CDA	Glycosphingolipid biosyn	STAD	0.049722257
CDA	Glycosphingolipid biosyn	STAD	0.077516601
CDA	Glycosphingolipid biosyn	STAD	0.095308112
CDA	Glycosylphosphatidylinos	STAD	-0.08866806
CDA	Glyoxylate and dicarboxy	STAD	-0.127599948
CDA	Granulocyte	STAD	-0.095561162
CDA	Hedgehog_signaling	STAD	0.106095346
CDA	Histidine metabolism	STAD	-0.005576209
CDA	Hypoxia	STAD	0.319491559
CDA	Il-17ralpha t cell	STAD	-0.214980493
CDA	Il2_stat5_signaling	STAD	0.033086201

CDA	Il6_jak_stat3_signaling	STAD	0.005884771
CDA	Immune_checkpoints_tun	STAD	-0.034842835
CDA	Immune_inhibition_cytok	STAD	0.03912236
CDA	Inositol phosphate metabo	STAD	-0.2456271
CDA	Interleukin_6_signaling	STAD	-0.189893769
CDA	Jaeger_metastasis_up	STAD	0.099547554
CDA	Jain_nfkb_signaling	STAD	-0.066321241
CDA	Kras_signaling_up	STAD	0.014691273
CDA	Linoleic acid metabolism	STAD	0.216892145
CDA	Lipoic acid metabolism	STAD	-0.208265971
CDA	Lysine degradation	STAD	-0.162679356
CDA	Lysosome	STAD	0.047594554
CDA	M1 macrophage	STAD	-0.052837217
CDA	M2 macrophage	STAD	-0.060642548
CDA	Mannose type o-glycan bi	STAD	-0.18647404
CDA	Mapk_signaling_pathway	STAD	0.061303063
CDA	Mapk3_erk1_activation	STAD	-0.081574606
CDA	Marginal zone b cell	STAD	-0.214257493
CDA	Memory b cell	STAD	-0.240320622
CDA	Mesenchymal cell	STAD	0.178961093
CDA	Mesenchymal stem cell	STAD	-0.018453051
CDA	Metabolism of xenobiotic	STAD	0.070156689
CDA	Migrating cancer stem cel	STAD	0.150763859
CDA	Mitotic_spindle	STAD	-0.05772724
CDA	Monocyte	STAD	0.059565498
CDA	Mtor_signaling_pathway	STAD	-0.107012258
CDA	Mtorc1_signaling	STAD	0.077501517
CDA	Mucin type o-glycan biosy	STAD	-0.011016899
CDA	Myc_targets_v1	STAD	0.014301604
CDA	Myeloid cell	STAD	-0.142622356
CDA	N-glycan biosynthesis	STAD	-0.027914469
CDA	Naive b cell	STAD	-0.155110688
CDA	Naive cd4+ t cell	STAD	-0.144574849
CDA	Naive cd8+ t cell	STAD	-0.11287375
CDA	Natural killer cell	STAD	-0.17116023
CDA	Natural killer t (nkt) cell	STAD	-0.197762496
CDA	Natural regulatory t (treg)	STAD	-0.180818319
CDA	Neomycin, kanamycin and	STAD	0.23458377
CDA	Neutrophil	STAD	0.180618193
CDA	Nicotinate and nicotinami	STAD	0.025617464
CDA	Nitrogen metabolism	STAD	-0.119242981
CDA	Nod_like_receptor_signal	STAD	-0.016503488
CDA	Notch_signaling	STAD	0.141053262

CDA	One carbon pool by folate	STAD	-0.111043235
CDA	Other glycan degradation	STAD	-0.086040712
CDA	Other types of o-glycan b	STAD	0.006841417
CDA	Oxidative phosphorylatior	STAD	0.091052296
CDA	P53_pathway	STAD	0.184891732
CDA	P53_signaling_pathway	STAD	-0.090025648
CDA	Pantothenate and coa bios	STAD	-0.048442131
CDA	Pentose and glucuronate i	STAD	-0.00855962
CDA	Pentose phosphate pathwa	STAD	0.098954932
CDA	Pericyte	STAD	0.030429394
CDA	Phenylalanine metabolism	STAD	0.228276999
CDA	Phenylalanine, tyrosine ar	STAD	0.111306099
CDA	Phosphonate and phosphir	STAD	-0.066709584
CDA	Pi3k_akt_activation	STAD	-0.125340263
CDA	Pi3k_akt_mtor_signaling	STAD	0.092108965
CDA	Porphyrin and chlorophyl	STAD	0.018963715
CDA	Primary bile acid biosynt	STAD	0.117372765
CDA	Propanoate metabolism	STAD	-0.1738274
CDA	Purine metabolism	STAD	-0.044112683
CDA	Pyrimidine metabolism	STAD	0.015659642
CDA	Pyruvate metabolism	STAD	-0.060488166
CDA	Regulation_of_autophagy	STAD	0.000532135
CDA	Retinol metabolism	STAD	0.072489843
CDA	Riboflavin metabolism	STAD	-0.010242343
CDA	Schmahl_pdgf_signaling	STAD	0.105225887
CDA	Selenocompound metabol	STAD	-0.189255176
CDA	Signaling_by_hippo	STAD	0.098090204
CDA	Sphingolipid metabolism	STAD	0.014728862
CDA	Starch and sucrose metabo	STAD	0.033952695
CDA	Steroid biosynthesis	STAD	0.146081519
CDA	Steroid hormone biosynth	STAD	0.221720257
CDA	Sulfur metabolism	STAD	0.040560395
CDA	Synthesis and degradation	STAD	-0.103892903
CDA	T helper cell	STAD	-0.134065626
CDA	T helper1 (th1) cell	STAD	-0.114754151
CDA	T helper17 (th17) cell	STAD	-0.10968745
CDA	T helper2 (th2) cell	STAD	-0.144970594
CDA	T helper9 (th9) cell	STAD	-0.202186769
CDA	Taurine and hypotaurine r	STAD	0.131549163
CDA	Terpenoid backbone biosy	STAD	0.023536454
CDA	Tgf_beta_signaling_pathw	STAD	0.037608066
CDA	Thiamine metabolism	STAD	0.181750433
CDA	Tnfa_signaling_via_nfkb	STAD	0.094362467

CDA	Tryptophan metabolism	STAD	-0.121840287
CDA	Tumor endothelial cell	STAD	0.302744465
CDA	Tyrosine metabolism	STAD	0.082802456
CDA	Ubiquinone and other terp	STAD	0.057411504
CDA	Valine, leucine and isoleu	STAD	-0.001798864
CDA	Valine, leucine and isoleu	STAD	-0.192645196
CDA	Vascular endothelial cell	STAD	-0.019601337
CDA	Vascular smooth muscle c	STAD	0.087393814
CDA	Vegf_signaling_pathway	STAD	0.075081502
CDA	Vitamin b6 metabolism	STAD	0.054918347
CDA	Willert_wnt_signaling	STAD	0.112516625
CDA	Wnt_beta_catenin_signali	STAD	0.061380231
UCK1	Abnormal plasma cell	STAD	0.040429396
UCK1	Activated b cell	STAD	0.0149055
UCK1	Activated cd4+ t cell	STAD	-0.093329582
UCK1	Activated t cell	STAD	-0.065856789
UCK1	Alanine, aspartate and glu	STAD	-0.070725752
UCK1	Alcala_apoptosis	STAD	-0.039048945
UCK1	Alpha-linolenic acid meta	STAD	-0.111314016
UCK1	Amino sugar and nucleoti	STAD	0.035658403
UCK1	Ampk_pathway	STAD	0.136609877
UCK1	Angiogenesis	STAD	0.040024224
UCK1	Arachidonic acid metabol	STAD	-0.067327594
UCK1	Arginine and proline meta	STAD	-0.005936944
UCK1	Arginine biosynthesis	STAD	-0.188663083
UCK1	Ascorbate and aldarate me	STAD	-0.225294716
UCK1	Atypical memory b cell	STAD	-0.034027308
UCK1	Axl+siglec6+ dendritic ce	STAD	-0.014884529
UCK1	B cell	STAD	-0.096547214
UCK1	B1 cell	STAD	0.027593363
UCK1	Basal cell	STAD	-0.104661135
UCK1	Beta-alanine metabolism	STAD	-0.086431945
UCK1	Biosynthesis of unsaturate	STAD	-0.049804087
UCK1	Biotin metabolism	STAD	-0.154641276
UCK1	Butanoate metabolism	STAD	-0.11858043
UCK1	Caffeine metabolism	STAD	-0.329024571
UCK1	Cancer stem cell	STAD	-0.132604281
UCK1	Cancer stem-like cell	STAD	-0.176476279
UCK1	Cd4+ cytotoxic t cell	STAD	-0.022208336
UCK1	Cd4+ memory t cell	STAD	-0.033498943
UCK1	Cd4+ regulatory t cell	STAD	0.008845592
UCK1	Cd4+ t helper cell	STAD	-0.051321086
UCK1	Cd4+cd25+ regulatory t c	STAD	-0.054921961

UCK1	Cd8+ cytotoxic t cell	STAD	-0.060960722
UCK1	Cd8+ regulatory t cell	STAD	-0.074580022
UCK1	Cell_cycle	STAD	-0.116523785
UCK1	Chandran_metastasis_top5	STAD	-0.198535174
UCK1	Citrate cycle (tca cycle)	STAD	-0.053067875
UCK1	Cysteine and methionine r	STAD	-0.149405637
UCK1	Cytokine induced killer c	STAD	0.048294417
UCK1	D-arginine and d-ornithin	STAD	-0.016766455
UCK1	D-glutamine and d-glutan	STAD	-0.240666053
UCK1	Dendritic cell	STAD	-0.055216499
UCK1	Dna_repair	STAD	0.091211638
UCK1	Dna_replication	STAD	-0.039132629
UCK1	Double-negative memory	STAD	0.0090001
UCK1	Drug metabolism - cytoch	STAD	-0.243116551
UCK1	Drug metabolism - other c	STAD	-0.141660217
UCK1	E2f_targets	STAD	-0.115633009
UCK1	Ecm_receptor_interaction	STAD	-0.013728569
UCK1	Effector cd4+ memory t (	STAD	-0.094665363
UCK1	Effector cd8+ memory t (	STAD	-0.032109073
UCK1	Effector memory t cell	STAD	-0.060073525
UCK1	Effector regulatory t (treg	STAD	-0.057868935
UCK1	Elvidge_hif1a_targets_up	STAD	-0.095299981
UCK1	Endothelial cell	STAD	-0.028336298
UCK1	Eosinophil	STAD	-0.081457191
UCK1	Ether lipid metabolism	STAD	-0.248103219
UCK1	Exhausted cd4+ t cell	STAD	-0.116208445
UCK1	Exhausted cd8+ t cell	STAD	-0.072857274
UCK1	Exhausted t cell	STAD	-0.048703622
UCK1	Fat cell (adipocyte)	STAD	0.200760746
UCK1	Fatty acid biosynthesis	STAD	-0.086896
UCK1	Fatty acid degradation	STAD	-0.206982032
UCK1	Fatty acid elongation	STAD	0.0672143
UCK1	Fibroblast	STAD	0.027368698
UCK1	Folate biosynthesis	STAD	0.011688639
UCK1	Follicular b cell	STAD	-0.03380711
UCK1	Follicular dendritic cell	STAD	-0.071838796
UCK1	Follicular helper (tfh) t ce	STAD	-0.02280042
UCK1	Follicular t cell	STAD	0.042846414
UCK1	Foxp3+il-17+ t cell	STAD	0.000445634
UCK1	Fructose and mannose me	STAD	-0.125654845
UCK1	G2m_checkpoint	STAD	-0.163860757
UCK1	Galactose metabolism	STAD	-0.086018662
UCK1	Galie_tumor_stemness_ge	STAD	0.00407208

UCK1	Glutathione metabolism	STAD	-0.095686136
UCK1	Glycerolipid metabolism	STAD	-0.240666435
UCK1	Glycerophospholipid metabolism	STAD	-0.144024381
UCK1	Glycine, serine and threonine metabolism	STAD	0.093774247
UCK1	Glycolysis / gluconeogenesis	STAD	-0.153110942
UCK1	Glycosaminoglycan biosynthesis	STAD	0.292231951
UCK1	Glycosaminoglycan biosynthesis	STAD	0.182198925
UCK1	Glycosaminoglycan biosynthesis	STAD	0.001247402
UCK1	Glycosaminoglycan degradation	STAD	0.02372362
UCK1	Glycosphingolipid biosynthesis	STAD	0.207110809
UCK1	Glycosphingolipid biosynthesis	STAD	0.037431471
UCK1	Glycosphingolipid biosynthesis	STAD	-0.015305367
UCK1	Glycosylphosphatidylinositol signaling	STAD	0.024191713
UCK1	Glyoxylate and dicarboxylate metabolism	STAD	0.011005813
UCK1	Granulocyte	STAD	-0.104704625
UCK1	Hedgehog signaling	STAD	0.130449491
UCK1	Histidine metabolism	STAD	-0.138442501
UCK1	Hypoxia	STAD	0.053716382
UCK1	Il-17 receptor signaling in T cells	STAD	-0.067293054
UCK1	Il2_stat5_signaling	STAD	-0.109174355
UCK1	Il6_jak_stat3_signaling	STAD	-0.094562753
UCK1	Immune checkpoints	STAD	-0.118492507
UCK1	Immune inhibition	STAD	-0.076904857
UCK1	Inositol phosphate metabolism	STAD	-0.240991367
UCK1	Interleukin_6_signaling	STAD	-0.161942542
UCK1	Jaeger metastasis up	STAD	-0.02012737
UCK1	Jain_nfkB_signaling	STAD	-0.136959335
UCK1	Kras signaling up	STAD	-0.145917531
UCK1	Linoleic acid metabolism	STAD	-0.185709718
UCK1	Lipoic acid metabolism	STAD	0.039361357
UCK1	Lysine degradation	STAD	6.42E-05
UCK1	Lysosome	STAD	-0.016075716
UCK1	M1 macrophage	STAD	-0.051290375
UCK1	M2 macrophage	STAD	-0.029907478
UCK1	Mannose type o-glycan biosynthesis	STAD	0.259524648
UCK1	Mapk signaling pathway	STAD	0.021018622
UCK1	Mapk3_erk1_activation	STAD	-0.239035256
UCK1	Marginal zone b cell	STAD	-0.072514012
UCK1	Memory b cell	STAD	-0.09353581
UCK1	Mesenchymal cell	STAD	0.138138031
UCK1	Mesenchymal stem cell	STAD	-0.00598372
UCK1	Metabolism of xenobiotics	STAD	-0.201690071
UCK1	Migrating cancer stem cell	STAD	-0.280417976

UCK1	Mitotic_spindle	STAD	-0.24355969
UCK1	Monocyte	STAD	-0.093192764
UCK1	Mtor_signaling_pathway	STAD	0.017997333
UCK1	Mtorc1_signaling	STAD	-0.148564853
UCK1	Mucin type o-glycan biosynthesis	STAD	-0.297534731
UCK1	Myc_targets_v1	STAD	-0.066122102
UCK1	Myeloid cell	STAD	-0.086085521
UCK1	N-glycan biosynthesis	STAD	0.088172772
UCK1	Naive b cell	STAD	-0.033482086
UCK1	Naive cd4+ t cell	STAD	-0.00931803
UCK1	Naive cd8+ t cell	STAD	-0.022770959
UCK1	Natural killer cell	STAD	-0.080532043
UCK1	Natural killer t (nkt) cell	STAD	-0.124382306
UCK1	Natural regulatory t (treg) cell	STAD	-0.074473653
UCK1	Neomycin, kanamycin and streptomycin	STAD	-0.021757131
UCK1	Neutrophil	STAD	-0.139709063
UCK1	Nicotinate and nicotinamide metabolism	STAD	-0.034880665
UCK1	Nitrogen metabolism	STAD	-0.26980024
UCK1	Nod_like_receptor_signaling_pathway	STAD	-0.177112647
UCK1	Notch_signaling	STAD	-0.033138458
UCK1	One carbon pool by folate	STAD	-0.124857325
UCK1	Other glycan degradation	STAD	-0.031191517
UCK1	Other types of o-glycan biosynthesis	STAD	0.365858403
UCK1	Oxidative phosphorylation	STAD	0.052480281
UCK1	P53_pathway	STAD	-0.079465957
UCK1	P53_signaling_pathway	STAD	-0.29583989
UCK1	Pantothenate and coenzyme a biosynthesis	STAD	-0.057485442
UCK1	Pentose and glucuronate interconversions	STAD	-0.204227545
UCK1	Pentose phosphate pathway	STAD	-0.051575765
UCK1	Pericyte	STAD	0.035164736
UCK1	Phenylalanine metabolism	STAD	0.012725541
UCK1	Phenylalanine, tyrosine and tryptophan metabolism	STAD	-0.020557126
UCK1	Phosphonate and phosphite metabolism	STAD	-0.025098271
UCK1	Pi3k_akt_activation	STAD	-0.112411797
UCK1	Pi3k_akt_mtor_signaling	STAD	-0.0874598
UCK1	Porphyrin and chlorophyll metabolism	STAD	-0.081405998
UCK1	Primary bile acid biosynthesis	STAD	-0.002092664
UCK1	Propanoate metabolism	STAD	-0.208821927
UCK1	Purine metabolism	STAD	-0.002492876
UCK1	Pyrimidine metabolism	STAD	0.011949042
UCK1	Pyruvate metabolism	STAD	-0.131057957
UCK1	Regulation_of_autophagy	STAD	-0.009888772
UCK1	Retinol metabolism	STAD	-0.281026188

UCK1	Riboflavin metabolism	STAD	0.072497563
UCK1	Schmahl_pdgf_signaling	STAD	-0.144775313
UCK1	Selenocompound metabol	STAD	-0.108371
UCK1	Signaling_by_hippo	STAD	-0.082520761
UCK1	Sphingolipid metabolism	STAD	-0.260685587
UCK1	Starch and sucrose metabo	STAD	-0.141471362
UCK1	Steroid biosynthesis	STAD	-0.026138389
UCK1	Steroid hormone biosynth	STAD	-0.167533876
UCK1	Sulfur metabolism	STAD	-0.178519366
UCK1	Synthesis and degradation	STAD	-0.149235524
UCK1	T helper cell	STAD	-0.079732005
UCK1	T helper1 (th1) cell	STAD	-0.148754584
UCK1	T helper17 (th17) cell	STAD	-0.0856455
UCK1	T helper2 (th2) cell	STAD	-0.055388944
UCK1	T helper9 (th9) cell	STAD	-0.021689461
UCK1	Taurine and hypotaurine r	STAD	0.087468639
UCK1	Terpenoid backbone biosy	STAD	-0.097410832
UCK1	Tgf_beta_signaling_pathw	STAD	-0.07926996
UCK1	Thiamine metabolism	STAD	0.077719827
UCK1	Tnfa_signaling_via_nfkb	STAD	-0.114672153
UCK1	Tryptophan metabolism	STAD	-0.064044296
UCK1	Tumor endothelial cell	STAD	-0.005320479
UCK1	Tyrosine metabolism	STAD	-0.018385428
UCK1	Ubiquinone and other ter	STAD	0.099511246
UCK1	Valine, leucine and isoleu	STAD	0.09120215
UCK1	Valine, leucine and isoleu	STAD	-0.125227601
UCK1	Vascular endothelial cell	STAD	0.064823448
UCK1	Vascular smooth muscle c	STAD	0.04161241
UCK1	Vegf_signaling_pathway	STAD	-0.105921894
UCK1	Vitamin b6 metabolism	STAD	-0.001688402
UCK1	Willert_wnt_signaling	STAD	-0.09492222
UCK1	Wnt_beta_catenin_signali	STAD	0.175797212
UCK2	Abnormal plasma cell	STAD	-0.287580349
UCK2	Activated b cell	STAD	-0.234019864
UCK2	Activated cd4+ t cell	STAD	-0.275079355
UCK2	Activated t cell	STAD	-0.252326778
UCK2	Alanine, aspartate and glu	STAD	0.386941387
UCK2	Alcala_apoptosis	STAD	0.380279176
UCK2	Alpha-linolenic acid meta	STAD	-0.057884524
UCK2	Amino sugar and nucleoti	STAD	0.380414748
UCK2	Ampk_pathway	STAD	0.233491393
UCK2	Angiogenesis	STAD	-0.170853331
UCK2	Arachidonic acid metabo	STAD	-0.158479183

UCK2	Arginine and proline metabolism	STAD	0.356720441
UCK2	Arginine biosynthesis	STAD	0.229660056
UCK2	Ascorbate and aldarate metabolism	STAD	0.097576609
UCK2	Atypical memory B cell	STAD	-0.236712481
UCK2	Axl+siglec6+ dendritic cell	STAD	-0.456489928
UCK2	B cell	STAD	-0.347670281
UCK2	B1 cell	STAD	-0.203378175
UCK2	Basal cell	STAD	-0.032688494
UCK2	Beta-alanine metabolism	STAD	0.040870071
UCK2	Biosynthesis of unsaturated fatty acids	STAD	0.205763603
UCK2	Biotin metabolism	STAD	0.277796454
UCK2	Butanoate metabolism	STAD	0.267770598
UCK2	Caffeine metabolism	STAD	0.048195807
UCK2	Cancer stem cell	STAD	-0.361664175
UCK2	Cancer stem-like cell	STAD	-0.135930395
UCK2	Cd4+ cytotoxic T cell	STAD	-0.336356388
UCK2	Cd4+ memory T cell	STAD	-0.320138439
UCK2	Cd4+ regulatory T cell	STAD	-0.201163219
UCK2	Cd4+ T helper cell	STAD	-0.322764919
UCK2	Cd4+cd25+ regulatory T cell	STAD	-0.29963025
UCK2	Cd8+ cytotoxic T cell	STAD	-0.163079982
UCK2	Cd8+ regulatory T cell	STAD	-0.245943058
UCK2	Cell cycle	STAD	0.495008132
UCK2	Chandran_metastasis_top50	STAD	0.379723386
UCK2	Citrate cycle (TCA cycle)	STAD	0.428765003
UCK2	Cysteine and methionine metabolism	STAD	0.513528817
UCK2	Cytokine induced killer cell	STAD	-0.367176098
UCK2	D-arginine and D-ornithine	STAD	0.132233349
UCK2	D-glutamine and D-glutamate	STAD	0.073413799
UCK2	Dendritic cell	STAD	-0.390667599
UCK2	DNA repair	STAD	0.587780121
UCK2	DNA replication	STAD	0.592368053
UCK2	Double-negative memory T cell	STAD	-0.229058353
UCK2	Drug metabolism - cytochrome P450	STAD	-0.141494111
UCK2	Drug metabolism - other	STAD	0.438820337
UCK2	E2f targets	STAD	0.588353803
UCK2	ECM receptor interaction	STAD	-0.411723717
UCK2	Effector CD4+ memory T cell	STAD	-0.398489187
UCK2	Effector CD8+ memory T cell	STAD	-0.365980341
UCK2	Effector memory T cell	STAD	-0.358777032
UCK2	Effector regulatory T cell (Treg)	STAD	-0.295999155
UCK2	Elvidge_hif1a_targets_up	STAD	0.51061465
UCK2	Endothelial cell	STAD	-0.439399768

UCK2	Eosinophil	STAD	-0.279207249
UCK2	Ether lipid metabolism	STAD	-0.038548023
UCK2	Exhausted cd4+ t cell	STAD	-0.400592297
UCK2	Exhausted cd8+ t cell	STAD	-0.336174661
UCK2	Exhausted t cell	STAD	-0.214922938
UCK2	Fat cell (adipocyte)	STAD	0.056479122
UCK2	Fatty acid biosynthesis	STAD	0.196724632
UCK2	Fatty acid degradation	STAD	-0.004531418
UCK2	Fatty acid elongation	STAD	0.35737041
UCK2	Fibroblast	STAD	-0.455512664
UCK2	Folate biosynthesis	STAD	0.359829499
UCK2	Follicular b cell	STAD	-0.381739913
UCK2	Follicular dendritic cell	STAD	-0.358659962
UCK2	Follicular helper (tfh) t ce	STAD	-0.289061621
UCK2	Follicular t cell	STAD	0.013143052
UCK2	Foxp3+il-17+ t cell	STAD	0.00894903
UCK2	Fructose and mannose me	STAD	0.342768442
UCK2	G2m_checkpoint	STAD	0.538733664
UCK2	Galactose metabolism	STAD	0.296524376
UCK2	Galie_tumor_stemness_ge	STAD	-0.393780629
UCK2	Glutathione metabolism	STAD	0.37119578
UCK2	Glycerolipid metabolism	STAD	0.169759012
UCK2	Glycerophospholipid met&	STAD	0.144733524
UCK2	Glycine, serine and threor	STAD	0.301670979
UCK2	Glycolysis / gluconeogene	STAD	0.310859237
UCK2	Glycosaminoglycan biosy	STAD	-0.128822118
UCK2	Glycosaminoglycan biosy	STAD	-0.124807259
UCK2	Glycosaminoglycan biosy	STAD	0.130479329
UCK2	Glycosaminoglycan degra	STAD	-0.005658061
UCK2	Glycosphingolipid biosyn	STAD	-0.184816103
UCK2	Glycosphingolipid biosyn	STAD	0.004457255
UCK2	Glycosphingolipid biosyn	STAD	0.122979572
UCK2	Glycosylphosphatidylinos	STAD	0.469971481
UCK2	Glyoxylate and dicarboxy	STAD	0.453402158
UCK2	Granulocyte	STAD	-0.261306745
UCK2	Hedgehog_signaling	STAD	-0.447879421
UCK2	Histidine metabolism	STAD	-0.123948329
UCK2	Hypoxia	STAD	-0.089081382
UCK2	Il-17alpha t cell	STAD	-0.292558101
UCK2	Il2_stat5_signaling	STAD	-0.272089916
UCK2	Il6_jak_stat3_signaling	STAD	-0.216236514
UCK2	Immune_checkpoints_tun	STAD	-0.123152752
UCK2	Immune_inhibition_cytok	STAD	-0.182234413

UCK2	Inositol phosphate metabo	STAD	-0.383996741
UCK2	Interleukin_6_signaling	STAD	-0.374048157
UCK2	Jaeger_metastasis_up	STAD	0.299207235
UCK2	Jain_nfkb_signaling	STAD	0.565000064
UCK2	Kras_signaling_up	STAD	-0.376398846
UCK2	Linoleic acid metabolism	STAD	-0.066271075
UCK2	Lipoic acid metabolism	STAD	0.201999082
UCK2	Lysine degradation	STAD	0.148340184
UCK2	Lysosome	STAD	0.00160416
UCK2	M1 macrophage	STAD	-0.280671932
UCK2	M2 macrophage	STAD	-0.277785088
UCK2	Mannose type o-glycan bi	STAD	0.125484913
UCK2	Mapk_signaling_pathway	STAD	-0.442296459
UCK2	Mapk3_erk1_activation	STAD	-0.211709497
UCK2	Marginal zone b cell	STAD	-0.39104948
UCK2	Memory b cell	STAD	-0.353283248
UCK2	Mesenchymal cell	STAD	-0.354096524
UCK2	Mesenchymal stem cell	STAD	-0.455512123
UCK2	Metabolism of xenobiotic	STAD	-0.035855595
UCK2	Migrating cancer stem cel	STAD	0.291931142
UCK2	Mitotic_spindle	STAD	0.010625539
UCK2	Monocyte	STAD	-0.267933489
UCK2	Mtor_signaling_pathway	STAD	-0.312998309
UCK2	Mtorc1_signaling	STAD	0.558221568
UCK2	Mucin type o-glycan biosy	STAD	-0.084387752
UCK2	Myc_targets_v1	STAD	0.617798229
UCK2	Myeloid cell	STAD	-0.336412586
UCK2	N-glycan biosynthesis	STAD	0.535326161
UCK2	Naive b cell	STAD	-0.189391437
UCK2	Naive cd4+ t cell	STAD	-0.46372299
UCK2	Naive cd8+ t cell	STAD	-0.449355219
UCK2	Natural killer cell	STAD	-0.291901521
UCK2	Natural killer t (nkt) cell	STAD	0.115920739
UCK2	Natural regulatory t (treg)	STAD	-0.336972248
UCK2	Neomycin, kanamycin and	STAD	0.089509503
UCK2	Neutrophil	STAD	-0.085138975
UCK2	Nicotinate and nicotinami	STAD	-0.178523639
UCK2	Nitrogen metabolism	STAD	-0.069833499
UCK2	Nod_like_receptor_signal	STAD	-0.14957864
UCK2	Notch_signaling	STAD	-0.018884014
UCK2	One carbon pool by folate	STAD	0.495356612
UCK2	Other glycan degradation	STAD	0.167195206
UCK2	Other types of o-glycan b	STAD	0.14579993

UCK2	Oxidative phosphorylation	STAD	0.375194601
UCK2	P53_pathway	STAD	0.11101973
UCK2	P53_signaling_pathway	STAD	0.200362894
UCK2	Pantothenate and coa biosynthesis	STAD	0.206166572
UCK2	Pentose and glucuronate interconversions	STAD	0.255148238
UCK2	Pentose phosphate pathway	STAD	0.503219391
UCK2	Pericyte	STAD	-0.436892344
UCK2	Phenylalanine metabolism	STAD	0.072932342
UCK2	Phenylalanine, tyrosine and tryptophan metabolism	STAD	0.384487824
UCK2	Phosphonate and phosphite metabolism	STAD	0.222690882
UCK2	Pi3k_akt_activation	STAD	-0.253479428
UCK2	Pi3k_akt_mtor_signaling	STAD	0.128088703
UCK2	Porphyrin and chlorophyll metabolism	STAD	0.365614493
UCK2	Primary bile acid biosynthesis	STAD	-0.153052424
UCK2	Propanoate metabolism	STAD	0.126377635
UCK2	Purine metabolism	STAD	0.603426807
UCK2	Pyrimidine metabolism	STAD	0.648821766
UCK2	Pyruvate metabolism	STAD	0.353464055
UCK2	Regulation_of_autophagy	STAD	-0.261463252
UCK2	Retinol metabolism	STAD	-0.051860907
UCK2	Riboflavin metabolism	STAD	0.46910312
UCK2	Schmahl_pdgf_signaling	STAD	-0.393335352
UCK2	Selenocompound metabolism	STAD	0.391010575
UCK2	Signaling_by_hippo	STAD	-0.176222087
UCK2	Sphingolipid metabolism	STAD	0.179870573
UCK2	Starch and sucrose metabolism	STAD	-0.144829995
UCK2	Steroid biosynthesis	STAD	0.468255126
UCK2	Steroid hormone biosynthesis	STAD	0.083794895
UCK2	Sulfur metabolism	STAD	0.305627144
UCK2	Synthesis and degradation of ribonucleotides	STAD	0.184770261
UCK2	T helper cell	STAD	-0.370483382
UCK2	T helper1 (th1) cell	STAD	-0.177350316
UCK2	T helper17 (th17) cell	STAD	-0.234246835
UCK2	T helper2 (th2) cell	STAD	-0.329143331
UCK2	T helper9 (th9) cell	STAD	-0.292016279
UCK2	Taurine and hypotaurine metabolism	STAD	-0.123337188
UCK2	Terpenoid backbone biosynthesis	STAD	0.474285856
UCK2	Tgf_beta_signaling_pathway	STAD	-0.438305717
UCK2	Thiamine metabolism	STAD	0.378064853
UCK2	Tnfa_signaling_via_nfkB	STAD	-0.132923257
UCK2	Tryptophan metabolism	STAD	-0.028014601
UCK2	Tumor endothelial cell	STAD	-0.004642564
UCK2	Tyrosine metabolism	STAD	-0.085861663

UCK2	Ubiquinone and other ter	STAD	0.41801428
UCK2	Valine, leucine and isoleu	STAD	0.212396225
UCK2	Valine, leucine and isoleu	STAD	0.226826299
UCK2	Vascular endothelial cell	STAD	-0.303316643
UCK2	Vascular smooth muscle c	STAD	-0.44921957
UCK2	Vegf_signaling_pathway	STAD	-0.153994038
UCK2	Vitamin b6 metabolism	STAD	0.326736943
UCK2	Willert_wnt_signaling	STAD	0.157063232
UCK2	Wnt_beta_catenin_signali	STAD	-0.055046941
UCKL1	Abnormal plasma cell	STAD	-0.309745482
UCKL1	Activated b cell	STAD	-0.207415681
UCKL1	Activated cd4+ t cell	STAD	-0.260779793
UCKL1	Activated t cell	STAD	-0.26199224
UCKL1	Alanine, aspartate and glu	STAD	0.169809542
UCKL1	Alcala_apoptosis	STAD	0.032061403
UCKL1	Alpha-linolenic acid meta	STAD	-0.092787382
UCKL1	Amino sugar and nucleoti	STAD	-0.031414351
UCKL1	Ampk_pathway	STAD	0.258646884
UCKL1	Angiogenesis	STAD	-0.313144481
UCKL1	Arachidonic acid metaboli	STAD	-0.255400009
UCKL1	Arginine and proline metæ	STAD	-0.022393427
UCKL1	Arginine biosynthesis	STAD	0.033398548
UCKL1	Ascorbate and aldarate mε	STAD	-0.049535884
UCKL1	Atypical memory b cell	STAD	-0.184588722
UCKL1	Ax1+siglec6+ dendritic ce	STAD	-0.424371534
UCKL1	B cell	STAD	-0.316672302
UCKL1	B1 cell	STAD	-0.128074177
UCKL1	Basal cell	STAD	-0.136778095
UCKL1	Beta-alanine metabolism	STAD	-0.25511543
UCKL1	Biosynthesis of unsaturate	STAD	0.018646384
UCKL1	Biotin metabolism	STAD	0.016389874
UCKL1	Butanoate metabolism	STAD	0.013585244
UCKL1	Caffeine metabolism	STAD	-0.054273295
UCKL1	Cancer stem cell	STAD	-0.288047453
UCKL1	Cancer stem-like cell	STAD	-0.168487976
UCKL1	Cd4+ cytotoxic t cell	STAD	-0.361872832
UCKL1	Cd4+ memory t cell	STAD	-0.256793492
UCKL1	Cd4+ regulatory t cell	STAD	-0.216006118
UCKL1	Cd4+ t helper cell	STAD	-0.263734288
UCKL1	Cd4+cd25+ regulatory t c	STAD	-0.258115681
UCKL1	Cd8+ cytotoxic t cell	STAD	-0.200225446
UCKL1	Cd8+ regulatory t cell	STAD	-0.254836075
UCKL1	Cell_cycle	STAD	0.293000316

UCKL1	Chandran_metastasis_top	STAD	0.275655989
UCKL1	Citrate cycle (tca cycle)	STAD	0.177867519
UCKL1	Cysteine and methionine	STAD	0.224702673
UCKL1	Cytokine induced killer	STAD	-0.296996357
UCKL1	D-arginine and d-ornithin	STAD	0.164832807
UCKL1	D-glutamine and d-glutan	STAD	0.155551896
UCKL1	Dendritic cell	STAD	-0.355078369
UCKL1	Dna_repair	STAD	0.255150202
UCKL1	Dna_replication	STAD	0.306525505
UCKL1	Double-negative memory	STAD	-0.197701017
UCKL1	Drug metabolism - cytoch	STAD	-0.174932622
UCKL1	Drug metabolism - other	STAD	0.082842955
UCKL1	E2f_targets	STAD	0.352467078
UCKL1	Ecm_receptor_interaction	STAD	-0.381598942
UCKL1	Effector cd4+ memory t	STAD	-0.28729681
UCKL1	Effector cd8+ memory t	STAD	-0.358529592
UCKL1	Effector memory t cell	STAD	-0.302354958
UCKL1	Effector regulatory t (treg	STAD	-0.248630968
UCKL1	Elvidge_hif1a_targets_up	STAD	0.128730692
UCKL1	Endothelial cell	STAD	-0.384014553
UCKL1	Eosinophil	STAD	-0.331322013
UCKL1	Ether lipid metabolism	STAD	-0.112684122
UCKL1	Exhausted cd4+ t cell	STAD	-0.396782682
UCKL1	Exhausted cd8+ t cell	STAD	-0.359473432
UCKL1	Exhausted t cell	STAD	-0.202930875
UCKL1	Fat cell (adipocyte)	STAD	-0.041648722
UCKL1	Fatty acid biosynthesis	STAD	-0.053936832
UCKL1	Fatty acid degradation	STAD	-0.172398757
UCKL1	Fatty acid elongation	STAD	0.009328784
UCKL1	Fibroblast	STAD	-0.381628347
UCKL1	Folate biosynthesis	STAD	0.010012434
UCKL1	Follicular b cell	STAD	-0.291108589
UCKL1	Follicular dendritic cell	STAD	-0.277460657
UCKL1	Follicular helper (tfh) t	STAD	-0.259699462
UCKL1	Follicular t cell	STAD	-0.064693012
UCKL1	Foxp3+il-17+ t cell	STAD	-0.018882635
UCKL1	Fructose and mannose me	STAD	0.028901071
UCKL1	G2m_checkpoint	STAD	0.34131836
UCKL1	Galactose metabolism	STAD	0.007243897
UCKL1	Galie_tumor_stemness_ge	STAD	-0.27889887
UCKL1	Glutathione metabolism	STAD	0.010963096
UCKL1	Glycerolipid metabolism	STAD	-0.024036895
UCKL1	Glycerophospholipid met	STAD	0.070667481

UCKL1	Glycine, serine and threon	STAD	0.086673727
UCKL1	Glycolysis / gluconeogene	STAD	0.029645683
UCKL1	Glycosaminoglycan biosyn	STAD	-0.21535029
UCKL1	Glycosaminoglycan biosyn	STAD	-0.139183206
UCKL1	Glycosaminoglycan biosyn	STAD	-0.127538733
UCKL1	Glycosaminoglycan degra	STAD	-0.26144531
UCKL1	Glycosphingolipid biosyn	STAD	-0.392800977
UCKL1	Glycosphingolipid biosyn	STAD	-0.225955319
UCKL1	Glycosphingolipid biosyn	STAD	-0.144865064
UCKL1	Glycosylphosphatidylinos	STAD	0.283844438
UCKL1	Glyoxylate and dicarboxy	STAD	0.198542052
UCKL1	Granulocyte	STAD	-0.32335031
UCKL1	Hedgehog_signaling	STAD	-0.251565006
UCKL1	Histidine metabolism	STAD	-0.270468559
UCKL1	Hypoxia	STAD	-0.270697329
UCKL1	Il-17alpha t cell	STAD	-0.246944453
UCKL1	Il2_stat5_signaling	STAD	-0.426393829
UCKL1	Il6_jak_stat3_signaling	STAD	-0.374901926
UCKL1	Immune_checkpoints_tun	STAD	-0.352262523
UCKL1	Immune_inhibition_cytok	STAD	-0.287493927
UCKL1	Inositol phosphate metabo	STAD	-0.290764439
UCKL1	Interleukin_6_signaling	STAD	-0.350695988
UCKL1	Jaeger_metastasis_up	STAD	0.029838392
UCKL1	Jain_nfkb_signaling	STAD	0.355751516
UCKL1	Kras_signaling_up	STAD	-0.437292031
UCKL1	Linoleic acid metabolism	STAD	-0.026538531
UCKL1	Lipoic acid metabolism	STAD	0.1158381
UCKL1	Lysine degradation	STAD	0.101279904
UCKL1	Lysosome	STAD	-0.240760827
UCKL1	M1 macrophage	STAD	-0.33272548
UCKL1	M2 macrophage	STAD	-0.325660502
UCKL1	Mannose type o-glycan bi	STAD	0.105797912
UCKL1	Mapk_signaling_pathway	STAD	-0.424481339
UCKL1	Mapk3_erk1_activation	STAD	-0.372814693
UCKL1	Marginal zone b cell	STAD	-0.279995059
UCKL1	Memory b cell	STAD	-0.330847129
UCKL1	Mesenchymal cell	STAD	-0.340168467
UCKL1	Mesenchymal stem cell	STAD	-0.376149028
UCKL1	Metabolism of xenobiotic	STAD	-0.158163055
UCKL1	Migrating cancer stem cel	STAD	0.042635093
UCKL1	Mitotic_spindle	STAD	0.077933742
UCKL1	Monocyte	STAD	-0.375388085
UCKL1	Mtor_signaling_pathway	STAD	-0.258062978

UCKL1	Mtorc1_signaling	STAD	0.14201218
UCKL1	Mucin type o-glycan biosynthesis	STAD	-0.29852559
UCKL1	Myc_targets_v1	STAD	0.292863151
UCKL1	Myeloid cell	STAD	-0.333937998
UCKL1	N-glycan biosynthesis	STAD	0.185341045
UCKL1	Naive b cell	STAD	-0.178649186
UCKL1	Naive cd4+ t cell	STAD	-0.333652473
UCKL1	Naive cd8+ t cell	STAD	-0.247362408
UCKL1	Natural killer cell	STAD	-0.299539307
UCKL1	Natural killer t (nkt) cell	STAD	-0.019082829
UCKL1	Natural regulatory t (treg) cell	STAD	-0.274220212
UCKL1	Neomycin, kanamycin and streptomycin	STAD	-0.093720349
UCKL1	Neutrophil	STAD	-0.276900097
UCKL1	Nicotinate and nicotinamide metabolism	STAD	-0.282556781
UCKL1	Nitrogen metabolism	STAD	-0.111618435
UCKL1	Nod_like_receptor_signaling	STAD	-0.273332222
UCKL1	Notch_signaling	STAD	-0.231001197
UCKL1	One carbon pool by folate	STAD	0.197535806
UCKL1	Other glycan degradation	STAD	-0.016341916
UCKL1	Other types of o-glycan biosynthesis	STAD	0.268671573
UCKL1	Oxidative phosphorylation	STAD	0.029206652
UCKL1	P53_pathway	STAD	-0.179446737
UCKL1	P53_signaling_pathway	STAD	-0.073479866
UCKL1	Pantothenate and coenzyme a biosynthesis	STAD	0.027250123
UCKL1	Pentose and glucuronate interconversions	STAD	0.037660615
UCKL1	Pentose phosphate pathway	STAD	0.159261657
UCKL1	Pericyte	STAD	-0.312651438
UCKL1	Phenylalanine metabolism	STAD	-0.185503771
UCKL1	Phenylalanine, tyrosine and tryptophan metabolism	STAD	0.205567981
UCKL1	Phosphonate and phosphite metabolism	STAD	0.070288171
UCKL1	Pi3k_akt_activation	STAD	-0.275707878
UCKL1	Pi3k_akt_mtor_signaling	STAD	-0.184163758
UCKL1	Porphyrim and chlorophyll biosynthesis	STAD	-0.01706379
UCKL1	Primary bile acid biosynthesis	STAD	-0.100775688
UCKL1	Propanoate metabolism	STAD	-0.011623351
UCKL1	Purine metabolism	STAD	0.14290559
UCKL1	Pyrimidine metabolism	STAD	0.278917773
UCKL1	Pyruvate metabolism	STAD	0.132934608
UCKL1	Regulation_of_autophagy	STAD	-0.214723757
UCKL1	Retinol metabolism	STAD	-0.13097136
UCKL1	Riboflavin metabolism	STAD	0.107151885
UCKL1	Schmahl_pdgf_signaling	STAD	-0.380543265
UCKL1	Selenocompound metabolism	STAD	0.219047762

UCKL1	Signaling_by_hippo	STAD	-0.040100963
UCKL1	Sphingolipid metabolism	STAD	-0.051508694
UCKL1	Starch and sucrose metabo	STAD	-0.269597557
UCKL1	Steroid biosynthesis	STAD	0.286086849
UCKL1	Steroid hormone biosynth	STAD	-0.080546809
UCKL1	Sulfur metabolism	STAD	-0.011214735
UCKL1	Synthesis and degradation	STAD	0.011210331
UCKL1	T helper cell	STAD	-0.321941385
UCKL1	T helper1 (th1) cell	STAD	-0.227461578
UCKL1	T helper17 (th17) cell	STAD	-0.207780154
UCKL1	T helper2 (th2) cell	STAD	-0.314591692
UCKL1	T helper9 (th9) cell	STAD	-0.247547193
UCKL1	Taurine and hypotaurine r	STAD	-0.040102425
UCKL1	Terpenoid backbone biosy	STAD	0.18678413
UCKL1	Tgf_beta_signaling_pathw	STAD	-0.382909315
UCKL1	Thiamine metabolism	STAD	0.102533796
UCKL1	Tnfa_signaling_via_nfkb	STAD	-0.311202405
UCKL1	Tryptophan metabolism	STAD	-0.174348437
UCKL1	Tumor endothelial cell	STAD	-0.012379954
UCKL1	Tyrosine metabolism	STAD	-0.260189534
UCKL1	Ubiquinone and other terp	STAD	0.069625104
UCKL1	Valine, leucine and isoleu	STAD	-0.098954436
UCKL1	Valine, leucine and isoleu	STAD	-0.032172122
UCKL1	Vascular endothelial cell	STAD	-0.299576049
UCKL1	Vascular smooth muscle c	STAD	-0.312417982
UCKL1	Vegf_signaling_pathway	STAD	-0.311291934
UCKL1	Vitamin b6 metabolism	STAD	0.140432621
UCKL1	Willert_wnt_signaling	STAD	0.106660549
UCKL1	Wnt_beta_catenin_signali	STAD	0.028481659
UPP1	Abnormal plasma cell	STAD	-0.203833725
UPP1	Activated b cell	STAD	-0.070110244
UPP1	Activated cd4+ t cell	STAD	-0.026066633
UPP1	Activated t cell	STAD	-0.045872896
UPP1	Alanine, aspartate and glu	STAD	0.109837282
UPP1	Alcala_apoptosis	STAD	0.211008565
UPP1	Alpha-linolenic acid meta	STAD	0.191956087
UPP1	Amino sugar and nucleoti	STAD	0.330698077
UPP1	Ampk_pathway	STAD	-0.082359839
UPP1	Angiogenesis	STAD	0.167239278
UPP1	Arachidonic acid metabol	STAD	0.275803727
UPP1	Arginine and proline metæ	STAD	0.214442585
UPP1	Arginine biosynthesis	STAD	0.253141021
UPP1	Ascorbate and aldarate mæ	STAD	0.130116095

UPP1	Atypical memory b cell	STAD	-0.082634871
UPP1	Ax1+siglec6+ dendritic ce	STAD	0.032310127
UPP1	B cell	STAD	-0.067012508
UPP1	B1 cell	STAD	-0.197971956
UPP1	Basal cell	STAD	0.378268684
UPP1	Beta-alanine metabolism	STAD	0.072304095
UPP1	Biosynthesis of unsaturate	STAD	0.224119891
UPP1	Biotin metabolism	STAD	-0.081077649
UPP1	Butanoate metabolism	STAD	0.080018266
UPP1	Caffeine metabolism	STAD	0.148184864
UPP1	Cancer stem cell	STAD	0.059113915
UPP1	Cancer stem-like cell	STAD	-0.051086932
UPP1	Cd4+ cytotoxic t cell	STAD	-0.02484625
UPP1	Cd4+ memory t cell	STAD	-0.079104264
UPP1	Cd4+ regulatory t cell	STAD	0.009235071
UPP1	Cd4+ t helper cell	STAD	-0.080825826
UPP1	Cd4+cd25+ regulatory t c	STAD	-0.063317775
UPP1	Cd8+ cytotoxic t cell	STAD	-0.012468268
UPP1	Cd8+ regulatory t cell	STAD	-0.12244225
UPP1	Cell_cycle	STAD	0.053404156
UPP1	Chandran_metastasis_top5	STAD	-0.047952909
UPP1	Citrate cycle (tca cycle)	STAD	0.174471833
UPP1	Cysteine and methionine r	STAD	0.201465775
UPP1	Cytokine induced killer cε	STAD	-0.176783424
UPP1	D-arginine and d-ornithin	STAD	0.216034214
UPP1	D-glutamine and d-glutan	STAD	-0.002808382
UPP1	Dendritic cell	STAD	0.012419797
UPP1	Dna_repair	STAD	0.210127578
UPP1	Dna_replication	STAD	0.121067349
UPP1	Double-negative memory	STAD	-0.045614549
UPP1	Drug metabolism - cytoch	STAD	0.119542259
UPP1	Drug metabolism - other c	STAD	0.350908984
UPP1	E2f_targets	STAD	0.088682988
UPP1	Ecm_receptor_interaction	STAD	-0.042490133
UPP1	Effector cd4+ memory t (	STAD	-0.140073239
UPP1	Effector cd8+ memory t (	STAD	-0.011152459
UPP1	Effector memory t cell	STAD	-0.0882846
UPP1	Effector regulatory t (treg	STAD	-0.062757021
UPP1	Elvidge_hif1a_targets_up	STAD	0.13492013
UPP1	Endothelial cell	STAD	-0.099636872
UPP1	Eosinophil	STAD	0.039353339
UPP1	Ether lipid metabolism	STAD	0.156225518
UPP1	Exhausted cd4+ t cell	STAD	-0.029970873

UPP1	Exhausted cd8+ t cell	STAD	0.009621742
UPP1	Exhausted t cell	STAD	-0.0670456
UPP1	Fat cell (adipocyte)	STAD	0.036855559
UPP1	Fatty acid biosynthesis	STAD	-0.041199137
UPP1	Fatty acid degradation	STAD	0.021263654
UPP1	Fatty acid elongation	STAD	0.289894964
UPP1	Fibroblast	STAD	0.007887539
UPP1	Folate biosynthesis	STAD	0.229209196
UPP1	Follicular b cell	STAD	-0.112808639
UPP1	Follicular dendritic cell	STAD	-0.144671878
UPP1	Follicular helper (tfh) t ce	STAD	-0.019864006
UPP1	Follicular t cell	STAD	-0.005641767
UPP1	Foxp3+il-17+ t cell	STAD	0.083025137
UPP1	Fructose and mannose me	STAD	0.342262455
UPP1	G2m_checkpoint	STAD	0.059815179
UPP1	Galactose metabolism	STAD	0.388770353
UPP1	Galie_tumor_stemness_ge	STAD	-0.147077733
UPP1	Glutathione metabolism	STAD	0.379732307
UPP1	Glycerolipid metabolism	STAD	0.178865426
UPP1	Glycerophospholipid metæ	STAD	0.209971118
UPP1	Glycine, serine and threor	STAD	0.201450325
UPP1	Glycolysis / gluconeogene	STAD	0.268349357
UPP1	Glycosaminoglycan biosy1	STAD	0.108918639
UPP1	Glycosaminoglycan biosy1	STAD	-0.021311272
UPP1	Glycosaminoglycan biosy1	STAD	0.264193294
UPP1	Glycosaminoglycan degra	STAD	0.217659137
UPP1	Glycosphingolipid biosyn1	STAD	0.133488028
UPP1	Glycosphingolipid biosyn1	STAD	0.115506386
UPP1	Glycosphingolipid biosyn1	STAD	0.210385951
UPP1	Glycosylphosphatidylinos:	STAD	0.053144075
UPP1	Glyoxylate and dicarboxy	STAD	0.087272198
UPP1	Granulocyte	STAD	0.030921647
UPP1	Hedgehog_signaling	STAD	-0.162368713
UPP1	Histidine metabolism	STAD	-0.02844354
UPP1	Hypoxia	STAD	0.334185798
UPP1	Il-17ralpha t cell	STAD	-0.061320565
UPP1	Il2_stat5_signaling	STAD	0.139817377
UPP1	Il6_jak_stat3_signaling	STAD	0.179136212
UPP1	Immune_checkpoints_tunr	STAD	0.067686914
UPP1	Immune_inhibition_cytok	STAD	0.166631559
UPP1	Inositol phosphate metabo	STAD	-0.224011998
UPP1	Interleukin_6_signaling	STAD	-0.108123288
UPP1	Jaeger_metastasis_up	STAD	0.170349641

UPP1	Jain_nfkb_signaling	STAD	0.104796603
UPP1	Kras_signaling_up	STAD	0.069781455
UPP1	Linoleic acid metabolism	STAD	0.151028711
UPP1	Lipoic acid metabolism	STAD	-0.096133261
UPP1	Lysine degradation	STAD	-0.173502836
UPP1	Lysosome	STAD	0.237725751
UPP1	M1 macrophage	STAD	0.072838158
UPP1	M2 macrophage	STAD	0.046573443
UPP1	Mannose type o-glycan bi	STAD	-0.185183957
UPP1	Mapk_signaling_pathway	STAD	0.022550167
UPP1	Mapk3_erk1_activation	STAD	0.079993211
UPP1	Marginal zone b cell	STAD	-0.145600876
UPP1	Memory b cell	STAD	-0.109025202
UPP1	Mesenchymal cell	STAD	0.049314216
UPP1	Mesenchymal stem cell	STAD	-0.062762297
UPP1	Metabolism of xenobiotic	STAD	0.201645084
UPP1	Migrating cancer stem cel	STAD	0.175715294
UPP1	Mitotic_spindle	STAD	-0.130276306
UPP1	Monocyte	STAD	0.208614954
UPP1	Mtor_signaling_pathway	STAD	-0.105135817
UPP1	Mtorc1_signaling	STAD	0.329636274
UPP1	Mucin type o-glycan biosy	STAD	0.016377928
UPP1	Myc_targets_v1	STAD	0.186491055
UPP1	Myeloid cell	STAD	-0.032411975
UPP1	N-glycan biosynthesis	STAD	0.165263763
UPP1	Naive b cell	STAD	-0.041664679
UPP1	Naive cd4+ t cell	STAD	-0.179641704
UPP1	Naive cd8+ t cell	STAD	-0.225894429
UPP1	Natural killer cell	STAD	-0.039342169
UPP1	Natural killer t (nkt) cell	STAD	0.065422838
UPP1	Natural regulatory t (treg)	STAD	-0.044186353
UPP1	Neomycin, kanamycin and	STAD	0.323545079
UPP1	Neutrophil	STAD	0.279275469
UPP1	Nicotinate and nicotinami	STAD	0.133079309
UPP1	Nitrogen metabolism	STAD	-0.044457041
UPP1	Nod_like_receptor_signal	STAD	0.187256057
UPP1	Notch_signaling	STAD	0.078466508
UPP1	One carbon pool by folate	STAD	0.032982283
UPP1	Other glycan degradation	STAD	0.091837735
UPP1	Other types of o-glycan b	STAD	0.021929036
UPP1	Oxidative phosphorylatio	STAD	0.343840965
UPP1	P53_pathway	STAD	0.314891885
UPP1	P53_signaling_pathway	STAD	0.051577923

UPP1	Pantothenate and coa bios	STAD	0.207030681
UPP1	Pentose and glucuronate i	STAD	0.236850822
UPP1	Pentose phosphate pathwa	STAD	0.363006403
UPP1	Pericyte	STAD	-0.038829496
UPP1	Phenylalanine metabolism	STAD	0.255337332
UPP1	Phenylalanine, tyrosine ar	STAD	0.230405528
UPP1	Phosphonate and phosphir	STAD	0.100141136
UPP1	Pi3k_akt_activation	STAD	-0.178464713
UPP1	Pi3k_akt_mtor_signaling	STAD	0.258074195
UPP1	Porphyrin and chlorophyl	STAD	0.305282149
UPP1	Primary bile acid biosynt	STAD	0.077546774
UPP1	Propanoate metabolism	STAD	-0.03824177
UPP1	Purine metabolism	STAD	0.17736709
UPP1	Pyrimidine metabolism	STAD	0.210754169
UPP1	Pyruvate metabolism	STAD	0.089889358
UPP1	Regulation_of_autophagy	STAD	0.064202535
UPP1	Retinol metabolism	STAD	0.209035558
UPP1	Riboflavin metabolism	STAD	0.236411072
UPP1	Schmahl_pdgf_signaling	STAD	-0.126912567
UPP1	Selenocompound metabol	STAD	-0.022027422
UPP1	Signaling_by_hippo	STAD	-0.219829101
UPP1	Sphingolipid metabolism	STAD	0.177990359
UPP1	Starch and sucrose metabo	STAD	0.098048723
UPP1	Steroid biosynthesis	STAD	0.218363838
UPP1	Steroid hormone biosynth	STAD	0.309610254
UPP1	Sulfur metabolism	STAD	0.1514293
UPP1	Synthesis and degradation	STAD	0.081069677
UPP1	T helper cell	STAD	-0.023879864
UPP1	T helper1 (th1) cell	STAD	0.077545686
UPP1	T helper17 (th17) cell	STAD	0.082819686
UPP1	T helper2 (th2) cell	STAD	-0.015121253
UPP1	T helper9 (th9) cell	STAD	-0.060669809
UPP1	Taurine and hypotaurine r	STAD	0.01505205
UPP1	Terpenoid backbone biosy	STAD	0.184961659
UPP1	Tgf_beta_signaling_pathw	STAD	-0.166732311
UPP1	Thiamine metabolism	STAD	0.235712246
UPP1	Tnfa_signaling_via_nfk	STAD	0.271242181
UPP1	Tryptophan metabolism	STAD	0.016453618
UPP1	Tumor endothelial cell	STAD	0.295362178
UPP1	Tyrosine metabolism	STAD	0.095931459
UPP1	Ubiquinone and other ter	STAD	0.245195031
UPP1	Valine, leucine and isoleu	STAD	0.227470873
UPP1	Valine, leucine and isoleu	STAD	0.040414507

UPP1	Vascular endothelial cell	STAD	0.095946245
UPP1	Vascular smooth muscle c	STAD	-0.067446268
UPP1	Vegf_signaling_pathway	STAD	0.200096112
UPP1	Vitamin b6 metabolism	STAD	0.080287148
UPP1	Willert_wnt_signaling	STAD	0.121964681
UPP1	Wnt_beta_catenin_signali	STAD	-0.177338634
UPP2	Abnormal plasma cell	STAD	0.031510596
UPP2	Activated b cell	STAD	0.014354741
UPP2	Activated cd4+ t cell	STAD	0.038202819
UPP2	Activated t cell	STAD	0.026761538
UPP2	Alanine, aspartate and glu	STAD	-0.185789166
UPP2	Alcala_apoptosis	STAD	-0.139315139
UPP2	Alpha-linolenic acid meta	STAD	-0.084485157
UPP2	Amino sugar and nucleoti	STAD	-0.173414463
UPP2	Ampk_pathway	STAD	-0.184234093
UPP2	Angiogenesis	STAD	-0.125231951
UPP2	Arachidonic acid metabol	STAD	-0.008596938
UPP2	Arginine and proline meta	STAD	-0.229589498
UPP2	Arginine biosynthesis	STAD	-0.20193787
UPP2	Ascorbate and aldarate me	STAD	-0.046129068
UPP2	Atypical memory b cell	STAD	0.024464263
UPP2	Axl+siglec6+ dendritic ce	STAD	0.017475049
UPP2	B cell	STAD	0.033566183
UPP2	B1 cell	STAD	0.00251939
UPP2	Basal cell	STAD	-0.022100698
UPP2	Beta-alanine metabolism	STAD	-0.201219144
UPP2	Biosynthesis of unsaturate	STAD	-0.183643642
UPP2	Biotin metabolism	STAD	-0.170223669
UPP2	Butanoate metabolism	STAD	-0.19193711
UPP2	Caffeine metabolism	STAD	-0.074139596
UPP2	Cancer stem cell	STAD	0.017759132
UPP2	Cancer stem-like cell	STAD	-0.041307734
UPP2	Cd4+ cytotoxic t cell	STAD	0.040375759
UPP2	Cd4+ memory t cell	STAD	0.030008117
UPP2	Cd4+ regulatory t cell	STAD	-0.004881902
UPP2	Cd4+ t helper cell	STAD	0.036998005
UPP2	Cd4+cd25+ regulatory t c	STAD	0.029506585
UPP2	Cd8+ cytotoxic t cell	STAD	0.045950658
UPP2	Cd8+ regulatory t cell	STAD	0.018675387
UPP2	Cell_cycle	STAD	-0.114569818
UPP2	Chandran_metastasis_top5	STAD	-0.122023577
UPP2	Citrate cycle (tca cycle)	STAD	-0.165105031
UPP2	Cysteine and methionine r	STAD	-0.117642085

UPP2	Cytokine induced killer cell	STAD	0.057669077
UPP2	D-arginine and d-ornithin	STAD	0.19392507
UPP2	D-glutamine and d-glutan	STAD	-0.071895683
UPP2	Dendritic cell	STAD	0.03322495
UPP2	Dna_repair	STAD	-0.099474995
UPP2	Dna_replication	STAD	-0.078568971
UPP2	Double-negative memory	STAD	0.018412548
UPP2	Drug metabolism - cytoch	STAD	-0.05210196
UPP2	Drug metabolism - other	STAD	-0.100131125
UPP2	E2f_targets	STAD	-0.103078898
UPP2	Ecm_receptor_interaction	STAD	-0.062914608
UPP2	Effector cd4+ memory t	STAD	0.030079234
UPP2	Effector cd8+ memory t	STAD	0.018878896
UPP2	Effector memory t cell	STAD	0.037498015
UPP2	Effector regulatory t (treg)	STAD	0.008167325
UPP2	Elvidge_hif1a_targets_up	STAD	-0.170483114
UPP2	Endothelial cell	STAD	0.047148845
UPP2	Eosinophil	STAD	0.02470365
UPP2	Ether lipid metabolism	STAD	-0.132489648
UPP2	Exhausted cd4+ t cell	STAD	0.069893345
UPP2	Exhausted cd8+ t cell	STAD	0.073826522
UPP2	Exhausted t cell	STAD	0.035449715
UPP2	Fat cell (adipocyte)	STAD	-0.163407759
UPP2	Fatty acid biosynthesis	STAD	-0.12277445
UPP2	Fatty acid degradation	STAD	-0.226348129
UPP2	Fatty acid elongation	STAD	-0.171366776
UPP2	Fibroblast	STAD	0.036786031
UPP2	Folate biosynthesis	STAD	-0.185252142
UPP2	Follicular b cell	STAD	0.04363613
UPP2	Follicular dendritic cell	STAD	0.04031729
UPP2	Follicular helper (tfh) t	STAD	0.048608587
UPP2	Follicular t cell	STAD	-0.052747101
UPP2	Foxp3+il-17+ t cell	STAD	-0.024168268
UPP2	Fructose and mannose me	STAD	-0.203357196
UPP2	G2m_checkpoint	STAD	-0.135633876
UPP2	Galactose metabolism	STAD	-0.16540805
UPP2	Galie_tumor_stemness_ge	STAD	-0.03251854
UPP2	Glutathione metabolism	STAD	-0.112480789
UPP2	Glycerolipid metabolism	STAD	-0.223873801
UPP2	Glycerophospholipid met	STAD	-0.165966707
UPP2	Glycine, serine and threor	STAD	-0.123145541
UPP2	Glycolysis / gluconeogene	STAD	-0.188719322
UPP2	Glycosaminoglycan biosy	STAD	-0.091182668

UPP2	Glycosaminoglycan biosyn	STAD	-0.0990815
UPP2	Glycosaminoglycan biosyn	STAD	-0.132961397
UPP2	Glycosaminoglycan degra	STAD	-0.101424492
UPP2	Glycosphingolipid biosyn	STAD	-0.027522383
UPP2	Glycosphingolipid biosyn	STAD	-0.094831345
UPP2	Glycosphingolipid biosyn	STAD	-0.085329694
UPP2	Glycosylphosphatidylinos	STAD	-0.043940598
UPP2	Glyoxylate and dicarboxy	STAD	-0.188230055
UPP2	Granulocyte	STAD	-0.013572683
UPP2	Hedgehog_signaling	STAD	-0.031076968
UPP2	Histidine metabolism	STAD	-0.125772439
UPP2	Hypoxia	STAD	-0.107379345
UPP2	Il-17ralpha t cell	STAD	0.048349166
UPP2	Il2_stat5_signaling	STAD	-0.130617782
UPP2	Il6_jak_stat3_signaling	STAD	-0.079413632
UPP2	Immune_checkpoints_tunr	STAD	-0.090986842
UPP2	Immune_inhibition_cytok	STAD	-0.03800614
UPP2	Inositol phosphate metabo	STAD	-0.163005308
UPP2	Interleukin_6_signaling	STAD	-0.068201586
UPP2	Jaeger_metastasis_up	STAD	-0.159805393
UPP2	Jain_nfkb_signaling	STAD	-0.12963148
UPP2	Kras_signaling_up	STAD	-0.095423714
UPP2	Linoleic acid metabolism	STAD	-0.020749915
UPP2	Lipoic acid metabolism	STAD	0.027544744
UPP2	Lysine degradation	STAD	-0.238423856
UPP2	Lysosome	STAD	-0.096874204
UPP2	M1 macrophage	STAD	0.040754145
UPP2	M2 macrophage	STAD	-0.026091068
UPP2	Mannose type o-glycan bi	STAD	-0.113141237
UPP2	Mapk_signaling_pathway	STAD	-0.061521613
UPP2	Mapk3_erk1_activation	STAD	-0.127619102
UPP2	Marginal zone b cell	STAD	0.038754682
UPP2	Memory b cell	STAD	0.031905811
UPP2	Mesenchymal cell	STAD	0.049700432
UPP2	Mesenchymal stem cell	STAD	0.023036134
UPP2	Metabolism of xenobiotic	STAD	-0.047990511
UPP2	Migrating cancer stem cel	STAD	-0.084078269
UPP2	Mitotic_spindle	STAD	-0.21416104
UPP2	Monocyte	STAD	0.046422844
UPP2	Mtor_signaling_pathway	STAD	-0.12599294
UPP2	Mtorc1_signaling	STAD	-0.131165399
UPP2	Mucin type o-glycan bios	STAD	-0.163202976
UPP2	Myc_targets_v1	STAD	-0.072650126

UPP2	Myeloid cell	STAD	0.016305667
UPP2	N-glycan biosynthesis	STAD	-0.158368533
UPP2	Naive b cell	STAD	0.045862958
UPP2	Naive cd4+ t cell	STAD	0.075458083
UPP2	Naive cd8+ t cell	STAD	0.075976315
UPP2	Natural killer cell	STAD	0.046253399
UPP2	Natural killer t (nkt) cell	STAD	0.060574951
UPP2	Natural regulatory t (treg)	STAD	0.033161238
UPP2	Neomycin, kanamycin and	STAD	-0.142906349
UPP2	Neutrophil	STAD	-0.001956834
UPP2	Nicotinate and nicotinami	STAD	-0.170344074
UPP2	Nitrogen metabolism	STAD	-0.076892083
UPP2	Nod_like_receptor_signal	STAD	-0.138681143
UPP2	Notch_signaling	STAD	-0.102910392
UPP2	One carbon pool by folate	STAD	-0.186197189
UPP2	Other glycan degradation	STAD	-0.104243858
UPP2	Other types of o-glycan b	STAD	-0.071123826
UPP2	Oxidative phosphorylatio	STAD	-0.034018771
UPP2	P53_pathway	STAD	-0.127426003
UPP2	P53_signaling_pathway	STAD	-0.185425381
UPP2	Pantothenate and coa bios	STAD	-0.131086823
UPP2	Pentose and glucuronate i	STAD	-0.065949972
UPP2	Pentose phosphate pathwa	STAD	-0.108222373
UPP2	Pericyte	STAD	0.024752552
UPP2	Phenylalanine metabolism	STAD	-0.01532855
UPP2	Phenylalanine, tyrosine ar	STAD	0.019428897
UPP2	Phosphonate and phosphir	STAD	-0.03991006
UPP2	Pi3k_akt_activation	STAD	-0.106284522
UPP2	Pi3k_akt_mtor_signaling	STAD	-0.094926901
UPP2	Porphyrin and chlorophyl	STAD	-0.074646237
UPP2	Primary bile acid biosynt	STAD	0.070680935
UPP2	Propanoate metabolism	STAD	-0.199051104
UPP2	Purine metabolism	STAD	-0.228468838
UPP2	Pyrimidine metabolism	STAD	-0.158321614
UPP2	Pyruvate metabolism	STAD	-0.200220238
UPP2	Regulation_of_autophagy	STAD	0.099640434
UPP2	Retinol metabolism	STAD	-0.036182169
UPP2	Riboflavin metabolism	STAD	-0.10019657
UPP2	Schmahl_pdgf_signaling	STAD	-0.030844846
UPP2	Selenocompound metabol	STAD	-0.109589997
UPP2	Signaling_by_hippo	STAD	-0.080800179
UPP2	Sphingolipid metabolism	STAD	-0.21993817
UPP2	Starch and sucrose metabo	STAD	-0.145199177

UPP2	Steroid biosynthesis	STAD	-0.088956135
UPP2	Steroid hormone biosynth	STAD	0.024941648
UPP2	Sulfur metabolism	STAD	-0.17780551
UPP2	Synthesis and degradation	STAD	-0.239340148
UPP2	T helper cell	STAD	0.051541841
UPP2	T helper1 (th1) cell	STAD	0.024541571
UPP2	T helper17 (th17) cell	STAD	0.043696728
UPP2	T helper2 (th2) cell	STAD	0.067678857
UPP2	T helper9 (th9) cell	STAD	0.066759014
UPP2	Taurine and hypotaurine r	STAD	0.054117198
UPP2	Terpenoid backbone biosy	STAD	-0.17754582
UPP2	Tgf_beta_signaling_pathw	STAD	-0.037400207
UPP2	Thiamine metabolism	STAD	-0.129375895
UPP2	Tnfa_signaling_via_nfb	STAD	-0.05604209
UPP2	Tryptophan metabolism	STAD	-0.146833932
UPP2	Tumor endothelial cell	STAD	0.006406365
UPP2	Tyrosine metabolism	STAD	-0.045986226
UPP2	Ubiquinone and other terf	STAD	-0.091565561
UPP2	Valine, leucine and isoleu	STAD	-0.102301213
UPP2	Valine, leucine and isoleu	STAD	-0.219379083
UPP2	Vascular endothelial cell	STAD	0.026530466
UPP2	Vascular smooth muscle c	STAD	0.062935074
UPP2	Vegf_signaling_pathway	STAD	-0.192518116
UPP2	Vitamin b6 metabolism	STAD	-0.102708472
UPP2	Willert_wnt_signaling	STAD	0.073513942
UPP2	Wnt_beta_catenin_signali	STAD	-0.120407248
CDA	Abnormal plasma cell	TGCT	-0.264003465
CDA	Activated b cell	TGCT	0.204074907
CDA	Activated cd4+ t cell	TGCT	0.068516045
CDA	Activated t cell	TGCT	0.096811184
CDA	Alanine, aspartate and glu	TGCT	0.392659916
CDA	Alcala_apoptosis	TGCT	0.408829218
CDA	Alpha-linolenic acid meta	TGCT	0.220375222
CDA	Amino sugar and nucleoti	TGCT	0.639189737
CDA	Ampk_pathway	TGCT	-0.28413855
CDA	Angiogenesis	TGCT	0.048513563
CDA	Arachidonic acid metabol	TGCT	0.342533348
CDA	Arginine and proline metæ	TGCT	0.464563269
CDA	Arginine biosynthesis	TGCT	0.261885079
CDA	Ascorbate and aldarate mε	TGCT	0.030794452
CDA	Atypical memory b cell	TGCT	-0.109855988
CDA	Axl+siglec6+ dendritic ce	TGCT	0.270663029
CDA	B cell	TGCT	0.130061641

CDA	B1 cell	TGCT	0.027612089
CDA	Basal cell	TGCT	0.197065632
CDA	Beta-alanine metabolism	TGCT	0.11400047
CDA	Biosynthesis of unsaturate	TGCT	0.210176855
CDA	Biotin metabolism	TGCT	-0.315247305
CDA	Butanoate metabolism	TGCT	0.104967913
CDA	Caffeine metabolism	TGCT	0.056978072
CDA	Cancer stem cell	TGCT	0.115099961
CDA	Cancer stem-like cell	TGCT	-0.130816561
CDA	Cd4+ cytotoxic t cell	TGCT	0.191260819
CDA	Cd4+ memory t cell	TGCT	0.034490552
CDA	Cd4+ regulatory t cell	TGCT	0.154884505
CDA	Cd4+ t helper cell	TGCT	0.065813093
CDA	Cd4+cd25+ regulatory t c	TGCT	0.076973015
CDA	Cd8+ cytotoxic t cell	TGCT	0.158087801
CDA	Cd8+ regulatory t cell	TGCT	0.051397263
CDA	Cell_cycle	TGCT	0.067751889
CDA	Chandran_metastasis_top5	TGCT	-0.048794645
CDA	Citrate cycle (tca cycle)	TGCT	0.48683386
CDA	Cysteine and methionine r	TGCT	0.473829041
CDA	Cytokine induced killer c	TGCT	-0.025438494
CDA	D-arginine and d-ornithin	TGCT	0.002959003
CDA	D-glutamine and d-glutan	TGCT	0.245094243
CDA	Dendritic cell	TGCT	0.172901654
CDA	Dna_repair	TGCT	0.36582829
CDA	Dna_replication	TGCT	0.182618602
CDA	Double-negative memory	TGCT	0.084539667
CDA	Drug metabolism - cytoch	TGCT	0.053162818
CDA	Drug metabolism - other	TGCT	0.449499754
CDA	E2f_targets	TGCT	0.066481367
CDA	Ecm_receptor_interaction	TGCT	-0.118420624
CDA	Effector cd4+ memory t (	TGCT	0.034329502
CDA	Effector cd8+ memory t (	TGCT	0.279757876
CDA	Effector memory t cell	TGCT	0.019671735
CDA	Effector regulatory t (treg	TGCT	-0.008571952
CDA	Elvidge_hif1a_targets_up	TGCT	0.121818635
CDA	Endothelial cell	TGCT	-0.006831554
CDA	Eosinophil	TGCT	0.273914359
CDA	Ether lipid metabolism	TGCT	0.079845447
CDA	Exhausted cd4+ t cell	TGCT	0.048688915
CDA	Exhausted cd8+ t cell	TGCT	0.198078678
CDA	Exhausted t cell	TGCT	0.137088647
CDA	Fat cell (adipocyte)	TGCT	0.143572663

CDA	Fatty acid biosynthesis	TGCT	0.258129696
CDA	Fatty acid degradation	TGCT	0.00988695
CDA	Fatty acid elongation	TGCT	0.282843146
CDA	Fibroblast	TGCT	-0.001537557
CDA	Folate biosynthesis	TGCT	0.328500892
CDA	Follicular b cell	TGCT	0.121882992
CDA	Follicular dendritic cell	TGCT	0.102975049
CDA	Follicular helper (tfh) t ce	TGCT	0.068337187
CDA	Follicular t cell	TGCT	0.162804647
CDA	Foxp3+il-17+ t cell	TGCT	0.21654559
CDA	Fructose and mannose me	TGCT	0.485062551
CDA	G2m_checkpoint	TGCT	-0.05630144
CDA	Galactose metabolism	TGCT	0.573568951
CDA	Galie_tumor_stemness_ge	TGCT	-0.125156051
CDA	Glutathione metabolism	TGCT	0.586191559
CDA	Glycerolipid metabolism	TGCT	0.038884038
CDA	Glycerophospholipid metæ	TGCT	0.328785945
CDA	Glycine, serine and threor	TGCT	0.372085366
CDA	Glycolysis / gluconeogene	TGCT	0.553090812
CDA	Glycosaminoglycan biosy	TGCT	0.204277639
CDA	Glycosaminoglycan biosy	TGCT	-0.078574507
CDA	Glycosaminoglycan biosy	TGCT	-0.106826808
CDA	Glycosaminoglycan degra	TGCT	0.079897787
CDA	Glycosphingolipid biosyn	TGCT	-0.082931939
CDA	Glycosphingolipid biosyn	TGCT	0.425729251
CDA	Glycosphingolipid biosyn	TGCT	0.117851451
CDA	Glycosylphosphatidylinos	TGCT	-0.048342159
CDA	Glyoxylate and dicarboxy	TGCT	0.395469041
CDA	Granulocyte	TGCT	0.218774188
CDA	Hedgehog_signaling	TGCT	-0.245887861
CDA	Histidine metabolism	TGCT	0.029061908
CDA	Hypoxia	TGCT	0.43125184
CDA	Il-17ralpha t cell	TGCT	0.055858879
CDA	Il2_stat5_signaling	TGCT	0.411908572
CDA	Il6_jak_stat3_signaling	TGCT	0.207807253
CDA	Immune_checkpoints_tun	TGCT	0.239791262
CDA	Immune_inhibition_cytok	TGCT	0.389063101
CDA	Inositol phosphate metabo	TGCT	-0.522031492
CDA	Interleukin_6_signaling	TGCT	-0.25821495
CDA	Jaeger_metastasis_up	TGCT	0.308939868
CDA	Jain_nfkb_signaling	TGCT	0.320557176
CDA	Kras_signaling_up	TGCT	0.154997918
CDA	Linoleic acid metabolism	TGCT	0.048968206

CDA	Lipoic acid metabolism	TGCT	0.126599021
CDA	Lysine degradation	TGCT	-0.203421838
CDA	Lysosome	TGCT	0.264940324
CDA	M1 macrophage	TGCT	0.290687743
CDA	M2 macrophage	TGCT	0.277681941
CDA	Mannose type o-glycan bi	TGCT	-0.553170136
CDA	Mapk_signaling_pathway	TGCT	0.214640764
CDA	Mapk3_erk1_activation	TGCT	-0.274271503
CDA	Marginal zone b cell	TGCT	-0.023181704
CDA	Memory b cell	TGCT	0.157136417
CDA	Mesenchymal cell	TGCT	0.050188938
CDA	Mesenchymal stem cell	TGCT	0.092277731
CDA	Metabolism of xenobiotic	TGCT	0.162478547
CDA	Migrating cancer stem cel	TGCT	0.320053659
CDA	Mitotic_spindle	TGCT	-0.499970996
CDA	Monocyte	TGCT	0.397777164
CDA	Mtor_signaling_pathway	TGCT	-0.268857995
CDA	Mtorc1_signaling	TGCT	0.512710494
CDA	Mucin type o-glycan biosy	TGCT	-0.3039287
CDA	Myc_targets_v1	TGCT	0.254781233
CDA	Myeloid cell	TGCT	0.120576992
CDA	N-glycan biosynthesis	TGCT	-0.045676245
CDA	Naive b cell	TGCT	0.254442305
CDA	Naive cd4+ t cell	TGCT	-0.061422995
CDA	Naive cd8+ t cell	TGCT	-0.089620948
CDA	Natural killer cell	TGCT	0.098511262
CDA	Natural killer t (nkt) cell	TGCT	0.284166336
CDA	Natural regulatory t (treg)	TGCT	-0.0279971
CDA	Neomycin, kanamycin and	TGCT	0.436831189
CDA	Neutrophil	TGCT	0.452757103
CDA	Nicotinate and nicotinami	TGCT	0.311664926
CDA	Nitrogen metabolism	TGCT	0.050144538
CDA	Nod_like_receptor_signal	TGCT	0.254521409
CDA	Notch_signaling	TGCT	0.014913215
CDA	One carbon pool by folate	TGCT	0.206207026
CDA	Other glycan degradation	TGCT	0.288243978
CDA	Other types of o-glycan b	TGCT	-0.309437776
CDA	Oxidative phosphorylatior	TGCT	0.631326016
CDA	P53_pathway	TGCT	0.671407655
CDA	P53_signaling_pathway	TGCT	0.443589445
CDA	Pantothenate and coa bios	TGCT	0.356771281
CDA	Pentose and glucuronate i	TGCT	-0.00348163
CDA	Pentose phosphate pathwa	TGCT	0.558297643

CDA	Pericyte	TGCT	0.023341711
CDA	Phenylalanine metabolism	TGCT	0.374048651
CDA	Phenylalanine, tyrosine ar	TGCT	0.41949209
CDA	Phosphonate and phosphir	TGCT	0.492849669
CDA	Pi3k_akt_activation	TGCT	-0.269771512
CDA	Pi3k_akt_mtor_signaling	TGCT	0.401701277
CDA	Porphyrin and chlorophyl	TGCT	0.13708001
CDA	Primary bile acid biosynt	TGCT	0.027804642
CDA	Propanoate metabolism	TGCT	-0.066147212
CDA	Purine metabolism	TGCT	0.277919599
CDA	Pyrimidine metabolism	TGCT	0.284667728
CDA	Pyruvate metabolism	TGCT	0.514581132
CDA	Regulation_of_autophagy	TGCT	0.166465879
CDA	Retinol metabolism	TGCT	-0.099780798
CDA	Riboflavin metabolism	TGCT	0.436942096
CDA	Schmahl_pdgf_signaling	TGCT	-0.267096099
CDA	Selenocompound metabol	TGCT	0.250635566
CDA	Signaling_by_hippo	TGCT	-0.159922874
CDA	Sphingolipid metabolism	TGCT	-0.043935163
CDA	Starch and sucrose metabo	TGCT	0.540932159
CDA	Steroid biosynthesis	TGCT	0.269000118
CDA	Steroid hormone biosynth	TGCT	0.103751802
CDA	Sulfur metabolism	TGCT	0.066319591
CDA	Synthesis and degradation	TGCT	0.128545839
CDA	T helper cell	TGCT	0.099063704
CDA	T helper1 (th1) cell	TGCT	0.213080912
CDA	T helper17 (th17) cell	TGCT	0.131357586
CDA	T helper2 (th2) cell	TGCT	0.283017572
CDA	T helper9 (th9) cell	TGCT	0.122355541
CDA	Taurine and hypotaurine r	TGCT	-0.064105941
CDA	Terpenoid backbone biosy	TGCT	0.27882861
CDA	Tgf_beta_signaling_pathw	TGCT	-0.106798313
CDA	Thiamine metabolism	TGCT	0.338739471
CDA	Tnfa_signaling_via_nfkb	TGCT	0.434531221
CDA	Tryptophan metabolism	TGCT	0.237161279
CDA	Tumor endothelial cell	TGCT	-0.050114259
CDA	Tyrosine metabolism	TGCT	0.021049793
CDA	Ubiquinone and other terp	TGCT	0.105727181
CDA	Valine, leucine and isoleu	TGCT	0.409043613
CDA	Valine, leucine and isoleu	TGCT	0.081492526
CDA	Vascular endothelial cell	TGCT	-0.038804304
CDA	Vascular smooth muscle c	TGCT	-0.083180513
CDA	Vegf_signaling_pathway	TGCT	-0.001468407

CDA	Vitamin b6 metabolism	TGCT	0.270077405
CDA	Willert_wnt_signaling	TGCT	0.326967984
CDA	Wnt_beta_catenin_signali	TGCT	0.07284766
UCK1	Abnormal plasma cell	TGCT	-0.122931343
UCK1	Activated b cell	TGCT	0.070309959
UCK1	Activated cd4+ t cell	TGCT	-0.087825303
UCK1	Activated t cell	TGCT	-0.00492085
UCK1	Alanine, aspartate and glu	TGCT	0.065963107
UCK1	Alcala_apoptosis	TGCT	0.144465644
UCK1	Alpha-linolenic acid meta	TGCT	0.06722198
UCK1	Amino sugar and nucleoti	TGCT	0.086709829
UCK1	Ampk_pathway	TGCT	-0.067477079
UCK1	Angiogenesis	TGCT	0.009791253
UCK1	Arachidonic acid metabol	TGCT	0.032352037
UCK1	Arginine and proline metæ	TGCT	0.186877199
UCK1	Arginine biosynthesis	TGCT	0.056466733
UCK1	Ascorbate and aldarate mε	TGCT	0.055959734
UCK1	Atypical memory b cell	TGCT	-0.063991457
UCK1	Axl+siglecc6+ dendritic ce	TGCT	-0.142568035
UCK1	B cell	TGCT	-0.050957017
UCK1	B1 cell	TGCT	-0.043622306
UCK1	Basal cell	TGCT	0.003964432
UCK1	Beta-alanine metabolism	TGCT	0.167729093
UCK1	Biosynthesis of unsaturate	TGCT	0.10882584
UCK1	Biotin metabolism	TGCT	0.032692967
UCK1	Butanoate metabolism	TGCT	0.163454409
UCK1	Caffeine metabolism	TGCT	0.012448454
UCK1	Cancer stem cell	TGCT	-0.099932635
UCK1	Cancer stem-like cell	TGCT	-0.206393721
UCK1	Cd4+ cytotoxic t cell	TGCT	0.012865589
UCK1	Cd4+ memory t cell	TGCT	-0.015976573
UCK1	Cd4+ regulatory t cell	TGCT	-0.041917939
UCK1	Cd4+ t helper cell	TGCT	-0.04944284
UCK1	Cd4+cd25+ regulatory t c	TGCT	-0.050979941
UCK1	Cd8+ cytotoxic t cell	TGCT	0.024775823
UCK1	Cd8+ regulatory t cell	TGCT	-0.045434234
UCK1	Cell_cycle	TGCT	0.042453719
UCK1	Chandran_metastasis_top5	TGCT	-0.179298235
UCK1	Citrate cycle (tca cycle)	TGCT	0.176231365
UCK1	Cysteine and methionine r	TGCT	0.222056419
UCK1	Cytokine induced killer cε	TGCT	-0.025913028
UCK1	D-arginine and d-ornithin	TGCT	0.024436658
UCK1	D-glutamine and d-glutan	TGCT	-0.134758378

UCK1	Dendritic cell	TGCT	-0.091273205
UCK1	Dna_repair	TGCT	0.340802114
UCK1	Dna_replication	TGCT	0.230725484
UCK1	Double-negative memory	TGCT	0.09887197
UCK1	Drug metabolism - cytoch	TGCT	0.039804469
UCK1	Drug metabolism - other	TGCT	0.31171702
UCK1	E2f_targets	TGCT	0.105182065
UCK1	Ecm_receptor_interaction	TGCT	-0.124253459
UCK1	Effector cd4+ memory t	(TGCT	-0.124890628
UCK1	Effector cd8+ memory t	(TGCT	-0.060497587
UCK1	Effector memory t cell	TGCT	-0.024219751
UCK1	Effector regulatory t (treg	TGCT	-0.152909638
UCK1	Elvidge_hif1a_targets_up	TGCT	-0.039204007
UCK1	Endothelial cell	TGCT	-0.024594481
UCK1	Eosinophil	TGCT	-0.090298631
UCK1	Ether lipid metabolism	TGCT	-0.091982968
UCK1	Exhausted cd4+ t cell	TGCT	-0.12053044
UCK1	Exhausted cd8+ t cell	TGCT	-0.045428368
UCK1	Exhausted t cell	TGCT	0.077653512
UCK1	Fat cell (adipocyte)	TGCT	0.209322871
UCK1	Fatty acid biosynthesis	TGCT	-0.088126035
UCK1	Fatty acid degradation	TGCT	0.046011613
UCK1	Fatty acid elongation	TGCT	0.05601593
UCK1	Fibroblast	TGCT	-0.111092301
UCK1	Folate biosynthesis	TGCT	0.287916543
UCK1	Follicular b cell	TGCT	-0.042373982
UCK1	Follicular dendritic cell	TGCT	-0.0773289
UCK1	Follicular helper (tfh) t ce	TGCT	-0.081167437
UCK1	Follicular t cell	TGCT	0.12372398
UCK1	Foxp3+il-17+ t cell	TGCT	0.015052054
UCK1	Fructose and mannose me	TGCT	0.055545158
UCK1	G2m_checkpoint	TGCT	-0.012889023
UCK1	Galactose metabolism	TGCT	0.112301305
UCK1	Galie_tumor_stemness_ge	TGCT	-0.101082882
UCK1	Glutathione metabolism	TGCT	0.206534646
UCK1	Glycerolipid metabolism	TGCT	-0.022946358
UCK1	Glycerophospholipid metæ	TGCT	0.156702915
UCK1	Glycine, serine and threor	TGCT	0.253105144
UCK1	Glycolysis / gluconeogene	TGCT	0.105722059
UCK1	Glycosaminoglycan biosy	TGCT	0.180576243
UCK1	Glycosaminoglycan biosy	TGCT	0.131360011
UCK1	Glycosaminoglycan biosy	TGCT	-0.096476316
UCK1	Glycosaminoglycan degra	TGCT	-0.075962779

UCK1	Glycosphingolipid biosyn	TGCT	-0.170228984
UCK1	Glycosphingolipid biosyn	TGCT	-0.028960923
UCK1	Glycosphingolipid biosyn	TGCT	0.128093276
UCK1	Glycosylphosphatidylinos	TGCT	0.243348364
UCK1	Glyoxylate and dicarboxy	TGCT	0.285745024
UCK1	Granulocyte	TGCT	-0.128163633
UCK1	Hedgehog_signaling	TGCT	-0.108545214
UCK1	Histidine metabolism	TGCT	0.052154654
UCK1	Hypoxia	TGCT	0.011006463
UCK1	Il-17alpha t cell	TGCT	-0.027124586
UCK1	Il2_stat5_signaling	TGCT	-0.033823063
UCK1	Il6_jak_stat3_signaling	TGCT	-0.140854219
UCK1	Immune_checkpoints_tun	TGCT	-0.095551565
UCK1	Immune_inhibition_cytok	TGCT	0.034124874
UCK1	Inositol phosphate metabo	TGCT	-0.384715631
UCK1	Interleukin_6_signaling	TGCT	-0.405086576
UCK1	Jaeger_metastasis_up	TGCT	0.082707605
UCK1	Jain_nfkb_signaling	TGCT	0.129712131
UCK1	Kras_signaling_up	TGCT	-0.189398782
UCK1	Linoleic acid metabolism	TGCT	-0.005863742
UCK1	Lipoic acid metabolism	TGCT	-0.042779053
UCK1	Lysine degradation	TGCT	0.030547964
UCK1	Lysosome	TGCT	-0.094846213
UCK1	M1 macrophage	TGCT	-0.061428694
UCK1	M2 macrophage	TGCT	-0.044590253
UCK1	Mannose type o-glycan bi	TGCT	0.135757237
UCK1	Mapk_signaling_pathway	TGCT	-0.223623776
UCK1	Mapk3_erk1_activation	TGCT	-0.461169609
UCK1	Marginal zone b cell	TGCT	-0.188929407
UCK1	Memory b cell	TGCT	-0.030289135
UCK1	Mesenchymal cell	TGCT	0.008743582
UCK1	Mesenchymal stem cell	TGCT	-0.226009571
UCK1	Metabolism of xenobiotic	TGCT	0.090324236
UCK1	Migrating cancer stem cel	TGCT	-0.133911209
UCK1	Mitotic_spindle	TGCT	-0.377389299
UCK1	Monocyte	TGCT	0.000918404
UCK1	Mtor_signaling_pathway	TGCT	-0.377729659
UCK1	Mtorc1_signaling	TGCT	0.082956891
UCK1	Mucin type o-glycan biosy	TGCT	-0.278625326
UCK1	Myc_targets_v1	TGCT	0.188507873
UCK1	Myeloid cell	TGCT	-0.121205398
UCK1	N-glycan biosynthesis	TGCT	0.140182002
UCK1	Naive b cell	TGCT	0.145921141

UCK1	Naive cd4+ t cell	TGCT	-0.177116564
UCK1	Naive cd8+ t cell	TGCT	-0.135941998
UCK1	Natural killer cell	TGCT	-0.024776845
UCK1	Natural killer t (nkt) cell	TGCT	0.069879362
UCK1	Natural regulatory t (treg)	TGCT	-0.105146589
UCK1	Neomycin, kanamycin and	TGCT	-0.083081415
UCK1	Neutrophil	TGCT	-0.057206302
UCK1	Nicotinate and nicotinami	TGCT	0.00871926
UCK1	Nitrogen metabolism	TGCT	-0.169051315
UCK1	Nod_like_receptor_signal	TGCT	-0.179713705
UCK1	Notch_signaling	TGCT	0.063586663
UCK1	One carbon pool by folate	TGCT	0.010201356
UCK1	Other glycan degradation	TGCT	-0.004688787
UCK1	Other types of o-glycan b	TGCT	0.097945623
UCK1	Oxidative phosphorylatio	TGCT	0.351995864
UCK1	P53_pathway	TGCT	0.177788554
UCK1	P53_signaling_pathway	TGCT	0.040152414
UCK1	Pantothenate and coa bios	TGCT	0.084159954
UCK1	Pentose and glucuronate i	TGCT	0.032785832
UCK1	Pentose phosphate pathwa	TGCT	0.180829763
UCK1	Pericyte	TGCT	-0.02192947
UCK1	Phenylalanine metabolism	TGCT	0.224296387
UCK1	Phenylalanine, tyrosine ar	TGCT	0.291773935
UCK1	Phosphonate and phosphir	TGCT	0.122354204
UCK1	Pi3k_akt_activation	TGCT	-0.141772409
UCK1	Pi3k_akt_mtor_signaling	TGCT	0.025161429
UCK1	Porphyrin and chlorophyl	TGCT	0.233270818
UCK1	Primary bile acid biosynt	TGCT	0.089851174
UCK1	Propanoate metabolism	TGCT	-0.070143201
UCK1	Purine metabolism	TGCT	0.23480893
UCK1	Pyrimidine metabolism	TGCT	0.214961121
UCK1	Pyruvate metabolism	TGCT	0.265158934
UCK1	Regulation_of_autophagy	TGCT	-0.06140291
UCK1	Retinol metabolism	TGCT	-0.021346578
UCK1	Riboflavin metabolism	TGCT	0.221263686
UCK1	Schmahl_pdgf_signaling	TGCT	-0.134832428
UCK1	Selenocompound metabol	TGCT	-0.046239681
UCK1	Signaling_by_hippo	TGCT	-0.125063721
UCK1	Sphingolipid metabolism	TGCT	-0.041070724
UCK1	Starch and sucrose metabo	TGCT	-0.110387999
UCK1	Steroid biosynthesis	TGCT	0.056321445
UCK1	Steroid hormone biosynth	TGCT	0.050693811
UCK1	Sulfur metabolism	TGCT	0.081406417

UCK1	Synthesis and degradation	TGCT	0.240846487
UCK1	T helper cell	TGCT	-0.062318964
UCK1	T helper1 (th1) cell	TGCT	-0.005730157
UCK1	T helper17 (th17) cell	TGCT	-0.073850663
UCK1	T helper2 (th2) cell	TGCT	0.042952605
UCK1	T helper9 (th9) cell	TGCT	0.051328569
UCK1	Taurine and hypotaurine r	TGCT	0.219717451
UCK1	Terpenoid backbone biosy	TGCT	0.126444979
UCK1	Tgf_beta_signaling_pathw	TGCT	-0.100476358
UCK1	Thiamine metabolism	TGCT	0.352602049
UCK1	Tnfa_signaling_via_nfk	TGCT	-0.02474414
UCK1	Tryptophan metabolism	TGCT	0.221536743
UCK1	Tumor endothelial cell	TGCT	-0.069361062
UCK1	Tyrosine metabolism	TGCT	0.102529564
UCK1	Ubiquinone and other ter	TGCT	0.13760723
UCK1	Valine, leucine and isoleu	TGCT	0.284552505
UCK1	Valine, leucine and isoleu	TGCT	0.181685043
UCK1	Vascular endothelial cell	TGCT	0.04358853
UCK1	Vascular smooth muscle c	TGCT	-0.150868434
UCK1	Vegf_signaling_pathway	TGCT	-0.18290946
UCK1	Vitamin b6 metabolism	TGCT	0.134653598
UCK1	Willert_wnt_signaling	TGCT	0.274119359
UCK1	Wnt_beta_catenin_signali	TGCT	-0.034850313
UCK2	Abnormal plasma cell	TGCT	-0.182996498
UCK2	Activated b cell	TGCT	-0.269094461
UCK2	Activated cd4+ t cell	TGCT	-0.392659782
UCK2	Activated t cell	TGCT	-0.388145309
UCK2	Alanine, aspartate and glu	TGCT	0.630514872
UCK2	Alcala_apoptosis	TGCT	0.189766578
UCK2	Alpha-linolenic acid meta	TGCT	-0.026906807
UCK2	Amino sugar and nucleoti	TGCT	0.510071462
UCK2	Ampk_pathway	TGCT	0.148830061
UCK2	Angiogenesis	TGCT	0.371398781
UCK2	Arachidonic acid metabol	TGCT	0.056760932
UCK2	Arginine and proline meta	TGCT	0.63887758
UCK2	Arginine biosynthesis	TGCT	0.567460583
UCK2	Ascorbate and aldarate m	TGCT	0.35413535
UCK2	Atypical memory b cell	TGCT	-0.534931317
UCK2	Axl+siglec6+ dendritic ce	TGCT	-0.135020246
UCK2	B cell	TGCT	-0.338577375
UCK2	B1 cell	TGCT	-0.418113375
UCK2	Basal cell	TGCT	0.21592641
UCK2	Beta-alanine metabolism	TGCT	0.307143061

UCK2	Biosynthesis of unsaturated fatty acids	TGCT	0.203202784
UCK2	Biotin metabolism	TGCT	-0.239976988
UCK2	Butanoate metabolism	TGCT	0.404290468
UCK2	Caffeine metabolism	TGCT	0.253577615
UCK2	Cancer stem cell	TGCT	0.275703396
UCK2	Cancer stem-like cell	TGCT	-0.136096532
UCK2	Cd4+ cytotoxic t cell	TGCT	-0.297634452
UCK2	Cd4+ memory t cell	TGCT	-0.423933554
UCK2	Cd4+ regulatory t cell	TGCT	-0.269855965
UCK2	Cd4+ t helper cell	TGCT	-0.397699183
UCK2	Cd4+cd25+ regulatory t cell	TGCT	-0.388410621
UCK2	Cd8+ cytotoxic t cell	TGCT	-0.315414713
UCK2	Cd8+ regulatory t cell	TGCT	-0.403981688
UCK2	Cell_cycle	TGCT	0.288876551
UCK2	Chandran_metastasis_top5	TGCT	0.100758465
UCK2	Citrate cycle (tca cycle)	TGCT	0.522476372
UCK2	Cysteine and methionine metabolism	TGCT	0.61702972
UCK2	Cytokine induced killer cell	TGCT	-0.431400324
UCK2	D-arginine and d-ornithine	TGCT	0.243762923
UCK2	D-glutamine and d-glutamate	TGCT	0.333128374
UCK2	Dendritic cell	TGCT	-0.263561675
UCK2	Dna_repair	TGCT	0.351466621
UCK2	Dna_replication	TGCT	0.266500696
UCK2	Double-negative memory t cell	TGCT	-0.415006317
UCK2	Drug metabolism - cytochrome p450	TGCT	0.126828329
UCK2	Drug metabolism - other cytochrome p450	TGCT	0.558274135
UCK2	E2f_targets	TGCT	0.304376733
UCK2	Ecm_receptor_interaction	TGCT	0.162416231
UCK2	Effector cd4+ memory t cell	TGCT	-0.398468005
UCK2	Effector cd8+ memory t cell	TGCT	-0.225809251
UCK2	Effector memory t cell	TGCT	-0.385280325
UCK2	Effector regulatory t (treg) cell	TGCT	-0.373889354
UCK2	Elvidge_hif1a_targets_up	TGCT	-0.004589577
UCK2	Endothelial cell	TGCT	0.216161102
UCK2	Eosinophil	TGCT	-0.22052017
UCK2	Ether lipid metabolism	TGCT	-0.201534567
UCK2	Exhausted cd4+ t cell	TGCT	-0.356745945
UCK2	Exhausted cd8+ t cell	TGCT	-0.237089915
UCK2	Exhausted t cell	TGCT	-0.306518081
UCK2	Fat cell (adipocyte)	TGCT	0.198673109
UCK2	Fatty acid biosynthesis	TGCT	-0.081545368
UCK2	Fatty acid degradation	TGCT	0.009410793
UCK2	Fatty acid elongation	TGCT	-0.031218314

UCK2	Fibroblast	TGCT	0.02705741
UCK2	Folate biosynthesis	TGCT	0.238613569
UCK2	Follicular b cell	TGCT	-0.372280928
UCK2	Follicular dendritic cell	TGCT	-0.416778368
UCK2	Follicular helper (tfh) t ce	TGCT	-0.4294761
UCK2	Follicular t cell	TGCT	-0.320597609
UCK2	Foxp3+il-17+ t cell	TGCT	-0.218803205
UCK2	Fructose and mannose me	TGCT	0.427587552
UCK2	G2m_checkpoint	TGCT	0.290721476
UCK2	Galactose metabolism	TGCT	0.555661747
UCK2	Galie_tumor_stemness_ge	TGCT	0.179609157
UCK2	Glutathione metabolism	TGCT	0.60243662
UCK2	Glycerolipid metabolism	TGCT	0.041834246
UCK2	Glycerophospholipid metæ	TGCT	0.025396651
UCK2	Glycine, serine and threor	TGCT	0.605742104
UCK2	Glycolysis / gluconeogene	TGCT	0.637981287
UCK2	Glycosaminoglycan biosy1	TGCT	0.355898061
UCK2	Glycosaminoglycan biosy1	TGCT	0.292960728
UCK2	Glycosaminoglycan biosy1	TGCT	0.024897497
UCK2	Glycosaminoglycan degra	TGCT	-0.016970208
UCK2	Glycosphingolipid biosyn1	TGCT	-0.434138203
UCK2	Glycosphingolipid biosyn1	TGCT	0.31480999
UCK2	Glycosphingolipid biosyn1	TGCT	0.317484715
UCK2	Glycosylphosphatidylinos:	TGCT	0.199858415
UCK2	Glyoxylate and dicarboxy	TGCT	0.517338372
UCK2	Granulocyte	TGCT	-0.173052598
UCK2	Hedgehog_signaling	TGCT	0.214612015
UCK2	Histidine metabolism	TGCT	0.121037465
UCK2	Hypoxia	TGCT	0.539726609
UCK2	Il-17ralpha t cell	TGCT	-0.414768507
UCK2	Il2_stat5_signaling	TGCT	0.092724764
UCK2	Il6_jak_stat3_signaling	TGCT	-0.166555868
UCK2	Immune_checkpoints_tunr	TGCT	-0.316601317
UCK2	Immune_inhibition_cytok	TGCT	-0.024819007
UCK2	Inositol phosphate metabo	TGCT	-0.468515187
UCK2	Interleukin_6_signaling	TGCT	-0.461999312
UCK2	Jaeger_metastasis_up	TGCT	0.676640884
UCK2	Jain_nfkb_signaling	TGCT	0.3697325
UCK2	Kras_signaling_up	TGCT	-0.122611974
UCK2	Linoleic acid metabolism	TGCT	-0.195368253
UCK2	Lipoic acid metabolism	TGCT	-0.126247754
UCK2	Lysine degradation	TGCT	0.130110466
UCK2	Lysosome	TGCT	-0.194794028

UCK2	M1 macrophage	TGCT	-0.162466174
UCK2	M2 macrophage	TGCT	-0.02815293
UCK2	Mannose type o-glycan bi	TGCT	-0.330291303
UCK2	Mapk_signaling_pathway	TGCT	0.23760381
UCK2	Mapk3_erk1_activation	TGCT	-0.454477028
UCK2	Marginal zone b cell	TGCT	-0.423678978
UCK2	Memory b cell	TGCT	-0.364655722
UCK2	Mesenchymal cell	TGCT	0.232932713
UCK2	Mesenchymal stem cell	TGCT	0.046417612
UCK2	Metabolism of xenobiotic	TGCT	0.203242416
UCK2	Migrating cancer stem cel	TGCT	0.307036412
UCK2	Mitotic_spindle	TGCT	-0.194612734
UCK2	Monocyte	TGCT	-0.060740938
UCK2	Mtor_signaling_pathway	TGCT	-0.494461435
UCK2	Mtorc1_signaling	TGCT	0.519123008
UCK2	Mucin type o-glycan biosy	TGCT	-0.127028733
UCK2	Myc_targets_v1	TGCT	0.374279792
UCK2	Myeloid cell	TGCT	-0.306314434
UCK2	N-glycan biosynthesis	TGCT	0.173409967
UCK2	Naive b cell	TGCT	-0.074115368
UCK2	Naive cd4+ t cell	TGCT	-0.399272782
UCK2	Naive cd8+ t cell	TGCT	-0.353224908
UCK2	Natural killer cell	TGCT	-0.372135506
UCK2	Natural killer t (nkt) cell	TGCT	-0.118187677
UCK2	Natural regulatory t (treg)	TGCT	-0.442496441
UCK2	Neomycin, kanamycin and	TGCT	0.400614193
UCK2	Neutrophil	TGCT	0.003150558
UCK2	Nicotinate and nicotinami	TGCT	-0.055839897
UCK2	Nitrogen metabolism	TGCT	0.241526813
UCK2	Nod_like_receptor_signal	TGCT	-0.164682038
UCK2	Notch_signaling	TGCT	0.371419759
UCK2	One carbon pool by folate	TGCT	0.432097226
UCK2	Other glycan degradation	TGCT	0.018404827
UCK2	Other types of o-glycan b	TGCT	-0.095327338
UCK2	Oxidative phosphorylatio	TGCT	0.355485842
UCK2	P53_pathway	TGCT	0.441698003
UCK2	P53_signaling_pathway	TGCT	0.577737802
UCK2	Pantothenate and coa bios	TGCT	0.034473904
UCK2	Pentose and glucuronate i	TGCT	0.245221999
UCK2	Pentose phosphate pathwa	TGCT	0.528682672
UCK2	Pericyte	TGCT	0.203969063
UCK2	Phenylalanine metabolism	TGCT	0.219566277
UCK2	Phenylalanine, tyrosine ar	TGCT	0.424535431

UCK2	Phosphonate and phosphir	TGCT	0.379078767
UCK2	Pi3k_akt_activation	TGCT	0.026428505
UCK2	Pi3k_akt_mtor_signaling	TGCT	0.271566674
UCK2	Porphyrin and chlorophyl	TGCT	0.254150634
UCK2	Primary bile acid biosynt	TGCT	-0.04207531
UCK2	Propanoate metabolism	TGCT	-0.001987879
UCK2	Purine metabolism	TGCT	0.523755698
UCK2	Pyrimidine metabolism	TGCT	0.37328302
UCK2	Pyruvate metabolism	TGCT	0.591899764
UCK2	Regulation_of_autophagy	TGCT	-0.239989457
UCK2	Retinol metabolism	TGCT	-0.006346419
UCK2	Riboflavin metabolism	TGCT	0.067207948
UCK2	Schmahl_pdgf_signaling	TGCT	-0.358814178
UCK2	Selenocompound metabol	TGCT	0.161956022
UCK2	Signaling_by_hippo	TGCT	0.276438795
UCK2	Sphingolipid metabolism	TGCT	0.012540898
UCK2	Starch and sucrose metab	TGCT	0.258501303
UCK2	Steroid biosynthesis	TGCT	0.015836765
UCK2	Steroid hormone biosynth	TGCT	0.180093439
UCK2	Sulfur metabolism	TGCT	0.236144316
UCK2	Synthesis and degradation	TGCT	0.371045359
UCK2	T helper cell	TGCT	-0.368944332
UCK2	T helper1 (th1) cell	TGCT	-0.272343114
UCK2	T helper17 (th17) cell	TGCT	-0.344606458
UCK2	T helper2 (th2) cell	TGCT	-0.143422309
UCK2	T helper9 (th9) cell	TGCT	-0.266484389
UCK2	Taurine and hypotaurine r	TGCT	0.06328163
UCK2	Terpenoid backbone biosy	TGCT	0.240836001
UCK2	Tgf_beta_signaling_pathw	TGCT	0.293658675
UCK2	Thiamine metabolism	TGCT	0.15340885
UCK2	Tnfa_signaling_via_nfkb	TGCT	0.091134839
UCK2	Tryptophan metabolism	TGCT	0.144186443
UCK2	Tumor endothelial cell	TGCT	-0.14276752
UCK2	Tyrosine metabolism	TGCT	0.010244036
UCK2	Ubiquinone and other ter	TGCT	0.037262265
UCK2	Valine, leucine and isoleu	TGCT	0.569397691
UCK2	Valine, leucine and isoleu	TGCT	0.32979966
UCK2	Vascular endothelial cell	TGCT	0.037706564
UCK2	Vascular smooth muscle c	TGCT	-0.021841196
UCK2	Vegf_signaling_pathway	TGCT	-0.212815775
UCK2	Vitamin b6 metabolism	TGCT	0.312932118
UCK2	Willert_wnt_signaling	TGCT	0.62966234
UCK2	Wnt_beta_catenin_signali	TGCT	0.408643446

UCKL1	Abnormal plasma cell	TGCT	-0.354647381
UCKL1	Activated b cell	TGCT	-0.122746927
UCKL1	Activated cd4+ t cell	TGCT	-0.239118541
UCKL1	Activated t cell	TGCT	-0.209424335
UCKL1	Alanine, aspartate and glu	TGCT	0.426381442
UCKL1	Alcala_apoptosis	TGCT	0.231359918
UCKL1	Alpha-linolenic acid meta	TGCT	-0.030212811
UCKL1	Amino sugar and nucleoti	TGCT	0.359418392
UCKL1	Ampk_pathway	TGCT	0.1313949
UCKL1	Angiogenesis	TGCT	-0.022670187
UCKL1	Arachidonic acid metabol	TGCT	0.012466365
UCKL1	Arginine and proline metæ	TGCT	0.445851199
UCKL1	Arginine biosynthesis	TGCT	0.262085852
UCKL1	Ascorbate and aldarate mε	TGCT	0.066315606
UCKL1	Atypical memory b cell	TGCT	-0.246269272
UCKL1	Axl+siglec6+ dendritic ce	TGCT	-0.246535621
UCKL1	B cell	TGCT	-0.25685834
UCKL1	B1 cell	TGCT	-0.231265958
UCKL1	Basal cell	TGCT	-0.025693835
UCKL1	Beta-alanine metabolism	TGCT	0.049039934
UCKL1	Biosynthesis of unsaturate	TGCT	0.024029817
UCKL1	Biotin metabolism	TGCT	-0.136720378
UCKL1	Butanoate metabolism	TGCT	0.180378187
UCKL1	Caffeine metabolism	TGCT	0.116547303
UCKL1	Cancer stem cell	TGCT	-0.200173313
UCKL1	Cancer stem-like cell	TGCT	-0.467928578
UCKL1	Cd4+ cytotoxic t cell	TGCT	-0.2037816
UCKL1	Cd4+ memory t cell	TGCT	-0.184606251
UCKL1	Cd4+ regulatory t cell	TGCT	-0.21612731
UCKL1	Cd4+ t helper cell	TGCT	-0.23288092
UCKL1	Cd4+cd25+ regulatory t c	TGCT	-0.231868033
UCKL1	Cd8+ cytotoxic t cell	TGCT	-0.123578176
UCKL1	Cd8+ regulatory t cell	TGCT	-0.200614871
UCKL1	Cell_cycle	TGCT	0.218665292
UCKL1	Chandran_metastasis_top5	TGCT	0.079062663
UCKL1	Citrate cycle (tca cycle)	TGCT	0.440792494
UCKL1	Cysteine and methionine r	TGCT	0.501777705
UCKL1	Cytokine induced killer α	TGCT	-0.343634705
UCKL1	D-arginine and d-ornithin	TGCT	0.035467402
UCKL1	D-glutamine and d-glutan	TGCT	0.161889455
UCKL1	Dendritic cell	TGCT	-0.28388064
UCKL1	Dna_repair	TGCT	0.510045752
UCKL1	Dna_replication	TGCT	0.331016226

UCKL1	Double-negative memory TGCT	-0.053899275
UCKL1	Drug metabolism - cytoch TGCT	-0.0096359
UCKL1	Drug metabolism - other (TGCT	0.483416832
UCKL1	E2f_targets TGCT	0.234275498
UCKL1	Ecm_receptor_interaction TGCT	-0.215159384
UCKL1	Effector cd4+ memory t (TGCT	-0.25702369
UCKL1	Effector cd8+ memory t (TGCT	-0.197650446
UCKL1	Effector memory t cell TGCT	-0.260751283
UCKL1	Effector regulatory t (treg TGCT	-0.386914384
UCKL1	Elvidge_hif1a_targets_up TGCT	0.139857276
UCKL1	Endothelial cell TGCT	-0.225366077
UCKL1	Eosinophil TGCT	-0.18860342
UCKL1	Ether lipid metabolism TGCT	-0.201375961
UCKL1	Exhausted cd4+ t cell TGCT	-0.380745589
UCKL1	Exhausted cd8+ t cell TGCT	-0.249838135
UCKL1	Exhausted t cell TGCT	-0.115532691
UCKL1	Fat cell (adipocyte) TGCT	0.106457386
UCKL1	Fatty acid biosynthesis TGCT	0.171673285
UCKL1	Fatty acid degradation TGCT	-0.078898859
UCKL1	Fatty acid elongation TGCT	0.152692418
UCKL1	Fibroblast TGCT	-0.3224211
UCKL1	Folate biosynthesis TGCT	0.256176005
UCKL1	Follicular b cell TGCT	-0.22897246
UCKL1	Follicular dendritic cell TGCT	-0.161935057
UCKL1	Follicular helper (tfh) t ce TGCT	-0.239120397
UCKL1	Follicular t cell TGCT	-0.017618154
UCKL1	Foxp3+il-17+ t cell TGCT	-0.109986721
UCKL1	Fructose and mannose me TGCT	0.349412633
UCKL1	G2m_checkpoint TGCT	0.119734317
UCKL1	Galactose metabolism TGCT	0.385876501
UCKL1	Galie_tumor_stemness_ge TGCT	-0.209414486
UCKL1	Glutathione metabolism TGCT	0.453953727
UCKL1	Glycerolipid metabolism TGCT	-0.138396392
UCKL1	Glycerophospholipid metæ TGCT	0.172558225
UCKL1	Glycine, serine and threor TGCT	0.43685323
UCKL1	Glycolysis / gluconeogene TGCT	0.407650661
UCKL1	Glycosaminoglycan biosy TGCT	0.097339506
UCKL1	Glycosaminoglycan biosy TGCT	-0.059107638
UCKL1	Glycosaminoglycan biosy TGCT	-0.142219433
UCKL1	Glycosaminoglycan degra TGCT	-0.251383431
UCKL1	Glycosphingolipid biosyn TGCT	-0.420335038
UCKL1	Glycosphingolipid biosyn TGCT	-0.093603012
UCKL1	Glycosphingolipid biosyn TGCT	0.049812679

UCKL1	Glycosylphosphatidylinos: TGCT	0.168787615
UCKL1	Glyoxylate and dicarboxy TGCT	0.456314247
UCKL1	Granulocyte TGCT	-0.267998867
UCKL1	Hedgehog_signaling TGCT	-0.232904987
UCKL1	Histidine metabolism TGCT	-0.130198415
UCKL1	Hypoxia TGCT	0.209314474
UCKL1	Il-17ralpha t cell TGCT	-0.20594142
UCKL1	Il2_stat5_signaling TGCT	-0.123986492
UCKL1	Il6_jak_stat3_signaling TGCT	-0.290875605
UCKL1	Immune_checkpoints_tun TGCT	-0.192211604
UCKL1	Immune_inhibition_cytok TGCT	-0.07095521
UCKL1	Inositol phosphate metabo TGCT	-0.472562519
UCKL1	Interleukin_6_signaling TGCT	-0.487056358
UCKL1	Jaeger_metastasis_up TGCT	0.309037923
UCKL1	Jain_nfkb_signaling TGCT	0.413791919
UCKL1	Kras_signaling_up TGCT	-0.366111417
UCKL1	Linoleic acid metabolism TGCT	-0.10334391
UCKL1	Lipoic acid metabolism TGCT	0.144553413
UCKL1	Lysine degradation TGCT	0.011626658
UCKL1	Lysosome TGCT	-0.206699251
UCKL1	M1 macrophage TGCT	-0.200939188
UCKL1	M2 macrophage TGCT	-0.16762573
UCKL1	Mannose type o-glycan bi TGCT	-0.19955649
UCKL1	Mapk_signaling_pathway TGCT	-0.15538143
UCKL1	Mapk3_erk1_activation TGCT	-0.44816655
UCKL1	Marginal zone b cell TGCT	-0.316690489
UCKL1	Memory b cell TGCT	-0.131886252
UCKL1	Mesenchymal cell TGCT	-0.160442016
UCKL1	Mesenchymal stem cell TGCT	-0.353058469
UCKL1	Metabolism of xenobiotic: TGCT	0.102810222
UCKL1	Migrating cancer stem cel TGCT	0.34043689
UCKL1	Mitotic_spindle TGCT	-0.359677161
UCKL1	Monocyte TGCT	-0.145708011
UCKL1	Mtor_signaling_pathway TGCT	-0.322119176
UCKL1	Mtorc1_signaling TGCT	0.406832024
UCKL1	Mucin type o-glycan biosy TGCT	-0.372316432
UCKL1	Myc_targets_v1 TGCT	0.443980516
UCKL1	Myeloid cell TGCT	-0.297853986
UCKL1	N-glycan biosynthesis TGCT	0.162488007
UCKL1	Naive b cell TGCT	0.073227206
UCKL1	Naive cd4+ t cell TGCT	-0.439960988
UCKL1	Naive cd8+ t cell TGCT	-0.404474888
UCKL1	Natural killer cell TGCT	-0.236623029

UCKL1	Natural killer t (nkt) cell	TGCT	0.047353747
UCKL1	Natural regulatory t (treg)	TGCT	-0.323783186
UCKL1	Neomycin, kanamycin and	TGCT	0.190163747
UCKL1	Neutrophil	TGCT	-0.126223546
UCKL1	Nicotinate and nicotinami	TGCT	0.132677696
UCKL1	Nitrogen metabolism	TGCT	-0.043427019
UCKL1	Nod_like_receptor_signal	TGCT	-0.216466065
UCKL1	Notch_signaling	TGCT	0.026121639
UCKL1	One carbon pool by folate	TGCT	0.268576056
UCKL1	Other glycan degradation	TGCT	-0.107617855
UCKL1	Other types of o-glycan b	TGCT	-0.152908754
UCKL1	Oxidative phosphorylatio	TGCT	0.56771349
UCKL1	P53_pathway	TGCT	0.344880543
UCKL1	P53_signaling_pathway	TGCT	0.237770121
UCKL1	Pantothenate and coa bios	TGCT	-0.000611079
UCKL1	Pentose and glucuronate i	TGCT	0.089759446
UCKL1	Pentose phosphate pathwa	TGCT	0.47248974
UCKL1	Pericyte	TGCT	-0.183756018
UCKL1	Phenylalanine metabolism	TGCT	0.191990751
UCKL1	Phenylalanine, tyrosine ar	TGCT	0.373327993
UCKL1	Phosphonate and phosphir	TGCT	0.297024844
UCKL1	Pi3k_akt_activation	TGCT	-0.221705607
UCKL1	Pi3k_akt_mtor_signaling	TGCT	0.148939166
UCKL1	Porphyrin and chlorophyl	TGCT	0.207076998
UCKL1	Primary bile acid biosynt	TGCT	-0.107968494
UCKL1	Propanoate metabolism	TGCT	-0.013362569
UCKL1	Purine metabolism	TGCT	0.481380955
UCKL1	Pyrimidine metabolism	TGCT	0.437608079
UCKL1	Pyruvate metabolism	TGCT	0.484287076
UCKL1	Regulation_of_autophagy	TGCT	0.107947077
UCKL1	Retinol metabolism	TGCT	-0.10242978
UCKL1	Riboflavin metabolism	TGCT	0.204859281
UCKL1	Schmahl_pdgf_signaling	TGCT	-0.463524028
UCKL1	Selenocompound metabol	TGCT	0.16663954
UCKL1	Signaling_by_hippo	TGCT	-0.091169002
UCKL1	Sphingolipid metabolism	TGCT	-0.211042275
UCKL1	Starch and sucrose metabo	TGCT	0.336455225
UCKL1	Steroid biosynthesis	TGCT	0.050682359
UCKL1	Steroid hormone biosynth	TGCT	0.007410822
UCKL1	Sulfur metabolism	TGCT	0.075660851
UCKL1	Synthesis and degradation	TGCT	0.153998551
UCKL1	T helper cell	TGCT	-0.281718595
UCKL1	T helper1 (th1) cell	TGCT	-0.205659143

UCKL1	T helper17 (th17) cell	TGCT	-0.260233296
UCKL1	T helper2 (th2) cell	TGCT	-0.15293445
UCKL1	T helper9 (th9) cell	TGCT	-0.211756736
UCKL1	Taurine and hypotaurine r	TGCT	0.058963051
UCKL1	Terpenoid backbone biosy	TGCT	0.280939479
UCKL1	Tgf_beta_signaling_pathw	TGCT	-0.168306039
UCKL1	Thiamine metabolism	TGCT	0.368076745
UCKL1	Tnfa_signaling_via_nfkb	TGCT	-0.111348979
UCKL1	Tryptophan metabolism	TGCT	-0.024362468
UCKL1	Tumor endothelial cell	TGCT	-0.15026137
UCKL1	Tyrosine metabolism	TGCT	-0.10160748
UCKL1	Ubiquinone and other terf	TGCT	0.198479456
UCKL1	Valine, leucine and isoleu	TGCT	0.308248528
UCKL1	Valine, leucine and isoleu	TGCT	0.143109218
UCKL1	Vascular endothelial cell	TGCT	-0.192126201
UCKL1	Vascular smooth muscle c	TGCT	-0.174620361
UCKL1	Vegf_signaling_pathway	TGCT	-0.29259829
UCKL1	Vitamin b6 metabolism	TGCT	0.29297641
UCKL1	Willert_wnt_signaling	TGCT	0.36042223
UCKL1	Wnt_beta_catenin_signali	TGCT	0.062299751
UPP1	Abnormal plasma cell	TGCT	-0.712657526
UPP1	Activated b cell	TGCT	0.289524104
UPP1	Activated cd4+ t cell	TGCT	0.23694425
UPP1	Activated t cell	TGCT	0.220594819
UPP1	Alanine, aspartate and glu	TGCT	0.447260576
UPP1	Alcala_apoptosis	TGCT	0.571121932
UPP1	Alpha-linolenic acid meta	TGCT	-0.212366739
UPP1	Amino sugar and nucleoti	TGCT	0.558757165
UPP1	Ampk_pathway	TGCT	-0.083072778
UPP1	Angiogenesis	TGCT	-0.470576216
UPP1	Arachidonic acid metabol:	TGCT	-0.098337676
UPP1	Arginine and proline metæ	TGCT	0.353736892
UPP1	Arginine biosynthesis	TGCT	0.132033126
UPP1	Ascorbate and aldarate mε	TGCT	-0.460571715
UPP1	Atypical memory b cell	TGCT	0.063248703
UPP1	Axl+siglec6+ dendritic ce	TGCT	-0.062965527
UPP1	B cell	TGCT	0.146453052
UPP1	B1 cell	TGCT	0.258497064
UPP1	Basal cell	TGCT	-0.337885121
UPP1	Beta-alanine metabolism	TGCT	-0.27011314
UPP1	Biosynthesis of unsaturate	TGCT	-0.08624825
UPP1	Biotin metabolism	TGCT	-0.304530619
UPP1	Butanoate metabolism	TGCT	-0.212429197

UPP1	Caffeine metabolism	TGCT	-0.318098044
UPP1	Cancer stem cell	TGCT	-0.370966179
UPP1	Cancer stem-like cell	TGCT	-0.436511725
UPP1	Cd4+ cytotoxic t cell	TGCT	0.163025168
UPP1	Cd4+ memory t cell	TGCT	0.284372513
UPP1	Cd4+ regulatory t cell	TGCT	0.219666308
UPP1	Cd4+ t helper cell	TGCT	0.223270293
UPP1	Cd4+cd25+ regulatory t c	TGCT	0.239286267
UPP1	Cd8+ cytotoxic t cell	TGCT	0.337506249
UPP1	Cd8+ regulatory t cell	TGCT	0.271139598
UPP1	Cell_cycle	TGCT	0.50810934
UPP1	Chandran_metastasis_top5	TGCT	0.494802074
UPP1	Citrate cycle (tca cycle)	TGCT	0.578693655
UPP1	Cysteine and methionine r	TGCT	0.652862883
UPP1	Cytokine induced killer α	TGCT	-0.116381153
UPP1	D-arginine and d-ornithin	TGCT	-0.176320541
UPP1	D-glutamine and d-glutan	TGCT	0.565264546
UPP1	Dendritic cell	TGCT	0.090851663
UPP1	Dna_repair	TGCT	0.735034741
UPP1	Dna_replication	TGCT	0.647595871
UPP1	Double-negative memory	TGCT	0.286627661
UPP1	Drug metabolism - cytoch	TGCT	-0.486395631
UPP1	Drug metabolism - other (	TGCT	0.141810966
UPP1	E2f_targets	TGCT	0.539699758
UPP1	Ecm_receptor_interaction	TGCT	-0.649137074
UPP1	Effector cd4+ memory t (	TGCT	0.297407012
UPP1	Effector cd8+ memory t (	TGCT	0.259496245
UPP1	Effector memory t cell	TGCT	0.16496147
UPP1	Effector regulatory t (treg	TGCT	-0.030582739
UPP1	Elvidge_hif1a_targets_up	TGCT	0.761627471
UPP1	Endothelial cell	TGCT	-0.512611888
UPP1	Eosinophil	TGCT	0.294173637
UPP1	Ether lipid metabolism	TGCT	-0.243588781
UPP1	Exhausted cd4+ t cell	TGCT	-0.025196847
UPP1	Exhausted cd8+ t cell	TGCT	0.132266896
UPP1	Exhausted t cell	TGCT	0.301748339
UPP1	Fat cell (adipocyte)	TGCT	-0.065438074
UPP1	Fatty acid biosynthesis	TGCT	0.698275055
UPP1	Fatty acid degradation	TGCT	-0.21699131
UPP1	Fatty acid elongation	TGCT	0.389234858
UPP1	Fibroblast	TGCT	-0.494058032
UPP1	Folate biosynthesis	TGCT	0.350680102
UPP1	Follicular b cell	TGCT	0.204668008

UPP1	Follicular dendritic cell	TGCT	0.29297456
UPP1	Follicular helper (tfh) t ce	TGCT	0.2130177
UPP1	Follicular t cell	TGCT	0.345129414
UPP1	Foxp3+il-17+ t cell	TGCT	0.379098825
UPP1	Fructose and mannose me	TGCT	0.4677191
UPP1	G2m_checkpoint	TGCT	0.377941632
UPP1	Galactose metabolism	TGCT	0.440647465
UPP1	Galie_tumor_stemness_ge	TGCT	-0.611409816
UPP1	Glutathione metabolism	TGCT	0.353567886
UPP1	Glycerolipid metabolism	TGCT	-0.408322659
UPP1	Glycerophospholipid metæ	TGCT	-0.11145834
UPP1	Glycine, serine and threor	TGCT	0.425319676
UPP1	Glycolysis / gluconeogene	TGCT	0.49188423
UPP1	Glycosaminoglycan biosy	TGCT	-0.314908797
UPP1	Glycosaminoglycan biosy	TGCT	-0.624173157
UPP1	Glycosaminoglycan biosy	TGCT	-0.346430713
UPP1	Glycosaminoglycan degra	TGCT	-0.494091669
UPP1	Glycosphingolipid biosyn	TGCT	-0.322960449
UPP1	Glycosphingolipid biosyn	TGCT	-0.047239629
UPP1	Glycosphingolipid biosyn	TGCT	-0.32384789
UPP1	Glycosylphosphatidylinos	TGCT	-0.393475772
UPP1	Glyoxylate and dicarboxy	TGCT	0.385426924
UPP1	Granulocyte	TGCT	0.106276608
UPP1	Hedgehog_signaling	TGCT	-0.62198641
UPP1	Histidine metabolism	TGCT	-0.52113951
UPP1	Hypoxia	TGCT	0.044605125
UPP1	Il-17alpha t cell	TGCT	0.278837705
UPP1	Il2_stat5_signaling	TGCT	0.145857523
UPP1	Il6_jak_stat3_signaling	TGCT	0.033972537
UPP1	Immune_checkpoints_tur	TGCT	0.315032359
UPP1	Immune_inhibition_cytok	TGCT	0.149535519
UPP1	Inositol phosphate metabo	TGCT	-0.327199942
UPP1	Interleukin_6_signaling	TGCT	0.028602329
UPP1	Jaeger_metastasis_up	TGCT	0.218997444
UPP1	Jain_nfkb_signaling	TGCT	0.686558062
UPP1	Kras_signaling_up	TGCT	-0.242880106
UPP1	Linoleic acid metabolism	TGCT	-0.292238094
UPP1	Lipoic acid metabolism	TGCT	0.543698897
UPP1	Lysine degradation	TGCT	-0.203589446
UPP1	Lysosome	TGCT	0.052966015
UPP1	M1 macrophage	TGCT	0.255700946
UPP1	M2 macrophage	TGCT	0.037731613
UPP1	Mannose type o-glycan bi	TGCT	-0.608341107

UPP1	Mapk_signaling_pathway	TGCT	-0.1783201
UPP1	Mapk3_erk1_activation	TGCT	0.028241846
UPP1	Marginal zone b cell	TGCT	0.109315049
UPP1	Memory b cell	TGCT	0.32215793
UPP1	Mesenchymal cell	TGCT	-0.451680052
UPP1	Mesenchymal stem cell	TGCT	-0.098815819
UPP1	Metabolism of xenobiotic	TGCT	-0.350905191
UPP1	Migrating cancer stem cel	TGCT	0.274828356
UPP1	Mitotic_spindle	TGCT	-0.222874383
UPP1	Monocyte	TGCT	0.192502873
UPP1	Mtor_signaling_pathway	TGCT	-0.059065532
UPP1	Mtorc1_signaling	TGCT	0.780346483
UPP1	Mucin type o-glycan bios	TGCT	-0.602626361
UPP1	Myc_targets_v1	TGCT	0.753756743
UPP1	Myeloid cell	TGCT	0.125364045
UPP1	N-glycan biosynthesis	TGCT	0.148316543
UPP1	Naive b cell	TGCT	0.27021677
UPP1	Naive cd4+ t cell	TGCT	-0.11316963
UPP1	Naive cd8+ t cell	TGCT	-0.163480937
UPP1	Natural killer cell	TGCT	0.188165701
UPP1	Natural killer t (nkt) cell	TGCT	0.613936111
UPP1	Natural regulatory t (treg)	TGCT	0.122206809
UPP1	Neomycin, kanamycin an	TGCT	0.536203406
UPP1	Neutrophil	TGCT	0.222514465
UPP1	Nicotinate and nicotinami	TGCT	0.254525567
UPP1	Nitrogen metabolism	TGCT	-0.265497742
UPP1	Nod_like_receptor_signal	TGCT	0.256425925
UPP1	Notch_signaling	TGCT	-0.516197626
UPP1	One carbon pool by folate	TGCT	0.556980249
UPP1	Other glycan degradation	TGCT	-0.224018134
UPP1	Other types of o-glycan b	TGCT	-0.669036971
UPP1	Oxidative phosphorylatior	TGCT	0.716515526
UPP1	P53_pathway	TGCT	0.434893692
UPP1	P53_signaling_pathway	TGCT	0.407637006
UPP1	Pantothenate and coa bios	TGCT	0.152941175
UPP1	Pentose and glucuronate in	TGCT	-0.265020011
UPP1	Pentose phosphate pathwa	TGCT	0.649092102
UPP1	Pericyte	TGCT	-0.482596914
UPP1	Phenylalanine metabolism	TGCT	0.104072047
UPP1	Phenylalanine, tyrosine ar	TGCT	0.425119586
UPP1	Phosphonate and phosphiri	TGCT	0.284591825
UPP1	Pi3k_akt_activation	TGCT	-0.675372698
UPP1	Pi3k_akt_mtor_signaling	TGCT	0.357031316

UPP1	Porphyrin and chlorophyl	TGCT	-0.0554226
UPP1	Primary bile acid biosynt	TGCT	-0.385024246
UPP1	Propanoate metabolism	TGCT	0.031446824
UPP1	Purine metabolism	TGCT	0.52161158
UPP1	Pyrimidine metabolism	TGCT	0.746908744
UPP1	Pyruvate metabolism	TGCT	0.446296769
UPP1	Regulation_of_autophagy	TGCT	0.627626951
UPP1	Retinol metabolism	TGCT	-0.61186951
UPP1	Riboflavin metabolism	TGCT	0.370094781
UPP1	Schmahl_pdgf_signaling	TGCT	-0.371356843
UPP1	Selenocompound metabol	TGCT	0.732300454
UPP1	Signaling_by_hippo	TGCT	-0.245531687
UPP1	Sphingolipid metabolism	TGCT	-0.413379528
UPP1	Starch and sucrose metabo	TGCT	0.762171077
UPP1	Steroid biosynthesis	TGCT	0.217167462
UPP1	Steroid hormone biosynth	TGCT	-0.430019519
UPP1	Sulfur metabolism	TGCT	-0.356882773
UPP1	Synthesis and degradation	TGCT	-0.293882115
UPP1	T helper cell	TGCT	0.157252851
UPP1	T helper1 (th1) cell	TGCT	0.193428779
UPP1	T helper17 (th17) cell	TGCT	0.135566805
UPP1	T helper2 (th2) cell	TGCT	0.172716719
UPP1	T helper9 (th9) cell	TGCT	0.102422686
UPP1	Taurine and hypotaurine r	TGCT	-0.480471419
UPP1	Terpenoid backbone biosy	TGCT	0.468688733
UPP1	Tgf_beta_signaling_pathw	TGCT	-0.555152873
UPP1	Thiamine metabolism	TGCT	0.359278768
UPP1	Tnfa_signaling_via_nfkb	TGCT	0.160144933
UPP1	Tryptophan metabolism	TGCT	-0.171475649
UPP1	Tumor endothelial cell	TGCT	-0.277378225
UPP1	Tyrosine metabolism	TGCT	-0.380080785
UPP1	Ubiquinone and other terp	TGCT	0.276591006
UPP1	Valine, leucine and isoleu	TGCT	0.054168162
UPP1	Valine, leucine and isoleu	TGCT	-0.132748945
UPP1	Vascular endothelial cell	TGCT	-0.448826447
UPP1	Vascular smooth muscle c	TGCT	-0.449298264
UPP1	Vegf_signaling_pathway	TGCT	-0.418878156
UPP1	Vitamin b6 metabolism	TGCT	0.42267898
UPP1	Willert_wnt_signaling	TGCT	0.10715634
UPP1	Wnt_beta_catenin_signali	TGCT	-0.267184844
UPP2	Abnormal plasma cell	TGCT	0.395182084
UPP2	Activated b cell	TGCT	-0.223003752
UPP2	Activated cd4+ t cell	TGCT	-0.200437768

UPP2	Activated t cell	TGCT	-0.2167459
UPP2	Alanine, aspartate and glu	TGCT	-0.144109271
UPP2	Alcala_apoptosis	TGCT	-0.403000697
UPP2	Alpha-linolenic acid meta	TGCT	-0.005933895
UPP2	Amino sugar and nucleoti	TGCT	-0.322518316
UPP2	Ampk_pathway	TGCT	0.16587296
UPP2	Angiogenesis	TGCT	0.309143547
UPP2	Arachidonic acid metabol	TGCT	0.014631664
UPP2	Arginine and proline metæ	TGCT	-0.121125343
UPP2	Arginine biosynthesis	TGCT	0.016192936
UPP2	Ascorbate and aldarate mε	TGCT	0.253400538
UPP2	Atypical memory b cell	TGCT	-0.103686135
UPP2	Axl+siglec6+ dendritic ce	TGCT	0.070350983
UPP2	B cell	TGCT	-0.123928398
UPP2	B1 cell	TGCT	-0.200689156
UPP2	Basal cell	TGCT	0.141784113
UPP2	Beta-alanine metabolism	TGCT	0.179006187
UPP2	Biosynthesis of unsaturate	TGCT	-0.052962526
UPP2	Biotin metabolism	TGCT	0.128429476
UPP2	Butanoate metabolism	TGCT	0.248487113
UPP2	Caffeine metabolism	TGCT	0.132731979
UPP2	Cancer stem cell	TGCT	0.296440237
UPP2	Cancer stem-like cell	TGCT	0.222657609
UPP2	Cd4+ cytotoxic t cell	TGCT	-0.1506826
UPP2	Cd4+ memory t cell	TGCT	-0.217775021
UPP2	Cd4+ regulatory t cell	TGCT	-0.184776203
UPP2	Cd4+ t helper cell	TGCT	-0.18569746
UPP2	Cd4+cd25+ regulatory t c	TGCT	-0.196239252
UPP2	Cd8+ cytotoxic t cell	TGCT	-0.257728301
UPP2	Cd8+ regulatory t cell	TGCT	-0.256991733
UPP2	Cell_cycle	TGCT	-0.191329731
UPP2	Chandran_metastasis_top5	TGCT	-0.182303772
UPP2	Citrate cycle (tca cycle)	TGCT	-0.261308213
UPP2	Cysteine and methionine r	TGCT	-0.272811754
UPP2	Cytokine induced killer cε	TGCT	0.001968736
UPP2	D-arginine and d-ornithin	TGCT	0.17500116
UPP2	D-glutamine and d-glutan	TGCT	-0.257040571
UPP2	Dendritic cell	TGCT	-0.111484256
UPP2	Dna_repair	TGCT	-0.428511699
UPP2	Dna_replication	TGCT	-0.374740639
UPP2	Double-negative memory	TGCT	-0.228369716
UPP2	Drug metabolism - cytoch	TGCT	0.294372212
UPP2	Drug metabolism - other ε	TGCT	-0.045878182

UPP2	E2f_targets	TGCT	-0.260433254
UPP2	Ecm_receptor_interaction	TGCT	0.426156627
UPP2	Effector cd4+ memory t (	TGCT	-0.206152157
UPP2	Effector cd8+ memory t (	TGCT	-0.191825424
UPP2	Effector memory t cell	TGCT	-0.156388987
UPP2	Effector regulatory t (treg	TGCT	-0.057402338
UPP2	Elvidge_hif1a_targets_up	TGCT	-0.424297369
UPP2	Endothelial cell	TGCT	0.350856316
UPP2	Eosinophil	TGCT	-0.253913277
UPP2	Ether lipid metabolism	TGCT	0.016110786
UPP2	Exhausted cd4+ t cell	TGCT	-0.04350954
UPP2	Exhausted cd8+ t cell	TGCT	-0.131593731
UPP2	Exhausted t cell	TGCT	-0.259198202
UPP2	Fat cell (adipocyte)	TGCT	0.140112438
UPP2	Fatty acid biosynthesis	TGCT	-0.346065233
UPP2	Fatty acid degradation	TGCT	0.036946132
UPP2	Fatty acid elongation	TGCT	-0.332040565
UPP2	Fibroblast	TGCT	0.371676743
UPP2	Folate biosynthesis	TGCT	-0.152297922
UPP2	Follicular b cell	TGCT	-0.17996339
UPP2	Follicular dendritic cell	TGCT	-0.284250007
UPP2	Follicular helper (tfh) t ce	TGCT	-0.211523817
UPP2	Follicular t cell	TGCT	-0.29406986
UPP2	Foxp3+il-17+ t cell	TGCT	-0.288929946
UPP2	Fructose and mannose me	TGCT	-0.247178926
UPP2	G2m_checkpoint	TGCT	-0.152629547
UPP2	Galactose metabolism	TGCT	-0.177558291
UPP2	Galie_tumor_stemness_ge	TGCT	0.406588657
UPP2	Glutathione metabolism	TGCT	-0.127190579
UPP2	Glycerolipid metabolism	TGCT	0.209326588
UPP2	Glycerophospholipid metæ	TGCT	-0.086856902
UPP2	Glycine, serine and threor	TGCT	-0.096772742
UPP2	Glycolysis / gluconeogene	TGCT	-0.183755836
UPP2	Glycosaminoglycan biosy	TGCT	0.237773778
UPP2	Glycosaminoglycan biosy	TGCT	0.415470209
UPP2	Glycosaminoglycan biosy	TGCT	0.159753262
UPP2	Glycosaminoglycan degra	TGCT	0.254720665
UPP2	Glycosphingolipid biosyn	TGCT	0.108795704
UPP2	Glycosphingolipid biosyn	TGCT	0.013440931
UPP2	Glycosphingolipid biosyn	TGCT	0.273304772
UPP2	Glycosylphosphatidylinos	TGCT	0.206541808
UPP2	Glyoxylate and dicarboxy	TGCT	-0.172914064
UPP2	Granulocyte	TGCT	-0.140106927

UPP2	Hedgehog_signaling	TGCT	0.463478557
UPP2	Histidine metabolism	TGCT	0.28614364
UPP2	Hypoxia	TGCT	-0.048287211
UPP2	Il-17alpha t cell	TGCT	-0.227485073
UPP2	Il2_stat5_signaling	TGCT	-0.157545687
UPP2	Il6_jak_stat3_signaling	TGCT	-0.114527444
UPP2	Immune_checkpoints_tun	TGCT	-0.266723197
UPP2	Immune_inhibition_cytok	TGCT	-0.121981859
UPP2	Inositol phosphate metabo	TGCT	0.066335169
UPP2	Interleukin_6_signaling	TGCT	-0.120242077
UPP2	Jaeger_metastasis_up	TGCT	-0.00628379
UPP2	Jain_nfkb_signaling	TGCT	-0.431191278
UPP2	Kras_signaling_up	TGCT	0.105373572
UPP2	Linoleic acid metabolism	TGCT	0.08795201
UPP2	Lipoic acid metabolism	TGCT	-0.318475317
UPP2	Lysine degradation	TGCT	0.136956812
UPP2	Lysosome	TGCT	-0.124113844
UPP2	M1 macrophage	TGCT	-0.201384825
UPP2	M2 macrophage	TGCT	-0.062387324
UPP2	Mannose type o-glycan bi	TGCT	0.329580597
UPP2	Mapk_signaling_pathway	TGCT	0.064560255
UPP2	Mapk3_erk1_activation	TGCT	-0.172248346
UPP2	Marginal zone b cell	TGCT	-0.099875101
UPP2	Memory b cell	TGCT	-0.266295318
UPP2	Mesenchymal cell	TGCT	0.363305994
UPP2	Mesenchymal stem cell	TGCT	0.168997276
UPP2	Metabolism of xenobiotic	TGCT	0.228416133
UPP2	Migrating cancer stem cel	TGCT	-0.050091078
UPP2	Mitotic_spindle	TGCT	0.109390918
UPP2	Monocyte	TGCT	-0.178577636
UPP2	Mtor_signaling_pathway	TGCT	-0.068308057
UPP2	Mtorc1_signaling	TGCT	-0.42383069
UPP2	Mucin type o-glycan biosy	TGCT	0.347633803
UPP2	Myc_targets_v1	TGCT	-0.421719173
UPP2	Myeloid cell	TGCT	-0.150713416
UPP2	N-glycan biosynthesis	TGCT	-0.159247662
UPP2	Naive b cell	TGCT	-0.1463742
UPP2	Naive cd4+ t cell	TGCT	0.050484754
UPP2	Naive cd8+ t cell	TGCT	0.092238591
UPP2	Natural killer cell	TGCT	-0.204925577
UPP2	Natural killer t (nkt) cell	TGCT	-0.423141321
UPP2	Natural regulatory t (treg)	TGCT	-0.133888331
UPP2	Neomycin, kanamycin and	TGCT	-0.260706741

UPP2	Neutrophil	TGCT	-0.236612634
UPP2	Nicotinate and nicotinami	TGCT	-0.117568627
UPP2	Nitrogen metabolism	TGCT	0.206672839
UPP2	Nod_like_receptor_signal	TGCT	-0.281813979
UPP2	Notch_signaling	TGCT	0.337079037
UPP2	One carbon pool by folate	TGCT	-0.268529097
UPP2	Other glycan degradation	TGCT	0.056971295
UPP2	Other types of o-glycan b	TGCT	0.428548541
UPP2	Oxidative phosphorylatior	TGCT	-0.395881549
UPP2	P53_pathway	TGCT	-0.329986464
UPP2	P53_signaling_pathway	TGCT	-0.199631052
UPP2	Pantothenate and coa bios	TGCT	-0.178459899
UPP2	Pentose and glucuronate in	TGCT	0.089872814
UPP2	Pentose phosphate pathwa	TGCT	-0.285716836
UPP2	Pericyte	TGCT	0.373640415
UPP2	Phenylalanine metabolism	TGCT	0.043694133
UPP2	Phenylalanine, tyrosine ar	TGCT	-0.121430477
UPP2	Phosphonate and phosphir	TGCT	-0.151443221
UPP2	Pi3k_akt_activation	TGCT	0.333859731
UPP2	Pi3k_akt_mtor_signaling	TGCT	-0.369866344
UPP2	Porphyrin and chlorophyl	TGCT	-0.007713336
UPP2	Primary bile acid biosyntf	TGCT	0.292119698
UPP2	Propanoate metabolism	TGCT	-0.010041075
UPP2	Purine metabolism	TGCT	-0.179095498
UPP2	Pyrimidine metabolism	TGCT	-0.365552038
UPP2	Pyruvate metabolism	TGCT	-0.154718097
UPP2	Regulation_of_autophagy	TGCT	-0.459037908
UPP2	Retinol metabolism	TGCT	0.315532633
UPP2	Riboflavin metabolism	TGCT	-0.309010835
UPP2	Schmahl_pdgf_signaling	TGCT	0.044761701
UPP2	Selenocompound metabol	TGCT	-0.428243636
UPP2	Signaling_by_hippo	TGCT	0.239092354
UPP2	Sphingolipid metabolism	TGCT	0.22051491
UPP2	Starch and sucrose metabo	TGCT	-0.452255899
UPP2	Steroid biosynthesis	TGCT	-0.166480337
UPP2	Steroid hormone biosynth	TGCT	0.322848006
UPP2	Sulfur metabolism	TGCT	0.11757755
UPP2	Synthesis and degradation	TGCT	0.211694906
UPP2	T helper cell	TGCT	-0.144898765
UPP2	T helper1 (th1) cell	TGCT	-0.208790089
UPP2	T helper17 (th17) cell	TGCT	-0.155251844
UPP2	T helper2 (th2) cell	TGCT	-0.169469024
UPP2	T helper9 (th9) cell	TGCT	-0.15042626

UPP2	Taurine and hypotaurine r	TGCT	0.313110136
UPP2	Terpenoid backbone biosy	TGCT	-0.245832231
UPP2	Tgf_beta_signaling_pathw	TGCT	0.366259584
UPP2	Thiamine metabolism	TGCT	-0.14783818
UPP2	Tnfa_signaling_via_nfkb	TGCT	-0.218326328
UPP2	Tryptophan metabolism	TGCT	0.100434807
UPP2	Tumor endothelial cell	TGCT	-0.047133423
UPP2	Tyrosine metabolism	TGCT	0.287201766
UPP2	Ubiquinone and other terp	TGCT	-0.100635675
UPP2	Valine, leucine and isoleu	TGCT	0.011230548
UPP2	Valine, leucine and isoleu	TGCT	0.059006008
UPP2	Vascular endothelial cell	TGCT	0.326696876
UPP2	Vascular smooth muscle c	TGCT	0.351367016
UPP2	Vegf_signaling_pathway	TGCT	0.105177126
UPP2	Vitamin b6 metabolism	TGCT	-0.036237618
UPP2	Willert_wnt_signaling	TGCT	-0.06385617
UPP2	Wnt_beta_catenin_signali	TGCT	0.284552004
CDA	Abnormal plasma cell	THCA	0.004093837
CDA	Activated b cell	THCA	0.022908034
CDA	Activated cd4+ t cell	THCA	0.013294608
CDA	Activated t cell	THCA	0.046240837
CDA	Alanine, aspartate and glu	THCA	-0.279679429
CDA	Alcala_apoptosis	THCA	-0.071164078
CDA	Alpha-linolenic acid meta	THCA	0.227546755
CDA	Amino sugar and nucleoti	THCA	-0.067661481
CDA	Ampk_pathway	THCA	-0.146718615
CDA	Angiogenesis	THCA	0.275298645
CDA	Arachidonic acid metabol	THCA	0.261318257
CDA	Arginine and proline metæ	THCA	0.074553152
CDA	Arginine biosynthesis	THCA	-0.064635351
CDA	Ascorbate and aldarate mε	THCA	-0.082109041
CDA	Atypical memory b cell	THCA	0.085826727
CDA	Axl+siglec6+ dendritic ce	THCA	0.102970768
CDA	B cell	THCA	-0.002387373
CDA	B1 cell	THCA	-0.031512201
CDA	Basal cell	THCA	0.152322379
CDA	Beta-alanine metabolism	THCA	-0.01372228
CDA	Biosynthesis of unsaturate	THCA	0.118881589
CDA	Biotin metabolism	THCA	-0.223690922
CDA	Butanoate metabolism	THCA	-0.10082848
CDA	Caffeine metabolism	THCA	0.092415982
CDA	Cancer stem cell	THCA	0.159722657
CDA	Cancer stem-like cell	THCA	0.146828729

CDA	Cd4+ cytotoxic t cell	THCA	0.107611724
CDA	Cd4+ memory t cell	THCA	0.082145567
CDA	Cd4+ regulatory t cell	THCA	0.088273237
CDA	Cd4+ t helper cell	THCA	0.028324861
CDA	Cd4+cd25+ regulatory t c	THCA	0.020943727
CDA	Cd8+ cytotoxic t cell	THCA	0.031501185
CDA	Cd8+ regulatory t cell	THCA	-0.013127593
CDA	Cell_cycle	THCA	-0.254174037
CDA	Chandran_metastasis_top5	THCA	-0.426290171
CDA	Citrate cycle (tca cycle)	THCA	-0.112986693
CDA	Cysteine and methionine r	THCA	-0.165915133
CDA	Cytokine induced killer cε	THCA	0.004211093
CDA	D-arginine and d-ornithin	THCA	0.091696664
CDA	D-glutamine and d-glutan	THCA	-0.34088813
CDA	Dendritic cell	THCA	0.130932071
CDA	Dna_repair	THCA	0.095692643
CDA	Dna_replication	THCA	-0.196161721
CDA	Double-negative memory	THCA	0.15237017
CDA	Drug metabolism - cytoch	THCA	0.164872458
CDA	Drug metabolism - other (	THCA	0.16759588
CDA	E2f_targets	THCA	-0.32233973
CDA	Ecm_receptor_interaction	THCA	0.141594329
CDA	Effector cd4+ memory t (	THCA	-0.032638037
CDA	Effector cd8+ memory t (	THCA	0.063304469
CDA	Effector memory t cell	THCA	0.059601184
CDA	Effector regulatory t (treg	THCA	0.061594688
CDA	Elvidge_hif1a_targets_up	THCA	-0.163632966
CDA	Endothelial cell	THCA	0.418078627
CDA	Eosinophil	THCA	0.071502902
CDA	Ether lipid metabolism	THCA	0.120695634
CDA	Exhausted cd4+ t cell	THCA	0.061757447
CDA	Exhausted cd8+ t cell	THCA	0.057714822
CDA	Exhausted t cell	THCA	0.033086113
CDA	Fat cell (adipocyte)	THCA	0.113238729
CDA	Fatty acid biosynthesis	THCA	0.003518268
CDA	Fatty acid degradation	THCA	-0.052119476
CDA	Fatty acid elongation	THCA	0.052985234
CDA	Fibroblast	THCA	0.235085211
CDA	Folate biosynthesis	THCA	0.150063999
CDA	Follicular b cell	THCA	0.056805453
CDA	Follicular dendritic cell	THCA	-0.019117506
CDA	Follicular helper (tfh) t ce	THCA	0.009319846
CDA	Follicular t cell	THCA	0.094502978

CDA	Foxp3+il-17+ t cell	THCA	0.002708547
CDA	Fructose and mannose me	THCA	0.077157992
CDA	G2m_checkpoint	THCA	-0.36789398
CDA	Galactose metabolism	THCA	0.164869327
CDA	Galie_tumor_stemness_ge	THCA	0.066858111
CDA	Glutathione metabolism	THCA	0.126121147
CDA	Glycerolipid metabolism	THCA	0.267881775
CDA	Glycerophospholipid metæ	THCA	0.391556234
CDA	Glycine, serine and threor	THCA	0.041885807
CDA	Glycolysis / gluconeogene	THCA	0.038412038
CDA	Glycosaminoglycan biosy1	THCA	0.343795135
CDA	Glycosaminoglycan biosy1	THCA	0.124487181
CDA	Glycosaminoglycan biosy1	THCA	0.141674053
CDA	Glycosaminoglycan degra	THCA	-0.020226765
CDA	Glycosphingolipid biosyn1	THCA	0.089188719
CDA	Glycosphingolipid biosyn1	THCA	-0.031709793
CDA	Glycosphingolipid biosyn1	THCA	-0.052203841
CDA	Glycosylphosphatidylinos:	THCA	-0.165481613
CDA	Glyoxylate and dicarboxy	THCA	-0.10932159
CDA	Granulocyte	THCA	0.094650484
CDA	Hedgehog_signaling	THCA	0.087563133
CDA	Histidine metabolism	THCA	0.074858212
CDA	Hypoxia	THCA	0.177165739
CDA	Il-17ralpha t cell	THCA	-0.024916707
CDA	Il2_stat5_signaling	THCA	0.087313164
CDA	Il6_jak_stat3_signaling	THCA	0.041427147
CDA	Immune_checkpoints_tunr	THCA	-0.035420207
CDA	Immune_inhibition_cytok	THCA	0.112769915
CDA	Inositol phosphate metabo	THCA	-0.228586349
CDA	Interleukin_6_signaling	THCA	-0.17188569
CDA	Jaeger_metastasis_up	THCA	-0.155152926
CDA	Jain_nfkb_signaling	THCA	-0.272519428
CDA	Kras_signaling_up	THCA	0.069143077
CDA	Linoleic acid metabolism	THCA	0.227857593
CDA	Lipoic acid metabolism	THCA	-0.067931223
CDA	Lysine degradation	THCA	-0.242651788
CDA	Lysosome	THCA	-0.122570791
CDA	M1 macrophage	THCA	0.04012838
CDA	M2 macrophage	THCA	0.09890963
CDA	Mannose type o-glycan bi	THCA	0.044848711
CDA	Mapk_signaling_pathway	THCA	0.072860734
CDA	Mapk3_erk1_activation	THCA	-0.204191723
CDA	Marginal zone b cell	THCA	0.019811003

CDA	Memory b cell	THCA	0.064433373
CDA	Mesenchymal cell	THCA	0.355724032
CDA	Mesenchymal stem cell	THCA	0.24540866
CDA	Metabolism of xenobiotic	THCA	0.115176166
CDA	Migrating cancer stem cel	THCA	-0.257701795
CDA	Mitotic_spindle	THCA	-0.270882761
CDA	Monocyte	THCA	0.132081402
CDA	Mtor_signaling_pathway	THCA	-0.191590208
CDA	Mtorc1_signaling	THCA	-0.054703222
CDA	Mucin type o-glycan biosy	THCA	-0.129794128
CDA	Myc_targets_v1	THCA	-0.093255323
CDA	Myeloid cell	THCA	0.064185788
CDA	N-glycan biosynthesis	THCA	-0.080459878
CDA	Naive b cell	THCA	0.114224974
CDA	Naive cd4+ t cell	THCA	0.121865454
CDA	Naive cd8+ t cell	THCA	0.063631392
CDA	Natural killer cell	THCA	0.023136728
CDA	Natural killer t (nkt) cell	THCA	-0.008319567
CDA	Natural regulatory t (treg)	THCA	0.04587871
CDA	Neomycin, kanamycin and	THCA	0.200741383
CDA	Neutrophil	THCA	0.094760892
CDA	Nicotinate and nicotinami	THCA	-0.046826344
CDA	Nitrogen metabolism	THCA	0.151038927
CDA	Nod_like_receptor_signal	THCA	-0.04718442
CDA	Notch_signaling	THCA	0.311248888
CDA	One carbon pool by folate	THCA	-0.265428377
CDA	Other glycan degradation	THCA	-0.247594676
CDA	Other types of o-glycan b	THCA	0.214094515
CDA	Oxidative phosphorylatio	THCA	0.204780089
CDA	P53_pathway	THCA	0.096105773
CDA	P53_signaling_pathway	THCA	-0.085751558
CDA	Pantothenate and coa bios	THCA	-0.052504816
CDA	Pentose and glucuronate i	THCA	-0.102785102
CDA	Pentose phosphate pathwa	THCA	-0.039943935
CDA	Pericyte	THCA	0.410332615
CDA	Phenylalanine metabolism	THCA	0.192284608
CDA	Phenylalanine, tyrosine ar	THCA	-0.013088735
CDA	Phosphonate and phosphir	THCA	-0.125531148
CDA	Pi3k_akt_activation	THCA	-0.270128184
CDA	Pi3k_akt_mtor_signaling	THCA	-0.073181452
CDA	Porphyrin and chlorophyl	THCA	-0.005087386
CDA	Primary bile acid biosynt	THCA	0.147261211
CDA	Propanoate metabolism	THCA	-0.212467562

CDA	Purine metabolism	THCA	0.071225562
CDA	Pyrimidine metabolism	THCA	-0.105730258
CDA	Pyruvate metabolism	THCA	-0.000694288
CDA	Regulation_of_autophagy	THCA	-0.041372801
CDA	Retinol metabolism	THCA	0.063056194
CDA	Riboflavin metabolism	THCA	-0.055059724
CDA	Schmahl_pdgf_signaling	THCA	0.065403258
CDA	Selenocompound metabol	THCA	-0.219440429
CDA	Signaling_by_hippo	THCA	-0.397156847
CDA	Sphingolipid metabolism	THCA	-0.436204554
CDA	Starch and sucrose metabo	THCA	0.058833351
CDA	Steroid biosynthesis	THCA	0.175284017
CDA	Steroid hormone biosynth	THCA	0.099608457
CDA	Sulfur metabolism	THCA	-0.038111782
CDA	Synthesis and degradation	THCA	0.027998647
CDA	T helper cell	THCA	0.059870105
CDA	T helper1 (th1) cell	THCA	0.001677104
CDA	T helper17 (th17) cell	THCA	0.000586612
CDA	T helper2 (th2) cell	THCA	0.023476946
CDA	T helper9 (th9) cell	THCA	0.017989002
CDA	Taurine and hypotaurine r	THCA	0.158583389
CDA	Terpenoid backbone biosy	THCA	0.016926591
CDA	Tgf_beta_signaling_pathw	THCA	-0.059532953
CDA	Thiamine metabolism	THCA	0.193378911
CDA	Tnfa_signaling_via_nfk	THCA	0.049007898
CDA	Tryptophan metabolism	THCA	-0.024017355
CDA	Tumor endothelial cell	THCA	0.031178403
CDA	Tyrosine metabolism	THCA	0.181270226
CDA	Ubiquinone and other ter	THCA	-0.052129379
CDA	Valine, leucine and isoleu	THCA	0.117087174
CDA	Valine, leucine and isoleu	THCA	-0.142604437
CDA	Vascular endothelial cell	THCA	0.383158048
CDA	Vascular smooth muscle c	THCA	0.392292221
CDA	Vegf_signaling_pathway	THCA	0.258838647
CDA	Vitamin b6 metabolism	THCA	-0.088227936
CDA	Willert_wnt_signaling	THCA	0.128178113
CDA	Wnt_beta_catenin_signali	THCA	0.286828914
UCK1	Abnormal plasma cell	THCA	-0.102523402
UCK1	Activated b cell	THCA	-0.249848239
UCK1	Activated cd4+ t cell	THCA	-0.328317489
UCK1	Activated t cell	THCA	-0.256033601
UCK1	Alanine, aspartate and glu	THCA	-0.053570953
UCK1	Alcala_apoptosis	THCA	-0.022202609

UCK1	Alpha-linolenic acid meta	THCA	0.229600654
UCK1	Amino sugar and nucleoti	THCA	0.039353297
UCK1	Ampk_pathway	THCA	0.099667456
UCK1	Angiogenesis	THCA	-0.394533786
UCK1	Arachidonic acid metabol	THCA	0.144914645
UCK1	Arginine and proline met	THCA	0.236199836
UCK1	Arginine biosynthesis	THCA	0.035509815
UCK1	Ascorbate and aldarate m	THCA	0.297104167
UCK1	Atypical memory b cell	THCA	-0.143632228
UCK1	Axl+siglec6+ dendritic ce	THCA	-0.43887325
UCK1	B cell	THCA	-0.320773887
UCK1	B1 cell	THCA	-0.23508484
UCK1	Basal cell	THCA	-0.229502469
UCK1	Beta-alanine metabolism	THCA	0.172763239
UCK1	Biosynthesis of unsaturate	THCA	0.16806946
UCK1	Biotin metabolism	THCA	0.235064854
UCK1	Butanoate metabolism	THCA	0.284941483
UCK1	Caffeine metabolism	THCA	-0.137133633
UCK1	Cancer stem cell	THCA	-0.493233221
UCK1	Cancer stem-like cell	THCA	-0.379488584
UCK1	Cd4+ cytotoxic t cell	THCA	-0.216389413
UCK1	Cd4+ memory t cell	THCA	-0.159925207
UCK1	Cd4+ regulatory t cell	THCA	-0.354173397
UCK1	Cd4+ t helper cell	THCA	-0.266298741
UCK1	Cd4+cd25+ regulatory t c	THCA	-0.28971608
UCK1	Cd8+ cytotoxic t cell	THCA	-0.147384197
UCK1	Cd8+ regulatory t cell	THCA	-0.22120083
UCK1	Cell_cycle	THCA	-0.326450774
UCK1	Chandran_metastasis_top5	THCA	-0.288400675
UCK1	Citrate cycle (tca cycle)	THCA	0.131189486
UCK1	Cysteine and methionine r	THCA	0.056807333
UCK1	Cytokine induced killer c	THCA	-0.149593389
UCK1	D-arginine and d-ornithin	THCA	0.080791763
UCK1	D-glutamine and d-glutan	THCA	-0.48618819
UCK1	Dendritic cell	THCA	-0.348677766
UCK1	Dna_repair	THCA	0.521539287
UCK1	Dna_replication	THCA	0.246682999
UCK1	Double-negative memory	THCA	0.07216946
UCK1	Drug metabolism - cytoch	THCA	0.431421127
UCK1	Drug metabolism - other	THCA	0.48359537
UCK1	E2f_targets	THCA	-0.027122896
UCK1	Ecm_receptor_interaction	THCA	-0.446743294
UCK1	Effector cd4+ memory t (	THCA	-0.372078355

UCK1	Effector cd8+ memory t (	THCA	-0.33653334
UCK1	Effector memory t cell	THCA	-0.253099269
UCK1	Effector regulatory t (treg	THCA	-0.385726982
UCK1	Elvidge_hif1a_targets_up	THCA	-0.323258336
UCK1	Endothelial cell	THCA	-0.277515285
UCK1	Eosinophil	THCA	-0.311165164
UCK1	Ether lipid metabolism	THCA	-0.151496192
UCK1	Exhausted cd4+ t cell	THCA	-0.422389157
UCK1	Exhausted cd8+ t cell	THCA	-0.377068207
UCK1	Exhausted t cell	THCA	-0.18356254
UCK1	Fat cell (adipocyte)	THCA	0.059066608
UCK1	Fatty acid biosynthesis	THCA	0.031099571
UCK1	Fatty acid degradation	THCA	0.229706176
UCK1	Fatty acid elongation	THCA	0.259965887
UCK1	Fibroblast	THCA	-0.372868225
UCK1	Folate biosynthesis	THCA	0.405050885
UCK1	Follicular b cell	THCA	-0.239502836
UCK1	Follicular dendritic cell	THCA	-0.291149264
UCK1	Follicular helper (tfh) t ce	THCA	-0.318656181
UCK1	Follicular t cell	THCA	0.082253238
UCK1	Foxp3+il-17+ t cell	THCA	-0.311084444
UCK1	Fructose and mannose me	THCA	0.307030649
UCK1	G2m_checkpoint	THCA	-0.3653437
UCK1	Galactose metabolism	THCA	0.076568925
UCK1	Galie_tumor_stemness_ge	THCA	-0.39739958
UCK1	Glutathione metabolism	THCA	0.23715394
UCK1	Glycerolipid metabolism	THCA	0.247701028
UCK1	Glycerophospholipid metæ	THCA	0.241655033
UCK1	Glycine, serine and threor	THCA	0.374484797
UCK1	Glycolysis / gluconeogene	THCA	0.172134744
UCK1	Glycosaminoglycan biosy	THCA	-0.104114365
UCK1	Glycosaminoglycan biosy	THCA	-0.174757778
UCK1	Glycosaminoglycan biosy	THCA	-0.214861705
UCK1	Glycosaminoglycan degra	THCA	-0.154245542
UCK1	Glycosphingolipid biosyn	THCA	-0.16356246
UCK1	Glycosphingolipid biosyn	THCA	-0.230347554
UCK1	Glycosphingolipid biosyn	THCA	-0.333127246
UCK1	Glycosylphosphatidylinos	THCA	0.221713094
UCK1	Glyoxylate and dicarboxy	THCA	0.290657672
UCK1	Granulocyte	THCA	-0.305704239
UCK1	Hedgehog_signaling	THCA	-0.461313286
UCK1	Histidine metabolism	THCA	0.16408357
UCK1	Hypoxia	THCA	-0.369215188

UCK1	Il-17alpha t cell	THCA	-0.264345048
UCK1	Il2_stat5_signaling	THCA	-0.428990244
UCK1	Il6_jak_stat3_signaling	THCA	-0.461604675
UCK1	Immune_checkpoints_tur	THCA	-0.380623361
UCK1	Immune_inhibition_cytok	THCA	-0.266668231
UCK1	Inositol phosphate metabo	THCA	-0.510701647
UCK1	Interleukin_6_signaling	THCA	-0.673176926
UCK1	Jaeger_metastasis_up	THCA	-0.46608522
UCK1	Jain_nfkb_signaling	THCA	0.11052456
UCK1	Kras_signaling_up	THCA	-0.507562236
UCK1	Linoleic acid metabolism	THCA	0.279272819
UCK1	Lipoic acid metabolism	THCA	0.446056935
UCK1	Lysine degradation	THCA	0.136314782
UCK1	Lysosome	THCA	-0.188095729
UCK1	M1 macrophage	THCA	-0.392984667
UCK1	M2 macrophage	THCA	-0.370874843
UCK1	Mannose type o-glycan bi	THCA	0.016107846
UCK1	Mapk_signaling_pathway	THCA	-0.550642191
UCK1	Mapk3_erk1_activation	THCA	-0.637288012
UCK1	Marginal zone b cell	THCA	-0.267340694
UCK1	Memory b cell	THCA	-0.170426676
UCK1	Mesenchymal cell	THCA	-0.242983888
UCK1	Mesenchymal stem cell	THCA	-0.456399472
UCK1	Metabolism of xenobiotic	THCA	0.419119638
UCK1	Migrating cancer stem cel	THCA	-0.381501512
UCK1	Mitotic_spindle	THCA	-0.610709466
UCK1	Monocyte	THCA	-0.317332913
UCK1	Mtor_signaling_pathway	THCA	-0.357038479
UCK1	Mtorc1_signaling	THCA	-0.116932652
UCK1	Mucin type o-glycan biosy	THCA	-0.605953327
UCK1	Myc_targets_v1	THCA	0.25498173
UCK1	Myeloid cell	THCA	-0.415382671
UCK1	N-glycan biosynthesis	THCA	-0.014251107
UCK1	Naive b cell	THCA	0.016922707
UCK1	Naive cd4+ t cell	THCA	-0.314627807
UCK1	Naive cd8+ t cell	THCA	-0.186293496
UCK1	Natural killer cell	THCA	-0.318232272
UCK1	Natural killer t (nkt) cell	THCA	-0.124264654
UCK1	Natural regulatory t (treg)	THCA	-0.330266795
UCK1	Neomycin, kanamycin and	THCA	-0.167048247
UCK1	Neutrophil	THCA	-0.368157277
UCK1	Nicotinate and nicotinami	THCA	-0.12903431
UCK1	Nitrogen metabolism	THCA	0.141007875

UCK1	Nod_like_receptor_signal	THCA	-0.504822601
UCK1	Notch_signaling	THCA	-0.119929849
UCK1	One carbon pool by folate	THCA	-0.008326997
UCK1	Other glycan degradation	THCA	0.059345821
UCK1	Other types of o-glycan b	THCA	0.225352751
UCK1	Oxidative phosphorylatio	THCA	0.52084119
UCK1	P53_pathway	THCA	-0.244744291
UCK1	P53_signaling_pathway	THCA	-0.444179533
UCK1	Pantothenate and coa bios	THCA	0.075700787
UCK1	Pentose and glucuronate i	THCA	0.256620373
UCK1	Pentose phosphate pathwa	THCA	0.190755698
UCK1	Pericyte	THCA	-0.20024381
UCK1	Phenylalanine metabolism	THCA	0.238433437
UCK1	Phenylalanine, tyrosine ar	THCA	0.123639863
UCK1	Phosphonate and phosphir	THCA	-0.048343657
UCK1	Pi3k_akt_activation	THCA	-0.519330856
UCK1	Pi3k_akt_mtor_signaling	THCA	-0.239487782
UCK1	Porphyrin and chlorophyl	THCA	0.374877257
UCK1	Primary bile acid biosynt	THCA	0.150662686
UCK1	Propanoate metabolism	THCA	0.108084829
UCK1	Purine metabolism	THCA	0.285505836
UCK1	Pyrimidine metabolism	THCA	0.339313492
UCK1	Pyruvate metabolism	THCA	0.231813336
UCK1	Regulation_of_autophagy	THCA	-0.06034243
UCK1	Retinol metabolism	THCA	0.337688002
UCK1	Riboflavin metabolism	THCA	0.239916972
UCK1	Schmahl_pdgf_signaling	THCA	-0.443835482
UCK1	Selenocompound metabol	THCA	0.003788541
UCK1	Signaling_by_hippo	THCA	-0.534542564
UCK1	Sphingolipid metabolism	THCA	-0.377356453
UCK1	Starch and sucrose metabo	THCA	-0.053629742
UCK1	Steroid biosynthesis	THCA	0.302238982
UCK1	Steroid hormone biosynth	THCA	0.421844192
UCK1	Sulfur metabolism	THCA	-0.20218198
UCK1	Synthesis and degradation	THCA	0.272210539
UCK1	T helper cell	THCA	-0.338912113
UCK1	T helper1 (th1) cell	THCA	-0.287889725
UCK1	T helper17 (th17) cell	THCA	-0.358263213
UCK1	T helper2 (th2) cell	THCA	-0.34705755
UCK1	T helper9 (th9) cell	THCA	-0.199340258
UCK1	Taurine and hypotaurine r	THCA	0.301916085
UCK1	Terpenoid backbone biosy	THCA	0.141644895
UCK1	Tgf_beta_signaling_pathw	THCA	-0.565338577

UCK1	Thiamine metabolism	THCA	0.408032522
UCK1	Tnfa_signaling_via_nfk	THCA	-0.491354428
UCK1	Tryptophan metabolism	THCA	0.193568029
UCK1	Tumor endothelial cell	THCA	-0.164893257
UCK1	Tyrosine metabolism	THCA	0.33288987
UCK1	Ubiquinone and other ter	THCA	0.3190702
UCK1	Valine, leucine and isoleu	THCA	0.147245903
UCK1	Valine, leucine and isoleu	THCA	0.210217325
UCK1	Vascular endothelial cell	THCA	-0.003604444
UCK1	Vascular smooth muscle c	THCA	-0.047261691
UCK1	Vegf_signaling_pathway	THCA	-0.262614714
UCK1	Vitamin b6 metabolism	THCA	0.303651728
UCK1	Willert_wnt_signaling	THCA	-0.049230508
UCK1	Wnt_beta_catenin_signali	THCA	-0.029713467
UCK2	Abnormal plasma cell	THCA	0.31524204
UCK2	Activated b cell	THCA	0.228309777
UCK2	Activated cd4+ t cell	THCA	0.21401412
UCK2	Activated t cell	THCA	0.221341463
UCK2	Alanine, aspartate and glu	THCA	0.068386356
UCK2	Alcala_apoptosis	THCA	0.195547582
UCK2	Alpha-linolenic acid meta	THCA	0.055229662
UCK2	Amino sugar and nucleoti	THCA	0.178289633
UCK2	Ampk_pathway	THCA	-0.024604468
UCK2	Angiogenesis	THCA	0.196030342
UCK2	Arachidonic acid metabol	THCA	0.128502955
UCK2	Arginine and proline met	THCA	0.142983207
UCK2	Arginine biosynthesis	THCA	-0.016733512
UCK2	Ascorbate and aldarate m	THCA	-0.049943648
UCK2	Atypical memory b cell	THCA	0.182981715
UCK2	Axl+siglec6+ dendritic ce	THCA	0.192709518
UCK2	B cell	THCA	0.238449532
UCK2	B1 cell	THCA	0.197490579
UCK2	Basal cell	THCA	0.176382697
UCK2	Beta-alanine metabolism	THCA	0.036368473
UCK2	Biosynthesis of unsaturate	THCA	0.115469195
UCK2	Biotin metabolism	THCA	-0.146361453
UCK2	Butanoate metabolism	THCA	-0.04465456
UCK2	Caffeine metabolism	THCA	0.134141471
UCK2	Cancer stem cell	THCA	0.222890732
UCK2	Cancer stem-like cell	THCA	0.368667642
UCK2	Cd4+ cytotoxic t cell	THCA	0.253222652
UCK2	Cd4+ memory t cell	THCA	0.211758378
UCK2	Cd4+ regulatory t cell	THCA	0.225657244

UCK2	Cd4+ t helper cell	THCA	0.175237783
UCK2	Cd4+cd25+ regulatory t c	THCA	0.18096588
UCK2	Cd8+ cytotoxic t cell	THCA	0.210204718
UCK2	Cd8+ regulatory t cell	THCA	0.16142359
UCK2	Cell_cycle	THCA	0.114398205
UCK2	Chandran_metastasis_top5	THCA	-0.110281041
UCK2	Citrate cycle (tca cycle)	THCA	0.104992872
UCK2	Cysteine and methionine r	THCA	0.128876189
UCK2	Cytokine induced killer c	THCA	0.254657179
UCK2	D-arginine and d-ornithin	THCA	0.079706285
UCK2	D-glutamine and d-glutan	THCA	-0.034599304
UCK2	Dendritic cell	THCA	0.255547853
UCK2	Dna_repair	THCA	0.008908075
UCK2	Dna_replication	THCA	0.029188351
UCK2	Double-negative memory	THCA	0.155439681
UCK2	Drug metabolism - cytoch	THCA	0.033008564
UCK2	Drug metabolism - other c	THCA	0.076029171
UCK2	E2f_targets	THCA	0.099403461
UCK2	Ecm_receptor_interaction	THCA	0.153534575
UCK2	Effector cd4+ memory t (	THCA	0.20459446
UCK2	Effector cd8+ memory t (	THCA	0.26418492
UCK2	Effector memory t cell	THCA	0.189079589
UCK2	Effector regulatory t (treg	THCA	0.193950919
UCK2	Elvidge_hif1a_targets_up	THCA	0.224400737
UCK2	Endothelial cell	THCA	0.250088666
UCK2	Eosinophil	THCA	0.212927309
UCK2	Ether lipid metabolism	THCA	0.093998182
UCK2	Exhausted cd4+ t cell	THCA	0.190883776
UCK2	Exhausted cd8+ t cell	THCA	0.189280116
UCK2	Exhausted t cell	THCA	0.175095402
UCK2	Fat cell (adipocyte)	THCA	0.160612404
UCK2	Fatty acid biosynthesis	THCA	0.128975007
UCK2	Fatty acid degradation	THCA	0.049062136
UCK2	Fatty acid elongation	THCA	0.010584087
UCK2	Fibroblast	THCA	0.196394575
UCK2	Folate biosynthesis	THCA	0.177428531
UCK2	Follicular b cell	THCA	0.159047817
UCK2	Follicular dendritic cell	THCA	0.179729253
UCK2	Follicular helper (tfh) t ce	THCA	0.215224359
UCK2	Follicular t cell	THCA	0.112210827
UCK2	Foxp3+il-17+ t cell	THCA	0.205308273
UCK2	Fructose and mannose me	THCA	0.130350119
UCK2	G2m_checkpoint	THCA	0.068726344

UCK2	Galactose metabolism	THCA	0.199423952
UCK2	Galie_tumor_stemness_ge	THCA	-0.025735341
UCK2	Glutathione metabolism	THCA	0.201501708
UCK2	Glycerolipid metabolism	THCA	0.068063822
UCK2	Glycerophospholipid metæ	THCA	-0.034132185
UCK2	Glycine, serine and threor	THCA	0.072302947
UCK2	Glycolysis / gluconeogene	THCA	0.176348265
UCK2	Glycosaminoglycan biosy	THCA	0.165783281
UCK2	Glycosaminoglycan biosy	THCA	0.042773252
UCK2	Glycosaminoglycan biosy	THCA	0.110344198
UCK2	Glycosaminoglycan degra	THCA	0.075662964
UCK2	Glycosphingolipid biosyn	THCA	0.094376863
UCK2	Glycosphingolipid biosyn	THCA	0.374358223
UCK2	Glycosphingolipid biosyn	THCA	0.319059762
UCK2	Glycosylphosphatidylinos	THCA	-0.199066869
UCK2	Glyoxylate and dicarboxy	THCA	-0.00059618
UCK2	Granulocyte	THCA	0.240086186
UCK2	Hedgehog_signaling	THCA	0.022427981
UCK2	Histidine metabolism	THCA	0.101570041
UCK2	Hypoxia	THCA	0.308246192
UCK2	Il-17ralpha t cell	THCA	0.149845161
UCK2	Il2_stat5_signaling	THCA	0.203445629
UCK2	Il6_jak_stat3_signaling	THCA	0.218612865
UCK2	Immune_checkpoints_tur	THCA	0.046507807
UCK2	Immune_inhibition_cytok	THCA	0.284544309
UCK2	Inositol phosphate metabo	THCA	-0.088941737
UCK2	Interleukin_6_signaling	THCA	0.079322625
UCK2	Jaeger_metastasis_up	THCA	0.276910292
UCK2	Jain_nfkb_signaling	THCA	-0.064557416
UCK2	Kras_signaling_up	THCA	0.171426709
UCK2	Linoleic acid metabolism	THCA	-0.048216528
UCK2	Lipoic acid metabolism	THCA	-0.225121122
UCK2	Lysine degradation	THCA	-0.053648225
UCK2	Lysosome	THCA	-0.006270678
UCK2	M1 macrophage	THCA	0.212385682
UCK2	M2 macrophage	THCA	0.261100595
UCK2	Mannose type o-glycan bi	THCA	0.032784637
UCK2	Mapk_signaling_pathway	THCA	0.211757257
UCK2	Mapk3_erk1_activation	THCA	0.117319782
UCK2	Marginal zone b cell	THCA	0.194346233
UCK2	Memory b cell	THCA	0.230993506
UCK2	Mesenchymal cell	THCA	0.230611555
UCK2	Mesenchymal stem cell	THCA	0.249629202

UCK2	Metabolism of xenobiotic	THCA	0.038248051
UCK2	Migrating cancer stem cel	THCA	-0.054904576
UCK2	Mitotic_spindle	THCA	-0.028844837
UCK2	Monocyte	THCA	0.245716761
UCK2	Mtor_signaling_pathway	THCA	-0.088853325
UCK2	Mtorc1_signaling	THCA	0.30060462
UCK2	Mucin type o-glycan bios	THCA	-0.017300142
UCK2	Myc_targets_v1	THCA	0.086890124
UCK2	Myeloid cell	THCA	0.213028114
UCK2	N-glycan biosynthesis	THCA	-0.128459242
UCK2	Naive b cell	THCA	0.16702857
UCK2	Naive cd4+ t cell	THCA	0.052009499
UCK2	Naive cd8+ t cell	THCA	-0.085265236
UCK2	Natural killer cell	THCA	0.202573008
UCK2	Natural killer t (nkt) cell	THCA	0.192055015
UCK2	Natural regulatory t (treg)	THCA	0.07579941
UCK2	Neomycin, kanamycin an	THCA	0.116849461
UCK2	Neutrophil	THCA	0.24451386
UCK2	Nicotinate and nicotinami	THCA	0.250697215
UCK2	Nitrogen metabolism	THCA	-0.158674616
UCK2	Nod_like_receptor_signal	THCA	0.245809452
UCK2	Notch_signaling	THCA	0.051704128
UCK2	One carbon pool by folate	THCA	0.073567058
UCK2	Other glycan degradation	THCA	-0.072275745
UCK2	Other types of o-glycan b	THCA	0.020023678
UCK2	Oxidative phosphorylatio	THCA	0.114071761
UCK2	P53_pathway	THCA	0.18990936
UCK2	P53_signaling_pathway	THCA	0.284012566
UCK2	Pantothenate and coa bios	THCA	0.147622261
UCK2	Pentose and glucuronate i	THCA	0.024654683
UCK2	Pentose phosphate pathwa	THCA	0.0837361
UCK2	Pericyte	THCA	0.25503136
UCK2	Phenylalanine metabolism	THCA	0.155699569
UCK2	Phenylalanine, tyrosine ar	THCA	0.230313334
UCK2	Phosphonate and phosphir	THCA	-0.141904914
UCK2	Pi3k_akt_activation	THCA	-0.00315843
UCK2	Pi3k_akt_mtor_signaling	THCA	0.222452645
UCK2	Porphyrin and chlorophyl	THCA	0.064494707
UCK2	Primary bile acid biosynt	THCA	0.119625034
UCK2	Propanoate metabolism	THCA	-0.00989775
UCK2	Purine metabolism	THCA	0.098918479
UCK2	Pyrimidine metabolism	THCA	-0.008302958
UCK2	Pyruvate metabolism	THCA	0.1383343

UCK2	Regulation_of_autophagy	THCA	-0.054816261
UCK2	Retinol metabolism	THCA	-0.073617867
UCK2	Riboflavin metabolism	THCA	0.144661955
UCK2	Schmahl_pdgf_signaling	THCA	-0.000590166
UCK2	Selenocompound metabol	THCA	0.049937774
UCK2	Signaling_by_hippo	THCA	-0.110957839
UCK2	Sphingolipid metabolism	THCA	-0.198069501
UCK2	Starch and sucrose metabo	THCA	0.211012092
UCK2	Steroid biosynthesis	THCA	-0.00763591
UCK2	Steroid hormone biosynth	THCA	-0.030900266
UCK2	Sulfur metabolism	THCA	0.060514529
UCK2	Synthesis and degradation	THCA	-0.028272226
UCK2	T helper cell	THCA	0.185585892
UCK2	T helper1 (th1) cell	THCA	0.137176378
UCK2	T helper17 (th17) cell	THCA	0.21918944
UCK2	T helper2 (th2) cell	THCA	0.202957882
UCK2	T helper9 (th9) cell	THCA	0.190141434
UCK2	Taurine and hypotaurine r	THCA	-0.147140225
UCK2	Terpenoid backbone biosy	THCA	0.007783732
UCK2	Tgf_beta_signaling_pathw	THCA	0.028661342
UCK2	Thiamine metabolism	THCA	-0.070212654
UCK2	Tnfa_signaling_via_nfkb	THCA	0.221117878
UCK2	Tryptophan metabolism	THCA	0.103933268
UCK2	Tumor endothelial cell	THCA	0.134584423
UCK2	Tyrosine metabolism	THCA	0.124223713
UCK2	Ubiquinone and other terp	THCA	-0.071997931
UCK2	Valine, leucine and isoleu	THCA	0.243277937
UCK2	Valine, leucine and isoleu	THCA	0.010892177
UCK2	Vascular endothelial cell	THCA	0.014899833
UCK2	Vascular smooth muscle c	THCA	0.123698494
UCK2	Vegf_signaling_pathway	THCA	0.175946623
UCK2	Vitamin b6 metabolism	THCA	0.105636393
UCK2	Willert_wnt_signaling	THCA	0.297576721
UCK2	Wnt_beta_catenin_signali	THCA	-0.083770713
UCKL1	Abnormal plasma cell	THCA	-0.078739387
UCKL1	Activated b cell	THCA	0.003383065
UCKL1	Activated cd4+ t cell	THCA	-0.096765327
UCKL1	Activated t cell	THCA	-0.048913323
UCKL1	Alanine, aspartate and glu	THCA	-0.038865771
UCKL1	Alcala_apoptosis	THCA	0.122816696
UCKL1	Alpha-linolenic acid meta	THCA	0.207548793
UCKL1	Amino sugar and nucleoti	THCA	0.13876618
UCKL1	Ampk_pathway	THCA	0.096688374

UCKL1	Angiogenesis	THCA	-0.111978873
UCKL1	Arachidonic acid metabol	THCA	0.246496126
UCKL1	Arginine and proline met	THCA	0.002097826
UCKL1	Arginine biosynthesis	THCA	0.01220166
UCKL1	Ascorbate and aldarate m	THCA	-0.058305429
UCKL1	Atypical memory b cell	THCA	-0.048807249
UCKL1	Axl+siglec6+ dendritic ce	THCA	-0.135443383
UCKL1	B cell	THCA	-0.109188167
UCKL1	B1 cell	THCA	-0.023043723
UCKL1	Basal cell	THCA	0.095482742
UCKL1	Beta-alanine metabolism	THCA	-0.113348417
UCKL1	Biosynthesis of unsaturate	THCA	-0.042418553
UCKL1	Biotin metabolism	THCA	-0.006382585
UCKL1	Butanoate metabolism	THCA	-0.0096823
UCKL1	Caffeine metabolism	THCA	-0.162810941
UCKL1	Cancer stem cell	THCA	-0.251149319
UCKL1	Cancer stem-like cell	THCA	-0.158739184
UCKL1	Cd4+ cytotoxic t cell	THCA	-0.042057305
UCKL1	Cd4+ memory t cell	THCA	-0.054477723
UCKL1	Cd4+ regulatory t cell	THCA	-0.10245798
UCKL1	Cd4+ t helper cell	THCA	-0.078436227
UCKL1	Cd4+cd25+ regulatory t c	THCA	-0.081777818
UCKL1	Cd8+ cytotoxic t cell	THCA	-0.017803215
UCKL1	Cd8+ regulatory t cell	THCA	-0.078502679
UCKL1	Cell_cycle	THCA	-0.162768344
UCKL1	Chandran_metastasis_top	THCA	-0.337353644
UCKL1	Citrate cycle (tca cycle)	THCA	0.025490696
UCKL1	Cysteine and methionine r	THCA	0.010008835
UCKL1	Cytokine induced killer c	THCA	-0.043139822
UCKL1	D-arginine and d-ornithin	THCA	0.040160764
UCKL1	D-glutamine and d-glutan	THCA	-0.179194338
UCKL1	Dendritic cell	THCA	-0.072042111
UCKL1	Dna_repair	THCA	0.459972593
UCKL1	Dna_replication	THCA	0.289622563
UCKL1	Double-negative memory	THCA	0.035753295
UCKL1	Drug metabolism - cytoch	THCA	0.179997209
UCKL1	Drug metabolism - other	THCA	0.345625261
UCKL1	E2f_targets	THCA	0.065990215
UCKL1	Ecm_receptor_interaction	THCA	-0.1493083
UCKL1	Effector cd4+ memory t (	THCA	-0.116884372
UCKL1	Effector cd8+ memory t (	THCA	-0.061552645
UCKL1	Effector memory t cell	THCA	-0.1119321
UCKL1	Effector regulatory t (treg	THCA	-0.156619509

UCKL1	Elvidge_hif1a_targets_up	THCA	-0.258649291
UCKL1	Endothelial cell	THCA	-0.266792143
UCKL1	Eosinophil	THCA	-0.015531671
UCKL1	Ether lipid metabolism	THCA	0.031481658
UCKL1	Exhausted cd4+ t cell	THCA	-0.18268908
UCKL1	Exhausted cd8+ t cell	THCA	-0.122530406
UCKL1	Exhausted t cell	THCA	-0.021740746
UCKL1	Fat cell (adipocyte)	THCA	-0.042300598
UCKL1	Fatty acid biosynthesis	THCA	-0.015239015
UCKL1	Fatty acid degradation	THCA	-0.001628773
UCKL1	Fatty acid elongation	THCA	0.080878878
UCKL1	Fibroblast	THCA	-0.16645843
UCKL1	Folate biosynthesis	THCA	0.110709267
UCKL1	Follicular b cell	THCA	-0.058358699
UCKL1	Follicular dendritic cell	THCA	-0.031943851
UCKL1	Follicular helper (tfh) t ce	THCA	-0.060124963
UCKL1	Follicular t cell	THCA	0.0863438
UCKL1	Foxp3+il-17+ t cell	THCA	-0.039689776
UCKL1	Fructose and mannose me	THCA	0.300231291
UCKL1	G2m_checkpoint	THCA	-0.245747246
UCKL1	Galactose metabolism	THCA	0.174059489
UCKL1	Galie_tumor_stemness_ge	THCA	-0.223988335
UCKL1	Glutathione metabolism	THCA	0.169789356
UCKL1	Glycerolipid metabolism	THCA	0.039105391
UCKL1	Glycerophospholipid metæ	THCA	0.226068662
UCKL1	Glycine, serine and threor	THCA	0.075031305
UCKL1	Glycolysis / gluconeogene	THCA	0.084756895
UCKL1	Glycosaminoglycan biosy	THCA	-0.007693934
UCKL1	Glycosaminoglycan biosy	THCA	-0.139539578
UCKL1	Glycosaminoglycan biosy	THCA	-0.122676598
UCKL1	Glycosaminoglycan degra	THCA	0.029829465
UCKL1	Glycosphingolipid biosyn	THCA	-0.037170938
UCKL1	Glycosphingolipid biosyn	THCA	-0.030754765
UCKL1	Glycosphingolipid biosyn	THCA	-0.046034779
UCKL1	Glycosylphosphatidylinos	THCA	0.006268712
UCKL1	Glyoxylate and dicarboxy	THCA	0.146302032
UCKL1	Granulocyte	THCA	-0.041443021
UCKL1	Hedgehog_signaling	THCA	-0.42261926
UCKL1	Histidine metabolism	THCA	-0.114847384
UCKL1	Hypoxia	THCA	-0.047085578
UCKL1	Il-17ralpha t cell	THCA	-0.064086969
UCKL1	Il2_stat5_signaling	THCA	-0.108395127
UCKL1	Il6_jak_stat3_signaling	THCA	-0.107722671

UCKL1	Immune_checkpoints_tur	THCA	-0.03951169
UCKL1	Immune_inhibition_cytok	THCA	0.114672702
UCKL1	Inositol phosphate metabo	THCA	-0.4586308
UCKL1	Interleukin_6_signaling	THCA	-0.375810002
UCKL1	Jaeger_metastasis_up	THCA	-0.240491395
UCKL1	Jain_nfkb_signaling	THCA	-0.065717445
UCKL1	Kras_signaling_up	THCA	-0.166588558
UCKL1	Linoleic acid metabolism	THCA	0.292053057
UCKL1	Lipoic acid metabolism	THCA	0.132234814
UCKL1	Lysine degradation	THCA	-0.148550014
UCKL1	Lysosome	THCA	-0.014008435
UCKL1	M1 macrophage	THCA	-0.103381178
UCKL1	M2 macrophage	THCA	-0.044352272
UCKL1	Mannose type o-glycan bi	THCA	-0.052870032
UCKL1	Mapk_signaling_pathway	THCA	-0.283544329
UCKL1	Mapk3_erk1_activation	THCA	-0.384972383
UCKL1	Marginal zone b cell	THCA	-0.109086144
UCKL1	Memory b cell	THCA	-0.090833822
UCKL1	Mesenchymal cell	THCA	-0.020081929
UCKL1	Mesenchymal stem cell	THCA	-0.251788814
UCKL1	Metabolism of xenobiotic	THCA	0.303240174
UCKL1	Migrating cancer stem cel	THCA	-0.170406047
UCKL1	Mitotic_spindle	THCA	-0.409463753
UCKL1	Monocyte	THCA	-0.012350644
UCKL1	Mtor_signaling_pathway	THCA	-0.44048679
UCKL1	Mtorc1_signaling	THCA	-0.111767744
UCKL1	Mucin type o-glycan biosy	THCA	-0.427135363
UCKL1	Myc_targets_v1	THCA	0.267219993
UCKL1	Myeloid cell	THCA	-0.117389747
UCKL1	N-glycan biosynthesis	THCA	-0.215285765
UCKL1	Naive b cell	THCA	0.010708379
UCKL1	Naive cd4+ t cell	THCA	-0.144104714
UCKL1	Naive cd8+ t cell	THCA	-0.128097571
UCKL1	Natural killer cell	THCA	-0.061413467
UCKL1	Natural killer t (nkt) cell	THCA	0.09028812
UCKL1	Natural regulatory t (treg)	THCA	-0.178011098
UCKL1	Neomycin, kanamycin and	THCA	-0.076667315
UCKL1	Neutrophil	THCA	-0.02272966
UCKL1	Nicotinate and nicotinami	THCA	-0.06308876
UCKL1	Nitrogen metabolism	THCA	-0.230279506
UCKL1	Nod_like_receptor_signal	THCA	-0.104357886
UCKL1	Notch_signaling	THCA	-0.051526959
UCKL1	One carbon pool by folate	THCA	0.006089365

UCKL1	Other glycan degradation	THCA	0.213866555
UCKL1	Other types of o-glycan b	THCA	0.227010224
UCKL1	Oxidative phosphorylatior	THCA	0.32885681
UCKL1	P53_pathway	THCA	0.044559529
UCKL1	P53_signaling_pathway	THCA	-0.151034003
UCKL1	Pantothenate and coa bios	THCA	0.01361838
UCKL1	Pentose and glucuronate i	THCA	0.067072949
UCKL1	Pentose phosphate pathwa	THCA	0.099149792
UCKL1	Pericyte	THCA	-0.126127026
UCKL1	Phenylalanine metabolism	THCA	0.076020802
UCKL1	Phenylalanine, tyrosine ar	THCA	0.138745307
UCKL1	Phosphonate and phosphir	THCA	-0.050921922
UCKL1	Pi3k_akt_activation	THCA	-0.371827873
UCKL1	Pi3k_akt_mtor_signaling	THCA	-0.294924732
UCKL1	Porphyrin and chlorophyl	THCA	0.183047967
UCKL1	Primary bile acid biosynt	THCA	-0.035467204
UCKL1	Propanoate metabolism	THCA	-0.123349474
UCKL1	Purine metabolism	THCA	0.256218721
UCKL1	Pyrimidine metabolism	THCA	0.364577964
UCKL1	Pyruvate metabolism	THCA	0.051274755
UCKL1	Regulation_of_autophagy	THCA	0.017178767
UCKL1	Retinol metabolism	THCA	0.103726918
UCKL1	Riboflavin metabolism	THCA	0.12053802
UCKL1	Schmahl_pdgf_signaling	THCA	-0.295717076
UCKL1	Selenocompound metabol	THCA	-0.137089543
UCKL1	Signaling_by_hippo	THCA	-0.485884836
UCKL1	Sphingolipid metabolism	THCA	-0.317151948
UCKL1	Starch and sucrose metabo	THCA	-0.105985469
UCKL1	Steroid biosynthesis	THCA	0.18207353
UCKL1	Steroid hormone biosynth	THCA	0.19557129
UCKL1	Sulfur metabolism	THCA	-0.015820104
UCKL1	Synthesis and degradation	THCA	0.085923827
UCKL1	T helper cell	THCA	-0.09000945
UCKL1	T helper1 (th1) cell	THCA	-0.042039823
UCKL1	T helper17 (th17) cell	THCA	-0.071704145
UCKL1	T helper2 (th2) cell	THCA	-0.031586538
UCKL1	T helper9 (th9) cell	THCA	0.001091262
UCKL1	Taurine and hypotaurine r	THCA	0.252424674
UCKL1	Terpenoid backbone biosy	THCA	-0.051070139
UCKL1	Tgf_beta_signaling_pathw	THCA	-0.392832441
UCKL1	Thiamine metabolism	THCA	0.09226294
UCKL1	Tnfa_signaling_via_nfkb	THCA	-0.059016345
UCKL1	Tryptophan metabolism	THCA	-0.024762065

UCKL1	Tumor endothelial cell	THCA	-0.020028264
UCKL1	Tyrosine metabolism	THCA	0.132673588
UCKL1	Ubiquinone and other ter	THCA	0.154368199
UCKL1	Valine, leucine and isoleu	THCA	0.225114561
UCKL1	Valine, leucine and isoleu	THCA	-0.053802805
UCKL1	Vascular endothelial cell	THCA	-0.101225124
UCKL1	Vascular smooth muscle c	THCA	-0.086836126
UCKL1	Vegf_signaling_pathway	THCA	-0.149960447
UCKL1	Vitamin b6 metabolism	THCA	0.023819921
UCKL1	Willert_wnt_signaling	THCA	-0.107620965
UCKL1	Wnt_beta_catenin_signali	THCA	-0.158903043
UPP1	Abnormal plasma cell	THCA	-0.296385145
UPP1	Activated b cell	THCA	0.307113657
UPP1	Activated cd4+ t cell	THCA	0.199295436
UPP1	Activated t cell	THCA	0.244196636
UPP1	Alanine, aspartate and glu	THCA	0.115136172
UPP1	Alcala_apoptosis	THCA	0.38458072
UPP1	Alpha-linolenic acid meta	THCA	0.223302106
UPP1	Amino sugar and nucleoti	THCA	0.272080309
UPP1	Ampk_pathway	THCA	-0.329693954
UPP1	Angiogenesis	THCA	0.3572065
UPP1	Arachidonic acid metabol	THCA	0.539122847
UPP1	Arginine and proline metæ	THCA	-0.313846558
UPP1	Arginine biosynthesis	THCA	-0.054518949
UPP1	Ascorbate and aldarate me	THCA	-0.464030638
UPP1	Atypical memory b cell	THCA	-0.021499294
UPP1	Axl+siglec6+ dendritic ce	THCA	0.455744814
UPP1	B cell	THCA	0.191066752
UPP1	B1 cell	THCA	0.276154532
UPP1	Basal cell	THCA	0.667881637
UPP1	Beta-alanine metabolism	THCA	-0.389970852
UPP1	Biosynthesis of unsaturate	THCA	-0.13063179
UPP1	Biotin metabolism	THCA	-0.317714069
UPP1	Butanoate metabolism	THCA	-0.525761187
UPP1	Caffeine metabolism	THCA	-0.045888993
UPP1	Cancer stem cell	THCA	0.292526691
UPP1	Cancer stem-like cell	THCA	0.076037727
UPP1	Cd4+ cytotoxic t cell	THCA	0.198854742
UPP1	Cd4+ memory t cell	THCA	-0.0102342
UPP1	Cd4+ regulatory t cell	THCA	0.346613278
UPP1	Cd4+ t helper cell	THCA	0.251351435
UPP1	Cd4+cd25+ regulatory t c	THCA	0.273644932
UPP1	Cd8+ cytotoxic t cell	THCA	0.180592703

UPP1	Cd8+ regulatory t cell	THCA	0.139608234
UPP1	Cell_cycle	THCA	0.302155911
UPP1	Chandran_metastasis_top5	THCA	-0.215668254
UPP1	Citrate cycle (tca cycle)	THCA	-0.302637883
UPP1	Cysteine and methionine r	THCA	-0.046631283
UPP1	Cytokine induced killer cε	THCA	-0.074920861
UPP1	D-arginine and d-ornithin	THCA	0.060226759
UPP1	D-glutamine and d-glutan	THCA	0.449311805
UPP1	Dendritic cell	THCA	0.320449757
UPP1	Dna_repair	THCA	0.188369949
UPP1	Dna_replication	THCA	0.301349107
UPP1	Double-negative memory	THCA	-0.150057526
UPP1	Drug metabolism - cytoch	THCA	-0.042058572
UPP1	Drug metabolism - other (	THCA	0.134872461
UPP1	E2f_targets	THCA	0.081204469
UPP1	Ecm_receptor_interaction	THCA	0.259052991
UPP1	Effector cd4+ memory t (	THCA	0.206854974
UPP1	Effector cd8+ memory t (	THCA	0.361924284
UPP1	Effector memory t cell	THCA	0.113155748
UPP1	Effector regulatory t (treg	THCA	0.25537433
UPP1	Elvidge_hif1a_targets_up	THCA	-0.105513378
UPP1	Endothelial cell	THCA	-0.206915847
UPP1	Eosinophil	THCA	0.412482211
UPP1	Ether lipid metabolism	THCA	0.282816875
UPP1	Exhausted cd4+ t cell	THCA	0.309981967
UPP1	Exhausted cd8+ t cell	THCA	0.380803278
UPP1	Exhausted t cell	THCA	0.240036084
UPP1	Fat cell (adipocyte)	THCA	-0.19604048
UPP1	Fatty acid biosynthesis	THCA	-0.196324669
UPP1	Fatty acid degradation	THCA	-0.46458538
UPP1	Fatty acid elongation	THCA	-0.037130627
UPP1	Fibroblast	THCA	0.207451425
UPP1	Folate biosynthesis	THCA	-0.184922305
UPP1	Follicular b cell	THCA	0.165325161
UPP1	Follicular dendritic cell	THCA	0.170091141
UPP1	Follicular helper (tfh) t ce	THCA	0.287918344
UPP1	Follicular t cell	THCA	0.077568371
UPP1	Foxp3+il-17+ t cell	THCA	0.380137285
UPP1	Fructose and mannose me	THCA	-0.129683995
UPP1	G2m_checkpoint	THCA	0.040361077
UPP1	Galactose metabolism	THCA	0.106238609
UPP1	Galie_tumor_stemness_ge	THCA	0.228291163
UPP1	Glutathione metabolism	THCA	0.221839715

UPP1	Glycerolipid metabolism	THCA	-0.452665608
UPP1	Glycerophospholipid metabolism	THCA	0.217681531
UPP1	Glycine, serine and threonine metabolism	THCA	-0.477214052
UPP1	Glycolysis / gluconeogenesis	THCA	-0.268180849
UPP1	Glycosaminoglycan biosynthesis	THCA	0.276725206
UPP1	Glycosaminoglycan biosynthesis	THCA	-0.0072739
UPP1	Glycosaminoglycan biosynthesis	THCA	0.357099215
UPP1	Glycosaminoglycan degradation	THCA	0.638269091
UPP1	Glycosphingolipid biosynthesis	THCA	0.328879862
UPP1	Glycosphingolipid biosynthesis	THCA	0.410541326
UPP1	Glycosphingolipid biosynthesis	THCA	0.443020303
UPP1	Glycosylphosphatidylinositol biosynthesis	THCA	-0.232944801
UPP1	Glyoxylate and dicarboxylate metabolism	THCA	-0.290374714
UPP1	Granulocyte	THCA	0.326589587
UPP1	Hedgehog signaling	THCA	-0.076303965
UPP1	Histidine metabolism	THCA	-0.154691159
UPP1	Hypoxia	THCA	0.347059558
UPP1	Il-17alpha t cell	THCA	0.264683009
UPP1	Il2_stat5_signaling	THCA	0.572499285
UPP1	Il6_jak_stat3_signaling	THCA	0.475499986
UPP1	Immune_checkpoints_turnover	THCA	0.673663133
UPP1	Immune_inhibition_cytokines	THCA	0.433927914
UPP1	Inositol phosphate metabolism	THCA	-0.130071915
UPP1	Interleukin_6_signaling	THCA	0.219122163
UPP1	Jaeger_metastasis_up	THCA	0.258950823
UPP1	Jain_nfkb_signaling	THCA	-0.032666051
UPP1	Kras_signaling_up	THCA	0.508279022
UPP1	Linoleic acid metabolism	THCA	0.237736405
UPP1	Lipoic acid metabolism	THCA	-0.366890693
UPP1	Lysine degradation	THCA	-0.654984975
UPP1	Lysosome	THCA	0.557320958
UPP1	M1 macrophage	THCA	0.418259622
UPP1	M2 macrophage	THCA	0.348357057
UPP1	Mannose type o-glycan biosynthesis	THCA	-0.231510402
UPP1	Mapk_signaling_pathway	THCA	0.298042087
UPP1	Mapk3_erk1_activation	THCA	0.116942701
UPP1	Marginal zone b cell	THCA	0.067078231
UPP1	Memory b cell	THCA	0.061833899
UPP1	Mesenchymal cell	THCA	0.357052322
UPP1	Mesenchymal stem cell	THCA	0.170594663
UPP1	Metabolism of xenobiotics	THCA	0.229156656
UPP1	Migrating cancer stem cell	THCA	0.57145467
UPP1	Mitotic_spindle	THCA	0.124468138

UPP1	Monocyte	THCA	0.534779127
UPP1	Mtor_signaling_pathway	THCA	-0.094858062
UPP1	Mtorc1_signaling	THCA	-0.042850255
UPP1	Mucin type o-glycan biosynthesis	THCA	0.270884757
UPP1	Myc_targets_v1	THCA	0.2753858
UPP1	Myeloid cell	THCA	0.327704694
UPP1	N-glycan biosynthesis	THCA	-0.259243961
UPP1	Naive b cell	THCA	-0.132805577
UPP1	Naive cd4+ t cell	THCA	0.330472925
UPP1	Naive cd8+ t cell	THCA	0.191709206
UPP1	Natural killer cell	THCA	0.343091829
UPP1	Natural killer t (nkt) cell	THCA	0.315183055
UPP1	Natural regulatory t (treg) cell	THCA	0.269436042
UPP1	Neomycin, kanamycin and streptomycin	THCA	-0.105887666
UPP1	Neutrophil	THCA	0.600295848
UPP1	Nicotinate and nicotinamide metabolism	THCA	-0.012307027
UPP1	Nitrogen metabolism	THCA	-0.383301017
UPP1	Nod_like_receptor_signaling	THCA	0.415175599
UPP1	Notch_signaling	THCA	0.205410841
UPP1	One carbon pool by folate	THCA	0.243882338
UPP1	Other glycan degradation	THCA	0.205243083
UPP1	Other types of o-glycan biosynthesis	THCA	-0.089241034
UPP1	Oxidative phosphorylation	THCA	-0.091674711
UPP1	P53_pathway	THCA	0.750100308
UPP1	P53_signaling_pathway	THCA	0.543142251
UPP1	Pantothenate and coenzyme a biosynthesis	THCA	-0.072582442
UPP1	Pentose and glucuronate interconversions	THCA	-0.014021756
UPP1	Pentose phosphate pathway	THCA	-0.033150439
UPP1	Pericyte	THCA	-0.000212898
UPP1	Phenylalanine metabolism	THCA	0.135674622
UPP1	Phenylalanine, tyrosine and tryptophan metabolism	THCA	0.048445789
UPP1	Phosphonate and phosphonate metabolism	THCA	0.146917967
UPP1	Pi3k_akt_activation	THCA	0.154404331
UPP1	Pi3k_akt_mtor_signaling	THCA	0.09477839
UPP1	Porphyrin and chlorophyll metabolism	THCA	-0.267186187
UPP1	Primary bile acid biosynthesis	THCA	-0.265021398
UPP1	Propanoate metabolism	THCA	-0.543050953
UPP1	Purine metabolism	THCA	0.174136457
UPP1	Pyrimidine metabolism	THCA	0.307712908
UPP1	Pyruvate metabolism	THCA	-0.378331109
UPP1	Regulation_of_autophagy	THCA	-0.123213824
UPP1	Retinol metabolism	THCA	0.030241548
UPP1	Riboflavin metabolism	THCA	0.146269084

UPP1	Schmahl_pdgf_signaling	THCA	0.219269694
UPP1	Selenocompound metabol	THCA	-0.467055579
UPP1	Signaling_by_hippo	THCA	-0.009147337
UPP1	Sphingolipid metabolism	THCA	0.002930565
UPP1	Starch and sucrose metabo	THCA	-0.197836078
UPP1	Steroid biosynthesis	THCA	0.01644495
UPP1	Steroid hormone biosynth	THCA	-0.171446646
UPP1	Sulfur metabolism	THCA	0.409843573
UPP1	Synthesis and degradation	THCA	-0.439267677
UPP1	T helper cell	THCA	0.35824346
UPP1	T helper1 (th1) cell	THCA	0.489768553
UPP1	T helper17 (th17) cell	THCA	0.371707303
UPP1	T helper2 (th2) cell	THCA	0.472451638
UPP1	T helper9 (th9) cell	THCA	0.31316521
UPP1	Taurine and hypotaurine r	THCA	0.122225795
UPP1	Terpenoid backbone biosy	THCA	-0.43829402
UPP1	Tgf_beta_signaling_pathw	THCA	-0.062115399
UPP1	Thiamine metabolism	THCA	-0.301744364
UPP1	Tnfa_signaling_via_nfb	THCA	0.555780071
UPP1	Tryptophan metabolism	THCA	-0.349991113
UPP1	Tumor endothelial cell	THCA	0.03424021
UPP1	Tyrosine metabolism	THCA	-0.001799681
UPP1	Ubiquinone and other terq	THCA	-0.232600971
UPP1	Valine, leucine and isoleu	THCA	0.009633009
UPP1	Valine, leucine and isoleu	THCA	-0.526531088
UPP1	Vascular endothelial cell	THCA	-0.082760197
UPP1	Vascular smooth muscle c	THCA	-0.172285728
UPP1	Vegf_signaling_pathway	THCA	0.270326376
UPP1	Vitamin b6 metabolism	THCA	-0.296399387
UPP1	Willert_wnt_signaling	THCA	-0.175860763
UPP1	Wnt_beta_catenin_signali	THCA	-0.008603162
UPP2	Abnormal plasma cell	THCA	-0.523222649
UPP2	Activated b cell	THCA	-0.015766783
UPP2	Activated cd4+ t cell	THCA	-0.078860042
UPP2	Activated t cell	THCA	-0.060249232
UPP2	Alanine, aspartate and glu	THCA	-0.255855092
UPP2	Alcala_apoptosis	THCA	-0.221589223
UPP2	Alpha-linolenic acid meta	THCA	-0.021435294
UPP2	Amino sugar and nucleoti	THCA	-0.326511748
UPP2	Ampk_pathway	THCA	-0.203417348
UPP2	Angiogenesis	THCA	0.077405535
UPP2	Arachidonic acid metabol	THCA	0.148969154
UPP2	Arginine and proline metæ	THCA	-0.503327687

UPP2	Arginine biosynthesis	THCA	-0.313698273
UPP2	Ascorbate and aldarate me	THCA	-0.366637399
UPP2	Atypical memory b cell	THCA	-0.070938281
UPP2	Axl+siglec6+ dendritic ce	THCA	0.010096492
UPP2	B cell	THCA	-0.07426432
UPP2	B1 cell	THCA	-0.046785064
UPP2	Basal cell	THCA	0.250553144
UPP2	Beta-alanine metabolism	THCA	-0.491576806
UPP2	Biosynthesis of unsaturate	THCA	-0.35868736
UPP2	Biotin metabolism	THCA	-0.21371883
UPP2	Butanoate metabolism	THCA	-0.437625404
UPP2	Caffeine metabolism	THCA	-0.047377356
UPP2	Cancer stem cell	THCA	0.132737093
UPP2	Cancer stem-like cell	THCA	-0.106697581
UPP2	Cd4+ cytotoxic t cell	THCA	-0.143856779
UPP2	Cd4+ memory t cell	THCA	-0.103522036
UPP2	Cd4+ regulatory t cell	THCA	-0.010136138
UPP2	Cd4+ t helper cell	THCA	-0.033262438
UPP2	Cd4+cd25+ regulatory t c	THCA	-0.033452625
UPP2	Cd8+ cytotoxic t cell	THCA	-0.131176669
UPP2	Cd8+ regulatory t cell	THCA	-0.11039652
UPP2	Cell_cycle	THCA	-0.040823199
UPP2	Chandran_metastasis_top5	THCA	-0.11974661
UPP2	Citrate cycle (tca cycle)	THCA	-0.517516514
UPP2	Cysteine and methionine r	THCA	-0.430469864
UPP2	Cytokine induced killer c	THCA	-0.352217185
UPP2	D-arginine and d-ornithin	THCA	0.008344332
UPP2	D-glutamine and d-glutan	THCA	0.165196351
UPP2	Dendritic cell	THCA	-0.001573209
UPP2	Dna_repair	THCA	-0.019502689
UPP2	Dna_replication	THCA	-0.00382837
UPP2	Double-negative memory	THCA	-0.098215
UPP2	Drug metabolism - cytoch	THCA	-0.108027242
UPP2	Drug metabolism - other	THCA	-0.13672599
UPP2	E2f_targets	THCA	-0.114689825
UPP2	Ecm_receptor_interaction	THCA	0.101679153
UPP2	Effector cd4+ memory t (	THCA	-0.047476235
UPP2	Effector cd8+ memory t (	THCA	-0.076773368
UPP2	Effector memory t cell	THCA	-0.062626188
UPP2	Effector regulatory t (treg	THCA	-0.02723874
UPP2	Elvidge_hif1a_targets_up	THCA	-0.477351806
UPP2	Endothelial cell	THCA	-0.111582574
UPP2	Eosinophil	THCA	0.021056877

UPP2	Ether lipid metabolism	THCA	0.047738024
UPP2	Exhausted cd4+ t cell	THCA	-0.006796436
UPP2	Exhausted cd8+ t cell	THCA	0.050658692
UPP2	Exhausted t cell	THCA	-0.049450691
UPP2	Fat cell (adipocyte)	THCA	-0.311582269
UPP2	Fatty acid biosynthesis	THCA	-0.387398312
UPP2	Fatty acid degradation	THCA	-0.509760583
UPP2	Fatty acid elongation	THCA	-0.258091414
UPP2	Fibroblast	THCA	0.070583491
UPP2	Folate biosynthesis	THCA	-0.363460396
UPP2	Follicular b cell	THCA	0.039146667
UPP2	Follicular dendritic cell	THCA	-0.016992249
UPP2	Follicular helper (tfh) t ce	THCA	-0.02916259
UPP2	Follicular t cell	THCA	-0.047452327
UPP2	Foxp3+il-17+ t cell	THCA	-0.007614991
UPP2	Fructose and mannose me	THCA	-0.394411517
UPP2	G2m_checkpoint	THCA	-0.079478979
UPP2	Galactose metabolism	THCA	-0.327305162
UPP2	Galie_tumor_stemness_ge	THCA	0.199561677
UPP2	Glutathione metabolism	THCA	-0.225142739
UPP2	Glycerolipid metabolism	THCA	-0.370089484
UPP2	Glycerophospholipid met&	THCA	0.067657554
UPP2	Glycine, serine and threor	THCA	-0.426021502
UPP2	Glycolysis / gluconeogene	THCA	-0.485098744
UPP2	Glycosaminoglycan biosy	THCA	0.12351249
UPP2	Glycosaminoglycan biosy	THCA	0.065750233
UPP2	Glycosaminoglycan biosy	THCA	0.130536039
UPP2	Glycosaminoglycan degra	THCA	0.136019347
UPP2	Glycosphingolipid biosyn	THCA	0.09985286
UPP2	Glycosphingolipid biosyn	THCA	-0.086454131
UPP2	Glycosphingolipid biosyn	THCA	-0.048336286
UPP2	Glycosylphosphatidylinos	THCA	-0.160365985
UPP2	Glyoxylate and dicarboxy	THCA	-0.436061973
UPP2	Granulocyte	THCA	-0.029030221
UPP2	Hedgehog_signaling	THCA	0.017383927
UPP2	Histidine metabolism	THCA	-0.262195654
UPP2	Hypoxia	THCA	-0.047818872
UPP2	Il-17ralpha t cell	THCA	-0.048966904
UPP2	Il2_stat5_signaling	THCA	0.073087201
UPP2	Il6_jak_stat3_signaling	THCA	0.048257415
UPP2	Immune_checkpoints_tur	THCA	0.224335653
UPP2	Immune_inhibition_cytok	THCA	0.036555776
UPP2	Inositol phosphate metabo	THCA	-0.138233799

UPP2	Interleukin_6_signaling	THCA	0.012231676
UPP2	Jaeger_metastasis_up	THCA	-0.180962178
UPP2	Jain_nfkb_signaling	THCA	-0.272481156
UPP2	Kras_signaling_up	THCA	0.113603371
UPP2	Linoleic acid metabolism	THCA	0.218985874
UPP2	Lipoic acid metabolism	THCA	0.094036212
UPP2	Lysine degradation	THCA	-0.422583916
UPP2	Lysosome	THCA	-0.043670032
UPP2	M1 macrophage	THCA	0.006024659
UPP2	M2 macrophage	THCA	-0.05257093
UPP2	Mannose type o-glycan bi	THCA	-0.075110677
UPP2	Mapk_signaling_pathway	THCA	-0.026279303
UPP2	Mapk3_erk1_activation	THCA	-0.165529971
UPP2	Marginal zone b cell	THCA	-0.070602252
UPP2	Memory b cell	THCA	-0.114925711
UPP2	Mesenchymal cell	THCA	0.169942662
UPP2	Mesenchymal stem cell	THCA	-0.024755247
UPP2	Metabolism of xenobiotic	THCA	-0.003597459
UPP2	Migrating cancer stem cel	THCA	0.294933898
UPP2	Mitotic_spindle	THCA	0.019867472
UPP2	Monocyte	THCA	0.055624068
UPP2	Mtor_signaling_pathway	THCA	-0.17124154
UPP2	Mtorc1_signaling	THCA	-0.50411794
UPP2	Mucin type o-glycan biosy	THCA	0.094648856
UPP2	Myc_targets_v1	THCA	-0.078079474
UPP2	Myeloid cell	THCA	-0.00886645
UPP2	N-glycan biosynthesis	THCA	-0.214699331
UPP2	Naive b cell	THCA	-0.12417625
UPP2	Naive cd4+ t cell	THCA	0.181029332
UPP2	Naive cd8+ t cell	THCA	0.281997624
UPP2	Natural killer cell	THCA	-0.011920713
UPP2	Natural killer t (nkt) cell	THCA	-0.082815872
UPP2	Natural regulatory t (treg)	THCA	0.114067093
UPP2	Neomycin, kanamycin an	THCA	-0.184890369
UPP2	Neutrophil	THCA	0.06355386
UPP2	Nicotinate and nicotinami	THCA	-0.458495445
UPP2	Nitrogen metabolism	THCA	-0.03482851
UPP2	Nod_like_receptor_signal	THCA	0.025280237
UPP2	Notch_signaling	THCA	0.079548491
UPP2	One carbon pool by folate	THCA	-0.093858893
UPP2	Other glycan degradation	THCA	-0.069407767
UPP2	Other types of o-glycan b	THCA	0.045333046
UPP2	Oxidative phosphorylatior	THCA	-0.328372513

UPP2	P53_pathway	THCA	0.185599708
UPP2	P53_signaling_pathway	THCA	0.01792699
UPP2	Pantothenate and coa bios	THCA	-0.479920819
UPP2	Pentose and glucuronate i	THCA	-0.247174157
UPP2	Pentose phosphate pathwa	THCA	-0.408107611
UPP2	Pericyte	THCA	-0.060896945
UPP2	Phenylalanine metabolism	THCA	-0.205747979
UPP2	Phenylalanine, tyrosine ar	THCA	-0.388917833
UPP2	Phosphonate and phosphir	THCA	-0.032196893
UPP2	Pi3k_akt_activation	THCA	-0.021608116
UPP2	Pi3k_akt_mtor_signaling	THCA	-0.469245279
UPP2	Porphyrin and chlorophyl	THCA	-0.384780513
UPP2	Primary bile acid biosynt	THCA	-0.296552256
UPP2	Propanoate metabolism	THCA	-0.476245224
UPP2	Purine metabolism	THCA	-0.211368506
UPP2	Pyrimidine metabolism	THCA	-0.057210165
UPP2	Pyruvate metabolism	THCA	-0.512631351
UPP2	Regulation_of_autophagy	THCA	-0.257251163
UPP2	Retinol metabolism	THCA	-0.008618557
UPP2	Riboflavin metabolism	THCA	-0.289758945
UPP2	Schmahl_pdgf_signaling	THCA	0.201069292
UPP2	Selenocompound metabol	THCA	-0.318664599
UPP2	Signaling_by_hippo	THCA	-0.008164678
UPP2	Sphingolipid metabolism	THCA	-0.090473117
UPP2	Starch and sucrose metabo	THCA	-0.452934803
UPP2	Steroid biosynthesis	THCA	-0.131129619
UPP2	Steroid hormone biosynth	THCA	-0.081752346
UPP2	Sulfur metabolism	THCA	-0.07705047
UPP2	Synthesis and degradation	THCA	-0.383312068
UPP2	T helper cell	THCA	0.052002379
UPP2	T helper1 (th1) cell	THCA	0.102454843
UPP2	T helper17 (th17) cell	THCA	0.02322124
UPP2	T helper2 (th2) cell	THCA	0.08239861
UPP2	T helper9 (th9) cell	THCA	-0.024358296
UPP2	Taurine and hypotaurine r	THCA	0.116134591
UPP2	Terpenoid backbone biosy	THCA	-0.39406781
UPP2	Tgf_beta_signaling_pathw	THCA	0.014226975
UPP2	Thiamine metabolism	THCA	-0.223106321
UPP2	Tnfa_signaling_via_nfkb	THCA	0.160463013
UPP2	Tryptophan metabolism	THCA	-0.430625725
UPP2	Tumor endothelial cell	THCA	-0.07436591
UPP2	Tyrosine metabolism	THCA	-0.251580693
UPP2	Ubiquinone and other ter	THCA	-0.293579815

UPP2	Valine, leucine and isoleu	THCA	-0.285650745
UPP2	Valine, leucine and isoleu	THCA	-0.501583325
UPP2	Vascular endothelial cell	THCA	0.051572655
UPP2	Vascular smooth muscle c	THCA	-0.077922237
UPP2	Vegf_signaling_pathway	THCA	-0.18109335
UPP2	Vitamin b6 metabolism	THCA	-0.434133465
UPP2	Willert_wnt_signaling	THCA	-0.298596707
UPP2	Wnt_beta_catenin_signali	THCA	0.157228441
CDA	Abnormal plasma cell	THYM	0.189685238
CDA	Activated b cell	THYM	0.034819559
CDA	Activated cd4+ t cell	THYM	-0.050344263
CDA	Activated t cell	THYM	-0.102306919
CDA	Alanine, aspartate and glu	THYM	0.122671656
CDA	Alcala_apoptosis	THYM	-0.044560757
CDA	Alpha-linolenic acid meta	THYM	0.428364939
CDA	Amino sugar and nucleoti	THYM	0.204049045
CDA	Ampk_pathway	THYM	-0.281891849
CDA	Angiogenesis	THYM	0.358915103
CDA	Arachidonic acid metabol:	THYM	0.461833482
CDA	Arginine and proline metæ	THYM	0.343260312
CDA	Arginine biosynthesis	THYM	0.196974703
CDA	Ascorbate and aldarate mε	THYM	0.282263923
CDA	Atypical memory b cell	THYM	-0.161929987
CDA	Axl+siglec6+ dendritic ce	THYM	0.171167556
CDA	B cell	THYM	-0.011046348
CDA	B1 cell	THYM	-0.155341284
CDA	Basal cell	THYM	0.528287801
CDA	Beta-alanine metabolism	THYM	0.232182109
CDA	Biosynthesis of unsaturate	THYM	-0.002265996
CDA	Biotin metabolism	THYM	0.116174143
CDA	Butanoate metabolism	THYM	-0.078956002
CDA	Caffeine metabolism	THYM	0.045170535
CDA	Cancer stem cell	THYM	0.250765176
CDA	Cancer stem-like cell	THYM	0.198631206
CDA	Cd4+ cytotoxic t cell	THYM	0.189401674
CDA	Cd4+ memory t cell	THYM	-0.053729992
CDA	Cd4+ regulatory t cell	THYM	-0.018042049
CDA	Cd4+ t helper cell	THYM	-0.215864699
CDA	Cd4+cd25+ regulatory t c	THYM	-0.208497885
CDA	Cd8+ cytotoxic t cell	THYM	-0.02636012
CDA	Cd8+ regulatory t cell	THYM	-0.171299306
CDA	Cell_cycle	THYM	-0.339317752
CDA	Chandran_metastasis_topδ	THYM	-0.367014777

CDA	Citrate cycle (tca cycle)	THYM	-0.078085502
CDA	Cysteine and methionine r	THYM	-0.077845977
CDA	Cytokine induced killer c	THYM	-0.17328282
CDA	D-arginine and d-ornithin	THYM	0.248603967
CDA	D-glutamine and d-glutan	THYM	-0.082818412
CDA	Dendritic cell	THYM	0.135641051
CDA	Dna_repair	THYM	0.057074757
CDA	Dna_replication	THYM	-0.19239191
CDA	Double-negative memory	THYM	0.127912459
CDA	Drug metabolism - cytoch	THYM	0.316506757
CDA	Drug metabolism - other	THYM	0.226765467
CDA	E2f_targets	THYM	-0.256845376
CDA	Ecm_receptor_interaction	THYM	0.181699294
CDA	Effector cd4+ memory t (	THYM	-0.178566923
CDA	Effector cd8+ memory t (	THYM	-0.01024274
CDA	Effector memory t cell	THYM	-0.164734264
CDA	Effector regulatory t (treg	THYM	-0.294363875
CDA	Elvidge_hif1a_targets_up	THYM	-0.183188355
CDA	Endothelial cell	THYM	0.0555551
CDA	Eosinophil	THYM	0.109529403
CDA	Ether lipid metabolism	THYM	0.410207244
CDA	Exhausted cd4+ t cell	THYM	-0.128643356
CDA	Exhausted cd8+ t cell	THYM	0.019084854
CDA	Exhausted t cell	THYM	-0.093729679
CDA	Fat cell (adipocyte)	THYM	0.174794865
CDA	Fatty acid biosynthesis	THYM	-0.127963988
CDA	Fatty acid degradation	THYM	0.011079468
CDA	Fatty acid elongation	THYM	0.062578877
CDA	Fibroblast	THYM	0.230589354
CDA	Folate biosynthesis	THYM	0.226352526
CDA	Follicular b cell	THYM	0.005974636
CDA	Follicular dendritic cell	THYM	0.027681114
CDA	Follicular helper (tfh) t ce	THYM	-0.123881808
CDA	Follicular t cell	THYM	-0.054240089
CDA	Foxp3+il-17+ t cell	THYM	0.143084303
CDA	Fructose and mannose me	THYM	0.238207863
CDA	G2m_checkpoint	THYM	-0.342080516
CDA	Galactose metabolism	THYM	0.057282888
CDA	Galie_tumor_stemness_ge	THYM	0.064344574
CDA	Glutathione metabolism	THYM	0.289397262
CDA	Glycerolipid metabolism	THYM	0.124555732
CDA	Glycerophospholipid met	THYM	0.449445086
CDA	Glycine, serine and threor	THYM	0.209279691

CDA	Glycolysis / gluconeogene	THYM	0.204804916
CDA	Glycosaminoglycan biosyn	THYM	0.327706351
CDA	Glycosaminoglycan biosyn	THYM	0.136340687
CDA	Glycosaminoglycan biosyn	THYM	-0.085866736
CDA	Glycosaminoglycan degra	THYM	0.349045171
CDA	Glycosphingolipid biosyn	THYM	0.139067641
CDA	Glycosphingolipid biosyn	THYM	0.273237759
CDA	Glycosphingolipid biosyn	THYM	0.34776062
CDA	Glycosylphosphatidylinos	THYM	0.159749258
CDA	Glyoxylate and dicarboxy	THYM	-0.019844954
CDA	Granulocyte	THYM	0.085686176
CDA	Hedgehog_signaling	THYM	-0.068530721
CDA	Histidine metabolism	THYM	0.36910973
CDA	Hypoxia	THYM	0.274264759
CDA	Il-17alpha t cell	THYM	-0.24161403
CDA	Il2_stat5_signaling	THYM	0.275440046
CDA	Il6_jak_stat3_signaling	THYM	0.197267251
CDA	Immune_checkpoints_tur	THYM	0.220910006
CDA	Immune_inhibition_cytok	THYM	0.391906203
CDA	Inositol phosphate metabo	THYM	-0.473483152
CDA	Interleukin_6_signaling	THYM	-0.181068006
CDA	Jaeger_metastasis_up	THYM	-0.154582286
CDA	Jain_nfkb_signaling	THYM	-0.230053204
CDA	Kras_signaling_up	THYM	0.173367044
CDA	Linoleic acid metabolism	THYM	0.328821964
CDA	Lipoic acid metabolism	THYM	0.180134788
CDA	Lysine degradation	THYM	-0.335457935
CDA	Lysosome	THYM	0.35677977
CDA	M1 macrophage	THYM	0.188372443
CDA	M2 macrophage	THYM	0.290499945
CDA	Mannose type o-glycan bi	THYM	0.195531454
CDA	Mapk_signaling_pathway	THYM	-0.018181976
CDA	Mapk3_erk1_activation	THYM	-0.291881363
CDA	Marginal zone b cell	THYM	-0.229793734
CDA	Memory b cell	THYM	0.168560629
CDA	Mesenchymal cell	THYM	0.252226974
CDA	Mesenchymal stem cell	THYM	0.218669782
CDA	Metabolism of xenobiotic	THYM	0.349780169
CDA	Migrating cancer stem cel	THYM	0.090697159
CDA	Mitotic_spindle	THYM	-0.53099772
CDA	Monocyte	THYM	0.224170085
CDA	Mtor_signaling_pathway	THYM	-0.363469087
CDA	Mtorc1_signaling	THYM	-0.042076058

CDA	Mucin type o-glycan biosynthesis	THYM	-0.266171357
CDA	Myc_targets_v1	THYM	-0.115914705
CDA	Myeloid cell	THYM	0.037507175
CDA	N-glycan biosynthesis	THYM	0.137472235
CDA	Naive b cell	THYM	-0.00288837
CDA	Naive cd4+ t cell	THYM	-0.203658408
CDA	Naive cd8+ t cell	THYM	-0.241273993
CDA	Natural killer cell	THYM	-0.060400166
CDA	Natural killer t (nkt) cell	THYM	-0.231115577
CDA	Natural regulatory t (treg) cell	THYM	-0.307831569
CDA	Neomycin, kanamycin and streptomycin	THYM	-0.052359713
CDA	Neutrophil	THYM	0.277689179
CDA	Nicotinate and nicotinamide metabolism	THYM	-0.001259537
CDA	Nitrogen metabolism	THYM	-0.021411755
CDA	Nod_like_receptor_signaling	THYM	0.135415205
CDA	Notch_signaling	THYM	0.179760203
CDA	One carbon pool by folate	THYM	-0.206702925
CDA	Other glycan degradation	THYM	0.154468327
CDA	Other types of o-glycan biosynthesis	THYM	0.205669543
CDA	Oxidative phosphorylation	THYM	0.171331827
CDA	P53_pathway	THYM	0.546820034
CDA	P53_signaling_pathway	THYM	-0.117106214
CDA	Pantothenate and coenzyme a biosynthesis	THYM	-0.135667436
CDA	Pentose and glucuronate interconversions	THYM	0.109104295
CDA	Pentose phosphate pathway	THYM	-0.005261403
CDA	Pericyte	THYM	0.298095076
CDA	Phenylalanine metabolism	THYM	0.405543544
CDA	Phenylalanine, tyrosine and tryptophan metabolism	THYM	0.023451584
CDA	Phosphonate and phosphite metabolism	THYM	-0.12634136
CDA	Pi3k_akt_activation	THYM	-0.206054923
CDA	Pi3k_akt_mtor_signaling	THYM	-0.288133348
CDA	Porphyrin and chlorophyll metabolism	THYM	0.247925875
CDA	Primary bile acid biosynthesis	THYM	0.056980614
CDA	Propanoate metabolism	THYM	-0.177585056
CDA	Purine metabolism	THYM	-0.012004127
CDA	Pyrimidine metabolism	THYM	-0.042265563
CDA	Pyruvate metabolism	THYM	0.081877651
CDA	Regulation_of_autophagy	THYM	-0.049454116
CDA	Retinol metabolism	THYM	0.28526922
CDA	Riboflavin metabolism	THYM	0.267918549
CDA	Schmahl_pdgf_signaling	THYM	0.032107515
CDA	Selenocompound metabolism	THYM	-0.161998336
CDA	Signaling_by_hippo	THYM	-0.124763337

CDA	Sphingolipid metabolism	THYM	-0.157764352
CDA	Starch and sucrose metabo	THYM	-0.040561946
CDA	Steroid biosynthesis	THYM	0.197728208
CDA	Steroid hormone biosynth	THYM	0.230910998
CDA	Sulfur metabolism	THYM	0.212119681
CDA	Synthesis and degradation	THYM	-0.11415693
CDA	T helper cell	THYM	-0.102934891
CDA	T helper1 (th1) cell	THYM	0.101837715
CDA	T helper17 (th17) cell	THYM	0.006907662
CDA	T helper2 (th2) cell	THYM	-0.053502452
CDA	T helper9 (th9) cell	THYM	-0.191132124
CDA	Taurine and hypotaurine r	THYM	0.306128698
CDA	Terpenoid backbone biosy	THYM	0.052061565
CDA	Tgf_beta_signaling_pathw	THYM	-0.035363918
CDA	Thiamine metabolism	THYM	0.301901098
CDA	Tnfa_signaling_via_nfk	THYM	0.289690814
CDA	Tryptophan metabolism	THYM	0.255005763
CDA	Tumor endothelial cell	THYM	0.081935941
CDA	Tyrosine metabolism	THYM	0.464386892
CDA	Ubiquinone and other ter	THYM	0.331318164
CDA	Valine, leucine and isoleu	THYM	0.284217634
CDA	Valine, leucine and isoleu	THYM	-0.085152057
CDA	Vascular endothelial cell	THYM	0.375970871
CDA	Vascular smooth muscle c	THYM	0.349250924
CDA	Vegf_signaling_pathway	THYM	0.082565905
CDA	Vitamin b6 metabolism	THYM	0.119921448
CDA	Willert_wnt_signaling	THYM	0.085350793
CDA	Wnt_beta_catenin_signali	THYM	0.09501211
UCK1	Abnormal plasma cell	THYM	0.156249144
UCK1	Activated b cell	THYM	-0.002541626
UCK1	Activated cd4+ t cell	THYM	-0.123135134
UCK1	Activated t cell	THYM	0.264468379
UCK1	Alanine, aspartate and glu	THYM	0.072532349
UCK1	Alcala_apoptosis	THYM	0.414213577
UCK1	Alpha-linolenic acid meta	THYM	0.33137411
UCK1	Amino sugar and nucleoti	THYM	0.379588072
UCK1	Ampk_pathway	THYM	0.124469635
UCK1	Angiogenesis	THYM	-0.260703359
UCK1	Arachidonic acid metabo	THYM	0.378140951
UCK1	Arginine and proline met	THYM	0.211055717
UCK1	Arginine biosynthesis	THYM	0.008492383
UCK1	Ascorbate and aldarate m	THYM	0.061397278
UCK1	Atypical memory b cell	THYM	0.122795199

UCK1	Axl+siglec6+ dendritic ce	THYM	-0.183898209
UCK1	B cell	THYM	-0.193839099
UCK1	B1 cell	THYM	0.141590141
UCK1	Basal cell	THYM	0.012711717
UCK1	Beta-alanine metabolism	THYM	0.112612516
UCK1	Biosynthesis of unsaturate	THYM	0.59397711
UCK1	Biotin metabolism	THYM	-0.05408329
UCK1	Butanoate metabolism	THYM	0.471952717
UCK1	Caffeine metabolism	THYM	0.049644082
UCK1	Cancer stem cell	THYM	-0.586149505
UCK1	Cancer stem-like cell	THYM	-0.364165777
UCK1	Cd4+ cytotoxic t cell	THYM	-0.027581397
UCK1	Cd4+ memory t cell	THYM	0.110100347
UCK1	Cd4+ regulatory t cell	THYM	-0.110932746
UCK1	Cd4+ t helper cell	THYM	0.268834879
UCK1	Cd4+cd25+ regulatory t c	THYM	0.247633281
UCK1	Cd8+ cytotoxic t cell	THYM	0.285386966
UCK1	Cd8+ regulatory t cell	THYM	0.259698831
UCK1	Cell_cycle	THYM	-0.052189722
UCK1	Chandran_metastasis_top5	THYM	-0.63841634
UCK1	Citrate cycle (tca cycle)	THYM	0.277231841
UCK1	Cysteine and methionine r	THYM	0.044080269
UCK1	Cytokine induced killer ce	THYM	0.330286233
UCK1	D-arginine and d-ornithin	THYM	0.111864539
UCK1	D-glutamine and d-glutan	THYM	-0.598472285
UCK1	Dendritic cell	THYM	-0.027987167
UCK1	Dna_repair	THYM	0.507272415
UCK1	Dna_replication	THYM	0.277245089
UCK1	Double-negative memory	THYM	0.248185251
UCK1	Drug metabolism - cytoch	THYM	0.459635459
UCK1	Drug metabolism - other c	THYM	0.636095196
UCK1	E2f_targets	THYM	0.125310089
UCK1	Ecm_receptor_interaction	THYM	-0.374540495
UCK1	Effector cd4+ memory t (	THYM	0.114609988
UCK1	Effector cd8+ memory t (	THYM	-0.248876014
UCK1	Effector memory t cell	THYM	0.147877907
UCK1	Effector regulatory t (treg	THYM	0.020013339
UCK1	Elvidge_hif1a_targets_up	THYM	-0.056414896
UCK1	Endothelial cell	THYM	-0.342099758
UCK1	Eosinophil	THYM	-0.039879547
UCK1	Ether lipid metabolism	THYM	0.167014924
UCK1	Exhausted cd4+ t cell	THYM	-0.306373634
UCK1	Exhausted cd8+ t cell	THYM	-0.353390447

UCK1	Exhausted t cell	THYM	0.257644762
UCK1	Fat cell (adipocyte)	THYM	0.296131071
UCK1	Fatty acid biosynthesis	THYM	0.111941024
UCK1	Fatty acid degradation	THYM	0.109441723
UCK1	Fatty acid elongation	THYM	0.587228002
UCK1	Fibroblast	THYM	-0.445426531
UCK1	Folate biosynthesis	THYM	0.474693774
UCK1	Follicular b cell	THYM	-0.135189162
UCK1	Follicular dendritic cell	THYM	0.002640157
UCK1	Follicular helper (tfh) t ce	THYM	0.134216323
UCK1	Follicular t cell	THYM	0.401212076
UCK1	Foxp3+il-17+ t cell	THYM	-0.410868877
UCK1	Fructose and mannose me	THYM	0.430241144
UCK1	G2m_checkpoint	THYM	0.011430855
UCK1	Galactose metabolism	THYM	0.583881678
UCK1	Galie_tumor_stemness_ge	THYM	-0.427802633
UCK1	Glutathione metabolism	THYM	0.558079036
UCK1	Glycerolipid metabolism	THYM	0.433491869
UCK1	Glycerophospholipid metæ	THYM	0.501605219
UCK1	Glycine, serine and threor	THYM	0.509033335
UCK1	Glycolysis / gluconeogene	THYM	0.188141572
UCK1	Glycosaminoglycan biosy	THYM	0.084539871
UCK1	Glycosaminoglycan biosy	THYM	-0.001706756
UCK1	Glycosaminoglycan biosy	THYM	0.025407493
UCK1	Glycosaminoglycan degra	THYM	0.010321089
UCK1	Glycosphingolipid biosyn	THYM	0.076400923
UCK1	Glycosphingolipid biosyn	THYM	0.049563213
UCK1	Glycosphingolipid biosyn	THYM	-0.101005102
UCK1	Glycosylphosphatidylinos	THYM	0.320398202
UCK1	Glyoxylate and dicarboxy	THYM	0.466246267
UCK1	Granulocyte	THYM	-0.203960319
UCK1	Hedgehog_signaling	THYM	-0.518609609
UCK1	Histidine metabolism	THYM	0.144521548
UCK1	Hypoxia	THYM	-0.167135723
UCK1	Il-17alpha t cell	THYM	0.219082522
UCK1	Il2_stat5_signaling	THYM	-0.310226976
UCK1	Il6_jak_stat3_signaling	THYM	-0.475423677
UCK1	Immune_checkpoints_tur	THYM	0.032387704
UCK1	Immune_inhibition_cytok	THYM	0.029552848
UCK1	Inositol phosphate metabo	THYM	-0.574327394
UCK1	Interleukin_6_signaling	THYM	-0.750166386
UCK1	Jaeger_metastasis_up	THYM	-0.020301626
UCK1	Jain_nfkb_signaling	THYM	0.128701324

UCK1	Kras_signaling_up	THYM	-0.459448757
UCK1	Linoleic acid metabolism	THYM	0.294311853
UCK1	Lipoic acid metabolism	THYM	0.217475526
UCK1	Lysine degradation	THYM	-0.040169579
UCK1	Lysosome	THYM	0.157817003
UCK1	M1 macrophage	THYM	-0.500429549
UCK1	M2 macrophage	THYM	-0.102813659
UCK1	Mannose type o-glycan bi	THYM	0.198338274
UCK1	Mapk_signaling_pathway	THYM	-0.56712657
UCK1	Mapk3_erk1_activation	THYM	-0.741376524
UCK1	Marginal zone b cell	THYM	-0.058916367
UCK1	Memory b cell	THYM	-0.105167541
UCK1	Mesenchymal cell	THYM	-0.219809054
UCK1	Mesenchymal stem cell	THYM	-0.556125341
UCK1	Metabolism of xenobiotic	THYM	0.527976561
UCK1	Migrating cancer stem cel	THYM	-0.261643059
UCK1	Mitotic_spindle	THYM	-0.487907511
UCK1	Monocyte	THYM	-0.141349186
UCK1	Mtor_signaling_pathway	THYM	-0.249408721
UCK1	Mtorc1_signaling	THYM	0.168242036
UCK1	Mucin type o-glycan biosy	THYM	-0.484213219
UCK1	Myc_targets_v1	THYM	0.340668367
UCK1	Myeloid cell	THYM	-0.160462724
UCK1	N-glycan biosynthesis	THYM	0.05121688
UCK1	Naive b cell	THYM	0.011513459
UCK1	Naive cd4+ t cell	THYM	0.074458904
UCK1	Naive cd8+ t cell	THYM	0.115518056
UCK1	Natural killer cell	THYM	0.120485064
UCK1	Natural killer t (nkt) cell	THYM	0.137100687
UCK1	Natural regulatory t (treg)	THYM	0.110545835
UCK1	Neomycin, kanamycin and	THYM	0.368312605
UCK1	Neutrophil	THYM	-0.218988667
UCK1	Nicotinate and nicotinami	THYM	0.015959526
UCK1	Nitrogen metabolism	THYM	0.251430294
UCK1	Nod_like_receptor_signal	THYM	-0.46320593
UCK1	Notch_signaling	THYM	-0.220562072
UCK1	One carbon pool by folate	THYM	0.240791927
UCK1	Other glycan degradation	THYM	-0.09372225
UCK1	Other types of o-glycan b	THYM	0.299468017
UCK1	Oxidative phosphorylatior	THYM	0.630672418
UCK1	P53_pathway	THYM	-0.002381514
UCK1	P53_signaling_pathway	THYM	-0.275127273
UCK1	Pantothenate and coa bios	THYM	0.060147544

UCK1	Pentose and glucuronate i	THYM	0.436978555
UCK1	Pentose phosphate pathwa	THYM	0.428161538
UCK1	Pericyte	THYM	-0.208187882
UCK1	Phenylalanine metabolism	THYM	0.485815076
UCK1	Phenylalanine, tyrosine ar	THYM	0.325125801
UCK1	Phosphonate and phosphir	THYM	0.073081806
UCK1	Pi3k_akt_activation	THYM	-0.265898228
UCK1	Pi3k_akt_mtor_signaling	THYM	0.112791536
UCK1	Porphyrin and chlorophyl	THYM	0.374977129
UCK1	Primary bile acid biosynt	THYM	0.372304315
UCK1	Propanoate metabolism	THYM	-0.03571022
UCK1	Purine metabolism	THYM	0.445872248
UCK1	Pyrimidine metabolism	THYM	0.422791414
UCK1	Pyruvate metabolism	THYM	0.340786754
UCK1	Regulation_of_autophagy	THYM	0.188904463
UCK1	Retinol metabolism	THYM	0.327562322
UCK1	Riboflavin metabolism	THYM	0.492065234
UCK1	Schmahl_pdgf_signaling	THYM	-0.567943811
UCK1	Selenocompound metabol	THYM	-0.537363903
UCK1	Signaling_by_hippo	THYM	-0.468462472
UCK1	Sphingolipid metabolism	THYM	-0.314953373
UCK1	Starch and sucrose metabo	THYM	0.58295886
UCK1	Steroid biosynthesis	THYM	0.235694127
UCK1	Steroid hormone biosynth	THYM	0.403736097
UCK1	Sulfur metabolism	THYM	-0.088941842
UCK1	Synthesis and degradation	THYM	0.427763019
UCK1	T helper cell	THYM	0.127073197
UCK1	T helper1 (th1) cell	THYM	0.045700952
UCK1	T helper17 (th17) cell	THYM	-0.111789656
UCK1	T helper2 (th2) cell	THYM	0.173078076
UCK1	T helper9 (th9) cell	THYM	0.310126752
UCK1	Taurine and hypotaurine r	THYM	-0.026727042
UCK1	Terpenoid backbone biosy	THYM	0.482995649
UCK1	Tgf_beta_signaling_pathw	THYM	-0.476316422
UCK1	Thiamine metabolism	THYM	0.560829317
UCK1	Tnfa_signaling_via_nfb	THYM	-0.482717029
UCK1	Tryptophan metabolism	THYM	0.235963987
UCK1	Tumor endothelial cell	THYM	0.126386757
UCK1	Tyrosine metabolism	THYM	0.546062329
UCK1	Ubiquinone and other ter	THYM	0.382375259
UCK1	Valine, leucine and isoleu	THYM	0.179557154
UCK1	Valine, leucine and isoleu	THYM	0.129926866
UCK1	Vascular endothelial cell	THYM	-0.274211466

UCK1	Vascular smooth muscle c	THYM	-0.303548177
UCK1	Vegf_signaling_pathway	THYM	0.032842481
UCK1	Vitamin b6 metabolism	THYM	0.20596165
UCK1	Willert_wnt_signaling	THYM	-0.128115755
UCK1	Wnt_beta_catenin_signali	THYM	-0.302251224
UCK2	Abnormal plasma cell	THYM	0.359407483
UCK2	Activated b cell	THYM	0.496628411
UCK2	Activated cd4+ t cell	THYM	0.363175762
UCK2	Activated t cell	THYM	0.629049761
UCK2	Alanine, aspartate and glu	THYM	0.471351701
UCK2	Alcala_apoptosis	THYM	0.731186875
UCK2	Alpha-linolenic acid meta	THYM	0.232246219
UCK2	Amino sugar and nucleoti	THYM	0.425431322
UCK2	Ampk_pathway	THYM	0.627201475
UCK2	Angiogenesis	THYM	-0.57889437
UCK2	Arachidonic acid metabol	THYM	0.220598488
UCK2	Arginine and proline metε	THYM	0.091367112
UCK2	Arginine biosynthesis	THYM	0.17730442
UCK2	Ascorbate and aldarate mε	THYM	0.046677501
UCK2	Atypical memory b cell	THYM	0.544124456
UCK2	Axl+siglec6+ dendritic ce	THYM	-0.000276211
UCK2	B cell	THYM	0.314672584
UCK2	B1 cell	THYM	0.703257584
UCK2	Basal cell	THYM	-0.193654917
UCK2	Beta-alanine metabolism	THYM	-0.187153343
UCK2	Biosynthesis of unsaturate	THYM	0.508288001
UCK2	Biotin metabolism	THYM	-0.070955506
UCK2	Butanoate metabolism	THYM	0.654499393
UCK2	Caffeine metabolism	THYM	0.376937302
UCK2	Cancer stem cell	THYM	-0.424019723
UCK2	Cancer stem-like cell	THYM	-0.29101055
UCK2	Cd4+ cytotoxic t cell	THYM	0.084359308
UCK2	Cd4+ memory t cell	THYM	0.487220339
UCK2	Cd4+ regulatory t cell	THYM	0.264778835
UCK2	Cd4+ t helper cell	THYM	0.531522156
UCK2	Cd4+cd25+ regulatory t c	THYM	0.543785418
UCK2	Cd8+ cytotoxic t cell	THYM	0.633049021
UCK2	Cd8+ regulatory t cell	THYM	0.562213019
UCK2	Cell_cycle	THYM	0.647985874
UCK2	Chandran_metastasis_top5	THYM	0.012884781
UCK2	Citrate cycle (tca cycle)	THYM	0.618244714
UCK2	Cysteine and methionine r	THYM	0.650131489
UCK2	Cytokine induced killer cε	THYM	0.592579166

UCK2	D-arginine and d-ornithin	THYM	0.218125601
UCK2	D-glutamine and d-glutan	THYM	-0.226237642
UCK2	Dendritic cell	THYM	0.076369283
UCK2	Dna_repair	THYM	0.636425064
UCK2	Dna_replication	THYM	0.833396774
UCK2	Double-negative memory	THYM	0.429012735
UCK2	Drug metabolism - cytoch	THYM	0.193269076
UCK2	Drug metabolism - other	THYM	0.599445661
UCK2	E2f_targets	THYM	0.753149166
UCK2	Ecm_receptor_interaction	THYM	-0.634162665
UCK2	Effector cd4+ memory t	THYM	0.392792732
UCK2	Effector cd8+ memory t	THYM	0.161094812
UCK2	Effector memory t cell	THYM	0.545684795
UCK2	Effector regulatory t (treg	THYM	0.414544892
UCK2	Elvidge_hif1a_targets_up	THYM	0.67683959
UCK2	Endothelial cell	THYM	-0.316796811
UCK2	Eosinophil	THYM	0.285588974
UCK2	Ether lipid metabolism	THYM	-0.012905714
UCK2	Exhausted cd4+ t cell	THYM	0.395972214
UCK2	Exhausted cd8+ t cell	THYM	0.188576496
UCK2	Exhausted t cell	THYM	0.584160607
UCK2	Fat cell (adipocyte)	THYM	-0.271950795
UCK2	Fatty acid biosynthesis	THYM	0.031793074
UCK2	Fatty acid degradation	THYM	0.017245465
UCK2	Fatty acid elongation	THYM	0.434666434
UCK2	Fibroblast	THYM	-0.400451555
UCK2	Folate biosynthesis	THYM	0.521511447
UCK2	Follicular b cell	THYM	0.342535954
UCK2	Follicular dendritic cell	THYM	0.333690809
UCK2	Follicular helper (tfh) t ce	THYM	0.627802383
UCK2	Follicular t cell	THYM	0.614808463
UCK2	Foxp3+il-17+ t cell	THYM	-0.079137806
UCK2	Fructose and mannose me	THYM	0.488390653
UCK2	G2m_checkpoint	THYM	0.669016857
UCK2	Galactose metabolism	THYM	0.499319169
UCK2	Galie_tumor_stemness_ge	THYM	-0.576769281
UCK2	Glutathione metabolism	THYM	0.408738414
UCK2	Glycerolipid metabolism	THYM	0.521907875
UCK2	Glycerophospholipid metæ	THYM	-0.017255177
UCK2	Glycine, serine and threor	THYM	0.347747614
UCK2	Glycolysis / gluconeogene	THYM	0.436241169
UCK2	Glycosaminoglycan biosy	THYM	-0.469730558
UCK2	Glycosaminoglycan biosy	THYM	-0.547095837

UCK2	Glycosaminoglycan biosyn	THYM	0.096361891
UCK2	Glycosaminoglycan degra	THYM	-0.687754934
UCK2	Glycosphingolipid biosyn	THYM	-0.499648488
UCK2	Glycosphingolipid biosyn	THYM	-0.588898986
UCK2	Glycosphingolipid biosyn	THYM	-0.452831008
UCK2	Glycosylphosphatidylinos	THYM	0.11470331
UCK2	Glyoxylate and dicarboxy	THYM	0.605887371
UCK2	Granulocyte	THYM	0.037495127
UCK2	Hedgehog_signaling	THYM	-0.678660714
UCK2	Histidine metabolism	THYM	-0.358353031
UCK2	Hypoxia	THYM	-0.022286447
UCK2	Il-17alpha t cell	THYM	0.560427407
UCK2	Il2_stat5_signaling	THYM	-0.10435082
UCK2	Il6_jak_stat3_signaling	THYM	-0.153914082
UCK2	Immune_checkpoints_tur	THYM	0.145967447
UCK2	Immune_inhibition_cytok	THYM	0.088834557
UCK2	Inositol phosphate metabo	THYM	-0.161724359
UCK2	Interleukin_6_signaling	THYM	-0.394545102
UCK2	Jaeger_metastasis_up	THYM	0.589210624
UCK2	Jain_nfkb_signaling	THYM	0.773560237
UCK2	Kras_signaling_up	THYM	-0.130860282
UCK2	Linoleic acid metabolism	THYM	0.27970892
UCK2	Lipoic acid metabolism	THYM	-0.078141518
UCK2	Lysine degradation	THYM	0.080126683
UCK2	Lysosome	THYM	-0.453374528
UCK2	M1 macrophage	THYM	-0.197751489
UCK2	M2 macrophage	THYM	-0.085809282
UCK2	Mannose type o-glycan bi	THYM	-0.466144536
UCK2	Mapk_signaling_pathway	THYM	-0.240341259
UCK2	Mapk3_erk1_activation	THYM	-0.307013433
UCK2	Marginal zone b cell	THYM	0.43689133
UCK2	Memory b cell	THYM	0.258498801
UCK2	Mesenchymal cell	THYM	-0.444266734
UCK2	Mesenchymal stem cell	THYM	-0.358458775
UCK2	Metabolism of xenobiotic	THYM	0.236046192
UCK2	Migrating cancer stem cel	THYM	-0.5348191
UCK2	Mitotic_spindle	THYM	0.034141339
UCK2	Monocyte	THYM	0.17082087
UCK2	Mtor_signaling_pathway	THYM	-0.093702352
UCK2	Mtorc1_signaling	THYM	0.722713851
UCK2	Mucin type o-glycan biosy	THYM	-0.354225338
UCK2	Myc_targets_v1	THYM	0.801240711
UCK2	Myeloid cell	THYM	0.245791383

UCK2	N-glycan biosynthesis	THYM	-0.160027831
UCK2	Naive b cell	THYM	0.558484984
UCK2	Naive cd4+ t cell	THYM	0.212375467
UCK2	Naive cd8+ t cell	THYM	0.233530144
UCK2	Natural killer cell	THYM	0.458445343
UCK2	Natural killer t (nkt) cell	THYM	0.634275596
UCK2	Natural regulatory t (treg)	THYM	0.51759903
UCK2	Neomycin, kanamycin and	THYM	0.511653284
UCK2	Neutrophil	THYM	0.128099047
UCK2	Nicotinate and nicotinami	THYM	0.433799444
UCK2	Nitrogen metabolism	THYM	-0.188462931
UCK2	Nod_like_receptor_signal	THYM	-0.161553545
UCK2	Notch_signaling	THYM	-0.698469922
UCK2	One carbon pool by folate	THYM	0.800465426
UCK2	Other glycan degradation	THYM	-0.581065261
UCK2	Other types of o-glycan b	THYM	-0.40337659
UCK2	Oxidative phosphorylatio	THYM	0.648846822
UCK2	P53_pathway	THYM	-0.408826826
UCK2	P53_signaling_pathway	THYM	0.418107462
UCK2	Pantothenate and coa bios	THYM	0.406642982
UCK2	Pentose and glucuronate i	THYM	0.321158813
UCK2	Pentose phosphate pathwa	THYM	0.681761141
UCK2	Pericyte	THYM	-0.329810984
UCK2	Phenylalanine metabolism	THYM	0.277303537
UCK2	Phenylalanine, tyrosine ar	THYM	0.524327056
UCK2	Phosphonate and phosphir	THYM	0.266718257
UCK2	Pi3k_akt_activation	THYM	-0.315892027
UCK2	Pi3k_akt_mtor_signaling	THYM	0.647039378
UCK2	Porphyrin and chlorophyl	THYM	0.567706899
UCK2	Primary bile acid biosynt	THYM	0.185941653
UCK2	Propanoate metabolism	THYM	0.136545246
UCK2	Purine metabolism	THYM	0.831131869
UCK2	Pyrimidine metabolism	THYM	0.793580704
UCK2	Pyruvate metabolism	THYM	0.373170177
UCK2	Regulation_of_autophagy	THYM	0.477471442
UCK2	Retinol metabolism	THYM	0.326734901
UCK2	Riboflavin metabolism	THYM	0.419271603
UCK2	Schmahl_pdgf_signaling	THYM	-0.579039281
UCK2	Selenocompound metabol	THYM	0.222608024
UCK2	Signaling_by_hippo	THYM	-0.727044596
UCK2	Sphingolipid metabolism	THYM	-0.384979949
UCK2	Starch and sucrose metabo	THYM	0.371301735
UCK2	Steroid biosynthesis	THYM	0.283044727

UCK2	Steroid hormone biosynth	THYM	0.383747021
UCK2	Sulfur metabolism	THYM	0.034877634
UCK2	Synthesis and degradation	THYM	0.513392823
UCK2	T helper cell	THYM	0.535576451
UCK2	T helper1 (th1) cell	THYM	0.318336688
UCK2	T helper17 (th17) cell	THYM	0.353248865
UCK2	T helper2 (th2) cell	THYM	0.472735828
UCK2	T helper9 (th9) cell	THYM	0.568693505
UCK2	Taurine and hypotaurine r	THYM	-0.230956869
UCK2	Terpenoid backbone biosy	THYM	0.631844416
UCK2	Tgf_beta_signaling_pathw	THYM	-0.794751118
UCK2	Thiamine metabolism	THYM	0.307635758
UCK2	Tnfa_signaling_via_nfkb	THYM	-0.173034359
UCK2	Tryptophan metabolism	THYM	0.089791891
UCK2	Tumor endothelial cell	THYM	0.171885453
UCK2	Tyrosine metabolism	THYM	-0.010033727
UCK2	Ubiquinone and other terq	THYM	0.251986164
UCK2	Valine, leucine and isoleu	THYM	0.415765309
UCK2	Valine, leucine and isoleu	THYM	0.291589594
UCK2	Vascular endothelial cell	THYM	-0.531820275
UCK2	Vascular smooth muscle c	THYM	-0.121314663
UCK2	Vegf_signaling_pathway	THYM	0.258557878
UCK2	Vitamin b6 metabolism	THYM	0.088452357
UCK2	Willert_wnt_signaling	THYM	0.209329006
UCK2	Wnt_beta_catenin_signali	THYM	-0.713901087
UCKL1	Abnormal plasma cell	THYM	0.291882082
UCKL1	Activated b cell	THYM	0.380785818
UCKL1	Activated cd4+ t cell	THYM	0.112790321
UCKL1	Activated t cell	THYM	0.355085856
UCKL1	Alanine, aspartate and glu	THYM	0.381589595
UCKL1	Alcala_apoptosis	THYM	0.56545567
UCKL1	Alpha-linolenic acid meta	THYM	0.456136157
UCKL1	Amino sugar and nucleoti	THYM	0.575405895
UCKL1	Ampk_pathway	THYM	0.223433886
UCKL1	Angiogenesis	THYM	-0.263419226
UCKL1	Arachidonic acid metabol:	THYM	0.473526489
UCKL1	Arginine and proline metæ	THYM	0.385299757
UCKL1	Arginine biosynthesis	THYM	0.279445879
UCKL1	Ascorbate and aldarate mc	THYM	0.315328457
UCKL1	Atypical memory b cell	THYM	0.309857158
UCKL1	Axl+siglec6+ dendritic ce	THYM	0.064314825
UCKL1	B cell	THYM	0.168402683
UCKL1	B1 cell	THYM	0.396820644

UCKL1	Basal cell	THYM	0.049050333
UCKL1	Beta-alanine metabolism	THYM	0.090637873
UCKL1	Biosynthesis of unsaturate	THYM	0.476626611
UCKL1	Biotin metabolism	THYM	0.055208044
UCKL1	Butanoate metabolism	THYM	0.57314666
UCKL1	Caffeine metabolism	THYM	0.188585549
UCKL1	Cancer stem cell	THYM	-0.357830557
UCKL1	Cancer stem-like cell	THYM	-0.184765199
UCKL1	Cd4+ cytotoxic t cell	THYM	0.160265028
UCKL1	Cd4+ memory t cell	THYM	0.357817427
UCKL1	Cd4+ regulatory t cell	THYM	0.119247919
UCKL1	Cd4+ t helper cell	THYM	0.208730502
UCKL1	Cd4+cd25+ regulatory t c	THYM	0.221443337
UCKL1	Cd8+ cytotoxic t cell	THYM	0.397739613
UCKL1	Cd8+ regulatory t cell	THYM	0.224083099
UCKL1	Cell_cycle	THYM	0.110627356
UCKL1	Chandran_metastasis_top5	THYM	-0.418270613
UCKL1	Citrate cycle (tca cycle)	THYM	0.405471455
UCKL1	Cysteine and methionine r	THYM	0.373543753
UCKL1	Cytokine induced killer c	THYM	0.306699527
UCKL1	D-arginine and d-ornithin	THYM	0.275650141
UCKL1	D-glutamine and d-glutan	THYM	-0.290174788
UCKL1	Dendritic cell	THYM	0.081987488
UCKL1	Dna_repair	THYM	0.569345444
UCKL1	Dna_replication	THYM	0.459702559
UCKL1	Double-negative memory	THYM	0.490140552
UCKL1	Drug metabolism - cytoch	THYM	0.438207437
UCKL1	Drug metabolism - other	THYM	0.712161625
UCKL1	E2f_targets	THYM	0.316504369
UCKL1	Ecm_receptor_interaction	THYM	-0.405663141
UCKL1	Effector cd4+ memory t (	THYM	0.131552235
UCKL1	Effector cd8+ memory t (	THYM	-0.02221634
UCKL1	Effector memory t cell	THYM	0.21760065
UCKL1	Effector regulatory t (treg	THYM	0.04045111
UCKL1	Elvidge_hif1a_targets_up	THYM	0.261826691
UCKL1	Endothelial cell	THYM	-0.378200753
UCKL1	Eosinophil	THYM	0.223736962
UCKL1	Ether lipid metabolism	THYM	0.205888813
UCKL1	Exhausted cd4+ t cell	THYM	0.069486161
UCKL1	Exhausted cd8+ t cell	THYM	-0.041990365
UCKL1	Exhausted t cell	THYM	0.348197545
UCKL1	Fat cell (adipocyte)	THYM	0.059719495
UCKL1	Fatty acid biosynthesis	THYM	0.173709965

UCKL1	Fatty acid degradation	THYM	0.076305447
UCKL1	Fatty acid elongation	THYM	0.477237945
UCKL1	Fibroblast	THYM	-0.290684387
UCKL1	Folate biosynthesis	THYM	0.534305837
UCKL1	Follicular b cell	THYM	0.229843673
UCKL1	Follicular dendritic cell	THYM	0.243795559
UCKL1	Follicular helper (tfh) t ce	THYM	0.30390222
UCKL1	Follicular t cell	THYM	0.477900247
UCKL1	Foxp3+il-17+ t cell	THYM	-0.109070755
UCKL1	Fructose and mannose me	THYM	0.668418558
UCKL1	G2m_checkpoint	THYM	0.154563447
UCKL1	Galactose metabolism	THYM	0.656866441
UCKL1	Galie_tumor_stemness_ge	THYM	-0.426135508
UCKL1	Glutathione metabolism	THYM	0.607759915
UCKL1	Glycerolipid metabolism	THYM	0.620472306
UCKL1	Glycerophospholipid metæ	THYM	0.426434136
UCKL1	Glycine, serine and threor	THYM	0.542575305
UCKL1	Glycolysis / gluconeogene	THYM	0.510169846
UCKL1	Glycosaminoglycan biosy	THYM	-0.061592989
UCKL1	Glycosaminoglycan biosy	THYM	-0.171359412
UCKL1	Glycosaminoglycan biosy	THYM	0.075665878
UCKL1	Glycosaminoglycan degra	THYM	-0.158500515
UCKL1	Glycosphingolipid biosyn	THYM	0.012614308
UCKL1	Glycosphingolipid biosyn	THYM	-0.050891373
UCKL1	Glycosphingolipid biosyn	THYM	0.027531646
UCKL1	Glycosylphosphatidylinos	THYM	0.397747181
UCKL1	Glyoxylate and dicarboxy	THYM	0.53685463
UCKL1	Granulocyte	THYM	-0.00087575
UCKL1	Hedgehog_signaling	THYM	-0.606903563
UCKL1	Histidine metabolism	THYM	-0.081127229
UCKL1	Hypoxia	THYM	0.142685064
UCKL1	Il-17ralpha t cell	THYM	0.211847401
UCKL1	Il2_stat5_signaling	THYM	0.011691873
UCKL1	Il6_jak_stat3_signaling	THYM	-0.160671369
UCKL1	Immune_checkpoints_tur	THYM	0.295291108
UCKL1	Immune_inhibition_cytok	THYM	0.286784081
UCKL1	Inositol phosphate metabo	THYM	-0.464370295
UCKL1	Interleukin_6_signaling	THYM	-0.615016837
UCKL1	Jaeger_metastasis_up	THYM	0.236120418
UCKL1	Jain_nfkb_signaling	THYM	0.40088636
UCKL1	Kras_signaling_up	THYM	-0.220585374
UCKL1	Linoleic acid metabolism	THYM	0.369883368
UCKL1	Lipoic acid metabolism	THYM	0.048191928

UCKL1	Lysine degradation	THYM	-0.148931317
UCKL1	Lysosome	THYM	0.059010632
UCKL1	M1 macrophage	THYM	-0.172101943
UCKL1	M2 macrophage	THYM	0.06042859
UCKL1	Mannose type o-glycan bi	THYM	-0.032843334
UCKL1	Mapk_signaling_pathway	THYM	-0.339837305
UCKL1	Mapk3_erk1_activation	THYM	-0.632839949
UCKL1	Marginal zone b cell	THYM	0.146659922
UCKL1	Memory b cell	THYM	0.311602091
UCKL1	Mesenchymal cell	THYM	-0.231465036
UCKL1	Mesenchymal stem cell	THYM	-0.33843404
UCKL1	Metabolism of xenobiotic	THYM	0.536996021
UCKL1	Migrating cancer stem cel	THYM	-0.287808011
UCKL1	Mitotic_spindle	THYM	-0.41401022
UCKL1	Monocyte	THYM	0.139804044
UCKL1	Mtor_signaling_pathway	THYM	-0.32953378
UCKL1	Mtorc1_signaling	THYM	0.462683567
UCKL1	Mucin type o-glycan biosy	THYM	-0.511778507
UCKL1	Myc_targets_v1	THYM	0.52897767
UCKL1	Myeloid cell	THYM	0.069111656
UCKL1	N-glycan biosynthesis	THYM	0.209466883
UCKL1	Naive b cell	THYM	0.434376364
UCKL1	Naive cd4+ t cell	THYM	-0.049272202
UCKL1	Naive cd8+ t cell	THYM	-0.021896363
UCKL1	Natural killer cell	THYM	0.272174602
UCKL1	Natural killer t (nkt) cell	THYM	0.242351919
UCKL1	Natural regulatory t (treg)	THYM	0.143988373
UCKL1	Neomycin, kanamycin and	THYM	0.480681918
UCKL1	Neutrophil	THYM	0.163582211
UCKL1	Nicotinate and nicotinami	THYM	0.271967732
UCKL1	Nitrogen metabolism	THYM	-0.048975358
UCKL1	Nod_like_receptor_signal	THYM	-0.155056349
UCKL1	Notch_signaling	THYM	-0.354962926
UCKL1	One carbon pool by folate	THYM	0.410813688
UCKL1	Other glycan degradation	THYM	-0.116581254
UCKL1	Other types of o-glycan b	THYM	0.131765316
UCKL1	Oxidative phosphorylatio	THYM	0.66388629
UCKL1	P53_pathway	THYM	0.009910324
UCKL1	P53_signaling_pathway	THYM	-0.137886529
UCKL1	Pantothenate and coa bios	THYM	0.228449047
UCKL1	Pentose and glucuronate i	THYM	0.575049445
UCKL1	Pentose phosphate pathwa	THYM	0.671334761
UCKL1	Pericyte	THYM	-0.189413268

UCKL1	Phenylalanine metabolism	THYM	0.586321313
UCKL1	Phenylalanine, tyrosine ar	THYM	0.427332505
UCKL1	Phosphonate and phosphir	THYM	0.258667533
UCKL1	Pi3k_akt_activation	THYM	-0.498312788
UCKL1	Pi3k_akt_mtor_signaling	THYM	0.227111095
UCKL1	Porphyrin and chlorophyl	THYM	0.669980668
UCKL1	Primary bile acid biosynt	THYM	0.245711885
UCKL1	Propanoate metabolism	THYM	0.042399996
UCKL1	Purine metabolism	THYM	0.65933572
UCKL1	Pyrimidine metabolism	THYM	0.656852454
UCKL1	Pyruvate metabolism	THYM	0.381333775
UCKL1	Regulation_of_autophagy	THYM	0.337273568
UCKL1	Retinol metabolism	THYM	0.585539791
UCKL1	Riboflavin metabolism	THYM	0.498492568
UCKL1	Schmahl_pdgf_signaling	THYM	-0.476119816
UCKL1	Selenocompound metabol	THYM	-0.032269245
UCKL1	Signaling_by_hippo	THYM	-0.668977173
UCKL1	Sphingolipid metabolism	THYM	-0.272655092
UCKL1	Starch and sucrose metabo	THYM	0.41927193
UCKL1	Steroid biosynthesis	THYM	0.559143092
UCKL1	Steroid hormone biosynth	THYM	0.540672705
UCKL1	Sulfur metabolism	THYM	0.113159408
UCKL1	Synthesis and degradation	THYM	0.439144359
UCKL1	T helper cell	THYM	0.255592562
UCKL1	T helper1 (th1) cell	THYM	0.220512736
UCKL1	T helper17 (th17) cell	THYM	0.112323384
UCKL1	T helper2 (th2) cell	THYM	0.261179748
UCKL1	T helper9 (th9) cell	THYM	0.297808365
UCKL1	Taurine and hypotaurine r	THYM	0.165409344
UCKL1	Terpenoid backbone biosy	THYM	0.65441581
UCKL1	Tgf_beta_signaling_pathw	THYM	-0.607718022
UCKL1	Thiamine metabolism	THYM	0.575137111
UCKL1	Tnfa_signaling_via_nfkb	THYM	-0.121609534
UCKL1	Tryptophan metabolism	THYM	0.261171197
UCKL1	Tumor endothelial cell	THYM	0.246697841
UCKL1	Tyrosine metabolism	THYM	0.451240709
UCKL1	Ubiquinone and other ter	THYM	0.489843928
UCKL1	Valine, leucine and isoleu	THYM	0.499868851
UCKL1	Valine, leucine and isoleu	THYM	0.198146655
UCKL1	Vascular endothelial cell	THYM	-0.201426869
UCKL1	Vascular smooth muscle c	THYM	-0.009066172
UCKL1	Vegf_signaling_pathway	THYM	0.141329981
UCKL1	Vitamin b6 metabolism	THYM	0.152638645

UCKL1	Willert_wnt_signaling	THYM	0.168616421
UCKL1	Wnt_beta_catenin_signali	THYM	-0.476700382
UPP1	Abnormal plasma cell	THYM	-0.043102365
UPP1	Activated b cell	THYM	0.104174703
UPP1	Activated cd4+ t cell	THYM	-0.095925845
UPP1	Activated t cell	THYM	-0.214539368
UPP1	Alanine, aspartate and glu	THYM	0.273527385
UPP1	Alcala_apoptosis	THYM	-0.12851829
UPP1	Alpha-linolenic acid meta	THYM	0.58942116
UPP1	Amino sugar and nucleoti	THYM	0.391516329
UPP1	Ampk_pathway	THYM	-0.52418315
UPP1	Angiogenesis	THYM	0.606993514
UPP1	Arachidonic acid metabol	THYM	0.664550747
UPP1	Arginine and proline metæ	THYM	0.502984448
UPP1	Arginine biosynthesis	THYM	0.410483463
UPP1	Ascorbate and aldarate me	THYM	0.471867811
UPP1	Atypical memory b cell	THYM	-0.190925821
UPP1	Axl+siglec6+ dendritic ce	THYM	0.409339836
UPP1	B cell	THYM	0.094697039
UPP1	B1 cell	THYM	-0.254281031
UPP1	Basal cell	THYM	0.54444144
UPP1	Beta-alanine metabolism	THYM	0.320481506
UPP1	Biosynthesis of unsaturate	THYM	-0.047337956
UPP1	Biotin metabolism	THYM	0.2846072
UPP1	Butanoate metabolism	THYM	-0.067840377
UPP1	Caffeine metabolism	THYM	0.133734989
UPP1	Cancer stem cell	THYM	0.41323921
UPP1	Cancer stem-like cell	THYM	0.433727809
UPP1	Cd4+ cytotoxic t cell	THYM	0.470176782
UPP1	Cd4+ memory t cell	THYM	0.013236959
UPP1	Cd4+ regulatory t cell	THYM	0.039944632
UPP1	Cd4+ t helper cell	THYM	-0.436308826
UPP1	Cd4+cd25+ regulatory t c	THYM	-0.4110133
UPP1	Cd8+ cytotoxic t cell	THYM	-0.058188195
UPP1	Cd8+ regulatory t cell	THYM	-0.322361801
UPP1	Cell_cycle	THYM	-0.544051026
UPP1	Chandran_metastasis_topç	THYM	-0.387753752
UPP1	Citrate cycle (tca cycle)	THYM	-0.184400436
UPP1	Cysteine and methionine r	THYM	0.040426926
UPP1	Cytokine induced killer cæ	THYM	-0.371041683
UPP1	D-arginine and d-ornithin	THYM	0.290081345
UPP1	D-glutamine and d-glutan	THYM	0.06446675
UPP1	Dendritic cell	THYM	0.21604873

UPP1	Dna_repair	THYM	-0.167855145
UPP1	Dna_replication	THYM	-0.333711882
UPP1	Double-negative memory	THYM	0.265870652
UPP1	Drug metabolism - cytoch	THYM	0.45516301
UPP1	Drug metabolism - other	THYM	0.278159813
UPP1	E2f_targets	THYM	-0.44941526
UPP1	Ecm_receptor_interaction	THYM	0.419017125
UPP1	Effector cd4+ memory t (	THYM	-0.291892104
UPP1	Effector cd8+ memory t (	THYM	0.13196379
UPP1	Effector memory t cell	THYM	-0.242150881
UPP1	Effector regulatory t (treg	THYM	-0.462312307
UPP1	Elvidge_hif1a_targets_up	THYM	-0.248810512
UPP1	Endothelial cell	THYM	-0.008301055
UPP1	Eosinophil	THYM	0.276949902
UPP1	Ether lipid metabolism	THYM	0.50211278
UPP1	Exhausted cd4+ t cell	THYM	-0.021508045
UPP1	Exhausted cd8+ t cell	THYM	0.160014573
UPP1	Exhausted t cell	THYM	-0.146351986
UPP1	Fat cell (adipocyte)	THYM	0.133064082
UPP1	Fatty acid biosynthesis	THYM	-0.01179264
UPP1	Fatty acid degradation	THYM	0.058190511
UPP1	Fatty acid elongation	THYM	0.048182504
UPP1	Fibroblast	THYM	0.387001809
UPP1	Folate biosynthesis	THYM	0.165505857
UPP1	Follicular b cell	THYM	0.129605672
UPP1	Follicular dendritic cell	THYM	0.182426113
UPP1	Follicular helper (tfh) t ce	THYM	-0.203164718
UPP1	Follicular t cell	THYM	-0.105705041
UPP1	Foxp3+il-17+ t cell	THYM	0.349312766
UPP1	Fructose and mannose me	THYM	0.456496221
UPP1	G2m_checkpoint	THYM	-0.532402811
UPP1	Galactose metabolism	THYM	0.188445105
UPP1	Galie_tumor_stemness_ge	THYM	0.213017653
UPP1	Glutathione metabolism	THYM	0.438107337
UPP1	Glycerolipid metabolism	THYM	0.237145602
UPP1	Glycerophospholipid metæ	THYM	0.525461376
UPP1	Glycine, serine and threor	THYM	0.314871193
UPP1	Glycolysis / gluconeogene	THYM	0.347922387
UPP1	Glycosaminoglycan biosy1	THYM	0.485405913
UPP1	Glycosaminoglycan biosy1	THYM	0.237823387
UPP1	Glycosaminoglycan biosy1	THYM	0.195839188
UPP1	Glycosaminoglycan degra	THYM	0.468871767
UPP1	Glycosphingolipid biosyn1	THYM	0.437069538

UPP1	Glycosphingolipid biosyn	THYM	0.436309324
UPP1	Glycosphingolipid biosyn	THYM	0.598479177
UPP1	Glycosylphosphatidylinos	THYM	0.149267633
UPP1	Glyoxylate and dicarboxy	THYM	-0.07288114
UPP1	Granulocyte	THYM	0.335574754
UPP1	Hedgehog_signaling	THYM	0.113153737
UPP1	Histidine metabolism	THYM	0.448785511
UPP1	Hypoxia	THYM	0.589788501
UPP1	Il-17alpha t cell	THYM	-0.434942133
UPP1	Il2_stat5_signaling	THYM	0.600361315
UPP1	Il6_jak_stat3_signaling	THYM	0.416528692
UPP1	Immune_checkpoints_tur	THYM	0.458425994
UPP1	Immune_inhibition_cytok	THYM	0.606435089
UPP1	Inositol phosphate metabo	THYM	-0.416673823
UPP1	Interleukin_6_signaling	THYM	0.005524045
UPP1	Jaeger_metastasis_up	THYM	-0.244838142
UPP1	Jain_nfkb_signaling	THYM	-0.300400627
UPP1	Kras_signaling_up	THYM	0.401527943
UPP1	Linoleic acid metabolism	THYM	0.463395431
UPP1	Lipoic acid metabolism	THYM	0.090918879
UPP1	Lysine degradation	THYM	-0.442996564
UPP1	Lysosome	THYM	0.551040328
UPP1	M1 macrophage	THYM	0.442652381
UPP1	M2 macrophage	THYM	0.533523949
UPP1	Mannose type o-glycan bi	THYM	0.39520325
UPP1	Mapk_signaling_pathway	THYM	0.23332155
UPP1	Mapk3_erk1_activation	THYM	-0.179605632
UPP1	Marginal zone b cell	THYM	-0.339288505
UPP1	Memory b cell	THYM	0.446434658
UPP1	Mesenchymal cell	THYM	0.378860329
UPP1	Mesenchymal stem cell	THYM	0.363795515
UPP1	Metabolism of xenobiotic	THYM	0.513252179
UPP1	Migrating cancer stem cel	THYM	0.424725875
UPP1	Mitotic_spindle	THYM	-0.595655536
UPP1	Monocyte	THYM	0.39151294
UPP1	Mtor_signaling_pathway	THYM	-0.289029009
UPP1	Mtorc1_signaling	THYM	-0.073733752
UPP1	Mucin type o-glycan biosy	THYM	-0.082115764
UPP1	Myc_targets_v1	THYM	-0.256438635
UPP1	Myeloid cell	THYM	0.130775247
UPP1	N-glycan biosynthesis	THYM	0.315874716
UPP1	Naive b cell	THYM	0.086380667
UPP1	Naive cd4+ t cell	THYM	-0.303663764

UPP1	Naive cd8+ t cell	THYM	-0.399566694
UPP1	Natural killer cell	THYM	-0.034306663
UPP1	Natural killer t (nkt) cell	THYM	-0.45030236
UPP1	Natural regulatory t (treg)	THYM	-0.451928887
UPP1	Neomycin, kanamycin and	THYM	0.112314537
UPP1	Neutrophil	THYM	0.539756038
UPP1	Nicotinate and nicotinami	THYM	0.012055824
UPP1	Nitrogen metabolism	THYM	0.003613341
UPP1	Nod_like_receptor_signal	THYM	0.396535088
UPP1	Notch_signaling	THYM	0.337905005
UPP1	One carbon pool by folate	THYM	-0.34677375
UPP1	Other glycan degradation	THYM	0.374024087
UPP1	Other types of o-glycan b	THYM	0.473603836
UPP1	Oxidative phosphorylatio	THYM	0.069568022
UPP1	P53_pathway	THYM	0.597660283
UPP1	P53_signaling_pathway	THYM	-0.300676257
UPP1	Pantothenate and coa bios	THYM	-0.166762091
UPP1	Pentose and glucuronate i	THYM	0.240602919
UPP1	Pentose phosphate pathwa	THYM	0.10932613
UPP1	Pericyte	THYM	0.399192235
UPP1	Phenylalanine metabolism	THYM	0.569212218
UPP1	Phenylalanine, tyrosine ar	THYM	0.099740132
UPP1	Phosphonate and phosphir	THYM	-0.019109743
UPP1	Pi3k_akt_activation	THYM	-0.159850692
UPP1	Pi3k_akt_mtor_signaling	THYM	-0.466782959
UPP1	Porphyrim and chlorophyl	THYM	0.389343953
UPP1	Primary bile acid biosynt	THYM	0.10035005
UPP1	Propanoate metabolism	THYM	-0.101015233
UPP1	Purine metabolism	THYM	-0.069967902
UPP1	Pyrimidine metabolism	THYM	-0.137314447
UPP1	Pyruvate metabolism	THYM	0.080548026
UPP1	Regulation_of_autophagy	THYM	-0.070319051
UPP1	Retinol metabolism	THYM	0.403228296
UPP1	Riboflavin metabolism	THYM	0.222614591
UPP1	Schmahl_pdgf_signaling	THYM	0.209647391
UPP1	Selenocompound metabol	THYM	-0.117293823
UPP1	Signaling_by_hippo	THYM	0.016056926
UPP1	Sphingolipid metabolism	THYM	0.04180244
UPP1	Starch and sucrose metabo	THYM	-0.025613061
UPP1	Steroid biosynthesis	THYM	0.336997698
UPP1	Steroid hormone biosynth	THYM	0.373609877
UPP1	Sulfur metabolism	THYM	0.382971386
UPP1	Synthesis and degradation	THYM	-0.165763454

UPP1	T helper cell	THYM	-0.173847549
UPP1	T helper1 (th1) cell	THYM	0.186608374
UPP1	T helper17 (th17) cell	THYM	0.016960651
UPP1	T helper2 (th2) cell	THYM	-0.139342001
UPP1	T helper9 (th9) cell	THYM	-0.393361369
UPP1	Taurine and hypotaurine r	THYM	0.478956101
UPP1	Terpenoid backbone biosy	THYM	0.030961623
UPP1	Tgf_beta_signaling_pathw	THYM	0.089713121
UPP1	Thiamine metabolism	THYM	0.394943384
UPP1	Tnfa_signaling_via_nfkb	THYM	0.520511366
UPP1	Tryptophan metabolism	THYM	0.495546048
UPP1	Tumor endothelial cell	THYM	0.081935523
UPP1	Tyrosine metabolism	THYM	0.578292519
UPP1	Ubiquinone and other terp	THYM	0.34863333
UPP1	Valine, leucine and isoleu	THYM	0.511463338
UPP1	Valine, leucine and isoleu	THYM	-0.110464235
UPP1	Vascular endothelial cell	THYM	0.527160047
UPP1	Vascular smooth muscle c	THYM	0.482246559
UPP1	Vegf_signaling_pathway	THYM	0.114620817
UPP1	Vitamin b6 metabolism	THYM	0.159930963
UPP1	Willert_wnt_signaling	THYM	0.129988461
UPP1	Wnt_beta_catenin_signali	THYM	0.093185184
UPP2	Abnormal plasma cell	THYM	0.006229562
UPP2	Activated b cell	THYM	-0.199494636
UPP2	Activated cd4+ t cell	THYM	-0.194762823
UPP2	Activated t cell	THYM	-0.259154066
UPP2	Alanine, aspartate and glu	THYM	0.039331299
UPP2	Alcala_apoptosis	THYM	-0.389970647
UPP2	Alpha-linolenic acid meta	THYM	-0.061988606
UPP2	Amino sugar and nucleoti	THYM	-0.189330128
UPP2	Ampk_pathway	THYM	-0.235742404
UPP2	Angiogenesis	THYM	0.169432509
UPP2	Arachidonic acid metabol	THYM	-0.082398655
UPP2	Arginine and proline metæ	THYM	0.148391369
UPP2	Arginine biosynthesis	THYM	0.168359941
UPP2	Ascorbate and aldarate mε	THYM	0.096221622
UPP2	Atypical memory b cell	THYM	-0.206568771
UPP2	Axl+siglec6+ dendritic ce	THYM	-0.047100146
UPP2	B cell	THYM	-0.154220815
UPP2	B1 cell	THYM	-0.263378629
UPP2	Basal cell	THYM	0.269531241
UPP2	Beta-alanine metabolism	THYM	0.314633689
UPP2	Biosynthesis of unsaturate	THYM	-0.176513139

UPP2	Biotin metabolism	THYM	0.09329238
UPP2	Butanoate metabolism	THYM	-0.169694002
UPP2	Caffeine metabolism	THYM	-0.113720221
UPP2	Cancer stem cell	THYM	0.193236817
UPP2	Cancer stem-like cell	THYM	0.100502822
UPP2	Cd4+ cytotoxic t cell	THYM	-0.026924315
UPP2	Cd4+ memory t cell	THYM	-0.186276337
UPP2	Cd4+ regulatory t cell	THYM	-0.167596168
UPP2	Cd4+ t helper cell	THYM	-0.204901379
UPP2	Cd4+cd25+ regulatory t c	THYM	-0.212706134
UPP2	Cd8+ cytotoxic t cell	THYM	-0.268615988
UPP2	Cd8+ regulatory t cell	THYM	-0.23894097
UPP2	Cell_cycle	THYM	-0.301956163
UPP2	Chandran_metastasis_top5	THYM	0.048322041
UPP2	Citrate cycle (tca cycle)	THYM	-0.101039232
UPP2	Cysteine and methionine r	THYM	-0.172218644
UPP2	Cytokine induced killer cε	THYM	-0.224703734
UPP2	D-arginine and d-ornithin	THYM	-0.029926729
UPP2	D-glutamine and d-glutan	THYM	0.092814939
UPP2	Dendritic cell	THYM	-0.067708105
UPP2	Dna_repair	THYM	-0.286041097
UPP2	Dna_replication	THYM	-0.27624566
UPP2	Double-negative memory	THYM	-0.127687198
UPP2	Drug metabolism - cytoch	THYM	0.114202319
UPP2	Drug metabolism - other (	THYM	-0.146436425
UPP2	E2f_targets	THYM	-0.318832382
UPP2	Ecm_receptor_interaction	THYM	0.214652169
UPP2	Effector cd4+ memory t (	THYM	-0.134058558
UPP2	Effector cd8+ memory t (	THYM	-0.093935234
UPP2	Effector memory t cell	THYM	-0.189226528
UPP2	Effector regulatory t (treg	THYM	-0.208659494
UPP2	Elvidge_hif1a_targets_up	THYM	-0.295910371
UPP2	Endothelial cell	THYM	0.049781373
UPP2	Eosinophil	THYM	-0.121055373
UPP2	Ether lipid metabolism	THYM	0.012707149
UPP2	Exhausted cd4+ t cell	THYM	-0.191595339
UPP2	Exhausted cd8+ t cell	THYM	-0.081938146
UPP2	Exhausted t cell	THYM	-0.25497427
UPP2	Fat cell (adipocyte)	THYM	0.247101284
UPP2	Fatty acid biosynthesis	THYM	0.239815726
UPP2	Fatty acid degradation	THYM	0.082166372
UPP2	Fatty acid elongation	THYM	0.037201698
UPP2	Fibroblast	THYM	0.10749201

UPP2	Folate biosynthesis	THYM	-0.067438797
UPP2	Follicular b cell	THYM	-0.113374231
UPP2	Follicular dendritic cell	THYM	-0.077038145
UPP2	Follicular helper (tfh) t ce	THYM	-0.238878659
UPP2	Follicular t cell	THYM	-0.273702201
UPP2	Foxp3+il-17+ t cell	THYM	-0.000809176
UPP2	Fructose and mannose me	THYM	-0.170018716
UPP2	G2m_checkpoint	THYM	-0.307219367
UPP2	Galactose metabolism	THYM	-0.26673223
UPP2	Galie_tumor_stemness_ge	THYM	0.181718511
UPP2	Glutathione metabolism	THYM	-0.095535481
UPP2	Glycerolipid metabolism	THYM	-0.11203159
UPP2	Glycerophospholipid metæ	THYM	0.024761758
UPP2	Glycine, serine and threor	THYM	-0.015129323
UPP2	Glycolysis / gluconeogene	THYM	-0.126405954
UPP2	Glycosaminoglycan biosy1	THYM	0.086600567
UPP2	Glycosaminoglycan biosy1	THYM	0.051643654
UPP2	Glycosaminoglycan biosy1	THYM	0.189722368
UPP2	Glycosaminoglycan degra	THYM	0.148373127
UPP2	Glycosphingolipid biosyn1	THYM	0.013798422
UPP2	Glycosphingolipid biosyn1	THYM	0.057988886
UPP2	Glycosphingolipid biosyn1	THYM	0.071718444
UPP2	Glycosylphosphatidylinos	THYM	-0.085421212
UPP2	Glyoxylate and dicarboxy	THYM	-0.121541845
UPP2	Granulocyte	THYM	-0.028640398
UPP2	Hedgehog_signaling	THYM	0.211373248
UPP2	Histidine metabolism	THYM	0.29439279
UPP2	Hypoxia	THYM	0.055797008
UPP2	Il-17ralpha t cell	THYM	-0.21734365
UPP2	Il2_stat5_signaling	THYM	0.037378786
UPP2	Il6_jak_stat3_signaling	THYM	-0.014886436
UPP2	Immune_checkpoints_tunr	THYM	-0.060450489
UPP2	Immune_inhibition_cytok	THYM	0.012740011
UPP2	Inositol phosphate metabo	THYM	0.094204627
UPP2	Interleukin_6_signaling	THYM	0.112508944
UPP2	Jaeger_metastasis_up	THYM	-0.310144757
UPP2	Jain_nfkb_signaling	THYM	-0.313520473
UPP2	Kras_signaling_up	THYM	0.060027238
UPP2	Linoleic acid metabolism	THYM	0.059406816
UPP2	Lipoic acid metabolism	THYM	0.249255583
UPP2	Lysine degradation	THYM	0.211944537
UPP2	Lysosome	THYM	0.026594896
UPP2	M1 macrophage	THYM	0.032988428

UPP2	M2 macrophage	THYM	-0.015918464
UPP2	Mannose type o-glycan bi	THYM	0.316926706
UPP2	Mapk_signaling_pathway	THYM	0.135162707
UPP2	Mapk3_erk1_activation	THYM	0.076966258
UPP2	Marginal zone b cell	THYM	-0.176067442
UPP2	Memory b cell	THYM	-0.095608809
UPP2	Mesenchymal cell	THYM	0.130450651
UPP2	Mesenchymal stem cell	THYM	0.135012065
UPP2	Metabolism of xenobiotic	THYM	0.043145431
UPP2	Migrating cancer stem cel	THYM	0.190984986
UPP2	Mitotic_spindle	THYM	-0.1017481
UPP2	Monocyte	THYM	-0.108793992
UPP2	Mtor_signaling_pathway	THYM	0.134606152
UPP2	Mtorc1_signaling	THYM	-0.325833652
UPP2	Mucin type o-glycan bios	THYM	0.163916546
UPP2	Myc_targets_v1	THYM	-0.314407453
UPP2	Myeloid cell	THYM	-0.142085722
UPP2	N-glycan biosynthesis	THYM	-0.077768602
UPP2	Naive b cell	THYM	-0.196493521
UPP2	Naive cd4+ t cell	THYM	-0.041439519
UPP2	Naive cd8+ t cell	THYM	-0.10631582
UPP2	Natural killer cell	THYM	-0.244655501
UPP2	Natural killer t (nkt) cell	THYM	-0.329573992
UPP2	Natural regulatory t (treg)	THYM	-0.233925417
UPP2	Neomycin, kanamycin and	THYM	-0.248718571
UPP2	Neutrophil	THYM	-0.085386131
UPP2	Nicotinate and nicotinami	THYM	0.000154285
UPP2	Nitrogen metabolism	THYM	0.147421213
UPP2	Nod_like_receptor_signal	THYM	0.0323613
UPP2	Notch_signaling	THYM	0.253721786
UPP2	One carbon pool by folate	THYM	-0.281975877
UPP2	Other glycan degradation	THYM	0.006201228
UPP2	Other types of o-glycan b	THYM	0.241485527
UPP2	Oxidative phosphorylatio	THYM	-0.207351812
UPP2	P53_pathway	THYM	0.097839245
UPP2	P53_signaling_pathway	THYM	-0.272452316
UPP2	Pantothenate and coa bios	THYM	-0.140726353
UPP2	Pentose and glucuronate i	THYM	-0.105039616
UPP2	Pentose phosphate pathwa	THYM	-0.30985184
UPP2	Pericyte	THYM	0.129371047
UPP2	Phenylalanine metabolism	THYM	0.04131922
UPP2	Phenylalanine, tyrosine ar	THYM	-0.049113429
UPP2	Phosphonate and phosphir	THYM	-0.151758552

UPP2	Pi3k_akt_activation	THYM	0.199422831
UPP2	Pi3k_akt_mtor_signaling	THYM	-0.375989893
UPP2	Porphyrin and chlorophyl	THYM	-0.137154415
UPP2	Primary bile acid biosynt	THYM	0.135783697
UPP2	Propanoate metabolism	THYM	0.079676328
UPP2	Purine metabolism	THYM	-0.249849093
UPP2	Pyrimidine metabolism	THYM	-0.272516283
UPP2	Pyruvate metabolism	THYM	0.014218229
UPP2	Regulation_of_autophagy	THYM	-0.315464881
UPP2	Retinol metabolism	THYM	-0.030374932
UPP2	Riboflavin metabolism	THYM	-0.105197948
UPP2	Schmahl_pdgf_signaling	THYM	0.260485595
UPP2	Selenocompound metabol	THYM	-0.182941345
UPP2	Signaling_by_hippo	THYM	0.232644923
UPP2	Sphingolipid metabolism	THYM	0.224811326
UPP2	Starch and sucrose metabo	THYM	-0.07417123
UPP2	Steroid biosynthesis	THYM	-0.109248304
UPP2	Steroid hormone biosynth	THYM	0.04497109
UPP2	Sulfur metabolism	THYM	0.213691735
UPP2	Synthesis and degradation	THYM	-0.122506395
UPP2	T helper cell	THYM	-0.23586827
UPP2	T helper1 (th1) cell	THYM	-0.200761808
UPP2	T helper17 (th17) cell	THYM	-0.140447433
UPP2	T helper2 (th2) cell	THYM	-0.237343887
UPP2	T helper9 (th9) cell	THYM	-0.238515235
UPP2	Taurine and hypotaurine r	THYM	-0.019787051
UPP2	Terpenoid backbone biosy	THYM	-0.212105822
UPP2	Tgf_beta_signaling_pathw	THYM	0.210882208
UPP2	Thiamine metabolism	THYM	-0.017613131
UPP2	Tnfa_signaling_via_nfb	THYM	0.069824414
UPP2	Tryptophan metabolism	THYM	0.071877283
UPP2	Tumor endothelial cell	THYM	0.05408213
UPP2	Tyrosine metabolism	THYM	0.096342865
UPP2	Ubiquinone and other ter	THYM	-0.149641923
UPP2	Valine, leucine and isoleu	THYM	-0.205631841
UPP2	Valine, leucine and isoleu	THYM	0.105771153
UPP2	Vascular endothelial cell	THYM	0.093427379
UPP2	Vascular smooth muscle c	THYM	0.121540335
UPP2	Vegf_signaling_pathway	THYM	-0.041355612
UPP2	Vitamin b6 metabolism	THYM	-0.004252289
UPP2	Willert_wnt_signaling	THYM	-0.180189011
UPP2	Wnt_beta_catenin_signali	THYM	0.287452559
CDA	Abnormal plasma cell	UCEC	0.235463136

CDA	Activated b cell	UCEC	0.14417728
CDA	Activated cd4+ t cell	UCEC	0.100623091
CDA	Activated t cell	UCEC	0.142724076
CDA	Alanine, aspartate and glu	UCEC	0.013260532
CDA	Alcala_apoptosis	UCEC	0.00833015
CDA	Alpha-linolenic acid meta	UCEC	0.186129004
CDA	Amino sugar and nucleoti	UCEC	0.089492627
CDA	Ampk_pathway	UCEC	-0.102675642
CDA	Angiogenesis	UCEC	0.327777829
CDA	Arachidonic acid metabol	UCEC	0.403073703
CDA	Arginine and proline meta	UCEC	0.114950513
CDA	Arginine biosynthesis	UCEC	0.244810674
CDA	Ascorbate and aldarate mε	UCEC	0.053815875
CDA	Atypical memory b cell	UCEC	0.113489606
CDA	Axl+siglec6+ dendritic ce	UCEC	0.383927641
CDA	B cell	UCEC	0.081188575
CDA	B1 cell	UCEC	0.13559675
CDA	Basal cell	UCEC	0.516548076
CDA	Beta-alanine metabolism	UCEC	-0.021522891
CDA	Biosynthesis of unsaturate	UCEC	-0.021816657
CDA	Biotin metabolism	UCEC	-0.016098474
CDA	Butanoate metabolism	UCEC	-0.169443582
CDA	Caffeine metabolism	UCEC	0.22256671
CDA	Cancer stem cell	UCEC	0.229480477
CDA	Cancer stem-like cell	UCEC	0.119562206
CDA	Cd4+ cytotoxic t cell	UCEC	0.266364516
CDA	Cd4+ memory t cell	UCEC	0.179447121
CDA	Cd4+ regulatory t cell	UCEC	0.073883185
CDA	Cd4+ t helper cell	UCEC	0.120982063
CDA	Cd4+cd25+ regulatory t c	UCEC	0.113458155
CDA	Cd8+ cytotoxic t cell	UCEC	0.21487779
CDA	Cd8+ regulatory t cell	UCEC	0.150942371
CDA	Cell_cycle	UCEC	-0.194536074
CDA	Chandran_metastasis_top5	UCEC	-0.340834626
CDA	Citrate cycle (tca cycle)	UCEC	-0.1517917
CDA	Cysteine and methionine r	UCEC	-0.0639764
CDA	Cytokine induced killer cε	UCEC	0.195618795
CDA	D-arginine and d-ornithin	UCEC	0.003429935
CDA	D-glutamine and d-glutan	UCEC	0.036229822
CDA	Dendritic cell	UCEC	0.214730459
CDA	Dna_repair	UCEC	-0.034480923
CDA	Dna_replication	UCEC	-0.167934682
CDA	Double-negative memory	UCEC	0.14387369

CDA	Drug metabolism - cytoch	UCEC	0.224695483
CDA	Drug metabolism - other	UCEC	0.298486627
CDA	E2f_targets	UCEC	-0.213852283
CDA	Ecm_receptor_interaction	UCEC	0.286616833
CDA	Effector cd4+ memory t	UCEC	0.081206555
CDA	Effector cd8+ memory t	UCEC	0.234081892
CDA	Effector memory t cell	UCEC	0.142634263
CDA	Effector regulatory t (treg)	UCEC	0.100153829
CDA	Elvidge_hif1a_targets_up	UCEC	-0.196670763
CDA	Endothelial cell	UCEC	0.11444791
CDA	Eosinophil	UCEC	0.235917803
CDA	Ether lipid metabolism	UCEC	0.286757242
CDA	Exhausted cd4+ t cell	UCEC	0.158619503
CDA	Exhausted cd8+ t cell	UCEC	0.198857981
CDA	Exhausted t cell	UCEC	0.148486135
CDA	Fat cell (adipocyte)	UCEC	0.014853482
CDA	Fatty acid biosynthesis	UCEC	0.073013695
CDA	Fatty acid degradation	UCEC	-0.048450372
CDA	Fatty acid elongation	UCEC	0.118570748
CDA	Fibroblast	UCEC	0.212925265
CDA	Folate biosynthesis	UCEC	0.119788756
CDA	Follicular b cell	UCEC	0.173186725
CDA	Follicular dendritic cell	UCEC	-0.003693885
CDA	Follicular helper (tfh) t ce	UCEC	0.189134558
CDA	Follicular t cell	UCEC	0.22927773
CDA	Foxp3+il-17+ t cell	UCEC	0.03236403
CDA	Fructose and mannose me	UCEC	0.102241859
CDA	G2m_checkpoint	UCEC	-0.253820175
CDA	Galactose metabolism	UCEC	0.131787075
CDA	Galie_tumor_stemness_ge	UCEC	0.101951771
CDA	Glutathione metabolism	UCEC	0.0866294
CDA	Glycerolipid metabolism	UCEC	0.181673558
CDA	Glycerophospholipid met	UCEC	0.278108788
CDA	Glycine, serine and threor	UCEC	0.019437464
CDA	Glycolysis / gluconeogene	UCEC	0.025752403
CDA	Glycosaminoglycan biosy	UCEC	0.219885623
CDA	Glycosaminoglycan biosy	UCEC	-0.10328544
CDA	Glycosaminoglycan biosy	UCEC	0.102481903
CDA	Glycosaminoglycan degra	UCEC	0.229309164
CDA	Glycosphingolipid biosyn	UCEC	0.15651899
CDA	Glycosphingolipid biosyn	UCEC	0.365170885
CDA	Glycosphingolipid biosyn	UCEC	0.248746496
CDA	Glycosylphosphatidylinos	UCEC	-0.253650806

CDA	Glyoxylate and dicarboxy	UCEC	-0.097398158
CDA	Granulocyte	UCEC	0.121606755
CDA	Hedgehog_signaling	UCEC	0.002187994
CDA	Histidine metabolism	UCEC	0.183408908
CDA	Hypoxia	UCEC	0.225250274
CDA	Il-17alpha t cell	UCEC	0.157656939
CDA	Il2_stat5_signaling	UCEC	0.37181837
CDA	Il6_jak_stat3_signaling	UCEC	0.287773331
CDA	Immune_checkpoints_turr	UCEC	0.134840467
CDA	Immune_inhibition_cytok	UCEC	0.304170885
CDA	Inositol phosphate metabo	UCEC	-0.121166179
CDA	Interleukin_6_signaling	UCEC	0.036583562
CDA	Jaeger_metastasis_up	UCEC	0.010599304
CDA	Jain_nfkb_signaling	UCEC	-0.151753906
CDA	Kras_signaling_up	UCEC	0.346494484
CDA	Linoleic acid metabolism	UCEC	0.311916915
CDA	Lipoic acid metabolism	UCEC	-0.080743399
CDA	Lysine degradation	UCEC	-0.312182418
CDA	Lysosome	UCEC	0.155043819
CDA	M1 macrophage	UCEC	0.106529064
CDA	M2 macrophage	UCEC	0.125360912
CDA	Mannose type o-glycan bi	UCEC	-0.016471643
CDA	Mapk_signaling_pathway	UCEC	0.271107739
CDA	Mapk3_erk1_activation	UCEC	-0.021083357
CDA	Marginal zone b cell	UCEC	-0.027155641
CDA	Memory b cell	UCEC	0.074468236
CDA	Mesenchymal cell	UCEC	0.154302883
CDA	Mesenchymal stem cell	UCEC	0.237602429
CDA	Metabolism of xenobiotic	UCEC	0.285904874
CDA	Migrating cancer stem cel	UCEC	0.157875497
CDA	Mitotic_spindle	UCEC	-0.195205028
CDA	Monocyte	UCEC	0.350983121
CDA	Mtor_signaling_pathway	UCEC	-0.047742766
CDA	Mtorc1_signaling	UCEC	-0.070062644
CDA	Mucin type o-glycan biosy	UCEC	0.017763201
CDA	Myc_targets_v1	UCEC	-0.149400064
CDA	Myeloid cell	UCEC	0.147461611
CDA	N-glycan biosynthesis	UCEC	-0.222463372
CDA	Naive b cell	UCEC	0.146721672
CDA	Naive cd4+ t cell	UCEC	0.106858677
CDA	Naive cd8+ t cell	UCEC	0.107784442
CDA	Natural killer cell	UCEC	0.199530767
CDA	Natural killer t (nkt) cell	UCEC	-0.013779124

CDA	Natural regulatory t (treg) UCEC	0.123978325
CDA	Neomycin, kanamycin and UCEC	0.187331321
CDA	Neutrophil UCEC	0.393292104
CDA	Nicotinate and nicotinami UCEC	0.241493217
CDA	Nitrogen metabolism UCEC	0.098726951
CDA	Nod_like_receptor_signal: UCEC	0.170980654
CDA	Notch_signaling UCEC	0.142011524
CDA	One carbon pool by folate UCEC	-0.057089237
CDA	Other glycan degradation UCEC	0.084552313
CDA	Other types of o-glycan b: UCEC	-0.007953179
CDA	Oxidative phosphorylatior UCEC	0.112782419
CDA	P53_pathway UCEC	0.372028995
CDA	P53_signaling_pathway UCEC	-0.040455371
CDA	Pantothenate and coa bios UCEC	0.132187173
CDA	Pentose and glucuronate in UCEC	0.104529093
CDA	Pentose phosphate pathwa UCEC	-0.002179201
CDA	Pericyte UCEC	0.24899054
CDA	Phenylalanine metabolism UCEC	0.284485213
CDA	Phenylalanine, tyrosine ar UCEC	0.128277149
CDA	Phosphonate and phosphir UCEC	-0.116647873
CDA	Pi3k_akt_activation UCEC	-0.103488529
CDA	Pi3k_akt_mtor_signaling UCEC	0.022879953
CDA	Porphyrin and chlorophyl UCEC	0.069998642
CDA	Primary bile acid biosynt# UCEC	0.211973012
CDA	Propanoate metabolism UCEC	-0.216814722
CDA	Purine metabolism UCEC	-0.022043914
CDA	Pyrimidine metabolism UCEC	-0.050949976
CDA	Pyruvate metabolism UCEC	-0.089982434
CDA	Regulation_of_autophagy UCEC	-0.057138986
CDA	Retinol metabolism UCEC	0.349899814
CDA	Riboflavin metabolism UCEC	0.206624411
CDA	Schmahl_pdgf_signaling UCEC	0.065619079
CDA	Selenocompound metabol UCEC	-0.134446902
CDA	Signaling_by_hippo UCEC	-0.122258917
CDA	Sphingolipid metabolism UCEC	0.001785111
CDA	Starch and sucrose metabo UCEC	0.035429234
CDA	Steroid biosynthesis UCEC	-0.020332223
CDA	Steroid hormone biosynth UCEC	0.278984304
CDA	Sulfur metabolism UCEC	0.14472814
CDA	Synthesis and degradation UCEC	-0.121651214
CDA	T helper cell UCEC	0.214184915
CDA	T helper1 (th1) cell UCEC	0.197623147
CDA	T helper17 (th17) cell UCEC	0.266113768

CDA	T helper2 (th2) cell	UCEC	0.2549734
CDA	T helper9 (th9) cell	UCEC	0.171201293
CDA	Taurine and hypotaurine r	UCEC	0.088597243
CDA	Terpenoid backbone biosy	UCEC	-0.104248933
CDA	Tgf_beta_signaling_pathw	UCEC	0.012046293
CDA	Thiamine metabolism	UCEC	0.003414859
CDA	Tnfa_signaling_via_nfkB	UCEC	0.349009071
CDA	Tryptophan metabolism	UCEC	0.048955329
CDA	Tumor endothelial cell	UCEC	0.253389171
CDA	Tyrosine metabolism	UCEC	0.259487077
CDA	Ubiquinone and other terf	UCEC	0.016418244
CDA	Valine, leucine and isoleu	UCEC	0.226510376
CDA	Valine, leucine and isoleu	UCEC	-0.17666221
CDA	Vascular endothelial cell	UCEC	0.322158719
CDA	Vascular smooth muscle c	UCEC	0.23849391
CDA	Vegf_signaling_pathway	UCEC	0.284952433
CDA	Vitamin b6 metabolism	UCEC	0.093495025
CDA	Willert_wnt_signaling	UCEC	0.136771251
CDA	Wnt_beta_catenin_signali	UCEC	0.022327604
UCK1	Abnormal plasma cell	UCEC	0.057424802
UCK1	Activated b cell	UCEC	0.122562706
UCK1	Activated cd4+ t cell	UCEC	-0.003058544
UCK1	Activated t cell	UCEC	0.126364618
UCK1	Alanine, aspartate and glu	UCEC	0.022416219
UCK1	Alcala_apoptosis	UCEC	0.116266782
UCK1	Alpha-linolenic acid meta	UCEC	0.320743601
UCK1	Amino sugar and nucleoti	UCEC	0.137628126
UCK1	Ampk_pathway	UCEC	0.106832185
UCK1	Angiogenesis	UCEC	-0.03097812
UCK1	Arachidonic acid metabol	UCEC	0.340635414
UCK1	Arginine and proline met	UCEC	0.153563723
UCK1	Arginine biosynthesis	UCEC	0.105095411
UCK1	Ascorbate and aldarate me	UCEC	-0.063916484
UCK1	Atypical memory b cell	UCEC	0.061868677
UCK1	Axl+siglec6+ dendritic ce	UCEC	0.068747817
UCK1	B cell	UCEC	-0.075212977
UCK1	B1 cell	UCEC	0.09476123
UCK1	Basal cell	UCEC	0.041508924
UCK1	Beta-alanine metabolism	UCEC	0.084923531
UCK1	Biosynthesis of unsaturate	UCEC	0.163641027
UCK1	Biotin metabolism	UCEC	0.069414765
UCK1	Butanoate metabolism	UCEC	0.073490036
UCK1	Caffeine metabolism	UCEC	0.035513487

UCK1	Cancer stem cell	UCEC	-0.279643781
UCK1	Cancer stem-like cell	UCEC	-0.145728299
UCK1	Cd4+ cytotoxic t cell	UCEC	0.092807139
UCK1	Cd4+ memory t cell	UCEC	0.110381923
UCK1	Cd4+ regulatory t cell	UCEC	0.043612506
UCK1	Cd4+ t helper cell	UCEC	0.075127307
UCK1	Cd4+cd25+ regulatory t c	UCEC	0.072579093
UCK1	Cd8+ cytotoxic t cell	UCEC	0.115424672
UCK1	Cd8+ regulatory t cell	UCEC	0.09681836
UCK1	Cell_cycle	UCEC	-0.128411574
UCK1	Chandran_metastasis_top5	UCEC	-0.478174734
UCK1	Citrate cycle (tca cycle)	UCEC	-0.05740147
UCK1	Cysteine and methionine r	UCEC	-0.08766605
UCK1	Cytokine induced killer c	UCEC	0.213602444
UCK1	D-arginine and d-ornithin	UCEC	-0.071133371
UCK1	D-glutamine and d-glutan	UCEC	-0.187637026
UCK1	Dendritic cell	UCEC	-0.01315307
UCK1	Dna_repair	UCEC	0.298446115
UCK1	Dna_replication	UCEC	0.092980745
UCK1	Double-negative memory	UCEC	0.243675415
UCK1	Drug metabolism - cytoch	UCEC	0.177251727
UCK1	Drug metabolism - other	UCEC	0.359615254
UCK1	E2f_targets	UCEC	-0.092918968
UCK1	Ecm_receptor_interaction	UCEC	-0.109842877
UCK1	Effector cd4+ memory t (	UCEC	-0.089664743
UCK1	Effector cd8+ memory t (	UCEC	0.040379296
UCK1	Effector memory t cell	UCEC	0.013325865
UCK1	Effector regulatory t (treg	UCEC	-0.038355074
UCK1	Elvidge_hif1a_targets_up	UCEC	-0.261563411
UCK1	Endothelial cell	UCEC	-0.195264557
UCK1	Eosinophil	UCEC	0.019890497
UCK1	Ether lipid metabolism	UCEC	0.147134157
UCK1	Exhausted cd4+ t cell	UCEC	-0.096256225
UCK1	Exhausted cd8+ t cell	UCEC	-0.066967152
UCK1	Exhausted t cell	UCEC	0.19118369
UCK1	Fat cell (adipocyte)	UCEC	0.216134218
UCK1	Fatty acid biosynthesis	UCEC	0.014193929
UCK1	Fatty acid degradation	UCEC	0.092910765
UCK1	Fatty acid elongation	UCEC	0.109302675
UCK1	Fibroblast	UCEC	-0.0907142
UCK1	Folate biosynthesis	UCEC	0.16320814
UCK1	Follicular b cell	UCEC	0.014409752
UCK1	Follicular dendritic cell	UCEC	0.010999331

UCK1	Follicular helper (tfh) t ce	UCEC	0.08215465
UCK1	Follicular t cell	UCEC	0.254039651
UCK1	Foxp3+il-17+ t cell	UCEC	0.069839525
UCK1	Fructose and mannose me	UCEC	0.266118227
UCK1	G2m_checkpoint	UCEC	-0.189532664
UCK1	Galactose metabolism	UCEC	0.128570525
UCK1	Galie_tumor_stemness_ge	UCEC	-0.103349503
UCK1	Glutathione metabolism	UCEC	0.137305321
UCK1	Glycerolipid metabolism	UCEC	0.15716689
UCK1	Glycerophospholipid metæ	UCEC	0.324553549
UCK1	Glycine, serine and threor	UCEC	0.18931442
UCK1	Glycolysis / gluconeogene	UCEC	0.105305677
UCK1	Glycosaminoglycan biosy	UCEC	0.215222553
UCK1	Glycosaminoglycan biosy	UCEC	-0.023369455
UCK1	Glycosaminoglycan biosy	UCEC	-0.031396744
UCK1	Glycosaminoglycan degra	UCEC	0.075038259
UCK1	Glycosphingolipid biosyn	UCEC	0.10816903
UCK1	Glycosphingolipid biosyn	UCEC	0.068688915
UCK1	Glycosphingolipid biosyn	UCEC	0.046893009
UCK1	Glycosylphosphatidylinos	UCEC	-0.038839725
UCK1	Glyoxylate and dicarboxy	UCEC	0.120864476
UCK1	Granulocyte	UCEC	0.001190436
UCK1	Hedgehog_signaling	UCEC	-0.164399881
UCK1	Histidine metabolism	UCEC	0.194491242
UCK1	Hypoxia	UCEC	-0.071852143
UCK1	Il-17ralpha t cell	UCEC	0.13859095
UCK1	Il2_stat5_signaling	UCEC	-0.01448189
UCK1	Il6_jak_stat3_signaling	UCEC	-0.10422248
UCK1	Immune_checkpoints_tur	UCEC	-0.089286152
UCK1	Immune_inhibition_cytok	UCEC	0.085352368
UCK1	Inositol phosphate metabo	UCEC	-0.313709517
UCK1	Interleukin_6_signaling	UCEC	-0.394663811
UCK1	Jaeger_metastasis_up	UCEC	-0.041638346
UCK1	Jain_nfkb_signaling	UCEC	-0.074354402
UCK1	Kras_signaling_up	UCEC	-0.082833972
UCK1	Linoleic acid metabolism	UCEC	0.33364074
UCK1	Lipoic acid metabolism	UCEC	0.204899503
UCK1	Lysine degradation	UCEC	-0.017622589
UCK1	Lysosome	UCEC	0.082391577
UCK1	M1 macrophage	UCEC	-0.027655531
UCK1	M2 macrophage	UCEC	-0.017294786
UCK1	Mannose type o-glycan bi	UCEC	0.221407143
UCK1	Mapk_signaling_pathway	UCEC	-0.132488627

UCK1	Mapk3_erk1_activation	UCEC	-0.345343454
UCK1	Marginal zone b cell	UCEC	-0.097889723
UCK1	Memory b cell	UCEC	0.139985564
UCK1	Mesenchymal cell	UCEC	-0.011327167
UCK1	Mesenchymal stem cell	UCEC	-0.166741628
UCK1	Metabolism of xenobiotics	UCEC	0.223210801
UCK1	Migrating cancer stem cell	UCEC	-0.155583043
UCK1	Mitotic_spindle	UCEC	-0.332262789
UCK1	Monocyte	UCEC	-0.023561567
UCK1	Mtor_signaling_pathway	UCEC	-0.008020113
UCK1	Mtorc1_signaling	UCEC	-0.135300791
UCK1	Mucin type o-glycan biosynthesis	UCEC	-0.362888501
UCK1	Myc_targets_v1	UCEC	-0.024995751
UCK1	Myeloid cell	UCEC	0.002097824
UCK1	N-glycan biosynthesis	UCEC	-0.141538183
UCK1	Naive b cell	UCEC	0.172289836
UCK1	Naive cd4+ t cell	UCEC	-0.142622252
UCK1	Naive cd8+ t cell	UCEC	-0.130822792
UCK1	Natural killer cell	UCEC	0.093505681
UCK1	Natural killer t (nkt) cell	UCEC	-0.087132344
UCK1	Natural regulatory t (treg) cell	UCEC	-0.032248162
UCK1	Neomycin, kanamycin and streptomycin	UCEC	0.036117831
UCK1	Neutrophil	UCEC	-0.015531878
UCK1	Nicotinate and nicotinamide metabolism	UCEC	0.179920974
UCK1	Nitrogen metabolism	UCEC	-0.024346984
UCK1	Nod_like_receptor_signaling	UCEC	-0.152424462
UCK1	Notch_signaling	UCEC	-0.066698574
UCK1	One carbon pool by folate	UCEC	0.028972345
UCK1	Other glycan degradation	UCEC	0.149428966
UCK1	Other types of o-glycan biosynthesis	UCEC	0.336992486
UCK1	Oxidative phosphorylation	UCEC	0.34295233
UCK1	P53_pathway	UCEC	0.159024269
UCK1	P53_signaling_pathway	UCEC	-0.134101992
UCK1	Pantothenate and coenzyme a biosynthesis	UCEC	0.02335689
UCK1	Pentose and glucuronate interconversions	UCEC	-0.055824596
UCK1	Pentose phosphate pathway	UCEC	0.032193695
UCK1	Pericyte	UCEC	0.022888759
UCK1	Phenylalanine metabolism	UCEC	0.31606053
UCK1	Phenylalanine, tyrosine and tryptophan metabolism	UCEC	0.203451396
UCK1	Phosphonate and phosphite metabolism	UCEC	-0.038579122
UCK1	Pi3k_akt_activation	UCEC	-0.39060713
UCK1	Pi3k_akt_mtor_signaling	UCEC	-0.104947598
UCK1	Porphyrin and chlorophyll metabolism	UCEC	0.170004762

UCK1	Primary bile acid biosynt	UCEC	0.148051476
UCK1	Propanoate metabolism	UCEC	-0.118966372
UCK1	Purine metabolism	UCEC	0.181757698
UCK1	Pyrimidine metabolism	UCEC	0.22577301
UCK1	Pyruvate metabolism	UCEC	0.115102099
UCK1	Regulation_of_autophagy	UCEC	-0.144820569
UCK1	Retinol metabolism	UCEC	0.160856654
UCK1	Riboflavin metabolism	UCEC	0.131054217
UCK1	Schmahl_pdgf_signaling	UCEC	-0.336704331
UCK1	Selenocompound metabol	UCEC	-0.186546994
UCK1	Signaling_by_hippo	UCEC	-0.468191715
UCK1	Sphingolipid metabolism	UCEC	-0.277720334
UCK1	Starch and sucrose metabo	UCEC	-0.025442336
UCK1	Steroid biosynthesis	UCEC	0.116018866
UCK1	Steroid hormone biosynth	UCEC	0.146993239
UCK1	Sulfur metabolism	UCEC	-0.149396336
UCK1	Synthesis and degradation	UCEC	0.103854847
UCK1	T helper cell	UCEC	0.059196249
UCK1	T helper1 (th1) cell	UCEC	0.061436941
UCK1	T helper17 (th17) cell	UCEC	-0.023031108
UCK1	T helper2 (th2) cell	UCEC	0.105629405
UCK1	T helper9 (th9) cell	UCEC	0.098334462
UCK1	Taurine and hypotaurine r	UCEC	0.198293667
UCK1	Terpenoid backbone biosy	UCEC	-0.036882495
UCK1	Tgf_beta_signaling_pathw	UCEC	-0.301480536
UCK1	Thiamine metabolism	UCEC	0.132161675
UCK1	Tnfa_signaling_via_nfkb	UCEC	-0.157483397
UCK1	Tryptophan metabolism	UCEC	0.143345637
UCK1	Tumor endothelial cell	UCEC	0.077013196
UCK1	Tyrosine metabolism	UCEC	0.31984472
UCK1	Ubiquinone and other terp	UCEC	0.162250813
UCK1	Valine, leucine and isoleu	UCEC	0.118359461
UCK1	Valine, leucine and isoleu	UCEC	-0.030026477
UCK1	Vascular endothelial cell	UCEC	0.010950629
UCK1	Vascular smooth muscle c	UCEC	0.089892814
UCK1	Vegf_signaling_pathway	UCEC	0.088272358
UCK1	Vitamin b6 metabolism	UCEC	0.095025843
UCK1	Willert_wnt_signaling	UCEC	0.059122034
UCK1	Wnt_beta_catenin_signali	UCEC	0.025908171
UCK2	Abnormal plasma cell	UCEC	0.197952006
UCK2	Activated b cell	UCEC	0.107654203
UCK2	Activated cd4+ t cell	UCEC	-0.0443073
UCK2	Activated t cell	UCEC	0.061925384

UCK2	Alanine, aspartate and glu	UCEC	0.314528373
UCK2	Alcala_apoptosis	UCEC	0.313051539
UCK2	Alpha-linolenic acid meta	UCEC	0.064498334
UCK2	Amino sugar and nucleoti	UCEC	0.191892581
UCK2	Ampk_pathway	UCEC	0.225746333
UCK2	Angiogenesis	UCEC	0.050487546
UCK2	Arachidonic acid metabol	UCEC	0.110502404
UCK2	Arginine and proline meta	UCEC	0.24117268
UCK2	Arginine biosynthesis	UCEC	0.229059551
UCK2	Ascorbate and aldarate me	UCEC	0.049242972
UCK2	Atypical memory b cell	UCEC	-0.003317458
UCK2	Axl+siglec6+ dendritic ce	UCEC	-0.077165604
UCK2	B cell	UCEC	0.037023511
UCK2	B1 cell	UCEC	0.116184009
UCK2	Basal cell	UCEC	0.086285032
UCK2	Beta-alanine metabolism	UCEC	0.076252485
UCK2	Biosynthesis of unsaturate	UCEC	0.170921407
UCK2	Biotin metabolism	UCEC	0.111667119
UCK2	Butanoate metabolism	UCEC	0.073449957
UCK2	Caffeine metabolism	UCEC	0.075341964
UCK2	Cancer stem cell	UCEC	0.014148027
UCK2	Cancer stem-like cell	UCEC	-0.074015195
UCK2	Cd4+ cytotoxic t cell	UCEC	-0.056677466
UCK2	Cd4+ memory t cell	UCEC	0.022846519
UCK2	Cd4+ regulatory t cell	UCEC	-0.035922051
UCK2	Cd4+ t helper cell	UCEC	-0.058070893
UCK2	Cd4+cd25+ regulatory t c	UCEC	-0.036264619
UCK2	Cd8+ cytotoxic t cell	UCEC	0.075634547
UCK2	Cd8+ regulatory t cell	UCEC	0.106887927
UCK2	Cell_cycle	UCEC	0.221290699
UCK2	Chandran_metastasis_top5	UCEC	0.100384009
UCK2	Citrate cycle (tca cycle)	UCEC	0.190675901
UCK2	Cysteine and methionine r	UCEC	0.298683924
UCK2	Cytokine induced killer cε	UCEC	0.126203245
UCK2	D-arginine and d-ornithin	UCEC	-0.183978552
UCK2	D-glutamine and d-glutan	UCEC	0.086721153
UCK2	Dendritic cell	UCEC	-0.000476998
UCK2	Dna_repair	UCEC	0.335717129
UCK2	Dna_replication	UCEC	0.302159721
UCK2	Double-negative memory	UCEC	0.002320322
UCK2	Drug metabolism - cytoch	UCEC	-0.02285958
UCK2	Drug metabolism - other (	UCEC	0.323896762
UCK2	E2f_targets	UCEC	0.254837445

UCK2	Ecm_receptor_interaction	UCEC	0.059236384
UCK2	Effector cd4+ memory t	(UCEC	-0.064031126
UCK2	Effector cd8+ memory t	(UCEC	-0.012185041
UCK2	Effector memory t cell	UCEC	-0.029451405
UCK2	Effector regulatory t (treg	UCEC	-0.036560515
UCK2	Elvidge_hif1a_targets_up	UCEC	0.238610291
UCK2	Endothelial cell	UCEC	-0.001095065
UCK2	Eosinophil	UCEC	0.009666019
UCK2	Ether lipid metabolism	UCEC	0.055756169
UCK2	Exhausted cd4+ t cell	UCEC	0.032265118
UCK2	Exhausted cd8+ t cell	UCEC	0.030397513
UCK2	Exhausted t cell	UCEC	0.057282067
UCK2	Fat cell (adipocyte)	UCEC	0.385618499
UCK2	Fatty acid biosynthesis	UCEC	0.129656792
UCK2	Fatty acid degradation	UCEC	0.123283921
UCK2	Fatty acid elongation	UCEC	0.310168561
UCK2	Fibroblast	UCEC	-0.107478353
UCK2	Folate biosynthesis	UCEC	0.277936505
UCK2	Follicular b cell	UCEC	0.019099311
UCK2	Follicular dendritic cell	UCEC	0.001737618
UCK2	Follicular helper (tfh) t ce	UCEC	0.025350002
UCK2	Follicular t cell	UCEC	0.149947848
UCK2	Foxp3+il-17+ t cell	UCEC	0.103321263
UCK2	Fructose and mannose me	UCEC	0.180131226
UCK2	G2m_checkpoint	UCEC	0.200573643
UCK2	Galactose metabolism	UCEC	0.229224443
UCK2	Galie_tumor_stemness_ge	UCEC	-0.077060673
UCK2	Glutathione metabolism	UCEC	0.233340629
UCK2	Glycerolipid metabolism	UCEC	0.198474306
UCK2	Glycerophospholipid metæ	UCEC	0.139958556
UCK2	Glycine, serine and threor	UCEC	0.207772162
UCK2	Glycolysis / gluconeogene	UCEC	0.242063938
UCK2	Glycosaminoglycan biosy	UCEC	0.21975444
UCK2	Glycosaminoglycan biosy	UCEC	0.098467348
UCK2	Glycosaminoglycan biosy	UCEC	0.08813643
UCK2	Glycosaminoglycan degra	UCEC	0.085464426
UCK2	Glycosphingolipid biosyn	UCEC	0.099566313
UCK2	Glycosphingolipid biosyn	UCEC	0.106066584
UCK2	Glycosphingolipid biosyn	UCEC	0.123250709
UCK2	Glycosylphosphatidylinos	UCEC	0.065912422
UCK2	Glyoxylate and dicarboxy	UCEC	0.293562464
UCK2	Granulocyte	UCEC	0.011266954
UCK2	Hedgehog_signaling	UCEC	-0.030274702

UCK2	Histidine metabolism	UCEC	0.153768795
UCK2	Hypoxia	UCEC	0.159552814
UCK2	Il-17alpha t cell	UCEC	0.018318193
UCK2	Il2_stat5_signaling	UCEC	0.087293558
UCK2	Il6_jak_stat3_signaling	UCEC	-0.031368768
UCK2	Immune_checkpoints_tun	UCEC	-0.019385139
UCK2	Immune_inhibition_cytok	UCEC	-0.13140116
UCK2	Inositol phosphate metabo	UCEC	-0.076411752
UCK2	Interleukin_6_signaling	UCEC	-0.085354515
UCK2	Jaeger_metastasis_up	UCEC	0.240453809
UCK2	Jain_nfkb_signaling	UCEC	0.432312576
UCK2	Kras_signaling_up	UCEC	0.049453403
UCK2	Linoleic acid metabolism	UCEC	0.112867234
UCK2	Lipoic acid metabolism	UCEC	0.080005087
UCK2	Lysine degradation	UCEC	0.18636152
UCK2	Lysosome	UCEC	0.106631997
UCK2	M1 macrophage	UCEC	0.081859401
UCK2	M2 macrophage	UCEC	0.082979687
UCK2	Mannose type o-glycan bi	UCEC	0.290548991
UCK2	Mapk_signaling_pathway	UCEC	0.0320631
UCK2	Mapk3_erk1_activation	UCEC	-0.100604898
UCK2	Marginal zone b cell	UCEC	0.001920429
UCK2	Memory b cell	UCEC	0.035464416
UCK2	Mesenchymal cell	UCEC	-0.030352865
UCK2	Mesenchymal stem cell	UCEC	-0.117578445
UCK2	Metabolism of xenobiotic	UCEC	0.045401372
UCK2	Migrating cancer stem cel	UCEC	0.06582193
UCK2	Mitotic_spindle	UCEC	0.006340453
UCK2	Monocyte	UCEC	0.024395567
UCK2	Mtor_signaling_pathway	UCEC	-0.049708222
UCK2	Mtorc1_signaling	UCEC	0.289627709
UCK2	Mucin type o-glycan biosy	UCEC	-0.01758674
UCK2	Myc_targets_v1	UCEC	0.354917903
UCK2	Myeloid cell	UCEC	0.022964166
UCK2	N-glycan biosynthesis	UCEC	0.092222846
UCK2	Naive b cell	UCEC	0.013911871
UCK2	Naive cd4+ t cell	UCEC	-0.02551797
UCK2	Naive cd8+ t cell	UCEC	0.075203411
UCK2	Natural killer cell	UCEC	0.064498996
UCK2	Natural killer t (nkt) cell	UCEC	0.173381804
UCK2	Natural regulatory t (treg)	UCEC	-0.122160164
UCK2	Neomycin, kanamycin an	UCEC	0.176000127
UCK2	Neutrophil	UCEC	0.090105746

UCK2	Nicotinate and nicotinami	UCEC	0.226112541
UCK2	Nitrogen metabolism	UCEC	0.182006847
UCK2	Nod_like_receptor_signal	UCEC	0.017775397
UCK2	Notch_signaling	UCEC	0.042573933
UCK2	One carbon pool by folate	UCEC	0.346568958
UCK2	Other glycan degradation	UCEC	0.208639216
UCK2	Other types of o-glycan b	UCEC	0.209220089
UCK2	Oxidative phosphorylatio	UCEC	0.28062634
UCK2	P53_pathway	UCEC	0.173275018
UCK2	P53_signaling_pathway	UCEC	0.091852649
UCK2	Pantothenate and coa bios	UCEC	0.029528692
UCK2	Pentose and glucuronate i	UCEC	0.069283492
UCK2	Pentose phosphate pathwa	UCEC	0.180147277
UCK2	Pericyte	UCEC	-0.028680457
UCK2	Phenylalanine metabolism	UCEC	0.073518526
UCK2	Phenylalanine, tyrosine ar	UCEC	0.181386252
UCK2	Phosphonate and phosphir	UCEC	-0.030920382
UCK2	Pi3k_akt_activation	UCEC	-0.091023343
UCK2	Pi3k_akt_mtor_signaling	UCEC	0.108771299
UCK2	Porphyrin and chlorophyl	UCEC	0.181615866
UCK2	Primary bile acid biosynt	UCEC	0.083788148
UCK2	Propanoate metabolism	UCEC	0.199124869
UCK2	Purine metabolism	UCEC	0.471192968
UCK2	Pyrimidine metabolism	UCEC	0.450122645
UCK2	Pyruvate metabolism	UCEC	0.332372669
UCK2	Regulation_of_autophagy	UCEC	-0.286976875
UCK2	Retinol metabolism	UCEC	0.054318794
UCK2	Riboflavin metabolism	UCEC	0.265427757
UCK2	Schmahl_pdgf_signaling	UCEC	-0.197184436
UCK2	Selenocompound metabol	UCEC	0.263281553
UCK2	Signaling_by_hippo	UCEC	-0.06940943
UCK2	Sphingolipid metabolism	UCEC	-0.041070035
UCK2	Starch and sucrose metabo	UCEC	0.003292936
UCK2	Steroid biosynthesis	UCEC	0.350150821
UCK2	Steroid hormone biosynth	UCEC	0.034184515
UCK2	Sulfur metabolism	UCEC	0.012550068
UCK2	Synthesis and degradation	UCEC	0.212196114
UCK2	T helper cell	UCEC	-0.017820503
UCK2	T helper1 (th1) cell	UCEC	0.044550567
UCK2	T helper17 (th17) cell	UCEC	-0.020585526
UCK2	T helper2 (th2) cell	UCEC	0.000428589
UCK2	T helper9 (th9) cell	UCEC	-0.101828401
UCK2	Taurine and hypotaurine r	UCEC	0.172884777

UCK2	Terpenoid backbone biosy	UCEC	0.286486796
UCK2	Tgf_beta_signaling_pathw	UCEC	0.030249756
UCK2	Thiamine metabolism	UCEC	0.078943588
UCK2	Tnfa_signaling_via_nfk	UCEC	0.037732215
UCK2	Tryptophan metabolism	UCEC	0.295013973
UCK2	Tumor endothelial cell	UCEC	0.256211088
UCK2	Tyrosine metabolism	UCEC	0.063545677
UCK2	Ubiquinone and other ter	UCEC	0.211633023
UCK2	Valine, leucine and isoleu	UCEC	0.106583078
UCK2	Valine, leucine and isoleu	UCEC	0.165596651
UCK2	Vascular endothelial cell	UCEC	-0.023716043
UCK2	Vascular smooth muscle c	UCEC	-0.093998507
UCK2	Vegf_signaling_pathway	UCEC	-0.038013463
UCK2	Vitamin b6 metabolism	UCEC	0.214045322
UCK2	Willert_wnt_signaling	UCEC	0.222238581
UCK2	Wnt_beta_catenin_signali	UCEC	0.163998523
UCKL1	Abnormal plasma cell	UCEC	0.008290891
UCKL1	Activated b cell	UCEC	-0.038554089
UCKL1	Activated cd4+ t cell	UCEC	-0.066068203
UCKL1	Activated t cell	UCEC	-0.013156653
UCKL1	Alanine, aspartate and glu	UCEC	0.219346569
UCKL1	Alcala_apoptosis	UCEC	0.147169408
UCKL1	Alpha-linolenic acid meta	UCEC	-0.023003906
UCKL1	Amino sugar and nucleoti	UCEC	0.015333583
UCKL1	Ampk_pathway	UCEC	0.378326689
UCKL1	Angiogenesis	UCEC	-0.045026726
UCKL1	Arachidonic acid metabo	UCEC	0.198725323
UCKL1	Arginine and proline met	UCEC	0.029269844
UCKL1	Arginine biosynthesis	UCEC	0.30621067
UCKL1	Ascorbate and aldarate m	UCEC	-0.205101309
UCKL1	Atypical memory b cell	UCEC	0.000283229
UCKL1	Axl+siglec6+ dendritic ce	UCEC	-0.10421651
UCKL1	B cell	UCEC	-0.164842625
UCKL1	B1 cell	UCEC	-0.11765305
UCKL1	Basal cell	UCEC	0.044162973
UCKL1	Beta-alanine metabolism	UCEC	-0.148103365
UCKL1	Biosynthesis of unsaturate	UCEC	-0.06606403
UCKL1	Biotin metabolism	UCEC	-0.120150513
UCKL1	Butanoate metabolism	UCEC	-0.056090818
UCKL1	Caffeine metabolism	UCEC	-0.072632419
UCKL1	Cancer stem cell	UCEC	-0.220968284
UCKL1	Cancer stem-like cell	UCEC	-0.271462605
UCKL1	Cd4+ cytotoxic t cell	UCEC	-0.010282876

UCKL1	Cd4+ memory t cell	UCEC	0.051089069
UCKL1	Cd4+ regulatory t cell	UCEC	-0.017870563
UCKL1	Cd4+ t helper cell	UCEC	-0.079081305
UCKL1	Cd4+cd25+ regulatory t c	UCEC	-0.066966183
UCKL1	Cd8+ cytotoxic t cell	UCEC	0.026323885
UCKL1	Cd8+ regulatory t cell	UCEC	-0.02267825
UCKL1	Cell_cycle	UCEC	0.089840881
UCKL1	Chandran_metastasis_top5	UCEC	-0.136986025
UCKL1	Citrate cycle (tca cycle)	UCEC	0.146785023
UCKL1	Cysteine and methionine r	UCEC	0.104000805
UCKL1	Cytokine induced killer c	UCEC	0.089917538
UCKL1	D-arginine and d-ornithin	UCEC	-0.132481511
UCKL1	D-glutamine and d-glutan	UCEC	0.143281146
UCKL1	Dendritic cell	UCEC	0.051518833
UCKL1	Dna_repair	UCEC	0.269961592
UCKL1	Dna_replication	UCEC	0.279382549
UCKL1	Double-negative memory	UCEC	0.115882862
UCKL1	Drug metabolism - cytoch	UCEC	-0.134948101
UCKL1	Drug metabolism - other	UCEC	0.133560823
UCKL1	E2f_targets	UCEC	0.141587955
UCKL1	Ecm_receptor_interaction	UCEC	0.126334309
UCKL1	Effector cd4+ memory t (	UCEC	-0.127756884
UCKL1	Effector cd8+ memory t (	UCEC	0.047236235
UCKL1	Effector memory t cell	UCEC	-0.130489167
UCKL1	Effector regulatory t (treg	UCEC	-0.191453834
UCKL1	Elvidge_hif1a_targets_up	UCEC	-0.103694187
UCKL1	Endothelial cell	UCEC	-0.259306889
UCKL1	Eosinophil	UCEC	-0.026189582
UCKL1	Ether lipid metabolism	UCEC	-0.053662705
UCKL1	Exhausted cd4+ t cell	UCEC	-0.174791851
UCKL1	Exhausted cd8+ t cell	UCEC	-0.13326882
UCKL1	Exhausted t cell	UCEC	0.012982028
UCKL1	Fat cell (adipocyte)	UCEC	0.341692446
UCKL1	Fatty acid biosynthesis	UCEC	-0.122637424
UCKL1	Fatty acid degradation	UCEC	-0.113635271
UCKL1	Fatty acid elongation	UCEC	0.165119516
UCKL1	Fibroblast	UCEC	-0.21269319
UCKL1	Folate biosynthesis	UCEC	-0.031895945
UCKL1	Follicular b cell	UCEC	0.091669617
UCKL1	Follicular dendritic cell	UCEC	0.02593214
UCKL1	Follicular helper (tfh) t ce	UCEC	-0.047490846
UCKL1	Follicular t cell	UCEC	0.108007286
UCKL1	Foxp3+il-17+ t cell	UCEC	0.1355151

UCKL1	Fructose and mannose me	UCEC	0.220170852
UCKL1	G2m_checkpoint	UCEC	0.074197661
UCKL1	Galactose metabolism	UCEC	0.291604272
UCKL1	Galie_tumor_stemness_ge	UCEC	-0.117537678
UCKL1	Glutathione metabolism	UCEC	0.016873356
UCKL1	Glycerolipid metabolism	UCEC	0.073994365
UCKL1	Glycerophospholipid metæ	UCEC	0.188408619
UCKL1	Glycine, serine and threor	UCEC	0.227240139
UCKL1	Glycolysis / gluconeogene	UCEC	0.174650327
UCKL1	Glycosaminoglycan biosy	UCEC	0.339353504
UCKL1	Glycosaminoglycan biosy	UCEC	0.144747962
UCKL1	Glycosaminoglycan biosy	UCEC	0.06226706
UCKL1	Glycosaminoglycan degra	UCEC	0.181600407
UCKL1	Glycosphingolipid biosyn	UCEC	0.205178967
UCKL1	Glycosphingolipid biosyn	UCEC	0.006269152
UCKL1	Glycosphingolipid biosyn	UCEC	-0.049788541
UCKL1	Glycosylphosphatidylinos	UCEC	-0.087632767
UCKL1	Glyoxylate and dicarboxy	UCEC	0.174909889
UCKL1	Granulocyte	UCEC	-0.073217191
UCKL1	Hedgehog_signaling	UCEC	0.047200126
UCKL1	Histidine metabolism	UCEC	-0.03207878
UCKL1	Hypoxia	UCEC	0.040710471
UCKL1	Il-17ralpha t cell	UCEC	-0.012265
UCKL1	Il2_stat5_signaling	UCEC	-0.047922497
UCKL1	Il6_jak_stat3_signaling	UCEC	-0.057033078
UCKL1	Immune_checkpoints_tunr	UCEC	-0.023103615
UCKL1	Immune_inhibition_cytok	UCEC	-0.149143429
UCKL1	Inositol phosphate metabo	UCEC	-0.040702729
UCKL1	Interleukin_6_signaling	UCEC	-0.142383192
UCKL1	Jaeger_metastasis_up	UCEC	0.104906478
UCKL1	Jain_nfkb_signaling	UCEC	0.136488891
UCKL1	Kras_signaling_up	UCEC	-0.146949283
UCKL1	Linoleic acid metabolism	UCEC	0.014502503
UCKL1	Lipoic acid metabolism	UCEC	0.13525122
UCKL1	Lysine degradation	UCEC	0.091553262
UCKL1	Lysosome	UCEC	0.158856389
UCKL1	M1 macrophage	UCEC	-0.065622804
UCKL1	M2 macrophage	UCEC	0.01424062
UCKL1	Mannose type o-glycan bi	UCEC	0.235497907
UCKL1	Mapk_signaling_pathway	UCEC	0.102567109
UCKL1	Mapk3_erk1_activation	UCEC	-0.134200956
UCKL1	Marginal zone b cell	UCEC	-0.059476589
UCKL1	Memory b cell	UCEC	-0.051792223

UCKL1	Mesenchymal cell	UCEC	-0.088066078
UCKL1	Mesenchymal stem cell	UCEC	-0.257569543
UCKL1	Metabolism of xenobiotic	UCEC	-0.015631707
UCKL1	Migrating cancer stem cel	UCEC	-0.210501269
UCKL1	Mitotic_spindle	UCEC	0.04486167
UCKL1	Monocyte	UCEC	-0.153807169
UCKL1	Mtor_signaling_pathway	UCEC	0.007625702
UCKL1	Mtorc1_signaling	UCEC	-0.090286984
UCKL1	Mucin type o-glycan biosy	UCEC	-0.404773642
UCKL1	Myc_targets_v1	UCEC	0.094705332
UCKL1	Myeloid cell	UCEC	-0.025063744
UCKL1	N-glycan biosynthesis	UCEC	-0.103162289
UCKL1	Naive b cell	UCEC	0.072667773
UCKL1	Naive cd4+ t cell	UCEC	-0.096383556
UCKL1	Naive cd8+ t cell	UCEC	-0.086857517
UCKL1	Natural killer cell	UCEC	-0.023464824
UCKL1	Natural killer t (nkt) cell	UCEC	-0.231102538
UCKL1	Natural regulatory t (treg)	UCEC	-0.14861028
UCKL1	Neomycin, kanamycin and	UCEC	0.298360474
UCKL1	Neutrophil	UCEC	-0.152272313
UCKL1	Nicotinate and nicotinami	UCEC	-0.13905154
UCKL1	Nitrogen metabolism	UCEC	-0.054343161
UCKL1	Nod_like_receptor_signal	UCEC	-0.10006947
UCKL1	Notch_signaling	UCEC	0.140979156
UCKL1	One carbon pool by folate	UCEC	0.146235257
UCKL1	Other glycan degradation	UCEC	0.135595397
UCKL1	Other types of o-glycan b	UCEC	0.392443824
UCKL1	Oxidative phosphorylatio	UCEC	0.173097688
UCKL1	P53_pathway	UCEC	0.026291829
UCKL1	P53_signaling_pathway	UCEC	-0.336537288
UCKL1	Pantothenate and coa bios	UCEC	-0.152420867
UCKL1	Pentose and glucuronate i	UCEC	-0.069076451
UCKL1	Pentose phosphate pathwa	UCEC	0.222199772
UCKL1	Pericyte	UCEC	-0.204679033
UCKL1	Phenylalanine metabolism	UCEC	0.116157201
UCKL1	Phenylalanine, tyrosine ar	UCEC	0.101775873
UCKL1	Phosphonate and phosphir	UCEC	0.00285273
UCKL1	Pi3k_akt_activation	UCEC	-0.046699918
UCKL1	Pi3k_akt_mtor_signaling	UCEC	-0.11480155
UCKL1	Porphyrin and chlorophyl	UCEC	0.070684805
UCKL1	Primary bile acid biosynt	UCEC	0.0226569
UCKL1	Propanoate metabolism	UCEC	-0.002080247
UCKL1	Purine metabolism	UCEC	0.270843671

UCKL1	Pyrimidine metabolism	UCEC	0.274688246
UCKL1	Pyruvate metabolism	UCEC	0.163654964
UCKL1	Regulation_of_autophagy	UCEC	-0.234875657
UCKL1	Retinol metabolism	UCEC	-0.004706241
UCKL1	Riboflavin metabolism	UCEC	0.011533831
UCKL1	Schmahl_pdgf_signaling	UCEC	-0.392005996
UCKL1	Selenocompound metabol	UCEC	-0.033728048
UCKL1	Signaling_by_hippo	UCEC	-0.161985691
UCKL1	Sphingolipid metabolism	UCEC	-0.1471431
UCKL1	Starch and sucrose metabo	UCEC	-0.077999997
UCKL1	Steroid biosynthesis	UCEC	0.07108921
UCKL1	Steroid hormone biosynth	UCEC	-0.092143086
UCKL1	Sulfur metabolism	UCEC	-0.206921755
UCKL1	Synthesis and degradation	UCEC	0.134770581
UCKL1	T helper cell	UCEC	-0.102950665
UCKL1	T helper1 (th1) cell	UCEC	-0.039138171
UCKL1	T helper17 (th17) cell	UCEC	-0.209069526
UCKL1	T helper2 (th2) cell	UCEC	-0.107410075
UCKL1	T helper9 (th9) cell	UCEC	-0.07522073
UCKL1	Taurine and hypotaurine r	UCEC	0.087974459
UCKL1	Terpenoid backbone biosy	UCEC	-0.041160814
UCKL1	Tgf_beta_signaling_pathw	UCEC	-0.048663148
UCKL1	Thiamine metabolism	UCEC	0.144524632
UCKL1	Tnfa_signaling_via_nfkb	UCEC	-0.147860569
UCKL1	Tryptophan metabolism	UCEC	-0.001194229
UCKL1	Tumor endothelial cell	UCEC	0.124628483
UCKL1	Tyrosine metabolism	UCEC	0.063175207
UCKL1	Ubiquinone and other terp	UCEC	0.136031027
UCKL1	Valine, leucine and isoleu	UCEC	0.094715239
UCKL1	Valine, leucine and isoleu	UCEC	-0.02690112
UCKL1	Vascular endothelial cell	UCEC	-0.032466286
UCKL1	Vascular smooth muscle c	UCEC	-0.100113285
UCKL1	Vegf_signaling_pathway	UCEC	0.019087651
UCKL1	Vitamin b6 metabolism	UCEC	0.221777792
UCKL1	Willert_wnt_signaling	UCEC	-0.116906668
UCKL1	Wnt_beta_catenin_signali	UCEC	0.111175199
UPP1	Abnormal plasma cell	UCEC	0.299624399
UPP1	Activated b cell	UCEC	0.209748981
UPP1	Activated cd4+ t cell	UCEC	0.250789269
UPP1	Activated t cell	UCEC	0.309586597
UPP1	Alanine, aspartate and glu	UCEC	0.22433225
UPP1	Alcala_apoptosis	UCEC	0.271436499
UPP1	Alpha-linolenic acid meta	UCEC	0.143943117

UPP1	Amino sugar and nucleoti	UCEC	0.276926872
UPP1	Ampk_pathway	UCEC	0.046747715
UPP1	Angiogenesis	UCEC	0.347061122
UPP1	Arachidonic acid metabol	UCEC	0.401494021
UPP1	Arginine and proline metε	UCEC	0.22759586
UPP1	Arginine biosynthesis	UCEC	0.364613818
UPP1	Ascorbate and aldarate mε	UCEC	0.10134551
UPP1	Atypical memory b cell	UCEC	0.159429825
UPP1	Axl+siglec6+ dendritic ce	UCEC	0.390592462
UPP1	B cell	UCEC	0.256139197
UPP1	B1 cell	UCEC	0.110162484
UPP1	Basal cell	UCEC	0.369509172
UPP1	Beta-alanine metabolism	UCEC	0.075493261
UPP1	Biosynthesis of unsaturate	UCEC	0.104854179
UPP1	Biotin metabolism	UCEC	-0.097002632
UPP1	Butanoate metabolism	UCEC	-0.048007932
UPP1	Caffeine metabolism	UCEC	0.165385571
UPP1	Cancer stem cell	UCEC	0.194598304
UPP1	Cancer stem-like cell	UCEC	0.065449494
UPP1	Cd4+ cytotoxic t cell	UCEC	0.373441052
UPP1	Cd4+ memory t cell	UCEC	0.271701465
UPP1	Cd4+ regulatory t cell	UCEC	0.195910901
UPP1	Cd4+ t helper cell	UCEC	0.229562267
UPP1	Cd4+cd25+ regulatory t c	UCEC	0.237035952
UPP1	Cd8+ cytotoxic t cell	UCEC	0.361735049
UPP1	Cd8+ regulatory t cell	UCEC	0.259982326
UPP1	Cell_cycle	UCEC	-0.036990002
UPP1	Chandran_metastasis_top ⁵	UCEC	-0.256851686
UPP1	Citrate cycle (tca cycle)	UCEC	0.068788034
UPP1	Cysteine and methionine r	UCEC	0.1081109
UPP1	Cytokine induced killer cε	UCEC	0.320736882
UPP1	D-arginine and d-ornithin	UCEC	-0.016083173
UPP1	D-glutamine and d-glutan	UCEC	0.139875226
UPP1	Dendritic cell	UCEC	0.37388074
UPP1	Dna_repair	UCEC	0.153898784
UPP1	Dna_replication	UCEC	0.053864076
UPP1	Double-negative memory	UCEC	0.256115182
UPP1	Drug metabolism - cytoch	UCEC	0.118862373
UPP1	Drug metabolism - other ε	UCEC	0.375462811
UPP1	E2f_targets	UCEC	-0.025918877
UPP1	Ecm_receptor_interaction	UCEC	0.289470347
UPP1	Effector cd4+ memory t (	UCEC	0.156903108
UPP1	Effector cd8+ memory t (	UCEC	0.377814592

UPP1	Effector memory t cell	UCEC	0.231239747
UPP1	Effector regulatory t (treg	UCEC	0.156372537
UPP1	Elvidge_hif1a_targets_up	UCEC	-0.063072314
UPP1	Endothelial cell	UCEC	0.073760037
UPP1	Eosinophil	UCEC	0.376759651
UPP1	Ether lipid metabolism	UCEC	0.227467535
UPP1	Exhausted cd4+ t cell	UCEC	0.290478945
UPP1	Exhausted cd8+ t cell	UCEC	0.320781766
UPP1	Exhausted t cell	UCEC	0.290293573
UPP1	Fat cell (adipocyte)	UCEC	0.061562338
UPP1	Fatty acid biosynthesis	UCEC	0.016837176
UPP1	Fatty acid degradation	UCEC	-0.015230676
UPP1	Fatty acid elongation	UCEC	0.157173749
UPP1	Fibroblast	UCEC	0.134951966
UPP1	Folate biosynthesis	UCEC	0.126883117
UPP1	Follicular b cell	UCEC	0.319181681
UPP1	Follicular dendritic cell	UCEC	0.118192758
UPP1	Follicular helper (tfh) t ce	UCEC	0.30915519
UPP1	Follicular t cell	UCEC	0.303489121
UPP1	Foxp3+il-17+ t cell	UCEC	0.167063191
UPP1	Fructose and mannose me	UCEC	0.302188107
UPP1	G2m_checkpoint	UCEC	-0.067420376
UPP1	Galactose metabolism	UCEC	0.377846977
UPP1	Galie_tumor_stemness_ge	UCEC	-0.013002986
UPP1	Glutathione metabolism	UCEC	0.251447793
UPP1	Glycerolipid metabolism	UCEC	0.204029708
UPP1	Glycerophospholipid metæ	UCEC	0.335223987
UPP1	Glycine, serine and threor	UCEC	0.256261866
UPP1	Glycolysis / gluconeogene	UCEC	0.230810107
UPP1	Glycosaminoglycan biosy	UCEC	0.284061347
UPP1	Glycosaminoglycan biosy	UCEC	-0.103165264
UPP1	Glycosaminoglycan biosy	UCEC	0.273620106
UPP1	Glycosaminoglycan degra	UCEC	0.211577873
UPP1	Glycosphingolipid biosyn	UCEC	0.269987578
UPP1	Glycosphingolipid biosyn	UCEC	0.387190771
UPP1	Glycosphingolipid biosyn	UCEC	0.285005099
UPP1	Glycosylphosphatidylinos	UCEC	-0.19169714
UPP1	Glyoxylate and dicarboxy	UCEC	0.102893753
UPP1	Granulocyte	UCEC	0.274494971
UPP1	Hedgehog_signaling	UCEC	-0.054427341
UPP1	Histidine metabolism	UCEC	0.122508362
UPP1	Hypoxia	UCEC	0.412818904
UPP1	Il-17ralpha t cell	UCEC	0.274297289

UPP1	Il2_stat5_signaling	UCEC	0.512308709
UPP1	Il6_jak_stat3_signaling	UCEC	0.456961119
UPP1	Immune_checkpoints_tun	UCEC	0.3353122
UPP1	Immune_inhibition_cytok	UCEC	0.402676295
UPP1	Inositol phosphate metabo	UCEC	-0.030895599
UPP1	Interleukin_6_signaling	UCEC	0.1719894
UPP1	Jaeger_metastasis_up	UCEC	0.187064602
UPP1	Jain_nfkb_signaling	UCEC	0.012921256
UPP1	Kras_signaling_up	UCEC	0.387068129
UPP1	Linoleic acid metabolism	UCEC	0.151444234
UPP1	Lipoic acid metabolism	UCEC	-0.125563734
UPP1	Lysine degradation	UCEC	-0.188445816
UPP1	Lysosome	UCEC	0.306192672
UPP1	M1 macrophage	UCEC	0.307464655
UPP1	M2 macrophage	UCEC	0.302672149
UPP1	Mannose type o-glycan bi	UCEC	0.043208727
UPP1	Mapk_signaling_pathway	UCEC	0.354653013
UPP1	Mapk3_erk1_activation	UCEC	0.123725317
UPP1	Marginal zone b cell	UCEC	0.159204681
UPP1	Memory b cell	UCEC	0.222493088
UPP1	Mesenchymal cell	UCEC	0.119544979
UPP1	Mesenchymal stem cell	UCEC	0.236899081
UPP1	Metabolism of xenobiotic	UCEC	0.242439878
UPP1	Migrating cancer stem cel	UCEC	0.158749542
UPP1	Mitotic_spindle	UCEC	-0.076146187
UPP1	Monocyte	UCEC	0.445228924
UPP1	Mtor_signaling_pathway	UCEC	0.074858013
UPP1	Mtorc1_signaling	UCEC	0.179474204
UPP1	Mucin type o-glycan biosy	UCEC	0.006201456
UPP1	Myc_targets_v1	UCEC	0.027381495
UPP1	Myeloid cell	UCEC	0.2971705
UPP1	N-glycan biosynthesis	UCEC	-0.034803866
UPP1	Naive b cell	UCEC	0.281024442
UPP1	Naive cd4+ t cell	UCEC	0.120402792
UPP1	Naive cd8+ t cell	UCEC	-0.049375769
UPP1	Natural killer cell	UCEC	0.341349508
UPP1	Natural killer t (nkt) cell	UCEC	0.122102084
UPP1	Natural regulatory t (treg)	UCEC	0.209761529
UPP1	Neomycin, kanamycin an	UCEC	0.337146581
UPP1	Neutrophil	UCEC	0.432481975
UPP1	Nicotinate and nicotinami	UCEC	0.237409425
UPP1	Nitrogen metabolism	UCEC	0.110913915
UPP1	Nod_like_receptor_signal	UCEC	0.380822526

UPP1	Notch_signaling	UCEC	0.16163833
UPP1	One carbon pool by folate	UCEC	0.103887863
UPP1	Other glycan degradation	UCEC	0.204558488
UPP1	Other types of o-glycan b	UCEC	0.096590085
UPP1	Oxidative phosphorylatior	UCEC	0.276672304
UPP1	P53_pathway	UCEC	0.51720228
UPP1	P53_signaling_pathway	UCEC	0.097908395
UPP1	Pantothenate and coa bios	UCEC	0.181833934
UPP1	Pentose and glucuronate i	UCEC	0.188759763
UPP1	Pentose phosphate pathwa	UCEC	0.276433369
UPP1	Pericyte	UCEC	0.170048492
UPP1	Phenylalanine metabolism	UCEC	0.312819179
UPP1	Phenylalanine, tyrosine ar	UCEC	0.254811869
UPP1	Phosphonate and phosphir	UCEC	-0.119268206
UPP1	Pi3k_akt_activation	UCEC	-0.18815981
UPP1	Pi3k_akt_mtor_signaling	UCEC	0.296624698
UPP1	Porphyrin and chlorophyl	UCEC	0.293086757
UPP1	Primary bile acid biosynt	UCEC	0.162824447
UPP1	Propanoate metabolism	UCEC	-0.094323216
UPP1	Purine metabolism	UCEC	0.139342108
UPP1	Pyrimidine metabolism	UCEC	0.152321754
UPP1	Pyruvate metabolism	UCEC	0.094258362
UPP1	Regulation_of_autophagy	UCEC	-0.063373172
UPP1	Retinol metabolism	UCEC	0.249671837
UPP1	Riboflavin metabolism	UCEC	0.277791437
UPP1	Schmahl_pdgf_signaling	UCEC	-0.022521989
UPP1	Selenocompound metabol	UCEC	-0.103313819
UPP1	Signaling_by_hippo	UCEC	-0.107579355
UPP1	Sphingolipid metabolism	UCEC	0.09269572
UPP1	Starch and sucrose metabo	UCEC	0.209586163
UPP1	Steroid biosynthesis	UCEC	0.050282666
UPP1	Steroid hormone biosynth	UCEC	0.193678433
UPP1	Sulfur metabolism	UCEC	0.080347527
UPP1	Synthesis and degradation	UCEC	0.038215392
UPP1	T helper cell	UCEC	0.30004779
UPP1	T helper1 (th1) cell	UCEC	0.356722572
UPP1	T helper17 (th17) cell	UCEC	0.361858503
UPP1	T helper2 (th2) cell	UCEC	0.330851302
UPP1	T helper9 (th9) cell	UCEC	0.254210813
UPP1	Taurine and hypotaurine r	UCEC	0.064360437
UPP1	Terpenoid backbone biosy	UCEC	0.024472585
UPP1	Tgf_beta_signaling_pathw	UCEC	-0.01575562
UPP1	Thiamine metabolism	UCEC	0.068415149

UPP1	Tnfa_signaling_via_nfk	UCEC	0.453705886
UPP1	Tryptophan metabolism	UCEC	0.13912905
UPP1	Tumor endothelial cell	UCEC	0.112669784
UPP1	Tyrosine metabolism	UCEC	0.217185738
UPP1	Ubiquinone and other ter	UCEC	0.092927041
UPP1	Valine, leucine and isoleu	UCEC	0.274292334
UPP1	Valine, leucine and isoleu	UCEC	-0.043832044
UPP1	Vascular endothelial cell	UCEC	0.291675062
UPP1	Vascular smooth muscle c	UCEC	0.075966371
UPP1	Vegf_signaling_pathway	UCEC	0.407653317
UPP1	Vitamin b6 metabolism	UCEC	0.262134706
UPP1	Willert_wnt_signaling	UCEC	0.114431432
UPP1	Wnt_beta_catenin_signali	UCEC	-0.092881507
UPP2	Abnormal plasma cell	UCEC	-0.069971462
UPP2	Activated b cell	UCEC	0.037285617
UPP2	Activated cd4+ t cell	UCEC	0.054512711
UPP2	Activated t cell	UCEC	0.006859038
UPP2	Alanine, aspartate and glu	UCEC	-0.199978023
UPP2	Alcala_apoptosis	UCEC	-0.149773071
UPP2	Alpha-linolenic acid meta	UCEC	0.194726483
UPP2	Amino sugar and nucleoti	UCEC	-0.057963788
UPP2	Ampk_pathway	UCEC	-0.284484745
UPP2	Angiogenesis	UCEC	0.038810443
UPP2	Arachidonic acid metabol	UCEC	0.148427607
UPP2	Arginine and proline meta	UCEC	-0.039350183
UPP2	Arginine biosynthesis	UCEC	-0.222186664
UPP2	Ascorbate and aldarate me	UCEC	0.061768356
UPP2	Atypical memory b cell	UCEC	0.077351396
UPP2	Axl+siglec6+ dendritic ce	UCEC	0.119337858
UPP2	B cell	UCEC	0.066146663
UPP2	B1 cell	UCEC	0.087027742
UPP2	Basal cell	UCEC	-0.084569845
UPP2	Beta-alanine metabolism	UCEC	0.061047745
UPP2	Biosynthesis of unsaturate	UCEC	-0.125970132
UPP2	Biotin metabolism	UCEC	0.155523034
UPP2	Butanoate metabolism	UCEC	-0.011555364
UPP2	Caffeine metabolism	UCEC	0.019181796
UPP2	Cancer stem cell	UCEC	0.064685567
UPP2	Cancer stem-like cell	UCEC	0.158510966
UPP2	Cd4+ cytotoxic t cell	UCEC	0.043337579
UPP2	Cd4+ memory t cell	UCEC	0.018357519
UPP2	Cd4+ regulatory t cell	UCEC	0.080156705
UPP2	Cd4+ t helper cell	UCEC	0.096959714

UPP2	Cd4+cd25+ regulatory t c	UCEC	0.081381857
UPP2	Cd8+ cytotoxic t cell	UCEC	0.019566811
UPP2	Cd8+ regulatory t cell	UCEC	-0.024411735
UPP2	Cell_cycle	UCEC	-0.34210334
UPP2	Chandran_metastasis_top5	UCEC	-0.245067515
UPP2	Citrate cycle (tca cycle)	UCEC	-0.276824883
UPP2	Cysteine and methionine r	UCEC	-0.160987154
UPP2	Cytokine induced killer c	UCEC	-0.022302628
UPP2	D-arginine and d-ornithin	UCEC	0.249353532
UPP2	D-glutamine and d-glutan	UCEC	-0.206370605
UPP2	Dendritic cell	UCEC	0.045621174
UPP2	Dna_repair	UCEC	-0.198286974
UPP2	Dna_replication	UCEC	-0.33629125
UPP2	Double-negative memory	UCEC	0.03855002
UPP2	Drug metabolism - cytoch	UCEC	0.27537544
UPP2	Drug metabolism - other c	UCEC	0.029626242
UPP2	E2f_targets	UCEC	-0.349347521
UPP2	Ecm_receptor_interaction	UCEC	-0.068047516
UPP2	Effector cd4+ memory t (	UCEC	0.028555277
UPP2	Effector cd8+ memory t (	UCEC	0.01383717
UPP2	Effector memory t cell	UCEC	0.048442553
UPP2	Effector regulatory t (treg	UCEC	0.092995644
UPP2	Elvidge_hif1a_targets_up	UCEC	-0.266046821
UPP2	Endothelial cell	UCEC	-0.035247768
UPP2	Eosinophil	UCEC	0.028317581
UPP2	Ether lipid metabolism	UCEC	0.151381836
UPP2	Exhausted cd4+ t cell	UCEC	-0.050609772
UPP2	Exhausted cd8+ t cell	UCEC	-0.009131331
UPP2	Exhausted t cell	UCEC	0.034556072
UPP2	Fat cell (adipocyte)	UCEC	-0.077328789
UPP2	Fatty acid biosynthesis	UCEC	0.083880671
UPP2	Fatty acid degradation	UCEC	0.073731327
UPP2	Fatty acid elongation	UCEC	-0.194119184
UPP2	Fibroblast	UCEC	0.12216703
UPP2	Folate biosynthesis	UCEC	-0.0108168
UPP2	Follicular b cell	UCEC	-0.011444544
UPP2	Follicular dendritic cell	UCEC	0.026694955
UPP2	Follicular helper (tfh) t ce	UCEC	0.055840691
UPP2	Follicular t cell	UCEC	0.006761532
UPP2	Foxp3+il-17+ t cell	UCEC	-0.046646016
UPP2	Fructose and mannose me	UCEC	-0.059202462
UPP2	G2m_checkpoint	UCEC	-0.36185335
UPP2	Galactose metabolism	UCEC	-0.1018715

UPP2	Galie_tumor_stemness_ge	UCEC	0.041048312
UPP2	Glutathione metabolism	UCEC	0.007767951
UPP2	Glycerolipid metabolism	UCEC	0.002421425
UPP2	Glycerophospholipid metæ	UCEC	0.120980402
UPP2	Glycine, serine and threor	UCEC	-0.102357326
UPP2	Glycolysis / gluconeogene	UCEC	-0.148494614
UPP2	Glycosaminoglycan biosy	UCEC	-0.015529076
UPP2	Glycosaminoglycan biosy	UCEC	-0.003836947
UPP2	Glycosaminoglycan biosy	UCEC	-0.02972472
UPP2	Glycosaminoglycan degra	UCEC	0.053360049
UPP2	Glycosphingolipid biosyn	UCEC	-0.06243049
UPP2	Glycosphingolipid biosyn	UCEC	-0.011503669
UPP2	Glycosphingolipid biosyn	UCEC	0.071319075
UPP2	Glycosylphosphatidylinos	UCEC	-0.020267974
UPP2	Glyoxylate and dicarboxy	UCEC	-0.162768429
UPP2	Granulocyte	UCEC	0.058786519
UPP2	Hedgehog_signaling	UCEC	-0.018970513
UPP2	Histidine metabolism	UCEC	0.212008539
UPP2	Hypoxia	UCEC	-0.157179505
UPP2	Il-17ralpha t cell	UCEC	0.06366807
UPP2	Il2_stat5_signaling	UCEC	-0.017302903
UPP2	Il6_jak_stat3_signaling	UCEC	-0.027787824
UPP2	Immune_checkpoints_tur	UCEC	-0.040197965
UPP2	Immune_inhibition_cytok	UCEC	0.103652458
UPP2	Inositol phosphate metabo	UCEC	-0.186185181
UPP2	Interleukin_6_signaling	UCEC	-0.12453222
UPP2	Jaeger_metastasis_up	UCEC	-0.277297499
UPP2	Jain_nfkb_signaling	UCEC	-0.297960711
UPP2	Kras_signaling_up	UCEC	0.071789881
UPP2	Linoleic acid metabolism	UCEC	0.269697377
UPP2	Lipoic acid metabolism	UCEC	0.158288416
UPP2	Lysine degradation	UCEC	-0.206264827
UPP2	Lysosome	UCEC	-0.023654219
UPP2	M1 macrophage	UCEC	-0.012703035
UPP2	M2 macrophage	UCEC	0.005676136
UPP2	Mannose type o-glycan bi	UCEC	0.044808699
UPP2	Mapk_signaling_pathway	UCEC	-0.134548479
UPP2	Mapk3_erk1_activation	UCEC	-0.194353618
UPP2	Marginal zone b cell	UCEC	0.015437339
UPP2	Memory b cell	UCEC	0.087874988
UPP2	Mesenchymal cell	UCEC	0.0708864
UPP2	Mesenchymal stem cell	UCEC	0.092607506
UPP2	Metabolism of xenobiotic	UCEC	0.169574327

UPP2	Migrating cancer stem cel	UCEC	-0.003080502
UPP2	Mitotic_spindle	UCEC	-0.350393905
UPP2	Monocyte	UCEC	0.066993798
UPP2	Mtor_signaling_pathway	UCEC	-0.076065281
UPP2	Mtorc1_signaling	UCEC	-0.263895731
UPP2	Mucin type o-glycan biosy	UCEC	0.035023564
UPP2	Myc_targets_v1	UCEC	-0.286760021
UPP2	Myeloid cell	UCEC	0.026570034
UPP2	N-glycan biosynthesis	UCEC	-0.124767693
UPP2	Naive b cell	UCEC	0.046256249
UPP2	Naive cd4+ t cell	UCEC	0.062811323
UPP2	Naive cd8+ t cell	UCEC	0.117239706
UPP2	Natural killer cell	UCEC	0.031310648
UPP2	Natural killer t (nkt) cell	UCEC	-0.121152947
UPP2	Natural regulatory t (treg)	UCEC	0.10258804
UPP2	Neomycin, kanamycin and	UCEC	-0.139375952
UPP2	Neutrophil	UCEC	0.118359894
UPP2	Nicotinate and nicotinami	UCEC	0.159695208
UPP2	Nitrogen metabolism	UCEC	-0.019424182
UPP2	Nod_like_receptor_signal	UCEC	-0.019731267
UPP2	Notch_signaling	UCEC	-0.045823101
UPP2	One carbon pool by folate	UCEC	-0.29577123
UPP2	Other glycan degradation	UCEC	0.083117718
UPP2	Other types of o-glycan b	UCEC	0.076919543
UPP2	Oxidative phosphorylatio	UCEC	-0.050126664
UPP2	P53_pathway	UCEC	-0.069789769
UPP2	P53_signaling_pathway	UCEC	-0.124116858
UPP2	Pantothenate and coa bios	UCEC	0.028032707
UPP2	Pentose and glucuronate i	UCEC	-0.029577817
UPP2	Pentose phosphate pathwa	UCEC	-0.24763421
UPP2	Pericyte	UCEC	0.123255409
UPP2	Phenylalanine metabolism	UCEC	0.121499101
UPP2	Phenylalanine, tyrosine ar	UCEC	0.031092175
UPP2	Phosphonate and phosphir	UCEC	0.05022537
UPP2	Pi3k_akt_activation	UCEC	-0.109343326
UPP2	Pi3k_akt_mtor_signaling	UCEC	-0.236604722
UPP2	Porphyrin and chlorophyl	UCEC	-0.085387594
UPP2	Primary bile acid biosynt	UCEC	0.253732739
UPP2	Propanoate metabolism	UCEC	-0.138712622
UPP2	Purine metabolism	UCEC	-0.199573897
UPP2	Pyrimidine metabolism	UCEC	-0.210526656
UPP2	Pyruvate metabolism	UCEC	-0.2109012
UPP2	Regulation_of_autophagy	UCEC	-0.031499444

UPP2	Retinol metabolism	UCEC	0.157402934
UPP2	Riboflavin metabolism	UCEC	-0.026807595
UPP2	Schmahl_pdgf_signaling	UCEC	-0.00338716
UPP2	Selenocompound metabol	UCEC	-0.15569207
UPP2	Signaling_by_hippo	UCEC	-0.217188852
UPP2	Sphingolipid metabolism	UCEC	-0.147102679
UPP2	Starch and sucrose metabo	UCEC	0.017174868
UPP2	Steroid biosynthesis	UCEC	-0.127692547
UPP2	Steroid hormone biosynth	UCEC	0.193903098
UPP2	Sulfur metabolism	UCEC	0.011146279
UPP2	Synthesis and degradation	UCEC	-0.13136836
UPP2	T helper cell	UCEC	0.106176626
UPP2	T helper1 (th1) cell	UCEC	0.048269755
UPP2	T helper17 (th17) cell	UCEC	0.123722321
UPP2	T helper2 (th2) cell	UCEC	0.11692261
UPP2	T helper9 (th9) cell	UCEC	0.071751577
UPP2	Taurine and hypotaurine r	UCEC	0.156708194
UPP2	Terpenoid backbone biosy	UCEC	-0.182981432
UPP2	Tgf_beta_signaling_pathw	UCEC	-0.136525629
UPP2	Thiamine metabolism	UCEC	-0.026162919
UPP2	Tnfa_signaling_via_nfkb	UCEC	-0.021740854
UPP2	Tryptophan metabolism	UCEC	0.067593905
UPP2	Tumor endothelial cell	UCEC	-0.011533569
UPP2	Tyrosine metabolism	UCEC	0.165931318
UPP2	Ubiquinone and other terf	UCEC	-0.086288544
UPP2	Valine, leucine and isoleu	UCEC	-0.003693478
UPP2	Valine, leucine and isoleu	UCEC	-0.10966766
UPP2	Vascular endothelial cell	UCEC	0.077567223
UPP2	Vascular smooth muscle c	UCEC	0.103721289
UPP2	Vegf_signaling_pathway	UCEC	-0.131831331
UPP2	Vitamin b6 metabolism	UCEC	-0.214621085
UPP2	Willert_wnt_signaling	UCEC	-0.031657667
UPP2	Wnt_beta_catenin_signali	UCEC	-0.001654001
CDA	Abnormal plasma cell	UCS	0.3349326
CDA	Activated b cell	UCS	0.070067225
CDA	Activated cd4+ t cell	UCS	-0.052524445
CDA	Activated t cell	UCS	0.038865107
CDA	Alanine, aspartate and glu	UCS	-0.369707241
CDA	Alcala_apoptosis	UCS	0.00927649
CDA	Alpha-linolenic acid meta	UCS	0.064301108
CDA	Amino sugar and nucleoti	UCS	-0.02848045
CDA	Ampk_pathway	UCS	-0.051373548
CDA	Angiogenesis	UCS	0.115493872

CDA	Arachidonic acid metabolism	UCS	0.202675373
CDA	Arginine and proline metabolism	UCS	-0.05190385
CDA	Arginine biosynthesis	UCS	-0.192555164
CDA	Ascorbate and aldarate metabolism	UCS	-0.141264407
CDA	Atypical memory b cell	UCS	-0.015350676
CDA	Axl+siglec6+ dendritic cell	UCS	0.229038803
CDA	B cell	UCS	-0.081580229
CDA	B1 cell	UCS	0.015565342
CDA	Basal cell	UCS	0.217455937
CDA	Beta-alanine metabolism	UCS	-0.186568327
CDA	Biosynthesis of unsaturated fatty acids	UCS	-0.065200475
CDA	Biotin metabolism	UCS	-0.064081335
CDA	Butanoate metabolism	UCS	-0.163996567
CDA	Caffeine metabolism	UCS	0.101708008
CDA	Cancer stem cell	UCS	0.160025704
CDA	Cancer stem-like cell	UCS	-0.016548014
CDA	Cd4+ cytotoxic t cell	UCS	0.008585225
CDA	Cd4+ memory t cell	UCS	-0.032391708
CDA	Cd4+ regulatory t cell	UCS	0.062673247
CDA	Cd4+ t helper cell	UCS	0.048244977
CDA	Cd4+cd25+ regulatory t cell	UCS	0.044602228
CDA	Cd8+ cytotoxic t cell	UCS	-0.028127107
CDA	Cd8+ regulatory t cell	UCS	-0.013663554
CDA	Cell cycle	UCS	-0.189380018
CDA	Chandran_metastasis_top50	UCS	-0.540143551
CDA	Citrate cycle (tricarballic acid cycle)	UCS	-0.242127895
CDA	Cysteine and methionine metabolism	UCS	-0.20111002
CDA	Cytokine induced killer cell	UCS	0.249348491
CDA	D-arginine and d-ornithine	UCS	0.091633396
CDA	D-glutamine and d-glutamate	UCS	-0.412655072
CDA	Dendritic cell	UCS	-0.024507764
CDA	Dna_repair	UCS	0.177707418
CDA	Dna_replication	UCS	-0.099465818
CDA	Double-negative memory t cell	UCS	0.133497161
CDA	Drug metabolism - cytochrome p450	UCS	0.061619142
CDA	Drug metabolism - other	UCS	0.119831879
CDA	E2f_targets	UCS	-0.194387044
CDA	Ecm_receptor_interaction	UCS	0.157600512
CDA	Effector cd4+ memory t cell	UCS	-0.069281092
CDA	Effector cd8+ memory t cell	UCS	0.00950188
CDA	Effector memory t cell	UCS	-0.048314686
CDA	Effector regulatory t (treg)	UCS	-0.108587908
CDA	Elvidge_hif1a_targets_up	UCS	-0.284177267

CDA	Endothelial cell	UCS	0.160977555
CDA	Eosinophil	UCS	-0.037812996
CDA	Ether lipid metabolism	UCS	0.263564537
CDA	Exhausted cd4+ t cell	UCS	0.06021585
CDA	Exhausted cd8+ t cell	UCS	0.040803151
CDA	Exhausted t cell	UCS	0.039925699
CDA	Fat cell (adipocyte)	UCS	0.029006327
CDA	Fatty acid biosynthesis	UCS	-0.237563943
CDA	Fatty acid degradation	UCS	-0.352856754
CDA	Fatty acid elongation	UCS	-0.049979612
CDA	Fibroblast	UCS	0.21002872
CDA	Folate biosynthesis	UCS	-0.088280593
CDA	Follicular b cell	UCS	0.058026308
CDA	Follicular dendritic cell	UCS	0.045101357
CDA	Follicular helper (tfh) t ce	UCS	-0.059505368
CDA	Follicular t cell	UCS	0.133011659
CDA	Foxp3+il-17+ t cell	UCS	0.063318666
CDA	Fructose and mannose me	UCS	0.066775929
CDA	G2m_checkpoint	UCS	-0.259751292
CDA	Galactose metabolism	UCS	0.072049554
CDA	Galie_tumor_stemness_ge	UCS	0.310180496
CDA	Glutathione metabolism	UCS	0.045854945
CDA	Glycerolipid metabolism	UCS	-0.188212621
CDA	Glycerophospholipid metæ	UCS	0.101806435
CDA	Glycine, serine and threor	UCS	-0.104462764
CDA	Glycolysis / gluconeogene	UCS	-0.004182531
CDA	Glycosaminoglycan biosy	UCS	0.283796367
CDA	Glycosaminoglycan biosy	UCS	0.037176805
CDA	Glycosaminoglycan biosy	UCS	0.349692804
CDA	Glycosaminoglycan degra	UCS	0.121723245
CDA	Glycosphingolipid biosyn	UCS	0.129641095
CDA	Glycosphingolipid biosyn	UCS	0.079055311
CDA	Glycosphingolipid biosyn	UCS	0.062681059
CDA	Glycosylphosphatidylinos	UCS	0.023411678
CDA	Glyoxylate and dicarboxy	UCS	-0.235042772
CDA	Granulocyte	UCS	-0.094713837
CDA	Hedgehog_signaling	UCS	-0.014002251
CDA	Histidine metabolism	UCS	-0.028204974
CDA	Hypoxia	UCS	0.095153107
CDA	Il-17alpha t cell	UCS	0.048989857
CDA	Il2_stat5_signaling	UCS	0.112570706
CDA	Il6_jak_stat3_signaling	UCS	0.039391534
CDA	Immune_checkpoints_tur	UCS	0.10930667

CDA	Immune_inhibition_cytok	UCS	0.097645547
CDA	Inositol phosphate metabo	UCS	-0.018020804
CDA	Interleukin_6_signaling	UCS	-0.402555022
CDA	Jaeger_metastasis_up	UCS	-0.028121895
CDA	Jain_nfkb_signaling	UCS	-0.312505358
CDA	Kras_signaling_up	UCS	0.168561125
CDA	Linoleic acid metabolism	UCS	0.126724402
CDA	Lipoic acid metabolism	UCS	-0.051818649
CDA	Lysine degradation	UCS	-0.454585526
CDA	Lysosome	UCS	0.013895964
CDA	M1 macrophage	UCS	-0.069641403
CDA	M2 macrophage	UCS	0.003920364
CDA	Mannose type o-glycan bi	UCS	0.16643447
CDA	Mapk_signaling_pathway	UCS	0.230720715
CDA	Mapk3_erk1_activation	UCS	-0.464603013
CDA	Marginal zone b cell	UCS	0.017340289
CDA	Memory b cell	UCS	-0.087993206
CDA	Mesenchymal cell	UCS	0.258754755
CDA	Mesenchymal stem cell	UCS	0.067111704
CDA	Metabolism of xenobiotic	UCS	0.148711922
CDA	Migrating cancer stem cel	UCS	-0.018148014
CDA	Mitotic_spindle	UCS	-0.145170787
CDA	Monocyte	UCS	0.093905447
CDA	Mtor_signaling_pathway	UCS	-0.320870055
CDA	Mtorc1_signaling	UCS	-0.155751123
CDA	Mucin type o-glycan biosy	UCS	0.036550731
CDA	Myc_targets_v1	UCS	-0.147734589
CDA	Myeloid cell	UCS	-0.054383429
CDA	N-glycan biosynthesis	UCS	-0.037469039
CDA	Naive b cell	UCS	0.060770488
CDA	Naive cd4+ t cell	UCS	0.052345107
CDA	Naive cd8+ t cell	UCS	0.184956601
CDA	Natural killer cell	UCS	-0.037613012
CDA	Natural killer t (nkt) cell	UCS	-0.087369722
CDA	Natural regulatory t (treg)	UCS	0.051304989
CDA	Neomycin, kanamycin and	UCS	0.111725161
CDA	Neutrophil	UCS	0.031896571
CDA	Nicotinate and nicotinami	UCS	-0.101822445
CDA	Nitrogen metabolism	UCS	-0.01155098
CDA	Nod_like_receptor_signal	UCS	0.004203684
CDA	Notch_signaling	UCS	0.188088211
CDA	One carbon pool by folate	UCS	-0.024577385
CDA	Other glycan degradation	UCS	-0.015550324

CDA	Other types of o-glycan b	UCS	0.267346657
CDA	Oxidative phosphorylation	UCS	-0.057254275
CDA	P53_pathway	UCS	0.093019564
CDA	P53_signaling_pathway	UCS	-0.215845163
CDA	Pantothenate and coa biosynthesis	UCS	0.010228847
CDA	Pentose and glucuronate interconversions	UCS	-0.060551686
CDA	Pentose phosphate pathway	UCS	0.128451572
CDA	Pericyte	UCS	0.227263645
CDA	Phenylalanine metabolism	UCS	0.040519064
CDA	Phenylalanine, tyrosine and tryptophan metabolism	UCS	-0.098865434
CDA	Phosphonate and phosphite metabolism	UCS	0.140729802
CDA	Pi3k_akt_activation	UCS	0.060666207
CDA	Pi3k_akt_mtor_signaling	UCS	0.009247292
CDA	Porphyrin and chlorophyll metabolism	UCS	-0.145558092
CDA	Primary bile acid biosynthesis	UCS	0.202036092
CDA	Propanoate metabolism	UCS	-0.330087202
CDA	Purine metabolism	UCS	-0.032151078
CDA	Pyrimidine metabolism	UCS	-0.034196452
CDA	Pyruvate metabolism	UCS	-0.264645355
CDA	Regulation_of_autophagy	UCS	0.150235626
CDA	Retinol metabolism	UCS	0.248114207
CDA	Riboflavin metabolism	UCS	0.097693881
CDA	Schmahl_pdgf_signaling	UCS	-0.096128254
CDA	Selenocompound metabolism	UCS	-0.09869319
CDA	Signaling_by_hippo	UCS	-0.229566295
CDA	Sphingolipid metabolism	UCS	0.051770339
CDA	Starch and sucrose metabolism	UCS	-0.15120965
CDA	Steroid biosynthesis	UCS	0.057285772
CDA	Steroid hormone biosynthesis	UCS	0.056484423
CDA	Sulfur metabolism	UCS	0.077445834
CDA	Synthesis and degradation of ribonucleotides	UCS	0.044186663
CDA	T helper cell	UCS	0.000968936
CDA	T helper1 (th1) cell	UCS	-0.025403854
CDA	T helper17 (th17) cell	UCS	-0.049651626
CDA	T helper2 (th2) cell	UCS	0.116190835
CDA	T helper9 (th9) cell	UCS	0.140754378
CDA	Taurine and hypotaurine metabolism	UCS	0.155138625
CDA	Terpenoid backbone biosynthesis	UCS	-0.11746091
CDA	Tgf_beta_signaling_pathway	UCS	-0.093550689
CDA	Thiamine metabolism	UCS	-0.14462883
CDA	Tnfa_signaling_via_nfb	UCS	0.061507019
CDA	Tryptophan metabolism	UCS	-0.340144988
CDA	Tumor endothelial cell	UCS	0.192450069

CDA	Tyrosine metabolism	UCS	0.094585108
CDA	Ubiquinone and other ter	UCS	-0.216482756
CDA	Valine, leucine and isoleu	UCS	-0.078095525
CDA	Valine, leucine and isoleu	UCS	-0.343219467
CDA	Vascular endothelial cell	UCS	0.007571843
CDA	Vascular smooth muscle c	UCS	0.280473694
CDA	Vegf_signaling_pathway	UCS	0.322566467
CDA	Vitamin b6 metabolism	UCS	-0.035628977
CDA	Willert_wnt_signaling	UCS	0.088413493
CDA	Wnt_beta_catenin_signali	UCS	0.07410416
UCK1	Abnormal plasma cell	UCS	0.065189678
UCK1	Activated b cell	UCS	-0.093048052
UCK1	Activated cd4+ t cell	UCS	-0.23427911
UCK1	Activated t cell	UCS	-0.050841711
UCK1	Alanine, aspartate and glu	UCS	-0.288918665
UCK1	Alcala_apoptosis	UCS	0.024280752
UCK1	Alpha-linolenic acid meta	UCS	0.117650112
UCK1	Amino sugar and nucleoti	UCS	-0.115778104
UCK1	Ampk_pathway	UCS	0.131222847
UCK1	Angiogenesis	UCS	-0.338219613
UCK1	Arachidonic acid metabol	UCS	0.114367183
UCK1	Arginine and proline met	UCS	0.038921359
UCK1	Arginine biosynthesis	UCS	-0.171588787
UCK1	Ascorbate and aldarate m	UCS	-0.056311098
UCK1	Atypical memory b cell	UCS	-0.048295662
UCK1	Axl+siglec6+ dendritic ce	UCS	-0.086293088
UCK1	B cell	UCS	-0.308291306
UCK1	B1 cell	UCS	0.020432374
UCK1	Basal cell	UCS	-0.024970455
UCK1	Beta-alanine metabolism	UCS	-0.111104926
UCK1	Biosynthesis of unsaturate	UCS	-0.254467894
UCK1	Biotin metabolism	UCS	-0.166089259
UCK1	Butanoate metabolism	UCS	-0.027980648
UCK1	Caffeine metabolism	UCS	0.085581904
UCK1	Cancer stem cell	UCS	-0.297633407
UCK1	Cancer stem-like cell	UCS	-0.324901423
UCK1	Cd4+ cytotoxic t cell	UCS	-0.149831879
UCK1	Cd4+ memory t cell	UCS	-0.125449343
UCK1	Cd4+ regulatory t cell	UCS	-0.115954987
UCK1	Cd4+ t helper cell	UCS	-0.059703191
UCK1	Cd4+cd25+ regulatory t c	UCS	-0.091426094
UCK1	Cd8+ cytotoxic t cell	UCS	-0.169211467
UCK1	Cd8+ regulatory t cell	UCS	-0.107111644

UCK1	Cell_cycle	UCS	-0.072382829
UCK1	Chandran_metastasis_top	UCS	-0.201606717
UCK1	Citrate cycle (tca cycle)	UCS	-0.111641017
UCK1	Cysteine and methionine r	UCS	-0.220716972
UCK1	Cytokine induced killer c	UCS	0.079512354
UCK1	D-arginine and d-ornithin	UCS	0.205561081
UCK1	D-glutamine and d-glutan	UCS	-0.278232554
UCK1	Dendritic cell	UCS	-0.2649196
UCK1	Dna_repair	UCS	0.340203471
UCK1	Dna_replication	UCS	0.038602238
UCK1	Double-negative memory	UCS	-0.028093952
UCK1	Drug metabolism - cytoch	UCS	0.081735217
UCK1	Drug metabolism - other	UCS	0.166944761
UCK1	E2f_targets	UCS	-0.068475525
UCK1	Ecm_receptor_interaction	UCS	-0.336241483
UCK1	Effector cd4+ memory t	UCS	-0.183076845
UCK1	Effector cd8+ memory t	UCS	-0.242217685
UCK1	Effector memory t cell	UCS	-0.167106058
UCK1	Effector regulatory t (treg	UCS	-0.166790978
UCK1	Elvidge_hif1a_targets_up	UCS	-0.159540895
UCK1	Endothelial cell	UCS	-0.240066766
UCK1	Eosinophil	UCS	-0.271989318
UCK1	Ether lipid metabolism	UCS	-0.012286063
UCK1	Exhausted cd4+ t cell	UCS	-0.207620047
UCK1	Exhausted cd8+ t cell	UCS	-0.257075605
UCK1	Exhausted t cell	UCS	-0.050644229
UCK1	Fat cell (adipocyte)	UCS	0.134055954
UCK1	Fatty acid biosynthesis	UCS	-0.107811158
UCK1	Fatty acid degradation	UCS	-0.106971565
UCK1	Fatty acid elongation	UCS	-0.118808109
UCK1	Fibroblast	UCS	-0.138094604
UCK1	Folate biosynthesis	UCS	0.072172502
UCK1	Follicular b cell	UCS	-0.18022553
UCK1	Follicular dendritic cell	UCS	-0.088491641
UCK1	Follicular helper (tfh) t ce	UCS	-0.138212287
UCK1	Follicular t cell	UCS	0.039016727
UCK1	Foxp3+il-17+ t cell	UCS	0.051089434
UCK1	Fructose and mannose me	UCS	0.019792026
UCK1	G2m_checkpoint	UCS	-0.16392366
UCK1	Galactose metabolism	UCS	-0.232750433
UCK1	Galie_tumor_stemness_ge	UCS	-0.173375259
UCK1	Glutathione metabolism	UCS	0.022675691
UCK1	Glycerolipid metabolism	UCS	0.046556718

UCK1	Glycerophospholipid metabolism	UCS	0.022157916
UCK1	Glycine, serine and threonine metabolism	UCS	-0.013882445
UCK1	Glycolysis / gluconeogenesis	UCS	0.078120192
UCK1	Glycosaminoglycan biosynthesis	UCS	0.005055921
UCK1	Glycosaminoglycan biosynthesis	UCS	-0.181500378
UCK1	Glycosaminoglycan biosynthesis	UCS	-0.077833424
UCK1	Glycosaminoglycan degradation	UCS	-0.147459203
UCK1	Glycosphingolipid biosynthesis	UCS	-0.062149602
UCK1	Glycosphingolipid biosynthesis	UCS	-0.192695802
UCK1	Glycosphingolipid biosynthesis	UCS	-0.145527865
UCK1	Glycosylphosphatidylinositol signaling	UCS	-0.060302852
UCK1	Glyoxylate and dicarboxylate metabolism	UCS	-0.036072466
UCK1	Granulocyte	UCS	-0.229583056
UCK1	Hedgehog signaling	UCS	-0.328032015
UCK1	Histidine metabolism	UCS	0.07333035
UCK1	Hypoxia	UCS	-0.159999338
UCK1	IL-17 receptor signaling	UCS	-0.026919227
UCK1	IL2 signaling	UCS	-0.170349882
UCK1	IL6 signaling	UCS	-0.219364671
UCK1	Immune checkpoints	UCS	-0.122295558
UCK1	Immune inhibition	UCS	-0.043349854
UCK1	Inositol phosphate metabolism	UCS	-0.184911633
UCK1	Interleukin 6 signaling	UCS	-0.340839285
UCK1	Jaeger metastasis up	UCS	-0.001327138
UCK1	Jain nfkb signaling	UCS	-0.165480774
UCK1	Kras signaling up	UCS	-0.283096322
UCK1	Linoleic acid metabolism	UCS	0.188492032
UCK1	Lipoic acid metabolism	UCS	-0.012568807
UCK1	Lysine degradation	UCS	-0.18741165
UCK1	Lysosome	UCS	-0.173700316
UCK1	M1 macrophage	UCS	-0.245130909
UCK1	M2 macrophage	UCS	-0.266976516
UCK1	Mannose type o-glycan biosynthesis	UCS	0.101489945
UCK1	Mapk signaling pathway	UCS	-0.025470545
UCK1	Mapk3 erk1 activation	UCS	-0.269242684
UCK1	Marginal zone b cell	UCS	0.036261415
UCK1	Memory b cell	UCS	-0.095418318
UCK1	Mesenchymal cell	UCS	0.04001969
UCK1	Mesenchymal stem cell	UCS	-0.381473657
UCK1	Metabolism of xenobiotics	UCS	0.173188056
UCK1	Migrating cancer stem cell	UCS	-0.172981188
UCK1	Mitotic spindle	UCS	-0.258558711
UCK1	Monocyte	UCS	-0.209525528

UCK1	Mtor_signaling_pathway	UCS	-0.122150486
UCK1	Mtorc1_signaling	UCS	-0.120778278
UCK1	Mucin type o-glycan biosynthesis	UCS	-0.308410472
UCK1	Myc_targets_v1	UCS	0.044649708
UCK1	Myeloid cell	UCS	-0.249149076
UCK1	N-glycan biosynthesis	UCS	-0.350250722
UCK1	Naive b cell	UCS	-0.086781518
UCK1	Naive cd4+ t cell	UCS	-0.311392274
UCK1	Naive cd8+ t cell	UCS	-0.279152455
UCK1	Natural killer cell	UCS	-0.220229506
UCK1	Natural killer t (nkt) cell	UCS	-0.069999602
UCK1	Natural regulatory t (treg) cell	UCS	-0.194607768
UCK1	Neomycin, kanamycin and paromomycin	UCS	-0.199520563
UCK1	Neutrophil	UCS	-0.283369161
UCK1	Nicotinate and nicotinamide metabolism	UCS	-0.153651517
UCK1	Nitrogen metabolism	UCS	-0.003073212
UCK1	Nod_like_receptor_signaling	UCS	-0.207040857
UCK1	Notch_signaling	UCS	-0.304128852
UCK1	One carbon pool by folate	UCS	0.055397133
UCK1	Other glycan degradation	UCS	-0.214544657
UCK1	Other types of o-glycan biosynthesis	UCS	-0.024511103
UCK1	Oxidative phosphorylation	UCS	0.20006148
UCK1	P53_pathway	UCS	0.002991661
UCK1	P53_signaling_pathway	UCS	-0.156732941
UCK1	Pantothenate and coa biosynthesis	UCS	-0.161955869
UCK1	Pentose and glucuronate interconversions	UCS	-0.103909287
UCK1	Pentose phosphate pathway	UCS	0.099247317
UCK1	Pericyte	UCS	-0.103172662
UCK1	Phenylalanine metabolism	UCS	-0.011400068
UCK1	Phenylalanine, tyrosine and tryptophan metabolism	UCS	-0.142414861
UCK1	Phosphonate and phosphite metabolism	UCS	0.170882081
UCK1	Pi3k_akt_activation	UCS	-0.304685841
UCK1	Pi3k_akt_mtor_signaling	UCS	-0.018251717
UCK1	Porphyrin and chlorophyll metabolism	UCS	0.035235468
UCK1	Primary bile acid biosynthesis	UCS	0.066256985
UCK1	Propanoate metabolism	UCS	-0.217963614
UCK1	Purine metabolism	UCS	-0.039473418
UCK1	Pyrimidine metabolism	UCS	0.112289323
UCK1	Pyruvate metabolism	UCS	-0.028743472
UCK1	Regulation_of_autophagy	UCS	0.096995527
UCK1	Retinol metabolism	UCS	0.141910539
UCK1	Riboflavin metabolism	UCS	-0.123853954
UCK1	Schmahl_pdgf_signaling	UCS	-0.192764423

UCK1	Selenocompound metabol	UCS	-0.287661554
UCK1	Signaling_by_hippo	UCS	-0.319871434
UCK1	Sphingolipid metabolism	UCS	-0.269076728
UCK1	Starch and sucrose metabo	UCS	-0.187472369
UCK1	Steroid biosynthesis	UCS	0.118379739
UCK1	Steroid hormone biosynth	UCS	-0.081354648
UCK1	Sulfur metabolism	UCS	-0.208541469
UCK1	Synthesis and degradation	UCS	0.155754549
UCK1	T helper cell	UCS	-0.211829418
UCK1	T helper1 (th1) cell	UCS	-0.20592051
UCK1	T helper17 (th17) cell	UCS	-0.245192565
UCK1	T helper2 (th2) cell	UCS	-0.137883625
UCK1	T helper9 (th9) cell	UCS	-0.118891017
UCK1	Taurine and hypotaurine r	UCS	-0.208773592
UCK1	Terpenoid backbone biosy	UCS	-0.034800787
UCK1	Tgf_beta_signaling_pathw	UCS	-0.308784235
UCK1	Thiamine metabolism	UCS	-0.03883597
UCK1	Tnfa_signaling_via_nfk	UCS	-0.21948866
UCK1	Tryptophan metabolism	UCS	-0.15931352
UCK1	Tumor endothelial cell	UCS	0.242100879
UCK1	Tyrosine metabolism	UCS	0.083521044
UCK1	Ubiquinone and other ter	UCS	-0.0342551
UCK1	Valine, leucine and isoleu	UCS	-0.084728649
UCK1	Valine, leucine and isoleu	UCS	-0.115348884
UCK1	Vascular endothelial cell	UCS	-0.318302088
UCK1	Vascular smooth muscle c	UCS	0.036335311
UCK1	Vegf_signaling_pathway	UCS	0.161054557
UCK1	Vitamin b6 metabolism	UCS	-0.124986463
UCK1	Willert_wnt_signaling	UCS	-0.181557347
UCK1	Wnt_beta_catenin_signali	UCS	-0.311666047
UCK2	Abnormal plasma cell	UCS	-0.279468663
UCK2	Activated b cell	UCS	-0.015038762
UCK2	Activated cd4+ t cell	UCS	-0.119978881
UCK2	Activated t cell	UCS	0.022170402
UCK2	Alanine, aspartate and glu	UCS	0.253667197
UCK2	Alcala_apoptosis	UCS	0.315447507
UCK2	Alpha-linolenic acid meta	UCS	-0.156351903
UCK2	Amino sugar and nucleoti	UCS	0.268273081
UCK2	Ampk_pathway	UCS	0.087278845
UCK2	Angiogenesis	UCS	-0.231696461
UCK2	Arachidonic acid metabo	UCS	-0.059792006
UCK2	Arginine and proline met	UCS	0.249089448
UCK2	Arginine biosynthesis	UCS	0.237570239

UCK2	Ascorbate and aldarate me	UCS	0.257229747
UCK2	Atypical memory b cell	UCS	-0.026161738
UCK2	Axl+siglec6+ dendritic ce	UCS	-0.510437511
UCK2	B cell	UCS	-0.0730301
UCK2	B1 cell	UCS	-0.084048133
UCK2	Basal cell	UCS	-0.257557857
UCK2	Beta-alanine metabolism	UCS	-0.039268295
UCK2	Biosynthesis of unsaturate	UCS	0.392219287
UCK2	Biotin metabolism	UCS	0.07885541
UCK2	Butanoate metabolism	UCS	0.217175497
UCK2	Caffeine metabolism	UCS	-0.156081641
UCK2	Cancer stem cell	UCS	-0.437272478
UCK2	Cancer stem-like cell	UCS	-0.298691337
UCK2	Cd4+ cytotoxic t cell	UCS	-0.136481067
UCK2	Cd4+ memory t cell	UCS	0.000712163
UCK2	Cd4+ regulatory t cell	UCS	-0.157127784
UCK2	Cd4+ t helper cell	UCS	-0.095423231
UCK2	Cd4+cd25+ regulatory t c	UCS	-0.081850656
UCK2	Cd8+ cytotoxic t cell	UCS	0.069184434
UCK2	Cd8+ regulatory t cell	UCS	0.095972216
UCK2	Cell_cycle	UCS	0.142907692
UCK2	Chandran_metastasis_top5	UCS	0.258309513
UCK2	Citrate cycle (tca cycle)	UCS	0.354011844
UCK2	Cysteine and methionine r	UCS	0.364039395
UCK2	Cytokine induced killer c	UCS	-0.166028292
UCK2	D-arginine and d-ornithin	UCS	-0.060468836
UCK2	D-glutamine and d-glutan	UCS	0.197419389
UCK2	Dendritic cell	UCS	-0.089387566
UCK2	Dna_repair	UCS	0.471591524
UCK2	Dna_replication	UCS	0.430021726
UCK2	Double-negative memory	UCS	0.042202042
UCK2	Drug metabolism - cytoch	UCS	0.125732579
UCK2	Drug metabolism - other	UCS	0.420426442
UCK2	E2f_targets	UCS	0.376212537
UCK2	Ecm_receptor_interaction	UCS	-0.366242105
UCK2	Effector cd4+ memory t (	UCS	-0.139581167
UCK2	Effector cd8+ memory t (	UCS	-0.179405508
UCK2	Effector memory t cell	UCS	-0.084042716
UCK2	Effector regulatory t (treg	UCS	-0.101145913
UCK2	Elvidge_hif1a_targets_up	UCS	0.371656468
UCK2	Endothelial cell	UCS	-0.27873204
UCK2	Eosinophil	UCS	-0.065647184
UCK2	Ether lipid metabolism	UCS	-0.172535873

UCK2	Exhausted cd4+ t cell	UCS	-0.172730728
UCK2	Exhausted cd8+ t cell	UCS	-0.173162966
UCK2	Exhausted t cell	UCS	0.01147097
UCK2	Fat cell (adipocyte)	UCS	-0.039215228
UCK2	Fatty acid biosynthesis	UCS	0.023539692
UCK2	Fatty acid degradation	UCS	0.150644499
UCK2	Fatty acid elongation	UCS	0.423478815
UCK2	Fibroblast	UCS	-0.374877947
UCK2	Folate biosynthesis	UCS	0.264749573
UCK2	Follicular b cell	UCS	-0.123123082
UCK2	Follicular dendritic cell	UCS	0.056412438
UCK2	Follicular helper (tfh) t ce	UCS	-0.068082775
UCK2	Follicular t cell	UCS	0.108564578
UCK2	Foxp3+il-17+ t cell	UCS	-0.198839002
UCK2	Fructose and mannose me	UCS	0.268283663
UCK2	G2m_checkpoint	UCS	0.182744275
UCK2	Galactose metabolism	UCS	0.07823448
UCK2	Galie_tumor_stemness_ge	UCS	-0.379455396
UCK2	Glutathione metabolism	UCS	0.252997568
UCK2	Glycerolipid metabolism	UCS	0.325842026
UCK2	Glycerophospholipid metæ	UCS	0.081501649
UCK2	Glycine, serine and threor	UCS	0.130228474
UCK2	Glycolysis / gluconeogene	UCS	0.177105531
UCK2	Glycosaminoglycan biosy	UCS	-0.177108993
UCK2	Glycosaminoglycan biosy	UCS	-0.308639906
UCK2	Glycosaminoglycan biosy	UCS	-0.230612774
UCK2	Glycosaminoglycan degra	UCS	-0.015698143
UCK2	Glycosphingolipid biosyn	UCS	-0.281040415
UCK2	Glycosphingolipid biosyn	UCS	-0.143913916
UCK2	Glycosphingolipid biosyn	UCS	-0.185546611
UCK2	Glycosylphosphatidylinos	UCS	0.216443428
UCK2	Glyoxylate and dicarboxy	UCS	0.351848648
UCK2	Granulocyte	UCS	-0.086163936
UCK2	Hedgehog_signaling	UCS	-0.517033924
UCK2	Histidine metabolism	UCS	-0.107354222
UCK2	Hypoxia	UCS	-0.125447008
UCK2	Il-17ralpha t cell	UCS	-0.008008
UCK2	Il2_stat5_signaling	UCS	-0.115705164
UCK2	Il6_jak_stat3_signaling	UCS	-0.109847811
UCK2	Immune_checkpoints_tur	UCS	-0.132624158
UCK2	Immune_inhibition_cytok	UCS	-0.129176813
UCK2	Inositol phosphate metabo	UCS	-0.114669034
UCK2	Interleukin_6_signaling	UCS	-0.094275636

UCK2	Jaeger_metastasis_up	UCS	-0.043158835
UCK2	Jain_nfkb_signaling	UCS	0.616662986
UCK2	Kras_signaling_up	UCS	-0.293468148
UCK2	Linoleic acid metabolism	UCS	-0.226643147
UCK2	Lipoic acid metabolism	UCS	0.280874229
UCK2	Lysine degradation	UCS	0.228761093
UCK2	Lysosome	UCS	0.04415088
UCK2	M1 macrophage	UCS	-0.098626719
UCK2	M2 macrophage	UCS	-0.147685883
UCK2	Mannose type o-glycan bi	UCS	-0.031615049
UCK2	Mapk_signaling_pathway	UCS	-0.332783489
UCK2	Mapk3_erk1_activation	UCS	0.085933394
UCK2	Marginal zone b cell	UCS	0.009238548
UCK2	Memory b cell	UCS	-0.022417008
UCK2	Mesenchymal cell	UCS	-0.221024974
UCK2	Mesenchymal stem cell	UCS	-0.396307505
UCK2	Metabolism of xenobiotic	UCS	0.128222991
UCK2	Migrating cancer stem cel	UCS	-0.096401085
UCK2	Mitotic_spindle	UCS	-0.161326464
UCK2	Monocyte	UCS	-0.11581879
UCK2	Mtor_signaling_pathway	UCS	-0.054285406
UCK2	Mtorc1_signaling	UCS	0.377190273
UCK2	Mucin type o-glycan biosy	UCS	-0.17820987
UCK2	Myc_targets_v1	UCS	0.50221759
UCK2	Myeloid cell	UCS	-0.113743313
UCK2	N-glycan biosynthesis	UCS	0.16586415
UCK2	Naive b cell	UCS	0.123036502
UCK2	Naive cd4+ t cell	UCS	-0.289588058
UCK2	Naive cd8+ t cell	UCS	-0.177845164
UCK2	Natural killer cell	UCS	-0.02083896
UCK2	Natural killer t (nkt) cell	UCS	0.377336764
UCK2	Natural regulatory t (treg)	UCS	-0.160153922
UCK2	Neomycin, kanamycin and	UCS	-0.121910963
UCK2	Neutrophil	UCS	-0.141304955
UCK2	Nicotinate and nicotinami	UCS	-0.041338148
UCK2	Nitrogen metabolism	UCS	0.176351738
UCK2	Nod_like_receptor_signal	UCS	-0.00724411
UCK2	Notch_signaling	UCS	-0.398535927
UCK2	One carbon pool by folate	UCS	0.314834223
UCK2	Other glycan degradation	UCS	0.048578091
UCK2	Other types of o-glycan b	UCS	-0.084676014
UCK2	Oxidative phosphorylatio	UCS	0.392973546
UCK2	P53_pathway	UCS	0.021278016

UCK2	P53_signaling_pathway	UCS	0.065664777
UCK2	Pantothenate and coa bios	UCS	-0.077648416
UCK2	Pentose and glucuronate i	UCS	0.305538294
UCK2	Pentose phosphate pathwa	UCS	0.415802741
UCK2	Pericyte	UCS	-0.412567955
UCK2	Phenylalanine metabolism	UCS	-0.020806823
UCK2	Phenylalanine, tyrosine ar	UCS	0.1658265
UCK2	Phosphonate and phosphir	UCS	-0.079307755
UCK2	Pi3k_akt_activation	UCS	-0.259479315
UCK2	Pi3k_akt_mtor_signaling	UCS	0.103891728
UCK2	Porphyrin and chlorophyl	UCS	0.423653968
UCK2	Primary bile acid biosynt	UCS	-0.030771215
UCK2	Propanoate metabolism	UCS	0.143111374
UCK2	Purine metabolism	UCS	0.565438229
UCK2	Pyrimidine metabolism	UCS	0.606909782
UCK2	Pyruvate metabolism	UCS	0.369008742
UCK2	Regulation_of_autophagy	UCS	0.077819278
UCK2	Retinol metabolism	UCS	-0.053635265
UCK2	Riboflavin metabolism	UCS	0.136736581
UCK2	Schmahl_pdgf_signaling	UCS	-0.382520317
UCK2	Selenocompound metabol	UCS	0.178420827
UCK2	Signaling_by_hippo	UCS	-0.178132576
UCK2	Sphingolipid metabolism	UCS	-0.044191654
UCK2	Starch and sucrose metabo	UCS	-0.141039231
UCK2	Steroid biosynthesis	UCS	0.309647935
UCK2	Steroid hormone biosynth	UCS	0.045919977
UCK2	Sulfur metabolism	UCS	0.263111645
UCK2	Synthesis and degradation	UCS	0.186225266
UCK2	T helper cell	UCS	-0.12025705
UCK2	T helper1 (th1) cell	UCS	0.021349961
UCK2	T helper17 (th17) cell	UCS	-0.098417047
UCK2	T helper2 (th2) cell	UCS	-0.056594329
UCK2	T helper9 (th9) cell	UCS	-0.041181344
UCK2	Taurine and hypotaurine r	UCS	-0.396242213
UCK2	Terpenoid backbone biosy	UCS	0.40308623
UCK2	Tgf_beta_signaling_pathw	UCS	-0.510562297
UCK2	Thiamine metabolism	UCS	0.201853982
UCK2	Tnfa_signaling_via_nfk	UCS	-0.154906066
UCK2	Tryptophan metabolism	UCS	0.19381954
UCK2	Tumor endothelial cell	UCS	-0.183174269
UCK2	Tyrosine metabolism	UCS	-0.113938031
UCK2	Ubiquinone and other ter	UCS	0.342349539
UCK2	Valine, leucine and isoleu	UCS	0.084140055

UCK2	Valine, leucine and isoleu	UCS	0.267433138
UCK2	Vascular endothelial cell	UCS	-0.102933141
UCK2	Vascular smooth muscle c	UCS	-0.448563751
UCK2	Vegf_signaling_pathway	UCS	-0.032711404
UCK2	Vitamin b6 metabolism	UCS	-0.157143772
UCK2	Willert_wnt_signaling	UCS	0.064798241
UCK2	Wnt_beta_catenin_signali	UCS	-0.402488732
UCKL1	Abnormal plasma cell	UCS	-0.230742871
UCKL1	Activated b cell	UCS	-0.049938328
UCKL1	Activated cd4+ t cell	UCS	-0.092403029
UCKL1	Activated t cell	UCS	0.019814296
UCKL1	Alanine, aspartate and glu	UCS	-0.037023365
UCKL1	Alcala_apoptosis	UCS	0.118986328
UCKL1	Alpha-linolenic acid meta	UCS	-0.088904511
UCKL1	Amino sugar and nucleoti	UCS	-0.239208453
UCKL1	Ampk_pathway	UCS	0.090477767
UCKL1	Angiogenesis	UCS	-0.211177765
UCKL1	Arachidonic acid metabol	UCS	0.061484404
UCKL1	Arginine and proline meta	UCS	-0.139279756
UCKL1	Arginine biosynthesis	UCS	0.276963204
UCKL1	Ascorbate and aldarate me	UCS	0.136428394
UCKL1	Atypical memory b cell	UCS	-0.323349345
UCKL1	Axl+siglec6+ dendritic ce	UCS	-0.2474769
UCKL1	B cell	UCS	-0.129599445
UCKL1	B1 cell	UCS	-0.062104683
UCKL1	Basal cell	UCS	-0.034963202
UCKL1	Beta-alanine metabolism	UCS	-0.38467022
UCKL1	Biosynthesis of unsaturate	UCS	0.057872585
UCKL1	Biotin metabolism	UCS	-0.209506013
UCKL1	Butanoate metabolism	UCS	0.082604353
UCKL1	Caffeine metabolism	UCS	-0.09870603
UCKL1	Cancer stem cell	UCS	-0.159251937
UCKL1	Cancer stem-like cell	UCS	-0.270783354
UCKL1	Cd4+ cytotoxic t cell	UCS	-0.12760816
UCKL1	Cd4+ memory t cell	UCS	0.008364012
UCKL1	Cd4+ regulatory t cell	UCS	-0.069739292
UCKL1	Cd4+ t helper cell	UCS	0.05581213
UCKL1	Cd4+cd25+ regulatory t c	UCS	0.027212176
UCKL1	Cd8+ cytotoxic t cell	UCS	0.044648352
UCKL1	Cd8+ regulatory t cell	UCS	-0.07350861
UCKL1	Cell_cycle	UCS	-0.135102072
UCKL1	Chandran_metastasis_top	UCS	-0.032575063
UCKL1	Citrate cycle (tca cycle)	UCS	-0.099587136

UCKL1	Cysteine and methionine r	UCS	0.043199438
UCKL1	Cytokine induced killer c	UCS	0.082662389
UCKL1	D-arginine and d-ornithin	UCS	-0.095729362
UCKL1	D-glutamine and d-glutan	UCS	0.125736007
UCKL1	Dendritic cell	UCS	-0.140892305
UCKL1	Dna_repair	UCS	0.147044829
UCKL1	Dna_replication	UCS	0.131661941
UCKL1	Double-negative memory	UCS	0.038121334
UCKL1	Drug metabolism - cytoch	UCS	0.143197784
UCKL1	Drug metabolism - other c	UCS	0.155419598
UCKL1	E2f_targets	UCS	0.035768728
UCKL1	Ecm_receptor_interaction	UCS	-0.22401049
UCKL1	Effector cd4+ memory t (	UCS	-0.035644659
UCKL1	Effector cd8+ memory t (	UCS	-0.092325008
UCKL1	Effector memory t cell	UCS	-0.085002073
UCKL1	Effector regulatory t (treg	UCS	-0.159608471
UCKL1	Elvidge_hif1a_targets_up	UCS	-0.426217594
UCKL1	Endothelial cell	UCS	-0.216619598
UCKL1	Eosinophil	UCS	-0.059008567
UCKL1	Ether lipid metabolism	UCS	0.102683035
UCKL1	Exhausted cd4+ t cell	UCS	-0.208159546
UCKL1	Exhausted cd8+ t cell	UCS	-0.147251899
UCKL1	Exhausted t cell	UCS	0.041052722
UCKL1	Fat cell (adipocyte)	UCS	0.008215895
UCKL1	Fatty acid biosynthesis	UCS	-0.234920056
UCKL1	Fatty acid degradation	UCS	-0.047481287
UCKL1	Fatty acid elongation	UCS	0.088569565
UCKL1	Fibroblast	UCS	-0.233308015
UCKL1	Folate biosynthesis	UCS	0.03086803
UCKL1	Follicular b cell	UCS	0.013677097
UCKL1	Follicular dendritic cell	UCS	-0.104438559
UCKL1	Follicular helper (tfh) t c	UCS	-0.092005317
UCKL1	Follicular t cell	UCS	0.040658337
UCKL1	Foxp3+il-17+ t cell	UCS	-0.132006606
UCKL1	Fructose and mannose me	UCS	0.146112025
UCKL1	G2m_checkpoint	UCS	-0.079260943
UCKL1	Galactose metabolism	UCS	0.02945463
UCKL1	Galie_tumor_stemness_ge	UCS	-0.173127299
UCKL1	Glutathione metabolism	UCS	-0.05692901
UCKL1	Glycerolipid metabolism	UCS	0.126364517
UCKL1	Glycerophospholipid met	UCS	0.168856828
UCKL1	Glycine, serine and threor	UCS	-0.089766601
UCKL1	Glycolysis / gluconeogene	UCS	0.113427485

UCKL1	Glycosaminoglycan biosyn	UCS	-0.202187123
UCKL1	Glycosaminoglycan biosyn	UCS	-0.264084383
UCKL1	Glycosaminoglycan biosyn	UCS	-0.271709613
UCKL1	Glycosaminoglycan degra	UCS	-0.193368768
UCKL1	Glycosphingolipid biosyn	UCS	-0.371702667
UCKL1	Glycosphingolipid biosyn	UCS	-0.11048885
UCKL1	Glycosphingolipid biosyn	UCS	-0.122708146
UCKL1	Glycosylphosphatidylinos	UCS	0.047267222
UCKL1	Glyoxylate and dicarboxy	UCS	0.101564434
UCKL1	Granulocyte	UCS	-0.109010373
UCKL1	Hedgehog_signaling	UCS	-0.207155747
UCKL1	Histidine metabolism	UCS	-0.107683706
UCKL1	Hypoxia	UCS	-0.121344675
UCKL1	Il-17alpha t cell	UCS	0.094204479
UCKL1	Il2_stat5_signaling	UCS	-0.194476456
UCKL1	Il6_jak_stat3_signaling	UCS	-0.216733957
UCKL1	Immune_checkpoints_tun	UCS	-0.13032186
UCKL1	Immune_inhibition_cytok	UCS	-0.183831077
UCKL1	Inositol phosphate metabo	UCS	-0.40717546
UCKL1	Interleukin_6_signaling	UCS	-0.137517748
UCKL1	Jaeger_metastasis_up	UCS	-0.321467802
UCKL1	Jain_nfkb_signaling	UCS	0.136527979
UCKL1	Kras_signaling_up	UCS	-0.172588352
UCKL1	Linoleic acid metabolism	UCS	0.029104099
UCKL1	Lipoic acid metabolism	UCS	0.125402557
UCKL1	Lysine degradation	UCS	-0.030029821
UCKL1	Lysosome	UCS	-0.168715685
UCKL1	M1 macrophage	UCS	-0.110804744
UCKL1	M2 macrophage	UCS	-0.131697956
UCKL1	Mannose type o-glycan bi	UCS	0.043895361
UCKL1	Mapk_signaling_pathway	UCS	-0.266139329
UCKL1	Mapk3_erk1_activation	UCS	-0.112619429
UCKL1	Marginal zone b cell	UCS	-0.074406824
UCKL1	Memory b cell	UCS	0.035095342
UCKL1	Mesenchymal cell	UCS	-0.136547906
UCKL1	Mesenchymal stem cell	UCS	-0.233333705
UCKL1	Metabolism of xenobiotic	UCS	0.183198222
UCKL1	Migrating cancer stem cel	UCS	-0.207793508
UCKL1	Mitotic_spindle	UCS	-0.211305557
UCKL1	Monocyte	UCS	-0.10495194
UCKL1	Mtor_signaling_pathway	UCS	-0.023218868
UCKL1	Mtorc1_signaling	UCS	-0.117944591
UCKL1	Mucin type o-glycan bios	UCS	-0.20141602

UCKL1	Myc_targets_v1	UCS	0.068295289
UCKL1	Myeloid cell	UCS	-0.114498577
UCKL1	N-glycan biosynthesis	UCS	-0.149454114
UCKL1	Naive b cell	UCS	-0.055673034
UCKL1	Naive cd4+ t cell	UCS	-0.238399135
UCKL1	Naive cd8+ t cell	UCS	0.023925417
UCKL1	Natural killer cell	UCS	-0.025976118
UCKL1	Natural killer t (nkt) cell	UCS	0.056831729
UCKL1	Natural regulatory t (treg)	UCS	-0.112713283
UCKL1	Neomycin, kanamycin and	UCS	0.254130921
UCKL1	Neutrophil	UCS	-0.141127917
UCKL1	Nicotinate and nicotinami	UCS	-0.053720783
UCKL1	Nitrogen metabolism	UCS	-0.124037985
UCKL1	Nod_like_receptor_signal	UCS	-0.071916647
UCKL1	Notch_signaling	UCS	-0.046381112
UCKL1	One carbon pool by folate	UCS	-0.069946229
UCKL1	Other glycan degradation	UCS	0.026227891
UCKL1	Other types of o-glycan b	UCS	0.370579214
UCKL1	Oxidative phosphorylatio	UCS	0.0559944
UCKL1	P53_pathway	UCS	-0.12623294
UCKL1	P53_signaling_pathway	UCS	-0.495719755
UCKL1	Pantothenate and coa bios	UCS	-0.1054734
UCKL1	Pentose and glucuronate i	UCS	0.12954507
UCKL1	Pentose phosphate pathwa	UCS	0.216631708
UCKL1	Pericyte	UCS	-0.156419133
UCKL1	Phenylalanine metabolism	UCS	0.007615594
UCKL1	Phenylalanine, tyrosine ar	UCS	0.17582912
UCKL1	Phosphonate and phosphir	UCS	0.069841052
UCKL1	Pi3k_akt_activation	UCS	-0.21704308
UCKL1	Pi3k_akt_mtor_signaling	UCS	-0.169523878
UCKL1	Porphyrin and chlorophyl	UCS	0.14482986
UCKL1	Primary bile acid biosynt	UCS	-0.00967533
UCKL1	Propanoate metabolism	UCS	0.012557405
UCKL1	Purine metabolism	UCS	-0.029959399
UCKL1	Pyrimidine metabolism	UCS	0.117797883
UCKL1	Pyruvate metabolism	UCS	0.020158094
UCKL1	Regulation_of_autophagy	UCS	0.025713257
UCKL1	Retinol metabolism	UCS	0.152833096
UCKL1	Riboflavin metabolism	UCS	-0.136714386
UCKL1	Schmahl_pdgf_signaling	UCS	-0.334064502
UCKL1	Selenocompound metabol	UCS	0.051673538
UCKL1	Signaling_by_hippo	UCS	-0.097839815
UCKL1	Sphingolipid metabolism	UCS	-0.108745315

UCKL1	Starch and sucrose metabo	UCS	-0.288512852
UCKL1	Steroid biosynthesis	UCS	0.178307404
UCKL1	Steroid hormone biosynth	UCS	0.244357805
UCKL1	Sulfur metabolism	UCS	-0.156458929
UCKL1	Synthesis and degradation	UCS	0.076064848
UCKL1	T helper cell	UCS	-0.0873758
UCKL1	T helper1 (th1) cell	UCS	0.037999689
UCKL1	T helper17 (th17) cell	UCS	-0.07445234
UCKL1	T helper2 (th2) cell	UCS	0.013079115
UCKL1	T helper9 (th9) cell	UCS	0.108451571
UCKL1	Taurine and hypotaurine r	UCS	0.039940338
UCKL1	Terpenoid backbone biosy	UCS	0.021903503
UCKL1	Tgf_beta_signaling_pathw	UCS	-0.220686157
UCKL1	Thiamine metabolism	UCS	0.003090234
UCKL1	Tnfa_signaling_via_nfkb	UCS	-0.138314945
UCKL1	Tryptophan metabolism	UCS	0.115605811
UCKL1	Tumor endothelial cell	UCS	0.107839536
UCKL1	Tyrosine metabolism	UCS	0.04668875
UCKL1	Ubiquinone and other terp	UCS	0.220001916
UCKL1	Valine, leucine and isoleu	UCS	0.055292969
UCKL1	Valine, leucine and isoleu	UCS	0.165127041
UCKL1	Vascular endothelial cell	UCS	-0.208788023
UCKL1	Vascular smooth muscle c	UCS	-0.043681645
UCKL1	Vegf_signaling_pathway	UCS	0.029885564
UCKL1	Vitamin b6 metabolism	UCS	-0.052586528
UCKL1	Willert_wnt_signaling	UCS	0.094936845
UCKL1	Wnt_beta_catenin_signali	UCS	-0.228507972
UPP1	Abnormal plasma cell	UCS	-0.069690318
UPP1	Activated b cell	UCS	0.457910351
UPP1	Activated cd4+ t cell	UCS	0.427205582
UPP1	Activated t cell	UCS	0.423411488
UPP1	Alanine, aspartate and glu	UCS	-0.036759936
UPP1	Alcala_apoptosis	UCS	0.440828791
UPP1	Alpha-linolenic acid meta	UCS	0.405498072
UPP1	Amino sugar and nucleoti	UCS	0.443833227
UPP1	Ampk_pathway	UCS	-0.358073916
UPP1	Angiogenesis	UCS	0.298259477
UPP1	Arachidonic acid metaboli	UCS	0.573673367
UPP1	Arginine and proline metæ	UCS	0.099355908
UPP1	Arginine biosynthesis	UCS	-0.085557522
UPP1	Ascorbate and aldarate mε	UCS	0.283231975
UPP1	Atypical memory b cell	UCS	0.193275845
UPP1	Axl+siglec6+ dendritic ce	UCS	0.16473884

UPP1	B cell	UCS	0.498235192
UPP1	B1 cell	UCS	0.222635262
UPP1	Basal cell	UCS	0.431965277
UPP1	Beta-alanine metabolism	UCS	0.021619736
UPP1	Biosynthesis of unsaturate	UCS	0.238531491
UPP1	Biotin metabolism	UCS	-0.030810543
UPP1	Butanoate metabolism	UCS	0.212173055
UPP1	Caffeine metabolism	UCS	0.235857126
UPP1	Cancer stem cell	UCS	0.416211319
UPP1	Cancer stem-like cell	UCS	0.307681388
UPP1	Cd4+ cytotoxic t cell	UCS	0.445087077
UPP1	Cd4+ memory t cell	UCS	0.258916314
UPP1	Cd4+ regulatory t cell	UCS	0.486777909
UPP1	Cd4+ t helper cell	UCS	0.401615669
UPP1	Cd4+cd25+ regulatory t c	UCS	0.423835994
UPP1	Cd8+ cytotoxic t cell	UCS	0.432994862
UPP1	Cd8+ regulatory t cell	UCS	0.322042092
UPP1	Cell_cycle	UCS	-0.228394386
UPP1	Chandran_metastasis_top ²	UCS	-0.322202916
UPP1	Citrate cycle (tca cycle)	UCS	0.005974483
UPP1	Cysteine and methionine r	UCS	0.225372197
UPP1	Cytokine induced killer c α	UCS	-0.038787963
UPP1	D-arginine and d-ornithin	UCS	-0.002218837
UPP1	D-glutamine and d-glutan	UCS	-0.061769855
UPP1	Dendritic cell	UCS	0.461759701
UPP1	Dna_repair	UCS	0.116645932
UPP1	Dna_replication	UCS	0.007837177
UPP1	Double-negative memory	UCS	0.20733983
UPP1	Drug metabolism - cytoch	UCS	0.32602366
UPP1	Drug metabolism - other α	UCS	0.408937723
UPP1	E2f_targets	UCS	-0.122984943
UPP1	Ecm_receptor_interaction	UCS	0.15040623
UPP1	Effector cd4+ memory t (	UCS	0.261349818
UPP1	Effector cd8+ memory t (	UCS	0.526303795
UPP1	Effector memory t cell	UCS	0.379965995
UPP1	Effector regulatory t (treg	UCS	0.262983334
UPP1	Elvidge_hif1a_targets_up	UCS	-0.142406943
UPP1	Endothelial cell	UCS	0.14662831
UPP1	Eosinophil	UCS	0.501322122
UPP1	Ether lipid metabolism	UCS	0.443405762
UPP1	Exhausted cd4+ t cell	UCS	0.463967316
UPP1	Exhausted cd8+ t cell	UCS	0.548514853
UPP1	Exhausted t cell	UCS	0.411521915

UPP1	Fat cell (adipocyte)	UCS	-0.217087953
UPP1	Fatty acid biosynthesis	UCS	-0.091644811
UPP1	Fatty acid degradation	UCS	0.094706808
UPP1	Fatty acid elongation	UCS	0.24258945
UPP1	Fibroblast	UCS	0.116424157
UPP1	Folate biosynthesis	UCS	0.216327477
UPP1	Follicular b cell	UCS	0.39250832
UPP1	Follicular dendritic cell	UCS	0.35078239
UPP1	Follicular helper (tfh) t cell	UCS	0.322569656
UPP1	Follicular t cell	UCS	0.265047626
UPP1	Foxp3+il-17+ t cell	UCS	0.327066994
UPP1	Fructose and mannose me	UCS	0.380269308
UPP1	G2m_checkpoint	UCS	-0.22776894
UPP1	Galactose metabolism	UCS	0.568612569
UPP1	Galie_tumor_stemness_ge	UCS	0.084543177
UPP1	Glutathione metabolism	UCS	0.451095315
UPP1	Glycerolipid metabolism	UCS	0.448537892
UPP1	Glycerophospholipid met	UCS	0.426828286
UPP1	Glycine, serine and threo	UCS	0.255604861
UPP1	Glycolysis / gluconeogene	UCS	0.202877472
UPP1	Glycosaminoglycan biosy	UCS	0.036913206
UPP1	Glycosaminoglycan biosy	UCS	-0.087177374
UPP1	Glycosaminoglycan biosy	UCS	0.364724289
UPP1	Glycosaminoglycan degra	UCS	0.332356753
UPP1	Glycosphingolipid biosyn	UCS	0.395190625
UPP1	Glycosphingolipid biosyn	UCS	0.519789675
UPP1	Glycosphingolipid biosyn	UCS	0.383382221
UPP1	Glycosylphosphatidylinos	UCS	0.153026441
UPP1	Glyoxylate and dicarboxy	UCS	0.09533067
UPP1	Granulocyte	UCS	0.413313734
UPP1	Hedgehog_signaling	UCS	0.006844266
UPP1	Histidine metabolism	UCS	0.288531117
UPP1	Hypoxia	UCS	0.491828254
UPP1	Il-17alpha t cell	UCS	0.359179084
UPP1	Il2_stat5_signaling	UCS	0.507453474
UPP1	Il6_jak_stat3_signaling	UCS	0.551897029
UPP1	Immune_checkpoints_tur	UCS	0.567081073
UPP1	Immune_inhibition_cytok	UCS	0.461311471
UPP1	Inositol phosphate metabo	UCS	-0.045654024
UPP1	Interleukin_6_signaling	UCS	0.1529474
UPP1	Jaeger_metastasis_up	UCS	0.016795581
UPP1	Jain_nfkb_signaling	UCS	0.224926175
UPP1	Kras_signaling_up	UCS	0.545321233

UPP1	Linoleic acid metabolism	UCS	0.237404711
UPP1	Lipoic acid metabolism	UCS	-0.149792833
UPP1	Lysine degradation	UCS	-0.182744258
UPP1	Lysosome	UCS	0.54894114
UPP1	M1 macrophage	UCS	0.531794553
UPP1	M2 macrophage	UCS	0.46607657
UPP1	Mannose type o-glycan biosynthesis	UCS	0.175688708
UPP1	Mapk_signaling_pathway	UCS	0.026170567
UPP1	Mapk3_erk1_activation	UCS	-0.126142631
UPP1	Marginal zone b cell	UCS	0.410684811
UPP1	Memory b cell	UCS	0.377146925
UPP1	Mesenchymal cell	UCS	0.051553032
UPP1	Mesenchymal stem cell	UCS	0.293869663
UPP1	Metabolism of xenobiotics	UCS	0.358718822
UPP1	Migrating cancer stem cell	UCS	0.563127308
UPP1	Mitotic_spindle	UCS	-0.208968507
UPP1	Monocyte	UCS	0.617007327
UPP1	Mtor_signaling_pathway	UCS	-0.019733067
UPP1	Mtorc1_signaling	UCS	0.294101127
UPP1	Mucin type o-glycan biosynthesis	UCS	0.407603075
UPP1	Myc_targets_v1	UCS	0.051699659
UPP1	Myeloid cell	UCS	0.4444847
UPP1	N-glycan biosynthesis	UCS	0.421465767
UPP1	Naive b cell	UCS	0.484725845
UPP1	Naive cd4+ t cell	UCS	0.437576916
UPP1	Naive cd8+ t cell	UCS	0.33932204
UPP1	Natural killer cell	UCS	0.451675522
UPP1	Natural killer t (nkt) cell	UCS	0.482944412
UPP1	Natural regulatory t (treg) cell	UCS	0.517263162
UPP1	Neomycin, kanamycin and streptomycin	UCS	0.223916451
UPP1	Neutrophil	UCS	0.634005314
UPP1	Nicotinate and nicotinamide	UCS	0.379481543
UPP1	Nitrogen metabolism	UCS	0.296270261
UPP1	Nod_like_receptor_signaling	UCS	0.505276229
UPP1	Notch_signaling	UCS	0.104301443
UPP1	One carbon pool by folate	UCS	0.083429527
UPP1	Other glycan degradation	UCS	0.36657993
UPP1	Other types of o-glycan biosynthesis	UCS	0.062343295
UPP1	Oxidative phosphorylation	UCS	0.156959827
UPP1	P53_pathway	UCS	0.501440841
UPP1	P53_signaling_pathway	UCS	-0.026014726
UPP1	Pantothenate and coa biosynthesis	UCS	0.091545147
UPP1	Pentose and glucuronate interconversions	UCS	0.281977982

UPP1	Pentose phosphate pathwa	UCS	0.408773668
UPP1	Pericyte	UCS	-0.120122168
UPP1	Phenylalanine metabolism	UCS	0.298998296
UPP1	Phenylalanine, tyrosine ar	UCS	0.209141913
UPP1	Phosphonate and phosphir	UCS	-0.021433114
UPP1	Pi3k_akt_activation	UCS	-0.032986105
UPP1	Pi3k_akt_mtor_signaling	UCS	0.288897402
UPP1	Porphyrin and chlorophyl	UCS	0.26408889
UPP1	Primary bile acid biosynt	UCS	0.025390613
UPP1	Propanoate metabolism	UCS	-0.284575129
UPP1	Purine metabolism	UCS	0.091911222
UPP1	Pyrimidine metabolism	UCS	0.255158539
UPP1	Pyruvate metabolism	UCS	-0.04071919
UPP1	Regulation_of_autophagy	UCS	0.058206844
UPP1	Retinol metabolism	UCS	0.301497143
UPP1	Riboflavin metabolism	UCS	0.558525967
UPP1	Schmahl_pdgf_signaling	UCS	0.174721639
UPP1	Selenocompound metabol	UCS	-0.012111119
UPP1	Signaling_by_hippo	UCS	-0.114359723
UPP1	Sphingolipid metabolism	UCS	0.535012913
UPP1	Starch and sucrose metabo	UCS	0.078783592
UPP1	Steroid biosynthesis	UCS	0.296372733
UPP1	Steroid hormone biosynth	UCS	0.171936394
UPP1	Sulfur metabolism	UCS	0.292494166
UPP1	Synthesis and degradation	UCS	0.213285566
UPP1	T helper cell	UCS	0.421627591
UPP1	T helper1 (th1) cell	UCS	0.578462925
UPP1	T helper17 (th17) cell	UCS	0.490793194
UPP1	T helper2 (th2) cell	UCS	0.469402271
UPP1	T helper9 (th9) cell	UCS	0.524243743
UPP1	Taurine and hypotaurine r	UCS	0.134036885
UPP1	Terpenoid backbone biosy	UCS	0.06147605
UPP1	Tgf_beta_signaling_pathw	UCS	-0.19198809
UPP1	Thiamine metabolism	UCS	0.086225929
UPP1	Tnfa_signaling_via_nfkb	UCS	0.555559498
UPP1	Tryptophan metabolism	UCS	0.236888942
UPP1	Tumor endothelial cell	UCS	0.190182488
UPP1	Tyrosine metabolism	UCS	0.242562333
UPP1	Ubiquinone and other ter	UCS	0.122795032
UPP1	Valine, leucine and isoleu	UCS	0.349162187
UPP1	Valine, leucine and isoleu	UCS	0.070611557
UPP1	Vascular endothelial cell	UCS	0.213103798
UPP1	Vascular smooth muscle c	UCS	0.082015355

UPP1	Vegf_signaling_pathway	UCS	0.463696446
UPP1	Vitamin b6 metabolism	UCS	0.214135247
UPP1	Willert_wnt_signaling	UCS	0.420011033
UPP1	Wnt_beta_catenin_signali	UCS	-0.238774715
UPP2	Abnormal plasma cell	UCS	-0.044659366
UPP2	Activated b cell	UCS	-0.057857096
UPP2	Activated cd4+ t cell	UCS	-0.061654943
UPP2	Activated t cell	UCS	-0.006957771
UPP2	Alanine, aspartate and glu	UCS	-0.049885884
UPP2	Alcala_apoptosis	UCS	0.15776006
UPP2	Alpha-linolenic acid meta	UCS	0.209495385
UPP2	Amino sugar and nucleoti	UCS	0.026527005
UPP2	Ampk_pathway	UCS	-0.014910925
UPP2	Angiogenesis	UCS	-0.187633893
UPP2	Arachidonic acid metaboli	UCS	0.150201869
UPP2	Arginine and proline metε	UCS	0.021903107
UPP2	Arginine biosynthesis	UCS	0.042741731
UPP2	Ascorbate and aldarate mε	UCS	0.077255743
UPP2	Atypical memory b cell	UCS	-0.240182235
UPP2	Axl+siglec6+ dendritic ce	UCS	-0.198085987
UPP2	B cell	UCS	-0.024979372
UPP2	B1 cell	UCS	-0.027772179
UPP2	Basal cell	UCS	0.107729398
UPP2	Beta-alanine metabolism	UCS	0.090598981
UPP2	Biosynthesis of unsaturate	UCS	-0.036884969
UPP2	Biotin metabolism	UCS	0.072300756
UPP2	Butanoate metabolism	UCS	0.177630838
UPP2	Caffeine metabolism	UCS	0.187849846
UPP2	Cancer stem cell	UCS	-0.10236932
UPP2	Cancer stem-like cell	UCS	-0.025850475
UPP2	Cd4+ cytotoxic t cell	UCS	-0.093971244
UPP2	Cd4+ memory t cell	UCS	0.029235327
UPP2	Cd4+ regulatory t cell	UCS	-0.004296066
UPP2	Cd4+ t helper cell	UCS	0.03593019
UPP2	Cd4+cd25+ regulatory t c	UCS	0.021967781
UPP2	Cd8+ cytotoxic t cell	UCS	0.007039188
UPP2	Cd8+ regulatory t cell	UCS	-0.067113004
UPP2	Cell_cycle	UCS	-0.321270231
UPP2	Chandran_metastasis_top ⁵	UCS	-0.213752929
UPP2	Citrate cycle (tca cycle)	UCS	-0.001219553
UPP2	Cysteine and methionine r	UCS	-0.035329304
UPP2	Cytokine induced killer cε	UCS	-0.06608313
UPP2	D-arginine and d-ornithin	UCS	0.191468303

UPP2	D-glutamine and d-glutan UCS	-0.193636419
UPP2	Dendritic cell UCS	-0.069933211
UPP2	Dna_repair UCS	0.094604987
UPP2	Dna_replication UCS	-0.028049423
UPP2	Double-negative memory UCS	0.025663687
UPP2	Drug metabolism - cytoch UCS	0.23927551
UPP2	Drug metabolism - other UCS	0.245234158
UPP2	E2f_targets UCS	-0.167305639
UPP2	Ecm_receptor_interaction UCS	-0.247859379
UPP2	Effector cd4+ memory t (UCS	-0.066236377
UPP2	Effector cd8+ memory t (UCS	-0.101254589
UPP2	Effector memory t cell UCS	-0.020471604
UPP2	Effector regulatory t (treg UCS	-0.137865078
UPP2	Elvidge_hif1a_targets_up UCS	-0.210477788
UPP2	Endothelial cell UCS	-0.29340542
UPP2	Eosinophil UCS	-0.068356342
UPP2	Ether lipid metabolism UCS	0.048429744
UPP2	Exhausted cd4+ t cell UCS	-0.18529731
UPP2	Exhausted cd8+ t cell UCS	-0.112463671
UPP2	Exhausted t cell UCS	0.036220856
UPP2	Fat cell (adipocyte) UCS	0.029530361
UPP2	Fatty acid biosynthesis UCS	0.066203764
UPP2	Fatty acid degradation UCS	0.122808474
UPP2	Fatty acid elongation UCS	0.108910452
UPP2	Fibroblast UCS	-0.314020308
UPP2	Folate biosynthesis UCS	0.124238567
UPP2	Follicular b cell UCS	-0.098325225
UPP2	Follicular dendritic cell UCS	-0.105479186
UPP2	Follicular helper (tfh) t ce UCS	-0.092811909
UPP2	Follicular t cell UCS	0.054092356
UPP2	Foxp3+il-17+ t cell UCS	-0.109859204
UPP2	Fructose and mannose me UCS	0.116862911
UPP2	G2m_checkpoint UCS	-0.264005791
UPP2	Galactose metabolism UCS	0.08374174
UPP2	Galie_tumor_stemness_ge UCS	-0.219774541
UPP2	Glutathione metabolism UCS	0.280327279
UPP2	Glycerolipid metabolism UCS	0.317385473
UPP2	Glycerophospholipid metæ UCS	0.372161468
UPP2	Glycine, serine and threor UCS	-0.02839132
UPP2	Glycolysis / gluconeogene UCS	-0.051004327
UPP2	Glycosaminoglycan biosy UCS	0.035432453
UPP2	Glycosaminoglycan biosy UCS	-0.068019027
UPP2	Glycosaminoglycan biosy UCS	-0.011599009

UPP2	Glycosaminoglycan degra	UCS	0.013739611
UPP2	Glycosphingolipid biosyn	UCS	-0.084869591
UPP2	Glycosphingolipid biosyn	UCS	-0.02786054
UPP2	Glycosphingolipid biosyn	UCS	0.148113385
UPP2	Glycosylphosphatidylinos	UCS	0.135875664
UPP2	Glyoxylate and dicarboxy	UCS	0.182215672
UPP2	Granulocyte	UCS	-0.07690348
UPP2	Hedgehog_signaling	UCS	-0.215735922
UPP2	Histidine metabolism	UCS	0.074341111
UPP2	Hypoxia	UCS	-0.071939059
UPP2	Il-17alpha t cell	UCS	0.048314219
UPP2	Il2_stat5_signaling	UCS	-0.012469894
UPP2	Il6_jak_stat3_signaling	UCS	-0.097145528
UPP2	Immune_checkpoints_tur	UCS	0.017703643
UPP2	Immune_inhibition_cytok	UCS	-0.051710368
UPP2	Inositol phosphate metabo	UCS	-0.173923963
UPP2	Interleukin_6_signaling	UCS	-0.20379825
UPP2	Jaeger_metastasis_up	UCS	-0.446498063
UPP2	Jain_nfkb_signaling	UCS	-0.091378395
UPP2	Kras_signaling_up	UCS	-0.107739878
UPP2	Linoleic acid metabolism	UCS	0.302160065
UPP2	Lipoic acid metabolism	UCS	0.191820163
UPP2	Lysine degradation	UCS	-0.065434449
UPP2	Lysosome	UCS	0.03396292
UPP2	M1 macrophage	UCS	-0.062150778
UPP2	M2 macrophage	UCS	-0.136449382
UPP2	Mannose type o-glycan bi	UCS	0.132271728
UPP2	Mapk_signaling_pathway	UCS	-0.186535257
UPP2	Mapk3_erk1_activation	UCS	-0.216128807
UPP2	Marginal zone b cell	UCS	0.050846014
UPP2	Memory b cell	UCS	-0.05083754
UPP2	Mesenchymal cell	UCS	-0.181736278
UPP2	Mesenchymal stem cell	UCS	-0.262588358
UPP2	Metabolism of xenobiotic	UCS	0.285641467
UPP2	Migrating cancer stem cel	UCS	0.121106683
UPP2	Mitotic_spindle	UCS	-0.254623423
UPP2	Monocyte	UCS	-0.051082164
UPP2	Mtor_signaling_pathway	UCS	-0.005550979
UPP2	Mtorc1_signaling	UCS	-0.051594864
UPP2	Mucin type o-glycan biosy	UCS	-0.012381845
UPP2	Myc_targets_v1	UCS	-0.029658666
UPP2	Myeloid cell	UCS	-0.11743896
UPP2	N-glycan biosynthesis	UCS	0.002429906

UPP2	Naive b cell	UCS	-0.005396557
UPP2	Naive cd4+ t cell	UCS	-0.059737991
UPP2	Naive cd8+ t cell	UCS	0.145151894
UPP2	Natural killer cell	UCS	-0.064860048
UPP2	Natural killer t (nkt) cell	UCS	0.006693232
UPP2	Natural regulatory t (treg)	UCS	0.017044539
UPP2	Neomycin, kanamycin and	UCS	-0.092688458
UPP2	Neutrophil	UCS	-0.011721867
UPP2	Nicotinate and nicotinami	UCS	0.173080675
UPP2	Nitrogen metabolism	UCS	0.12958218
UPP2	Nod_like_receptor_signal	UCS	-0.047698168
UPP2	Notch_signaling	UCS	-0.10897398
UPP2	One carbon pool by folate	UCS	-0.025325644
UPP2	Other glycan degradation	UCS	0.053054949
UPP2	Other types of o-glycan b	UCS	-0.008611596
UPP2	Oxidative phosphorylatio	UCS	0.186268645
UPP2	P53_pathway	UCS	0.125737165
UPP2	P53_signaling_pathway	UCS	-0.15089117
UPP2	Pantothenate and coa bios	UCS	-0.068917023
UPP2	Pentose and glucuronate i	UCS	0.143114592
UPP2	Pentose phosphate pathwa	UCS	0.148791589
UPP2	Pericyte	UCS	-0.263326308
UPP2	Phenylalanine metabolism	UCS	0.017713048
UPP2	Phenylalanine, tyrosine ar	UCS	-0.164334142
UPP2	Phosphonate and phosphir	UCS	-0.031546657
UPP2	Pi3k_akt_activation	UCS	-0.046958293
UPP2	Pi3k_akt_mtor_signaling	UCS	-0.029662487
UPP2	Porphyrin and chlorophyl	UCS	0.099901758
UPP2	Primary bile acid biosynt	UCS	0.07468787
UPP2	Propanoate metabolism	UCS	0.061929838
UPP2	Purine metabolism	UCS	0.146715665
UPP2	Pyrimidine metabolism	UCS	0.108102018
UPP2	Pyruvate metabolism	UCS	0.010965287
UPP2	Regulation_of_autophagy	UCS	4.22E-05
UPP2	Retinol metabolism	UCS	0.173652555
UPP2	Riboflavin metabolism	UCS	0.133429151
UPP2	Schmahl_pdgf_signaling	UCS	0.015321494
UPP2	Selenocompound metabol	UCS	-0.141229355
UPP2	Signaling_by_hippo	UCS	-0.224162259
UPP2	Sphingolipid metabolism	UCS	0.176414236
UPP2	Starch and sucrose metabo	UCS	-0.034714828
UPP2	Steroid biosynthesis	UCS	0.322463828
UPP2	Steroid hormone biosynth	UCS	0.126500246

UPP2	Sulfur metabolism	UCS	-0.107088174
UPP2	Synthesis and degradation	UCS	0.117434964
UPP2	T helper cell	UCS	-0.107435119
UPP2	T helper1 (th1) cell	UCS	0.001672356
UPP2	T helper17 (th17) cell	UCS	-0.074896804
UPP2	T helper2 (th2) cell	UCS	0.021474073
UPP2	T helper9 (th9) cell	UCS	0.028839586
UPP2	Taurine and hypotaurine r	UCS	0.199241653
UPP2	Terpenoid backbone biosy	UCS	0.322991014
UPP2	Tgf_beta_signaling_pathw	UCS	-0.305899336
UPP2	Thiamine metabolism	UCS	0.056596932
UPP2	Tnfa_signaling_via_nfkb	UCS	-0.044076476
UPP2	Tryptophan metabolism	UCS	0.237534551
UPP2	Tumor endothelial cell	UCS	0.054221816
UPP2	Tyrosine metabolism	UCS	0.156678235
UPP2	Ubiquinone and other terq	UCS	0.116569815
UPP2	Valine, leucine and isoleu	UCS	0.00987531
UPP2	Valine, leucine and isoleu	UCS	0.127136447
UPP2	Vascular endothelial cell	UCS	-0.234737954
UPP2	Vascular smooth muscle c	UCS	-0.16493723
UPP2	Vegf_signaling_pathway	UCS	0.102541881
UPP2	Vitamin b6 metabolism	UCS	0.210488762
UPP2	Willert_wnt_signaling	UCS	0.068660083
UPP2	Wnt_beta_catenin_signali	UCS	-0.416041623
CDA	Abnormal plasma cell	UVM	0.245011167
CDA	Activated b cell	UVM	0.481381956
CDA	Activated cd4+ t cell	UVM	0.305520789
CDA	Activated t cell	UVM	0.319884616
CDA	Alanine, aspartate and glu	UVM	-0.130476744
CDA	Alcala_apoptosis	UVM	0.384471223
CDA	Alpha-linolenic acid meta	UVM	0.465293881
CDA	Amino sugar and nucleoti	UVM	0.103047085
CDA	Ampk_pathway	UVM	-0.128948204
CDA	Angiogenesis	UVM	0.394275686
CDA	Arachidonic acid metabol	UVM	0.592306387
CDA	Arginine and proline metæ	UVM	0.353115177
CDA	Arginine biosynthesis	UVM	0.176483649
CDA	Ascorbate and aldarate mε	UVM	0.148642293
CDA	Atypical memory b cell	UVM	0.249124698
CDA	Axl+siglec6+ dendritic ce	UVM	0.567771258
CDA	B cell	UVM	0.300052283
CDA	B1 cell	UVM	0.492556889
CDA	Basal cell	UVM	0.602067734

CDA	Beta-alanine metabolism	UVM	0.090078726
CDA	Biosynthesis of unsaturate	UVM	0.272820012
CDA	Biotin metabolism	UVM	0.066200672
CDA	Butanoate metabolism	UVM	-0.219696809
CDA	Caffeine metabolism	UVM	0.227910854
CDA	Cancer stem cell	UVM	0.341775234
CDA	Cancer stem-like cell	UVM	0.175539798
CDA	Cd4+ cytotoxic t cell	UVM	0.420858886
CDA	Cd4+ memory t cell	UVM	0.392957071
CDA	Cd4+ regulatory t cell	UVM	0.502398489
CDA	Cd4+ t helper cell	UVM	0.408663106
CDA	Cd4+cd25+ regulatory t c	UVM	0.386310513
CDA	Cd8+ cytotoxic t cell	UVM	0.350024221
CDA	Cd8+ regulatory t cell	UVM	0.236256825
CDA	Cell_cycle	UVM	-0.303115638
CDA	Chandran_metastasis_top5	UVM	-0.519218637
CDA	Citrate cycle (tca cycle)	UVM	-0.2326611
CDA	Cysteine and methionine r	UVM	-0.121621758
CDA	Cytokine induced killer c	UVM	0.364021994
CDA	D-arginine and d-ornithin	UVM	0.18536465
CDA	D-glutamine and d-glutan	UVM	-0.425385669
CDA	Dendritic cell	UVM	0.504132051
CDA	Dna_repair	UVM	0.02159369
CDA	Dna_replication	UVM	-0.203371585
CDA	Double-negative memory	UVM	0.364477915
CDA	Drug metabolism - cytoch	UVM	0.380303821
CDA	Drug metabolism - other	UVM	0.434596119
CDA	E2f_targets	UVM	-0.330411005
CDA	Ecm_receptor_interaction	UVM	0.373750972
CDA	Effector cd4+ memory t (	UVM	0.279081906
CDA	Effector cd8+ memory t (	UVM	0.394796754
CDA	Effector memory t cell	UVM	0.401485217
CDA	Effector regulatory t (treg	UVM	0.358961772
CDA	Elvidge_hif1a_targets_up	UVM	-0.121617535
CDA	Endothelial cell	UVM	0.203927881
CDA	Eosinophil	UVM	0.463246801
CDA	Ether lipid metabolism	UVM	0.3740706
CDA	Exhausted cd4+ t cell	UVM	0.192296286
CDA	Exhausted cd8+ t cell	UVM	0.293124932
CDA	Exhausted t cell	UVM	0.380233882
CDA	Fat cell (adipocyte)	UVM	0.146133587
CDA	Fatty acid biosynthesis	UVM	0.039234134
CDA	Fatty acid degradation	UVM	-0.093834441

CDA	Fatty acid elongation	UVM	0.17694281
CDA	Fibroblast	UVM	0.359821753
CDA	Folate biosynthesis	UVM	0.214659413
CDA	Follicular b cell	UVM	0.382838593
CDA	Follicular dendritic cell	UVM	0.238565375
CDA	Follicular helper (tfh) t ce	UVM	0.314582428
CDA	Follicular t cell	UVM	0.352808547
CDA	Foxp3+il-17+ t cell	UVM	0.406566416
CDA	Fructose and mannose me	UVM	0.421022357
CDA	G2m_checkpoint	UVM	-0.408210142
CDA	Galactose metabolism	UVM	0.413829473
CDA	Galie_tumor_stemness_ge	UVM	0.256351578
CDA	Glutathione metabolism	UVM	0.459818284
CDA	Glycerolipid metabolism	UVM	0.345235154
CDA	Glycerophospholipid metæ	UVM	0.458659721
CDA	Glycine, serine and threor	UVM	0.495699776
CDA	Glycolysis / gluconeogene	UVM	0.194569778
CDA	Glycosaminoglycan biosy1	UVM	0.415594549
CDA	Glycosaminoglycan biosy1	UVM	0.307167809
CDA	Glycosaminoglycan biosy1	UVM	0.36008648
CDA	Glycosaminoglycan degra	UVM	0.462130246
CDA	Glycosphingolipid biosyn1	UVM	0.458130551
CDA	Glycosphingolipid biosyn1	UVM	0.505862983
CDA	Glycosphingolipid biosyn1	UVM	0.32966264
CDA	Glycosylphosphatidylinos:	UVM	-0.215523602
CDA	Glyoxylate and dicarboxy	UVM	-0.073402904
CDA	Granulocyte	UVM	0.388469787
CDA	Hedgehog_signaling	UVM	0.24945764
CDA	Histidine metabolism	UVM	0.197350084
CDA	Hypoxia	UVM	0.301099695
CDA	Il-17ralpha t cell	UVM	0.357649592
CDA	Il2_stat5_signaling	UVM	0.501323183
CDA	Il6_jak_stat3_signaling	UVM	0.432938158
CDA	Immune_checkpoints_tunr	UVM	0.461026673
CDA	Immune_inhibition_cytok	UVM	0.588339319
CDA	Inositol phosphatè metabo	UVM	-0.272500576
CDA	Interleukin_6_signaling	UVM	-0.033640077
CDA	Jaeger_metastasis_up	UVM	-0.01852293
CDA	Jain_nfkb_signaling	UVM	-0.151471147
CDA	Kras_signaling_up	UVM	0.50409502
CDA	Linoleic acid metabolism	UVM	0.374909928
CDA	Lipoic acid metabolism	UVM	-0.377658038
CDA	Lysine degradation	UVM	-0.327843616

CDA	Lysosome	UVM	0.40472243
CDA	M1 macrophage	UVM	0.306649626
CDA	M2 macrophage	UVM	0.478698967
CDA	Mannose type o-glycan bi	UVM	-0.051723725
CDA	Mapk_signaling_pathway	UVM	0.287841755
CDA	Mapk3_erk1_activation	UVM	0.005648298
CDA	Marginal zone b cell	UVM	0.210839888
CDA	Memory b cell	UVM	0.322311819
CDA	Mesenchymal cell	UVM	0.440600148
CDA	Mesenchymal stem cell	UVM	0.377297113
CDA	Metabolism of xenobiotic	UVM	0.488715942
CDA	Migrating cancer stem cel	UVM	0.369016572
CDA	Mitotic_spindle	UVM	-0.485064375
CDA	Monocyte	UVM	0.471614816
CDA	Mtor_signaling_pathway	UVM	-0.068167199
CDA	Mtorc1_signaling	UVM	-0.025189041
CDA	Mucin type o-glycan biosy	UVM	-0.299621044
CDA	Myc_targets_v1	UVM	-0.315644383
CDA	Myeloid cell	UVM	0.397001062
CDA	N-glycan biosynthesis	UVM	0.223013594
CDA	Naive b cell	UVM	0.335406247
CDA	Naive cd4+ t cell	UVM	0.372447961
CDA	Naive cd8+ t cell	UVM	0.027413874
CDA	Natural killer cell	UVM	0.407867456
CDA	Natural killer t (nkt) cell	UVM	-0.188358954
CDA	Natural regulatory t (treg)	UVM	0.431866449
CDA	Neomycin, kanamycin and	UVM	0.371065646
CDA	Neutrophil	UVM	0.505893319
CDA	Nicotinate and nicotinami	UVM	0.17593043
CDA	Nitrogen metabolism	UVM	-0.094247665
CDA	Nod_like_receptor_signal	UVM	0.372184562
CDA	Notch_signaling	UVM	0.27447637
CDA	One carbon pool by folate	UVM	-0.39166123
CDA	Other glycan degradation	UVM	0.250715363
CDA	Other types of o-glycan b	UVM	0.413455634
CDA	Oxidative phosphorylatior	UVM	0.332051815
CDA	P53_pathway	UVM	0.492680426
CDA	P53_signaling_pathway	UVM	0.009763058
CDA	Pantothenate and coa bios	UVM	0.1558456
CDA	Pentose and glucuronate in	UVM	0.304426082
CDA	Pentose phosphate pathwa	UVM	0.263844828
CDA	Pericyte	UVM	0.358252455
CDA	Phenylalanine metabolism	UVM	0.343425132

CDA	Phenylalanine, tyrosine ar	UVM	0.285595976
CDA	Phosphonate and phosphir	UVM	-0.015429794
CDA	Pi3k_akt_activation	UVM	-0.066037709
CDA	Pi3k_akt_mtor_signaling	UVM	0.281519749
CDA	Porphyrin and chlorophyl	UVM	0.328262412
CDA	Primary bile acid biosynt	UVM	0.134594
CDA	Propanoate metabolism	UVM	-0.493730206
CDA	Purine metabolism	UVM	-0.077006497
CDA	Pyrimidine metabolism	UVM	-0.080655978
CDA	Pyruvate metabolism	UVM	-0.133476591
CDA	Regulation_of_autophagy	UVM	-0.283857224
CDA	Retinol metabolism	UVM	0.427480077
CDA	Riboflavin metabolism	UVM	0.233340799
CDA	Schmahl_pdgf_signaling	UVM	-0.287703262
CDA	Selenocompound metabol	UVM	-0.312797575
CDA	Signaling_by_hippo	UVM	-0.494520174
CDA	Sphingolipid metabolism	UVM	0.029849114
CDA	Starch and sucrose metabo	UVM	0.125091631
CDA	Steroid biosynthesis	UVM	0.255512213
CDA	Steroid hormone biosynth	UVM	0.363642474
CDA	Sulfur metabolism	UVM	0.056318688
CDA	Synthesis and degradation	UVM	-0.096881459
CDA	T helper cell	UVM	0.429348988
CDA	T helper1 (th1) cell	UVM	0.333466825
CDA	T helper17 (th17) cell	UVM	0.32913855
CDA	T helper2 (th2) cell	UVM	0.374743566
CDA	T helper9 (th9) cell	UVM	0.433129804
CDA	Taurine and hypotaurine r	UVM	0.201608902
CDA	Terpenoid backbone biosy	UVM	-0.029281413
CDA	Tgf_beta_signaling_pathw	UVM	-0.018205837
CDA	Thiamine metabolism	UVM	0.233781051
CDA	Tnfa_signaling_via_nfkb	UVM	0.402557839
CDA	Tryptophan metabolism	UVM	0.310820512
CDA	Tumor endothelial cell	UVM	0.171827361
CDA	Tyrosine metabolism	UVM	0.348481035
CDA	Ubiquinone and other ter	UVM	0.036568398
CDA	Valine, leucine and isoleu	UVM	0.564499354
CDA	Valine, leucine and isoleu	UVM	-0.26850181
CDA	Vascular endothelial cell	UVM	0.551957926
CDA	Vascular smooth muscle c	UVM	0.365278181
CDA	Vegf_signaling_pathway	UVM	0.47099077
CDA	Vitamin b6 metabolism	UVM	0.406435434
CDA	Willert_wnt_signaling	UVM	-0.094879077

CDA	Wnt_beta_catenin_signali	UVM	0.122161327
UCK1	Abnormal plasma cell	UVM	0.019305828
UCK1	Activated b cell	UVM	-0.157081998
UCK1	Activated cd4+ t cell	UVM	-0.376665795
UCK1	Activated t cell	UVM	-0.319498152
UCK1	Alanine, aspartate and glu	UVM	0.029121362
UCK1	Alcala_apoptosis	UVM	-0.130002168
UCK1	Alpha-linolenic acid meta	UVM	0.36093476
UCK1	Amino sugar and nucleoti	UVM	-0.19454288
UCK1	Ampk_pathway	UVM	0.108169373
UCK1	Angiogenesis	UVM	0.036133595
UCK1	Arachidonic acid metabol:	UVM	0.50507306
UCK1	Arginine and proline meta	UVM	0.44051726
UCK1	Arginine biosynthesis	UVM	0.393827787
UCK1	Ascorbate and aldarate me	UVM	0.380124229
UCK1	Atypical memory b cell	UVM	-0.212010271
UCK1	Axl+siglec6+ dendritic ce	UVM	0.110219127
UCK1	B cell	UVM	-0.371616998
UCK1	B1 cell	UVM	-0.146900288
UCK1	Basal cell	UVM	0.306524585
UCK1	Beta-alanine metabolism	UVM	0.403025897
UCK1	Biosynthesis of unsaturate	UVM	0.153530083
UCK1	Biotin metabolism	UVM	-0.376294248
UCK1	Butanoate metabolism	UVM	0.087779461
UCK1	Caffeine metabolism	UVM	0.494991092
UCK1	Cancer stem cell	UVM	-0.29880984
UCK1	Cancer stem-like cell	UVM	-0.078401571
UCK1	Cd4+ cytotoxic t cell	UVM	-0.273730702
UCK1	Cd4+ memory t cell	UVM	-0.227787884
UCK1	Cd4+ regulatory t cell	UVM	-0.099551199
UCK1	Cd4+ t helper cell	UVM	-0.280477853
UCK1	Cd4+cd25+ regulatory t c	UVM	-0.291913529
UCK1	Cd8+ cytotoxic t cell	UVM	-0.332615672
UCK1	Cd8+ regulatory t cell	UVM	-0.362814107
UCK1	Cell_cycle	UVM	-0.353344517
UCK1	Chandran_metastasis_top	UVM	-0.49735932
UCK1	Citrate cycle (tca cycle)	UVM	-0.247205553
UCK1	Cysteine and methionine r	UVM	-0.21250735
UCK1	Cytokine induced killer ce	UVM	-0.19176591
UCK1	D-arginine and d-ornithin	UVM	-0.024966768
UCK1	D-glutamine and d-glutan	UVM	-0.299645823
UCK1	Dendritic cell	UVM	-0.162275381
UCK1	Dna_repair	UVM	0.143215119

UCK1	Dna_replication	UVM	-0.006626185
UCK1	Double-negative memory	UVM	-0.157349621
UCK1	Drug metabolism - cytoch	UVM	0.596735857
UCK1	Drug metabolism - other	UVM	0.512107521
UCK1	E2f_targets	UVM	-0.202762936
UCK1	Ecm_receptor_interaction	UVM	0.260571799
UCK1	Effector cd4+ memory t	UVM	-0.397249361
UCK1	Effector cd8+ memory t	UVM	-0.293832531
UCK1	Effector memory t cell	UVM	-0.306173726
UCK1	Effector regulatory t (treg	UVM	-0.307602819
UCK1	Elvidge_hif1a_targets_up	UVM	-0.496778116
UCK1	Endothelial cell	UVM	-0.330653701
UCK1	Eosinophil	UVM	-0.265150849
UCK1	Ether lipid metabolism	UVM	0.056782231
UCK1	Exhausted cd4+ t cell	UVM	-0.409518526
UCK1	Exhausted cd8+ t cell	UVM	-0.357398692
UCK1	Exhausted t cell	UVM	-0.309227757
UCK1	Fat cell (adipocyte)	UVM	0.460394832
UCK1	Fatty acid biosynthesis	UVM	-0.161143357
UCK1	Fatty acid degradation	UVM	0.067466621
UCK1	Fatty acid elongation	UVM	0.042084989
UCK1	Fibroblast	UVM	-0.200616766
UCK1	Folate biosynthesis	UVM	0.388741979
UCK1	Follicular b cell	UVM	-0.276612684
UCK1	Follicular dendritic cell	UVM	-0.03378801
UCK1	Follicular helper (tfh) t ce	UVM	-0.341591717
UCK1	Follicular t cell	UVM	-0.268787871
UCK1	Foxp3+il-17+ t cell	UVM	0.011366297
UCK1	Fructose and mannose me	UVM	0.292175154
UCK1	G2m_checkpoint	UVM	-0.353848444
UCK1	Galactose metabolism	UVM	0.276452663
UCK1	Galie_tumor_stemness_ge	UVM	0.257782631
UCK1	Glutathione metabolism	UVM	0.201568058
UCK1	Glycerolipid metabolism	UVM	0.344103144
UCK1	Glycerophospholipid metæ	UVM	0.223464788
UCK1	Glycine, serine and threor	UVM	0.411431043
UCK1	Glycolysis / gluconeogene	UVM	0.254000676
UCK1	Glycosaminoglycan biosy	UVM	0.279663404
UCK1	Glycosaminoglycan biosy	UVM	0.020589383
UCK1	Glycosaminoglycan biosy	UVM	0.352641968
UCK1	Glycosaminoglycan degra	UVM	0.298630734
UCK1	Glycosphingolipid biosyn	UVM	0.30272481
UCK1	Glycosphingolipid biosyn	UVM	0.402068426

UCK1	Glycosphingolipid biosyn	UVM	0.457890499
UCK1	Glycosylphosphatidylinos	UVM	-0.411193405
UCK1	Glyoxylate and dicarboxy	UVM	-0.0724866
UCK1	Granulocyte	UVM	-0.318481308
UCK1	Hedgehog_signaling	UVM	0.034885646
UCK1	Histidine metabolism	UVM	0.488787981
UCK1	Hypoxia	UVM	0.297647995
UCK1	Il-17alpha t cell	UVM	-0.288293017
UCK1	Il2_stat5_signaling	UVM	0.003339723
UCK1	Il6_jak_stat3_signaling	UVM	-0.184403437
UCK1	Immune_checkpoints_tur	UVM	-0.085819968
UCK1	Immune_inhibition_cytok	UVM	0.158543281
UCK1	Inositol phosphate metabo	UVM	-0.469192434
UCK1	Interleukin_6_signaling	UVM	-0.397647519
UCK1	Jaeger_metastasis_up	UVM	-0.204584131
UCK1	Jain_nfkb_signaling	UVM	-0.479204582
UCK1	Kras_signaling_up	UVM	-0.055901292
UCK1	Linoleic acid metabolism	UVM	0.417025859
UCK1	Lipoic acid metabolism	UVM	-0.222563985
UCK1	Lysine degradation	UVM	0.287948567
UCK1	Lysosome	UVM	0.02410145
UCK1	M1 macrophage	UVM	-0.313664638
UCK1	M2 macrophage	UVM	-0.164197218
UCK1	Mannose type o-glycan bi	UVM	-0.111405791
UCK1	Mapk_signaling_pathway	UVM	0.007702333
UCK1	Mapk3_erk1_activation	UVM	-0.176063488
UCK1	Marginal zone b cell	UVM	-0.423921726
UCK1	Memory b cell	UVM	-0.280317737
UCK1	Mesenchymal cell	UVM	0.042420254
UCK1	Mesenchymal stem cell	UVM	-0.287742847
UCK1	Metabolism of xenobiotic	UVM	0.565247156
UCK1	Migrating cancer stem cel	UVM	0.079609011
UCK1	Mitotic_spindle	UVM	-0.331648248
UCK1	Monocyte	UVM	-0.251446413
UCK1	Mtor_signaling_pathway	UVM	-0.198597101
UCK1	Mtorc1_signaling	UVM	-0.360847588
UCK1	Mucin type o-glycan bios	UVM	-0.132319873
UCK1	Myc_targets_v1	UVM	-0.230008916
UCK1	Myeloid cell	UVM	-0.319384935
UCK1	N-glycan biosynthesis	UVM	-0.005928746
UCK1	Naive b cell	UVM	-0.217441332
UCK1	Naive cd4+ t cell	UVM	-0.034976203
UCK1	Naive cd8+ t cell	UVM	-0.178506558

UCK1	Natural killer cell	UVM	-0.302593518
UCK1	Natural killer t (nkt) cell	UVM	-0.559141583
UCK1	Natural regulatory t (treg)	UVM	-0.233681425
UCK1	Neomycin, kanamycin and	UVM	-0.049697333
UCK1	Neutrophil	UVM	-0.203281173
UCK1	Nicotinate and nicotinami	UVM	-0.22147482
UCK1	Nitrogen metabolism	UVM	-0.025982459
UCK1	Nod_like_receptor_signal	UVM	-0.212564212
UCK1	Notch_signaling	UVM	0.211543242
UCK1	One carbon pool by folate	UVM	-0.484611765
UCK1	Other glycan degradation	UVM	0.200662007
UCK1	Other types of o-glycan b	UVM	0.464183376
UCK1	Oxidative phosphorylatio	UVM	0.23680435
UCK1	P53_pathway	UVM	0.326364025
UCK1	P53_signaling_pathway	UVM	-0.188047566
UCK1	Pantothenate and coa bios	UVM	-0.217440807
UCK1	Pentose and glucuronate i	UVM	0.376850243
UCK1	Pentose phosphate pathwa	UVM	0.403264448
UCK1	Pericyte	UVM	-0.152427061
UCK1	Phenylalanine metabolism	UVM	0.611278552
UCK1	Phenylalanine, tyrosine ar	UVM	0.551671206
UCK1	Phosphonate and phosphir	UVM	-0.1986655
UCK1	Pi3k_akt_activation	UVM	-0.081813671
UCK1	Pi3k_akt_mtor_signaling	UVM	-0.099472773
UCK1	Porphyrin and chlorophyl	UVM	0.544624089
UCK1	Primary bile acid biosynt	UVM	0.371348454
UCK1	Propanoate metabolism	UVM	-0.377853448
UCK1	Purine metabolism	UVM	0.076879198
UCK1	Pyrimidine metabolism	UVM	-0.046001584
UCK1	Pyruvate metabolism	UVM	0.105648583
UCK1	Regulation_of_autophagy	UVM	-0.158817573
UCK1	Retinol metabolism	UVM	0.57979047
UCK1	Riboflavin metabolism	UVM	0.354932172
UCK1	Schmahl_pdgf_signaling	UVM	0.07058662
UCK1	Selenocompound metabol	UVM	-0.482896115
UCK1	Signaling_by_hippo	UVM	-0.408288678
UCK1	Sphingolipid metabolism	UVM	0.028762734
UCK1	Starch and sucrose metabo	UVM	-0.037611149
UCK1	Steroid biosynthesis	UVM	0.24184658
UCK1	Steroid hormone biosynth	UVM	0.548016283
UCK1	Sulfur metabolism	UVM	-0.029232532
UCK1	Synthesis and degradation	UVM	-0.013429817
UCK1	T helper cell	UVM	-0.288701204

UCK1	T helper1 (th1) cell	UVM	-0.337591921
UCK1	T helper17 (th17) cell	UVM	-0.307958473
UCK1	T helper2 (th2) cell	UVM	-0.23277252
UCK1	T helper9 (th9) cell	UVM	-0.257272907
UCK1	Taurine and hypotaurine r	UVM	0.004205393
UCK1	Terpenoid backbone biosy	UVM	-0.063717024
UCK1	Tgf_beta_signaling_pathw	UVM	0.150511671
UCK1	Thiamine metabolism	UVM	0.229688498
UCK1	Tnfa_signaling_via_nfkb	UVM	0.011935785
UCK1	Tryptophan metabolism	UVM	0.533179431
UCK1	Tumor endothelial cell	UVM	-0.075687144
UCK1	Tyrosine metabolism	UVM	0.702406226
UCK1	Ubiquinone and other terf	UVM	0.104957941
UCK1	Valine, leucine and isoleu	UVM	0.036523132
UCK1	Valine, leucine and isoleu	UVM	-0.099232716
UCK1	Vascular endothelial cell	UVM	0.304099976
UCK1	Vascular smooth muscle c	UVM	0.089831235
UCK1	Vegf_signaling_pathway	UVM	0.112334597
UCK1	Vitamin b6 metabolism	UVM	0.433979045
UCK1	Willert_wnt_signaling	UVM	-0.247607725
UCK1	Wnt_beta_catenin_signali	UVM	0.264233067
UCK2	Abnormal plasma cell	UVM	0.10805427
UCK2	Activated b cell	UVM	0.004794567
UCK2	Activated cd4+ t cell	UVM	0.009890033
UCK2	Activated t cell	UVM	0.099652415
UCK2	Alanine, aspartate and glu	UVM	-0.093178045
UCK2	Alcala_apoptosis	UVM	0.162154483
UCK2	Alpha-linolenic acid meta	UVM	-0.274786487
UCK2	Amino sugar and nucleoti	UVM	0.316300166
UCK2	Ampk_pathway	UVM	0.044591585
UCK2	Angiogenesis	UVM	0.295356632
UCK2	Arachidonic acid metabol	UVM	-0.283014754
UCK2	Arginine and proline metæ	UVM	-0.091954826
UCK2	Arginine biosynthesis	UVM	-0.056556435
UCK2	Ascorbate and aldarate mε	UVM	-0.136163569
UCK2	Atypical memory b cell	UVM	0.055225837
UCK2	Axl+siglec6+ dendritic ce	UVM	-0.040391921
UCK2	B cell	UVM	0.064323328
UCK2	B1 cell	UVM	-0.01170026
UCK2	Basal cell	UVM	0.059788742
UCK2	Beta-alanine metabolism	UVM	-0.326856523
UCK2	Biosynthesis of unsaturate	UVM	0.221044336
UCK2	Biotin metabolism	UVM	0.090201546

UCK2	Butanoate metabolism	UVM	-0.107795036
UCK2	Caffeine metabolism	UVM	-0.195236443
UCK2	Cancer stem cell	UVM	0.245550796
UCK2	Cancer stem-like cell	UVM	0.324821402
UCK2	Cd4+ cytotoxic t cell	UVM	0.089501666
UCK2	Cd4+ memory t cell	UVM	0.02013933
UCK2	Cd4+ regulatory t cell	UVM	-0.069867428
UCK2	Cd4+ t helper cell	UVM	0.034177821
UCK2	Cd4+cd25+ regulatory t c	UVM	0.020334018
UCK2	Cd8+ cytotoxic t cell	UVM	0.084125909
UCK2	Cd8+ regulatory t cell	UVM	0.012609997
UCK2	Cell_cycle	UVM	0.5343841
UCK2	Chandran_metastasis_top5	UVM	0.260759292
UCK2	Citrate cycle (tca cycle)	UVM	0.245005461
UCK2	Cysteine and methionine r	UVM	0.199153275
UCK2	Cytokine induced killer c	UVM	0.102617471
UCK2	D-arginine and d-ornithin	UVM	0.124486329
UCK2	D-glutamine and d-glutan	UVM	0.042900789
UCK2	Dendritic cell	UVM	0.009664822
UCK2	Dna_repair	UVM	0.054505259
UCK2	Dna_replication	UVM	0.38420671
UCK2	Double-negative memory	UVM	-0.042316219
UCK2	Drug metabolism - cytoch	UVM	-0.323925001
UCK2	Drug metabolism - other	UVM	-0.041182674
UCK2	E2f_targets	UVM	0.53692098
UCK2	Ecm_receptor_interaction	UVM	-0.086773162
UCK2	Effector cd4+ memory t (	UVM	0.069110819
UCK2	Effector cd8+ memory t (	UVM	0.133519627
UCK2	Effector memory t cell	UVM	0.034327899
UCK2	Effector regulatory t (treg	UVM	0.015867531
UCK2	Elvidge_hif1a_targets_up	UVM	0.423444535
UCK2	Endothelial cell	UVM	0.263734514
UCK2	Eosinophil	UVM	0.078954258
UCK2	Ether lipid metabolism	UVM	-0.123342003
UCK2	Exhausted cd4+ t cell	UVM	0.047969092
UCK2	Exhausted cd8+ t cell	UVM	0.10639711
UCK2	Exhausted t cell	UVM	0.050449224
UCK2	Fat cell (adipocyte)	UVM	-0.231033516
UCK2	Fatty acid biosynthesis	UVM	0.320561422
UCK2	Fatty acid degradation	UVM	-0.242322118
UCK2	Fatty acid elongation	UVM	-0.012296045
UCK2	Fibroblast	UVM	0.148703347
UCK2	Folate biosynthesis	UVM	0.089891225

UCK2	Follicular b cell	UVM	-0.01086129
UCK2	Follicular dendritic cell	UVM	-0.126883014
UCK2	Follicular helper (tfh) t ce	UVM	0.027731209
UCK2	Follicular t cell	UVM	0.113112188
UCK2	Foxp3+il-17+ t cell	UVM	0.037324391
UCK2	Fructose and mannose me	UVM	0.022096267
UCK2	G2m_checkpoint	UVM	0.514857055
UCK2	Galactose metabolism	UVM	0.056204484
UCK2	Galie_tumor_stemness_ge	UVM	-0.271432805
UCK2	Glutathione metabolism	UVM	0.088983584
UCK2	Glycerolipid metabolism	UVM	0.259165131
UCK2	Glycerophospholipid metæ	UVM	0.061704877
UCK2	Glycine, serine and threor	UVM	-0.009817892
UCK2	Glycolysis / gluconeogene	UVM	0.093177968
UCK2	Glycosaminoglycan biosy	UVM	-0.18955634
UCK2	Glycosaminoglycan biosy	UVM	-0.086057195
UCK2	Glycosaminoglycan biosy	UVM	-0.239104797
UCK2	Glycosaminoglycan degra	UVM	-0.20591146
UCK2	Glycosphingolipid biosyn	UVM	-0.007715945
UCK2	Glycosphingolipid biosyn	UVM	0.031659843
UCK2	Glycosphingolipid biosyn	UVM	-0.375707329
UCK2	Glycosylphosphatidylinos	UVM	0.219805926
UCK2	Glyoxylate and dicarboxy	UVM	0.142529064
UCK2	Granulocyte	UVM	0.129317296
UCK2	Hedgehog_signaling	UVM	-0.004006732
UCK2	Histidine metabolism	UVM	-0.405795626
UCK2	Hypoxia	UVM	0.166589441
UCK2	Il-17alpha t cell	UVM	0.067381826
UCK2	Il2_stat5_signaling	UVM	0.062977224
UCK2	Il6_jak_stat3_signaling	UVM	0.071179879
UCK2	Immune_checkpoints_tun	UVM	-0.00191932
UCK2	Immune_inhibition_cytok	UVM	-0.070666855
UCK2	Inositol phosphate metabo	UVM	0.127684143
UCK2	Interleukin_6_signaling	UVM	0.090737518
UCK2	Jaeger_metastasis_up	UVM	0.599399598
UCK2	Jain_nfkb_signaling	UVM	0.392121226
UCK2	Kras_signaling_up	UVM	-0.044713044
UCK2	Linoleic acid metabolism	UVM	-0.302880903
UCK2	Lipoic acid metabolism	UVM	0.072362233
UCK2	Lysine degradation	UVM	-0.327785479
UCK2	Lysosome	UVM	-0.082937493
UCK2	M1 macrophage	UVM	0.090211033
UCK2	M2 macrophage	UVM	-0.009716849

UCK2	Mannose type o-glycan bi	UVM	-0.182622398
UCK2	Mapk_signaling_pathway	UVM	0.131994817
UCK2	Mapk3_erk1_activation	UVM	0.130838342
UCK2	Marginal zone b cell	UVM	-0.007752895
UCK2	Memory b cell	UVM	0.021494327
UCK2	Mesenchymal cell	UVM	0.303069894
UCK2	Mesenchymal stem cell	UVM	0.221251034
UCK2	Metabolism of xenobiotic	UVM	-0.238555321
UCK2	Migrating cancer stem cel	UVM	-0.247600862
UCK2	Mitotic_spindle	UVM	0.259429353
UCK2	Monocyte	UVM	0.123654396
UCK2	Mtor_signaling_pathway	UVM	-0.083544715
UCK2	Mtorc1_signaling	UVM	0.571206479
UCK2	Mucin type o-glycan bios	UVM	0.128059835
UCK2	Myc_targets_v1	UVM	0.433486552
UCK2	Myeloid cell	UVM	0.036787235
UCK2	N-glycan biosynthesis	UVM	0.324684372
UCK2	Naive b cell	UVM	-0.031347546
UCK2	Naive cd4+ t cell	UVM	-0.351482706
UCK2	Naive cd8+ t cell	UVM	-0.029270439
UCK2	Natural killer cell	UVM	0.067974385
UCK2	Natural killer t (nkt) cell	UVM	0.207217444
UCK2	Natural regulatory t (treg)	UVM	-0.011658229
UCK2	Neomycin, kanamycin and	UVM	0.106180474
UCK2	Neutrophil	UVM	0.182159478
UCK2	Nicotinate and nicotinami	UVM	-0.132515934
UCK2	Nitrogen metabolism	UVM	0.382831003
UCK2	Nod_like_receptor_signal	UVM	0.007703521
UCK2	Notch_signaling	UVM	0.197880303
UCK2	One carbon pool by folate	UVM	0.279094838
UCK2	Other glycan degradation	UVM	-0.443956516
UCK2	Other types of o-glycan b	UVM	-0.282169974
UCK2	Oxidative phosphorylatio	UVM	0.160316867
UCK2	P53_pathway	UVM	-0.200302339
UCK2	P53_signaling_pathway	UVM	-0.07323442
UCK2	Pantothenate and coa bios	UVM	-0.14807768
UCK2	Pentose and glucuronate in	UVM	-0.087159768
UCK2	Pentose phosphate pathwa	UVM	-0.011982882
UCK2	Pericyte	UVM	0.296340254
UCK2	Phenylalanine metabolism	UVM	-0.172649926
UCK2	Phenylalanine, tyrosine ar	UVM	-0.256933109
UCK2	Phosphonate and phosphir	UVM	-0.123478864
UCK2	Pi3k_akt_activation	UVM	-0.062951664

UCK2	Pi3k_akt_mtor_signaling	UVM	-0.012233526
UCK2	Porphyrin and chlorophyl	UVM	0.045066611
UCK2	Primary bile acid biosynt	UVM	-0.275812626
UCK2	Propanoate metabolism	UVM	-0.032229206
UCK2	Purine metabolism	UVM	0.422572965
UCK2	Pyrimidine metabolism	UVM	0.419020538
UCK2	Pyruvate metabolism	UVM	0.063836671
UCK2	Regulation_of_autophagy	UVM	-0.475120893
UCK2	Retinol metabolism	UVM	-0.212867333
UCK2	Riboflavin metabolism	UVM	-0.276160507
UCK2	Schmahl_pdgf_signaling	UVM	-0.101342436
UCK2	Selenocompound metabol	UVM	0.46920988
UCK2	Signaling_by_hippo	UVM	0.016414844
UCK2	Sphingolipid metabolism	UVM	-0.220041185
UCK2	Starch and sucrose metabo	UVM	-0.021564403
UCK2	Steroid biosynthesis	UVM	0.225789853
UCK2	Steroid hormone biosynth	UVM	-0.092455445
UCK2	Sulfur metabolism	UVM	0.405622727
UCK2	Synthesis and degradation	UVM	0.090261231
UCK2	T helper cell	UVM	0.068507742
UCK2	T helper1 (th1) cell	UVM	0.020188747
UCK2	T helper17 (th17) cell	UVM	0.052161575
UCK2	T helper2 (th2) cell	UVM	0.058113776
UCK2	T helper9 (th9) cell	UVM	-0.009225021
UCK2	Taurine and hypotaurine r	UVM	0.114267273
UCK2	Terpenoid backbone biosy	UVM	0.108807231
UCK2	Tgf_beta_signaling_pathw	UVM	-0.070702452
UCK2	Thiamine metabolism	UVM	-0.066167953
UCK2	Tnfa_signaling_via_nfkb	UVM	0.095424638
UCK2	Tryptophan metabolism	UVM	-0.314781377
UCK2	Tumor endothelial cell	UVM	0.202603083
UCK2	Tyrosine metabolism	UVM	-0.25809334
UCK2	Ubiquinone and other terp	UVM	0.211932011
UCK2	Valine, leucine and isoleu	UVM	0.298330485
UCK2	Valine, leucine and isoleu	UVM	-0.089444439
UCK2	Vascular endothelial cell	UVM	-0.005902462
UCK2	Vascular smooth muscle c	UVM	0.113146976
UCK2	Vegf_signaling_pathway	UVM	0.032892697
UCK2	Vitamin b6 metabolism	UVM	-0.024249173
UCK2	Willert_wnt_signaling	UVM	0.013971151
UCK2	Wnt_beta_catenin_signali	UVM	0.016381184
UCKL1	Abnormal plasma cell	UVM	-0.097618328
UCKL1	Activated b cell	UVM	-0.13932737

UCKL1	Activated cd4+ t cell	UVM	-0.082947571
UCKL1	Activated t cell	UVM	-0.14876884
UCKL1	Alanine, aspartate and glu	UVM	0.138414822
UCKL1	Alcala_apoptosis	UVM	-0.234760084
UCKL1	Alpha-linolenic acid meta	UVM	-0.248539643
UCKL1	Amino sugar and nucleoti	UVM	-0.248604691
UCKL1	Ampk_pathway	UVM	-0.094119815
UCKL1	Angiogenesis	UVM	-0.115545513
UCKL1	Arachidonic acid metabol	UVM	-0.275577646
UCKL1	Arginine and proline meta	UVM	-0.368075233
UCKL1	Arginine biosynthesis	UVM	0.043331499
UCKL1	Ascorbate and aldarate me	UVM	-0.27018599
UCKL1	Atypical memory b cell	UVM	-0.242767596
UCKL1	Axl+siglec6+ dendritic ce	UVM	0.064359004
UCKL1	B cell	UVM	-0.080634181
UCKL1	B1 cell	UVM	-0.116300706
UCKL1	Basal cell	UVM	-0.219894018
UCKL1	Beta-alanine metabolism	UVM	-0.192293292
UCKL1	Biosynthesis of unsaturate	UVM	-0.268769335
UCKL1	Biotin metabolism	UVM	0.025533454
UCKL1	Butanoate metabolism	UVM	-0.116444736
UCKL1	Caffeine metabolism	UVM	-0.12267236
UCKL1	Cancer stem cell	UVM	-0.05260183
UCKL1	Cancer stem-like cell	UVM	0.087244777
UCKL1	Cd4+ cytotoxic t cell	UVM	-0.090784731
UCKL1	Cd4+ memory t cell	UVM	-0.145392828
UCKL1	Cd4+ regulatory t cell	UVM	-0.232102408
UCKL1	Cd4+ t helper cell	UVM	-0.1411591
UCKL1	Cd4+cd25+ regulatory t c	UVM	-0.143876759
UCKL1	Cd8+ cytotoxic t cell	UVM	-0.079254546
UCKL1	Cd8+ regulatory t cell	UVM	-0.055097539
UCKL1	Cell_cycle	UVM	-0.023824151
UCKL1	Chandran_metastasis_top ⁵	UVM	0.087108371
UCKL1	Citrate cycle (tca cycle)	UVM	-0.119365482
UCKL1	Cysteine and methionine r	UVM	-0.157167587
UCKL1	Cytokine induced killer c ϵ	UVM	-0.087380635
UCKL1	D-arginine and d-ornithin	UVM	-0.071828466
UCKL1	D-glutamine and d-glutan	UVM	0.397667599
UCKL1	Dendritic cell	UVM	-0.097735357
UCKL1	Dna_repair	UVM	-0.098024422
UCKL1	Dna_replication	UVM	-0.003333415
UCKL1	Double-negative memory	UVM	-0.155353166
UCKL1	Drug metabolism - cytoch	UVM	-0.228781273

UCKL1	Drug metabolism - other (UVM	-0.270210175
UCKL1	E2f_targets UVM	-0.055246376
UCKL1	Ecm_receptor_interaction UVM	-0.160771387
UCKL1	Effector cd4+ memory t (UVM	-0.03515562
UCKL1	Effector cd8+ memory t (UVM	-0.093146816
UCKL1	Effector memory t cell UVM	-0.127718247
UCKL1	Effector regulatory t (treg UVM	-0.120979636
UCKL1	Elvidge_hif1a_targets_up UVM	-0.186822992
UCKL1	Endothelial cell UVM	0.173273547
UCKL1	Eosinophil UVM	-0.155194478
UCKL1	Ether lipid metabolism UVM	-0.381903437
UCKL1	Exhausted cd4+ t cell UVM	-0.000364047
UCKL1	Exhausted cd8+ t cell UVM	-0.071323608
UCKL1	Exhausted t cell UVM	-0.155174255
UCKL1	Fat cell (adipocyte) UVM	-0.122704898
UCKL1	Fatty acid biosynthesis UVM	-0.018846576
UCKL1	Fatty acid degradation UVM	0.02069296
UCKL1	Fatty acid elongation UVM	-0.3438053
UCKL1	Fibroblast UVM	-0.084836909
UCKL1	Folate biosynthesis UVM	-0.152367103
UCKL1	Follicular b cell UVM	-0.127413986
UCKL1	Follicular dendritic cell UVM	-0.065795399
UCKL1	Follicular helper (tfh) t ce UVM	-0.159575516
UCKL1	Follicular t cell UVM	-0.09606461
UCKL1	Foxp3+il-17+ t cell UVM	-0.250193829
UCKL1	Fructose and mannose me UVM	-0.26533942
UCKL1	G2m_checkpoint UVM	-0.026626656
UCKL1	Galactose metabolism UVM	-0.388189887
UCKL1	Galie_tumor_stemness_ge UVM	-0.110424458
UCKL1	Glutathione metabolism UVM	-0.324708211
UCKL1	Glycerolipid metabolism UVM	-0.293621373
UCKL1	Glycerophospholipid metæ UVM	-0.235165005
UCKL1	Glycine, serine and threor UVM	-0.24910541
UCKL1	Glycolysis / gluconeogene UVM	-0.311401946
UCKL1	Glycosaminoglycan biosy1 UVM	-0.227085344
UCKL1	Glycosaminoglycan biosy1 UVM	-0.308935013
UCKL1	Glycosaminoglycan biosy1 UVM	-0.254424594
UCKL1	Glycosaminoglycan degra UVM	-0.093112279
UCKL1	Glycosphingolipid biosyn1 UVM	-0.155232179
UCKL1	Glycosphingolipid biosyn1 UVM	-0.067065951
UCKL1	Glycosphingolipid biosyn1 UVM	-0.263055513
UCKL1	Glycosylphosphatidylinos: UVM	-0.042915648
UCKL1	Glyoxylate and dicarboxy UVM	0.107616928

UCKL1	Granulocyte	UVM	-0.078442966
UCKL1	Hedgehog_signaling	UVM	-0.204141038
UCKL1	Histidine metabolism	UVM	-0.16667469
UCKL1	Hypoxia	UVM	-0.18905077
UCKL1	Il-17alpha t cell	UVM	-0.128414066
UCKL1	Il2_stat5_signaling	UVM	-0.257262453
UCKL1	Il6_jak_stat3_signaling	UVM	-0.174827303
UCKL1	Immune_checkpoints_tun	UVM	-0.198571076
UCKL1	Immune_inhibition_cytok	UVM	-0.179964253
UCKL1	Inositol phosphate metabo	UVM	0.084494878
UCKL1	Interleukin_6_signaling	UVM	-0.027800166
UCKL1	Jaeger_metastasis_up	UVM	-0.142317879
UCKL1	Jain_nfkb_signaling	UVM	0.072563644
UCKL1	Kras_signaling_up	UVM	-0.116423876
UCKL1	Linoleic acid metabolism	UVM	-0.349244621
UCKL1	Lipoic acid metabolism	UVM	0.211434921
UCKL1	Lysine degradation	UVM	0.097995407
UCKL1	Lysosome	UVM	-0.339096475
UCKL1	M1 macrophage	UVM	-0.040211006
UCKL1	M2 macrophage	UVM	-0.059134445
UCKL1	Mannose type o-glycan bi	UVM	-0.018689571
UCKL1	Mapk_signaling_pathway	UVM	-0.21305598
UCKL1	Mapk3_erk1_activation	UVM	-0.196678617
UCKL1	Marginal zone b cell	UVM	0.021019607
UCKL1	Memory b cell	UVM	-0.098546075
UCKL1	Mesenchymal cell	UVM	-0.118762023
UCKL1	Mesenchymal stem cell	UVM	-0.02776388
UCKL1	Metabolism of xenobiotic	UVM	-0.262955003
UCKL1	Migrating cancer stem cel	UVM	-0.196054291
UCKL1	Mitotic_spindle	UVM	0.078100996
UCKL1	Monocyte	UVM	-0.119750106
UCKL1	Mtor_signaling_pathway	UVM	0.002943548
UCKL1	Mtorc1_signaling	UVM	-0.208195398
UCKL1	Mucin type o-glycan bios	UVM	-0.015987423
UCKL1	Myc_targets_v1	UVM	-0.070551337
UCKL1	Myeloid cell	UVM	-0.07920636
UCKL1	N-glycan biosynthesis	UVM	-0.315086105
UCKL1	Naive b cell	UVM	-0.133609198
UCKL1	Naive cd4+ t cell	UVM	-0.080893852
UCKL1	Naive cd8+ t cell	UVM	0.214741159
UCKL1	Natural killer cell	UVM	-0.098311408
UCKL1	Natural killer t (nkt) cell	UVM	0.133568806
UCKL1	Natural regulatory t (treg)	UVM	-0.139240495

UCKL1	Neomycin, kanamycin and	UVM	-0.114955109
UCKL1	Neutrophil	UVM	-0.166306536
UCKL1	Nicotinate and nicotinami	UVM	-0.058371093
UCKL1	Nitrogen metabolism	UVM	0.053264212
UCKL1	Nod_like_receptor_signal	UVM	-0.14267589
UCKL1	Notch_signaling	UVM	-0.175228983
UCKL1	One carbon pool by folate	UVM	0.251141237
UCKL1	Other glycan degradation	UVM	0.026466292
UCKL1	Other types of o-glycan b	UVM	-0.198143318
UCKL1	Oxidative phosphorylatio	UVM	-0.261106945
UCKL1	P53_pathway	UVM	-0.301108147
UCKL1	P53_signaling_pathway	UVM	0.04354318
UCKL1	Pantothenate and coa bios	UVM	-0.140640131
UCKL1	Pentose and glucuronate in	UVM	-0.266374243
UCKL1	Pentose phosphate pathwa	UVM	-0.320355145
UCKL1	Pericyte	UVM	-0.087206482
UCKL1	Phenylalanine metabolism	UVM	-0.217619961
UCKL1	Phenylalanine, tyrosine ar	UVM	-0.074084427
UCKL1	Phosphonate and phosphir	UVM	-0.233410517
UCKL1	Pi3k_akt_activation	UVM	0.057501016
UCKL1	Pi3k_akt_mtor_signaling	UVM	-0.235257485
UCKL1	Porphyrin and chlorophyl	UVM	-0.279219035
UCKL1	Primary bile acid biosynt	UVM	0.012199329
UCKL1	Propanoate metabolism	UVM	0.228125309
UCKL1	Purine metabolism	UVM	-0.227950184
UCKL1	Pyrimidine metabolism	UVM	-0.085296331
UCKL1	Pyruvate metabolism	UVM	-0.002064677
UCKL1	Regulation_of_autophagy	UVM	0.297171692
UCKL1	Retinol metabolism	UVM	-0.239769219
UCKL1	Riboflavin metabolism	UVM	-0.27556727
UCKL1	Schmahl_pdgf_signaling	UVM	-0.03524889
UCKL1	Selenocompound metabol	UVM	0.118051083
UCKL1	Signaling_by_hippo	UVM	0.128208671
UCKL1	Sphingolipid metabolism	UVM	-0.270523731
UCKL1	Starch and sucrose metabo	UVM	-0.241790207
UCKL1	Steroid biosynthesis	UVM	-0.197122665
UCKL1	Steroid hormone biosynth	UVM	-0.372525988
UCKL1	Sulfur metabolism	UVM	-0.233727237
UCKL1	Synthesis and degradation	UVM	0.029270437
UCKL1	T helper cell	UVM	-0.163665969
UCKL1	T helper1 (th1) cell	UVM	-0.063316881
UCKL1	T helper17 (th17) cell	UVM	-0.060025482
UCKL1	T helper2 (th2) cell	UVM	-0.065935572

UCKL1	T helper9 (th9) cell	UVM	-0.121475664
UCKL1	Taurine and hypotaurine r	UVM	-0.034772557
UCKL1	Terpenoid backbone biosy	UVM	-0.150365755
UCKL1	Tgf_beta_signaling_pathw	UVM	0.055123144
UCKL1	Thiamine metabolism	UVM	-0.302704083
UCKL1	Tnfa_signaling_via_nfkb	UVM	-0.18473495
UCKL1	Tryptophan metabolism	UVM	-0.119399937
UCKL1	Tumor endothelial cell	UVM	-0.100466404
UCKL1	Tyrosine metabolism	UVM	-0.234657692
UCKL1	Ubiquinone and other terq	UVM	-0.003262144
UCKL1	Valine, leucine and isoleu	UVM	-0.107877116
UCKL1	Valine, leucine and isoleu	UVM	0.129243007
UCKL1	Vascular endothelial cell	UVM	-0.225725249
UCKL1	Vascular smooth muscle c	UVM	-0.146012699
UCKL1	Vegf_signaling_pathway	UVM	-0.269215274
UCKL1	Vitamin b6 metabolism	UVM	-0.147401067
UCKL1	Willert_wnt_signaling	UVM	0.205178276
UCKL1	Wnt_beta_catenin_signali	UVM	0.062682888
UPP1	Abnormal plasma cell	UVM	0.317415014
UPP1	Activated b cell	UVM	0.312492502
UPP1	Activated cd4+ t cell	UVM	0.162713815
UPP1	Activated t cell	UVM	0.251709774
UPP1	Alanine, aspartate and glu	UVM	-0.023601183
UPP1	Alcala_apoptosis	UVM	0.449614913
UPP1	Alpha-linolenic acid meta	UVM	0.285199046
UPP1	Amino sugar and nucleoti	UVM	0.291353375
UPP1	Ampk_pathway	UVM	-0.147711638
UPP1	Angiogenesis	UVM	0.255782716
UPP1	Arachidonic acid metabol:	UVM	0.298491004
UPP1	Arginine and proline meta	UVM	0.232653499
UPP1	Arginine biosynthesis	UVM	0.033059417
UPP1	Ascorbate and aldarate me	UVM	-0.083563051
UPP1	Atypical memory b cell	UVM	0.064272817
UPP1	Axl+siglec6+ dendritic ce	UVM	0.255481554
UPP1	B cell	UVM	0.220103775
UPP1	B1 cell	UVM	0.353763659
UPP1	Basal cell	UVM	0.355119567
UPP1	Beta-alanine metabolism	UVM	-0.023147408
UPP1	Biosynthesis of unsaturate	UVM	0.231313433
UPP1	Biotin metabolism	UVM	-0.010772608
UPP1	Butanoate metabolism	UVM	-0.248498696
UPP1	Caffeine metabolism	UVM	0.103841642
UPP1	Cancer stem cell	UVM	0.358173888

UPP1	Cancer stem-like cell	UVM	0.1327824
UPP1	Cd4+ cytotoxic t cell	UVM	0.373850511
UPP1	Cd4+ memory t cell	UVM	0.230908169
UPP1	Cd4+ regulatory t cell	UVM	0.217610398
UPP1	Cd4+ t helper cell	UVM	0.275331449
UPP1	Cd4+cd25+ regulatory t c	UVM	0.267490995
UPP1	Cd8+ cytotoxic t cell	UVM	0.286908632
UPP1	Cd8+ regulatory t cell	UVM	0.16936749
UPP1	Cell_cycle	UVM	-0.159709997
UPP1	Chandran_metastasis_top5	UVM	-0.320228267
UPP1	Citrate cycle (tca cycle)	UVM	0.045930939
UPP1	Cysteine and methionine r	UVM	-0.054539508
UPP1	Cytokine induced killer c	UVM	0.389974286
UPP1	D-arginine and d-ornithin	UVM	0.025667815
UPP1	D-glutamine and d-glutan	UVM	-0.21128008
UPP1	Dendritic cell	UVM	0.349262747
UPP1	Dna_repair	UVM	-0.132367713
UPP1	Dna_replication	UVM	-0.19433238
UPP1	Double-negative memory	UVM	0.24093218
UPP1	Drug metabolism - cytoch	UVM	0.086706481
UPP1	Drug metabolism - other c	UVM	0.197672076
UPP1	E2f_targets	UVM	-0.168867614
UPP1	Ecm_receptor_interaction	UVM	0.10199193
UPP1	Effector cd4+ memory t (	UVM	0.151008683
UPP1	Effector cd8+ memory t (	UVM	0.324099559
UPP1	Effector memory t cell	UVM	0.216052391
UPP1	Effector regulatory t (treg	UVM	0.176022118
UPP1	Elvidge_hif1a_targets_up	UVM	0.195663339
UPP1	Endothelial cell	UVM	0.156918286
UPP1	Eosinophil	UVM	0.370407369
UPP1	Ether lipid metabolism	UVM	0.174577854
UPP1	Exhausted cd4+ t cell	UVM	0.251247155
UPP1	Exhausted cd8+ t cell	UVM	0.335910594
UPP1	Exhausted t cell	UVM	0.308265278
UPP1	Fat cell (adipocyte)	UVM	0.166102211
UPP1	Fatty acid biosynthesis	UVM	0.206499855
UPP1	Fatty acid degradation	UVM	-0.077721312
UPP1	Fatty acid elongation	UVM	0.263485677
UPP1	Fibroblast	UVM	0.224743309
UPP1	Folate biosynthesis	UVM	0.316283343
UPP1	Follicular b cell	UVM	0.218405684
UPP1	Follicular dendritic cell	UVM	-0.036851559
UPP1	Follicular helper (tfh) t ce	UVM	0.246357218

UPP1	Follicular t cell	UVM	0.322802578
UPP1	Foxp3+il-17+ t cell	UVM	0.215763627
UPP1	Fructose and mannose me	UVM	0.302908246
UPP1	G2m_checkpoint	UVM	-0.228172528
UPP1	Galactose metabolism	UVM	0.325950553
UPP1	Galie_tumor_stemness_ge	UVM	-0.225615115
UPP1	Glutathione metabolism	UVM	0.308771924
UPP1	Glycerolipid metabolism	UVM	0.318134615
UPP1	Glycerophospholipid metæ	UVM	0.33691986
UPP1	Glycine, serine and threor	UVM	0.309639834
UPP1	Glycolysis / gluconeogene	UVM	0.291708028
UPP1	Glycosaminoglycan biosy1	UVM	0.155263279
UPP1	Glycosaminoglycan biosy1	UVM	0.009716811
UPP1	Glycosaminoglycan biosy1	UVM	0.250852926
UPP1	Glycosaminoglycan degra	UVM	0.213979411
UPP1	Glycosphingolipid biosyn1	UVM	0.368452393
UPP1	Glycosphingolipid biosyn1	UVM	0.34219957
UPP1	Glycosphingolipid biosyn1	UVM	0.145159242
UPP1	Glycosylphosphatidylinos:	UVM	-0.055029477
UPP1	Glyoxylate and dicarboxy	UVM	-0.044975027
UPP1	Granulocyte	UVM	0.314488144
UPP1	Hedgehog_signaling	UVM	0.070968819
UPP1	Histidine metabolism	UVM	0.037625938
UPP1	Hypoxia	UVM	0.303770329
UPP1	Il-17ralpha t cell	UVM	0.32934719
UPP1	Il2_stat5_signaling	UVM	0.399970385
UPP1	Il6_jak_stat3_signaling	UVM	0.351211309
UPP1	Immune_checkpoints_tur	UVM	0.274555096
UPP1	Immune_inhibition_cytok	UVM	0.324108681
UPP1	Inositol phosphate metabo	UVM	-0.109575679
UPP1	Interleukin_6_signaling	UVM	0.187754622
UPP1	Jaeger_metastasis_up	UVM	0.133177097
UPP1	Jain_nfkb_signaling	UVM	-0.012430618
UPP1	Kras_signaling_up	UVM	0.316892154
UPP1	Linoleic acid metabolism	UVM	0.205022515
UPP1	Lipoic acid metabolism	UVM	-0.177597351
UPP1	Lysine degradation	UVM	-0.335585695
UPP1	Lysosome	UVM	0.384379638
UPP1	M1 macrophage	UVM	0.245238894
UPP1	M2 macrophage	UVM	0.210616685
UPP1	Mannose type o-glycan bi	UVM	0.113281574
UPP1	Mapk_signaling_pathway	UVM	0.373289782
UPP1	Mapk3_erk1_activation	UVM	0.075930047

UPP1	Marginal zone b cell	UVM	0.098549683
UPP1	Memory b cell	UVM	0.220579492
UPP1	Mesenchymal cell	UVM	0.411288572
UPP1	Mesenchymal stem cell	UVM	0.29833452
UPP1	Metabolism of xenobiotics	UVM	0.168286617
UPP1	Migrating cancer stem cell	UVM	0.218518363
UPP1	Mitotic_spindle	UVM	-0.35472831
UPP1	Monocyte	UVM	0.434299868
UPP1	Mtor_signaling_pathway	UVM	0.00441661
UPP1	Mtorc1_signaling	UVM	0.222772886
UPP1	Mucin type o-glycan biosynthesis	UVM	-0.07825549
UPP1	Myc_targets_v1	UVM	-0.192121213
UPP1	Myeloid cell	UVM	0.25910789
UPP1	N-glycan biosynthesis	UVM	0.242794604
UPP1	Naive b cell	UVM	0.194474415
UPP1	Naive cd4+ t cell	UVM	-0.004600854
UPP1	Naive cd8+ t cell	UVM	-0.080827548
UPP1	Natural killer cell	UVM	0.277931079
UPP1	Natural killer t (nkt) cell	UVM	-0.021922853
UPP1	Natural regulatory t (treg) cell	UVM	0.205756588
UPP1	Neomycin, kanamycin and streptomycin	UVM	0.454699911
UPP1	Neutrophil	UVM	0.451858013
UPP1	Nicotinate and nicotinamide	UVM	0.069993328
UPP1	Nitrogen metabolism	UVM	0.122881645
UPP1	Nod_like_receptor_signaling	UVM	0.249263844
UPP1	Notch_signaling	UVM	0.272204189
UPP1	One carbon pool by folate	UVM	-0.259435975
UPP1	Other glycan degradation	UVM	0.081884444
UPP1	Other types of o-glycan biosynthesis	UVM	0.197892659
UPP1	Oxidative phosphorylation	UVM	0.416730976
UPP1	P53_pathway	UVM	0.404737665
UPP1	P53_signaling_pathway	UVM	0.096394572
UPP1	Pantothenate and coa biosynthesis	UVM	0.055256077
UPP1	Pentose and glucuronate interconversions	UVM	-0.052683401
UPP1	Pentose phosphate pathway	UVM	0.173176507
UPP1	Pericyte	UVM	0.288183377
UPP1	Phenylalanine metabolism	UVM	0.264643799
UPP1	Phenylalanine, tyrosine and tryptophan	UVM	0.331271726
UPP1	Phosphonate and phosphite metabolism	UVM	-0.09663657
UPP1	Pi3k_akt_activation	UVM	-0.415679414
UPP1	Pi3k_akt_mtor_signaling	UVM	0.253675688
UPP1	Porphyrin and chlorophyll biosynthesis	UVM	0.081060711
UPP1	Primary bile acid biosynthesis	UVM	0.145411643

UPP1	Propanoate metabolism	UVM	-0.294929148
UPP1	Purine metabolism	UVM	0.005372696
UPP1	Pyrimidine metabolism	UVM	-0.057927048
UPP1	Pyruvate metabolism	UVM	0.044041516
UPP1	Regulation_of_autophagy	UVM	-0.161577139
UPP1	Retinol metabolism	UVM	0.183902304
UPP1	Riboflavin metabolism	UVM	0.167860999
UPP1	Schmahl_pdgf_signaling	UVM	-0.12060946
UPP1	Selenocompound metabol	UVM	-0.096567058
UPP1	Signaling_by_hippo	UVM	-0.422253686
UPP1	Sphingolipid metabolism	UVM	0.03176099
UPP1	Starch and sucrose metabo	UVM	0.304120991
UPP1	Steroid biosynthesis	UVM	0.360631475
UPP1	Steroid hormone biosynth	UVM	0.026863334
UPP1	Sulfur metabolism	UVM	0.048253728
UPP1	Synthesis and degradation	UVM	0.020213757
UPP1	T helper cell	UVM	0.321687144
UPP1	T helper1 (th1) cell	UVM	0.269288555
UPP1	T helper17 (th17) cell	UVM	0.306833146
UPP1	T helper2 (th2) cell	UVM	0.283632487
UPP1	T helper9 (th9) cell	UVM	0.238029353
UPP1	Taurine and hypotaurine r	UVM	0.106120108
UPP1	Terpenoid backbone biosy	UVM	0.058280859
UPP1	Tgf_beta_signaling_pathw	UVM	-0.333198446
UPP1	Thiamine metabolism	UVM	0.191736368
UPP1	Tnfa_signaling_via_nfbk	UVM	0.459410702
UPP1	Tryptophan metabolism	UVM	0.062778477
UPP1	Tumor endothelial cell	UVM	0.28107893
UPP1	Tyrosine metabolism	UVM	0.169713524
UPP1	Ubiquinone and other terf	UVM	0.239771991
UPP1	Valine, leucine and isoleu	UVM	0.469773781
UPP1	Valine, leucine and isoleu	UVM	-0.172233104
UPP1	Vascular endothelial cell	UVM	0.281071718
UPP1	Vascular smooth muscle c	UVM	0.122791546
UPP1	Vegf_signaling_pathway	UVM	0.160233208
UPP1	Vitamin b6 metabolism	UVM	0.389906499
UPP1	Willert_wnt_signaling	UVM	-0.237757255
UPP1	Wnt_beta_catenin_signali	UVM	-0.01896479
UPP2	Abnormal plasma cell	UVM	-0.053093921
UPP2	Activated b cell	UVM	-0.156746102
UPP2	Activated cd4+ t cell	UVM	-0.032938754
UPP2	Activated t cell	UVM	-0.084225488
UPP2	Alanine, aspartate and glu	UVM	0.234931245

UPP2	Alcala_apoptosis	UVM	-0.141285518
UPP2	Alpha-linolenic acid meta	UVM	-0.275721821
UPP2	Amino sugar and nucleoti	UVM	-0.10337458
UPP2	Ampk_pathway	UVM	-0.258652918
UPP2	Angiogenesis	UVM	-0.164530435
UPP2	Arachidonic acid metabol	UVM	-0.275802202
UPP2	Arginine and proline meta	UVM	-0.221219018
UPP2	Arginine biosynthesis	UVM	-0.106796277
UPP2	Ascorbate and aldarate me	UVM	-0.311893507
UPP2	Atypical memory b cell	UVM	-0.162089683
UPP2	Axl+siglec6+ dendritic ce	UVM	-0.110335761
UPP2	B cell	UVM	-0.024624402
UPP2	B1 cell	UVM	-0.133638154
UPP2	Basal cell	UVM	-0.249011924
UPP2	Beta-alanine metabolism	UVM	-0.149587637
UPP2	Biosynthesis of unsaturate	UVM	-0.065428114
UPP2	Biotin metabolism	UVM	-0.003935811
UPP2	Butanoate metabolism	UVM	-0.12174373
UPP2	Caffeine metabolism	UVM	-0.051138745
UPP2	Cancer stem cell	UVM	0.013621678
UPP2	Cancer stem-like cell	UVM	0.065998345
UPP2	Cd4+ cytotoxic t cell	UVM	-0.040771384
UPP2	Cd4+ memory t cell	UVM	-0.078957364
UPP2	Cd4+ regulatory t cell	UVM	-0.137626116
UPP2	Cd4+ t helper cell	UVM	-0.059435632
UPP2	Cd4+cd25+ regulatory t c	UVM	-0.054995832
UPP2	Cd8+ cytotoxic t cell	UVM	-0.02954459
UPP2	Cd8+ regulatory t cell	UVM	-0.032721765
UPP2	Cell_cycle	UVM	-0.190661764
UPP2	Chandran_metastasis_top	UVM	0.117561963
UPP2	Citrate cycle (tca cycle)	UVM	-0.009149217
UPP2	Cysteine and methionine r	UVM	-0.239810851
UPP2	Cytokine induced killer ce	UVM	0.008293553
UPP2	D-arginine and d-ornithin	UVM	0.010566138
UPP2	D-glutamine and d-glutan	UVM	0.350851086
UPP2	Dendritic cell	UVM	-0.150704757
UPP2	Dna_repair	UVM	-0.348526411
UPP2	Dna_replication	UVM	-0.3458696
UPP2	Double-negative memory	UVM	-0.079575628
UPP2	Drug metabolism - cytoch	UVM	-0.273934013
UPP2	Drug metabolism - other	UVM	-0.315279898
UPP2	E2f_targets	UVM	-0.24847389
UPP2	Ecm_receptor_interaction	UVM	-0.262066643

UPP2	Effector cd4+ memory t (UVM	-0.032009448
UPP2	Effector cd8+ memory t (UVM	0.002519481
UPP2	Effector memory t cell UVM	-0.064108164
UPP2	Effector regulatory t (treg UVM	-0.017030354
UPP2	Elvidge_hif1a_targets_up UVM	-0.039730596
UPP2	Endothelial cell UVM	0.038379573
UPP2	Eosinophil UVM	-0.093298666
UPP2	Ether lipid metabolism UVM	-0.276724848
UPP2	Exhausted cd4+ t cell UVM	0.099569166
UPP2	Exhausted cd8+ t cell UVM	0.069249211
UPP2	Exhausted t cell UVM	-0.038866282
UPP2	Fat cell (adipocyte) UVM	0.053743081
UPP2	Fatty acid biosynthesis UVM	0.236256699
UPP2	Fatty acid degradation UVM	0.013076199
UPP2	Fatty acid elongation UVM	-0.108161303
UPP2	Fibroblast UVM	-0.078781022
UPP2	Folate biosynthesis UVM	-0.113321357
UPP2	Follicular b cell UVM	-0.062452483
UPP2	Follicular dendritic cell UVM	-0.236069938
UPP2	Follicular helper (tfh) t ce UVM	-0.065596704
UPP2	Follicular t cell UVM	-0.033590504
UPP2	Foxp3+il-17+ t cell UVM	-0.210970356
UPP2	Fructose and mannose me UVM	-0.176110633
UPP2	G2m_checkpoint UVM	-0.211012166
UPP2	Galactose metabolism UVM	-0.26662626
UPP2	Galie_tumor_stemness_ge UVM	-0.247206827
UPP2	Glutathione metabolism UVM	-0.274418506
UPP2	Glycerolipid metabolism UVM	-0.146297986
UPP2	Glycerophospholipid metæ UVM	-0.158517443
UPP2	Glycine, serine and threor UVM	-0.270824838
UPP2	Glycolysis / gluconeogene UVM	-0.132601689
UPP2	Glycosaminoglycan biosy1 UVM	-0.369777658
UPP2	Glycosaminoglycan biosy1 UVM	-0.078352532
UPP2	Glycosaminoglycan biosy1 UVM	-0.316367541
UPP2	Glycosaminoglycan degra UVM	-0.37651869
UPP2	Glycosphingolipid biosyn1 UVM	-0.086870998
UPP2	Glycosphingolipid biosyn1 UVM	-0.164473805
UPP2	Glycosphingolipid biosyn1 UVM	-0.185890008
UPP2	Glycosylphosphatidylinos: UVM	-0.002135306
UPP2	Glyoxylate and dicarboxy UVM	-0.111712682
UPP2	Granulocyte UVM	-0.034722765
UPP2	Hedgehog_signaling UVM	-0.104503799
UPP2	Histidine metabolism UVM	-0.191209987

UPP2	Hypoxia	UVM	-0.12760635
UPP2	Il-17alpha t cell	UVM	-0.043754347
UPP2	Il2_stat5_signaling	UVM	-0.167515977
UPP2	Il6_jak_stat3_signaling	UVM	-0.086522303
UPP2	Immune_checkpoints_tur	UVM	-0.117465899
UPP2	Immune_inhibition_cytok	UVM	-0.269411656
UPP2	Inositol phosphate metabo	UVM	0.26713047
UPP2	Interleukin_6_signaling	UVM	0.163290343
UPP2	Jaeger_metastasis_up	UVM	-0.16767257
UPP2	Jain_nfkb_signaling	UVM	-0.091336662
UPP2	Kras_signaling_up	UVM	-0.029890785
UPP2	Linoleic acid metabolism	UVM	-0.235778369
UPP2	Lipoic acid metabolism	UVM	0.173125695
UPP2	Lysine degradation	UVM	-0.017625644
UPP2	Lysosome	UVM	-0.198187876
UPP2	M1 macrophage	UVM	0.007806145
UPP2	M2 macrophage	UVM	-0.17798998
UPP2	Mannose type o-glycan bi	UVM	0.056190556
UPP2	Mapk_signaling_pathway	UVM	0.049232745
UPP2	Mapk3_erk1_activation	UVM	-0.066725804
UPP2	Marginal zone b cell	UVM	-0.09425303
UPP2	Memory b cell	UVM	-0.021317984
UPP2	Mesenchymal cell	UVM	-0.025929823
UPP2	Mesenchymal stem cell	UVM	0.001292786
UPP2	Metabolism of xenobiotic	UVM	-0.346751827
UPP2	Migrating cancer stem cel	UVM	-0.07523394
UPP2	Mitotic_spindle	UVM	-0.003268954
UPP2	Monocyte	UVM	-0.054742842
UPP2	Mtor_signaling_pathway	UVM	0.18599071
UPP2	Mtorc1_signaling	UVM	-0.05190246
UPP2	Mucin type o-glycan biosy	UVM	-0.087362619
UPP2	Myc_targets_v1	UVM	-0.205004764
UPP2	Myeloid cell	UVM	-0.064154665
UPP2	N-glycan biosynthesis	UVM	-0.258416596
UPP2	Naive b cell	UVM	-0.083792475
UPP2	Naive cd4+ t cell	UVM	-0.140666504
UPP2	Naive cd8+ t cell	UVM	0.251815977
UPP2	Natural killer cell	UVM	-0.062639677
UPP2	Natural killer t (nkt) cell	UVM	0.096422939
UPP2	Natural regulatory t (treg)	UVM	-0.071472744
UPP2	Neomycin, kanamycin and	UVM	0.047206998
UPP2	Neutrophil	UVM	-0.104367216
UPP2	Nicotinate and nicotinami	UVM	-0.15631503

UPP2	Nitrogen metabolism	UVM	0.216314903
UPP2	Nod_like_receptor_signal	UVM	-0.059771529
UPP2	Notch_signaling	UVM	-0.112397466
UPP2	One carbon pool by folate	UVM	-0.012353429
UPP2	Other glycan degradation	UVM	-0.141496601
UPP2	Other types of o-glycan b	UVM	-0.317929325
UPP2	Oxidative phosphorylatio	UVM	-0.195298742
UPP2	P53_pathway	UVM	-0.262118139
UPP2	P53_signaling_pathway	UVM	-0.101985414
UPP2	Pantothenate and coa bios	UVM	-0.174069323
UPP2	Pentose and glucuronate in	UVM	-0.418663297
UPP2	Pentose phosphate pathwa	UVM	-0.285359134
UPP2	Pericyte	UVM	-0.016454293
UPP2	Phenylalanine metabolism	UVM	-0.181611854
UPP2	Phenylalanine, tyrosine ar	UVM	-0.052622278
UPP2	Phosphonate and phosphir	UVM	-0.17307873
UPP2	Pi3k_akt_activation	UVM	-0.095086446
UPP2	Pi3k_akt_mtor_signaling	UVM	-0.048674677
UPP2	Porphyrin and chlorophyl	UVM	-0.496336654
UPP2	Primary bile acid biosynt	UVM	0.08199919
UPP2	Propanoate metabolism	UVM	0.101905788
UPP2	Purine metabolism	UVM	-0.338350514
UPP2	Pyrimidine metabolism	UVM	-0.437731089
UPP2	Pyruvate metabolism	UVM	0.031223938
UPP2	Regulation_of_autophagy	UVM	0.315901912
UPP2	Retinol metabolism	UVM	-0.3236036
UPP2	Riboflavin metabolism	UVM	-0.336681676
UPP2	Schmahl_pdgf_signaling	UVM	0.009016862
UPP2	Selenocompound metabol	UVM	0.016937732
UPP2	Signaling_by_hippo	UVM	-0.021880511
UPP2	Sphingolipid metabolism	UVM	-0.112843663
UPP2	Starch and sucrose metabo	UVM	0.048622647
UPP2	Steroid biosynthesis	UVM	-0.049886738
UPP2	Steroid hormone biosynth	UVM	-0.305471353
UPP2	Sulfur metabolism	UVM	-0.208891703
UPP2	Synthesis and degradation	UVM	0.073469327
UPP2	T helper cell	UVM	-0.068843987
UPP2	T helper1 (th1) cell	UVM	-0.02868754
UPP2	T helper17 (th17) cell	UVM	-0.009096763
UPP2	T helper2 (th2) cell	UVM	-0.071782986
UPP2	T helper9 (th9) cell	UVM	-0.08747365
UPP2	Taurine and hypotaurine r	UVM	-0.001055589
UPP2	Terpenoid backbone biosy	UVM	-0.247096706

UPP2	Tgf_beta_signaling_pathw	UVM	-0.217058791
UPP2	Thiamine metabolism	UVM	-0.349367793
UPP2	Tnfa_signaling_via_nfk	UVM	-0.110916268
UPP2	Tryptophan metabolism	UVM	-0.192072023
UPP2	Tumor endothelial cell	UVM	-0.00857908
UPP2	Tyrosine metabolism	UVM	-0.272191816
UPP2	Ubiquinone and other ter	UVM	-0.099689564
UPP2	Valine, leucine and isoleu	UVM	-0.165672264
UPP2	Valine, leucine and isoleu	UVM	-0.028588623
UPP2	Vascular endothelial cell	UVM	-0.273903922
UPP2	Vascular smooth muscle c	UVM	-0.217399329
UPP2	Vegf_signaling_pathway	UVM	-0.247776026
UPP2	Vitamin b6 metabolism	UVM	-0.124467245
UPP2	Willert_wnt_signaling	UVM	-0.153833938
UPP2	Wnt_beta_catenin_signali	UVM	-0.047437921

ation/Metastasis- associated biological terms in different cancers

p-value	Group
0.520113163	TME
0.2824878	TME
0.000816784	TME
0.004724531	TME
0.00162049	Metabolism
0.530247044	Proliferation/Metastasis
0.583030212	Metabolism
0.729416614	Metabolism
0.000412682	Proliferation/Metastasis
0.035969821	Proliferation/Metastasis
0.006607126	Metabolism
0.709922276	Metabolism
0.134575162	Metabolism
0.67615105	Metabolism
0.751892223	TME
0.010620938	TME
0.006375129	TME
0.474716075	TME
0.003183905	TME
0.744425207	Metabolism
0.435036606	Metabolism
0.806754802	Metabolism
0.206878184	Metabolism
0.765968941	Metabolism
0.01288362	TME
0.175279802	TME
0.000601264	TME
0.855125913	TME
0.00125623	TME
0.000177534	TME
0.000572617	TME
0.000222529	TME
0.010512041	TME
0.007835369	Proliferation/Metastasis
3.85E-06	Proliferation/Metastasis
0.063956175	Metabolism
0.100852082	Metabolism
0.092184812	TME
0.643405314	Metabolism
0.02710168	Metabolism
0.001642667	TME

0.443198889	Proliferation/Metastasis
0.159635	Proliferation/Metastasis
0.075933598	TME
0.051389595	Metabolism
0.028023156	Metabolism
0.034128325	Proliferation/Metastasis
0.586971331	Proliferation/Metastasis
0.003844947	TME
0.001513532	TME
0.020219469	TME
0.002522008	TME
0.121948605	Proliferation/Metastasis
0.001536331	TME
0.000269004	TME
0.605203108	Metabolism
0.139985342	TME
0.027461529	TME
0.00016237	TME
0.215238047	TME
0.814190086	Metabolism
0.431501585	Metabolism
0.484283777	Metabolism
0.010884029	TME
0.461635109	Metabolism
0.0015069	TME
0.483438567	TME
0.032878838	TME
0.00042642	TME
0.313252218	TME
0.505998695	Metabolism
0.011497567	Proliferation/Metastasis
0.272806388	Metabolism
0.975519568	Proliferation/Metastasis
0.097521181	Metabolism
0.859754088	Metabolism
0.458650766	Metabolism
0.940685197	Metabolism
0.086431106	Metabolism
0.019745424	Metabolism
0.075103608	Metabolism
0.618086932	Metabolism
0.579966934	Metabolism
0.18338291	Metabolism

0.018658166	Metabolism
0.661331919	Metabolism
0.338045288	Metabolism
0.056478762	Metabolism
0.000436248	TME
0.059420191	Proliferation/Metastasis
0.006946088	Metabolism
0.936759654	Proliferation/Metastasis
0.099469393	TME
0.002240062	Proliferation/Metastasis
0.005552048	Proliferation/Metastasis
0.051876907	TME
9.83E-05	TME
0.043037698	Metabolism
0.995938992	Metabolism
0.195008794	Proliferation/Metastasis
0.112315777	Proliferation/Metastasis
0.000233498	Proliferation/Metastasis
0.68782826	Metabolism
0.070484426	Metabolism
0.022793873	Metabolism
0.852530391	Proliferation/Metastasis
0.014531384	TME
0.001425156	TME
0.060780195	Metabolism
0.837912311	Proliferation/Metastasis
0.051692582	Metabolism
0.149578083	TME
0.009563936	TME
0.011930561	TME
0.003183003	TME
0.008528546	Metabolism
0.555597083	TME
6.92E-05	Proliferation/Metastasis
0.000265329	TME
0.391471519	Proliferation/Metastasis
0.041754511	Proliferation/Metastasis
0.024421646	Metabolism
0.127840857	Proliferation/Metastasis
0.000850358	TME
0.002679484	Metabolism
0.009017935	TME
0.009461442	TME

0.573568882	TME
0.002936401	TME
0.09490122	TME
0.128034957	TME
0.888183295	Metabolism
0.000201764	TME
0.94099956	Metabolism
0.241945786	Metabolism
0.020513608	Proliferation/Metastasis
0.013073259	Proliferation/Metastasis
0.118672152	Metabolism
0.882594782	Metabolism
0.493596522	Metabolism
0.140980761	Metabolism
0.004457317	Proliferation/Metastasis
0.051095598	Proliferation/Metastasis
0.075035254	Metabolism
0.724931907	Metabolism
0.289909947	Metabolism
0.002844034	TME
0.091858693	Metabolism
0.542123988	Metabolism
0.513474796	Metabolism
0.323793032	Metabolism
0.293391777	Proliferation/Metastasis
0.621500956	Metabolism
0.268821905	Metabolism
0.00625743	Metabolism
0.367177209	Metabolism
0.330639288	Metabolism
0.033829338	Metabolism
0.114047612	Proliferation/Metastasis
0.586880896	Metabolism
0.820717798	Metabolism
0.129703282	Proliferation/Metastasis
0.027743373	Metabolism
0.000286799	Metabolism
0.000117868	Metabolism
0.77858126	Metabolism
0.114062838	Metabolism
0.626914148	Metabolism
0.146720307	Metabolism
0.314348577	Metabolism

0.006718064	TME
0.000762762	TME
0.003025084	TME
0.00021063	TME
0.000557184	TME
0.435445406	Metabolism
0.06251367	Metabolism
0.775228247	Proliferation/Metastasis
0.692367161	Metabolism
0.00989283	Proliferation/Metastasis
0.49491854	Metabolism
0.779497506	TME
0.056809674	Metabolism
0.41035501	Metabolism
0.196729466	Metabolism
0.03191269	Metabolism
0.000249507	TME
0.000725017	TME
0.386551473	Proliferation/Metastasis
0.019689457	Metabolism
0.282481818	Proliferation/Metastasis
0.963817361	Proliferation/Metastasis
0.19319351	TME
0.442258209	TME
0.101228568	TME
0.276908484	TME
0.013855598	Metabolism
0.19667817	Proliferation/Metastasis
0.05005121	Metabolism
0.104378364	Metabolism
0.090741139	Proliferation/Metastasis
0.639985144	Proliferation/Metastasis
0.125229243	Metabolism
0.129646326	Metabolism
0.000234711	Metabolism
0.346185236	Metabolism
0.425808166	TME
0.713222144	TME
0.041291697	TME
0.236963666	TME
0.358333198	TME
0.415348416	Metabolism
0.420261965	Metabolism

0.88573186	Metabolism
0.5602845	Metabolism
0.758275333	Metabolism
0.040598361	TME
0.188681529	TME
0.189721436	TME
0.01939683	TME
0.446207385	TME
0.287857285	TME
0.187269988	TME
0.149144808	TME
0.17240781	TME
0.481758245	Proliferation/Metastasis
0.038206194	Proliferation/Metastasis
0.19575037	Metabolism
0.1555702	Metabolism
0.619828299	TME
0.592305852	Metabolism
0.00753891	Metabolism
0.075942009	TME
0.005184699	Proliferation/Metastasis
0.169212431	Proliferation/Metastasis
0.755920485	TME
0.726219934	Metabolism
0.155692853	Metabolism
0.39285757	Proliferation/Metastasis
0.015007215	Proliferation/Metastasis
0.038638882	TME
0.083682921	TME
0.077375781	TME
0.096148778	TME
0.004069744	Proliferation/Metastasis
0.259572592	TME
0.192671726	TME
0.915108081	Metabolism
0.010017472	TME
0.011104585	TME
0.356340786	TME
0.243553573	TME
0.196996976	Metabolism
0.306187497	Metabolism
0.744815293	Metabolism
0.10963381	TME

0.144839832	Metabolism
0.197416312	TME
0.020604275	TME
0.142182145	TME
0.263574335	TME
0.065824806	TME
0.324253409	Metabolism
0.689330178	Proliferation/Metastasis
0.912530186	Metabolism
0.494733404	Proliferation/Metastasis
0.928199374	Metabolism
0.576798079	Metabolism
0.407322483	Metabolism
0.779538013	Metabolism
0.215836212	Metabolism
0.676385119	Metabolism
0.19218304	Metabolism
0.985698042	Metabolism
0.549496422	Metabolism
0.198114526	Metabolism
0.031013854	Metabolism
0.056416991	Metabolism
0.551548238	Metabolism
0.507913154	Metabolism
0.241729968	TME
0.135518782	Proliferation/Metastasis
0.536068771	Metabolism
0.138934567	Proliferation/Metastasis
0.07110962	TME
0.066617169	Proliferation/Metastasis
0.050072518	Proliferation/Metastasis
0.261278875	TME
0.3302352	TME
0.078921702	Metabolism
1.88E-05	Metabolism
0.942541191	Proliferation/Metastasis
0.129083592	Proliferation/Metastasis
0.014085296	Proliferation/Metastasis
0.082828364	Metabolism
0.431360502	Metabolism
0.622545587	Metabolism
0.177308938	Proliferation/Metastasis
0.087376109	TME

0.050702763	TME
0.048307918	Metabolism
0.002099986	Proliferation/Metastasis
1.34E-05	Metabolism
0.038795151	TME
0.161405247	TME
0.986409201	TME
0.037503737	TME
0.487678695	Metabolism
0.008055943	TME
0.010751917	Proliferation/Metastasis
0.118542419	TME
0.150084652	Proliferation/Metastasis
0.418051257	Proliferation/Metastasis
0.006918963	Metabolism
0.326426292	Proliferation/Metastasis
0.067118812	TME
0.225798129	Metabolism
0.849865096	TME
0.090442185	TME
0.657714558	TME
0.155005592	TME
0.180231027	TME
0.052939524	TME
0.257052291	Metabolism
0.116854964	TME
0.016485816	Metabolism
3.09E-06	Metabolism
0.001036246	Proliferation/Metastasis
0.048361189	Proliferation/Metastasis
0.924707773	Metabolism
0.606532636	Metabolism
0.214752161	Metabolism
0.054975148	Metabolism
0.760735681	Proliferation/Metastasis
0.33445485	Proliferation/Metastasis
0.073862057	Metabolism
0.209977384	Metabolism
0.831234779	Metabolism
0.408678426	TME
0.314121704	Metabolism
0.870577083	Metabolism
0.292238947	Metabolism

0.045957834	Metabolism
0.080781894	Proliferation/Metastasis
0.815262548	Metabolism
0.102335045	Metabolism
0.095823585	Metabolism
0.985955125	Metabolism
0.445529942	Metabolism
0.694663203	Metabolism
0.00011599	Proliferation/Metastasis
0.453397999	Metabolism
0.521507657	Metabolism
0.355256759	Proliferation/Metastasis
0.724151705	Metabolism
0.024648345	Metabolism
0.111008018	Metabolism
0.210808091	Metabolism
0.413697551	Metabolism
0.41298291	Metabolism
0.662675655	Metabolism
0.547494267	Metabolism
0.08072387	TME
0.109127902	TME
0.341114324	TME
0.226371032	TME
0.427092469	TME
0.749526215	Metabolism
0.261371728	Metabolism
0.040326623	Proliferation/Metastasis
0.017283323	Metabolism
0.070748056	Proliferation/Metastasis
0.813119103	Metabolism
0.43462594	TME
0.775183044	Metabolism
0.192202127	Metabolism
0.443683837	Metabolism
0.587490226	Metabolism
0.093614846	TME
0.312585127	TME
0.045043183	Proliferation/Metastasis
0.458632675	Metabolism
0.101747765	Proliferation/Metastasis
0.440565194	Proliferation/Metastasis
0.022864046	TME

0.21942532	TME
0.000968395	TME
8.15E-05	TME
0.95185278	Metabolism
6.02E-05	Proliferation/Metastasis
0.004688972	Metabolism
0.262220602	Metabolism
0.671591964	Proliferation/Metastasis
0.007892612	Proliferation/Metastasis
0.465085502	Metabolism
0.683498008	Metabolism
0.32553036	Metabolism
0.025969004	Metabolism
0.308037526	TME
0.007752028	TME
0.000244905	TME
0.981915857	TME
4.00E-07	TME
0.165468693	Metabolism
0.244035086	Metabolism
0.254863772	Metabolism
0.003117765	Metabolism
0.964579155	Metabolism
5.13E-05	TME
0.000712901	TME
0.000298205	TME
0.574541614	TME
0.015512238	TME
0.006694495	TME
0.005239601	TME
0.000266617	TME
9.13E-05	TME
0.045695081	Proliferation/Metastasis
0.084296424	Proliferation/Metastasis
0.168163416	Metabolism
0.854167801	Metabolism
0.620415756	TME
0.81961143	Metabolism
0.135039478	Metabolism
0.00033321	TME
0.031904211	Proliferation/Metastasis
0.001222249	Proliferation/Metastasis
0.18869976	TME

0.246674691	Metabolism
0.002922183	Metabolism
0.000789408	Proliferation/Metastasis
0.001646047	Proliferation/Metastasis
0.010623609	TME
8.63E-05	TME
0.01356521	TME
0.003389613	TME
0.754361289	Proliferation/Metastasis
1.28E-06	TME
0.000689966	TME
0.015579585	Metabolism
0.000114109	TME
7.59E-06	TME
0.002852204	TME
0.666666639	TME
0.320900817	Metabolism
0.007166459	Metabolism
0.929527375	Metabolism
0.001814331	TME
0.291541863	Metabolism
0.040809349	TME
0.005026988	TME
0.001751178	TME
0.002517839	TME
0.673243762	TME
0.512281715	Metabolism
0.001095342	Proliferation/Metastasis
0.037340316	Metabolism
0.707718166	Proliferation/Metastasis
0.015735054	Metabolism
0.631484465	Metabolism
0.152592623	Metabolism
0.690439682	Metabolism
0.653677276	Metabolism
0.013306131	Metabolism
0.147073288	Metabolism
0.003790689	Metabolism
0.18143625	Metabolism
0.939490739	Metabolism
0.436254418	Metabolism
0.007002723	Metabolism
0.937192729	Metabolism

0.187183828	Metabolism
0.000284573	TME
0.118742197	Proliferation/Metastasis
0.743486123	Metabolism
0.009541558	Proliferation/Metastasis
0.068781827	TME
7.95E-07	Proliferation/Metastasis
2.84E-05	Proliferation/Metastasis
0.00256487	TME
3.23E-06	TME
0.032236162	Metabolism
0.010656958	Metabolism
0.03340161	Proliferation/Metastasis
0.018954787	Proliferation/Metastasis
0.003810526	Proliferation/Metastasis
0.005617504	Metabolism
0.071707119	Metabolism
0.273949777	Metabolism
0.71001891	Proliferation/Metastasis
0.000620425	TME
0.004002875	TME
0.157258184	Metabolism
0.594472523	Proliferation/Metastasis
0.409111759	Metabolism
0.070027364	TME
0.063442706	TME
0.000282589	TME
0.000386882	TME
0.882451895	Metabolism
5.70E-08	TME
0.131820927	Proliferation/Metastasis
0.000215709	TME
0.061803534	Proliferation/Metastasis
0.205581169	Proliferation/Metastasis
0.320442099	Metabolism
0.008537856	Proliferation/Metastasis
0.001093616	TME
0.680443664	Metabolism
0.006110966	TME
0.209533943	TME
0.435251012	TME
0.001012205	TME
3.79E-06	TME

0.220473112	TME
0.041141728	Metabolism
1.64E-05	TME
0.254034192	Metabolism
0.748979078	Metabolism
0.000165461	Proliferation/Metastasis
0.069050046	Proliferation/Metastasis
0.000228528	Metabolism
0.944081443	Metabolism
0.048395469	Metabolism
0.3020466	Metabolism
0.112593027	Proliferation/Metastasis
0.050286203	Proliferation/Metastasis
0.503999426	Metabolism
0.808660223	Metabolism
0.419048084	Metabolism
0.007239097	TME
0.360065144	Metabolism
0.091519172	Metabolism
0.076905237	Metabolism
0.453970191	Metabolism
0.09598923	Proliferation/Metastasis
0.082285368	Metabolism
0.011274307	Metabolism
0.008601965	Metabolism
0.00017654	Metabolism
1.42E-05	Metabolism
0.00424258	Metabolism
0.00018443	Proliferation/Metastasis
0.1003161	Metabolism
0.02650934	Metabolism
0.146052546	Proliferation/Metastasis
0.020381467	Metabolism
0.496451164	Metabolism
0.364430581	Metabolism
0.783430057	Metabolism
0.01061976	Metabolism
0.013454289	Metabolism
0.379070716	Metabolism
0.031740466	Metabolism
0.008893379	TME
0.001623756	TME
0.00023001	TME

0.000233659	TME
0.001043967	TME
0.014342622	Metabolism
0.215415113	Metabolism
0.387120328	Proliferation/Metastasis
0.261112196	Metabolism
1.51E-07	Proliferation/Metastasis
0.223767962	Metabolism
0.002043504	TME
0.564165191	Metabolism
0.229760638	Metabolism
0.077269524	Metabolism
0.000945668	Metabolism
0.003057212	TME
0.125156118	TME
0.419933694	Proliferation/Metastasis
0.784327787	Metabolism
0.903549681	Proliferation/Metastasis
0.635814481	Proliferation/Metastasis
0.793603589	TME
0.726998121	TME
0.800639757	TME
0.975697552	TME
0.148031214	Metabolism
0.296954587	Proliferation/Metastasis
0.527215419	Metabolism
0.146070726	Metabolism
0.049765239	Proliferation/Metastasis
0.263032221	Proliferation/Metastasis
0.269648052	Metabolism
0.097491159	Metabolism
0.737444329	Metabolism
0.049518178	Metabolism
0.765407079	TME
0.524835938	TME
0.836441229	TME
0.902863538	TME
0.686448616	TME
0.005210064	Metabolism
0.538883098	Metabolism
0.667354747	Metabolism
0.662107717	Metabolism
0.048794285	Metabolism

0.764256937	TME
0.81436939	TME
0.432371153	TME
0.081343526	TME
0.811037822	TME
0.896071943	TME
0.871653657	TME
0.682236992	TME
0.972940151	TME
0.033233413	Proliferation/Metastasis
0.595811838	Proliferation/Metastasis
0.982196032	Metabolism
0.683393669	Metabolism
0.856991327	TME
0.669170819	Metabolism
0.381184189	Metabolism
0.916496975	TME
0.11056921	Proliferation/Metastasis
0.12396474	Proliferation/Metastasis
0.622374015	TME
0.079643774	Metabolism
0.936852432	Metabolism
0.117549632	Proliferation/Metastasis
0.797449279	Proliferation/Metastasis
0.745949717	TME
0.516642481	TME
0.310886226	TME
0.928547383	TME
0.492110823	Proliferation/Metastasis
0.740825946	TME
0.812243352	TME
0.224629569	Metabolism
0.72003937	TME
0.538818638	TME
0.585475921	TME
0.624617893	TME
0.131674448	Metabolism
0.508558312	Metabolism
0.515983326	Metabolism
0.922954367	TME
0.233918925	Metabolism
0.360350679	TME
0.71235579	TME

0.644464898	TME
0.411676091	TME
0.348124781	TME
0.153399189	Metabolism
0.162510247	Proliferation/Metastasis
0.604897383	Metabolism
0.18064609	Proliferation/Metastasis
0.909519629	Metabolism
0.623727885	Metabolism
0.434999578	Metabolism
0.03456974	Metabolism
0.216128501	Metabolism
0.283847954	Metabolism
0.239801587	Metabolism
0.234299042	Metabolism
0.380313724	Metabolism
0.131439103	Metabolism
0.667043085	Metabolism
0.963187996	Metabolism
0.748473589	Metabolism
0.374867887	Metabolism
0.752627848	TME
0.098165165	Proliferation/Metastasis
0.001319543	Metabolism
0.386455777	Proliferation/Metastasis
0.21637422	TME
0.357535872	Proliferation/Metastasis
0.316538778	Proliferation/Metastasis
0.168025066	TME
0.173294188	TME
0.328678116	Metabolism
0.451590722	Metabolism
0.097432055	Proliferation/Metastasis
0.16399711	Proliferation/Metastasis
0.044637805	Proliferation/Metastasis
0.080456479	Metabolism
0.475678886	Metabolism
0.25759807	Metabolism
0.109160921	Proliferation/Metastasis
0.778863708	TME
0.794204456	TME
0.14873989	Metabolism
0.371190774	Proliferation/Metastasis

0.385281937	Metabolism
0.304290456	TME
0.579673182	TME
0.859977336	TME
0.56412061	TME
0.40074871	Metabolism
0.155051403	TME
0.558625017	Proliferation/Metastasis
0.582007357	TME
0.494201659	Proliferation/Metastasis
0.471598904	Proliferation/Metastasis
4.02E-05	Metabolism
0.082597351	Proliferation/Metastasis
0.972212548	TME
0.8464329	Metabolism
0.067170884	TME
0.27726544	TME
0.910121673	TME
0.791329335	TME
0.127014768	TME
0.346421556	TME
0.616779703	Metabolism
0.732911489	TME
0.088238492	Metabolism
0.505134438	Metabolism
0.254115529	Proliferation/Metastasis
0.050920178	Proliferation/Metastasis
0.206860096	Metabolism
0.298243237	Metabolism
0.191460767	Metabolism
0.750049367	Metabolism
0.122395975	Proliferation/Metastasis
0.25004153	Proliferation/Metastasis
0.674264482	Metabolism
0.231966029	Metabolism
0.556797369	Metabolism
0.760144905	TME
0.022322893	Metabolism
0.843714542	Metabolism
0.506328815	Metabolism
0.209395648	Metabolism
0.580592961	Proliferation/Metastasis
0.069853696	Metabolism

0.080181348	Metabolism
0.774958311	Metabolism
0.500420864	Metabolism
0.023506706	Metabolism
0.555501851	Metabolism
0.419545035	Proliferation/Metastasis
0.002768056	Metabolism
0.672311142	Metabolism
0.076332031	Proliferation/Metastasis
0.414493169	Metabolism
0.861433094	Metabolism
0.057232539	Metabolism
0.464979464	Metabolism
0.273589026	Metabolism
0.114690396	Metabolism
0.211766924	Metabolism
0.533508132	Metabolism
0.36271856	TME
0.701678493	TME
0.394766915	TME
0.328056483	TME
0.964810303	TME
0.335934334	Metabolism
0.639228298	Metabolism
0.629796981	Proliferation/Metastasis
0.40783921	Metabolism
0.285313768	Proliferation/Metastasis
0.2140993	Metabolism
0.593631884	TME
0.00403753	Metabolism
0.311284224	Metabolism
0.547044188	Metabolism
0.957060504	Metabolism
0.477743593	TME
0.458676092	TME
0.138980612	Proliferation/Metastasis
0.890095555	Metabolism
0.54005587	Proliferation/Metastasis
0.094016657	Proliferation/Metastasis
0.446626646	TME
0.038784108	TME
0.015963491	TME
0.038415873	TME

0.437107787	Metabolism
0.025165673	Proliferation/Metastasis
0.659178462	Metabolism
0.004177223	Metabolism
0.244896846	Proliferation/Metastasis
0.175032101	Proliferation/Metastasis
0.066192755	Metabolism
0.382757983	Metabolism
0.619212428	Metabolism
0.497800487	Metabolism
0.182766097	TME
0.065799749	TME
0.001671599	TME
0.075553388	TME
0.0170726	TME
0.171699199	Metabolism
0.014765971	Metabolism
0.447802387	Metabolism
0.574170821	Metabolism
0.15984476	Metabolism
0.0106168	TME
0.218035442	TME
0.04168531	TME
0.445632617	TME
0.099475057	TME
0.031508682	TME
0.03513284	TME
0.153792295	TME
0.017936078	TME
0.45926712	Proliferation/Metastasis
0.480174373	Proliferation/Metastasis
0.190519822	Metabolism
0.128218219	Metabolism
0.359592918	TME
0.862953333	Metabolism
0.033199327	Metabolism
0.013184837	TME
0.594260276	Proliferation/Metastasis
0.096032228	Proliferation/Metastasis
0.602029799	TME
0.724109401	Metabolism
0.941270732	Metabolism
0.273859841	Proliferation/Metastasis

0.176193519	Proliferation/Metastasis
0.02162616	TME
0.001739759	TME
0.039463301	TME
0.028435594	TME
0.143073937	Proliferation/Metastasis
0.132779144	TME
0.005491082	TME
0.41689821	Metabolism
0.013962207	TME
0.003088975	TME
0.030798631	TME
0.541301252	TME
0.160382556	Metabolism
0.110586981	Metabolism
0.105886372	Metabolism
0.065572979	TME
0.472699612	Metabolism
0.063150272	TME
0.799528613	TME
0.010707539	TME
0.005185556	TME
0.050255163	TME
0.014816715	Metabolism
0.471961953	Proliferation/Metastasis
0.376178298	Metabolism
0.370580959	Proliferation/Metastasis
0.11967854	Metabolism
0.641431821	Metabolism
0.155319187	Metabolism
0.039469408	Metabolism
0.414625838	Metabolism
0.917726736	Metabolism
0.169880206	Metabolism
0.413286044	Metabolism
0.002551651	Metabolism
0.750701772	Metabolism
0.046713495	Metabolism
0.733632687	Metabolism
0.029001489	Metabolism
0.164061029	Metabolism
0.004238946	TME
0.881501674	Proliferation/Metastasis

0.99236549	Metabolism
0.055243162	Proliferation/Metastasis
0.144646193	TME
0.079668605	Proliferation/Metastasis
0.008557307	Proliferation/Metastasis
0.000750084	TME
0.01122431	TME
0.680124911	Metabolism
0.022906972	Metabolism
0.158541029	Proliferation/Metastasis
0.046180789	Proliferation/Metastasis
0.004985026	Proliferation/Metastasis
0.841319131	Metabolism
0.207041883	Metabolism
0.208998124	Metabolism
0.046385801	Proliferation/Metastasis
0.003932694	TME
0.022533845	TME
0.823890597	Metabolism
0.131262416	Proliferation/Metastasis
0.149377904	Metabolism
0.157861507	TME
0.068284298	TME
0.577278872	TME
0.01566084	TME
0.919263492	Metabolism
0.06715954	TME
0.680208427	Proliferation/Metastasis
0.003370071	TME
0.91813788	Proliferation/Metastasis
0.031362523	Proliferation/Metastasis
0.305889658	Metabolism
0.213950392	Proliferation/Metastasis
0.029474579	TME
0.747926554	Metabolism
0.824893448	TME
0.196958287	TME
0.444408516	TME
0.023804564	TME
0.008134424	TME
0.104448258	TME
0.01238657	Metabolism
0.001353121	TME

0.075822713	Metabolism
0.435717698	Metabolism
0.197120752	Proliferation/Metastasis
0.271873386	Proliferation/Metastasis
0.208136706	Metabolism
0.251893656	Metabolism
0.482944651	Metabolism
0.16201436	Metabolism
0.011914461	Proliferation/Metastasis
0.905907671	Proliferation/Metastasis
0.260983258	Metabolism
0.135133272	Metabolism
0.192077514	Metabolism
0.008197777	TME
0.23904553	Metabolism
0.002355811	Metabolism
0.842122716	Metabolism
0.997564366	Metabolism
0.41098448	Proliferation/Metastasis
0.188686159	Metabolism
0.558596454	Metabolism
0.20957722	Metabolism
0.16155481	Metabolism
0.102175203	Metabolism
0.532541549	Metabolism
0.721412983	Proliferation/Metastasis
0.619471386	Metabolism
0.381219991	Metabolism
0.947691636	Proliferation/Metastasis
0.394898002	Metabolism
0.005247833	Metabolism
0.236071758	Metabolism
0.222348424	Metabolism
0.903666779	Metabolism
0.393425711	Metabolism
0.176987528	Metabolism
0.65778826	Metabolism
0.012947526	TME
0.033802137	TME
0.006302693	TME
0.039271187	TME
0.052829889	TME
0.952210613	Metabolism

0.932124297	Metabolism
0.135518114	Proliferation/Metastasis
0.468001269	Metabolism
0.011060788	Proliferation/Metastasis
0.731541964	Metabolism
0.445929824	TME
0.923370415	Metabolism
0.29745915	Metabolism
6.51E-05	Metabolism
0.51843143	Metabolism
0.016032445	TME
0.246026204	TME
0.281451613	Proliferation/Metastasis
0.793659753	Metabolism
0.303904101	Proliferation/Metastasis
0.872141541	Proliferation/Metastasis
0.245361948	TME
0.954378458	TME
0.031547186	TME
0.350921322	TME
0.356086152	Metabolism
0.338911492	Proliferation/Metastasis
0.662812202	Metabolism
0.201817996	Metabolism
0.046349065	Proliferation/Metastasis
0.277468207	Proliferation/Metastasis
0.883842627	Metabolism
0.009725052	Metabolism
0.59633491	Metabolism
0.000572809	Metabolism
0.390188035	TME
0.70552654	TME
0.249886524	TME
0.489542177	TME
0.371235637	TME
0.456753638	Metabolism
0.047029931	Metabolism
0.581925465	Metabolism
0.161315114	Metabolism
0.027965885	Metabolism
0.91846177	TME
0.410053845	TME
0.148224761	TME

0.027300111	TME
0.143568944	TME
0.073377352	TME
0.075599715	TME
0.373842751	TME
0.251434151	TME
0.017986834	Proliferation/Metastasis
0.187312459	Proliferation/Metastasis
0.273913992	Metabolism
0.965080335	Metabolism
0.010620698	TME
0.478575064	Metabolism
0.906266453	Metabolism
0.36574691	TME
0.00126163	Proliferation/Metastasis
0.028823157	Proliferation/Metastasis
0.402778609	TME
0.000362316	Metabolism
0.621984273	Metabolism
0.024037972	Proliferation/Metastasis
0.015299206	Proliferation/Metastasis
0.046243597	TME
0.2019375	TME
0.01768404	TME
0.098349887	TME
0.722967129	Proliferation/Metastasis
0.296880702	TME
0.252350147	TME
0.497038456	Metabolism
0.890168179	TME
0.65476872	TME
0.106061673	TME
0.414233655	TME
0.277628896	Metabolism
0.605591401	Metabolism
0.456985463	Metabolism
0.961225394	TME
0.657188639	Metabolism
0.129103019	TME
0.500584155	TME
0.203836554	TME
0.317656399	TME
0.046531572	TME

0.054581657	Metabolism
0.016179665	Proliferation/Metastasis
0.885703332	Metabolism
0.289370551	Proliferation/Metastasis
0.292278833	Metabolism
0.743089153	Metabolism
0.482471999	Metabolism
0.684615441	Metabolism
0.604080223	Metabolism
0.769889357	Metabolism
0.00904823	Metabolism
0.488702147	Metabolism
0.435695843	Metabolism
0.421827238	Metabolism
0.187951803	Metabolism
0.012194412	Metabolism
0.951674355	Metabolism
0.955465193	Metabolism
0.250173328	TME
0.643321176	Proliferation/Metastasis
0.124808747	Metabolism
0.908277635	Proliferation/Metastasis
0.034262716	TME
0.848764725	Proliferation/Metastasis
0.963318261	Proliferation/Metastasis
0.73050129	TME
0.435524158	TME
0.370447753	Metabolism
0.558781201	Metabolism
0.231009623	Proliferation/Metastasis
0.315296821	Proliferation/Metastasis
0.443485373	Proliferation/Metastasis
0.033936085	Metabolism
0.775383086	Metabolism
0.629085305	Metabolism
0.000384842	Proliferation/Metastasis
0.364908118	TME
0.112164215	TME
0.002048604	Metabolism
0.869837908	Proliferation/Metastasis
0.204263923	Metabolism
0.082040826	TME
0.076721367	TME

0.036248423	TME
0.64663416	TME
0.019033337	Metabolism
0.018368283	TME
0.140631751	Proliferation/Metastasis
0.210722567	TME
0.017376779	Proliferation/Metastasis
0.252603968	Proliferation/Metastasis
0.150042399	Metabolism
0.002643373	Proliferation/Metastasis
0.338773112	TME
0.115417111	Metabolism
0.744043293	TME
0.02737255	TME
0.208607097	TME
0.412077656	TME
0.921336848	TME
0.017906279	TME
0.820770931	Metabolism
0.243615971	TME
0.038046587	Metabolism
0.000550412	Metabolism
0.835829514	Proliferation/Metastasis
0.322260959	Proliferation/Metastasis
0.001119352	Metabolism
0.023888264	Metabolism
0.049809686	Metabolism
0.006884751	Metabolism
0.473655381	Proliferation/Metastasis
0.014226088	Proliferation/Metastasis
0.042742705	Metabolism
0.000285102	Metabolism
0.493917414	Metabolism
0.536820942	TME
0.181610646	Metabolism
0.380381124	Metabolism
0.417822321	Metabolism
0.302925804	Metabolism
0.840448394	Proliferation/Metastasis
0.052940353	Metabolism
2.64E-05	Metabolism
0.701125967	Metabolism
0.008496008	Metabolism

0.032421519	Metabolism
0.956688974	Metabolism
0.010990698	Proliferation/Metastasis
0.004092542	Metabolism
0.8153173	Metabolism
0.740661338	Proliferation/Metastasis
0.908302115	Metabolism
0.100591091	Metabolism
0.765489158	Metabolism
0.143946013	Metabolism
0.786671872	Metabolism
0.003194087	Metabolism
0.18921549	Metabolism
0.85755684	Metabolism
0.138930996	TME
0.244248081	TME
0.483575468	TME
0.131665993	TME
0.489709886	TME
0.342045974	Metabolism
0.123385001	Metabolism
0.001753902	Proliferation/Metastasis
0.784543193	Metabolism
0.186225791	Proliferation/Metastasis
0.572714631	Metabolism
0.104369447	TME
0.091106057	Metabolism
0.683200692	Metabolism
0.227957306	Metabolism
0.457271213	Metabolism
0.712445007	TME
0.769562402	TME
0.929527693	Proliferation/Metastasis
0.297291733	Metabolism
4.23E-05	Proliferation/Metastasis
0.019803898	Proliferation/Metastasis
1.92E-06	TME
1.38E-09	TME
5.41E-14	TME
4.45E-13	TME
2.14E-13	Metabolism
7.95E-11	Proliferation/Metastasis
6.50E-09	Metabolism

2.51E-08	Metabolism
0.720690444	Proliferation/Metastasis
6.08E-29	Proliferation/Metastasis
0.896043836	Metabolism
0.114653259	Metabolism
0.002271542	Metabolism
7.15E-17	Metabolism
0.000852905	TME
2.96E-20	TME
4.81E-07	TME
5.33E-05	TME
7.64E-09	TME
0.000855032	Metabolism
0.017896797	Metabolism
6.34E-10	Metabolism
6.79E-19	Metabolism
0.019257622	Metabolism
2.03E-27	TME
1.03E-07	TME
5.27E-17	TME
0.007428742	TME
4.62E-14	TME
4.39E-10	TME
4.05E-11	TME
1.07E-11	TME
3.48E-10	TME
0.014595533	Proliferation/Metastasis
2.69E-09	Proliferation/Metastasis
0.031157871	Metabolism
4.56E-07	Metabolism
1.57E-08	TME
0.070604598	Metabolism
0.011881763	Metabolism
5.75E-24	TME
0.241411961	Proliferation/Metastasis
0.000732416	Proliferation/Metastasis
0.000405746	TME
3.93E-15	Metabolism
0.219112693	Metabolism
0.052604537	Proliferation/Metastasis
6.40E-31	Proliferation/Metastasis
0.060371675	TME
7.00E-24	TME

8.19E-07	TME
7.68E-15	TME
0.023631216	Proliferation/Metastasis
2.58E-22	TME
5.87E-19	TME
0.006005507	Metabolism
2.27E-22	TME
2.10E-17	TME
3.01E-08	TME
0.185775254	TME
4.87E-17	Metabolism
1.22E-27	Metabolism
0.342356953	Metabolism
4.02E-24	TME
0.000139036	Metabolism
1.91E-05	TME
0.000401482	TME
2.46E-12	TME
9.44E-09	TME
0.000105022	TME
0.860601787	Metabolism
0.055356507	Proliferation/Metastasis
2.43E-09	Metabolism
8.91E-21	Proliferation/Metastasis
0.061122647	Metabolism
1.68E-05	Metabolism
0.000120288	Metabolism
4.17E-05	Metabolism
0.031620044	Metabolism
1.22E-39	Metabolism
0.000157725	Metabolism
1.22E-07	Metabolism
1.40E-06	Metabolism
7.54E-10	Metabolism
0.006352843	Metabolism
0.001028301	Metabolism
7.56E-13	Metabolism
4.73E-06	Metabolism
1.01E-25	TME
1.79E-11	Proliferation/Metastasis
0.063368271	Metabolism
8.02E-26	Proliferation/Metastasis
3.95E-11	TME

3.53E-29	Proliferation/Metastasis
1.96E-28	Proliferation/Metastasis
1.84E-15	TME
4.61E-28	TME
2.70E-07	Metabolism
1.26E-12	Metabolism
1.33E-12	Proliferation/Metastasis
0.036072436	Proliferation/Metastasis
1.12E-24	Proliferation/Metastasis
8.10E-12	Metabolism
2.07E-15	Metabolism
9.12E-08	Metabolism
6.05E-07	Proliferation/Metastasis
4.60E-16	TME
4.80E-24	TME
0.391456129	Metabolism
1.91E-18	Proliferation/Metastasis
4.14E-10	Metabolism
2.11E-07	TME
5.18E-10	TME
1.61E-31	TME
5.60E-27	TME
1.90E-14	Metabolism
6.57E-06	TME
0.002255277	Proliferation/Metastasis
2.16E-25	TME
0.959389104	Proliferation/Metastasis
1.91E-05	Proliferation/Metastasis
0.040117471	Metabolism
0.028035508	Proliferation/Metastasis
1.24E-17	TME
0.906198075	Metabolism
0.000145705	TME
0.019143454	TME
0.44873034	TME
6.98E-15	TME
0.040103306	TME
5.40E-05	TME
2.68E-17	Metabolism
1.42E-30	TME
2.71E-06	Metabolism
0.024614638	Metabolism
1.98E-24	Proliferation/Metastasis

0.000128233	Proliferation/Metastasis
0.957265493	Metabolism
0.098505882	Metabolism
1.68E-08	Metabolism
0.265140298	Metabolism
1.58E-10	Proliferation/Metastasis
0.620746655	Proliferation/Metastasis
3.03E-08	Metabolism
1.01E-18	Metabolism
0.643805337	Metabolism
1.82E-28	TME
0.002206123	Metabolism
0.058888175	Metabolism
8.54E-10	Metabolism
0.053137873	Metabolism
0.000227744	Proliferation/Metastasis
4.16E-07	Metabolism
0.927313474	Metabolism
3.36E-24	Metabolism
2.80E-06	Metabolism
1.05E-06	Metabolism
0.007365763	Metabolism
0.87768765	Proliferation/Metastasis
1.05E-11	Metabolism
1.47E-12	Metabolism
0.867183238	Proliferation/Metastasis
0.386080538	Metabolism
0.007343373	Metabolism
0.237681648	Metabolism
2.62E-08	Metabolism
0.286918076	Metabolism
3.44E-12	Metabolism
5.40E-05	Metabolism
0.000361113	Metabolism
4.25E-15	TME
3.16E-19	TME
2.43E-14	TME
3.67E-08	TME
0.000785977	TME
3.18E-05	Metabolism
0.058356893	Metabolism
0.000589309	Proliferation/Metastasis
0.004003488	Metabolism

7.22E-27	Proliferation/Metastasis
0.325240945	Metabolism
3.60E-12	TME
3.94E-08	Metabolism
0.136923899	Metabolism
0.004633209	Metabolism
8.71E-24	Metabolism
4.82E-13	TME
4.58E-08	TME
2.68E-05	Proliferation/Metastasis
0.002556203	Metabolism
0.200346278	Proliferation/Metastasis
3.42E-05	Proliferation/Metastasis
0.292075873	TME
0.077976023	TME
0.753704651	TME
0.284122113	TME
4.26E-07	Metabolism
0.221484022	Proliferation/Metastasis
1.33E-05	Metabolism
0.965310765	Metabolism
0.119339911	Proliferation/Metastasis
0.208709701	Proliferation/Metastasis
0.054660712	Metabolism
0.782762714	Metabolism
6.10E-08	Metabolism
3.09E-08	Metabolism
0.147463997	TME
0.303566084	TME
0.683256398	TME
0.405626572	TME
0.0007819	TME
0.003755042	Metabolism
0.700849079	Metabolism
0.363959475	Metabolism
0.222457755	Metabolism
0.701277869	Metabolism
0.068644732	TME
0.257739186	TME
0.312665532	TME
0.283873296	TME
0.574760529	TME
0.742466505	TME

0.74473591	TME
0.175254937	TME
0.522119866	TME
0.678175115	Proliferation/Metastasis
5.87E-07	Proliferation/Metastasis
0.326562119	Metabolism
0.175230716	Metabolism
0.084298938	TME
0.097987857	Metabolism
5.88E-17	Metabolism
0.355208964	TME
1.79E-09	Proliferation/Metastasis
9.37E-08	Proliferation/Metastasis
0.045629897	TME
1.35E-06	Metabolism
0.240865495	Metabolism
0.040515493	Proliferation/Metastasis
0.409086166	Proliferation/Metastasis
0.023767533	TME
0.735351249	TME
0.273447333	TME
0.909828029	TME
6.87E-05	Proliferation/Metastasis
0.798930007	TME
0.797349913	TME
1.09E-10	Metabolism
0.976313951	TME
0.502846868	TME
0.271872088	TME
0.129460548	TME
2.27E-06	Metabolism
1.79E-05	Metabolism
0.028799532	Metabolism
0.975431521	TME
0.558988653	Metabolism
0.821660299	TME
0.449945373	TME
0.759903882	TME
0.051870646	TME
0.832234212	TME
0.09227427	Metabolism
0.995450765	Proliferation/Metastasis
0.977277469	Metabolism

0.289626611	Proliferation/Metastasis
0.010869847	Metabolism
0.022134258	Metabolism
0.000349987	Metabolism
0.223757466	Metabolism
0.014915946	Metabolism
0.002019272	Metabolism
0.201048607	Metabolism
0.441104789	Metabolism
0.481761496	Metabolism
0.087776799	Metabolism
0.016812568	Metabolism
0.211630649	Metabolism
0.141978365	Metabolism
0.029003013	Metabolism
0.235675562	TME
0.284848485	Proliferation/Metastasis
0.430293782	Metabolism
0.053369096	Proliferation/Metastasis
0.916954528	TME
0.626166676	Proliferation/Metastasis
0.415530847	Proliferation/Metastasis
0.37271161	TME
0.151962184	TME
1.57E-17	Metabolism
0.000126321	Metabolism
0.009128751	Proliferation/Metastasis
0.003064497	Proliferation/Metastasis
0.026756182	Proliferation/Metastasis
8.73E-05	Metabolism
0.424230653	Metabolism
0.023261705	Metabolism
0.075208268	Proliferation/Metastasis
0.248925366	TME
0.645156329	TME
4.98E-11	Metabolism
0.000634817	Proliferation/Metastasis
6.60E-05	Metabolism
0.903456042	TME
0.101345322	TME
0.166103206	TME
0.782795434	TME
0.000178634	Metabolism

0.060599635	TME
0.000484787	Proliferation/Metastasis
0.623468324	TME
9.76E-06	Proliferation/Metastasis
0.004860579	Proliferation/Metastasis
6.61E-13	Metabolism
0.308296284	Proliferation/Metastasis
0.955711749	TME
0.310647834	Metabolism
0.445510424	TME
0.001059613	TME
0.042604051	TME
0.357280398	TME
0.542757952	TME
0.041437326	TME
0.604968535	Metabolism
0.667674699	TME
0.823491817	Metabolism
0.002213338	Metabolism
0.073968964	Proliferation/Metastasis
1.19E-07	Proliferation/Metastasis
0.139637852	Metabolism
0.304213589	Metabolism
1.74E-15	Metabolism
0.001939417	Metabolism
0.000515754	Proliferation/Metastasis
8.42E-12	Proliferation/Metastasis
0.195540047	Metabolism
2.40E-08	Metabolism
0.744658606	Metabolism
0.137914247	TME
0.045801421	Metabolism
0.081914918	Metabolism
0.432044543	Metabolism
8.23E-07	Metabolism
1.38E-06	Proliferation/Metastasis
0.023324029	Metabolism
0.497837343	Metabolism
1.56E-10	Metabolism
0.005397026	Metabolism
7.58E-06	Metabolism
0.041904159	Metabolism
0.61638953	Proliferation/Metastasis

1.99E-05	Metabolism
9.37E-16	Metabolism
7.93E-09	Proliferation/Metastasis
0.954557907	Metabolism
0.00974186	Metabolism
0.065083759	Metabolism
0.344040536	Metabolism
0.234449631	Metabolism
9.57E-06	Metabolism
1.04E-07	Metabolism
0.031416245	Metabolism
0.643720986	TME
0.489739071	TME
0.170036597	TME
0.14860528	TME
0.448631322	TME
0.015819577	Metabolism
0.294958754	Metabolism
1.36E-09	Proliferation/Metastasis
1.09E-12	Metabolism
0.039611454	Proliferation/Metastasis
0.104577847	Metabolism
0.451086429	TME
0.011723901	Metabolism
0.052777375	Metabolism
0.305536568	Metabolism
0.004841633	Metabolism
0.259139865	TME
0.634747985	TME
1.13E-08	Proliferation/Metastasis
0.000300273	Metabolism
7.82E-05	Proliferation/Metastasis
0.062092834	Proliferation/Metastasis
0.949648872	TME
0.204449025	TME
0.412290406	TME
0.223097084	TME
0.207788054	Metabolism
0.000320215	Proliferation/Metastasis
9.32E-08	Metabolism
0.000392676	Metabolism
0.034849898	Proliferation/Metastasis
0.632014257	Proliferation/Metastasis

3.48E-06	Metabolism
0.012990077	Metabolism
0.067853639	Metabolism
1.08E-06	Metabolism
0.696845808	TME
0.059801589	TME
0.076187622	TME
0.897394325	TME
0.835184004	TME
0.163559332	Metabolism
0.290479314	Metabolism
0.37454728	Metabolism
0.032336527	Metabolism
0.255693079	Metabolism
0.454984758	TME
0.466497707	TME
0.812490238	TME
0.132511901	TME
0.62160126	TME
0.707210001	TME
0.968178086	TME
0.060034414	TME
0.044921441	TME
4.26E-15	Proliferation/Metastasis
0.001331695	Proliferation/Metastasis
0.003682766	Metabolism
4.65E-07	Metabolism
0.777993443	TME
0.064744741	Metabolism
0.019357643	Metabolism
0.277583242	TME
3.24E-14	Proliferation/Metastasis
1.14E-25	Proliferation/Metastasis
0.617745917	TME
1.68E-07	Metabolism
0.051606994	Metabolism
1.23E-23	Proliferation/Metastasis
0.947759821	Proliferation/Metastasis
0.257352272	TME
0.637281131	TME
0.807029566	TME
0.505156191	TME
7.09E-07	Proliferation/Metastasis

0.024846292	TME
0.346641583	TME
2.67E-13	Metabolism
0.48948609	TME
0.935926494	TME
0.306535565	TME
0.272144254	TME
0.000463622	Metabolism
0.000409441	Metabolism
0.000717372	Metabolism
0.363463535	TME
0.258928383	Metabolism
0.154592973	TME
0.456494881	TME
0.938005411	TME
0.06759201	TME
0.892909092	TME
0.873801533	Metabolism
4.32E-17	Proliferation/Metastasis
0.369407869	Metabolism
0.052076355	Proliferation/Metastasis
0.032167241	Metabolism
0.087360706	Metabolism
2.77E-11	Metabolism
0.110240896	Metabolism
0.562801321	Metabolism
0.027113338	Metabolism
0.006469324	Metabolism
0.124698407	Metabolism
0.027906153	Metabolism
0.015501519	Metabolism
4.58E-07	Metabolism
0.039849874	Metabolism
0.60445635	Metabolism
0.00298206	Metabolism
0.004044078	TME
0.144023948	Proliferation/Metastasis
0.08705919	Metabolism
0.829882508	Proliferation/Metastasis
0.981046873	TME
0.305672953	Proliferation/Metastasis
0.657743877	Proliferation/Metastasis
0.462268672	TME

0.029882164	TME
1.36E-21	Metabolism
0.731205581	Metabolism
5.80E-15	Proliferation/Metastasis
5.00E-11	Proliferation/Metastasis
0.244030121	Proliferation/Metastasis
4.12E-10	Metabolism
0.106618873	Metabolism
0.000203308	Metabolism
3.93E-05	Proliferation/Metastasis
0.050765307	TME
0.029496145	TME
0.000525201	Metabolism
0.065276171	Proliferation/Metastasis
0.453534834	Metabolism
0.647111945	TME
0.612110229	TME
0.076985231	TME
0.635833748	TME
2.42E-05	Metabolism
0.101724755	TME
0.029740448	Proliferation/Metastasis
0.592014498	TME
0.000202935	Proliferation/Metastasis
5.64E-13	Proliferation/Metastasis
1.19E-08	Metabolism
3.46E-25	Proliferation/Metastasis
0.319666146	TME
0.018683173	Metabolism
0.879983417	TME
0.00742261	TME
8.09E-06	TME
0.180605946	TME
0.017090638	TME
0.041755338	TME
0.248891057	Metabolism
0.060542014	TME
0.014432584	Metabolism
0.725491011	Metabolism
0.38253519	Proliferation/Metastasis
0.033692908	Proliferation/Metastasis
2.73E-15	Metabolism
2.82E-05	Metabolism

0.000562792	Metabolism
0.000137988	Metabolism
1.39E-05	Proliferation/Metastasis
0.002418598	Proliferation/Metastasis
0.3000123	Metabolism
1.57E-06	Metabolism
0.009142479	Metabolism
0.392308834	TME
0.048275014	Metabolism
0.348546492	Metabolism
0.368927383	Metabolism
0.000621462	Metabolism
0.440651103	Proliferation/Metastasis
0.264219483	Metabolism
0.020488939	Metabolism
4.18E-05	Metabolism
1.88E-22	Metabolism
2.59E-28	Metabolism
3.37E-06	Metabolism
0.872120938	Proliferation/Metastasis
2.99E-09	Metabolism
1.85E-11	Metabolism
2.79E-12	Proliferation/Metastasis
0.005032699	Metabolism
0.204677504	Metabolism
0.026061131	Metabolism
0.002526302	Metabolism
0.000931657	Metabolism
7.14E-08	Metabolism
0.000123123	Metabolism
0.720012479	Metabolism
0.812294655	TME
0.154045548	TME
0.921977556	TME
0.013093553	TME
0.001739028	TME
0.008934354	Metabolism
2.30E-06	Metabolism
0.000389703	Proliferation/Metastasis
1.82E-05	Metabolism
0.640448778	Proliferation/Metastasis
0.090052867	Metabolism
3.77E-07	TME

1.73E-05	Metabolism
0.000302653	Metabolism
0.006848824	Metabolism
0.013101152	Metabolism
0.673163984	TME
0.836033535	TME
7.29E-08	Proliferation/Metastasis
0.000821732	Metabolism
0.653929693	Proliferation/Metastasis
0.424476435	Proliferation/Metastasis
0.000527826	TME
0.000880436	TME
3.29E-07	TME
4.31E-06	TME
0.313006574	Metabolism
0.042791321	Proliferation/Metastasis
0.886117303	Metabolism
3.64E-05	Metabolism
0.003363015	Proliferation/Metastasis
3.52E-09	Proliferation/Metastasis
0.0588755	Metabolism
0.002305761	Metabolism
0.984826768	Metabolism
0.254589514	Metabolism
0.000569913	TME
6.24E-12	TME
1.38E-07	TME
0.001602492	TME
0.082420611	TME
6.27E-06	Metabolism
0.14603817	Metabolism
0.038233687	Metabolism
0.183617968	Metabolism
0.001309727	Metabolism
7.50E-15	TME
1.58E-05	TME
9.75E-08	TME
0.146838218	TME
6.83E-07	TME
3.25E-06	TME
2.66E-06	TME
0.000506231	TME
1.71E-06	TME

0.383200167	Proliferation/Metastasis
0.860562429	Proliferation/Metastasis
0.409343927	Metabolism
0.408997764	Metabolism
8.46E-05	TME
0.663992789	Metabolism
0.855265997	Metabolism
4.11E-08	TME
2.48E-07	Proliferation/Metastasis
0.405998203	Proliferation/Metastasis
0.045693669	TME
0.710923021	Metabolism
0.031555977	Metabolism
0.853028804	Proliferation/Metastasis
2.38E-10	Proliferation/Metastasis
0.115988209	TME
3.57E-08	TME
3.41E-05	TME
3.79E-08	TME
4.05E-09	Proliferation/Metastasis
6.63E-12	TME
1.25E-08	TME
0.062267136	Metabolism
6.80E-13	TME
7.44E-12	TME
0.000262234	TME
0.041373348	TME
0.709492663	Metabolism
0.840134455	Metabolism
0.556602942	Metabolism
4.97E-10	TME
0.021581243	Metabolism
4.17E-05	TME
0.0014392	TME
1.21E-06	TME
0.005401713	TME
0.000817942	TME
0.002930211	Metabolism
0.196593417	Proliferation/Metastasis
0.129111306	Metabolism
1.08E-11	Proliferation/Metastasis
0.823126245	Metabolism
0.233484732	Metabolism

0.000603283	Metabolism
0.499474193	Metabolism
0.872703224	Metabolism
0.000105754	Metabolism
0.003151324	Metabolism
0.000549605	Metabolism
4.76E-05	Metabolism
1.14E-06	Metabolism
3.89E-05	Metabolism
3.11E-06	Metabolism
0.001015067	Metabolism
0.0081413	Metabolism
1.11E-07	TME
7.16E-06	Proliferation/Metastasis
2.96E-06	Metabolism
7.14E-07	Proliferation/Metastasis
4.09E-06	TME
5.19E-12	Proliferation/Metastasis
9.64E-13	Proliferation/Metastasis
1.02E-08	TME
1.12E-06	TME
2.53E-05	Metabolism
5.23E-14	Metabolism
0.000374157	Proliferation/Metastasis
0.007212808	Proliferation/Metastasis
2.47E-14	Proliferation/Metastasis
0.835337779	Metabolism
1.81E-06	Metabolism
0.274658366	Metabolism
5.40E-07	Proliferation/Metastasis
5.58E-08	TME
2.11E-07	TME
4.02E-05	Metabolism
3.99E-13	Proliferation/Metastasis
2.18E-12	Metabolism
1.53E-07	TME
5.88E-05	TME
5.01E-06	TME
1.00E-11	TME
0.502168882	Metabolism
0.003835702	TME
3.06E-06	Proliferation/Metastasis
7.89E-10	TME

0.000460215	Proliferation/Metastasis
5.06E-05	Proliferation/Metastasis
2.05E-18	Metabolism
0.029365775	Proliferation/Metastasis
2.32E-09	TME
0.006114778	Metabolism
0.049264427	TME
1.33E-07	TME
0.007507765	TME
1.12E-06	TME
0.092335731	TME
1.29E-08	TME
0.000122506	Metabolism
5.27E-10	TME
3.38E-05	Metabolism
0.671762761	Metabolism
5.00E-10	Proliferation/Metastasis
0.003814922	Proliferation/Metastasis
0.987240748	Metabolism
0.793093302	Metabolism
3.79E-05	Metabolism
3.60E-05	Metabolism
3.58E-05	Proliferation/Metastasis
2.74E-06	Proliferation/Metastasis
0.012624314	Metabolism
0.993765939	Metabolism
0.740340947	Metabolism
3.30E-08	TME
0.54250579	Metabolism
0.100568055	Metabolism
0.143446698	Metabolism
3.09E-12	Metabolism
2.83E-11	Proliferation/Metastasis
0.577815858	Metabolism
0.440547955	Metabolism
0.261229657	Metabolism
0.035668267	Metabolism
0.001205959	Metabolism
0.409694448	Metabolism
0.386656987	Proliferation/Metastasis
0.773300036	Metabolism
0.106242813	Metabolism
3.86E-09	Proliferation/Metastasis

0.445933051	Metabolism
1.52E-08	Metabolism
0.000106456	Metabolism
0.001264981	Metabolism
0.724157975	Metabolism
0.681970594	Metabolism
0.114516038	Metabolism
0.016374899	Metabolism
9.60E-08	TME
1.04E-06	TME
9.06E-07	TME
1.37E-05	TME
0.000208751	TME
9.61E-07	Metabolism
0.394731498	Metabolism
8.06E-09	Proliferation/Metastasis
0.053026093	Metabolism
3.55E-11	Proliferation/Metastasis
0.064865528	Metabolism
0.357340933	TME
0.44735782	Metabolism
0.004596208	Metabolism
0.025876476	Metabolism
0.936848786	Metabolism
3.58E-07	TME
0.000416707	TME
8.09E-06	Proliferation/Metastasis
0.386957882	Metabolism
0.225562341	Proliferation/Metastasis
0.034088302	Proliferation/Metastasis
0.000539782	TME
1.36E-08	TME
7.88E-10	TME
2.03E-10	TME
0.002233517	Metabolism
2.75E-11	Proliferation/Metastasis
0.304790511	Metabolism
9.86E-16	Metabolism
0.000932956	Proliferation/Metastasis
1.85E-08	Proliferation/Metastasis
0.00145675	Metabolism
0.025647439	Metabolism
0.445205612	Metabolism

0.000388685	Metabolism
0.000122275	TME
3.39E-09	TME
6.50E-07	TME
9.88E-05	TME
2.14E-05	TME
0.618803457	Metabolism
0.299786327	Metabolism
0.006268856	Metabolism
0.001513615	Metabolism
0.111907004	Metabolism
6.96E-08	TME
0.05837124	TME
4.32E-13	TME
0.000718566	TME
3.22E-08	TME
3.02E-08	TME
6.78E-09	TME
1.27E-10	TME
2.57E-08	TME
0.435686461	Proliferation/Metastasis
5.56E-05	Proliferation/Metastasis
0.52069104	Metabolism
0.621452786	Metabolism
2.63E-06	TME
0.06913209	Metabolism
8.49E-06	Metabolism
1.45E-12	TME
0.004981615	Proliferation/Metastasis
0.00215729	Proliferation/Metastasis
2.06E-06	TME
0.07905802	Metabolism
5.89E-05	Metabolism
0.209377944	Proliferation/Metastasis
6.59E-07	Proliferation/Metastasis
0.009956583	TME
1.53E-14	TME
6.62E-06	TME
2.48E-08	TME
0.002416244	Proliferation/Metastasis
5.08E-07	TME
5.74E-15	TME
0.137136166	Metabolism

2.82E-10	TME
1.46E-10	TME
2.00E-09	TME
0.062484181	TME
0.006050542	Metabolism
0.000144811	Metabolism
0.001151689	Metabolism
1.24E-08	TME
0.124536531	Metabolism
2.58E-06	TME
3.40E-05	TME
1.05E-10	TME
4.48E-08	TME
0.001418938	TME
6.90E-05	Metabolism
0.779089392	Proliferation/Metastasis
1.81E-11	Metabolism
0.041350283	Proliferation/Metastasis
0.000735664	Metabolism
0.110977245	Metabolism
0.122948444	Metabolism
0.047176901	Metabolism
0.093123604	Metabolism
6.35E-10	Metabolism
0.808786515	Metabolism
9.77E-07	Metabolism
0.000125575	Metabolism
3.61E-05	Metabolism
0.006081582	Metabolism
0.000506789	Metabolism
0.014752069	Metabolism
0.428350261	Metabolism
4.59E-13	TME
0.866926392	Proliferation/Metastasis
0.286278325	Metabolism
7.78E-10	Proliferation/Metastasis
5.04E-09	TME
3.34E-16	Proliferation/Metastasis
6.33E-17	Proliferation/Metastasis
2.41E-10	TME
6.44E-21	TME
6.99E-08	Metabolism
0.001271514	Metabolism

3.65E-06	Proliferation/Metastasis
0.955349091	Proliferation/Metastasis
3.00E-10	Proliferation/Metastasis
0.018140224	Metabolism
0.006092873	Metabolism
9.09E-07	Metabolism
1.33E-05	Proliferation/Metastasis
1.55E-13	TME
4.41E-19	TME
0.936930609	Metabolism
0.000141429	Proliferation/Metastasis
0.027562791	Metabolism
0.000126383	TME
4.33E-06	TME
6.47E-08	TME
5.71E-09	TME
0.362336569	Metabolism
0.008649853	TME
0.215435723	Proliferation/Metastasis
7.22E-21	TME
0.109825961	Proliferation/Metastasis
7.65E-08	Proliferation/Metastasis
0.308757544	Metabolism
0.018667263	Proliferation/Metastasis
8.27E-12	TME
0.187016854	Metabolism
1.05E-06	TME
0.041008826	TME
0.825735184	TME
3.58E-11	TME
1.71E-05	TME
3.14E-07	TME
3.91E-07	Metabolism
4.31E-22	TME
2.41E-05	Metabolism
0.465288762	Metabolism
5.28E-14	Proliferation/Metastasis
0.055907277	Proliferation/Metastasis
0.603581643	Metabolism
0.446168658	Metabolism
0.001398401	Metabolism
8.27E-05	Metabolism
6.20E-09	Proliferation/Metastasis

0.540704204	Proliferation/Metastasis
3.77E-09	Metabolism
0.040266573	Metabolism
9.81E-07	Metabolism
8.75E-08	TME
0.000623528	Metabolism
0.0121581	Metabolism
0.006424808	Metabolism
0.236475509	Metabolism
0.000107051	Proliferation/Metastasis
0.296547693	Metabolism
0.528326015	Metabolism
1.57E-07	Metabolism
0.000459389	Metabolism
3.51E-06	Metabolism
0.70128425	Metabolism
0.727112757	Proliferation/Metastasis
0.028740134	Metabolism
6.01E-15	Metabolism
0.179311426	Proliferation/Metastasis
0.006755767	Metabolism
0.229842881	Metabolism
0.251140658	Metabolism
0.000122908	Metabolism
0.024211272	Metabolism
0.195061378	Metabolism
0.013701582	Metabolism
0.140730789	Metabolism
1.44E-10	TME
4.20E-14	TME
1.41E-16	TME
4.01E-11	TME
1.15E-08	TME
0.013172565	Metabolism
0.239880809	Metabolism
0.000422094	Proliferation/Metastasis
0.00055915	Metabolism
2.72E-16	Proliferation/Metastasis
0.001307518	Metabolism
0.000110888	TME
0.289505984	Metabolism
0.074142145	Metabolism
6.92E-10	Metabolism

5.93E-06	Metabolism
4.92E-08	TME
0.000800247	TME
0.008160021	Proliferation/Metastasis
0.000574814	Metabolism
0.694922543	Proliferation/Metastasis
0.102073222	Proliferation/Metastasis
0.227493379	TME
0.015718058	TME
0.008499778	TME
0.007865572	TME
0.98774537	Metabolism
4.73E-06	Proliferation/Metastasis
0.525178906	Metabolism
0.000395706	Metabolism
0.364225392	Proliferation/Metastasis
0.031232715	Proliferation/Metastasis
0.467991454	Metabolism
0.000143576	Metabolism
0.746541446	Metabolism
0.61710378	Metabolism
0.014389179	TME
0.015697385	TME
0.054003884	TME
0.056628887	TME
0.003379675	TME
0.047445262	Metabolism
0.034727833	Metabolism
0.528260817	Metabolism
0.499037761	Metabolism
0.440399022	Metabolism
0.107533814	TME
0.222992569	TME
0.013734363	TME
0.000703373	TME
0.070727934	TME
0.030870077	TME
0.021377412	TME
0.010240077	TME
0.003254686	TME
4.20E-05	Proliferation/Metastasis
0.076445153	Proliferation/Metastasis
0.000337079	Metabolism

0.018451393	Metabolism
0.075487035	TME
0.854293131	Metabolism
0.186463415	Metabolism
0.008864919	TME
0.000177282	Proliferation/Metastasis
0.000133927	Proliferation/Metastasis
0.042697836	TME
0.385162904	Metabolism
0.150707547	Metabolism
0.000169811	Proliferation/Metastasis
0.106499094	Proliferation/Metastasis
0.000977009	TME
0.017466516	TME
0.002013433	TME
0.043144553	TME
1.71E-07	Proliferation/Metastasis
0.044931167	TME
0.003124854	TME
0.771246029	Metabolism
0.001539709	TME
0.004479191	TME
0.016909235	TME
0.409303417	TME
0.625934372	Metabolism
0.933801016	Metabolism
0.014249679	Metabolism
0.026147815	TME
0.155774838	Metabolism
0.037444357	TME
0.039184431	TME
0.009088497	TME
0.009437468	TME
0.091930609	TME
0.052624296	Metabolism
0.000143916	Proliferation/Metastasis
0.000625582	Metabolism
0.232727642	Proliferation/Metastasis
0.014643179	Metabolism
0.054146014	Metabolism
0.05771562	Metabolism
0.100387465	Metabolism
0.079207094	Metabolism

0.164933478	Metabolism
0.793477032	Metabolism
0.09062359	Metabolism
0.383111479	Metabolism
0.564001926	Metabolism
0.182000361	Metabolism
0.965435285	Metabolism
0.726214713	Metabolism
0.073737812	Metabolism
0.007383785	TME
0.538786778	Proliferation/Metastasis
0.318882662	Metabolism
0.027686562	Proliferation/Metastasis
0.006264231	TME
0.005880578	Proliferation/Metastasis
0.002535237	Proliferation/Metastasis
0.034286801	TME
0.008356784	TME
0.434654368	Metabolism
0.060336631	Metabolism
0.002312888	Proliferation/Metastasis
0.01011387	Proliferation/Metastasis
0.102277335	Proliferation/Metastasis
0.191476712	Metabolism
0.252826841	Metabolism
0.553538838	Metabolism
0.131350089	Proliferation/Metastasis
0.001256703	TME
0.001827803	TME
0.194721355	Metabolism
0.060353267	Proliferation/Metastasis
0.024751127	Metabolism
0.014840285	TME
0.094161327	TME
0.043983348	TME
0.056676728	TME
0.93121992	Metabolism
0.319376398	TME
0.026823118	Proliferation/Metastasis
0.001530571	TME
0.565447889	Proliferation/Metastasis
4.77E-07	Proliferation/Metastasis
0.241653867	Metabolism

2.32E-06	Proliferation/Metastasis
0.009795846	TME
0.002537509	Metabolism
0.022891529	TME
0.017982085	TME
0.359907139	TME
0.01161717	TME
0.000753398	TME
0.029374814	TME
0.000722143	Metabolism
0.000976039	TME
0.823315131	Metabolism
0.010257759	Metabolism
0.00117147	Proliferation/Metastasis
0.029839877	Proliferation/Metastasis
0.005739679	Metabolism
0.042483709	Metabolism
0.328311383	Metabolism
0.046256142	Metabolism
0.004032516	Proliferation/Metastasis
0.000116017	Proliferation/Metastasis
0.15872158	Metabolism
0.513170898	Metabolism
0.009021372	Metabolism
0.124125271	TME
0.087014343	Metabolism
0.945553611	Metabolism
0.6075946	Metabolism
0.322050109	Metabolism
6.53E-06	Proliferation/Metastasis
0.197858401	Metabolism
0.001561538	Metabolism
0.831550762	Metabolism
0.000234703	Metabolism
7.46E-05	Metabolism
0.112020959	Metabolism
0.380419961	Proliferation/Metastasis
0.463106884	Metabolism
0.123452747	Metabolism
0.30192277	Proliferation/Metastasis
0.469253429	Metabolism
0.442662513	Metabolism
0.186764965	Metabolism

0.400419374	Metabolism
0.375804997	Metabolism
0.453121704	Metabolism
0.195218266	Metabolism
0.496753787	Metabolism
0.004465758	TME
0.009737936	TME
0.021376005	TME
0.024869552	TME
0.040077294	TME
4.74E-07	Metabolism
0.131655057	Metabolism
0.985522742	Proliferation/Metastasis
0.168847561	Metabolism
0.002328202	Proliferation/Metastasis
0.023128357	Metabolism
0.001860357	TME
0.492833253	Metabolism
0.031120731	Metabolism
0.000429779	Metabolism
0.599187341	Metabolism
0.119055623	TME
0.425114384	TME
0.015411546	Proliferation/Metastasis
0.713886299	Metabolism
0.293430971	Proliferation/Metastasis
0.497386468	Proliferation/Metastasis
0.246008427	TME
0.000905905	TME
0.008666763	TME
0.001411199	TME
3.27E-14	Metabolism
0.100044831	Proliferation/Metastasis
1.12E-13	Metabolism
0.890269201	Metabolism
1.25E-24	Proliferation/Metastasis
5.35E-17	Proliferation/Metastasis
1.23E-45	Metabolism
0.031026995	Metabolism
0.876023445	Metabolism
0.073818387	Metabolism
2.92E-05	TME
1.22E-18	TME

6.99E-05	TME
4.29E-05	TME
5.85E-30	TME
0.00349225	Metabolism
0.046358941	Metabolism
0.000145468	Metabolism
0.019604933	Metabolism
0.002300562	Metabolism
6.48E-14	TME
6.26E-08	TME
1.03E-13	TME
0.004123124	TME
0.011631665	TME
6.59E-05	TME
0.000413961	TME
7.23E-06	TME
0.071174687	TME
2.25E-21	Proliferation/Metastasis
1.61E-44	Proliferation/Metastasis
0.006469121	Metabolism
5.20E-07	Metabolism
1.97E-05	TME
0.176491283	Metabolism
2.31E-11	Metabolism
1.10E-11	TME
0.964980699	Proliferation/Metastasis
4.65E-08	Proliferation/Metastasis
5.55E-05	TME
8.80E-12	Metabolism
1.16E-06	Metabolism
3.52E-20	Proliferation/Metastasis
1.27E-08	Proliferation/Metastasis
0.035225004	TME
1.40E-07	TME
0.000686936	TME
0.142022915	TME
1.05E-18	Proliferation/Metastasis
8.90E-18	TME
9.45E-07	TME
8.18E-12	Metabolism
0.000210523	TME
1.71E-08	TME
0.000468784	TME

1.28E-09	TME
0.541643413	Metabolism
0.03736684	Metabolism
0.071472883	Metabolism
6.52E-13	TME
0.104484679	Metabolism
1.67E-05	TME
0.028392935	TME
5.70E-05	TME
4.57E-05	TME
0.657866059	TME
0.138221008	Metabolism
5.99E-31	Proliferation/Metastasis
0.006997957	Metabolism
1.70E-06	Proliferation/Metastasis
1.91E-08	Metabolism
7.06E-07	Metabolism
3.88E-16	Metabolism
0.006650286	Metabolism
0.544488434	Metabolism
3.70E-28	Metabolism
0.611729641	Metabolism
7.03E-06	Metabolism
2.44E-16	Metabolism
3.87E-10	Metabolism
1.73E-08	Metabolism
0.08106795	Metabolism
0.000329403	Metabolism
0.362013284	Metabolism
1.11E-05	TME
0.180280151	Proliferation/Metastasis
2.64E-08	Metabolism
8.10E-10	Proliferation/Metastasis
0.000340403	TME
1.23E-15	Proliferation/Metastasis
4.98E-08	Proliferation/Metastasis
2.59E-05	TME
5.15E-19	TME
5.82E-17	Metabolism
0.000163231	Metabolism
1.22E-07	Proliferation/Metastasis
4.69E-14	Proliferation/Metastasis
8.32E-16	Proliferation/Metastasis

1.16E-13	Metabolism
0.230511416	Metabolism
5.93E-20	Metabolism
0.001820562	Proliferation/Metastasis
1.07E-05	TME
1.66E-07	TME
0.364657421	Metabolism
1.85E-05	Proliferation/Metastasis
1.74E-06	Metabolism
0.004933144	TME
0.101846843	TME
5.45E-29	TME
3.26E-13	TME
1.57E-11	Metabolism
0.074473842	TME
2.46E-30	Proliferation/Metastasis
1.71E-22	TME
9.38E-06	Proliferation/Metastasis
1.78E-08	Proliferation/Metastasis
0.151724845	Metabolism
9.25E-06	Proliferation/Metastasis
2.24E-05	TME
1.68E-05	Metabolism
0.045629095	TME
4.37E-08	TME
4.78E-06	TME
2.65E-05	TME
0.001004843	TME
0.012073571	TME
0.259140584	Metabolism
1.10E-14	TME
0.796158655	Metabolism
0.110577749	Metabolism
0.138690116	Proliferation/Metastasis
1.07E-14	Proliferation/Metastasis
9.41E-13	Metabolism
0.067751915	Metabolism
5.90E-08	Metabolism
3.39E-10	Metabolism
2.34E-35	Proliferation/Metastasis
0.000184757	Proliferation/Metastasis
0.747241075	Metabolism
0.216800354	Metabolism

0.646325305	Metabolism
9.91E-25	TME
7.60E-12	Metabolism
0.137185402	Metabolism
2.27E-06	Metabolism
0.109318002	Metabolism
0.000122627	Proliferation/Metastasis
0.349161448	Metabolism
8.80E-08	Metabolism
7.88E-09	Metabolism
0.001958426	Metabolism
0.000283224	Metabolism
0.039054716	Metabolism
0.003414268	Proliferation/Metastasis
2.02E-08	Metabolism
0.789784569	Metabolism
0.011374175	Proliferation/Metastasis
2.64E-23	Metabolism
4.31E-12	Metabolism
2.92E-09	Metabolism
0.018572919	Metabolism
0.010011537	Metabolism
1.17E-05	Metabolism
0.21457606	Metabolism
0.094759138	Metabolism
1.32E-09	TME
5.69E-05	TME
4.25E-11	TME
2.60E-12	TME
1.61E-05	TME
1.26E-06	Metabolism
6.17E-07	Metabolism
0.403998903	Proliferation/Metastasis
0.000239824	Metabolism
1.03E-12	Proliferation/Metastasis
0.000811503	Metabolism
3.09E-07	TME
8.97E-12	Metabolism
0.113484344	Metabolism
5.32E-06	Metabolism
0.001291755	Metabolism
1.14E-47	TME
4.16E-18	TME

1.11E-09	Proliferation/Metastasis
0.123990796	Metabolism
0.465335072	Proliferation/Metastasis
5.21E-09	Proliferation/Metastasis
0.03388222	TME
0.118804026	TME
0.000561348	TME
0.074003374	TME
8.19E-07	Metabolism
1.33E-05	Proliferation/Metastasis
1.43E-16	Metabolism
0.001918706	Metabolism
0.138824449	Proliferation/Metastasis
8.17E-05	Proliferation/Metastasis
5.65E-30	Metabolism
0.000743654	Metabolism
0.346774441	Metabolism
0.607447784	Metabolism
0.135269936	TME
0.077926691	TME
0.000286832	TME
0.818264267	TME
0.018596433	TME
0.10599919	Metabolism
0.227056383	Metabolism
0.062355971	Metabolism
0.009249391	Metabolism
0.050924507	Metabolism
1.08E-12	TME
1.58E-07	TME
0.933342428	TME
0.158613739	TME
0.01527537	TME
0.021754283	TME
0.011346289	TME
0.665534721	TME
0.048788491	TME
1.48E-13	Proliferation/Metastasis
5.88E-38	Proliferation/Metastasis
0.599828648	Metabolism
0.003170514	Metabolism
0.521238524	TME
0.572625245	Metabolism

5.51E-26	Metabolism
1.58E-05	TME
5.76E-37	Proliferation/Metastasis
0.042045854	Proliferation/Metastasis
0.002472897	TME
9.90E-05	Metabolism
2.63E-21	Metabolism
2.95E-08	Proliferation/Metastasis
1.41E-09	Proliferation/Metastasis
5.90E-07	TME
0.003912145	TME
0.001324267	TME
1.17E-12	TME
1.07E-34	Proliferation/Metastasis
3.56E-11	TME
0.001771606	TME
0.75068067	Metabolism
2.10E-08	TME
0.003352433	TME
0.434053097	TME
0.000589982	TME
3.36E-05	Metabolism
0.224956658	Metabolism
0.000100421	Metabolism
5.51E-11	TME
3.48E-06	Metabolism
0.000211291	TME
0.007661263	TME
0.005601555	TME
2.91E-06	TME
0.375881117	TME
3.04E-16	Metabolism
8.03E-20	Proliferation/Metastasis
1.26E-06	Metabolism
0.000447798	Proliferation/Metastasis
2.05E-09	Metabolism
0.000108362	Metabolism
4.13E-23	Metabolism
3.27E-22	Metabolism
0.139038059	Metabolism
1.49E-09	Metabolism
0.664695469	Metabolism
0.683228204	Metabolism

0.000966316	Metabolism
0.533078491	Metabolism
8.30E-05	Metabolism
3.24E-05	Metabolism
0.197775917	Metabolism
2.53E-08	Metabolism
4.98E-06	TME
4.38E-14	Proliferation/Metastasis
0.068124841	Metabolism
0.233796368	Proliferation/Metastasis
0.048881506	TME
2.51E-05	Proliferation/Metastasis
4.01E-07	Proliferation/Metastasis
4.52E-07	TME
0.23409256	TME
8.79E-47	Metabolism
3.51E-53	Metabolism
7.11E-21	Proliferation/Metastasis
2.39E-05	Proliferation/Metastasis
2.08E-12	Proliferation/Metastasis
5.36E-17	Metabolism
1.74E-09	Metabolism
1.18E-07	Metabolism
0.202326157	Proliferation/Metastasis
4.32E-09	TME
0.000160036	TME
1.36E-15	Metabolism
1.45E-10	Proliferation/Metastasis
3.41E-48	Metabolism
5.59E-09	TME
1.14E-08	TME
0.578328681	TME
6.31E-11	TME
4.16E-09	Metabolism
6.47E-09	TME
6.03E-56	Proliferation/Metastasis
0.576395655	TME
5.05E-08	Proliferation/Metastasis
1.07E-08	Proliferation/Metastasis
2.99E-19	Metabolism
0.949637321	Proliferation/Metastasis
3.13E-08	TME
0.688729436	Metabolism

0.485530802	TME
1.95E-06	TME
6.83E-05	TME
0.003363154	TME
0.03073588	TME
1.64E-06	TME
0.161486473	Metabolism
1.87E-05	TME
0.64111631	Metabolism
2.92E-05	Metabolism
3.22E-16	Proliferation/Metastasis
0.111940499	Proliferation/Metastasis
4.26E-09	Metabolism
4.30E-12	Metabolism
6.92E-27	Metabolism
9.01E-35	Metabolism
9.81E-26	Proliferation/Metastasis
2.15E-15	Proliferation/Metastasis
0.231878017	Metabolism
0.253958075	Metabolism
8.96E-07	Metabolism
0.009255469	TME
5.36E-11	Metabolism
0.008637047	Metabolism
8.61E-12	Metabolism
1.52E-18	Metabolism
2.84E-06	Proliferation/Metastasis
2.48E-11	Metabolism
1.97E-06	Metabolism
1.26E-09	Metabolism
0.023143707	Metabolism
1.19E-08	Metabolism
0.615087509	Metabolism
0.463393432	Proliferation/Metastasis
6.31E-05	Metabolism
9.79E-13	Metabolism
1.05E-18	Proliferation/Metastasis
5.77E-14	Metabolism
5.12E-65	Metabolism
1.88E-09	Metabolism
0.000409304	Metabolism
0.283701155	Metabolism
1.74E-05	Metabolism

0.133001595	Metabolism
0.01525423	Metabolism
0.012193677	TME
0.002552184	TME
0.002013524	TME
0.386145011	TME
0.761003413	TME
6.31E-21	Metabolism
0.249148972	Metabolism
6.80E-45	Proliferation/Metastasis
3.75E-25	Metabolism
8.02E-05	Proliferation/Metastasis
0.084189062	Metabolism
0.689808688	TME
1.08E-21	Metabolism
3.47E-06	Metabolism
1.49E-12	Metabolism
0.330599254	Metabolism
0.507614673	TME
0.173962418	TME
0.102942573	Proliferation/Metastasis
0.339387116	Metabolism
4.10E-05	Proliferation/Metastasis
0.017844645	Proliferation/Metastasis
2.58E-14	TME
0.001853863	TME
0.055577759	TME
0.000149199	TME
0.005757584	Metabolism
1.35E-44	Proliferation/Metastasis
9.80E-12	Metabolism
1.38E-19	Metabolism
4.97E-05	Proliferation/Metastasis
8.99E-05	Proliferation/Metastasis
1.38E-11	Metabolism
3.59E-46	Metabolism
0.641702235	Metabolism
0.050730592	Metabolism
0.282863706	TME
6.12E-33	TME
0.279446051	TME
0.374550899	TME
1.17E-18	TME

0.587329821	Metabolism
5.93E-09	Metabolism
3.02E-09	Metabolism
3.93E-08	Metabolism
3.83E-49	Metabolism
0.013934259	TME
0.000223379	TME
0.191110125	TME
0.296040368	TME
0.001428056	TME
0.886507242	TME
0.351250841	TME
0.000168825	TME
0.292082043	TME
4.23E-60	Proliferation/Metastasis
0.568472921	Proliferation/Metastasis
1.49E-23	Metabolism
3.28E-63	Metabolism
0.061498147	TME
0.477324721	Metabolism
1.06E-19	Metabolism
0.981666502	TME
7.88E-33	Proliferation/Metastasis
3.93E-81	Proliferation/Metastasis
0.005493348	TME
2.94E-07	Metabolism
2.57E-11	Metabolism
2.39E-85	Proliferation/Metastasis
6.45E-15	Proliferation/Metastasis
0.23088906	TME
0.127061045	TME
0.860014678	TME
0.471030736	TME
1.02E-25	Proliferation/Metastasis
0.599692675	TME
0.10045127	TME
3.41E-10	Metabolism
0.461750346	TME
0.054219009	TME
0.00223125	TME
1.15E-07	TME
0.000143563	Metabolism
1.48E-10	Metabolism

0.500508609	Metabolism
7.45E-10	TME
0.0014401	Metabolism
0.944035796	TME
0.190582674	TME
0.013134421	TME
7.06E-07	TME
3.04E-09	TME
9.40E-06	Metabolism
1.42E-65	Proliferation/Metastasis
2.83E-38	Metabolism
5.68E-09	Proliferation/Metastasis
2.30E-16	Metabolism
4.21E-06	Metabolism
9.30E-06	Metabolism
1.15E-07	Metabolism
6.27E-21	Metabolism
0.001164376	Metabolism
2.33E-09	Metabolism
2.33E-24	Metabolism
4.18E-05	Metabolism
0.113811907	Metabolism
0.802564064	Metabolism
2.38E-62	Metabolism
7.66E-10	Metabolism
1.27E-09	Metabolism
0.985365891	TME
3.23E-07	Proliferation/Metastasis
0.003315848	Metabolism
1.22E-09	Proliferation/Metastasis
0.251629475	TME
0.0231333	Proliferation/Metastasis
0.000412148	Proliferation/Metastasis
0.004418905	TME
1.25E-10	TME
1.19E-14	Metabolism
8.88E-12	Metabolism
7.71E-49	Proliferation/Metastasis
3.39E-68	Proliferation/Metastasis
0.014418123	Proliferation/Metastasis
7.40E-10	Metabolism
0.000145419	Metabolism
2.87E-13	Metabolism

4.51E-08	Proliferation/Metastasis
0.000192854	TME
0.726211002	TME
1.90E-08	Metabolism
4.43E-26	Proliferation/Metastasis
5.70E-17	Metabolism
0.562978336	TME
0.000106422	TME
0.093804571	TME
0.000993014	TME
0.01187108	Metabolism
5.05E-06	TME
6.94E-07	Proliferation/Metastasis
0.373991905	TME
1.94E-20	Proliferation/Metastasis
2.93E-66	Proliferation/Metastasis
3.20E-11	Metabolism
1.74E-113	Proliferation/Metastasis
0.706384347	TME
0.481147086	Metabolism
7.76E-08	TME
0.009584849	TME
9.67E-05	TME
0.168649427	TME
8.63E-16	TME
0.945110327	TME
0.302020956	Metabolism
2.47E-13	TME
0.202285447	Metabolism
3.84E-18	Metabolism
4.19E-07	Proliferation/Metastasis
5.66E-06	Proliferation/Metastasis
1.21E-72	Metabolism
1.12E-08	Metabolism
0.841594605	Metabolism
9.12E-20	Metabolism
0.043673281	Proliferation/Metastasis
1.23E-15	Proliferation/Metastasis
2.20E-06	Metabolism
0.147856355	Metabolism
5.37E-51	Metabolism
9.70E-12	TME
0.467271509	Metabolism

0.056176978	Metabolism
0.055134726	Metabolism
6.71E-31	Metabolism
4.87E-08	Proliferation/Metastasis
0.003287882	Metabolism
1.41E-09	Metabolism
2.94E-09	Metabolism
1.47E-91	Metabolism
1.35E-83	Metabolism
1.04E-22	Metabolism
4.29E-05	Proliferation/Metastasis
1.64E-10	Metabolism
0.735329454	Metabolism
2.88E-08	Proliferation/Metastasis
4.74E-13	Metabolism
0.170558875	Metabolism
2.19E-29	Metabolism
0.05549281	Metabolism
1.05E-13	Metabolism
0.066682766	Metabolism
5.07E-09	Metabolism
0.446101593	Metabolism
0.452701827	TME
5.50E-06	TME
0.728748084	TME
0.013499731	TME
9.89E-05	TME
1.00E-12	Metabolism
7.74E-26	Metabolism
1.35E-15	Proliferation/Metastasis
0.032743616	Metabolism
7.44E-05	Proliferation/Metastasis
4.94E-12	Metabolism
5.03E-46	TME
6.46E-09	Metabolism
0.021994976	Metabolism
0.00200144	Metabolism
6.06E-12	Metabolism
3.50E-09	TME
5.45E-25	TME
0.400679018	Proliferation/Metastasis
1.48E-20	Metabolism
0.708465226	Proliferation/Metastasis

2.05E-12	Proliferation/Metastasis
0.006976233	TME
0.913403048	TME
0.015487093	TME
0.274622117	TME
0.003918138	Metabolism
0.000417541	Proliferation/Metastasis
0.502065991	Metabolism
0.064179525	Metabolism
8.95E-18	Proliferation/Metastasis
5.73E-15	Proliferation/Metastasis
0.046431579	Metabolism
0.591148794	Metabolism
0.298868023	Metabolism
1.11E-09	Metabolism
0.10586441	TME
5.36E-09	TME
1.63E-06	TME
0.538007879	TME
0.791133136	TME
1.03E-11	Metabolism
0.001302191	Metabolism
9.32E-10	Metabolism
0.001775277	Metabolism
1.09E-08	Metabolism
5.77E-19	TME
2.83E-15	TME
0.077089808	TME
0.868375809	TME
0.063307398	TME
0.009177193	TME
0.015356421	TME
0.43781348	TME
0.296467013	TME
0.301960255	Proliferation/Metastasis
5.82E-17	Proliferation/Metastasis
0.997683536	Metabolism
0.028605032	Metabolism
0.583308534	TME
0.464750608	Metabolism
1.52E-17	Metabolism
4.96E-05	TME
8.40E-40	Proliferation/Metastasis

1.85E-12	Proliferation/Metastasis
0.000402979	TME
0.000745211	Metabolism
1.63E-10	Metabolism
0.000672911	Proliferation/Metastasis
4.76E-15	Proliferation/Metastasis
0.000522894	TME
0.004588411	TME
0.006122067	TME
2.63E-07	TME
1.65E-10	Proliferation/Metastasis
8.47E-23	TME
0.000487565	TME
0.052028609	Metabolism
1.27E-10	TME
3.92E-06	TME
0.792835969	TME
0.283589563	TME
1.96E-05	Metabolism
1.12E-08	Metabolism
0.625797072	Metabolism
1.52E-22	TME
0.015313068	Metabolism
0.00262422	TME
0.961475407	TME
0.004706511	TME
7.24E-11	TME
0.794901097	TME
8.21E-20	Metabolism
0.911570607	Proliferation/Metastasis
2.05E-06	Metabolism
2.47E-28	Proliferation/Metastasis
0.01940466	Metabolism
0.364839923	Metabolism
4.98E-20	Metabolism
3.98E-09	Metabolism
0.00458968	Metabolism
0.065721366	Metabolism
0.066289792	Metabolism
0.009477173	Metabolism
0.393171154	Metabolism
6.26E-05	Metabolism
1.65E-06	Metabolism

0.024216865	Metabolism
0.179005306	Metabolism
0.000289603	Metabolism
3.83E-07	TME
2.58E-14	Proliferation/Metastasis
1.72E-05	Metabolism
0.002509105	Proliferation/Metastasis
0.066676487	TME
1.21E-09	Proliferation/Metastasis
9.97E-08	Proliferation/Metastasis
1.99E-09	TME
0.191913351	TME
1.19E-22	Metabolism
4.16E-44	Metabolism
0.000281176	Proliferation/Metastasis
0.000274433	Proliferation/Metastasis
7.03E-29	Proliferation/Metastasis
0.000593288	Metabolism
1.64E-06	Metabolism
3.68E-08	Metabolism
0.035703908	Proliferation/Metastasis
2.06E-06	TME
1.60E-05	TME
0.00621581	Metabolism
4.04E-16	Proliferation/Metastasis
3.10E-25	Metabolism
3.15E-06	TME
3.97E-06	TME
2.49E-05	TME
3.15E-20	TME
0.993541212	Metabolism
8.23E-17	TME
2.57E-10	Proliferation/Metastasis
0.000429438	TME
8.36E-06	Proliferation/Metastasis
0.035357253	Proliferation/Metastasis
4.69E-53	Metabolism
1.87E-05	Proliferation/Metastasis
9.68E-08	TME
5.35E-14	Metabolism
0.045703702	TME
4.32E-09	TME
5.70E-05	TME

0.00152421	TME
0.002458678	TME
7.54E-06	TME
0.000425482	Metabolism
3.15E-07	TME
0.699595006	Metabolism
1.16E-24	Metabolism
2.69E-09	Proliferation/Metastasis
4.92E-09	Proliferation/Metastasis
0.162121738	Metabolism
1.00E-07	Metabolism
1.98E-08	Metabolism
2.56E-16	Metabolism
0.438839339	Proliferation/Metastasis
1.39E-13	Proliferation/Metastasis
0.20233994	Metabolism
4.89E-08	Metabolism
1.42E-06	Metabolism
2.22E-11	TME
8.07E-05	Metabolism
7.56E-06	Metabolism
2.52E-10	Metabolism
5.43E-24	Metabolism
9.54E-10	Proliferation/Metastasis
0.749276567	Metabolism
5.39E-08	Metabolism
4.15E-17	Metabolism
2.08E-06	Metabolism
3.50E-25	Metabolism
0.15108027	Metabolism
0.748300069	Proliferation/Metastasis
1.04E-05	Metabolism
0.093119027	Metabolism
8.59E-62	Proliferation/Metastasis
0.000242258	Metabolism
7.10E-50	Metabolism
3.52E-44	Metabolism
4.09E-09	Metabolism
0.014503815	Metabolism
0.000195774	Metabolism
6.74E-05	Metabolism
0.814966784	Metabolism
0.000179007	TME

0.009377645	TME
1.14E-05	TME
0.004048355	TME
0.16106115	TME
8.67E-07	Metabolism
0.886879594	Metabolism
4.40E-46	Proliferation/Metastasis
2.89E-05	Metabolism
1.99E-05	Proliferation/Metastasis
0.001453833	Metabolism
0.005394461	TME
0.157100841	Metabolism
0.817044627	Metabolism
3.46E-07	Metabolism
6.27E-08	Metabolism
3.38E-08	TME
0.00073215	TME
0.860114526	Proliferation/Metastasis
0.011330535	Metabolism
1.29E-08	Proliferation/Metastasis
0.002647139	Proliferation/Metastasis
4.13E-33	TME
2.18E-43	TME
9.04E-41	TME
1.89E-37	TME
2.20E-11	Metabolism
1.33E-41	Proliferation/Metastasis
0.37168247	Metabolism
3.85E-36	Metabolism
4.49E-08	Proliferation/Metastasis
3.00E-21	Proliferation/Metastasis
1.45E-20	Metabolism
2.80E-22	Metabolism
5.07E-06	Metabolism
2.08E-08	Metabolism
6.14E-27	TME
4.81E-12	TME
2.82E-25	TME
5.08E-24	TME
4.07E-87	TME
0.003430963	Metabolism
3.68E-16	Metabolism
4.99E-40	Metabolism

6.80E-21	Metabolism
7.39E-35	Metabolism
1.11E-42	TME
2.59E-20	TME
4.46E-74	TME
4.18E-20	TME
2.48E-43	TME
3.83E-27	TME
1.05E-30	TME
3.62E-33	TME
6.72E-23	TME
0.119803598	Proliferation/Metastasis
3.92E-86	Proliferation/Metastasis
0.036083987	Metabolism
1.47E-08	Metabolism
1.91E-31	TME
0.414388087	Metabolism
2.79E-51	Metabolism
2.61E-58	TME
8.31E-11	Proliferation/Metastasis
1.96E-12	Proliferation/Metastasis
6.19E-30	TME
0.200334403	Metabolism
7.75E-07	Metabolism
0.001278096	Proliferation/Metastasis
3.19E-07	Proliferation/Metastasis
7.02E-16	TME
3.96E-62	TME
7.02E-21	TME
1.39E-24	TME
0.046996149	Proliferation/Metastasis
3.35E-22	TME
2.38E-57	TME
2.57E-07	Metabolism
4.55E-33	TME
1.69E-57	TME
2.54E-35	TME
0.002716834	TME
0.006457987	Metabolism
9.23E-07	Metabolism
0.001442248	Metabolism
1.43E-14	TME
0.104335219	Metabolism

5.59E-28	TME
1.31E-26	TME
9.47E-45	TME
4.94E-48	TME
1.93E-21	TME
1.29E-13	Metabolism
0.614067959	Proliferation/Metastasis
9.20E-92	Metabolism
0.000448183	Proliferation/Metastasis
1.48E-26	Metabolism
5.64E-18	Metabolism
1.07E-08	Metabolism
8.62E-17	Metabolism
1.11E-18	Metabolism
1.16E-59	Metabolism
0.000158313	Metabolism
2.76E-53	Metabolism
2.11E-22	Metabolism
1.88E-27	Metabolism
6.66E-31	Metabolism
3.72E-75	Metabolism
2.97E-59	Metabolism
0.263763475	Metabolism
1.41E-53	TME
0.021618658	Proliferation/Metastasis
0.447207232	Metabolism
6.16E-107	Proliferation/Metastasis
9.31E-22	TME
3.93E-68	Proliferation/Metastasis
4.00E-70	Proliferation/Metastasis
2.73E-43	TME
1.18E-101	TME
1.66E-29	Metabolism
0.284037388	Metabolism
6.72E-18	Proliferation/Metastasis
0.032401547	Proliferation/Metastasis
2.55E-35	Proliferation/Metastasis
0.775867592	Metabolism
3.44E-10	Metabolism
3.47E-10	Metabolism
5.10E-09	Proliferation/Metastasis
3.47E-55	TME
3.67E-61	TME

2.75E-07	Metabolism
1.47E-08	Proliferation/Metastasis
0.006284062	Metabolism
1.42E-21	TME
1.28E-28	TME
4.19E-45	TME
2.34E-36	TME
0.022476839	Metabolism
7.26E-06	TME
0.000135845	Proliferation/Metastasis
2.61E-95	TME
3.82E-10	Proliferation/Metastasis
1.61E-14	Proliferation/Metastasis
5.22E-06	Metabolism
1.89E-11	Proliferation/Metastasis
1.48E-39	TME
2.36E-06	Metabolism
5.60E-26	TME
2.33E-18	TME
3.59E-13	TME
1.84E-38	TME
4.28E-41	TME
5.56E-22	TME
1.83E-29	Metabolism
2.90E-115	TME
0.000339576	Metabolism
2.86E-25	Metabolism
9.02E-48	Proliferation/Metastasis
1.41E-32	Proliferation/Metastasis
6.76E-10	Metabolism
0.00261321	Metabolism
2.53E-16	Metabolism
2.10E-15	Metabolism
4.52E-60	Proliferation/Metastasis
0.00010114	Proliferation/Metastasis
0.404827178	Metabolism
0.00254831	Metabolism
8.29E-50	Metabolism
6.35E-22	TME
5.05E-15	Metabolism
0.329991349	Metabolism
0.491663123	Metabolism
5.59E-14	Metabolism

3.01E-05	Proliferation/Metastasis
0.685798479	Metabolism
0.46111074	Metabolism
3.85E-40	Metabolism
6.02E-11	Metabolism
1.08E-11	Metabolism
0.139174149	Metabolism
7.08E-08	Proliferation/Metastasis
0.584420616	Metabolism
0.578617331	Metabolism
0.143080468	Proliferation/Metastasis
4.13E-14	Metabolism
1.28E-07	Metabolism
2.63E-34	Metabolism
1.24E-19	Metabolism
0.064290366	Metabolism
0.148351999	Metabolism
0.096544907	Metabolism
0.048754755	Metabolism
1.67E-31	TME
9.62E-52	TME
2.67E-40	TME
1.13E-25	TME
3.53E-12	TME
0.177018393	Metabolism
0.622659907	Metabolism
3.40E-06	Proliferation/Metastasis
0.005486554	Metabolism
2.98E-84	Proliferation/Metastasis
3.46E-20	Metabolism
6.24E-66	TME
0.051870446	Metabolism
8.71E-15	Metabolism
2.14E-07	Metabolism
4.34E-28	Metabolism
1.16E-22	TME
0.621317728	TME
5.41E-43	Proliferation/Metastasis
7.07E-08	Metabolism
0.002495752	Proliferation/Metastasis
4.88E-29	Proliferation/Metastasis
0.001602841	TME
2.57E-06	TME

4.46E-07	TME
1.80E-06	TME
0.001525338	Metabolism
2.68E-14	Proliferation/Metastasis
0.598015118	Metabolism
1.88E-13	Metabolism
0.162190536	Proliferation/Metastasis
0.002136845	Proliferation/Metastasis
0.166542788	Metabolism
1.08E-06	Metabolism
0.727144261	Metabolism
0.071339012	Metabolism
0.003701769	TME
0.206315325	TME
7.71E-05	TME
0.000832633	TME
0.163705786	TME
0.01226858	Metabolism
0.008888557	Metabolism
0.285760484	Metabolism
0.466525741	Metabolism
0.007562841	Metabolism
9.23E-05	TME
0.346754806	TME
6.25E-05	TME
0.002741592	TME
2.24E-08	TME
5.36E-05	TME
8.67E-06	TME
0.000120779	TME
3.41E-05	TME
4.46E-07	Proliferation/Metastasis
0.001316854	Proliferation/Metastasis
2.79E-09	Metabolism
5.61E-08	Metabolism
0.002067492	TME
0.671744681	Metabolism
0.062442129	Metabolism
1.54E-05	TME
0.000325732	Proliferation/Metastasis
1.10E-08	Proliferation/Metastasis
0.006046439	TME
0.002119929	Metabolism

0.586453028	Metabolism
2.79E-09	Proliferation/Metastasis
0.092964603	Proliferation/Metastasis
0.000329287	TME
1.92E-07	TME
0.000803181	TME
2.66E-07	TME
3.41E-16	Proliferation/Metastasis
0.001380881	TME
7.64E-09	TME
0.109417139	Metabolism
4.94E-07	TME
2.33E-07	TME
1.67E-05	TME
0.153672683	TME
0.018419587	Metabolism
0.33239918	Metabolism
0.239465819	Metabolism
0.013710921	TME
0.911461923	Metabolism
0.000377781	TME
0.000261538	TME
2.91E-06	TME
0.000171208	TME
9.86E-06	TME
2.41E-06	Metabolism
9.66E-11	Proliferation/Metastasis
1.85E-07	Metabolism
0.270806585	Proliferation/Metastasis
0.02272381	Metabolism
0.100496276	Metabolism
0.015019174	Metabolism
0.447651958	Metabolism
1.21E-07	Metabolism
0.056044843	Metabolism
0.050159539	Metabolism
0.000502567	Metabolism
0.1611498	Metabolism
3.61E-05	Metabolism
0.000732752	Metabolism
8.59E-05	Metabolism
0.019768354	Metabolism
0.019212342	Metabolism

4.44E-07	TME
0.023143451	Proliferation/Metastasis
0.000558735	Metabolism
4.57E-06	Proliferation/Metastasis
0.000326364	TME
5.30E-08	Proliferation/Metastasis
1.87E-08	Proliferation/Metastasis
0.000112765	TME
0.000129391	TME
0.874698097	Metabolism
0.001682094	Metabolism
8.48E-19	Proliferation/Metastasis
1.55E-11	Proliferation/Metastasis
0.000541943	Proliferation/Metastasis
5.06E-06	Metabolism
4.90E-08	Metabolism
8.37E-05	Metabolism
0.000316717	Proliferation/Metastasis
3.08E-08	TME
2.55E-07	TME
0.850860702	Metabolism
0.023381656	Proliferation/Metastasis
0.005122194	Metabolism
8.73E-05	TME
8.86E-05	TME
0.003697854	TME
0.001266322	TME
0.1308898	Metabolism
1.16E-06	TME
4.29E-08	Proliferation/Metastasis
1.23E-05	TME
0.528970623	Proliferation/Metastasis
1.26E-17	Proliferation/Metastasis
0.003883952	Metabolism
1.15E-10	Proliferation/Metastasis
1.88E-06	TME
1.12E-09	Metabolism
0.006171259	TME
0.148318898	TME
0.887829208	TME
1.39E-05	TME
5.39E-08	TME
7.54E-05	TME

1.76E-06	Metabolism
1.25E-06	TME
0.625528171	Metabolism
7.04E-05	Metabolism
2.26E-08	Proliferation/Metastasis
0.036050224	Proliferation/Metastasis
3.21E-09	Metabolism
0.799734843	Metabolism
0.602786719	Metabolism
0.173440744	Metabolism
0.10803938	Proliferation/Metastasis
3.59E-10	Proliferation/Metastasis
0.002432182	Metabolism
0.003167752	Metabolism
5.09E-09	Metabolism
0.148039503	TME
0.242386066	Metabolism
0.051619396	Metabolism
0.498517653	Metabolism
0.185469455	Metabolism
9.92E-19	Proliferation/Metastasis
3.95E-05	Metabolism
0.282637054	Metabolism
0.451225564	Metabolism
6.97E-10	Metabolism
7.56E-06	Metabolism
0.000112724	Metabolism
0.509255962	Proliferation/Metastasis
0.244655977	Metabolism
0.037611724	Metabolism
0.732751037	Proliferation/Metastasis
0.045223649	Metabolism
0.047014174	Metabolism
0.074008165	Metabolism
0.019151413	Metabolism
0.000192341	Metabolism
0.97590502	Metabolism
0.891501935	Metabolism
0.118101453	Metabolism
0.000303206	TME
9.28E-07	TME
0.000234844	TME
0.005338621	TME

0.005562281	TME
0.000214815	Metabolism
1.49E-07	Metabolism
0.281389776	Proliferation/Metastasis
0.540995247	Metabolism
0.000377747	Proliferation/Metastasis
1.17E-06	Metabolism
0.073529185	TME
0.090778706	Metabolism
0.702818686	Metabolism
0.000725421	Metabolism
0.837310079	Metabolism
0.467137271	TME
0.021623582	TME
3.68E-06	Proliferation/Metastasis
0.01870452	Metabolism
0.264367196	Proliferation/Metastasis
0.985855063	Proliferation/Metastasis
0.784762505	TME
0.951239098	TME
0.561756601	TME
0.992278791	TME
0.037481705	Metabolism
0.02950481	Proliferation/Metastasis
0.167553326	Metabolism
0.00444806	Metabolism
0.000806508	Proliferation/Metastasis
1.17E-14	Proliferation/Metastasis
0.00564727	Metabolism
0.876619868	Metabolism
0.981617928	Metabolism
0.000871557	Metabolism
0.218045493	TME
0.004474775	TME
0.176237936	TME
0.253188145	TME
3.57E-05	TME
0.703627478	Metabolism
0.2353991	Metabolism
8.76E-06	Metabolism
7.63E-06	Metabolism
0.017356933	Metabolism
1.22E-06	TME

0.055036498	TME
0.02811095	TME
0.688186592	TME
0.207801388	TME
0.536344631	TME
0.497344754	TME
0.351197443	TME
0.917107075	TME
0.011670356	Proliferation/Metastasis
0.182841434	Proliferation/Metastasis
0.457397454	Metabolism
0.000368868	Metabolism
0.995969689	TME
0.685655397	Metabolism
0.973297781	Metabolism
0.000994265	TME
0.935760271	Proliferation/Metastasis
0.000288642	Proliferation/Metastasis
0.59548694	TME
0.041208444	Metabolism
0.036189001	Metabolism
1.51E-05	Proliferation/Metastasis
4.99E-10	Proliferation/Metastasis
0.735423838	TME
0.000427683	TME
0.798934306	TME
0.215810816	TME
0.101987193	Proliferation/Metastasis
0.009797441	TME
0.068446024	TME
0.001250018	Metabolism
0.203032449	TME
0.120932905	TME
0.743876411	TME
0.000437969	TME
0.945441607	Metabolism
2.84E-05	Metabolism
0.006519419	Metabolism
1.91E-06	TME
0.015047535	Metabolism
0.920526496	TME
0.421747214	TME
0.109167208	TME

0.648868265	TME
0.651771438	TME
0.000987808	Metabolism
0.00098112	Proliferation/Metastasis
3.93E-06	Metabolism
0.001878323	Proliferation/Metastasis
0.131249255	Metabolism
0.218383307	Metabolism
0.019556898	Metabolism
0.203310457	Metabolism
0.167327803	Metabolism
7.61E-09	Metabolism
0.04637454	Metabolism
0.059604627	Metabolism
0.049419109	Metabolism
0.162267596	Metabolism
0.000128199	Metabolism
0.229996054	Metabolism
0.006465464	Metabolism
0.000636585	Metabolism
0.037846289	TME
0.227394174	Proliferation/Metastasis
0.046562355	Metabolism
5.06E-10	Proliferation/Metastasis
0.449066533	TME
2.45E-07	Proliferation/Metastasis
5.18E-05	Proliferation/Metastasis
0.002075975	TME
5.30E-06	TME
0.002952826	Metabolism
0.268306461	Metabolism
0.934896971	Proliferation/Metastasis
0.596777973	Proliferation/Metastasis
3.75E-09	Proliferation/Metastasis
0.510214712	Metabolism
0.029707311	Metabolism
1.27E-10	Metabolism
0.005138246	Proliferation/Metastasis
0.018078364	TME
5.81E-05	TME
0.675184838	Metabolism
0.001212381	Proliferation/Metastasis
0.32386506	Metabolism

0.520579419	TME
0.234360532	TME
1.34E-08	TME
2.32E-05	TME
0.026500279	Metabolism
0.08804242	TME
0.18001448	Proliferation/Metastasis
6.54E-07	TME
0.120285907	Proliferation/Metastasis
0.154524169	Proliferation/Metastasis
0.010657882	Metabolism
0.170589025	Proliferation/Metastasis
0.144692898	TME
0.563504745	Metabolism
0.821826245	TME
0.885962097	TME
0.562197287	TME
0.106645602	TME
0.125602899	TME
0.338682368	TME
2.06E-09	Metabolism
1.03E-16	TME
0.008029926	Metabolism
0.427167492	Metabolism
3.94E-05	Proliferation/Metastasis
1.44E-05	Proliferation/Metastasis
0.013177104	Metabolism
0.702493804	Metabolism
0.514354219	Metabolism
0.229094121	Metabolism
1.95E-06	Proliferation/Metastasis
0.719035134	Proliferation/Metastasis
0.891730953	Metabolism
0.009136216	Metabolism
0.171676683	Metabolism
4.27E-08	TME
0.000122367	Metabolism
0.762037562	Metabolism
0.286488091	Metabolism
0.174126212	Metabolism
0.089922525	Proliferation/Metastasis
0.33368522	Metabolism
0.606234323	Metabolism

1.24E-07	Metabolism
0.160787071	Metabolism
0.477621937	Metabolism
0.002936124	Metabolism
7.18E-06	Proliferation/Metastasis
0.633371263	Metabolism
0.877501898	Metabolism
0.839588732	Proliferation/Metastasis
1.87E-07	Metabolism
0.43681973	Metabolism
0.843439033	Metabolism
0.006093845	Metabolism
0.253673335	Metabolism
0.243180458	Metabolism
0.309281719	Metabolism
0.109195079	Metabolism
0.268769666	TME
0.024464772	TME
1.39E-05	TME
0.039034437	TME
0.131605161	TME
0.000344491	Metabolism
0.248691857	Metabolism
0.014795839	Proliferation/Metastasis
0.089836807	Metabolism
6.19E-07	Proliferation/Metastasis
0.006038581	Metabolism
6.26E-08	TME
0.117757981	Metabolism
0.052762567	Metabolism
0.021607234	Metabolism
2.06E-06	Metabolism
0.001488001	TME
0.078439473	TME
0.057900014	Proliferation/Metastasis
0.312972146	Metabolism
0.003204016	Proliferation/Metastasis
0.084816629	Proliferation/Metastasis
0.290201663	TME
0.001191123	TME
0.040723174	TME
0.000843426	TME
0.104649572	Metabolism

4.31E-06	Proliferation/Metastasis
0.223289194	Metabolism
0.14935947	Metabolism
0.117008812	Proliferation/Metastasis
0.000320396	Proliferation/Metastasis
0.010097324	Metabolism
0.034916385	Metabolism
0.03306915	Metabolism
0.295265322	Metabolism
0.89886194	TME
0.473766574	TME
0.098830776	TME
0.006659006	TME
0.76393432	TME
0.09697276	Metabolism
0.247365007	Metabolism
0.160568355	Metabolism
4.14E-05	Metabolism
0.031228859	Metabolism
2.46E-05	TME
0.045155162	TME
0.00153196	TME
0.121187169	TME
0.021017396	TME
0.003370112	TME
0.004715018	TME
0.000159268	TME
0.006830019	TME
0.000438433	Proliferation/Metastasis
7.01E-07	Proliferation/Metastasis
0.479706284	Metabolism
0.639405272	Metabolism
3.12E-06	TME
0.012899007	Metabolism
6.44E-05	Metabolism
0.215294804	TME
9.99E-10	Proliferation/Metastasis
0.002474505	Proliferation/Metastasis
1.20E-05	TME
0.086407994	Metabolism
0.000150949	Metabolism
0.045266254	Proliferation/Metastasis
1.99E-06	Proliferation/Metastasis

0.85131624	TME
0.37367695	TME
0.109232032	TME
0.117353797	TME
1.53E-08	Proliferation/Metastasis
0.047140458	TME
0.030960086	TME
0.554056616	Metabolism
0.121123408	TME
0.064719783	TME
4.73E-05	TME
0.214606781	TME
0.206763301	Metabolism
0.002852467	Metabolism
0.522986673	Metabolism
0.014889156	TME
0.000237502	Metabolism
0.115474675	TME
0.701522866	TME
0.046467549	TME
0.000247969	TME
0.024682695	TME
0.614907529	Metabolism
1.14E-07	Proliferation/Metastasis
0.308389481	Metabolism
0.00076541	Proliferation/Metastasis
0.000488268	Metabolism
0.550810846	Metabolism
0.014228217	Metabolism
6.91E-07	Metabolism
0.868048027	Metabolism
0.832128128	Metabolism
0.02311184	Metabolism
0.00821858	Metabolism
0.155204559	Metabolism
0.05783475	Metabolism
0.024563769	Metabolism
0.021141647	Metabolism
0.000635857	Metabolism
5.60E-05	Metabolism
0.228740209	TME
7.27E-07	Proliferation/Metastasis
0.149438408	Metabolism

0.043270385	Proliferation/Metastasis
0.002266031	TME
0.318161618	Proliferation/Metastasis
0.230912906	Proliferation/Metastasis
0.155909786	TME
0.670141087	TME
1.01E-05	Metabolism
3.67E-08	Metabolism
0.079573536	Proliferation/Metastasis
0.265594664	Proliferation/Metastasis
0.004311817	Proliferation/Metastasis
0.342482709	Metabolism
1.72E-05	Metabolism
0.415214855	Metabolism
0.001711551	Proliferation/Metastasis
0.35735369	TME
0.351683953	TME
0.385531008	Metabolism
2.46E-07	Proliferation/Metastasis
1.72E-09	Metabolism
0.353514834	TME
8.24E-05	TME
0.116794166	TME
0.019773668	TME
0.011986392	Metabolism
0.011995904	TME
1.28E-15	Proliferation/Metastasis
0.502484522	TME
0.008677225	Proliferation/Metastasis
0.050486689	Proliferation/Metastasis
9.31E-10	Metabolism
0.311207603	Proliferation/Metastasis
0.15328802	TME
0.53468089	Metabolism
0.017309224	TME
0.802433457	TME
0.2928827	TME
0.004865075	TME
0.000158779	TME
0.463411556	TME
0.038399032	Metabolism
0.050610496	TME
0.864175084	Metabolism

0.015072471	Metabolism
0.005695717	Proliferation/Metastasis
0.017673348	Proliferation/Metastasis
0.620365137	Metabolism
0.01665019	Metabolism
0.175354372	Metabolism
1.88E-12	Metabolism
0.56549969	Proliferation/Metastasis
0.000424304	Proliferation/Metastasis
0.088499232	Metabolism
0.245496783	Metabolism
0.036983211	Metabolism
0.015665755	TME
0.717182357	Metabolism
0.218690362	Metabolism
0.994606998	Metabolism
1.09E-05	Metabolism
0.023513455	Proliferation/Metastasis
3.95E-05	Metabolism
0.207191288	Metabolism
0.7461516	Metabolism
0.098495292	Metabolism
0.004670283	Metabolism
0.003936751	Metabolism
0.002038803	Proliferation/Metastasis
0.518252691	Metabolism
0.000196786	Metabolism
5.22E-07	Proliferation/Metastasis
0.515503667	Metabolism
1.21E-15	Metabolism
0.000193792	Metabolism
0.745480268	Metabolism
0.941080694	Metabolism
0.565222307	Metabolism
0.30461081	Metabolism
0.032975592	Metabolism
0.044039002	TME
0.009579047	TME
0.727037941	TME
0.018525759	TME
0.002551034	TME
0.009022788	Metabolism
0.799215896	Metabolism

2.74E-12	Proliferation/Metastasis
9.71E-05	Metabolism
0.011803981	Proliferation/Metastasis
7.71E-10	Metabolism
0.386490905	TME
0.029522256	Metabolism
0.000136332	Metabolism
0.000468965	Metabolism
0.013431641	Metabolism
0.430289513	TME
0.125992693	TME
0.001538515	Proliferation/Metastasis
1.03E-06	Metabolism
0.487150386	Proliferation/Metastasis
0.000572831	Proliferation/Metastasis
0.484750615	TME
0.13534018	TME
0.386608722	TME
0.911124747	TME
0.026993012	Metabolism
4.52E-08	Proliferation/Metastasis
0.938376175	Metabolism
0.054269123	Metabolism
0.362553776	Proliferation/Metastasis
0.321259196	Proliferation/Metastasis
0.41021333	Metabolism
0.003391592	Metabolism
0.168634501	Metabolism
0.898925386	Metabolism
0.572176993	TME
0.077714561	TME
0.001112068	TME
0.96153286	TME
1.32E-07	TME
0.574046766	Metabolism
0.730347221	Metabolism
0.281144586	Metabolism
0.138884513	Metabolism
0.015666886	Metabolism
0.856071829	TME
2.69E-08	TME
0.742585995	TME
0.945813358	TME

0.170041759	TME
0.928782669	TME
0.729099041	TME
0.27781994	TME
0.710940464	TME
0.00017785	Proliferation/Metastasis
2.49E-05	Proliferation/Metastasis
0.0001187	Metabolism
0.029464443	Metabolism
0.707712194	TME
0.527191651	Metabolism
0.032856245	Metabolism
0.025649277	TME
3.92E-08	Proliferation/Metastasis
0.015285338	Proliferation/Metastasis
0.730491524	TME
0.86379064	Metabolism
8.92E-12	Metabolism
0.002499154	Proliferation/Metastasis
0.345120779	Proliferation/Metastasis
0.680544258	TME
0.252079832	TME
0.905676534	TME
0.700602479	TME
3.62E-13	Proliferation/Metastasis
0.042444265	TME
0.39349278	TME
0.461456347	Metabolism
0.826138305	TME
0.606228149	TME
0.522905298	TME
0.397286012	TME
0.250699609	Metabolism
0.043907106	Metabolism
1.03E-06	Metabolism
0.662719389	TME
8.73E-05	Metabolism
0.926540956	TME
0.113714741	TME
0.056189201	TME
0.554211532	TME
0.269945327	TME
0.000899167	Metabolism

0.002971763	Proliferation/Metastasis
1.52E-05	Metabolism
3.98E-05	Proliferation/Metastasis
0.023893761	Metabolism
0.235613171	Metabolism
0.958358663	Metabolism
0.738193438	Metabolism
0.001344854	Metabolism
0.128403792	Metabolism
0.733061733	Metabolism
0.026323619	Metabolism
0.006442992	Metabolism
0.000517042	Metabolism
0.000108668	Metabolism
0.013299331	Metabolism
0.287448491	Metabolism
0.094768162	Metabolism
0.48570911	TME
0.083642929	Proliferation/Metastasis
0.52807032	Metabolism
0.001227338	Proliferation/Metastasis
0.99429322	TME
0.017535286	Proliferation/Metastasis
0.089126251	Proliferation/Metastasis
0.44384489	TME
0.044400678	TME
0.00016184	Metabolism
0.374259079	Metabolism
0.105874332	Proliferation/Metastasis
6.74E-20	Proliferation/Metastasis
0.473559982	Proliferation/Metastasis
0.375815363	Metabolism
0.414684635	Metabolism
0.988364209	Metabolism
0.03160657	Proliferation/Metastasis
0.006556725	TME
0.000546324	TME
0.962459203	Metabolism
0.31962322	Proliferation/Metastasis
0.529799517	Metabolism
0.761739081	TME
0.407807378	TME
0.428998607	TME

0.158093823	TME
0.53717487	Metabolism
0.001153803	TME
0.078374087	Proliferation/Metastasis
0.114739277	TME
0.274232798	Proliferation/Metastasis
8.00E-16	Proliferation/Metastasis
1.04E-06	Metabolism
9.48E-25	Proliferation/Metastasis
0.45259111	TME
0.020374144	Metabolism
0.422508985	TME
0.257985245	TME
0.059926679	TME
0.311097189	TME
0.001856107	TME
0.603156138	TME
1.16E-05	Metabolism
0.017650109	TME
0.018342481	Metabolism
0.82119108	Metabolism
0.000231799	Proliferation/Metastasis
0.013029787	Proliferation/Metastasis
0.010642102	Metabolism
1.57E-08	Metabolism
0.002762218	Metabolism
1.38E-06	Metabolism
2.27E-05	Proliferation/Metastasis
0.12932987	Proliferation/Metastasis
0.466394151	Metabolism
0.567432033	Metabolism
0.000103167	Metabolism
0.106890664	TME
0.000133146	Metabolism
0.000822501	Metabolism
0.007714091	Metabolism
0.458531514	Metabolism
1.83E-05	Proliferation/Metastasis
5.23E-05	Metabolism
0.414840008	Metabolism
0.048230249	Metabolism
1.97E-13	Metabolism
1.64E-17	Metabolism

0.00267845	Metabolism
0.554948493	Proliferation/Metastasis
0.551271727	Metabolism
0.947202654	Metabolism
0.335758065	Proliferation/Metastasis
0.250964705	Metabolism
0.182151749	Metabolism
3.53E-07	Metabolism
0.226975304	Metabolism
8.40E-07	Metabolism
0.011185197	Metabolism
0.091476673	Metabolism
0.65415926	Metabolism
0.360040403	TME
0.125501158	TME
0.047335684	TME
0.355244103	TME
0.71744201	TME
3.93E-05	Metabolism
1.34E-07	Metabolism
0.564184334	Proliferation/Metastasis
0.106018339	Metabolism
0.004888166	Proliferation/Metastasis
0.660733814	Metabolism
1.63E-05	TME
0.265668767	Metabolism
0.286045632	Metabolism
0.213835067	Metabolism
0.139079027	Metabolism
0.709180909	TME
0.314845404	TME
0.033310519	Proliferation/Metastasis
0.133960192	Metabolism
0.018702853	Proliferation/Metastasis
0.219246232	Proliferation/Metastasis
0.790379767	TME
0.460297346	TME
0.649457422	TME
0.726439578	TME
0.053451279	Metabolism
0.000843731	Proliferation/Metastasis
0.374954187	Metabolism
0.610298939	Metabolism

0.008565775	Proliferation/Metastasis
0.107248712	Proliferation/Metastasis
0.011166887	Metabolism
0.098235761	Metabolism
0.469613325	Metabolism
0.058353745	Metabolism
0.952888644	TME
0.00420901	TME
0.786537217	TME
0.373767511	TME
7.04E-06	TME
0.156685094	Metabolism
0.302437241	Metabolism
0.147902386	Metabolism
0.003831567	Metabolism
8.40E-05	Metabolism
9.19E-05	TME
0.240031625	TME
0.286902741	TME
0.468282541	TME
0.628599395	TME
0.933330866	TME
0.898666312	TME
0.694234983	TME
0.876800055	TME
0.005098751	Proliferation/Metastasis
0.674159694	Proliferation/Metastasis
0.001522914	Metabolism
0.142484636	Metabolism
0.128750233	TME
0.00194211	Metabolism
0.000996272	Metabolism
0.079261096	TME
7.64E-08	Proliferation/Metastasis
0.448339681	Proliferation/Metastasis
0.00244636	TME
0.002688819	Metabolism
0.071168704	Metabolism
0.519977294	Proliferation/Metastasis
0.071968158	Proliferation/Metastasis
0.105231847	TME
0.032149011	TME
0.479117574	TME

0.32934967	TME
0.016676778	Proliferation/Metastasis
0.037111029	TME
0.181392961	TME
0.007046861	Metabolism
0.008208975	TME
0.008917737	TME
0.414112897	TME
0.000402795	TME
0.015360594	Metabolism
0.356137354	Metabolism
0.015204205	Metabolism
0.012185203	TME
0.765969168	Metabolism
0.235668379	TME
0.854852674	TME
0.337431529	TME
0.085729276	TME
0.799507456	TME
0.00740869	Metabolism
0.001844533	Proliferation/Metastasis
0.665396475	Metabolism
6.12E-05	Proliferation/Metastasis
0.301807011	Metabolism
0.237733975	Metabolism
0.002661644	Metabolism
0.002810163	Metabolism
0.491744694	Metabolism
0.472910283	Metabolism
0.094929773	Metabolism
0.311823388	Metabolism
0.974378295	Metabolism
0.279678707	Metabolism
0.410432364	Metabolism
0.010600585	Metabolism
0.14469987	Metabolism
1.20E-07	Metabolism
0.605457992	TME
0.001389844	Proliferation/Metastasis
0.040423554	Metabolism
0.015245604	Proliferation/Metastasis
0.72436395	TME
0.000375717	Proliferation/Metastasis

1.82E-05	Proliferation/Metastasis
0.103707288	TME
0.319070531	TME
5.08E-08	Metabolism
1.46E-13	Metabolism
0.077961592	Proliferation/Metastasis
0.829962095	Proliferation/Metastasis
3.66E-06	Proliferation/Metastasis
0.002164569	Metabolism
0.019551151	Metabolism
0.411467471	Metabolism
0.60624973	Proliferation/Metastasis
0.013479754	TME
0.129800161	TME
0.000107444	Metabolism
1.76E-10	Proliferation/Metastasis
2.13E-11	Metabolism
0.081801581	TME
0.865639438	TME
0.917422785	TME
0.034393728	TME
0.094866219	Metabolism
0.000787582	TME
2.18E-07	Proliferation/Metastasis
0.010288955	TME
0.026747452	Proliferation/Metastasis
0.05841311	Proliferation/Metastasis
8.01E-08	Metabolism
0.000503704	Proliferation/Metastasis
0.249076466	TME
0.860759955	Metabolism
0.174411233	TME
0.008815275	TME
0.461988705	TME
0.6795868	TME
0.157206157	TME
0.028599469	TME
0.000636216	Metabolism
0.000371262	TME
0.431472608	Metabolism
0.053417563	Metabolism
9.59E-05	Proliferation/Metastasis
0.336185216	Proliferation/Metastasis

0.108921557	Metabolism
0.033779	Metabolism
1.63E-12	Metabolism
1.62E-08	Metabolism
2.38E-05	Proliferation/Metastasis
1.49E-13	Proliferation/Metastasis
0.927141531	Metabolism
0.806527831	Metabolism
0.01029665	Metabolism
0.422212103	TME
0.883391759	Metabolism
0.003369443	Metabolism
0.483349003	Metabolism
0.001113821	Metabolism
7.38E-07	Proliferation/Metastasis
0.51552731	Metabolism
0.019621341	Metabolism
0.551901136	Metabolism
5.79E-07	Metabolism
5.22E-08	Metabolism
7.54E-06	Metabolism
0.668262605	Proliferation/Metastasis
0.000637687	Metabolism
0.016563236	Metabolism
1.16E-20	Proliferation/Metastasis
0.175457531	Metabolism
7.98E-05	Metabolism
0.003721002	Metabolism
0.020463206	Metabolism
0.000616362	Metabolism
0.001731802	Metabolism
0.007931279	Metabolism
8.55E-05	Metabolism
0.496256436	TME
0.552271463	TME
0.063849701	TME
0.551087697	TME
0.77698599	TME
0.000165058	Metabolism
0.181063264	Metabolism
6.95E-05	Proliferation/Metastasis
2.06E-05	Metabolism
3.18E-07	Proliferation/Metastasis

0.010138343	Metabolism
0.035902976	TME
0.855276599	Metabolism
0.000205039	Metabolism
0.006683897	Metabolism
0.012471345	Metabolism
0.833872511	TME
0.835234868	TME
0.008929113	Proliferation/Metastasis
8.13E-07	Metabolism
0.002507196	Proliferation/Metastasis
0.180074221	Proliferation/Metastasis
0.079125697	TME
0.000293015	TME
0.00087991	TME
0.001577906	TME
0.330867078	Metabolism
1.69E-07	Proliferation/Metastasis
0.089212009	Metabolism
1.32E-09	Metabolism
3.16E-07	Proliferation/Metastasis
3.02E-11	Proliferation/Metastasis
4.29E-08	Metabolism
0.313945462	Metabolism
0.067413894	Metabolism
0.5550157	Metabolism
0.002218902	TME
0.00050906	TME
0.696602097	TME
0.542852316	TME
1.74E-23	TME
0.281544612	Metabolism
0.398395215	Metabolism
0.001047102	Metabolism
0.116325858	Metabolism
0.74224187	Metabolism
1.34E-05	TME
1.55E-09	TME
1.68E-06	TME
0.002050871	TME
0.000268767	TME
0.00385074	TME
0.001572814	TME

2.15E-05	TME
0.011035974	TME
0.931929202	Proliferation/Metastasis
0.051459049	Proliferation/Metastasis
0.741273773	Metabolism
0.849967974	Metabolism
0.008796	TME
0.675530149	Metabolism
0.113550582	Metabolism
6.03E-11	TME
0.020336461	Proliferation/Metastasis
0.575707464	Proliferation/Metastasis
0.012435742	TME
0.80628516	Metabolism
4.20E-10	Metabolism
0.034158347	Proliferation/Metastasis
3.76E-05	Proliferation/Metastasis
0.122446235	TME
3.24E-11	TME
0.007851607	TME
0.003793463	TME
0.405171858	Proliferation/Metastasis
0.117206389	TME
6.16E-07	TME
0.056139666	Metabolism
4.87E-07	TME
9.58E-06	TME
0.000583775	TME
0.244913208	TME
0.009780919	Metabolism
9.31E-05	Metabolism
0.117369208	Metabolism
0.000198429	TME
4.22E-05	Metabolism
0.000182531	TME
0.233234286	TME
1.31E-07	TME
0.006472685	TME
0.095052302	TME
1.53E-11	Metabolism
0.034974322	Proliferation/Metastasis
4.47E-21	Metabolism
0.067312878	Proliferation/Metastasis

0.225972506	Metabolism
0.945272058	Metabolism
0.040433164	Metabolism
0.019414771	Metabolism
1.43E-06	Metabolism
2.84E-09	Metabolism
0.234980913	Metabolism
0.34703319	Metabolism
0.583703395	Metabolism
0.385553475	Metabolism
0.025297499	Metabolism
0.619518786	Metabolism
0.030915658	Metabolism
0.014352647	Metabolism
0.000718419	TME
0.440962811	Proliferation/Metastasis
0.65476277	Metabolism
4.56E-24	Proliferation/Metastasis
0.000320825	TME
3.03E-22	Proliferation/Metastasis
1.33E-15	Proliferation/Metastasis
9.27E-09	TME
1.54E-15	TME
0.048023194	Metabolism
0.008839446	Metabolism
0.619187585	Proliferation/Metastasis
0.000524176	Proliferation/Metastasis
3.88E-12	Proliferation/Metastasis
0.622998173	Metabolism
0.017500629	Metabolism
3.96E-11	Metabolism
0.000129114	Proliferation/Metastasis
5.71E-11	TME
6.99E-16	TME
0.045173034	Metabolism
1.30E-10	Proliferation/Metastasis
0.040677061	Metabolism
0.186366622	TME
0.001541819	TME
1.05E-05	TME
0.000901169	TME
0.407677826	Metabolism
1.81E-08	TME

0.10874642	Proliferation/Metastasis
3.57E-17	TME
0.401407585	Proliferation/Metastasis
4.38E-12	Proliferation/Metastasis
0.132891579	Metabolism
3.18E-06	Proliferation/Metastasis
1.04E-05	TME
0.000146934	Metabolism
0.003801499	TME
0.196924949	TME
0.504578959	TME
2.42E-05	TME
0.023692585	TME
7.18E-05	TME
1.49E-14	Metabolism
3.70E-22	TME
0.945486286	Metabolism
0.708426989	Metabolism
1.11E-18	Proliferation/Metastasis
0.010784899	Proliferation/Metastasis
0.00712419	Metabolism
0.026261142	Metabolism
0.000441573	Metabolism
0.000649664	Metabolism
1.00E-28	Proliferation/Metastasis
0.000357106	Proliferation/Metastasis
0.259941595	Metabolism
0.582528971	Metabolism
4.39E-09	Metabolism
0.00431766	TME
1.88E-08	Metabolism
0.01424367	Metabolism
0.283618679	Metabolism
0.368479745	Metabolism
1.24E-12	Proliferation/Metastasis
0.004191636	Metabolism
0.270632531	Metabolism
1.05E-06	Metabolism
0.160978146	Metabolism
0.000130629	Metabolism
0.203944934	Metabolism
0.241199989	Proliferation/Metastasis
0.011409675	Metabolism

0.497657885	Metabolism
0.055275055	Proliferation/Metastasis
3.06E-16	Metabolism
0.236111617	Metabolism
0.079041564	Metabolism
4.70E-06	Metabolism
5.40E-05	Metabolism
8.65E-06	Metabolism
0.086750681	Metabolism
0.736737225	Metabolism
0.001951368	TME
3.19E-09	TME
1.93E-14	TME
8.70E-07	TME
0.00010379	TME
3.96E-06	Metabolism
0.245919313	Metabolism
0.665217968	Proliferation/Metastasis
0.368334452	Metabolism
5.51E-26	Proliferation/Metastasis
0.473445001	Metabolism
8.90E-12	TME
0.01050178	Metabolism
0.209174246	Metabolism
5.30E-07	Metabolism
5.14E-06	Metabolism
0.011058139	TME
0.414941019	TME
2.70E-09	Proliferation/Metastasis
0.499092573	Metabolism
0.005343171	Proliferation/Metastasis
0.551519761	Proliferation/Metastasis
0.966815269	TME
0.093752662	TME
0.066095328	TME
0.170344583	TME
0.525465025	Metabolism
0.000127518	Proliferation/Metastasis
0.871292518	Metabolism
0.060988695	Metabolism
0.610804944	Proliferation/Metastasis
0.09180755	Proliferation/Metastasis
0.636790976	Metabolism

0.550080941	Metabolism
0.150253432	Metabolism
0.970090514	Metabolism
0.159594173	TME
0.456178201	TME
0.098739316	TME
0.282959672	TME
2.83E-07	TME
0.372747926	Metabolism
0.765850606	Metabolism
0.385500261	Metabolism
0.217525912	Metabolism
0.508283706	Metabolism
0.216451897	TME
2.06E-07	TME
0.371599631	TME
0.050094371	TME
0.031905282	TME
0.120492107	TME
0.091633757	TME
0.068230011	TME
0.187647549	TME
0.000159748	Proliferation/Metastasis
0.003438169	Proliferation/Metastasis
0.061099264	Metabolism
0.553869948	Metabolism
0.495068379	TME
0.793772838	Metabolism
0.094698094	Metabolism
0.041830449	TME
0.017117807	Proliferation/Metastasis
0.036235069	Proliferation/Metastasis
0.558094099	TME
0.26769849	Metabolism
0.101309668	Metabolism
0.009632369	Proliferation/Metastasis
0.404052352	Proliferation/Metastasis
0.068932959	TME
0.026689477	TME
0.059385573	TME
0.137838874	TME
0.000165984	Proliferation/Metastasis
0.404227709	TME

0.120083435	TME
0.682873686	Metabolism
0.174759013	TME
0.181936363	TME
0.083686582	TME
0.557081897	TME
0.416635995	Metabolism
0.053609162	Metabolism
0.081658205	Metabolism
0.692472945	TME
0.296646623	Metabolism
0.068988316	TME
0.339340432	TME
0.007219897	TME
0.141313816	TME
0.015510744	TME
0.006149322	Metabolism
0.000167798	Proliferation/Metastasis
0.002739904	Metabolism
0.318567097	Proliferation/Metastasis
0.23474088	Metabolism
0.008840531	Metabolism
0.86438359	Metabolism
0.151849501	Metabolism
0.00130584	Metabolism
0.577612043	Metabolism
0.777574179	Metabolism
0.242219428	Metabolism
0.363687539	Metabolism
0.004518744	Metabolism
0.412504009	Metabolism
0.841344898	Metabolism
0.233978361	Metabolism
0.94579487	Metabolism
0.331145711	TME
0.485430742	Proliferation/Metastasis
0.96727731	Metabolism
5.39E-06	Proliferation/Metastasis
0.075145289	TME
0.002178057	Proliferation/Metastasis
3.99E-05	Proliferation/Metastasis
0.164473255	TME
0.003808041	TME

0.394602209	Metabolism
0.002497607	Metabolism
0.34176282	Proliferation/Metastasis
9.83E-10	Proliferation/Metastasis
0.190942877	Proliferation/Metastasis
0.177018251	Metabolism
0.076373419	Metabolism
0.618118922	Metabolism
0.95432032	Proliferation/Metastasis
0.005633341	TME
0.007651394	TME
0.752520291	Metabolism
0.00072215	Proliferation/Metastasis
0.000776967	Metabolism
0.126711626	TME
0.170355337	TME
0.623427887	TME
0.680344042	TME
0.224322088	Metabolism
0.000256055	TME
0.001735556	Proliferation/Metastasis
0.018720061	TME
0.008215569	Proliferation/Metastasis
7.89E-08	Proliferation/Metastasis
0.478463274	Metabolism
1.51E-05	Proliferation/Metastasis
0.114440852	TME
0.709220256	Metabolism
0.953916914	TME
0.771159349	TME
0.887117965	TME
0.064509456	TME
0.038147429	TME
0.02461926	TME
0.005930324	Metabolism
0.000320727	TME
0.525235306	Metabolism
0.806050077	Metabolism
1.69E-07	Proliferation/Metastasis
0.149016307	Proliferation/Metastasis
0.148500435	Metabolism
0.009847051	Metabolism
0.004931466	Metabolism

0.981104353	Metabolism
1.44E-07	Proliferation/Metastasis
0.003568725	Proliferation/Metastasis
0.412552254	Metabolism
0.977367643	Metabolism
0.001695894	Metabolism
0.633806386	TME
0.044086644	Metabolism
0.178588608	Metabolism
0.322872109	Metabolism
0.777862994	Metabolism
1.66E-08	Proliferation/Metastasis
0.23655001	Metabolism
0.004579299	Metabolism
0.810748355	Metabolism
0.067270956	Metabolism
0.000433876	Metabolism
0.471826185	Metabolism
0.386745117	Proliferation/Metastasis
0.99987539	Metabolism
0.056753088	Metabolism
0.042538613	Proliferation/Metastasis
0.000109461	Metabolism
0.042160475	Metabolism
0.181119131	Metabolism
0.259472459	Metabolism
0.019906243	Metabolism
0.207822614	Metabolism
0.027257269	Metabolism
0.880348831	Metabolism
0.559112924	TME
0.029606741	TME
0.000154797	TME
0.057298559	TME
0.055215136	TME
2.49E-07	Metabolism
0.013152773	Metabolism
0.036097736	Proliferation/Metastasis
0.000790024	Metabolism
2.17E-06	Proliferation/Metastasis
0.162116026	Metabolism
0.000216831	TME
0.757349584	Metabolism

0.301138772	Metabolism
0.462445197	Metabolism
0.560079584	Metabolism
0.783600805	TME
0.528372656	TME
2.46E-05	Proliferation/Metastasis
0.375584529	Metabolism
0.660865145	Proliferation/Metastasis
0.031198363	Proliferation/Metastasis
0.007239972	TME
0.906984118	TME
0.306137579	TME
0.316800662	TME
0.434198117	Metabolism
0.41853774	Proliferation/Metastasis
0.009542061	Metabolism
0.527905185	Metabolism
0.472031352	Proliferation/Metastasis
0.609094155	Proliferation/Metastasis
0.001798618	Metabolism
0.18187921	Metabolism
0.045495695	Metabolism
0.45194318	Metabolism
0.420514946	TME
0.29056779	TME
0.750741399	TME
0.674847765	TME
0.090852887	TME
0.196062348	Metabolism
0.63135694	Metabolism
0.27895089	Metabolism
0.03338344	Metabolism
0.965260252	Metabolism
0.003134739	TME
0.442647556	TME
0.259715387	TME
0.695861382	TME
0.359362924	TME
0.142550135	TME
0.14911326	TME
0.141014184	TME
0.53843219	TME
0.852951157	Proliferation/Metastasis

0.2522389	Proliferation/Metastasis
0.745604859	Metabolism
0.416535327	Metabolism
0.033063459	TME
0.110761934	Metabolism
0.527764405	Metabolism
0.610884816	TME
0.749632157	Proliferation/Metastasis
0.711338023	Proliferation/Metastasis
0.535499297	TME
0.064907757	Metabolism
0.095764351	Metabolism
0.896756535	Proliferation/Metastasis
0.719938385	Proliferation/Metastasis
0.628927451	TME
0.818683711	TME
0.254394842	TME
0.386270358	TME
0.906577996	Proliferation/Metastasis
0.016978247	TME
0.426747742	TME
0.083420281	Metabolism
0.456838673	TME
0.66111427	TME
0.502909409	TME
0.285238203	TME
0.122801512	Metabolism
0.183418527	Metabolism
0.282099121	Metabolism
0.071973772	TME
0.365766161	Metabolism
0.881582902	TME
0.703337453	TME
0.260039397	TME
0.032142229	TME
0.655244273	TME
0.718821077	Metabolism
0.92255666	Proliferation/Metastasis
0.559395583	Metabolism
0.13096557	Proliferation/Metastasis
0.246587416	Metabolism
0.055262414	Metabolism
0.002612979	Metabolism

0.375805463	Metabolism
0.417631312	Metabolism
0.818916475	Metabolism
0.152276771	Metabolism
0.003717134	Metabolism
0.747411391	Metabolism
0.115838586	Metabolism
0.006802777	Metabolism
0.004005903	Metabolism
0.906269076	Metabolism
0.883030269	Metabolism
0.633907215	TME
0.331534765	Proliferation/Metastasis
0.912256683	Metabolism
0.428425469	Proliferation/Metastasis
0.142376883	TME
0.073451123	Proliferation/Metastasis
0.414802263	Proliferation/Metastasis
0.998119325	TME
0.087502709	TME
0.282053654	Metabolism
0.260195113	Metabolism
0.766944639	Proliferation/Metastasis
0.015287314	Proliferation/Metastasis
0.12705215	Proliferation/Metastasis
0.099226987	Metabolism
0.325801604	Metabolism
0.891559715	Metabolism
0.43550093	Proliferation/Metastasis
0.725485752	TME
0.099629631	TME
0.988279001	Metabolism
0.300867874	Proliferation/Metastasis
0.881613481	Metabolism
0.955428853	TME
0.504002154	TME
0.078161432	TME
0.055309276	TME
0.028540751	Metabolism
0.602048721	TME
0.208125579	Proliferation/Metastasis
0.172624603	TME
0.741769014	Proliferation/Metastasis

0.318611235	Proliferation/Metastasis
0.007857869	Metabolism
0.884853198	Proliferation/Metastasis
0.269480464	TME
0.48569645	Metabolism
0.3491249	TME
0.534478716	TME
0.772276319	TME
0.344444735	TME
0.938946379	TME
0.417611796	TME
0.171317552	Metabolism
0.047704769	TME
0.003355107	Metabolism
0.001416769	Metabolism
0.56061774	Proliferation/Metastasis
0.475553365	Proliferation/Metastasis
0.351182883	Metabolism
0.453382954	Metabolism
0.481826145	Metabolism
0.657801647	Metabolism
0.093827804	Proliferation/Metastasis
0.693818697	Proliferation/Metastasis
0.01606763	Metabolism
0.297231588	Metabolism
0.15517041	Metabolism
0.034935451	TME
0.643643175	Metabolism
0.815771227	Metabolism
0.17548074	Metabolism
0.067981009	Metabolism
0.164962252	Proliferation/Metastasis
0.529018627	Metabolism
0.130125238	Metabolism
0.333269197	Metabolism
0.647088662	Metabolism
0.923178948	Metabolism
0.37441386	Metabolism
0.86478935	Proliferation/Metastasis
0.021682414	Metabolism
0.988908786	Metabolism
0.263432783	Proliferation/Metastasis
0.250516034	Metabolism

0.756486764	Metabolism
0.500298782	Metabolism
0.087541004	Metabolism
0.682509543	Metabolism
0.389823276	Metabolism
0.1195333	Metabolism
0.000153988	Metabolism
0.20968892	TME
0.180645219	TME
0.320440427	TME
0.257616821	TME
0.149646086	TME
0.415017613	Metabolism
0.8660579	Metabolism
0.913597832	Proliferation/Metastasis
0.011073298	Metabolism
0.700317166	Proliferation/Metastasis
0.539174657	Metabolism
0.772931522	TME
0.061053195	Metabolism
0.14914278	Metabolism
0.905755877	Metabolism
0.212956962	Metabolism
0.191967903	TME
0.54293082	TME
0.001062721	Proliferation/Metastasis
0.123268225	Metabolism
0.282808687	Proliferation/Metastasis
0.288137055	Proliferation/Metastasis
0.140869758	TME
0.280477316	TME
0.524077305	TME
0.476855779	TME
0.535850576	Metabolism
0.003225812	Proliferation/Metastasis
0.220809148	Metabolism
0.760175884	Metabolism
0.119207055	Proliferation/Metastasis
0.045360555	Proliferation/Metastasis
0.756759924	Metabolism
0.501857158	Metabolism
0.380588268	Metabolism
0.220524866	Metabolism

0.802664826	TME
0.487393234	TME
0.502440181	TME
0.32465807	TME
0.007302072	TME
0.717000317	Metabolism
0.234657336	Metabolism
0.975509766	Metabolism
0.07072975	Metabolism
0.490364056	Metabolism
0.044972464	TME
0.173497314	TME
0.647371656	TME
0.88610488	TME
0.323526167	TME
0.514757422	TME
0.504606613	TME
0.193148149	TME
0.444733438	TME
0.763681075	Proliferation/Metastasis
0.30798938	Proliferation/Metastasis
0.011548461	Metabolism
0.823177589	Metabolism
0.103895168	TME
0.941653532	Metabolism
0.382654977	Metabolism
0.739260589	TME
9.76E-05	Proliferation/Metastasis
0.009634613	Proliferation/Metastasis
0.567351521	TME
0.15583456	Metabolism
0.715179852	Metabolism
0.460697816	Proliferation/Metastasis
0.005588296	Proliferation/Metastasis
0.826468165	TME
0.80983952	TME
0.976255295	TME
0.76103301	TME
0.57425167	Proliferation/Metastasis
0.104947644	TME
0.767351253	TME
0.158266517	Metabolism
0.97271574	TME

0.722731553	TME
0.255522013	TME
0.113711406	TME
0.03447752	Metabolism
0.484402636	Metabolism
0.086720498	Metabolism
0.117438694	TME
0.288065248	Metabolism
0.853192463	TME
0.813183792	TME
0.697649991	TME
0.528593932	TME
0.140675213	TME
0.897546563	Metabolism
0.786889112	Proliferation/Metastasis
0.044897685	Metabolism
0.881853734	Proliferation/Metastasis
0.820878493	Metabolism
0.608451045	Metabolism
0.4379189	Metabolism
0.236703495	Metabolism
0.17756623	Metabolism
0.712323029	Metabolism
0.56416645	Metabolism
0.97107511	Metabolism
0.508606199	Metabolism
0.083659995	Metabolism
0.967602063	Metabolism
0.133500396	Metabolism
0.203752453	Metabolism
0.0574761	Metabolism
0.956814134	TME
0.025055535	Proliferation/Metastasis
0.285504928	Metabolism
0.52654047	Proliferation/Metastasis
0.550583945	TME
0.931478791	Proliferation/Metastasis
0.457647966	Proliferation/Metastasis
0.243566525	TME
0.758978253	TME
0.119050105	Metabolism
0.021656272	Metabolism
0.919115098	Proliferation/Metastasis

0.216347719	Proliferation/Metastasis
0.09049545	Proliferation/Metastasis
0.032495646	Metabolism
0.293029005	Metabolism
0.522443553	Metabolism
0.43327556	Proliferation/Metastasis
0.993384526	TME
0.646610469	TME
0.240928256	Metabolism
0.045201853	Proliferation/Metastasis
0.07464789	Metabolism
0.894073181	TME
0.626435822	TME
0.337707658	TME
0.124872161	TME
0.47495892	Metabolism
0.107201677	TME
0.006539078	Proliferation/Metastasis
0.909315627	TME
0.109109943	Proliferation/Metastasis
0.255812557	Proliferation/Metastasis
0.1924849	Metabolism
0.002788119	Proliferation/Metastasis
0.758783233	TME
0.15046193	Metabolism
0.546013036	TME
0.944022517	TME
0.804427715	TME
0.359890996	TME
0.068965916	TME
0.749343072	TME
0.475601349	Metabolism
0.321157034	TME
0.13234786	Metabolism
0.410458804	Metabolism
0.356742314	Proliferation/Metastasis
0.005400259	Proliferation/Metastasis
0.935336276	Metabolism
0.19561874	Metabolism
0.098105305	Metabolism
2.70E-05	Metabolism
0.506813841	Proliferation/Metastasis
0.345473702	Proliferation/Metastasis

0.118290031	Metabolism
0.173940777	Metabolism
0.03166618	Metabolism
0.16658165	TME
0.965602678	Metabolism
0.256510484	Metabolism
0.576301492	Metabolism
0.724925434	Metabolism
0.005338865	Proliferation/Metastasis
0.271264641	Metabolism
0.995018695	Metabolism
0.075062881	Metabolism
0.287639773	Metabolism
0.027345769	Metabolism
0.111855821	Metabolism
0.001686717	Proliferation/Metastasis
0.376068799	Metabolism
0.31205956	Metabolism
0.012934799	Proliferation/Metastasis
0.927768744	Metabolism
0.012915713	Metabolism
0.293671623	Metabolism
0.147306292	Metabolism
0.728023184	Metabolism
0.133342294	Metabolism
0.361736041	Metabolism
0.302387524	Metabolism
0.511778285	TME
0.15798305	TME
0.875233818	TME
0.511275054	TME
0.289170872	TME
0.096467144	Metabolism
0.283582532	Metabolism
0.002384011	Proliferation/Metastasis
0.049431705	Metabolism
0.06210305	Proliferation/Metastasis
0.290991654	Metabolism
0.444248736	TME
0.717000184	Metabolism
0.070666363	Metabolism
0.758492597	Metabolism
0.089735755	Metabolism

0.312012862	TME
0.075347993	TME
0.159136876	Proliferation/Metastasis
0.199328142	Metabolism
0.992574487	Proliferation/Metastasis
0.135941377	Proliferation/Metastasis
0.163222609	TME
0.193409112	TME
0.093109852	TME
0.239081532	TME
0.867287749	Metabolism
0.720992881	Proliferation/Metastasis
0.339216993	Metabolism
0.509788581	Metabolism
0.505724049	Proliferation/Metastasis
0.346644568	Proliferation/Metastasis
0.529778596	Metabolism
0.523121664	Metabolism
0.346605935	Metabolism
0.524686281	Metabolism
0.31624882	TME
0.51296205	TME
0.119395872	TME
0.278454691	TME
0.244995351	TME
0.895226111	Metabolism
0.354927078	Metabolism
0.036118919	Metabolism
0.100578047	Metabolism
0.615799645	Metabolism
0.750597724	TME
0.102376277	TME
0.49408068	TME
0.276165398	TME
0.289463855	TME
0.233445564	TME
0.252820635	TME
0.132007444	TME
0.51864525	TME
0.136249484	Proliferation/Metastasis
0.225235472	Proliferation/Metastasis
0.740554893	Metabolism
0.74326071	Metabolism

0.112077614	TME
0.968291302	Metabolism
0.742069032	Metabolism
0.120725785	TME
0.422945592	Proliferation/Metastasis
0.935609824	Proliferation/Metastasis
0.203639353	TME
0.92732516	Metabolism
0.556422615	Metabolism
0.265312913	Proliferation/Metastasis
0.484422122	Proliferation/Metastasis
0.27876269	TME
0.827740607	TME
0.385253338	TME
0.501962941	TME
0.022238136	Proliferation/Metastasis
0.496424481	TME
0.398704741	TME
0.351306935	Metabolism
0.093223602	TME
0.409052339	TME
0.179629966	TME
0.025288759	TME
0.980515023	Metabolism
0.750440641	Metabolism
0.556991643	Metabolism
0.528792366	TME
0.596071455	Metabolism
0.142148029	TME
0.119981647	TME
0.072693087	TME
0.931020179	TME
0.049794864	TME
0.307326884	Metabolism
0.112716754	Proliferation/Metastasis
0.581654318	Metabolism
0.605524369	Proliferation/Metastasis
0.600371782	Metabolism
0.966038146	Metabolism
0.299824333	Metabolism
0.815788066	Metabolism
0.387381374	Metabolism
0.904129597	Metabolism

0.877106642	Metabolism
0.507684611	Metabolism
0.642227718	Metabolism
0.211628889	Metabolism
0.79670676	Metabolism
0.347166668	Metabolism
0.186585501	Metabolism
0.402332697	Metabolism
0.773551381	TME
0.953514219	Proliferation/Metastasis
0.263439359	Metabolism
0.606420925	Proliferation/Metastasis
0.234319764	TME
0.333917871	Proliferation/Metastasis
0.579594799	Proliferation/Metastasis
0.542885397	TME
0.218312392	TME
0.897858048	Metabolism
0.785723085	Metabolism
0.861769247	Proliferation/Metastasis
0.06568038	Proliferation/Metastasis
0.529518416	Proliferation/Metastasis
0.856351441	Metabolism
0.712285075	Metabolism
0.650787744	Metabolism
0.88208685	Proliferation/Metastasis
0.825407726	TME
0.085836381	TME
0.172649959	Metabolism
0.253813193	Proliferation/Metastasis
0.410158527	Metabolism
0.362624089	TME
0.369936178	TME
0.934542312	TME
0.916683852	TME
0.929053163	Metabolism
0.033966808	TME
0.140522132	Proliferation/Metastasis
0.311028594	TME
0.046123947	Proliferation/Metastasis
0.73975369	Proliferation/Metastasis
0.939102362	Metabolism
0.06850133	Proliferation/Metastasis

0.246089635	TME
0.717091696	Metabolism
0.144396048	TME
0.354179418	TME
0.605797263	TME
0.140624263	TME
0.337658504	TME
0.280011395	TME
0.592265616	Metabolism
0.506806171	TME
0.00493031	Metabolism
0.978340233	Metabolism
0.630288106	Proliferation/Metastasis
0.257943017	Proliferation/Metastasis
0.124377794	Metabolism
0.665784124	Metabolism
0.295692082	Metabolism
0.405737034	Metabolism
0.116623079	Proliferation/Metastasis
0.945519221	Proliferation/Metastasis
0.005849042	Metabolism
0.665235611	Metabolism
0.618465254	Metabolism
0.674467938	TME
0.580838479	Metabolism
0.867080382	Metabolism
0.032712539	Metabolism
0.129637252	Metabolism
0.213270677	Proliferation/Metastasis
0.771936902	Metabolism
0.200750633	Metabolism
0.664564565	Metabolism
0.008647021	Metabolism
0.058671913	Metabolism
0.701063591	Metabolism
0.095053676	Proliferation/Metastasis
0.717461131	Metabolism
0.885417987	Metabolism
0.500357916	Proliferation/Metastasis
0.517841646	Metabolism
0.154965362	Metabolism
0.088792773	Metabolism
0.117870667	Metabolism

0.238169841	Metabolism
0.500713911	Metabolism
0.81478511	Metabolism
0.027708739	Metabolism
0.06750034	TME
0.095851582	TME
0.161294265	TME
0.116393458	TME
0.167195689	TME
0.833910935	Metabolism
0.681725819	Metabolism
0.335109828	Proliferation/Metastasis
0.173274775	Metabolism
0.989074634	Proliferation/Metastasis
0.638144991	Metabolism
0.541050389	TME
0.654868351	Metabolism
0.547336433	Metabolism
0.649405167	Metabolism
0.409554429	Metabolism
0.272851355	TME
0.888909305	TME
0.033541236	Proliferation/Metastasis
0.839580348	Metabolism
0.620125007	Proliferation/Metastasis
0.241810978	Proliferation/Metastasis
0.804304233	TME
0.390886856	TME
0.839890196	TME
0.953308258	TME
0.045894916	Metabolism
0.542478729	Proliferation/Metastasis
0.259759071	Metabolism
0.038809311	Metabolism
0.954066684	Proliferation/Metastasis
0.942066245	Proliferation/Metastasis
0.605127899	Metabolism
0.46865566	Metabolism
0.071889417	Metabolism
0.013323014	Metabolism
0.59031227	TME
0.560072888	TME
0.820046742	TME

0.409470737	TME
0.788304838	TME
0.014777599	Metabolism
0.009576691	Metabolism
0.983929402	Metabolism
0.026346478	Metabolism
0.01332068	Metabolism
0.507494465	TME
0.452148355	TME
0.500930383	TME
0.758114886	TME
0.730183148	TME
0.743632149	TME
0.783102669	TME
0.880233706	TME
0.568757212	TME
0.471187832	Proliferation/Metastasis
0.2473637	Proliferation/Metastasis
0.196306727	Metabolism
0.095405892	Metabolism
0.874781424	TME
0.093431217	Metabolism
0.028706035	Metabolism
0.780458403	TME
0.028896899	Proliferation/Metastasis
0.733148788	Proliferation/Metastasis
0.486089327	TME
0.02302988	Metabolism
0.12705678	Metabolism
0.6133285	Proliferation/Metastasis
0.223887201	Proliferation/Metastasis
0.814813009	TME
0.486612006	TME
0.935801034	TME
0.97252868	TME
0.559351908	Proliferation/Metastasis
0.448913489	TME
0.794591204	TME
0.086048237	Metabolism
0.282920577	TME
0.841691645	TME
0.866067588	TME
0.017411532	TME

0.220517677	Metabolism
0.116331026	Metabolism
0.03642284	Metabolism
0.458908183	TME
0.316253804	Metabolism
0.944370675	TME
0.960356009	TME
0.765914118	TME
0.788843192	TME
0.392902643	TME
0.212425026	Metabolism
0.742895544	Proliferation/Metastasis
0.38253301	Metabolism
0.790113986	Proliferation/Metastasis
0.55542092	Metabolism
0.456472033	Metabolism
0.795597545	Metabolism
0.059069208	Metabolism
0.268123369	Metabolism
0.908141894	Metabolism
0.87626111	Metabolism
0.27375559	Metabolism
0.057483244	Metabolism
0.319161808	Metabolism
0.484936389	Metabolism
0.43358401	Metabolism
0.31364014	Metabolism
0.404004096	Metabolism
0.857492969	TME
0.142949541	Proliferation/Metastasis
0.236804411	Metabolism
0.139353082	Proliferation/Metastasis
0.639567235	TME
0.747872145	Proliferation/Metastasis
0.494963738	Proliferation/Metastasis
0.894507106	TME
0.9429805	TME
0.489697274	Metabolism
0.01742975	Metabolism
0.152484377	Proliferation/Metastasis
0.656425314	Proliferation/Metastasis
0.227181763	Proliferation/Metastasis
0.057922487	Metabolism

0.74628443	Metabolism
0.050286945	Metabolism
0.18199819	Proliferation/Metastasis
0.859457899	TME
0.29526582	TME
0.095970983	Metabolism
0.078430695	Proliferation/Metastasis
0.002405093	Metabolism
0.415852581	TME
0.237921307	TME
0.709959998	TME
0.390980681	TME
0.018012865	Metabolism
0.571779319	TME
0.264430083	Proliferation/Metastasis
0.767009666	TME
0.002896336	Proliferation/Metastasis
0.122843224	Proliferation/Metastasis
0.267717248	Metabolism
0.119991787	Proliferation/Metastasis
0.727760842	TME
0.362248757	Metabolism
0.534388797	TME
0.977090051	TME
0.445956467	TME
0.836120416	TME
0.264894411	TME
0.942601361	TME
0.336555052	Metabolism
0.326811377	TME
0.003729457	Metabolism
0.966004211	Metabolism
0.724823909	Proliferation/Metastasis
0.88997283	Proliferation/Metastasis
0.503893494	Metabolism
0.724757351	Metabolism
0.060971445	Metabolism
0.781231564	Metabolism
0.282440128	Proliferation/Metastasis
0.129974509	Proliferation/Metastasis
0.008278964	Metabolism
0.004053079	Metabolism
0.335273516	Metabolism

0.756787559	TME
0.164153613	Metabolism
0.313473242	Metabolism
0.118832237	Metabolism
0.009351017	Metabolism
0.29810321	Proliferation/Metastasis
0.04637119	Metabolism
0.005926634	Metabolism
0.032273143	Metabolism
0.296396165	Metabolism
0.077816489	Metabolism
0.175013688	Metabolism
0.436129831	Proliferation/Metastasis
0.005987998	Metabolism
0.198367402	Metabolism
0.041431619	Proliferation/Metastasis
0.195564407	Metabolism
0.90990387	Metabolism
0.041254764	Metabolism
0.000978297	Metabolism
0.607544458	Metabolism
0.005224901	Metabolism
0.960007223	Metabolism
0.011911026	Metabolism
0.967609926	TME
0.580037237	TME
0.534273	TME
0.904940831	TME
0.894456984	TME
0.133983199	Metabolism
0.1216977	Metabolism
0.490357145	Proliferation/Metastasis
0.2857183	Metabolism
0.655815082	Proliferation/Metastasis
0.079177412	Metabolism
0.956330995	TME
0.060746608	Metabolism
0.314393462	Metabolism
0.068608615	Metabolism
0.056299393	Metabolism
0.193529831	TME
0.852846185	TME
0.61497343	Proliferation/Metastasis

0.138141821	Metabolism
0.057312977	Proliferation/Metastasis
0.077641662	Proliferation/Metastasis
0.61184017	TME
0.070846667	TME
0.066297656	TME
0.134392956	TME
0.678222367	Metabolism
0.00038627	Proliferation/Metastasis
0.094247084	Metabolism
0.011207704	Metabolism
0.729945702	Proliferation/Metastasis
0.68263101	Proliferation/Metastasis
0.061692557	Metabolism
0.604247929	Metabolism
0.646560827	Metabolism
0.395974931	Metabolism
0.607011218	TME
0.028660331	TME
0.049552449	TME
0.176852187	TME
0.984954694	TME
0.975766679	Metabolism
0.420308878	Metabolism
0.222418823	Metabolism
0.727371178	Metabolism
0.267285755	Metabolism
0.845001011	TME
0.868536575	TME
0.062714241	TME
0.237000741	TME
0.049049744	TME
0.269466863	TME
0.253987721	TME
0.317332266	TME
0.070341089	TME
0.914345717	Proliferation/Metastasis
0.081348179	Proliferation/Metastasis
0.07370328	Metabolism
0.877524336	Metabolism
0.756034652	TME
0.393093598	Metabolism
0.202022055	Metabolism

0.022325774	TME
0.003905942	Proliferation/Metastasis
0.02300211	Proliferation/Metastasis
0.190761806	TME
0.592092732	Metabolism
0.267917621	Metabolism
0.53355753	Proliferation/Metastasis
0.625685934	Proliferation/Metastasis
0.18096328	TME
0.024986195	TME
0.171934004	TME
0.097838412	TME
0.708424722	Proliferation/Metastasis
0.610406947	TME
0.020370119	TME
0.267438495	Metabolism
0.077739015	TME
0.098553409	TME
0.088662506	TME
0.117544464	TME
0.527360715	Metabolism
0.401939239	Metabolism
0.111648888	Metabolism
0.56803011	TME
0.626528758	Metabolism
0.093344896	TME
0.242753733	TME
0.344764918	TME
0.120647542	TME
0.071028046	TME
0.034290812	Metabolism
0.702500443	Proliferation/Metastasis
0.003403245	Metabolism
0.603803778	Proliferation/Metastasis
0.027263335	Metabolism
0.662718128	Metabolism
0.113983408	Metabolism
0.613926045	Metabolism
0.081368251	Metabolism
0.013246951	Metabolism
0.302812832	Metabolism
0.408683591	Metabolism
0.000982492	Metabolism

8.28E-06	Metabolism
0.059913198	Metabolism
0.883215381	Metabolism
0.400519797	Metabolism
0.862793804	Metabolism
0.027256848	TME
0.337950877	Proliferation/Metastasis
0.10997503	Metabolism
0.162311313	Proliferation/Metastasis
0.581410471	TME
0.07772136	Proliferation/Metastasis
0.279188041	Proliferation/Metastasis
0.144387023	TME
0.166839901	TME
0.005822538	Metabolism
0.480380173	Metabolism
0.049988795	Proliferation/Metastasis
0.95959821	Proliferation/Metastasis
0.60850903	Proliferation/Metastasis
0.016600186	Metabolism
0.224899354	Metabolism
0.067787891	Metabolism
0.004518687	Proliferation/Metastasis
0.019451015	TME
0.014481328	TME
0.612151292	Metabolism
0.964059694	Proliferation/Metastasis
0.965307721	Metabolism
0.336880578	TME
0.235382838	TME
0.257215925	TME
0.552264214	TME
0.613526054	Metabolism
0.302441113	TME
0.020365835	Proliferation/Metastasis
0.01585457	TME
0.640034109	Proliferation/Metastasis
0.009214203	Proliferation/Metastasis
0.40398552	Metabolism
0.020222978	Proliferation/Metastasis
0.035398929	TME
0.787473656	Metabolism
0.309940804	TME

0.278244773	TME
0.409246537	TME
0.059854453	TME
0.011910304	TME
0.217186654	TME
0.51140417	Metabolism
0.132276877	TME
0.208268544	Metabolism
0.010631208	Metabolism
0.113546937	Proliferation/Metastasis
0.036793515	Proliferation/Metastasis
0.484416838	Metabolism
0.670802395	Metabolism
0.675747792	Metabolism
0.010166577	Metabolism
0.004226663	Proliferation/Metastasis
0.830763196	Proliferation/Metastasis
0.245252212	Metabolism
0.916187267	Metabolism
0.000237107	Metabolism
0.898465127	TME
0.445261868	Metabolism
0.475360629	Metabolism
0.184197144	Metabolism
0.422160582	Metabolism
0.006631784	Proliferation/Metastasis
0.319725431	Metabolism
0.941218296	Metabolism
0.711634053	Metabolism
0.387220403	Metabolism
0.130197897	Metabolism
0.583779953	Metabolism
0.173539344	Proliferation/Metastasis
0.493265319	Metabolism
0.391800616	Metabolism
0.2255266	Proliferation/Metastasis
0.160634641	Metabolism
0.001572363	Metabolism
0.781322423	Metabolism
0.132189065	Metabolism
0.641784657	Metabolism
0.432368259	Metabolism
0.106131666	Metabolism

0.843862134	Metabolism
0.141129118	TME
0.104575337	TME
0.511745998	TME
0.132934262	TME
0.219912747	TME
0.229982669	Metabolism
0.636251788	Metabolism
0.047817953	Proliferation/Metastasis
0.420539593	Metabolism
0.409358991	Proliferation/Metastasis
0.861700135	Metabolism
0.398634045	TME
0.906687628	Metabolism
0.698944597	Metabolism
0.000634421	Metabolism
0.946484294	Metabolism
0.463327498	TME
0.762638867	TME
0.117113892	Proliferation/Metastasis
0.297266295	Metabolism
0.037934736	Proliferation/Metastasis
0.003415933	Proliferation/Metastasis
0.374547099	TME
0.086138063	TME
0.421432236	TME
0.128812924	TME
0.000355066	Metabolism
0.354462136	Proliferation/Metastasis
0.001759837	Metabolism
0.099578439	Metabolism
0.427518926	Proliferation/Metastasis
0.75314098	Proliferation/Metastasis
0.266989475	Metabolism
0.000256532	Metabolism
4.34E-05	Metabolism
0.003395026	Metabolism
0.57555868	TME
0.108600871	TME
0.116492627	TME
0.095371702	TME
0.184668003	TME
0.000151164	Metabolism

0.003131081	Metabolism
0.454454175	Metabolism
6.29E-05	Metabolism
0.049329555	Metabolism
0.645944145	TME
0.747481975	TME
0.067274177	TME
0.142535306	TME
0.156424029	TME
0.203324439	TME
0.179178751	TME
0.377753561	TME
0.184723805	TME
0.827266748	Proliferation/Metastasis
0.335043953	Proliferation/Metastasis
0.081920416	Metabolism
0.000839389	Metabolism
0.115853337	TME
0.000268426	Metabolism
0.123143636	Metabolism
0.414387469	TME
0.927555608	Proliferation/Metastasis
0.706063415	Proliferation/Metastasis
0.143644089	TME
0.000957909	Metabolism
0.004158871	Metabolism
0.262252015	Proliferation/Metastasis
0.531246855	Proliferation/Metastasis
0.269636782	TME
0.012477256	TME
0.211049969	TME
0.116666037	TME
0.594183579	Proliferation/Metastasis
0.395615342	TME
0.1964526	TME
0.400590893	Metabolism
0.160586398	TME
0.05040938	TME
0.208047238	TME
0.000453368	TME
0.091609834	Metabolism
0.000247129	Metabolism
0.020497971	Metabolism

0.180013848	TME
0.009113996	Metabolism
0.178216381	TME
0.259144248	TME
0.485862857	TME
0.461324724	TME
0.560850688	TME
0.011337184	Metabolism
0.482360474	Proliferation/Metastasis
0.583011709	Metabolism
0.160882567	Proliferation/Metastasis
0.046333566	Metabolism
0.009884319	Metabolism
0.02078919	Metabolism
8.51E-05	Metabolism
0.02203227	Metabolism
0.136189229	Metabolism
0.118686907	Metabolism
0.541213482	Metabolism
0.740830138	Metabolism
0.56507169	Metabolism
0.504463265	Metabolism
0.330809682	Metabolism
0.564343597	Metabolism
0.02408675	Metabolism
0.158902969	TME
0.171628555	Proliferation/Metastasis
0.008760556	Metabolism
0.764355136	Proliferation/Metastasis
0.183541803	TME
0.434927098	Proliferation/Metastasis
0.461923711	Proliferation/Metastasis
0.510197937	TME
0.761247672	TME
0.271859942	Metabolism
0.840587667	Metabolism
0.289632247	Proliferation/Metastasis
0.68117879	Proliferation/Metastasis
0.456761912	Proliferation/Metastasis
0.009477859	Metabolism
0.872231304	Metabolism
0.047930859	Metabolism
0.89322724	Proliferation/Metastasis

0.130678132	TME
0.713234657	TME
0.884106069	Metabolism
0.175285416	Proliferation/Metastasis
0.401940132	Metabolism
0.104757368	TME
0.014529606	TME
0.093470772	TME
0.11749344	TME
0.001982343	Metabolism
0.18521778	TME
0.28944977	Proliferation/Metastasis
0.152370343	TME
0.78442008	Proliferation/Metastasis
0.129432987	Proliferation/Metastasis
0.64457709	Metabolism
0.814135514	Proliferation/Metastasis
0.177218629	TME
0.637806691	Metabolism
0.222971578	TME
0.013362719	TME
0.00050624	TME
0.193028686	TME
0.033763304	TME
0.134659276	TME
0.089490979	Metabolism
0.843825953	TME
0.004672787	Metabolism
0.009989479	Metabolism
0.419002086	Proliferation/Metastasis
0.083680027	Proliferation/Metastasis
0.176413242	Metabolism
0.667047684	Metabolism
0.520836722	Metabolism
0.126108406	Metabolism
0.706885246	Proliferation/Metastasis
0.991649635	Proliferation/Metastasis
0.00993882	Metabolism
0.002300071	Metabolism
0.577811579	Metabolism
0.467045603	TME
0.002147621	Metabolism
0.004621946	Metabolism

0.126455959	Metabolism
0.833003737	Metabolism
0.835935716	Proliferation/Metastasis
0.003044835	Metabolism
2.87E-06	Metabolism
0.027527016	Metabolism
0.895350821	Metabolism
0.784037009	Metabolism
0.015619062	Metabolism
0.888231623	Proliferation/Metastasis
0.000449663	Metabolism
0.057515645	Metabolism
0.523755729	Proliferation/Metastasis
0.000689921	Metabolism
0.087399663	Metabolism
0.942571524	Metabolism
0.094691963	Metabolism
0.097626517	Metabolism
0.007520574	Metabolism
0.047776537	Metabolism
0.000120981	Metabolism
0.39552205	TME
0.405642995	TME
0.273045228	TME
0.247049195	TME
0.156810202	TME
0.481737801	Metabolism
0.00237939	Metabolism
0.362088041	Proliferation/Metastasis
0.011369686	Metabolism
0.455581075	Proliferation/Metastasis
0.000446602	Metabolism
0.123221063	TME
0.000973674	Metabolism
0.006836104	Metabolism
0.121877373	Metabolism
0.001347569	Metabolism
0.984277178	TME
0.150024263	TME
0.290175657	Proliferation/Metastasis
0.0102787	Metabolism
0.351765266	Proliferation/Metastasis
0.032310505	Proliferation/Metastasis

0.225609555	TME
0.661929768	TME
0.013599093	TME
0.402524324	TME
0.023464738	Metabolism
0.977320936	Proliferation/Metastasis
2.14E-07	Metabolism
0.027998911	Metabolism
0.559780825	Proliferation/Metastasis
1.23E-06	Proliferation/Metastasis
3.44E-13	Metabolism
0.015195328	Metabolism
0.090148705	Metabolism
0.867289833	Metabolism
0.186801553	TME
2.50E-05	TME
0.73345834	TME
0.063590618	TME
4.75E-19	TME
0.547772631	Metabolism
0.064468263	Metabolism
0.007063157	Metabolism
0.002740624	Metabolism
0.355810734	Metabolism
0.014908703	TME
0.141663217	TME
0.002131156	TME
0.188699597	TME
0.111340023	TME
0.197934787	TME
0.231235789	TME
0.307649655	TME
0.521507797	TME
0.003978548	Proliferation/Metastasis
2.09E-06	Proliferation/Metastasis
0.83035468	Metabolism
0.225721355	Metabolism
0.845848645	TME
0.000116896	Metabolism
0.44621553	Metabolism
0.000930712	TME
0.253618271	Proliferation/Metastasis
0.004292537	Proliferation/Metastasis

0.147640192	TME
1.81E-05	Metabolism
0.000559706	Metabolism
0.000103494	Proliferation/Metastasis
0.000728206	Proliferation/Metastasis
0.250778885	TME
0.003028687	TME
0.183788451	TME
0.201771803	TME
0.651367515	Proliferation/Metastasis
0.235054197	TME
0.003506302	TME
2.05E-05	Metabolism
0.043369814	TME
0.016893498	TME
0.6855269	TME
0.778562032	TME
0.840968752	Metabolism
0.080597029	Metabolism
0.563590686	Metabolism
0.003043935	TME
0.004390694	Metabolism
0.220123509	TME
0.680927167	TME
0.008298305	TME
0.608512832	TME
0.938423285	TME
0.075700039	Metabolism
5.32E-05	Proliferation/Metastasis
0.010203829	Metabolism
0.004026431	Proliferation/Metastasis
3.78E-07	Metabolism
0.002193123	Metabolism
2.44E-07	Metabolism
0.252990399	Metabolism
0.253135558	Metabolism
0.000399519	Metabolism
0.167233925	Metabolism
2.03E-07	Metabolism
0.000246891	Metabolism
2.23E-06	Metabolism
9.62E-13	Metabolism
1.24E-05	Metabolism

0.030131909	Metabolism
0.00020249	Metabolism
0.009036269	TME
0.253947523	Proliferation/Metastasis
0.081928172	Metabolism
4.10E-07	Proliferation/Metastasis
0.393296657	TME
3.77E-05	Proliferation/Metastasis
7.63E-07	Proliferation/Metastasis
0.002226236	TME
1.34E-06	TME
0.854621982	Metabolism
0.14185159	Metabolism
0.761837731	Proliferation/Metastasis
5.62E-05	Proliferation/Metastasis
0.000162596	Proliferation/Metastasis
2.28E-05	Metabolism
4.82E-05	Metabolism
8.66E-08	Metabolism
4.56E-08	Proliferation/Metastasis
0.040207824	TME
0.057406693	TME
0.000748472	Metabolism
5.79E-05	Proliferation/Metastasis
0.00803483	Metabolism
0.76183901	TME
0.587770156	TME
1.70E-06	TME
0.00255277	TME
1.15E-05	Metabolism
0.047281237	TME
0.093459227	Proliferation/Metastasis
2.64E-07	TME
0.854844769	Proliferation/Metastasis
0.526286219	Proliferation/Metastasis
0.148914411	Metabolism
0.001025014	Proliferation/Metastasis
0.018437477	TME
0.666521825	Metabolism
0.316241886	TME
0.667767329	TME
0.130083352	TME
0.040277044	TME

0.030559121	TME
0.371445616	TME
0.001279409	Metabolism
1.40E-08	TME
0.008372131	Metabolism
0.074022552	Metabolism
0.000144329	Proliferation/Metastasis
0.054073724	Proliferation/Metastasis
0.001547389	Metabolism
0.770783399	Metabolism
0.427794292	Metabolism
0.28061958	Metabolism
7.14E-05	Proliferation/Metastasis
0.972590383	Proliferation/Metastasis
0.084284546	Metabolism
0.507964917	Metabolism
0.170664934	Metabolism
9.97E-05	TME
6.19E-07	Metabolism
0.071679491	Metabolism
0.879079075	Metabolism
0.294869504	Metabolism
0.101339349	Proliferation/Metastasis
0.680413272	Metabolism
0.149840539	Metabolism
6.82E-05	Metabolism
0.020874144	Metabolism
0.027927657	Metabolism
0.035353557	Metabolism
0.244854699	Proliferation/Metastasis
0.000516203	Metabolism
0.934372837	Metabolism
9.89E-06	Proliferation/Metastasis
0.004382596	Metabolism
0.015554071	Metabolism
0.000127299	Metabolism
0.997125099	Metabolism
0.902456891	Metabolism
2.82E-07	Metabolism
0.182866984	Metabolism
0.030887339	Metabolism
0.008461489	TME
0.011918892	TME

0.003626229	TME
0.008536056	TME
0.037623901	TME
0.013779532	Metabolism
0.804727764	Metabolism
0.969540485	Proliferation/Metastasis
8.57E-09	Metabolism
1.84E-06	Proliferation/Metastasis
0.918377782	Metabolism
0.046953482	TME
6.31E-05	Metabolism
0.816459842	Metabolism
0.08069172	Metabolism
0.001353613	Metabolism
0.004201934	TME
0.021651505	TME
8.06E-11	Proliferation/Metastasis
0.686498398	Metabolism
0.993800492	Proliferation/Metastasis
0.509862437	Proliferation/Metastasis
0.062406047	TME
0.895333231	TME
0.47293742	TME
0.746032929	TME
0.846366453	Metabolism
0.816357388	Proliferation/Metastasis
0.225180638	Metabolism
0.033399644	Metabolism
0.038608904	Proliferation/Metastasis
0.081762129	Proliferation/Metastasis
0.008015871	Metabolism
0.093494645	Metabolism
0.45217697	Metabolism
0.183612419	Metabolism
0.811845794	TME
0.899194487	TME
0.30713395	TME
0.451397693	TME
0.26599092	TME
0.50206871	Metabolism
0.660029339	Metabolism
0.0167176	Metabolism
0.132195692	Metabolism

0.003502594	Metabolism
0.040042792	TME
0.00045717	TME
0.523358936	TME
0.142444697	TME
0.645198893	TME
0.435328118	TME
0.404026532	TME
0.321743066	TME
0.775355683	TME
0.000254244	Proliferation/Metastasis
4.41E-12	Proliferation/Metastasis
0.276513087	Metabolism
0.694702416	Metabolism
0.089213765	TME
0.184879801	Metabolism
0.000331143	Metabolism
0.402754198	TME
0.008565749	Proliferation/Metastasis
0.933577073	Proliferation/Metastasis
0.00167516	TME
0.645415271	Metabolism
0.835565816	Metabolism
7.80E-06	Proliferation/Metastasis
0.063172028	Proliferation/Metastasis
0.017922911	TME
0.319657196	TME
0.250152245	TME
0.058766287	TME
9.58E-05	Proliferation/Metastasis
0.228840454	TME
0.816241384	TME
0.074631843	Metabolism
0.012648594	TME
0.26077731	TME
0.884634648	TME
1.88E-06	TME
0.005411771	Metabolism
0.073752605	Metabolism
0.275982957	Metabolism
0.444532396	TME
0.013355706	Metabolism
0.51491875	TME

0.308190042	TME
0.907937271	TME
0.00960205	TME
0.005797549	TME
0.00011773	Metabolism
4.31E-07	Proliferation/Metastasis
3.17E-05	Metabolism
0.007226079	Proliferation/Metastasis
0.594232231	Metabolism
0.171255579	Metabolism
0.05864334	Metabolism
7.48E-09	Metabolism
0.113116795	Metabolism
5.14E-10	Metabolism
0.015605458	Metabolism
0.107145096	Metabolism
8.17E-06	Metabolism
4.60E-06	Metabolism
0.003084472	Metabolism
0.285796622	Metabolism
0.05493326	Metabolism
0.058202129	Metabolism
0.404166935	TME
0.020658088	Proliferation/Metastasis
0.301889702	Metabolism
0.319578426	Proliferation/Metastasis
0.866111965	TME
0.634945985	Proliferation/Metastasis
0.198190818	Proliferation/Metastasis
0.819056576	TME
0.094788615	TME
3.05E-05	Metabolism
0.000127742	Metabolism
0.528536899	Proliferation/Metastasis
0.049572415	Proliferation/Metastasis
0.266678223	Proliferation/Metastasis
0.587942797	Metabolism
0.27400464	Metabolism
0.285898933	Metabolism
0.000292487	Proliferation/Metastasis
0.184641206	TME
0.513766008	TME
1.59E-06	Metabolism

0.597675887	Proliferation/Metastasis
2.03E-06	Metabolism
0.640792003	TME
0.756171667	TME
0.004844582	TME
0.960167113	TME
0.243897086	Metabolism
0.000502971	TME
0.004270847	Proliferation/Metastasis
0.341096804	TME
0.044384189	Proliferation/Metastasis
6.68E-08	Proliferation/Metastasis
1.26E-05	Metabolism
8.47E-05	Proliferation/Metastasis
0.881120136	TME
0.041008645	Metabolism
0.078080356	TME
0.585053618	TME
0.796798726	TME
0.998405262	TME
3.24E-07	TME
0.312617039	TME
0.001162393	Metabolism
0.146197581	TME
0.459449754	Metabolism
0.124281657	Metabolism
0.000189581	Proliferation/Metastasis
0.007426753	Proliferation/Metastasis
0.004330576	Metabolism
4.43E-07	Metabolism
5.43E-16	Metabolism
0.072124397	Metabolism
0.361878915	Proliferation/Metastasis
3.93E-13	Proliferation/Metastasis
0.000776074	Metabolism
0.40588634	Metabolism
0.081268189	Metabolism
0.109756494	TME
3.63E-05	Metabolism
0.87415329	Metabolism
0.004689011	Metabolism
0.281709826	Metabolism
0.000613909	Proliferation/Metastasis

0.105572325	Metabolism
0.000100681	Metabolism
3.17E-06	Metabolism
0.061691933	Metabolism
0.015203339	Metabolism
0.597230897	Metabolism
0.000788677	Proliferation/Metastasis
0.216694848	Metabolism
0.000208015	Metabolism
9.38E-06	Proliferation/Metastasis
0.054147668	Metabolism
1.19E-06	Metabolism
0.052556558	Metabolism
0.496567632	Metabolism
0.354990956	Metabolism
0.206458846	Metabolism
0.005527443	Metabolism
0.821771786	Metabolism
0.974683294	TME
0.379596922	TME
0.104621209	TME
0.911967176	TME
0.89473966	TME
0.001458052	Metabolism
1.81E-05	Metabolism
0.407350837	Proliferation/Metastasis
0.005207424	Metabolism
0.043019924	Proliferation/Metastasis
0.57211915	Metabolism
0.023037047	TME
1.35E-09	Metabolism
0.253621311	Metabolism
0.053016883	Metabolism
0.037884801	Metabolism
1.39E-05	TME
0.002478645	TME
0.873981008	Proliferation/Metastasis
0.153627038	Metabolism
0.010765804	Proliferation/Metastasis
2.37E-07	Proliferation/Metastasis
0.425718783	TME
0.877439645	TME
0.058318347	TME

0.760000907	TME
6.85E-17	Metabolism
1.08E-18	Proliferation/Metastasis
0.759045277	Metabolism
4.76E-09	Metabolism
6.42E-12	Proliferation/Metastasis
0.50795448	Proliferation/Metastasis
0.92014974	Metabolism
4.96E-25	Metabolism
3.67E-13	Metabolism
0.058413432	Metabolism
0.142261477	TME
0.000703359	TME
0.412430955	TME
0.066069573	TME
0.106795397	TME
0.000565748	Metabolism
3.63E-10	Metabolism
0.01750058	Metabolism
0.001303872	Metabolism
0.557510201	Metabolism
0.003461158	TME
0.052763523	TME
0.282460575	TME
0.588680813	TME
0.124728598	TME
0.012877564	TME
0.047298053	TME
0.388983486	TME
0.83649321	TME
5.17E-14	Proliferation/Metastasis
0.000120947	Proliferation/Metastasis
3.87E-17	Metabolism
3.57E-20	Metabolism
0.510240739	TME
0.695091529	Metabolism
0.00015191	Metabolism
0.152028924	TME
2.66E-29	Proliferation/Metastasis
2.70E-24	Proliferation/Metastasis
0.397972837	TME
0.327068054	Metabolism
4.28E-12	Metabolism

2.70E-16	Proliferation/Metastasis
0.940478559	Proliferation/Metastasis
0.000441838	TME
0.477241052	TME
0.010038195	TME
4.03E-05	TME
2.63E-13	Proliferation/Metastasis
0.306021021	TME
0.397798848	TME
0.13787783	Metabolism
0.016413918	TME
0.151698077	TME
0.635364833	TME
0.00081568	TME
4.42E-07	Metabolism
0.005924719	Metabolism
9.55E-13	Metabolism
0.001086132	TME
3.17E-11	Metabolism
0.295859037	TME
0.95009577	TME
0.161826653	TME
0.007650873	TME
4.58E-05	TME
8.84E-17	Metabolism
1.65E-13	Proliferation/Metastasis
3.42E-11	Metabolism
0.417945274	Proliferation/Metastasis
1.32E-07	Metabolism
0.008618925	Metabolism
0.593005318	Metabolism
1.54E-22	Metabolism
5.83E-19	Metabolism
0.507068364	Metabolism
0.967020799	Metabolism
0.040160346	Metabolism
0.247849556	Metabolism
0.05075534	Metabolism
0.694479442	Metabolism
0.289822073	Metabolism
0.030530224	Metabolism
8.51E-17	Metabolism
0.076067834	TME

0.110684778	Proliferation/Metastasis
1.28E-07	Metabolism
0.188061688	Proliferation/Metastasis
0.884835133	TME
0.957349561	Proliferation/Metastasis
0.016798839	Proliferation/Metastasis
0.521820566	TME
0.164050465	TME
0.001898041	Metabolism
0.216446727	Metabolism
8.43E-07	Proliferation/Metastasis
4.68E-21	Proliferation/Metastasis
0.127722432	Proliferation/Metastasis
0.727904198	Metabolism
0.035411492	Metabolism
7.58E-13	Metabolism
0.39162963	Proliferation/Metastasis
0.161377317	TME
0.062131917	TME
0.001142708	Metabolism
0.284922347	Proliferation/Metastasis
0.931983025	Metabolism
0.41756814	TME
0.236840828	TME
0.554723194	TME
0.000435924	TME
0.19787042	Metabolism
0.992575469	TME
0.015727011	Proliferation/Metastasis
0.020040651	TME
0.867676236	Proliferation/Metastasis
4.09E-17	Proliferation/Metastasis
0.036195914	Metabolism
5.33E-21	Proliferation/Metastasis
0.082293349	TME
1.69E-05	Metabolism
0.389762509	TME
0.000319767	TME
0.012930847	TME
0.804721218	TME
0.106184752	TME
0.021210952	TME
0.000486426	Metabolism

0.869800748	TME
0.441946601	Metabolism
0.184487594	Metabolism
0.017047268	Proliferation/Metastasis
0.00039302	Proliferation/Metastasis
8.23E-22	Metabolism
0.521775588	Metabolism
0.038063087	Metabolism
9.83E-12	Metabolism
0.001296079	Proliferation/Metastasis
0.234121892	Proliferation/Metastasis
0.042651149	Metabolism
0.121929228	Metabolism
4.01E-16	Metabolism
0.001316666	TME
4.45E-10	Metabolism
6.14E-08	Metabolism
0.656051171	Metabolism
0.001722039	Metabolism
0.059440239	Proliferation/Metastasis
2.44E-12	Metabolism
0.106237563	Metabolism
0.022943536	Metabolism
5.57E-42	Metabolism
1.08E-40	Metabolism
1.02E-14	Metabolism
2.23E-11	Proliferation/Metastasis
0.090044876	Metabolism
7.47E-09	Metabolism
4.58E-10	Proliferation/Metastasis
1.21E-19	Metabolism
0.210624027	Metabolism
0.132553082	Metabolism
0.755407048	Metabolism
4.04E-06	Metabolism
0.675731579	Metabolism
2.17E-05	Metabolism
2.63E-06	Metabolism
0.113503797	TME
0.789417138	TME
0.030481293	TME
0.421152281	TME
1.16E-05	TME

0.571549493	Metabolism
1.97E-09	Metabolism
0.127768521	Proliferation/Metastasis
5.35E-16	Metabolism
0.398989048	Proliferation/Metastasis
2.64E-07	Metabolism
0.000125811	TME
5.48E-10	Metabolism
6.19E-15	Metabolism
0.003990555	Metabolism
8.99E-05	Metabolism
0.291893234	TME
0.082863471	TME
0.014916641	Proliferation/Metastasis
0.000341553	Metabolism
7.02E-05	Proliferation/Metastasis
0.007806794	Proliferation/Metastasis
0.006194236	TME
4.65E-10	TME
5.86E-08	TME
2.56E-11	TME
0.492137648	Metabolism
9.22E-06	Proliferation/Metastasis
0.01035407	Metabolism
2.35E-07	Metabolism
0.000334476	Proliferation/Metastasis
0.000600577	Proliferation/Metastasis
0.215093684	Metabolism
0.651569917	Metabolism
0.939734623	Metabolism
0.000485277	Metabolism
0.030885844	TME
1.05E-12	TME
1.21E-18	TME
0.003938017	TME
0.001209242	TME
3.62E-13	Metabolism
0.869518993	Metabolism
4.91E-05	Metabolism
4.52E-05	Metabolism
0.000387941	Metabolism
7.79E-16	TME
1.07E-17	TME

4.20E-11	TME
0.001032483	TME
1.02E-05	TME
1.65E-10	TME
1.30E-10	TME
0.000364745	TME
1.98E-10	TME
6.96E-06	Proliferation/Metastasis
0.004002973	Proliferation/Metastasis
0.180592526	Metabolism
0.783433191	Metabolism
3.03E-05	TME
0.198216673	Metabolism
0.557995937	Metabolism
9.72E-07	TME
0.117001965	Proliferation/Metastasis
0.507611385	Proliferation/Metastasis
0.435698439	TME
0.00052905	Metabolism
0.783318114	Metabolism
4.74E-05	Proliferation/Metastasis
0.009137139	Proliferation/Metastasis
1.51E-12	TME
3.09E-09	TME
2.14E-12	TME
3.34E-12	TME
0.009712999	Proliferation/Metastasis
1.41E-17	TME
2.44E-07	TME
3.17E-06	Metabolism
2.23E-25	TME
6.12E-20	TME
1.17E-09	TME
0.238687096	TME
0.604808657	Metabolism
0.00028195	Metabolism
9.66E-08	Metabolism
7.97E-08	TME
0.711234977	Metabolism
4.12E-06	TME
2.40E-05	TME
1.29E-06	TME
0.312189169	TME

0.944939395	TME
0.704464547	Metabolism
2.62E-08	Proliferation/Metastasis
0.925197641	Metabolism
0.254053363	Proliferation/Metastasis
0.135337565	Metabolism
0.04185991	Metabolism
4.88E-07	Metabolism
0.046496375	Metabolism
0.781802032	Metabolism
0.47269801	Metabolism
0.777189852	Metabolism
5.88E-08	Metabolism
0.380665313	Metabolism
0.007017479	Metabolism
0.054780327	Metabolism
7.80E-08	Metabolism
0.485770075	Metabolism
0.917711103	Metabolism
5.49E-10	TME
0.298130577	Proliferation/Metastasis
4.36E-05	Metabolism
7.28E-05	Proliferation/Metastasis
5.67E-08	TME
7.53E-10	Proliferation/Metastasis
1.69E-11	Proliferation/Metastasis
1.58E-11	TME
0.000273819	TME
3.62E-10	Metabolism
9.34E-13	Metabolism
3.31E-10	Proliferation/Metastasis
0.012667517	Proliferation/Metastasis
2.68E-13	Proliferation/Metastasis
0.362060304	Metabolism
0.009756147	Metabolism
0.234377251	Metabolism
0.014329136	Proliferation/Metastasis
3.59E-13	TME
1.98E-16	TME
0.028182003	Metabolism
2.34E-05	Proliferation/Metastasis
2.00E-21	Metabolism
9.86E-13	TME

9.38E-14	TME
0.018829379	TME
7.61E-10	TME
0.013806742	Metabolism
1.01E-07	TME
3.38E-05	Proliferation/Metastasis
1.47E-15	TME
0.774009027	Proliferation/Metastasis
5.55E-12	Proliferation/Metastasis
1.72E-23	Metabolism
0.020802482	Proliferation/Metastasis
1.04E-09	TME
0.010206449	Metabolism
0.061958551	TME
4.55E-05	TME
0.147258639	TME
3.72E-11	TME
6.43E-21	TME
3.06E-13	TME
0.521272779	Metabolism
3.11E-12	TME
0.07837048	Metabolism
2.70E-12	Metabolism
2.43E-09	Proliferation/Metastasis
0.178506639	Proliferation/Metastasis
9.49E-06	Metabolism
2.56E-05	Metabolism
3.74E-34	Metabolism
0.810867249	Metabolism
0.00223402	Proliferation/Metastasis
1.12E-22	Proliferation/Metastasis
2.16E-22	Metabolism
0.01585085	Metabolism
0.018153546	Metabolism
0.00049002	TME
0.182824026	Metabolism
0.6677653	Metabolism
0.044343684	Metabolism
1.53E-08	Metabolism
7.59E-11	Proliferation/Metastasis
0.004222245	Metabolism
0.000240665	Metabolism
1.63E-09	Metabolism

0.602800653	Metabolism
0.045015567	Metabolism
0.882163247	Metabolism
0.376875017	Proliferation/Metastasis
0.002346811	Metabolism
0.117476925	Metabolism
4.98E-23	Proliferation/Metastasis
0.0612694	Metabolism
0.005644392	Metabolism
2.72E-13	Metabolism
2.76E-05	Metabolism
0.000262053	Metabolism
0.203436095	Metabolism
1.14E-06	Metabolism
0.025114301	Metabolism
3.34E-10	TME
7.82E-11	TME
2.04E-07	TME
2.47E-07	TME
0.000137336	TME
2.92E-16	Metabolism
2.18E-09	Metabolism
3.29E-07	Proliferation/Metastasis
0.328082042	Metabolism
1.98E-09	Proliferation/Metastasis
3.79E-06	Metabolism
0.247982376	TME
0.434322547	Metabolism
1.97E-09	Metabolism
3.17E-06	Metabolism
4.69E-10	Metabolism
0.913322609	TME
0.839216517	TME
0.00014575	Proliferation/Metastasis
0.011237179	Metabolism
0.056334369	Proliferation/Metastasis
2.06E-09	Proliferation/Metastasis
0.208045159	TME
0.418756159	TME
2.44E-06	TME
4.47E-06	TME
0.078153007	Metabolism
0.000462812	Proliferation/Metastasis

0.483636766	Metabolism
1.29E-08	Metabolism
0.373788609	Proliferation/Metastasis
2.46E-05	Proliferation/Metastasis
5.57E-08	Metabolism
0.108266004	Metabolism
0.008428111	Metabolism
0.046886546	Metabolism
0.788630799	TME
0.000357087	TME
0.014874681	TME
0.000110153	TME
4.18E-20	TME
0.127498673	Metabolism
0.478676321	Metabolism
0.142549574	Metabolism
0.000572127	Metabolism
0.963884908	Metabolism
0.024814975	TME
0.750897155	TME
1.37E-09	TME
0.008294211	TME
3.34E-06	TME
1.04E-05	TME
6.27E-06	TME
9.50E-06	TME
3.98E-05	TME
0.003552569	Proliferation/Metastasis
2.26E-14	Proliferation/Metastasis
0.822337864	Metabolism
0.097811661	Metabolism
0.006729908	TME
3.27E-05	Metabolism
0.763610571	Metabolism
1.42E-07	TME
0.204599085	Proliferation/Metastasis
0.262873683	Proliferation/Metastasis
0.021186264	TME
0.031668101	Metabolism
0.000105234	Metabolism
0.000429517	Proliferation/Metastasis
0.043560314	Proliferation/Metastasis
0.001722592	TME

2.56E-10	TME
7.54E-05	TME
7.27E-05	TME
0.004571753	Proliferation/Metastasis
0.034078854	TME
3.53E-11	TME
0.041559542	Metabolism
7.19E-09	TME
4.20E-12	TME
6.70E-06	TME
0.18596518	TME
5.99E-05	Metabolism
0.067616023	Metabolism
0.013389362	Metabolism
0.002874089	TME
0.025338386	Metabolism
0.000121437	TME
0.134621456	TME
2.11E-06	TME
0.000240034	TME
0.170798113	TME
6.89E-05	Metabolism
4.39E-06	Proliferation/Metastasis
1.22E-06	Metabolism
0.299603688	Proliferation/Metastasis
1.22E-08	Metabolism
0.478125579	Metabolism
0.003569461	Metabolism
0.001349397	Metabolism
0.024828407	Metabolism
1.37E-09	Metabolism
0.219214296	Metabolism
4.53E-17	Metabolism
4.26E-07	Metabolism
1.63E-10	Metabolism
6.15E-13	Metabolism
6.68E-09	Metabolism
3.10E-05	Metabolism
0.172826459	Metabolism
4.30E-08	TME
0.04424624	Proliferation/Metastasis
0.088288052	Metabolism
6.46E-13	Proliferation/Metastasis

4.83E-05	TME
4.27E-10	Proliferation/Metastasis
2.73E-15	Proliferation/Metastasis
1.31E-10	TME
9.19E-19	TME
0.015374138	Metabolism
0.00098651	Metabolism
0.329921223	Proliferation/Metastasis
9.77E-10	Proliferation/Metastasis
3.64E-06	Proliferation/Metastasis
0.953028169	Metabolism
0.012749384	Metabolism
6.36E-14	Metabolism
5.58E-14	Proliferation/Metastasis
6.48E-09	TME
7.62E-10	TME
0.297747848	Metabolism
2.68E-05	Proliferation/Metastasis
5.89E-05	Metabolism
0.050513938	TME
0.111952059	TME
1.64E-07	TME
0.000339752	TME
0.000407188	Metabolism
0.149947385	TME
0.000140647	Proliferation/Metastasis
9.50E-19	TME
0.633604273	Proliferation/Metastasis
0.030082199	Proliferation/Metastasis
0.850359779	Metabolism
0.000459242	Proliferation/Metastasis
1.83E-06	TME
0.580475064	Metabolism
0.155717296	TME
0.586829955	TME
1.07E-06	TME
5.15E-09	TME
0.529911031	TME
6.41E-05	TME
1.14E-06	Metabolism
8.96E-16	TME
0.127138217	Metabolism
8.97E-05	Metabolism

1.18E-09	Proliferation/Metastasis
0.622073968	Proliferation/Metastasis
0.026626811	Metabolism
0.855345831	Metabolism
0.267076402	Metabolism
1.89E-05	Metabolism
2.41E-10	Proliferation/Metastasis
0.685795361	Proliferation/Metastasis
1.44E-06	Metabolism
0.126817094	Metabolism
0.252553985	Metabolism
0.012375038	TME
5.92E-06	Metabolism
0.102416291	Metabolism
0.287571505	Metabolism
0.755350042	Metabolism
0.000132285	Proliferation/Metastasis
0.000244189	Metabolism
0.046509923	Metabolism
1.82E-09	Metabolism
0.798518208	Metabolism
0.705055748	Metabolism
0.013239069	Metabolism
6.79E-05	Proliferation/Metastasis
0.127988623	Metabolism
0.00067084	Metabolism
0.00801745	Proliferation/Metastasis
0.002064189	Metabolism
0.000455033	Metabolism
4.45E-07	Metabolism
0.708347503	Metabolism
0.076532269	Metabolism
0.030084703	Metabolism
0.915417331	Metabolism
6.59E-05	Metabolism
3.51E-06	TME
8.40E-10	TME
1.81E-10	TME
4.05E-08	TME
2.84E-09	TME
0.797452161	Metabolism
0.252302426	Metabolism
0.001739107	Proliferation/Metastasis

2.40E-05	Metabolism
2.31E-18	Proliferation/Metastasis
0.014413316	Metabolism
0.000202749	TME
0.005892045	Metabolism
0.010726367	Metabolism
2.10E-14	Metabolism
0.013952284	Metabolism
0.004168349	TME
0.98598009	TME
9.64E-10	Proliferation/Metastasis
0.69729171	Metabolism
0.163722455	Proliferation/Metastasis
2.94E-09	Proliferation/Metastasis
0.00316396	TME
0.021366298	TME
0.288805148	TME
0.005662922	TME
0.549122089	Metabolism
0.005363785	Proliferation/Metastasis
0.070121511	Metabolism
0.920798592	Metabolism
0.003703606	Proliferation/Metastasis
0.203860812	Proliferation/Metastasis
0.358264386	Metabolism
0.026132774	Metabolism
0.367266914	Metabolism
0.649925639	Metabolism
0.004417817	TME
0.032725999	TME
0.000433268	TME
0.062177488	TME
0.540421058	TME
0.278701028	Metabolism
0.587070806	Metabolism
0.331968222	Metabolism
0.559093582	Metabolism
0.653697735	Metabolism
0.092032625	TME
0.187961145	TME
0.013731462	TME
0.013202779	TME
0.216802828	TME

0.067276153	TME
0.056386482	TME
0.001643194	TME
0.000649652	TME
0.000595425	Proliferation/Metastasis
0.000731027	Proliferation/Metastasis
0.941844711	Metabolism
0.021849178	Metabolism
0.000254534	TME
0.005855644	Metabolism
0.933640428	Metabolism
0.080824644	TME
0.069810106	Proliferation/Metastasis
0.105047431	Proliferation/Metastasis
0.059056628	TME
0.2286746	Metabolism
0.605971097	Metabolism
0.137166632	Proliferation/Metastasis
0.037754472	Proliferation/Metastasis
0.136133324	TME
0.07991768	TME
0.048331118	TME
0.799629997	TME
0.31804797	Proliferation/Metastasis
0.028916717	TME
0.482390226	TME
0.856117506	Metabolism
0.008240119	TME
0.025975616	TME
0.000947815	TME
0.119601087	TME
0.069720687	Metabolism
0.641964428	Metabolism
0.044198602	Metabolism
0.27433113	TME
0.534590181	Metabolism
0.008124309	TME
0.001220839	TME
0.038607596	TME
0.00132454	TME
0.000294063	TME
0.63192294	Metabolism
0.009593476	Proliferation/Metastasis

0.923083561	Metabolism
0.017547142	Proliferation/Metastasis
0.158419321	Metabolism
0.40615022	Metabolism
0.695326743	Metabolism
0.043999554	Metabolism
0.582113714	Metabolism
0.739727913	Metabolism
0.708456609	Metabolism
0.755122238	Metabolism
0.30851619	Metabolism
0.598390029	Metabolism
0.230999729	Metabolism
0.409538745	Metabolism
0.53436377	Metabolism
0.941518589	Metabolism
0.532669741	TME
0.166112074	Proliferation/Metastasis
4.52E-06	Metabolism
0.480884573	Proliferation/Metastasis
0.001803899	TME
0.107780967	Proliferation/Metastasis
0.963198547	Proliferation/Metastasis
0.690416917	TME
0.014646913	TME
0.009959441	Metabolism
0.589085283	Metabolism
0.01544057	Proliferation/Metastasis
0.001192763	Proliferation/Metastasis
0.008284477	Proliferation/Metastasis
0.864714208	Metabolism
0.747035608	Metabolism
0.000193325	Metabolism
0.622909661	Proliferation/Metastasis
0.117748446	TME
0.615815365	TME
0.911439215	Metabolism
0.107511061	Proliferation/Metastasis
0.303327646	Metabolism
0.000307948	TME
0.000969635	TME
0.797241524	TME
0.68148716	TME

0.979249198	Metabolism
0.039300539	TME
0.000225255	Proliferation/Metastasis
0.258795555	TME
0.108688715	Proliferation/Metastasis
0.266773853	Proliferation/Metastasis
0.380153282	Metabolism
0.092872067	Proliferation/Metastasis
0.055216011	TME
0.488584608	Metabolism
0.036165913	TME
0.004008306	TME
3.34E-07	TME
0.007604886	TME
2.88E-05	TME
0.015747378	TME
0.043408152	Metabolism
0.678800116	TME
0.012154013	Metabolism
0.591280407	Metabolism
0.677868034	Proliferation/Metastasis
0.000753587	Proliferation/Metastasis
0.591512261	Metabolism
0.938164562	Metabolism
0.00310278	Metabolism
0.997256909	Metabolism
0.002680982	Proliferation/Metastasis
0.087595649	Proliferation/Metastasis
0.241576998	Metabolism
0.936300788	Metabolism
0.586922209	Metabolism
0.45636676	TME
0.048150762	Metabolism
0.94375531	Metabolism
0.550590495	Metabolism
0.032461644	Metabolism
0.046220019	Proliferation/Metastasis
0.796457833	Metabolism
0.059254877	Metabolism
0.326556436	Metabolism
0.241231753	Metabolism
0.031957128	Metabolism
0.62014684	Metabolism

6.75E-08	Proliferation/Metastasis
0.740639727	Metabolism
0.013709097	Metabolism
0.44101033	Proliferation/Metastasis
0.094306539	Metabolism
0.17443451	Metabolism
0.078062969	Metabolism
0.15029329	Metabolism
0.364929396	Metabolism
0.157747251	Metabolism
0.471058514	Metabolism
0.176551205	Metabolism
0.008159507	TME
0.001173315	TME
0.928109205	TME
0.220597109	TME
0.225560084	TME
0.39789733	Metabolism
0.785698789	Metabolism
0.002926327	Proliferation/Metastasis
0.807423054	Metabolism
0.392006198	Proliferation/Metastasis
0.544118414	Metabolism
0.098398964	TME
0.194458799	Metabolism
0.781596433	Metabolism
0.465324421	Metabolism
0.932065417	Metabolism
0.885718542	TME
0.910583533	TME
0.848525119	Proliferation/Metastasis
0.596663814	Metabolism
0.118888955	Proliferation/Metastasis
0.000457565	Proliferation/Metastasis
0.594577667	TME
0.0924296	TME
0.19704845	TME
0.01436234	TME
0.440476351	Metabolism
0.564805946	Proliferation/Metastasis
0.00550869	Metabolism
0.009104537	Metabolism
1.61E-05	Proliferation/Metastasis

0.032980487	Proliferation/Metastasis
0.009326389	Metabolism
0.135124173	Metabolism
0.215188653	Metabolism
0.850278581	Metabolism
0.585096219	TME
0.000178701	TME
0.002363372	TME
0.0522722	TME
0.002451205	TME
0.353635173	Metabolism
0.015076182	Metabolism
0.442123143	Metabolism
0.534293246	Metabolism
0.21395489	Metabolism
0.001155328	TME
0.028267377	TME
0.001266105	TME
0.536440191	TME
0.468619883	TME
0.044528537	TME
0.142095803	TME
0.013536101	TME
0.106144427	TME
0.044389379	Proliferation/Metastasis
0.028413537	Proliferation/Metastasis
0.8222254	Metabolism
0.505260012	Metabolism
0.135642907	TME
0.224573704	Metabolism
0.406896032	Metabolism
0.000135218	TME
0.496938719	Proliferation/Metastasis
0.021431304	Proliferation/Metastasis
0.459634149	TME
0.152865263	Metabolism
0.125055175	Metabolism
0.017057122	Proliferation/Metastasis
0.272223209	Proliferation/Metastasis
0.962263371	TME
0.007755979	TME
0.054451363	TME
0.718339701	TME

0.8871262	Proliferation/Metastasis
0.277265024	TME
2.73E-06	TME
0.005775499	Metabolism
0.001419681	TME
0.00939705	TME
0.03353137	TME
0.073614591	TME
0.371384023	Metabolism
0.395751745	Metabolism
0.931982979	Metabolism
0.008649529	TME
0.495788285	Metabolism
0.69713288	TME
0.986193296	TME
0.007440259	TME
0.198420473	TME
0.074173915	TME
0.232718509	Metabolism
0.02777728	Proliferation/Metastasis
0.01698507	Metabolism
0.906824287	Proliferation/Metastasis
0.026106285	Metabolism
0.001443789	Metabolism
0.015261008	Metabolism
0.6276647	Metabolism
0.095176492	Metabolism
4.95E-05	Metabolism
0.000103662	Metabolism
0.46048067	Metabolism
9.14E-07	Metabolism
7.27E-06	Metabolism
4.98E-08	Metabolism
0.026246099	Metabolism
0.072478909	Metabolism
0.547932862	Metabolism
9.44E-07	TME
0.493950878	Proliferation/Metastasis
0.001666222	Metabolism
0.000306841	Proliferation/Metastasis
0.023235064	TME
2.27E-05	Proliferation/Metastasis
0.000366318	Proliferation/Metastasis

0.00053754	TME
2.68E-05	TME
0.889971904	Metabolism
0.504811083	Metabolism
0.634991644	Proliferation/Metastasis
0.083986627	Proliferation/Metastasis
0.000340232	Proliferation/Metastasis
0.198723417	Metabolism
0.115534444	Metabolism
0.173555074	Metabolism
5.68E-08	Proliferation/Metastasis
0.000964825	TME
0.038391376	TME
0.9125729	Metabolism
0.358364616	Proliferation/Metastasis
0.968510135	Metabolism
0.38078284	TME
0.277521148	TME
0.001357988	TME
0.001178886	TME
0.069090828	Metabolism
0.042220457	TME
0.055826976	Proliferation/Metastasis
1.01E-08	TME
0.530229508	Proliferation/Metastasis
0.425903287	Proliferation/Metastasis
0.042786467	Metabolism
0.029525308	Proliferation/Metastasis
0.000943218	TME
0.691865072	Metabolism
0.237585713	TME
0.226015415	TME
0.862556476	TME
0.003490277	TME
0.714334658	TME
0.094844969	TME
5.97E-05	Metabolism
1.13E-08	TME
0.000923128	Metabolism
0.302238872	Metabolism
0.040782116	Proliferation/Metastasis
0.000260435	Proliferation/Metastasis
0.012357737	Metabolism

9.38E-07	Metabolism
0.835043944	Metabolism
0.51540654	Metabolism
0.001294778	Proliferation/Metastasis
0.653071217	Proliferation/Metastasis
0.004094073	Metabolism
0.81168207	Metabolism
0.432238805	Metabolism
0.087286233	TME
0.483922777	Metabolism
0.33713374	Metabolism
0.385492725	Metabolism
0.560683444	Metabolism
0.524898122	Proliferation/Metastasis
0.907451028	Metabolism
3.87E-05	Metabolism
0.305244292	Metabolism
0.138982616	Metabolism
0.110548765	Metabolism
0.463913084	Metabolism
0.000143111	Proliferation/Metastasis
0.044365417	Metabolism
0.002203471	Metabolism
0.015442752	Proliferation/Metastasis
0.460455479	Metabolism
0.155707483	Metabolism
0.001526974	Metabolism
0.03283307	Metabolism
0.15411957	Metabolism
0.135647955	Metabolism
0.463248649	Metabolism
0.601055573	Metabolism
0.01333099	TME
0.002014142	TME
0.029720648	TME
0.055510493	TME
0.066481037	TME
0.116029766	Metabolism
0.699577243	Metabolism
0.220370751	Proliferation/Metastasis
0.777031822	Metabolism
3.43E-06	Proliferation/Metastasis
0.009423401	Metabolism

0.005245674	TME
0.352908583	Metabolism
0.819217487	Metabolism
0.007641356	Metabolism
0.661571721	Metabolism
0.515092993	TME
0.026580382	TME
0.137514964	Proliferation/Metastasis
0.828982038	Metabolism
0.89625632	Proliferation/Metastasis
0.70356628	Proliferation/Metastasis
0.84990879	TME
0.460642119	TME
0.009508975	TME
0.762521593	TME
0.132530967	Metabolism
0.043473022	Proliferation/Metastasis
9.25E-09	Metabolism
0.092363032	Metabolism
0.026635776	Proliferation/Metastasis
0.895994005	Proliferation/Metastasis
1.99E-05	Metabolism
0.005223972	Metabolism
0.581487858	Metabolism
0.002991586	Metabolism
0.769491995	TME
0.895097933	TME
0.044682331	TME
0.760420964	TME
0.006215358	TME
0.000315218	Metabolism
0.07924882	Metabolism
0.00106751	Metabolism
0.000399669	Metabolism
0.000350187	Metabolism
0.091690868	TME
0.797951739	TME
0.867436744	TME
0.37178514	TME
0.029040256	TME
0.867497705	TME
0.657548582	TME
0.796851625	TME

0.218060632	TME
3.92E-07	Proliferation/Metastasis
1.90E-08	Proliferation/Metastasis
0.370131719	Metabolism
0.277322224	Metabolism
0.389465809	TME
0.04781348	Metabolism
2.41E-06	Metabolism
0.552351996	TME
0.001558238	Proliferation/Metastasis
0.154131765	Proliferation/Metastasis
0.010573791	TME
1.31E-05	Metabolism
4.25E-06	Metabolism
4.42E-05	Proliferation/Metastasis
0.209502008	Proliferation/Metastasis
0.311085186	TME
0.090332835	TME
0.113237573	TME
0.001588598	TME
1.51E-09	Proliferation/Metastasis
0.055005297	TME
0.327161595	TME
0.005466581	Metabolism
0.404044488	TME
0.124654207	TME
0.714818943	TME
0.011689986	TME
0.005236359	Metabolism
0.005984266	Metabolism
0.004939409	Metabolism
0.137542928	TME
0.000378413	Metabolism
0.674352905	TME
0.733996555	TME
0.502562427	TME
0.175098359	TME
0.027219277	TME
0.000215616	Metabolism
1.11E-08	Proliferation/Metastasis
0.02820646	Metabolism
0.011491642	Proliferation/Metastasis
0.000256488	Metabolism

0.047879168	Metabolism
2.55E-05	Metabolism
0.1075046	Metabolism
0.232792101	Metabolism
0.108468579	Metabolism
0.002333465	Metabolism
0.450198157	Metabolism
0.013438613	Metabolism
0.064631803	Metabolism
0.000517618	Metabolism
0.000258583	Metabolism
0.017254479	Metabolism
0.022215791	Metabolism
0.146865221	TME
0.24278257	Proliferation/Metastasis
0.005183225	Metabolism
0.482692585	Proliferation/Metastasis
0.585793122	TME
0.822141244	Proliferation/Metastasis
0.010519954	Proliferation/Metastasis
0.611720356	TME
0.665727589	TME
3.62E-05	Metabolism
9.03E-08	Metabolism
0.084435435	Proliferation/Metastasis
3.03E-05	Proliferation/Metastasis
0.153990496	Proliferation/Metastasis
1.29E-05	Metabolism
0.008092882	Metabolism
0.001958962	Metabolism
0.022988285	Proliferation/Metastasis
0.050139122	TME
0.306092579	TME
0.15342361	Metabolism
0.000115674	Proliferation/Metastasis
2.70E-09	Metabolism
0.558403394	TME
0.449869213	TME
0.23820909	TME
0.251979934	TME
2.62E-06	Metabolism
0.802069102	TME
1.52E-09	Proliferation/Metastasis

0.610458443	TME
9.41E-05	Proliferation/Metastasis
0.114768645	Proliferation/Metastasis
0.076930835	Metabolism
0.640258204	Proliferation/Metastasis
0.121145284	TME
0.619542761	Metabolism
0.693830336	TME
0.286112853	TME
0.352480634	TME
0.660412567	TME
0.14736339	TME
0.106172032	TME
0.611309929	Metabolism
0.532317742	TME
0.763604879	Metabolism
0.195527641	Metabolism
0.001087227	Proliferation/Metastasis
0.085677577	Proliferation/Metastasis
0.001146418	Metabolism
0.01162657	Metabolism
0.259712959	Metabolism
1.85E-05	Metabolism
0.038866224	Proliferation/Metastasis
0.003340464	Proliferation/Metastasis
0.271706295	Metabolism
3.51E-05	Metabolism
0.024294944	Metabolism
0.982309484	TME
0.082275768	Metabolism
0.823947278	Metabolism
0.157086215	Metabolism
0.107893864	Metabolism
0.000808384	Proliferation/Metastasis
0.000890643	Metabolism
0.001623739	Metabolism
0.571267196	Metabolism
0.378686525	Metabolism
0.515116673	Metabolism
0.043342299	Metabolism
0.457976439	Proliferation/Metastasis
2.74E-05	Metabolism
0.000264109	Metabolism

0.420040666	Proliferation/Metastasis
2.93E-07	Metabolism
1.71E-05	Metabolism
0.453928106	Metabolism
0.044101199	Metabolism
0.226700857	Metabolism
0.000198117	Metabolism
0.000958955	Metabolism
0.06961755	Metabolism
0.243251483	TME
0.894756009	TME
0.01980765	TME
0.301733599	TME
0.980616855	TME
0.000301193	Metabolism
0.036079431	Metabolism
8.37E-06	Proliferation/Metastasis
0.00103092	Metabolism
0.076468114	Proliferation/Metastasis
0.003603241	Metabolism
0.371183888	TME
0.000576885	Metabolism
0.000166269	Metabolism
0.012005994	Metabolism
0.118530893	Metabolism
0.327551685	TME
0.289621676	TME
0.682731742	Proliferation/Metastasis
0.013435385	Metabolism
0.335263579	Proliferation/Metastasis
0.007487528	Proliferation/Metastasis
0.153265337	TME
0.013302709	TME
0.574256431	TME
0.366047632	TME
3.30E-06	Metabolism
0.006002764	Proliferation/Metastasis
0.855678648	Metabolism
0.044238641	Metabolism
0.218720024	Proliferation/Metastasis
0.768897739	Proliferation/Metastasis
0.924420783	Metabolism
0.167401091	Metabolism

0.000174289	Metabolism
0.463582823	Metabolism
0.113525962	TME
0.749253957	TME
0.622871178	TME
0.030469753	TME
0.398828401	TME
0.553801965	Metabolism
0.136536693	Metabolism
0.231523245	Metabolism
0.692629052	Metabolism
0.002409387	Metabolism
0.138170819	TME
0.945203002	TME
0.52252213	TME
0.355543256	TME
0.327740261	TME
0.282829066	TME
0.504750306	TME
0.629326151	TME
0.395752539	TME
0.004226608	Proliferation/Metastasis
0.017857973	Proliferation/Metastasis
0.000109535	Metabolism
6.17E-06	Metabolism
0.141952703	TME
0.942195372	Metabolism
0.142806035	Metabolism
0.126887976	TME
0.168657005	Proliferation/Metastasis
0.003039108	Proliferation/Metastasis
0.102934005	TME
0.753682875	Metabolism
0.531159308	Metabolism
0.001320221	Proliferation/Metastasis
0.29161178	Proliferation/Metastasis
0.782683924	TME
0.353758366	TME
0.908432998	TME
0.181938626	TME
0.000274877	Proliferation/Metastasis
0.150891013	TME
0.656143131	TME

0.874789143	Metabolism
0.276609193	TME
0.983782126	TME
0.413216095	TME
0.492038975	TME
0.031607607	Metabolism
0.149493577	Metabolism
0.191322059	Metabolism
0.84830232	TME
0.661625211	Metabolism
0.003433958	TME
0.030306354	TME
0.240155222	TME
0.369596718	TME
0.011856853	TME
0.197766244	Metabolism
0.001728276	Proliferation/Metastasis
0.110437538	Metabolism
0.589014362	Proliferation/Metastasis
0.43597082	Metabolism
0.061912634	Metabolism
0.90260216	Metabolism
0.038236787	Metabolism
0.010828379	Metabolism
0.655240341	Metabolism
0.009831864	Metabolism
0.899947039	Metabolism
0.417849402	Metabolism
0.110795426	Metabolism
0.394108506	Metabolism
0.121740026	Metabolism
0.238066842	Metabolism
0.139483241	Metabolism
0.176538688	TME
0.347560861	Proliferation/Metastasis
0.58226882	Metabolism
0.941178739	Proliferation/Metastasis
0.251219709	TME
0.554989766	Proliferation/Metastasis
0.296991996	Proliferation/Metastasis
0.103550645	TME
0.603372212	TME
0.921928074	Metabolism

0.133719853	Metabolism
0.019009979	Proliferation/Metastasis
2.34E-05	Proliferation/Metastasis
0.127659088	Proliferation/Metastasis
0.964300313	Metabolism
0.083345959	Metabolism
0.086523504	Metabolism
0.417839952	Proliferation/Metastasis
0.17119826	TME
0.037303052	TME
0.896664116	Metabolism
0.561661482	Proliferation/Metastasis
0.335560175	Metabolism
0.537542233	TME
0.050475411	TME
0.590138354	TME
0.777680165	TME
0.951322832	Metabolism
0.222119302	TME
0.356007788	Proliferation/Metastasis
0.49497797	TME
0.923593396	Proliferation/Metastasis
1.10E-05	Proliferation/Metastasis
0.121820521	Metabolism
4.84E-06	Proliferation/Metastasis
0.92416896	TME
0.823882088	Metabolism
0.110121861	TME
0.322681516	TME
0.329184813	TME
0.888699631	TME
0.273428847	TME
0.182372719	TME
0.093575385	Metabolism
0.194812097	TME
0.604722389	Metabolism
0.033359279	Metabolism
0.352726854	Proliferation/Metastasis
0.423704085	Proliferation/Metastasis
1.64E-05	Metabolism
0.198973677	Metabolism
0.409471629	Metabolism
0.58666802	Metabolism

0.731798862	Proliferation/Metastasis
0.027972922	Proliferation/Metastasis
0.393949782	Metabolism
0.487278889	Metabolism
0.852680346	Metabolism
0.515108215	TME
0.062128395	Metabolism
0.159316241	Metabolism
0.282014941	Metabolism
0.401223969	Metabolism
0.194264759	Proliferation/Metastasis
0.169559905	Metabolism
0.661714312	Metabolism
0.388400984	Metabolism
0.000876918	Metabolism
0.000149302	Metabolism
0.012137346	Metabolism
0.393154821	Proliferation/Metastasis
0.860363798	Metabolism
0.981381533	Metabolism
0.004317618	Proliferation/Metastasis
0.00173998	Metabolism
0.963553494	Metabolism
0.155798083	Metabolism
0.949644404	Metabolism
0.118604069	Metabolism
0.664827137	Metabolism
0.347199498	Metabolism
0.044904297	Metabolism
0.4280486	TME
0.528083783	TME
0.846251661	TME
0.582763971	TME
0.900558125	TME
0.063506884	Metabolism
0.119779724	Metabolism
0.471801481	Proliferation/Metastasis
0.925822941	Metabolism
0.319755244	Proliferation/Metastasis
0.876631813	Metabolism
0.668754824	TME
0.272551173	Metabolism
0.856553787	Metabolism

0.136892768	Metabolism
0.203136937	Metabolism
0.112778187	TME
0.803063761	TME
0.258666138	Proliferation/Metastasis
0.958276414	Metabolism
0.000572062	Proliferation/Metastasis
0.230623881	Proliferation/Metastasis
0.683891088	TME
0.142928951	TME
0.048892583	TME
0.269450699	TME
0.15331782	Metabolism
0.098600959	Proliferation/Metastasis
0.014148079	Metabolism
0.09278796	Metabolism
0.413149628	Proliferation/Metastasis
0.920986702	Proliferation/Metastasis
0.002806391	Metabolism
0.050006924	Metabolism
0.957809315	Metabolism
0.112365919	Metabolism
0.097508438	TME
0.35569665	TME
0.860486823	TME
0.191391256	TME
0.129842055	TME
0.206238337	Metabolism
0.47227613	Metabolism
0.00468321	Metabolism
0.003455149	Metabolism
0.344707493	Metabolism
0.185654545	TME
0.486196384	TME
0.308917297	TME
0.04902251	TME
0.050016948	TME
0.342118428	TME
0.301705295	TME
0.243881818	TME
0.024855674	TME
0.027702884	Proliferation/Metastasis
0.000920472	Proliferation/Metastasis

0.878143921	Metabolism
0.506078839	Metabolism
0.682415037	TME
0.283330561	Metabolism
0.000226496	Metabolism
0.064192526	TME
0.00227921	Proliferation/Metastasis
0.814908655	Proliferation/Metastasis
0.154233678	TME
0.001696836	Metabolism
0.000273204	Metabolism
0.205344514	Proliferation/Metastasis
0.413778763	Proliferation/Metastasis
0.037888507	TME
0.087610838	TME
0.011169819	TME
0.154910953	TME
0.004616679	Proliferation/Metastasis
0.232813542	TME
0.0776459	TME
0.278474623	Metabolism
0.045364585	TME
0.052295727	TME
0.449863477	TME
0.07897343	TME
0.073677276	Metabolism
0.103323021	Metabolism
0.017854254	Metabolism
0.444987826	TME
0.037537665	Metabolism
0.519718163	TME
0.751272313	TME
0.073013611	TME
0.28628051	TME
0.011174672	TME
0.003954632	Metabolism
0.019109226	Proliferation/Metastasis
0.024181529	Metabolism
0.013955939	Proliferation/Metastasis
0.012477029	Metabolism
0.76421901	Metabolism
0.05349197	Metabolism
0.045394512	Metabolism

0.020048376	Metabolism
0.863537195	Metabolism
0.652554227	Metabolism
0.952458597	Metabolism
0.968357623	Metabolism
0.214871598	Metabolism
0.568307038	Metabolism
0.000444113	Metabolism
3.05E-05	Metabolism
0.013017109	Metabolism
0.089166655	TME
0.004013182	Proliferation/Metastasis
0.36453748	Metabolism
0.975553963	Proliferation/Metastasis
0.112265	TME
0.178212018	Proliferation/Metastasis
0.002361343	Proliferation/Metastasis
0.483585235	TME
0.956477744	TME
0.000272468	Metabolism
4.75E-06	Metabolism
0.651799323	Proliferation/Metastasis
0.046812251	Proliferation/Metastasis
0.100386894	Proliferation/Metastasis
0.00066516	Metabolism
0.004874501	Metabolism
0.071687021	Metabolism
0.504585795	Proliferation/Metastasis
0.012266677	TME
0.32683162	TME
0.036434843	Metabolism
0.000272939	Proliferation/Metastasis
2.89E-05	Metabolism
0.931111224	TME
0.042377223	TME
0.396505312	TME
0.282126375	TME
0.00136168	Metabolism
0.121068863	TME
2.03E-05	Proliferation/Metastasis
0.134537775	TME
4.49E-05	Proliferation/Metastasis
0.904024509	Proliferation/Metastasis

0.035775944	Metabolism
0.176588837	Proliferation/Metastasis
0.02195637	TME
0.85285878	Metabolism
0.574730468	TME
0.109532166	TME
0.284654755	TME
0.194738951	TME
0.646999781	TME
0.019245889	TME
0.72007067	Metabolism
0.271888901	TME
0.822079235	Metabolism
0.866139304	Metabolism
0.001310038	Proliferation/Metastasis
0.887670802	Proliferation/Metastasis
0.648267416	Metabolism
0.970389752	Metabolism
0.030585075	Metabolism
8.49E-05	Metabolism
0.532572142	Proliferation/Metastasis
0.519045279	Proliferation/Metastasis
0.246336789	Metabolism
0.006150507	Metabolism
0.091705674	Metabolism
0.798774442	TME
0.111317017	Metabolism
0.986524033	Metabolism
0.877486837	Metabolism
0.008379438	Metabolism
0.010847918	Proliferation/Metastasis
0.000849051	Metabolism
0.236260433	Metabolism
0.122439605	Metabolism
0.017942102	Metabolism
0.008069715	Metabolism
0.026319942	Metabolism
0.954821352	Proliferation/Metastasis
0.002273633	Metabolism
0.092905691	Metabolism
0.003897947	Proliferation/Metastasis
0.006442121	Metabolism
9.95E-05	Metabolism

0.014172538	Metabolism
0.009886352	Metabolism
0.009324546	Metabolism
0.001629614	Metabolism
0.005395789	Metabolism
0.001917176	Metabolism
0.079814007	TME
0.126680988	TME
0.002157884	TME
0.018640843	TME
0.193436363	TME
0.240028795	Metabolism
0.001522637	Metabolism
7.94E-05	Proliferation/Metastasis
0.011962789	Metabolism
0.022022136	Proliferation/Metastasis
0.416006734	Metabolism
0.640911707	TME
0.000694074	Metabolism
2.62E-05	Metabolism
0.539718531	Metabolism
0.052535168	Metabolism
0.877509294	TME
0.289354995	TME
0.197044653	Proliferation/Metastasis
0.037984968	Metabolism
0.067947906	Proliferation/Metastasis
0.005263087	Proliferation/Metastasis
0.5245514	TME
0.277799819	TME
0.030966817	TME
0.301276449	TME
0.484531766	Metabolism
0.007001452	Proliferation/Metastasis
2.90E-05	Metabolism
0.000137957	Metabolism
1.53E-05	Proliferation/Metastasis
0.001451851	Proliferation/Metastasis
3.95E-07	Metabolism
2.48E-09	Metabolism
0.159419791	Metabolism
0.032671924	Metabolism
0.269352801	TME

0.878329147	TME
0.000263556	TME
0.179863264	TME
8.24E-09	TME
0.000364762	Metabolism
0.002698704	Metabolism
0.822149273	Metabolism
0.019778972	Metabolism
0.000529584	Metabolism
0.425359904	TME
0.176004098	TME
0.867222633	TME
0.051019002	TME
0.042022775	TME
0.163236833	TME
0.121744321	TME
0.429571906	TME
0.065928179	TME
0.00057299	Proliferation/Metastasis
1.54E-07	Proliferation/Metastasis
0.310957021	Metabolism
0.588118358	Metabolism
0.326727299	TME
0.000595671	Metabolism
6.98E-05	Metabolism
0.775546247	TME
0.002316723	Proliferation/Metastasis
0.187662931	Proliferation/Metastasis
0.260169337	TME
1.46E-06	Metabolism
1.15E-07	Metabolism
0.003182688	Proliferation/Metastasis
0.023967288	Proliferation/Metastasis
0.03761508	TME
0.340340129	TME
0.022140203	TME
0.004824404	TME
0.002003696	Proliferation/Metastasis
0.923460309	TME
0.713515154	TME
0.045498137	Metabolism
0.312920851	TME
0.178851928	TME

0.174065304	TME
0.003302923	TME
0.161167297	Metabolism
0.011459827	Metabolism
0.01508995	Metabolism
0.054045118	TME
0.001176674	Metabolism
0.021747148	TME
0.099883573	TME
0.120897321	TME
0.521566864	TME
0.091068284	TME
3.41E-06	Metabolism
0.000135989	Proliferation/Metastasis
3.92E-06	Metabolism
0.011707952	Proliferation/Metastasis
1.70E-07	Metabolism
0.024334813	Metabolism
9.30E-05	Metabolism
0.000138485	Metabolism
1.92E-05	Metabolism
0.001428476	Metabolism
0.010327246	Metabolism
0.920063189	Metabolism
0.000749022	Metabolism
0.041335615	Metabolism
9.26E-06	Metabolism
1.37E-06	Metabolism
0.230752059	Metabolism
0.016045523	Metabolism
0.396226216	TME
0.596395303	Proliferation/Metastasis
8.99E-05	Metabolism
5.78E-06	Proliferation/Metastasis
0.099812371	TME
0.134190918	Proliferation/Metastasis
0.494252489	Proliferation/Metastasis
0.08891386	TME
0.006923684	TME
0.000369013	Metabolism
0.000209745	Metabolism
0.486117285	Proliferation/Metastasis
0.001156772	Proliferation/Metastasis

0.091904742	Proliferation/Metastasis
0.001073247	Metabolism
0.286951311	Metabolism
0.000616031	Metabolism
0.012071644	Proliferation/Metastasis
0.989237747	TME
0.970058434	TME
0.969684008	Metabolism
0.024468455	Proliferation/Metastasis
5.12E-05	Metabolism
0.506213082	TME
0.703758853	TME
4.00E-06	TME
0.181396479	TME
3.71E-08	Metabolism
3.58E-05	TME
1.76E-09	Proliferation/Metastasis
0.086124089	TME
8.42E-05	Proliferation/Metastasis
0.147500786	Proliferation/Metastasis
0.611386062	Metabolism
0.579550352	Proliferation/Metastasis
0.2736489	TME
0.5225248	Metabolism
0.076158999	TME
0.01844766	TME
0.00101186	TME
0.488863257	TME
0.038685466	TME
0.081185403	TME
0.005832274	Metabolism
0.003443623	TME
0.026417705	Metabolism
0.186702352	Metabolism
0.113149933	Proliferation/Metastasis
5.28E-05	Proliferation/Metastasis
0.126356267	Metabolism
0.01119676	Metabolism
0.592736034	Metabolism
9.69E-08	Metabolism
2.13E-06	Proliferation/Metastasis
0.668750193	Proliferation/Metastasis
0.004429436	Metabolism

0.003948788	Metabolism
0.00493725	Metabolism
0.026660626	TME
0.004607397	Metabolism
0.740735055	Metabolism
0.859665075	Metabolism
0.005963014	Metabolism
0.14647226	Proliferation/Metastasis
0.007665257	Metabolism
1.70E-05	Metabolism
0.636882856	Metabolism
0.206020061	Metabolism
0.319722874	Metabolism
0.002817716	Metabolism
0.058815835	Proliferation/Metastasis
6.88E-06	Metabolism
0.000389604	Metabolism
0.52396366	Proliferation/Metastasis
0.061895686	Metabolism
0.000644586	Metabolism
0.788634785	Metabolism
0.000219097	Metabolism
0.001065961	Metabolism
9.05E-08	Metabolism
3.43E-06	Metabolism
0.024992057	Metabolism
0.111618932	TME
0.662607023	TME
0.056415892	TME
0.086171535	TME
0.120011513	TME
0.007157046	Metabolism
0.000179796	Metabolism
0.000663128	Proliferation/Metastasis
0.000786719	Metabolism
0.1474022	Proliferation/Metastasis
0.004652065	Metabolism
0.000987996	TME
6.11E-05	Metabolism
0.00089695	Metabolism
1.24E-06	Metabolism
0.198138466	Metabolism
0.791624371	TME

0.284222539	TME
0.293103907	Proliferation/Metastasis
0.000117883	Metabolism
0.000418351	Proliferation/Metastasis
0.001000884	Proliferation/Metastasis
0.621120203	TME
0.138958664	TME
0.67740122	TME
0.129872957	TME
0.00180906	Metabolism
0.018456588	Proliferation/Metastasis
0.156951415	Metabolism
0.183948463	Metabolism
0.082720666	Proliferation/Metastasis
0.212534437	Proliferation/Metastasis
0.191745982	Metabolism
0.111022034	Metabolism
0.003325555	Metabolism
0.013902428	Metabolism
0.288951196	TME
0.376404944	TME
0.933401506	TME
0.139579485	TME
0.46316697	TME
0.152715077	Metabolism
0.008660009	Metabolism
0.166968434	Metabolism
0.053950575	Metabolism
0.741782427	Metabolism
0.739622966	TME
0.916987889	TME
0.694680174	TME
0.070336817	TME
0.622894278	TME
0.179155365	TME
0.475100485	TME
0.548481434	TME
0.564046396	TME
0.606780999	Proliferation/Metastasis
0.796897834	Proliferation/Metastasis
0.003860423	Metabolism
0.046491823	Metabolism
0.266055969	TME

0.759926307	Metabolism
0.910855701	Metabolism
0.007616371	TME
0.026649662	Proliferation/Metastasis
0.186858404	Proliferation/Metastasis
0.332626709	TME
0.154870806	Metabolism
0.018748783	Metabolism
0.421269387	Proliferation/Metastasis
0.34402	Proliferation/Metastasis
0.298696552	TME
0.513586969	TME
0.070079121	TME
0.948548823	TME
0.576371077	Proliferation/Metastasis
0.763073618	TME
0.18899277	TME
0.692269689	Metabolism
0.080919148	TME
0.25906408	TME
0.298593402	TME
0.274877506	TME
0.504778622	Metabolism
0.048188416	Metabolism
0.000390246	Metabolism
0.993918387	TME
0.197164346	Metabolism
0.010203106	TME
0.019040552	TME
0.107701332	TME
0.651951896	TME
0.001255412	TME
0.00263457	Metabolism
0.758661613	Proliferation/Metastasis
0.138621864	Metabolism
0.388562134	Proliferation/Metastasis
0.050028545	Metabolism
0.628436918	Metabolism
0.496645937	Metabolism
0.006173891	Metabolism
0.091132646	Metabolism
0.213132162	Metabolism
0.369046478	Metabolism

0.521302314	Metabolism
0.99677117	Metabolism
0.642631782	Metabolism
0.752369036	Metabolism
0.27147864	Metabolism
0.534356706	Metabolism
0.015029158	Metabolism
0.520237628	TME
0.497596127	Proliferation/Metastasis
0.644903244	Metabolism
0.163764474	Proliferation/Metastasis
0.118777456	TME
0.737214753	Proliferation/Metastasis
0.331761715	Proliferation/Metastasis
0.561454391	TME
0.797148361	TME
0.111057115	Metabolism
0.32489762	Metabolism
0.016162298	Proliferation/Metastasis
0.057071607	Proliferation/Metastasis
0.475796891	Proliferation/Metastasis
0.285314865	Metabolism
0.588218146	Metabolism
0.309346708	Metabolism
0.470034958	Proliferation/Metastasis
0.866074966	TME
0.198293423	TME
0.217105023	Metabolism
0.816604827	Proliferation/Metastasis
0.291233531	Metabolism
0.067372416	TME
0.005751675	TME
0.448915694	TME
0.979609503	TME
0.101605586	Metabolism
0.507365002	TME
0.928356104	Proliferation/Metastasis
0.348699351	TME
0.414037436	Proliferation/Metastasis
0.057850148	Proliferation/Metastasis
0.280451855	Metabolism
0.017286691	Proliferation/Metastasis
0.203556743	TME

0.476224491	Metabolism
0.195984992	TME
0.035933416	TME
0.110686236	TME
0.392408017	TME
0.765340173	TME
0.239164661	TME
0.80613062	Metabolism
0.77772954	TME
0.89373442	Metabolism
0.191587037	Metabolism
0.411482828	Proliferation/Metastasis
0.595769872	Proliferation/Metastasis
0.058717462	Metabolism
0.146753636	Metabolism
0.724588603	Metabolism
0.121865313	Metabolism
0.40368886	Proliferation/Metastasis
0.127608621	Proliferation/Metastasis
0.641350327	Metabolism
0.015520683	Metabolism
0.156281868	Metabolism
0.689444712	TME
0.015756698	Metabolism
0.209629246	Metabolism
0.017643917	Metabolism
0.659026971	Metabolism
0.661817445	Proliferation/Metastasis
0.001506845	Metabolism
0.429079726	Metabolism
0.281931915	Metabolism
0.030477286	Metabolism
0.004052986	Metabolism
0.022919142	Metabolism
0.359690955	Proliferation/Metastasis
0.29780203	Metabolism
0.806167307	Metabolism
0.002711713	Proliferation/Metastasis
0.980956816	Metabolism
0.63359212	Metabolism
0.935360373	Metabolism
0.272533961	Metabolism
0.174758376	Metabolism

0.24967663	Metabolism
0.419627242	Metabolism
0.004887239	Metabolism
0.232987803	TME
0.165356217	TME
0.117293312	TME
0.158476616	TME
0.438807992	TME
0.362268039	Metabolism
0.013196576	Metabolism
0.376593851	Proliferation/Metastasis
0.056066322	Metabolism
0.684280739	Proliferation/Metastasis
0.120720596	Metabolism
0.236946736	TME
0.00975272	Metabolism
0.197818237	Metabolism
0.219521987	Metabolism
0.027103442	Metabolism
0.413458351	TME
0.489516771	TME
0.974157096	Proliferation/Metastasis
0.082291138	Metabolism
0.048286143	Proliferation/Metastasis
0.728634888	Proliferation/Metastasis
0.242390675	TME
0.28882022	TME
0.190212493	TME
0.112414517	TME
0.081021416	Metabolism
0.820288631	Proliferation/Metastasis
0.000101078	Metabolism
0.090058009	Metabolism
0.62274645	Proliferation/Metastasis
0.260255101	Proliferation/Metastasis
7.81E-05	Metabolism
0.269199031	Metabolism
0.038526072	Metabolism
0.007722824	Metabolism
0.907245918	TME
0.790652229	TME
0.026964521	TME
0.108196968	TME

6.65E-07	TME
0.049253209	Metabolism
0.1069526	Metabolism
0.147713052	Metabolism
0.239758913	Metabolism
0.060827333	Metabolism
0.354712175	TME
0.012144216	TME
0.16494155	TME
0.455400748	TME
0.144797252	TME
0.385814413	TME
0.327499234	TME
0.898381094	TME
0.24420426	TME
0.284452648	Proliferation/Metastasis
0.000221874	Proliferation/Metastasis
0.850036295	Metabolism
0.066278376	Metabolism
0.194859127	TME
0.401106474	Metabolism
0.150845815	Metabolism
0.721457959	TME
0.963270235	Proliferation/Metastasis
0.01405717	Proliferation/Metastasis
0.499811679	TME
0.468954982	Metabolism
0.365668512	Metabolism
0.017822322	Proliferation/Metastasis
0.49485742	Proliferation/Metastasis
0.349043351	TME
0.135815519	TME
0.340272916	TME
0.129619551	TME
0.4360692	Proliferation/Metastasis
0.179189274	TME
0.670436549	TME
0.001684343	Metabolism
0.957672736	TME
0.535984334	TME
0.396429432	TME
0.545675805	TME
0.432549039	Metabolism

0.248074615	Metabolism
0.000165441	Metabolism
0.669727056	TME
0.634886152	Metabolism
0.590043538	TME
0.779761302	TME
0.787447492	TME
0.996504204	TME
0.048951769	TME
0.155610777	Metabolism
0.030788666	Proliferation/Metastasis
0.295566228	Metabolism
0.002314488	Proliferation/Metastasis
0.686319188	Metabolism
0.635960239	Metabolism
0.044795351	Metabolism
0.871257692	Metabolism
0.046795416	Metabolism
0.73677423	Metabolism
0.712660331	Metabolism
0.240830155	Metabolism
0.029307902	Metabolism
0.116548794	Metabolism
0.68930462	Metabolism
0.236849286	Metabolism
0.007692356	Metabolism
0.002709758	Metabolism
0.355420056	TME
0.223633051	Proliferation/Metastasis
0.061283337	Metabolism
4.15E-07	Proliferation/Metastasis
0.612758931	TME
0.022965395	Proliferation/Metastasis
0.024723217	Proliferation/Metastasis
0.457743075	TME
0.001921092	TME
0.75636948	Metabolism
0.823952528	Metabolism
4.65E-05	Proliferation/Metastasis
0.358046233	Proliferation/Metastasis
0.01086176	Proliferation/Metastasis
0.002213187	Metabolism
0.000311151	Metabolism

0.001715425	Metabolism
0.573337795	Proliferation/Metastasis
0.909990657	TME
0.453892547	TME
0.000417119	Metabolism
0.011490284	Proliferation/Metastasis
0.035057044	Metabolism
0.654550739	TME
0.036919807	TME
0.659289339	TME
0.441472152	TME
0.37326642	Metabolism
5.28E-05	TME
0.308308013	Proliferation/Metastasis
0.002370802	TME
0.025208302	Proliferation/Metastasis
0.34978283	Proliferation/Metastasis
0.332516797	Metabolism
0.959012583	Proliferation/Metastasis
0.462005596	TME
0.000657271	Metabolism
0.728193081	TME
0.771368402	TME
0.652759472	TME
0.601666711	TME
0.264835628	TME
0.651514036	TME
0.0005998	Metabolism
7.51E-06	TME
0.134769927	Metabolism
0.222959548	Metabolism
0.000638217	Proliferation/Metastasis
0.005879109	Proliferation/Metastasis
0.000442928	Metabolism
0.009579512	Metabolism
0.044836078	Metabolism
0.24088932	Metabolism
1.79E-10	Proliferation/Metastasis
0.04746092	Proliferation/Metastasis
0.328455445	Metabolism
0.014422497	Metabolism
0.347124924	Metabolism
0.149453337	TME

0.025690867	Metabolism
0.224171649	Metabolism
0.004177164	Metabolism
0.272371824	Metabolism
0.000271969	Proliferation/Metastasis
0.064038065	Metabolism
0.170991401	Metabolism
0.013296191	Metabolism
0.175288062	Metabolism
0.791182052	Metabolism
0.397988573	Metabolism
0.92283357	Proliferation/Metastasis
0.427125995	Metabolism
0.051346042	Metabolism
0.000883619	Proliferation/Metastasis
4.55E-09	Metabolism
0.056679035	Metabolism
0.086135973	Metabolism
0.005894604	Metabolism
0.025997975	Metabolism
0.578631698	Metabolism
0.098548595	Metabolism
0.991884396	Metabolism
0.407664111	TME
0.590199528	TME
0.23522445	TME
0.646281904	TME
0.441727191	TME
0.90705452	Metabolism
0.000324057	Metabolism
0.085797652	Proliferation/Metastasis
0.870889314	Metabolism
0.000556539	Proliferation/Metastasis
0.001420104	Metabolism
6.32E-07	TME
0.200636752	Metabolism
0.027960327	Metabolism
0.715571241	Metabolism
0.02279995	Metabolism
0.204259701	TME
0.623834624	TME
1.64E-06	Proliferation/Metastasis
0.398219154	Metabolism

0.769937818	Proliferation/Metastasis
0.129427302	Proliferation/Metastasis
0.038442636	TME
0.66790784	TME
0.908856846	TME
0.518595327	TME
0.321553625	Metabolism
0.004675426	Proliferation/Metastasis
0.01616319	Metabolism
0.415780116	Metabolism
0.698597135	Proliferation/Metastasis
0.170201648	Proliferation/Metastasis
0.256145812	Metabolism
0.149904478	Metabolism
0.043909644	Metabolism
0.539929468	Metabolism
0.059897631	TME
0.359502442	TME
0.084493284	TME
0.624401277	TME
0.062562831	TME
0.212583199	Metabolism
0.581110978	Metabolism
0.812763402	Metabolism
0.441833035	Metabolism
7.55E-06	Metabolism
0.011574836	TME
0.000347014	TME
0.201535793	TME
0.715805532	TME
0.193621705	TME
0.772712477	TME
0.691761665	TME
0.161850141	TME
0.365906669	TME
0.007500891	Proliferation/Metastasis
0.910317826	Proliferation/Metastasis
0.747959471	Metabolism
0.111741998	Metabolism
0.279348682	TME
0.712139118	Metabolism
0.616276317	Metabolism
0.543011385	TME

6.54E-05	Proliferation/Metastasis
0.000234684	Proliferation/Metastasis
0.597304326	TME
0.239562069	Metabolism
0.174558382	Metabolism
0.018023243	Proliferation/Metastasis
0.252262916	Proliferation/Metastasis
0.435749097	TME
0.659426869	TME
0.94948112	TME
0.873421921	TME
0.201590223	Proliferation/Metastasis
0.76571822	TME
0.462653632	TME
6.77E-05	Metabolism
0.391908528	TME
0.950252685	TME
0.471845525	TME
0.462699471	TME
0.004799631	Metabolism
0.1761104	Metabolism
0.445838066	Metabolism
0.564156782	TME
0.069262712	Metabolism
0.635393389	TME
0.136435996	TME
0.830525955	TME
0.399897661	TME
0.583755097	TME
0.116526391	Metabolism
0.195168889	Proliferation/Metastasis
0.894017647	Metabolism
0.399147992	Proliferation/Metastasis
0.032836568	Metabolism
0.043754826	Metabolism
0.007995932	Metabolism
0.000224669	Metabolism
0.717872302	Metabolism
0.033417561	Metabolism
0.251339905	Metabolism
0.519048366	Metabolism
0.010675115	Metabolism
0.301314712	Metabolism

0.806884385	Metabolism
0.077629975	Metabolism
0.001880266	Metabolism
0.06793352	Metabolism
0.303692554	TME
0.947221866	Proliferation/Metastasis
0.200076137	Metabolism
0.702751619	Proliferation/Metastasis
0.748863668	TME
0.29065889	Proliferation/Metastasis
0.089444453	Proliferation/Metastasis
0.475209635	TME
0.521313688	TME
0.002805611	Metabolism
0.002180563	Metabolism
0.004461966	Proliferation/Metastasis
0.283805389	Proliferation/Metastasis
0.004788733	Proliferation/Metastasis
0.003131434	Metabolism
0.930265877	Metabolism
0.277415686	Metabolism
0.016404255	Proliferation/Metastasis
0.89305626	TME
0.825787518	TME
0.001344246	Metabolism
0.039140803	Proliferation/Metastasis
0.002298909	Metabolism
0.650846269	TME
0.929425782	TME
0.149745793	TME
0.239594814	TME
0.919106019	Metabolism
0.077350285	TME
0.147469142	Proliferation/Metastasis
0.230646736	TME
0.548146319	Proliferation/Metastasis
0.166034898	Proliferation/Metastasis
4.72E-06	Metabolism
0.039350493	Proliferation/Metastasis
0.335758282	TME
0.113212472	Metabolism
0.731039874	TME
0.369721983	TME

0.565597937	TME
0.962133711	TME
0.300247499	TME
0.903071056	TME
0.610133533	Metabolism
0.001683176	TME
0.060331428	Metabolism
0.000373091	Metabolism
0.025682162	Proliferation/Metastasis
0.454774395	Proliferation/Metastasis
0.169305233	Metabolism
0.155832778	Metabolism
0.015247479	Metabolism
0.003432273	Metabolism
0.608217416	Proliferation/Metastasis
0.530029497	Proliferation/Metastasis
0.030124752	Metabolism
0.590968109	Metabolism
0.761904651	Metabolism
0.659655373	TME
0.098584273	Metabolism
0.108151388	Metabolism
0.13402729	Metabolism
0.948303304	Metabolism
0.747378107	Proliferation/Metastasis
0.082170827	Metabolism
0.016166949	Metabolism
0.055055538	Metabolism
0.015342341	Metabolism
0.003188893	Metabolism
0.317952226	Metabolism
0.955934901	Proliferation/Metastasis
0.056541229	Metabolism
0.13396429	Metabolism
0.059788598	Proliferation/Metastasis
0.841681635	Metabolism
0.198658463	Metabolism
0.000362886	Metabolism
0.034647196	Metabolism
0.147838262	Metabolism
0.023970897	Metabolism
0.019851303	Metabolism
0.521247056	Metabolism

0.364924985	TME
0.561516567	TME
0.087988877	TME
0.120196327	TME
0.975725665	TME
0.397536166	Metabolism
0.179916162	Metabolism
0.067422825	Proliferation/Metastasis
0.379642532	Metabolism
0.09038929	Proliferation/Metastasis
0.065334605	Metabolism
0.171388236	TME
0.221720569	Metabolism
0.058078062	Metabolism
0.225585698	Metabolism
0.884265045	Metabolism
0.095850293	TME
0.227173577	TME
0.003343301	Proliferation/Metastasis
0.101615838	Metabolism
0.946121596	Proliferation/Metastasis
0.029172033	Proliferation/Metastasis
0.010881449	TME
0.000244078	TME
1.90E-06	TME
2.76E-06	TME
9.18E-05	Metabolism
2.43E-05	Proliferation/Metastasis
0.152000074	Metabolism
0.004219134	Metabolism
0.003385452	Proliferation/Metastasis
0.007582297	Proliferation/Metastasis
0.005228474	Metabolism
7.00E-05	Metabolism
0.34784712	Metabolism
0.131137473	Metabolism
8.90E-05	TME
5.93E-12	TME
4.52E-07	TME
0.00170256	TME
0.887602589	TME
0.862697445	Metabolism
0.000170599	Metabolism

0.069874103	Metabolism
0.051895444	Metabolism
0.37117166	Metabolism
1.05E-07	TME
0.08651851	TME
4.13E-08	TME
7.23E-08	TME
5.32E-06	TME
6.67E-09	TME
3.54E-08	TME
0.000128313	TME
1.95E-05	TME
3.06E-09	Proliferation/Metastasis
0.002427142	Proliferation/Metastasis
1.49E-05	Metabolism
2.96E-12	Metabolism
4.77E-08	TME
0.17803094	Metabolism
0.742169282	Metabolism
7.85E-08	TME
1.40E-14	Proliferation/Metastasis
1.98E-12	Proliferation/Metastasis
9.65E-06	TME
0.294945071	Metabolism
1.98E-07	Metabolism
4.11E-13	Proliferation/Metastasis
0.0002027	Proliferation/Metastasis
7.08E-10	TME
6.96E-09	TME
1.35E-08	TME
1.64E-06	TME
2.06E-05	Proliferation/Metastasis
4.26E-05	TME
2.46E-08	TME
0.000228504	Metabolism
6.91E-12	TME
1.34E-10	TME
2.71E-06	TME
0.569842212	TME
0.886100794	Metabolism
0.35369797	Metabolism
3.00E-07	Metabolism
9.13E-06	TME

0.000278326	Metabolism
1.57E-08	TME
2.28E-05	TME
2.78E-07	TME
0.017131722	TME
0.000431115	TME
0.00990054	Metabolism
9.91E-11	Proliferation/Metastasis
0.000621827	Metabolism
4.69E-05	Proliferation/Metastasis
1.20E-07	Metabolism
0.795309819	Metabolism
0.318967806	Metabolism
0.012319817	Metabolism
0.001572124	Metabolism
0.90326283	Metabolism
0.215283373	Metabolism
0.514966526	Metabolism
0.053003622	Metabolism
0.011545773	Metabolism
0.152174799	Metabolism
0.593915774	Metabolism
6.92E-06	Metabolism
8.08E-06	Metabolism
5.92E-06	TME
1.57E-05	Proliferation/Metastasis
0.179288355	Metabolism
0.281897409	Proliferation/Metastasis
2.48E-08	TME
1.06E-07	Proliferation/Metastasis
4.50E-08	Proliferation/Metastasis
0.000360404	TME
1.10E-05	TME
2.81E-07	Metabolism
1.59E-05	Metabolism
0.001149043	Proliferation/Metastasis
3.49E-14	Proliferation/Metastasis
1.15E-10	Proliferation/Metastasis
0.040834707	Metabolism
0.003515882	Metabolism
8.45E-06	Metabolism
0.006253538	Proliferation/Metastasis
3.07E-07	TME

9.64E-06	TME
0.039084944	Metabolism
4.87E-05	Proliferation/Metastasis
0.028504605	Metabolism
5.78E-09	TME
1.51E-06	TME
0.023723307	TME
1.31E-07	TME
0.633123936	Metabolism
0.721764892	TME
0.891116402	Proliferation/Metastasis
3.18E-08	TME
0.539666804	Proliferation/Metastasis
4.36E-10	Proliferation/Metastasis
0.006582649	Metabolism
5.55E-18	Proliferation/Metastasis
2.45E-09	TME
0.000493566	Metabolism
0.001518181	TME
1.54E-10	TME
9.32E-06	TME
3.74E-09	TME
0.712424872	TME
1.18E-11	TME
0.535662918	Metabolism
0.000257181	TME
0.038776259	Metabolism
0.359914333	Metabolism
5.90E-05	Proliferation/Metastasis
0.154534383	Proliferation/Metastasis
1.78E-10	Metabolism
0.848501721	Metabolism
0.484678552	Metabolism
1.27E-06	Metabolism
0.892916137	Proliferation/Metastasis
0.904500439	Proliferation/Metastasis
0.695189173	Metabolism
0.020551763	Metabolism
1.95E-06	Metabolism
0.000377981	TME
0.536577244	Metabolism
0.005191172	Metabolism
0.049931858	Metabolism

0.422460457	Metabolism
0.245825582	Proliferation/Metastasis
2.77E-05	Metabolism
0.010378757	Metabolism
0.178434008	Metabolism
1.12E-17	Metabolism
4.41E-18	Metabolism
1.38E-06	Metabolism
0.008870049	Proliferation/Metastasis
0.210876754	Metabolism
0.009016323	Metabolism
1.12E-07	Proliferation/Metastasis
3.10E-05	Metabolism
0.512416524	Metabolism
0.236594479	Metabolism
0.86825754	Metabolism
0.000469221	Metabolism
0.43122097	Metabolism
0.596891523	Metabolism
0.011732865	Metabolism
8.40E-09	TME
1.21E-07	TME
6.98E-07	TME
1.78E-08	TME
1.66E-07	TME
0.030362858	Metabolism
1.60E-05	Metabolism
0.00022135	Proliferation/Metastasis
0.166812771	Metabolism
0.001981013	Proliferation/Metastasis
0.415768353	Metabolism
0.641754893	TME
0.270423745	Metabolism
7.83E-10	Metabolism
0.92869243	Metabolism
0.00594635	Metabolism
0.000608748	TME
1.34E-05	TME
0.050432899	Proliferation/Metastasis
0.003279452	Metabolism
0.158023688	Proliferation/Metastasis
0.355374227	Proliferation/Metastasis
3.07E-05	TME

0.122402881	TME
0.29062351	TME
0.47132803	TME
0.824359753	Metabolism
0.474400548	Proliferation/Metastasis
0.179086293	Metabolism
0.064878359	Metabolism
0.110012564	Proliferation/Metastasis
0.096028428	Proliferation/Metastasis
0.000351436	Metabolism
0.188038008	Metabolism
0.539543228	Metabolism
0.269382115	Metabolism
0.589871047	TME
0.073611925	TME
0.753861557	TME
0.68141277	TME
0.002328079	TME
0.46928358	Metabolism
0.53582182	Metabolism
0.262158459	Metabolism
0.409652888	Metabolism
0.085742192	Metabolism
0.058241867	TME
0.348257676	TME
0.00269848	TME
0.083632974	TME
0.818670767	TME
0.621276237	TME
0.61620677	TME
0.29332209	TME
0.492046688	TME
0.805825616	Proliferation/Metastasis
0.163095604	Proliferation/Metastasis
0.879845683	Metabolism
0.74914139	Metabolism
0.14212702	TME
0.496759738	Metabolism
0.096614219	Metabolism
0.324816683	TME
0.509731322	Proliferation/Metastasis
0.985765972	Proliferation/Metastasis
0.435917789	TME

0.077111288	Metabolism
0.382705227	Metabolism
0.604366146	Proliferation/Metastasis
0.089055808	Proliferation/Metastasis
0.526281889	TME
0.014476354	TME
0.266710337	TME
0.422987511	TME
0.562204615	Proliferation/Metastasis
0.02207402	TME
0.187864542	TME
0.271625405	Metabolism
0.106178265	TME
0.136062989	TME
0.698712579	TME
0.418617964	TME
0.521579526	Metabolism
0.844226701	Metabolism
0.907198841	Metabolism
0.023127963	TME
0.167824204	Metabolism
0.215388156	TME
0.107133288	TME
0.03460101	TME
0.810095906	TME
0.580207865	TME
0.754311141	Metabolism
0.868285061	Proliferation/Metastasis
0.790699334	Metabolism
0.001273764	Proliferation/Metastasis
0.113228622	Metabolism
0.309644696	Metabolism
0.873630704	Metabolism
0.516661119	Metabolism
0.821536767	Metabolism
0.067207215	Metabolism
0.011522484	Metabolism
0.136113953	Metabolism
0.563642866	Metabolism
0.038075158	Metabolism
0.071797668	Metabolism
0.039448298	Metabolism
0.489527251	Metabolism

0.843550475	Metabolism
0.821618354	TME
0.000443097	Proliferation/Metastasis
0.273770714	Metabolism
0.000521875	Proliferation/Metastasis
0.171968084	TME
0.000902364	Proliferation/Metastasis
0.042537054	Proliferation/Metastasis
0.132288174	TME
0.256502579	TME
0.1084087	Metabolism
0.008580418	Metabolism
0.941727722	Proliferation/Metastasis
0.857854489	Proliferation/Metastasis
0.005950883	Proliferation/Metastasis
0.18413181	Metabolism
0.266874099	Metabolism
0.030705966	Metabolism
0.203399909	Proliferation/Metastasis
0.096590636	TME
0.039238791	TME
0.06794367	Metabolism
0.000306108	Proliferation/Metastasis
0.008921411	Metabolism
0.250546588	TME
0.114928142	TME
0.022347189	TME
0.268376776	TME
0.036760144	Metabolism
0.909860343	TME
0.341694775	Proliferation/Metastasis
0.043365248	TME
0.000821562	Proliferation/Metastasis
0.041764436	Proliferation/Metastasis
0.932673757	Metabolism
0.603198708	Proliferation/Metastasis
0.282047963	TME
0.121235084	Metabolism
0.056975088	TME
0.122720997	TME
0.111939999	TME
0.274536098	TME
0.94820754	TME

0.084683752	TME
0.004679251	Metabolism
0.072076634	TME
0.009702519	Metabolism
0.63775777	Metabolism
0.046905502	Proliferation/Metastasis
0.03694455	Proliferation/Metastasis
0.125694223	Metabolism
0.193893743	Metabolism
2.32E-05	Metabolism
0.300535855	Metabolism
0.000356368	Proliferation/Metastasis
0.007984626	Proliferation/Metastasis
0.507327157	Metabolism
0.154697302	Metabolism
0.411387076	Metabolism
0.279624776	TME
0.015174496	Metabolism
0.63196944	Metabolism
0.829436086	Metabolism
0.001481567	Metabolism
0.000218154	Proliferation/Metastasis
0.279938043	Metabolism
0.866619857	Metabolism
0.742358242	Metabolism
0.880486286	Metabolism
0.36160346	Metabolism
0.593298855	Metabolism
0.839654141	Proliferation/Metastasis
0.005953513	Metabolism
0.242743409	Metabolism
1.99E-05	Proliferation/Metastasis
0.288986626	Metabolism
0.716637494	Metabolism
0.706318015	Metabolism
0.043703755	Metabolism
0.459279132	Metabolism
0.029592466	Metabolism
0.966465435	Metabolism
0.737401658	Metabolism
0.377297481	TME
0.603778755	TME
0.086900575	TME

0.482939245	TME
0.761589092	TME
0.05193759	Metabolism
0.82215947	Metabolism
0.006865899	Proliferation/Metastasis
0.018766861	Metabolism
0.001426474	Proliferation/Metastasis
0.929138725	Metabolism
0.006224701	TME
0.000642752	Metabolism
0.454044043	Metabolism
0.682935159	Metabolism
0.501114213	Metabolism
0.460660531	TME
0.075708724	TME
0.000351161	Proliferation/Metastasis
0.065603619	Metabolism
0.118535846	Proliferation/Metastasis
0.346776122	Proliferation/Metastasis
0.373969697	TME
0.3584416	TME
0.292053059	TME
0.193060886	TME
0.229222298	Metabolism
0.089025684	Proliferation/Metastasis
0.26570895	Metabolism
0.00444838	Metabolism
0.974660761	Proliferation/Metastasis
0.050282517	Proliferation/Metastasis
0.049663353	Metabolism
0.568785099	Metabolism
0.486385883	Metabolism
0.007010903	Metabolism
0.208560209	TME
0.228080118	TME
0.000153834	TME
0.000102084	TME
2.16E-14	TME
0.327730185	Metabolism
0.285542298	Metabolism
4.21E-05	Metabolism
0.002543492	Metabolism
0.407905041	Metabolism

0.580791551	TME
4.16E-10	TME
0.223536265	TME
0.395820687	TME
0.638726891	TME
0.19545924	TME
0.270766577	TME
0.681463988	TME
0.583025809	TME
0.04285	Proliferation/Metastasis
0.103397886	Proliferation/Metastasis
0.799795748	Metabolism
0.873209456	Metabolism
0.178171672	TME
0.104170908	Metabolism
0.028895021	Metabolism
0.602890179	TME
0.058463458	Proliferation/Metastasis
0.988926257	Proliferation/Metastasis
0.039046349	TME
0.048079538	Metabolism
0.063695543	Metabolism
0.790648007	Proliferation/Metastasis
0.076854698	Proliferation/Metastasis
0.035869408	TME
0.011894789	TME
0.248597235	TME
0.556744928	TME
0.968781714	Proliferation/Metastasis
0.325985548	TME
0.790238944	TME
0.903334702	Metabolism
0.765051993	TME
0.514123398	TME
0.596876089	TME
0.048781247	TME
0.000423777	Metabolism
0.000904494	Metabolism
0.013549766	Metabolism
0.124942063	TME
0.545576689	Metabolism
0.530467744	TME
0.215777064	TME

0.120408222	TME
0.925060728	TME
0.158252847	TME
0.100438118	Metabolism
0.884962045	Proliferation/Metastasis
0.006734583	Metabolism
0.022550989	Proliferation/Metastasis
0.233402983	Metabolism
0.015608145	Metabolism
0.905772059	Metabolism
0.323331133	Metabolism
0.006838832	Metabolism
0.001179729	Metabolism
0.050585137	Metabolism
0.834684369	Metabolism
0.003361023	Metabolism
0.755594734	Metabolism
0.033149218	Metabolism
0.143977019	Metabolism
0.385848147	Metabolism
0.023516593	Metabolism
0.655920098	TME
0.02914532	Proliferation/Metastasis
0.01492103	Metabolism
4.65E-18	Proliferation/Metastasis
0.994733217	TME
0.001894436	Proliferation/Metastasis
0.015642532	Proliferation/Metastasis
0.622231743	TME
0.00121625	TME
0.102633405	Metabolism
0.34864344	Metabolism
0.169355325	Proliferation/Metastasis
0.002216582	Proliferation/Metastasis
0.033944243	Proliferation/Metastasis
0.978543167	Metabolism
3.56E-06	Metabolism
0.00304447	Metabolism
0.693321348	Proliferation/Metastasis
0.066262211	TME
0.002389082	TME
0.128431453	Metabolism
1.10E-05	Proliferation/Metastasis

0.13076734	Metabolism
0.145175278	TME
0.379755125	TME
0.039640432	TME
0.188996856	TME
0.28756474	Metabolism
6.37E-05	TME
0.139655278	Proliferation/Metastasis
0.003715063	TME
6.41E-06	Proliferation/Metastasis
5.03E-07	Proliferation/Metastasis
0.076289177	Metabolism
0.008811062	Proliferation/Metastasis
0.855925898	TME
6.99E-05	Metabolism
0.524767944	TME
0.266590714	TME
0.009548664	TME
0.720235793	TME
0.408311896	TME
0.992736531	TME
1.71E-10	Metabolism
0.00012262	TME
0.266059346	Metabolism
0.004174757	Metabolism
2.21E-07	Proliferation/Metastasis
0.00017411	Proliferation/Metastasis
0.117776602	Metabolism
1.59E-05	Metabolism
0.000374279	Metabolism
0.02684474	Metabolism
5.11E-21	Proliferation/Metastasis
8.56E-06	Proliferation/Metastasis
0.205388868	Metabolism
0.093888144	Metabolism
0.017428223	Metabolism
0.309053503	TME
0.173171517	Metabolism
0.534076885	Metabolism
0.355054634	Metabolism
0.163431353	Metabolism
1.10E-13	Proliferation/Metastasis
0.444324419	Metabolism

0.00570719	Metabolism
0.000199978	Metabolism
0.729051338	Metabolism
0.025774036	Metabolism
0.101667551	Metabolism
0.854654309	Proliferation/Metastasis
0.568946114	Metabolism
0.008884421	Metabolism
0.004165127	Proliferation/Metastasis
3.80E-11	Metabolism
0.107234381	Metabolism
0.094918678	Metabolism
0.00087971	Metabolism
0.035981535	Metabolism
0.717646676	Metabolism
0.058650938	Metabolism
0.421219205	Metabolism
0.080413895	TME
0.549740587	TME
0.010103487	TME
0.3481575	TME
0.311528388	TME
7.30E-05	Metabolism
0.068309996	Metabolism
0.051631488	Proliferation/Metastasis
0.005828691	Metabolism
1.10E-08	Proliferation/Metastasis
0.000882159	Metabolism
7.30E-14	TME
0.511344183	Metabolism
0.768747863	Metabolism
0.489251551	Metabolism
0.000874197	Metabolism
0.016480327	TME
0.339755758	TME
3.80E-07	Proliferation/Metastasis
0.091987584	Metabolism
0.015834546	Proliferation/Metastasis
0.033451359	Proliferation/Metastasis
0.539233843	TME
0.506483225	TME
0.294594148	TME
0.287510967	TME

0.049526557	Metabolism
0.002953313	Proliferation/Metastasis
0.874511906	Metabolism
0.000238328	Metabolism
0.087149586	Proliferation/Metastasis
0.449335469	Proliferation/Metastasis
0.852934139	Metabolism
0.004502339	Metabolism
0.036337438	Metabolism
0.693178914	Metabolism
0.162979033	TME
0.149402254	TME
0.064801228	TME
0.133977314	TME
0.112253919	TME
0.577491779	Metabolism
0.002436528	Metabolism
0.627884364	Metabolism
0.689469011	Metabolism
0.176672638	Metabolism
0.180806589	TME
0.06751264	TME
0.956170969	TME
0.673536778	TME
0.426524862	TME
0.194872691	TME
0.210155659	TME
0.895640906	TME
0.88746943	TME
4.63E-05	Proliferation/Metastasis
0.155753468	Proliferation/Metastasis
0.043258571	Metabolism
0.013654205	Metabolism
0.291448154	TME
0.021257847	Metabolism
0.603415791	Metabolism
0.653692525	TME
0.010458491	Proliferation/Metastasis
0.017155122	Proliferation/Metastasis
0.312981999	TME
0.970549308	Metabolism
0.01931043	Metabolism
0.004023521	Proliferation/Metastasis

0.19309022	Proliferation/Metastasis
0.116884976	TME
0.474033308	TME
0.368347037	TME
0.419356759	TME
0.004739736	Proliferation/Metastasis
0.704853173	TME
0.643091687	TME
0.539746029	Metabolism
0.195176704	TME
0.205680091	TME
0.446787892	TME
0.575646916	TME
0.715226884	Metabolism
0.896980951	Metabolism
0.000946751	Metabolism
0.952152217	TME
0.089925744	Metabolism
0.231342028	TME
0.558737389	TME
0.557219295	TME
0.46965799	TME
0.781748047	TME
0.009156259	Metabolism
0.000978704	Proliferation/Metastasis
0.000825184	Metabolism
0.656729145	Proliferation/Metastasis
0.000653533	Metabolism
0.584025733	Metabolism
0.359884338	Metabolism
0.01935276	Metabolism
0.005052744	Metabolism
0.300934151	Metabolism
0.648901764	Metabolism
0.218646531	Metabolism
0.073804849	Metabolism
0.110785318	Metabolism
0.430291927	Metabolism
0.680923343	Metabolism
0.078194821	Metabolism
0.009841895	Metabolism
0.976241732	TME
0.804083038	Proliferation/Metastasis

0.506840024	Metabolism
0.023098716	Proliferation/Metastasis
0.601972039	TME
0.419660338	Proliferation/Metastasis
0.317453284	Proliferation/Metastasis
0.404945442	TME
0.73330633	TME
0.274757321	Metabolism
0.605638783	Metabolism
0.041388126	Proliferation/Metastasis
0.001514048	Proliferation/Metastasis
0.892997241	Proliferation/Metastasis
0.486088738	Metabolism
0.076072036	Metabolism
0.045845466	Metabolism
0.023230612	Proliferation/Metastasis
0.885538377	TME
0.398081959	TME
0.347452872	Metabolism
0.187764137	Proliferation/Metastasis
0.11695744	Metabolism
0.304652957	TME
0.811586513	TME
0.788694009	TME
0.189198345	TME
0.538023853	Metabolism
0.011362683	TME
0.003469928	Proliferation/Metastasis
0.542657748	TME
0.003939527	Proliferation/Metastasis
1.06E-05	Proliferation/Metastasis
0.363950251	Metabolism
0.005226575	Proliferation/Metastasis
0.637507127	TME
0.115242831	Metabolism
0.550014085	TME
0.345411095	TME
0.153391181	TME
0.512408485	TME
0.708204039	TME
0.31331061	TME
0.050176128	Metabolism
0.577261896	TME

0.514699951	Metabolism
0.106652142	Metabolism
0.204597718	Proliferation/Metastasis
0.349562477	Proliferation/Metastasis
0.000187363	Metabolism
0.943249038	Metabolism
0.662861409	Metabolism
0.028454058	Metabolism
0.000903705	Proliferation/Metastasis
0.000388603	Proliferation/Metastasis
0.050415371	Metabolism
0.079986456	Metabolism
0.001344915	Metabolism
0.358488777	TME
0.361520068	Metabolism
0.933930023	Metabolism
0.685935285	Metabolism
0.036436245	Metabolism
3.22E-06	Proliferation/Metastasis
0.009109072	Metabolism
0.01455212	Metabolism
0.944986747	Metabolism
0.004956804	Metabolism
0.00892881	Metabolism
0.025112659	Metabolism
0.267974414	Proliferation/Metastasis
0.953823922	Metabolism
0.391239697	Metabolism
0.406745935	Proliferation/Metastasis
0.551930486	Metabolism
0.024936351	Metabolism
0.880343313	Metabolism
0.019167079	Metabolism
0.000437474	Metabolism
0.461433038	Metabolism
0.688506162	Metabolism
0.952058686	Metabolism
0.142198936	TME
0.590778085	TME
0.335872945	TME
0.219787883	TME
0.231959688	TME
0.20138696	Metabolism

0.020003404	Metabolism
0.293042974	Proliferation/Metastasis
0.476433571	Metabolism
0.461024995	Proliferation/Metastasis
0.95684704	Metabolism
0.089887168	TME
0.377363909	Metabolism
0.007073144	Metabolism
0.811218482	Metabolism
0.495793353	Metabolism
0.769163314	TME
0.715717185	TME
0.008291902	Proliferation/Metastasis
0.396980757	Metabolism
0.158201071	Proliferation/Metastasis
0.216469845	Proliferation/Metastasis
0.432606602	TME
0.00021696	TME
0.00183502	TME
0.000127539	TME
0.878562606	Metabolism
0.001382669	Proliferation/Metastasis
0.640283338	Metabolism
0.0069136	Metabolism
0.003231691	Proliferation/Metastasis
0.000162459	Proliferation/Metastasis
4.40E-06	Metabolism
2.86E-05	Metabolism
9.76E-05	Metabolism
0.126445844	Metabolism
6.44E-05	TME
8.60E-05	TME
8.58E-06	TME
0.075805614	TME
4.82E-05	TME
0.016168438	Metabolism
0.458220253	Metabolism
0.457955171	Metabolism
0.615363329	Metabolism
0.193361341	Metabolism
0.008063136	TME
2.39E-07	TME
0.000108215	TME

0.001278557	TME
0.00023979	TME
0.000565786	TME
0.000195718	TME
9.06E-06	TME
4.86E-06	TME
0.001430133	Proliferation/Metastasis
6.28E-07	Proliferation/Metastasis
0.030986756	Metabolism
0.205973908	Metabolism
0.00434356	TME
0.874372983	Metabolism
0.488677889	Metabolism
0.000109326	TME
0.177064528	Proliferation/Metastasis
0.048809777	Proliferation/Metastasis
0.00261305	TME
0.002754586	Metabolism
0.002202732	Metabolism
0.005251629	Proliferation/Metastasis
0.007442649	Proliferation/Metastasis
0.00982	TME
0.001493377	TME
0.000703718	TME
0.000176475	TME
0.12255669	Proliferation/Metastasis
3.98E-09	TME
0.000122736	TME
0.182143337	Metabolism
0.015856044	TME
0.002783472	TME
0.000186731	TME
6.67E-06	TME
0.762728036	Metabolism
0.039197426	Metabolism
0.000191658	Metabolism
1.57E-06	TME
0.011777301	Metabolism
0.001091088	TME
0.000434196	TME
0.000488066	TME
0.005284647	TME
0.901244626	TME

0.18146551	Metabolism
9.99E-05	Proliferation/Metastasis
0.010739146	Metabolism
0.773873692	Proliferation/Metastasis
8.96E-05	Metabolism
0.540864254	Metabolism
0.030425966	Metabolism
0.110569129	Metabolism
0.055159856	Metabolism
0.065265686	Metabolism
0.220851265	Metabolism
0.002128	Metabolism
0.000917934	Metabolism
1.21E-06	Metabolism
9.51E-08	Metabolism
0.185262908	Metabolism
0.106930979	Metabolism
0.016500424	Metabolism
0.00036121	TME
0.035125308	Proliferation/Metastasis
0.011285181	Metabolism
0.035895948	Proliferation/Metastasis
9.53E-05	TME
4.10E-05	Proliferation/Metastasis
0.001235552	Proliferation/Metastasis
0.090881529	TME
5.96E-06	TME
0.243900521	Metabolism
0.051440314	Metabolism
0.208420636	Proliferation/Metastasis
0.018947028	Proliferation/Metastasis
5.51E-05	Proliferation/Metastasis
0.945253816	Metabolism
0.40045256	Metabolism
3.65E-07	Metabolism
0.000127492	Proliferation/Metastasis
7.43E-05	TME
1.01E-06	TME
0.013312193	Metabolism
0.041192475	Proliferation/Metastasis
0.729594398	Metabolism
0.000184532	TME
0.014088417	TME

1.45E-07	TME
0.000200186	TME
0.000291306	Metabolism
0.225432466	TME
4.20E-06	Proliferation/Metastasis
4.52E-06	TME
0.20392386	Proliferation/Metastasis
0.099232351	Proliferation/Metastasis
0.22744162	Metabolism
0.620246291	Proliferation/Metastasis
0.000133916	TME
0.017238363	Metabolism
0.956539082	TME
1.71E-09	TME
2.81E-05	TME
1.98E-05	TME
0.003957913	TME
0.001313289	TME
0.807573624	Metabolism
1.19E-06	TME
0.020171872	Metabolism
0.376235893	Metabolism
0.010686064	Proliferation/Metastasis
0.611237681	Proliferation/Metastasis
0.989612082	Metabolism
0.015495822	Metabolism
0.107366868	Metabolism
4.54E-05	Metabolism
4.66E-06	Proliferation/Metastasis
0.189485225	Proliferation/Metastasis
0.019673753	Metabolism
0.075720619	Metabolism
0.017245101	Metabolism
8.95E-08	TME
0.003201231	Metabolism
0.20175078	Metabolism
0.855908584	Metabolism
0.237949289	Metabolism
0.040684259	Proliferation/Metastasis
0.040501034	Metabolism
0.000588947	Metabolism
0.730421978	Metabolism
0.000718828	Metabolism

0.192708983	Metabolism
0.125525902	Metabolism
0.060141353	Proliferation/Metastasis
0.003168618	Metabolism
0.000844045	Metabolism
0.49197703	Proliferation/Metastasis
0.104362754	Metabolism
0.020400786	Metabolism
0.00170017	Metabolism
0.677483679	Metabolism
0.551114227	Metabolism
0.001416174	Metabolism
3.16E-05	Metabolism
0.996237093	Metabolism
9.65E-07	TME
1.64E-05	TME
0.000103818	TME
7.42E-06	TME
3.30E-07	TME
0.402699547	Metabolism
0.202577743	Metabolism
0.695527923	Proliferation/Metastasis
0.010280394	Metabolism
0.015847046	Proliferation/Metastasis
4.14E-05	Metabolism
0.305239251	TME
6.82E-05	Metabolism
0.004838384	Metabolism
0.004987719	Metabolism
0.325336677	Metabolism
2.59E-06	TME
2.30E-05	TME
0.094935999	Proliferation/Metastasis
0.177451948	Metabolism
0.038961885	Proliferation/Metastasis
0.093770362	Proliferation/Metastasis
0.723035501	TME
0.041925502	TME
0.006272067	TME
0.001113775	TME
0.830932414	Metabolism
0.684749213	Proliferation/Metastasis
0.249947132	Metabolism

0.055733439	Metabolism
0.053149946	Proliferation/Metastasis
4.75E-08	Proliferation/Metastasis
0.160128874	Metabolism
0.660493739	Metabolism
0.994931708	Metabolism
0.430425455	Metabolism
6.68E-05	TME
2.16E-05	TME
0.012393716	TME
0.008810683	TME
0.068838093	TME
0.944116587	Metabolism
0.008944035	Metabolism
0.042892566	Metabolism
0.00121608	Metabolism
0.094444443	Metabolism
9.38E-07	TME
0.003165706	TME
0.002761458	TME
0.002192506	TME
0.001647277	TME
0.006374998	TME
0.000749084	TME
0.01002305	TME
0.003540298	TME
0.000610588	Proliferation/Metastasis
0.226664071	Proliferation/Metastasis
0.034780351	Metabolism
0.22355798	Metabolism
0.460305583	TME
0.536299665	Metabolism
0.66109784	Metabolism
1.03E-06	TME
3.56E-07	Proliferation/Metastasis
1.64E-08	Proliferation/Metastasis
0.1168362	TME
0.132667222	Metabolism
0.017005458	Metabolism
3.67E-05	Proliferation/Metastasis
5.11E-10	Proliferation/Metastasis
0.00048179	TME
1.79E-05	TME

0.007132801	TME
8.97E-08	TME
0.194196958	Proliferation/Metastasis
8.45E-05	TME
0.00299184	TME
0.483548684	Metabolism
0.021708706	TME
0.001030022	TME
0.044904397	TME
0.123336841	TME
0.040879777	Metabolism
0.270421109	Metabolism
0.290981834	Metabolism
3.73E-08	TME
5.96E-05	Metabolism
0.004918206	TME
1.50E-06	TME
1.36E-05	TME
0.519697489	TME
0.254480567	TME
0.461349851	Metabolism
0.010801079	Proliferation/Metastasis
0.186435004	Metabolism
0.175584621	Proliferation/Metastasis
0.77224041	Metabolism
0.062320582	Metabolism
0.113089325	Metabolism
0.000882376	Metabolism
0.878587911	Metabolism
1.19E-05	Metabolism
2.95E-08	Metabolism
1.40E-06	Metabolism
1.45E-05	Metabolism
6.81E-05	Metabolism
5.85E-07	Metabolism
0.81662202	Metabolism
0.359185904	Metabolism
4.70E-05	Metabolism
3.17E-05	TME
0.001475518	Proliferation/Metastasis
0.382104303	Metabolism
0.000582995	Proliferation/Metastasis
0.005363067	TME

3.96E-07	Proliferation/Metastasis
5.41E-07	Proliferation/Metastasis
0.000467912	TME
0.00019937	TME
0.002733921	Metabolism
1.35E-06	Metabolism
0.42810636	Proliferation/Metastasis
0.308437648	Proliferation/Metastasis
1.14E-07	Proliferation/Metastasis
0.735852863	Metabolism
0.020795022	Metabolism
0.278505853	Metabolism
2.76E-05	Proliferation/Metastasis
0.000855105	TME
0.000143254	TME
0.671573642	Metabolism
1.26E-07	Proliferation/Metastasis
9.20E-07	Metabolism
0.001774196	TME
0.002372638	TME
0.000128995	TME
3.59E-06	TME
0.068340588	Metabolism
0.008924517	TME
0.554595013	Proliferation/Metastasis
0.000597989	TME
0.034046982	Proliferation/Metastasis
0.457914226	Proliferation/Metastasis
1.47E-08	Metabolism
0.002350819	Proliferation/Metastasis
7.96E-06	TME
0.915843652	Metabolism
0.010254163	TME
7.70E-05	TME
2.49E-05	TME
0.000219644	TME
0.630436496	TME
0.000340541	TME
0.002778268	Metabolism
0.000139625	TME
0.803404457	Metabolism
0.167679692	Metabolism
4.76E-09	Proliferation/Metastasis

0.028973402	Proliferation/Metastasis
0.050942928	Metabolism
2.64E-05	Metabolism
0.028639866	Metabolism
0.009869156	Metabolism
0.013441842	Proliferation/Metastasis
0.090344109	Proliferation/Metastasis
0.01067937	Metabolism
0.922167428	Metabolism
0.027779997	Metabolism
7.60E-07	TME
0.692829409	Metabolism
0.195050071	Metabolism
0.963514513	Metabolism
0.000256659	Metabolism
0.009551909	Proliferation/Metastasis
0.079604725	Metabolism
0.504168464	Metabolism
0.539379776	Metabolism
0.013035769	Metabolism
0.000288823	Metabolism
0.007198774	Metabolism
0.313567362	Proliferation/Metastasis
0.181357973	Metabolism
0.659568326	Metabolism
0.056992283	Proliferation/Metastasis
0.129483169	Metabolism
0.002224565	Metabolism
0.005134634	Metabolism
0.000276951	Metabolism
0.007515082	Metabolism
0.30029154	Metabolism
0.908133462	Metabolism
0.000606789	Metabolism
7.61E-05	TME
0.000345098	TME
2.00E-06	TME
0.001272811	TME
0.002900223	TME
0.569449401	Metabolism
0.007447241	Metabolism
1.75E-07	Proliferation/Metastasis
0.000844413	Metabolism

1.67E-05	Proliferation/Metastasis
0.986063393	Metabolism
0.001851594	TME
0.234485214	Metabolism
0.145076862	Metabolism
0.336583353	Metabolism
0.002652129	Metabolism
4.85E-06	TME
1.59E-05	TME
6.49E-06	Proliferation/Metastasis
0.023845254	Metabolism
0.697740219	Proliferation/Metastasis
0.822631435	Proliferation/Metastasis
0.05154565	TME
0.197308213	TME
0.033249732	TME
0.052132101	TME
0.000524489	Metabolism
0.000257832	Proliferation/Metastasis
2.73E-09	Metabolism
0.00053818	Metabolism
0.015449094	Proliferation/Metastasis
0.139900634	Proliferation/Metastasis
0.000369508	Metabolism
0.072566433	Metabolism
0.053192933	Metabolism
0.59304443	Metabolism
0.00955658	TME
0.011726021	TME
0.162033896	TME
0.267553422	TME
0.149087312	TME
0.000102119	Metabolism
0.074878472	Metabolism
0.722776971	Metabolism
0.000561224	Metabolism
0.051781383	Metabolism
0.444670383	TME
0.068531826	TME
0.131947423	TME
0.079529463	TME
0.681414445	TME
0.070251606	TME

0.303805237	TME
0.155375138	TME
0.022495494	TME
1.77E-15	Proliferation/Metastasis
0.005931548	Proliferation/Metastasis
0.075602405	Metabolism
0.152368003	Metabolism
0.168536673	TME
5.80E-06	Metabolism
0.052459728	Metabolism
0.387973253	TME
2.36E-07	Proliferation/Metastasis
2.14E-13	Proliferation/Metastasis
0.331573995	TME
0.152810863	Metabolism
0.002877576	Metabolism
2.96E-14	Proliferation/Metastasis
0.333705192	Proliferation/Metastasis
0.054292265	TME
0.122716487	TME
0.15201077	TME
0.140545173	TME
0.001995173	Proliferation/Metastasis
0.000515925	TME
0.069242035	TME
1.45E-07	Metabolism
0.287693545	TME
0.358267813	TME
0.69768754	TME
0.583516657	TME
6.03E-05	Metabolism
3.59E-05	Metabolism
0.994342857	Metabolism
0.037374442	TME
0.790639505	Metabolism
0.139710479	TME
0.706740264	TME
0.821441855	TME
0.026152073	TME
0.617128633	TME
0.424592214	Metabolism
9.93E-13	Proliferation/Metastasis
0.018028086	Metabolism

0.013463159	Proliferation/Metastasis
0.047302781	Metabolism
0.067001147	Metabolism
1.77E-08	Metabolism
0.004083916	Metabolism
0.144103459	Metabolism
0.033358515	Metabolism
0.013090681	Metabolism
0.003305692	Metabolism
0.646860328	Metabolism
0.089469778	Metabolism
0.295711709	Metabolism
0.137355088	Metabolism
0.344895291	Metabolism
0.191592184	Metabolism
0.461772744	TME
0.366949867	Proliferation/Metastasis
6.35E-10	Metabolism
0.110546198	Proliferation/Metastasis
0.631708544	TME
0.568404091	Proliferation/Metastasis
0.732835663	Proliferation/Metastasis
0.388497593	TME
0.770695281	TME
0.000303842	Metabolism
0.019744853	Metabolism
2.52E-09	Proliferation/Metastasis
6.77E-10	Proliferation/Metastasis
0.65582361	Proliferation/Metastasis
9.34E-09	Metabolism
0.597245027	Metabolism
0.680179787	Metabolism
0.590574254	Proliferation/Metastasis
0.275403728	TME
0.94594632	TME
0.262930653	Metabolism
0.113988187	Proliferation/Metastasis
0.026619246	Metabolism
0.276792597	TME
0.075534862	TME
6.56E-05	TME
0.199480442	TME
0.592400385	Metabolism

0.772651775	TME
0.329611467	Proliferation/Metastasis
0.29774361	TME
0.801101018	Proliferation/Metastasis
1.37E-07	Proliferation/Metastasis
0.994082651	Metabolism
2.29E-17	Proliferation/Metastasis
0.174093585	TME
5.11E-11	Metabolism
0.478366356	TME
0.580541376	TME
0.033703374	TME
0.550029603	TME
0.000109452	TME
0.560399257	TME
0.115673644	Metabolism
0.691241032	TME
0.01546159	Metabolism
1.11E-05	Metabolism
0.30468495	Proliferation/Metastasis
0.98755625	Proliferation/Metastasis
4.27E-08	Metabolism
0.776774144	Metabolism
0.05750258	Metabolism
0.076714789	Metabolism
0.59173668	Proliferation/Metastasis
9.11E-08	Proliferation/Metastasis
0.137224954	Metabolism
0.018427287	Metabolism
0.00894292	Metabolism
0.046446448	TME
0.001696535	Metabolism
0.001127186	Metabolism
0.000357645	Metabolism
0.467569461	Metabolism
0.170629508	Proliferation/Metastasis
0.09372583	Metabolism
1.77E-09	Metabolism
0.002119186	Metabolism
3.61E-14	Metabolism
7.66E-12	Metabolism
0.536150291	Metabolism
0.000214576	Proliferation/Metastasis

0.02059251	Metabolism
0.015064552	Metabolism
0.124469569	Proliferation/Metastasis
0.007369224	Metabolism
0.005876362	Metabolism
0.161032576	Metabolism
0.001765334	Metabolism
1.95E-05	Metabolism
0.000891994	Metabolism
0.009743819	Metabolism
0.055242069	Metabolism
0.154598169	TME
0.314379216	TME
0.647377622	TME
0.617300615	TME
0.933377089	TME
0.478275982	Metabolism
0.000304343	Metabolism
0.012822092	Proliferation/Metastasis
0.017971975	Metabolism
0.467869103	Proliferation/Metastasis
0.003773081	Metabolism
0.578136631	TME
0.001647745	Metabolism
0.428860199	Metabolism
0.822490343	Metabolism
0.001085065	Metabolism
0.363640436	TME
0.351304616	TME
0.580971034	Proliferation/Metastasis
4.68E-07	Metabolism
0.003531993	Proliferation/Metastasis
0.010257328	Proliferation/Metastasis
0.111803524	TME
0.000868979	TME
1.20E-05	TME
0.019192155	TME
0.055855647	Metabolism
0.51357711	Proliferation/Metastasis
0.070663956	Metabolism
0.015420145	Metabolism
0.000246414	Proliferation/Metastasis
0.062433205	Proliferation/Metastasis

0.012763765	Metabolism
0.001641698	Metabolism
0.025073674	Metabolism
0.008298629	Metabolism
0.044172549	TME
0.00022337	TME
8.29E-06	TME
0.000571179	TME
0.044705628	TME
0.000353003	Metabolism
0.202335981	Metabolism
0.8093764	Metabolism
0.105893898	Metabolism
0.000482178	Metabolism
0.001193332	TME
0.004112114	TME
4.87E-05	TME
0.009293847	TME
0.000141111	TME
0.000125831	TME
0.000175127	TME
0.143316042	TME
0.130133203	TME
0.072445647	Proliferation/Metastasis
0.067587896	Proliferation/Metastasis
0.797247402	Metabolism
0.02327783	Metabolism
0.125646873	TME
0.1435858	Metabolism
0.7013668	Metabolism
0.000864504	TME
0.000174834	Proliferation/Metastasis
0.038149075	Proliferation/Metastasis
0.702167756	TME
0.006542959	Metabolism
0.996218001	Metabolism
0.015593404	Proliferation/Metastasis
0.003419275	Proliferation/Metastasis
2.92E-05	TME
8.05E-06	TME
5.91E-06	TME
0.000360628	TME
0.013003189	Proliferation/Metastasis

0.105408064	TME
0.000208233	TME
0.012048112	Metabolism
5.51E-05	TME
0.000264939	TME
0.008175481	TME
0.042231959	TME
0.04911368	Metabolism
0.168786503	Metabolism
0.22287698	Metabolism
0.000107894	TME
0.197821788	Metabolism
1.33E-06	TME
0.00959126	TME
0.000148591	TME
0.662728478	TME
0.717178904	TME
0.010402839	Metabolism
0.228209167	Proliferation/Metastasis
0.016878003	Metabolism
0.004884458	Proliferation/Metastasis
0.59007283	Metabolism
0.019152795	Metabolism
0.633577517	Metabolism
0.459385517	Metabolism
0.001478527	Metabolism
0.170634142	Metabolism
0.209714594	Metabolism
0.067102475	Metabolism
0.159498897	Metabolism
0.000126338	Metabolism
0.000174162	Metabolism
0.575040265	Metabolism
0.005995942	Metabolism
0.993807846	Metabolism
0.000346253	TME
0.011071068	Proliferation/Metastasis
0.000286724	Metabolism
0.001434304	Proliferation/Metastasis
0.066947568	TME
0.000464821	Proliferation/Metastasis
0.00061124	Proliferation/Metastasis
9.53E-05	TME

0.057213178	TME
2.05E-05	Metabolism
1.28E-05	Metabolism
0.001415161	Proliferation/Metastasis
0.49611061	Proliferation/Metastasis
5.20E-08	Proliferation/Metastasis
0.22078441	Metabolism
0.005749503	Metabolism
0.260429447	Metabolism
0.000290848	Proliferation/Metastasis
7.45E-05	TME
0.000151312	TME
0.001244312	Metabolism
0.003400097	Proliferation/Metastasis
1.47E-05	Metabolism
0.003524978	TME
2.93E-05	TME
0.344554999	TME
9.88E-07	TME
0.069866992	Metabolism
1.02E-06	TME
0.219650643	Proliferation/Metastasis
0.000376782	TME
0.304378055	Proliferation/Metastasis
0.004525509	Proliferation/Metastasis
4.49E-07	Metabolism
0.052749797	Proliferation/Metastasis
1.50E-05	TME
0.487036034	Metabolism
0.002434139	TME
2.31E-06	TME
0.000303702	TME
0.000305674	TME
0.608208096	TME
3.84E-05	TME
1.82E-05	Metabolism
0.000364306	TME
0.080828926	Metabolism
0.002933045	Metabolism
0.000109884	Proliferation/Metastasis
0.364261243	Proliferation/Metastasis
0.146116606	Metabolism
0.428313351	Metabolism

8.34E-05	Metabolism
0.343635729	Metabolism
0.006553133	Proliferation/Metastasis
0.926338675	Proliferation/Metastasis
0.531098957	Metabolism
0.145147189	Metabolism
8.74E-05	Metabolism
0.0524081	TME
0.00014177	Metabolism
0.278461323	Metabolism
7.28E-05	Metabolism
2.76E-07	Metabolism
0.000751483	Proliferation/Metastasis
0.338203074	Metabolism
1.28E-05	Metabolism
0.182164018	Metabolism
0.280001571	Metabolism
0.000957573	Metabolism
0.044204407	Metabolism
0.070738268	Proliferation/Metastasis
0.099098393	Metabolism
0.423843182	Metabolism
1.60E-11	Proliferation/Metastasis
0.032224393	Metabolism
8.64E-06	Metabolism
3.27E-06	Metabolism
0.000800749	Metabolism
0.051469196	Metabolism
0.017557329	Metabolism
0.498071988	Metabolism
0.048070987	Metabolism
8.64E-05	TME
0.000496961	TME
0.000591096	TME
0.001491325	TME
0.002754821	TME
0.000276651	Metabolism
0.687475943	Metabolism
0.004106898	Proliferation/Metastasis
0.079646506	Metabolism
0.003407584	Proliferation/Metastasis
0.000232892	Metabolism
0.586055339	TME

0.000637804	Metabolism
0.13366439	Metabolism
0.052634207	Metabolism
0.208907801	Metabolism
0.114665756	TME
0.027655442	TME
0.04675217	Proliferation/Metastasis
0.000158309	Metabolism
0.554080883	Proliferation/Metastasis
0.401092403	Proliferation/Metastasis
0.313025113	TME
8.86E-17	TME
1.34E-12	TME
6.97E-10	TME
0.182807697	Metabolism
2.88E-10	Proliferation/Metastasis
0.015298433	Metabolism
9.57E-19	Metabolism
1.46E-13	Proliferation/Metastasis
3.70E-08	Proliferation/Metastasis
1.33E-10	Metabolism
6.04E-08	Metabolism
0.022302826	Metabolism
0.216243828	Metabolism
3.48E-06	TME
1.74E-13	TME
2.27E-13	TME
0.001918607	TME
1.40E-30	TME
0.003038107	Metabolism
0.004624425	Metabolism
0.011413487	Metabolism
0.467511002	Metabolism
0.510840565	Metabolism
1.17E-06	TME
0.002181121	TME
2.78E-11	TME
9.60E-07	TME
2.42E-12	TME
9.77E-10	TME
1.75E-11	TME
4.45E-09	TME
5.90E-07	TME

0.000118359	Proliferation/Metastasis
1.40E-07	Proliferation/Metastasis
0.026506749	Metabolism
3.75E-05	Metabolism
0.008148214	TME
0.250779745	Metabolism
0.015376823	Metabolism
9.38E-12	TME
0.003489332	Proliferation/Metastasis
0.115786497	Proliferation/Metastasis
0.000730814	TME
0.000134324	Metabolism
2.29E-07	Metabolism
0.000126221	Proliferation/Metastasis
7.60E-05	Proliferation/Metastasis
7.30E-08	TME
6.04E-11	TME
3.06E-10	TME
5.79E-09	TME
0.048817991	Proliferation/Metastasis
0.003601789	TME
1.81E-13	TME
0.132385324	Metabolism
3.38E-12	TME
3.31E-14	TME
1.49E-08	TME
0.002326463	TME
0.774790439	Metabolism
0.085780661	Metabolism
9.12E-09	Metabolism
5.16E-07	TME
1.24E-07	Metabolism
1.73E-05	TME
0.000603171	TME
2.65E-11	TME
0.001998689	TME
0.059736384	TME
5.31E-12	Metabolism
1.57E-09	Proliferation/Metastasis
9.80E-15	Metabolism
0.138697716	Proliferation/Metastasis
1.83E-13	Metabolism
0.31828564	Metabolism

0.007103405	Metabolism
0.001222138	Metabolism
1.88E-09	Metabolism
4.34E-06	Metabolism
0.27241869	Metabolism
1.21E-08	Metabolism
2.06E-12	Metabolism
1.54E-14	Metabolism
9.08E-11	Metabolism
0.859748751	Metabolism
9.29E-09	Metabolism
0.038747335	Metabolism
2.87E-14	TME
0.019000175	Proliferation/Metastasis
8.56E-07	Metabolism
2.14E-13	Proliferation/Metastasis
5.18E-08	TME
7.64E-17	Proliferation/Metastasis
9.55E-16	Proliferation/Metastasis
1.97E-12	TME
1.14E-12	TME
0.002614532	Metabolism
0.270250495	Metabolism
0.025086662	Proliferation/Metastasis
0.258905715	Proliferation/Metastasis
7.48E-14	Proliferation/Metastasis
0.166343089	Metabolism
0.029276862	Metabolism
6.85E-11	Metabolism
4.11E-14	Proliferation/Metastasis
2.15E-14	TME
3.15E-15	TME
0.77830091	Metabolism
0.645643701	Proliferation/Metastasis
0.773204855	Metabolism
2.38E-09	TME
1.26E-05	TME
4.30E-12	TME
2.72E-11	TME
7.07E-06	Metabolism
4.01E-13	TME
1.05E-11	Proliferation/Metastasis
9.28E-20	TME

0.000142207	Proliferation/Metastasis
4.07E-12	Proliferation/Metastasis
1.15E-05	Metabolism
0.537940313	Proliferation/Metastasis
3.64E-10	TME
2.37E-08	Metabolism
0.036213413	TME
0.000278801	TME
0.729548202	TME
1.99E-12	TME
6.30E-12	TME
5.49E-10	TME
3.89E-10	Metabolism
1.20E-15	TME
2.85E-15	Metabolism
0.013379517	Metabolism
1.15E-11	Proliferation/Metastasis
0.625486318	Proliferation/Metastasis
0.094434876	Metabolism
2.73E-12	Metabolism
0.126884451	Metabolism
3.87E-06	Metabolism
7.33E-18	Proliferation/Metastasis
0.124299421	Proliferation/Metastasis
3.74E-05	Metabolism
0.000191295	Metabolism
1.93E-09	Metabolism
0.001322361	TME
1.10E-12	Metabolism
0.048005568	Metabolism
3.96E-11	Metabolism
0.87847335	Metabolism
1.97E-10	Proliferation/Metastasis
1.82E-05	Metabolism
1.43E-09	Metabolism
0.835305879	Metabolism
0.007790193	Metabolism
0.018896632	Metabolism
0.125612743	Metabolism
0.002599644	Proliferation/Metastasis
0.065319184	Metabolism
9.23E-11	Metabolism
0.039186207	Proliferation/Metastasis

0.002427175	Metabolism
0.152667365	Metabolism
0.011827439	Metabolism
3.44E-07	Metabolism
0.733836275	Metabolism
7.94E-05	Metabolism
0.989594823	Metabolism
0.678067667	Metabolism
1.22E-10	TME
3.75E-11	TME
4.55E-14	TME
6.66E-15	TME
7.44E-10	TME
0.001104515	Metabolism
0.469617039	Metabolism
0.008081321	Proliferation/Metastasis
3.23E-05	Metabolism
1.18E-14	Proliferation/Metastasis
7.43E-09	Metabolism
0.004931214	TME
1.20E-09	Metabolism
1.28E-10	Metabolism
1.77E-10	Metabolism
0.088901073	Metabolism
0.000219526	TME
0.375489487	TME
0.829998467	Proliferation/Metastasis
0.053404763	Metabolism
0.016827237	Proliferation/Metastasis
6.63E-07	Proliferation/Metastasis
0.004696951	TME
0.637500859	TME
0.642070762	TME
0.154545047	TME
3.64E-05	Metabolism
0.400519772	Proliferation/Metastasis
0.678450684	Metabolism
0.018863543	Metabolism
0.052587914	Proliferation/Metastasis
0.043323798	Proliferation/Metastasis
0.101560807	Metabolism
0.038971993	Metabolism
2.13E-05	Metabolism

0.509154514	Metabolism
0.061458597	TME
0.897246088	TME
0.812923887	TME
0.453085827	TME
0.072232011	TME
0.003879646	Metabolism
0.975345002	Metabolism
0.767280059	Metabolism
0.001019189	Metabolism
0.041765245	Metabolism
0.002555499	TME
0.040583825	TME
0.834261469	TME
0.018005754	TME
0.623011179	TME
0.728980646	TME
0.996413369	TME
0.461880338	TME
0.619233123	TME
4.71E-06	Proliferation/Metastasis
0.014647178	Proliferation/Metastasis
0.851605818	Metabolism
0.333748308	Metabolism
0.515995677	TME
0.00319116	Metabolism
6.88E-10	Metabolism
0.646092965	TME
0.002130114	Proliferation/Metastasis
6.03E-07	Proliferation/Metastasis
0.103082913	TME
0.031390449	Metabolism
0.568955478	Metabolism
1.55E-06	Proliferation/Metastasis
0.001511564	Proliferation/Metastasis
0.616044419	TME
0.971224513	TME
0.969619982	TME
0.169540438	TME
0.009298537	Proliferation/Metastasis
0.000373756	TME
0.42984853	TME
0.028148417	Metabolism

0.931346355	TME
0.572782196	TME
0.749993993	TME
0.510469084	TME
0.02107302	Metabolism
0.005475725	Metabolism
0.346943476	Metabolism
0.027507689	TME
0.243503077	Metabolism
0.70606271	TME
0.511768513	TME
0.370222995	TME
0.148833097	TME
0.000404658	TME
0.00814053	Metabolism
3.09E-07	Proliferation/Metastasis
0.004715862	Metabolism
0.000524822	Proliferation/Metastasis
0.513613676	Metabolism
0.519672421	Metabolism
0.332470884	Metabolism
0.449605866	Metabolism
0.411133582	Metabolism
2.11E-07	Metabolism
0.000310174	Metabolism
0.009708058	Metabolism
0.03331887	Metabolism
0.561404966	Metabolism
0.561764569	Metabolism
0.587601596	Metabolism
0.464807788	Metabolism
0.074340966	Metabolism
0.707833015	TME
0.050386344	Proliferation/Metastasis
0.000443893	Metabolism
0.084946635	Proliferation/Metastasis
0.140022059	TME
0.142992959	Proliferation/Metastasis
0.272332736	Proliferation/Metastasis
0.219692097	TME
0.773717029	TME
0.419764781	Metabolism
0.047449868	Metabolism

0.000199601	Proliferation/Metastasis
2.97E-05	Proliferation/Metastasis
0.717207869	Proliferation/Metastasis
0.032043651	Metabolism
0.030939547	Metabolism
0.001668795	Metabolism
0.320151032	Proliferation/Metastasis
0.695207602	TME
0.900643402	TME
0.016070901	Metabolism
0.619982416	Proliferation/Metastasis
0.970751007	Metabolism
0.580572741	TME
0.57590797	TME
0.002142366	TME
0.13382195	TME
0.089094222	Metabolism
0.127710141	TME
0.001271746	Proliferation/Metastasis
0.91247946	TME
0.461904949	Proliferation/Metastasis
0.002856477	Proliferation/Metastasis
0.331767491	Metabolism
0.012608136	Proliferation/Metastasis
0.929666765	TME
3.12E-06	Metabolism
0.166499211	TME
0.317752725	TME
0.020710536	TME
0.974443774	TME
0.046278031	TME
0.566851888	TME
0.116665258	Metabolism
0.974563785	TME
0.064608146	Metabolism
0.03427931	Metabolism
0.88643993	Proliferation/Metastasis
2.62E-05	Proliferation/Metastasis
6.58E-07	Metabolism
0.138410208	Metabolism
6.94E-05	Metabolism
0.021900499	Metabolism
0.45661076	Proliferation/Metastasis

0.000548634	Proliferation/Metastasis
0.23891472	Metabolism
0.219021286	Metabolism
0.079900037	Metabolism
0.018796991	TME
0.452041082	Metabolism
1.31E-05	Metabolism
0.310587128	Metabolism
0.866850835	Metabolism
0.022904654	Proliferation/Metastasis
0.811698529	Metabolism
0.001108143	Metabolism
0.002081604	Metabolism
0.098917924	Metabolism
0.008020643	Metabolism
0.005345823	Metabolism
6.19E-05	Proliferation/Metastasis
0.007150105	Metabolism
0.558401598	Metabolism
0.452393277	Proliferation/Metastasis
0.261434339	Metabolism
0.253534909	Metabolism
0.672803435	Metabolism
0.468611584	Metabolism
0.041894236	Metabolism
0.001681618	Metabolism
0.523144213	Metabolism
0.010487702	Metabolism
0.52182022	TME
0.743325016	TME
0.645555197	TME
0.347272563	TME
0.36747436	TME
0.065760782	Metabolism
0.091261075	Metabolism
0.032452129	Proliferation/Metastasis
0.004614128	Metabolism
0.1029351	Proliferation/Metastasis
0.087818563	Metabolism
0.607428995	TME
0.001214367	Metabolism
0.400335174	Metabolism
0.050753281	Metabolism

0.022810268	Metabolism
0.017085036	TME
0.209777119	TME
0.163200615	Proliferation/Metastasis
2.76E-05	Metabolism
0.351641502	Proliferation/Metastasis
4.43E-06	Proliferation/Metastasis
0.069563257	TME
0.000302893	TME
0.000324312	TME
1.70E-05	TME
6.15E-05	Metabolism
0.037883962	Proliferation/Metastasis
1.16E-13	Metabolism
3.89E-17	Metabolism
0.851845491	Proliferation/Metastasis
4.84E-13	Proliferation/Metastasis
8.39E-06	Metabolism
1.47E-11	Metabolism
0.032406096	Metabolism
2.60E-06	Metabolism
0.000163212	TME
0.029911223	TME
3.60E-11	TME
5.71E-05	TME
1.83E-26	TME
0.001017858	Metabolism
0.004297501	Metabolism
4.73E-08	Metabolism
0.031415228	Metabolism
0.283205686	Metabolism
0.202725909	TME
5.94E-13	TME
0.648969787	TME
0.014905716	TME
0.002513552	TME
0.000209565	TME
0.000397543	TME
0.031207329	TME
0.003483657	TME
9.97E-14	Proliferation/Metastasis
0.000321689	Proliferation/Metastasis
0.003791833	Metabolism

1.46E-07	Metabolism
0.13992929	TME
0.528204916	Metabolism
3.08E-05	Metabolism
0.885027622	TME
0.182685546	Proliferation/Metastasis
6.42E-18	Proliferation/Metastasis
3.82E-07	TME
0.006618861	Metabolism
0.040025572	Metabolism
4.62E-17	Proliferation/Metastasis
8.85E-09	Proliferation/Metastasis
0.000111215	TME
0.087562208	TME
0.000617128	TME
0.003564411	TME
0.00046938	Proliferation/Metastasis
0.016617014	TME
0.087393101	TME
3.63E-13	Metabolism
0.439863293	TME
0.470990534	TME
0.001500693	TME
0.118562682	TME
0.000779011	Metabolism
0.071029146	Metabolism
2.17E-14	Metabolism
0.001665841	TME
0.000172328	Metabolism
4.83E-06	TME
7.44E-06	TME
0.069856957	TME
0.001513215	TME
0.007356366	TME
9.80E-14	Metabolism
2.78E-09	Proliferation/Metastasis
4.81E-14	Metabolism
2.23E-07	Proliferation/Metastasis
0.196396569	Metabolism
1.51E-06	Metabolism
0.000508161	Metabolism
0.590394222	Metabolism
0.000268775	Metabolism

1.48E-05	Metabolism
7.46E-05	Metabolism
0.646949491	Metabolism
0.002220889	Metabolism
0.125730375	Metabolism
0.016411254	Metabolism
0.124554928	Metabolism
0.072118574	Metabolism
0.000885864	Metabolism
0.686997857	TME
0.152690949	Proliferation/Metastasis
0.002103784	Metabolism
4.47E-22	Proliferation/Metastasis
0.066671041	TME
8.22E-05	Proliferation/Metastasis
7.47E-06	Proliferation/Metastasis
0.037186959	TME
1.23E-07	TME
0.585615376	Metabolism
0.312344975	Metabolism
5.13E-09	Proliferation/Metastasis
0.330270849	Proliferation/Metastasis
3.24E-11	Proliferation/Metastasis
3.72E-05	Metabolism
1.81E-06	Metabolism
3.55E-26	Metabolism
1.62E-08	Proliferation/Metastasis
0.414659769	TME
0.001171469	TME
0.023352355	Metabolism
6.69E-05	Proliferation/Metastasis
0.121268052	Metabolism
2.47E-07	TME
4.21E-07	TME
9.84E-06	TME
0.383551175	TME
0.006475502	Metabolism
2.75E-11	TME
0.19922814	Proliferation/Metastasis
2.87E-05	TME
2.46E-10	Proliferation/Metastasis
4.37E-07	Proliferation/Metastasis
0.000168807	Metabolism

0.318213074	Proliferation/Metastasis
0.083793736	TME
0.950871355	Metabolism
0.021774658	TME
0.184463907	TME
0.000252957	TME
0.128176321	TME
1.98E-09	TME
0.000136174	TME
5.02E-08	Metabolism
6.00E-18	TME
8.02E-06	Metabolism
4.02E-08	Metabolism
3.43E-17	Proliferation/Metastasis
2.07E-15	Proliferation/Metastasis
3.05E-06	Metabolism
0.028384025	Metabolism
0.077492074	Metabolism
0.005244535	Metabolism
2.99E-20	Proliferation/Metastasis
1.27E-05	Proliferation/Metastasis
0.141988644	Metabolism
0.003259028	Metabolism
0.156010728	Metabolism
0.001723713	TME
0.023382309	Metabolism
0.241234955	Metabolism
0.05520427	Metabolism
1.70E-05	Metabolism
8.40E-10	Proliferation/Metastasis
0.036419951	Metabolism
6.48E-09	Metabolism
0.000254852	Metabolism
0.702378266	Metabolism
0.559074071	Metabolism
0.695768232	Metabolism
0.423015879	Proliferation/Metastasis
0.035242299	Metabolism
0.869834679	Metabolism
0.116712902	Proliferation/Metastasis
6.10E-24	Metabolism
4.57E-05	Metabolism
1.47E-19	Metabolism

6.58E-09	Metabolism
0.000809147	Metabolism
0.655968591	Metabolism
0.25738979	Metabolism
0.021473587	Metabolism
0.059684045	TME
0.505476373	TME
0.023377593	TME
0.503768537	TME
0.009296659	TME
0.00224146	Metabolism
4.56E-14	Metabolism
1.46E-05	Proliferation/Metastasis
7.76E-06	Metabolism
3.61E-15	Proliferation/Metastasis
6.85E-07	Metabolism
1.25E-47	TME
0.006266798	Metabolism
0.499983963	Metabolism
0.012931572	Metabolism
1.37E-05	Metabolism
0.60464213	TME
0.569521407	TME
4.19E-13	Proliferation/Metastasis
1.73E-07	Metabolism
2.06E-18	Proliferation/Metastasis
0.512924649	Proliferation/Metastasis
0.085221148	TME
0.025328422	TME
0.242669446	TME
0.000916236	TME
0.041486221	Metabolism
0.000284555	Proliferation/Metastasis
0.000594714	Metabolism
0.062031246	Metabolism
0.888527646	Proliferation/Metastasis
7.96E-08	Proliferation/Metastasis
0.91825366	Metabolism
0.002906865	Metabolism
6.44E-05	Metabolism
0.059434504	Metabolism
0.030096472	TME
0.635722234	TME

0.001354553	TME
0.378785498	TME
4.75E-07	TME
0.116223201	Metabolism
0.163372721	Metabolism
1.07E-05	Metabolism
4.91E-06	Metabolism
0.069998379	Metabolism
9.15E-06	TME
0.354039441	TME
0.04253165	TME
0.880716	TME
0.499785323	TME
0.011336177	TME
0.024502186	TME
7.52E-05	TME
0.021617235	TME
0.585641169	Proliferation/Metastasis
2.31E-09	Proliferation/Metastasis
0.120936484	Metabolism
0.493945653	Metabolism
0.000315289	TME
0.142830636	Metabolism
4.16E-07	Metabolism
0.624152958	TME
2.27E-19	Proliferation/Metastasis
2.55E-15	Proliferation/Metastasis
4.36E-07	TME
0.257821625	Metabolism
0.021766208	Metabolism
0.005735732	Proliferation/Metastasis
8.84E-12	Proliferation/Metastasis
0.793112934	TME
0.666473439	TME
0.443869705	TME
0.999073199	TME
2.03E-15	Proliferation/Metastasis
0.22973749	TME
0.335066402	TME
5.69E-08	Metabolism
0.981745532	TME
0.754075745	TME
0.000100929	TME

4.39E-06	TME
0.000485871	Metabolism
0.742674569	Metabolism
0.583624869	Metabolism
2.77E-05	TME
0.067802201	Metabolism
0.218669204	TME
0.580003631	TME
0.625868756	TME
3.25E-07	TME
0.210370436	TME
0.587423945	Metabolism
0.007487107	Proliferation/Metastasis
0.269955617	Metabolism
2.82E-10	Proliferation/Metastasis
0.23451239	Metabolism
0.092433142	Metabolism
0.428243452	Metabolism
0.000310294	Metabolism
0.03126018	Metabolism
0.524113426	Metabolism
0.403223774	Metabolism
0.147298401	Metabolism
0.195519517	Metabolism
0.044569607	Metabolism
0.006127579	Metabolism
0.409454186	Metabolism
2.33E-05	Metabolism
7.68E-09	Metabolism
0.609770449	TME
1.87E-16	Proliferation/Metastasis
0.048344942	Metabolism
7.05E-11	Proliferation/Metastasis
0.252402713	TME
0.00016932	Proliferation/Metastasis
8.25E-06	Proliferation/Metastasis
0.785938561	TME
0.577838697	TME
4.26E-20	Metabolism
7.35E-24	Metabolism
0.762230702	Proliferation/Metastasis
0.00458688	Proliferation/Metastasis
3.59E-12	Proliferation/Metastasis

0.009440565	Metabolism
6.90E-09	Metabolism
0.029212465	Metabolism
0.20053591	Proliferation/Metastasis
0.116769405	TME
0.106763311	TME
4.62E-09	Metabolism
5.14E-23	Proliferation/Metastasis
9.82E-23	Metabolism
0.313822148	TME
0.104542546	TME
0.371193554	TME
0.082435055	TME
0.547275219	Metabolism
8.97E-15	TME
9.47E-23	Proliferation/Metastasis
0.242497258	TME
8.11E-19	Proliferation/Metastasis
4.21E-10	Proliferation/Metastasis
7.74E-23	Metabolism
0.037907738	Proliferation/Metastasis
0.839543341	TME
0.025101285	Metabolism
0.091609836	TME
0.005702897	TME
0.02686699	TME
0.037883479	TME
9.66E-10	TME
0.580572543	TME
7.31E-07	Metabolism
3.20E-05	TME
0.006708368	Metabolism
3.31E-10	Metabolism
7.51E-15	Proliferation/Metastasis
2.23E-08	Proliferation/Metastasis
0.032472927	Metabolism
0.001111802	Metabolism
2.18E-10	Metabolism
8.87E-13	Metabolism
0.0010518	Proliferation/Metastasis
0.001029455	Proliferation/Metastasis
0.112906266	Metabolism
0.339240736	Metabolism

0.629601264	Metabolism
0.034294611	TME
0.11607421	Metabolism
0.153502839	Metabolism
0.443915102	Metabolism
4.33E-20	Metabolism
1.10E-16	Proliferation/Metastasis
0.001270165	Metabolism
0.961049278	Metabolism
0.641856203	Metabolism
0.000132157	Metabolism
4.07E-09	Metabolism
0.012556277	Metabolism
0.001039246	Proliferation/Metastasis
0.012291048	Metabolism
1.12E-11	Metabolism
1.27E-15	Proliferation/Metastasis
0.853246893	Metabolism
3.88E-33	Metabolism
1.83E-17	Metabolism
6.67E-07	Metabolism
0.012690271	Metabolism
0.04731268	Metabolism
0.042831557	Metabolism
0.000470193	Metabolism
0.498751352	TME
0.253044408	TME
0.001671072	TME
0.646628309	TME
0.005754547	TME
1.14E-06	Metabolism
0.005376723	Metabolism
6.00E-30	Proliferation/Metastasis
2.82E-08	Metabolism
1.10E-12	Proliferation/Metastasis
3.74E-06	Metabolism
1.80E-07	TME
0.766629993	Metabolism
2.47E-05	Metabolism
3.47E-09	Metabolism
0.006635383	Metabolism
0.166467572	TME
0.007508824	TME

1.14E-19	Proliferation/Metastasis
1.09E-17	Metabolism
0.00142141	Proliferation/Metastasis
6.43E-09	Proliferation/Metastasis
5.19E-08	TME
4.87E-06	TME
1.45E-06	TME
1.89E-06	TME
3.79E-13	Metabolism
4.90E-07	Proliferation/Metastasis
5.19E-06	Metabolism
0.038330906	Metabolism
0.008382719	Proliferation/Metastasis
0.00119914	Proliferation/Metastasis
0.012337501	Metabolism
0.406917991	Metabolism
0.003885844	Metabolism
0.000281096	Metabolism
0.002800662	TME
3.76E-12	TME
0.00024397	TME
5.06E-08	TME
4.56E-05	TME
0.136645192	Metabolism
0.205983716	Metabolism
0.185988493	Metabolism
0.034093739	Metabolism
0.769819348	Metabolism
0.00877218	TME
0.017769679	TME
3.45E-08	TME
1.26E-08	TME
1.04E-08	TME
9.10E-09	TME
3.86E-08	TME
1.58E-05	TME
7.38E-08	TME
2.23E-06	Proliferation/Metastasis
5.39E-11	Proliferation/Metastasis
7.72E-08	Metabolism
5.69E-23	Metabolism
1.45E-13	TME
0.018828853	Metabolism

0.011057835	Metabolism
1.85E-11	TME
3.45E-17	Proliferation/Metastasis
1.17E-16	Proliferation/Metastasis
0.001029416	TME
0.001221995	Metabolism
1.52E-19	Metabolism
2.75E-17	Proliferation/Metastasis
1.33E-09	Proliferation/Metastasis
2.62E-10	TME
3.19E-10	TME
2.51E-09	TME
2.45E-06	TME
7.68E-05	Proliferation/Metastasis
3.61E-05	TME
2.62E-07	TME
1.43E-09	Metabolism
2.66E-11	TME
2.54E-09	TME
7.87E-06	TME
0.18966543	TME
0.960197231	Metabolism
0.376916263	Metabolism
0.000363431	Metabolism
5.88E-11	TME
2.93E-08	Metabolism
2.03E-10	TME
0.002317865	TME
1.25E-09	TME
0.005848378	TME
7.59E-14	TME
1.34E-05	Metabolism
1.19E-07	Proliferation/Metastasis
0.449076103	Metabolism
2.65E-07	Proliferation/Metastasis
5.99E-12	Metabolism
0.81861486	Metabolism
0.932403411	Metabolism
7.27E-06	Metabolism
0.057199711	Metabolism
0.000440975	Metabolism
3.57E-07	Metabolism
0.233381943	Metabolism

0.0011162	Metabolism
1.82E-08	Metabolism
0.264294973	Metabolism
0.134549661	Metabolism
1.78E-06	Metabolism
5.45E-12	Metabolism
0.000165331	TME
6.58E-05	Proliferation/Metastasis
7.02E-07	Metabolism
0.014439928	Proliferation/Metastasis
1.05E-08	TME
8.94E-08	Proliferation/Metastasis
3.67E-11	Proliferation/Metastasis
4.81E-07	TME
1.61E-06	TME
2.52E-12	Metabolism
6.25E-12	Metabolism
0.001218737	Proliferation/Metastasis
1.94E-11	Proliferation/Metastasis
7.13E-13	Proliferation/Metastasis
0.001509426	Metabolism
2.76E-07	Metabolism
0.104816001	Metabolism
2.46E-10	Proliferation/Metastasis
2.55E-07	TME
1.06E-05	TME
0.001814135	Metabolism
3.71E-12	Proliferation/Metastasis
7.97E-09	Metabolism
4.58E-07	TME
4.76E-07	TME
0.033735625	TME
3.24E-09	TME
2.28E-06	Metabolism
0.715538068	TME
0.002383413	Proliferation/Metastasis
6.42E-08	TME
5.54E-10	Proliferation/Metastasis
1.45E-12	Proliferation/Metastasis
7.64E-05	Metabolism
1.93E-34	Proliferation/Metastasis
3.75E-09	TME
0.714203958	Metabolism

0.001126588	TME
6.53E-13	TME
1.81E-05	TME
8.89E-09	TME
0.010760279	TME
1.62E-09	TME
0.767272517	Metabolism
0.000637253	TME
0.960259389	Metabolism
0.031470327	Metabolism
5.85E-08	Proliferation/Metastasis
0.005936947	Proliferation/Metastasis
1.31E-26	Metabolism
0.009675107	Metabolism
0.710389362	Metabolism
1.68E-09	Metabolism
0.000557052	Proliferation/Metastasis
0.035284201	Proliferation/Metastasis
0.019231939	Metabolism
8.87E-07	Metabolism
6.62E-08	Metabolism
2.24E-07	TME
0.003126852	Metabolism
9.70E-05	Metabolism
0.039500086	Metabolism
3.86E-11	Metabolism
9.99E-07	Proliferation/Metastasis
4.66E-13	Metabolism
1.01E-09	Metabolism
0.015928343	Metabolism
1.46E-37	Metabolism
1.45E-34	Metabolism
2.29E-07	Metabolism
0.003715238	Proliferation/Metastasis
0.293778281	Metabolism
4.55E-07	Metabolism
5.49E-13	Proliferation/Metastasis
8.24E-18	Metabolism
7.31E-05	Metabolism
2.97E-09	Metabolism
0.001262939	Metabolism
1.62E-05	Metabolism
1.60E-05	Metabolism

0.789118223	Metabolism
0.000383036	Metabolism
1.58E-10	TME
3.26E-08	TME
1.02E-06	TME
8.81E-10	TME
9.23E-10	TME
0.107584903	Metabolism
0.003185814	Metabolism
3.01E-08	Proliferation/Metastasis
0.000297592	Metabolism
0.000134237	Proliferation/Metastasis
0.97077078	Metabolism
0.000455228	TME
0.277627485	Metabolism
2.95E-13	Metabolism
0.000277195	Metabolism
0.011288827	Metabolism
6.23E-06	TME
0.097943025	TME
5.99E-15	Proliferation/Metastasis
2.95E-08	Metabolism
0.27670686	Proliferation/Metastasis
0.000526584	Proliferation/Metastasis
0.008130181	TME
0.001931381	TME
2.86E-05	TME
0.004556491	TME
0.742218681	Metabolism
0.001834128	Proliferation/Metastasis
0.065957693	Metabolism
0.581941113	Metabolism
0.219720146	Proliferation/Metastasis
5.60E-07	Proliferation/Metastasis
0.075006469	Metabolism
0.278329254	Metabolism
0.059343896	Metabolism
0.00162057	Metabolism
0.23790762	TME
1.27E-11	TME
0.003718124	TME
2.47E-05	TME
0.000173028	TME

0.063291804	Metabolism
0.107421816	Metabolism
0.015384463	Metabolism
2.92E-06	Metabolism
0.003539389	Metabolism
2.59E-14	TME
0.006361776	TME
0.000379093	TME
7.43E-06	TME
2.14E-07	TME
0.000464	TME
0.000314397	TME
0.438145475	TME
0.002608996	TME
0.005347498	Proliferation/Metastasis
0.000402415	Proliferation/Metastasis
0.043406014	Metabolism
0.195091921	Metabolism
0.077026052	TME
0.626640354	Metabolism
1.92E-05	Metabolism
7.62E-07	TME
3.55E-18	Proliferation/Metastasis
0.002205524	Proliferation/Metastasis
0.865378056	TME
0.483573693	Metabolism
5.61E-07	Metabolism
0.424311272	Proliferation/Metastasis
1.03E-15	Proliferation/Metastasis
2.44E-07	TME
2.64E-07	TME
7.64E-07	TME
1.08E-09	TME
5.87E-15	Proliferation/Metastasis
3.42E-15	TME
1.12E-05	TME
1.17E-07	Metabolism
4.29E-08	TME
5.40E-06	TME
0.130564491	TME
0.000116627	TME
0.010792594	Metabolism
0.484496331	Metabolism

0.036333741	Metabolism
5.31E-11	TME
0.009419953	Metabolism
0.000140917	TME
0.000244676	TME
1.10E-05	TME
0.596131516	TME
3.27E-10	TME
6.58E-05	Metabolism
2.04E-05	Proliferation/Metastasis
0.331997385	Metabolism
3.20E-20	Proliferation/Metastasis
0.04446528	Metabolism
0.233028888	Metabolism
1.77E-05	Metabolism
0.003333033	Metabolism
0.911469905	Metabolism
0.144063724	Metabolism
1.55E-05	Metabolism
0.006099067	Metabolism
0.002268254	Metabolism
0.034996497	Metabolism
0.03095325	Metabolism
0.000194573	Metabolism
3.35E-07	Metabolism
2.31E-11	Metabolism
6.83E-05	TME
2.75E-19	Proliferation/Metastasis
1.27E-06	Metabolism
0.004041152	Proliferation/Metastasis
7.46E-05	TME
2.69E-15	Proliferation/Metastasis
8.30E-15	Proliferation/Metastasis
2.32E-05	TME
0.028625042	TME
3.87E-31	Metabolism
4.24E-34	Metabolism
0.007767035	Proliferation/Metastasis
0.68155476	Proliferation/Metastasis
1.67E-19	Proliferation/Metastasis
0.15562122	Metabolism
4.72E-14	Metabolism
0.000101134	Metabolism

0.000165335	Proliferation/Metastasis
2.76E-08	TME
2.04E-07	TME
6.36E-05	Metabolism
4.49E-28	Proliferation/Metastasis
5.95E-38	Metabolism
1.50E-06	TME
4.33E-05	TME
0.012998987	TME
9.76E-12	TME
0.378398313	Metabolism
4.42E-11	TME
7.56E-31	Proliferation/Metastasis
0.000125456	TME
8.53E-28	Proliferation/Metastasis
0.060888759	Proliferation/Metastasis
3.55E-22	Metabolism
2.39E-09	Proliferation/Metastasis
1.69E-07	TME
0.002326504	Metabolism
0.130223371	TME
1.51E-14	TME
1.49E-08	TME
0.000689655	TME
1.40E-06	TME
4.30E-12	TME
8.05E-05	Metabolism
1.87E-06	TME
0.13474294	Metabolism
1.49E-10	Metabolism
1.32E-08	Proliferation/Metastasis
5.57E-08	Proliferation/Metastasis
0.043687621	Metabolism
0.007308983	Metabolism
1.20E-05	Metabolism
1.98E-21	Metabolism
0.022287668	Proliferation/Metastasis
1.34E-12	Proliferation/Metastasis
0.215348169	Metabolism
0.124058505	Metabolism
0.422534468	Metabolism
1.35E-07	TME
0.056797988	Metabolism

0.007126218	Metabolism
0.717954562	Metabolism
1.33E-26	Metabolism
1.08E-17	Proliferation/Metastasis
0.086743033	Metabolism
0.718544562	Metabolism
0.164411305	Metabolism
0.000282549	Metabolism
1.15E-10	Metabolism
7.49E-06	Metabolism
9.30E-06	Proliferation/Metastasis
0.31872416	Metabolism
8.34E-05	Metabolism
7.26E-29	Proliferation/Metastasis
0.817372948	Metabolism
1.07E-24	Metabolism
2.74E-24	Metabolism
0.000219782	Metabolism
0.033408953	Metabolism
0.243270977	Metabolism
0.291149674	Metabolism
2.42E-10	Metabolism
1.27E-06	TME
0.000487826	TME
9.83E-07	TME
7.17E-05	TME
0.004267365	TME
1.53E-07	Metabolism
0.244774847	Metabolism
3.58E-29	Proliferation/Metastasis
3.95E-06	Metabolism
3.22E-07	Proliferation/Metastasis
0.682269251	Metabolism
0.348549855	TME
0.47919786	Metabolism
8.90E-11	Metabolism
0.007032545	Metabolism
0.000891376	Metabolism
3.26E-10	TME
2.54E-05	TME
2.47E-23	Proliferation/Metastasis
0.007717255	Metabolism
0.511470056	Proliferation/Metastasis

2.39E-13	Proliferation/Metastasis
0.033163232	TME
3.99E-06	TME
2.06E-07	TME
2.28E-07	TME
0.161813614	Metabolism
1.22E-12	Proliferation/Metastasis
1.12E-08	Metabolism
2.79E-34	Metabolism
0.006801144	Proliferation/Metastasis
0.000889945	Proliferation/Metastasis
4.49E-05	Metabolism
2.57E-11	Metabolism
2.20E-05	Metabolism
0.001416944	Metabolism
4.15E-08	TME
6.60E-10	TME
2.83E-16	TME
4.14E-10	TME
6.55E-25	TME
0.015829557	Metabolism
3.43E-05	Metabolism
1.14E-05	Metabolism
0.146394486	Metabolism
2.14E-05	Metabolism
1.00E-08	TME
5.55E-18	TME
0.284389501	TME
2.11E-06	TME
8.72E-09	TME
2.54E-08	TME
1.98E-07	TME
0.071972539	TME
0.000373789	TME
1.22E-07	Proliferation/Metastasis
0.032332745	Proliferation/Metastasis
1.77E-12	Metabolism
0.448657855	Metabolism
6.82E-05	TME
0.279263929	Metabolism
1.09E-05	Metabolism
0.002284031	TME
2.45E-06	Proliferation/Metastasis

0.000753658	Proliferation/Metastasis
2.38E-08	TME
0.761731023	Metabolism
4.80E-16	Metabolism
0.00013117	Proliferation/Metastasis
0.888253424	Proliferation/Metastasis
3.84E-12	TME
0.773921731	TME
5.68E-09	TME
3.74E-08	TME
3.91E-06	Proliferation/Metastasis
3.01E-12	TME
0.008582506	TME
6.43E-05	Metabolism
0.000470306	TME
0.002145986	TME
0.000852659	TME
0.485250024	TME
0.000102227	Metabolism
0.894146594	Metabolism
7.54E-22	Metabolism
0.023268742	TME
9.42E-17	Metabolism
1.27E-13	TME
2.58E-07	TME
0.00010686	TME
0.06631088	TME
2.15E-10	TME
8.06E-32	Metabolism
2.84E-05	Proliferation/Metastasis
5.76E-31	Metabolism
0.834075116	Proliferation/Metastasis
0.004822104	Metabolism
1.66E-08	Metabolism
1.32E-07	Metabolism
7.64E-09	Metabolism
2.98E-09	Metabolism
0.483832002	Metabolism
0.439047263	Metabolism
0.49643113	Metabolism
0.092352267	Metabolism
0.13496603	Metabolism
0.000498781	Metabolism

0.988427841	Metabolism
0.01762049	Metabolism
0.007107258	Metabolism
0.112944584	TME
3.01E-05	Proliferation/Metastasis
0.369489138	Metabolism
4.27E-12	Proliferation/Metastasis
0.001434655	TME
0.083767784	Proliferation/Metastasis
0.024797992	Proliferation/Metastasis
0.536980001	TME
2.49E-06	TME
1.69E-05	Metabolism
0.000842551	Metabolism
1.60E-12	Proliferation/Metastasis
1.00E-07	Proliferation/Metastasis
0.035494111	Proliferation/Metastasis
0.001584301	Metabolism
0.048893545	Metabolism
2.84E-24	Metabolism
0.000267099	Proliferation/Metastasis
0.148773054	TME
0.027797386	TME
0.07830432	Metabolism
0.218489125	Proliferation/Metastasis
0.134996036	Metabolism
2.40E-14	TME
6.18E-13	TME
0.391390747	TME
5.72E-09	TME
0.51407365	Metabolism
9.40E-18	TME
6.98E-06	Proliferation/Metastasis
0.000555958	TME
0.000725787	Proliferation/Metastasis
5.78E-24	Proliferation/Metastasis
0.60205048	Metabolism
7.24E-15	Proliferation/Metastasis
9.74E-05	TME
0.235723814	Metabolism
0.001422362	TME
3.91E-08	TME
1.23E-15	TME

0.00521642	TME
0.059937282	TME
1.02E-07	TME
2.75E-06	Metabolism
1.69E-15	TME
2.63E-08	Metabolism
0.002310808	Metabolism
1.61E-13	Proliferation/Metastasis
0.015302416	Proliferation/Metastasis
0.528933245	Metabolism
0.001042969	Metabolism
0.080436318	Metabolism
1.96E-17	Metabolism
5.77E-28	Proliferation/Metastasis
3.80E-05	Proliferation/Metastasis
0.006061012	Metabolism
0.378146725	Metabolism
1.96E-07	Metabolism
0.102193342	TME
0.000259565	Metabolism
0.187699366	Metabolism
0.42769833	Metabolism
0.262439446	Metabolism
6.44E-13	Proliferation/Metastasis
0.000103804	Metabolism
0.002804943	Metabolism
0.195638008	Metabolism
2.96E-06	Metabolism
1.81E-09	Metabolism
0.001933204	Metabolism
0.010996897	Proliferation/Metastasis
2.80E-05	Metabolism
2.91E-05	Metabolism
0.014779702	Proliferation/Metastasis
3.55E-15	Metabolism
0.390144016	Metabolism
7.73E-12	Metabolism
6.19E-11	Metabolism
3.76E-11	Metabolism
5.03E-05	Metabolism
0.192705751	Metabolism
1.82E-09	Metabolism
7.40E-06	TME

0.900284598	TME
0.049893828	TME
0.016673597	TME
2.37E-05	TME
1.02E-05	Metabolism
8.86E-23	Metabolism
0.087115918	Proliferation/Metastasis
6.69E-13	Metabolism
2.56E-10	Proliferation/Metastasis
0.000314133	Metabolism
6.05E-26	TME
4.18E-05	Metabolism
1.18E-05	Metabolism
0.700665556	Metabolism
0.050521702	Metabolism
3.25E-05	TME
4.08E-06	TME
0.004173725	Proliferation/Metastasis
0.878567626	Metabolism
3.41E-21	Proliferation/Metastasis
5.39E-11	Proliferation/Metastasis
0.888738788	TME
0.224613482	TME
0.185425226	TME
0.175813806	TME
0.827374106	Metabolism
0.000354528	Proliferation/Metastasis
0.504624977	Metabolism
0.019658772	Metabolism
0.542739001	Proliferation/Metastasis
0.133840766	Proliferation/Metastasis
0.396229623	Metabolism
0.074618379	Metabolism
0.078965717	Metabolism
0.218686445	Metabolism
0.906120145	TME
0.907345241	TME
0.380558524	TME
0.106835479	TME
0.536977137	TME
0.425807441	Metabolism
0.003266997	Metabolism
0.256844117	Metabolism

0.44164066	Metabolism
0.00873225	Metabolism
0.826323034	TME
0.656465688	TME
0.145659162	TME
0.408639399	TME
0.209775736	TME
0.209509959	TME
0.187615598	TME
0.149011828	TME
0.101826651	TME
0.148785211	Proliferation/Metastasis
0.74068588	Proliferation/Metastasis
0.03353569	Metabolism
0.455449467	Metabolism
0.447001465	TME
0.846581892	Metabolism
0.518301235	Metabolism
0.206449222	TME
0.370733666	Proliferation/Metastasis
0.515013706	Proliferation/Metastasis
0.878852399	TME
0.046607371	Metabolism
0.852251133	Metabolism
0.156206622	Proliferation/Metastasis
0.272797187	Proliferation/Metastasis
0.122580727	TME
0.018928872	TME
0.173122759	TME
0.316678991	TME
0.000261257	Proliferation/Metastasis
0.604892076	TME
0.128762454	TME
0.118074726	Metabolism
0.124202905	TME
0.19126627	TME
0.222516897	TME
0.116644959	TME
0.027870904	Metabolism
0.492781091	Metabolism
0.018658318	Metabolism
0.616548835	TME
0.039881806	Metabolism

0.466039121	TME
0.195414129	TME
0.145812582	TME
0.088619518	TME
0.031409081	TME
0.104259516	Metabolism
0.036964672	Proliferation/Metastasis
0.00185476	Metabolism
0.175137058	Proliferation/Metastasis
0.46667458	Metabolism
0.645329905	Metabolism
0.426927711	Metabolism
0.449681265	Metabolism
0.097349092	Metabolism
0.392415534	Metabolism
0.322635771	Metabolism
0.585239896	Metabolism
0.390265661	Metabolism
0.830134334	Metabolism
0.528072901	Metabolism
0.407472949	Metabolism
0.462566499	Metabolism
0.487358535	Metabolism
0.131650465	TME
0.761338278	Proliferation/Metastasis
0.624989869	Metabolism
0.663649789	Proliferation/Metastasis
0.147598896	TME
0.010271592	Proliferation/Metastasis
0.000454224	Proliferation/Metastasis
0.011728617	TME
0.050463147	TME
0.041535867	Metabolism
0.001667809	Metabolism
0.986152403	Proliferation/Metastasis
0.002316646	Proliferation/Metastasis
0.043179478	Proliferation/Metastasis
0.929761976	Metabolism
0.03269584	Metabolism
0.669036435	Metabolism
0.029993279	Proliferation/Metastasis
0.109856044	TME
0.129513247	TME

0.205793116	Metabolism
0.169686398	Proliferation/Metastasis
0.000875599	Metabolism
0.370726134	TME
0.455888315	TME
0.789274207	TME
0.455650648	TME
0.076471388	Metabolism
0.003102661	TME
0.027788285	Proliferation/Metastasis
0.090704189	TME
0.001753208	Proliferation/Metastasis
0.003255892	Proliferation/Metastasis
0.037269818	Metabolism
0.187831715	Proliferation/Metastasis
0.136292346	TME
0.004115425	Metabolism
0.832777786	TME
0.056221555	TME
0.100893392	TME
0.131946723	TME
0.351802397	TME
0.21703941	TME
0.357853567	Metabolism
0.167821538	TME
0.441187126	Metabolism
0.075569358	Metabolism
0.027372533	Proliferation/Metastasis
0.769209014	Proliferation/Metastasis
0.310271195	Metabolism
0.888412162	Metabolism
0.494068339	Metabolism
0.818567726	Metabolism
0.060551543	Proliferation/Metastasis
0.119269681	Proliferation/Metastasis
0.194721488	Metabolism
0.324120142	Metabolism
0.017839926	Metabolism
0.2875213	TME
0.144940398	Metabolism
0.173620388	Metabolism
0.669024405	Metabolism
0.071438006	Metabolism

6.22E-06	Proliferation/Metastasis
0.69087033	Metabolism
0.081239519	Metabolism
0.505040033	Metabolism
0.092934707	Metabolism
0.260736034	Metabolism
0.295264345	Metabolism
0.805647015	Proliferation/Metastasis
0.031004269	Metabolism
0.261455263	Metabolism
0.035749397	Proliferation/Metastasis
0.646819256	Metabolism
0.138285439	Metabolism
0.000138261	Metabolism
0.07462411	Metabolism
0.223737997	Metabolism
0.063161198	Metabolism
0.674616823	Metabolism
0.289431025	Metabolism
0.142062407	TME
0.023171021	TME
0.059231413	TME
0.139661807	TME
0.26464686	TME
0.019411196	Metabolism
0.115216413	Metabolism
0.07447531	Proliferation/Metastasis
0.013546417	Metabolism
0.116761645	Proliferation/Metastasis
0.368061198	Metabolism
0.538022532	TME
0.183580935	Metabolism
0.753424358	Metabolism
0.342157087	Metabolism
0.861871254	Metabolism
0.222866332	TME
0.439165809	TME
0.030952554	Proliferation/Metastasis
0.373339085	Metabolism
0.264929197	Proliferation/Metastasis
0.572321608	Proliferation/Metastasis
0.035292018	TME
0.964707442	TME

0.792298344	TME
0.899878976	TME
0.130988517	Metabolism
0.822721828	Proliferation/Metastasis
0.856345953	Metabolism
0.904888425	Metabolism
0.385047975	Proliferation/Metastasis
0.48123528	Proliferation/Metastasis
0.196337311	Metabolism
0.099674661	Metabolism
0.704077855	Metabolism
0.026485469	Metabolism
0.557658122	TME
0.153327214	TME
0.784431081	TME
0.941311625	TME
0.058010005	TME
0.074787965	Metabolism
0.980448703	Metabolism
4.91E-05	Metabolism
0.139102168	Metabolism
0.288163741	Metabolism
0.244005264	TME
0.134407626	TME
0.262053952	TME
0.732398388	TME
0.628561657	TME
0.709295526	TME
0.916461009	TME
0.399047208	TME
0.971056784	TME
0.32713058	Proliferation/Metastasis
0.192192659	Proliferation/Metastasis
0.032545645	Metabolism
0.362835289	Metabolism
0.188482523	TME
0.632282306	Metabolism
0.378179317	Metabolism
0.720928512	TME
0.551559868	Proliferation/Metastasis
0.517052801	Proliferation/Metastasis
0.086659535	TME
0.335312074	Metabolism

0.405495232	Metabolism
0.418791561	Proliferation/Metastasis
0.490275613	Proliferation/Metastasis
0.696375421	TME
0.232550177	TME
0.413086866	TME
0.683298496	TME
0.02516573	Proliferation/Metastasis
0.451715661	TME
0.772627659	TME
0.606292583	Metabolism
0.472877781	TME
0.414071436	TME
0.643808537	TME
0.204234263	TME
0.667802431	Metabolism
0.019024296	Metabolism
0.589358871	Metabolism
0.171579033	TME
0.359553167	Metabolism
0.078192267	TME
0.980368334	TME
0.508107686	TME
0.548409973	TME
0.777268215	TME
0.173378246	Metabolism
0.584186053	Proliferation/Metastasis
0.690548209	Metabolism
0.940879227	Proliferation/Metastasis
0.008428598	Metabolism
0.693606831	Metabolism
0.002737446	Metabolism
0.042319207	Metabolism
0.036823726	Metabolism
0.115286175	Metabolism
0.518019901	Metabolism
0.001104176	Metabolism
0.007273211	Metabolism
0.494992164	Metabolism
0.020041093	Metabolism
0.022220536	Metabolism
0.00784931	Metabolism
0.00064125	Metabolism

0.696698848	TME
0.043329879	Proliferation/Metastasis
0.130855331	Metabolism
0.127964502	Proliferation/Metastasis
0.741197239	TME
0.287334325	Proliferation/Metastasis
0.428627619	Proliferation/Metastasis
0.749643793	TME
0.280655936	TME
0.354832429	Metabolism
0.561591606	Metabolism
0.29564229	Proliferation/Metastasis
0.001636603	Proliferation/Metastasis
0.610762925	Proliferation/Metastasis
0.416447161	Metabolism
0.067731158	Metabolism
0.000408222	Metabolism
0.068560968	Proliferation/Metastasis
0.995935322	TME
0.96193346	TME
0.037242934	Metabolism
0.016293227	Proliferation/Metastasis
0.721685583	Metabolism
0.985635376	TME
0.220963906	TME
0.282659629	TME
0.146753547	TME
0.347517388	Metabolism
0.057231266	TME
0.386954582	Proliferation/Metastasis
0.653504321	TME
0.968794013	Proliferation/Metastasis
0.216985586	Proliferation/Metastasis
0.016123894	Metabolism
0.685382965	Proliferation/Metastasis
0.80820817	TME
0.211183885	Metabolism
0.671885262	TME
0.948189285	TME
0.366101499	TME
0.627837832	TME
0.366624103	TME
0.84838507	TME

0.679618849	Metabolism
0.461228993	TME
0.276938992	Metabolism
0.122189942	Metabolism
0.475431801	Proliferation/Metastasis
0.279624821	Proliferation/Metastasis
0.072324733	Metabolism
0.007788395	Metabolism
0.044126305	Metabolism
0.135519245	Metabolism
0.620849397	Proliferation/Metastasis
0.493562425	Proliferation/Metastasis
0.000465514	Metabolism
0.019591465	Metabolism
0.072835743	Metabolism
0.033453604	TME
0.006675723	Metabolism
0.300884868	Metabolism
0.496285318	Metabolism
0.432616916	Metabolism
0.880509921	Proliferation/Metastasis
0.00821783	Metabolism
0.315932144	Metabolism
0.003726079	Metabolism
0.946004033	Metabolism
0.38923307	Metabolism
0.00458449	Metabolism
0.000120801	Proliferation/Metastasis
0.301495214	Metabolism
0.210335989	Metabolism
0.299046584	Proliferation/Metastasis
0.646782606	Metabolism
0.563266835	Metabolism
0.490841718	Metabolism
0.057902447	Metabolism
0.730530018	Metabolism
0.028211956	Metabolism
0.040423518	Metabolism
0.019930557	Metabolism
0.585287599	TME
0.357134776	TME
0.866615958	TME
0.915197362	TME

0.642174715	TME
0.050675605	Metabolism
0.069326681	Metabolism
0.095708481	Proliferation/Metastasis
0.086706441	Metabolism
0.227240181	Proliferation/Metastasis
0.482879268	Metabolism
0.388019161	TME
0.199670467	Metabolism
0.569119114	Metabolism
0.937643609	Metabolism
0.001161606	Metabolism
0.318099176	TME
0.230110092	TME
0.006335354	Proliferation/Metastasis
0.756014231	Metabolism
0.697008787	Proliferation/Metastasis
0.017759002	Proliferation/Metastasis
0.178951813	TME
0.073593711	TME
0.020688852	TME
0.007022385	TME
0.003913392	Metabolism
0.018230486	Proliferation/Metastasis
0.016575988	Metabolism
0.076481323	Metabolism
0.241667768	Proliferation/Metastasis
0.003447679	Proliferation/Metastasis
0.010820984	Metabolism
0.333941906	Metabolism
0.169346756	Metabolism
0.013036294	Metabolism
0.039033491	TME
0.080372792	TME
0.000348056	TME
0.027649347	TME
0.873375942	TME
0.214619534	Metabolism
0.344445825	Metabolism
0.196389014	Metabolism
0.816325049	Metabolism
0.624287885	Metabolism
0.004705686	TME

0.0759892	TME
0.372792173	TME
0.000720143	TME
0.213330792	TME
0.045195649	TME
0.024588745	TME
0.079622622	TME
0.038557792	TME
0.061566814	Proliferation/Metastasis
0.004825369	Proliferation/Metastasis
0.760952307	Metabolism
0.06185517	Metabolism
0.669761512	TME
0.535663601	Metabolism
0.004330127	Metabolism
0.07098531	TME
0.002862265	Proliferation/Metastasis
0.772871148	Proliferation/Metastasis
0.003181171	TME
0.389694589	Metabolism
0.959533701	Metabolism
0.154959695	Proliferation/Metastasis
0.000240087	Proliferation/Metastasis
0.002316327	TME
0.060650554	TME
0.024104627	TME
0.015326695	TME
0.000232688	Proliferation/Metastasis
0.007698235	TME
0.161532579	TME
0.906913827	Metabolism
0.000327572	TME
0.053617711	TME
0.197930748	TME
9.18E-05	TME
0.865042563	Metabolism
0.532903804	Metabolism
0.970264356	Metabolism
0.01126822	TME
0.082174284	Metabolism
0.026265408	TME
0.150486433	TME
0.030895388	TME

0.873027692	TME
0.77626363	TME
0.202594777	Metabolism
0.036690691	Proliferation/Metastasis
0.708288072	Metabolism
0.000460907	Proliferation/Metastasis
0.233368876	Metabolism
0.767109542	Metabolism
0.066265909	Metabolism
0.755081409	Metabolism
0.4671536	Metabolism
0.216950072	Metabolism
0.772298769	Metabolism
0.076715958	Metabolism
0.217674674	Metabolism
0.754930679	Metabolism
0.868737258	Metabolism
0.342816516	Metabolism
0.237303128	Metabolism
0.888771199	Metabolism
0.05764256	TME
0.215471962	Proliferation/Metastasis
0.221400583	Metabolism
0.184546752	Proliferation/Metastasis
0.003861104	TME
0.005458253	Proliferation/Metastasis
0.01524729	Proliferation/Metastasis
0.078495012	TME
0.506799544	TME
0.004326175	Metabolism
3.70E-07	Metabolism
0.043694472	Proliferation/Metastasis
0.065303257	Proliferation/Metastasis
0.001981821	Proliferation/Metastasis
0.003220481	Metabolism
0.674670605	Metabolism
0.710499661	Metabolism
0.17311404	Proliferation/Metastasis
0.009026613	TME
0.055975391	TME
0.00017311	Metabolism
0.004196878	Proliferation/Metastasis
1.35E-08	Metabolism

0.000132884	TME
8.21E-05	TME
0.1163829	TME
0.00867154	TME
0.981214337	Metabolism
0.776633437	TME
2.24E-08	Proliferation/Metastasis
0.140592255	TME
0.001567103	Proliferation/Metastasis
0.006104179	Proliferation/Metastasis
0.114144963	Metabolism
0.16755207	Proliferation/Metastasis
0.022672416	TME
0.170183237	Metabolism
0.115939343	TME
0.012882362	TME
0.172240218	TME
0.083284589	TME
0.055989104	TME
0.011692173	TME
0.145045258	Metabolism
0.196889238	TME
0.058151018	Metabolism
0.038037782	Metabolism
0.00012856	Proliferation/Metastasis
0.695519077	Proliferation/Metastasis
0.453342896	Metabolism
0.256718246	Metabolism
8.28E-05	Metabolism
0.003351039	Metabolism
0.554644912	Proliferation/Metastasis
0.000370333	Proliferation/Metastasis
0.011764088	Metabolism
0.001051208	Metabolism
0.821536566	Metabolism
0.23281892	TME
0.521065407	Metabolism
0.050129822	Metabolism
0.379244929	Metabolism
0.000102645	Metabolism
3.43E-05	Proliferation/Metastasis
0.173444947	Metabolism
0.511736042	Metabolism

0.463683871	Metabolism
0.012924922	Metabolism
0.427310301	Metabolism
0.752703607	Metabolism
0.337506363	Proliferation/Metastasis
0.264896649	Metabolism
0.008582362	Metabolism
0.234647762	Proliferation/Metastasis
0.000590995	Metabolism
9.21E-06	Metabolism
0.00450372	Metabolism
0.006756331	Metabolism
0.051877672	Metabolism
0.974982797	Metabolism
0.000464134	Metabolism
0.658215631	Metabolism
0.006579252	TME
0.027265626	TME
0.022378177	TME
0.096354888	TME
0.403347741	TME
0.496720376	Metabolism
0.667448573	Metabolism
9.48E-05	Proliferation/Metastasis
0.871165834	Metabolism
0.048551991	Proliferation/Metastasis
0.388717642	Metabolism
0.451403553	TME
0.766654603	Metabolism
0.029853729	Metabolism
0.431136887	Metabolism
0.98048608	Metabolism
0.183252711	TME
0.575571213	TME
0.099826402	Proliferation/Metastasis
0.09963881	Metabolism
0.097282901	Proliferation/Metastasis
0.50663301	Proliferation/Metastasis
0.113388896	TME
2.72E-06	TME
0.000220449	TME
2.45E-09	TME
0.306321721	Metabolism

0.012955241	Proliferation/Metastasis
0.007600311	Metabolism
0.059435641	Metabolism
0.207891223	Proliferation/Metastasis
2.13E-05	Proliferation/Metastasis
0.619027172	Metabolism
0.991556299	Metabolism
0.000388809	Metabolism
0.117847642	Metabolism
0.021048296	TME
0.001129472	TME
0.005453873	TME
0.000390455	TME
9.58E-10	TME
0.388635034	Metabolism
0.019244067	Metabolism
0.001547401	Metabolism
9.03E-08	Metabolism
0.160078938	Metabolism
0.007823897	TME
0.06250052	TME
0.000841543	TME
6.48E-05	TME
1.78E-06	TME
6.65E-05	TME
4.13E-05	TME
0.001770916	TME
1.46E-06	TME
0.000992611	Proliferation/Metastasis
0.632778363	Proliferation/Metastasis
2.10E-06	Metabolism
0.899523702	Metabolism
0.026925149	TME
0.503265864	Metabolism
3.67E-05	Metabolism
1.16E-05	TME
0.146415979	Proliferation/Metastasis
8.27E-05	Proliferation/Metastasis
0.000359692	TME
0.138983198	Metabolism
0.242708238	Metabolism
1.21E-05	Proliferation/Metastasis
0.007752891	Proliferation/Metastasis

0.001317565	TME
4.21E-06	TME
5.83E-05	TME
1.51E-05	TME
0.719950665	Proliferation/Metastasis
0.000100546	TME
6.57E-05	TME
0.003432949	Metabolism
6.11E-06	TME
4.37E-06	TME
0.000153904	TME
0.014168503	TME
2.18E-05	Metabolism
2.30E-07	Metabolism
2.56E-05	Metabolism
3.89E-07	TME
0.000320553	Metabolism
0.101392582	TME
0.001347342	TME
4.96E-08	TME
0.000428088	TME
1.86E-05	TME
0.038064334	Metabolism
4.72E-05	Proliferation/Metastasis
0.134823533	Metabolism
0.091170602	Proliferation/Metastasis
0.280409112	Metabolism
0.197615814	Metabolism
0.256842162	Metabolism
0.681198606	Metabolism
0.24010595	Metabolism
0.000253081	Metabolism
0.001027092	Metabolism
0.578186266	Metabolism
0.012093324	Metabolism
0.320712927	Metabolism
0.491853822	Metabolism
0.396147879	Metabolism
2.18E-06	Metabolism
0.008163845	Metabolism
3.95E-06	TME
0.960525469	Proliferation/Metastasis
0.621657478	Metabolism

0.005631413	Proliferation/Metastasis
0.000250176	TME
0.000234002	Proliferation/Metastasis
3.30E-06	Proliferation/Metastasis
0.000168493	TME
0.008411767	TME
0.001664264	Metabolism
0.026756556	Metabolism
0.000727825	Proliferation/Metastasis
0.630531157	Proliferation/Metastasis
0.008278845	Proliferation/Metastasis
0.001496222	Metabolism
0.00164148	Metabolism
0.018715286	Metabolism
0.061071402	Proliferation/Metastasis
0.000104427	TME
2.94E-05	TME
0.229435927	Metabolism
0.003304543	Proliferation/Metastasis
0.479144356	Metabolism
0.011733452	TME
0.001907333	TME
2.68E-12	TME
0.002567344	TME
0.142328542	Metabolism
0.449608414	TME
0.001489655	Proliferation/Metastasis
1.72E-06	TME
0.148117494	Proliferation/Metastasis
0.034707284	Proliferation/Metastasis
0.011814667	Metabolism
0.003987011	Proliferation/Metastasis
0.000305976	TME
0.00097356	Metabolism
0.04694005	TME
0.037104963	TME
0.750924084	TME
0.001297724	TME
0.000782096	TME
1.44E-05	TME
3.88E-05	Metabolism
2.33E-05	TME
0.014705003	Metabolism

2.74E-06	Metabolism
0.000191502	Proliferation/Metastasis
0.376766092	Proliferation/Metastasis
0.047213278	Metabolism
0.000444046	Metabolism
0.284154667	Metabolism
1.12E-10	Metabolism
0.007744589	Proliferation/Metastasis
9.58E-05	Proliferation/Metastasis
0.226180247	Metabolism
0.48520945	Metabolism
0.079486306	Metabolism
0.000187457	TME
0.877960958	Metabolism
5.51E-05	Metabolism
0.004473362	Metabolism
0.471517423	Metabolism
0.002360324	Proliferation/Metastasis
0.003723342	Metabolism
0.010079638	Metabolism
1.72E-07	Metabolism
0.03816303	Metabolism
0.003875842	Metabolism
9.16E-06	Metabolism
7.73E-06	Proliferation/Metastasis
2.74E-07	Metabolism
0.45905104	Metabolism
0.440720057	Proliferation/Metastasis
0.32877954	Metabolism
0.127560013	Metabolism
0.036274274	Metabolism
0.167628979	Metabolism
0.000164182	Metabolism
2.34E-05	Metabolism
0.100608838	Metabolism
0.00109163	Metabolism
5.61E-05	TME
0.000672921	TME
4.42E-05	TME
6.60E-06	TME
0.021707181	TME
0.161936615	Metabolism
0.0707825	Metabolism

0.504139095	Proliferation/Metastasis
0.538760944	Metabolism
0.002930035	Proliferation/Metastasis
0.012657413	Metabolism
0.00084167	TME
0.610038859	Metabolism
0.001032685	Metabolism
0.752635542	Metabolism
4.15E-06	Metabolism
0.459499767	TME
0.10790689	TME
0.042314459	Proliferation/Metastasis
0.622152521	Metabolism
5.75E-05	Proliferation/Metastasis
0.061736659	Proliferation/Metastasis
0.671113018	TME
0.608014179	TME
0.315930298	TME
0.133725065	TME
0.039137252	Metabolism
0.951716499	Proliferation/Metastasis
0.062638147	Metabolism
0.786962195	Metabolism
0.525277341	Proliferation/Metastasis
0.078847669	Proliferation/Metastasis
0.021895952	Metabolism
0.000321448	Metabolism
0.35829422	Metabolism
0.026668443	Metabolism
0.62710641	TME
0.732379848	TME
0.086847349	TME
0.277474927	TME
0.915792231	TME
0.071881293	Metabolism
0.507499214	Metabolism
0.935272876	Metabolism
0.286015977	Metabolism
0.000319695	Metabolism
0.590505398	TME
0.466241919	TME
0.720411619	TME
0.166515862	TME

0.209599788	TME
0.587941256	TME
0.457879535	TME
0.704703448	TME
0.490193589	TME
0.177807982	Proliferation/Metastasis
0.004126602	Proliferation/Metastasis
0.477689868	Metabolism
0.05264252	Metabolism
0.782496809	TME
0.049854244	Metabolism
0.108526145	Metabolism
0.643927848	TME
0.284034231	Proliferation/Metastasis
0.598220746	Proliferation/Metastasis
0.737435861	TME
0.950543591	Metabolism
0.253293119	Metabolism
0.251586484	Proliferation/Metastasis
0.448120934	Proliferation/Metastasis
0.672891984	TME
0.401435742	TME
0.697174728	TME
0.103675468	TME
0.001661091	Proliferation/Metastasis
0.730976802	TME
0.51028226	TME
0.09630722	Metabolism
0.138401003	TME
0.38055595	TME
0.698485491	TME
0.192951295	TME
0.904998699	Metabolism
0.300560194	Metabolism
0.757026215	Metabolism
0.635950872	TME
0.610237733	Metabolism
0.203200361	TME
0.616525003	TME
0.345880659	TME
0.777887588	TME
0.199495716	TME
0.396739334	Metabolism

0.216715181	Proliferation/Metastasis
0.037014914	Metabolism
0.077918091	Proliferation/Metastasis
0.035525206	Metabolism
0.029875738	Metabolism
0.001338262	Metabolism
3.08E-07	Metabolism
0.174314079	Metabolism
0.412270404	Metabolism
0.029461432	Metabolism
0.73577629	Metabolism
0.759627082	Metabolism
0.487741814	Metabolism
0.641600375	Metabolism
0.913827244	Metabolism
0.966959549	Metabolism
0.003850269	Metabolism
0.38911939	TME
0.633009806	Proliferation/Metastasis
0.016533209	Metabolism
0.54526057	Proliferation/Metastasis
0.308334767	TME
0.220783406	Proliferation/Metastasis
0.449641713	Proliferation/Metastasis
0.33613377	TME
0.238739407	TME
0.182579781	Metabolism
0.024682627	Metabolism
0.02009619	Proliferation/Metastasis
0.909297982	Proliferation/Metastasis
0.077189348	Proliferation/Metastasis
0.00453933	Metabolism
0.749604698	Metabolism
0.01400813	Metabolism
0.149877107	Proliferation/Metastasis
0.246434988	TME
0.633316833	TME
0.313220359	Metabolism
0.464476868	Proliferation/Metastasis
0.119598799	Metabolism
0.093830527	TME
0.914173341	TME
0.576165628	TME

0.896831817	TME
0.685350002	Metabolism
0.204946632	TME
0.007318206	Proliferation/Metastasis
0.376743883	TME
0.156760139	Proliferation/Metastasis
0.002510444	Proliferation/Metastasis
0.528720682	Metabolism
0.814434985	Proliferation/Metastasis
0.509155398	TME
0.940333748	Metabolism
0.985127473	TME
0.59464704	TME
0.784939932	TME
0.408346917	TME
0.900619269	TME
0.216306867	TME
0.416218626	Metabolism
0.37528486	TME
0.103839681	Metabolism
0.725129167	Metabolism
0.269191978	Proliferation/Metastasis
0.335161027	Proliferation/Metastasis
2.48E-05	Metabolism
0.692697365	Metabolism
0.100871544	Metabolism
0.497939175	Metabolism
0.381569592	Proliferation/Metastasis
0.200293899	Proliferation/Metastasis
0.1289057	Metabolism
0.068957268	Metabolism
0.472490654	Metabolism
0.393957194	TME
0.390763246	Metabolism
0.078627997	Metabolism
0.903195769	Metabolism
0.016634426	Metabolism
0.055424916	Proliferation/Metastasis
0.583579294	Metabolism
0.213901674	Metabolism
0.102346936	Metabolism
0.482877747	Metabolism
0.947447175	Metabolism

0.208498692	Metabolism
0.492135321	Proliferation/Metastasis
0.120875637	Metabolism
0.2464053	Metabolism
0.017892118	Proliferation/Metastasis
0.106423476	Metabolism
0.114218792	Metabolism
0.008686374	Metabolism
0.000631006	Metabolism
0.186646319	Metabolism
0.0198655	Metabolism
0.009161275	Metabolism
0.121970354	Metabolism
0.207708732	TME
0.222672061	TME
0.138281971	TME
0.257619371	TME
0.834749553	TME
0.861370057	Metabolism
0.018480955	Metabolism
0.91164396	Proliferation/Metastasis
0.329559669	Metabolism
0.64337904	Proliferation/Metastasis
0.042629753	Metabolism
0.406653985	TME
0.670933203	Metabolism
0.995673237	Metabolism
0.086135389	Metabolism
0.077655897	Metabolism
0.499765264	TME
0.441712686	TME
0.087273335	Proliferation/Metastasis
0.006064206	Metabolism
0.650053537	Proliferation/Metastasis
0.104842666	Proliferation/Metastasis
0.36105789	TME
0.314426144	TME
0.309450392	TME
0.079318177	TME
0.021351055	Metabolism
0.162108097	Proliferation/Metastasis
0.000306655	Metabolism
0.860414251	Metabolism

0.038252571	Proliferation/Metastasis
0.423763759	Proliferation/Metastasis
0.020499812	Metabolism
0.075798097	Metabolism
0.059942937	Metabolism
8.35E-05	Metabolism
0.771812566	TME
0.162610849	TME
0.133382135	TME
0.196441682	TME
0.76385427	TME
0.002381602	Metabolism
0.021202573	Metabolism
0.819426942	Metabolism
0.653934791	Metabolism
0.002647211	Metabolism
0.726783771	TME
0.096675985	TME
0.881847935	TME
0.092044263	TME
0.10999008	TME
0.277892669	TME
0.176634306	TME
0.406155063	TME
0.088358231	TME
0.430720246	Proliferation/Metastasis
0.096847111	Proliferation/Metastasis
0.463017063	Metabolism
0.068611846	Metabolism
0.756629506	TME
0.410299166	Metabolism
0.065692419	Metabolism
0.387513784	TME
0.126240466	Proliferation/Metastasis
0.783033209	Proliferation/Metastasis
0.850945003	TME
0.143321395	Metabolism
0.713970983	Metabolism
0.476269846	Proliferation/Metastasis
0.743070682	Proliferation/Metastasis
0.153163812	TME
0.413663379	TME
0.54541051	TME

0.094823604	TME
0.006821081	Proliferation/Metastasis
0.430619433	TME
0.555940535	TME
0.049822442	Metabolism
0.854899496	TME
0.965146325	TME
0.723705098	TME
8.03E-05	TME
0.002344518	Metabolism
0.661232744	Metabolism
0.215034832	Metabolism
0.85572808	TME
0.246626292	Metabolism
0.82470299	TME
0.063773093	TME
0.465376864	TME
0.48471423	TME
0.182388433	TME
0.529394156	Metabolism
0.308760947	Proliferation/Metastasis
0.789320813	Metabolism
0.002292618	Proliferation/Metastasis
0.157685666	Metabolism
0.095088031	Metabolism
0.000710346	Metabolism
0.105703312	Metabolism
0.818799408	Metabolism
0.233631836	Metabolism
0.66425226	Metabolism
0.00022397	Metabolism
0.118694863	Metabolism
0.000674861	Metabolism
0.011013734	Metabolism
0.315347992	Metabolism
0.099856338	Metabolism
0.175845033	Metabolism
0.456050119	TME
0.302783632	Proliferation/Metastasis
0.000155934	Metabolism
0.05691987	Proliferation/Metastasis
0.215380667	TME
0.24554605	Proliferation/Metastasis

0.258102788	Proliferation/Metastasis
0.724926705	TME
0.441034351	TME
0.791484324	Metabolism
0.002760968	Metabolism
0.393851169	Proliferation/Metastasis
0.000218978	Proliferation/Metastasis
0.322555534	Proliferation/Metastasis
0.001316896	Metabolism
0.178500671	Metabolism
0.044258452	Metabolism
0.809228624	Proliferation/Metastasis
0.322354993	TME
0.163191252	TME
0.613355383	Metabolism
0.784750006	Proliferation/Metastasis
0.308180291	Metabolism
0.008851364	TME
0.305925955	TME
0.929326748	TME
0.76231204	TME
0.714675902	Metabolism
0.247882332	TME
0.000151823	Proliferation/Metastasis
0.464238748	TME
0.912056456	Proliferation/Metastasis
0.475359994	Proliferation/Metastasis
0.202509066	Metabolism
0.506824101	Proliferation/Metastasis
0.302233831	TME
0.203602908	Metabolism
0.829774179	TME
0.573224571	TME
0.728845891	TME
0.513861692	TME
0.170959639	TME
0.13485368	TME
0.720279968	Metabolism
0.642583403	TME
0.321663494	Metabolism
0.735020599	Metabolism
0.074041538	Proliferation/Metastasis
0.739970892	Proliferation/Metastasis

0.012519581	Metabolism
0.767403553	Metabolism
0.031203472	Metabolism
0.009199602	Metabolism
0.977534941	Proliferation/Metastasis
0.481442382	Proliferation/Metastasis
0.039938194	Metabolism
0.000104359	Metabolism
0.525752043	Metabolism
0.105831042	TME
0.199438411	Metabolism
0.009154581	Metabolism
0.199639472	Metabolism
0.004301652	Metabolism
0.230948373	Proliferation/Metastasis
0.600115089	Metabolism
0.434587829	Metabolism
0.571930002	Metabolism
0.129249217	Metabolism
0.929852268	Metabolism
0.544018512	Metabolism
0.196930527	Proliferation/Metastasis
0.001124102	Metabolism
0.994003564	Metabolism
0.075551914	Proliferation/Metastasis
0.000123066	Metabolism
0.137143051	Metabolism
0.298341402	Metabolism
0.794656374	Metabolism
0.000103479	Metabolism
0.001007264	Metabolism
0.001993446	Metabolism
0.88572544	Metabolism
0.107750027	TME
0.251715288	TME
0.312295803	TME
0.079741356	TME
0.155410158	TME
0.000267146	Metabolism
0.623725479	Metabolism
0.494895667	Proliferation/Metastasis
0.03735671	Metabolism
0.888769401	Proliferation/Metastasis

0.611401596	Metabolism
0.818780058	TME
0.188755883	Metabolism
0.896105591	Metabolism
0.022429165	Metabolism
0.487879197	Metabolism
0.643889326	TME
0.845803455	TME
0.168631452	Proliferation/Metastasis
0.757918985	Metabolism
0.189735258	Proliferation/Metastasis
0.187599944	Proliferation/Metastasis
0.471949995	TME
0.006602273	TME
0.00690366	TME
0.004566677	TME
0.262800539	Metabolism
0.008048157	Proliferation/Metastasis
0.570712744	Metabolism
0.028663532	Metabolism
0.591311524	Proliferation/Metastasis
0.12242519	Proliferation/Metastasis
0.067206078	Metabolism
0.086594558	Metabolism
0.101021954	Metabolism
0.001279477	Metabolism
0.090478618	TME
0.055438155	TME
0.202821575	TME
0.014855523	TME
0.000644083	TME
0.156746374	Metabolism
0.607753626	Metabolism
0.537381391	Metabolism
0.009875704	Metabolism
0.926292883	Metabolism
0.10849134	TME
0.041433086	TME
0.010405457	TME
0.045264773	TME
0.000772081	TME
0.009684902	TME
0.008114674	TME

0.098169516	TME
0.005899211	TME
0.350055186	Proliferation/Metastasis
0.702598146	Proliferation/Metastasis
0.065128009	Metabolism
0.154847969	Metabolism
0.49403776	TME
0.206492876	Metabolism
0.04129317	Metabolism
0.01113263	TME
0.27924439	Proliferation/Metastasis
0.045015031	Proliferation/Metastasis
0.093904689	TME
0.142614378	Metabolism
0.767355769	Metabolism
0.221338978	Proliferation/Metastasis
0.149349935	Proliferation/Metastasis
0.032771215	TME
0.011985893	TME
0.002186914	TME
0.010121258	TME
0.323689329	Proliferation/Metastasis
0.011759953	TME
0.003314658	TME
0.584442304	Metabolism
0.025941365	TME
0.005558296	TME
0.007273725	TME
0.297975559	TME
0.068010595	Metabolism
0.03845434	Metabolism
0.115625669	Metabolism
0.003452347	TME
0.86444121	Metabolism
0.412073336	TME
0.024560114	TME
0.013410456	TME
0.009325874	TME
0.008308553	TME
0.546822567	Metabolism
0.24134328	Proliferation/Metastasis
0.363618162	Metabolism
0.722956891	Proliferation/Metastasis

0.612580907	Metabolism
0.733995422	Metabolism
0.960903003	Metabolism
0.114654025	Metabolism
0.43111999	Metabolism
0.001501471	Metabolism
0.055388134	Metabolism
0.014668655	Metabolism
0.210097554	Metabolism
0.002437518	Metabolism
0.096890155	Metabolism
0.351910838	Metabolism
0.297231481	Metabolism
0.226132753	Metabolism
0.006053736	TME
0.568847679	Proliferation/Metastasis
0.219790666	Metabolism
0.072557953	Proliferation/Metastasis
0.103040796	TME
0.067998932	Proliferation/Metastasis
0.015246864	Proliferation/Metastasis
1.07E-05	TME
0.02813719	TME
0.150210196	Metabolism
0.737424872	Metabolism
0.044290272	Proliferation/Metastasis
0.715603498	Proliferation/Metastasis
0.030552097	Proliferation/Metastasis
0.878897211	Metabolism
0.004527124	Metabolism
0.06237206	Metabolism
0.599574063	Proliferation/Metastasis
0.032020481	TME
0.011023101	TME
0.404531657	Metabolism
0.308998569	Proliferation/Metastasis
0.230710753	Metabolism
0.855396236	TME
0.11898774	TME
0.000406368	TME
0.028302638	TME
0.223686358	Metabolism
0.064245368	TME

0.594494869	Proliferation/Metastasis
0.00178508	TME
0.105069041	Proliferation/Metastasis
0.489132126	Proliferation/Metastasis
0.818861262	Metabolism
0.353630281	Proliferation/Metastasis
0.022001996	TME
0.46716212	Metabolism
0.516651473	TME
0.047289559	TME
0.861892845	TME
0.120879088	TME
0.023508555	TME
0.003159372	TME
0.236321238	Metabolism
0.003598804	TME
0.224458774	Metabolism
0.138901069	Metabolism
0.243989541	Proliferation/Metastasis
0.516979105	Proliferation/Metastasis
0.183662814	Metabolism
0.346102448	Metabolism
0.002732773	Metabolism
0.105104197	Metabolism
0.121295887	Proliferation/Metastasis
0.974077081	Proliferation/Metastasis
0.845854559	Metabolism
0.011972503	Metabolism
0.680793498	Metabolism
0.00757722	TME
0.330543192	Metabolism
0.248171804	Metabolism
0.043088892	Metabolism
0.870846885	Metabolism
0.105110964	Proliferation/Metastasis
0.25592622	Metabolism
0.300250897	Metabolism
0.075466592	Metabolism
0.67970315	Metabolism
0.478410444	Metabolism
0.041732367	Metabolism
0.216507851	Proliferation/Metastasis
0.024358218	Metabolism

0.070971444	Metabolism
0.519326813	Proliferation/Metastasis
0.016003219	Metabolism
0.112600027	Metabolism
0.597691221	Metabolism
0.953963726	Metabolism
0.796204305	Metabolism
0.010624815	Metabolism
0.544952448	Metabolism
0.201930022	Metabolism
0.044682558	TME
0.130468175	TME
0.131544616	TME
0.111497846	TME
0.336973713	TME
0.705399603	Metabolism
0.045629171	Metabolism
0.294405419	Proliferation/Metastasis
0.469794404	Metabolism
0.106494376	Proliferation/Metastasis
0.083107341	Metabolism
0.25958695	TME
0.114802178	Metabolism
5.37E-06	Metabolism
0.011060196	Metabolism
0.128763677	Metabolism
0.081235409	TME
0.354122138	TME
0.121241617	Proliferation/Metastasis
0.921461193	Metabolism
0.007683956	Proliferation/Metastasis
0.304787441	Proliferation/Metastasis
0.048753114	TME
0.434418854	TME
0.061586996	TME
0.054596264	TME
0.014870007	Metabolism
0.336599008	Proliferation/Metastasis
6.67E-07	Metabolism
0.546308753	Metabolism
0.739928356	Proliferation/Metastasis
8.43E-08	Proliferation/Metastasis
5.29E-07	Metabolism

0.677682807	Metabolism
0.154500714	Metabolism
0.000168883	Metabolism
0.124486263	TME
0.19615718	TME
0.026176435	TME
0.589302656	TME
2.65E-19	TME
0.048222389	Metabolism
0.079652693	Metabolism
0.317230353	Metabolism
0.005136328	Metabolism
0.004775541	Metabolism
0.326175604	TME
0.31909557	TME
0.429080458	TME
0.063867615	TME
0.381899658	TME
0.049961531	TME
0.050086322	TME
0.399598574	TME
0.028671134	TME
0.038465974	Proliferation/Metastasis
4.52E-12	Proliferation/Metastasis
0.007901669	Metabolism
0.001988316	Metabolism
0.493581013	TME
0.154672391	Metabolism
1.37E-09	Metabolism
0.47457853	TME
6.39E-05	Proliferation/Metastasis
0.081757282	Proliferation/Metastasis
0.577242109	TME
0.901622202	Metabolism
0.003060493	Metabolism
0.004720571	Proliferation/Metastasis
3.22E-05	Proliferation/Metastasis
0.001832884	TME
0.821622456	TME
0.040746604	TME
0.03458718	TME
0.003432052	Proliferation/Metastasis
2.03E-05	TME

0.299430077	TME
0.577285135	Metabolism
0.082444039	TME
0.736896046	TME
0.013279924	TME
0.56138793	TME
0.051558794	Metabolism
0.069464478	Metabolism
0.760308585	Metabolism
0.004360977	TME
0.094930939	Metabolism
0.631914009	TME
0.197591579	TME
0.010314061	TME
0.064731577	TME
0.250910827	TME
0.380852914	Metabolism
0.000234332	Proliferation/Metastasis
0.314990388	Metabolism
0.053730627	Proliferation/Metastasis
0.009766683	Metabolism
0.184781495	Metabolism
0.009266608	Metabolism
0.012210346	Metabolism
0.174853938	Metabolism
1.24E-09	Metabolism
0.124548031	Metabolism
7.32E-08	Metabolism
0.015754755	Metabolism
1.92E-05	Metabolism
0.003058473	Metabolism
0.02810269	Metabolism
0.132908595	Metabolism
0.004546828	Metabolism
0.14116904	TME
0.850635546	Proliferation/Metastasis
0.018190525	Metabolism
6.06E-08	Proliferation/Metastasis
0.074600157	TME
0.000257312	Proliferation/Metastasis
0.278227752	Proliferation/Metastasis
0.265461685	TME
0.020712739	TME

3.07E-06	Metabolism
4.80E-05	Metabolism
0.42812631	Proliferation/Metastasis
6.92E-08	Proliferation/Metastasis
0.165520912	Proliferation/Metastasis
0.000717028	Metabolism
0.749638234	Metabolism
7.19E-10	Metabolism
0.220084803	Proliferation/Metastasis
0.106655127	TME
0.133247867	TME
0.556747402	Metabolism
0.087338582	Proliferation/Metastasis
0.019599631	Metabolism
0.400190141	TME
0.008561673	TME
2.15E-05	TME
0.060273002	TME
0.347900794	Metabolism
0.00166674	TME
6.60E-06	Proliferation/Metastasis
0.178356224	TME
0.096901242	Proliferation/Metastasis
0.904298349	Proliferation/Metastasis
0.019432441	Metabolism
0.057481364	Proliferation/Metastasis
0.024127066	TME
0.253873174	Metabolism
0.093138965	TME
0.281942789	TME
0.407634775	TME
0.533197156	TME
0.255242264	TME
0.001955762	TME
0.053448307	Metabolism
0.02105887	TME
1.68E-05	Metabolism
0.000815844	Metabolism
0.026753129	Proliferation/Metastasis
4.29E-05	Proliferation/Metastasis
6.45E-06	Metabolism
0.000109037	Metabolism
0.042782549	Metabolism

0.000546036	Metabolism
1.35E-10	Proliferation/Metastasis
0.81445389	Proliferation/Metastasis
0.000812894	Metabolism
0.00138979	Metabolism
0.262173574	Metabolism
0.000241254	TME
0.049635323	Metabolism
0.49517942	Metabolism
0.002921069	Metabolism
0.682989138	Metabolism
0.153834469	Proliferation/Metastasis
0.092871691	Metabolism
0.002783184	Metabolism
1.85E-07	Metabolism
0.000133975	Metabolism
0.036340098	Metabolism
0.019007076	Metabolism
0.315744784	Proliferation/Metastasis
0.654273991	Metabolism
0.274604037	Metabolism
0.376462124	Proliferation/Metastasis
7.25E-05	Metabolism
5.00E-07	Metabolism
2.22E-10	Metabolism
0.602318639	Metabolism
0.142137119	Metabolism
0.103844437	Metabolism
0.237319998	Metabolism
0.00431707	Metabolism
0.126388015	TME
0.040326849	TME
0.369350075	TME
0.113110959	TME
0.477146396	TME
7.37E-06	Metabolism
0.335197333	Metabolism
0.989062813	Proliferation/Metastasis
0.390297578	Metabolism
0.000822741	Proliferation/Metastasis
0.103248706	Metabolism
4.89E-09	TME
0.000136933	Metabolism

0.013870212	Metabolism
0.370784556	Metabolism
3.70E-05	Metabolism
1.11E-06	TME
9.32E-06	TME
5.33E-07	Proliferation/Metastasis
0.184456752	Metabolism
1.50E-06	Proliferation/Metastasis
0.000312736	Proliferation/Metastasis
1.72E-05	TME
2.68E-06	TME
1.02E-15	TME
4.85E-05	TME
0.003440498	Metabolism
0.092312791	Proliferation/Metastasis
0.017349178	Metabolism
0.617073372	Metabolism
0.143203384	Proliferation/Metastasis
6.80E-06	Proliferation/Metastasis
0.030865963	Metabolism
0.085016504	Metabolism
0.389911909	Metabolism
0.397013032	Metabolism
0.13800344	TME
7.87E-16	TME
3.79E-10	TME
0.007134164	TME
0.376357004	TME
0.052579964	Metabolism
0.001033919	Metabolism
0.37791126	Metabolism
0.021972895	Metabolism
0.369845927	Metabolism
9.15E-21	TME
3.48E-07	TME
0.038315263	TME
0.000178474	TME
2.94E-11	TME
7.63E-05	TME
1.36E-06	TME
0.403133465	TME
5.23E-05	TME
2.15E-09	Proliferation/Metastasis

1.35E-18	Proliferation/Metastasis
0.005390733	Metabolism
0.648557352	Metabolism
0.00192818	TME
0.091078041	Metabolism
0.001363336	Metabolism
5.46E-14	TME
1.01E-20	Proliferation/Metastasis
0.559406313	Proliferation/Metastasis
0.729962515	TME
0.006280408	Metabolism
3.90E-07	Metabolism
2.35E-06	Proliferation/Metastasis
3.19E-13	Proliferation/Metastasis
2.27E-14	TME
2.43E-08	TME
3.31E-08	TME
5.17E-21	TME
6.19E-05	Proliferation/Metastasis
1.61E-07	TME
2.04E-10	TME
1.54E-05	Metabolism
1.72E-12	TME
6.64E-07	TME
0.028483936	TME
2.49E-12	TME
0.524552638	Metabolism
0.000650402	Metabolism
4.30E-08	Metabolism
1.42E-13	TME
2.78E-09	Metabolism
3.01E-09	TME
8.49E-14	TME
5.46E-07	TME
0.420774027	TME
0.000752574	TME
0.027666847	Metabolism
4.07E-14	Proliferation/Metastasis
0.564853065	Metabolism
1.56E-05	Proliferation/Metastasis
4.50E-05	Metabolism
0.004391857	Metabolism
0.000217322	Metabolism

0.004737929	Metabolism
0.055127657	Metabolism
0.002232723	Metabolism
0.000563539	Metabolism
0.003809119	Metabolism
0.368129211	Metabolism
0.000403138	Metabolism
0.025619695	Metabolism
0.652166289	Metabolism
0.033942732	Metabolism
4.86E-05	Metabolism
6.88E-11	TME
2.39E-11	Proliferation/Metastasis
0.069307158	Metabolism
1.05E-05	Proliferation/Metastasis
0.000660098	TME
2.10E-08	Proliferation/Metastasis
2.92E-16	Proliferation/Metastasis
3.62E-10	TME
0.006007534	TME
1.05E-20	Metabolism
1.84E-48	Metabolism
2.84E-14	Proliferation/Metastasis
0.412134834	Proliferation/Metastasis
1.75E-24	Proliferation/Metastasis
0.006774865	Metabolism
0.000117257	Metabolism
0.302754102	Metabolism
0.010081588	Proliferation/Metastasis
6.85E-17	TME
1.09E-13	TME
0.001560752	Metabolism
9.50E-15	Proliferation/Metastasis
7.54E-40	Metabolism
4.06E-16	TME
2.90E-13	TME
0.111710209	TME
3.67E-12	TME
4.27E-08	Metabolism
6.69E-14	TME
1.90E-26	Proliferation/Metastasis
1.12E-05	TME
1.27E-05	Proliferation/Metastasis

1.26E-06	Proliferation/Metastasis
1.03E-24	Metabolism
0.041563807	Proliferation/Metastasis
1.22E-14	TME
0.007203501	Metabolism
0.027576689	TME
4.41E-10	TME
0.000137416	TME
2.25E-06	TME
0.022043454	TME
4.14E-14	TME
4.71E-10	Metabolism
4.15E-13	TME
0.014531478	Metabolism
0.130551448	Metabolism
4.38E-21	Proliferation/Metastasis
0.001656561	Proliferation/Metastasis
0.126166779	Metabolism
0.121877138	Metabolism
0.295629342	Metabolism
1.37E-25	Metabolism
0.058391241	Proliferation/Metastasis
5.29E-15	Proliferation/Metastasis
0.06129463	Metabolism
0.211873135	Metabolism
0.068024612	Metabolism
9.09E-05	TME
5.77E-06	Metabolism
1.06E-06	Metabolism
0.775520647	Metabolism
4.72E-27	Metabolism
1.88E-09	Proliferation/Metastasis
0.140683394	Metabolism
0.003502574	Metabolism
0.549114117	Metabolism
0.030833557	Metabolism
9.42E-06	Metabolism
0.00010351	Metabolism
0.310787939	Proliferation/Metastasis
2.99E-05	Metabolism
0.000111031	Metabolism
2.86E-05	Proliferation/Metastasis
5.27E-05	Metabolism

4.31E-18	Metabolism
3.56E-06	Metabolism
1.58E-06	Metabolism
0.350612079	Metabolism
0.626239977	Metabolism
0.665865721	Metabolism
4.72E-05	Metabolism
4.61E-08	TME
1.55E-05	TME
9.63E-11	TME
5.97E-07	TME
0.010864643	TME
0.996405043	Metabolism
0.00641922	Metabolism
1.39E-18	Proliferation/Metastasis
7.05E-13	Metabolism
4.49E-10	Proliferation/Metastasis
0.006173309	Metabolism
0.328744257	TME
4.38E-10	Metabolism
0.948021092	Metabolism
0.155948602	Metabolism
0.004380128	Metabolism
0.038152761	TME
0.846377062	TME
0.001511293	Proliferation/Metastasis
0.302060094	Metabolism
0.002664393	Proliferation/Metastasis
0.525363587	Proliferation/Metastasis
4.49E-09	TME
9.13E-09	TME
4.67E-07	TME
6.13E-07	TME
0.00012923	Metabolism
0.548720927	Proliferation/Metastasis
0.028621328	Metabolism
0.057859303	Metabolism
0.389520252	Proliferation/Metastasis
2.02E-13	Proliferation/Metastasis
0.053174806	Metabolism
0.01833527	Metabolism
5.57E-18	Metabolism
0.000172164	Metabolism

0.056340093	TME
2.84E-05	TME
0.292712548	TME
9.00E-07	TME
2.20E-37	TME
2.05E-11	Metabolism
5.22E-07	Metabolism
2.76E-09	Metabolism
4.08E-34	Metabolism
0.027528696	Metabolism
5.18E-10	TME
0.581559117	TME
4.57E-06	TME
0.000102553	TME
4.83E-14	TME
0.001401996	TME
9.17E-05	TME
0.001539677	TME
0.004033871	TME
5.12E-12	Proliferation/Metastasis
0.868539247	Proliferation/Metastasis
1.76E-17	Metabolism
0.000315498	Metabolism
5.90E-09	TME
0.013813872	Metabolism
1.92E-27	Metabolism
4.12E-12	TME
0.000390262	Proliferation/Metastasis
9.37E-13	Proliferation/Metastasis
0.003554642	TME
2.65E-07	Metabolism
0.006804077	Metabolism
1.46E-15	Proliferation/Metastasis
1.51E-11	Proliferation/Metastasis
0.002986196	TME
4.85E-07	TME
0.000561272	TME
1.76E-06	TME
0.489065927	Proliferation/Metastasis
1.14E-06	TME
5.46E-08	TME
0.000378781	Metabolism
2.37E-06	TME

4.63E-11	TME
0.00532648	TME
3.03E-17	TME
2.42E-12	Metabolism
8.28E-41	Metabolism
1.96E-15	Metabolism
1.50E-13	TME
9.03E-05	Metabolism
7.66E-05	TME
2.30E-05	TME
5.57E-07	TME
0.000318456	TME
1.75E-11	TME
0.814935527	Metabolism
1.99E-13	Proliferation/Metastasis
8.78E-06	Metabolism
0.226938006	Proliferation/Metastasis
0.481957743	Metabolism
7.61E-07	Metabolism
0.071529709	Metabolism
6.10E-05	Metabolism
6.13E-08	Metabolism
5.82E-35	Metabolism
1.38E-07	Metabolism
2.11E-23	Metabolism
0.008864249	Metabolism
0.033735485	Metabolism
2.81E-05	Metabolism
0.450948807	Metabolism
1.16E-05	Metabolism
2.67E-18	Metabolism
3.28E-08	TME
0.19872564	Proliferation/Metastasis
1.08E-05	Metabolism
5.53E-13	Proliferation/Metastasis
0.002349135	TME
3.22E-13	Proliferation/Metastasis
1.35E-15	Proliferation/Metastasis
0.005713921	TME
1.45E-11	TME
1.46E-08	Metabolism
0.002390945	Metabolism
1.53E-11	Proliferation/Metastasis

0.158870379	Proliferation/Metastasis
9.72E-05	Proliferation/Metastasis
0.000506812	Metabolism
1.75E-18	Metabolism
4.02E-20	Metabolism
0.161209307	Proliferation/Metastasis
1.18E-05	TME
1.03E-06	TME
0.101174911	Metabolism
3.97E-05	Proliferation/Metastasis
0.074379767	Metabolism
2.28E-07	TME
0.126314505	TME
4.04E-44	TME
1.62E-06	TME
1.41E-06	Metabolism
0.014481834	TME
0.03402636	Proliferation/Metastasis
1.54E-14	TME
4.90E-08	Proliferation/Metastasis
3.69E-05	Proliferation/Metastasis
0.534911459	Metabolism
3.63E-08	Proliferation/Metastasis
0.001603133	TME
0.385807776	Metabolism
0.077890383	TME
0.000673318	TME
0.479023437	TME
4.51E-05	TME
6.68E-11	TME
4.30E-05	TME
2.38E-20	Metabolism
4.73E-12	TME
0.022383428	Metabolism
2.07E-21	Metabolism
7.28E-08	Proliferation/Metastasis
9.32E-11	Proliferation/Metastasis
0.67375946	Metabolism
0.102972406	Metabolism
7.18E-10	Metabolism
0.001971615	Metabolism
8.76E-08	Proliferation/Metastasis
3.82E-16	Proliferation/Metastasis

0.00023197	Metabolism
0.01181513	Metabolism
0.653929724	Metabolism
4.08E-07	TME
0.009497104	Metabolism
6.89E-06	Metabolism
2.25E-11	Metabolism
0.867277243	Metabolism
0.00292553	Proliferation/Metastasis
0.001050378	Metabolism
1.57E-07	Metabolism
5.14E-42	Metabolism
9.10E-08	Metabolism
7.61E-08	Metabolism
2.66E-23	Metabolism
7.81E-27	Proliferation/Metastasis
6.01E-09	Metabolism
0.036502334	Metabolism
0.248030377	Proliferation/Metastasis
2.61E-06	Metabolism
0.000168861	Metabolism
2.66E-14	Metabolism
0.08704158	Metabolism
0.004072049	Metabolism
0.000150986	Metabolism
0.111491725	Metabolism
1.18E-27	Metabolism
0.000139777	TME
0.016112555	TME
3.76E-14	TME
2.34E-07	TME
0.001021878	TME
0.52721388	Metabolism
1.03E-12	Metabolism
0.063185475	Proliferation/Metastasis
2.01E-09	Metabolism
1.08E-17	Proliferation/Metastasis
9.41E-17	Metabolism
4.25E-12	TME
2.79E-07	Metabolism
0.004102764	Metabolism
7.83E-05	Metabolism
2.94E-37	Metabolism

0.015173773	TME
4.49E-05	TME
0.000860863	Proliferation/Metastasis
0.023489366	Metabolism
2.89E-12	Proliferation/Metastasis
8.28E-07	Proliferation/Metastasis
0.025272122	TME
1.29E-05	TME
1.27E-06	TME
5.17E-06	TME
5.12E-10	Metabolism
2.40E-09	Proliferation/Metastasis
0.002671856	Metabolism
3.81E-05	Metabolism
5.55E-15	Proliferation/Metastasis
1.33E-16	Proliferation/Metastasis
0.023076609	Metabolism
2.94E-11	Metabolism
7.57E-05	Metabolism
8.35E-08	Metabolism
0.018827398	TME
2.35E-14	TME
2.14E-11	TME
0.013062638	TME
0.435795893	TME
7.01E-07	Metabolism
1.24E-06	Metabolism
0.040649438	Metabolism
0.001649539	Metabolism
0.000147654	Metabolism
5.81E-19	TME
1.35E-08	TME
0.002121802	TME
0.002341789	TME
2.12E-05	TME
3.17E-06	TME
2.07E-06	TME
0.001024135	TME
3.79E-08	TME
2.54E-09	Proliferation/Metastasis
4.42E-05	Proliferation/Metastasis
0.003687057	Metabolism
0.027139798	Metabolism

0.001866862	TME
0.028257559	Metabolism
0.000369235	Metabolism
3.90E-09	TME
0.003911311	Proliferation/Metastasis
0.700674738	Proliferation/Metastasis
0.628707918	TME
0.000932273	Metabolism
0.00315506	Metabolism
9.03E-05	Proliferation/Metastasis
8.50E-12	Proliferation/Metastasis
1.34E-08	TME
0.001842206	TME
7.24E-08	TME
1.84E-13	TME
4.30E-07	Proliferation/Metastasis
3.11E-15	TME
3.42E-07	TME
0.275800398	Metabolism
9.40E-13	TME
4.58E-05	TME
0.000512649	TME
0.006826627	TME
0.670150514	Metabolism
0.006990982	Metabolism
0.001594392	Metabolism
1.46E-13	TME
0.008712143	Metabolism
8.17E-06	TME
0.000212792	TME
2.79E-06	TME
0.484699022	TME
0.134998067	TME
0.06155959	Metabolism
1.65E-09	Proliferation/Metastasis
4.17E-05	Metabolism
3.95E-14	Proliferation/Metastasis
8.70E-09	Metabolism
0.639375971	Metabolism
2.02E-12	Metabolism
0.002870019	Metabolism
3.53E-05	Metabolism
3.16E-06	Metabolism

1.39E-13	Metabolism
0.000135542	Metabolism
0.334542224	Metabolism
2.28E-10	Metabolism
7.95E-10	Metabolism
1.10E-13	Metabolism
0.11884452	Metabolism
0.069507277	Metabolism
1.20E-08	TME
1.04E-10	Proliferation/Metastasis
1.32E-06	Metabolism
1.64E-08	Proliferation/Metastasis
3.60E-05	TME
2.24E-18	Proliferation/Metastasis
1.07E-15	Proliferation/Metastasis
8.01E-13	TME
3.07E-05	TME
2.20E-06	Metabolism
1.25E-17	Metabolism
1.24E-26	Proliferation/Metastasis
2.02E-07	Proliferation/Metastasis
9.89E-34	Proliferation/Metastasis
1.01E-06	Metabolism
0.908658098	Metabolism
0.106223812	Metabolism
1.30E-07	Proliferation/Metastasis
5.02E-09	TME
4.19E-14	TME
0.011057059	Metabolism
1.30E-09	Proliferation/Metastasis
4.13E-15	Metabolism
1.19E-13	TME
8.95E-11	TME
3.99E-05	TME
3.75E-10	TME
0.011618897	Metabolism
0.015214902	TME
1.42E-11	Proliferation/Metastasis
1.31E-05	TME
0.132128155	Proliferation/Metastasis
1.90E-17	Proliferation/Metastasis
1.24E-33	Metabolism
0.00094468	Proliferation/Metastasis

1.17E-10	TME
1.02E-10	Metabolism
0.163829954	TME
5.07E-09	TME
0.297318183	TME
3.77E-07	TME
0.012369513	TME
2.07E-08	TME
1.96E-05	Metabolism
2.62E-10	TME
0.001829531	Metabolism
6.17E-15	Metabolism
2.73E-11	Proliferation/Metastasis
5.62E-16	Proliferation/Metastasis
1.18E-07	Metabolism
1.23E-06	Metabolism
0.000135533	Metabolism
0.045806579	Metabolism
0.000153399	Proliferation/Metastasis
1.60E-11	Proliferation/Metastasis
2.62E-07	Metabolism
6.29E-09	Metabolism
9.51E-06	Metabolism
3.12E-07	TME
0.000883145	Metabolism
0.242233389	Metabolism
0.278323287	Metabolism
2.13E-12	Metabolism
6.69E-28	Proliferation/Metastasis
0.000337758	Metabolism
0.000886645	Metabolism
0.000236455	Metabolism
6.29E-05	Metabolism
0.574457297	Metabolism
0.03522962	Metabolism
0.777827201	Proliferation/Metastasis
0.021312092	Metabolism
0.001851837	Metabolism
6.85E-13	Proliferation/Metastasis
1.35E-05	Metabolism
1.40E-15	Metabolism
5.03E-09	Metabolism
5.77E-10	Metabolism

0.072383683	Metabolism
0.025840858	Metabolism
3.79E-07	Metabolism
0.103277964	Metabolism
2.42E-10	TME
3.87E-08	TME
9.70E-05	TME
1.44E-10	TME
0.000999393	TME
0.071680341	Metabolism
3.57E-07	Metabolism
6.56E-19	Proliferation/Metastasis
0.367803347	Metabolism
3.28E-08	Proliferation/Metastasis
3.47E-06	Metabolism
0.193389635	TME
0.006404671	Metabolism
0.087350196	Metabolism
0.914506896	Metabolism
0.001430466	Metabolism
2.89E-05	TME
0.013132649	TME
3.00E-06	Proliferation/Metastasis
4.25E-06	Metabolism
2.49E-21	Proliferation/Metastasis
0.336817948	Proliferation/Metastasis
0.113961964	TME
0.087570521	TME
8.39E-05	TME
0.000865541	TME
5.85E-07	Metabolism
0.83186534	Proliferation/Metastasis
7.44E-13	Metabolism
0.15157713	Metabolism
0.018408894	Proliferation/Metastasis
0.000242959	Proliferation/Metastasis
0.000519755	Metabolism
0.00024165	Metabolism
0.005099169	Metabolism
3.12E-18	Metabolism
1.50E-05	TME
0.001842798	TME
4.21E-12	TME

0.024526542	TME
4.58E-20	TME
1.30E-14	Metabolism
0.063714469	Metabolism
0.616924686	Metabolism
5.78E-08	Metabolism
0.008760719	Metabolism
4.13E-14	TME
1.56E-06	TME
0.00934934	TME
0.054639877	TME
0.005110544	TME
6.18E-07	TME
7.26E-06	TME
0.001197649	TME
0.000518828	TME
0.548311714	Proliferation/Metastasis
3.47E-05	Proliferation/Metastasis
0.357405884	Metabolism
0.280665292	Metabolism
0.547237521	TME
2.63E-10	Metabolism
2.68E-15	Metabolism
8.88E-05	TME
8.57E-27	Proliferation/Metastasis
0.000701228	Proliferation/Metastasis
0.870914483	TME
1.68E-05	Metabolism
0.000118812	Metabolism
0.313139274	Proliferation/Metastasis
0.135965102	Proliferation/Metastasis
3.97E-11	TME
7.75E-05	TME
1.11E-05	TME
8.48E-13	TME
8.44E-05	Proliferation/Metastasis
6.75E-08	TME
0.003756609	TME
0.082374063	Metabolism
6.39E-07	TME
0.006045306	TME
0.00032662	TME
0.000808959	TME

0.000266519	Metabolism
5.90E-09	Metabolism
0.149762488	Metabolism
2.92E-06	TME
0.022209924	Metabolism
0.001925731	TME
0.273732771	TME
6.35E-08	TME
0.98021302	TME
0.764960044	TME
0.001701332	Metabolism
0.104534328	Proliferation/Metastasis
0.365004873	Metabolism
0.004706504	Proliferation/Metastasis
0.001007656	Metabolism
4.55E-05	Metabolism
1.86E-09	Metabolism
3.48E-05	Metabolism
5.64E-05	Metabolism
0.000151839	Metabolism
0.470390157	Metabolism
3.42E-10	Metabolism
1.29E-08	Metabolism
2.01E-05	Metabolism
0.002072142	Metabolism
0.004878099	Metabolism
0.032882349	Metabolism
0.018942644	Metabolism
2.87E-09	TME
1.87E-16	Proliferation/Metastasis
2.41E-30	Metabolism
0.006270228	Proliferation/Metastasis
0.000767167	TME
0.005121871	Proliferation/Metastasis
6.77E-05	Proliferation/Metastasis
0.088236543	TME
0.165772622	TME
1.25E-14	Metabolism
3.67E-20	Metabolism
0.724903489	Proliferation/Metastasis
6.46E-07	Proliferation/Metastasis
2.05E-06	Proliferation/Metastasis
4.51E-06	Metabolism

0.000502313	Metabolism
1.37E-17	Metabolism
0.107116145	Proliferation/Metastasis
0.009430507	TME
1.95E-07	TME
0.056599012	Metabolism
0.06588683	Proliferation/Metastasis
1.01E-16	Metabolism
7.33E-11	TME
3.61E-06	TME
0.026038573	TME
2.73E-12	TME
0.253639755	Metabolism
5.38E-08	TME
5.66E-20	Proliferation/Metastasis
0.906418786	TME
1.77E-07	Proliferation/Metastasis
0.001258229	Proliferation/Metastasis
6.75E-06	Metabolism
1.18E-12	Proliferation/Metastasis
6.89E-11	TME
0.016146655	Metabolism
0.379554005	TME
0.002252983	TME
0.08419393	TME
0.000189437	TME
4.96E-08	TME
3.38E-07	TME
0.259758131	Metabolism
0.991919439	TME
0.001630333	Metabolism
1.64E-10	Metabolism
7.99E-06	Proliferation/Metastasis
0.002891639	Proliferation/Metastasis
5.14E-16	Metabolism
0.000258732	Metabolism
8.19E-06	Metabolism
1.25E-20	Metabolism
0.000123882	Proliferation/Metastasis
0.113798272	Proliferation/Metastasis
5.83E-05	Metabolism
2.20E-13	Metabolism
0.22662929	Metabolism

2.03E-08	TME
0.048461183	Metabolism
0.384135086	Metabolism
0.09945872	Metabolism
0.000278003	Metabolism
0.342533802	Proliferation/Metastasis
0.176048064	Metabolism
0.001742923	Metabolism
2.18E-11	Metabolism
1.13E-10	Metabolism
1.60E-14	Metabolism
0.106122637	Metabolism
0.300300497	Proliferation/Metastasis
0.024801745	Metabolism
0.009243704	Metabolism
5.74E-09	Proliferation/Metastasis
7.44E-05	Metabolism
1.62E-24	Metabolism
9.05E-08	Metabolism
0.002026843	Metabolism
1.11E-21	Metabolism
0.074359695	Metabolism
0.872666091	Metabolism
0.012465927	Metabolism
1.36E-09	TME
2.05E-08	TME
0.004450605	TME
2.09E-07	TME
0.085016676	TME
0.016105836	Metabolism
0.271541474	Metabolism
2.16E-07	Proliferation/Metastasis
0.100778436	Metabolism
0.462435845	Proliferation/Metastasis
5.53E-11	Metabolism
9.02E-08	TME
0.09750144	Metabolism
1.16E-05	Metabolism
7.02E-14	Metabolism
4.10E-10	Metabolism
2.39E-09	TME
0.199270817	TME
0.3508457	Proliferation/Metastasis

0.075550532	Metabolism
0.35917351	Proliferation/Metastasis
0.275051885	Proliferation/Metastasis
0.021776239	TME
0.643719608	TME
0.732678183	TME
0.379671689	TME
8.61E-09	Metabolism
0.002947182	Proliferation/Metastasis
0.007032853	Metabolism
0.022296303	Metabolism
0.672171997	Proliferation/Metastasis
0.536989761	Proliferation/Metastasis
2.62E-06	Metabolism
2.21E-08	Metabolism
2.35E-06	Metabolism
6.52E-12	Metabolism
9.76E-05	TME
0.165431098	TME
0.003057731	TME
0.375249113	TME
0.692673968	TME
2.03E-09	Metabolism
6.25E-06	Metabolism
0.95401341	Metabolism
1.85E-05	Metabolism
0.016139362	Metabolism
0.788379299	TME
0.160674386	TME
0.933679176	TME
0.495863023	TME
0.232679137	TME
0.25463815	TME
0.512178684	TME
0.28089566	TME
0.681347976	TME
0.000186141	Proliferation/Metastasis
0.33700578	Proliferation/Metastasis
0.009045822	Metabolism
5.29E-08	Metabolism
0.160189708	TME
1.35E-13	Metabolism
0.103615181	Metabolism

0.674099206	TME
0.918174967	Proliferation/Metastasis
0.015346418	Proliferation/Metastasis
0.379683799	TME
1.23E-19	Metabolism
2.34E-12	Metabolism
0.005437921	Proliferation/Metastasis
0.001027082	Proliferation/Metastasis
0.119591012	TME
0.84492105	TME
0.416618412	TME
0.11266048	TME
0.015813538	Proliferation/Metastasis
0.021876429	TME
0.87442351	TME
0.0060726	Metabolism
0.750955588	TME
0.904637187	TME
0.221558282	TME
0.694263316	TME
0.101462837	Metabolism
1.52E-07	Metabolism
0.000694088	Metabolism
0.057804045	TME
3.85E-06	Metabolism
0.8270038	TME
0.248341923	TME
0.160077931	TME
0.201528168	TME
0.745211406	TME
4.71E-11	Metabolism
2.08E-05	Proliferation/Metastasis
0.038973107	Metabolism
0.000170434	Proliferation/Metastasis
7.88E-05	Metabolism
7.21E-08	Metabolism
0.001767805	Metabolism
9.83E-14	Metabolism
5.68E-10	Metabolism
0.015877792	Metabolism
0.001954312	Metabolism
0.000128438	Metabolism
0.189784524	Metabolism

7.11E-05	Metabolism
0.063128533	Metabolism
0.001761265	Metabolism
0.95812897	Metabolism
1.19E-06	Metabolism
0.210052287	TME
0.041815598	Proliferation/Metastasis
2.54E-10	Metabolism
0.099567997	Proliferation/Metastasis
0.261080077	TME
0.30194799	Proliferation/Metastasis
0.155946434	Proliferation/Metastasis
0.053482765	TME
0.461172176	TME
0.045930073	Metabolism
0.156445607	Metabolism
0.517975459	Proliferation/Metastasis
0.09126237	Proliferation/Metastasis
0.434735216	Proliferation/Metastasis
1.52E-05	Metabolism
0.041623937	Metabolism
0.057367044	Metabolism
0.207357112	Proliferation/Metastasis
0.821926273	TME
0.999205234	TME
0.000638943	Metabolism
0.000206115	Proliferation/Metastasis
0.098360841	Metabolism
0.647995851	TME
0.818999846	TME
0.000483555	TME
0.551948015	TME
3.81E-15	Metabolism
0.2811392	TME
1.04E-05	Proliferation/Metastasis
0.428068419	TME
0.007410063	Proliferation/Metastasis
0.578117299	Proliferation/Metastasis
0.060278251	Metabolism
0.41969982	Proliferation/Metastasis
0.256053776	TME
0.82211948	Metabolism
0.281929526	TME

0.128996598	TME
0.039651136	TME
0.388803623	TME
0.812787392	TME
0.6223782	TME
0.27580891	Metabolism
0.097444663	TME
2.54E-09	Metabolism
0.014892975	Metabolism
0.868464587	Proliferation/Metastasis
0.698404771	Proliferation/Metastasis
0.000195546	Metabolism
0.646127689	Metabolism
0.145326227	Metabolism
0.042067485	Metabolism
0.112706468	Proliferation/Metastasis
0.471268994	Proliferation/Metastasis
4.02E-05	Metabolism
2.92E-15	Metabolism
0.000195741	Metabolism
0.573096476	TME
6.07E-13	Metabolism
0.001011915	Metabolism
0.01420436	Metabolism
0.013321688	Metabolism
0.674985967	Proliferation/Metastasis
1.49E-13	Metabolism
2.85E-11	Metabolism
0.001403725	Metabolism
0.394969002	Metabolism
0.166682828	Metabolism
2.39E-05	Metabolism
0.026830535	Proliferation/Metastasis
3.27E-13	Metabolism
2.19E-05	Metabolism
0.299953809	Proliferation/Metastasis
0.046264995	Metabolism
0.027519724	Metabolism
0.138648709	Metabolism
0.002254104	Metabolism
0.498359645	Metabolism
1.72E-18	Metabolism
0.000127299	Metabolism

0.021746675	Metabolism
0.038427681	TME
0.004088843	TME
0.336373453	TME
0.083900913	TME
0.869126019	TME
0.301309947	Metabolism
0.010733695	Metabolism
0.004815292	Proliferation/Metastasis
0.002923386	Metabolism
0.88998879	Proliferation/Metastasis
2.51E-08	Metabolism
0.725004539	TME
5.36E-13	Metabolism
0.001624749	Metabolism
0.720226793	Metabolism
0.000113167	Metabolism
0.270777087	TME
0.058121043	TME
0.001963994	Proliferation/Metastasis
4.83E-06	Metabolism
0.814495263	Proliferation/Metastasis
1.27E-07	Proliferation/Metastasis
2.58E-06	TME
6.87E-09	TME
2.51E-09	TME
4.52E-11	TME
0.000430309	Metabolism
0.014882145	Proliferation/Metastasis
5.99E-07	Metabolism
0.047316457	Metabolism
0.458498026	Proliferation/Metastasis
1.16E-06	Proliferation/Metastasis
9.76E-12	Metabolism
0.708677224	Metabolism
0.219798337	Metabolism
0.003009344	Metabolism
0.000411992	TME
1.11E-05	TME
1.96E-08	TME
1.32E-09	TME
1.35E-09	TME
0.004384827	Metabolism

0.429170408	Metabolism
0.008565257	Metabolism
9.88E-08	Metabolism
0.302781884	Metabolism
1.06E-08	TME
5.26E-06	TME
5.30E-14	TME
3.28E-09	TME
5.33E-11	TME
2.53E-11	TME
1.77E-11	TME
2.58E-09	TME
2.65E-08	TME
0.410142267	Proliferation/Metastasis
3.22E-06	Proliferation/Metastasis
0.000510614	Metabolism
0.003772779	Metabolism
3.69E-13	TME
0.004845954	Metabolism
1.78E-10	Metabolism
4.54E-12	TME
0.663756793	Proliferation/Metastasis
0.0303472	Proliferation/Metastasis
3.60E-07	TME
0.397571758	Metabolism
0.031104379	Metabolism
0.150475612	Proliferation/Metastasis
3.60E-06	Proliferation/Metastasis
7.72E-08	TME
2.45E-11	TME
2.83E-12	TME
1.92E-11	TME
0.388405268	Proliferation/Metastasis
8.85E-14	TME
1.82E-12	TME
0.003651545	Metabolism
7.58E-11	TME
1.42E-13	TME
4.48E-09	TME
0.004618381	TME
0.218708978	Metabolism
0.100885274	Metabolism
0.597785387	Metabolism

6.81E-16	TME
0.805618047	Metabolism
1.63E-13	TME
2.48E-05	TME
8.22E-09	TME
1.26E-05	TME
0.000376398	TME
0.011816287	Metabolism
0.400914535	Proliferation/Metastasis
0.266451255	Metabolism
0.561207163	Proliferation/Metastasis
0.103900777	Metabolism
0.181327333	Metabolism
0.003368109	Metabolism
6.38E-05	Metabolism
0.389785746	Metabolism
6.36E-07	Metabolism
0.275802495	Metabolism
6.96E-11	Metabolism
0.614241685	Metabolism
1.29E-08	Metabolism
4.44E-07	Metabolism
6.15E-06	Metabolism
1.09E-06	Metabolism
0.000705469	Metabolism
1.08E-08	TME
0.514778416	Proliferation/Metastasis
5.67E-05	Metabolism
3.04E-11	Proliferation/Metastasis
1.44E-09	TME
9.58E-15	Proliferation/Metastasis
3.15E-14	Proliferation/Metastasis
2.07E-08	TME
7.05E-17	TME
0.475831069	Metabolism
0.710343337	Metabolism
0.82580877	Proliferation/Metastasis
0.037816824	Proliferation/Metastasis
3.14E-11	Proliferation/Metastasis
3.86E-08	Metabolism
0.757081458	Metabolism
1.75E-13	Metabolism
0.286777339	Proliferation/Metastasis

1.65E-12	TME
6.66E-10	TME
0.005690225	Metabolism
9.89E-08	Proliferation/Metastasis
0.645847226	Metabolism
1.78E-07	TME
2.00E-11	TME
5.49E-10	TME
7.85E-16	TME
0.498617983	Metabolism
0.004968678	TME
0.000225604	Proliferation/Metastasis
1.60E-16	TME
0.870804371	Proliferation/Metastasis
0.265780255	Proliferation/Metastasis
0.127190996	Metabolism
0.683578701	Proliferation/Metastasis
8.19E-11	TME
0.451800831	Metabolism
3.72E-07	TME
1.17E-11	TME
5.01E-13	TME
9.97E-14	TME
5.05E-08	TME
2.77E-11	TME
1.37E-07	Metabolism
6.39E-20	TME
0.043193032	Metabolism
0.877587832	Metabolism
1.00E-13	Proliferation/Metastasis
0.547256137	Proliferation/Metastasis
1.73E-05	Metabolism
0.022724834	Metabolism
0.575783675	Metabolism
0.146646881	Metabolism
4.66E-11	Proliferation/Metastasis
0.016991381	Proliferation/Metastasis
0.193596425	Metabolism
0.012302551	Metabolism
0.78006634	Metabolism
1.43E-18	TME
0.602661302	Metabolism
0.41535332	Metabolism

0.119722684	Metabolism
0.608978733	Metabolism
0.012710828	Proliferation/Metastasis
0.129485337	Metabolism
0.460196936	Metabolism
2.39E-06	Metabolism
0.104697474	Metabolism
0.353278992	Metabolism
0.002677624	Metabolism
0.157849554	Proliferation/Metastasis
0.353200656	Metabolism
0.958210739	Metabolism
0.316470176	Proliferation/Metastasis
4.91E-06	Metabolism
7.68E-11	Metabolism
7.64E-06	Metabolism
0.671762306	Metabolism
0.745597298	Metabolism
0.28878834	Metabolism
0.000105045	Metabolism
1.39E-09	Metabolism
2.71E-10	TME
6.10E-06	TME
1.08E-11	TME
1.60E-11	TME
1.56E-19	TME
0.009783976	Metabolism
0.002732237	Metabolism
0.110108728	Proliferation/Metastasis
0.003186506	Metabolism
2.84E-12	Proliferation/Metastasis
0.082383906	Metabolism
0.037024226	TME
0.621279583	Metabolism
0.005540169	Metabolism
0.005824031	Metabolism
1.39E-05	Metabolism
1.88E-27	TME
4.48E-13	TME
1.04E-11	Proliferation/Metastasis
0.028710495	Metabolism
0.090952915	Proliferation/Metastasis
0.237477545	Proliferation/Metastasis

0.111208567	TME
0.643420158	TME
0.004361842	TME
0.176236484	TME
0.237332863	Metabolism
0.278401094	Proliferation/Metastasis
0.000112754	Metabolism
0.571734252	Metabolism
0.408349917	Proliferation/Metastasis
0.001232083	Proliferation/Metastasis
0.000726307	Metabolism
0.030299419	Metabolism
0.108315837	Metabolism
0.851833219	Metabolism
0.382594618	TME
0.069270502	TME
0.035131792	TME
0.677696682	TME
0.000411082	TME
0.435050983	Metabolism
0.154716392	Metabolism
0.23907303	Metabolism
0.124361805	Metabolism
0.043012647	Metabolism
1.56E-09	TME
0.205817008	TME
0.812181844	TME
0.000603487	TME
0.307391046	TME
0.518839536	TME
0.282129625	TME
0.615691098	TME
0.685262251	TME
3.13E-07	Proliferation/Metastasis
2.04E-11	Proliferation/Metastasis
0.495566297	Metabolism
0.72917669	Metabolism
0.502116739	TME
0.00037617	Metabolism
2.94E-12	Metabolism
0.106342855	TME
6.79E-10	Proliferation/Metastasis
0.989288061	Proliferation/Metastasis

0.980330824	TME
0.004800517	Metabolism
4.04E-05	Metabolism
0.000172483	Proliferation/Metastasis
7.05E-09	Proliferation/Metastasis
5.34E-07	TME
0.48690227	TME
0.006567896	TME
0.015116259	TME
0.000107553	Proliferation/Metastasis
4.04E-09	TME
0.556906087	TME
0.972167163	Metabolism
0.000102772	TME
0.010082782	TME
0.292824847	TME
0.000836657	TME
0.039703035	Metabolism
0.779977698	Metabolism
0.509157684	Metabolism
3.53E-06	TME
0.000459197	Metabolism
0.013675527	TME
0.080009415	TME
0.022659109	TME
0.033157905	TME
0.357261844	TME
0.063595239	Metabolism
1.02E-09	Proliferation/Metastasis
0.217662597	Metabolism
0.000373904	Proliferation/Metastasis
0.044787836	Metabolism
0.037136696	Metabolism
1.81E-05	Metabolism
0.00137931	Metabolism
0.732757659	Metabolism
0.071752569	Metabolism
0.832098348	Metabolism
0.618661669	Metabolism
0.505786551	Metabolism
0.705454219	Metabolism
0.763608135	Metabolism
0.087992032	Metabolism

0.244935401	Metabolism
0.030878168	Metabolism
0.718652584	TME
3.48E-07	Proliferation/Metastasis
0.000282463	Metabolism
0.004033886	Proliferation/Metastasis
0.365941289	TME
0.004639782	Proliferation/Metastasis
0.000524585	Proliferation/Metastasis
0.00013768	TME
0.094769251	TME
2.21E-12	Metabolism
6.70E-23	Metabolism
7.38E-05	Proliferation/Metastasis
0.080588928	Proliferation/Metastasis
2.24E-05	Proliferation/Metastasis
0.000379109	Metabolism
5.11E-08	Metabolism
0.56626696	Metabolism
0.439323715	Proliferation/Metastasis
0.098651761	TME
0.629563779	TME
1.55E-07	Metabolism
3.78E-05	Proliferation/Metastasis
9.55E-19	Metabolism
0.000390222	TME
0.214585887	TME
0.373685642	TME
4.36E-06	TME
0.000498929	Metabolism
2.82E-07	TME
5.10E-19	Proliferation/Metastasis
0.710445018	TME
0.000958563	Proliferation/Metastasis
0.00205142	Proliferation/Metastasis
7.31E-21	Metabolism
0.750801424	Proliferation/Metastasis
0.139488795	TME
0.012499551	Metabolism
0.508037741	TME
1.90E-06	TME
0.000131272	TME
0.389856098	TME

0.002827914	TME
0.011942388	TME
0.290789968	Metabolism
0.142505481	TME
0.625217401	Metabolism
0.00097882	Metabolism
8.27E-05	Proliferation/Metastasis
0.041368647	Proliferation/Metastasis
0.284906723	Metabolism
0.957387414	Metabolism
1.38E-06	Metabolism
7.55E-11	Metabolism
0.316539005	Proliferation/Metastasis
1.05E-08	Proliferation/Metastasis
0.543581838	Metabolism
0.692322741	Metabolism
0.803593468	Metabolism
0.017003725	TME
0.000596349	Metabolism
0.036685009	Metabolism
0.870755614	Metabolism
3.26E-12	Metabolism
2.15E-05	Proliferation/Metastasis
0.050237438	Metabolism
0.004595944	Metabolism
0.099464064	Metabolism
0.585553204	Metabolism
0.000433506	Metabolism
0.11272853	Metabolism
0.577257545	Proliferation/Metastasis
0.006596961	Metabolism
1.95E-06	Metabolism
1.98E-08	Proliferation/Metastasis
0.021673376	Metabolism
4.97E-19	Metabolism
1.74E-06	Metabolism
0.077607688	Metabolism
0.056672057	Metabolism
0.218781386	Metabolism
0.022491264	Metabolism
0.026989829	Metabolism
0.118530052	TME
0.425323363	TME

0.007467128	TME
0.003348478	TME
0.105006929	TME
0.818694953	Metabolism
0.107171537	Metabolism
1.29E-12	Proliferation/Metastasis
4.87E-05	Metabolism
0.000411372	Proliferation/Metastasis
0.018517739	Metabolism
0.000450295	TME
8.19E-05	Metabolism
0.423723557	Metabolism
0.000100936	Metabolism
0.595139194	Metabolism
0.407956434	TME
0.035191826	TME
0.871712649	Proliferation/Metastasis
0.005329382	Metabolism
0.043727422	Proliferation/Metastasis
0.110271102	Proliferation/Metastasis
6.05E-07	TME
0.041692471	TME
0.008568287	TME
2.50E-06	TME
0.02945353	Metabolism
3.46E-09	Proliferation/Metastasis
0.226562341	Metabolism
6.51E-09	Metabolism
0.000223672	Proliferation/Metastasis
0.282789289	Proliferation/Metastasis
6.87E-05	Metabolism
0.002619882	Metabolism
0.543470434	Metabolism
2.84E-06	Metabolism
3.23E-09	TME
0.279207856	TME
0.006152939	TME
0.027512185	TME
1.50E-06	TME
0.290083882	Metabolism
0.038311732	Metabolism
0.000733749	Metabolism
1.37E-05	Metabolism

0.268460687	Metabolism
0.049920739	TME
8.90E-05	TME
0.10553597	TME
0.002230973	TME
0.0074121	TME
0.054913735	TME
0.031202524	TME
0.05438376	TME
0.002786139	TME
7.67E-24	Proliferation/Metastasis
9.00E-12	Proliferation/Metastasis
0.0322657	Metabolism
1.16E-05	Metabolism
0.002319909	TME
0.070472858	Metabolism
8.21E-07	Metabolism
0.272360345	TME
1.21E-08	Proliferation/Metastasis
1.31E-15	Proliferation/Metastasis
0.000602468	TME
0.04214161	Metabolism
7.83E-11	Metabolism
3.28E-30	Proliferation/Metastasis
0.000209148	Proliferation/Metastasis
0.020321388	TME
0.995023772	TME
0.006596525	TME
0.007134244	TME
1.48E-14	Proliferation/Metastasis
4.65E-05	TME
0.211667465	TME
0.498603834	Metabolism
5.75E-05	TME
0.001658028	TME
0.008241644	TME
0.032469236	TME
0.635202471	Metabolism
0.066724404	Metabolism
0.107603644	Metabolism
1.63E-09	TME
1.18E-08	Metabolism
0.000931353	TME

0.210536505	TME
0.001672221	TME
0.000652274	TME
2.09E-07	TME
2.86E-06	Metabolism
1.81E-26	Proliferation/Metastasis
0.006485375	Metabolism
0.003155514	Proliferation/Metastasis
7.44E-14	Metabolism
2.49E-05	Metabolism
0.274793282	Metabolism
0.099704873	Metabolism
0.476509794	Metabolism
0.916141845	Metabolism
0.952892896	Metabolism
6.28E-08	Metabolism
0.016371405	Metabolism
3.15E-05	Metabolism
0.033570403	Metabolism
0.436152475	Metabolism
0.906942958	Metabolism
0.02098275	Metabolism
0.413246702	TME
0.148736463	Proliferation/Metastasis
8.36E-10	Metabolism
0.000155384	Proliferation/Metastasis
0.111711281	TME
0.000702133	Proliferation/Metastasis
0.000261475	Proliferation/Metastasis
1.83E-05	TME
0.045002785	TME
0.016842638	Metabolism
0.689624364	Metabolism
1.89E-20	Proliferation/Metastasis
1.46E-30	Proliferation/Metastasis
0.561708243	Proliferation/Metastasis
0.070286903	Metabolism
0.725592931	Metabolism
2.84E-07	Metabolism
0.324377097	Proliferation/Metastasis
0.036281722	TME
0.626688797	TME
0.001177194	Metabolism

0.003272838	Proliferation/Metastasis
0.000391244	Metabolism
0.128820869	TME
0.04668553	TME
0.011131476	TME
0.00135045	TME
1.63E-06	Metabolism
0.520872473	TME
0.058641818	Proliferation/Metastasis
0.068192755	TME
0.505402357	Proliferation/Metastasis
1.81E-30	Proliferation/Metastasis
0.349467277	Metabolism
8.18E-36	Proliferation/Metastasis
0.288898003	TME
2.56E-06	Metabolism
0.000231215	TME
0.003226748	TME
0.132763345	TME
0.062514983	TME
5.97E-10	TME
0.237094067	TME
0.00026712	Metabolism
0.004990859	TME
0.040240249	Metabolism
0.218783357	Metabolism
0.000253874	Proliferation/Metastasis
0.246422253	Proliferation/Metastasis
1.11E-08	Metabolism
0.232868881	Metabolism
0.000388112	Metabolism
0.297183183	Metabolism
0.000603519	Proliferation/Metastasis
1.61E-13	Proliferation/Metastasis
0.950473981	Metabolism
3.27E-10	Metabolism
4.54E-13	Metabolism
1.58E-06	TME
0.411615617	Metabolism
0.034302076	Metabolism
0.250718408	Metabolism
0.048366071	Metabolism
4.50E-08	Proliferation/Metastasis

4.66E-07	Metabolism
0.320795133	Metabolism
7.76E-06	Metabolism
4.27E-27	Metabolism
1.46E-16	Metabolism
0.535274007	Metabolism
3.21E-07	Proliferation/Metastasis
0.000129132	Metabolism
0.000540442	Metabolism
0.000517648	Proliferation/Metastasis
0.073289567	Metabolism
6.23E-05	Metabolism
5.67E-06	Metabolism
1.76E-05	Metabolism
3.45E-06	Metabolism
4.34E-09	Metabolism
0.507080697	Metabolism
1.90E-09	Metabolism
0.169304444	TME
0.610016407	TME
0.972799064	TME
0.095546587	TME
0.000187838	TME
0.026080504	Metabolism
0.17248254	Metabolism
0.909893167	Proliferation/Metastasis
0.199777322	Metabolism
0.069817216	Proliferation/Metastasis
0.955544617	Metabolism
3.55E-07	TME
0.81402445	Metabolism
0.023439321	Metabolism
0.521330066	Metabolism
0.000100503	Metabolism
8.22E-13	TME
2.03E-09	TME
0.018791474	Proliferation/Metastasis
0.036877902	Metabolism
0.019352231	Proliferation/Metastasis
0.997669521	Proliferation/Metastasis
1.30E-06	TME
9.18E-07	TME
7.15E-08	TME

1.95E-08	TME
1.51E-07	Metabolism
8.04E-08	Proliferation/Metastasis
0.762565367	Metabolism
1.82E-10	Metabolism
0.092873327	Proliferation/Metastasis
2.70E-09	Proliferation/Metastasis
0.023779633	Metabolism
7.87E-09	Metabolism
1.71E-05	Metabolism
2.92E-08	Metabolism
4.92E-08	TME
1.60E-07	TME
2.87E-12	TME
1.03E-06	TME
0.491111226	TME
2.50E-06	Metabolism
1.30E-05	Metabolism
0.759154834	Metabolism
0.106121464	Metabolism
7.31E-05	Metabolism
6.88E-11	TME
0.080588488	TME
5.74E-08	TME
2.48E-05	TME
8.56E-07	TME
4.14E-06	TME
8.37E-07	TME
2.64E-05	TME
9.85E-08	TME
0.000179728	Proliferation/Metastasis
5.56E-06	Proliferation/Metastasis
0.014018618	Metabolism
3.75E-09	Metabolism
3.87E-05	TME
0.578602664	Metabolism
0.009880551	Metabolism
4.89E-06	TME
0.029472974	Proliferation/Metastasis
0.479945012	Proliferation/Metastasis
0.003540519	TME
0.12476058	Metabolism
0.128079948	Metabolism

0.233106678	Proliferation/Metastasis
9.92E-14	Proliferation/Metastasis
2.74E-08	TME
3.20E-06	TME
8.23E-09	TME
3.10E-08	TME
1.32E-13	Proliferation/Metastasis
1.04E-11	TME
5.65E-06	TME
0.000823698	Metabolism
3.17E-18	TME
1.17E-10	TME
0.000108916	TME
0.230235164	TME
0.00996274	Metabolism
4.08E-05	Metabolism
2.13E-07	Metabolism
1.71E-15	TME
9.32E-06	Metabolism
2.28E-07	TME
1.22E-06	TME
5.47E-11	TME
0.115779645	TME
3.94E-07	TME
0.001263261	Metabolism
0.003232298	Proliferation/Metastasis
1.10E-06	Metabolism
0.000140393	Proliferation/Metastasis
4.97E-06	Metabolism
0.003432782	Metabolism
0.000639112	Metabolism
0.008687191	Metabolism
1.01E-05	Metabolism
0.000715084	Metabolism
2.60E-06	Metabolism
1.02E-08	Metabolism
0.001128582	Metabolism
6.43E-11	Metabolism
2.60E-06	Metabolism
0.016601398	Metabolism
0.674626022	Metabolism
0.033091756	Metabolism
6.75E-05	TME

4.12E-11	Proliferation/Metastasis
0.067508524	Metabolism
7.98E-14	Proliferation/Metastasis
1.90E-05	TME
5.38E-16	Proliferation/Metastasis
8.15E-18	Proliferation/Metastasis
1.56E-10	TME
0.000586361	TME
1.03E-09	Metabolism
1.54E-22	Metabolism
4.50E-15	Proliferation/Metastasis
0.000173396	Proliferation/Metastasis
1.28E-17	Proliferation/Metastasis
0.003114409	Metabolism
4.71E-05	Metabolism
0.350875722	Metabolism
6.70E-08	Proliferation/Metastasis
1.83E-07	TME
6.58E-07	TME
0.000518889	Metabolism
9.88E-17	Proliferation/Metastasis
1.98E-25	Metabolism
2.59E-08	TME
9.59E-06	TME
0.006729149	TME
2.09E-13	TME
0.020300909	Metabolism
5.19E-05	TME
2.17E-05	Proliferation/Metastasis
1.36E-06	TME
1.62E-15	Proliferation/Metastasis
3.79E-21	Proliferation/Metastasis
9.52E-19	Metabolism
0.03635724	Proliferation/Metastasis
6.11E-08	TME
1.96E-15	Metabolism
0.000113898	TME
3.27E-12	TME
3.85E-07	TME
1.29E-07	TME
0.000207502	TME
1.14E-05	TME
9.04E-05	Metabolism

2.61E-07	TME
0.006705298	Metabolism
1.34E-10	Metabolism
9.83E-14	Proliferation/Metastasis
0.003510435	Proliferation/Metastasis
2.10E-06	Metabolism
0.005742377	Metabolism
8.68E-05	Metabolism
0.207488554	Metabolism
8.23E-08	Proliferation/Metastasis
4.24E-10	Proliferation/Metastasis
1.67E-06	Metabolism
2.40E-07	Metabolism
8.99E-11	Metabolism
2.17E-09	TME
0.002845569	Metabolism
0.018555797	Metabolism
0.011687239	Metabolism
1.72E-08	Metabolism
1.91E-24	Proliferation/Metastasis
4.92E-06	Metabolism
0.001071134	Metabolism
0.002363221	Metabolism
1.61E-07	Metabolism
0.887832404	Metabolism
0.001161213	Metabolism
0.000584309	Proliferation/Metastasis
0.007504445	Metabolism
0.002280591	Metabolism
1.40E-11	Proliferation/Metastasis
3.69E-09	Metabolism
0.00017954	Metabolism
5.09E-12	Metabolism
0.026213056	Metabolism
0.634127027	Metabolism
0.009796665	Metabolism
1.06E-06	Metabolism
0.187247083	Metabolism
7.86E-09	TME
0.00076546	TME
0.000728331	TME
2.26E-08	TME
9.57E-06	TME

8.31E-07	Metabolism
0.004970352	Metabolism
0.000257878	Proliferation/Metastasis
0.265719512	Metabolism
5.54E-11	Proliferation/Metastasis
1.42E-05	Metabolism
0.909839092	TME
0.026105473	Metabolism
0.006779065	Metabolism
0.021336545	Metabolism
0.00573094	Metabolism
8.88E-13	TME
1.90E-07	TME
2.28E-06	Proliferation/Metastasis
0.00317509	Metabolism
0.57325172	Proliferation/Metastasis
0.372122255	Proliferation/Metastasis
0.006435397	TME
0.007645271	TME
0.135245885	TME
0.0102851	TME
0.000327881	Metabolism
0.252998301	Proliferation/Metastasis
0.236983552	Metabolism
0.938751441	Metabolism
0.247880964	Proliferation/Metastasis
0.055641038	Proliferation/Metastasis
0.019576744	Metabolism
0.449222059	Metabolism
0.022917618	Metabolism
1.94E-06	Metabolism
0.025006206	TME
0.012347433	TME
0.852186082	TME
0.004751667	TME
8.01E-09	TME
2.30E-05	Metabolism
8.06E-05	Metabolism
0.027870526	Metabolism
6.44E-05	Metabolism
0.000811937	Metabolism
0.138804373	TME
0.013985191	TME

6.86E-05	TME
0.157748023	TME
0.025949621	TME
0.019818403	TME
0.019597385	TME
0.002543325	TME
0.034754103	TME
0.755942024	Proliferation/Metastasis
6.95E-06	Proliferation/Metastasis
0.02586894	Metabolism
0.001321416	Metabolism
0.000198659	TME
0.00039536	Metabolism
7.49E-10	Metabolism
0.067984019	TME
1.58E-05	Proliferation/Metastasis
0.103692158	Proliferation/Metastasis
0.050341999	TME
0.210173836	Metabolism
0.013073153	Metabolism
0.57257389	Proliferation/Metastasis
0.186129192	Proliferation/Metastasis
0.762507297	TME
0.005524287	TME
0.025731564	TME
0.199406823	TME
0.091541708	Proliferation/Metastasis
0.042932577	TME
0.008634918	TME
0.417717712	Metabolism
0.277297428	TME
0.026335797	TME
0.003882929	TME
0.798141668	TME
0.137164601	Metabolism
0.000157028	Metabolism
0.031229489	Metabolism
0.034434693	TME
0.752870184	Metabolism
0.079035559	TME
0.216116594	TME
0.89982118	TME
0.002250996	TME

0.822981309	TME
0.086712195	Metabolism
0.967142419	Proliferation/Metastasis
0.062315207	Metabolism
0.529785553	Proliferation/Metastasis
0.013742537	Metabolism
0.05907048	Metabolism
0.016815109	Metabolism
0.017770236	Metabolism
0.025628956	Metabolism
2.30E-11	Metabolism
0.00135214	Metabolism
4.69E-13	Metabolism
0.162393367	Metabolism
0.000498543	Metabolism
0.000248519	Metabolism
4.47E-06	Metabolism
0.008557581	Metabolism
0.004998169	Metabolism
0.146960902	TME
0.063014322	Proliferation/Metastasis
3.49E-05	Metabolism
0.000214651	Proliferation/Metastasis
0.030173583	TME
0.000209129	Proliferation/Metastasis
0.06684521	Proliferation/Metastasis
0.09965158	TME
2.69E-05	TME
4.35E-06	Metabolism
0.000102178	Metabolism
0.237577235	Proliferation/Metastasis
0.042771144	Proliferation/Metastasis
0.024122143	Proliferation/Metastasis
0.216015724	Metabolism
0.615537391	Metabolism
1.60E-12	Metabolism
0.618380776	Proliferation/Metastasis
0.045123881	TME
0.117292109	TME
0.003664987	Metabolism
0.037350302	Proliferation/Metastasis
5.97E-05	Metabolism
0.06146419	TME

0.17757756	TME
2.17E-06	TME
0.190944526	TME
0.621908619	Metabolism
0.00010726	TME
2.90E-06	Proliferation/Metastasis
4.32E-05	TME
0.077250628	Proliferation/Metastasis
0.544558504	Proliferation/Metastasis
9.51E-06	Metabolism
0.012001544	Proliferation/Metastasis
0.302776342	TME
0.196880479	Metabolism
0.069083819	TME
0.37798159	TME
0.187357058	TME
0.005082401	TME
0.025841166	TME
0.088657226	TME
0.002297613	Metabolism
1.64E-05	TME
0.042298106	Metabolism
0.005398649	Metabolism
0.566076495	Proliferation/Metastasis
0.020116345	Proliferation/Metastasis
0.000731514	Metabolism
0.016026691	Metabolism
1.62E-08	Metabolism
0.002445611	Metabolism
5.69E-10	Proliferation/Metastasis
0.477796601	Proliferation/Metastasis
0.010372031	Metabolism
0.000785782	Metabolism
0.828081445	Metabolism
0.003582246	TME
0.083940564	Metabolism
0.408823	Metabolism
5.18E-06	Metabolism
0.3494749	Metabolism
0.775101609	Proliferation/Metastasis
0.322831385	Metabolism
0.017980033	Metabolism
1.57E-07	Metabolism

0.010321734	Metabolism
0.004867788	Metabolism
0.008152971	Metabolism
0.003016129	Proliferation/Metastasis
0.040920587	Metabolism
0.50720834	Metabolism
0.06707825	Proliferation/Metastasis
6.94E-08	Metabolism
1.17E-13	Metabolism
5.26E-09	Metabolism
0.635758705	Metabolism
0.168024123	Metabolism
0.016435169	Metabolism
0.023498516	Metabolism
0.001331439	Metabolism
0.36032877	TME
0.096198382	TME
0.029504566	TME
0.561335066	TME
4.82E-05	TME
0.010978798	Metabolism
0.006034849	Metabolism
0.016594603	Proliferation/Metastasis
0.8369729	Metabolism
0.00030262	Proliferation/Metastasis
0.001511206	Metabolism
0.122477272	TME
0.697792743	Metabolism
0.037931179	Metabolism
0.033203206	Metabolism
3.83E-05	Metabolism
7.03E-05	TME
0.018245234	TME
0.023648659	Proliferation/Metastasis
0.090792745	Metabolism
0.230680055	Proliferation/Metastasis
0.001478789	Proliferation/Metastasis
0.041031239	TME
0.284152949	TME
0.915111967	TME
0.937006071	TME
0.00010483	Metabolism
0.060660998	Proliferation/Metastasis

0.053044007	Metabolism
0.826998601	Metabolism
0.155086933	Proliferation/Metastasis
0.532609036	Proliferation/Metastasis
0.003676265	Metabolism
0.005018256	Metabolism
0.003920425	Metabolism
0.002336516	Metabolism
0.008194865	TME
0.07400639	TME
0.007902245	TME
0.354679633	TME
1.04E-05	TME
2.15E-07	Metabolism
0.002408175	Metabolism
0.793675106	Metabolism
1.62E-10	Metabolism
0.003923685	Metabolism
0.256695828	TME
8.29E-07	TME
0.582112079	TME
0.884421441	TME
0.446345895	TME
0.160134109	TME
0.24108679	TME
0.224124445	TME
0.629058171	TME
4.62E-08	Proliferation/Metastasis
0.000154862	Proliferation/Metastasis
3.67E-06	Metabolism
0.006741353	Metabolism
0.647249374	TME
3.91E-11	Metabolism
7.01E-05	Metabolism
0.115443833	TME
0.753813075	Proliferation/Metastasis
0.033537542	Proliferation/Metastasis
0.637003143	TME
5.40E-07	Metabolism
0.000467652	Metabolism
5.40E-06	Proliferation/Metastasis
3.37E-05	Proliferation/Metastasis
0.723087741	TME

0.158066875	TME
0.284492838	TME
0.839034388	TME
0.002016037	Proliferation/Metastasis
0.000115086	TME
0.059961626	TME
1.33E-05	Metabolism
0.748475611	TME
0.87995407	TME
0.079296707	TME
9.89E-05	TME
0.060773888	Metabolism
1.82E-06	Metabolism
0.001199304	Metabolism
0.012186135	TME
0.029389304	Metabolism
0.524826706	TME
0.183992945	TME
0.005069682	TME
0.291786203	TME
0.000450719	TME
0.165394364	Metabolism
6.02E-10	Proliferation/Metastasis
0.074403598	Metabolism
0.000180469	Proliferation/Metastasis
0.233115244	Metabolism
0.001455185	Metabolism
1.19E-05	Metabolism
1.36E-13	Metabolism
0.00138865	Metabolism
0.085422736	Metabolism
0.000442178	Metabolism
5.87E-06	Metabolism
0.007388129	Metabolism
0.003075712	Metabolism
0.11295748	Metabolism
0.359309291	Metabolism
0.086543012	Metabolism
1.64E-09	Metabolism
0.001894643	TME
0.000467299	Proliferation/Metastasis
1.86E-14	Metabolism
0.011615324	Proliferation/Metastasis

0.255012686	TME
0.559092227	Proliferation/Metastasis
0.751663617	Proliferation/Metastasis
0.506797063	TME
0.121367709	TME
0.012147778	Metabolism
0.205918647	Metabolism
0.096722684	Proliferation/Metastasis
0.004160776	Proliferation/Metastasis
0.762148949	Proliferation/Metastasis
0.034864234	Metabolism
0.083969772	Metabolism
2.02E-05	Metabolism
0.000407464	Proliferation/Metastasis
0.649586391	TME
0.001215773	TME
0.972805529	Metabolism
2.54E-05	Proliferation/Metastasis
0.008554042	Metabolism
0.93819959	TME
0.975221366	TME
0.087302947	TME
0.525118597	TME
0.000713672	Metabolism
0.09750025	TME
1.30E-05	Proliferation/Metastasis
0.120054615	TME
0.089996543	Proliferation/Metastasis
0.016961569	Proliferation/Metastasis
0.228645988	Metabolism
0.01287515	Proliferation/Metastasis
0.034736222	TME
1.11E-05	Metabolism
0.459524372	TME
0.26470591	TME
0.071103594	TME
0.171511333	TME
0.232618083	TME
0.325970289	TME
0.03268112	Metabolism
0.200263125	TME
2.39E-11	Metabolism
0.352133895	Metabolism

0.073793381	Proliferation/Metastasis
1.36E-07	Proliferation/Metastasis
0.079962363	Metabolism
0.004003805	Metabolism
0.678309918	Metabolism
7.25E-05	Metabolism
0.399719389	Proliferation/Metastasis
0.000378077	Proliferation/Metastasis
2.89E-05	Metabolism
0.002935114	Metabolism
0.817914938	Metabolism
0.170306539	TME
6.75E-10	Metabolism
0.002835768	Metabolism
0.100977436	Metabolism
0.004237872	Metabolism
0.626473033	Proliferation/Metastasis
0.000131104	Metabolism
3.36E-07	Metabolism
3.95E-06	Metabolism
0.205159806	Metabolism
0.867259085	Metabolism
2.55E-06	Metabolism
0.003995688	Proliferation/Metastasis
3.76E-05	Metabolism
0.000137405	Metabolism
0.988138443	Proliferation/Metastasis
0.0002174	Metabolism
0.457918824	Metabolism
0.019098643	Metabolism
0.000161868	Metabolism
0.452812956	Metabolism
0.003946961	Metabolism
0.000348361	Metabolism
2.22E-08	Metabolism
0.02377306	TME
4.39E-06	TME
0.268219086	TME
0.031376629	TME
0.241775338	TME
0.843398463	Metabolism
0.47562482	Metabolism
5.49E-07	Proliferation/Metastasis

1.32E-09	Metabolism
0.631641563	Proliferation/Metastasis
1.77E-07	Metabolism
6.46E-05	TME
1.18E-05	Metabolism
0.007628919	Metabolism
5.00E-07	Metabolism
7.35E-08	Metabolism
0.000166572	TME
6.15E-05	TME
0.292015436	Proliferation/Metastasis
4.24E-05	Metabolism
0.000672757	Proliferation/Metastasis
1.70E-07	Proliferation/Metastasis
9.75E-05	TME
7.06E-12	TME
0.137435164	TME
0.000271407	TME
0.003258046	Metabolism
1.32E-07	Proliferation/Metastasis
0.243896863	Metabolism
0.008967632	Metabolism
0.147229717	Proliferation/Metastasis
6.85E-13	Proliferation/Metastasis
2.02E-07	Metabolism
0.004104437	Metabolism
0.038175613	Metabolism
0.083108297	Metabolism
2.83E-06	TME
1.35E-05	TME
0.000789781	TME
0.032345988	TME
1.01E-16	TME
0.128571892	Metabolism
0.766220712	Metabolism
0.03939136	Metabolism
0.384732753	Metabolism
0.313707301	Metabolism
1.99E-06	TME
1.11E-15	TME
4.57E-05	TME
0.001824185	TME
0.00042732	TME

0.018284516	TME
0.007244622	TME
4.78E-05	TME
0.01080178	TME
0.118019066	Proliferation/Metastasis
4.55E-06	Proliferation/Metastasis
0.016518788	Metabolism
0.088208283	Metabolism
2.57E-05	TME
0.152131285	Metabolism
3.59E-07	Metabolism
0.002137021	TME
0.000236434	Proliferation/Metastasis
0.57144474	Proliferation/Metastasis
0.000159104	TME
0.002730588	Metabolism
1.88E-06	Metabolism
0.197264981	Proliferation/Metastasis
3.72E-06	Proliferation/Metastasis
0.880863153	TME
0.002784624	TME
0.193088668	TME
0.001073067	TME
0.916992507	Proliferation/Metastasis
4.30E-13	TME
0.005298901	TME
0.10902802	Metabolism
0.191526534	TME
8.14E-05	TME
0.00119195	TME
1.07E-05	TME
2.18E-07	Metabolism
0.001794925	Metabolism
0.026330402	Metabolism
3.80E-11	TME
0.249614583	Metabolism
0.0114089	TME
0.017307426	TME
0.013387572	TME
0.000770353	TME
0.159968763	TME
5.13E-05	Metabolism
0.028313253	Proliferation/Metastasis

2.78E-09	Metabolism
0.238352464	Proliferation/Metastasis
6.72E-10	Metabolism
0.946936464	Metabolism
0.909774815	Metabolism
0.016584419	Metabolism
0.000277968	Metabolism
2.85E-10	Metabolism
0.000766084	Metabolism
0.041380743	Metabolism
7.41E-05	Metabolism
0.014900342	Metabolism
2.62E-05	Metabolism
0.569378395	Metabolism
0.359836172	Metabolism
0.01750759	Metabolism
0.002137264	TME
0.791992589	Proliferation/Metastasis
0.99477861	Metabolism
4.35E-14	Proliferation/Metastasis
8.33E-05	TME
8.54E-10	Proliferation/Metastasis
8.37E-05	Proliferation/Metastasis
0.348768174	TME
0.000907567	TME
0.000338091	Metabolism
0.935097929	Metabolism
0.165864189	Proliferation/Metastasis
0.102088572	Proliferation/Metastasis
0.000381515	Proliferation/Metastasis
0.39602486	Metabolism
0.037296892	Metabolism
0.055034447	Metabolism
2.82E-06	Proliferation/Metastasis
0.00097421	TME
0.000141496	TME
0.107436474	Metabolism
0.342102503	Proliferation/Metastasis
0.162256632	Metabolism
0.16403938	TME
0.791199313	TME
1.66E-11	TME
3.46E-11	TME

0.000548517	Metabolism
0.074218894	TME
7.02E-06	Proliferation/Metastasis
2.53E-06	TME
0.070929036	Proliferation/Metastasis
0.008854066	Proliferation/Metastasis
0.014369877	Metabolism
0.139359802	Proliferation/Metastasis
0.000162405	TME
0.335305552	Metabolism
0.00023168	TME
0.000470688	TME
0.007672763	TME
0.000255541	TME
3.24E-08	TME
0.000108376	TME
0.16045379	Metabolism
4.53E-08	TME
0.027999481	Metabolism
0.222316296	Metabolism
0.573101316	Proliferation/Metastasis
0.432091484	Proliferation/Metastasis
0.922194142	Metabolism
5.08E-05	Metabolism
0.148397689	Metabolism
3.85E-09	Metabolism
7.45E-19	Proliferation/Metastasis
0.000684066	Proliferation/Metastasis
0.203186893	Metabolism
0.773811138	Metabolism
0.005291249	Metabolism
1.02E-30	TME
0.021056405	Metabolism
0.291528729	Metabolism
0.003535332	Metabolism
0.396462569	Metabolism
0.183190137	Proliferation/Metastasis
0.010110937	Metabolism
0.5141126	Metabolism
0.258660833	Metabolism
0.094589683	Metabolism
0.046305602	Metabolism
0.135439298	Metabolism

0.018067159	Proliferation/Metastasis
0.852608209	Metabolism
0.006373932	Metabolism
0.38809591	Proliferation/Metastasis
0.111223467	Metabolism
6.11E-06	Metabolism
0.482220532	Metabolism
0.001317645	Metabolism
0.049202836	Metabolism
0.316717284	Metabolism
0.000101724	Metabolism
0.78610697	Metabolism
5.79E-08	TME
0.000422314	TME
0.045429881	TME
0.000333393	TME
7.88E-05	TME
0.163457591	Metabolism
0.878539253	Metabolism
0.018438763	Proliferation/Metastasis
0.307658344	Metabolism
0.000187201	Proliferation/Metastasis
0.001932662	Metabolism
0.027968309	TME
0.000626801	Metabolism
1.01E-06	Metabolism
4.11E-09	Metabolism
0.460747934	Metabolism
2.01E-22	TME
8.22E-11	TME
0.227527914	Proliferation/Metastasis
0.397229967	Metabolism
0.279363192	Proliferation/Metastasis
0.660352154	Proliferation/Metastasis
0.630363121	TME
8.05E-05	TME
0.000622511	TME
4.06E-07	TME
0.087966427	Metabolism
1.21E-07	Proliferation/Metastasis
0.002706976	Metabolism
0.007631233	Metabolism
0.039044645	Proliferation/Metastasis

1.06E-15	Proliferation/Metastasis
0.00049018	Metabolism
0.90421865	Metabolism
0.005843693	Metabolism
4.61E-08	Metabolism
0.006076647	TME
6.28E-07	TME
0.009986267	TME
1.88E-12	TME
0.208610406	TME
0.029998887	Metabolism
0.017227643	Metabolism
0.85542745	Metabolism
1.35E-05	Metabolism
0.018443013	Metabolism
3.46E-07	TME
0.002091791	TME
0.000251558	TME
9.99E-12	TME
0.285017357	TME
0.002397234	TME
0.000522467	TME
2.67E-07	TME
2.06E-16	TME
0.965339798	Proliferation/Metastasis
0.0021493	Proliferation/Metastasis
0.692023607	Metabolism
0.00257354	Metabolism
0.000401723	TME
2.37E-05	Metabolism
0.886709963	Metabolism
0.000499053	TME
7.46E-30	Proliferation/Metastasis
1.72E-05	Proliferation/Metastasis
0.056046519	TME
0.000686922	Metabolism
8.80E-25	Metabolism
0.274807215	Proliferation/Metastasis
8.41E-24	Proliferation/Metastasis
1.33E-07	TME
1.11E-09	TME
0.949954837	TME
0.000354516	TME

2.49E-16	Proliferation/Metastasis
2.03E-06	TME
0.251377013	TME
0.163818327	Metabolism
2.87E-07	TME
3.10E-05	TME
0.003755107	TME
0.774800171	TME
0.076805938	Metabolism
3.32E-09	Metabolism
0.384196256	Metabolism
2.73E-09	TME
1.69E-07	Metabolism
0.012088521	TME
0.000152069	TME
1.09E-05	TME
0.015445452	TME
0.29971083	TME
0.000126461	Metabolism
0.379764545	Proliferation/Metastasis
0.406100424	Metabolism
0.954748816	Proliferation/Metastasis
0.000182324	Metabolism
0.307474667	Metabolism
0.008592076	Metabolism
3.93E-19	Metabolism
0.592020796	Metabolism
0.105300814	Metabolism
1.88E-11	Metabolism
0.000259558	Metabolism
2.70E-06	Metabolism
1.60E-14	Metabolism
1.30E-11	Metabolism
0.190307931	Metabolism
0.030263771	Metabolism
4.93E-12	Metabolism
0.052769463	TME
9.09E-10	Proliferation/Metastasis
0.084024251	Metabolism
1.86E-08	Proliferation/Metastasis
8.17E-12	TME
1.85E-09	Proliferation/Metastasis
2.54E-11	Proliferation/Metastasis

2.78E-14	TME
0.770671242	TME
1.07E-15	Metabolism
7.13E-20	Metabolism
0.000327563	Proliferation/Metastasis
0.064576853	Proliferation/Metastasis
9.15E-17	Proliferation/Metastasis
0.529735998	Metabolism
1.35E-15	Metabolism
3.92E-06	Metabolism
0.000192051	Proliferation/Metastasis
0.050979597	TME
0.015783945	TME
0.00145443	Metabolism
8.22E-25	Proliferation/Metastasis
1.97E-21	Metabolism
0.938053094	TME
0.0041473	TME
0.026193422	TME
4.29E-06	TME
5.55E-07	Metabolism
0.00228753	TME
1.04E-07	Proliferation/Metastasis
0.00358329	TME
0.012665235	Proliferation/Metastasis
0.001528974	Proliferation/Metastasis
2.01E-34	Metabolism
4.10E-13	Proliferation/Metastasis
0.003434715	TME
0.000290239	Metabolism
5.01E-08	TME
0.063616813	TME
0.033190043	TME
0.000536211	TME
0.012637771	TME
1.10E-05	TME
7.55E-08	Metabolism
0.006559722	TME
0.142120492	Metabolism
0.47902137	Metabolism
7.10E-07	Proliferation/Metastasis
0.000613114	Proliferation/Metastasis
1.11E-08	Metabolism

0.223454678	Metabolism
1.64E-12	Metabolism
6.02E-12	Metabolism
0.383861716	Proliferation/Metastasis
0.006654622	Proliferation/Metastasis
3.23E-11	Metabolism
0.001583551	Metabolism
2.35E-11	Metabolism
9.33E-07	TME
1.24E-05	Metabolism
0.103454819	Metabolism
0.002763848	Metabolism
5.39E-06	Metabolism
1.11E-19	Proliferation/Metastasis
3.47E-10	Metabolism
0.925309312	Metabolism
0.107460711	Metabolism
4.78E-07	Metabolism
4.00E-20	Metabolism
0.006901352	Metabolism
0.457784017	Proliferation/Metastasis
0.010013337	Metabolism
0.003460324	Metabolism
0.126839828	Proliferation/Metastasis
0.127637867	Metabolism
0.022356943	Metabolism
3.04E-10	Metabolism
0.000901309	Metabolism
0.048584595	Metabolism
0.005345589	Metabolism
3.29E-16	Metabolism
0.000839578	Metabolism
2.75E-07	TME
3.35E-06	TME
2.13E-09	TME
0.002801134	TME
2.30E-05	TME
0.239939438	Metabolism
1.21E-05	Metabolism
0.006142687	Proliferation/Metastasis
0.000300078	Metabolism
7.99E-11	Proliferation/Metastasis
0.217574171	Metabolism

0.223626341	TME
0.100253421	Metabolism
0.000672485	Metabolism
0.001108672	Metabolism
9.06E-10	Metabolism
5.85E-05	TME
1.95E-07	TME
0.000401236	Proliferation/Metastasis
0.913048477	Metabolism
2.66E-08	Proliferation/Metastasis
0.010297389	Proliferation/Metastasis
0.001339532	TME
7.16E-06	TME
1.81E-05	TME
3.41E-05	TME
4.99E-12	Metabolism
0.185518428	Proliferation/Metastasis
4.54E-42	Metabolism
0.001153243	Metabolism
5.51E-14	Proliferation/Metastasis
0.214990033	Proliferation/Metastasis
3.46E-39	Metabolism
8.54E-23	Metabolism
5.88E-07	Metabolism
2.21E-06	Metabolism
0.00042479	TME
5.20E-20	TME
1.12E-06	TME
0.0718332	TME
1.83E-05	TME
8.60E-32	Metabolism
1.19E-07	Metabolism
4.70E-05	Metabolism
6.26E-17	Metabolism
0.632358883	Metabolism
0.185426774	TME
0.03389963	TME
6.72E-10	TME
0.000434011	TME
0.006799539	TME
1.11E-05	TME
0.000200887	TME
0.520137038	TME

0.446110852	TME
4.12E-40	Proliferation/Metastasis
4.21E-24	Proliferation/Metastasis
0.122487544	Metabolism
1.22E-25	Metabolism
0.269713679	TME
1.29E-05	Metabolism
0.003335131	Metabolism
2.64E-06	TME
1.59E-15	Proliferation/Metastasis
2.51E-23	Proliferation/Metastasis
0.000117653	TME
6.24E-33	Metabolism
0.160531624	Metabolism
2.47E-35	Proliferation/Metastasis
0.848675359	Proliferation/Metastasis
3.73E-05	TME
2.00E-12	TME
1.39E-09	TME
0.609775076	TME
7.84E-07	Proliferation/Metastasis
0.17709168	TME
4.08E-08	TME
2.19E-30	Metabolism
0.000136186	TME
0.000215008	TME
0.000126785	TME
3.88E-11	TME
0.00012857	Metabolism
7.65E-30	Metabolism
1.78E-13	Metabolism
0.271755417	TME
2.38E-05	Metabolism
9.29E-07	TME
0.009622567	TME
0.00019078	TME
0.837773021	TME
3.47E-06	TME
6.13E-11	Metabolism
7.76E-44	Proliferation/Metastasis
0.022959514	Metabolism
0.000340946	Proliferation/Metastasis
1.23E-12	Metabolism

1.52E-11	Metabolism
9.66E-26	Metabolism
2.18E-16	Metabolism
3.23E-12	Metabolism
0.001724531	Metabolism
0.182970856	Metabolism
5.80E-10	Metabolism
0.000666448	Metabolism
0.04081118	Metabolism
3.95E-05	Metabolism
7.25E-09	Metabolism
0.027299559	Metabolism
0.584425453	Metabolism
2.82E-06	TME
2.02E-08	Proliferation/Metastasis
9.17E-31	Metabolism
0.000192933	Proliferation/Metastasis
0.813166224	TME
0.000262009	Proliferation/Metastasis
0.005639262	Proliferation/Metastasis
4.13E-05	TME
5.98E-09	TME
5.83E-09	Metabolism
0.227148761	Metabolism
0.001994234	Proliferation/Metastasis
5.15E-35	Proliferation/Metastasis
9.37E-06	Proliferation/Metastasis
2.28E-34	Metabolism
0.906551235	Metabolism
0.02806337	Metabolism
1.16E-08	Proliferation/Metastasis
1.17E-10	TME
1.97E-05	TME
0.137365052	Metabolism
4.31E-06	Proliferation/Metastasis
0.012040873	Metabolism
7.48E-05	TME
0.169516519	TME
0.182610363	TME
0.002735577	TME
2.51E-27	Metabolism
9.42E-21	TME
1.91E-19	Proliferation/Metastasis

3.59E-10	TME
0.005901523	Proliferation/Metastasis
0.068990548	Proliferation/Metastasis
0.019174985	Metabolism
3.72E-39	Proliferation/Metastasis
5.62E-07	TME
2.78E-11	Metabolism
0.10714146	TME
0.00800363	TME
0.997585161	TME
0.006913173	TME
0.016368967	TME
0.0006795	TME
7.34E-13	Metabolism
3.72E-05	TME
2.79E-12	Metabolism
8.33E-23	Metabolism
1.09E-07	Proliferation/Metastasis
0.000330251	Proliferation/Metastasis
2.69E-20	Metabolism
0.263948961	Metabolism
0.166982649	Metabolism
0.004793541	Metabolism
0.043731581	Proliferation/Metastasis
3.62E-31	Proliferation/Metastasis
1.41E-05	Metabolism
2.40E-07	Metabolism
7.51E-09	Metabolism
7.44E-05	TME
1.52E-19	Metabolism
1.68E-10	Metabolism
2.13E-13	Metabolism
8.17E-10	Metabolism
0.655267758	Proliferation/Metastasis
0.000386024	Metabolism
4.42E-48	Metabolism
2.01E-08	Metabolism
1.66E-26	Metabolism
9.20E-32	Metabolism
1.19E-07	Metabolism
1.61E-26	Proliferation/Metastasis
7.52E-36	Metabolism
0.017870601	Metabolism

6.51E-10	Proliferation/Metastasis
0.00030888	Metabolism
7.32E-08	Metabolism
0.878620931	Metabolism
2.52E-27	Metabolism
8.90E-09	Metabolism
9.51E-06	Metabolism
0.298471548	Metabolism
2.35E-19	Metabolism
0.00074086	TME
2.11E-08	TME
3.18E-05	TME
3.55E-14	TME
3.41E-06	TME
0.573764705	Metabolism
2.03E-06	Metabolism
0.002132731	Proliferation/Metastasis
2.41E-16	Metabolism
0.059647158	Proliferation/Metastasis
5.85E-25	Metabolism
0.541894657	TME
2.16E-29	Metabolism
0.018703506	Metabolism
6.75E-07	Metabolism
1.61E-26	Metabolism
0.013170262	TME
0.495438059	TME
2.68E-06	Proliferation/Metastasis
2.16E-08	Metabolism
0.6932119	Proliferation/Metastasis
1.64E-25	Proliferation/Metastasis
5.26E-06	TME
0.119348289	TME
1.10E-05	TME
0.82796231	TME
1.01E-18	Metabolism
0.907576421	Proliferation/Metastasis
0.20465027	Metabolism
0.761402117	Metabolism
3.30E-10	Proliferation/Metastasis
0.619945255	Proliferation/Metastasis
0.551059479	Metabolism
4.23E-20	Metabolism

3.57E-23	Metabolism
8.06E-12	Metabolism
0.324343779	TME
2.33E-05	TME
1.91E-05	TME
0.011285854	TME
0.001311079	TME
5.62E-18	Metabolism
8.02E-11	Metabolism
0.077714186	Metabolism
2.27E-15	Metabolism
0.002295772	Metabolism
0.009169729	TME
0.494208833	TME
0.002797185	TME
0.619720625	TME
0.222191637	TME
0.003451556	TME
0.006178988	TME
0.01232185	TME
2.27E-05	TME
0.067227107	Proliferation/Metastasis
1.20E-05	Proliferation/Metastasis
6.28E-17	Metabolism
0.001270923	Metabolism
0.404708556	TME
0.88138977	Metabolism
1.48E-15	Metabolism
0.014837072	TME
1.99E-22	Proliferation/Metastasis
1.00E-07	Proliferation/Metastasis
1.91E-05	TME
4.31E-05	Metabolism
0.003189431	Metabolism
0.000104469	Proliferation/Metastasis
0.046042575	Proliferation/Metastasis
5.22E-06	TME
0.000140782	TME
1.04E-05	TME
0.087604039	TME
1.15E-23	Proliferation/Metastasis
0.140801628	TME
0.09765252	TME

7.33E-06	Metabolism
6.84E-17	TME
0.009823989	TME
0.206023706	TME
0.003164331	TME
0.001306195	Metabolism
1.89E-06	Metabolism
2.13E-11	Metabolism
0.092260382	TME
0.006017613	Metabolism
0.005704934	TME
0.005485257	TME
0.011744761	TME
0.191998345	TME
0.198915411	TME
0.930773515	Metabolism
0.081847895	Proliferation/Metastasis
0.276435355	Metabolism
2.93E-07	Proliferation/Metastasis
0.278677075	Metabolism
2.71E-11	Metabolism
4.04E-05	Metabolism
0.037209473	Metabolism
2.48E-10	Metabolism
1.87E-06	Metabolism
3.15E-16	Metabolism
7.63E-05	Metabolism
0.261096337	Metabolism
2.10E-16	Metabolism
1.15E-07	Metabolism
9.84E-07	Metabolism
8.01E-05	Metabolism
0.664800679	Metabolism
0.321699705	TME
1.86E-10	Proliferation/Metastasis
7.01E-09	Metabolism
0.017388736	Proliferation/Metastasis
0.009630726	TME
0.001406361	Proliferation/Metastasis
0.009477152	Proliferation/Metastasis
2.91E-05	TME
0.367168081	TME
4.41E-48	Metabolism

4.73E-15	Metabolism
0.061152807	Proliferation/Metastasis
2.58E-06	Proliferation/Metastasis
4.50E-17	Proliferation/Metastasis
0.380583186	Metabolism
3.93E-11	Metabolism
0.616017972	Metabolism
0.096918619	Proliferation/Metastasis
0.000673627	TME
0.010573697	TME
5.88E-07	Metabolism
1.28E-28	Proliferation/Metastasis
2.19E-25	Metabolism
0.001630321	TME
0.000173102	TME
0.027049551	TME
0.000679236	TME
0.003630718	Metabolism
0.018837034	TME
7.73E-05	Proliferation/Metastasis
0.112207451	TME
4.01E-11	Proliferation/Metastasis
9.17E-14	Proliferation/Metastasis
1.49E-33	Metabolism
0.000259562	Proliferation/Metastasis
0.000291941	TME
0.639844095	Metabolism
0.020899183	TME
8.89E-13	TME
0.000121898	TME
0.021149774	TME
1.34E-09	TME
0.000624346	TME
0.002830137	Metabolism
0.064187676	TME
0.001851161	Metabolism
3.72E-15	Metabolism
1.00E-06	Proliferation/Metastasis
0.039994871	Proliferation/Metastasis
5.08E-08	Metabolism
2.67E-14	Metabolism
5.57E-27	Metabolism
0.089583482	Metabolism

0.547053262	Proliferation/Metastasis
7.29E-05	Proliferation/Metastasis
8.12E-06	Metabolism
4.01E-05	Metabolism
0.106178509	Metabolism
0.825306248	TME
0.003484608	Metabolism
1.44E-06	Metabolism
2.52E-28	Metabolism
2.01E-20	Metabolism
2.19E-16	Proliferation/Metastasis
0.000361658	Metabolism
1.21E-14	Metabolism
7.99E-19	Metabolism
0.387228983	Metabolism
1.86E-15	Metabolism
1.20E-11	Metabolism
1.05E-07	Proliferation/Metastasis
2.60E-06	Metabolism
0.146906837	Metabolism
9.29E-10	Proliferation/Metastasis
0.261404765	Metabolism
2.75E-23	Metabolism
1.66E-17	Metabolism
0.000887758	Metabolism
0.001273546	Metabolism
0.004623629	Metabolism
0.003564886	Metabolism
4.35E-15	Metabolism
4.10E-10	TME
0.000402911	TME
5.62E-05	TME
0.042545863	TME
0.014945101	TME
1.39E-13	Metabolism
0.004322343	Metabolism
1.35E-15	Proliferation/Metastasis
0.001858198	Metabolism
0.0375395	Proliferation/Metastasis
3.50E-09	Metabolism
1.29E-05	TME
1.13E-05	Metabolism
1.13E-05	Metabolism

4.48E-07	Metabolism
6.28E-11	Metabolism
0.595562655	TME
1.54E-05	TME
2.94E-13	Proliferation/Metastasis
4.24E-06	Metabolism
0.100167859	Proliferation/Metastasis
5.33E-06	Proliferation/Metastasis
0.006864896	TME
4.75E-69	TME
1.65E-36	TME
3.45E-34	TME
0.043072199	Metabolism
8.32E-11	Proliferation/Metastasis
2.42E-10	Metabolism
3.18E-38	Metabolism
0.000130547	Proliferation/Metastasis
2.89E-47	Proliferation/Metastasis
6.73E-24	Metabolism
3.95E-11	Metabolism
0.000848893	Metabolism
1.66E-11	Metabolism
0.553291875	TME
2.38E-64	TME
1.60E-39	TME
9.13E-25	TME
7.50E-85	TME
0.00651564	Metabolism
0.00017096	Metabolism
0.318245257	Metabolism
4.51E-09	Metabolism
0.031640637	Metabolism
1.51E-33	TME
8.63E-28	TME
7.04E-50	TME
1.40E-11	TME
1.61E-27	TME
8.30E-39	TME
5.64E-39	TME
8.22E-29	TME
1.91E-28	TME
0.531284123	Proliferation/Metastasis
9.74E-42	Proliferation/Metastasis

0.011369048	Metabolism
9.53E-05	Metabolism
1.97E-27	TME
0.014701328	Metabolism
2.02E-30	Metabolism
1.43E-47	TME
0.001842609	Proliferation/Metastasis
0.000687062	Proliferation/Metastasis
9.43E-12	TME
2.68E-05	Metabolism
2.11E-05	Metabolism
0.684717012	Proliferation/Metastasis
2.30E-36	Proliferation/Metastasis
1.12E-28	TME
7.47E-58	TME
5.12E-13	TME
1.95E-30	TME
1.69E-05	Proliferation/Metastasis
6.47E-41	TME
1.12E-39	TME
2.12E-08	Metabolism
2.26E-29	TME
2.73E-50	TME
8.11E-48	TME
0.052929474	TME
3.34E-05	Metabolism
0.624542472	Metabolism
0.348710126	Metabolism
9.03E-41	TME
0.974384511	Metabolism
1.61E-17	TME
0.334384237	TME
4.33E-26	TME
5.27E-25	TME
4.38E-06	TME
2.58E-21	Metabolism
0.041970161	Proliferation/Metastasis
6.96E-41	Metabolism
8.81E-09	Proliferation/Metastasis
7.42E-49	Metabolism
0.000170555	Metabolism
7.28E-08	Metabolism
0.016111932	Metabolism

0.000128777	Metabolism
6.39E-17	Metabolism
1.42E-07	Metabolism
8.05E-44	Metabolism
2.35E-29	Metabolism
1.34E-10	Metabolism
1.98E-35	Metabolism
0.018168477	Metabolism
1.66E-12	Metabolism
5.45E-11	Metabolism
8.15E-48	TME
9.74E-10	Proliferation/Metastasis
3.12E-08	Metabolism
1.57E-38	Proliferation/Metastasis
1.70E-27	TME
3.60E-56	Proliferation/Metastasis
1.33E-47	Proliferation/Metastasis
1.28E-37	TME
3.76E-22	TME
3.88E-08	Metabolism
1.58E-13	Metabolism
1.29E-30	Proliferation/Metastasis
0.926589715	Proliferation/Metastasis
1.14E-37	Proliferation/Metastasis
0.058346665	Metabolism
0.02105707	Metabolism
5.38E-31	Metabolism
6.70E-37	Proliferation/Metastasis
5.02E-37	TME
2.31E-32	TME
1.29E-18	Metabolism
0.000480613	Proliferation/Metastasis
0.004028133	Metabolism
3.22E-18	TME
3.91E-16	TME
4.59E-67	TME
2.50E-46	TME
3.23E-05	Metabolism
1.38E-33	TME
2.86E-08	Proliferation/Metastasis
5.47E-69	TME
1.42E-20	Proliferation/Metastasis
2.64E-13	Proliferation/Metastasis

6.11E-06	Metabolism
0.057638212	Proliferation/Metastasis
8.38E-31	TME
2.48E-10	Metabolism
7.02E-15	TME
0.001265364	TME
6.14E-24	TME
6.07E-39	TME
6.17E-24	TME
6.75E-32	TME
2.62E-43	Metabolism
7.11E-45	TME
1.82E-46	Metabolism
0.000118303	Metabolism
7.10E-15	Proliferation/Metastasis
3.00E-10	Proliferation/Metastasis
0.020628187	Metabolism
2.50E-17	Metabolism
5.53E-17	Metabolism
0.049663397	Metabolism
1.33E-26	Proliferation/Metastasis
0.000412731	Proliferation/Metastasis
2.25E-20	Metabolism
0.367637439	Metabolism
1.41E-09	Metabolism
2.68E-26	TME
1.25E-27	Metabolism
0.062408977	Metabolism
5.24E-06	Metabolism
1.14E-24	Metabolism
3.11E-23	Proliferation/Metastasis
0.839267064	Metabolism
5.49E-22	Metabolism
3.95E-12	Metabolism
0.754828346	Metabolism
0.004575906	Metabolism
0.000653871	Metabolism
0.789474314	Proliferation/Metastasis
0.032420057	Metabolism
1.38E-23	Metabolism
0.003523427	Proliferation/Metastasis
3.12E-08	Metabolism
0.03100004	Metabolism

0.020883323	Metabolism
3.98E-47	Metabolism
7.25E-05	Metabolism
5.83E-05	Metabolism
0.007023261	Metabolism
0.006726725	Metabolism
1.21E-19	TME
3.74E-51	TME
1.13E-39	TME
1.03E-59	TME
3.05E-49	TME
1.11E-15	Metabolism
3.74E-14	Metabolism
5.50E-08	Proliferation/Metastasis
0.002483303	Metabolism
6.90E-35	Proliferation/Metastasis
2.75E-08	Metabolism
0.000171278	TME
3.33E-17	Metabolism
2.03E-06	Metabolism
6.92E-26	Metabolism
0.227389845	Metabolism
4.85E-29	TME
0.002282448	TME
2.79E-07	Proliferation/Metastasis
0.84309949	Metabolism
0.195530708	Proliferation/Metastasis
8.76E-12	Proliferation/Metastasis
0.115009225	TME
7.76E-06	TME
0.125711091	TME
9.48E-25	TME
4.57E-22	Metabolism
0.037503069	Proliferation/Metastasis
9.82E-10	Metabolism
5.15E-08	Metabolism
3.18E-06	Proliferation/Metastasis
8.56E-15	Proliferation/Metastasis
1.76E-05	Metabolism
7.60E-13	Metabolism
2.08E-19	Metabolism
1.05E-06	Metabolism
0.001696278	TME

0.52307107	TME
0.021514708	TME
7.38E-06	TME
3.07E-07	TME
6.82E-16	Metabolism
8.92E-07	Metabolism
3.28E-09	Metabolism
1.24E-31	Metabolism
0.026889668	Metabolism
3.72E-13	TME
1.96E-07	TME
0.242398429	TME
5.71E-15	TME
0.009708646	TME
0.057345378	TME
0.005350941	TME
3.98E-05	TME
2.00E-07	TME
3.45E-32	Proliferation/Metastasis
0.005875711	Proliferation/Metastasis
1.04E-05	Metabolism
1.51E-11	Metabolism
8.50E-08	TME
0.080622177	Metabolism
6.56E-38	Metabolism
0.055439423	TME
3.52E-15	Proliferation/Metastasis
2.74E-31	Proliferation/Metastasis
1.19E-16	TME
7.82E-11	Metabolism
0.139097886	Metabolism
5.69E-35	Proliferation/Metastasis
3.32E-11	Proliferation/Metastasis
0.078099524	TME
0.581563685	TME
0.782301702	TME
3.07E-06	TME
2.61E-11	Proliferation/Metastasis
1.84E-15	TME
0.304550977	TME
4.19E-09	Metabolism
0.293397015	TME
0.000735601	TME

0.000664127	TME
1.89E-08	TME
0.000122348	Metabolism
9.59E-14	Metabolism
1.75E-07	Metabolism
8.36E-10	TME
0.023164878	Metabolism
0.256142171	TME
0.67041441	TME
0.02061946	TME
7.05E-10	TME
4.46E-11	TME
0.144889619	Metabolism
1.87E-34	Proliferation/Metastasis
6.99E-06	Metabolism
0.504946266	Proliferation/Metastasis
0.944057769	Metabolism
1.06E-16	Metabolism
2.85E-12	Metabolism
8.58E-11	Metabolism
5.86E-05	Metabolism
6.63E-14	Metabolism
0.555173205	Metabolism
0.923446156	Metabolism
1.18E-06	Metabolism
0.000709487	Metabolism
0.027173834	Metabolism
1.64E-29	Metabolism
4.52E-12	Metabolism
0.007638651	Metabolism
0.011298665	TME
0.574155778	Proliferation/Metastasis
9.27E-09	Metabolism
0.007660117	Proliferation/Metastasis
9.67E-12	TME
8.80E-06	Proliferation/Metastasis
7.45E-06	Proliferation/Metastasis
0.001235309	TME
0.097430691	TME
4.74E-19	Metabolism
0.000290006	Metabolism
3.88E-18	Proliferation/Metastasis
3.43E-21	Proliferation/Metastasis

0.048840767	Proliferation/Metastasis
7.35E-13	Metabolism
0.479313904	Metabolism
0.925746428	Metabolism
1.06E-05	Proliferation/Metastasis
0.327660442	TME
0.214367135	TME
0.758401556	Metabolism
5.94E-08	Proliferation/Metastasis
0.08259338	Metabolism
0.140826889	TME
0.004192557	TME
4.50E-13	TME
2.79E-05	TME
4.70E-13	Metabolism
0.369178035	TME
1.18E-08	Proliferation/Metastasis
0.027122817	TME
1.42E-06	Proliferation/Metastasis
2.90E-06	Proliferation/Metastasis
0.607127805	Metabolism
2.07E-11	Proliferation/Metastasis
0.096368281	TME
3.88E-35	Metabolism
0.004356254	TME
0.031351914	TME
1.34E-06	TME
0.000105225	TME
2.33E-15	TME
0.003674442	TME
0.950969263	Metabolism
0.022711628	TME
0.780855048	Metabolism
3.94E-12	Metabolism
0.001454738	Proliferation/Metastasis
0.117471962	Proliferation/Metastasis
6.98E-14	Metabolism
1.26E-15	Metabolism
0.00109305	Metabolism
6.82E-05	Metabolism
5.42E-06	Proliferation/Metastasis
1.09E-47	Proliferation/Metastasis
0.010465237	Metabolism

0.001478679	Metabolism
0.009512302	Metabolism
8.08E-16	TME
0.003215611	Metabolism
3.97E-10	Metabolism
9.55E-06	Metabolism
0.506807525	Metabolism
2.62E-06	Proliferation/Metastasis
0.007234613	Metabolism
7.03E-15	Metabolism
1.55E-10	Metabolism
1.50E-08	Metabolism
1.57E-21	Metabolism
7.29E-13	Metabolism
1.81E-12	Proliferation/Metastasis
3.07E-18	Metabolism
0.004100366	Metabolism
1.57E-05	Proliferation/Metastasis
0.066727363	Metabolism
0.000399594	Metabolism
0.011632125	Metabolism
0.033401302	Metabolism
5.72E-08	Metabolism
6.51E-10	Metabolism
0.220276901	Metabolism
9.74E-26	Metabolism
0.097660334	TME
0.133134173	TME
0.068112116	TME
0.489538532	TME
0.035074918	TME
0.078323867	Metabolism
0.778222416	Metabolism
0.12190857	Proliferation/Metastasis
1.47E-07	Metabolism
0.002695774	Proliferation/Metastasis
0.001334568	Metabolism
0.035023314	TME
3.00E-08	Metabolism
1.23E-11	Metabolism
0.005361114	Metabolism
2.38E-17	Metabolism
2.76E-10	TME

0.100558863	TME
1.26E-10	Proliferation/Metastasis
7.08E-05	Metabolism
0.349375048	Proliferation/Metastasis
7.67E-08	Proliferation/Metastasis
0.890782273	TME
0.64521517	TME
0.062031076	TME
0.839854192	TME
0.003477196	Metabolism
0.113621445	Proliferation/Metastasis
1.29E-10	Metabolism
1.37E-06	Metabolism
0.052500317	Proliferation/Metastasis
0.000577721	Proliferation/Metastasis
4.45E-10	Metabolism
0.005904024	Metabolism
5.68E-05	Metabolism
0.003883773	Metabolism
0.154386506	TME
5.16E-07	TME
0.075624776	TME
0.745640717	TME
0.000699483	TME
1.41E-05	Metabolism
4.67E-05	Metabolism
0.033617168	Metabolism
0.000265753	Metabolism
1.83E-13	Metabolism
0.668632783	TME
0.103291328	TME
0.111162241	TME
0.934515467	TME
0.001217379	TME
0.26368994	TME
0.299445641	TME
0.53557458	TME
0.704369055	TME
1.31E-07	Proliferation/Metastasis
7.88E-13	Proliferation/Metastasis
0.026587122	Metabolism
1.14E-05	Metabolism
0.533610142	TME

0.000509255	Metabolism
0.000333221	Metabolism
0.018584356	TME
0.001229563	Proliferation/Metastasis
0.002252573	Proliferation/Metastasis
0.292429292	TME
0.000724068	Metabolism
1.49E-05	Metabolism
0.000118943	Proliferation/Metastasis
0.016092564	Proliferation/Metastasis
0.520816001	TME
0.279676187	TME
0.581053482	TME
0.097753267	TME
0.722492359	Proliferation/Metastasis
0.064988026	TME
0.000644498	TME
0.278211194	Metabolism
0.056521539	TME
0.059902611	TME
0.850701138	TME
0.000151803	TME
0.005157028	Metabolism
0.000230021	Metabolism
0.000196974	Metabolism
0.028405573	TME
1.32E-11	Metabolism
0.56409655	TME
0.065454773	TME
0.862850179	TME
0.516514924	TME
0.058679892	TME
2.07E-05	Metabolism
1.06E-05	Proliferation/Metastasis
6.47E-08	Metabolism
0.062823585	Proliferation/Metastasis
2.41E-05	Metabolism
5.31E-16	Metabolism
0.000705965	Metabolism
1.89E-05	Metabolism
7.31E-06	Metabolism
0.00316715	Metabolism
1.41E-07	Metabolism

0.866839753	Metabolism
0.211167371	Metabolism
0.08972048	Metabolism
6.03E-05	Metabolism
0.0004858	Metabolism
0.048024585	Metabolism
0.009148061	Metabolism
0.004158124	TME
0.004337157	Proliferation/Metastasis
2.04E-06	Metabolism
3.20E-09	Proliferation/Metastasis
0.676463011	TME
0.000676135	Proliferation/Metastasis
6.46E-06	Proliferation/Metastasis
0.961916849	TME
3.87E-08	TME
0.618836132	Metabolism
0.030866222	Metabolism
0.056672144	Proliferation/Metastasis
1.09E-12	Proliferation/Metastasis
5.52E-07	Proliferation/Metastasis
2.53E-07	Metabolism
0.000811443	Metabolism
0.181700345	Metabolism
0.006573038	Proliferation/Metastasis
0.000367861	TME
8.80E-06	TME
0.765276661	Metabolism
0.299578001	Proliferation/Metastasis
0.03118026	Metabolism
0.000161573	TME
0.514662689	TME
0.527152219	TME
4.41E-05	TME
1.38E-05	Metabolism
0.590061057	TME
7.48E-05	Proliferation/Metastasis
0.000142799	TME
0.09973472	Proliferation/Metastasis
0.337767279	Proliferation/Metastasis
0.627595876	Metabolism
8.44E-09	Proliferation/Metastasis
0.011949046	TME

0.034818113	Metabolism
0.589912469	TME
0.012018316	TME
1.08E-06	TME
0.399537966	TME
0.024375911	TME
0.012940367	TME
4.04E-13	Metabolism
2.13E-11	TME
1.86E-12	Metabolism
0.932512909	Metabolism
0.110989868	Proliferation/Metastasis
0.004574437	Proliferation/Metastasis
0.025022416	Metabolism
0.106626907	Metabolism
0.799093944	Metabolism
0.009398106	Metabolism
2.73E-07	Proliferation/Metastasis
0.340677417	Proliferation/Metastasis
2.08E-08	Metabolism
1.21E-05	Metabolism
0.007700898	Metabolism
0.314524778	TME
0.003942068	Metabolism
1.76E-07	Metabolism
0.296636441	Metabolism
0.802579558	Metabolism
0.08211072	Proliferation/Metastasis
0.038529432	Metabolism
0.002120215	Metabolism
6.48E-05	Metabolism
0.270566517	Metabolism
0.004379851	Metabolism
2.66E-07	Metabolism
0.010226293	Proliferation/Metastasis
3.38E-06	Metabolism
0.000251661	Metabolism
2.53E-05	Proliferation/Metastasis
0.216423482	Metabolism
0.000125386	Metabolism
0.831042148	Metabolism
2.27E-14	Metabolism
0.440300554	Metabolism

4.24E-05	Metabolism
0.079543166	Metabolism
4.11E-05	Metabolism
0.454278363	TME
0.255937715	TME
0.429659308	TME
0.259207647	TME
0.166506732	TME
0.384890189	Metabolism
0.155726669	Metabolism
0.051559184	Proliferation/Metastasis
8.80E-20	Metabolism
6.43E-06	Proliferation/Metastasis
3.30E-07	Metabolism
0.914688435	TME
0.004017485	Metabolism
5.68E-07	Metabolism
1.07E-24	Metabolism
0.000439611	Metabolism
8.05E-06	TME
0.007058588	TME
0.323959515	Proliferation/Metastasis
0.004930813	Metabolism
0.201693059	Proliferation/Metastasis
5.27E-21	Proliferation/Metastasis
0.004499419	TME
0.94176015	TME
0.110511953	TME
0.533807947	TME
0.0003875	Metabolism
0.083849251	Proliferation/Metastasis
0.040658409	Metabolism
0.534367533	Metabolism
0.281941037	Proliferation/Metastasis
0.000815635	Proliferation/Metastasis
0.814644972	Metabolism
0.039856177	Metabolism
0.075682941	Metabolism
0.002514757	Metabolism
0.628684825	TME
0.056574206	TME
0.037052305	TME
0.721809921	TME

0.887132684	TME
0.021887145	Metabolism
0.240528893	Metabolism
0.787583349	Metabolism
0.144809603	Metabolism
0.000103341	Metabolism
4.01E-07	TME
1.82E-06	TME
0.526821526	TME
0.874889454	TME
0.467757218	TME
0.945240604	TME
0.865922786	TME
0.099770137	TME
0.568324174	TME
0.186923729	Proliferation/Metastasis
0.000347704	Proliferation/Metastasis
0.008235695	Metabolism
0.000472194	Metabolism
0.186583684	TME
0.836886144	Metabolism
0.001782078	Metabolism
0.006203721	TME
2.59E-11	Proliferation/Metastasis
9.73E-06	Proliferation/Metastasis
0.014774787	TME
0.105230503	Metabolism
0.092465101	Metabolism
0.043873491	Proliferation/Metastasis
3.88E-09	Proliferation/Metastasis
0.002372794	TME
0.002143457	TME
0.043220326	TME
0.007712113	TME
0.000159778	Proliferation/Metastasis
3.31E-06	TME
0.067793521	TME
0.596367637	Metabolism
0.004889555	TME
0.01483966	TME
0.029355445	TME
0.035285634	TME
0.479362563	Metabolism

0.926829052	Metabolism
0.003432363	Metabolism
5.17E-08	TME
0.47973536	Metabolism
0.088003757	TME
0.641875528	TME
0.404283908	TME
0.000135451	TME
0.45059455	TME
0.442318362	Metabolism
0.432960051	Proliferation/Metastasis
0.558005364	Metabolism
0.000115889	Proliferation/Metastasis
0.632148666	Metabolism
0.361065791	Metabolism
0.000252251	Metabolism
0.870820703	Metabolism
0.50505621	Metabolism
0.75143221	Metabolism
0.200337492	Metabolism
0.562430283	Metabolism
4.50E-05	Metabolism
0.475487741	Metabolism
0.913765796	Metabolism
0.298418751	Metabolism
0.252017299	Metabolism
0.159437927	Metabolism
0.001873242	TME
5.58E-13	Proliferation/Metastasis
0.043682781	Metabolism
6.55E-05	Proliferation/Metastasis
0.305468235	TME
0.001637235	Proliferation/Metastasis
1.34E-05	Proliferation/Metastasis
0.060428867	TME
0.67553098	TME
0.000463672	Metabolism
7.99E-16	Metabolism
0.048804927	Proliferation/Metastasis
0.223996058	Proliferation/Metastasis
3.11E-07	Proliferation/Metastasis
0.574971582	Metabolism
0.12144246	Metabolism

0.740258714	Metabolism
0.105440079	Proliferation/Metastasis
0.001372112	TME
0.011089282	TME
1.45E-08	Metabolism
8.98E-10	Proliferation/Metastasis
6.75E-17	Metabolism
0.010888898	TME
0.163400079	TME
0.02248342	TME
2.70E-09	TME
0.225157804	Metabolism
0.070564339	TME
3.42E-06	Proliferation/Metastasis
0.034896817	TME
0.123923383	Proliferation/Metastasis
0.553683155	Proliferation/Metastasis
5.83E-08	Metabolism
0.000163246	Proliferation/Metastasis
0.001319002	TME
0.362641561	Metabolism
0.959970346	TME
7.22E-09	TME
3.57E-06	TME
0.874702919	TME
0.200506793	TME
0.091523735	TME
0.677780511	Metabolism
0.010590786	TME
0.087235711	Metabolism
0.656540468	Metabolism
7.19E-06	Proliferation/Metastasis
0.049376121	Proliferation/Metastasis
0.054694	Metabolism
0.050575322	Metabolism
4.42E-06	Metabolism
9.26E-06	Metabolism
0.605056684	Proliferation/Metastasis
0.008159504	Proliferation/Metastasis
0.107175653	Metabolism
0.000901706	Metabolism
0.353715417	Metabolism
3.73E-06	TME

0.047734133	Metabolism
0.695172908	Metabolism
0.00289461	Metabolism
8.67E-07	Metabolism
0.314579825	Proliferation/Metastasis
0.639027788	Metabolism
0.16276517	Metabolism
0.108902511	Metabolism
0.00077191	Metabolism
1.74E-06	Metabolism
0.60087308	Metabolism
0.075616367	Proliferation/Metastasis
0.372456763	Metabolism
0.000311528	Metabolism
0.000411507	Proliferation/Metastasis
5.07E-05	Metabolism
1.98E-07	Metabolism
1.01E-05	Metabolism
0.907905772	Metabolism
9.94E-07	Metabolism
0.044451048	Metabolism
0.000219262	Metabolism
0.003791751	Metabolism
0.254397789	TME
0.859971563	TME
0.069020081	TME
0.467086275	TME
0.491566119	TME
0.711840395	Metabolism
0.000103612	Metabolism
3.04E-10	Proliferation/Metastasis
0.09667591	Metabolism
5.51E-07	Proliferation/Metastasis
0.467834061	Metabolism
0.228140662	TME
0.566239321	Metabolism
0.274116986	Metabolism
0.741825006	Metabolism
0.512636967	Metabolism
0.000235178	TME
0.00051135	TME
0.646564203	Proliferation/Metastasis
0.008108527	Metabolism

0.051779735	Proliferation/Metastasis
0.164602026	Proliferation/Metastasis
0.181463625	TME
0.418665804	TME
0.44034538	TME
0.262030363	TME
0.039086461	Metabolism
3.99E-16	Proliferation/Metastasis
8.71E-06	Metabolism
0.033630055	Metabolism
0.001737014	Proliferation/Metastasis
0.005803417	Proliferation/Metastasis
0.017248381	Metabolism
0.000783262	Metabolism
1.20E-06	Metabolism
0.440793407	Metabolism
0.043241992	TME
1.39E-06	TME
0.860037435	TME
0.30414005	TME
0.000201095	TME
1.83E-09	Metabolism
0.000827415	Metabolism
1.24E-07	Metabolism
1.93E-07	Metabolism
1.76E-07	Metabolism
0.859845615	TME
0.659398173	TME
0.158184125	TME
0.056839626	TME
0.004902457	TME
0.312096997	TME
0.517209324	TME
0.757214805	TME
0.497266283	TME
1.85E-30	Proliferation/Metastasis
3.89E-11	Proliferation/Metastasis
3.23E-05	Metabolism
0.101308497	Metabolism
0.328187186	TME
0.059041733	Metabolism
0.000819361	Metabolism
0.094714383	TME

8.04E-19	Proliferation/Metastasis
6.07E-28	Proliferation/Metastasis
0.243620926	TME
3.40E-05	Metabolism
0.341600689	Metabolism
1.00E-31	Proliferation/Metastasis
2.57E-06	Proliferation/Metastasis
0.002930012	TME
0.685764738	TME
0.040010954	TME
0.09452479	TME
1.73E-10	Proliferation/Metastasis
0.004273414	TME
0.377426039	TME
0.440129195	Metabolism
0.371514163	TME
0.921677721	TME
0.631815165	TME
8.43E-14	TME
0.417587714	Metabolism
7.84E-10	Metabolism
0.654390577	Metabolism
2.77E-06	TME
0.001510042	Metabolism
0.222837119	TME
0.211098345	TME
0.086996655	TME
0.009286421	TME
0.000141401	TME
0.002002719	Metabolism
1.59E-28	Proliferation/Metastasis
0.837277465	Metabolism
1.78E-08	Proliferation/Metastasis
0.502772645	Metabolism
0.000522929	Metabolism
0.473734979	Metabolism
2.26E-05	Metabolism
0.035227171	Metabolism
0.016665304	Metabolism
0.001350781	Metabolism
0.022319405	Metabolism
0.003376524	Metabolism
0.294786736	Metabolism

0.098777824	Metabolism
0.038649273	Metabolism
0.037493245	Metabolism
0.001896019	Metabolism
0.76520344	TME
0.000268532	Proliferation/Metastasis
6.00E-13	Metabolism
0.076756097	Proliferation/Metastasis
0.723819587	TME
0.159770958	Proliferation/Metastasis
0.00904511	Proliferation/Metastasis
0.755202124	TME
0.075678035	TME
1.35E-05	Metabolism
8.37E-09	Metabolism
3.02E-17	Proliferation/Metastasis
1.60E-19	Proliferation/Metastasis
1.48E-06	Proliferation/Metastasis
6.09E-05	Metabolism
0.884949407	Metabolism
2.61E-07	Metabolism
0.01978771	Proliferation/Metastasis
0.076152037	TME
0.001140146	TME
0.008563127	Metabolism
1.67E-08	Proliferation/Metastasis
3.28E-07	Metabolism
0.000191007	TME
0.157319561	TME
0.606365104	TME
0.001378337	TME
5.39E-05	Metabolism
0.007549295	TME
0.001131214	Proliferation/Metastasis
0.654880417	TME
0.001116145	Proliferation/Metastasis
8.54E-22	Proliferation/Metastasis
4.68E-05	Metabolism
3.58E-45	Proliferation/Metastasis
0.023417733	TME
0.257493596	Metabolism
0.000101561	TME
0.000112323	TME

0.002149444	TME
0.125822202	TME
1.31E-09	TME
0.010734304	TME
0.210394214	Metabolism
0.154525555	TME
4.76E-05	Metabolism
7.03E-06	Metabolism
0.540448948	Proliferation/Metastasis
0.026270399	Proliferation/Metastasis
0.955172851	Metabolism
3.31E-05	Metabolism
0.671776498	Metabolism
0.399849316	Metabolism
0.545363078	Proliferation/Metastasis
0.001933349	Proliferation/Metastasis
0.924411806	Metabolism
0.594665567	Metabolism
8.65E-08	Metabolism
1.50E-05	TME
6.11E-05	Metabolism
0.002998747	Metabolism
1.26E-06	Metabolism
2.63E-08	Metabolism
0.020320496	Proliferation/Metastasis
0.574031497	Metabolism
7.00E-09	Metabolism
1.30E-09	Metabolism
4.61E-17	Metabolism
1.03E-32	Metabolism
0.008579851	Metabolism
0.000411182	Proliferation/Metastasis
0.006970736	Metabolism
0.865912399	Metabolism
7.23E-14	Proliferation/Metastasis
0.783434751	Metabolism
0.001582549	Metabolism
0.100840761	Metabolism
6.59E-07	Metabolism
0.006571472	Metabolism
0.004735506	Metabolism
0.006020663	Metabolism
2.61E-07	Metabolism

0.00851403	TME
0.189911063	TME
0.859301343	TME
0.293209556	TME
0.337501558	TME
0.001897258	Metabolism
0.099942227	Metabolism
0.000574764	Proliferation/Metastasis
0.000952331	Metabolism
0.063262786	Proliferation/Metastasis
6.26E-09	Metabolism
0.023710813	TME
1.18E-09	Metabolism
0.016890974	Metabolism
0.759913725	Metabolism
2.44E-10	Metabolism
3.80E-07	TME
9.51E-07	TME
2.06E-05	Proliferation/Metastasis
0.875184068	Metabolism
0.078181935	Proliferation/Metastasis
0.032200869	Proliferation/Metastasis
0.008436424	TME
0.796855413	TME
0.013778398	TME
0.706630946	TME
0.000768332	Metabolism
0.000756608	Proliferation/Metastasis
0.00138911	Metabolism
0.000558293	Metabolism
0.000164016	Proliferation/Metastasis
3.44E-13	Proliferation/Metastasis
8.57E-06	Metabolism
0.039437126	Metabolism
0.018745268	Metabolism
3.61E-06	Metabolism
0.05256688	TME
6.33E-10	TME
0.006954304	TME
0.120314255	TME
0.494504095	TME
1.37E-08	Metabolism
0.007106424	Metabolism

0.030088769	Metabolism
0.023086609	Metabolism
6.00E-11	Metabolism
9.16E-05	TME
0.108631881	TME
0.000130042	TME
0.100267543	TME
0.025344747	TME
0.055016436	TME
0.057859701	TME
0.741163807	TME
0.764450125	TME
1.35E-09	Proliferation/Metastasis
0.68001155	Proliferation/Metastasis
6.58E-05	Metabolism
0.015697789	Metabolism
0.246705231	TME
0.214768113	Metabolism
0.011416943	Metabolism
2.31E-06	TME
6.13E-16	Proliferation/Metastasis
2.29E-15	Proliferation/Metastasis
0.010513135	TME
8.31E-06	Metabolism
0.244892181	Metabolism
2.59E-12	Proliferation/Metastasis
2.97E-13	Proliferation/Metastasis
2.06E-05	TME
2.37E-06	TME
0.000327945	TME
0.001653596	TME
4.04E-06	Proliferation/Metastasis
3.63E-07	TME
0.000614862	TME
0.066656938	Metabolism
4.40E-05	TME
0.000173079	TME
0.996001415	TME
0.120196858	TME
0.001771484	Metabolism
0.000549881	Metabolism
0.504081847	Metabolism
9.61E-15	TME

1.93E-06	Metabolism
0.027733545	TME
0.109865676	TME
0.001683849	TME
0.118938778	TME
0.085992367	TME
0.116257645	Metabolism
1.27E-08	Proliferation/Metastasis
5.37E-07	Metabolism
2.17E-09	Proliferation/Metastasis
0.014714286	Metabolism
4.55E-06	Metabolism
0.218830174	Metabolism
0.016387242	Metabolism
3.43E-05	Metabolism
0.002001679	Metabolism
0.074366302	Metabolism
0.048362841	Metabolism
8.75E-08	Metabolism
1.22E-05	Metabolism
0.084673583	Metabolism
0.075850286	Metabolism
4.57E-07	Metabolism
0.114650507	Metabolism
0.000319651	TME
2.73E-11	Proliferation/Metastasis
5.50E-09	Metabolism
1.03E-09	Proliferation/Metastasis
0.112495799	TME
8.92E-12	Proliferation/Metastasis
5.41E-16	Proliferation/Metastasis
0.01933979	TME
0.000685712	TME
1.35E-06	Metabolism
5.50E-17	Metabolism
0.70009674	Proliferation/Metastasis
3.33E-05	Proliferation/Metastasis
5.29E-18	Proliferation/Metastasis
4.14E-05	Metabolism
0.374861232	Metabolism
0.038500962	Metabolism
9.44E-06	Proliferation/Metastasis
3.07E-06	TME

1.10E-06	TME
0.001156398	Metabolism
2.43E-16	Proliferation/Metastasis
2.40E-09	Metabolism
8.06E-05	TME
0.341221702	TME
0.000104047	TME
1.68E-12	TME
6.59E-06	Metabolism
0.057093352	TME
0.12233444	Proliferation/Metastasis
1.98E-05	TME
2.20E-06	Proliferation/Metastasis
0.093074624	Proliferation/Metastasis
2.12E-08	Metabolism
7.34E-13	Proliferation/Metastasis
4.05E-06	TME
0.006783652	Metabolism
0.002825334	TME
1.62E-07	TME
0.000594566	TME
0.003557348	TME
0.099606813	TME
0.000564041	TME
0.001807548	Metabolism
2.30E-07	TME
5.99E-10	Metabolism
0.000118599	Metabolism
1.51E-07	Proliferation/Metastasis
0.000121021	Proliferation/Metastasis
0.001117432	Metabolism
0.007337151	Metabolism
0.000688846	Metabolism
0.516381371	Metabolism
2.17E-06	Proliferation/Metastasis
0.007107195	Proliferation/Metastasis
0.639722406	Metabolism
1.33E-05	Metabolism
0.624881487	Metabolism
2.02E-09	TME
8.79E-09	Metabolism
0.055448316	Metabolism
1.34E-05	Metabolism

9.70E-05	Metabolism
0.028312304	Proliferation/Metastasis
3.24E-07	Metabolism
7.38E-05	Metabolism
0.000208462	Metabolism
0.316708668	Metabolism
1.74E-10	Metabolism
0.000280774	Metabolism
0.038154159	Proliferation/Metastasis
4.54E-05	Metabolism
0.56784383	Metabolism
3.38E-15	Proliferation/Metastasis
0.00065863	Metabolism
0.001311278	Metabolism
0.002854389	Metabolism
6.85E-09	Metabolism
0.002862875	Metabolism
4.89E-06	Metabolism
0.000327277	Metabolism
0.627372764	Metabolism
4.55E-05	TME
0.017331569	TME
0.000151058	TME
0.00059109	TME
0.040658668	TME
0.564507702	Metabolism
0.023511238	Metabolism
3.44E-05	Proliferation/Metastasis
2.82E-06	Metabolism
1.62E-12	Proliferation/Metastasis
9.00E-05	Metabolism
0.472038078	TME
9.94E-06	Metabolism
0.021316784	Metabolism
0.001084515	Metabolism
0.000255316	Metabolism
5.13E-13	TME
3.10E-06	TME
3.58E-06	Proliferation/Metastasis
0.232011682	Metabolism
0.049773864	Proliferation/Metastasis
0.900443962	Proliferation/Metastasis
0.015296296	TME

6.79E-07	TME
0.000570918	TME
0.00017672	TME
0.000320327	Metabolism
5.72E-16	Proliferation/Metastasis
0.193874923	Metabolism
2.20E-09	Metabolism
0.063917586	Proliferation/Metastasis
2.48E-08	Proliferation/Metastasis
8.50E-11	Metabolism
0.773571198	Metabolism
2.09E-09	Metabolism
8.20E-09	Metabolism
0.005256002	TME
2.53E-12	TME
2.44E-07	TME
0.010568814	TME
2.15E-34	TME
2.04E-07	Metabolism
0.00035563	Metabolism
2.60E-08	Metabolism
2.72E-08	Metabolism
1.55E-05	Metabolism
0.01924359	TME
0.010640962	TME
3.45E-09	TME
0.066687253	TME
0.040516341	TME
6.26E-05	TME
2.12E-05	TME
0.002937655	TME
0.033473049	TME
0.507515428	Proliferation/Metastasis
3.30E-12	Proliferation/Metastasis
0.028854747	Metabolism
0.335674667	Metabolism
9.85E-08	TME
9.83E-07	Metabolism
1.09E-06	Metabolism
4.01E-05	TME
0.129884182	Proliferation/Metastasis
0.022624568	Proliferation/Metastasis
0.000164066	TME

5.22E-06	Metabolism
0.913762385	Metabolism
0.123267576	Proliferation/Metastasis
0.004808939	Proliferation/Metastasis
0.732166716	TME
7.44E-09	TME
0.030533224	TME
0.000272406	TME
0.014565077	Proliferation/Metastasis
0.003288435	TME
5.99E-15	TME
2.46E-06	Metabolism
2.66E-09	TME
2.66E-10	TME
3.93E-06	TME
0.006315917	TME
0.002737357	Metabolism
6.63E-13	Metabolism
0.909524634	Metabolism
0.028618248	TME
0.011621387	Metabolism
0.004226716	TME
0.274620907	TME
0.959059215	TME
1.04E-06	TME
7.36E-05	TME
3.10E-16	Metabolism
0.42840928	Proliferation/Metastasis
2.97E-15	Metabolism
0.000903768	Proliferation/Metastasis
0.000140592	Metabolism
0.570389689	Metabolism
2.09E-07	Metabolism
1.50E-05	Metabolism
0.043829729	Metabolism
6.76E-19	Metabolism
0.077994644	Metabolism
1.69E-08	Metabolism
0.093028253	Metabolism
8.72E-07	Metabolism
5.85E-10	Metabolism
1.97E-11	Metabolism
0.000236271	Metabolism

4.77E-09	Metabolism
2.20E-09	TME
0.863423912	Proliferation/Metastasis
3.28E-09	Metabolism
1.55E-19	Proliferation/Metastasis
0.000119131	TME
7.42E-08	Proliferation/Metastasis
0.000897944	Proliferation/Metastasis
9.21E-12	TME
1.17E-12	TME
9.52E-06	Metabolism
0.000922704	Metabolism
4.61E-06	Proliferation/Metastasis
0.000903832	Proliferation/Metastasis
0.000250322	Proliferation/Metastasis
0.535812777	Metabolism
0.000772925	Metabolism
8.17E-25	Metabolism
2.87E-06	Proliferation/Metastasis
1.51E-06	TME
0.000123076	TME
0.003349021	Metabolism
0.449027221	Proliferation/Metastasis
1.06E-06	Metabolism
0.067306805	TME
4.96E-06	TME
2.53E-10	TME
8.01E-05	TME
0.011387255	Metabolism
0.008126003	TME
0.00067245	Proliferation/Metastasis
3.41E-18	TME
0.006405416	Proliferation/Metastasis
4.80E-06	Proliferation/Metastasis
0.803574912	Metabolism
0.000361889	Proliferation/Metastasis
0.00015749	TME
2.23E-07	Metabolism
2.65E-09	TME
0.073493083	TME
0.217905529	TME
0.000129683	TME
8.18E-07	TME

0.000264911	TME
7.74E-11	Metabolism
7.43E-17	TME
0.064188953	Metabolism
1.43E-15	Metabolism
0.000522095	Proliferation/Metastasis
2.90E-05	Proliferation/Metastasis
0.131664825	Metabolism
0.035246121	Metabolism
0.168740185	Metabolism
0.000168531	Metabolism
1.77E-13	Proliferation/Metastasis
0.23167027	Proliferation/Metastasis
0.133250514	Metabolism
0.001194173	Metabolism
2.49E-08	Metabolism
0.523049142	TME
0.02491147	Metabolism
0.124133782	Metabolism
3.72E-09	Metabolism
1.12E-15	Metabolism
0.007865528	Proliferation/Metastasis
0.012217302	Metabolism
1.22E-11	Metabolism
4.89E-11	Metabolism
0.007134016	Metabolism
0.09735204	Metabolism
0.00100221	Metabolism
0.959062477	Proliferation/Metastasis
1.83E-06	Metabolism
0.326238817	Metabolism
4.49E-07	Proliferation/Metastasis
7.32E-12	Metabolism
3.60E-07	Metabolism
0.011539424	Metabolism
0.000540271	Metabolism
1.55E-05	Metabolism
4.31E-06	Metabolism
3.05E-12	Metabolism
0.000692156	Metabolism
0.070725119	TME
0.003169515	TME
0.009109625	TME

3.01E-05	TME
1.53E-06	TME
0.050609849	Metabolism
0.020055916	Metabolism
0.004975183	Proliferation/Metastasis
0.062108212	Metabolism
4.52E-06	Proliferation/Metastasis
1.72E-09	Metabolism
0.000152859	TME
1.12E-07	Metabolism
0.790205455	Metabolism
7.81E-23	Metabolism
1.03E-11	Metabolism
0.761781733	TME
0.058757667	TME
0.004002607	Proliferation/Metastasis
0.002922034	Metabolism
7.81E-05	Proliferation/Metastasis
7.25E-08	Proliferation/Metastasis
0.665900205	TME
0.60980072	TME
0.02246839	TME
0.106041768	TME
7.59E-12	Metabolism
0.280383706	Proliferation/Metastasis
4.48E-15	Metabolism
0.030171684	Metabolism
0.246390992	Proliferation/Metastasis
0.050538483	Proliferation/Metastasis
2.32E-10	Metabolism
5.90E-12	Metabolism
3.31E-20	Metabolism
2.00E-10	Metabolism
0.026138164	TME
0.031093156	TME
0.009998327	TME
0.08617436	TME
0.243517286	TME
5.38E-15	Metabolism
4.73E-09	Metabolism
4.44E-09	Metabolism
9.76E-13	Metabolism
1.93E-12	Metabolism

0.540854386	TME
0.110406224	TME
0.209611482	TME
0.08207284	TME
1.46E-08	TME
0.008292851	TME
0.018332968	TME
0.03144412	TME
0.101235844	TME
5.04E-08	Proliferation/Metastasis
5.95E-06	Proliferation/Metastasis
7.08E-12	Metabolism
1.76E-13	Metabolism
0.776553992	TME
4.01E-09	Metabolism
2.26E-07	Metabolism
0.014798401	TME
0.037019836	Proliferation/Metastasis
2.87E-06	Proliferation/Metastasis
0.750606324	TME
1.27E-14	Metabolism
2.42E-12	Metabolism
6.96E-07	Proliferation/Metastasis
0.122173886	Proliferation/Metastasis
0.027912364	TME
0.89757929	TME
0.017110021	TME
0.000675872	TME
0.818262698	Proliferation/Metastasis
0.082621586	TME
0.140872156	TME
0.925926689	Metabolism
0.082028009	TME
0.185690241	TME
0.101409973	TME
5.09E-11	TME
0.002358668	Metabolism
3.75E-13	Metabolism
8.45E-05	Metabolism
0.009769394	TME
1.01E-17	Metabolism
0.26886649	TME
0.517772753	TME

0.001135652	TME
0.396626017	TME
2.31E-07	TME
0.211073937	Metabolism
3.92E-10	Proliferation/Metastasis
0.002417849	Metabolism
0.454220008	Proliferation/Metastasis
4.76E-10	Metabolism
2.99E-21	Metabolism
0.000227213	Metabolism
1.17E-18	Metabolism
8.20E-08	Metabolism
0.47632304	Metabolism
7.51E-06	Metabolism
0.611856013	Metabolism
0.434525749	Metabolism
0.004558927	Metabolism
0.035461555	Metabolism
0.036117813	Metabolism
0.006316169	Metabolism
8.05E-14	Metabolism
0.170534063	TME
0.000488898	Proliferation/Metastasis
6.36E-15	Metabolism
0.005949121	Proliferation/Metastasis
0.092222602	TME
0.000993058	Proliferation/Metastasis
0.000385205	Proliferation/Metastasis
0.690456274	TME
0.000223238	TME
0.31785351	Metabolism
0.002225767	Metabolism
0.542203176	Proliferation/Metastasis
4.22E-08	Proliferation/Metastasis
2.61E-05	Proliferation/Metastasis
4.93E-17	Metabolism
0.507964319	Metabolism
6.50E-06	Metabolism
0.074244363	Proliferation/Metastasis
0.009193929	TME
4.21E-08	TME
0.000456854	Metabolism
0.843570872	Proliferation/Metastasis

0.006607741	Metabolism
2.42E-05	TME
0.060993786	TME
0.650783974	TME
0.001843949	TME
3.39E-15	Metabolism
0.01051631	TME
7.85E-08	Proliferation/Metastasis
0.06293688	TME
0.451352721	Proliferation/Metastasis
0.080865333	Proliferation/Metastasis
0.538599324	Metabolism
7.11E-05	Proliferation/Metastasis
0.000560478	TME
0.05790463	Metabolism
0.135880717	TME
0.083084779	TME
0.909932616	TME
0.01149647	TME
0.216448659	TME
0.000279278	TME
0.035011013	Metabolism
0.003891448	TME
5.80E-16	Metabolism
5.54E-08	Metabolism
0.155924451	Proliferation/Metastasis
0.562304179	Proliferation/Metastasis
5.25E-08	Metabolism
0.197823672	Metabolism
0.005559724	Metabolism
1.26E-05	Metabolism
1.04E-05	Proliferation/Metastasis
0.00033285	Proliferation/Metastasis
5.97E-07	Metabolism
2.40E-12	Metabolism
0.12943025	Metabolism
0.013856875	TME
2.66E-12	Metabolism
3.09E-11	Metabolism
2.57E-05	Metabolism
0.001422583	Metabolism
0.849213466	Proliferation/Metastasis
2.68E-10	Metabolism

2.97E-14	Metabolism
4.09E-19	Metabolism
0.57756217	Metabolism
0.013848905	Metabolism
3.28E-16	Metabolism
1.54E-08	Proliferation/Metastasis
2.49E-14	Metabolism
0.000189819	Metabolism
1.01E-08	Proliferation/Metastasis
9.41E-05	Metabolism
0.006106535	Metabolism
0.042374359	Metabolism
8.58E-09	Metabolism
0.032237487	Metabolism
1.29E-14	Metabolism
5.13E-07	Metabolism
7.20E-12	Metabolism
0.000456278	TME
0.000266956	TME
0.057630168	TME
0.021303534	TME
0.015306594	TME
0.60061804	Metabolism
0.56114886	Metabolism
0.304541777	Proliferation/Metastasis
6.25E-06	Metabolism
0.004240468	Proliferation/Metastasis
1.28E-22	Metabolism
0.008015151	TME
3.80E-14	Metabolism
6.43E-09	Metabolism
3.05E-15	Metabolism
2.62E-19	Metabolism
2.06E-08	TME
0.01109196	TME
0.103853334	Proliferation/Metastasis
0.000898571	Metabolism
0.068181563	Proliferation/Metastasis
8.61E-14	Proliferation/Metastasis
0.001062492	TME
0.001751913	TME
1.03E-06	TME
7.29E-10	TME

0.20883295	Metabolism
6.87E-08	Proliferation/Metastasis
0.027872078	Metabolism
2.01E-11	Metabolism
0.034298031	Proliferation/Metastasis
1.21E-13	Proliferation/Metastasis
0.008628882	Metabolism
0.536609085	Metabolism
0.373715384	Metabolism
0.288203324	Metabolism
0.330697402	TME
3.40E-06	TME
0.032358902	TME
0.455032081	TME
1.07E-35	TME
0.032409793	Metabolism
0.446888782	Metabolism
0.346313291	Metabolism
5.60E-13	Metabolism
0.393577515	Metabolism
4.50E-06	TME
0.548412252	TME
5.74E-10	TME
0.01899669	TME
7.66E-11	TME
1.11E-05	TME
3.82E-07	TME
1.39E-08	TME
3.06E-06	TME
0.002873836	Proliferation/Metastasis
0.288219451	Proliferation/Metastasis
0.867091145	Metabolism
0.101216183	Metabolism
0.043773155	TME
0.885245997	Metabolism
0.811658654	Metabolism
2.13E-07	TME
0.01194323	Proliferation/Metastasis
0.012553366	Proliferation/Metastasis
0.323044801	TME
0.473119285	Metabolism
5.37E-06	Metabolism
0.115027322	Proliferation/Metastasis

3.87E-10	Proliferation/Metastasis
0.002520604	TME
9.64E-10	TME
0.000135776	TME
1.34E-05	TME
0.955062073	Proliferation/Metastasis
0.000222579	TME
1.62E-09	TME
0.446549998	Metabolism
1.26E-12	TME
7.77E-15	TME
2.37E-07	TME
0.011174354	TME
0.443155658	Metabolism
1.87E-06	Metabolism
0.035589402	Metabolism
3.90E-10	TME
0.959998758	Metabolism
0.003779896	TME
0.236329537	TME
1.12E-06	TME
2.52E-09	TME
1.93E-07	TME
4.61E-08	Metabolism
0.298866502	Proliferation/Metastasis
7.64E-24	Metabolism
0.000295981	Proliferation/Metastasis
0.012430335	Metabolism
0.946232943	Metabolism
0.102510222	Metabolism
0.569459809	Metabolism
6.95E-05	Metabolism
1.27E-12	Metabolism
0.090716785	Metabolism
0.000606289	Metabolism
0.000860436	Metabolism
0.019617351	Metabolism
1.81E-08	Metabolism
5.56E-06	Metabolism
1.26E-05	Metabolism
0.04475203	Metabolism
6.88E-09	TME
0.782955266	Proliferation/Metastasis

0.019607486	Metabolism
4.18E-22	Proliferation/Metastasis
3.71E-05	TME
4.90E-16	Proliferation/Metastasis
8.79E-17	Proliferation/Metastasis
1.71E-12	TME
2.93E-14	TME
0.009493331	Metabolism
0.1214379	Metabolism
8.48E-06	Proliferation/Metastasis
0.305539631	Proliferation/Metastasis
2.67E-12	Proliferation/Metastasis
0.047853189	Metabolism
0.716046602	Metabolism
8.50E-14	Metabolism
0.001227859	Proliferation/Metastasis
2.31E-10	TME
5.41E-09	TME
1.22E-05	Metabolism
0.000229668	Proliferation/Metastasis
0.000191865	Metabolism
0.183247475	TME
0.063541037	TME
3.51E-14	TME
6.19E-07	TME
0.789157556	Metabolism
1.77E-14	TME
0.151196391	Proliferation/Metastasis
8.90E-20	TME
0.047997895	Proliferation/Metastasis
7.06E-05	Proliferation/Metastasis
0.041950772	Metabolism
0.013981584	Proliferation/Metastasis
9.18E-08	TME
0.118151651	Metabolism
0.746123706	TME
0.002420075	TME
0.571711255	TME
3.00E-08	TME
4.25E-07	TME
0.000109082	TME
2.87E-09	Metabolism
4.19E-21	TME

0.007192321	Metabolism
0.11862179	Metabolism
1.99E-12	Proliferation/Metastasis
0.004993592	Proliferation/Metastasis
0.692639456	Metabolism
0.146344073	Metabolism
0.028763006	Metabolism
0.208524039	Metabolism
8.29E-11	Proliferation/Metastasis
2.69E-09	Proliferation/Metastasis
0.183153555	Metabolism
0.365610379	Metabolism
1.58E-11	Metabolism
5.55E-08	TME
0.00891113	Metabolism
0.228276068	Metabolism
0.222003733	Metabolism
0.416850467	Metabolism
1.08E-09	Proliferation/Metastasis
0.601434302	Metabolism
0.955416696	Metabolism
6.80E-09	Metabolism
0.109355129	Metabolism
0.000371227	Metabolism
0.000300366	Metabolism
0.160991366	Proliferation/Metastasis
0.613753283	Metabolism
0.051868379	Metabolism
8.83E-07	Proliferation/Metastasis
4.19E-07	Metabolism
0.09446178	Metabolism
0.011695805	Metabolism
9.44E-08	Metabolism
3.58E-05	Metabolism
0.221459004	Metabolism
0.585859316	Metabolism
6.67E-13	Metabolism
1.12E-08	TME
1.57E-14	TME
1.78E-07	TME
1.03E-09	TME
1.85E-05	TME
2.07E-08	Metabolism

0.004348974	Metabolism
0.603588935	Proliferation/Metastasis
0.441176007	Metabolism
3.42E-20	Proliferation/Metastasis
0.013996013	Metabolism
1.39E-09	TME
0.020562245	Metabolism
0.28553741	Metabolism
0.007081107	Metabolism
1.15E-11	Metabolism
0.020671264	TME
0.019414452	TME
0.000124986	Proliferation/Metastasis
0.020010437	Metabolism
0.009620442	Proliferation/Metastasis
0.215107929	Proliferation/Metastasis
0.003585175	TME
0.908863236	TME
0.536003776	TME
0.51521094	TME
0.037840839	Metabolism
0.217598244	Proliferation/Metastasis
0.987106721	Metabolism
0.181422136	Metabolism
0.913535452	Proliferation/Metastasis
1.02E-07	Proliferation/Metastasis
0.542201778	Metabolism
0.621338346	Metabolism
0.027313178	Metabolism
0.54215762	Metabolism
0.86516229	TME
0.039745632	TME
0.526763109	TME
0.853694212	TME
0.050936198	TME
0.02506952	Metabolism
0.634731049	Metabolism
0.472352569	Metabolism
0.041551793	Metabolism
0.000606096	Metabolism
0.000215308	TME
0.028082584	TME
0.827550963	TME

0.485660696	TME
0.241005165	TME
0.733473266	TME
0.476050262	TME
0.842384592	TME
0.633620616	TME
0.794078738	Proliferation/Metastasis
5.11E-08	Proliferation/Metastasis
0.874292458	Metabolism
0.782067126	Metabolism
0.077352756	TME
0.606618366	Metabolism
0.000734057	Metabolism
0.355197088	TME
6.15E-08	Proliferation/Metastasis
0.000738115	Proliferation/Metastasis
0.138545843	TME
0.586148094	Metabolism
0.040317886	Metabolism
0.940256112	Proliferation/Metastasis
4.29E-09	Proliferation/Metastasis
0.130138879	TME
0.315133916	TME
0.181410178	TME
0.098179935	TME
0.000158932	Proliferation/Metastasis
0.011342472	TME
0.448069084	TME
0.012024882	Metabolism
0.496220033	TME
0.436557476	TME
0.86386229	TME
0.034391996	TME
0.417463193	Metabolism
0.182057155	Metabolism
0.019724917	Metabolism
0.001531247	TME
2.98E-05	Metabolism
0.47092641	TME
0.222262888	TME
0.654360826	TME
0.226194831	TME
0.913683435	TME

0.574104446	Metabolism
0.06798566	Proliferation/Metastasis
0.509231451	Metabolism
0.001339606	Proliferation/Metastasis
0.003541734	Metabolism
0.308602551	Metabolism
0.813906129	Metabolism
0.000280859	Metabolism
0.550805572	Metabolism
0.482875086	Metabolism
0.618422777	Metabolism
0.281960944	Metabolism
0.889700619	Metabolism
0.458784247	Metabolism
0.989528007	Metabolism
0.803740719	Metabolism
0.159974036	Metabolism
0.006780902	Metabolism
0.476318991	TME
4.96E-05	Proliferation/Metastasis
0.682979124	Metabolism
0.001023268	Proliferation/Metastasis
0.454216858	TME
9.07E-05	Proliferation/Metastasis
0.012221483	Proliferation/Metastasis
0.867248137	TME
0.359350212	TME
6.03E-08	Metabolism
1.71E-13	Metabolism
0.097831599	Proliferation/Metastasis
0.314644255	Proliferation/Metastasis
1.90E-05	Proliferation/Metastasis
0.293055508	Metabolism
0.002306367	Metabolism
0.918254529	Metabolism
0.257726377	Proliferation/Metastasis
0.202268901	TME
0.100847352	TME
2.33E-05	Metabolism
1.02E-05	Proliferation/Metastasis
1.30E-13	Metabolism
0.095899932	TME
0.767926789	TME

0.210742092	TME
0.001681056	TME
0.565907187	Metabolism
0.000358928	TME
6.84E-09	Proliferation/Metastasis
0.496797515	TME
0.004708732	Proliferation/Metastasis
0.170301411	Proliferation/Metastasis
9.05E-07	Metabolism
0.598764851	Proliferation/Metastasis
0.135794916	TME
0.123109802	Metabolism
0.100521504	TME
0.003442704	TME
0.048431889	TME
0.424931349	TME
0.004118543	TME
0.019768403	TME
0.001282581	Metabolism
0.060742468	TME
0.058815394	Metabolism
0.577763957	Metabolism
0.00155893	Proliferation/Metastasis
0.017833802	Proliferation/Metastasis
0.713463257	Metabolism
0.147543392	Metabolism
4.04E-05	Metabolism
1.77E-10	Metabolism
0.398281536	Proliferation/Metastasis
0.006770395	Proliferation/Metastasis
0.204719255	Metabolism
0.537786392	Metabolism
0.407558984	Metabolism
0.054051304	TME
0.06886896	Metabolism
0.861668424	Metabolism
0.332210865	Metabolism
1.84E-05	Metabolism
0.035320452	Proliferation/Metastasis
0.038918865	Metabolism
0.006694464	Metabolism
0.475440287	Metabolism
0.08159961	Metabolism

0.00300813	Metabolism
0.062182158	Metabolism
0.291873739	Proliferation/Metastasis
0.495311517	Metabolism
4.00E-05	Metabolism
2.97E-07	Proliferation/Metastasis
0.017187437	Metabolism
1.93E-08	Metabolism
0.021289525	Metabolism
0.000346049	Metabolism
0.053108385	Metabolism
0.096619107	Metabolism
0.024226956	Metabolism
0.002280639	Metabolism
0.21964319	TME
0.312229598	TME
0.16728948	TME
0.285264153	TME
0.708787479	TME
0.666375432	Metabolism
0.715901141	Metabolism
8.66E-14	Proliferation/Metastasis
9.86E-05	Metabolism
8.28E-06	Proliferation/Metastasis
0.108596744	Metabolism
0.017487499	TME
0.826718411	Metabolism
0.211976283	Metabolism
0.065405115	Metabolism
0.022212584	Metabolism
0.025327051	TME
0.001293353	TME
0.002620288	Proliferation/Metastasis
0.663624379	Metabolism
0.003170252	Proliferation/Metastasis
0.051708718	Proliferation/Metastasis
0.001829614	TME
0.038228552	TME
0.008399586	TME
0.550759697	TME
3.96E-11	Metabolism
8.21E-12	Proliferation/Metastasis
5.18E-38	Metabolism

0.002582641	Metabolism
3.46E-16	Proliferation/Metastasis
0.606690625	Proliferation/Metastasis
2.91E-17	Metabolism
0.00010447	Metabolism
0.354454916	Metabolism
5.15E-08	Metabolism
0.043221616	TME
8.15E-18	TME
0.000179391	TME
0.005396922	TME
0.160513786	TME
0.031173423	Metabolism
0.537162525	Metabolism
0.000676279	Metabolism
0.002528982	Metabolism
8.70E-09	Metabolism
0.425780461	TME
0.06082241	TME
0.004953707	TME
0.00071797	TME
0.003856946	TME
0.000255899	TME
0.003290131	TME
0.611800221	TME
0.83550122	TME
1.16E-43	Proliferation/Metastasis
4.68E-22	Proliferation/Metastasis
3.80E-14	Metabolism
2.63E-16	Metabolism
0.389095994	TME
0.050968043	Metabolism
1.41E-10	Metabolism
8.42E-14	TME
3.27E-17	Proliferation/Metastasis
1.25E-34	Proliferation/Metastasis
0.387233319	TME
0.041460117	Metabolism
1.17E-10	Metabolism
4.34E-45	Proliferation/Metastasis
0.014678319	Proliferation/Metastasis
1.09E-07	TME
0.000253388	TME

6.31E-05	TME
5.39E-05	TME
1.03E-22	Proliferation/Metastasis
0.530649442	TME
1.13E-07	TME
2.34E-25	Metabolism
0.973736282	TME
0.367499475	TME
0.350441806	TME
3.67E-10	TME
0.01307185	Metabolism
6.06E-10	Metabolism
0.000358481	Metabolism
4.53E-05	TME
7.77E-10	Metabolism
1.45E-05	TME
2.85E-05	TME
0.030933302	TME
0.103414707	TME
0.693781833	TME
0.001164909	Metabolism
3.95E-47	Proliferation/Metastasis
0.008103928	Metabolism
7.29E-13	Proliferation/Metastasis
2.46E-05	Metabolism
0.974811551	Metabolism
4.07E-23	Metabolism
0.003085517	Metabolism
8.38E-08	Metabolism
0.416456707	Metabolism
0.698355864	Metabolism
0.008555461	Metabolism
8.17E-08	Metabolism
1.15E-10	Metabolism
0.034564631	Metabolism
2.52E-13	Metabolism
0.662911953	Metabolism
2.00E-05	Metabolism
5.47E-06	TME
6.79E-07	Proliferation/Metastasis
1.95E-10	Metabolism
0.000261882	Proliferation/Metastasis
0.052462894	TME

0.001687027	Proliferation/Metastasis
3.26E-05	Proliferation/Metastasis
2.91E-05	TME
0.097755323	TME
1.36E-10	Metabolism
0.005103533	Metabolism
3.64E-32	Proliferation/Metastasis
4.20E-31	Proliferation/Metastasis
1.33E-05	Proliferation/Metastasis
7.54E-22	Metabolism
0.519365724	Metabolism
0.000188763	Metabolism
1.66E-16	Proliferation/Metastasis
2.48E-06	TME
8.83E-06	TME
0.019437433	Metabolism
1.36E-08	Proliferation/Metastasis
0.186219271	Metabolism
3.07E-05	TME
9.17E-07	TME
0.259756643	TME
0.000155628	TME
0.404927851	Metabolism
0.051593384	TME
2.99E-09	Proliferation/Metastasis
1.25E-05	TME
0.000834595	Proliferation/Metastasis
9.47E-43	Proliferation/Metastasis
0.103387584	Metabolism
1.22E-37	Proliferation/Metastasis
4.72E-07	TME
1.17E-13	Metabolism
0.30504627	TME
4.31E-13	TME
8.73E-17	TME
0.011220474	TME
0.0052289	TME
2.51E-06	TME
0.381976836	Metabolism
0.306566763	TME
0.082359991	Metabolism
0.148235844	Metabolism
0.002312443	Proliferation/Metastasis

2.55E-10	Proliferation/Metastasis
2.37E-23	Metabolism
7.80E-08	Metabolism
0.894381041	Metabolism
4.52E-06	Metabolism
5.58E-09	Proliferation/Metastasis
9.16E-14	Proliferation/Metastasis
0.388642153	Metabolism
2.53E-11	Metabolism
2.93E-12	Metabolism
0.002339381	TME
0.00031151	Metabolism
7.03E-14	Metabolism
0.001863889	Metabolism
0.014547091	Metabolism
9.44E-13	Proliferation/Metastasis
2.99E-07	Metabolism
1.55E-20	Metabolism
0.043842119	Metabolism
1.04E-18	Metabolism
2.43E-23	Metabolism
0.000582574	Metabolism
1.92E-06	Proliferation/Metastasis
0.507593808	Metabolism
3.29E-14	Metabolism
9.22E-06	Proliferation/Metastasis
7.31E-09	Metabolism
0.875763987	Metabolism
0.783042529	Metabolism
0.043138514	Metabolism
0.83656596	Metabolism
0.011611768	Metabolism
0.915167937	Metabolism
0.08189919	Metabolism
2.32E-08	TME
0.001849526	TME
0.02532576	TME
0.000217933	TME
0.015823134	TME
1.10E-10	Metabolism
1.43E-07	Metabolism
0.0524659	Proliferation/Metastasis
3.47E-06	Metabolism

0.066746777	Proliferation/Metastasis
0.014741222	Metabolism
4.17E-06	TME
0.099631006	Metabolism
0.230110663	Metabolism
0.298445909	Metabolism
2.16E-06	Metabolism
0.000503711	TME
0.002375658	TME
1.24E-15	Proliferation/Metastasis
6.17E-08	Metabolism
9.92E-20	Proliferation/Metastasis
0.123968795	Proliferation/Metastasis
0.855435235	TME
0.006081977	TME
0.000164261	TME
5.57E-05	TME
0.245979971	Metabolism
0.150431505	Proliferation/Metastasis
0.428622832	Metabolism
0.149256467	Metabolism
1.18E-13	Proliferation/Metastasis
3.55E-08	Proliferation/Metastasis
0.087144341	Metabolism
0.875921259	Metabolism
0.848573983	Metabolism
0.043678256	Metabolism
0.227107576	TME
4.88E-09	TME
6.34E-05	TME
0.005877238	TME
2.73E-08	TME
0.001773979	Metabolism
0.001904771	Metabolism
0.477457473	Metabolism
0.322233778	Metabolism
1.71E-05	Metabolism
1.75E-11	TME
2.40E-07	TME
6.43E-05	TME
0.004896531	TME
5.89E-06	TME
1.96E-05	TME

1.57E-05	TME
0.003090456	TME
0.001447542	TME
0.581989959	Proliferation/Metastasis
0.044135128	Proliferation/Metastasis
0.016109106	Metabolism
0.318022999	Metabolism
0.030681272	TME
0.368068188	Metabolism
2.56E-07	Metabolism
1.02E-06	TME
5.62E-05	Proliferation/Metastasis
0.053256642	Proliferation/Metastasis
0.290977161	TME
0.016608968	Metabolism
0.720253169	Metabolism
0.380620407	Proliferation/Metastasis
4.13E-08	Proliferation/Metastasis
1.62E-05	TME
0.000113228	TME
8.80E-06	TME
2.25E-07	TME
0.000294217	Proliferation/Metastasis
1.22E-11	TME
3.25E-06	TME
0.036232822	Metabolism
9.94E-09	TME
3.51E-07	TME
0.001850511	TME
0.951319789	TME
0.028622437	Metabolism
0.541101083	Metabolism
0.057536249	Metabolism
5.07E-09	TME
0.493984939	Metabolism
0.000226685	TME
0.01333131	TME
0.000191946	TME
0.501982968	TME
0.013035413	TME
0.018902611	Metabolism
0.736420754	Proliferation/Metastasis
0.004666866	Metabolism

4.35E-12	Proliferation/Metastasis
0.222814571	Metabolism
0.021454825	Metabolism
0.000801416	Metabolism
0.120969431	Metabolism
0.158854283	Metabolism
0.021617411	Metabolism
0.003030406	Metabolism
0.00060724	Metabolism
0.036650711	Metabolism
0.000227905	Metabolism
8.96E-08	Metabolism
0.001328877	Metabolism
0.078534576	Metabolism
0.000132253	Metabolism
7.32E-06	TME
5.35E-06	Proliferation/Metastasis
0.040455429	Metabolism
0.000556169	Proliferation/Metastasis
3.77E-05	TME
1.04E-11	Proliferation/Metastasis
4.36E-09	Proliferation/Metastasis
7.94E-07	TME
0.001967993	TME
0.001239116	Metabolism
2.89E-07	Metabolism
0.020457064	Proliferation/Metastasis
0.279109162	Proliferation/Metastasis
2.04E-15	Proliferation/Metastasis
0.158509953	Metabolism
0.89014751	Metabolism
0.001297296	Metabolism
4.88E-05	Proliferation/Metastasis
1.66E-07	TME
1.59E-06	TME
1.01E-05	Metabolism
7.49E-09	Proliferation/Metastasis
6.23E-10	Metabolism
5.43E-05	TME
2.72E-06	TME
0.000125408	TME
1.36E-09	TME
0.075283261	Metabolism

5.98E-10	TME
0.004355451	Proliferation/Metastasis
1.51E-06	TME
0.00812677	Proliferation/Metastasis
0.010849094	Proliferation/Metastasis
6.62E-11	Metabolism
0.946199301	Proliferation/Metastasis
2.87E-07	TME
0.910729358	Metabolism
0.829314527	TME
1.38E-10	TME
0.000177339	TME
3.07E-05	TME
0.847994612	TME
5.30E-08	TME
0.000311864	Metabolism
1.00E-07	TME
0.497241066	Metabolism
0.003354863	Metabolism
1.70E-08	Proliferation/Metastasis
5.56E-05	Proliferation/Metastasis
0.066147953	Metabolism
0.000427281	Metabolism
4.96E-09	Metabolism
0.00127634	Metabolism
2.12E-05	Proliferation/Metastasis
1.56E-08	Proliferation/Metastasis
0.257260298	Metabolism
0.016468976	Metabolism
0.083200517	Metabolism
8.58E-07	TME
0.235194103	Metabolism
0.699036352	Metabolism
0.002903485	Metabolism
1.57E-08	Metabolism
1.82E-06	Proliferation/Metastasis
0.540942047	Metabolism
0.03817803	Metabolism
0.713359053	Metabolism
0.371563208	Metabolism
0.005695683	Metabolism
0.000506341	Metabolism
0.515456659	Proliferation/Metastasis

0.003955427	Metabolism
0.179973628	Metabolism
3.50E-17	Proliferation/Metastasis
0.579879035	Metabolism
3.65E-10	Metabolism
7.70E-05	Metabolism
5.76E-11	Metabolism
0.024850936	Metabolism
0.002999727	Metabolism
0.027084881	Metabolism
0.007900428	Metabolism
1.68E-07	TME
5.92E-07	TME
0.00040689	TME
2.94E-06	TME
0.000156798	TME
0.004879535	Metabolism
0.517363195	Metabolism
7.25E-11	Proliferation/Metastasis
0.687704593	Metabolism
5.10E-08	Proliferation/Metastasis
0.730777769	Metabolism
0.572943628	TME
0.087533343	Metabolism
0.214389459	Metabolism
0.036974773	Metabolism
0.387348462	Metabolism
0.000365232	TME
0.004600463	TME
0.002160141	Proliferation/Metastasis
0.386481014	Metabolism
0.019529604	Proliferation/Metastasis
0.125580291	Proliferation/Metastasis
2.97E-07	TME
0.006643845	TME
2.28E-05	TME
5.63E-07	TME
0.309912473	Metabolism
7.62E-08	Proliferation/Metastasis
0.98029759	Metabolism
2.64E-17	Metabolism
0.000252321	Proliferation/Metastasis
3.72E-07	Proliferation/Metastasis

0.073409964	Metabolism
0.925469212	Metabolism
0.925030298	Metabolism
0.001618662	Metabolism
0.893793422	TME
0.000164081	TME
0.048949685	TME
0.307382233	TME
5.60E-14	TME
9.46E-07	Metabolism
6.78E-06	Metabolism
0.984465929	Metabolism
8.68E-05	Metabolism
0.398628943	Metabolism
0.004751516	TME
0.823089642	TME
0.001863391	TME
0.456296524	TME
2.90E-08	TME
0.000490731	TME
7.00E-05	TME
2.21E-05	TME
0.00148787	TME
0.029742948	Proliferation/Metastasis
3.53E-07	Proliferation/Metastasis
0.897554428	Metabolism
0.000282736	Metabolism
0.568012425	TME
0.679000165	Metabolism
0.024966933	Metabolism
2.30E-07	TME
3.42E-07	Proliferation/Metastasis
9.33E-06	Proliferation/Metastasis
0.965175546	TME
0.019145151	Metabolism
3.85E-06	Metabolism
0.038678142	Proliferation/Metastasis
0.005426995	Proliferation/Metastasis
0.023963618	TME
2.81E-07	TME
0.004522517	TME
0.000142108	TME
0.484709556	Proliferation/Metastasis

0.263742353	TME
1.60E-11	TME
0.876039389	Metabolism
8.24E-11	TME
3.36E-13	TME
3.45E-05	TME
0.084175353	TME
0.039945226	Metabolism
1.35E-05	Metabolism
1.93E-07	Metabolism
4.36E-06	TME
0.01105947	Metabolism
0.044067502	TME
0.714244079	TME
0.000105816	TME
1.13E-07	TME
7.46E-06	TME
5.64E-09	Metabolism
0.989094015	Proliferation/Metastasis
2.37E-21	Metabolism
0.244618266	Proliferation/Metastasis
0.00136874	Metabolism
0.135582721	Metabolism
0.76928072	Metabolism
0.000933493	Metabolism
0.000221694	Metabolism
9.56E-10	Metabolism
0.627753351	Metabolism
1.06E-06	Metabolism
3.52E-05	Metabolism
0.00417845	Metabolism
1.08E-08	Metabolism
1.22E-05	Metabolism
0.034839189	Metabolism
0.293625398	Metabolism
3.18E-13	TME
0.001334023	Proliferation/Metastasis
0.000204788	Metabolism
1.33E-17	Proliferation/Metastasis
0.009108967	TME
1.77E-12	Proliferation/Metastasis
1.10E-18	Proliferation/Metastasis
1.06E-18	TME

8.49E-18	TME
2.28E-08	Metabolism
0.053435715	Metabolism
1.14E-06	Proliferation/Metastasis
0.397420498	Proliferation/Metastasis
8.42E-11	Proliferation/Metastasis
0.067911302	Metabolism
0.983482872	Metabolism
3.79E-18	Metabolism
5.19E-08	Proliferation/Metastasis
9.81E-14	TME
6.25E-10	TME
0.206152119	Metabolism
0.047235522	Proliferation/Metastasis
0.708154451	Metabolism
0.536697967	TME
0.048427513	TME
1.04E-08	TME
0.003840721	TME
0.107574554	Metabolism
7.01E-06	TME
0.004447219	Proliferation/Metastasis
7.40E-21	TME
0.434132668	Proliferation/Metastasis
2.03E-06	Proliferation/Metastasis
0.000445193	Metabolism
0.013514666	Proliferation/Metastasis
7.96E-07	TME
0.652385493	Metabolism
0.117518615	TME
0.430142733	TME
0.056974069	TME
3.73E-06	TME
8.59E-11	TME
0.014472147	TME
0.000597368	Metabolism
3.05E-21	TME
1.51E-12	Metabolism
5.69E-08	Metabolism
5.90E-13	Proliferation/Metastasis
0.00222544	Proliferation/Metastasis
0.361736447	Metabolism
0.041146861	Metabolism

0.751260208	Metabolism
2.92E-07	Metabolism
6.47E-14	Proliferation/Metastasis
2.07E-10	Proliferation/Metastasis
0.526012896	Metabolism
0.682207044	Metabolism
6.45E-08	Metabolism
0.004600929	TME
0.055180655	Metabolism
0.881535576	Metabolism
0.201577821	Metabolism
0.722023276	Metabolism
5.70E-06	Proliferation/Metastasis
0.670312221	Metabolism
0.001159429	Metabolism
1.30E-09	Metabolism
0.000819139	Metabolism
1.02E-11	Metabolism
0.028554882	Metabolism
0.262079878	Proliferation/Metastasis
0.055158415	Metabolism
3.34E-05	Metabolism
0.072610045	Proliferation/Metastasis
2.97E-08	Metabolism
2.85E-13	Metabolism
0.666497599	Metabolism
6.13E-07	Metabolism
0.363160724	Metabolism
0.105850557	Metabolism
0.095544015	Metabolism
0.00029395	Metabolism
8.06E-07	TME
1.12E-13	TME
2.88E-08	TME
1.69E-06	TME
0.013503328	TME
3.79E-05	Metabolism
0.094751387	Metabolism
3.08E-05	Proliferation/Metastasis
0.786425389	Metabolism
8.90E-19	Proliferation/Metastasis
0.266522587	Metabolism
5.38E-14	TME

0.529534047	Metabolism
0.025885765	Metabolism
3.93E-10	Metabolism
2.00E-05	Metabolism
0.070410317	TME
0.041720596	TME
0.017676515	Proliferation/Metastasis
0.00239527	Metabolism
0.023447793	Proliferation/Metastasis
3.01E-13	Proliferation/Metastasis
0.246062279	TME
0.923616305	TME
0.643847284	TME
0.279196517	TME
3.21E-05	Metabolism
4.17E-07	Proliferation/Metastasis
0.001696265	Metabolism
0.059322036	Metabolism
6.25E-05	Proliferation/Metastasis
0.708150351	Proliferation/Metastasis
6.85E-06	Metabolism
0.000751388	Metabolism
0.00758194	Metabolism
0.294838523	Metabolism
0.004999101	TME
0.008397008	TME
0.080900126	TME
0.761078584	TME
0.329037049	TME
0.401082269	Metabolism
0.004472324	Metabolism
0.199169372	Metabolism
0.605891817	Metabolism
4.32E-05	Metabolism
0.172809714	TME
0.004692811	TME
0.681230048	TME
0.409331988	TME
0.785948533	TME
0.660109996	TME
0.962794757	TME
0.049523443	TME
0.070817917	TME

1.88E-06	Proliferation/Metastasis
1.84E-08	Proliferation/Metastasis
9.54E-07	Metabolism
9.52E-06	Metabolism
0.435024044	TME
0.830695584	Metabolism
0.968777427	Metabolism
0.255550612	TME
0.002197335	Proliferation/Metastasis
0.000123703	Proliferation/Metastasis
0.417843968	TME
3.32E-05	Metabolism
0.163900956	Metabolism
6.77E-07	Proliferation/Metastasis
0.574182028	Proliferation/Metastasis
0.128495271	TME
0.701768503	TME
0.585309056	TME
0.748683763	TME
3.91E-09	Proliferation/Metastasis
0.149073311	TME
0.238093336	TME
0.01428943	Metabolism
0.593756783	TME
0.79676449	TME
0.203717674	TME
0.055120669	TME
0.162116534	Metabolism
0.230482216	Metabolism
0.009245675	Metabolism
0.019016698	TME
0.002010806	Metabolism
0.192974083	TME
0.903338701	TME
0.832067053	TME
0.012468673	TME
0.419279278	TME
0.239492268	Metabolism
1.22E-08	Proliferation/Metastasis
0.020482345	Metabolism
0.003108973	Proliferation/Metastasis
0.411524878	Metabolism
0.992794467	Metabolism

0.051114945	Metabolism
0.518113559	Metabolism
0.026815766	Metabolism
0.781483715	Metabolism
0.398608039	Metabolism
0.596290693	Metabolism
0.078796471	Metabolism
0.592212644	Metabolism
0.501026362	Metabolism
0.143716969	Metabolism
0.167804882	Metabolism
0.000803809	Metabolism
0.354985294	TME
0.439425332	Proliferation/Metastasis
0.212447092	Metabolism
0.032680972	Proliferation/Metastasis
0.50938681	TME
0.673364704	Proliferation/Metastasis
0.650672184	Proliferation/Metastasis
0.279712683	TME
0.445177686	TME
0.026672605	Metabolism
0.005494509	Metabolism
0.000557874	Proliferation/Metastasis
8.19E-12	Proliferation/Metastasis
0.191316882	Proliferation/Metastasis
4.71E-05	Metabolism
0.246113175	Metabolism
3.23E-05	Metabolism
0.116749676	Proliferation/Metastasis
0.438913473	TME
0.593691757	TME
0.807740024	Metabolism
0.515753435	Proliferation/Metastasis
0.000288094	Metabolism
0.301714089	TME
0.171496079	TME
0.070337606	TME
0.085735618	TME
0.000707478	Metabolism
0.600195892	TME
5.16E-07	Proliferation/Metastasis
0.402197344	TME

0.070163165	Proliferation/Metastasis
5.07E-08	Proliferation/Metastasis
0.161304235	Metabolism
2.03E-06	Proliferation/Metastasis
0.582587376	TME
5.99E-06	Metabolism
0.282315019	TME
0.374890165	TME
0.059647176	TME
0.405551929	TME
0.017985713	TME
0.603011514	TME
0.14333155	Metabolism
0.487296719	TME
0.011725516	Metabolism
0.725833364	Metabolism
0.985322021	Proliferation/Metastasis
0.0366878	Proliferation/Metastasis
6.22E-05	Metabolism
0.112702509	Metabolism
0.742882153	Metabolism
0.223404623	Metabolism
0.438055443	Proliferation/Metastasis
0.291469408	Proliferation/Metastasis
0.134971912	Metabolism
0.401071813	Metabolism
0.001937337	Metabolism
0.057212429	TME
0.066054842	Metabolism
0.005297341	Metabolism
0.506835744	Metabolism
0.013378353	Metabolism
7.82E-10	Proliferation/Metastasis
0.91533003	Metabolism
2.49E-07	Metabolism
0.02777493	Metabolism
7.16E-06	Metabolism
0.001464674	Metabolism
0.000410569	Metabolism
0.011845463	Proliferation/Metastasis
5.35E-05	Metabolism
0.064208861	Metabolism
0.698757297	Proliferation/Metastasis

0.000156144	Metabolism
0.256295584	Metabolism
0.034733896	Metabolism
0.817537991	Metabolism
0.202784727	Metabolism
0.012148492	Metabolism
0.632908981	Metabolism
0.331903654	Metabolism
0.257961188	TME
0.491145837	TME
0.768777887	TME
0.678347379	TME
0.857194129	TME
1.31E-06	Metabolism
0.000213801	Metabolism
0.457796243	Proliferation/Metastasis
0.396308473	Metabolism
0.775879554	Proliferation/Metastasis
0.488934042	Metabolism
0.430924685	TME
0.057349886	Metabolism
0.772495361	Metabolism
0.107218435	Metabolism
0.381179984	Metabolism
0.106426693	TME
0.016544026	TME
0.418255804	Proliferation/Metastasis
0.02695891	Metabolism
3.42E-05	Proliferation/Metastasis
0.179199219	Proliferation/Metastasis
0.789109243	TME
0.0001258	TME
5.72E-06	TME
6.24E-05	TME
0.747454191	Metabolism
0.000153764	Proliferation/Metastasis
0.010548857	Metabolism
5.74E-06	Metabolism
6.88E-05	Proliferation/Metastasis
4.98E-11	Proliferation/Metastasis
0.001943872	Metabolism
0.114749873	Metabolism
0.031388629	Metabolism

9.23E-09	Metabolism
0.001357884	TME
4.33E-09	TME
0.000269431	TME
0.013172261	TME
0.969807456	TME
0.036774211	Metabolism
0.097093392	Metabolism
0.220622648	Metabolism
1.10E-07	Metabolism
0.009117918	Metabolism
1.59E-05	TME
0.00110921	TME
1.57E-10	TME
0.0007273	TME
7.39E-06	TME
7.69E-06	TME
7.74E-06	TME
9.29E-05	TME
4.27E-05	TME
6.14E-07	Proliferation/Metastasis
3.15E-07	Proliferation/Metastasis
0.828953472	Metabolism
0.153296306	Metabolism
0.000992172	TME
0.062079108	Metabolism
0.746559487	Metabolism
6.61E-11	TME
0.073576858	Proliferation/Metastasis
3.05E-05	Proliferation/Metastasis
0.031360883	TME
1.69E-05	Metabolism
0.321822277	Metabolism
1.18E-06	Proliferation/Metastasis
8.38E-08	Proliferation/Metastasis
0.000517669	TME
1.31E-11	TME
5.92E-05	TME
8.84E-07	TME
0.5423008	Proliferation/Metastasis
2.07E-06	TME
6.19E-09	TME
0.000621854	Metabolism

1.61E-08	TME
1.15E-09	TME
1.72E-05	TME
0.043447799	TME
0.022083422	Metabolism
0.000664381	Metabolism
0.029668902	Metabolism
5.71E-11	TME
0.364282437	Metabolism
0.005040797	TME
0.029626294	TME
7.59E-07	TME
7.03E-05	TME
0.003261389	TME
0.118432945	Metabolism
8.65E-07	Proliferation/Metastasis
7.29E-05	Metabolism
1.57E-05	Proliferation/Metastasis
0.546940497	Metabolism
0.061267351	Metabolism
0.919082086	Metabolism
0.732029668	Metabolism
0.554969806	Metabolism
9.16E-08	Metabolism
0.574647838	Metabolism
0.002394686	Metabolism
1.77E-08	Metabolism
1.59E-10	Metabolism
1.13E-10	Metabolism
0.991975507	Metabolism
5.25E-09	Metabolism
0.018958739	Metabolism
1.60E-10	TME
0.39658767	Proliferation/Metastasis
0.001527499	Metabolism
1.05E-07	Proliferation/Metastasis
2.66E-06	TME
5.77E-12	Proliferation/Metastasis
4.17E-11	Proliferation/Metastasis
6.13E-07	TME
8.34E-11	TME
0.160963136	Metabolism
0.057642264	Metabolism

0.939719224	Proliferation/Metastasis
0.002560443	Proliferation/Metastasis
2.98E-12	Proliferation/Metastasis
0.686841113	Metabolism
3.98E-05	Metabolism
5.22E-12	Metabolism
7.12E-11	Proliferation/Metastasis
6.68E-09	TME
3.07E-10	TME
0.000526431	Metabolism
2.51E-05	Proliferation/Metastasis
0.007172141	Metabolism
0.003652682	TME
0.037990765	TME
3.89E-11	TME
5.90E-09	TME
0.001029211	Metabolism
0.000250067	TME
0.038321947	Proliferation/Metastasis
1.09E-16	TME
0.30079578	Proliferation/Metastasis
0.408575044	Proliferation/Metastasis
0.006082038	Metabolism
0.053461706	Proliferation/Metastasis
5.17E-07	TME
0.36257301	Metabolism
0.461348975	TME
0.000599706	TME
0.02218566	TME
8.09E-08	TME
0.029304596	TME
0.001283728	TME
6.90E-06	Metabolism
1.03E-16	TME
0.003733613	Metabolism
0.678391082	Metabolism
6.75E-10	Proliferation/Metastasis
0.006535657	Proliferation/Metastasis
0.017608489	Metabolism
0.000121903	Metabolism
0.653052534	Metabolism
0.616574136	Metabolism
1.69E-05	Proliferation/Metastasis

0.609301568	Proliferation/Metastasis
0.69797052	Metabolism
4.85E-05	Metabolism
0.799056511	Metabolism
5.03E-13	TME
0.00151279	Metabolism
0.482997894	Metabolism
3.41E-08	Metabolism
0.651513891	Metabolism
0.424583928	Proliferation/Metastasis
0.001922141	Metabolism
0.001169179	Metabolism
0.000177058	Metabolism
0.668412561	Metabolism
0.379118032	Metabolism
0.199457236	Metabolism
0.019282922	Proliferation/Metastasis
0.002346363	Metabolism
3.17E-05	Metabolism
5.14E-05	Proliferation/Metastasis
9.92E-06	Metabolism
0.213825633	Metabolism
2.88E-05	Metabolism
0.019226503	Metabolism
0.562254745	Metabolism
0.00064704	Metabolism
0.148869455	Metabolism
2.48E-05	Metabolism
5.63E-09	TME
4.11E-11	TME
1.22E-10	TME
5.76E-08	TME
7.51E-06	TME
0.038607031	Metabolism
0.526036229	Metabolism
0.244416299	Proliferation/Metastasis
0.001392554	Metabolism
2.15E-11	Proliferation/Metastasis
0.869639636	Metabolism
4.41E-10	TME
0.40596549	Metabolism
0.809814542	Metabolism
4.37E-10	Metabolism

0.000273132	Metabolism
2.37E-08	TME
0.000229708	TME
0.007476603	Proliferation/Metastasis
0.714806467	Metabolism
0.074447366	Proliferation/Metastasis
0.102433129	Proliferation/Metastasis
0.141839514	TME
0.398125341	TME
0.35885332	TME
0.546975914	TME
0.070236886	Metabolism
0.341420484	Proliferation/Metastasis
0.028553458	Metabolism
0.073638341	Metabolism
0.159135887	Proliferation/Metastasis
6.22E-10	Proliferation/Metastasis
0.365858229	Metabolism
0.02504469	Metabolism
0.026093637	Metabolism
0.536593042	Metabolism
0.22539491	TME
0.733348038	TME
0.032501549	TME
0.605579963	TME
0.005123644	TME
0.000567413	Metabolism
0.784587838	Metabolism
0.837792658	Metabolism
0.853715755	Metabolism
0.000105637	Metabolism
0.00016825	TME
0.389889964	TME
0.999952543	TME
0.097914567	TME
0.575126076	TME
0.845316071	TME
0.855288846	TME
0.499160213	TME
0.255217177	TME
0.003042326	Proliferation/Metastasis
0.875387045	Proliferation/Metastasis
0.722896498	Metabolism

0.211160106	Metabolism
0.044982513	TME
0.7572861	Metabolism
0.426950544	Metabolism
0.021135157	TME
0.000210096	Proliferation/Metastasis
5.47E-06	Proliferation/Metastasis
0.588119082	TME
0.160080467	Metabolism
0.636294351	Metabolism
0.02425207	Proliferation/Metastasis
6.61E-08	Proliferation/Metastasis
0.248160173	TME
0.024124968	TME
0.419322969	TME
0.117482205	TME
0.986942564	Proliferation/Metastasis
0.001123069	TME
0.008945194	TME
0.000505501	Metabolism
0.342678296	TME
0.059784938	TME
0.367579698	TME
0.736223253	TME
0.293213933	Metabolism
0.297870356	Metabolism
0.929547413	Metabolism
5.45E-05	TME
0.000485298	Metabolism
0.063646731	TME
0.121532791	TME
0.106136206	TME
0.106334602	TME
0.941507853	TME
0.002677031	Metabolism
0.268320388	Proliferation/Metastasis
0.367155034	Metabolism
0.03037872	Proliferation/Metastasis
0.298525605	Metabolism
0.004963326	Metabolism
0.471777562	Metabolism
0.780741146	Metabolism
0.03314363	Metabolism

0.00218637	Metabolism
0.361779983	Metabolism
0.171691769	Metabolism
0.007843984	Metabolism
0.775623795	Metabolism
0.744510725	Metabolism
0.75630125	Metabolism
0.010758294	Metabolism
0.323974525	Metabolism
0.008116107	TME
0.240232876	Proliferation/Metastasis
0.091129989	Metabolism
1.58E-05	Proliferation/Metastasis
0.658364273	TME
0.000183977	Proliferation/Metastasis
6.93E-07	Proliferation/Metastasis
0.063280879	TME
9.54E-07	TME
0.381642901	Metabolism
1.60E-09	Metabolism
0.491583219	Proliferation/Metastasis
0.422453898	Proliferation/Metastasis
1.42E-05	Proliferation/Metastasis
0.076379599	Metabolism
0.319136161	Metabolism
0.018402859	Metabolism
0.01012051	Proliferation/Metastasis
0.012627614	TME
0.045065291	TME
1.03E-06	Metabolism
3.03E-05	Proliferation/Metastasis
1.52E-07	Metabolism
0.26368065	TME
0.087932314	TME
0.045938493	TME
0.000751991	TME
0.530180287	Metabolism
0.011194881	TME
0.047986042	Proliferation/Metastasis
0.000996069	TME
0.001585861	Proliferation/Metastasis
0.067923273	Proliferation/Metastasis
2.16E-10	Metabolism

0.417838485	Proliferation/Metastasis
0.026232138	TME
0.007818747	Metabolism
0.199669999	TME
0.06530629	TME
0.257753191	TME
0.361253715	TME
0.754146648	TME
0.017715423	TME
0.32337447	Metabolism
1.22E-08	TME
0.542303695	Metabolism
0.446843465	Metabolism
1.52E-11	Proliferation/Metastasis
0.065838353	Proliferation/Metastasis
0.072760836	Metabolism
0.207604557	Metabolism
0.076446388	Metabolism
0.070917969	Metabolism
0.005607852	Proliferation/Metastasis
2.50E-07	Proliferation/Metastasis
9.47E-06	Metabolism
0.710972798	Metabolism
0.513583015	Metabolism
0.000982637	TME
0.133040932	Metabolism
0.141296051	Metabolism
0.000192689	Metabolism
0.014088732	Metabolism
0.263724049	Proliferation/Metastasis
0.054619915	Metabolism
0.006277481	Metabolism
0.047806357	Metabolism
0.444297715	Metabolism
0.01060747	Metabolism
0.0543711	Metabolism
0.058479846	Proliferation/Metastasis
0.10353483	Metabolism
0.005044096	Metabolism
0.175974017	Proliferation/Metastasis
0.796374631	Metabolism
0.022936136	Metabolism
0.615326101	Metabolism

0.016009409	Metabolism
0.258500884	Metabolism
0.010495422	Metabolism
3.92E-07	Metabolism
0.895895291	Metabolism
0.155180295	TME
0.08708069	TME
3.47E-05	TME
0.009197032	TME
0.38911435	TME
0.694734709	Metabolism
0.000934293	Metabolism
0.002743303	Proliferation/Metastasis
0.000335131	Metabolism
4.25E-09	Proliferation/Metastasis
0.444555151	Metabolism
0.607162921	TME
0.363506312	Metabolism
0.330197247	Metabolism
0.000774407	Metabolism
0.872279428	Metabolism
0.001047981	TME
0.516859301	TME
5.77E-08	Proliferation/Metastasis
0.101122908	Metabolism
0.398712224	Proliferation/Metastasis
0.865023359	Proliferation/Metastasis
0.126897142	TME
4.32E-11	TME
7.66E-07	TME
0.000100266	TME
3.18E-18	Metabolism
1.99E-11	Proliferation/Metastasis
2.00E-14	Metabolism
0.079072122	Metabolism
2.23E-05	Proliferation/Metastasis
1.01E-08	Proliferation/Metastasis
3.98E-05	Metabolism
1.27E-05	Metabolism
0.124221115	Metabolism
6.79E-06	Metabolism
5.02E-07	TME
5.15E-17	TME

2.32E-11	TME
3.66E-10	TME
0.571475931	TME
0.427710888	Metabolism
0.000527446	Metabolism
0.005445027	Metabolism
0.004149312	Metabolism
3.86E-10	Metabolism
3.03E-07	TME
1.28E-05	TME
4.65E-11	TME
1.02E-09	TME
9.50E-05	TME
3.33E-06	TME
2.15E-05	TME
0.008911793	TME
0.004350328	TME
7.73E-31	Proliferation/Metastasis
1.15E-18	Proliferation/Metastasis
1.63E-19	Metabolism
2.01E-16	Metabolism
0.000422539	TME
0.025268739	Metabolism
0.010707086	Metabolism
1.24E-13	TME
1.21E-24	Proliferation/Metastasis
1.25E-33	Proliferation/Metastasis
1.17E-07	TME
0.436043982	Metabolism
5.84E-14	Metabolism
2.05E-35	Proliferation/Metastasis
1.00E-10	Proliferation/Metastasis
2.66E-08	TME
2.47E-16	TME
6.76E-08	TME
5.13E-06	TME
1.87E-20	Proliferation/Metastasis
2.98E-08	TME
3.87E-10	TME
1.18E-13	Metabolism
1.24E-05	TME
5.77E-08	TME
0.000397947	TME

0.195543847	TME
0.767861273	Metabolism
0.075405596	Metabolism
4.32E-09	Metabolism
9.61E-11	TME
1.37E-10	Metabolism
6.94E-12	TME
1.41E-11	TME
8.23E-07	TME
2.77E-05	TME
0.010164728	TME
0.000257223	Metabolism
2.55E-28	Proliferation/Metastasis
0.155301544	Metabolism
6.44E-09	Proliferation/Metastasis
9.30E-11	Metabolism
0.043820591	Metabolism
6.40E-08	Metabolism
2.07E-06	Metabolism
2.58E-08	Metabolism
5.67E-08	Metabolism
0.004504265	Metabolism
0.824988307	Metabolism
7.80E-11	Metabolism
1.39E-08	Metabolism
0.000357783	Metabolism
0.360961561	Metabolism
8.85E-12	Metabolism
6.13E-15	Metabolism
2.78E-08	TME
0.000164384	Proliferation/Metastasis
0.005152471	Metabolism
0.025119771	Proliferation/Metastasis
6.62E-06	TME
1.43E-06	Proliferation/Metastasis
1.28E-08	Proliferation/Metastasis
0.001386008	TME
2.93E-07	TME
5.11E-10	Metabolism
1.33E-09	Metabolism
4.74E-12	Proliferation/Metastasis
2.48E-30	Proliferation/Metastasis
5.75E-10	Proliferation/Metastasis

2.91E-14	Metabolism
3.23E-05	Metabolism
4.49E-14	Metabolism
1.18E-12	Proliferation/Metastasis
4.10E-07	TME
1.16E-06	TME
0.00073935	Metabolism
2.83E-14	Proliferation/Metastasis
1.46E-06	Metabolism
2.22E-09	TME
5.00E-07	TME
8.18E-06	TME
1.72E-12	TME
0.031760433	Metabolism
2.31E-07	TME
0.416975501	Proliferation/Metastasis
2.23E-11	TME
0.004991045	Proliferation/Metastasis
1.36E-26	Proliferation/Metastasis
4.45E-06	Metabolism
2.32E-44	Proliferation/Metastasis
7.87E-11	TME
0.000954816	Metabolism
1.07E-07	TME
7.10E-15	TME
2.21E-19	TME
3.10E-08	TME
0.133745751	TME
3.73E-10	TME
0.179634508	Metabolism
9.54E-09	TME
0.359097304	Metabolism
0.466986158	Metabolism
6.54E-09	Proliferation/Metastasis
0.130045365	Proliferation/Metastasis
9.14E-23	Metabolism
3.94E-11	Metabolism
0.007632482	Metabolism
4.41E-14	Metabolism
0.003334604	Proliferation/Metastasis
0.699468041	Proliferation/Metastasis
0.002517524	Metabolism
7.36E-06	Metabolism

2.60E-14	Metabolism
2.04E-10	TME
0.030034614	Metabolism
2.77E-05	Metabolism
1.59E-06	Metabolism
0.195750448	Metabolism
0.027103492	Proliferation/Metastasis
1.88E-12	Metabolism
2.41E-07	Metabolism
2.09E-07	Metabolism
6.91E-32	Metabolism
5.88E-37	Metabolism
8.03E-22	Metabolism
6.37E-05	Proliferation/Metastasis
0.445138888	Metabolism
3.92E-06	Metabolism
1.15E-07	Proliferation/Metastasis
3.33E-07	Metabolism
0.4688039	Metabolism
0.000378566	Metabolism
0.052128836	Metabolism
1.22E-07	Metabolism
0.350590089	Metabolism
0.334058207	Metabolism
0.533903773	Metabolism
3.79E-10	TME
1.49E-08	TME
5.21E-08	TME
5.56E-11	TME
7.50E-09	TME
5.12E-05	Metabolism
1.14E-07	Metabolism
1.92E-05	Proliferation/Metastasis
0.094974773	Metabolism
1.46E-07	Proliferation/Metastasis
0.05085794	Metabolism
0.188465365	TME
0.398088613	Metabolism
1.62E-09	Metabolism
0.155872116	Metabolism
5.44E-07	Metabolism
5.32E-11	TME
1.06E-06	TME

1.92E-16	Proliferation/Metastasis
8.25E-12	Metabolism
9.47E-08	Proliferation/Metastasis
0.272663658	Proliferation/Metastasis
0.000367189	TME
0.000422565	TME
1.76E-05	TME
6.27E-05	TME
0.088197518	Metabolism
0.000174246	Proliferation/Metastasis
0.111371704	Metabolism
0.000319314	Metabolism
5.67E-06	Proliferation/Metastasis
4.30E-06	Proliferation/Metastasis
3.21E-05	Metabolism
1.70E-05	Metabolism
0.229141418	Metabolism
1.99E-05	Metabolism
0.071145235	TME
9.91E-10	TME
7.57E-05	TME
0.001062205	TME
0.068784872	TME
4.81E-05	Metabolism
8.03E-07	Metabolism
0.768867141	Metabolism
0.776031508	Metabolism
0.002692986	Metabolism
1.31E-13	TME
2.81E-06	TME
1.64E-05	TME
0.00010917	TME
9.43E-07	TME
1.95E-05	TME
7.08E-06	TME
0.002292224	TME
0.000155019	TME
0.210635827	Proliferation/Metastasis
0.009276037	Proliferation/Metastasis
0.239617531	Metabolism
0.071901608	Metabolism
0.000352676	TME
0.04104748	Metabolism

0.00030041	Metabolism
8.70E-06	TME
0.01087457	Proliferation/Metastasis
0.75169825	Proliferation/Metastasis
0.104807289	TME
6.32E-05	Metabolism
0.07997734	Metabolism
0.952054515	Proliferation/Metastasis
3.03E-05	Proliferation/Metastasis
3.38E-05	TME
0.000134263	TME
6.74E-06	TME
1.17E-06	TME
7.57E-08	Proliferation/Metastasis
9.20E-13	TME
1.09E-05	TME
0.000229109	Metabolism
3.98E-07	TME
7.16E-06	TME
0.000861999	TME
0.263516094	TME
0.015855392	Metabolism
0.002521349	Metabolism
0.241881032	Metabolism
8.37E-08	TME
0.226959157	Metabolism
0.000729514	TME
0.000748381	TME
4.33E-06	TME
0.82096944	TME
6.20E-05	TME
0.313433768	Metabolism
0.433870188	Proliferation/Metastasis
0.002320355	Metabolism
6.24E-10	Proliferation/Metastasis
0.000277009	Metabolism
0.093893338	Metabolism
0.905327034	Metabolism
0.077629129	Metabolism
0.000214422	Metabolism
0.132474644	Metabolism
0.004738164	Metabolism
9.64E-06	Metabolism

2.57E-06	Metabolism
2.26E-06	Metabolism
1.09E-07	Metabolism
1.28E-08	Metabolism
0.303480314	Metabolism
0.716105111	Metabolism
8.91E-06	TME
4.13E-06	Proliferation/Metastasis
0.000888005	Metabolism
3.27E-05	Proliferation/Metastasis
1.76E-06	TME
6.04E-12	Proliferation/Metastasis
3.59E-08	Proliferation/Metastasis
2.26E-09	TME
0.00040965	TME
2.88E-07	Metabolism
2.35E-10	Metabolism
1.48E-09	Proliferation/Metastasis
0.324914653	Proliferation/Metastasis
3.89E-11	Proliferation/Metastasis
0.663597981	Metabolism
0.866746379	Metabolism
0.110436343	Metabolism
2.28E-07	Proliferation/Metastasis
3.76E-09	TME
1.08E-07	TME
0.016423039	Metabolism
1.67E-09	Proliferation/Metastasis
8.90E-10	Metabolism
6.83E-06	TME
8.57E-08	TME
4.45E-06	TME
2.67E-06	TME
0.000209177	Metabolism
1.22E-05	TME
0.249367647	Proliferation/Metastasis
5.52E-05	TME
7.02E-06	Proliferation/Metastasis
1.09E-07	Proliferation/Metastasis
8.62E-12	Metabolism
0.550428153	Proliferation/Metastasis
6.89E-07	TME
1.79E-06	Metabolism

0.047317116	TME
1.58E-09	TME
0.002788277	TME
1.53E-05	TME
0.90520532	TME
1.41E-07	TME
0.00667841	Metabolism
6.71E-05	TME
5.47E-06	Metabolism
2.22E-06	Metabolism
2.78E-05	Proliferation/Metastasis
0.001242971	Proliferation/Metastasis
0.821436795	Metabolism
0.672771344	Metabolism
0.049569599	Metabolism
0.13712788	Metabolism
0.000122453	Proliferation/Metastasis
1.72E-06	Proliferation/Metastasis
0.338801374	Metabolism
0.000124094	Metabolism
0.000536097	Metabolism
9.72E-05	TME
0.019945602	Metabolism
0.499136999	Metabolism
0.015547688	Metabolism
6.07E-12	Metabolism
8.64E-14	Proliferation/Metastasis
0.000116583	Metabolism
0.098793245	Metabolism
0.001849184	Metabolism
0.218900104	Metabolism
0.177457279	Metabolism
0.288020696	Metabolism
0.655860752	Proliferation/Metastasis
0.000242046	Metabolism
0.000408778	Metabolism
2.63E-16	Proliferation/Metastasis
0.010652294	Metabolism
0.003655029	Metabolism
1.73E-14	Metabolism
2.47E-07	Metabolism
0.456317155	Metabolism
0.000871365	Metabolism

0.003382742	Metabolism
0.19121374	Metabolism
1.08E-06	TME
6.17E-05	TME
6.25E-06	TME
1.50E-05	TME
0.0014364	TME
0.006735461	Metabolism
0.252117574	Metabolism
1.88E-14	Proliferation/Metastasis
0.656784956	Metabolism
0.000197657	Proliferation/Metastasis
1.90E-05	Metabolism
0.30255867	TME
0.000920454	Metabolism
0.137315453	Metabolism
0.046114074	Metabolism
0.19578751	Metabolism
3.07E-05	TME
6.27E-06	TME
0.001590159	Proliferation/Metastasis
0.002808321	Metabolism
0.003595096	Proliferation/Metastasis
0.924876876	Proliferation/Metastasis
1.63E-06	TME
0.414543412	TME
0.176527613	TME
0.69946643	TME
0.005511255	Metabolism
4.33E-06	Proliferation/Metastasis
0.015756451	Metabolism
5.38E-27	Metabolism
1.05E-06	Proliferation/Metastasis
4.53E-13	Proliferation/Metastasis
1.79E-08	Metabolism
1.64E-08	Metabolism
1.37E-08	Metabolism
0.410741048	Metabolism
0.584781188	TME
0.066864563	TME
0.662634501	TME
0.026822006	TME
6.14E-15	TME

0.022605296	Metabolism
9.53E-06	Metabolism
0.284515925	Metabolism
0.130100716	Metabolism
3.55E-06	Metabolism
0.011474293	TME
0.03330142	TME
0.005319872	TME
0.306286724	TME
0.245237928	TME
0.679709058	TME
0.530975585	TME
0.590618023	TME
0.993066996	TME
0.036719848	Proliferation/Metastasis
5.10E-07	Proliferation/Metastasis
2.92E-06	Metabolism
0.072377875	Metabolism
0.010645225	TME
0.173828868	Metabolism
0.014859441	Metabolism
4.87E-05	TME
0.014302726	Proliferation/Metastasis
0.230410598	Proliferation/Metastasis
0.648265423	TME
0.221091762	Metabolism
1.70E-10	Metabolism
0.012405378	Proliferation/Metastasis
0.000726343	Proliferation/Metastasis
0.762330137	TME
1.27E-05	TME
0.73917074	TME
0.255256191	TME
0.003697156	Proliferation/Metastasis
0.414170612	TME
0.000172663	TME
0.005741362	Metabolism
0.004803566	TME
0.009022493	TME
0.849825381	TME
0.184892986	TME
0.903127841	Metabolism
0.543172846	Metabolism

1.54E-06	Metabolism
0.000186522	TME
5.01E-09	Metabolism
0.56507913	TME
0.618231776	TME
0.035009911	TME
0.80984816	TME
0.860450844	TME
7.96E-15	Metabolism
0.000734445	Proliferation/Metastasis
1.34E-20	Metabolism
0.025225168	Proliferation/Metastasis
1.63E-07	Metabolism
0.001760325	Metabolism
0.000671389	Metabolism
5.08E-06	Metabolism
2.00E-09	Metabolism
7.19E-07	Metabolism
0.427120541	Metabolism
0.000644366	Metabolism
1.18E-07	Metabolism
1.56E-06	Metabolism
1.81E-08	Metabolism
1.37E-05	Metabolism
0.404991086	Metabolism
0.355060583	Metabolism
0.000279837	TME
0.014538218	Proliferation/Metastasis
0.115473659	Metabolism
3.28E-21	Proliferation/Metastasis
0.076062857	TME
2.74E-11	Proliferation/Metastasis
3.03E-11	Proliferation/Metastasis
4.64E-05	TME
9.70E-12	TME
0.000135724	Metabolism
0.761173857	Metabolism
0.589019561	Proliferation/Metastasis
0.778881842	Proliferation/Metastasis
3.27E-09	Proliferation/Metastasis
0.655396162	Metabolism
0.101585772	Metabolism
2.11E-10	Metabolism

9.18E-10	Proliferation/Metastasis
6.38E-06	TME
9.36E-08	TME
0.002453255	Metabolism
3.69E-05	Proliferation/Metastasis
0.02750181	Metabolism
0.386046177	TME
0.893031609	TME
1.82E-06	TME
0.056443497	TME
0.021091418	Metabolism
5.63E-11	TME
0.000141138	Proliferation/Metastasis
1.07E-13	TME
0.204109758	Proliferation/Metastasis
6.15E-13	Proliferation/Metastasis
7.65E-09	Metabolism
0.023362488	Proliferation/Metastasis
0.069208216	TME
5.80E-05	Metabolism
0.199742857	TME
0.74305402	TME
0.000276318	TME
0.164283514	TME
0.110063994	TME
0.306945732	TME
4.80E-11	Metabolism
6.27E-19	TME
3.64E-06	Metabolism
0.006623934	Metabolism
9.14E-15	Proliferation/Metastasis
0.00178198	Proliferation/Metastasis
0.117652445	Metabolism
0.023333401	Metabolism
0.598652578	Metabolism
9.91E-09	Metabolism
6.74E-31	Proliferation/Metastasis
0.000196694	Proliferation/Metastasis
0.110790769	Metabolism
0.149776574	Metabolism
6.02E-12	Metabolism
0.002998307	TME
4.28E-08	Metabolism

0.858561833	Metabolism
0.023176937	Metabolism
0.500609346	Metabolism
2.97E-10	Proliferation/Metastasis
0.001114684	Metabolism
0.008025671	Metabolism
0.023036135	Metabolism
3.25E-06	Metabolism
5.02E-06	Metabolism
0.881027574	Metabolism
0.860526	Proliferation/Metastasis
0.010219321	Metabolism
2.69E-06	Metabolism
0.007885685	Proliferation/Metastasis
5.19E-11	Metabolism
0.558694571	Metabolism
2.04E-05	Metabolism
3.38E-10	Metabolism
3.02E-07	Metabolism
0.000904308	Metabolism
0.002394355	Metabolism
0.024933751	Metabolism
0.028299636	TME
0.000236731	TME
2.15E-10	TME
0.0111144	TME
0.906961786	TME
1.39E-06	Metabolism
4.73E-06	Metabolism
0.112557516	Proliferation/Metastasis
1.11E-05	Metabolism
1.99E-21	Proliferation/Metastasis
0.257744643	Metabolism
5.11E-16	TME
1.83E-05	Metabolism
0.001938237	Metabolism
2.28E-10	Metabolism
0.171456441	Metabolism
0.086003741	TME
0.814888252	TME
4.64E-05	Proliferation/Metastasis
0.053515806	Metabolism
0.309934938	Proliferation/Metastasis

4.44E-05	Proliferation/Metastasis
0.573966888	TME
0.443113062	TME
0.231213983	TME
0.125782615	TME
0.0013457	Metabolism
3.29E-08	Proliferation/Metastasis
0.291333025	Metabolism
0.041717896	Metabolism
0.021612952	Proliferation/Metastasis
0.108595285	Proliferation/Metastasis
0.975157305	Metabolism
0.004381028	Metabolism
0.000222626	Metabolism
0.409436547	Metabolism
0.990387613	TME
0.56901138	TME
0.995886273	TME
0.08950231	TME
0.672079	TME
0.784529793	Metabolism
0.008520855	Metabolism
0.910357667	Metabolism
0.685170622	Metabolism
0.39583237	Metabolism
0.824648489	TME
0.381991214	TME
0.380178388	TME
0.495444118	TME
0.275066399	TME
0.220941161	TME
0.177576603	TME
0.043516816	TME
0.0796879	TME
4.63E-07	Proliferation/Metastasis
0.000225002	Proliferation/Metastasis
0.002652624	Metabolism
2.81E-05	Metabolism
0.988223559	TME
0.488006681	Metabolism
0.000122707	Metabolism
0.432206449	TME
0.001401955	Proliferation/Metastasis

3.28E-07	Proliferation/Metastasis
0.936371268	TME
0.179626087	Metabolism
0.18058991	Metabolism
1.39E-08	Proliferation/Metastasis
0.575836856	Proliferation/Metastasis
0.261731692	TME
0.672907014	TME
0.421656141	TME
0.503732726	TME
5.66E-08	Proliferation/Metastasis
0.938602283	TME
0.294957073	TME
0.330638963	Metabolism
0.265965479	TME
0.209107622	TME
0.063970909	TME
0.812178639	TME
0.582739628	Metabolism
0.387929827	Metabolism
0.021956111	Metabolism
0.689035895	TME
0.01593713	Metabolism
0.706063269	TME
0.212133665	TME
0.378238952	TME
0.004831753	TME
0.138858462	TME
0.019398953	Metabolism
3.25E-09	Proliferation/Metastasis
0.000206014	Metabolism
0.666595111	Proliferation/Metastasis
0.010092183	Metabolism
0.656771693	Metabolism
0.296370645	Metabolism
0.095322067	Metabolism
0.00232306	Metabolism
0.12833541	Metabolism
0.048075504	Metabolism
0.721802608	Metabolism
0.156653945	Metabolism
0.976536035	Metabolism
0.47276992	Metabolism

0.99950832	Metabolism
0.330988191	Metabolism
0.005172764	Metabolism
0.497917814	TME
0.597219054	Proliferation/Metastasis
0.975724437	Metabolism
0.734809694	Proliferation/Metastasis
0.116230178	TME
0.091549897	Proliferation/Metastasis
0.066496289	Proliferation/Metastasis
0.213919628	TME
0.448667418	TME
0.561808704	Metabolism
0.012593427	Metabolism
0.00568277	Proliferation/Metastasis
1.06E-07	Proliferation/Metastasis
0.948530571	Proliferation/Metastasis
0.011523079	Metabolism
0.024490025	Metabolism
0.010461984	Metabolism
0.941663001	Proliferation/Metastasis
0.451920217	TME
0.402727629	TME
0.393336688	Metabolism
0.577225715	Proliferation/Metastasis
0.00221325	Metabolism
0.342149033	TME
0.822990169	TME
0.383449638	TME
0.679093795	TME
0.396171657	Metabolism
0.001142935	TME
1.35E-05	Proliferation/Metastasis
0.427825438	TME
0.37357305	Proliferation/Metastasis
1.73E-06	Proliferation/Metastasis
0.653868699	Metabolism
9.31E-08	Proliferation/Metastasis
0.585951336	TME
0.260356692	Metabolism
0.857065404	TME
0.751298909	TME
0.622273895	TME

0.425906587	TME
0.002147468	TME
0.445611698	TME
0.027474796	Metabolism
0.785511487	TME
0.164994299	Metabolism
0.228795656	Metabolism
0.285035214	Proliferation/Metastasis
0.530899991	Proliferation/Metastasis
1.94E-06	Metabolism
0.812296538	Metabolism
0.070544393	Metabolism
0.25996899	Metabolism
0.06598792	Proliferation/Metastasis
0.390485	Proliferation/Metastasis
0.023668141	Metabolism
0.343553238	Metabolism
2.30E-06	Metabolism
0.105767359	TME
0.004559282	Metabolism
0.092746229	Metabolism
0.771142461	Metabolism
0.925103827	Metabolism
0.001132216	Proliferation/Metastasis
0.346832963	Metabolism
0.001975359	Metabolism
0.49888897	Metabolism
2.40E-06	Metabolism
6.34E-06	Metabolism
0.021481544	Metabolism
0.802667956	Proliferation/Metastasis
0.187333081	Metabolism
0.055854495	Metabolism
0.261748432	Proliferation/Metastasis
0.148109433	Metabolism
0.030786937	Metabolism
0.377181953	Metabolism
0.978102467	Metabolism
0.000646625	Metabolism
0.125868112	Metabolism
0.25559574	Metabolism
0.695198796	Metabolism
0.312753894	TME

0.129556801	TME
0.382508659	TME
0.642527052	TME
0.427661756	TME
0.011071032	Metabolism
0.689998402	Metabolism
0.837868037	Proliferation/Metastasis
0.206166464	Metabolism
0.089183827	Proliferation/Metastasis
0.42314629	Metabolism
0.107851957	TME
0.609626216	Metabolism
0.418611044	Metabolism
0.023385849	Metabolism
0.856531031	Metabolism
0.995093973	TME
0.257130007	TME
0.508919504	Proliferation/Metastasis
0.003579413	Metabolism
0.271809526	Proliferation/Metastasis
0.674289688	Proliferation/Metastasis
0.001242707	TME
0.119203576	TME
0.149535385	TME
0.03498513	TME
0.004236169	Metabolism
0.59723958	Proliferation/Metastasis
0.254870741	Metabolism
0.529174821	Metabolism
0.884385363	Proliferation/Metastasis
4.46E-05	Proliferation/Metastasis
0.275158692	Metabolism
0.267105826	Metabolism
0.065869326	Metabolism
0.008310464	Metabolism
0.311182822	TME
0.012682458	TME
0.021423369	TME
0.111259498	TME
0.454622125	TME
4.31E-05	Metabolism
0.02691479	Metabolism
0.131670115	Metabolism

0.442574588	Metabolism
0.256954906	Metabolism
0.006128408	TME
9.03E-05	TME
0.040042415	TME
0.056806063	TME
0.007060197	TME
0.093331149	TME
0.0440211	TME
0.129531466	TME
0.346031215	TME
0.003836461	Proliferation/Metastasis
0.069988184	Proliferation/Metastasis
0.164066435	Metabolism
0.104408809	Metabolism
0.012059821	TME
0.966008666	Metabolism
0.037989717	Metabolism
0.002046057	TME
0.169852744	Proliferation/Metastasis
0.025521873	Proliferation/Metastasis
0.12204077	TME
0.038036252	Metabolism
0.193712868	Metabolism
0.005349461	Proliferation/Metastasis
7.17E-05	Proliferation/Metastasis
0.139903038	TME
0.043557249	TME
0.115777917	TME
0.003118318	TME
0.567434563	Proliferation/Metastasis
1.47E-08	TME
0.066015376	TME
0.211629183	Metabolism
0.01281998	TME
0.04072857	TME
0.478478493	TME
0.805304855	TME
0.003546322	Metabolism
0.030462825	Metabolism
0.327600988	Metabolism
3.62E-06	TME
0.593509278	Metabolism

0.07766833	TME
0.036818101	TME
0.052656234	TME
0.476448266	TME
0.07071686	TME
0.325967324	Metabolism
0.00922078	Proliferation/Metastasis
0.547108642	Metabolism
0.166796215	Proliferation/Metastasis
0.024048889	Metabolism
0.043066126	Metabolism
0.649017096	Metabolism
0.016836217	Metabolism
0.004043773	Metabolism
2.31E-07	Metabolism
0.001375822	Metabolism
0.024612559	Metabolism
0.001475725	Metabolism
0.023315321	Metabolism
0.010395793	Metabolism
0.863946514	Metabolism
0.352939701	Metabolism
0.511156286	Metabolism
0.018736529	TME
0.003940336	Proliferation/Metastasis
1.57E-05	Metabolism
0.158391906	Proliferation/Metastasis
0.056020905	TME
0.000327418	Proliferation/Metastasis
0.38928517	Proliferation/Metastasis
0.029954215	TME
0.018286347	TME
0.016655871	Metabolism
0.218465854	Metabolism
0.008619243	Proliferation/Metastasis
0.769023937	Proliferation/Metastasis
0.001046016	Proliferation/Metastasis
0.007533043	Metabolism
0.296675203	Metabolism
0.491839254	Metabolism
0.171393891	Proliferation/Metastasis
0.074941134	TME
0.001203688	TME

0.205890243	Metabolism
0.059053048	Proliferation/Metastasis
0.728465024	Metabolism
0.185773444	TME
0.238580744	TME
1.80E-08	TME
1.31E-05	TME
0.054856875	Metabolism
0.354101588	TME
0.271739324	Proliferation/Metastasis
0.072773628	TME
0.037731222	Proliferation/Metastasis
0.256016294	Proliferation/Metastasis
0.123966599	Metabolism
0.237042835	Proliferation/Metastasis
0.06185337	TME
0.910167223	Metabolism
0.113295003	TME
0.021132405	TME
0.141007076	TME
0.188180633	TME
0.141166823	TME
0.007158931	TME
0.13630609	Metabolism
0.05922476	TME
0.549385019	Metabolism
0.746059516	Metabolism
0.725383257	Proliferation/Metastasis
0.002629594	Proliferation/Metastasis
0.365894422	Metabolism
0.272004984	Metabolism
0.320685853	Metabolism
0.50791471	Metabolism
0.939571758	Proliferation/Metastasis
0.327760247	Proliferation/Metastasis
0.289888941	Metabolism
0.78092824	Metabolism
0.99576769	Metabolism
7.65E-10	TME
0.037384854	Metabolism
0.057352998	Metabolism
0.599280091	Metabolism
0.620393401	Metabolism

0.983321228	Proliferation/Metastasis
0.573629593	Metabolism
0.121080029	Metabolism
0.006210894	Metabolism
0.005824017	Metabolism
0.083196101	Metabolism
0.114435372	Metabolism
0.56545897	Proliferation/Metastasis
0.001581047	Metabolism
0.829999699	Metabolism
0.665636798	Proliferation/Metastasis
0.738749791	Metabolism
0.107468037	Metabolism
0.796697185	Metabolism
0.084150386	Metabolism
0.847623347	Metabolism
0.021810939	Metabolism
0.324320408	Metabolism
0.126885971	Metabolism
0.031595896	TME
0.513061262	TME
0.108560851	TME
0.068449859	TME
0.052986278	TME
0.244165125	Metabolism
0.188125415	Metabolism
0.081181057	Proliferation/Metastasis
0.82432164	Metabolism
0.397943508	Proliferation/Metastasis
0.801126665	Metabolism
0.110815756	TME
0.0406547	Metabolism
0.318361892	Metabolism
0.643807277	Metabolism
0.004945027	Metabolism
5.45E-09	TME
1.11E-06	TME
0.02438297	Proliferation/Metastasis
0.11575992	Metabolism
0.01806259	Proliferation/Metastasis
0.000405568	Proliferation/Metastasis
0.32873615	TME
0.087662705	TME

0.006907234	TME
0.038011627	TME
0.235539167	Metabolism
0.798237821	Proliferation/Metastasis
0.44229236	Metabolism
0.190441919	Metabolism
0.670842532	Proliferation/Metastasis
0.001991002	Proliferation/Metastasis
0.010087642	Metabolism
0.344925429	Metabolism
0.077749191	Metabolism
0.200477417	Metabolism
0.010895281	TME
0.157703385	TME
0.001579182	TME
0.096598745	TME
0.994401467	TME
0.465254841	Metabolism
0.039033943	Metabolism
0.033508779	Metabolism
0.006803132	Metabolism
0.949540417	Metabolism
2.61E-05	TME
0.000889054	TME
0.052405841	TME
0.007825707	TME
0.060202363	TME
0.027570798	TME
0.028810275	TME
0.040390286	TME
0.009892093	TME
0.223503245	Proliferation/Metastasis
0.112303856	Proliferation/Metastasis
0.91010558	Metabolism
0.572265185	Metabolism
0.055838756	TME
0.113072837	Metabolism
0.000828189	Metabolism
0.000337211	TME
0.003180358	Proliferation/Metastasis
0.189581569	Proliferation/Metastasis
0.089682005	TME
0.329934198	Metabolism

0.006512354	Metabolism
0.530076465	Proliferation/Metastasis
0.001693725	Proliferation/Metastasis
0.001541303	TME
0.006773385	TME
0.001686897	TME
0.007578613	TME
4.51E-06	Proliferation/Metastasis
3.39E-05	TME
0.024999237	TME
0.330829302	Metabolism
0.001616886	TME
0.003702514	TME
0.197698218	TME
0.640034255	TME
0.957463788	Metabolism
0.721984134	Metabolism
0.475020125	Metabolism
0.000558411	TME
0.015848602	Metabolism
0.00364492	TME
0.134111895	TME
0.002475313	TME
0.630581578	TME
0.035553317	TME
0.168044373	Metabolism
0.13197071	Proliferation/Metastasis
0.996525725	Metabolism
0.123208832	Proliferation/Metastasis
0.843020306	Metabolism
0.964893201	Metabolism
0.859591039	Metabolism
0.514093469	Metabolism
0.86532554	Metabolism
0.137722632	Metabolism
0.901095072	Metabolism
0.951333691	Metabolism
0.009920418	Metabolism
0.228142941	Metabolism
0.658322751	Metabolism
0.39419359	Metabolism
0.084464041	Metabolism
0.599967142	Metabolism

0.004102959	TME
0.018817006	Proliferation/Metastasis
0.023015516	Metabolism
0.066590261	Proliferation/Metastasis
0.016830925	TME
0.000430078	Proliferation/Metastasis
6.66E-05	Proliferation/Metastasis
0.011203651	TME
0.201457215	TME
0.010706521	Metabolism
2.09E-09	Metabolism
0.072578533	Proliferation/Metastasis
0.044910914	Proliferation/Metastasis
2.34E-05	Proliferation/Metastasis
0.212532958	Metabolism
0.020757886	Metabolism
0.794304645	Metabolism
0.084505574	Proliferation/Metastasis
0.002507692	TME
0.003097954	TME
0.110444565	Metabolism
0.000207515	Proliferation/Metastasis
7.72E-10	Metabolism
0.012606374	TME
0.027916679	TME
0.046143715	TME
9.63E-06	TME
0.014926319	Metabolism
0.110057808	TME
0.011715109	Proliferation/Metastasis
0.010993828	TME
0.354560056	Proliferation/Metastasis
0.002349518	Proliferation/Metastasis
0.000562084	Metabolism
0.932863948	Proliferation/Metastasis
0.000728176	TME
0.056473863	Metabolism
0.021787089	TME
0.000135534	TME
0.097364295	TME
0.01666215	TME
0.00785383	TME
0.017412778	TME

0.236096618	Metabolism
0.002202263	TME
0.432958043	Metabolism
0.570653917	Metabolism
4.61E-05	Proliferation/Metastasis
0.035993924	Proliferation/Metastasis
0.759767873	Metabolism
0.52890813	Metabolism
0.164941705	Metabolism
0.034276177	Metabolism
0.444087381	Proliferation/Metastasis
0.309501029	Proliferation/Metastasis
0.439573198	Metabolism
0.255808958	Metabolism
0.515597604	Metabolism
0.002322915	TME
0.240204946	Metabolism
0.082381454	Metabolism
0.430266923	Metabolism
0.000903424	Metabolism
0.003304448	Proliferation/Metastasis
0.01119608	Metabolism
0.92697903	Metabolism
0.324604576	Metabolism
0.824253537	Metabolism
0.250005921	Metabolism
0.424667775	Metabolism
0.695685321	Proliferation/Metastasis
0.004956489	Metabolism
0.329781679	Metabolism
0.035133371	Proliferation/Metastasis
0.002043002	Metabolism
0.006993523	Metabolism
0.012083479	Metabolism
0.083177455	Metabolism
0.222790107	Metabolism
0.005805017	Metabolism
0.791885842	Metabolism
0.01096934	Metabolism
0.008247157	TME
0.069322138	TME
0.001663084	TME
0.024070541	TME

0.140667671	TME
0.28117838	Metabolism
0.492765904	Metabolism
0.00091364	Proliferation/Metastasis
0.140642911	Metabolism
0.016758303	Proliferation/Metastasis
0.999253921	Metabolism
0.133747491	TME
0.153210301	Metabolism
0.357419069	Metabolism
0.46475814	Metabolism
0.507631887	Metabolism
0.004360665	TME
0.008534175	TME
0.003624632	Proliferation/Metastasis
0.007174321	Metabolism
0.003432574	Proliferation/Metastasis
0.939107661	Proliferation/Metastasis
0.000528567	TME
0.477106236	TME
0.34082987	TME
0.086877517	TME
0.760785186	Metabolism
0.129550269	Proliferation/Metastasis
0.003223791	Metabolism
0.242960427	Metabolism
0.019116299	Proliferation/Metastasis
0.000359929	Proliferation/Metastasis
0.001261346	Metabolism
0.660226447	Metabolism
0.018453241	Metabolism
0.380851981	Metabolism
0.195003164	TME
0.993635319	TME
0.731644644	TME
0.260571654	TME
0.094027377	TME
0.000340696	Metabolism
0.00147682	Metabolism
0.044381148	Metabolism
0.000226018	Metabolism
0.744036242	Metabolism
0.007667351	TME

0.034357163	TME
0.14343071	TME
0.37511737	TME
0.317205548	TME
0.557162668	TME
0.367019961	TME
0.287690912	TME
0.181624986	TME
1.20E-06	Proliferation/Metastasis
0.022878923	Proliferation/Metastasis
0.603292247	Metabolism
0.815810049	Metabolism
0.234577508	TME
0.347859728	Metabolism
0.86500966	Metabolism
0.242903031	TME
0.116545589	Proliferation/Metastasis
0.001146964	Proliferation/Metastasis
0.422812091	TME
0.00368053	Metabolism
0.09404209	Metabolism
2.20E-07	Proliferation/Metastasis
0.000109135	Proliferation/Metastasis
0.628391813	TME
0.07386786	TME
0.45524716	TME
0.242215922	TME
5.48E-05	Proliferation/Metastasis
1.95E-05	TME
0.359720822	TME
0.004020172	Metabolism
0.088828553	TME
0.144116509	TME
0.448380037	TME
0.470875261	TME
0.097569583	Metabolism
0.00012028	Metabolism
0.100435174	Metabolism
0.00105312	TME
0.502865368	Metabolism
0.354781661	TME
0.502725424	TME
0.063222994	TME

0.301863082	TME
0.133859094	TME
0.512163432	Metabolism
5.97E-08	Proliferation/Metastasis
0.331901144	Metabolism
0.393110072	Proliferation/Metastasis
0.786775	Metabolism
0.003973872	Metabolism
0.744783505	Metabolism
0.174300444	Metabolism
0.177730608	Metabolism
0.000909829	Metabolism
0.127621215	Metabolism
0.003337855	Metabolism
0.288158612	Metabolism
0.53428015	Metabolism
0.975606872	Metabolism
0.067018184	Metabolism
0.076788124	Metabolism
0.141086216	Metabolism
0.364192897	TME
0.009557069	Proliferation/Metastasis
0.003301194	Metabolism
0.005728215	Proliferation/Metastasis
0.264900965	TME
0.000408469	Proliferation/Metastasis
0.415631272	Proliferation/Metastasis
0.284245968	TME
0.281939865	TME
0.293091262	Metabolism
0.755121657	Metabolism
0.000402503	Proliferation/Metastasis
0.000171239	Proliferation/Metastasis
0.059045531	Proliferation/Metastasis
0.000294778	Metabolism
3.84E-05	Metabolism
0.313933246	Metabolism
0.85553393	Proliferation/Metastasis
0.643061929	TME
0.362987547	TME
1.31E-05	Metabolism
0.000584642	Proliferation/Metastasis
0.538386719	Metabolism

0.900265772	TME
0.624442435	TME
1.28E-06	TME
0.000369512	TME
0.010748707	Metabolism
0.509491307	TME
0.001640907	Proliferation/Metastasis
0.447878175	TME
0.666337382	Proliferation/Metastasis
7.36E-06	Proliferation/Metastasis
0.681923316	Metabolism
1.19E-06	Proliferation/Metastasis
0.312085944	TME
0.838581816	Metabolism
0.022875388	TME
0.771452208	TME
0.519933032	TME
0.410353964	TME
0.073958251	TME
0.334418898	TME
0.001461181	Metabolism
0.210256795	TME
0.458060235	Metabolism
0.468035177	Metabolism
0.906763326	Proliferation/Metastasis
0.061465578	Proliferation/Metastasis
0.004791026	Metabolism
0.000812348	Metabolism
0.159074393	Metabolism
0.863083818	Metabolism
0.661822287	Proliferation/Metastasis
0.013299077	Proliferation/Metastasis
0.013801312	Metabolism
0.390611031	Metabolism
0.342602717	Metabolism
0.000111147	TME
0.348495353	Metabolism
0.407865873	Metabolism
0.498836867	Metabolism
0.591426527	Metabolism
0.002842105	Proliferation/Metastasis
0.229837972	Metabolism
0.00086805	Metabolism

0.000553454	Metabolism
1.31E-08	Metabolism
4.71E-05	Metabolism
0.107789997	Metabolism
0.405917687	Proliferation/Metastasis
0.000408662	Metabolism
0.04597517	Metabolism
0.312594298	Proliferation/Metastasis
0.283347234	Metabolism
0.383483991	Metabolism
0.65275255	Metabolism
0.505008461	Metabolism
0.005288381	Metabolism
0.081478716	Metabolism
0.001053341	Metabolism
0.440522734	Metabolism
0.232702834	TME
0.994782831	TME
0.413204379	TME
0.26546244	TME
0.570268263	TME
0.020109166	Metabolism
0.043047093	Metabolism
0.035747315	Proliferation/Metastasis
0.0968612	Metabolism
0.055266815	Proliferation/Metastasis
0.071784394	Metabolism
5.78E-05	TME
0.001065596	Metabolism
0.087718904	Metabolism
0.365584304	Metabolism
0.000207981	Metabolism
0.000623862	TME
0.000159361	TME
0.009656341	Proliferation/Metastasis
0.388556804	Metabolism
4.72E-06	Proliferation/Metastasis
0.008925715	Proliferation/Metastasis
0.16505551	TME
0.846700353	TME
0.336952464	TME
0.998189099	TME
0.376337708	Metabolism

0.03931187	Proliferation/Metastasis
0.091409379	Metabolism
0.309687016	Metabolism
0.737934288	Proliferation/Metastasis
0.014561549	Proliferation/Metastasis
0.021027502	Metabolism
0.959522095	Metabolism
0.838442238	Metabolism
0.488186882	Metabolism
0.964583267	TME
0.157984714	TME
0.420776031	TME
0.891677177	TME
0.147078517	TME
0.912366794	Metabolism
0.68834829	Metabolism
0.62836173	Metabolism
0.006318519	Metabolism
0.395919523	Metabolism
0.027311332	TME
0.74268278	TME
0.985623822	TME
0.777051698	TME
0.910924687	TME
0.911224137	TME
0.899502997	TME
0.263062423	TME
0.974787765	TME
0.995644217	Proliferation/Metastasis
0.005235505	Proliferation/Metastasis
0.894839752	Metabolism
0.45059382	Metabolism
0.105111211	TME
0.639558737	Metabolism
0.001627605	Metabolism
0.349875349	TME
7.79E-05	Proliferation/Metastasis
0.04801656	Proliferation/Metastasis
0.702565185	TME
0.816946208	Metabolism
0.032447403	Metabolism
0.599407845	Proliferation/Metastasis
0.006824604	Proliferation/Metastasis

0.198415266	TME
0.248719969	TME
0.595939615	TME
0.279212713	TME
0.001682507	Proliferation/Metastasis
0.039261195	TME
0.525329739	TME
0.403250527	Metabolism
0.658085176	TME
0.866287833	TME
0.20969347	TME
0.810134017	TME
0.007034442	Metabolism
0.750666621	Metabolism
0.582282614	Metabolism
0.018536327	TME
0.029625345	Metabolism
0.335587768	TME
0.104635386	TME
0.904014724	TME
0.005962653	TME
0.630499584	TME
0.101226049	Metabolism
0.642148133	Proliferation/Metastasis
0.745269337	Metabolism
0.002741102	Proliferation/Metastasis
0.058528438	Metabolism
0.954059244	Metabolism
0.462597495	Metabolism
0.484985234	Metabolism
0.887565811	Metabolism
0.108511086	Metabolism
0.720807243	Metabolism
0.011531596	Metabolism
0.067717877	Metabolism
0.069366665	Metabolism
0.033756341	Metabolism
0.594743304	Metabolism
0.988441406	Metabolism
0.521773813	Metabolism
0.260970426	TME
0.036030302	Proliferation/Metastasis
0.756910855	Metabolism

0.381952373	Proliferation/Metastasis
0.60821274	TME
0.195107423	Proliferation/Metastasis
0.084393421	Proliferation/Metastasis
0.81133381	TME
0.93690961	TME
1.12E-05	Metabolism
1.73E-06	Metabolism
0.197962782	Proliferation/Metastasis
0.356205273	Proliferation/Metastasis
0.009727651	Proliferation/Metastasis
0.120189814	Metabolism
0.274467858	Metabolism
0.188638445	Metabolism
0.175315281	Proliferation/Metastasis
0.656379516	TME
0.306620105	TME
0.211845538	Metabolism
0.058320011	Proliferation/Metastasis
7.69E-05	Metabolism
0.088059081	TME
0.42483697	TME
0.561067514	TME
0.043169591	TME
0.246977197	Metabolism
0.287884422	TME
0.005721715	Proliferation/Metastasis
0.37868564	TME
6.26E-05	Proliferation/Metastasis
0.371169345	Proliferation/Metastasis
1.71E-07	Metabolism
0.023272325	Proliferation/Metastasis
0.279619539	TME
0.002598757	Metabolism
0.751754019	TME
0.165528111	TME
0.399563529	TME
0.9628701	TME
0.489105993	TME
0.629651419	TME
0.158940521	Metabolism
0.485299037	TME
0.168247472	Metabolism

0.910115709	Metabolism
0.015042898	Proliferation/Metastasis
0.47090573	Proliferation/Metastasis
0.2627598	Metabolism
0.138170004	Metabolism
0.040721499	Metabolism
0.003680211	Metabolism
0.415238312	Proliferation/Metastasis
0.497427833	Proliferation/Metastasis
0.398781722	Metabolism
0.861283007	Metabolism
0.170242374	Metabolism
0.524011481	TME
0.929213343	Metabolism
0.170078153	Metabolism
0.755310993	Metabolism
0.018833739	Metabolism
0.252112217	Proliferation/Metastasis
0.973680888	Metabolism
0.17196591	Metabolism
0.207984595	Metabolism
0.068274234	Metabolism
0.014648147	Metabolism
0.632271808	Metabolism
0.815764478	Proliferation/Metastasis
0.523754907	Metabolism
0.011665283	Metabolism
0.00151545	Proliferation/Metastasis
0.000302199	Metabolism
0.010025543	Metabolism
3.67E-05	Metabolism
0.403212229	Metabolism
0.946733476	Metabolism
0.560504288	Metabolism
0.791331166	Metabolism
0.001996441	Metabolism
0.708033386	TME
0.95653588	TME
0.19154696	TME
0.466354323	TME
0.510341147	TME
0.014486128	Metabolism
0.163984798	Metabolism

0.040631953	Proliferation/Metastasis
0.039609616	Metabolism
0.069495457	Proliferation/Metastasis
0.976362666	Metabolism
0.364670537	TME
0.471970537	Metabolism
0.239306	Metabolism
0.360756112	Metabolism
0.880099444	Metabolism
0.271747659	TME
0.140316154	TME
0.583235519	Proliferation/Metastasis
0.781853334	Metabolism
0.705695496	Proliferation/Metastasis
0.932094229	Proliferation/Metastasis
0.009980299	TME
0.001591555	TME
0.001527361	TME
0.000222428	TME
0.190328415	Metabolism
0.022139574	Proliferation/Metastasis
0.055248832	Metabolism
1.91E-05	Metabolism
0.126567151	Proliferation/Metastasis
0.001140849	Proliferation/Metastasis
0.010002775	Metabolism
0.00033015	Metabolism
0.000843253	Metabolism
0.589800742	Metabolism
0.032533579	TME
0.005658267	TME
0.006925464	TME
0.003645879	TME
1.42E-06	TME
0.645515115	Metabolism
0.002649989	Metabolism
0.638396156	Metabolism
0.546799403	Metabolism
0.537169777	Metabolism
0.055007462	TME
0.208163703	TME
4.19E-06	TME
0.005622128	TME

0.002985719	TME
0.008431793	TME
0.003231803	TME
0.000296535	TME
0.00043982	TME
0.1387022	Proliferation/Metastasis
0.0922978	Proliferation/Metastasis
0.960755665	Metabolism
0.050040762	Metabolism
0.099724525	TME
0.883969083	Metabolism
0.035726277	Metabolism
0.000118126	TME
0.050672553	Proliferation/Metastasis
0.105795544	Proliferation/Metastasis
0.029305086	TME
0.688919965	Metabolism
0.000266126	Metabolism
0.141564654	Proliferation/Metastasis
0.139152924	Proliferation/Metastasis
0.037609692	TME
1.13E-06	TME
0.007874596	TME
0.018622501	TME
0.086129214	Proliferation/Metastasis
0.043259465	TME
1.02E-05	TME
0.035542733	Metabolism
0.00058592	TME
8.19E-05	TME
0.001174825	TME
0.044721291	TME
0.823837756	Metabolism
0.188431978	Metabolism
0.130957922	Metabolism
0.042851442	TME
0.003936999	Metabolism
0.021917603	TME
0.01682047	TME
4.46E-05	TME
0.000987147	TME
0.061798232	TME
1.61E-05	Metabolism

0.313242838	Proliferation/Metastasis
1.90E-08	Metabolism
0.006989278	Proliferation/Metastasis
4.90E-06	Metabolism
1.10E-09	Metabolism
1.26E-05	Metabolism
0.003200783	Metabolism
0.039194818	Metabolism
0.043428569	Metabolism
0.575606093	Metabolism
0.014752658	Metabolism
0.03577512	Metabolism
0.00020157	Metabolism
0.001619163	Metabolism
0.040382448	Metabolism
0.555952934	Metabolism
0.465203062	Metabolism
0.000183253	TME
0.391696917	Proliferation/Metastasis
0.757523931	Metabolism
7.55E-09	Proliferation/Metastasis
0.001840421	TME
7.92E-07	Proliferation/Metastasis
6.75E-05	Proliferation/Metastasis
0.000314184	TME
4.62E-07	TME
0.023415178	Metabolism
0.580047499	Metabolism
0.001515027	Proliferation/Metastasis
0.232016564	Proliferation/Metastasis
0.000603063	Proliferation/Metastasis
0.443082533	Metabolism
0.042200577	Metabolism
0.000354603	Metabolism
6.25E-05	Proliferation/Metastasis
4.49E-05	TME
4.93E-05	TME
0.263572821	Metabolism
0.00245346	Proliferation/Metastasis
0.713515683	Metabolism
0.208907183	TME
0.185868032	TME
0.017487577	TME

0.003080043	TME
0.357793586	Metabolism
0.955744096	TME
0.27335544	Proliferation/Metastasis
9.08E-08	TME
0.12840476	Proliferation/Metastasis
5.37E-07	Proliferation/Metastasis
0.835736383	Metabolism
0.017348007	Proliferation/Metastasis
0.000270711	TME
0.684960787	Metabolism
0.000714511	TME
0.943612292	TME
0.212241119	TME
5.68E-05	TME
0.000757088	TME
0.000703437	TME
5.03E-09	Metabolism
1.85E-09	TME
0.010994069	Metabolism
0.379688685	Metabolism
0.010242596	Proliferation/Metastasis
0.211210633	Proliferation/Metastasis
0.425915237	Metabolism
0.369265738	Metabolism
0.79832374	Metabolism
0.012336877	Metabolism
4.34E-07	Proliferation/Metastasis
0.056743471	Proliferation/Metastasis
0.200710776	Metabolism
0.016355298	Metabolism
1.91E-05	Metabolism
0.016539989	TME
0.001134052	Metabolism
0.024972129	Metabolism
0.000260571	Metabolism
0.005684761	Metabolism
0.008522289	Proliferation/Metastasis
0.006120607	Metabolism
0.354216018	Metabolism
0.008421332	Metabolism
0.019956694	Metabolism
0.012293296	Metabolism

0.876092844	Metabolism
0.722087884	Proliferation/Metastasis
0.814402506	Metabolism
0.001153762	Metabolism
0.531378642	Proliferation/Metastasis
0.797590218	Metabolism
0.043270148	Metabolism
0.026250715	Metabolism
0.000402908	Metabolism
2.06E-05	Metabolism
0.185336255	Metabolism
0.34799977	Metabolism
0.00260406	Metabolism
0.000650173	TME
0.000206968	TME
5.88E-05	TME
4.96E-05	TME
0.001502072	TME
0.285482939	Metabolism
0.030685435	Metabolism
0.257812135	Proliferation/Metastasis
0.478669908	Metabolism
1.57E-05	Proliferation/Metastasis
0.11160878	Metabolism
0.002958454	TME
0.420076709	Metabolism
0.613051228	Metabolism
1.35E-06	Metabolism
0.157602186	Metabolism
0.024069551	TME
0.025675307	TME
0.000416194	Proliferation/Metastasis
0.769292128	Metabolism
0.000864919	Proliferation/Metastasis
0.844315379	Proliferation/Metastasis
0.167811109	TME
0.591797003	TME
0.386266596	TME
0.368389134	TME
0.1840348	Metabolism
0.126036643	Proliferation/Metastasis
0.779594945	Metabolism
0.191952608	Metabolism

0.708930284	Proliferation/Metastasis
0.01727361	Proliferation/Metastasis
0.385467029	Metabolism
0.04928492	Metabolism
0.023320962	Metabolism
0.33051131	Metabolism
0.19382515	TME
0.332493498	TME
0.589051292	TME
0.681505092	TME
0.02027672	TME
0.269120782	Metabolism
0.000735868	Metabolism
0.716631883	Metabolism
0.248852955	Metabolism
0.856037045	Metabolism
0.032611683	TME
0.303248131	TME
0.564708077	TME
0.229530238	TME
0.857918823	TME
0.844798042	TME
0.786259226	TME
0.722250538	TME
0.485678412	TME
0.145064539	Proliferation/Metastasis
0.343678499	Proliferation/Metastasis
0.187517486	Metabolism
0.22900254	Metabolism
0.70042299	TME
0.562229822	Metabolism
0.061785277	Metabolism
0.162398502	TME
0.545439015	Proliferation/Metastasis
0.074131019	Proliferation/Metastasis
0.664594302	TME
0.997705073	Metabolism
0.703015023	Metabolism
0.058729088	Proliferation/Metastasis
0.070617132	Proliferation/Metastasis
0.414456012	TME
0.22387042	TME
0.572940308	TME

0.64524841	TME
5.79E-05	Proliferation/Metastasis
0.052424166	TME
0.211244792	TME
0.416972336	Metabolism
0.56631624	TME
0.58095082	TME
0.963162958	TME
0.04785133	TME
0.906360068	Metabolism
0.819236688	Metabolism
0.083515894	Metabolism
0.314649174	TME
0.488585476	Metabolism
0.2850531	TME
0.120207827	TME
0.324031008	TME
0.170019115	TME
0.875669514	TME
0.148126506	Metabolism
0.037923738	Proliferation/Metastasis
0.027005463	Metabolism
0.201587449	Proliferation/Metastasis
0.846661002	Metabolism
0.015906164	Metabolism
0.900998227	Metabolism
0.126665449	Metabolism
0.131336379	Metabolism
0.352434586	Metabolism
0.628180727	Metabolism
0.057859381	Metabolism
0.084570191	Metabolism
0.909698281	Metabolism
0.268132315	Metabolism
0.816830117	Metabolism
0.256286219	Metabolism
0.791257226	Metabolism
0.259756901	TME
0.341712929	Proliferation/Metastasis
0.855843862	Metabolism
0.03480243	Proliferation/Metastasis
0.494451315	TME
0.025290269	Proliferation/Metastasis

0.041782061	Proliferation/Metastasis
0.047224095	TME
0.285349673	TME
0.388488876	Metabolism
0.089362781	Metabolism
0.36815375	Proliferation/Metastasis
0.191751881	Proliferation/Metastasis
0.014766692	Proliferation/Metastasis
0.404867179	Metabolism
0.016256725	Metabolism
0.848343117	Metabolism
0.306510436	Proliferation/Metastasis
0.439001618	TME
0.226868279	TME
0.228042912	Metabolism
0.087834423	Proliferation/Metastasis
0.089032571	Metabolism
0.229000682	TME
0.709021177	TME
0.256216011	TME
0.132511685	TME
0.880613443	Metabolism
0.344952469	TME
0.077719973	Proliferation/Metastasis
0.167050015	TME
0.633982827	Proliferation/Metastasis
0.000735674	Proliferation/Metastasis
0.008876235	Metabolism
0.087201737	Proliferation/Metastasis
0.220923251	TME
0.007860557	Metabolism
0.141850859	TME
0.866850636	TME
0.458589452	TME
0.485289906	TME
0.354828938	TME
0.594788455	TME
0.022784616	Metabolism
0.040524269	TME
0.217669094	Metabolism
0.654725871	Metabolism
0.051558745	Proliferation/Metastasis
0.151489117	Proliferation/Metastasis

0.424766431	Metabolism
0.357751956	Metabolism
0.615041529	Metabolism
0.871903507	Metabolism
0.195107273	Proliferation/Metastasis
0.273663654	Proliferation/Metastasis
0.087696885	Metabolism
0.666139777	Metabolism
0.051695838	Metabolism
0.359915741	TME
0.95055234	Metabolism
0.320875813	Metabolism
0.573381707	Metabolism
0.572873586	Metabolism
0.020982616	Proliferation/Metastasis
0.021223049	Metabolism
0.341971908	Metabolism
0.666763355	Metabolism
0.077211572	Metabolism
0.321261575	Metabolism
0.230188681	Metabolism
0.590736587	Proliferation/Metastasis
0.814041944	Metabolism
0.708583332	Metabolism
0.024717855	Proliferation/Metastasis
0.01411656	Metabolism
0.404219059	Metabolism
0.015931705	Metabolism
0.720139317	Metabolism
0.001000141	Metabolism
0.614858921	Metabolism
0.996789354	Metabolism
0.454634189	Metabolism
0.446321955	TME
0.648356586	TME
0.23601135	TME
0.151199689	TME
0.818401754	TME
0.014608746	Metabolism
0.753377367	Metabolism
0.380763984	Proliferation/Metastasis
0.918215887	Metabolism
0.01006022	Proliferation/Metastasis

0.373441799	Metabolism
0.009572942	TME
0.558324157	Metabolism
0.577205794	Metabolism
0.238922365	Metabolism
0.89576417	Metabolism
0.806071185	TME
0.633209826	TME
0.207720784	Proliferation/Metastasis
0.60748413	Metabolism
0.004415952	Proliferation/Metastasis
0.817166953	Proliferation/Metastasis
0.00600724	TME
0.920379093	TME
0.669188157	TME
0.577859729	TME
0.002358282	Metabolism
0.582201976	Proliferation/Metastasis
0.846330484	Metabolism
0.154264524	Metabolism
0.014017881	Proliferation/Metastasis
8.42E-07	Proliferation/Metastasis
5.08E-05	Metabolism
0.008821091	Metabolism
0.727505566	Metabolism
0.107858571	Metabolism
0.579250086	TME
3.03E-05	TME
0.816405288	TME
0.377940263	TME
2.78E-11	TME
0.517710097	Metabolism
0.447660456	Metabolism
0.092579597	Metabolism
0.013050093	Metabolism
0.42196498	Metabolism
0.000577566	TME
0.492080155	TME
0.065781035	TME
0.819837909	TME
0.411410574	TME
0.613117988	TME
0.517222948	TME

0.883325238	TME
0.046095382	TME
0.049932131	Proliferation/Metastasis
0.00037034	Proliferation/Metastasis
0.051796542	Metabolism
0.048587508	Metabolism
0.1263876	TME
0.259540973	Metabolism
0.217843	Metabolism
0.086484739	TME
0.680974057	Proliferation/Metastasis
0.107097651	Proliferation/Metastasis
0.278866343	TME
0.02917521	Metabolism
0.199698334	Metabolism
0.017914226	Proliferation/Metastasis
0.006995792	Proliferation/Metastasis
0.608918747	TME
0.11632155	TME
0.432483899	TME
0.337694365	TME
0.804244085	Proliferation/Metastasis
1.78E-05	TME
0.118080777	TME
0.622735924	Metabolism
0.223087835	TME
0.187366036	TME
0.905309367	TME
3.63E-06	TME
0.078388747	Metabolism
0.556382911	Metabolism
0.417575848	Metabolism
5.64E-05	TME
0.20127242	Metabolism
0.371017747	TME
0.019806983	TME
0.976430528	TME
0.025919022	TME
0.297208334	TME
0.822039926	Metabolism
0.00734786	Proliferation/Metastasis
0.08714297	Metabolism
8.78E-09	Proliferation/Metastasis

0.298797666	Metabolism
0.391698691	Metabolism
0.060267283	Metabolism
0.79590935	Metabolism
0.322920108	Metabolism
7.43E-10	Metabolism
0.001550498	Metabolism
0.255102647	Metabolism
0.198113397	Metabolism
0.03670002	Metabolism
4.39E-05	Metabolism
0.029926637	Metabolism
0.068209632	Metabolism
0.033644581	Metabolism
0.165703633	TME
9.08E-06	Proliferation/Metastasis
0.007179434	Metabolism
3.50E-05	Proliferation/Metastasis
0.885282971	TME
0.000534031	Proliferation/Metastasis
0.052735959	Proliferation/Metastasis
0.79229289	TME
0.20011705	TME
0.044072055	Metabolism
0.005231134	Metabolism
0.257125645	Proliferation/Metastasis
1.14E-05	Proliferation/Metastasis
6.08E-06	Proliferation/Metastasis
0.74195356	Metabolism
0.075007348	Metabolism
3.05E-05	Metabolism
0.208728242	Proliferation/Metastasis
0.34380437	TME
0.011724678	TME
0.406306471	Metabolism
5.52E-06	Proliferation/Metastasis
0.021131806	Metabolism
0.774072525	TME
0.725321053	TME
2.65E-08	TME
0.006144806	TME
0.008843631	Metabolism
0.289927142	TME

0.00360326	Proliferation/Metastasis
0.003620545	TME
0.001509485	Proliferation/Metastasis
0.361339024	Proliferation/Metastasis
0.004257457	Metabolism
0.422471263	Proliferation/Metastasis
0.215829909	TME
0.674202123	Metabolism
0.019376018	TME
0.075074206	TME
0.021039757	TME
0.346055673	TME
0.839179919	TME
0.376065556	TME
0.033725987	Metabolism
0.002491093	TME
0.841999327	Metabolism
0.034580327	Metabolism
0.511958301	Proliferation/Metastasis
0.001609319	Proliferation/Metastasis
0.08299835	Metabolism
0.167674222	Metabolism
0.123855406	Metabolism
0.743379799	Metabolism
0.001467721	Proliferation/Metastasis
0.744374163	Proliferation/Metastasis
0.246212656	Metabolism
0.183541342	Metabolism
0.017006224	Metabolism
3.16E-05	TME
0.144318659	Metabolism
0.112683092	Metabolism
0.024986434	Metabolism
0.721119235	Metabolism
0.445142591	Proliferation/Metastasis
0.658410282	Metabolism
0.001678329	Metabolism
0.023674419	Metabolism
0.963803509	Metabolism
0.316078969	Metabolism
0.031908014	Metabolism
0.36071646	Proliferation/Metastasis
0.002553656	Metabolism

0.017558932	Metabolism
0.560867431	Proliferation/Metastasis
0.66272452	Metabolism
0.26202313	Metabolism
0.382843782	Metabolism
0.98242035	Metabolism
0.214219037	Metabolism
0.30470593	Metabolism
0.003221158	Metabolism
0.007326752	Metabolism
0.209694871	TME
0.505950425	TME
0.290429944	TME
0.113253123	TME
0.437249364	TME
0.676044525	Metabolism
0.173355512	Metabolism
0.008219441	Proliferation/Metastasis
0.339455067	Metabolism
0.064207794	Proliferation/Metastasis
0.431791231	Metabolism
0.000850943	TME
0.002484471	Metabolism
0.868397327	Metabolism
0.000114583	Metabolism
0.114871258	Metabolism
0.020579816	TME
0.00418439	TME
0.013586731	Proliferation/Metastasis
0.034965678	Metabolism
1.76E-07	Proliferation/Metastasis
0.003134762	Proliferation/Metastasis
0.879621939	TME
0.700156001	TME
0.565458098	TME
0.757229952	TME
0.158915807	Metabolism
0.457132092	Proliferation/Metastasis
0.65742357	Metabolism
0.023953477	Metabolism
0.026779051	Proliferation/Metastasis
0.880478511	Proliferation/Metastasis
0.00811677	Metabolism

0.172674044	Metabolism
0.372662023	Metabolism
0.440374031	Metabolism
0.13819688	TME
0.729027465	TME
0.111232964	TME
0.835206909	TME
0.632005899	TME
0.415780836	Metabolism
3.72E-06	Metabolism
0.934188343	Metabolism
0.01057933	Metabolism
0.426728119	Metabolism
0.047415837	TME
0.942771434	TME
0.646895128	TME
0.415987589	TME
0.714522031	TME
0.606108651	TME
0.608931233	TME
0.628710018	TME
0.992196929	TME
0.025811438	Proliferation/Metastasis
0.000955653	Proliferation/Metastasis
0.039253434	Metabolism
0.649355353	Metabolism
0.257095236	TME
0.463192571	Metabolism
0.553213915	Metabolism
0.41322583	TME
6.79E-06	Proliferation/Metastasis
3.22E-06	Proliferation/Metastasis
0.946741624	TME
0.994938271	Metabolism
0.006201896	Metabolism
0.019219037	Proliferation/Metastasis
0.485053847	Proliferation/Metastasis
0.343197839	TME
0.298547994	TME
0.504126033	TME
0.447380698	TME
0.825277295	Proliferation/Metastasis
0.730472772	TME

0.579208557	TME
0.414258176	Metabolism
0.776509133	TME
0.3357306	TME
0.90169405	TME
0.044718117	TME
0.431098994	Metabolism
0.002020799	Metabolism
0.004108171	Metabolism
0.584133118	TME
0.000165625	Metabolism
0.074760165	TME
0.504526622	TME
0.37775547	TME
0.561628856	TME
0.584211188	TME
0.308699905	Metabolism
0.098198932	Proliferation/Metastasis
0.028798092	Metabolism
0.766718531	Proliferation/Metastasis
0.004324478	Metabolism
0.201214582	Metabolism
0.011509652	Metabolism
0.009917165	Metabolism
0.006472948	Metabolism
0.710494144	Metabolism
0.814003951	Metabolism
0.011945567	Metabolism
0.231283387	Metabolism
0.02581329	Metabolism
0.015662897	Metabolism
0.275257509	Metabolism
0.073059743	Metabolism
0.168102359	Metabolism
0.590699911	TME
0.007864784	Proliferation/Metastasis
0.676198165	Metabolism
0.671610688	Proliferation/Metastasis
0.733606835	TME
0.331320584	Proliferation/Metastasis
0.20054682	Proliferation/Metastasis
0.193800857	TME
0.783749351	TME

0.140460841	Metabolism
2.38E-05	Metabolism
0.036977141	Proliferation/Metastasis
0.00758322	Proliferation/Metastasis
0.220971863	Proliferation/Metastasis
0.39510306	Metabolism
0.161571247	Metabolism
0.622478593	Metabolism
0.970150482	Proliferation/Metastasis
0.37082722	TME
0.537232642	TME
0.003980464	Metabolism
0.242113946	Proliferation/Metastasis
0.002299366	Metabolism
0.898810981	TME
0.345768589	TME
0.729744038	TME
0.18349659	TME
0.160034612	Metabolism
0.100433913	TME
0.291413605	Proliferation/Metastasis
0.824399373	TME
0.185188616	Proliferation/Metastasis
0.45971665	Proliferation/Metastasis
0.061028961	Metabolism
0.094565929	Proliferation/Metastasis
0.510778561	TME
7.14E-05	Metabolism
0.554790211	TME
0.018325585	TME
2.07E-05	TME
0.514283303	TME
0.834844569	TME
0.149460321	TME
0.749286116	Metabolism
0.684394959	TME
0.141324192	Metabolism
0.863103237	Metabolism
0.106168724	Proliferation/Metastasis
0.005182407	Proliferation/Metastasis
0.294197422	Metabolism
0.579965318	Metabolism
0.152045226	Metabolism

0.006291275	Metabolism
0.125091523	Proliferation/Metastasis
0.812890099	Proliferation/Metastasis
0.384203799	Metabolism
0.430295072	Metabolism
0.061803547	Metabolism
0.742800821	TME
0.295532792	Metabolism
0.981367965	Metabolism
0.208272101	Metabolism
0.06110599	Metabolism
0.292167553	Proliferation/Metastasis
0.187691773	Metabolism
0.065991089	Metabolism
0.566689325	Metabolism
0.012966908	Metabolism
4.54E-05	Metabolism
0.000725304	Metabolism
0.284345959	Proliferation/Metastasis
0.00032027	Metabolism
0.038965428	Metabolism
0.393621154	Proliferation/Metastasis
0.000123997	Metabolism
0.037885998	Metabolism
0.215673971	Metabolism
0.240928108	Metabolism
7.55E-06	Metabolism
0.677776329	Metabolism
0.207044162	Metabolism
9.71E-05	Metabolism
0.257900053	TME
0.281455827	TME
0.360341286	TME
0.537144364	TME
0.447680443	TME
0.379394943	Metabolism
0.431596323	Metabolism
0.015440044	Proliferation/Metastasis
0.005701035	Metabolism
0.426261958	Proliferation/Metastasis
0.016984263	Metabolism
0.801384219	TME
0.004582385	Metabolism

0.958819093	Metabolism
0.594394824	Metabolism
0.371785495	Metabolism
0.825195055	TME
0.81142996	TME
0.363712983	Proliferation/Metastasis
0.173743561	Metabolism
0.423661527	Proliferation/Metastasis
0.284367047	Proliferation/Metastasis
0.164957822	TME
0.816955713	TME
0.445709651	TME
0.920246691	TME
8.95E-07	Metabolism
3.98E-07	Proliferation/Metastasis
0.155723508	Metabolism
2.31E-07	Metabolism
0.227810226	Proliferation/Metastasis
0.04989629	Proliferation/Metastasis
0.806407475	Metabolism
8.74E-08	Metabolism
0.009573493	Metabolism
5.64E-07	Metabolism
0.585905216	TME
4.73E-05	TME
0.74712624	TME
0.548867208	TME
0.447392867	TME
0.002892408	Metabolism
2.51E-06	Metabolism
0.051712781	Metabolism
2.66E-05	Metabolism
0.921539108	Metabolism
0.002263232	TME
0.065486229	TME
0.003343743	TME
0.712987857	TME
0.028516353	TME
0.22301391	TME
0.226497858	TME
0.697773689	TME
0.926385988	TME
2.44E-06	Proliferation/Metastasis

0.936184968	Proliferation/Metastasis
0.000276159	Metabolism
5.99E-10	Metabolism
0.059465277	TME
0.072263024	Metabolism
0.673010802	Metabolism
0.152759129	TME
7.31E-14	Proliferation/Metastasis
3.63E-13	Proliferation/Metastasis
0.205496846	TME
3.04E-05	Metabolism
3.77E-18	Metabolism
7.41E-11	Proliferation/Metastasis
8.87E-06	Proliferation/Metastasis
0.164832924	TME
0.00072227	TME
0.505561187	TME
0.02174819	TME
1.25E-06	Proliferation/Metastasis
0.296497146	TME
0.331522415	TME
0.498417725	Metabolism
0.570065414	TME
0.190227935	TME
0.793923101	TME
0.468000346	TME
0.044207886	Metabolism
2.50E-05	Metabolism
1.34E-11	Metabolism
0.00827329	TME
8.42E-05	Metabolism
0.080088456	TME
0.02435389	TME
0.349142243	TME
0.537283877	TME
0.977942006	TME
3.05E-06	Metabolism
8.92E-06	Proliferation/Metastasis
0.000121913	Metabolism
0.000191757	Proliferation/Metastasis
6.39E-11	Metabolism
0.524882952	Metabolism
0.626885131	Metabolism

7.87E-06	Metabolism
1.17E-07	Metabolism
0.302012554	Metabolism
0.01289047	Metabolism
0.447771835	Metabolism
0.137941671	Metabolism
0.419426504	Metabolism
0.839364229	Metabolism
0.300309488	Metabolism
2.64E-06	Metabolism
1.42E-09	Metabolism
0.425172665	TME
1.08E-05	Proliferation/Metastasis
0.900952561	Metabolism
0.426904224	Proliferation/Metastasis
0.984871659	TME
0.425761682	Proliferation/Metastasis
0.449168805	Proliferation/Metastasis
0.417980352	TME
0.403241919	TME
3.14E-05	Metabolism
0.01240922	Metabolism
0.0435511	Proliferation/Metastasis
6.16E-10	Proliferation/Metastasis
0.005703978	Proliferation/Metastasis
0.357683392	Metabolism
0.079887257	Metabolism
0.912361037	Metabolism
0.421431243	Proliferation/Metastasis
0.515574095	TME
0.222603385	TME
0.124781666	Metabolism
2.72E-05	Proliferation/Metastasis
0.381825473	Metabolism
0.884601194	TME
0.172745799	TME
0.805518386	TME
0.004734864	TME
5.57E-07	Metabolism
0.272428246	TME
0.023080528	Proliferation/Metastasis
0.315374313	TME
0.173817073	Proliferation/Metastasis

1.07E-11	Proliferation/Metastasis
0.001921471	Metabolism
6.14E-18	Proliferation/Metastasis
0.118030733	TME
0.001249428	Metabolism
0.042339427	TME
2.40E-05	TME
8.17E-06	TME
0.539358397	TME
2.30E-05	TME
0.000204534	TME
0.916566606	Metabolism
0.881366351	TME
0.002032033	Metabolism
0.876009146	Metabolism
0.623463526	Proliferation/Metastasis
0.240915128	Proliferation/Metastasis
7.69E-07	Metabolism
0.321562282	Metabolism
0.382628683	Metabolism
1.13E-07	Metabolism
0.607593424	Proliferation/Metastasis
0.197509119	Proliferation/Metastasis
0.025533174	Metabolism
1.93E-13	Metabolism
3.57E-08	Metabolism
0.016758805	TME
0.02694217	Metabolism
0.0204638	Metabolism
0.000214777	Metabolism
0.661808489	Metabolism
0.002221464	Proliferation/Metastasis
1.32E-09	Metabolism
0.004749686	Metabolism
0.013807292	Metabolism
2.27E-27	Metabolism
2.41E-25	Metabolism
4.65E-08	Metabolism
0.756603454	Proliferation/Metastasis
0.005786554	Metabolism
7.11E-08	Metabolism
6.86E-06	Proliferation/Metastasis
1.10E-09	Metabolism

0.000673721	Metabolism
0.021567205	Metabolism
0.900545467	Metabolism
1.65E-06	Metabolism
0.000825025	Metabolism
0.001019866	Metabolism
2.67E-05	Metabolism
0.351433204	TME
0.642828102	TME
0.12276588	TME
0.219771923	TME
0.277723309	TME
0.39646316	Metabolism
1.91E-07	Metabolism
0.026223047	Proliferation/Metastasis
0.016114181	Metabolism
0.321077121	Proliferation/Metastasis
0.000219715	Metabolism
0.547877548	TME
0.015565913	Metabolism
6.10E-07	Metabolism
0.17963357	Metabolism
9.12E-05	Metabolism
0.189687396	TME
0.013599126	TME
0.040245475	Proliferation/Metastasis
0.095543955	Metabolism
0.001057621	Proliferation/Metastasis
0.053388905	Proliferation/Metastasis
0.076747118	TME
0.069398558	TME
0.009414697	TME
0.002672718	TME
0.641715552	Metabolism
0.006050435	Proliferation/Metastasis
0.192773544	Metabolism
0.241587533	Metabolism
1.64E-05	Proliferation/Metastasis
8.31E-06	Proliferation/Metastasis
0.016268826	Metabolism
0.016337794	Metabolism
0.778637385	Metabolism
0.892965284	Metabolism

0.037891663	TME
0.00368767	TME
0.00015838	TME
0.114780278	TME
3.19E-05	TME
0.001046977	Metabolism
0.006259915	Metabolism
0.331074616	Metabolism
0.569764752	Metabolism
0.019963207	Metabolism
3.78E-06	TME
0.000833522	TME
0.001796327	TME
0.021213036	TME
0.000879682	TME
0.00515616	TME
0.003855193	TME
0.012745037	TME
0.008865074	TME
0.606762305	Proliferation/Metastasis
0.235408149	Proliferation/Metastasis
0.405581753	Metabolism
0.168670541	Metabolism
0.031969723	TME
0.028756969	Metabolism
0.61937741	Metabolism
0.001507755	TME
0.383884452	Proliferation/Metastasis
0.918692161	Proliferation/Metastasis
0.575566972	TME
0.072796871	Metabolism
0.717829795	Metabolism
0.369081963	Proliferation/Metastasis
0.004427922	Proliferation/Metastasis
0.006117761	TME
0.00163476	TME
0.001072502	TME
0.001430336	TME
0.05494551	Proliferation/Metastasis
2.88E-05	TME
0.001046466	TME
0.564837695	Metabolism
2.59E-05	TME

0.00012867	TME
0.030140552	TME
0.164543353	TME
0.700258259	Metabolism
0.767620343	Metabolism
0.038122804	Metabolism
0.000517098	TME
0.718828929	Metabolism
0.018754321	TME
0.000551861	TME
0.002656286	TME
0.05424922	TME
0.098315729	TME
0.375800024	Metabolism
0.963090809	Proliferation/Metastasis
0.391491389	Metabolism
5.69E-05	Proliferation/Metastasis
0.069179468	Metabolism
0.7763743	Metabolism
0.002723194	Metabolism
0.150497525	Metabolism
0.361730106	Metabolism
2.48E-05	Metabolism
2.95E-05	Metabolism
0.013105337	Metabolism
0.029928079	Metabolism
0.092715921	Metabolism
0.208521853	Metabolism
0.05278845	Metabolism
0.359555849	Metabolism
0.117898076	Metabolism
0.000868595	TME
0.004858536	Proliferation/Metastasis
0.001491994	Metabolism
0.000801728	Proliferation/Metastasis
0.012633028	TME
1.75E-05	Proliferation/Metastasis
0.000826305	Proliferation/Metastasis
0.001656505	TME
0.01614822	TME
0.523209304	Metabolism
0.03109599	Metabolism
0.029870431	Proliferation/Metastasis

0.364696722	Proliferation/Metastasis
5.71E-07	Proliferation/Metastasis
0.87141174	Metabolism
0.031382131	Metabolism
0.514533363	Metabolism
0.001704653	Proliferation/Metastasis
0.00070175	TME
0.002175068	TME
0.276070374	Metabolism
0.002401718	Proliferation/Metastasis
0.003982271	Metabolism
0.090233089	TME
0.031042083	TME
3.03E-05	TME
0.000224763	TME
0.038990043	Metabolism
0.001347486	TME
0.800841743	Proliferation/Metastasis
0.000188615	TME
0.197274551	Proliferation/Metastasis
0.001102092	Proliferation/Metastasis
0.001290264	Metabolism
0.240736878	Proliferation/Metastasis
0.001058337	TME
0.018282722	Metabolism
0.64882082	TME
0.0008041	TME
0.000260402	TME
0.000789805	TME
0.07044757	TME
5.60E-05	TME
0.800118964	Metabolism
8.23E-05	TME
0.154009823	Metabolism
0.074950751	Metabolism
0.002622534	Proliferation/Metastasis
0.260554566	Proliferation/Metastasis
0.831306271	Metabolism
0.377861413	Metabolism
0.228473673	Metabolism
0.861746413	Metabolism
0.001774376	Proliferation/Metastasis
0.008327753	Proliferation/Metastasis

0.032419659	Metabolism
0.148159744	Metabolism
0.116970369	Metabolism
0.000327638	TME
0.045758099	Metabolism
0.436549878	Metabolism
0.080779288	Metabolism
0.000118985	Metabolism
0.022500244	Proliferation/Metastasis
0.825594775	Metabolism
0.02344765	Metabolism
0.206133101	Metabolism
0.622849553	Metabolism
0.945575452	Metabolism
0.315190316	Metabolism
0.659317868	Proliferation/Metastasis
0.000557226	Metabolism
0.748007212	Metabolism
0.004742669	Proliferation/Metastasis
0.452451394	Metabolism
0.058983542	Metabolism
0.004172677	Metabolism
0.439355794	Metabolism
0.237746016	Metabolism
0.005347854	Metabolism
0.023718519	Metabolism
0.324020512	Metabolism
0.00028151	TME
0.001440224	TME
0.016246249	TME
0.00080096	TME
0.006683399	TME
0.133509047	Metabolism
0.152608477	Metabolism
0.001313165	Proliferation/Metastasis
0.070419145	Metabolism
0.002708476	Proliferation/Metastasis
0.213327774	Metabolism
0.433421081	TME
0.023720609	Metabolism
0.436191114	Metabolism
0.028414672	Metabolism
0.843561791	Metabolism

0.027521025	TME
0.01249696	TME
0.133795589	Proliferation/Metastasis
0.993306082	Metabolism
0.02487817	Proliferation/Metastasis
0.302875188	Proliferation/Metastasis
0.461961821	TME
2.45E-14	TME
2.87E-18	TME
3.16E-14	TME
0.674983852	Metabolism
1.25E-11	Proliferation/Metastasis
0.114667079	Metabolism
4.71E-23	Metabolism
0.043502358	Proliferation/Metastasis
1.01E-08	Proliferation/Metastasis
3.76E-11	Metabolism
0.001311206	Metabolism
0.021761788	Metabolism
0.021801976	Metabolism
4.79E-05	TME
3.68E-13	TME
4.16E-11	TME
4.67E-07	TME
7.09E-15	TME
0.24021629	Metabolism
1.76E-05	Metabolism
0.035036764	Metabolism
0.745798264	Metabolism
0.929294498	Metabolism
1.15E-05	TME
3.13E-06	TME
9.11E-16	TME
5.29E-10	TME
3.29E-13	TME
3.76E-14	TME
4.20E-15	TME
1.03E-16	TME
2.53E-14	TME
0.894575881	Proliferation/Metastasis
1.10E-07	Proliferation/Metastasis
3.91E-09	Metabolism
0.15156402	Metabolism

0.002687646	TME
0.020898798	Metabolism
0.45617483	Metabolism
4.94E-21	TME
0.000272409	Proliferation/Metastasis
0.056424752	Proliferation/Metastasis
0.000337501	TME
0.612046604	Metabolism
1.70E-06	Metabolism
0.652290184	Proliferation/Metastasis
0.002893721	Proliferation/Metastasis
2.05E-13	TME
1.57E-15	TME
1.25E-13	TME
3.13E-12	TME
0.000658046	Proliferation/Metastasis
1.87E-06	TME
6.42E-22	TME
0.071543656	Metabolism
8.48E-22	TME
4.19E-16	TME
1.14E-13	TME
0.713553326	TME
0.048517727	Metabolism
0.00339592	Metabolism
3.53E-05	Metabolism
8.63E-10	TME
0.002916319	Metabolism
1.55E-10	TME
0.002625649	TME
1.60E-13	TME
4.51E-12	TME
4.26E-11	TME
2.58E-09	Metabolism
0.272610951	Proliferation/Metastasis
5.73E-12	Metabolism
0.003760834	Proliferation/Metastasis
1.25E-10	Metabolism
0.197612907	Metabolism
0.947993978	Metabolism
0.008153807	Metabolism
2.80E-10	Metabolism
0.00073103	Metabolism

0.881782528	Metabolism
3.31E-06	Metabolism
0.001885985	Metabolism
1.24E-15	Metabolism
1.45E-23	Metabolism
1.15E-08	Metabolism
0.327593833	Metabolism
0.000532386	Metabolism
1.20E-19	TME
0.010234139	Proliferation/Metastasis
0.005947794	Metabolism
3.15E-15	Proliferation/Metastasis
8.22E-15	TME
1.02E-21	Proliferation/Metastasis
1.31E-22	Proliferation/Metastasis
3.40E-21	TME
6.16E-24	TME
0.030311197	Metabolism
0.546168357	Metabolism
1.59E-09	Proliferation/Metastasis
0.005537526	Proliferation/Metastasis
4.29E-17	Proliferation/Metastasis
0.044020335	Metabolism
0.041450572	Metabolism
8.97E-15	Metabolism
1.33E-15	Proliferation/Metastasis
1.54E-20	TME
8.89E-21	TME
0.361078407	Metabolism
0.000316571	Proliferation/Metastasis
0.013347801	Metabolism
8.01E-13	TME
6.61E-10	TME
1.09E-06	TME
7.13E-14	TME
0.050920245	Metabolism
3.92E-05	TME
0.000159824	Proliferation/Metastasis
1.64E-28	TME
0.187726308	Proliferation/Metastasis
2.07E-17	Proliferation/Metastasis
0.017761941	Metabolism
0.310991454	Proliferation/Metastasis

4.44E-19	TME
5.09E-12	Metabolism
9.58E-05	TME
0.000106847	TME
0.163583982	TME
2.90E-19	TME
1.22E-15	TME
7.99E-11	TME
0.156576394	Metabolism
9.58E-31	TME
8.54E-12	Metabolism
0.20297041	Metabolism
3.21E-18	Proliferation/Metastasis
0.666310657	Proliferation/Metastasis
0.07450952	Metabolism
0.000350498	Metabolism
0.210325186	Metabolism
4.20E-11	Metabolism
1.68E-17	Proliferation/Metastasis
0.000413958	Proliferation/Metastasis
1.15E-06	Metabolism
0.027752297	Metabolism
1.03E-07	Metabolism
2.72E-07	TME
9.82E-06	Metabolism
0.000107879	Metabolism
2.69E-07	Metabolism
0.068672525	Metabolism
8.75E-15	Proliferation/Metastasis
9.48E-05	Metabolism
2.14E-12	Metabolism
0.149144726	Metabolism
0.000105922	Metabolism
3.28E-06	Metabolism
1.71E-06	Metabolism
2.17E-06	Proliferation/Metastasis
0.208750596	Metabolism
6.73E-09	Metabolism
0.160653779	Proliferation/Metastasis
1.70E-05	Metabolism
4.76E-05	Metabolism
1.20E-09	Metabolism
0.013623231	Metabolism

9.42E-19	Metabolism
0.413356687	Metabolism
8.67E-05	Metabolism
0.185851383	Metabolism
4.51E-16	TME
1.68E-17	TME
3.17E-16	TME
8.12E-12	TME
7.00E-12	TME
0.023264653	Metabolism
0.003539644	Metabolism
0.163408294	Proliferation/Metastasis
0.076961974	Metabolism
3.20E-16	Proliferation/Metastasis
2.62E-06	Metabolism
0.272830246	TME
0.000524887	Metabolism
0.000767718	Metabolism
2.82E-08	Metabolism
0.275572121	Metabolism
1.14E-10	TME
0.588308626	TME
2.10E-05	Proliferation/Metastasis
0.002036631	Metabolism
3.88E-09	Proliferation/Metastasis
4.81E-12	Proliferation/Metastasis
0.000139763	TME
0.85892258	TME
0.186862442	TME
0.037740882	TME
0.914721848	Metabolism
0.286606611	Proliferation/Metastasis
0.616484847	Metabolism
0.197826263	Metabolism
0.030555872	Proliferation/Metastasis
0.000735696	Proliferation/Metastasis
0.249729735	Metabolism
0.077032115	Metabolism
0.186261877	Metabolism
0.357078649	Metabolism
0.002843279	TME
0.191245301	TME
0.850307875	TME

0.405595348	TME
0.019610038	TME
0.03473267	Metabolism
5.68E-05	Metabolism
0.320779548	Metabolism
0.011925415	Metabolism
0.835893917	Metabolism
0.000272964	TME
0.071523197	TME
0.547725625	TME
0.03103491	TME
0.094634938	TME
0.195537321	TME
0.143410253	TME
0.430850316	TME
0.073222952	TME
0.104710005	Proliferation/Metastasis
0.449891494	Proliferation/Metastasis
0.985327939	Metabolism
0.63722378	Metabolism
0.025912197	TME
0.919050989	Metabolism
0.052162578	Metabolism
0.293141992	TME
0.284520912	Proliferation/Metastasis
0.168980848	Proliferation/Metastasis
0.213182516	TME
0.889339264	Metabolism
0.786835779	Metabolism
0.27907197	Proliferation/Metastasis
3.50E-05	Proliferation/Metastasis
0.232539309	TME
0.59661146	TME
0.033569659	TME
0.134964095	TME
0.017525811	Proliferation/Metastasis
5.57E-05	TME
0.461851905	TME
0.548679301	Metabolism
0.336680564	TME
0.424834569	TME
0.353975159	TME
0.004184744	TME

0.226162209	Metabolism
0.02503822	Metabolism
0.702780666	Metabolism
6.84E-05	TME
0.349084986	Metabolism
0.625590528	TME
0.255594817	TME
0.148186638	TME
0.44679708	TME
0.04554415	TME
0.42748576	Metabolism
0.093930841	Proliferation/Metastasis
0.095806695	Metabolism
0.0005441	Proliferation/Metastasis
0.388481869	Metabolism
0.660798335	Metabolism
0.470048256	Metabolism
0.8301672	Metabolism
0.225767718	Metabolism
4.56E-06	Metabolism
0.003863633	Metabolism
0.013422123	Metabolism
0.843315077	Metabolism
0.0026645	Metabolism
0.001689843	Metabolism
0.220459654	Metabolism
0.308980836	Metabolism
0.507069994	Metabolism
0.228653488	TME
0.073239238	Proliferation/Metastasis
0.853886692	Metabolism
0.018257749	Proliferation/Metastasis
0.057740101	TME
0.002672082	Proliferation/Metastasis
0.086239966	Proliferation/Metastasis
0.33487973	TME
0.066091801	TME
0.905435393	Metabolism
0.38270659	Metabolism
1.61E-05	Proliferation/Metastasis
0.74003974	Proliferation/Metastasis
0.000760947	Proliferation/Metastasis
0.962171156	Metabolism

0.065933433	Metabolism
0.614521985	Metabolism
0.10294725	Proliferation/Metastasis
0.560134106	TME
0.15081489	TME
0.188709921	Metabolism
0.004845409	Proliferation/Metastasis
0.228103021	Metabolism
0.2364087	TME
0.560238852	TME
6.56E-06	TME
0.002449337	TME
0.766415866	Metabolism
0.755137888	TME
0.035048849	Proliferation/Metastasis
0.291138457	TME
0.284437162	Proliferation/Metastasis
0.065633192	Proliferation/Metastasis
0.010837668	Metabolism
0.72568053	Proliferation/Metastasis
0.208061512	TME
0.002338664	Metabolism
0.308995229	TME
0.589104123	TME
0.916497259	TME
0.108854413	TME
0.66995502	TME
0.096900719	TME
0.194379376	Metabolism
0.18171407	TME
0.535309049	Metabolism
0.783412705	Metabolism
0.832492866	Proliferation/Metastasis
0.001516745	Proliferation/Metastasis
0.776690601	Metabolism
0.552658721	Metabolism
0.436088642	Metabolism
0.748178476	Metabolism
0.917868433	Proliferation/Metastasis
0.903442301	Proliferation/Metastasis
0.5596455	Metabolism
0.991463381	Metabolism
0.583170241	Metabolism

5.70E-05	TME
0.945978585	Metabolism
0.162505732	Metabolism
0.417975212	Metabolism
0.853612474	Metabolism
0.007856121	Proliferation/Metastasis
0.447475825	Metabolism
0.781360906	Metabolism
0.000407447	Metabolism
0.219043314	Metabolism
0.309324933	Metabolism
0.257071016	Metabolism
0.903184358	Proliferation/Metastasis
0.15843002	Metabolism
0.089252021	Metabolism
0.533352369	Proliferation/Metastasis
0.86950183	Metabolism
0.060045739	Metabolism
0.002723217	Metabolism
0.671067435	Metabolism
0.318963511	Metabolism
0.176151012	Metabolism
0.045527425	Metabolism
0.157741914	Metabolism
0.05672021	TME
0.315138931	TME
0.225664967	TME
0.119990555	TME
0.141808015	TME
0.049680167	Metabolism
0.316364312	Metabolism
7.57E-05	Proliferation/Metastasis
0.716136294	Metabolism
0.311700017	Proliferation/Metastasis
0.547545342	Metabolism
0.446799712	TME
0.409353624	Metabolism
0.359251839	Metabolism
0.618764312	Metabolism
0.00128193	Metabolism
0.005675313	TME
0.00019378	TME
0.041991815	Proliferation/Metastasis

0.953791941	Metabolism
0.002232064	Proliferation/Metastasis
0.152577448	Proliferation/Metastasis
0.001309529	TME
0.686265247	TME
0.116002105	TME
0.214864127	TME
0.05561627	Metabolism
0.001043108	Proliferation/Metastasis
0.956220541	Metabolism
0.002426333	Metabolism
0.248180265	Proliferation/Metastasis
2.78E-06	Proliferation/Metastasis
0.004647897	Metabolism
0.543746402	Metabolism
0.569727537	Metabolism
0.942188007	Metabolism
0.26609756	TME
0.000149793	TME
0.531810837	TME
0.203519729	TME
1.04E-21	TME
0.037834058	Metabolism
0.490796352	Metabolism
8.03E-05	Metabolism
2.05E-06	Metabolism
0.026197358	Metabolism
6.89E-06	TME
0.249429481	TME
0.034839752	TME
0.966807421	TME
0.025768656	TME
0.547899043	TME
0.302258737	TME
0.721854717	TME
0.397077152	TME
0.000299787	Proliferation/Metastasis
0.920651437	Proliferation/Metastasis
0.091938466	Metabolism
0.237636223	Metabolism
0.003336306	TME
0.554470929	Metabolism
0.011455829	Metabolism

0.061880331	TME
0.131880972	Proliferation/Metastasis
0.415825107	Proliferation/Metastasis
0.642365769	TME
0.256297433	Metabolism
0.000613759	Metabolism
0.063712326	Proliferation/Metastasis
9.05E-07	Proliferation/Metastasis
0.749685172	TME
0.025579222	TME
0.930695023	TME
0.243782331	TME
0.092892398	Proliferation/Metastasis
0.014249807	TME
0.027768026	TME
0.039828648	Metabolism
0.000174984	TME
9.31E-05	TME
0.814366552	TME
0.031245794	TME
0.004629088	Metabolism
2.34E-08	Metabolism
0.767649512	Metabolism
0.000703962	TME
0.90819616	Metabolism
0.596651418	TME
0.736816294	TME
0.09643147	TME
0.521698753	TME
0.544905558	TME
0.003499919	Metabolism
0.012696697	Proliferation/Metastasis
1.69E-06	Metabolism
1.02E-05	Proliferation/Metastasis
0.059186213	Metabolism
0.439436334	Metabolism
0.069887766	Metabolism
8.31E-06	Metabolism
5.04E-05	Metabolism
9.50E-05	Metabolism
0.919871764	Metabolism
2.14E-08	Metabolism
0.592290642	Metabolism

0.611818447	Metabolism
0.00074314	Metabolism
1.01E-09	Metabolism
2.64E-05	Metabolism
8.08E-05	Metabolism
0.041928798	TME
0.071893035	Proliferation/Metastasis
0.544270481	Metabolism
2.37E-13	Proliferation/Metastasis
0.879940901	TME
1.11E-05	Proliferation/Metastasis
0.000134144	Proliferation/Metastasis
3.61E-07	TME
0.007469527	TME
0.042397766	Metabolism
0.435125394	Metabolism
3.66E-09	Proliferation/Metastasis
0.873363193	Proliferation/Metastasis
1.24E-05	Proliferation/Metastasis
0.647522308	Metabolism
4.32E-07	Metabolism
9.08E-08	Metabolism
0.627714441	Proliferation/Metastasis
0.013559205	TME
0.061297393	TME
0.000590273	Metabolism
0.00382148	Proliferation/Metastasis
0.742835295	Metabolism
0.49038651	TME
0.891139161	TME
9.35E-07	TME
0.000997293	TME
0.054102867	Metabolism
9.11E-07	TME
3.26E-05	Proliferation/Metastasis
8.43E-06	TME
0.526545993	Proliferation/Metastasis
2.71E-05	Proliferation/Metastasis
0.000312646	Metabolism
0.057401537	Proliferation/Metastasis
0.077842731	TME
0.473770534	Metabolism
0.389846262	TME

0.468783171	TME
0.1096774	TME
0.544114076	TME
0.01094137	TME
0.112495351	TME
5.84E-10	Metabolism
6.41E-08	TME
0.408407473	Metabolism
0.315162351	Metabolism
0.00359465	Proliferation/Metastasis
9.58E-09	Proliferation/Metastasis
0.201462725	Metabolism
0.002634428	Metabolism
0.261404216	Metabolism
0.907449196	Metabolism
8.25E-08	Proliferation/Metastasis
1.17E-07	Proliferation/Metastasis
0.002545989	Metabolism
0.268743315	Metabolism
6.03E-05	Metabolism
0.156556874	TME
0.301443679	Metabolism
0.133261171	Metabolism
0.028577884	Metabolism
0.001613708	Metabolism
6.90E-06	Proliferation/Metastasis
0.740265913	Metabolism
0.000470678	Metabolism
5.40E-09	Metabolism
0.858540944	Metabolism
0.11332424	Metabolism
0.000241957	Metabolism
0.000588568	Proliferation/Metastasis
0.31282901	Metabolism
0.840281716	Metabolism
0.000876928	Proliferation/Metastasis
1.06E-06	Metabolism
0.094161136	Metabolism
0.035316413	Metabolism
0.006345224	Metabolism
0.557495798	Metabolism
0.009820285	Metabolism
0.575594885	Metabolism

0.000186302	Metabolism
0.776150106	TME
0.063255416	TME
0.067391151	TME
0.115276927	TME
0.130725868	TME
0.360490003	Metabolism
0.521928706	Metabolism
0.005570101	Proliferation/Metastasis
0.032255763	Metabolism
4.00E-08	Proliferation/Metastasis
6.59E-06	Metabolism
4.95E-08	TME
0.962187472	Metabolism
0.118845068	Metabolism
0.402406105	Metabolism
5.89E-09	Metabolism
0.545604435	TME
0.008583987	TME
3.42E-09	Proliferation/Metastasis
0.000259394	Metabolism
5.69E-07	Proliferation/Metastasis
0.153331871	Proliferation/Metastasis
7.81E-05	TME
0.192895333	TME
0.005033099	TME
0.006020827	TME
0.680673796	Metabolism
0.087043661	Proliferation/Metastasis
6.08E-05	Metabolism
0.001244093	Metabolism
0.958075638	Proliferation/Metastasis
0.000295678	Proliferation/Metastasis
1.14E-07	Metabolism
0.706365131	Metabolism
0.129712943	Metabolism
8.31E-07	Metabolism
0.271526699	TME
3.70E-06	TME
0.001357207	TME
0.404287717	TME
1.08E-10	TME
0.292943287	Metabolism

0.611355636	Metabolism
0.027960761	Metabolism
0.026574955	Metabolism
2.77E-05	Metabolism
2.29E-10	TME
3.18E-08	TME
0.012860208	TME
0.181498692	TME
0.011425541	TME
0.091965021	TME
0.05659719	TME
0.335428922	TME
0.752698107	TME
0.006125266	Proliferation/Metastasis
8.41E-06	Proliferation/Metastasis
0.170399963	Metabolism
0.097731075	Metabolism
0.000888508	TME
0.411868878	Metabolism
0.901140629	Metabolism
0.002642501	TME
0.009370368	Proliferation/Metastasis
0.785571696	Proliferation/Metastasis
0.604570673	TME
3.68E-07	Metabolism
0.00128854	Metabolism
0.063589356	Proliferation/Metastasis
1.73E-08	Proliferation/Metastasis
0.075640873	TME
0.005854023	TME
0.088613023	TME
0.02712503	TME
0.053934128	Proliferation/Metastasis
0.001024936	TME
0.000720737	TME
1.83E-10	Metabolism
5.95E-07	TME
8.65E-09	TME
0.298657839	TME
0.1555147	TME
0.421940638	Metabolism
0.09933071	Metabolism
0.124452693	Metabolism

0.003796779	TME
0.001734116	Metabolism
0.062557822	TME
0.203013528	TME
0.010108255	TME
0.934512775	TME
0.012876649	TME
0.013457384	Metabolism
5.93E-05	Proliferation/Metastasis
0.003311952	Metabolism
2.91E-07	Proliferation/Metastasis
0.052018938	Metabolism
3.94E-05	Metabolism
0.012667159	Metabolism
5.46E-08	Metabolism
5.44E-05	Metabolism
0.354832586	Metabolism
0.062166843	Metabolism
6.35E-09	Metabolism
0.09801337	Metabolism
0.000187855	Metabolism
0.043072785	Metabolism
6.62E-10	Metabolism
2.21E-06	Metabolism
0.00010795	Metabolism
0.001728761	TME
0.082711899	Proliferation/Metastasis
0.023121104	Metabolism
4.17E-07	Proliferation/Metastasis
0.094896485	TME
1.12E-09	Proliferation/Metastasis
1.11E-09	Proliferation/Metastasis
1.40E-05	TME
0.000553758	TME
4.18E-05	Metabolism
6.28E-05	Metabolism
0.000101152	Proliferation/Metastasis
0.408111329	Proliferation/Metastasis
1.55E-10	Proliferation/Metastasis
5.02E-07	Metabolism
0.000146012	Metabolism
0.000399719	Metabolism
0.260008232	Proliferation/Metastasis

0.000164676	TME
0.095646979	TME
2.20E-13	Metabolism
2.26E-07	Proliferation/Metastasis
6.84E-08	Metabolism
0.032330799	TME
0.071545669	TME
0.007350063	TME
2.61E-05	TME
6.61E-06	Metabolism
1.08E-07	TME
3.63E-12	Proliferation/Metastasis
1.01E-07	TME
0.777362398	Proliferation/Metastasis
4.35E-06	Proliferation/Metastasis
6.28E-27	Metabolism
0.475026915	Proliferation/Metastasis
0.001957557	TME
0.253522349	Metabolism
0.02874337	TME
0.057910012	TME
0.968449944	TME
0.086335604	TME
1.68E-05	TME
0.001729446	TME
4.09E-11	Metabolism
9.81E-11	TME
0.148732808	Metabolism
4.16E-05	Metabolism
8.13E-10	Proliferation/Metastasis
4.12E-13	Proliferation/Metastasis
0.002320835	Metabolism
0.001012932	Metabolism
0.000677348	Metabolism
3.43E-05	Metabolism
6.69E-07	Proliferation/Metastasis
6.46E-16	Proliferation/Metastasis
0.002062422	Metabolism
7.51E-08	Metabolism
0.00735389	Metabolism
0.587876932	TME
0.232745901	Metabolism
0.00480116	Metabolism

0.003516956	Metabolism
0.000208272	Metabolism
6.53E-05	Proliferation/Metastasis
0.041904415	Metabolism
0.00038824	Metabolism
0.100028609	Metabolism
0.667283949	Metabolism
0.6641336	Metabolism
0.034614769	Metabolism
5.92E-05	Proliferation/Metastasis
3.05E-05	Metabolism
0.872660043	Metabolism
2.18E-09	Proliferation/Metastasis
0.264723358	Metabolism
3.92E-06	Metabolism
0.171741267	Metabolism
0.047848985	Metabolism
0.029906189	Metabolism
8.60E-11	Metabolism
3.31E-05	Metabolism
0.363785235	Metabolism
0.089221099	TME
0.000933131	TME
3.54E-06	TME
0.001202887	TME
0.018977939	TME
0.253111503	Metabolism
0.57689744	Metabolism
2.61E-08	Proliferation/Metastasis
0.18875255	Metabolism
5.09E-16	Proliferation/Metastasis
0.082574825	Metabolism
0.051819233	TME
0.499993355	Metabolism
0.000668853	Metabolism
0.136714201	Metabolism
0.000407576	Metabolism
0.447034021	TME
0.006189916	TME
3.49E-07	Proliferation/Metastasis
5.96E-10	Metabolism
0.000461532	Proliferation/Metastasis
0.621400091	Proliferation/Metastasis

5.61E-07	TME
0.064763603	TME
0.068891188	TME
0.313084448	TME
0.006723557	Metabolism
8.94E-12	Proliferation/Metastasis
0.000770003	Metabolism
1.68E-11	Metabolism
0.028543264	Proliferation/Metastasis
0.866862047	Proliferation/Metastasis
0.00045535	Metabolism
1.65E-08	Metabolism
0.076868724	Metabolism
0.002180021	Metabolism
0.167820338	TME
0.826208698	TME
0.27088517	TME
0.025503896	TME
4.74E-10	TME
0.250752469	Metabolism
0.010521219	Metabolism
0.565058343	Metabolism
0.632419235	Metabolism
0.000180608	Metabolism
0.624301837	TME
0.024158001	TME
0.04078022	TME
0.0062455	TME
0.036568018	TME
0.001114294	TME
0.003130706	TME
0.035012488	TME
0.001087598	TME
3.99E-07	Proliferation/Metastasis
0.002180913	Proliferation/Metastasis
0.001367468	Metabolism
7.92E-07	Metabolism
6.94E-10	TME
0.042243795	Metabolism
5.75E-05	Metabolism
0.07982503	TME
2.33E-08	Proliferation/Metastasis
5.45E-09	Proliferation/Metastasis

0.089515811	TME
0.00286522	Metabolism
2.13E-15	Metabolism
5.00E-09	Proliferation/Metastasis
0.961338179	Proliferation/Metastasis
0.000137403	TME
0.014011	TME
0.001350703	TME
0.001501283	TME
0.001111274	Proliferation/Metastasis
0.161302784	TME
0.380539155	TME
0.058603226	Metabolism
0.356030524	TME
0.54733828	TME
0.009520986	TME
0.176469944	TME
0.20783366	Metabolism
0.667220963	Metabolism
0.000835516	Metabolism
0.024673165	TME
0.146865091	Metabolism
0.026837453	TME
0.007391272	TME
0.085858151	TME
0.248806112	TME
0.08895856	TME
2.22E-10	Metabolism
6.00E-09	Proliferation/Metastasis
2.22E-05	Metabolism
0.295347921	Proliferation/Metastasis
3.43E-10	Metabolism
0.001011495	Metabolism
0.002668987	Metabolism
0.220785124	Metabolism
1.67E-10	Metabolism
0.356612893	Metabolism
4.53E-06	Metabolism
3.64E-06	Metabolism
0.589489625	Metabolism
9.51E-06	Metabolism
0.728858151	Metabolism
1.36E-06	Metabolism

0.622887278	Metabolism
0.003808213	Metabolism
0.239503836	TME
4.74E-06	Proliferation/Metastasis
0.039962924	Metabolism
0.001912805	Proliferation/Metastasis
0.005029389	TME
0.265389191	Proliferation/Metastasis
0.841275652	Proliferation/Metastasis
0.458789142	TME
0.340174388	TME
0.000111481	Metabolism
0.000355166	Metabolism
2.13E-05	Proliferation/Metastasis
1.38E-09	Proliferation/Metastasis
0.976475555	Proliferation/Metastasis
0.00125866	Metabolism
0.800972188	Metabolism
0.287591466	Metabolism
0.07965472	Proliferation/Metastasis
0.583708635	TME
0.020956416	TME
0.01248113	Metabolism
0.088060877	Proliferation/Metastasis
0.037303705	Metabolism
0.053959054	TME
0.06658704	TME
0.959784417	TME
0.22247925	TME
1.56E-05	Metabolism
1.12E-07	TME
0.079629232	Proliferation/Metastasis
0.196286963	TME
0.000106584	Proliferation/Metastasis
1.54E-17	Proliferation/Metastasis
0.000179959	Metabolism
2.95E-15	Proliferation/Metastasis
0.025367767	TME
0.005280224	Metabolism
0.500535005	TME
0.000271818	TME
2.35E-08	TME
0.004674536	TME

0.000397846	TME
0.007847731	TME
2.61E-05	Metabolism
0.004979135	TME
0.57312841	Metabolism
0.002657081	Metabolism
0.391336563	Proliferation/Metastasis
8.88E-09	Proliferation/Metastasis
4.68E-11	Metabolism
0.357690501	Metabolism
0.179831045	Metabolism
4.62E-06	Metabolism
1.09E-09	Proliferation/Metastasis
1.08E-11	Proliferation/Metastasis
0.385089641	Metabolism
2.58E-05	Metabolism
1.54E-10	Metabolism
0.002446367	TME
0.02014759	Metabolism
0.773400528	Metabolism
0.017871756	Metabolism
0.055110776	Metabolism
7.91E-05	Proliferation/Metastasis
1.48E-07	Metabolism
9.65E-05	Metabolism
0.652773677	Metabolism
1.06E-13	Metabolism
1.65E-14	Metabolism
0.00680486	Metabolism
0.800123118	Proliferation/Metastasis
0.154969799	Metabolism
1.22E-10	Metabolism
0.423505916	Proliferation/Metastasis
0.715816675	Metabolism
0.650686388	Metabolism
0.220826544	Metabolism
0.625752518	Metabolism
3.33E-08	Metabolism
3.09E-05	Metabolism
6.07E-05	Metabolism
0.244960145	Metabolism
0.000779252	TME
0.134635871	TME

0.864864788	TME
0.235795089	TME
0.027946793	TME
0.852322368	Metabolism
1.02E-09	Metabolism
0.102901115	Proliferation/Metastasis
0.000828536	Metabolism
0.000661463	Proliferation/Metastasis
0.032958451	Metabolism
0.000169981	TME
0.432735991	Metabolism
0.076438406	Metabolism
0.07580544	Metabolism
0.572174424	Metabolism
0.006444351	TME
0.230899957	TME
0.494829645	Proliferation/Metastasis
0.138088173	Metabolism
1.13E-06	Proliferation/Metastasis
0.291947881	Proliferation/Metastasis
0.000229672	TME
3.97E-06	TME
1.27E-11	TME
4.12E-09	TME
0.888175871	Metabolism
0.388899781	Proliferation/Metastasis
0.137061956	Metabolism
0.470124375	Metabolism
8.78E-10	Proliferation/Metastasis
5.11E-09	Proliferation/Metastasis
0.001048452	Metabolism
0.158617017	Metabolism
0.473908043	Metabolism
0.00887837	Metabolism
0.000687903	TME
3.00E-14	TME
6.95E-11	TME
3.85E-06	TME
0.966861292	TME
9.24E-08	Metabolism
0.31892355	Metabolism
0.724416531	Metabolism
0.707417882	Metabolism

0.484566955	Metabolism
3.61E-22	TME
1.19E-17	TME
2.25E-13	TME
2.52E-07	TME
3.18E-11	TME
7.18E-13	TME
2.24E-13	TME
2.39E-08	TME
1.96E-09	TME
0.221178025	Proliferation/Metastasis
0.028766687	Proliferation/Metastasis
0.451862774	Metabolism
0.901972269	Metabolism
8.03E-05	TME
0.011089458	Metabolism
0.034116269	Metabolism
4.37E-12	TME
6.30E-14	Proliferation/Metastasis
9.11E-05	Proliferation/Metastasis
0.008427315	TME
3.25E-05	Metabolism
0.031210858	Metabolism
0.029950211	Proliferation/Metastasis
1.00E-10	Proliferation/Metastasis
8.42E-13	TME
4.28E-12	TME
7.87E-13	TME
4.32E-16	TME
3.50E-05	Proliferation/Metastasis
1.65E-19	TME
6.99E-14	TME
1.78E-05	Metabolism
1.07E-14	TME
8.97E-13	TME
2.90E-08	TME
0.116450493	TME
0.738218456	Metabolism
0.00503961	Metabolism
0.862179528	Metabolism
2.24E-14	TME
0.095395645	Metabolism
9.23E-08	TME

1.58E-05	TME
5.19E-10	TME
0.132750691	TME
1.37E-05	TME
0.000455397	Metabolism
0.954731614	Proliferation/Metastasis
0.558042352	Metabolism
5.32E-16	Proliferation/Metastasis
0.190379689	Metabolism
0.268033976	Metabolism
2.83E-06	Metabolism
0.982555414	Metabolism
0.704310787	Metabolism
0.598560704	Metabolism
0.002700018	Metabolism
0.000853235	Metabolism
0.475344909	Metabolism
2.29E-05	Metabolism
3.17E-06	Metabolism
0.00043912	Metabolism
1.41E-05	Metabolism
0.001596626	Metabolism
1.83E-15	TME
1.34E-08	Proliferation/Metastasis
6.88E-08	Metabolism
0.075796694	Proliferation/Metastasis
1.70E-11	TME
1.02E-14	Proliferation/Metastasis
2.10E-16	Proliferation/Metastasis
6.48E-10	TME
3.09E-07	TME
2.00E-10	Metabolism
1.88E-20	Metabolism
0.000239462	Proliferation/Metastasis
1.44E-05	Proliferation/Metastasis
2.08E-19	Proliferation/Metastasis
0.017522552	Metabolism
0.001966293	Metabolism
0.253723133	Metabolism
0.122343687	Proliferation/Metastasis
1.14E-15	TME
7.90E-14	TME
3.95E-06	Metabolism

7.16E-12	Proliferation/Metastasis
5.91E-15	Metabolism
3.58E-11	TME
1.05E-07	TME
4.39E-08	TME
7.29E-19	TME
0.010101681	Metabolism
0.834047791	TME
0.000187826	Proliferation/Metastasis
6.56E-10	TME
0.000604726	Proliferation/Metastasis
0.893510423	Proliferation/Metastasis
5.81E-12	Metabolism
0.000911388	Proliferation/Metastasis
6.98E-17	TME
0.083005067	Metabolism
4.42E-05	TME
1.13E-15	TME
2.41E-06	TME
1.15E-13	TME
0.183458793	TME
1.66E-14	TME
0.081882699	Metabolism
6.22E-11	TME
0.000954047	Metabolism
0.001054893	Metabolism
5.85E-13	Proliferation/Metastasis
0.005676151	Proliferation/Metastasis
0.913325271	Metabolism
3.54E-08	Metabolism
2.73E-07	Metabolism
4.46E-10	Metabolism
0.04755949	Proliferation/Metastasis
0.419779994	Proliferation/Metastasis
0.202863319	Metabolism
0.078404693	Metabolism
0.036771199	Metabolism
2.78E-12	TME
0.68890865	Metabolism
0.009180116	Metabolism
0.015797091	Metabolism
4.45E-13	Metabolism
0.045187065	Proliferation/Metastasis

0.470916586	Metabolism
0.001330677	Metabolism
0.010664975	Metabolism
0.032498452	Metabolism
7.79E-08	Metabolism
0.082001085	Metabolism
0.00242228	Proliferation/Metastasis
0.013385701	Metabolism
0.157545083	Metabolism
1.16E-12	Proliferation/Metastasis
3.99E-05	Metabolism
1.67E-14	Metabolism
0.000124544	Metabolism
7.49E-06	Metabolism
0.187141271	Metabolism
0.011405929	Metabolism
0.44820449	Metabolism
0.445168528	Metabolism
2.56E-12	TME
7.19E-13	TME
4.47E-11	TME
3.54E-11	TME
9.43E-09	TME
0.779055742	Metabolism
0.018293134	Metabolism
3.77E-24	Proliferation/Metastasis
0.089843876	Metabolism
3.42E-06	Proliferation/Metastasis
8.88E-06	Metabolism
0.900421067	TME
0.871226109	Metabolism
0.006084308	Metabolism
0.124370427	Metabolism
0.314441383	Metabolism
2.04E-09	TME
3.28E-08	TME
0.000302774	Proliferation/Metastasis
0.004957218	Metabolism
0.002971525	Proliferation/Metastasis
0.423772243	Proliferation/Metastasis
0.000656701	TME
0.182117419	TME
0.131666554	TME

0.164647594	TME
0.001314304	Metabolism
3.05E-07	Proliferation/Metastasis
0.735584375	Metabolism
2.57E-06	Metabolism
0.35890094	Proliferation/Metastasis
0.00341814	Proliferation/Metastasis
0.014259474	Metabolism
0.597970916	Metabolism
0.206815164	Metabolism
0.064412422	Metabolism
0.877159719	TME
0.022272285	TME
0.555294391	TME
0.630221812	TME
7.92E-13	TME
0.002746188	Metabolism
0.18548213	Metabolism
0.000341371	Metabolism
0.000109344	Metabolism
0.911830949	Metabolism
0.055211712	TME
0.983983608	TME
0.167154372	TME
0.816638891	TME
0.00778359	TME
0.729562638	TME
0.446531945	TME
0.701921254	TME
0.321730523	TME
0.022953065	Proliferation/Metastasis
0.001852941	Proliferation/Metastasis
0.2843614	Metabolism
0.580681856	Metabolism
0.022861285	TME
0.009392163	Metabolism
1.12E-06	Metabolism
0.026222687	TME
1.03E-05	Proliferation/Metastasis
0.002681134	Proliferation/Metastasis
0.530611739	TME
0.643267596	Metabolism
6.79E-05	Metabolism

0.052618451	Proliferation/Metastasis
0.007903735	Proliferation/Metastasis
0.602646836	TME
0.039239502	TME
0.816002874	TME
0.47835103	TME
0.0014905	Proliferation/Metastasis
0.218526639	TME
0.012268135	TME
0.356744954	Metabolism
0.054762562	TME
0.002542238	TME
0.388583059	TME
0.530377877	TME
0.006969075	Metabolism
3.57E-06	Metabolism
0.714994491	Metabolism
0.059214752	TME
0.374118108	Metabolism
0.525811489	TME
0.813646757	TME
0.24967141	TME
0.006314473	TME
0.331223464	TME
1.24E-05	Metabolism
0.382920622	Proliferation/Metastasis
1.07E-08	Metabolism
0.8341637	Proliferation/Metastasis
0.00059826	Metabolism
0.408141636	Metabolism
0.002255163	Metabolism
0.277401561	Metabolism
0.000998843	Metabolism
6.05E-08	Metabolism
0.398120163	Metabolism
5.46E-07	Metabolism
0.000371454	Metabolism
0.855037894	Metabolism
0.01200704	Metabolism
0.007579665	Metabolism
0.010082299	Metabolism
0.256238232	Metabolism
0.036982935	TME

0.224753514	Proliferation/Metastasis
0.085567693	Metabolism
1.44E-13	Proliferation/Metastasis
0.62965046	TME
0.000271619	Proliferation/Metastasis
0.003719926	Proliferation/Metastasis
0.000621975	TME
0.000824971	TME
7.76E-08	Metabolism
0.003265259	Metabolism
0.000322182	Proliferation/Metastasis
0.050168014	Proliferation/Metastasis
0.037052926	Proliferation/Metastasis
0.657581581	Metabolism
0.001979986	Metabolism
3.09E-07	Metabolism
0.000159366	Proliferation/Metastasis
0.028371658	TME
0.035018589	TME
0.644033829	Metabolism
0.28417668	Proliferation/Metastasis
0.032418316	Metabolism
0.786045981	TME
0.653652498	TME
1.17E-05	TME
0.045878243	TME
0.553755402	Metabolism
0.162889072	TME
0.258443767	Proliferation/Metastasis
4.65E-07	TME
0.077294144	Proliferation/Metastasis
0.00014761	Proliferation/Metastasis
0.267258328	Metabolism
0.002454707	Proliferation/Metastasis
0.145126645	TME
0.256772743	Metabolism
0.64037591	TME
0.311518459	TME
0.176740972	TME
0.620130777	TME
0.000308516	TME
0.410243569	TME
7.73E-10	Metabolism

2.09E-07	TME
0.326134458	Metabolism
0.405438496	Metabolism
0.025097262	Proliferation/Metastasis
1.90E-05	Proliferation/Metastasis
0.341823691	Metabolism
0.001099995	Metabolism
2.32E-05	Metabolism
0.001430503	Metabolism
2.22E-19	Proliferation/Metastasis
0.000194067	Proliferation/Metastasis
0.05533424	Metabolism
0.601287934	Metabolism
3.14E-06	Metabolism
0.241217389	TME
0.004635506	Metabolism
0.84732456	Metabolism
0.674420192	Metabolism
0.232959008	Metabolism
0.000272096	Proliferation/Metastasis
0.587166511	Metabolism
0.000117548	Metabolism
1.08E-10	Metabolism
0.238319259	Metabolism
0.000366958	Metabolism
0.01250044	Metabolism
0.454986272	Proliferation/Metastasis
0.434133767	Metabolism
0.053782973	Metabolism
0.96231613	Proliferation/Metastasis
1.42E-13	Metabolism
0.000470346	Metabolism
0.000698652	Metabolism
0.01498346	Metabolism
0.021991854	Metabolism
0.497750427	Metabolism
0.002948137	Metabolism
0.082251934	Metabolism
0.867304776	TME
0.132292635	TME
0.043373844	TME
0.157830406	TME
0.238914377	TME

0.142149155	Metabolism
0.744279488	Metabolism
0.048384253	Proliferation/Metastasis
0.995090865	Metabolism
4.01E-08	Proliferation/Metastasis
0.009573519	Metabolism
0.001874298	TME
0.595078515	Metabolism
0.319935882	Metabolism
8.55E-05	Metabolism
6.84E-08	Metabolism
0.289776105	TME
0.555900828	TME
0.000859277	Proliferation/Metastasis
0.094679054	Metabolism
0.019071144	Proliferation/Metastasis
0.021154895	Proliferation/Metastasis
0.938643646	TME
0.105180447	TME
0.027122395	TME
0.004935192	TME
0.39951304	Metabolism
0.002211133	Proliferation/Metastasis
0.294664961	Metabolism
0.009370663	Metabolism
0.880335885	Proliferation/Metastasis
0.120112908	Proliferation/Metastasis
0.014248334	Metabolism
0.00620804	Metabolism
0.00283756	Metabolism
0.022700781	Metabolism
0.081142613	TME
0.001526345	TME
0.004210427	TME
0.25533542	TME
0.005807886	TME
0.027599336	Metabolism
0.054664623	Metabolism
0.19304334	Metabolism
0.383395577	Metabolism
0.207024963	Metabolism
0.001176677	TME
0.000231524	TME

0.013518966	TME
0.090493159	TME
0.058591023	TME
0.040095835	TME
0.027325725	TME
0.013389358	TME
0.058802634	TME
0.063359741	Proliferation/Metastasis
0.070553088	Proliferation/Metastasis
0.405754729	Metabolism
0.004577007	Metabolism
0.843119717	TME
0.020700196	Metabolism
0.990990426	Metabolism
0.024675342	TME
0.863124026	Proliferation/Metastasis
0.123081299	Proliferation/Metastasis
0.169935292	TME
0.013954444	Metabolism
0.07919986	Metabolism
0.10444186	Proliferation/Metastasis
0.003954894	Proliferation/Metastasis
0.085208023	TME
0.049708527	TME
0.061845906	TME
0.074323196	TME
0.004118455	Proliferation/Metastasis
0.028669303	TME
0.028758595	TME
0.288495073	Metabolism
0.00608798	TME
0.00348732	TME
0.029349953	TME
0.656369885	TME
0.853970689	Metabolism
0.134551863	Metabolism
0.445134665	Metabolism
0.050466082	TME
0.74490623	Metabolism
0.045645742	TME
0.211450146	TME
0.0113117	TME
0.010437205	TME

0.255276021	TME
0.041354057	Metabolism
0.011282705	Proliferation/Metastasis
0.00068341	Metabolism
0.006592713	Proliferation/Metastasis
0.028082072	Metabolism
0.009277869	Metabolism
0.788474189	Metabolism
0.79197273	Metabolism
0.001710852	Metabolism
0.833493189	Metabolism
0.51406131	Metabolism
0.000840587	Metabolism
0.784802207	Metabolism
0.724311213	Metabolism
0.580749475	Metabolism
0.011541554	Metabolism
0.223357686	Metabolism
0.89369083	Metabolism
0.019114013	TME
0.367708327	Proliferation/Metastasis
0.003562103	Metabolism
0.051042434	Proliferation/Metastasis
0.026148573	TME
0.000125935	Proliferation/Metastasis
0.000793565	Proliferation/Metastasis
0.030139354	TME
0.055632296	TME
0.117817968	Metabolism
0.111408147	Metabolism
0.009867059	Proliferation/Metastasis
0.203502817	Proliferation/Metastasis
0.009438874	Proliferation/Metastasis
0.405868823	Metabolism
0.238630731	Metabolism
0.383451743	Metabolism
0.994485844	Proliferation/Metastasis
0.007489505	TME
0.288160896	TME
0.003742485	Metabolism
0.069742394	Proliferation/Metastasis
0.065698125	Metabolism
0.040808747	TME

0.142918935	TME
0.190190022	TME
0.021419482	TME
0.017664897	Metabolism
0.000265479	TME
0.002847219	Proliferation/Metastasis
0.005033917	TME
0.840483259	Proliferation/Metastasis
0.004642093	Proliferation/Metastasis
5.06E-06	Metabolism
0.054544892	Proliferation/Metastasis
0.02245812	TME
0.019563199	Metabolism
0.056632335	TME
0.092654815	TME
0.935741161	TME
0.029381364	TME
0.002381865	TME
0.038204845	TME
0.003613611	Metabolism
0.002528682	TME
0.053287333	Metabolism
0.006320375	Metabolism
0.053143707	Proliferation/Metastasis
0.001270571	Proliferation/Metastasis
0.001965047	Metabolism
0.242816078	Metabolism
0.09497219	Metabolism
0.629968981	Metabolism
0.009255871	Proliferation/Metastasis
0.004523108	Proliferation/Metastasis
0.744877163	Metabolism
0.060226497	Metabolism
0.044957862	Metabolism
0.236418752	TME
0.112606421	Metabolism
0.267033491	Metabolism
0.138049475	Metabolism
0.023525843	Metabolism
0.001899961	Proliferation/Metastasis
0.069971582	Metabolism
0.117512516	Metabolism
0.403672016	Metabolism

0.014116736	Metabolism
0.356910349	Metabolism
0.574874884	Metabolism
0.292369476	Proliferation/Metastasis
0.271165734	Metabolism
0.059759453	Metabolism
0.174217627	Proliferation/Metastasis
0.058982799	Metabolism
0.030557131	Metabolism
0.150676043	Metabolism
0.113598458	Metabolism
0.63597022	Metabolism
0.041596197	Metabolism
0.102428422	Metabolism
0.407740543	Metabolism
0.065027441	TME
0.003936127	TME
0.014095587	TME
0.00902125	TME
0.016581216	TME
0.597837438	Metabolism
0.61991123	Metabolism
0.049609318	Proliferation/Metastasis
0.325854486	Metabolism
0.005636205	Proliferation/Metastasis
0.641649637	Metabolism
0.527411215	TME
0.42732855	Metabolism
0.478051251	Metabolism
0.503917232	Metabolism
0.793660206	Metabolism
0.386775362	TME
0.043589381	TME
0.018975421	Proliferation/Metastasis
0.271491772	Metabolism
0.008939188	Proliferation/Metastasis
0.451643338	Proliferation/Metastasis
0.222870645	TME
0.001320749	TME
0.150128627	TME
0.0025441	TME
0.010586101	Metabolism
0.019141781	Proliferation/Metastasis

0.296300334	Metabolism
0.339874554	Metabolism
0.512917589	Proliferation/Metastasis
2.16E-15	Proliferation/Metastasis
1.52E-09	Metabolism
0.112001093	Metabolism
0.001581006	Metabolism
7.40E-05	Metabolism
0.621176599	TME
1.66E-07	TME
3.91E-06	TME
0.007507464	TME
2.94E-22	TME
0.15330555	Metabolism
4.24E-06	Metabolism
7.07E-07	Metabolism
3.83E-06	Metabolism
0.0456313	Metabolism
1.02E-13	TME
9.75E-08	TME
1.15E-11	TME
0.934023806	TME
0.003820943	TME
0.013331576	TME
0.020012127	TME
0.000283344	TME
0.966495613	TME
0.001133368	Proliferation/Metastasis
3.90E-15	Proliferation/Metastasis
3.36E-05	Metabolism
0.013112183	Metabolism
0.322945538	TME
0.103929879	Metabolism
8.03E-28	Metabolism
2.11E-05	TME
0.687566024	Proliferation/Metastasis
0.010664419	Proliferation/Metastasis
0.524649075	TME
0.773356921	Metabolism
0.000701579	Metabolism
2.79E-06	Proliferation/Metastasis
1.08E-11	Proliferation/Metastasis
0.851202841	TME

1.51E-09	TME
0.424055382	TME
0.000172481	TME
9.40E-15	Proliferation/Metastasis
2.26E-25	TME
5.49E-05	TME
0.572141388	Metabolism
8.08E-06	TME
4.80E-05	TME
0.359089342	TME
0.127424867	TME
0.136975683	Metabolism
0.00036712	Metabolism
0.000124369	Metabolism
1.39E-11	TME
0.020638808	Metabolism
0.020492393	TME
0.117698572	TME
0.000657656	TME
0.279839956	TME
0.000179414	TME
0.000103957	Metabolism
5.26E-07	Proliferation/Metastasis
0.000102365	Metabolism
1.29E-06	Proliferation/Metastasis
0.010339668	Metabolism
0.537196623	Metabolism
0.000298004	Metabolism
0.807144348	Metabolism
0.225347964	Metabolism
2.09E-14	Metabolism
0.011403348	Metabolism
7.80E-12	Metabolism
0.010889942	Metabolism
0.041417508	Metabolism
1.32E-10	Metabolism
8.83E-09	Metabolism
1.05E-07	Metabolism
0.018919255	Metabolism
0.002279765	TME
6.33E-05	Proliferation/Metastasis
0.300011358	Metabolism
5.53E-16	Proliferation/Metastasis

0.374399592	TME
1.52E-06	Proliferation/Metastasis
0.005810134	Proliferation/Metastasis
0.429438576	TME
0.001048566	TME
0.015695824	Metabolism
0.480919535	Metabolism
0.084108587	Proliferation/Metastasis
0.504040825	Proliferation/Metastasis
8.21E-05	Proliferation/Metastasis
0.010935187	Metabolism
0.11869219	Metabolism
2.15E-11	Metabolism
0.205311126	Proliferation/Metastasis
0.0061027	TME
0.000526825	TME
0.270130652	Metabolism
0.016724633	Proliferation/Metastasis
0.289013841	Metabolism
3.87E-06	TME
0.745502813	TME
4.10E-17	TME
6.25E-11	TME
0.392707622	Metabolism
0.005068397	TME
3.28E-05	Proliferation/Metastasis
4.37E-07	TME
0.135630601	Proliferation/Metastasis
0.190593063	Proliferation/Metastasis
0.768391947	Metabolism
0.235358333	Proliferation/Metastasis
0.002412731	TME
0.307929807	Metabolism
0.600265399	TME
4.37E-07	TME
0.849551658	TME
0.00208729	TME
0.000655313	TME
0.016397829	TME
1.34E-05	Metabolism
2.50E-05	TME
0.108649676	Metabolism
0.001020092	Metabolism

0.33487735	Proliferation/Metastasis
9.66E-21	Proliferation/Metastasis
0.002039322	Metabolism
8.87E-07	Metabolism
9.27E-08	Metabolism
0.005564179	Metabolism
2.67E-11	Proliferation/Metastasis
0.381204554	Proliferation/Metastasis
1.12E-07	Metabolism
0.010241078	Metabolism
0.775089737	Metabolism
2.56E-19	TME
0.00056038	Metabolism
0.015818016	Metabolism
0.010168141	Metabolism
0.108155298	Metabolism
0.06084939	Proliferation/Metastasis
0.373152836	Metabolism
0.284969048	Metabolism
4.80E-05	Metabolism
0.374518014	Metabolism
0.284041247	Metabolism
9.31E-06	Metabolism
0.085635508	Proliferation/Metastasis
0.868213806	Metabolism
0.019064763	Metabolism
0.000433407	Proliferation/Metastasis
8.12E-06	Metabolism
0.445149141	Metabolism
5.47E-16	Metabolism
4.52E-06	Metabolism
0.000203525	Metabolism
0.24791378	Metabolism
0.258102222	Metabolism
6.92E-05	Metabolism
0.000507843	TME
0.126107286	TME
1.48E-06	TME
1.09E-06	TME
0.015246481	TME
7.54E-07	Metabolism
0.001185782	Metabolism
9.67E-09	Proliferation/Metastasis

0.054558629	Metabolism
0.008580691	Proliferation/Metastasis
0.28618208	Metabolism
0.228260465	TME
0.884652982	Metabolism
0.342425186	Metabolism
1.85E-10	Metabolism
0.000137559	Metabolism
1.39E-23	TME
3.77E-20	TME
1.26E-12	Proliferation/Metastasis
0.00054186	Metabolism
4.87E-16	Proliferation/Metastasis
1.68E-22	Proliferation/Metastasis
0.258908854	TME
0.6877838	TME
6.17E-06	TME
0.040819762	TME
0.00013088	Metabolism
0.436572721	Proliferation/Metastasis
1.95E-07	Metabolism
0.01735236	Metabolism
0.119914302	Proliferation/Metastasis
0.003387257	Proliferation/Metastasis
4.23E-06	Metabolism
0.168016201	Metabolism
9.75E-07	Metabolism
0.54058165	Metabolism
0.822886109	TME
0.002752452	TME
6.76E-05	TME
0.271129318	TME
0.471279568	TME
0.051014466	Metabolism
0.121723065	Metabolism
0.704185872	Metabolism
0.317846688	Metabolism
0.084622209	Metabolism
3.52E-06	TME
0.000889615	TME
0.012486179	TME
0.007819255	TME
0.027937076	TME

0.027192425	TME
0.005666736	TME
0.363388287	TME
0.008175028	TME
0.04107763	Proliferation/Metastasis
4.12E-08	Proliferation/Metastasis
0.001199318	Metabolism
0.080870004	Metabolism
0.75755659	TME
0.846071496	Metabolism
5.64E-07	Metabolism
0.000558352	TME
1.25E-11	Proliferation/Metastasis
0.00115998	Proliferation/Metastasis
0.409747075	TME
0.027173183	Metabolism
1.16E-05	Metabolism
0.890302405	Proliferation/Metastasis
9.51E-07	Proliferation/Metastasis
7.54E-06	TME
6.07E-05	TME
0.009256076	TME
0.000148973	TME
9.45E-08	Proliferation/Metastasis
0.003300111	TME
0.007880272	TME
0.216158148	Metabolism
1.18E-06	TME
3.76E-06	TME
0.21178042	TME
0.442228406	TME
0.015115404	Metabolism
0.321720185	Metabolism
0.725497639	Metabolism
0.000621248	TME
0.000379236	Metabolism
0.00188757	TME
0.068442941	TME
0.00290939	TME
0.02858691	TME
0.457325338	TME
0.806246936	Metabolism
0.023157621	Proliferation/Metastasis

0.629061357	Metabolism
0.022107265	Proliferation/Metastasis
0.201798146	Metabolism
0.941419517	Metabolism
5.88E-09	Metabolism
0.223822761	Metabolism
0.450933771	Metabolism
0.21775464	Metabolism
6.37E-05	Metabolism
0.465425363	Metabolism
0.089993966	Metabolism
1.35E-06	Metabolism
0.013140573	Metabolism
0.131092514	Metabolism
0.054026369	Metabolism
0.390888475	Metabolism
0.00224602	TME
3.53E-05	Proliferation/Metastasis
0.927915013	Metabolism
0.014612765	Proliferation/Metastasis
0.006759658	TME
0.001710173	Proliferation/Metastasis
3.00E-05	Proliferation/Metastasis
0.085127741	TME
0.522250162	TME
1.64E-10	Metabolism
1.53E-14	Metabolism
1.83E-05	Proliferation/Metastasis
0.075910237	Proliferation/Metastasis
1.75E-07	Proliferation/Metastasis
4.81E-09	Metabolism
8.29E-06	Metabolism
0.553127136	Metabolism
0.00064942	Proliferation/Metastasis
3.00E-05	TME
0.00071251	TME
0.663751424	Metabolism
2.99E-09	Proliferation/Metastasis
1.88E-14	Metabolism
0.001576077	TME
0.348669706	TME
0.023210008	TME
2.13E-06	TME

0.000584225	Metabolism
0.00526153	TME
6.36E-11	Proliferation/Metastasis
0.003469922	TME
1.50E-07	Proliferation/Metastasis
8.91E-07	Proliferation/Metastasis
8.08E-05	Metabolism
0.042828382	Proliferation/Metastasis
1.16E-05	TME
7.31E-05	Metabolism
0.613435351	TME
0.003211681	TME
0.003404356	TME
0.000906571	TME
0.084581021	TME
0.002030231	TME
0.451288702	Metabolism
0.003845743	TME
0.01608961	Metabolism
0.001678135	Metabolism
2.92E-07	Proliferation/Metastasis
0.065257113	Proliferation/Metastasis
0.972377491	Metabolism
7.25E-05	Metabolism
0.194716343	Metabolism
1.48E-06	Metabolism
0.73249607	Proliferation/Metastasis
0.005366892	Proliferation/Metastasis
0.191905837	Metabolism
0.248278171	Metabolism
0.599200767	Metabolism
0.026637673	TME
0.016179002	Metabolism
0.003240079	Metabolism
0.62024724	Metabolism
4.08E-11	Metabolism
0.000174046	Proliferation/Metastasis
0.057539053	Metabolism
0.058443939	Metabolism
0.000115624	Metabolism
0.214134543	Metabolism
0.00100735	Metabolism
0.916556159	Metabolism

8.14E-05	Proliferation/Metastasis
0.004656175	Metabolism
0.01543996	Metabolism
1.41E-05	Proliferation/Metastasis
0.140838821	Metabolism
3.04E-07	Metabolism
1.03E-10	Metabolism
0.836198586	Metabolism
0.714386098	Metabolism
0.16712544	Metabolism
0.767845451	Metabolism
0.148365516	Metabolism
0.005167356	TME
0.038401327	TME
0.000191318	TME
0.040529915	TME
0.767163709	TME
0.109182122	Metabolism
0.540647775	Metabolism
1.94E-08	Proliferation/Metastasis
0.009833749	Metabolism
1.51E-05	Proliferation/Metastasis
0.63317409	Metabolism
0.760598181	TME
0.031727247	Metabolism
0.195795601	Metabolism
0.565969068	Metabolism
0.049063014	Metabolism
0.025095854	TME
0.095435054	TME
0.913900707	Proliferation/Metastasis
0.023592041	Metabolism
0.879686913	Proliferation/Metastasis
0.946972596	Proliferation/Metastasis
0.496133793	TME
0.003348031	TME
0.001475198	TME
5.41E-06	TME
0.034800658	Metabolism
7.23E-05	Proliferation/Metastasis
0.000621219	Metabolism
0.006307065	Metabolism
0.947833383	Proliferation/Metastasis

2.33E-07	Proliferation/Metastasis
0.157956309	Metabolism
0.009093422	Metabolism
0.024396909	Metabolism
0.109473158	Metabolism
0.075200086	TME
0.030569405	TME
0.000594873	TME
0.060676325	TME
0.002848578	TME
0.088558509	Metabolism
0.02577373	Metabolism
0.126725426	Metabolism
0.000898545	Metabolism
0.115996772	Metabolism
8.96E-06	TME
0.000333575	TME
0.001071109	TME
0.043289495	TME
0.000353757	TME
0.011127966	TME
0.001794437	TME
0.036520994	TME
0.000542843	TME
0.044502461	Proliferation/Metastasis
0.009467939	Proliferation/Metastasis
0.426319933	Metabolism
0.709698021	Metabolism
0.054780995	TME
0.718568312	Metabolism
0.12093243	Metabolism
2.44E-05	TME
0.014037351	Proliferation/Metastasis
0.179918429	Proliferation/Metastasis
0.406553113	TME
7.82E-05	Metabolism
0.540037788	Metabolism
0.108938796	Proliferation/Metastasis
7.64E-09	Proliferation/Metastasis
0.003919354	TME
0.000486053	TME
0.028108877	TME
4.11E-05	TME

0.001915892	Proliferation/Metastasis
0.000352143	TME
0.000160713	TME
0.18679083	Metabolism
3.41E-07	TME
2.03E-07	TME
0.002397445	TME
0.184482858	TME
0.351164307	Metabolism
0.00078723	Metabolism
0.08757201	Metabolism
0.002344594	TME
5.46E-05	Metabolism
1.43E-05	TME
0.007434737	TME
1.70E-05	TME
9.97E-05	TME
0.297546978	TME
0.066649428	Metabolism
0.001166253	Proliferation/Metastasis
0.003449938	Metabolism
0.511398024	Proliferation/Metastasis
0.140322713	Metabolism
0.79297885	Metabolism
0.253955004	Metabolism
0.240403151	Metabolism
0.909721623	Metabolism
0.002266341	Metabolism
0.34430362	Metabolism
3.69E-05	Metabolism
0.038499851	Metabolism
0.045763247	Metabolism
3.56E-06	Metabolism
0.054745803	Metabolism
0.155470326	Metabolism
0.163744948	Metabolism
0.000487958	TME
0.000758827	Proliferation/Metastasis
0.006744195	Metabolism
3.62E-10	Proliferation/Metastasis
0.01779306	TME
7.23E-12	Proliferation/Metastasis
2.33E-11	Proliferation/Metastasis

3.79E-05	TME
0.040885336	TME
0.021013464	Metabolism
2.06E-09	Metabolism
1.08E-15	Proliferation/Metastasis
0.442664636	Proliferation/Metastasis
1.95E-06	Proliferation/Metastasis
0.030679417	Metabolism
5.58E-09	Metabolism
0.011104337	Metabolism
0.014572821	Proliferation/Metastasis
0.003044774	TME
0.001147619	TME
0.351550416	Metabolism
4.81E-10	Proliferation/Metastasis
6.23E-07	Metabolism
0.002307617	TME
0.042503836	TME
0.000206967	TME
8.42E-06	TME
0.000118637	Metabolism
0.170862267	TME
4.32E-05	Proliferation/Metastasis
3.54E-05	TME
0.963793388	Proliferation/Metastasis
4.92E-05	Proliferation/Metastasis
1.17E-09	Metabolism
0.007184397	Proliferation/Metastasis
8.25E-05	TME
0.031689671	Metabolism
0.073764381	TME
0.047126969	TME
0.957765285	TME
8.26E-06	TME
0.00640397	TME
0.003874305	TME
0.001087143	Metabolism
6.30E-05	TME
0.438689331	Metabolism
0.000168761	Metabolism
1.14E-05	Proliferation/Metastasis
6.33E-06	Proliferation/Metastasis
0.030045976	Metabolism

0.078681502	Metabolism
0.221778108	Metabolism
0.86521894	Metabolism
4.57E-06	Proliferation/Metastasis
4.46E-07	Proliferation/Metastasis
0.776364073	Metabolism
0.399568077	Metabolism
0.723194811	Metabolism
5.82E-05	TME
0.037620834	Metabolism
0.78763336	Metabolism
0.036955139	Metabolism
0.063312803	Metabolism
7.47E-07	Proliferation/Metastasis
0.486485706	Metabolism
1.02E-05	Metabolism
0.004022449	Metabolism
0.00738281	Metabolism
0.30750898	Metabolism
0.109903028	Metabolism
0.639402486	Proliferation/Metastasis
0.01983599	Metabolism
0.764208558	Metabolism
7.63E-06	Proliferation/Metastasis
0.003025546	Metabolism
0.001488335	Metabolism
0.085526433	Metabolism
0.053101049	Metabolism
0.041608592	Metabolism
0.011566959	Metabolism
0.010510844	Metabolism
0.03183792	Metabolism
0.000852923	TME
0.013396836	TME
3.65E-05	TME
0.008108156	TME
0.182135434	TME
0.621539305	Metabolism
0.185085055	Metabolism
3.32E-07	Proliferation/Metastasis
7.00E-05	Metabolism
8.67E-10	Proliferation/Metastasis
0.360950881	Metabolism

0.013488048	TME
5.15E-05	Metabolism
0.001027094	Metabolism
0.00047124	Metabolism
0.001482934	Metabolism
0.000750494	TME
0.053064105	TME
4.07E-06	Proliferation/Metastasis
0.02911586	Metabolism
0.001946405	Proliferation/Metastasis
0.001453435	Proliferation/Metastasis
0.040190129	TME
0.812442388	TME
0.00029739	TME
0.003760483	TME
0.665939683	Metabolism
0.098305939	Proliferation/Metastasis
0.006104604	Metabolism
0.119511316	Metabolism
0.000126456	Proliferation/Metastasis
0.032646567	Proliferation/Metastasis
0.012449127	Metabolism
0.764005991	Metabolism
0.006787182	Metabolism
0.619444416	Metabolism
0.016238624	TME
0.015005198	TME
0.010714607	TME
0.461715672	TME
0.265025224	TME
0.439182506	Metabolism
0.299197379	Metabolism
0.034350823	Metabolism
0.05856308	Metabolism
0.776941531	Metabolism
0.000174154	TME
0.000139697	TME
0.000889544	TME
0.008274034	TME
0.000336262	TME
0.001192232	TME
0.000759241	TME
0.017190174	TME

0.001401237	TME
0.298323035	Proliferation/Metastasis
0.382506342	Proliferation/Metastasis
0.777082685	Metabolism
0.528084995	Metabolism
0.011986944	TME
0.223759767	Metabolism
0.000367459	Metabolism
0.000713539	TME
1.60E-05	Proliferation/Metastasis
0.000430657	Proliferation/Metastasis
0.817586518	TME
0.411098053	Metabolism
0.015490884	Metabolism
0.025254943	Proliferation/Metastasis
0.036739612	Proliferation/Metastasis
2.50E-05	TME
0.00127381	TME
1.86E-05	TME
0.000149162	TME
0.004348674	Proliferation/Metastasis
0.032126954	TME
0.002334232	TME
0.038373167	Metabolism
0.000609751	TME
0.00011186	TME
0.006232214	TME
0.417608954	TME
0.136032134	Metabolism
0.845883487	Metabolism
0.766991342	Metabolism
0.000577851	TME
0.844259281	Metabolism
1.65E-07	TME
0.001390826	TME
1.70E-05	TME
0.084537819	TME
0.00354086	TME
0.0030947	Metabolism
0.548402112	Proliferation/Metastasis
0.142339031	Metabolism
0.26158879	Proliferation/Metastasis
0.29046774	Metabolism

0.114339398	Metabolism
0.0656319	Metabolism
0.898759442	Metabolism
0.591805135	Metabolism
0.082026979	Metabolism
0.19271832	Metabolism
0.317648104	Metabolism
0.38994659	Metabolism
0.48231561	Metabolism
0.723641943	Metabolism
0.864891247	Metabolism
0.224752102	Metabolism
0.030912731	Metabolism
0.001158594	TME
0.004802572	Proliferation/Metastasis
0.751669378	Metabolism
0.068455059	Proliferation/Metastasis
0.004743285	TME
0.000164714	Proliferation/Metastasis
2.98E-06	Proliferation/Metastasis
0.001205421	TME
0.010798433	TME
8.45E-08	Metabolism
6.42E-09	Metabolism
0.005803044	Proliferation/Metastasis
0.003808501	Proliferation/Metastasis
3.53E-07	Proliferation/Metastasis
0.007595425	Metabolism
0.389080365	Metabolism
0.184446866	Metabolism
0.584690099	Proliferation/Metastasis
0.001034114	TME
0.000465171	TME
0.017777679	Metabolism
2.04E-05	Proliferation/Metastasis
0.003857056	Metabolism
2.76E-05	TME
0.001060977	TME
0.023094918	TME
4.75E-05	TME
0.052301214	Metabolism
0.004194349	TME
0.005567261	Proliferation/Metastasis

0.001454533	TME
0.692847735	Proliferation/Metastasis
0.0476617	Proliferation/Metastasis
2.81E-07	Metabolism
8.26E-05	Proliferation/Metastasis
2.93E-05	TME
0.539141383	Metabolism
0.762494618	TME
0.008466455	TME
0.000461295	TME
5.22E-05	TME
0.354537176	TME
0.00011604	TME
0.962332947	Metabolism
0.001923616	TME
0.602540849	Metabolism
0.010811413	Metabolism
5.17E-05	Proliferation/Metastasis
0.262840299	Proliferation/Metastasis
0.55437013	Metabolism
0.88665068	Metabolism
0.000627013	Metabolism
0.001544212	Metabolism
0.285909949	Proliferation/Metastasis
0.142473218	Proliferation/Metastasis
0.791732183	Metabolism
0.001049835	Metabolism
0.74740082	Metabolism
0.003184258	TME
0.691799227	Metabolism
0.095172142	Metabolism
0.197989223	Metabolism
0.023426196	Metabolism
0.00304006	Proliferation/Metastasis
0.009475497	Metabolism
0.859543635	Metabolism
0.955232732	Metabolism
0.231151222	Metabolism
2.94E-05	Metabolism
0.795680984	Metabolism
0.551222601	Proliferation/Metastasis
0.615927197	Metabolism
0.251209049	Metabolism

0.019982761	Proliferation/Metastasis
0.493382186	Metabolism
2.41E-05	Metabolism
0.045190645	Metabolism
0.882248977	Metabolism
0.554891556	Metabolism
0.999085423	Metabolism
0.164998158	Metabolism
0.584850822	Metabolism
0.001917193	TME
1.98E-05	TME
1.04E-05	TME
0.003976659	TME
0.035239551	TME
0.002618606	Metabolism
0.063564717	Metabolism
0.0511419	Proliferation/Metastasis
0.134907314	Metabolism
0.000377973	Proliferation/Metastasis
0.132925359	Metabolism
0.355076734	TME
0.715891072	Metabolism
0.000212827	Metabolism
0.561574867	Metabolism
0.504104909	Metabolism
0.14753138	TME
0.180533793	TME
0.323724847	Proliferation/Metastasis
0.922036751	Metabolism
0.513379889	Proliferation/Metastasis
0.837036561	Proliferation/Metastasis
0.020799047	TME
2.52E-05	TME
2.16E-06	TME
3.74E-10	TME
0.942097692	Metabolism
4.28E-08	Proliferation/Metastasis
0.010790453	Metabolism
0.0020338	Metabolism
0.273899068	Proliferation/Metastasis
1.33E-05	Proliferation/Metastasis
3.12E-07	Metabolism
1.67E-07	Metabolism

0.015272898	Metabolism
0.6026715	Metabolism
0.002466705	TME
4.20E-06	TME
0.00017135	TME
0.359203137	TME
1.87E-10	TME
0.406629277	Metabolism
0.189485851	Metabolism
0.887607411	Metabolism
0.00118248	Metabolism
0.709288243	Metabolism
0.001769612	TME
0.24126841	TME
7.43E-07	TME
1.06E-08	TME
6.10E-07	TME
1.89E-06	TME
2.54E-06	TME
2.62E-05	TME
3.42E-06	TME
0.115225422	Proliferation/Metastasis
6.32E-05	Proliferation/Metastasis
0.116879865	Metabolism
0.288853615	Metabolism
4.72E-07	TME
0.118578961	Metabolism
0.125833652	Metabolism
6.34E-10	TME
0.017438239	Proliferation/Metastasis
0.76499268	Proliferation/Metastasis
5.49E-08	TME
0.021008753	Metabolism
1.60E-06	Metabolism
0.123733442	Proliferation/Metastasis
0.014139706	Proliferation/Metastasis
0.000119794	TME
0.000496408	TME
2.30E-07	TME
0.002758256	TME
0.809004705	Proliferation/Metastasis
0.012215659	TME
3.37E-11	TME

0.424277239	Metabolism
5.17E-05	TME
6.17E-09	TME
5.17E-12	TME
0.018674903	TME
0.446651707	Metabolism
0.101125974	Metabolism
0.444629738	Metabolism
0.00060031	TME
0.00521369	Metabolism
6.64E-11	TME
2.67E-05	TME
4.05E-09	TME
2.38E-10	TME
0.001334632	TME
0.052348727	Metabolism
0.099309858	Proliferation/Metastasis
0.000240446	Metabolism
0.348841471	Proliferation/Metastasis
2.65E-05	Metabolism
0.000236483	Metabolism
0.000190234	Metabolism
0.324894822	Metabolism
0.544825468	Metabolism
0.000129786	Metabolism
0.24610883	Metabolism
0.186461144	Metabolism
0.00144473	Metabolism
0.932029411	Metabolism
0.00196354	Metabolism
0.299849238	Metabolism
0.002501044	Metabolism
0.551716657	Metabolism
1.21E-08	TME
0.036618088	Proliferation/Metastasis
0.007764815	Metabolism
4.99E-05	Proliferation/Metastasis
7.22E-06	TME
1.72E-16	Proliferation/Metastasis
9.69E-13	Proliferation/Metastasis
1.99E-08	TME
5.16E-15	TME
0.002911626	Metabolism

0.109620783	Metabolism
0.033738284	Proliferation/Metastasis
0.005408561	Proliferation/Metastasis
3.69E-09	Proliferation/Metastasis
0.014403405	Metabolism
0.003716839	Metabolism
8.38E-08	Metabolism
0.007195221	Proliferation/Metastasis
2.32E-07	TME
1.46E-06	TME
0.084993896	Metabolism
2.20E-05	Proliferation/Metastasis
0.095604881	Metabolism
0.000131548	TME
5.06E-09	TME
1.78E-06	TME
0.000289299	TME
0.007145245	Metabolism
0.001972743	TME
0.007451374	Proliferation/Metastasis
5.50E-13	TME
0.00052913	Proliferation/Metastasis
0.002178898	Proliferation/Metastasis
0.474741172	Metabolism
0.004903835	Proliferation/Metastasis
1.11E-06	TME
0.45085819	Metabolism
0.014759425	TME
0.207439991	TME
0.58585277	TME
8.23E-10	TME
0.000123699	TME
3.98E-05	TME
0.180209685	Metabolism
1.73E-14	TME
0.09920767	Metabolism
0.512273727	Metabolism
3.70E-10	Proliferation/Metastasis
0.03869369	Proliferation/Metastasis
0.311885626	Metabolism
0.01112894	Metabolism
0.231418348	Metabolism
0.000481162	Metabolism

2.23E-11	Proliferation/Metastasis
0.000941341	Proliferation/Metastasis
0.234598162	Metabolism
0.668756846	Metabolism
0.027583179	Metabolism
2.09E-05	TME
2.47E-06	Metabolism
0.009436654	Metabolism
0.539682516	Metabolism
0.002319271	Metabolism
0.000661953	Proliferation/Metastasis
0.017418561	Metabolism
0.073753204	Metabolism
3.47E-06	Metabolism
0.198007398	Metabolism
0.126178722	Metabolism
0.43399762	Metabolism
0.00017363	Proliferation/Metastasis
0.001186021	Metabolism
0.000165604	Metabolism
0.532899459	Proliferation/Metastasis
0.000110575	Metabolism
0.083226002	Metabolism
0.043632305	Metabolism
0.241782307	Metabolism
0.038291963	Metabolism
0.000600264	Metabolism
0.192143053	Metabolism
0.710039507	Metabolism
3.70E-07	TME
5.63E-11	TME
3.93E-08	TME
3.83E-09	TME
3.26E-07	TME
0.878471391	Metabolism
0.833005357	Metabolism
0.444332585	Proliferation/Metastasis
0.865803855	Metabolism
3.75E-13	Proliferation/Metastasis
0.013715738	Metabolism
0.092084407	TME
8.21E-06	Metabolism
0.820162698	Metabolism

9.81E-06	Metabolism
0.004778079	Metabolism
0.004847761	TME
0.006249547	TME
0.00012012	Proliferation/Metastasis
0.782489682	Metabolism
0.003798945	Proliferation/Metastasis
0.256709187	Proliferation/Metastasis
0.053321696	TME
0.227941549	TME
0.534111281	TME
0.296358399	TME
0.234066895	Metabolism
0.000181067	Proliferation/Metastasis
0.804958718	Metabolism
0.16730155	Metabolism
0.739139486	Proliferation/Metastasis
0.927482302	Proliferation/Metastasis
0.929100111	Metabolism
0.02102439	Metabolism
0.305974837	Metabolism
0.044239772	Metabolism
0.754392434	TME
0.721075693	TME
0.24663407	TME
0.342402048	TME
0.468280241	TME
0.191959686	Metabolism
0.017890324	Metabolism
0.000390252	Metabolism
0.069622306	Metabolism
0.457792309	Metabolism
0.36615895	TME
0.038479727	TME
0.777575709	TME
0.517528617	TME
0.955662709	TME
0.621680455	TME
0.71296469	TME
0.070232078	TME
0.635260545	TME
0.727187051	Proliferation/Metastasis
0.275627916	Proliferation/Metastasis

0.000227579	Metabolism
0.001072061	Metabolism
0.045464171	TME
0.245317685	Metabolism
0.627898394	Metabolism
0.605142362	TME
0.014133484	Proliferation/Metastasis
0.051123367	Proliferation/Metastasis
0.255359884	TME
0.916078784	Metabolism
0.742921548	Metabolism
0.108711032	Proliferation/Metastasis
0.844261406	Proliferation/Metastasis
0.776309594	TME
0.86349267	TME
0.635063849	TME
0.5871321	TME
0.005726862	Proliferation/Metastasis
0.867680176	TME
0.515271623	TME
0.413637777	Metabolism
0.76036891	TME
0.616670707	TME
0.650941916	TME
0.024570973	TME
0.142959928	Metabolism
0.095035911	Metabolism
0.311528384	Metabolism
0.998693837	TME
0.766205877	Metabolism
0.656090753	TME
0.967677432	TME
0.969890124	TME
0.439393006	TME
0.038676066	TME
0.91606592	Metabolism
0.466554719	Proliferation/Metastasis
0.312847783	Metabolism
0.399044003	Proliferation/Metastasis
0.770793265	Metabolism
0.183291444	Metabolism
0.466206585	Metabolism
0.258858569	Metabolism

0.157726854	Metabolism
0.971105895	Metabolism
0.183052175	Metabolism
0.870492035	Metabolism
0.026758159	Metabolism
0.822863059	Metabolism
0.284521138	Metabolism
0.912901479	Metabolism
0.126610738	Metabolism
0.003361363	Metabolism
0.454405878	TME
0.246657302	Proliferation/Metastasis
0.012806099	Metabolism
0.789875597	Proliferation/Metastasis
0.193293446	TME
0.500149616	Proliferation/Metastasis
0.661478595	Proliferation/Metastasis
0.735876361	TME
0.838554335	TME
0.290144419	Metabolism
0.451893283	Metabolism
0.815588586	Proliferation/Metastasis
2.43E-05	Proliferation/Metastasis
0.320596193	Proliferation/Metastasis
0.602078814	Metabolism
0.107958766	Metabolism
0.039276372	Metabolism
0.134787738	Proliferation/Metastasis
0.747540896	TME
0.481997673	TME
0.103530355	Metabolism
0.126991642	Proliferation/Metastasis
0.060071661	Metabolism
0.707281691	TME
0.678881139	TME
0.956553872	TME
0.772914396	TME
0.410092561	Metabolism
0.499840397	TME
0.909089122	Proliferation/Metastasis
0.721012656	TME
0.001396156	Proliferation/Metastasis
0.095422946	Proliferation/Metastasis

0.014119169	Metabolism
0.039143426	Proliferation/Metastasis
0.703263348	TME
0.336481601	Metabolism
0.505565146	TME
0.374625058	TME
0.54872812	TME
0.857467632	TME
0.004921079	TME
0.647712647	TME
0.09498458	Metabolism
0.922494906	TME
0.869589867	Metabolism
0.02370934	Metabolism
0.56416313	Proliferation/Metastasis
0.148632429	Proliferation/Metastasis
2.88E-07	Metabolism
0.029647663	Metabolism
0.803071293	Metabolism
0.097913289	Metabolism
0.019214257	Proliferation/Metastasis
0.088122046	Proliferation/Metastasis
0.173471845	Metabolism
0.260877219	Metabolism
0.509065238	Metabolism
0.803026059	TME
0.300612984	Metabolism
0.597419865	Metabolism
0.481167249	Metabolism
0.353950493	Metabolism
0.435513309	Proliferation/Metastasis
0.000110302	Metabolism
0.31397846	Metabolism
0.018599076	Metabolism
0.285998735	Metabolism
0.27889985	Metabolism
2.92E-07	Metabolism
0.006139402	Proliferation/Metastasis
0.153432283	Metabolism
0.007105061	Metabolism
0.032753721	Proliferation/Metastasis
0.119821358	Metabolism
0.305263568	Metabolism

0.06153096	Metabolism
0.947009751	Metabolism
0.127065566	Metabolism
0.70851975	Metabolism
0.071428709	Metabolism
0.784396701	Metabolism
0.760163675	TME
0.744443115	TME
0.780033916	TME
0.825756167	TME
0.675804098	TME
0.119047815	Metabolism
0.840796013	Metabolism
0.844570855	Proliferation/Metastasis
0.959981561	Metabolism
0.684837117	Proliferation/Metastasis
0.120528959	Metabolism
0.01996986	TME
0.33143732	Metabolism
0.059867011	Metabolism
0.029927614	Metabolism
0.076938583	Metabolism
0.65142151	TME
0.682785669	TME
0.469863736	Proliferation/Metastasis
0.390961262	Metabolism
0.149013156	Proliferation/Metastasis
0.470044953	Proliferation/Metastasis
0.000418276	TME
3.03E-15	TME
3.45E-06	TME
8.71E-06	TME
5.21E-07	Metabolism
0.936260273	Proliferation/Metastasis
0.323010798	Metabolism
0.002179936	Metabolism
1.54E-10	Proliferation/Metastasis
1.86E-35	Proliferation/Metastasis
1.28E-08	Metabolism
0.481373391	Metabolism
0.099967571	Metabolism
3.20E-06	Metabolism
0.002244296	TME

1.06E-29	TME
2.49E-12	TME
1.77E-05	TME
3.44E-12	TME
0.6045177	Metabolism
0.00146745	Metabolism
2.75E-09	Metabolism
0.000321816	Metabolism
0.005846303	Metabolism
1.22E-21	TME
1.92E-12	TME
1.00E-23	TME
9.57E-05	TME
1.87E-10	TME
1.49E-09	TME
2.60E-09	TME
6.12E-05	TME
0.001790405	TME
6.06E-12	Proliferation/Metastasis
1.44E-18	Proliferation/Metastasis
1.26E-07	Metabolism
5.51E-11	Metabolism
2.91E-18	TME
0.241913897	Metabolism
9.10E-09	Metabolism
1.01E-21	TME
0.16317746	Proliferation/Metastasis
2.74E-05	Proliferation/Metastasis
4.11E-06	TME
0.000673473	Metabolism
0.169869145	Metabolism
1.01E-08	Proliferation/Metastasis
8.30E-27	Proliferation/Metastasis
7.41E-05	TME
1.35E-18	TME
6.55E-08	TME
4.51E-10	TME
1.96E-07	Proliferation/Metastasis
4.60E-52	TME
1.29E-13	TME
0.022564233	Metabolism
2.42E-17	TME
8.26E-19	TME

7.09E-08	TME
0.035958457	TME
0.779352172	Metabolism
0.632647421	Metabolism
0.278726829	Metabolism
1.38E-45	TME
0.681194678	Metabolism
4.51E-09	TME
0.003276178	TME
2.18E-09	TME
1.59E-05	TME
0.811463058	TME
0.050378206	Metabolism
2.60E-13	Proliferation/Metastasis
0.083976496	Metabolism
9.39E-16	Proliferation/Metastasis
0.001443357	Metabolism
0.018217955	Metabolism
2.14E-09	Metabolism
0.270856598	Metabolism
0.041567258	Metabolism
1.24E-28	Metabolism
0.198878901	Metabolism
1.75E-14	Metabolism
0.165141526	Metabolism
3.78E-07	Metabolism
0.012168572	Metabolism
0.265665373	Metabolism
3.78E-20	Metabolism
2.60E-11	Metabolism
1.88E-12	TME
7.00E-05	Proliferation/Metastasis
4.43E-05	Metabolism
2.53E-09	Proliferation/Metastasis
1.41E-06	TME
7.80E-14	Proliferation/Metastasis
1.88E-07	Proliferation/Metastasis
1.36E-05	TME
2.50E-15	TME
0.001426104	Metabolism
0.603280769	Metabolism
0.016778	Proliferation/Metastasis
4.89E-11	Proliferation/Metastasis

1.13E-16	Proliferation/Metastasis
0.055650911	Metabolism
0.000186382	Metabolism
1.19E-18	Metabolism
0.708292579	Proliferation/Metastasis
7.01E-12	TME
1.95E-15	TME
4.13E-10	Metabolism
4.59E-10	Proliferation/Metastasis
0.899141957	Metabolism
2.40E-06	TME
3.93E-05	TME
4.46E-51	TME
2.17E-35	TME
0.00155651	Metabolism
0.000205472	TME
1.71E-08	Proliferation/Metastasis
7.10E-27	TME
0.000252322	Proliferation/Metastasis
9.57E-09	Proliferation/Metastasis
0.000140563	Metabolism
3.37E-07	Proliferation/Metastasis
1.43E-15	TME
1.95E-13	Metabolism
0.260647899	TME
9.78E-12	TME
0.000974351	TME
9.23E-13	TME
0.254091728	TME
0.004966715	TME
0.020560294	Metabolism
2.10E-15	TME
0.005039024	Metabolism
0.74979837	Metabolism
0.028593476	Proliferation/Metastasis
2.19E-07	Proliferation/Metastasis
1.09E-14	Metabolism
2.39E-06	Metabolism
0.651425161	Metabolism
0.007269736	Metabolism
4.66E-07	Proliferation/Metastasis
0.004299233	Proliferation/Metastasis
0.667640425	Metabolism

1.11E-06	Metabolism
0.036943139	Metabolism
3.12E-51	TME
8.99E-09	Metabolism
0.499520974	Metabolism
0.199955772	Metabolism
0.001269117	Metabolism
0.001900696	Proliferation/Metastasis
0.000391061	Metabolism
0.000268736	Metabolism
4.41E-14	Metabolism
0.045032331	Metabolism
1.17E-06	Metabolism
8.46E-06	Metabolism
7.17E-10	Proliferation/Metastasis
0.008903999	Metabolism
0.026819988	Metabolism
0.172218877	Proliferation/Metastasis
1.97E-12	Metabolism
1.23E-07	Metabolism
2.94E-19	Metabolism
0.585421111	Metabolism
4.26E-05	Metabolism
0.154506665	Metabolism
6.70E-09	Metabolism
0.69985451	Metabolism
5.98E-18	TME
1.08E-06	TME
2.79E-08	TME
7.87E-16	TME
2.91E-10	TME
0.005224469	Metabolism
5.14E-14	Metabolism
6.56E-05	Proliferation/Metastasis
0.227893936	Metabolism
0.002398201	Proliferation/Metastasis
0.02129369	Metabolism
0.334687195	TME
5.36E-05	Metabolism
2.81E-05	Metabolism
0.005493889	Metabolism
1.25E-05	Metabolism
2.39E-67	TME

2.43E-31	TME
2.44E-12	Proliferation/Metastasis
0.000213398	Metabolism
0.642983161	Proliferation/Metastasis
0.000733885	Proliferation/Metastasis
0.043750912	TME
0.458769561	TME
1.23E-11	TME
0.00038844	TME
3.16E-08	Metabolism
2.32E-05	Proliferation/Metastasis
0.781589562	Metabolism
0.396843647	Metabolism
0.947500411	Proliferation/Metastasis
0.031417891	Proliferation/Metastasis
0.023287438	Metabolism
0.482763789	Metabolism
0.051572686	Metabolism
0.095895366	Metabolism
0.05046261	TME
8.63E-06	TME
6.89E-08	TME
0.326233832	TME
0.4921413	TME
0.000219347	Metabolism
0.015487815	Metabolism
0.30600915	Metabolism
0.008187082	Metabolism
0.193259644	Metabolism
1.57E-12	TME
3.70E-07	TME
4.64E-05	TME
0.000489422	TME
0.003467348	TME
0.000163051	TME
8.49E-05	TME
0.056727867	TME
9.09E-05	TME
0.139266701	Proliferation/Metastasis
2.33E-08	Proliferation/Metastasis
0.216571437	Metabolism
0.599507571	Metabolism
0.210856983	TME

0.085624102	Metabolism
2.56E-16	Metabolism
9.75E-06	TME
1.61E-32	Proliferation/Metastasis
1.65E-07	Proliferation/Metastasis
0.424103041	TME
0.002069872	Metabolism
5.11E-11	Metabolism
0.392557936	Proliferation/Metastasis
3.27E-08	Proliferation/Metastasis
5.97E-11	TME
5.88E-10	TME
1.28E-07	TME
1.09E-08	TME
1.39E-08	Proliferation/Metastasis
1.27E-09	TME
1.69E-05	TME
0.019379267	Metabolism
9.27E-12	TME
2.37E-05	TME
0.202214216	TME
0.736591756	TME
0.001197009	Metabolism
0.005895567	Metabolism
7.32E-12	Metabolism
9.46E-06	TME
3.06E-06	Metabolism
3.83E-08	TME
2.83E-06	TME
1.26E-05	TME
0.30217153	TME
0.142161822	TME
3.00E-05	Metabolism
0.006771873	Proliferation/Metastasis
0.050787055	Metabolism
7.25E-16	Proliferation/Metastasis
1.88E-05	Metabolism
0.003325725	Metabolism
3.95E-09	Metabolism
0.003080866	Metabolism
0.247193103	Metabolism
0.023440256	Metabolism
1.25E-07	Metabolism

0.007362156	Metabolism
0.00131907	Metabolism
0.057426831	Metabolism
0.008474557	Metabolism
0.000745617	Metabolism
0.234892737	Metabolism
0.718513777	Metabolism
2.13E-05	TME
6.90E-26	Proliferation/Metastasis
0.884377823	Metabolism
0.000140045	Proliferation/Metastasis
0.000180475	TME
1.05E-09	Proliferation/Metastasis
9.00E-13	Proliferation/Metastasis
0.000114575	TME
0.238168793	TME
2.92E-31	Metabolism
5.15E-45	Metabolism
0.027373289	Proliferation/Metastasis
0.232194214	Proliferation/Metastasis
5.61E-18	Proliferation/Metastasis
0.00309352	Metabolism
3.10E-07	Metabolism
7.62E-12	Metabolism
0.087070221	Proliferation/Metastasis
6.42E-10	TME
1.54E-06	TME
0.163456021	Metabolism
7.97E-16	Proliferation/Metastasis
2.52E-42	Metabolism
1.37E-08	TME
8.83E-06	TME
0.140350981	TME
2.95E-10	TME
1.02E-05	Metabolism
2.54E-07	TME
6.70E-28	Proliferation/Metastasis
0.006239962	TME
1.92E-13	Proliferation/Metastasis
0.299030368	Proliferation/Metastasis
5.97E-50	Metabolism
5.54E-05	Proliferation/Metastasis
3.39E-10	TME

5.97E-06	Metabolism
0.024739213	TME
7.18E-20	TME
4.72E-16	TME
1.95E-07	TME
0.113616182	TME
1.24E-09	TME
0.004368669	Metabolism
1.96E-07	TME
0.002633133	Metabolism
1.46E-05	Metabolism
3.83E-11	Proliferation/Metastasis
0.002315473	Proliferation/Metastasis
0.647335182	Metabolism
0.044075802	Metabolism
0.015894147	Metabolism
6.31E-35	Metabolism
0.080230929	Proliferation/Metastasis
0.000240077	Proliferation/Metastasis
0.000524769	Metabolism
0.086331427	Metabolism
0.001960045	Metabolism
0.026159044	TME
3.02E-05	Metabolism
0.010494397	Metabolism
0.00151989	Metabolism
7.10E-23	Metabolism
0.000613755	Proliferation/Metastasis
0.000290374	Metabolism
0.36467048	Metabolism
4.25E-17	Metabolism
0.052836726	Metabolism
1.03E-11	Metabolism
0.554592088	Metabolism
0.28714612	Proliferation/Metastasis
0.010123949	Metabolism
5.33E-05	Metabolism
1.80E-23	Proliferation/Metastasis
2.86E-22	Metabolism
6.06E-42	Metabolism
1.03E-17	Metabolism
7.50E-07	Metabolism
0.030255828	Metabolism

0.000247905	Metabolism
0.001349882	Metabolism
0.011272399	Metabolism
3.14E-07	TME
0.000256451	TME
1.16E-11	TME
3.10E-05	TME
0.018671208	TME
0.037796752	Metabolism
0.569143737	Metabolism
3.89E-27	Proliferation/Metastasis
7.74E-14	Metabolism
2.24E-09	Proliferation/Metastasis
0.000515127	Metabolism
0.101490017	TME
0.000498942	Metabolism
0.027770602	Metabolism
0.030120028	Metabolism
8.74E-07	Metabolism
0.02651787	TME
0.006275958	TME
0.052297182	Proliferation/Metastasis
0.105953011	Metabolism
0.002706109	Proliferation/Metastasis
9.57E-07	Proliferation/Metastasis
6.05E-23	TME
0.000255151	TME
2.28E-13	TME
0.125641276	TME
1.39E-12	Metabolism
4.95E-10	Proliferation/Metastasis
0.003268618	Metabolism
8.24E-05	Metabolism
2.61E-19	Proliferation/Metastasis
0.003267756	Proliferation/Metastasis
1.46E-05	Metabolism
0.034761393	Metabolism
0.724377965	Metabolism
9.71E-07	Metabolism
7.99E-08	TME
3.06E-11	TME
8.58E-08	TME
0.115548981	TME

1.18E-21	TME
5.27E-07	Metabolism
0.333674665	Metabolism
2.59E-07	Metabolism
0.52426701	Metabolism
3.98E-19	Metabolism
2.38E-19	TME
2.28E-16	TME
1.36E-14	TME
0.000221217	TME
0.000269674	TME
1.61E-06	TME
5.99E-06	TME
5.41E-05	TME
0.006935688	TME
1.96E-20	Proliferation/Metastasis
1.62E-16	Proliferation/Metastasis
8.95E-10	Metabolism
8.18E-10	Metabolism
3.78E-14	TME
0.523928811	Metabolism
0.269193364	Metabolism
2.90E-12	TME
1.43E-24	Proliferation/Metastasis
1.99E-16	Proliferation/Metastasis
0.014711412	TME
0.031256746	Metabolism
2.42E-09	Metabolism
1.54E-23	Proliferation/Metastasis
5.13E-11	Proliferation/Metastasis
1.50E-06	TME
2.35E-14	TME
1.39E-06	TME
3.02E-05	TME
4.07E-06	Proliferation/Metastasis
2.54E-13	TME
1.99E-07	TME
4.16E-07	Metabolism
1.76E-16	TME
1.64E-15	TME
0.002275691	TME
4.97E-07	TME
0.140244373	Metabolism

3.72E-05	Metabolism
0.00231758	Metabolism
6.37E-15	TME
2.28E-08	Metabolism
7.36E-07	TME
0.005401462	TME
8.53E-12	TME
0.902744189	TME
0.036499486	TME
3.75E-06	Metabolism
4.60E-18	Proliferation/Metastasis
0.787574269	Metabolism
3.51E-14	Proliferation/Metastasis
0.031233689	Metabolism
0.119771879	Metabolism
7.17E-05	Metabolism
0.665865267	Metabolism
0.027827796	Metabolism
0.00755256	Metabolism
2.48E-10	Metabolism
0.114085288	Metabolism
0.154585397	Metabolism
1.61E-17	Metabolism
1.86E-08	Metabolism
9.13E-13	Metabolism
1.49E-06	Metabolism
3.80E-14	Metabolism
5.36E-10	TME
2.09E-05	Proliferation/Metastasis
7.36E-13	Metabolism
8.50E-08	Proliferation/Metastasis
8.68E-06	TME
1.46E-05	Proliferation/Metastasis
2.22E-06	Proliferation/Metastasis
4.41E-06	TME
3.57E-06	TME
1.20E-18	Metabolism
1.78E-07	Metabolism
3.07E-07	Proliferation/Metastasis
3.10E-33	Proliferation/Metastasis
2.22E-09	Proliferation/Metastasis
0.308447902	Metabolism
0.029577973	Metabolism

0.663281326	Metabolism
3.79E-08	Proliferation/Metastasis
2.47E-05	TME
6.94E-06	TME
0.062110166	Metabolism
2.36E-16	Proliferation/Metastasis
0.00241512	Metabolism
3.74E-05	TME
3.10E-06	TME
6.51E-14	TME
2.67E-21	TME
0.244950266	Metabolism
0.023868359	TME
0.168733265	Proliferation/Metastasis
2.68E-11	TME
0.783949549	Proliferation/Metastasis
1.79E-13	Proliferation/Metastasis
0.057665935	Metabolism
2.64E-54	Proliferation/Metastasis
9.26E-13	TME
6.24E-07	Metabolism
2.89E-10	TME
1.29E-09	TME
9.09E-13	TME
1.75E-10	TME
9.93E-06	TME
7.95E-06	TME
0.000545147	Metabolism
1.13E-10	TME
1.91E-08	Metabolism
0.185246513	Metabolism
0.001727955	Proliferation/Metastasis
4.34E-08	Proliferation/Metastasis
2.25E-18	Metabolism
0.024560497	Metabolism
3.12E-08	Metabolism
6.54E-07	Metabolism
0.001146572	Proliferation/Metastasis
1.54E-05	Proliferation/Metastasis
0.001685411	Metabolism
1.31E-14	Metabolism
1.15E-13	Metabolism
2.29E-20	TME

5.60E-07	Metabolism
0.036189723	Metabolism
0.019926278	Metabolism
8.09E-10	Metabolism
0.004266339	Proliferation/Metastasis
1.70E-10	Metabolism
0.43496079	Metabolism
0.290666805	Metabolism
1.38E-34	Metabolism
6.13E-35	Metabolism
0.004519379	Metabolism
0.087764949	Proliferation/Metastasis
0.207490637	Metabolism
0.002335438	Metabolism
1.31E-08	Proliferation/Metastasis
2.43E-06	Metabolism
0.07736203	Metabolism
0.000786875	Metabolism
3.92E-06	Metabolism
0.516021529	Metabolism
0.000383148	Metabolism
0.000158649	Metabolism
1.90E-06	Metabolism
1.47E-11	TME
3.75E-06	TME
2.23E-14	TME
2.05E-11	TME
2.49E-10	TME
0.075979608	Metabolism
0.028604003	Metabolism
6.32E-08	Proliferation/Metastasis
1.52E-07	Metabolism
0.000642739	Proliferation/Metastasis
5.58E-05	Metabolism
0.480369857	TME
0.054126211	Metabolism
0.002572231	Metabolism
0.050482617	Metabolism
0.026895524	Metabolism
0.000150164	TME
1.61E-11	TME
4.08E-10	Proliferation/Metastasis
9.22E-07	Metabolism

1.49E-05	Proliferation/Metastasis
0.201420895	Proliferation/Metastasis
1.31E-09	TME
0.002854456	TME
4.47E-10	TME
0.005775135	TME
1.95E-05	Metabolism
0.003450085	Proliferation/Metastasis
0.002247149	Metabolism
0.00318998	Metabolism
2.05E-05	Proliferation/Metastasis
5.23E-05	Proliferation/Metastasis
0.010889639	Metabolism
6.69E-11	Metabolism
8.47E-06	Metabolism
4.72E-05	Metabolism
8.48E-05	TME
9.06E-14	TME
5.17E-10	TME
0.035379098	TME
0.146064857	TME
2.21E-17	Metabolism
1.51E-05	Metabolism
0.202391504	Metabolism
3.28E-10	Metabolism
1.11E-10	Metabolism
1.07E-13	TME
2.25E-17	TME
2.25E-08	TME
0.001421178	TME
0.000700325	TME
1.53E-05	TME
2.57E-05	TME
0.000767366	TME
0.000243915	TME
0.718238324	Proliferation/Metastasis
0.809653145	Proliferation/Metastasis
0.097297606	Metabolism
0.037756919	Metabolism
1.02E-07	TME
0.120798428	Metabolism
6.29E-10	Metabolism
1.18E-06	TME

6.25E-18	Proliferation/Metastasis
3.58E-08	Proliferation/Metastasis
0.654319994	TME
9.12E-08	Metabolism
0.485148053	Metabolism
0.001014013	Proliferation/Metastasis
4.07E-06	Proliferation/Metastasis
1.53E-07	TME
9.57E-08	TME
1.97E-07	TME
3.37E-06	TME
5.03E-10	Proliferation/Metastasis
3.07E-14	TME
5.08E-05	TME
0.018248171	Metabolism
2.17E-13	TME
3.96E-06	TME
0.019181778	TME
1.86E-05	TME
0.343419438	Metabolism
2.56E-11	Metabolism
0.6013458	Metabolism
5.93E-10	TME
0.167139724	Metabolism
3.88E-06	TME
9.72E-08	TME
1.16E-08	TME
0.105169351	TME
0.009497969	TME
0.062412204	Metabolism
0.501545255	Proliferation/Metastasis
0.064607593	Metabolism
9.26E-16	Proliferation/Metastasis
2.37E-05	Metabolism
0.162708762	Metabolism
0.043198624	Metabolism
0.003315382	Metabolism
0.000154925	Metabolism
0.010968366	Metabolism
4.21E-08	Metabolism
0.00526068	Metabolism
3.17E-06	Metabolism
9.95E-11	Metabolism

3.83E-09	Metabolism
5.17E-09	Metabolism
0.675988172	Metabolism
0.215827233	Metabolism
1.31E-08	TME
7.98E-10	Proliferation/Metastasis
4.82E-09	Metabolism
3.45E-06	Proliferation/Metastasis
5.53E-05	TME
1.38E-13	Proliferation/Metastasis
1.32E-10	Proliferation/Metastasis
0.121647908	TME
0.024375056	TME
4.07E-19	Metabolism
8.30E-23	Metabolism
0.000446051	Proliferation/Metastasis
0.331930738	Proliferation/Metastasis
3.21E-19	Proliferation/Metastasis
0.52729161	Metabolism
0.036053309	Metabolism
1.08E-08	Metabolism
7.01E-10	Proliferation/Metastasis
5.00E-06	TME
6.39E-07	TME
0.012466565	Metabolism
6.38E-15	Proliferation/Metastasis
1.44E-17	Metabolism
5.34E-08	TME
2.96E-09	TME
2.51E-06	TME
1.41E-12	TME
0.000188612	Metabolism
1.16E-05	TME
3.10E-05	Proliferation/Metastasis
8.36E-06	TME
3.08E-09	Proliferation/Metastasis
0.00052827	Proliferation/Metastasis
2.07E-27	Metabolism
4.02E-07	Proliferation/Metastasis
3.21E-10	TME
3.41E-05	Metabolism
2.49E-07	TME
2.57E-13	TME

2.81E-08	TME
3.16E-08	TME
3.97E-05	TME
2.41E-06	TME
7.39E-09	Metabolism
1.97E-10	TME
7.07E-12	Metabolism
1.31E-12	Metabolism
0.00015496	Proliferation/Metastasis
1.62E-07	Proliferation/Metastasis
0.309219257	Metabolism
0.389825789	Metabolism
5.91E-09	Metabolism
2.03E-06	Metabolism
0.018953922	Proliferation/Metastasis
9.87E-08	Proliferation/Metastasis
3.00E-14	Metabolism
0.000149178	Metabolism
0.004567471	Metabolism
4.89E-11	TME
0.001090036	Metabolism
0.000963082	Metabolism
1.82E-06	Metabolism
1.12E-23	Metabolism
1.63E-13	Proliferation/Metastasis
0.213369967	Metabolism
4.09E-07	Metabolism
6.60E-12	Metabolism
0.014102953	Metabolism
1.87E-12	Metabolism
0.007758256	Metabolism
0.166226427	Proliferation/Metastasis
3.17E-08	Metabolism
0.066880379	Metabolism
2.13E-24	Proliferation/Metastasis
2.48E-13	Metabolism
1.51E-19	Metabolism
1.21E-14	Metabolism
2.13E-11	Metabolism
0.846759015	Metabolism
0.149764946	Metabolism
8.97E-14	Metabolism
2.03E-06	Metabolism

1.24E-09	TME
2.65E-05	TME
1.55E-11	TME
3.84E-08	TME
4.01E-05	TME
5.74E-05	Metabolism
0.103850093	Metabolism
1.63E-17	Proliferation/Metastasis
0.001576168	Metabolism
0.000180029	Proliferation/Metastasis
4.11E-12	Metabolism
0.017367071	TME
2.23E-06	Metabolism
0.221937945	Metabolism
0.186940224	Metabolism
3.91E-10	Metabolism
0.0019268	TME
1.15E-06	TME
4.98E-09	Proliferation/Metastasis
0.777899386	Metabolism
3.75E-05	Proliferation/Metastasis
0.92616316	Proliferation/Metastasis
1.39E-05	TME
5.18E-23	TME
6.64E-10	TME
3.39E-08	TME
4.97E-09	Metabolism
0.32691166	Proliferation/Metastasis
0.209831145	Metabolism
0.00029845	Metabolism
1.02E-18	Proliferation/Metastasis
8.08E-31	Proliferation/Metastasis
3.97E-15	Metabolism
0.0974172	Metabolism
0.035891415	Metabolism
4.00E-06	Metabolism
0.000204656	TME
1.52E-36	TME
1.45E-13	TME
4.64E-09	TME
1.24E-34	TME
0.993142823	Metabolism
8.04E-07	Metabolism

7.28E-12	Metabolism
4.92E-06	Metabolism
0.000387789	Metabolism
2.61E-29	TME
2.30E-14	TME
9.36E-30	TME
3.80E-07	TME
2.76E-10	TME
3.37E-11	TME
5.76E-11	TME
2.02E-11	TME
3.82E-08	TME
1.30E-12	Proliferation/Metastasis
2.39E-27	Proliferation/Metastasis
7.13E-11	Metabolism
6.39E-07	Metabolism
1.90E-18	TME
0.136266803	Metabolism
1.76E-17	Metabolism
2.41E-33	TME
0.623679243	Proliferation/Metastasis
0.000151527	Proliferation/Metastasis
1.68E-08	TME
0.000176529	Metabolism
0.014715167	Metabolism
1.12E-09	Proliferation/Metastasis
1.03E-18	Proliferation/Metastasis
1.67E-06	TME
1.96E-23	TME
3.49E-09	TME
4.25E-08	TME
3.84E-06	Proliferation/Metastasis
5.08E-37	TME
4.72E-21	TME
2.02E-06	Metabolism
3.93E-18	TME
8.24E-34	TME
2.77E-13	TME
0.020924699	TME
0.207962187	Metabolism
0.265923688	Metabolism
0.001032255	Metabolism
8.81E-32	TME

0.209047377	Metabolism
4.98E-14	TME
0.046145581	TME
5.86E-18	TME
3.38E-13	TME
0.849607332	TME
0.954293485	Metabolism
1.09E-17	Proliferation/Metastasis
0.071653684	Metabolism
9.93E-08	Proliferation/Metastasis
0.000163736	Metabolism
0.355996681	Metabolism
1.39E-18	Metabolism
0.927915236	Metabolism
0.010036335	Metabolism
1.51E-25	Metabolism
0.784277659	Metabolism
2.91E-16	Metabolism
0.743661006	Metabolism
0.052533289	Metabolism
0.075036591	Metabolism
0.003391362	Metabolism
1.85E-20	Metabolism
7.36E-10	Metabolism
2.49E-14	TME
0.325582742	Proliferation/Metastasis
1.20E-07	Metabolism
2.44E-31	Proliferation/Metastasis
3.72E-09	TME
2.02E-31	Proliferation/Metastasis
6.12E-23	Proliferation/Metastasis
1.98E-08	TME
1.13E-47	TME
2.02E-07	Metabolism
0.009347598	Metabolism
0.780369454	Proliferation/Metastasis
2.03E-17	Proliferation/Metastasis
9.49E-19	Proliferation/Metastasis
0.206204259	Metabolism
4.92E-10	Metabolism
2.39E-37	Metabolism
0.389911926	Proliferation/Metastasis
4.82E-17	TME

5.92E-25	TME
1.26E-12	Metabolism
2.74E-19	Proliferation/Metastasis
0.650700583	Metabolism
1.11E-05	TME
0.000216045	TME
4.99E-55	TME
2.24E-36	TME
4.16E-05	Metabolism
0.00068839	TME
2.94E-21	Proliferation/Metastasis
3.82E-52	TME
5.22E-16	Proliferation/Metastasis
9.84E-08	Proliferation/Metastasis
1.89E-10	Metabolism
7.64E-06	Proliferation/Metastasis
3.57E-18	TME
1.24E-24	Metabolism
0.122994821	TME
1.69E-07	TME
0.030857174	TME
2.40E-20	TME
1.88E-08	TME
0.002784604	TME
0.000219699	Metabolism
7.79E-31	TME
3.56E-06	Metabolism
0.002002551	Metabolism
6.95E-10	Proliferation/Metastasis
4.49E-07	Proliferation/Metastasis
1.87E-23	Metabolism
0.000254134	Metabolism
0.146828125	Metabolism
0.000382775	Metabolism
1.06E-30	Proliferation/Metastasis
0.504768828	Proliferation/Metastasis
0.081999113	Metabolism
1.86E-11	Metabolism
0.052852102	Metabolism
9.36E-41	TME
2.18E-12	Metabolism
0.661348921	Metabolism
0.000604006	Metabolism

0.925976876	Metabolism
2.53E-06	Proliferation/Metastasis
0.006590465	Metabolism
0.000442372	Metabolism
1.51E-19	Metabolism
0.000894686	Metabolism
1.59E-05	Metabolism
3.50E-06	Metabolism
1.55E-09	Proliferation/Metastasis
0.000432335	Metabolism
0.022251437	Metabolism
0.096818688	Proliferation/Metastasis
1.84E-26	Metabolism
3.16E-15	Metabolism
3.47E-23	Metabolism
0.57198294	Metabolism
0.047478511	Metabolism
0.004902537	Metabolism
2.53E-15	Metabolism
0.624988009	Metabolism
4.93E-24	TME
1.24E-12	TME
2.00E-18	TME
1.32E-29	TME
6.43E-18	TME
7.78E-07	Metabolism
7.55E-17	Metabolism
0.078545972	Proliferation/Metastasis
0.046496096	Metabolism
4.22E-29	Proliferation/Metastasis
0.012778863	Metabolism
0.205304103	TME
1.45E-05	Metabolism
2.46E-09	Metabolism
2.01E-06	Metabolism
6.35E-09	Metabolism
5.13E-60	TME
3.27E-22	TME
2.54E-17	Proliferation/Metastasis
0.000114918	Metabolism
0.34264012	Proliferation/Metastasis
0.003400218	Proliferation/Metastasis
0.055644104	TME

0.619605793	TME
0.984397711	TME
0.671111712	TME
0.000482001	Metabolism
9.77E-05	Proliferation/Metastasis
0.000339363	Metabolism
2.45E-07	Metabolism
0.820781276	Proliferation/Metastasis
0.847810786	Proliferation/Metastasis
0.011079858	Metabolism
0.006149518	Metabolism
0.942167969	Metabolism
0.028453535	Metabolism
0.081545362	TME
0.676462998	TME
0.707291681	TME
0.200823095	TME
0.03734715	TME
0.54446119	Metabolism
0.025035849	Metabolism
0.00499649	Metabolism
0.034662139	Metabolism
0.298144451	Metabolism
0.312346726	TME
0.178636932	TME
0.314225772	TME
0.259432122	TME
0.834796947	TME
0.807985861	TME
0.760068378	TME
0.836136552	TME
0.586259996	TME
0.802939521	Proliferation/Metastasis
0.090237564	Proliferation/Metastasis
4.48E-07	Metabolism
0.069258853	Metabolism
0.413038659	TME
0.911007685	Metabolism
0.682914958	Metabolism
0.606765419	TME
0.794093539	Proliferation/Metastasis
0.066978534	Proliferation/Metastasis
0.547536737	TME

0.398207162	Metabolism
0.359160781	Metabolism
0.417430675	Proliferation/Metastasis
0.531648504	Proliferation/Metastasis
0.337619218	TME
0.52293647	TME
0.398029539	TME
0.615092025	TME
1.21E-07	Proliferation/Metastasis
0.125344815	TME
0.420961184	TME
0.252997673	Metabolism
0.501457983	TME
0.725715124	TME
0.788722806	TME
0.079594434	TME
0.532657619	Metabolism
0.576151261	Metabolism
0.265851808	Metabolism
0.127474104	TME
0.001210592	Metabolism
0.526885295	TME
0.255287829	TME
0.102532213	TME
0.509992434	TME
0.823739415	TME
0.016186634	Metabolism
0.88446409	Proliferation/Metastasis
1.09E-05	Metabolism
0.397757359	Proliferation/Metastasis
0.821961999	Metabolism
0.398558374	Metabolism
0.068677433	Metabolism
0.104039228	Metabolism
0.010987345	Metabolism
0.502166621	Metabolism
0.806672856	Metabolism
0.993109038	Metabolism
2.21E-06	Metabolism
0.49903226	Metabolism
0.011118092	Metabolism
0.317669003	Metabolism
3.18E-05	Metabolism

2.13E-07	Metabolism
0.354685218	TME
0.003793991	Proliferation/Metastasis
0.011269025	Metabolism
0.559103644	Proliferation/Metastasis
0.458358174	TME
0.204825337	Proliferation/Metastasis
0.312663424	Proliferation/Metastasis
0.834334073	TME
0.051467936	TME
0.26659084	Metabolism
0.146374177	Metabolism
0.864891313	Proliferation/Metastasis
0.001128614	Proliferation/Metastasis
0.254933453	Proliferation/Metastasis
0.001110481	Metabolism
0.095723895	Metabolism
0.164011963	Metabolism
0.00064967	Proliferation/Metastasis
0.642248724	TME
0.673983805	TME
0.001165508	Metabolism
0.626277387	Proliferation/Metastasis
0.594939084	Metabolism
0.360550302	TME
0.278455446	TME
0.085479891	TME
0.366014679	TME
0.548061416	Metabolism
0.000180922	TME
0.139323221	Proliferation/Metastasis
0.830562574	TME
0.236977967	Proliferation/Metastasis
0.00025911	Proliferation/Metastasis
2.78E-06	Metabolism
0.004157334	Proliferation/Metastasis
0.773498838	TME
4.76E-10	Metabolism
0.282794869	TME
0.289238358	TME
0.57709548	TME
0.778700324	TME
0.055555434	TME

0.204562785	TME
0.296863084	Metabolism
0.913475262	TME
0.949658497	Metabolism
0.049873657	Metabolism
0.990409904	Proliferation/Metastasis
0.720491586	Proliferation/Metastasis
0.020158074	Metabolism
0.000889387	Metabolism
0.21080044	Metabolism
0.790588421	Metabolism
0.191880983	Proliferation/Metastasis
0.317556886	Proliferation/Metastasis
0.0105118	Metabolism
7.75E-06	Metabolism
0.000149793	Metabolism
0.009873296	TME
0.044943291	Metabolism
0.759510294	Metabolism
0.160014338	Metabolism
0.554926196	Metabolism
2.22E-07	Proliferation/Metastasis
0.139155753	Metabolism
0.979704187	Metabolism
6.98E-05	Metabolism
0.000185314	Metabolism
0.389166175	Metabolism
0.006026503	Metabolism
0.096754439	Proliferation/Metastasis
0.491715114	Metabolism
0.001173281	Metabolism
0.037787118	Proliferation/Metastasis
8.19E-06	Metabolism
0.028276252	Metabolism
0.001730928	Metabolism
0.018192227	Metabolism
0.391403456	Metabolism
0.897470134	Metabolism
0.000260345	Metabolism
0.852676514	Metabolism
0.976260131	TME
0.868431283	TME
0.290189877	TME

0.362642328	TME
0.491353608	TME
0.173648104	Metabolism
0.000952806	Metabolism
0.649952307	Proliferation/Metastasis
0.090910247	Metabolism
0.66026212	Proliferation/Metastasis
0.010590112	Metabolism
0.001253541	TME
0.317367931	Metabolism
0.184419008	Metabolism
0.191765809	Metabolism
0.031022807	Metabolism
0.924913152	TME
0.532475869	TME
0.660824125	Proliferation/Metastasis
0.001405787	Metabolism
0.000542084	Proliferation/Metastasis
0.275508931	Proliferation/Metastasis
0.299013359	TME
0.149565587	TME
0.366848751	TME
0.904461775	TME
0.229084065	Metabolism
0.420763242	Proliferation/Metastasis
0.007536147	Metabolism
0.092740377	Metabolism
0.930786455	Proliferation/Metastasis
0.103720773	Proliferation/Metastasis
1.12E-05	Metabolism
0.075825208	Metabolism
0.19158649	Metabolism
0.779181728	Metabolism
0.678179335	TME
0.128248842	TME
0.737109212	TME
0.016810546	TME
1.66E-09	TME
0.390747099	Metabolism
0.21969798	Metabolism
0.049497112	Metabolism
0.59739809	Metabolism
0.458233428	Metabolism

0.457851436	TME
0.761673956	TME
0.116215707	TME
0.561723357	TME
0.817735362	TME
0.741617359	TME
0.808655838	TME
0.245182184	TME
0.888958387	TME
0.490204833	Proliferation/Metastasis
0.073717742	Proliferation/Metastasis
0.715638585	Metabolism
0.513246702	Metabolism
0.558002401	TME
0.002310944	Metabolism
0.015319282	Metabolism
0.230147523	TME
0.78301823	Proliferation/Metastasis
0.260413872	Proliferation/Metastasis
0.23356458	TME
0.029347744	Metabolism
0.048165612	Metabolism
0.076027297	Proliferation/Metastasis
0.192623618	Proliferation/Metastasis
0.618101849	TME
0.276139338	TME
0.737389082	TME
0.829614893	TME
0.562222276	Proliferation/Metastasis
0.861540125	TME
0.16896121	TME
0.010274849	Metabolism
0.475209051	TME
0.240954576	TME
0.779557828	TME
0.067135126	TME
0.993909042	Metabolism
0.512128245	Metabolism
0.024925661	Metabolism
0.256008634	TME
0.006648428	Metabolism
0.333078193	TME
0.870050735	TME

0.473361253	TME
0.526894234	TME
0.646206071	TME
0.253267556	Metabolism
0.022801057	Proliferation/Metastasis
0.009915141	Metabolism
0.000255278	Proliferation/Metastasis
2.98E-05	Metabolism
0.016079247	Metabolism
0.005281248	Metabolism
0.045119697	Metabolism
0.460140694	Metabolism
0.020974848	Metabolism
0.006973766	Metabolism
0.011028106	Metabolism
0.43574316	Metabolism
0.023894786	Metabolism
0.00069005	Metabolism
0.3207241	Metabolism
0.150837678	Metabolism
0.421341965	Metabolism
0.241010004	TME
0.061228173	Proliferation/Metastasis
0.978267686	Metabolism
0.03090017	Proliferation/Metastasis
0.622296609	TME
0.461944823	Proliferation/Metastasis
0.135949158	Proliferation/Metastasis
0.336339173	TME
0.339849696	TME
0.379930976	Metabolism
0.300235661	Metabolism
0.988122859	Proliferation/Metastasis
0.241817834	Proliferation/Metastasis
0.196524684	Proliferation/Metastasis
0.002255678	Metabolism
0.519243466	Metabolism
0.257686364	Metabolism
3.05E-05	Proliferation/Metastasis
0.349117763	TME
0.16987602	TME
0.407553041	Metabolism
0.34621743	Proliferation/Metastasis

0.400431742	Metabolism
0.516108124	TME
0.637957747	TME
0.067808353	TME
0.461564533	TME
0.007922861	Metabolism
0.28213851	TME
0.133195592	Proliferation/Metastasis
0.028375999	TME
0.305675653	Proliferation/Metastasis
0.493161092	Proliferation/Metastasis
0.906140888	Metabolism
0.521593689	Proliferation/Metastasis
0.422293592	TME
0.899845175	Metabolism
0.046427389	TME
0.58344922	TME
0.084243192	TME
0.403647859	TME
0.501633588	TME
0.802110564	TME
0.000209354	Metabolism
0.002764357	TME
0.516173721	Metabolism
0.109300524	Metabolism
0.39215876	Proliferation/Metastasis
0.761372573	Proliferation/Metastasis
0.830969212	Metabolism
0.423491681	Metabolism
0.712098608	Metabolism
0.019075501	Metabolism
0.002986725	Proliferation/Metastasis
0.115380409	Proliferation/Metastasis
0.724932009	Metabolism
0.284602485	Metabolism
0.000418217	Metabolism
0.201016537	TME
0.024061179	Metabolism
0.807866991	Metabolism
0.423408008	Metabolism
0.781993355	Metabolism
0.077845002	Proliferation/Metastasis
0.18259785	Metabolism

0.273566996	Metabolism
0.366931211	Metabolism
0.679271168	Metabolism
0.846000629	Metabolism
0.406181276	Metabolism
0.855633115	Proliferation/Metastasis
0.16950304	Metabolism
0.112339775	Metabolism
0.090187649	Proliferation/Metastasis
0.668844618	Metabolism
0.970117657	Metabolism
0.014912872	Metabolism
0.305905943	Metabolism
0.457222208	Metabolism
0.000436052	Metabolism
0.13181515	Metabolism
0.226255038	Metabolism
0.54319527	TME
0.337976173	TME
0.692949185	TME
0.77330779	TME
0.494122195	TME
0.060456287	Metabolism
0.689634939	Metabolism
0.42060161	Proliferation/Metastasis
8.33E-05	Metabolism
0.140251883	Proliferation/Metastasis
0.65156108	Metabolism
0.017460819	TME
0.055512057	Metabolism
0.603543671	Metabolism
0.744467042	Metabolism
0.468390161	Metabolism
0.615553418	TME
0.331892752	TME
0.000103106	Proliferation/Metastasis
0.351660249	Metabolism
0.347126141	Proliferation/Metastasis
0.598826852	Proliferation/Metastasis
0.099794964	TME
0.194157715	TME
0.069628164	TME
0.013331851	TME

0.787197911	Metabolism
0.179294203	Proliferation/Metastasis
0.027092106	Metabolism
0.001669732	Metabolism
0.912172801	Proliferation/Metastasis
0.022096807	Proliferation/Metastasis
0.000141349	Metabolism
0.314753152	Metabolism
0.575083687	Metabolism
0.099803584	Metabolism
0.810463217	TME
0.006842787	TME
0.693415225	TME
0.256675566	TME
0.007330762	TME
0.744946909	Metabolism
0.954245996	Metabolism
0.009252927	Metabolism
0.746630947	Metabolism
0.084494279	Metabolism
0.85726971	TME
0.160074463	TME
0.003090658	TME
0.164502212	TME
0.024539961	TME
0.062390134	TME
0.086123539	TME
0.005347351	TME
0.191449468	TME
0.105161835	Proliferation/Metastasis
2.79E-05	Proliferation/Metastasis
0.153979614	Metabolism
0.894284415	Metabolism
0.006255012	TME
0.652543488	Metabolism
3.72E-05	Metabolism
0.016648498	TME
0.129898415	Proliferation/Metastasis
0.96411249	Proliferation/Metastasis
0.026754153	TME
0.305986915	Metabolism
0.045585391	Metabolism
0.002944773	Proliferation/Metastasis

0.059479538	Proliferation/Metastasis
0.758138679	TME
0.031232585	TME
0.326965677	TME
0.165649339	TME
0.0001817	Proliferation/Metastasis
0.579105462	TME
0.008093352	TME
0.585217871	Metabolism
0.477216425	TME
0.37282509	TME
0.040509781	TME
0.0111733	TME
0.002167922	Metabolism
0.070530811	Metabolism
0.332760597	Metabolism
0.057402752	TME
0.004374632	Metabolism
0.129397999	TME
0.068802159	TME
0.039800748	TME
0.08849019	TME
0.220461148	TME
0.008417086	Metabolism
0.000362624	Proliferation/Metastasis
0.003113416	Metabolism
0.130500407	Proliferation/Metastasis
0.225974863	Metabolism
0.951810105	Metabolism
0.064626726	Metabolism
0.00022998	Metabolism
0.59942126	Metabolism
6.79E-08	Metabolism
0.020568402	Metabolism
0.019853448	Metabolism
0.001712473	Metabolism
3.13E-05	Metabolism
0.001987097	Metabolism
0.022593082	Metabolism
0.151699254	Metabolism
0.848935558	Metabolism
0.045334173	TME
0.51837907	Proliferation/Metastasis

0.092182274	Metabolism
0.029351342	Proliferation/Metastasis
0.118677059	TME
0.101264602	Proliferation/Metastasis
0.105092534	Proliferation/Metastasis
0.179973203	TME
0.081888491	TME
9.11E-05	Metabolism
0.050586596	Metabolism
0.396783346	Proliferation/Metastasis
0.002252936	Proliferation/Metastasis
0.334700537	Proliferation/Metastasis
0.079837633	Metabolism
0.905247907	Metabolism
0.119134115	Metabolism
0.000307676	Proliferation/Metastasis
0.065048141	TME
0.026341714	TME
0.000616453	Metabolism
0.305539116	Proliferation/Metastasis
0.020531356	Metabolism
0.304835857	TME
0.327574155	TME
0.00112342	TME
0.200650829	TME
0.063974394	Metabolism
0.00074575	TME
0.00040362	Proliferation/Metastasis
0.052204241	TME
0.664304912	Proliferation/Metastasis
0.011061752	Proliferation/Metastasis
0.023111896	Metabolism
0.017595029	Proliferation/Metastasis
0.065303198	TME
0.617453415	Metabolism
0.444092946	TME
0.657218714	TME
0.353018836	TME
0.043191591	TME
0.001910679	TME
0.180513192	TME
0.004025081	Metabolism
0.05984931	TME

0.186817587	Metabolism
0.849198324	Metabolism
0.672074336	Proliferation/Metastasis
0.014167554	Proliferation/Metastasis
0.046335349	Metabolism
0.002034747	Metabolism
2.96E-06	Metabolism
0.006455077	Metabolism
0.124551692	Proliferation/Metastasis
0.001776635	Proliferation/Metastasis
0.653541135	Metabolism
0.919220364	Metabolism
0.294613617	Metabolism
0.01799756	TME
0.00025836	Metabolism
0.781926958	Metabolism
0.732301854	Metabolism
0.163447309	Metabolism
0.245249221	Proliferation/Metastasis
0.035903083	Metabolism
0.006462165	Metabolism
0.000996617	Metabolism
0.206947145	Metabolism
0.11562896	Metabolism
0.754961374	Metabolism
0.701326812	Proliferation/Metastasis
0.329545554	Metabolism
3.32E-06	Metabolism
0.510492906	Proliferation/Metastasis
0.001408666	Metabolism
0.001411313	Metabolism
0.803821477	Metabolism
0.548564637	Metabolism
0.129487187	Metabolism
0.005362817	Metabolism
0.09860523	Metabolism
0.700333406	Metabolism
0.027074556	TME
0.286411909	TME
0.37203726	TME
0.007182018	TME
0.037291803	TME
0.005491629	Metabolism

0.091903683	Metabolism
0.628721694	Proliferation/Metastasis
0.000148546	Metabolism
0.783561836	Proliferation/Metastasis
0.306779831	Metabolism
0.292002461	TME
2.35E-05	Metabolism
0.874494834	Metabolism
0.006434659	Metabolism
0.045511016	Metabolism
0.008348291	TME
0.000264564	TME
0.22816683	Proliferation/Metastasis
0.467268966	Metabolism
0.498590728	Proliferation/Metastasis
0.357953615	Proliferation/Metastasis
0.912707521	TME
0.862498987	TME
0.64019593	TME
0.399646803	TME
0.009853723	Metabolism
4.96E-05	Proliferation/Metastasis
0.096547202	Metabolism
0.341290358	Metabolism
0.000269362	Proliferation/Metastasis
0.834912922	Proliferation/Metastasis
0.060819906	Metabolism
7.51E-05	Metabolism
0.071514317	Metabolism
0.525816217	Metabolism
0.818225735	TME
0.227029482	TME
0.714850023	TME
0.747513588	TME
0.539927053	TME
0.198795902	Metabolism
0.003908632	Metabolism
0.451966993	Metabolism
0.672088016	Metabolism
0.601334802	Metabolism
0.638514856	TME
0.714904828	TME
0.658871187	TME

0.418438902	TME
0.497842655	TME
0.506515331	TME
0.725618738	TME
0.746066886	TME
0.794037653	TME
2.67E-06	Proliferation/Metastasis
0.000132509	Proliferation/Metastasis
0.059868302	Metabolism
0.001270186	Metabolism
0.368586328	TME
0.458138552	Metabolism
0.337812598	Metabolism
0.91924749	TME
2.13E-07	Proliferation/Metastasis
3.76E-08	Proliferation/Metastasis
0.689237903	TME
0.118406133	Metabolism
0.011781144	Metabolism
2.83E-07	Proliferation/Metastasis
0.951009316	Proliferation/Metastasis
0.518888019	TME
0.664650901	TME
0.597994219	TME
0.237504641	TME
0.000695072	Proliferation/Metastasis
0.298632152	TME
0.946691299	TME
0.031014019	Metabolism
0.360690607	TME
0.604766263	TME
0.342014834	TME
0.034951024	TME
0.000942171	Metabolism
0.976207761	Metabolism
0.008859118	Metabolism
0.177333785	TME
0.257804361	Metabolism
0.736681151	TME
0.260043001	TME
0.969056984	TME
0.049236161	TME
0.033825653	TME

0.00142321	Metabolism
6.32E-07	Proliferation/Metastasis
0.229144169	Metabolism
0.970565058	Proliferation/Metastasis
0.260499209	Metabolism
0.449757883	Metabolism
0.133972593	Metabolism
0.01270935	Metabolism
0.002353405	Metabolism
0.770913766	Metabolism
0.155923803	Metabolism
0.097415812	Metabolism
0.008729292	Metabolism
0.087986916	Metabolism
0.921031432	Metabolism
0.915392168	Metabolism
0.501426592	Metabolism
0.000573822	Metabolism
0.506747686	TME
0.196042351	Proliferation/Metastasis
0.082779799	Metabolism
0.850608598	Proliferation/Metastasis
0.387723679	TME
0.558631997	Proliferation/Metastasis
0.240389522	Proliferation/Metastasis
0.401261234	TME
0.616769718	TME
0.124468439	Metabolism
0.880959368	Metabolism
0.003996515	Proliferation/Metastasis
0.000909671	Proliferation/Metastasis
0.44341912	Proliferation/Metastasis
0.267724695	Metabolism
0.760386342	Metabolism
0.000863453	Metabolism
0.000978773	Proliferation/Metastasis
0.825695653	TME
0.470693676	TME
0.000336338	Metabolism
0.17579248	Proliferation/Metastasis
0.435945962	Metabolism
0.299785721	TME
0.574381581	TME

0.580096438	TME
0.25879578	TME
0.304083413	Metabolism
0.735864338	TME
0.018958426	Proliferation/Metastasis
0.411533925	TME
0.443898867	Proliferation/Metastasis
1.81E-05	Proliferation/Metastasis
0.472043829	Metabolism
8.06E-07	Proliferation/Metastasis
0.517465844	TME
0.991409812	Metabolism
0.47815288	TME
0.027901031	TME
0.027073034	TME
0.688324206	TME
0.274072699	TME
0.74607891	TME
0.433934061	Metabolism
0.566882805	TME
0.100979372	Metabolism
0.039783361	Metabolism
0.375259972	Proliferation/Metastasis
0.766433902	Proliferation/Metastasis
3.74E-09	Metabolism
0.002259071	Metabolism
0.328793994	Metabolism
0.002209579	Metabolism
0.701355673	Proliferation/Metastasis
0.636458165	Proliferation/Metastasis
0.654983715	Metabolism
0.85286132	Metabolism
0.058648807	Metabolism
0.34222786	TME
0.1028879	Metabolism
0.296949085	Metabolism
0.145303196	Metabolism
0.002114496	Metabolism
0.330484306	Proliferation/Metastasis
0.001744888	Metabolism
0.136469811	Metabolism
0.296258775	Metabolism
4.40E-10	Metabolism

9.21E-10	Metabolism
0.009893534	Metabolism
0.000987877	Proliferation/Metastasis
0.665597515	Metabolism
0.010504308	Metabolism
0.00720244	Proliferation/Metastasis
0.017545834	Metabolism
0.667199436	Metabolism
0.000156461	Metabolism
0.512246605	Metabolism
0.031628604	Metabolism
0.583230786	Metabolism
0.653364172	Metabolism
0.132908698	Metabolism
0.812523739	TME
0.808234342	TME
0.37473987	TME
0.363504312	TME
0.118696036	TME
0.003298558	Metabolism
0.000506	Metabolism
0.327548206	Proliferation/Metastasis
0.024353828	Metabolism
0.520244826	Proliferation/Metastasis
0.101784109	Metabolism
0.090909824	TME
0.658072553	Metabolism
0.000218561	Metabolism
0.640276696	Metabolism
0.415910174	Metabolism
0.615393201	TME
0.32206142	TME
0.120602815	Proliferation/Metastasis
0.309107272	Metabolism
0.023500606	Proliferation/Metastasis
0.819945794	Proliferation/Metastasis
0.007749112	TME
2.30E-05	TME
0.048013771	TME
0.143217407	TME
0.693913447	Metabolism
0.047657927	Proliferation/Metastasis
0.041383747	Metabolism

0.204566886	Metabolism
0.000965583	Proliferation/Metastasis
0.315657273	Proliferation/Metastasis
0.094710964	Metabolism
0.794473486	Metabolism
0.117100515	Metabolism
0.075686845	Metabolism
0.007410555	TME
0.012088315	TME
4.10E-06	TME
0.025961348	TME
0.414009734	TME
0.026313958	Metabolism
0.315928547	Metabolism
0.053053777	Metabolism
0.128412799	Metabolism
0.11421189	Metabolism
5.47E-05	TME
0.123162354	TME
0.021874977	TME
0.557144352	TME
0.937242562	TME
0.191871717	TME
0.136438606	TME
0.771371208	TME
0.007719058	TME
0.015010151	Proliferation/Metastasis
0.018716441	Proliferation/Metastasis
0.21322998	Metabolism
0.765584367	Metabolism
0.692439392	TME
0.061276751	Metabolism
0.57980484	Metabolism
0.209475597	TME
0.254258287	Proliferation/Metastasis
0.334077839	Proliferation/Metastasis
0.555192682	TME
0.283814984	Metabolism
0.382713565	Metabolism
0.005154286	Proliferation/Metastasis
0.239250964	Proliferation/Metastasis
0.003952404	TME
0.048667584	TME

0.009803338	TME
0.131244233	TME
0.000652313	Proliferation/Metastasis
6.82E-05	TME
0.26410307	TME
0.506941044	Metabolism
1.33E-06	TME
2.32E-05	TME
0.078648451	TME
0.16189572	TME
0.136191532	Metabolism
0.014262512	Metabolism
0.004178149	Metabolism
0.009305723	TME
0.612223966	Metabolism
0.020550414	TME
0.003735025	TME
0.220247179	TME
0.732122724	TME
0.187893035	TME
0.01567719	Metabolism
0.000363535	Proliferation/Metastasis
0.407508219	Metabolism
0.658783514	Proliferation/Metastasis
0.144611108	Metabolism
0.042928809	Metabolism
2.17E-05	Metabolism
0.038706153	Metabolism
0.65733503	Metabolism
0.005441297	Metabolism
0.027352568	Metabolism
0.160616709	Metabolism
0.163490953	Metabolism
0.642436391	Metabolism
0.156529719	Metabolism
0.2243889	Metabolism
0.240278363	Metabolism
0.895073332	Metabolism
0.047517045	TME
0.693576344	Proliferation/Metastasis
0.673479805	Metabolism
0.045130622	Proliferation/Metastasis
0.308101307	TME

0.051699935	Proliferation/Metastasis
0.075964521	Proliferation/Metastasis
0.014794595	TME
0.809851043	TME
1.64E-05	Metabolism
0.001596558	Metabolism
0.000180748	Proliferation/Metastasis
0.966027198	Proliferation/Metastasis
0.001031663	Proliferation/Metastasis
0.477321338	Metabolism
0.237621626	Metabolism
0.946706056	Metabolism
0.767199271	Proliferation/Metastasis
0.00454829	TME
0.005694217	TME
0.00285735	Metabolism
0.070654623	Proliferation/Metastasis
0.000633116	Metabolism
0.000422359	TME
1.04E-05	TME
0.64211928	TME
0.031117876	TME
0.811965478	Metabolism
1.15E-06	TME
0.001771898	Proliferation/Metastasis
0.001594746	TME
0.394456092	Proliferation/Metastasis
2.27E-05	Proliferation/Metastasis
4.67E-08	Metabolism
0.018162027	Proliferation/Metastasis
0.027576576	TME
0.249017768	Metabolism
0.138234689	TME
0.009591168	TME
0.037986542	TME
0.015656223	TME
1.39E-11	TME
0.051985586	TME
0.383959299	Metabolism
0.003540584	TME
0.365818608	Metabolism
9.70E-06	Metabolism
0.045458263	Proliferation/Metastasis

0.708487595	Proliferation/Metastasis
0.013683553	Metabolism
0.040267297	Metabolism
1.31E-09	Metabolism
0.984573781	Metabolism
0.546478794	Proliferation/Metastasis
0.000187619	Proliferation/Metastasis
0.000183021	Metabolism
0.130190825	Metabolism
0.116691068	Metabolism
0.30757851	TME
0.714278659	Metabolism
0.272917711	Metabolism
0.010146289	Metabolism
0.060426212	Metabolism
3.77E-05	Proliferation/Metastasis
0.637670014	Metabolism
0.15620082	Metabolism
6.65E-06	Metabolism
0.792161071	Metabolism
0.220103488	Metabolism
0.570466465	Metabolism
0.91691501	Proliferation/Metastasis
0.330649287	Metabolism
0.059336088	Metabolism
8.15E-10	Proliferation/Metastasis
0.890643667	Metabolism
0.032784651	Metabolism
0.013656416	Metabolism
0.103582881	Metabolism
0.564996221	Metabolism
0.723585592	Metabolism
0.030860002	Metabolism
0.057232228	Metabolism
0.027568456	TME
0.011958089	TME
0.590769603	TME
0.58946993	TME
0.157769368	TME
4.81E-07	Metabolism
1.54E-06	Metabolism
0.000979603	Proliferation/Metastasis
0.978654145	Metabolism

0.039239869	Proliferation/Metastasis
0.380391703	Metabolism
0.113307997	TME
0.11607775	Metabolism
0.043033547	Metabolism
0.394381959	Metabolism
0.000277858	Metabolism
0.201778569	TME
0.356680729	TME
0.719349613	Proliferation/Metastasis
0.352940904	Metabolism
0.027043165	Proliferation/Metastasis
0.032888889	Proliferation/Metastasis
0.397332979	TME
0.180821886	TME
0.001613221	TME
0.08484769	TME
0.043249476	Metabolism
0.133963176	Proliferation/Metastasis
0.533186317	Metabolism
0.000261172	Metabolism
0.286239656	Proliferation/Metastasis
0.002007026	Proliferation/Metastasis
1.42E-06	Metabolism
0.907222879	Metabolism
0.888808155	Metabolism
0.084516823	Metabolism
0.286239881	TME
0.044013689	TME
0.905696498	TME
1.70E-05	TME
2.65E-12	TME
0.383703889	Metabolism
0.6197764	Metabolism
0.043720106	Metabolism
0.007534539	Metabolism
0.081103789	Metabolism
0.414134258	TME
0.689235654	TME
0.013468567	TME
0.448206195	TME
0.003714344	TME
0.055841842	TME

0.052225664	TME
0.329279316	TME
0.716543989	TME
0.005341454	Proliferation/Metastasis
4.50E-05	Proliferation/Metastasis
0.756260083	Metabolism
0.42926921	Metabolism
0.659342374	TME
0.281367651	Metabolism
0.272220276	Metabolism
0.001358853	TME
0.277396152	Proliferation/Metastasis
0.406735747	Proliferation/Metastasis
0.768164737	TME
0.267904933	Metabolism
0.010432083	Metabolism
0.004568606	Proliferation/Metastasis
0.05233168	Proliferation/Metastasis
0.307219969	TME
0.005574263	TME
0.17709268	TME
0.006739924	TME
0.125806347	Proliferation/Metastasis
0.11527825	TME
2.41E-06	TME
0.309913162	Metabolism
0.089048312	TME
0.047357396	TME
0.23501987	TME
0.782849336	TME
0.025134399	Metabolism
0.047916963	Metabolism
0.052874971	Metabolism
0.004217453	TME
0.006450009	Metabolism
0.342514591	TME
0.477740468	TME
0.042254081	TME
0.906715454	TME
0.668724855	TME
0.06940321	Metabolism
2.27E-05	Proliferation/Metastasis
7.64E-05	Metabolism

0.136869317	Proliferation/Metastasis
5.93E-06	Metabolism
0.615735734	Metabolism
0.107855975	Metabolism
0.031132513	Metabolism
0.551320577	Metabolism
5.04E-09	Metabolism
0.022298624	Metabolism
0.000126943	Metabolism
0.002060333	Metabolism
7.67E-06	Metabolism
0.000183576	Metabolism
0.065625694	Metabolism
0.064452481	Metabolism
0.964680679	Metabolism
9.69E-06	TME
0.831067908	Proliferation/Metastasis
0.507124453	Metabolism
0.013500546	Proliferation/Metastasis
0.382704796	TME
0.048369374	Proliferation/Metastasis
0.00234159	Proliferation/Metastasis
0.002640096	TME
7.51E-05	TME
1.95E-06	Metabolism
0.211660901	Metabolism
0.706036911	Proliferation/Metastasis
5.92E-05	Proliferation/Metastasis
0.071531893	Proliferation/Metastasis
0.524169728	Metabolism
0.597611213	Metabolism
0.00021957	Metabolism
1.53E-06	Proliferation/Metastasis
0.000290128	TME
2.59E-05	TME
0.186474935	Metabolism
0.778342498	Proliferation/Metastasis
0.528845133	Metabolism
0.642392712	TME
0.595285485	TME
6.99E-06	TME
0.008920374	TME
0.019657202	Metabolism

0.008437418	TME
1.20E-05	Proliferation/Metastasis
5.69E-06	TME
0.804387223	Proliferation/Metastasis
0.890062841	Proliferation/Metastasis
0.024507614	Metabolism
0.051088267	Proliferation/Metastasis
0.002846548	TME
0.914652328	Metabolism
0.455945811	TME
0.574017553	TME
0.000885056	TME
0.032795646	TME
0.069507506	TME
0.043953003	TME
0.026495917	Metabolism
5.43E-07	TME
0.687758468	Metabolism
0.301803104	Metabolism
0.075985034	Proliferation/Metastasis
0.427314977	Proliferation/Metastasis
0.153773622	Metabolism
0.090152859	Metabolism
0.265546038	Metabolism
1.58E-05	Metabolism
0.19318083	Proliferation/Metastasis
0.005978751	Proliferation/Metastasis
0.048941127	Metabolism
0.524961794	Metabolism
0.006663605	Metabolism
0.002956977	TME
0.02807896	Metabolism
0.719971034	Metabolism
0.053974158	Metabolism
0.02936542	Metabolism
0.465446514	Proliferation/Metastasis
0.021836267	Metabolism
0.222757763	Metabolism
0.000241762	Metabolism
0.36670913	Metabolism
0.196932295	Metabolism
0.156082068	Metabolism
0.1046213	Proliferation/Metastasis

0.356132172	Metabolism
0.000194723	Metabolism
0.110999123	Proliferation/Metastasis
0.005231163	Metabolism
0.004610109	Metabolism
0.281866743	Metabolism
0.814432706	Metabolism
0.284137301	Metabolism
0.076163021	Metabolism
0.077392726	Metabolism
0.001483328	Metabolism
0.107345799	TME
0.256348988	TME
0.055072843	TME
0.00431058	TME
0.010841766	TME
0.390932712	Metabolism
0.030683332	Metabolism
0.107003229	Proliferation/Metastasis
0.0010729	Metabolism
0.138702191	Proliferation/Metastasis
0.506836981	Metabolism
0.899307123	TME
0.015489985	Metabolism
0.028219924	Metabolism
3.12E-09	Metabolism
0.006155128	Metabolism
0.000171819	TME
0.00663383	TME
0.026058247	Proliferation/Metastasis
0.91579419	Metabolism
0.43549676	Proliferation/Metastasis
0.023875451	Proliferation/Metastasis
5.36E-06	TME
0.693418916	TME
0.772585333	TME
0.529761572	TME
0.007436307	Metabolism
0.94725556	Proliferation/Metastasis
0.089285348	Metabolism
0.238039349	Metabolism
0.769704025	Proliferation/Metastasis
0.0038487	Proliferation/Metastasis

0.093512959	Metabolism
0.00917496	Metabolism
0.004023332	Metabolism
0.008042781	Metabolism
0.008078509	TME
0.000203506	TME
0.023048031	TME
0.866294747	TME
0.42837292	TME
0.000163793	Metabolism
0.055912247	Metabolism
0.615477585	Metabolism
0.485708522	Metabolism
0.150422893	Metabolism
0.00321811	TME
0.687332001	TME
0.006152863	TME
0.333018996	TME
0.80099245	TME
0.487187361	TME
0.503319382	TME
0.099610796	TME
0.117755387	TME
0.591109236	Proliferation/Metastasis
0.413402532	Proliferation/Metastasis
0.785974223	Metabolism
0.100531028	Metabolism
0.001439733	TME
0.029694568	Metabolism
0.08978481	Metabolism
0.06783747	TME
0.412808365	Proliferation/Metastasis
0.026283104	Proliferation/Metastasis
0.75271404	TME
0.004562108	Metabolism
0.055873557	Metabolism
0.010025267	Proliferation/Metastasis
0.001620521	Proliferation/Metastasis
0.568696042	TME
0.057361441	TME
0.417204255	TME
0.975714376	TME
0.948896962	Proliferation/Metastasis

0.021523966	TME
0.783396168	TME
0.164877126	Metabolism
0.079173493	TME
0.091840527	TME
0.080294624	TME
0.009145737	TME
0.526787759	Metabolism
0.161335112	Metabolism
0.042187697	Metabolism
0.016261199	TME
0.163699715	Metabolism
0.097024165	TME
0.005657026	TME
0.046966183	TME
0.38632061	TME
0.160270372	TME
0.387269271	Metabolism
0.083405818	Proliferation/Metastasis
0.809822067	Metabolism
0.00519234	Proliferation/Metastasis
0.830410739	Metabolism
0.028743504	Metabolism
0.034775999	Metabolism
0.000218737	Metabolism
0.749719935	Metabolism
0.280426576	Metabolism
0.13438576	Metabolism
0.471704015	Metabolism
0.930188261	Metabolism
0.116828562	Metabolism
0.317944123	Metabolism
0.10708742	Metabolism
0.277678407	Metabolism
0.282972991	Metabolism
0.619800549	TME
0.00342399	Proliferation/Metastasis
2.26E-07	Metabolism
0.002372637	Proliferation/Metastasis
0.324107426	TME
0.009096246	Proliferation/Metastasis
0.450478937	Proliferation/Metastasis
0.84136	TME

0.060451504	TME
0.103263803	Metabolism
0.974633248	Metabolism
0.005093398	Proliferation/Metastasis
0.51155044	Proliferation/Metastasis
0.00062595	Proliferation/Metastasis
0.009845336	Metabolism
0.836700573	Metabolism
0.007151585	Metabolism
0.011143986	Proliferation/Metastasis
0.230013808	TME
0.218818163	TME
0.68109489	Metabolism
0.009537591	Proliferation/Metastasis
0.606874663	Metabolism
0.065946711	TME
0.011417078	TME
0.1273212	TME
0.085145411	TME
0.037150495	Metabolism
0.132274058	TME
0.496239069	Proliferation/Metastasis
0.154242474	TME
0.083380467	Proliferation/Metastasis
0.780509757	Proliferation/Metastasis
0.008833505	Metabolism
0.433679176	Proliferation/Metastasis
0.153365079	TME
0.884305	Metabolism
0.361760513	TME
0.001510584	TME
0.000383775	TME
0.022460145	TME
0.232781512	TME
0.420271271	TME
0.261516128	Metabolism
0.224016778	TME
0.000451209	Metabolism
0.006167113	Metabolism
0.618762762	Proliferation/Metastasis
3.51E-05	Proliferation/Metastasis
0.515806099	Metabolism
0.703110512	Metabolism

0.192637136	Metabolism
0.419505221	Metabolism
0.000739507	Proliferation/Metastasis
0.649636184	Proliferation/Metastasis
0.514645407	Metabolism
0.005238661	Metabolism
0.90804339	Metabolism
0.003510884	TME
0.000350793	Metabolism
0.317844702	Metabolism
0.034449848	Metabolism
0.006012296	Metabolism
0.300001038	Proliferation/Metastasis
0.688547167	Metabolism
3.50E-06	Metabolism
0.051530473	Metabolism
0.684646436	Metabolism
0.500023538	Metabolism
0.125944043	Metabolism
7.34E-05	Proliferation/Metastasis
0.002888671	Metabolism
0.001788825	Metabolism
0.005114262	Proliferation/Metastasis
0.237820726	Metabolism
0.009934844	Metabolism
0.5015125	Metabolism
0.008416607	Metabolism
0.423278187	Metabolism
2.15E-07	Metabolism
0.934103256	Metabolism
0.038823258	Metabolism
0.017148626	TME
0.053691191	TME
0.932218387	TME
0.489770045	TME
0.067701346	TME
0.093112131	Metabolism
0.12028964	Metabolism
0.000302666	Proliferation/Metastasis
0.069099999	Metabolism
0.173061052	Proliferation/Metastasis
0.049519422	Metabolism
0.062455487	TME

0.00296403	Metabolism
0.485273731	Metabolism
0.273988479	Metabolism
0.180957275	Metabolism
0.449666262	TME
0.005499068	TME
0.104645085	Proliferation/Metastasis
0.064550193	Metabolism
0.001683071	Proliferation/Metastasis
0.001322518	Proliferation/Metastasis
0.000597363	TME
2.81E-08	TME
5.12E-07	TME
2.08E-07	TME
0.098526614	Metabolism
1.58E-07	Proliferation/Metastasis
1.97E-05	Metabolism
5.81E-08	Metabolism
1.02E-12	Proliferation/Metastasis
7.86E-09	Proliferation/Metastasis
2.74E-15	Metabolism
0.039612848	Metabolism
0.627942703	Metabolism
0.011725881	Metabolism
2.29E-07	TME
1.04E-06	TME
7.77E-09	TME
0.00131538	TME
1.03E-13	TME
0.473446022	Metabolism
0.099605974	Metabolism
0.000880976	Metabolism
0.000340229	Metabolism
0.019548699	Metabolism
3.58E-10	TME
2.67E-07	TME
3.18E-06	TME
0.000657565	TME
9.31E-10	TME
1.67E-07	TME
2.21E-08	TME
4.33E-07	TME
2.28E-08	TME

3.62E-05	Proliferation/Metastasis
4.18E-05	Proliferation/Metastasis
0.194293701	Metabolism
0.201107244	Metabolism
0.37771738	TME
0.002371694	Metabolism
0.011784675	Metabolism
7.36E-13	TME
0.000176075	Proliferation/Metastasis
0.019990657	Proliferation/Metastasis
8.62E-06	TME
0.002352787	Metabolism
2.68E-06	Metabolism
0.000278733	Proliferation/Metastasis
0.492014984	Proliferation/Metastasis
0.000324054	TME
2.10E-08	TME
3.45E-06	TME
5.23E-09	TME
0.280601743	Proliferation/Metastasis
1.50E-07	TME
1.32E-11	TME
7.24E-07	Metabolism
0.001606427	TME
4.96E-07	TME
3.01E-06	TME
0.025320831	TME
0.999228658	Metabolism
0.207835094	Metabolism
0.800487858	Metabolism
1.51E-12	TME
0.001554782	Metabolism
4.32E-08	TME
8.99E-10	TME
1.63E-06	TME
0.004298634	TME
0.051242253	TME
0.003170277	Metabolism
2.41E-05	Proliferation/Metastasis
4.59E-06	Metabolism
0.006607454	Proliferation/Metastasis
1.03E-10	Metabolism
0.088567854	Metabolism

1.85E-05	Metabolism
0.523262545	Metabolism
0.252153448	Metabolism
1.06E-08	Metabolism
0.009644696	Metabolism
0.014919012	Metabolism
2.17E-09	Metabolism
4.39E-05	Metabolism
2.18E-09	Metabolism
0.015998454	Metabolism
0.492044775	Metabolism
0.158125488	Metabolism
6.76E-12	TME
3.12E-05	Proliferation/Metastasis
0.695436362	Metabolism
0.004210113	Proliferation/Metastasis
1.45E-05	TME
1.13E-10	Proliferation/Metastasis
3.51E-10	Proliferation/Metastasis
1.51E-06	TME
5.33E-11	TME
4.62E-07	Metabolism
0.043177932	Metabolism
0.988691808	Proliferation/Metastasis
0.393348754	Proliferation/Metastasis
9.55E-10	Proliferation/Metastasis
0.000225624	Metabolism
0.51070037	Metabolism
3.19E-15	Metabolism
1.10E-10	Proliferation/Metastasis
6.91E-12	TME
1.77E-12	TME
0.542678779	Metabolism
0.195122128	Proliferation/Metastasis
0.02839767	Metabolism
2.86E-05	TME
7.29E-07	TME
7.10E-10	TME
4.00E-08	TME
0.000243905	Metabolism
0.298288902	TME
1.12E-08	Proliferation/Metastasis
5.95E-14	TME

0.143325887	Proliferation/Metastasis
0.028206685	Proliferation/Metastasis
3.74E-05	Metabolism
0.062836636	Proliferation/Metastasis
9.97E-12	TME
0.000250737	Metabolism
9.42E-06	TME
5.87E-10	TME
0.000419276	TME
1.32E-08	TME
3.69E-06	TME
2.66E-08	TME
0.000215646	Metabolism
4.99E-15	TME
1.25E-05	Metabolism
2.55E-06	Metabolism
3.61E-10	Proliferation/Metastasis
0.000467524	Proliferation/Metastasis
1.52E-06	Metabolism
1.14E-07	Metabolism
2.57E-06	Metabolism
0.001152103	Metabolism
1.04E-09	Proliferation/Metastasis
0.82856236	Proliferation/Metastasis
0.000562291	Metabolism
0.005187407	Metabolism
0.006949358	Metabolism
1.60E-11	TME
0.411831661	Metabolism
0.023703382	Metabolism
0.711708102	Metabolism
0.309615534	Metabolism
0.0037097	Proliferation/Metastasis
0.002822272	Metabolism
7.23E-06	Metabolism
5.13E-06	Metabolism
0.000846222	Metabolism
0.001867721	Metabolism
0.005973282	Metabolism
0.582766401	Proliferation/Metastasis
1.14E-05	Metabolism
5.12E-06	Metabolism
0.004833616	Proliferation/Metastasis

0.479693332	Metabolism
4.11E-07	Metabolism
0.001226897	Metabolism
0.155115811	Metabolism
0.011689392	Metabolism
6.65E-07	Metabolism
0.088600978	Metabolism
0.026415492	Metabolism
6.79E-10	TME
5.93E-10	TME
3.65E-07	TME
1.13E-09	TME
3.73E-08	TME
0.410114863	Metabolism
0.601007414	Metabolism
0.328339039	Proliferation/Metastasis
8.55E-06	Metabolism
1.52E-07	Proliferation/Metastasis
0.656405417	Metabolism
4.67E-06	TME
1.88E-05	Metabolism
0.573690607	Metabolism
5.97E-05	Metabolism
0.000196592	Metabolism
3.20E-09	TME
0.056424519	TME
0.000202866	Proliferation/Metastasis
8.68E-05	Metabolism
3.86E-05	Proliferation/Metastasis
0.982696973	Proliferation/Metastasis
0.484196157	TME
0.640987107	TME
0.052194491	TME
0.352711787	TME
0.886377407	Metabolism
0.010093677	Proliferation/Metastasis
6.51E-06	Metabolism
0.61415781	Metabolism
0.010941652	Proliferation/Metastasis
0.009296152	Proliferation/Metastasis
0.00593997	Metabolism
0.003113349	Metabolism
0.207834099	Metabolism

1.41E-05	Metabolism
0.088471194	TME
0.397030497	TME
0.049085124	TME
0.719668842	TME
0.340288637	TME
0.001365222	Metabolism
7.83E-05	Metabolism
0.234922572	Metabolism
4.45E-11	Metabolism
0.732137669	Metabolism
6.58E-08	TME
6.50E-06	TME
0.260132927	TME
0.517102369	TME
0.054778893	TME
0.467395816	TME
0.249975899	TME
0.963721056	TME
0.196571489	TME
0.38236565	Proliferation/Metastasis
1.04E-05	Proliferation/Metastasis
5.36E-05	Metabolism
0.300758206	Metabolism
0.449522577	TME
0.15344533	Metabolism
3.03E-09	Metabolism
0.057043091	TME
1.45E-05	Proliferation/Metastasis
2.03E-05	Proliferation/Metastasis
0.851787517	TME
6.71E-08	Metabolism
1.69E-08	Metabolism
0.398891041	Proliferation/Metastasis
0.015914488	Proliferation/Metastasis
0.054245796	TME
0.276377299	TME
0.186976668	TME
0.000717049	TME
0.000195769	Proliferation/Metastasis
8.37E-07	TME
0.237711296	TME
0.316253944	Metabolism

0.360460354	TME
0.115648263	TME
0.96082501	TME
0.004193179	TME
0.618140189	Metabolism
1.46E-07	Metabolism
4.60E-05	Metabolism
0.000320999	TME
9.06E-12	Metabolism
0.067611796	TME
0.006256587	TME
0.206940087	TME
0.232292292	TME
0.248437605	TME
0.00130072	Metabolism
0.321186504	Proliferation/Metastasis
0.076139318	Metabolism
4.01E-05	Proliferation/Metastasis
0.007160888	Metabolism
0.000113388	Metabolism
0.000360014	Metabolism
4.85E-09	Metabolism
3.81E-06	Metabolism
0.028655268	Metabolism
1.33E-06	Metabolism
0.174179988	Metabolism
0.874619096	Metabolism
0.456605402	Metabolism
0.958546469	Metabolism
0.933144599	Metabolism
0.02871859	Metabolism
5.75E-09	Metabolism
0.044179579	TME
0.000385187	Proliferation/Metastasis
2.43E-05	Metabolism
0.72134316	Proliferation/Metastasis
0.669988689	TME
0.027176004	Proliferation/Metastasis
0.01788909	Proliferation/Metastasis
0.389448534	TME
0.965852699	TME
0.002578877	Metabolism
9.79E-09	Metabolism

0.764208518	Proliferation/Metastasis
0.41843049	Proliferation/Metastasis
0.000774499	Proliferation/Metastasis
0.000152382	Metabolism
0.037962048	Metabolism
0.077762842	Metabolism
0.515127437	Proliferation/Metastasis
0.10179656	TME
0.077494542	TME
0.404120111	Metabolism
0.000321158	Proliferation/Metastasis
1.21E-09	Metabolism
0.021474598	TME
0.247060887	TME
5.58E-05	TME
0.001917599	TME
3.62E-11	Metabolism
0.477807132	TME
1.36E-05	Proliferation/Metastasis
0.396074029	TME
0.08856604	Proliferation/Metastasis
0.673345066	Proliferation/Metastasis
3.24E-10	Metabolism
0.094699067	Proliferation/Metastasis
0.019042149	TME
0.00173437	Metabolism
0.336704576	TME
0.000109485	TME
0.001044025	TME
0.258178104	TME
0.96299823	TME
0.078066195	TME
0.632932825	Metabolism
0.112141261	TME
0.880357973	Metabolism
0.164358872	Metabolism
0.007092011	Proliferation/Metastasis
7.41E-05	Proliferation/Metastasis
7.16E-07	Metabolism
0.570400027	Metabolism
0.195610599	Metabolism
5.02E-15	Metabolism
0.983186093	Proliferation/Metastasis

4.22E-06	Proliferation/Metastasis
0.268289846	Metabolism
0.038901836	Metabolism
0.006035442	Metabolism
8.49E-05	TME
1.11E-10	Metabolism
0.013166332	Metabolism
0.09174858	Metabolism
0.000821124	Metabolism
0.222975524	Proliferation/Metastasis
7.82E-05	Metabolism
0.110136966	Metabolism
0.025547102	Metabolism
0.370886073	Metabolism
0.078672182	Metabolism
1.63E-11	Metabolism
0.001485999	Proliferation/Metastasis
0.000174611	Metabolism
0.20573803	Metabolism
0.005514184	Proliferation/Metastasis
1.83E-07	Metabolism
1.17E-07	Metabolism
6.38E-06	Metabolism
5.93E-05	Metabolism
0.128451031	Metabolism
0.023183624	Metabolism
0.066320763	Metabolism
3.71E-09	Metabolism
0.097875198	TME
0.274569496	TME
0.161905897	TME
0.436109086	TME
0.389050324	TME
0.188797426	Metabolism
0.086250205	Metabolism
1.42E-14	Proliferation/Metastasis
2.76E-06	Metabolism
0.046340131	Proliferation/Metastasis
7.77E-07	Metabolism
0.301631434	TME
4.21E-08	Metabolism
1.52E-06	Metabolism
0.00518798	Metabolism

4.42E-06	Metabolism
0.02151315	TME
0.000689699	TME
0.01049753	Proliferation/Metastasis
0.012841047	Metabolism
0.042881734	Proliferation/Metastasis
2.83E-07	Proliferation/Metastasis
0.587877469	TME
0.003595273	TME
0.004994001	TME
0.017673245	TME
0.853812399	Metabolism
7.36E-10	Proliferation/Metastasis
0.002456258	Metabolism
1.28E-14	Metabolism
0.010280387	Proliferation/Metastasis
0.000820047	Proliferation/Metastasis
0.948200758	Metabolism
0.065115236	Metabolism
0.801678595	Metabolism
0.396768839	Metabolism
3.30E-05	TME
0.39437147	TME
0.042676812	TME
0.421640983	TME
2.50E-07	TME
5.04E-05	Metabolism
0.50455934	Metabolism
0.256654259	Metabolism
1.09E-05	Metabolism
0.692712489	Metabolism
0.004375222	TME
4.39E-06	TME
0.206698711	TME
0.319118208	TME
0.001454935	TME
0.031761053	TME
0.019265432	TME
0.040637299	TME
0.021308364	TME
6.32E-05	Proliferation/Metastasis
0.00549708	Proliferation/Metastasis
0.042428105	Metabolism

2.66E-10	Metabolism
0.497542815	TME
0.92171446	Metabolism
0.061227882	Metabolism
0.006113137	TME
1.37E-13	Proliferation/Metastasis
7.49E-08	Proliferation/Metastasis
0.38426052	TME
0.006494649	Metabolism
5.48E-12	Metabolism
9.28E-07	Proliferation/Metastasis
0.844402917	Proliferation/Metastasis
0.267758286	TME
0.015201172	TME
0.092634404	TME
0.000673514	TME
3.56E-07	Proliferation/Metastasis
0.242962365	TME
0.002594183	TME
0.009810236	Metabolism
0.091614627	TME
0.026555603	TME
0.05159396	TME
0.000175399	TME
0.606023157	Metabolism
2.19E-07	Metabolism
0.001689588	Metabolism
0.004988854	TME
0.003765543	Metabolism
0.332734511	TME
0.162055067	TME
0.00359186	TME
0.092896406	TME
0.010057581	TME
6.96E-11	Metabolism
2.48E-05	Proliferation/Metastasis
5.78E-08	Metabolism
0.067590958	Proliferation/Metastasis
5.54E-11	Metabolism
0.53060315	Metabolism
0.182927999	Metabolism
0.422111404	Metabolism
0.000377651	Metabolism

6.25E-05	Metabolism
0.007533349	Metabolism
2.54E-08	Metabolism
0.009425051	Metabolism
0.010167923	Metabolism
0.295244926	Metabolism
0.695142175	Metabolism
0.00354616	Metabolism
0.218455347	Metabolism
1.05E-05	TME
0.050361156	Proliferation/Metastasis
2.10E-09	Metabolism
1.21E-06	Proliferation/Metastasis
0.074306347	TME
0.000337802	Proliferation/Metastasis
0.004275248	Proliferation/Metastasis
0.000395785	TME
0.00095291	TME
3.79E-11	Metabolism
0.011325326	Metabolism
3.00E-10	Proliferation/Metastasis
3.58E-15	Proliferation/Metastasis
0.126894308	Proliferation/Metastasis
0.002686188	Metabolism
0.004882398	Metabolism
1.10E-05	Metabolism
0.002787229	Proliferation/Metastasis
0.001915891	TME
0.009278797	TME
0.216434411	Metabolism
0.638188967	Proliferation/Metastasis
0.046026441	Metabolism
0.424342321	TME
0.19228066	TME
2.54E-05	TME
0.018744018	TME
0.218134181	Metabolism
2.46E-05	TME
0.655614668	Proliferation/Metastasis
0.000460996	TME
0.003409634	Proliferation/Metastasis
8.26E-22	Proliferation/Metastasis
0.020520861	Metabolism

6.94E-25	Proliferation/Metastasis
0.005361428	TME
1.94E-12	Metabolism
0.21486494	TME
0.280613991	TME
0.05369234	TME
0.004456966	TME
1.36E-08	TME
0.016824285	TME
1.83E-07	Metabolism
1.94E-06	TME
0.760197657	Metabolism
0.59786456	Metabolism
0.002699498	Proliferation/Metastasis
0.045484004	Proliferation/Metastasis
0.886266384	Metabolism
0.050117667	Metabolism
1.16E-05	Metabolism
0.00205321	Metabolism
0.04156654	Proliferation/Metastasis
0.620163817	Proliferation/Metastasis
0.02126458	Metabolism
8.86E-07	Metabolism
9.55E-08	Metabolism
0.002222826	TME
0.000149169	Metabolism
0.023862183	Metabolism
0.401906158	Metabolism
0.052541422	Metabolism
7.46E-05	Proliferation/Metastasis
3.18E-08	Metabolism
0.442701948	Metabolism
4.04E-06	Metabolism
9.77E-23	Metabolism
4.43E-24	Metabolism
0.318373199	Metabolism
0.379815462	Proliferation/Metastasis
0.100976761	Metabolism
7.25E-08	Metabolism
0.025042035	Proliferation/Metastasis
0.013309558	Metabolism
0.136557148	Metabolism
0.651899791	Metabolism

0.944274296	Metabolism
9.19E-08	Metabolism
0.994937499	Metabolism
0.241240721	Metabolism
0.829181151	Metabolism
0.026705425	TME
0.008716977	TME
0.003703382	TME
0.238899748	TME
0.031387016	TME
0.001755145	Metabolism
4.92E-08	Metabolism
0.210708075	Proliferation/Metastasis
2.10E-08	Metabolism
0.000140925	Proliferation/Metastasis
4.38E-05	Metabolism
4.76E-12	TME
2.08E-05	Metabolism
0.443599065	Metabolism
1.03E-09	Metabolism
0.000252143	Metabolism
0.855638827	TME
0.00036421	TME
0.020188334	Proliferation/Metastasis
0.004929919	Metabolism
3.25E-09	Proliferation/Metastasis
0.16097472	Proliferation/Metastasis
0.227695914	TME
0.367872749	TME
0.635221598	TME
0.615521621	TME
0.995298469	Metabolism
4.44E-05	Proliferation/Metastasis
0.481267258	Metabolism
0.854676748	Metabolism
0.387630257	Proliferation/Metastasis
0.08583305	Proliferation/Metastasis
0.008355823	Metabolism
0.850577063	Metabolism
0.278177269	Metabolism
0.007993369	Metabolism
0.228525364	TME
0.1687056	TME

0.977191935	TME
0.872880347	TME
0.360216255	TME
0.019506831	Metabolism
0.04833517	Metabolism
0.080817942	Metabolism
0.97206157	Metabolism
0.019737826	Metabolism
0.157342092	TME
0.410708391	TME
0.463853818	TME
0.781792191	TME
0.498494346	TME
0.833436725	TME
0.807207566	TME
0.491525262	TME
0.685361912	TME
0.235112015	Proliferation/Metastasis
0.106634284	Proliferation/Metastasis
0.171960165	Metabolism
0.578632545	Metabolism
0.840148573	TME
0.056179516	Metabolism
6.46E-05	Metabolism
0.964633168	TME
2.34E-08	Proliferation/Metastasis
0.581579605	Proliferation/Metastasis
0.036111887	TME
0.68794797	Metabolism
0.013810684	Metabolism
0.862346081	Proliferation/Metastasis
3.58E-09	Proliferation/Metastasis
0.260584163	TME
0.529884833	TME
0.686205192	TME
0.977279169	TME
0.004741522	Proliferation/Metastasis
0.069969309	TME
0.979083306	TME
0.612089316	Metabolism
0.043779376	TME
0.463599316	TME
0.300267396	TME

0.150003206	TME
0.071181173	Metabolism
0.845148994	Metabolism
0.166077495	Metabolism
0.04694069	TME
0.235887144	Metabolism
0.410025797	TME
0.762249556	TME
0.783194472	TME
0.032111315	TME
0.181286421	TME
0.002454134	Metabolism
0.152351404	Proliferation/Metastasis
0.165869544	Metabolism
0.251620395	Proliferation/Metastasis
0.033647923	Metabolism
0.166551691	Metabolism
0.034420008	Metabolism
0.255254908	Metabolism
0.096159292	Metabolism
0.389630114	Metabolism
0.50651821	Metabolism
0.208251957	Metabolism
0.187222017	Metabolism
0.018274787	Metabolism
0.951439786	Metabolism
0.423840163	Metabolism
0.539200036	Metabolism
0.001061706	Metabolism
0.780537521	TME
1.41E-05	Proliferation/Metastasis
0.101408808	Metabolism
0.212788159	Proliferation/Metastasis
0.957195622	TME
0.083222802	Proliferation/Metastasis
0.281068287	Proliferation/Metastasis
0.658010301	TME
0.367169502	TME
2.64E-11	Metabolism
1.08E-12	Metabolism
0.065060502	Proliferation/Metastasis
0.148083313	Proliferation/Metastasis
0.096884324	Proliferation/Metastasis

0.092984098	Metabolism
0.012270006	Metabolism
0.002766506	Metabolism
0.872254513	Proliferation/Metastasis
0.83205422	TME
0.77375434	TME
0.200066825	Metabolism
2.43E-07	Proliferation/Metastasis
1.62E-08	Metabolism
0.962122217	TME
0.6927627	TME
0.754556215	TME
0.002338086	TME
0.233386806	Metabolism
0.176483531	TME
1.06E-06	Proliferation/Metastasis
0.592469952	TME
2.27E-05	Proliferation/Metastasis
0.846720494	Proliferation/Metastasis
8.51E-06	Metabolism
0.000141323	Proliferation/Metastasis
0.825616636	TME
0.114804279	Metabolism
0.443930211	TME
0.817372226	TME
0.128215676	TME
0.990816399	TME
0.030762381	TME
0.775788666	TME
0.022278693	Metabolism
0.667793181	TME
0.084016341	Metabolism
0.001308599	Metabolism
0.611490031	Proliferation/Metastasis
0.596250053	Proliferation/Metastasis
0.373731047	Metabolism
0.391849199	Metabolism
0.018001551	Metabolism
2.66E-06	Metabolism
0.499103585	Proliferation/Metastasis
0.000621037	Proliferation/Metastasis
0.753298	Metabolism
0.889131891	Metabolism

0.077675067	Metabolism
0.510624266	TME
0.583463026	Metabolism
5.98E-05	Metabolism
0.499422176	Metabolism
8.11E-07	Metabolism
0.020718021	Proliferation/Metastasis
0.225421183	Metabolism
0.502092256	Metabolism
0.649979813	Metabolism
0.044939278	Metabolism
0.000121739	Metabolism
0.556780059	Metabolism
0.305211142	Proliferation/Metastasis
0.735698157	Metabolism
0.179523599	Metabolism
1.13E-08	Proliferation/Metastasis
0.679374977	Metabolism
1.66E-10	Metabolism
0.000440507	Metabolism
0.006622045	Metabolism
0.02770346	Metabolism
0.909489303	Metabolism
0.581675404	Metabolism
0.144811832	Metabolism
0.649480194	TME
0.906417384	TME
0.552452387	TME
0.897943241	TME
0.507425654	TME
0.006706774	Metabolism
0.881777918	Metabolism
3.20E-07	Proliferation/Metastasis
0.005752402	Metabolism
0.533625017	Proliferation/Metastasis
0.212152698	Metabolism
0.228438877	TME
0.334169523	Metabolism
0.099896238	Metabolism
0.366185704	Metabolism
0.689182248	Metabolism
0.127446887	TME
5.58E-08	TME

0.058787802	Proliferation/Metastasis
0.152979067	Metabolism
0.420861712	Proliferation/Metastasis
0.356336745	Proliferation/Metastasis
0.00011888	TME
1.07E-15	TME
1.61E-14	TME
1.88E-11	TME
0.166506037	Metabolism
1.28E-15	Proliferation/Metastasis
5.39E-05	Metabolism
1.96E-19	Metabolism
9.25E-05	Proliferation/Metastasis
5.73E-07	Proliferation/Metastasis
7.38E-10	Metabolism
1.62E-05	Metabolism
0.814404732	Metabolism
0.222781365	Metabolism
1.78E-10	TME
8.22E-08	TME
1.67E-11	TME
4.05E-08	TME
1.78E-10	TME
0.740397355	Metabolism
0.690771461	Metabolism
0.826970105	Metabolism
0.370750333	Metabolism
0.688397801	Metabolism
0.003339904	TME
0.000832994	TME
3.26E-15	TME
3.31E-08	TME
2.57E-13	TME
1.99E-14	TME
3.12E-14	TME
1.08E-13	TME
1.72E-09	TME
0.178221083	Proliferation/Metastasis
2.26E-05	Proliferation/Metastasis
1.15E-05	Metabolism
4.78E-07	Metabolism
0.037529777	TME
0.002358873	Metabolism

1.67E-08	Metabolism
3.37E-13	TME
3.76E-09	Proliferation/Metastasis
0.003237079	Proliferation/Metastasis
1.67E-07	TME
0.001085093	Metabolism
5.97E-16	Metabolism
0.963070523	Proliferation/Metastasis
0.297269089	Proliferation/Metastasis
8.67E-10	TME
1.03E-15	TME
1.77E-12	TME
1.14E-12	TME
0.056320092	Proliferation/Metastasis
0.053274511	TME
6.17E-19	TME
0.00137181	Metabolism
1.91E-13	TME
8.98E-15	TME
3.45E-13	TME
0.900574311	TME
0.053776325	Metabolism
0.435495253	Metabolism
0.029583826	Metabolism
1.04E-07	TME
4.60E-12	Metabolism
1.31E-08	TME
0.001690092	TME
7.54E-14	TME
4.94E-06	TME
0.001051779	TME
9.65E-15	Metabolism
0.081741886	Proliferation/Metastasis
3.57E-18	Metabolism
0.177279642	Proliferation/Metastasis
3.26E-22	Metabolism
0.001929314	Metabolism
1.06E-06	Metabolism
1.44E-07	Metabolism
9.30E-12	Metabolism
0.00096283	Metabolism
0.399164518	Metabolism
0.009765712	Metabolism

7.45E-08	Metabolism
1.13E-10	Metabolism
8.38E-07	Metabolism
0.091762453	Metabolism
0.449974856	Metabolism
4.64E-05	Metabolism
5.67E-20	TME
9.39E-12	Proliferation/Metastasis
0.613921053	Metabolism
1.30E-14	Proliferation/Metastasis
1.24E-11	TME
3.61E-17	Proliferation/Metastasis
9.85E-14	Proliferation/Metastasis
9.08E-24	TME
5.66E-17	TME
1.34E-05	Metabolism
0.470260752	Metabolism
3.30E-07	Proliferation/Metastasis
0.010427214	Proliferation/Metastasis
6.40E-12	Proliferation/Metastasis
0.024960547	Metabolism
0.019316792	Metabolism
4.87E-09	Metabolism
5.00E-19	Proliferation/Metastasis
1.71E-19	TME
7.41E-15	TME
0.000195777	Metabolism
0.377349001	Proliferation/Metastasis
0.36769923	Metabolism
7.81E-08	TME
1.29E-10	TME
0.05712214	TME
1.45E-10	TME
1.12E-07	Metabolism
1.53E-05	TME
1.83E-05	Proliferation/Metastasis
6.47E-22	TME
0.196627452	Proliferation/Metastasis
7.63E-15	Proliferation/Metastasis
0.524133367	Metabolism
0.000334804	Proliferation/Metastasis
5.81E-15	TME
1.26E-05	Metabolism

0.267748509	TME
1.83E-05	TME
0.955096005	TME
1.18E-15	TME
1.31E-17	TME
1.76E-13	TME
4.68E-19	Metabolism
4.02E-22	TME
4.45E-09	Metabolism
0.060463377	Metabolism
4.86E-13	Proliferation/Metastasis
0.657365409	Proliferation/Metastasis
0.195995378	Metabolism
5.26E-11	Metabolism
0.002325755	Metabolism
4.18E-16	Metabolism
5.13E-13	Proliferation/Metastasis
0.079227467	Proliferation/Metastasis
1.65E-11	Metabolism
3.56E-07	Metabolism
1.70E-12	Metabolism
0.001538079	TME
3.91E-05	Metabolism
5.38E-09	Metabolism
6.13E-06	Metabolism
0.063712344	Metabolism
5.98E-13	Proliferation/Metastasis
1.92E-09	Metabolism
2.15E-06	Metabolism
0.002521929	Metabolism
0.000860181	Metabolism
6.03E-06	Metabolism
0.026629428	Metabolism
2.09E-08	Proliferation/Metastasis
0.00032581	Metabolism
1.61E-15	Metabolism
0.237582925	Proliferation/Metastasis
0.03950069	Metabolism
4.91E-07	Metabolism
0.010810511	Metabolism
8.82E-11	Metabolism
0.001161862	Metabolism
2.48E-07	Metabolism

0.200418367	Metabolism
0.013285357	Metabolism
4.10E-13	TME
2.36E-15	TME
9.48E-15	TME
1.26E-12	TME
3.04E-12	TME
0.466792123	Metabolism
0.018402607	Metabolism
7.92E-09	Proliferation/Metastasis
8.53E-12	Metabolism
3.97E-16	Proliferation/Metastasis
0.007623357	Metabolism
6.84E-10	TME
0.000276466	Metabolism
0.021423719	Metabolism
6.49E-21	Metabolism
0.311000514	Metabolism
1.40E-06	TME
0.155954914	TME
0.000169059	Proliferation/Metastasis
2.50E-05	Metabolism
0.032350304	Proliferation/Metastasis
2.78E-08	Proliferation/Metastasis
0.572340993	TME
0.000424772	TME
1.63E-05	TME
3.74E-05	TME
0.797317471	Metabolism
2.50E-05	Proliferation/Metastasis
0.002131508	Metabolism
0.00026666	Metabolism
0.063339131	Proliferation/Metastasis
0.363072312	Proliferation/Metastasis
0.029366742	Metabolism
0.000293901	Metabolism
0.165014088	Metabolism
0.144344784	Metabolism
0.001304092	TME
0.00076185	TME
9.25E-05	TME
8.85E-05	TME
0.001621769	TME

0.001777213	Metabolism
0.008685127	Metabolism
0.782131811	Metabolism
0.25529124	Metabolism
0.008452218	Metabolism
0.052512087	TME
0.003793477	TME
9.28E-07	TME
4.58E-05	TME
0.001421467	TME
3.43E-05	TME
5.60E-05	TME
7.81E-06	TME
0.000652855	TME
0.787570246	Proliferation/Metastasis
0.072008227	Proliferation/Metastasis
0.001736111	Metabolism
0.032326964	Metabolism
0.017052137	TME
0.255669394	Metabolism
0.121893923	Metabolism
0.000418009	TME
0.131142371	Proliferation/Metastasis
0.074687399	Proliferation/Metastasis
0.000711673	TME
0.084352546	Metabolism
0.001227569	Metabolism
0.298267266	Proliferation/Metastasis
0.024317055	Proliferation/Metastasis
6.85E-05	TME
1.21E-05	TME
2.77E-05	TME
0.000684446	TME
0.00074061	Proliferation/Metastasis
0.041602425	TME
2.53E-05	TME
0.128041727	Metabolism
1.16E-06	TME
7.39E-06	TME
0.000152067	TME
0.71081789	TME
0.111170105	Metabolism
0.034720373	Metabolism

0.129750409	Metabolism
0.016766453	TME
0.001106142	Metabolism
0.034520466	TME
0.073606748	TME
0.000340714	TME
0.22510009	TME
0.028201569	TME
0.001317776	Metabolism
0.511403538	Proliferation/Metastasis
0.000431865	Metabolism
0.266796749	Proliferation/Metastasis
0.003402937	Metabolism
0.000443926	Metabolism
0.001378218	Metabolism
0.048309731	Metabolism
0.000129764	Metabolism
0.828162828	Metabolism
8.22E-05	Metabolism
0.722977391	Metabolism
0.058697785	Metabolism
0.289389133	Metabolism
0.67678161	Metabolism
0.604874108	Metabolism
0.645254333	Metabolism
0.00448099	Metabolism
0.000112509	TME
0.007269839	Proliferation/Metastasis
0.040094359	Metabolism
0.000921478	Proliferation/Metastasis
6.87E-06	TME
3.53E-05	Proliferation/Metastasis
0.000113746	Proliferation/Metastasis
1.86E-05	TME
4.25E-05	TME
0.277488615	Metabolism
0.316610859	Metabolism
0.00071792	Proliferation/Metastasis
0.92876037	Proliferation/Metastasis
0.003054761	Proliferation/Metastasis
0.202389518	Metabolism
0.234030862	Metabolism
0.401249505	Metabolism

0.030730481	Proliferation/Metastasis
0.000140516	TME
0.00060996	TME
0.031831352	Metabolism
0.006894774	Proliferation/Metastasis
0.936606101	Metabolism
0.002681854	TME
0.00028632	TME
0.985345023	TME
3.06E-05	TME
0.008657672	Metabolism
5.10E-05	TME
0.732369079	Proliferation/Metastasis
3.26E-05	TME
0.036310562	Proliferation/Metastasis
0.003011539	Proliferation/Metastasis
0.658890164	Metabolism
0.411202626	Proliferation/Metastasis
0.0001264	TME
0.260707868	Metabolism
0.13807063	TME
0.035997729	TME
0.788939397	TME
1.79E-05	TME
1.12E-05	TME
0.000101696	TME
0.014927877	Metabolism
0.000207493	TME
0.002689856	Metabolism
0.475453037	Metabolism
0.000662121	Proliferation/Metastasis
0.058887842	Proliferation/Metastasis
0.20567277	Metabolism
0.053822429	Metabolism
0.583282805	Metabolism
0.013455145	Metabolism
0.003466673	Proliferation/Metastasis
0.059360819	Proliferation/Metastasis
0.022446408	Metabolism
0.153889751	Metabolism
0.003356658	Metabolism
0.420095704	TME
0.000195879	Metabolism

0.244771324	Metabolism
0.396900287	Metabolism
0.989977743	Metabolism
1.28E-06	Proliferation/Metastasis
0.006174563	Metabolism
0.092777142	Metabolism
0.822520867	Metabolism
0.002900073	Metabolism
0.177701351	Metabolism
0.005200868	Metabolism
0.226040618	Proliferation/Metastasis
0.403649044	Metabolism
0.019600111	Metabolism
0.22148067	Proliferation/Metastasis
0.666808713	Metabolism
0.616000331	Metabolism
0.175895234	Metabolism
0.000149032	Metabolism
0.032467067	Metabolism
0.462906769	Metabolism
0.199695536	Metabolism
0.00863629	Metabolism
0.000268533	TME
6.54E-05	TME
0.000343329	TME
0.000344356	TME
7.82E-05	TME
0.369375651	Metabolism
0.131685194	Metabolism
0.005311509	Proliferation/Metastasis
0.132082827	Metabolism
0.000555689	Proliferation/Metastasis
0.000542142	Metabolism
0.073351069	TME
0.013528146	Metabolism
0.080250715	Metabolism
0.018742058	Metabolism
0.249686867	Metabolism
0.064512344	TME
0.001174166	TME
0.06917892	Proliferation/Metastasis
0.528923399	Metabolism
0.91761307	Proliferation/Metastasis

0.001159817	Proliferation/Metastasis
0.002104467	TME
0.915394492	TME
0.261424747	TME
0.820576849	TME
0.799360171	Metabolism
0.404778021	Proliferation/Metastasis
1.81E-29	Metabolism
0.957756858	Metabolism
0.030986521	Proliferation/Metastasis
0.001557185	Proliferation/Metastasis
3.77E-29	Metabolism
4.10E-08	Metabolism
5.97E-09	Metabolism
6.28E-06	Metabolism
0.235628062	TME
1.96E-05	TME
0.265242082	TME
0.188675774	TME
4.34E-39	TME
1.51E-05	Metabolism
0.149868651	Metabolism
0.002116537	Metabolism
0.253853724	Metabolism
0.051599069	Metabolism
8.56E-07	TME
0.296028171	TME
0.022479277	TME
0.669687492	TME
0.458313512	TME
0.593063384	TME
0.75809459	TME
0.189275829	TME
0.572183635	TME
4.84E-06	Proliferation/Metastasis
2.40E-07	Proliferation/Metastasis
0.201557642	Metabolism
0.00245572	Metabolism
0.899014399	TME
0.41531539	Metabolism
0.039828628	Metabolism
0.07000557	TME
0.040157868	Proliferation/Metastasis

5.27E-05	Proliferation/Metastasis
0.983661329	TME
1.50E-09	Metabolism
7.07E-06	Metabolism
6.63E-09	Proliferation/Metastasis
0.000316525	Proliferation/Metastasis
0.646876077	TME
0.160270604	TME
0.971372331	TME
0.100701641	TME
0.006010787	Proliferation/Metastasis
0.426834985	TME
0.009764826	TME
3.64E-18	Metabolism
0.054116503	TME
0.665150425	TME
0.819326004	TME
0.015821445	TME
0.211166772	Metabolism
0.100081157	Metabolism
8.93E-05	Metabolism
0.112826949	TME
0.088788427	Metabolism
0.058893069	TME
0.0455118	TME
0.869474175	TME
0.527981099	TME
0.033841476	TME
0.001839938	Metabolism
2.69E-06	Proliferation/Metastasis
0.003034152	Metabolism
3.32E-05	Proliferation/Metastasis
4.21E-05	Metabolism
5.35E-06	Metabolism
1.83E-07	Metabolism
0.033633972	Metabolism
0.030127105	Metabolism
0.056603286	Metabolism
0.031013438	Metabolism
0.540304188	Metabolism
0.000215343	Metabolism
0.886785085	Metabolism
0.00155766	Metabolism

4.22E-13	Metabolism
0.426411425	Metabolism
0.280395117	Metabolism
0.386260513	TME
0.33727361	Proliferation/Metastasis
7.32E-11	Metabolism
8.03E-07	Proliferation/Metastasis
0.426157109	TME
0.000297783	Proliferation/Metastasis
0.011498528	Proliferation/Metastasis
0.31121626	TME
8.71E-06	TME
0.041922452	Metabolism
0.042029571	Metabolism
5.10E-05	Proliferation/Metastasis
0.001903639	Proliferation/Metastasis
8.78E-05	Proliferation/Metastasis
3.51E-25	Metabolism
0.021934039	Metabolism
0.083196802	Metabolism
0.252592627	Proliferation/Metastasis
0.671240524	TME
0.001924258	TME
0.258488857	Metabolism
0.008081645	Proliferation/Metastasis
0.020134209	Metabolism
0.12227517	TME
0.136084556	TME
0.030358345	TME
0.029364143	TME
4.32E-08	Metabolism
3.43E-07	TME
0.000423953	Proliferation/Metastasis
0.000349261	TME
0.808720807	Proliferation/Metastasis
0.281274585	Proliferation/Metastasis
0.770738722	Metabolism
0.003461027	Proliferation/Metastasis
0.357888043	TME
0.123877413	Metabolism
2.44E-11	TME
0.021643952	TME
0.051833471	TME

0.685433975	TME
3.96E-08	TME
0.772198516	TME
0.084345023	Metabolism
3.27E-15	TME
0.035613355	Metabolism
4.18E-05	Metabolism
0.006790444	Proliferation/Metastasis
9.82E-07	Proliferation/Metastasis
8.98E-06	Metabolism
0.569498932	Metabolism
0.080751556	Metabolism
0.321158014	Metabolism
4.90E-18	Proliferation/Metastasis
0.062599224	Proliferation/Metastasis
0.835464631	Metabolism
0.025852994	Metabolism
0.048212055	Metabolism
0.105775355	TME
6.12E-06	Metabolism
0.719069737	Metabolism
0.693705911	Metabolism
0.803938814	Metabolism
0.571426709	Proliferation/Metastasis
0.084080213	Metabolism
0.000456146	Metabolism
0.017238106	Metabolism
0.341606294	Metabolism
0.04255018	Metabolism
0.817540543	Metabolism
0.00419841	Proliferation/Metastasis
1.45E-14	Metabolism
0.757655945	Metabolism
0.59980493	Proliferation/Metastasis
0.000103018	Metabolism
0.011742733	Metabolism
2.43E-08	Metabolism
0.910006462	Metabolism
1.36E-06	Metabolism
2.99E-09	Metabolism
0.479886604	Metabolism
0.916249033	Metabolism
0.172550678	TME

0.342951769	TME
0.018551432	TME
0.022047333	TME
0.020559841	TME
0.220616323	Metabolism
0.8200502	Metabolism
0.312713198	Proliferation/Metastasis
0.866567458	Metabolism
0.000125416	Proliferation/Metastasis
0.029874556	Metabolism
3.81E-30	TME
3.43E-06	Metabolism
0.363909076	Metabolism
0.101078564	Metabolism
0.606824684	Metabolism
0.000239878	TME
0.003582953	TME
6.61E-07	Proliferation/Metastasis
0.060731883	Metabolism
0.053571927	Proliferation/Metastasis
0.007909647	Proliferation/Metastasis
0.002612638	TME
0.57280907	TME
0.001519716	TME
0.417313052	TME
0.244750679	Metabolism
0.107911614	Proliferation/Metastasis
0.746442671	Metabolism
0.45934717	Metabolism
0.210732326	Proliferation/Metastasis
0.034777947	Proliferation/Metastasis
0.265894973	Metabolism
0.004043417	Metabolism
0.020167488	Metabolism
0.007828608	Metabolism
0.49310093	TME
0.968279288	TME
0.006083943	TME
0.833178453	TME
0.837797929	TME
0.453860881	Metabolism
0.406533246	Metabolism
0.645275784	Metabolism

0.065721449	Metabolism
0.014810279	Metabolism
3.33E-05	TME
0.053345096	TME
0.332199415	TME
0.758969302	TME
0.358826874	TME
0.302073856	TME
0.212478715	TME
0.587816212	TME
0.235442678	TME
0.028039047	Proliferation/Metastasis
0.127470772	Proliferation/Metastasis
0.048436443	Metabolism
0.033537373	Metabolism
0.128686191	TME
0.855771612	Metabolism
0.006230326	Metabolism
0.202644834	TME
9.51E-05	Proliferation/Metastasis
0.105491075	Proliferation/Metastasis
0.679326495	TME
1.93E-05	Metabolism
1.31E-06	Metabolism
0.166746938	Proliferation/Metastasis
0.004212977	Proliferation/Metastasis
0.031701529	TME
0.050412469	TME
0.157876127	TME
8.58E-05	TME
0.117309242	Proliferation/Metastasis
1.38E-05	TME
0.056752941	TME
0.297976961	Metabolism
0.000273988	TME
0.010432747	TME
0.780117095	TME
0.000516209	TME
0.205392848	Metabolism
0.141184652	Metabolism
0.025657439	Metabolism
0.00110651	TME
0.018824066	Metabolism

0.081903295	TME
0.251399801	TME
0.661313516	TME
0.354449803	TME
0.074280009	TME
0.000660746	Metabolism
0.037343904	Proliferation/Metastasis
0.084451993	Metabolism
0.221611113	Proliferation/Metastasis
0.000289494	Metabolism
0.001070979	Metabolism
0.087152053	Metabolism
8.97E-05	Metabolism
0.001084729	Metabolism
0.536931365	Metabolism
0.253969045	Metabolism
0.81773847	Metabolism
0.578653509	Metabolism
0.158002523	Metabolism
0.005187315	Metabolism
0.329524168	Metabolism
0.769864237	Metabolism
0.017187896	Metabolism
0.004465785	TME
0.305917723	Proliferation/Metastasis
0.425523583	Metabolism
0.465483258	Proliferation/Metastasis
0.805041887	TME
0.173813229	Proliferation/Metastasis
0.056296225	Proliferation/Metastasis
0.211798468	TME
0.474674185	TME
0.000214338	Metabolism
5.10E-06	Metabolism
0.141692124	Proliferation/Metastasis
0.118323825	Proliferation/Metastasis
0.00025268	Proliferation/Metastasis
0.31113639	Metabolism
0.400360249	Metabolism
0.15941812	Metabolism
0.488390459	Proliferation/Metastasis
0.010228485	TME
0.008189315	TME

0.008618481	Metabolism
0.153022428	Proliferation/Metastasis
0.000126046	Metabolism
0.001384843	TME
0.018211905	TME
0.461356403	TME
1.81E-06	TME
5.19E-07	Metabolism
0.056215709	TME
0.011533296	Proliferation/Metastasis
0.069384978	TME
0.33652021	Proliferation/Metastasis
0.093090641	Proliferation/Metastasis
0.030214846	Metabolism
0.75258463	Proliferation/Metastasis
0.010869268	TME
0.40104386	Metabolism
0.149609218	TME
0.018010916	TME
0.000156049	TME
0.315006237	TME
0.000495476	TME
0.083741064	TME
0.515390328	Metabolism
0.110295379	TME
0.425899474	Metabolism
0.168028831	Metabolism
0.000178273	Proliferation/Metastasis
0.494928258	Proliferation/Metastasis
0.542844381	Metabolism
0.366479807	Metabolism
0.051027766	Metabolism
4.66E-07	Metabolism
0.830784087	Proliferation/Metastasis
4.72E-06	Proliferation/Metastasis
0.880683407	Metabolism
0.061890848	Metabolism
3.26E-06	Metabolism
0.004822258	TME
5.90E-05	Metabolism
9.84E-05	Metabolism
0.62918124	Metabolism
0.148771153	Metabolism

0.850197089	Proliferation/Metastasis
1.26E-07	Metabolism
0.27205203	Metabolism
0.069846345	Metabolism
0.001536962	Metabolism
0.094051408	Metabolism
0.073615114	Metabolism
0.005900135	Proliferation/Metastasis
0.004561775	Metabolism
1.13E-05	Metabolism
0.713467287	Proliferation/Metastasis
0.618758362	Metabolism
0.003935871	Metabolism
0.390957071	Metabolism
0.400662017	Metabolism
0.206744485	Metabolism
0.001441986	Metabolism
0.64477709	Metabolism
0.620897131	Metabolism
0.352095702	TME
0.221557473	TME
0.095912943	TME
0.453671385	TME
0.872594109	TME
0.112382064	Metabolism
0.703803144	Metabolism
0.005760376	Proliferation/Metastasis
4.11E-08	Metabolism
0.029114915	Proliferation/Metastasis
0.005482683	Metabolism
0.93468913	TME
1.12E-07	Metabolism
0.008920371	Metabolism
0.000664418	Metabolism
0.292506477	Metabolism
0.063659868	TME
0.047483969	TME
0.695601888	Proliferation/Metastasis
0.001061096	Metabolism
0.057673139	Proliferation/Metastasis
0.013598739	Proliferation/Metastasis
0.384243829	TME
0.242671691	TME

0.103576756	TME
0.110105898	TME
0.666898338	Metabolism
0.211782401	Proliferation/Metastasis
0.015706933	Metabolism
0.326534909	Metabolism
0.383200877	Proliferation/Metastasis
0.642970596	Proliferation/Metastasis
0.06192539	Metabolism
0.634638727	Metabolism
0.253359254	Metabolism
0.667165228	Metabolism
0.711266149	TME
0.01497105	TME
0.10976862	TME
0.042554841	TME
0.132753554	TME
0.428210585	Metabolism
0.536055346	Metabolism
0.603496139	Metabolism
0.494842023	Metabolism
0.586117673	Metabolism
0.072634654	TME
0.997917577	TME
0.045511247	TME
0.136381412	TME
0.188881365	TME
0.037476507	TME
0.036168859	TME
0.018875599	TME
0.083634115	TME
0.104774669	Proliferation/Metastasis
0.017229066	Proliferation/Metastasis
0.044772167	Metabolism
0.001890287	Metabolism
0.020573856	TME
0.867018069	Metabolism
0.957729552	Metabolism
0.211696767	TME
0.832328245	Proliferation/Metastasis
0.037263107	Proliferation/Metastasis
0.152346012	TME
0.83933483	Metabolism

0.076199464	Metabolism
0.011688759	Proliferation/Metastasis
0.301980912	Proliferation/Metastasis
0.036996076	TME
0.075904263	TME
0.104146255	TME
0.665140308	TME
0.434991186	Proliferation/Metastasis
0.927383646	TME
0.124778444	TME
0.039222276	Metabolism
0.00933329	TME
0.002355153	TME
0.051981724	TME
0.159174437	TME
0.352827423	Metabolism
0.559187223	Metabolism
0.680256358	Metabolism
0.621974898	TME
0.918071444	Metabolism
0.034298531	TME
0.498828153	TME
0.050454581	TME
0.016157278	TME
0.116610947	TME
0.375163771	Metabolism
0.017544332	Proliferation/Metastasis
0.493122414	Metabolism
0.007523238	Proliferation/Metastasis
0.329012282	Metabolism
0.358198545	Metabolism
0.457831557	Metabolism
0.442473271	Metabolism
0.219750432	Metabolism
0.682005619	Metabolism
0.438505992	Metabolism
0.470453618	Metabolism
0.938035741	Metabolism
0.536023071	Metabolism
0.190019808	Metabolism
0.666209069	Metabolism
0.643362254	Metabolism
0.380832411	Metabolism

0.247355295	TME
0.271919318	Proliferation/Metastasis
0.12794747	Metabolism
0.870110409	Proliferation/Metastasis
0.034162236	TME
0.087376992	Proliferation/Metastasis
0.030124488	Proliferation/Metastasis
0.000632294	TME
0.017739047	TME
0.640421961	Metabolism
0.602234739	Metabolism
0.003023269	Proliferation/Metastasis
0.021837212	Proliferation/Metastasis
0.048312486	Proliferation/Metastasis
0.095047457	Metabolism
0.713448634	Metabolism
0.175849981	Metabolism
0.356216167	Proliferation/Metastasis
0.135326074	TME
0.296532473	TME
0.308387761	Metabolism
0.271459942	Proliferation/Metastasis
0.762379367	Metabolism
0.06322338	TME
0.241003342	TME
0.181747408	TME
0.046964934	TME
0.631672472	Metabolism
0.091478149	TME
0.454020902	Proliferation/Metastasis
0.024903962	TME
0.198291281	Proliferation/Metastasis
0.125769642	Proliferation/Metastasis
0.453227742	Metabolism
0.005885191	Proliferation/Metastasis
0.057889088	TME
0.03280994	Metabolism
0.023185463	TME
0.140761394	TME
0.03273915	TME
0.04410575	TME
0.186971214	TME
0.073690633	TME

0.522795484	Metabolism
0.079451896	TME
0.404672711	Metabolism
0.709868635	Metabolism
0.002435373	Proliferation/Metastasis
0.75833018	Proliferation/Metastasis
0.027882334	Metabolism
0.684988259	Metabolism
0.135555088	Metabolism
0.436465232	Metabolism
0.098462302	Proliferation/Metastasis
0.673288192	Proliferation/Metastasis
0.607099761	Metabolism
0.391999554	Metabolism
0.256591333	Metabolism
0.139466255	TME
0.963328659	Metabolism
0.969891473	Metabolism
0.601140708	Metabolism
0.140920565	Metabolism
0.564454948	Proliferation/Metastasis
0.249227098	Metabolism
0.540703511	Metabolism
0.874357121	Metabolism
6.28E-06	Metabolism
0.001381465	Metabolism
0.217601482	Metabolism
0.009747408	Proliferation/Metastasis
0.862350987	Metabolism
0.555010831	Metabolism
0.130549821	Proliferation/Metastasis
0.046599944	Metabolism
0.939227309	Metabolism
0.996768922	Metabolism
0.812994747	Metabolism
0.458984642	Metabolism
0.877101675	Metabolism
0.291661094	Metabolism
0.271540182	Metabolism
0.044853885	TME
0.026214402	TME
0.02805874	TME
0.026337786	TME

0.016387279	TME
0.999776537	Metabolism
0.518212273	Metabolism
0.807003272	Proliferation/Metastasis
0.53508349	Metabolism
0.015106409	Proliferation/Metastasis
0.452204668	Metabolism
0.18240663	TME
0.702102351	Metabolism
0.251414433	Metabolism
0.330628256	Metabolism
0.737601825	Metabolism
0.423595982	TME
0.112098954	TME
0.185387768	Proliferation/Metastasis
0.707732921	Metabolism
0.06873154	Proliferation/Metastasis
0.746340549	Proliferation/Metastasis
0.77336996	TME
0.260886854	TME
0.391809327	TME
0.532819861	TME
0.673926717	Metabolism
0.114248901	Proliferation/Metastasis
0.459184654	Metabolism
0.10105344	Metabolism
0.010375902	Proliferation/Metastasis
0.004130906	Proliferation/Metastasis
0.445616106	Metabolism
0.048808355	Metabolism
0.302563666	Metabolism
0.05456156	Metabolism
0.341197883	TME
0.20161893	TME
0.090958403	TME
0.329480343	TME
0.356583166	TME
0.060667409	Metabolism
0.00806079	Metabolism
0.765450863	Metabolism
0.038873278	Metabolism
0.165584329	Metabolism
0.029803429	TME

0.032888881	TME
0.568377878	TME
0.698642716	TME
0.291490659	TME
0.387736505	TME
0.372283486	TME
0.499166481	TME
0.747172608	TME
0.587474039	Proliferation/Metastasis
0.975792714	Proliferation/Metastasis
0.704804632	Metabolism
0.506302791	Metabolism
0.766928259	TME
0.368361164	Metabolism
0.686671059	Metabolism
0.067946167	TME
0.453283238	Proliferation/Metastasis
0.445162537	Proliferation/Metastasis
0.914698129	TME
0.353496512	Metabolism
0.79529549	Metabolism
0.46696964	Proliferation/Metastasis
0.068169742	Proliferation/Metastasis
0.532328918	TME
0.275493117	TME
0.390460772	TME
0.801211944	TME
0.320372926	Proliferation/Metastasis
0.057758989	TME
0.146202565	TME
0.353523253	Metabolism
0.25805958	TME
0.259954966	TME
0.591344294	TME
0.58920461	TME
0.425923777	Metabolism
0.054101855	Metabolism
0.057862484	Metabolism
0.002243413	TME
0.100343552	Metabolism
0.235345108	TME
0.502934691	TME
0.151442195	TME

0.865810896	TME
0.156219494	TME
0.869710395	Metabolism
0.745028051	Proliferation/Metastasis
0.265889063	Metabolism
0.004470927	Proliferation/Metastasis
0.181399089	Metabolism
0.561140022	Metabolism
0.755066759	Metabolism
0.98369505	Metabolism
0.563045851	Metabolism
0.879088735	Metabolism
0.045752484	Metabolism
0.353323095	Metabolism
0.038703071	Metabolism
0.333970942	Metabolism
0.102198658	Metabolism
0.212405491	Metabolism
0.134215935	Metabolism
0.34148687	Metabolism
0.122810181	TME
0.026907284	Proliferation/Metastasis
0.14182372	Metabolism
0.077524969	Proliferation/Metastasis
0.351607585	TME
0.053599951	Proliferation/Metastasis
0.038462883	Proliferation/Metastasis
0.010900809	TME
0.02271195	TME
0.183253184	Metabolism
0.038928858	Metabolism
0.305224573	Proliferation/Metastasis
0.039692623	Proliferation/Metastasis
0.004544958	Proliferation/Metastasis
0.904408498	Metabolism
0.361810785	Metabolism
0.699848793	Metabolism
0.001333766	Proliferation/Metastasis
0.023056545	TME
0.048409678	TME
0.030320269	Metabolism
0.382835079	Proliferation/Metastasis
0.184723005	Metabolism

0.159896844	TME
0.208911532	TME
0.389894324	TME
0.011975252	TME
0.459374158	Metabolism
0.167715571	TME
0.54721733	Proliferation/Metastasis
0.091284297	TME
0.688455291	Proliferation/Metastasis
0.088020158	Proliferation/Metastasis
0.12519672	Metabolism
0.295219136	Proliferation/Metastasis
0.07764102	TME
0.126493462	Metabolism
0.379787171	TME
0.062721528	TME
0.255592112	TME
0.216606151	TME
0.775505063	TME
0.219893547	TME
0.72605776	Metabolism
0.013103566	TME
0.050157299	Metabolism
0.074703154	Metabolism
0.019605252	Proliferation/Metastasis
0.666378985	Proliferation/Metastasis
0.832174777	Metabolism
0.244561666	Metabolism
0.107358306	Metabolism
0.679796181	Metabolism
0.119186609	Proliferation/Metastasis
0.526771836	Proliferation/Metastasis
0.126872173	Metabolism
0.002696829	Metabolism
0.713266283	Metabolism
0.01299034	TME
0.919774755	Metabolism
0.857136454	Metabolism
0.106780058	Metabolism
0.744225182	Metabolism
0.07552347	Proliferation/Metastasis
0.147809485	Metabolism
0.487949639	Metabolism

0.087682659	Metabolism
0.479429718	Metabolism
0.148635474	Metabolism
0.146450425	Metabolism
0.747354093	Proliferation/Metastasis
0.224546647	Metabolism
0.21815779	Metabolism
0.016844737	Proliferation/Metastasis
0.776511162	Metabolism
0.069511749	Metabolism
0.114790373	Metabolism
0.036151989	Metabolism
0.388730182	Metabolism
0.111876373	Metabolism
0.104277233	Metabolism
0.220324719	Metabolism
0.067376337	TME
0.254951541	TME
0.120758766	TME
0.118673323	TME
0.388200765	TME
0.472797359	Metabolism
0.279596584	Metabolism
0.16561679	Proliferation/Metastasis
0.17510811	Metabolism
0.020129104	Proliferation/Metastasis
0.147552851	Metabolism
0.42164912	TME
0.991438165	Metabolism
0.185131055	Metabolism
0.547729339	Metabolism
0.108447547	Metabolism
0.150341708	TME
0.108659936	TME
0.08257912	Proliferation/Metastasis
0.051101561	Metabolism
0.140502858	Proliferation/Metastasis
0.696970645	Proliferation/Metastasis
0.035817584	TME
0.452126402	TME
0.675413576	TME
0.55904522	TME
0.085085964	Metabolism

0.000112575	Proliferation/Metastasis
0.681192158	Metabolism
1.23E-08	Metabolism
0.091912283	Proliferation/Metastasis
0.924570369	Proliferation/Metastasis
0.772249329	Metabolism
8.99E-05	Metabolism
0.002499208	Metabolism
0.223415957	Metabolism
0.704226412	TME
0.483110668	TME
0.552577736	TME
0.530716471	TME
0.900374331	TME
0.083166896	Metabolism
0.000487382	Metabolism
0.000927458	Metabolism
0.001993539	Metabolism
0.859585409	Metabolism
0.219693157	TME
0.215493942	TME
0.110445086	TME
0.499807014	TME
0.488783135	TME
0.934194303	TME
0.946247242	TME
0.514180906	TME
0.717644534	TME
0.92173624	Proliferation/Metastasis
0.31700285	Proliferation/Metastasis
1.38E-06	Metabolism
0.013176999	Metabolism
0.497333424	TME
0.44352848	Metabolism
0.141662745	Metabolism
0.386590968	TME
1.26E-05	Proliferation/Metastasis
0.006626375	Proliferation/Metastasis
0.705394555	TME
0.173547328	Metabolism
1.77E-06	Metabolism
0.653274922	Proliferation/Metastasis
0.69921931	Proliferation/Metastasis

0.442062858	TME
0.203090683	TME
0.968001564	TME
0.388286899	TME
0.007545359	Proliferation/Metastasis
0.039304231	TME
0.175894458	TME
0.841661994	Metabolism
0.699526736	TME
0.625167376	TME
0.370470442	TME
0.110754516	TME
0.001522277	Metabolism
0.002046708	Metabolism
1.55E-05	Metabolism
0.510273391	TME
3.54E-11	Metabolism
0.615153594	TME
0.423476652	TME
0.087614864	TME
0.402561991	TME
0.06724381	TME
3.42E-12	Metabolism
0.844971861	Proliferation/Metastasis
6.08E-08	Metabolism
0.160704773	Proliferation/Metastasis
2.26E-08	Metabolism
0.000379232	Metabolism
0.027509357	Metabolism
0.000109859	Metabolism
1.37E-08	Metabolism
0.364723995	Metabolism
0.122732905	Metabolism
0.012005452	Metabolism
0.002553121	Metabolism
0.003088114	Metabolism
7.32E-06	Metabolism
0.028127722	Metabolism
0.830377084	Metabolism
9.53E-05	Metabolism
0.692623721	TME
0.846534543	Proliferation/Metastasis
0.685615407	Metabolism

2.90E-05	Proliferation/Metastasis
0.58720448	TME
0.001207394	Proliferation/Metastasis
0.051113943	Proliferation/Metastasis
0.061577124	TME
0.027703804	TME
0.060316697	Metabolism
0.601549788	Metabolism
0.022605877	Proliferation/Metastasis
0.425763746	Proliferation/Metastasis
0.800266646	Proliferation/Metastasis
0.444538832	Metabolism
0.015994036	Metabolism
0.628394077	Metabolism
5.62E-09	Proliferation/Metastasis
0.29050368	TME
0.426744254	TME
0.000842467	Metabolism
0.191999631	Proliferation/Metastasis
0.762802226	Metabolism
0.403369074	TME
0.351693794	TME
0.320401488	TME
0.477474701	TME
0.007412708	Metabolism
0.969054012	TME
0.291544885	Proliferation/Metastasis
0.045398592	TME
0.29323586	Proliferation/Metastasis
3.30E-07	Proliferation/Metastasis
0.074607632	Metabolism
0.033182674	Proliferation/Metastasis
0.950913968	TME
0.000847721	Metabolism
0.377146988	TME
0.006954759	TME
9.33E-06	TME
0.453778997	TME
0.144490578	TME
0.92083285	TME
0.029730765	Metabolism
0.016728189	TME
0.004237668	Metabolism

0.525166762	Metabolism
0.426939818	Proliferation/Metastasis
0.135214186	Proliferation/Metastasis
0.859282869	Metabolism
0.001030197	Metabolism
0.351137503	Metabolism
1.05E-08	Metabolism
0.046456231	Proliferation/Metastasis
0.466323387	Proliferation/Metastasis
0.013474261	Metabolism
7.26E-05	Metabolism
2.27E-14	Metabolism
0.367750616	TME
0.002253164	Metabolism
2.58E-05	Metabolism
0.007692004	Metabolism
0.540876467	Metabolism
1.72E-05	Proliferation/Metastasis
6.75E-09	Metabolism
0.630539792	Metabolism
0.400932733	Metabolism
9.06E-08	Metabolism
6.26E-06	Metabolism
3.95E-05	Metabolism
0.505769891	Proliferation/Metastasis
0.205633512	Metabolism
2.92E-07	Metabolism
0.800437375	Proliferation/Metastasis
0.710566021	Metabolism
0.057204094	Metabolism
0.000467294	Metabolism
0.004776586	Metabolism
3.99E-06	Metabolism
0.331806203	Metabolism
0.744857895	Metabolism
0.001628611	Metabolism
0.217493891	TME
0.35693477	TME
0.147129974	TME
0.404707133	TME
0.605800409	TME
0.70905879	Metabolism
0.001878283	Metabolism

6.78E-05	Proliferation/Metastasis
3.47E-08	Metabolism
0.000606162	Proliferation/Metastasis
0.000362877	Metabolism
0.708821512	TME
0.004502276	Metabolism
3.01E-08	Metabolism
7.48E-09	Metabolism
0.002820188	Metabolism
0.03439707	TME
0.843151772	TME
0.064038273	Proliferation/Metastasis
5.12E-06	Metabolism
0.281314626	Proliferation/Metastasis
0.946351563	Proliferation/Metastasis
0.086668151	TME
0.578105874	TME
0.557049689	TME
0.809209231	TME
0.387569709	Metabolism
0.045656957	Proliferation/Metastasis
0.262316495	Metabolism
0.012639629	Metabolism
0.476036605	Proliferation/Metastasis
0.640412584	Proliferation/Metastasis
0.341498406	Metabolism
0.011401199	Metabolism
0.011043593	Metabolism
0.014675238	Metabolism
0.990284246	TME
0.97285375	TME
0.317613147	TME
0.747456845	TME
0.207135375	TME
0.450837705	Metabolism
0.15320228	Metabolism
0.631844637	Metabolism
0.019816083	Metabolism
0.404162478	Metabolism
0.639006693	TME
0.043528191	TME
0.865011743	TME
0.80054182	TME

0.695494077	TME
0.592391188	TME
0.577296309	TME
0.942592397	TME
0.885861193	TME
0.92397599	Proliferation/Metastasis
0.640339386	Proliferation/Metastasis
0.001174032	Metabolism
0.12920832	Metabolism
0.100080794	TME
0.497867528	Metabolism
0.988023851	Metabolism
0.72550554	TME
0.12651104	Proliferation/Metastasis
0.49746799	Proliferation/Metastasis
0.904082446	TME
0.063488431	Metabolism
0.006739864	Metabolism
0.606019445	Proliferation/Metastasis
0.751961921	Proliferation/Metastasis
0.557012529	TME
0.932055395	TME
0.717395571	TME
0.488866488	TME
0.011209901	Proliferation/Metastasis
0.114441831	TME
0.838653813	TME
0.250669382	Metabolism
0.168566044	TME
0.237599307	TME
0.853975617	TME
0.88672733	TME
0.060649431	Metabolism
0.013484497	Metabolism
0.040856758	Metabolism
0.32304267	TME
0.004205178	Metabolism
0.563343058	TME
0.275360976	TME
0.422189649	TME
0.925806851	TME
0.401924447	TME
0.05926305	Metabolism

0.429807178	Proliferation/Metastasis
0.02748866	Metabolism
0.359652701	Proliferation/Metastasis
0.020938218	Metabolism
0.010445883	Metabolism
0.217005784	Metabolism
0.153342835	Metabolism
0.018914127	Metabolism
0.547660901	Metabolism
0.574466021	Metabolism
0.477458225	Metabolism
0.252621714	Metabolism
0.842835458	Metabolism
0.00554923	Metabolism
0.029172396	Metabolism
0.333630866	Metabolism
0.017765528	Metabolism
0.39610125	TME
0.845016077	Proliferation/Metastasis
0.215774965	Metabolism
0.302622822	Proliferation/Metastasis
0.903999943	TME
0.477149756	Proliferation/Metastasis
0.877921571	Proliferation/Metastasis
0.907074333	TME
0.863152009	TME
0.862401179	Metabolism
0.689347873	Metabolism
0.97779869	Proliferation/Metastasis
0.668594965	Proliferation/Metastasis
0.558026399	Proliferation/Metastasis
0.27135888	Metabolism
0.143825683	Metabolism
0.180249282	Metabolism
0.043700132	Proliferation/Metastasis
0.661923979	TME
0.847155129	TME
0.064742172	Metabolism
0.913101769	Proliferation/Metastasis
0.826356148	Metabolism
0.05945721	TME
0.391409906	TME
0.0848238	TME

0.147871585	TME
0.063402663	Metabolism
0.598977617	TME
0.935152418	Proliferation/Metastasis
0.993447578	TME
0.434387863	Proliferation/Metastasis
0.004816137	Proliferation/Metastasis
0.031405522	Metabolism
0.054368899	Proliferation/Metastasis
0.518749017	TME
0.058688131	Metabolism
0.751883976	TME
0.578011545	TME
0.200402976	TME
0.652799473	TME
0.229276013	TME
0.501178885	TME
0.55218959	Metabolism
0.267205705	TME
0.076217641	Metabolism
0.404618083	Metabolism
0.938692443	Proliferation/Metastasis
0.897129269	Proliferation/Metastasis
0.891281036	Metabolism
0.370021521	Metabolism
0.323714864	Metabolism
0.039358744	Metabolism
0.261272468	Proliferation/Metastasis
0.640210834	Proliferation/Metastasis
0.558223091	Metabolism
0.01040964	Metabolism
0.01483447	Metabolism
0.049852059	TME
0.312677809	Metabolism
0.228341271	Metabolism
0.506586373	Metabolism
0.264045471	Metabolism
0.242533492	Proliferation/Metastasis
4.03E-05	Metabolism
0.358440595	Metabolism
0.358810958	Metabolism
0.004847729	Metabolism
0.125674514	Metabolism

0.0013008	Metabolism
0.549504929	Proliferation/Metastasis
0.133136316	Metabolism
0.133806921	Metabolism
0.778282358	Proliferation/Metastasis
0.491953058	Metabolism
0.851497118	Metabolism
0.002037446	Metabolism
0.917398582	Metabolism
0.010246616	Metabolism
0.232153737	Metabolism
0.377484741	Metabolism
0.035388118	Metabolism
0.916205177	TME
0.792001316	TME
0.752835604	TME
0.811011235	TME
0.616656729	TME
0.756069965	Metabolism
0.005914631	Metabolism
0.118777991	Proliferation/Metastasis
0.160118349	Metabolism
0.836601353	Proliferation/Metastasis
0.25684164	Metabolism
0.296119771	TME
0.111061892	Metabolism
0.094256419	Metabolism
0.645863018	Metabolism
0.126033154	Metabolism
0.814654966	TME
0.524049563	TME
0.588471364	Proliferation/Metastasis
0.435873826	Metabolism
0.526180501	Proliferation/Metastasis
0.855157896	Proliferation/Metastasis
0.006914478	TME
0.000172598	TME
0.000240821	TME
3.58E-06	TME
0.241460148	Metabolism
0.667028654	Proliferation/Metastasis
2.78E-05	Metabolism
0.240971046	Metabolism

0.064147616	Proliferation/Metastasis
4.08E-05	Proliferation/Metastasis
5.17E-10	Metabolism
0.009152465	Metabolism
0.017826567	Metabolism
0.960719826	Metabolism
0.02507479	TME
0.535763596	TME
9.32E-06	TME
5.68E-06	TME
3.65E-31	TME
0.132070446	Metabolism
0.002723894	Metabolism
4.20E-05	Metabolism
0.001686647	Metabolism
0.084245599	Metabolism
0.006634237	TME
0.087826904	TME
0.254266148	TME
0.000142876	TME
0.002993418	TME
6.52E-06	TME
1.60E-05	TME
0.000473283	TME
1.58E-07	TME
0.440367077	Proliferation/Metastasis
0.000660995	Proliferation/Metastasis
0.788928863	Metabolism
0.768725273	Metabolism
1.78E-07	TME
0.024441268	Metabolism
0.085056216	Metabolism
0.051138302	TME
0.190427524	Proliferation/Metastasis
0.208852967	Proliferation/Metastasis
0.000255498	TME
0.473469453	Metabolism
0.00021839	Metabolism
0.213902071	Proliferation/Metastasis
0.019366057	Proliferation/Metastasis
6.24E-06	TME
0.260606639	TME
4.15E-05	TME

0.000323601	TME
0.567825651	Proliferation/Metastasis
0.22472286	TME
0.184838505	TME
0.014118017	Metabolism
0.016112418	TME
0.045696155	TME
2.31E-06	TME
0.04947338	TME
0.973261283	Metabolism
0.000504536	Metabolism
0.000708868	Metabolism
0.12359539	TME
0.018084302	Metabolism
1.38E-05	TME
0.00032389	TME
0.003694539	TME
0.000599095	TME
0.014119225	TME
0.339608438	Metabolism
0.149739407	Proliferation/Metastasis
0.008770972	Metabolism
8.19E-05	Proliferation/Metastasis
0.002230745	Metabolism
0.211977297	Metabolism
0.039594	Metabolism
0.213791007	Metabolism
0.514407211	Metabolism
0.002251042	Metabolism
0.703117693	Metabolism
0.006957799	Metabolism
0.858652108	Metabolism
0.312260915	Metabolism
0.114854574	Metabolism
0.052363151	Metabolism
0.071166594	Metabolism
0.009262426	Metabolism
0.05173756	TME
0.030702316	Proliferation/Metastasis
0.90982898	Metabolism
2.66E-11	Proliferation/Metastasis
9.96E-06	TME
0.501476611	Proliferation/Metastasis

0.904862332	Proliferation/Metastasis
0.479021926	TME
0.42668126	TME
4.05E-07	Metabolism
9.93E-05	Metabolism
0.042676923	Proliferation/Metastasis
0.177505241	Proliferation/Metastasis
0.76539989	Proliferation/Metastasis
8.26E-06	Metabolism
1.90E-05	Metabolism
0.00088033	Metabolism
0.333444803	Proliferation/Metastasis
0.282876639	TME
0.217653646	TME
0.00013298	Metabolism
0.212674853	Proliferation/Metastasis
0.097003912	Metabolism
1.07E-05	TME
7.28E-07	TME
0.000247975	TME
0.707797835	TME
0.153681388	Metabolism
0.002072436	TME
0.240625433	Proliferation/Metastasis
0.225950294	TME
0.029280261	Proliferation/Metastasis
0.114925432	Proliferation/Metastasis
0.822943156	Metabolism
0.77144758	Proliferation/Metastasis
0.003596141	TME
0.570675949	Metabolism
0.001526922	TME
0.003158731	TME
0.021457758	TME
0.000461503	TME
4.98E-05	TME
0.000213059	TME
1.35E-06	Metabolism
0.000216588	TME
0.602799621	Metabolism
0.015077384	Metabolism
0.737466392	Proliferation/Metastasis
0.003986671	Proliferation/Metastasis

0.023678866	Metabolism
0.079990079	Metabolism
0.889488466	Metabolism
0.063863367	Metabolism
0.00015194	Proliferation/Metastasis
0.066928776	Proliferation/Metastasis
0.324897876	Metabolism
0.86198338	Metabolism
0.043932719	Metabolism
0.536465063	TME
2.62E-06	Metabolism
0.023348169	Metabolism
0.174975154	Metabolism
0.010595617	Metabolism
0.060829929	Proliferation/Metastasis
0.700096908	Metabolism
0.016751057	Metabolism
0.000374298	Metabolism
0.370055421	Metabolism
0.750433014	Metabolism
0.218829284	Metabolism
0.99137685	Proliferation/Metastasis
0.140423378	Metabolism
0.835206718	Metabolism
0.03210495	Proliferation/Metastasis
0.000104929	Metabolism
0.04582079	Metabolism
0.764817252	Metabolism
0.490331508	Metabolism
0.002854864	Metabolism
5.11E-06	Metabolism
0.409868535	Metabolism
0.034361463	Metabolism
0.006233389	TME
0.019366594	TME
0.025449563	TME
0.003076194	TME
3.33E-05	TME
0.007286731	Metabolism
0.632583264	Metabolism
0.444811196	Proliferation/Metastasis
0.000197323	Metabolism
0.054757013	Proliferation/Metastasis

0.012997085	Metabolism
3.03E-10	TME
0.092061839	Metabolism
0.243211851	Metabolism
0.970855658	Metabolism
7.82E-05	Metabolism
0.690524459	TME
0.075341241	TME
0.126743815	Proliferation/Metastasis
0.264319468	Metabolism
0.021876316	Proliferation/Metastasis
0.212098567	Proliferation/Metastasis
0.411383665	TME
0.762081098	TME
0.057474913	TME
0.180566704	TME
0.150363439	Metabolism
0.42755019	Proliferation/Metastasis
0.023338272	Metabolism
0.468785663	Metabolism
0.005309338	Proliferation/Metastasis
0.416090769	Proliferation/Metastasis
0.171004225	Metabolism
0.904022905	Metabolism
0.000110388	Metabolism
3.56E-06	Metabolism
0.489378056	TME
0.762405785	TME
0.049358988	TME
0.575117437	TME
0.033045042	TME
0.078622658	Metabolism
0.311464237	Metabolism
0.001578729	Metabolism
0.01565272	Metabolism
6.20E-12	Metabolism
0.006827099	TME
0.00030309	TME
0.651910815	TME
0.496151189	TME
0.857420751	TME
0.296937161	TME
0.264287992	TME

0.215245003	TME
0.129306817	TME
0.017562993	Proliferation/Metastasis
4.64E-05	Proliferation/Metastasis
0.280777593	Metabolism
0.002276335	Metabolism
0.326377102	TME
0.733440591	Metabolism
7.01E-07	Metabolism
0.261731003	TME
0.06339812	Proliferation/Metastasis
0.426559787	Proliferation/Metastasis
0.854957567	TME
5.36E-07	Metabolism
0.003831271	Metabolism
0.018451651	Proliferation/Metastasis
0.780366228	Proliferation/Metastasis
0.053980535	TME
0.514203262	TME
0.222009295	TME
0.239471012	TME
0.052383356	Proliferation/Metastasis
0.564866141	TME
0.097487375	TME
3.07E-07	Metabolism
0.017873214	TME
0.138417872	TME
0.322289937	TME
3.80E-05	TME
0.077025349	Metabolism
2.14E-05	Metabolism
0.171727098	Metabolism
0.578234622	TME
0.812342157	Metabolism
0.492194751	TME
0.144031491	TME
0.643264657	TME
0.383964422	TME
0.992778544	TME
0.010400369	Metabolism
0.000806064	Proliferation/Metastasis
0.080067716	Metabolism
0.934086335	Proliferation/Metastasis

0.051430906	Metabolism
7.01E-07	Metabolism
0.003276881	Metabolism
0.056291438	Metabolism
0.001759025	Metabolism
1.29E-09	Metabolism
0.000190146	Metabolism
0.979787856	Metabolism
0.629879118	Metabolism
2.11E-05	Metabolism
0.446953612	Metabolism
0.755898086	Metabolism
0.62313783	Metabolism
0.823118396	Metabolism
0.032971823	TME
0.007795027	Proliferation/Metastasis
0.004722179	Metabolism
0.274932601	Proliferation/Metastasis
0.171224362	TME
0.026148852	Proliferation/Metastasis
0.054242546	Proliferation/Metastasis
0.015730497	TME
0.117755825	TME
6.77E-07	Metabolism
0.000929797	Metabolism
0.682664135	Proliferation/Metastasis
0.005192546	Proliferation/Metastasis
0.002886597	Proliferation/Metastasis
0.000141843	Metabolism
0.423859597	Metabolism
0.998959693	Metabolism
0.744030531	Proliferation/Metastasis
0.297226705	TME
0.543479412	TME
8.18E-08	Metabolism
0.669424814	Proliferation/Metastasis
8.37E-07	Metabolism
0.140290777	TME
0.0569235	TME
0.00481548	TME
0.903270419	TME
3.49E-05	Metabolism
6.16E-09	TME

5.10E-07	Proliferation/Metastasis
0.057843175	TME
0.714695433	Proliferation/Metastasis
0.002411565	Proliferation/Metastasis
6.27E-10	Metabolism
0.178813125	Proliferation/Metastasis
0.079832494	TME
0.072766227	Metabolism
0.496368099	TME
0.849893544	TME
0.643693754	TME
0.101364146	TME
0.011210336	TME
0.12985558	TME
0.658531245	Metabolism
0.004351311	TME
0.478544444	Metabolism
2.36E-08	Metabolism
0.000287977	Proliferation/Metastasis
0.500800703	Proliferation/Metastasis
0.010901681	Metabolism
0.526304607	Metabolism
1.37E-14	Metabolism
0.286145686	Metabolism
0.105982135	Proliferation/Metastasis
7.91E-10	Proliferation/Metastasis
0.242604434	Metabolism
2.76E-05	Metabolism
0.294543301	Metabolism
0.474967261	TME
0.796046118	Metabolism
0.676267765	Metabolism
0.610171413	Metabolism
0.022000513	Metabolism
0.075120274	Proliferation/Metastasis
0.097698763	Metabolism
0.96609831	Metabolism
1.80E-05	Metabolism
0.959619848	Metabolism
0.808241726	Metabolism
0.007509998	Metabolism
0.840818288	Proliferation/Metastasis
5.69E-09	Metabolism

0.14038101	Metabolism
0.003116674	Proliferation/Metastasis
0.027276959	Metabolism
0.09317746	Metabolism
7.12E-08	Metabolism
0.003879026	Metabolism
0.595443648	Metabolism
0.000610556	Metabolism
0.000257032	Metabolism
0.002303124	Metabolism
0.104814409	TME
0.002380424	TME
0.081390897	TME
0.260241877	TME
0.659526478	TME
0.075090716	Metabolism
0.047351507	Metabolism
0.106848958	Proliferation/Metastasis
0.113903254	Metabolism
0.019453941	Proliferation/Metastasis
0.192887905	Metabolism
0.913947903	TME
0.708819872	Metabolism
0.042752982	Metabolism
0.063425745	Metabolism
0.010666328	Metabolism
0.187517892	TME
0.397821327	TME
0.03097787	Proliferation/Metastasis
0.972644581	Metabolism
0.053329277	Proliferation/Metastasis
0.00032003	Proliferation/Metastasis
2.41E-09	TME
1.44E-06	TME
1.22E-08	TME
1.90E-07	TME
2.85E-16	Metabolism
9.98E-16	Proliferation/Metastasis
0.239344237	Metabolism
9.73E-16	Metabolism
1.52E-06	Proliferation/Metastasis
0.000472668	Proliferation/Metastasis
0.00119856	Metabolism

6.73E-14	Metabolism
2.27E-06	Metabolism
0.046974093	Metabolism
1.08E-06	TME
9.41E-23	TME
3.10E-13	TME
2.99E-05	TME
0.506636431	TME
0.406300009	Metabolism
2.40E-05	Metabolism
8.63E-09	Metabolism
3.03E-08	Metabolism
0.327367019	Metabolism
2.86E-14	TME
0.005543214	TME
1.96E-12	TME
2.41E-11	TME
3.66E-05	TME
1.62E-11	TME
4.69E-10	TME
0.000854465	TME
3.91E-07	TME
4.88E-27	Proliferation/Metastasis
1.11E-15	Proliferation/Metastasis
5.48E-20	Metabolism
2.66E-29	Metabolism
1.08E-14	TME
0.006985638	Metabolism
0.135422221	Metabolism
1.39E-16	TME
6.45E-40	Proliferation/Metastasis
1.15E-40	Proliferation/Metastasis
2.42E-06	TME
0.003873245	Metabolism
5.82E-21	Metabolism
5.21E-40	Proliferation/Metastasis
2.07E-18	Proliferation/Metastasis
3.02E-17	TME
1.34E-14	TME
4.73E-14	TME
7.74E-10	TME
6.18E-29	Proliferation/Metastasis
5.10E-21	TME

7.20E-09	TME
0.43350646	Metabolism
1.99E-17	TME
2.01E-12	TME
1.00E-05	TME
0.250963048	TME
5.46E-05	Metabolism
0.926670986	Metabolism
6.02E-14	Metabolism
1.19E-22	TME
3.94E-14	Metabolism
7.60E-16	TME
4.82E-14	TME
1.98E-09	TME
0.789508979	TME
0.855771571	TME
6.95E-13	Metabolism
1.30E-32	Proliferation/Metastasis
7.20E-10	Metabolism
7.62E-17	Proliferation/Metastasis
5.28E-15	Metabolism
0.000514553	Metabolism
0.003125399	Metabolism
3.53E-10	Metabolism
9.50E-11	Metabolism
0.008605371	Metabolism
0.010933854	Metabolism
0.007780828	Metabolism
0.908511128	Metabolism
0.000152906	Metabolism
0.927867842	Metabolism
0.012167399	Metabolism
3.43E-24	Metabolism
1.97E-22	Metabolism
6.62E-08	TME
7.24E-22	Proliferation/Metastasis
0.011499058	Metabolism
0.069853779	Proliferation/Metastasis
1.24E-09	TME
1.77E-08	Proliferation/Metastasis
8.81E-06	Proliferation/Metastasis
0.012045464	TME
0.000189589	TME

4.98E-16	Metabolism
3.15E-15	Metabolism
4.97E-10	Proliferation/Metastasis
2.26E-36	Proliferation/Metastasis
2.05E-15	Proliferation/Metastasis
0.177834048	Metabolism
3.39E-05	Metabolism
0.00244892	Metabolism
0.974008979	Proliferation/Metastasis
5.96E-09	TME
8.64E-09	TME
0.010505439	Metabolism
2.64E-21	Proliferation/Metastasis
1.37E-05	Metabolism
1.30E-16	TME
1.21E-13	TME
1.05E-13	TME
1.19E-22	TME
0.466328916	Metabolism
1.35E-09	TME
0.829134383	Proliferation/Metastasis
2.97E-08	TME
6.96E-11	Proliferation/Metastasis
2.28E-35	Proliferation/Metastasis
0.085981408	Metabolism
4.87E-45	Proliferation/Metastasis
1.94E-12	TME
3.79E-32	Metabolism
0.000103709	TME
1.62E-23	TME
5.12E-22	TME
1.35E-09	TME
0.018160411	TME
1.77E-12	TME
0.068514908	Metabolism
0.083215189	TME
0.000256943	Metabolism
0.155590298	Metabolism
0.002249383	Proliferation/Metastasis
0.70129682	Proliferation/Metastasis
4.43E-27	Metabolism
0.000626546	Metabolism
0.002909551	Metabolism

2.55E-15	Metabolism
0.023708633	Proliferation/Metastasis
3.94E-05	Proliferation/Metastasis
2.31E-05	Metabolism
1.37E-07	Metabolism
5.04E-28	Metabolism
9.00E-21	TME
0.138010853	Metabolism
4.53E-16	Metabolism
4.64E-06	Metabolism
1.66E-07	Metabolism
0.008994493	Proliferation/Metastasis
1.43E-14	Metabolism
0.00176628	Metabolism
0.009963798	Metabolism
1.61E-42	Metabolism
6.00E-51	Metabolism
1.17E-13	Metabolism
6.49E-08	Proliferation/Metastasis
0.291878431	Metabolism
4.26E-24	Metabolism
8.31E-17	Proliferation/Metastasis
1.30E-16	Metabolism
0.00030933	Metabolism
0.000230258	Metabolism
0.00310529	Metabolism
5.27E-24	Metabolism
0.088216341	Metabolism
2.02E-10	Metabolism
0.000153495	Metabolism
6.00E-15	TME
0.000282516	TME
1.40E-06	TME
6.09E-12	TME
1.33E-09	TME
0.01191679	Metabolism
1.15E-24	Metabolism
6.54E-21	Proliferation/Metastasis
1.51E-15	Metabolism
0.00669335	Proliferation/Metastasis
0.569294287	Metabolism
0.924877638	TME
0.080622276	Metabolism

5.55E-19	Metabolism
1.28E-05	Metabolism
3.04E-06	Metabolism
2.80E-10	TME
5.29E-22	TME
0.001652808	Proliferation/Metastasis
8.84E-12	Metabolism
0.001327742	Proliferation/Metastasis
0.26320091	Proliferation/Metastasis
1.12E-10	TME
2.05E-05	TME
7.05E-08	TME
6.10E-08	TME
0.000512546	Metabolism
0.5148284	Proliferation/Metastasis
0.0589458	Metabolism
0.523352453	Metabolism
9.07E-08	Proliferation/Metastasis
6.81E-11	Proliferation/Metastasis
1.33E-07	Metabolism
0.649202864	Metabolism
0.497443772	Metabolism
0.314080382	Metabolism
0.000155848	TME
1.43E-19	TME
4.05E-11	TME
0.009002356	TME
0.005252826	TME
1.37E-07	Metabolism
0.704878774	Metabolism
0.739207963	Metabolism
0.782601495	Metabolism
0.269979648	Metabolism
2.27E-09	TME
0.00056752	TME
2.76E-14	TME
1.13E-07	TME
9.01E-06	TME
4.94E-08	TME
9.66E-08	TME
3.99E-05	TME
1.42E-07	TME
1.17E-09	Proliferation/Metastasis

1.13E-08	Proliferation/Metastasis
0.000270964	Metabolism
3.78E-06	Metabolism
6.75E-10	TME
0.000749349	Metabolism
0.001479655	Metabolism
8.92E-14	TME
1.37E-07	Proliferation/Metastasis
1.77E-10	Proliferation/Metastasis
5.00E-05	TME
0.000342877	Metabolism
0.091902329	Metabolism
1.39E-13	Proliferation/Metastasis
7.80E-16	Proliferation/Metastasis
2.50E-09	TME
4.93E-14	TME
3.20E-10	TME
2.89E-07	TME
0.008653046	Proliferation/Metastasis
4.96E-16	TME
4.34E-12	TME
0.021679133	Metabolism
4.23E-17	TME
4.19E-14	TME
3.11E-05	TME
0.397409339	TME
0.272964663	Metabolism
0.000418892	Metabolism
0.849722363	Metabolism
7.76E-16	TME
0.838854697	Metabolism
1.50E-09	TME
9.00E-09	TME
8.01E-08	TME
0.188409124	TME
0.701317588	TME
0.557132251	Metabolism
8.81E-13	Proliferation/Metastasis
0.883032393	Metabolism
7.49E-09	Proliferation/Metastasis
0.82379367	Metabolism
0.625364001	Metabolism
0.150700671	Metabolism

0.07778711	Metabolism
0.547014884	Metabolism
9.61E-06	Metabolism
0.004501972	Metabolism
0.009296478	Metabolism
6.51E-08	Metabolism
9.22E-17	Metabolism
3.33E-06	Metabolism
0.00309801	Metabolism
3.95E-09	Metabolism
4.64E-05	Metabolism
1.48E-11	TME
2.07E-07	Proliferation/Metastasis
2.17E-08	Metabolism
2.11E-08	Proliferation/Metastasis
3.50E-07	TME
9.19E-20	Proliferation/Metastasis
2.69E-15	Proliferation/Metastasis
1.44E-13	TME
2.44E-09	TME
1.58E-09	Metabolism
1.87E-13	Metabolism
0.544411299	Proliferation/Metastasis
7.95E-14	Proliferation/Metastasis
8.22E-21	Proliferation/Metastasis
0.589821125	Metabolism
0.018243645	Metabolism
0.039178145	Metabolism
6.94E-07	Proliferation/Metastasis
3.48E-12	TME
1.04E-11	TME
0.031176127	Metabolism
1.39E-19	Proliferation/Metastasis
3.94E-15	Metabolism
6.51E-09	TME
4.67E-12	TME
1.06E-12	TME
2.14E-15	TME
0.001226355	Metabolism
0.386316272	TME
0.112908587	Proliferation/Metastasis
2.46E-15	TME
9.72E-08	Proliferation/Metastasis

0.003743689	Proliferation/Metastasis
5.46E-10	Metabolism
1.19E-09	Proliferation/Metastasis
2.87E-12	TME
0.000146313	Metabolism
0.000254338	TME
3.01E-12	TME
3.33E-07	TME
4.75E-10	TME
0.69830501	TME
1.36E-08	TME
0.056433802	Metabolism
9.67E-09	TME
4.67E-09	Metabolism
0.022960434	Metabolism
1.52E-08	Proliferation/Metastasis
1.97E-06	Proliferation/Metastasis
5.08E-05	Metabolism
0.739943498	Metabolism
2.71E-08	Metabolism
0.552969211	Metabolism
0.000238361	Proliferation/Metastasis
0.135069937	Proliferation/Metastasis
0.579883005	Metabolism
0.444174807	Metabolism
0.001132238	Metabolism
7.32E-11	TME
0.000144324	Metabolism
2.44E-05	Metabolism
0.152909896	Metabolism
1.13E-08	Metabolism
0.000161489	Proliferation/Metastasis
0.728897423	Metabolism
0.040170528	Metabolism
0.813371022	Metabolism
0.003529459	Metabolism
7.47E-09	Metabolism
0.006688634	Metabolism
1.02E-05	Proliferation/Metastasis
0.007549987	Metabolism
0.029068744	Metabolism
9.50E-16	Proliferation/Metastasis
6.68E-06	Metabolism

0.415196826	Metabolism
0.295172479	Metabolism
2.42E-08	Metabolism
2.94E-09	Metabolism
0.101301325	Metabolism
0.819817588	Metabolism
0.819887142	Metabolism
1.84E-11	TME
2.85E-06	TME
1.98E-05	TME
5.51E-11	TME
3.27E-07	TME
0.415179806	Metabolism
0.000129535	Metabolism
6.10E-16	Proliferation/Metastasis
0.036799832	Metabolism
9.04E-11	Proliferation/Metastasis
0.000359165	Metabolism
0.801467934	TME
7.56E-08	Metabolism
0.15683065	Metabolism
0.043933782	Metabolism
0.513377055	Metabolism
4.72E-10	TME
7.57E-11	TME
8.92E-11	Proliferation/Metastasis
0.004151451	Metabolism
0.029818913	Proliferation/Metastasis
0.562870696	Proliferation/Metastasis
2.87E-05	TME
0.15395462	TME
0.596454486	TME
0.35124658	TME
0.025248425	Metabolism
1.46E-05	Proliferation/Metastasis
8.31E-05	Metabolism
4.78E-12	Metabolism
0.093819607	Proliferation/Metastasis
0.000624444	Proliferation/Metastasis
1.11E-08	Metabolism
1.05E-05	Metabolism
1.73E-07	Metabolism
0.007955264	Metabolism

0.092724245	TME
0.511571026	TME
0.17302028	TME
4.88E-05	TME
1.45E-15	TME
0.141445659	Metabolism
4.01E-06	Metabolism
0.09906329	Metabolism
0.103569353	Metabolism
0.002475053	Metabolism
0.229494975	TME
0.299149508	TME
0.613764064	TME
0.107586128	TME
0.851214333	TME
0.100120031	TME
0.197995822	TME
0.800081475	TME
0.012552693	TME
0.277736277	Proliferation/Metastasis
0.329813682	Proliferation/Metastasis
0.000355665	Metabolism
3.56E-05	Metabolism
0.000295705	TME
8.99E-06	Metabolism
0.954514419	Metabolism
0.800842353	TME
1.59E-05	Proliferation/Metastasis
0.013587994	Proliferation/Metastasis
0.35396872	TME
0.014823645	Metabolism
1.81E-13	Metabolism
0.071118831	Proliferation/Metastasis
0.387934635	Proliferation/Metastasis
0.004249657	TME
0.82080117	TME
0.072402518	TME
0.202005184	TME
0.005908089	Proliferation/Metastasis
0.042490302	TME
0.423954086	TME
0.001410075	Metabolism
0.542624977	TME

0.84506174	TME
0.172807712	TME
0.453980982	TME
0.40252838	Metabolism
0.66580257	Metabolism
1.77E-09	Metabolism
0.872724143	TME
2.38E-06	Metabolism
0.021533547	TME
0.00313831	TME
0.686595269	TME
0.908773454	TME
0.091187524	TME
7.55E-13	Metabolism
0.224007231	Proliferation/Metastasis
2.01E-16	Metabolism
0.002668814	Proliferation/Metastasis
1.11E-15	Metabolism
0.00024991	Metabolism
1.61E-05	Metabolism
3.57E-05	Metabolism
2.82E-08	Metabolism
0.0265035	Metabolism
0.665099549	Metabolism
4.68E-08	Metabolism
7.66E-06	Metabolism
0.006462283	Metabolism
0.018581104	Metabolism
1.55E-05	Metabolism
0.280086482	Metabolism
0.075749878	Metabolism
0.529891226	TME
0.000900881	Proliferation/Metastasis
0.563393641	Metabolism
2.76E-12	Proliferation/Metastasis
0.212544051	TME
0.00432085	Proliferation/Metastasis
0.000244467	Proliferation/Metastasis
0.16872659	TME
0.000654022	TME
4.06E-06	Metabolism
0.027633142	Metabolism
0.000491537	Proliferation/Metastasis

0.032817426	Proliferation/Metastasis
0.155899363	Proliferation/Metastasis
0.002034677	Metabolism
0.050346161	Metabolism
0.000384022	Metabolism
9.65E-07	Proliferation/Metastasis
0.138521661	TME
0.343931812	TME
0.000148257	Metabolism
0.646913303	Proliferation/Metastasis
0.103677858	Metabolism
0.002948782	TME
0.026355209	TME
0.316253433	TME
0.201967188	TME
3.50E-05	Metabolism
0.000322132	TME
0.0078779	Proliferation/Metastasis
1.83E-05	TME
0.032253333	Proliferation/Metastasis
5.64E-12	Proliferation/Metastasis
0.739391159	Metabolism
0.000132789	Proliferation/Metastasis
0.510240285	TME
0.000725405	Metabolism
0.397228365	TME
0.000234601	TME
3.35E-06	TME
0.424085735	TME
0.183462265	TME
0.369255925	TME
1.44E-11	Metabolism
7.14E-09	TME
0.006628775	Metabolism
0.366327535	Metabolism
0.000124453	Proliferation/Metastasis
0.110460965	Proliferation/Metastasis
0.502822152	Metabolism
0.061596984	Metabolism
0.656005737	Metabolism
5.84E-13	Metabolism
5.27E-11	Proliferation/Metastasis
0.294523075	Proliferation/Metastasis

2.13E-05	Metabolism
1.06E-06	Metabolism
2.26E-14	Metabolism
0.430153707	TME
1.34E-07	Metabolism
2.10E-06	Metabolism
0.041449547	Metabolism
0.000258174	Metabolism
9.71E-08	Proliferation/Metastasis
2.12E-10	Metabolism
0.114712941	Metabolism
0.437171424	Metabolism
0.000282134	Metabolism
1.50E-05	Metabolism
0.067344645	Metabolism
0.191788291	Proliferation/Metastasis
1.76E-05	Metabolism
1.11E-06	Metabolism
0.009651248	Proliferation/Metastasis
0.654562079	Metabolism
6.18E-06	Metabolism
0.000268285	Metabolism
0.045913047	Metabolism
7.15E-06	Metabolism
1.14E-10	Metabolism
0.001978759	Metabolism
0.099096608	Metabolism
0.627625488	TME
0.114718042	TME
0.091993949	TME
0.758743079	TME
0.217446523	TME
0.759813265	Metabolism
0.000151051	Metabolism
0.00064903	Proliferation/Metastasis
1.20E-06	Metabolism
1.97E-08	Proliferation/Metastasis
0.73823068	Metabolism
8.45E-10	TME
0.050833352	Metabolism
4.25E-07	Metabolism
2.85E-06	Metabolism
0.411556073	Metabolism

0.050797523	TME
0.170249457	TME
4.03E-05	Proliferation/Metastasis
0.102410578	Metabolism
0.012904132	Proliferation/Metastasis
0.000282782	Proliferation/Metastasis
0.522079997	TME
0.77062207	TME
0.437638823	TME
0.586698191	TME
0.000140896	Metabolism
0.004463737	Proliferation/Metastasis
0.085618613	Metabolism
0.000386711	Metabolism
0.000160542	Proliferation/Metastasis
0.01066359	Proliferation/Metastasis
0.861387722	Metabolism
2.29E-06	Metabolism
3.41E-05	Metabolism
0.348560442	Metabolism
0.619227064	TME
0.722629178	TME
0.495286481	TME
0.959190734	TME
0.653487705	TME
3.64E-05	Metabolism
0.000168653	Metabolism
0.000496364	Metabolism
8.32E-05	Metabolism
0.131590703	Metabolism
0.71831007	TME
0.401288285	TME
0.412004979	TME
0.542123331	TME
0.921017176	TME
0.452237084	TME
0.548897965	TME
0.350429814	TME
0.704441244	TME
0.01956343	Proliferation/Metastasis
0.012860327	Proliferation/Metastasis
0.000734141	Metabolism
0.016500442	Metabolism

0.241100432	TME
7.00E-05	Metabolism
0.143713428	Metabolism
0.499683037	TME
0.042829037	Proliferation/Metastasis
0.109995054	Proliferation/Metastasis
0.708409927	TME
0.289638244	Metabolism
0.041469998	Metabolism
0.035804776	Proliferation/Metastasis
0.200872534	Proliferation/Metastasis
0.541166058	TME
0.701373892	TME
0.446145635	TME
0.868249825	TME
0.00048647	Proliferation/Metastasis
0.337996781	TME
0.615800981	TME
0.006875747	Metabolism
0.155235472	TME
0.133233039	TME
0.471393384	TME
0.000833828	TME
0.012313234	Metabolism
3.20E-06	Metabolism
0.000454128	Metabolism
0.454833556	TME
0.00014741	Metabolism
0.375252978	TME
0.412682894	TME
0.323236178	TME
0.283699586	TME
0.623474729	TME
2.99E-05	Metabolism
0.005648148	Proliferation/Metastasis
0.000717548	Metabolism
0.508849849	Proliferation/Metastasis
0.021918705	Metabolism
4.12E-06	Metabolism
0.000687865	Metabolism
0.012050519	Metabolism
0.000109859	Metabolism
0.063482499	Metabolism

0.043661936	Metabolism
0.006677516	Metabolism
0.038897427	Metabolism
0.576101413	Metabolism
0.053558937	Metabolism
0.082524461	Metabolism
0.371927115	Metabolism
0.000114549	Metabolism
0.782797468	TME
0.527825465	Proliferation/Metastasis
0.010328206	Metabolism
0.028726975	Proliferation/Metastasis
0.325828329	TME
0.007715242	Proliferation/Metastasis
0.106213006	Proliferation/Metastasis
0.064055293	TME
0.440003295	TME
0.000859232	Metabolism
0.165503843	Metabolism
0.001088159	Proliferation/Metastasis
0.008193421	Proliferation/Metastasis
0.052076581	Proliferation/Metastasis
0.673405849	Metabolism
0.575791342	Metabolism
8.95E-07	Metabolism
0.048590686	Proliferation/Metastasis
0.407633708	TME
0.596110175	TME
0.021148825	Metabolism
0.211045658	Proliferation/Metastasis
0.009251793	Metabolism
0.431043385	TME
0.516871536	TME
0.312473623	TME
0.639835812	TME
0.329434154	Metabolism
0.087142335	TME
1.08E-05	Proliferation/Metastasis
0.345496057	TME
0.010194089	Proliferation/Metastasis
0.007460647	Proliferation/Metastasis
0.000846667	Metabolism
0.139545803	Proliferation/Metastasis

0.74049961	TME
0.001208222	Metabolism
0.351351047	TME
0.124845191	TME
0.122268619	TME
0.347261445	TME
0.218167845	TME
0.500506209	TME
0.003529282	Metabolism
0.96829759	TME
0.000491749	Metabolism
0.11781701	Metabolism
0.004650194	Proliferation/Metastasis
0.036109905	Proliferation/Metastasis
0.000136129	Metabolism
0.033754639	Metabolism
0.148074997	Metabolism
0.489487102	Metabolism
0.009359479	Proliferation/Metastasis
0.000145279	Proliferation/Metastasis
0.007496711	Metabolism
0.179949371	Metabolism
0.027490193	Metabolism
0.615102119	TME
0.755540088	Metabolism
0.69310847	Metabolism
0.417422776	Metabolism
0.030404176	Metabolism
0.053317468	Proliferation/Metastasis
0.128966123	Metabolism
0.150622759	Metabolism
4.43E-05	Metabolism
2.57E-06	Metabolism
0.001212341	Metabolism
3.99E-05	Metabolism
0.042482875	Proliferation/Metastasis
0.462275959	Metabolism
0.041336459	Metabolism
0.530914174	Proliferation/Metastasis
0.025581125	Metabolism
0.100228154	Metabolism
6.11E-06	Metabolism
0.003029419	Metabolism

0.070249489	Metabolism
0.612403036	Metabolism
0.000272325	Metabolism
8.10E-07	Metabolism
0.294861429	TME
0.618119732	TME
0.374589574	TME
0.168777412	TME
0.174655053	TME
0.271361714	Metabolism
0.000278096	Metabolism
0.447333521	Proliferation/Metastasis
0.008321568	Metabolism
0.254654749	Proliferation/Metastasis
0.002713296	Metabolism
0.896475222	TME
0.350056633	Metabolism
0.06237471	Metabolism
0.037231489	Metabolism
6.46E-06	Metabolism
0.589934198	TME
0.200725775	TME
7.91E-05	Proliferation/Metastasis
0.036478444	Metabolism
0.134888512	Proliferation/Metastasis
0.014111231	Proliferation/Metastasis
0.00086794	TME
0.010608239	TME
0.395390729	TME
0.229257851	TME
3.98E-07	Metabolism
1.17E-07	Proliferation/Metastasis
0.005702427	Metabolism
2.72E-19	Metabolism
0.00032473	Proliferation/Metastasis
0.547563443	Proliferation/Metastasis
1.20E-05	Metabolism
1.00E-09	Metabolism
0.000958379	Metabolism
0.702743414	Metabolism
0.17218975	TME
0.000632206	TME
0.105600965	TME

0.732225615	TME
0.01367141	TME
0.156471822	Metabolism
0.008451523	Metabolism
6.11E-05	Metabolism
0.192195923	Metabolism
0.479873124	Metabolism
0.152488713	TME
0.103575691	TME
0.016767916	TME
0.669051982	TME
0.053530637	TME
0.414340157	TME
0.339538002	TME
0.048718322	TME
0.52398803	TME
0.400694646	Proliferation/Metastasis
0.545242833	Proliferation/Metastasis
1.16E-10	Metabolism
4.17E-10	Metabolism
0.752592807	TME
0.970755481	Metabolism
0.002043875	Metabolism
0.030892374	TME
2.65E-06	Proliferation/Metastasis
0.02250208	Proliferation/Metastasis
0.294045717	TME
0.509812639	Metabolism
3.95E-09	Metabolism
0.409606302	Proliferation/Metastasis
0.140922722	Proliferation/Metastasis
0.67050695	TME
0.000404753	TME
0.807426435	TME
0.915420073	TME
0.129791328	Proliferation/Metastasis
0.932546942	TME
0.00053999	TME
0.321767751	Metabolism
0.54611517	TME
0.013185648	TME
0.087908979	TME
0.073763844	TME

0.001140222	Metabolism
0.90250479	Metabolism
0.000346717	Metabolism
0.984801506	TME
2.83E-05	Metabolism
0.129587223	TME
0.200820472	TME
0.396628378	TME
0.042291117	TME
0.006623664	TME
1.39E-10	Metabolism
0.485112634	Proliferation/Metastasis
5.03E-15	Metabolism
0.119528867	Proliferation/Metastasis
9.02E-16	Metabolism
0.629850087	Metabolism
2.78E-05	Metabolism
1.73E-06	Metabolism
7.04E-14	Metabolism
0.010529453	Metabolism
0.329554897	Metabolism
0.184397188	Metabolism
0.321449628	Metabolism
0.303355998	Metabolism
3.02E-08	Metabolism
0.142856268	Metabolism
0.548980924	Metabolism
3.23E-07	Metabolism
0.006072652	TME
0.001974211	Proliferation/Metastasis
0.718742508	Metabolism
1.91E-08	Proliferation/Metastasis
0.48855614	TME
9.17E-08	Proliferation/Metastasis
0.009238009	Proliferation/Metastasis
0.002569629	TME
5.18E-07	TME
2.77E-12	Metabolism
0.001135765	Metabolism
8.71E-05	Proliferation/Metastasis
4.51E-05	Proliferation/Metastasis
0.053353784	Proliferation/Metastasis
0.543812335	Metabolism

0.115291639	Metabolism
0.010865575	Metabolism
0.000830499	Proliferation/Metastasis
0.000232041	TME
0.000448726	TME
6.97E-14	Metabolism
0.007129451	Proliferation/Metastasis
0.000530656	Metabolism
0.773921384	TME
0.050108505	TME
0.533803518	TME
0.251908754	TME
0.042711356	Metabolism
4.64E-05	TME
3.03E-11	Proliferation/Metastasis
2.72E-07	TME
0.00068946	Proliferation/Metastasis
7.78E-12	Proliferation/Metastasis
0.000114699	Metabolism
0.001328442	Proliferation/Metastasis
0.13377766	TME
0.571255429	Metabolism
0.001348996	TME
0.446225603	TME
0.265878851	TME
0.221145412	TME
0.000324272	TME
0.72863688	TME
1.19E-08	Metabolism
2.95E-09	TME
7.48E-05	Metabolism
0.534165938	Metabolism
0.001344173	Proliferation/Metastasis
0.853402987	Proliferation/Metastasis
0.009805073	Metabolism
0.000263294	Metabolism
8.47E-05	Metabolism
1.00E-18	Metabolism
8.65E-22	Proliferation/Metastasis
6.64E-09	Proliferation/Metastasis
4.84E-06	Metabolism
0.96559317	Metabolism
3.66E-14	Metabolism

0.772403397	TME
1.51E-06	Metabolism
5.01E-08	Metabolism
6.33E-11	Metabolism
0.000659913	Metabolism
2.02E-07	Proliferation/Metastasis
0.087929172	Metabolism
0.730430072	Metabolism
0.41196936	Metabolism
0.000443477	Metabolism
0.000316125	Metabolism
6.34E-12	Metabolism
0.037806093	Proliferation/Metastasis
0.215221797	Metabolism
1.18E-08	Metabolism
0.000749913	Proliferation/Metastasis
0.001600652	Metabolism
0.046127392	Metabolism
0.586028822	Metabolism
3.10E-13	Metabolism
0.000684785	Metabolism
0.197426234	Metabolism
0.410749345	Metabolism
0.109761352	Metabolism
0.218553669	TME
0.007568907	TME
0.102143144	TME
0.000343678	TME
0.128096119	TME
0.426577623	Metabolism
0.00042392	Metabolism
0.184514957	Proliferation/Metastasis
1.52E-05	Metabolism
1.45E-08	Proliferation/Metastasis
0.002873379	Metabolism
0.534413161	TME
0.794226496	Metabolism
0.188982	Metabolism
1.15E-07	Metabolism
0.311854426	Metabolism
0.630552834	TME
0.30190398	TME
0.985484967	Proliferation/Metastasis

0.000650283	Metabolism
3.10E-05	Proliferation/Metastasis
0.36612753	Proliferation/Metastasis
0.126297104	TME
0.38310559	TME
0.275614614	TME
0.951385129	TME
0.41327472	Metabolism
0.071968943	Proliferation/Metastasis
0.404397411	Metabolism
0.2817824	Metabolism
0.40261237	Proliferation/Metastasis
0.903443853	Proliferation/Metastasis
0.688470186	Metabolism
0.019494325	Metabolism
0.483829861	Metabolism
0.487770252	Metabolism
0.427405683	TME
0.075826299	TME
0.527553605	TME
0.58870196	TME
0.960825494	TME
0.036354695	Metabolism
0.176272136	Metabolism
0.685360405	Metabolism
0.041464101	Metabolism
0.877423146	Metabolism
0.214520986	TME
0.00973737	TME
0.873349495	TME
0.843080192	TME
0.603361462	TME
0.539909833	TME
0.527367641	TME
0.75883705	TME
0.573298401	TME
0.59873564	Proliferation/Metastasis
0.025116598	Proliferation/Metastasis
0.027758685	Metabolism
0.005335488	Metabolism
0.748131155	TME
0.762039003	Metabolism
0.093492733	Metabolism

0.257130022	TME
1.34E-05	Proliferation/Metastasis
0.00375806	Proliferation/Metastasis
0.219450717	TME
0.621761875	Metabolism
7.46E-05	Metabolism
0.191285433	Proliferation/Metastasis
0.122240094	Proliferation/Metastasis
0.120321263	TME
0.453119145	TME
0.764088881	TME
0.056688714	TME
0.627033331	Proliferation/Metastasis
0.76054854	TME
0.262266228	TME
0.25343321	Metabolism
0.133928921	TME
0.573347959	TME
0.335272805	TME
0.008727854	TME
0.27396751	Metabolism
0.568430058	Metabolism
0.487332657	Metabolism
0.167383334	TME
0.000267766	Metabolism
0.599423063	TME
0.337303119	TME
0.313795088	TME
0.123852559	TME
0.852053727	TME
0.491005036	Metabolism
0.873120738	Proliferation/Metastasis
0.162780313	Metabolism
0.20926482	Proliferation/Metastasis
0.009686538	Metabolism
0.77615568	Metabolism
0.05075278	Metabolism
0.001432951	Metabolism
0.189003549	Metabolism
0.024080971	Metabolism
0.102136759	Metabolism
0.230880189	Metabolism
0.345933169	Metabolism

0.033620697	Metabolism
0.719678905	Metabolism
0.111028044	Metabolism
0.00220505	Metabolism
0.000299258	Metabolism
0.110830374	TME
0.177396518	Proliferation/Metastasis
0.51788263	Metabolism
0.89152942	Proliferation/Metastasis
0.73677801	TME
0.675090186	Proliferation/Metastasis
0.079452027	Proliferation/Metastasis
0.235402233	TME
0.672357372	TME
7.10E-07	Metabolism
1.56E-07	Metabolism
0.304670368	Proliferation/Metastasis
0.106549095	Proliferation/Metastasis
0.017882633	Proliferation/Metastasis
0.942084858	Metabolism
0.595934556	Metabolism
0.705011842	Metabolism
0.238892884	Proliferation/Metastasis
0.446183332	TME
0.58044969	TME
0.09106572	Metabolism
0.005012567	Proliferation/Metastasis
1.37E-09	Metabolism
0.018173571	TME
0.707396653	TME
0.913733078	TME
0.004554549	TME
0.262130391	Metabolism
0.095591196	TME
1.19E-06	Proliferation/Metastasis
0.99092138	TME
1.17E-06	Proliferation/Metastasis
0.303210039	Proliferation/Metastasis
0.000428223	Metabolism
0.018438344	Proliferation/Metastasis
0.131748579	TME
0.080911732	Metabolism
0.069119436	TME

0.026972776	TME
0.090622338	TME
0.758827408	TME
0.386033096	TME
0.191436046	TME
0.3024823	Metabolism
0.478112746	TME
0.913972117	Metabolism
0.034886151	Metabolism
0.024775813	Proliferation/Metastasis
0.430340975	Proliferation/Metastasis
0.899420494	Metabolism
0.953675141	Metabolism
0.223821597	Metabolism
6.60E-06	Metabolism
0.026388934	Proliferation/Metastasis
0.618716014	Proliferation/Metastasis
0.296227316	Metabolism
0.684514247	Metabolism
0.023879949	Metabolism
0.785830529	TME
0.004879439	Metabolism
0.000219288	Metabolism
0.12810032	Metabolism
0.077492534	Metabolism
0.755201618	Proliferation/Metastasis
0.003382414	Metabolism
0.264647762	Metabolism
0.384237728	Metabolism
0.003172171	Metabolism
0.007042057	Metabolism
0.000821979	Metabolism
0.446374587	Proliferation/Metastasis
0.791391171	Metabolism
0.005505795	Metabolism
0.093311062	Proliferation/Metastasis
0.566512443	Metabolism
0.119804051	Metabolism
0.610708444	Metabolism
0.170109066	Metabolism
0.484957288	Metabolism
0.529691164	Metabolism
0.312367698	Metabolism

0.002456158	Metabolism
0.43960807	TME
0.94340204	TME
0.35954732	TME
0.594442727	TME
0.524543579	TME
0.005852019	Metabolism
0.115738322	Metabolism
0.212024761	Proliferation/Metastasis
6.35E-06	Metabolism
0.759135982	Proliferation/Metastasis
0.005446592	Metabolism
0.389574754	TME
0.202786061	Metabolism
0.086703331	Metabolism
0.000317981	Metabolism
0.023212376	Metabolism
0.588990877	TME
0.060112638	TME
0.022284639	Proliferation/Metastasis
0.093750275	Metabolism
0.000534614	Proliferation/Metastasis
0.665806272	Proliferation/Metastasis
0.022219923	TME
0.000681697	TME
3.98E-07	TME
5.54E-07	TME
1.14E-18	Metabolism
0.01765749	Proliferation/Metastasis
0.738814644	Metabolism
1.04E-11	Metabolism
0.063699448	Proliferation/Metastasis
1.81E-06	Proliferation/Metastasis
0.481551217	Metabolism
2.87E-19	Metabolism
1.13E-14	Metabolism
5.75E-06	Metabolism
6.31E-13	TME
0.092851534	TME
1.54E-05	TME
5.60E-08	TME
0.006784454	TME
9.62E-05	Metabolism

0.010953113	Metabolism
0.002549319	Metabolism
1.66E-07	Metabolism
0.001402756	Metabolism
0.000494707	TME
0.090252816	TME
0.000161013	TME
3.49E-08	TME
0.000657242	TME
2.73E-07	TME
5.43E-07	TME
6.05E-05	TME
1.70E-07	TME
0.000254849	Proliferation/Metastasis
0.210737835	Proliferation/Metastasis
2.64E-12	Metabolism
9.72E-18	Metabolism
1.88E-08	TME
0.002165768	Metabolism
2.14E-05	Metabolism
0.000886127	TME
6.83E-06	Proliferation/Metastasis
0.000771419	Proliferation/Metastasis
7.18E-08	TME
0.114629189	Metabolism
3.67E-14	Metabolism
0.00011193	Proliferation/Metastasis
0.042792059	Proliferation/Metastasis
2.58E-07	TME
0.004591509	TME
6.82E-07	TME
1.53E-06	TME
0.95465427	Proliferation/Metastasis
0.006723105	TME
0.005669926	TME
0.011640372	Metabolism
4.85E-06	TME
0.002882056	TME
9.95E-05	TME
0.012907706	TME
0.311539717	Metabolism
0.907178604	Metabolism
0.698848723	Metabolism

0.737406031	TME
0.002701857	Metabolism
1.71E-06	TME
6.23E-08	TME
2.21E-08	TME
4.50E-05	TME
0.006065756	TME
2.59E-08	Metabolism
0.000231635	Proliferation/Metastasis
5.11E-14	Metabolism
0.024861192	Proliferation/Metastasis
8.81E-17	Metabolism
0.604085487	Metabolism
0.752986615	Metabolism
5.40E-17	Metabolism
3.33E-19	Metabolism
5.12E-06	Metabolism
0.000206101	Metabolism
0.757689353	Metabolism
0.833458281	Metabolism
1.50E-08	Metabolism
6.26E-05	Metabolism
5.38E-05	Metabolism
0.012368769	Metabolism
4.68E-12	Metabolism
0.030744071	TME
0.007137341	Proliferation/Metastasis
0.132288496	Metabolism
3.58E-13	Proliferation/Metastasis
7.31E-08	TME
0.249608892	Proliferation/Metastasis
0.037701107	Proliferation/Metastasis
5.66E-05	TME
0.758429654	TME
6.91E-10	Metabolism
1.27E-09	Metabolism
3.17E-22	Proliferation/Metastasis
2.03E-06	Proliferation/Metastasis
0.127292508	Proliferation/Metastasis
0.014520442	Metabolism
0.116312192	Metabolism
0.105469045	Metabolism
0.014817912	Proliferation/Metastasis

0.042727371	TME
0.727186039	TME
2.54E-05	Metabolism
0.0028201	Proliferation/Metastasis
2.53E-09	Metabolism
3.57E-08	TME
2.87E-06	TME
0.003430281	TME
0.565018522	TME
0.01093723	Metabolism
9.67E-05	TME
0.014912927	Proliferation/Metastasis
0.451300623	TME
5.36E-11	Proliferation/Metastasis
3.84E-12	Proliferation/Metastasis
0.114052674	Metabolism
1.48E-06	Proliferation/Metastasis
0.000100657	TME
0.030395368	Metabolism
0.357823061	TME
2.43E-07	TME
6.10E-06	TME
1.72E-06	TME
0.141711648	TME
7.31E-09	TME
2.19E-07	Metabolism
0.96886322	TME
0.488704122	Metabolism
0.002385429	Metabolism
0.039938571	Proliferation/Metastasis
1.81E-06	Proliferation/Metastasis
1.78E-08	Metabolism
0.819609899	Metabolism
0.236507992	Metabolism
5.26E-06	Metabolism
7.83E-09	Proliferation/Metastasis
2.88E-15	Proliferation/Metastasis
0.66920233	Metabolism
0.002032511	Metabolism
1.30E-12	Metabolism
0.010649578	TME
0.005886891	Metabolism
3.33E-08	Metabolism

1.06E-06	Metabolism
0.743293999	Metabolism
0.000605219	Proliferation/Metastasis
0.001366916	Metabolism
0.602001102	Metabolism
0.98035094	Metabolism
2.28E-12	Metabolism
1.59E-06	Metabolism
4.04E-16	Metabolism
0.002547961	Proliferation/Metastasis
0.937326897	Metabolism
0.404495736	Metabolism
4.23E-06	Proliferation/Metastasis
0.043392014	Metabolism
0.000477131	Metabolism
0.876520074	Metabolism
0.001120913	Metabolism
0.844435926	Metabolism
0.024467817	Metabolism
0.002999282	Metabolism
1.86E-06	Metabolism
2.14E-06	TME
0.000582883	TME
1.06E-05	TME
0.074069591	TME
0.000772016	TME
0.432560497	Metabolism
0.002457263	Metabolism
0.000198694	Proliferation/Metastasis
0.055876257	Metabolism
0.257855001	Proliferation/Metastasis
0.072526294	Metabolism
0.075413101	TME
0.899001923	Metabolism
0.644208287	Metabolism
8.74E-15	Metabolism
2.62E-05	Metabolism
0.640261349	TME
0.786671947	TME
0.007645949	Proliferation/Metastasis
6.97E-05	Metabolism
1.31E-18	Proliferation/Metastasis
1.18E-07	Proliferation/Metastasis

5.56E-06	TME
0.126871153	TME
0.002644424	TME
0.008694609	TME
2.86E-08	Metabolism
0.003661073	Proliferation/Metastasis
0.708100432	Metabolism
4.07E-06	Metabolism
0.102044921	Proliferation/Metastasis
0.778779883	Proliferation/Metastasis
0.877248158	Metabolism
5.45E-09	Metabolism
0.000949451	Metabolism
0.410777524	Metabolism
0.001941505	TME
0.001918959	TME
0.001208606	TME
0.003675293	TME
0.750191018	TME
0.543221688	Metabolism
0.765885198	Metabolism
0.088773262	Metabolism
0.024239023	Metabolism
0.147362563	Metabolism
0.012228951	TME
7.31E-10	TME
0.010723142	TME
0.021051869	TME
0.006731908	TME
0.003437668	TME
0.003585027	TME
0.124299462	TME
0.012035232	TME
0.006098595	Proliferation/Metastasis
0.326549746	Proliferation/Metastasis
8.47E-09	Metabolism
2.51E-11	Metabolism
1.12E-05	TME
0.660253411	Metabolism
0.043479374	Metabolism
0.000329001	TME
1.04E-11	Proliferation/Metastasis
2.43E-05	Proliferation/Metastasis

0.503959029	TME
0.904968608	Metabolism
1.64E-10	Metabolism
0.00324371	Proliferation/Metastasis
0.006988448	Proliferation/Metastasis
0.001199505	TME
0.013389113	TME
0.00101026	TME
6.06E-07	TME
0.08162455	Proliferation/Metastasis
0.004674234	TME
0.018378038	TME
0.011707644	Metabolism
9.43E-07	TME
0.001658508	TME
0.150942198	TME
0.185928283	TME
0.032122012	Metabolism
0.327556175	Metabolism
0.057045263	Metabolism
4.05E-05	TME
0.001246836	Metabolism
0.004038186	TME
0.043419511	TME
0.002644215	TME
0.827197041	TME
0.17167672	TME
7.79E-06	Metabolism
0.136536072	Proliferation/Metastasis
6.53E-07	Metabolism
0.008697831	Proliferation/Metastasis
2.65E-09	Metabolism
0.084894026	Metabolism
0.03123206	Metabolism
1.19E-08	Metabolism
1.28E-07	Metabolism
0.226714654	Metabolism
0.463584108	Metabolism
0.076552759	Metabolism
0.001548069	Metabolism
4.68E-08	Metabolism
0.245132964	Metabolism
0.536878629	Metabolism

0.03517496	Metabolism
2.14E-09	Metabolism
0.000718354	TME
0.003434234	Proliferation/Metastasis
0.105231744	Metabolism
0.00873061	Proliferation/Metastasis
0.00990211	TME
0.123051069	Proliferation/Metastasis
0.000229787	Proliferation/Metastasis
0.016222387	TME
0.378744008	TME
4.71E-10	Metabolism
1.14E-10	Metabolism
8.66E-05	Proliferation/Metastasis
7.90E-08	Proliferation/Metastasis
2.60E-06	Proliferation/Metastasis
0.199203409	Metabolism
0.071794455	Metabolism
0.885457936	Metabolism
0.009627461	Proliferation/Metastasis
0.011894669	TME
0.036471662	TME
0.012504142	Metabolism
0.052759318	Proliferation/Metastasis
4.44E-09	Metabolism
5.63E-05	TME
0.100758452	TME
0.045415625	TME
6.16E-06	TME
0.201546119	Metabolism
1.37E-05	TME
4.00E-06	Proliferation/Metastasis
0.069530866	TME
4.12E-05	Proliferation/Metastasis
1.36E-07	Proliferation/Metastasis
1.70E-06	Metabolism
6.42E-09	Proliferation/Metastasis
0.00015914	TME
0.042699116	Metabolism
0.363628813	TME
9.10E-09	TME
1.63E-07	TME
0.002939408	TME

0.557189714	TME
3.74E-05	TME
0.017417134	Metabolism
0.116382782	TME
0.09871322	Metabolism
0.590373362	Metabolism
0.006644124	Proliferation/Metastasis
0.74617239	Proliferation/Metastasis
0.000698822	Metabolism
0.181149767	Metabolism
0.056690162	Metabolism
1.09E-14	Metabolism
1.04E-05	Proliferation/Metastasis
0.002800308	Proliferation/Metastasis
0.993959276	Metabolism
0.265137794	Metabolism
4.74E-10	Metabolism
0.021662031	TME
0.016347709	Metabolism
1.59E-06	Metabolism
0.000166322	Metabolism
0.005410265	Metabolism
0.063503125	Proliferation/Metastasis
0.009493088	Metabolism
0.179723842	Metabolism
0.868500447	Metabolism
2.00E-10	Metabolism
1.11E-08	Metabolism
1.50E-10	Metabolism
0.179810696	Proliferation/Metastasis
0.203228233	Metabolism
0.010306269	Metabolism
1.10E-09	Proliferation/Metastasis
0.037603712	Metabolism
0.25767587	Metabolism
0.008179423	Metabolism
1.75E-05	Metabolism
0.529784265	Metabolism
0.926842667	Metabolism
0.347859143	Metabolism
0.054928927	Metabolism
0.000366913	TME
0.010006164	TME

0.001034808	TME
0.056648104	TME
0.007960667	TME
0.464680305	Metabolism
0.000381539	Metabolism
0.035707609	Proliferation/Metastasis
2.27E-06	Metabolism
0.16639808	Proliferation/Metastasis
0.762739955	Metabolism
0.061163083	TME
0.206898542	Metabolism
0.012997685	Metabolism
9.05E-05	Metabolism
0.07470956	Metabolism
0.016270749	TME
0.029239211	TME
0.000210048	Proliferation/Metastasis
0.000205932	Metabolism
3.80E-06	Proliferation/Metastasis
0.439749385	Proliferation/Metastasis
1.74E-25	TME
0.000246466	TME
0.00289984	TME
0.005653252	TME
4.81E-09	Metabolism
6.97E-15	Proliferation/Metastasis
0.007778016	Metabolism
3.45E-14	Metabolism
0.302532738	Proliferation/Metastasis
5.69E-10	Proliferation/Metastasis
0.221964268	Metabolism
5.90E-06	Metabolism
0.100376397	Metabolism
1.45E-09	Metabolism
0.432800482	TME
0.43486748	TME
0.068101265	TME
0.001121132	TME
1.60E-05	TME
0.000649167	Metabolism
0.284361519	Metabolism
0.000110993	Metabolism
0.007759526	Metabolism

5.19E-05	Metabolism
1.87E-06	TME
1.22E-08	TME
0.042008902	TME
0.000320899	TME
0.005863796	TME
0.005083826	TME
0.002625594	TME
1.64E-05	TME
0.000617839	TME
1.28E-11	Proliferation/Metastasis
5.18E-11	Proliferation/Metastasis
2.53E-15	Metabolism
2.58E-20	Metabolism
0.147944314	TME
0.027678636	Metabolism
1.50E-14	Metabolism
0.259343086	TME
8.94E-28	Proliferation/Metastasis
6.49E-20	Proliferation/Metastasis
0.000286065	TME
1.22E-10	Metabolism
0.077411112	Metabolism
3.59E-13	Proliferation/Metastasis
4.96E-20	Proliferation/Metastasis
0.000162975	TME
0.001070681	TME
0.039597999	TME
0.70469165	TME
8.09E-31	Proliferation/Metastasis
7.86E-12	TME
0.000193388	TME
0.002182191	Metabolism
0.754867979	TME
0.099770664	TME
0.000129111	TME
0.417010653	TME
3.99E-24	Metabolism
0.006510028	Metabolism
5.12E-07	Metabolism
5.59E-11	TME
7.19E-06	Metabolism
0.010379199	TME

0.000205951	TME
0.007587212	TME
1.02E-05	TME
1.06E-06	TME
7.45E-10	Metabolism
1.15E-06	Proliferation/Metastasis
8.58E-09	Metabolism
2.30E-17	Proliferation/Metastasis
5.96E-06	Metabolism
1.21E-07	Metabolism
0.165979614	Metabolism
3.12E-08	Metabolism
6.98E-11	Metabolism
6.23E-05	Metabolism
3.17E-18	Metabolism
9.42E-06	Metabolism
5.57E-11	Metabolism
3.92E-05	Metabolism
0.558141268	Metabolism
3.72E-05	Metabolism
3.75E-07	Metabolism
6.74E-07	Metabolism
0.186680908	TME
4.48E-18	Proliferation/Metastasis
3.07E-12	Metabolism
0.580323317	Proliferation/Metastasis
0.000423728	TME
0.069242038	Proliferation/Metastasis
0.673736206	Proliferation/Metastasis
6.19E-05	TME
0.062438784	TME
3.06E-05	Metabolism
0.723007376	Metabolism
0.006019772	Proliferation/Metastasis
4.48E-23	Proliferation/Metastasis
0.002250197	Proliferation/Metastasis
0.00021404	Metabolism
2.23E-13	Metabolism
0.010799012	Metabolism
0.511382839	Proliferation/Metastasis
0.001274101	TME
0.640039119	TME
3.66E-17	Metabolism

0.025934803	Proliferation/Metastasis
0.726358626	Metabolism
0.174324623	TME
4.11E-05	TME
3.25E-09	TME
0.219713919	TME
7.08E-06	Metabolism
0.000516399	TME
0.005164714	Proliferation/Metastasis
0.016058388	TME
0.463903189	Proliferation/Metastasis
3.28E-33	Proliferation/Metastasis
8.57E-17	Metabolism
7.06E-30	Proliferation/Metastasis
0.118910754	TME
0.064630142	Metabolism
0.000645939	TME
0.159533154	TME
0.041430625	TME
0.01865572	TME
1.57E-17	TME
0.128564007	TME
5.44E-13	Metabolism
0.005239246	TME
0.00134392	Metabolism
0.000808933	Metabolism
0.001232707	Proliferation/Metastasis
5.31E-12	Proliferation/Metastasis
4.33E-14	Metabolism
0.004934124	Metabolism
1.35E-21	Metabolism
7.28E-26	Metabolism
1.40E-08	Proliferation/Metastasis
1.28E-07	Proliferation/Metastasis
0.056637102	Metabolism
0.000827384	Metabolism
5.00E-20	Metabolism
1.77E-10	TME
0.19603901	Metabolism
3.17E-08	Metabolism
0.000317346	Metabolism
4.05E-22	Metabolism
4.76E-06	Proliferation/Metastasis

0.491963487	Metabolism
6.94E-07	Metabolism
0.696752289	Metabolism
2.91E-12	Metabolism
4.36E-29	Metabolism
5.24E-09	Metabolism
1.82E-18	Proliferation/Metastasis
2.15E-17	Metabolism
1.98E-06	Metabolism
1.82E-06	Proliferation/Metastasis
1.75E-27	Metabolism
0.002005205	Metabolism
8.17E-08	Metabolism
6.94E-31	Metabolism
0.006465599	Metabolism
2.11E-08	Metabolism
4.81E-06	Metabolism
0.000196375	Metabolism
0.04993662	TME
0.015546601	TME
0.091524517	TME
0.031074902	TME
0.203259692	TME
2.19E-10	Metabolism
6.80E-10	Metabolism
5.44E-14	Proliferation/Metastasis
4.10E-06	Metabolism
0.045821809	Proliferation/Metastasis
0.03232368	Metabolism
0.000455518	TME
9.88E-07	Metabolism
0.000473566	Metabolism
0.501830604	Metabolism
0.098530721	Metabolism
4.19E-09	TME
4.02E-09	TME
5.27E-08	Proliferation/Metastasis
3.87E-08	Metabolism
0.18303924	Proliferation/Metastasis
0.000746755	Proliferation/Metastasis
3.30E-07	TME
0.005138157	TME
0.012112604	TME

0.006572378	TME
0.072680962	Metabolism
1.83E-07	Proliferation/Metastasis
0.941393197	Metabolism
4.02E-05	Metabolism
0.038503993	Proliferation/Metastasis
8.61E-05	Proliferation/Metastasis
0.856140458	Metabolism
0.132005751	Metabolism
0.840982998	Metabolism
0.001414004	Metabolism
0.197711566	TME
0.382827385	TME
0.123228092	TME
0.012002908	TME
0.077467811	TME
0.025358545	Metabolism
0.5114107	Metabolism
0.110085959	Metabolism
0.001760893	Metabolism
0.098574153	Metabolism
0.000171566	TME
0.005209489	TME
0.060432616	TME
0.006314425	TME
0.020931699	TME
0.020290545	TME
0.014079184	TME
0.00116142	TME
0.001201259	TME
0.016727848	Proliferation/Metastasis
0.022739498	Proliferation/Metastasis
0.000984462	Metabolism
0.000569772	Metabolism
0.980540112	TME
0.028883314	Metabolism
0.001198579	Metabolism
0.165880561	TME
2.40E-08	Proliferation/Metastasis
1.44E-06	Proliferation/Metastasis
0.004138753	TME
0.000191378	Metabolism
0.569553381	Metabolism

0.001025268	Proliferation/Metastasis
2.91E-08	Proliferation/Metastasis
0.00982505	TME
0.016442074	TME
0.051223622	TME
0.476603477	TME
3.39E-08	Proliferation/Metastasis
7.10E-06	TME
0.001381659	TME
0.841779147	Metabolism
0.589666821	TME
0.101522788	TME
0.001085508	TME
0.081064011	TME
9.64E-06	Metabolism
0.647022739	Metabolism
2.29E-05	Metabolism
1.78E-06	TME
0.057697519	Metabolism
0.024572926	TME
0.0003229	TME
0.008031406	TME
0.000194447	TME
0.000254148	TME
0.001865482	Metabolism
0.057148805	Proliferation/Metastasis
0.026587763	Metabolism
1.39E-07	Proliferation/Metastasis
0.113588734	Metabolism
0.008726634	Metabolism
0.280963927	Metabolism
0.229443686	Metabolism
0.021662163	Metabolism
0.002799875	Metabolism
6.92E-08	Metabolism
0.046361945	Metabolism
0.001332094	Metabolism
0.176392628	Metabolism
0.867736307	Metabolism
0.000556273	Metabolism
0.00968396	Metabolism
0.030880158	Metabolism
0.081076085	TME

1.11E-09	Proliferation/Metastasis
0.000293232	Metabolism
0.54943571	Proliferation/Metastasis
0.004290431	TME
0.049506486	Proliferation/Metastasis
0.15455312	Proliferation/Metastasis
0.000763317	TME
0.129274156	TME
0.410639193	Metabolism
0.134868814	Metabolism
0.93794414	Proliferation/Metastasis
1.92E-08	Proliferation/Metastasis
0.190473882	Proliferation/Metastasis
0.274919832	Metabolism
5.08E-05	Metabolism
0.088217604	Metabolism
0.12266369	Proliferation/Metastasis
0.011703875	TME
0.43910547	TME
2.65E-05	Metabolism
0.423300728	Proliferation/Metastasis
0.031541281	Metabolism
0.214786344	TME
0.000778968	TME
3.14E-06	TME
0.034945172	TME
0.004130929	Metabolism
0.534602464	TME
0.174024023	Proliferation/Metastasis
0.025717193	TME
0.396830175	Proliferation/Metastasis
3.52E-08	Proliferation/Metastasis
8.73E-06	Metabolism
4.19E-08	Proliferation/Metastasis
0.060379459	TME
0.047067033	Metabolism
0.068251425	TME
0.531392067	TME
0.252110814	TME
0.010281097	TME
3.73E-08	TME
0.095648377	TME
0.001012349	Metabolism

0.002940697	TME
0.143824522	Metabolism
0.009636918	Metabolism
0.000365159	Proliferation/Metastasis
1.69E-05	Proliferation/Metastasis
0.000700393	Metabolism
0.479925451	Metabolism
2.39E-08	Metabolism
3.13E-07	Metabolism
2.59E-05	Proliferation/Metastasis
0.01247059	Proliferation/Metastasis
0.025816482	Metabolism
0.264532247	Metabolism
0.000299689	Metabolism
1.55E-06	TME
0.588087749	Metabolism
0.131027585	Metabolism
0.059131742	Metabolism
2.05E-05	Metabolism
2.01E-06	Proliferation/Metastasis
0.923865153	Metabolism
0.000215367	Metabolism
0.900992646	Metabolism
0.025284345	Metabolism
2.70E-06	Metabolism
0.053791008	Metabolism
1.67E-09	Proliferation/Metastasis
6.01E-05	Metabolism
8.67E-05	Metabolism
0.578993615	Proliferation/Metastasis
2.45E-08	Metabolism
0.002647375	Metabolism
0.005671102	Metabolism
3.09E-09	Metabolism
0.037789209	Metabolism
3.95E-05	Metabolism
0.143793898	Metabolism
0.007979391	Metabolism
0.071111212	TME
0.008904273	TME
0.052959568	TME
0.034432772	TME
0.060876284	TME

6.90E-05	Metabolism
0.001979023	Metabolism
2.57E-06	Proliferation/Metastasis
0.06550709	Metabolism
0.006179983	Proliferation/Metastasis
0.212214783	Metabolism
0.559027547	TME
0.000277775	Metabolism
0.211297291	Metabolism
0.889334961	Metabolism
0.46435448	Metabolism
3.15E-05	TME
6.87E-06	TME
0.191306393	Proliferation/Metastasis
0.653348586	Metabolism
0.428385403	Proliferation/Metastasis
0.000317989	Proliferation/Metastasis
0.926880814	TME
0.607541648	TME
0.765678751	TME
0.299683031	TME
1.58E-10	Metabolism
0.110204111	Proliferation/Metastasis
2.36E-07	Metabolism
0.128894619	Metabolism
0.000943573	Proliferation/Metastasis
3.11E-10	Proliferation/Metastasis
2.50E-09	Metabolism
0.094218746	Metabolism
0.146942426	Metabolism
0.065224991	Metabolism
0.053918077	TME
0.020645737	TME
0.957320246	TME
0.479834178	TME
0.00059343	TME
0.75837134	Metabolism
0.007486282	Metabolism
3.80E-07	Metabolism
0.023451337	Metabolism
0.037885709	Metabolism
0.000313857	TME
0.000935157	TME

0.01555002	TME
0.065105084	TME
0.047406505	TME
0.525381348	TME
0.638685892	TME
0.479987816	TME
0.768538155	TME
6.91E-09	Proliferation/Metastasis
1.03E-23	Proliferation/Metastasis
0.011056462	Metabolism
0.00018023	Metabolism
0.924792648	TME
0.03941181	Metabolism
3.31E-15	Metabolism
0.003201058	TME
0.031552698	Proliferation/Metastasis
8.98E-06	Proliferation/Metastasis
0.000591047	TME
0.00019815	Metabolism
0.000154507	Metabolism
1.13E-13	Proliferation/Metastasis
0.001422046	Proliferation/Metastasis
0.464274705	TME
0.155464852	TME
0.181144316	TME
0.166956072	TME
0.000221622	Proliferation/Metastasis
8.74E-23	TME
0.108515645	TME
0.006617393	Metabolism
0.165835524	TME
0.195373764	TME
0.458160914	TME
0.010877373	TME
0.937137962	Metabolism
0.24235051	Metabolism
0.234605198	Metabolism
9.05E-08	TME
0.000716756	Metabolism
0.202518275	TME
0.668223755	TME
0.834508321	TME
0.033738665	TME

0.951585141	TME
0.083238584	Metabolism
1.25E-17	Proliferation/Metastasis
0.000198206	Metabolism
0.13350948	Proliferation/Metastasis
0.004532052	Metabolism
9.53E-10	Metabolism
5.96E-20	Metabolism
0.347553022	Metabolism
0.389027668	Metabolism
1.86E-15	Metabolism
0.005086974	Metabolism
0.001413142	Metabolism
0.650217519	Metabolism
0.045145713	Metabolism
0.477083038	Metabolism
0.241587964	Metabolism
0.000187488	Metabolism
0.013972085	Metabolism
0.033460801	TME
0.049224811	Proliferation/Metastasis
0.092875856	Metabolism
6.25E-05	Proliferation/Metastasis
0.57641253	TME
0.049878616	Proliferation/Metastasis
0.352862539	Proliferation/Metastasis
0.427051692	TME
0.011212583	TME
2.07E-07	Metabolism
0.000103598	Metabolism
0.000466656	Proliferation/Metastasis
4.75E-10	Proliferation/Metastasis
0.12070899	Proliferation/Metastasis
2.27E-07	Metabolism
0.127373144	Metabolism
3.35E-08	Metabolism
0.005815325	Proliferation/Metastasis
0.368172919	TME
0.026238595	TME
0.314483838	Metabolism
0.101953035	Proliferation/Metastasis
3.73E-06	Metabolism
0.656943336	TME

0.148212383	TME
1.65E-16	TME
2.31E-08	TME
0.009584374	Metabolism
4.19E-09	TME
6.08E-10	Proliferation/Metastasis
0.002940947	TME
1.46E-05	Proliferation/Metastasis
0.219756924	Proliferation/Metastasis
0.003479017	Metabolism
0.03616861	Proliferation/Metastasis
0.149780476	TME
0.070830897	Metabolism
0.010201039	TME
0.006106154	TME
0.153337495	TME
0.603959981	TME
0.852053498	TME
0.303487768	TME
5.46E-06	Metabolism
0.033254098	TME
0.29359871	Metabolism
0.000660861	Metabolism
0.289918745	Proliferation/Metastasis
8.33E-13	Proliferation/Metastasis
1.37E-09	Metabolism
1.72E-08	Metabolism
1.20E-06	Metabolism
3.49E-06	Metabolism
0.030822466	Proliferation/Metastasis
0.054129381	Proliferation/Metastasis
0.238881286	Metabolism
0.020876772	Metabolism
0.370380191	Metabolism
6.25E-22	TME
1.36E-05	Metabolism
0.76920387	Metabolism
0.004725785	Metabolism
6.81E-10	Metabolism
0.100449895	Proliferation/Metastasis
0.909204335	Metabolism
0.000902769	Metabolism
1.45E-06	Metabolism

0.10989619	Metabolism
0.017465	Metabolism
0.987582602	Metabolism
0.353495018	Proliferation/Metastasis
0.157095299	Metabolism
0.216761893	Metabolism
0.142189803	Proliferation/Metastasis
6.36E-07	Metabolism
1.58E-20	Metabolism
7.16E-25	Metabolism
0.186840894	Metabolism
7.50E-05	Metabolism
0.025192105	Metabolism
0.392748286	Metabolism
0.530164293	Metabolism
0.179179887	TME
0.970010707	TME
0.989508284	TME
0.598649278	TME
0.686739751	TME
0.000346829	Metabolism
0.70434452	Metabolism
0.181645258	Proliferation/Metastasis
1.21E-05	Metabolism
0.271660342	Proliferation/Metastasis
0.590257353	Metabolism
0.484501301	TME
4.18E-05	Metabolism
0.242260912	Metabolism
0.008444731	Metabolism
0.001312963	Metabolism
4.18E-19	TME
5.01E-20	TME
3.57E-09	Proliferation/Metastasis
0.0475208	Metabolism
0.00391144	Proliferation/Metastasis
5.09E-11	Proliferation/Metastasis
0.021206233	TME
1.26E-08	TME
3.72E-14	TME
5.32E-09	TME
0.229465338	Metabolism
0.618648605	Proliferation/Metastasis

1.82E-07	Metabolism
0.377503373	Metabolism
0.025105427	Proliferation/Metastasis
2.95E-20	Proliferation/Metastasis
0.0010918	Metabolism
7.83E-08	Metabolism
0.425882373	Metabolism
9.46E-12	Metabolism
0.00120992	TME
3.44E-25	TME
1.50E-13	TME
9.05E-08	TME
1.84E-07	TME
9.54E-05	Metabolism
0.000147907	Metabolism
9.07E-08	Metabolism
6.89E-11	Metabolism
0.002010598	Metabolism
2.56E-32	TME
9.60E-19	TME
9.16E-07	TME
0.00030831	TME
2.27E-16	TME
1.20E-09	TME
3.19E-11	TME
0.000893749	TME
5.14E-07	TME
5.27E-14	Proliferation/Metastasis
3.95E-11	Proliferation/Metastasis
0.003141049	Metabolism
0.202503315	Metabolism
0.000745277	TME
0.069672139	Metabolism
2.54E-31	Metabolism
6.98E-16	TME
1.44E-36	Proliferation/Metastasis
1.95E-08	Proliferation/Metastasis
0.105253588	TME
2.62E-24	Metabolism
5.84E-31	Metabolism
0.543112701	Proliferation/Metastasis
3.82E-26	Proliferation/Metastasis
5.00E-18	TME

7.74E-15	TME
8.03E-09	TME
2.32E-19	TME
9.53E-14	Proliferation/Metastasis
2.21E-10	TME
8.45E-13	TME
0.000636062	Metabolism
2.86E-23	TME
1.65E-18	TME
3.32E-05	TME
0.18509657	TME
0.485607085	Metabolism
1.80E-07	Metabolism
3.03E-09	Metabolism
4.20E-18	TME
2.32E-21	Metabolism
5.08E-08	TME
2.53E-11	TME
2.21E-13	TME
0.064752678	TME
8.57E-13	TME
1.74E-12	Metabolism
2.16E-17	Proliferation/Metastasis
0.085626608	Metabolism
1.49E-20	Proliferation/Metastasis
6.92E-08	Metabolism
1.69E-08	Metabolism
3.82E-08	Metabolism
2.94E-18	Metabolism
0.000101191	Metabolism
0.019271112	Metabolism
7.88E-05	Metabolism
1.10E-06	Metabolism
0.000504254	Metabolism
0.000223033	Metabolism
1.66E-07	Metabolism
1.49E-14	Metabolism
4.83E-07	Metabolism
2.74E-11	Metabolism
2.19E-12	TME
5.60E-28	Proliferation/Metastasis
0.000212803	Metabolism
9.36E-18	Proliferation/Metastasis

1.61E-09	TME
5.02E-24	Proliferation/Metastasis
5.13E-28	Proliferation/Metastasis
7.43E-19	TME
1.14E-09	TME
6.79E-35	Metabolism
6.20E-68	Metabolism
1.34E-28	Proliferation/Metastasis
0.012948093	Proliferation/Metastasis
2.02E-34	Proliferation/Metastasis
1.68E-10	Metabolism
4.64E-26	Metabolism
0.002140267	Metabolism
2.10E-05	Proliferation/Metastasis
4.26E-20	TME
6.51E-18	TME
0.718020771	Metabolism
2.23E-41	Proliferation/Metastasis
6.72E-59	Metabolism
1.03E-09	TME
0.000118813	TME
3.20E-08	TME
2.38E-27	TME
6.69E-23	Metabolism
6.09E-19	TME
6.06E-53	Proliferation/Metastasis
2.81E-13	TME
1.25E-16	Proliferation/Metastasis
0.008532173	Proliferation/Metastasis
6.15E-52	Metabolism
6.17E-09	Proliferation/Metastasis
1.74E-22	TME
0.749365272	Metabolism
0.704409168	TME
4.57E-13	TME
2.52E-05	TME
2.39E-13	TME
0.005167109	TME
2.57E-14	TME
0.000162484	Metabolism
1.18E-17	TME
0.003676621	Metabolism
0.001489139	Metabolism

5.19E-34	Proliferation/Metastasis
0.006972514	Proliferation/Metastasis
0.851922897	Metabolism
0.183024419	Metabolism
3.09E-07	Metabolism
1.85E-36	Metabolism
2.53E-08	Proliferation/Metastasis
7.87E-26	Proliferation/Metastasis
0.089246266	Metabolism
4.89E-09	Metabolism
1.59E-05	Metabolism
5.77E-06	TME
5.85E-08	Metabolism
0.005398216	Metabolism
0.27821828	Metabolism
3.18E-36	Metabolism
5.10E-08	Proliferation/Metastasis
2.70E-18	Metabolism
0.000681935	Metabolism
0.01509849	Metabolism
6.29E-11	Metabolism
4.51E-15	Metabolism
1.38E-07	Metabolism
0.17576793	Proliferation/Metastasis
6.19E-15	Metabolism
4.81E-08	Metabolism
8.66E-26	Proliferation/Metastasis
0.93232006	Metabolism
1.17E-38	Metabolism
1.55E-18	Metabolism
0.228953895	Metabolism
3.98E-12	Metabolism
3.30E-23	Metabolism
4.66E-06	Metabolism
4.98E-10	Metabolism
4.87E-15	TME
4.29E-11	TME
9.70E-17	TME
9.69E-16	TME
6.36E-06	TME
4.20E-12	Metabolism
0.001416393	Metabolism
5.44E-44	Proliferation/Metastasis

1.11E-21	Metabolism
4.74E-32	Proliferation/Metastasis
1.18E-05	Metabolism
0.000197777	TME
1.56E-14	Metabolism
2.05E-13	Metabolism
0.000903897	Metabolism
1.88E-06	Metabolism
0.93560153	TME
0.289128707	TME
2.07E-09	Proliferation/Metastasis
3.12E-12	Metabolism
0.269486354	Proliferation/Metastasis
0.505270776	Proliferation/Metastasis
4.10E-13	TME
2.14E-07	TME
1.21E-06	TME
5.06E-07	TME
0.124837603	Metabolism
9.59E-06	Proliferation/Metastasis
0.215344564	Metabolism
5.60E-05	Metabolism
0.581201883	Proliferation/Metastasis
9.10E-06	Proliferation/Metastasis
0.003820796	Metabolism
0.001274084	Metabolism
0.707561304	Metabolism
0.262602192	Metabolism
3.52E-05	TME
1.30E-05	TME
5.84E-08	TME
7.78E-06	TME
6.74E-05	TME
0.414772255	Metabolism
0.009401196	Metabolism
0.000971355	Metabolism
0.316585461	Metabolism
0.002522351	Metabolism
4.19E-07	TME
1.05E-17	TME
7.90E-09	TME
1.58E-06	TME
2.98E-07	TME

7.53E-05	TME
4.31E-05	TME
1.88E-06	TME
0.000270034	TME
0.010086176	Proliferation/Metastasis
0.01314987	Proliferation/Metastasis
0.01826997	Metabolism
0.003719	Metabolism
6.46E-09	TME
0.073520584	Metabolism
0.437850433	Metabolism
5.69E-09	TME
0.841721495	Proliferation/Metastasis
0.512827965	Proliferation/Metastasis
0.000455328	TME
0.459215806	Metabolism
0.087862897	Metabolism
0.025495286	Proliferation/Metastasis
0.00053566	Proliferation/Metastasis
3.56E-06	TME
1.64E-09	TME
1.89E-05	TME
1.14E-05	TME
3.48E-07	Proliferation/Metastasis
1.22E-08	TME
1.38E-06	TME
0.03470451	Metabolism
1.57E-05	TME
1.85E-05	TME
7.63E-05	TME
0.000290167	TME
0.003692464	Metabolism
0.271129557	Metabolism
0.812451205	Metabolism
8.75E-06	TME
6.09E-05	Metabolism
0.000333016	TME
4.86E-05	TME
1.05E-06	TME
0.011624274	TME
3.29E-06	TME
0.003340583	Metabolism
0.122969271	Proliferation/Metastasis

6.31E-06	Metabolism
0.563944664	Proliferation/Metastasis
5.02E-06	Metabolism
0.126630351	Metabolism
0.444064511	Metabolism
0.10460974	Metabolism
6.77E-05	Metabolism
0.000182409	Metabolism
0.33742455	Metabolism
0.013097274	Metabolism
0.08940672	Metabolism
0.033977791	Metabolism
3.02E-18	Metabolism
2.06E-13	Metabolism
6.56E-06	Metabolism
0.989337161	Metabolism
4.71E-08	TME
0.615090503	Proliferation/Metastasis
0.02244493	Metabolism
1.41E-12	Proliferation/Metastasis
0.00072989	TME
4.05E-06	Proliferation/Metastasis
7.03E-07	Proliferation/Metastasis
0.296898473	TME
7.34E-11	TME
0.045746525	Metabolism
0.074921588	Metabolism
2.43E-10	Proliferation/Metastasis
0.147431461	Proliferation/Metastasis
0.000108174	Proliferation/Metastasis
0.279485554	Metabolism
3.18E-07	Metabolism
0.228793267	Metabolism
0.888211116	Proliferation/Metastasis
1.46E-06	TME
2.58E-09	TME
0.462269459	Metabolism
1.58E-06	Proliferation/Metastasis
0.008314608	Metabolism
1.09E-05	TME
1.53E-07	TME
1.60E-07	TME
1.30E-08	TME

0.391057051	Metabolism
0.218061696	TME
0.517803227	Proliferation/Metastasis
2.22E-08	TME
0.045963223	Proliferation/Metastasis
5.25E-12	Proliferation/Metastasis
0.698135957	Metabolism
0.051001629	Proliferation/Metastasis
1.36E-06	TME
0.003832882	Metabolism
0.000162777	TME
0.243347083	TME
0.055513176	TME
4.46E-06	TME
1.39E-05	TME
0.088828978	TME
0.008579584	Metabolism
2.61E-08	TME
1.12E-08	Metabolism
0.000344074	Metabolism
2.19E-08	Proliferation/Metastasis
0.246129285	Proliferation/Metastasis
0.09866601	Metabolism
0.10474069	Metabolism
0.653499376	Metabolism
0.010303595	Metabolism
1.74E-05	Proliferation/Metastasis
7.98E-11	Proliferation/Metastasis
0.000876527	Metabolism
0.580430389	Metabolism
0.060056957	Metabolism
6.12E-09	TME
0.000445282	Metabolism
1.66E-07	Metabolism
0.001387649	Metabolism
0.943555995	Metabolism
4.42E-07	Proliferation/Metastasis
0.14782586	Metabolism
0.007118552	Metabolism
0.824408444	Metabolism
0.026225113	Metabolism
0.852345481	Metabolism
0.001833429	Metabolism

0.218804075	Proliferation/Metastasis
0.098432854	Metabolism
0.001114197	Metabolism
0.989444711	Proliferation/Metastasis
0.262658393	Metabolism
0.012595829	Metabolism
7.31E-06	Metabolism
1.72E-06	Metabolism
0.864087733	Metabolism
0.488408832	Metabolism
0.174536814	Metabolism
0.526151595	Metabolism
2.71E-05	TME
0.00200403	TME
6.56E-07	TME
4.28E-06	TME
1.70E-05	TME
0.000911723	Metabolism
0.861482896	Metabolism
0.520471035	Proliferation/Metastasis
0.115056115	Metabolism
5.20E-07	Proliferation/Metastasis
0.019483332	Metabolism
0.002439767	TME
0.005181975	Metabolism
0.106085523	Metabolism
3.08E-08	Metabolism
0.807097675	Metabolism
0.738363786	TME
0.00537614	TME
7.03E-05	Proliferation/Metastasis
0.017565715	Metabolism
8.74E-12	Proliferation/Metastasis
0.059950805	Proliferation/Metastasis
0.077092953	TME
0.939548969	TME
0.029686658	TME
0.27258757	TME
0.383445971	Metabolism
0.005716897	Proliferation/Metastasis
2.55E-06	Metabolism
0.001773281	Metabolism
0.029817301	Proliferation/Metastasis

0.011798965	Proliferation/Metastasis
2.00E-08	Metabolism
0.962492496	Metabolism
0.784446675	Metabolism
0.190833396	Metabolism
0.273630091	TME
0.002286617	TME
0.014089936	TME
0.605415437	TME
0.031929343	TME
0.010800237	Metabolism
0.341449849	Metabolism
0.886229546	Metabolism
0.828170527	Metabolism
0.000238598	Metabolism
1.05E-08	TME
0.000342136	TME
0.345580822	TME
0.221666599	TME
0.021289298	TME
0.078241641	TME
0.066320628	TME
0.689806473	TME
0.077988671	TME
0.00023951	Proliferation/Metastasis
6.60E-15	Proliferation/Metastasis
0.567657038	Metabolism
0.822470309	Metabolism
0.333296632	TME
0.367786224	Metabolism
5.13E-05	Metabolism
0.10587075	TME
8.32E-28	Proliferation/Metastasis
3.24E-11	Proliferation/Metastasis
0.422714543	TME
4.74E-05	Metabolism
1.29E-15	Metabolism
0.138637133	Proliferation/Metastasis
0.000763061	Proliferation/Metastasis
0.00855966	TME
0.167246446	TME
0.011834471	TME
0.000411357	TME

3.66E-09	Proliferation/Metastasis
1.12E-09	TME
0.727699764	TME
0.480260206	Metabolism
3.63E-05	TME
0.005831635	TME
0.625968215	TME
0.342795223	TME
0.732632761	Metabolism
0.970874563	Metabolism
0.069370565	Metabolism
0.000171506	TME
0.012796874	Metabolism
0.190427713	TME
0.473835337	TME
0.177332811	TME
0.052483077	TME
0.373435128	TME
5.59E-12	Metabolism
2.21E-08	Proliferation/Metastasis
8.43E-05	Metabolism
3.66E-07	Proliferation/Metastasis
0.000126097	Metabolism
0.380518059	Metabolism
2.83E-07	Metabolism
0.09212073	Metabolism
0.056990914	Metabolism
0.863065097	Metabolism
0.001670071	Metabolism
0.005772789	Metabolism
0.50360931	Metabolism
0.404545296	Metabolism
0.490459691	Metabolism
0.301844097	Metabolism
0.888245931	Metabolism
0.00097605	Metabolism
0.352677922	TME
2.70E-23	Proliferation/Metastasis
0.009793673	Metabolism
0.290931441	Proliferation/Metastasis
0.150409861	TME
0.014808632	Proliferation/Metastasis
0.015443082	Proliferation/Metastasis

0.375584912	TME
0.009906517	TME
1.24E-27	Metabolism
2.19E-18	Metabolism
4.46E-08	Proliferation/Metastasis
0.140279553	Proliferation/Metastasis
0.000169476	Proliferation/Metastasis
2.18E-11	Metabolism
0.002907722	Metabolism
0.000812296	Metabolism
0.753493894	Proliferation/Metastasis
0.020142912	TME
0.319875865	TME
0.235625627	Metabolism
8.60E-11	Proliferation/Metastasis
2.76E-19	Metabolism
0.014180641	TME
0.041310748	TME
0.652557357	TME
9.64E-09	TME
3.35E-12	Metabolism
0.000119042	TME
7.76E-22	Proliferation/Metastasis
0.781880712	TME
2.20E-25	Proliferation/Metastasis
0.011959985	Proliferation/Metastasis
8.22E-24	Metabolism
1.05E-09	Proliferation/Metastasis
0.00827582	TME
1.04E-06	Metabolism
0.810290382	TME
0.001165095	TME
0.003934214	TME
0.168210394	TME
0.042551167	TME
5.76E-05	TME
0.085223947	Metabolism
0.610341774	TME
0.156880705	Metabolism
1.67E-07	Metabolism
0.018988918	Proliferation/Metastasis
0.247753613	Proliferation/Metastasis
0.891423163	Metabolism

1.23E-06	Metabolism
2.52E-07	Metabolism
3.36E-14	Metabolism
0.317617471	Proliferation/Metastasis
0.000661133	Proliferation/Metastasis
0.760144669	Metabolism
0.132263064	Metabolism
0.025874806	Metabolism
0.004530159	TME
0.087897939	Metabolism
0.001776146	Metabolism
0.253357056	Metabolism
5.28E-18	Metabolism
1.36E-11	Proliferation/Metastasis
3.50E-05	Metabolism
0.426438175	Metabolism
0.005508764	Metabolism
5.18E-09	Metabolism
2.55E-17	Metabolism
0.250078754	Metabolism
0.700151076	Proliferation/Metastasis
0.019727623	Metabolism
0.00668913	Metabolism
1.19E-11	Proliferation/Metastasis
0.002017392	Metabolism
2.80E-31	Metabolism
2.91E-13	Metabolism
0.017193711	Metabolism
3.86E-05	Metabolism
9.56E-06	Metabolism
0.722848949	Metabolism
0.053646139	Metabolism
0.043196623	TME
0.345781542	TME
0.107522486	TME
0.478798154	TME
0.980483846	TME
8.83E-09	Metabolism
0.251976304	Metabolism
4.41E-20	Proliferation/Metastasis
0.038206138	Metabolism
0.185471426	Proliferation/Metastasis
0.578782224	Metabolism

0.653425187	TME
0.002814572	Metabolism
0.000499012	Metabolism
3.19E-07	Metabolism
0.227452999	Metabolism
0.02290828	TME
0.051146481	TME
0.000722944	Proliferation/Metastasis
0.59331701	Metabolism
0.015541088	Proliferation/Metastasis
0.000337265	Proliferation/Metastasis
1.07E-11	TME
1.72E-12	TME
6.40E-06	TME
2.72E-08	TME
0.009609619	Metabolism
3.01E-19	Proliferation/Metastasis
3.98E-07	Metabolism
5.08E-10	Metabolism
2.87E-14	Proliferation/Metastasis
1.21E-16	Proliferation/Metastasis
2.03E-39	Metabolism
5.26E-13	Metabolism
0.221316585	Metabolism
2.49E-28	Metabolism
0.629809493	TME
2.88E-27	TME
1.54E-05	TME
2.73E-10	TME
1.60E-66	TME
8.65E-20	Metabolism
0.003272376	Metabolism
2.63E-13	Metabolism
3.08E-37	Metabolism
0.303379286	Metabolism
2.02E-11	TME
0.087827085	TME
6.71E-06	TME
0.818541607	TME
1.06E-15	TME
1.02E-08	TME
4.00E-10	TME
4.47E-05	TME

0.00166118	TME
4.03E-12	Proliferation/Metastasis
9.97E-07	Proliferation/Metastasis
3.71E-12	Metabolism
0.295616453	Metabolism
0.092601976	TME
0.176599011	Metabolism
1.84E-26	Metabolism
1.60E-13	TME
2.04E-05	Proliferation/Metastasis
4.63E-12	Proliferation/Metastasis
0.000717142	TME
0.345566277	Metabolism
0.002387398	Metabolism
0.06825289	Proliferation/Metastasis
3.46E-09	Proliferation/Metastasis
2.76E-06	TME
4.48E-17	TME
0.010936051	TME
5.84E-09	TME
0.017698476	Proliferation/Metastasis
2.74E-06	TME
3.64E-22	TME
9.65E-11	Metabolism
1.04E-12	TME
7.13E-19	TME
4.74E-08	TME
9.09E-06	TME
8.82E-06	Metabolism
2.11E-28	Metabolism
0.405055412	Metabolism
2.58E-06	TME
2.90E-05	Metabolism
0.000190174	TME
0.000122597	TME
4.27E-11	TME
0.081606959	TME
8.30E-19	TME
0.003507049	Metabolism
0.365399895	Proliferation/Metastasis
0.016928272	Metabolism
2.15E-07	Proliferation/Metastasis
4.76E-07	Metabolism

7.03E-27	Metabolism
7.85E-07	Metabolism
4.39E-30	Metabolism
9.11E-10	Metabolism
2.50E-10	Metabolism
0.870473033	Metabolism
1.24E-16	Metabolism
3.95E-59	Metabolism
3.34E-14	Metabolism
5.93E-22	Metabolism
1.09E-25	Metabolism
1.19E-07	Metabolism
2.87E-11	Metabolism
5.14E-14	TME
0.086718581	Proliferation/Metastasis
0.000485451	Metabolism
9.68E-16	Proliferation/Metastasis
1.53E-09	TME
2.60E-45	Proliferation/Metastasis
7.50E-30	Proliferation/Metastasis
4.58E-68	TME
1.33E-24	TME
0.003409214	Metabolism
6.61E-07	Metabolism
3.51E-09	Proliferation/Metastasis
0.463891149	Proliferation/Metastasis
1.58E-34	Proliferation/Metastasis
6.41E-08	Metabolism
1.55E-17	Metabolism
3.36E-63	Metabolism
1.50E-42	Proliferation/Metastasis
8.35E-23	TME
7.45E-16	TME
1.43E-07	Metabolism
8.08E-12	Proliferation/Metastasis
0.008526462	Metabolism
0.132232532	TME
0.165311125	TME
1.25E-16	TME
0.000116959	TME
1.93E-07	Metabolism
4.07E-45	TME
0.005093788	Proliferation/Metastasis

1.07E-38	TME
0.033073083	Proliferation/Metastasis
0.336554718	Proliferation/Metastasis
6.08E-10	Metabolism
3.07E-10	Proliferation/Metastasis
4.17E-14	TME
3.36E-09	Metabolism
0.002787087	TME
2.47E-14	TME
1.44E-05	TME
2.14E-15	TME
4.14E-13	TME
7.56E-10	TME
0.017297237	Metabolism
9.22E-51	TME
0.782631678	Metabolism
4.04E-19	Metabolism
1.84E-22	Proliferation/Metastasis
3.25E-06	Proliferation/Metastasis
2.84E-08	Metabolism
3.31E-06	Metabolism
0.045019304	Metabolism
0.039459193	Metabolism
2.21E-92	Proliferation/Metastasis
4.30E-40	Proliferation/Metastasis
0.103271754	Metabolism
0.75326708	Metabolism
0.457286928	Metabolism
0.996192163	TME
0.002246915	Metabolism
0.277203022	Metabolism
0.000928388	Metabolism
0.000497477	Metabolism
0.03322144	Proliferation/Metastasis
1.06E-09	Metabolism
1.45E-09	Metabolism
4.45E-40	Metabolism
8.37E-05	Metabolism
1.55E-12	Metabolism
1.25E-18	Metabolism
0.005561099	Proliferation/Metastasis
0.497730304	Metabolism
0.000978662	Metabolism

6.49E-07	Proliferation/Metastasis
1.00E-28	Metabolism
0.837528583	Metabolism
0.947622077	Metabolism
7.49E-06	Metabolism
0.712378605	Metabolism
0.000107972	Metabolism
7.06E-22	Metabolism
3.09E-25	Metabolism
9.74E-17	TME
7.96E-32	TME
5.43E-18	TME
1.93E-29	TME
5.93E-13	TME
0.005955983	Metabolism
4.04E-25	Metabolism
0.163390984	Proliferation/Metastasis
4.32E-12	Metabolism
2.82E-42	Proliferation/Metastasis
5.35E-16	Metabolism
0.44262301	TME
0.967819972	Metabolism
1.24E-07	Metabolism
0.829031779	Metabolism
2.32E-37	Metabolism
0.06311444	TME
9.98E-05	TME
6.61E-10	Proliferation/Metastasis
1.06E-11	Metabolism
7.09E-05	Proliferation/Metastasis
0.84707135	Proliferation/Metastasis
7.79E-37	TME
0.723744862	TME
0.076639616	TME
0.176437319	TME
5.45E-09	Metabolism
4.91E-07	Proliferation/Metastasis
0.630829358	Metabolism
5.21E-14	Metabolism
4.06E-06	Proliferation/Metastasis
0.082251256	Proliferation/Metastasis
0.00078473	Metabolism
8.65E-34	Metabolism

5.40E-13	Metabolism
1.64E-17	Metabolism
0.111340768	TME
0.820941686	TME
0.095504456	TME
0.294024944	TME
1.14E-08	TME
4.41E-32	Metabolism
8.88E-17	Metabolism
1.25E-06	Metabolism
4.85E-25	Metabolism
0.287948814	Metabolism
0.002801317	TME
0.016456136	TME
0.001188422	TME
0.01997281	TME
0.820250545	TME
0.455767443	TME
0.453193694	TME
0.003144012	TME
0.013053842	TME
0.359931499	Proliferation/Metastasis
0.007059979	Proliferation/Metastasis
6.10E-36	Metabolism
3.38E-24	Metabolism
3.40E-16	TME
0.851618209	Metabolism
0.000192412	Metabolism
0.971867723	TME
0.661948938	Proliferation/Metastasis
0.931610276	Proliferation/Metastasis
0.027315707	TME
0.015152828	Metabolism
0.002074223	Metabolism
0.009895405	Proliferation/Metastasis
0.022300054	Proliferation/Metastasis
0.286942739	TME
0.084791636	TME
0.159949715	TME
0.541390919	TME
4.21E-30	Proliferation/Metastasis
0.012102803	TME
0.636873834	TME

0.284290502	Metabolism
0.878907583	TME
0.255822184	TME
0.267347807	TME
7.85E-13	TME
1.57E-19	Metabolism
9.42E-35	Metabolism
3.97E-09	Metabolism
0.113145392	TME
3.23E-17	Metabolism
0.380015103	TME
0.70325182	TME
0.513200213	TME
0.287185785	TME
0.864456475	TME
3.04E-20	Metabolism
0.074348029	Proliferation/Metastasis
4.49E-14	Metabolism
6.21E-06	Proliferation/Metastasis
3.18E-07	Metabolism
7.73E-18	Metabolism
0.128916873	Metabolism
1.10E-23	Metabolism
3.61E-31	Metabolism
0.005446458	Metabolism
0.140081342	Metabolism
0.003295419	Metabolism
0.002188896	Metabolism
0.024834713	Metabolism
0.05218104	Metabolism
0.278291653	Metabolism
0.000296555	Metabolism
7.44E-25	Metabolism
0.515115138	TME
0.696746153	Proliferation/Metastasis
2.20E-09	Metabolism
0.28347477	Proliferation/Metastasis
0.272061986	TME
0.100889794	Proliferation/Metastasis
0.279077548	Proliferation/Metastasis
3.51E-07	TME
0.412371644	TME
0.001847691	Metabolism

0.783929516	Metabolism
4.31E-05	Proliferation/Metastasis
4.78E-10	Proliferation/Metastasis
0.010622818	Proliferation/Metastasis
6.72E-07	Metabolism
0.034630934	Metabolism
2.72E-23	Metabolism
0.3273837	Proliferation/Metastasis
0.892569896	TME
0.238289586	TME
0.091776118	Metabolism
0.555732344	Proliferation/Metastasis
0.000186665	Metabolism
0.113049396	TME
0.009743445	TME
0.000124308	TME
0.578886803	TME
0.935726058	Metabolism
1.36E-11	TME
0.656028194	Proliferation/Metastasis
0.212080812	TME
0.000110074	Proliferation/Metastasis
6.61E-34	Proliferation/Metastasis
0.033463856	Metabolism
0.079611148	Proliferation/Metastasis
0.8424514	TME
1.12E-06	Metabolism
0.005199258	TME
4.28E-05	TME
1.10E-10	TME
0.789291802	TME
0.062936628	TME
0.010306734	TME
2.91E-05	Metabolism
0.153840005	TME
1.29E-27	Metabolism
0.434819631	Metabolism
0.570859945	Proliferation/Metastasis
0.074094187	Proliferation/Metastasis
0.034975125	Metabolism
0.11929028	Metabolism
0.309281046	Metabolism
3.68E-14	Metabolism

2.70E-05	Proliferation/Metastasis
0.687762789	Proliferation/Metastasis
1.88E-30	Metabolism
1.82E-08	Metabolism
1.09E-21	Metabolism
0.171824183	TME
3.13E-06	Metabolism
1.11E-19	Metabolism
0.470337895	Metabolism
0.628076999	Metabolism
5.15E-29	Proliferation/Metastasis
2.88E-19	Metabolism
1.04E-11	Metabolism
5.95E-30	Metabolism
1.65E-06	Metabolism
0.199315538	Metabolism
3.45E-35	Metabolism
4.47E-09	Proliferation/Metastasis
0.84680107	Metabolism
3.17E-11	Metabolism
5.27E-06	Proliferation/Metastasis
2.21E-13	Metabolism
0.854777074	Metabolism
0.042127184	Metabolism
6.51E-27	Metabolism
0.003154913	Metabolism
0.066405509	Metabolism
0.083670411	Metabolism
4.03E-19	Metabolism
0.243411701	TME
0.021293288	TME
0.602638803	TME
0.06427937	TME
0.584990881	TME
0.008996761	Metabolism
3.29E-20	Metabolism
0.749775521	Proliferation/Metastasis
4.08E-07	Metabolism
0.000294024	Proliferation/Metastasis
3.24E-24	Metabolism
0.095050648	TME
9.92E-09	Metabolism
1.70E-11	Metabolism

6.15E-11	Metabolism
1.57E-33	Metabolism
0.247333949	TME
0.080220884	TME
4.25E-05	Proliferation/Metastasis
1.26E-24	Metabolism
7.36E-12	Proliferation/Metastasis
0.000390242	Proliferation/Metastasis
0.037984078	TME
0.705763958	TME
0.585019341	TME
0.266178527	TME
0.181947562	Metabolism
0.6289044	Proliferation/Metastasis
1.06E-06	Metabolism
0.025389578	Metabolism
0.001813683	Proliferation/Metastasis
5.68E-05	Proliferation/Metastasis
1.10E-07	Metabolism
0.000123957	Metabolism
0.031057342	Metabolism
0.001787434	Metabolism
0.077233527	TME
0.061589354	TME
0.904686135	TME
0.090233432	TME
5.60E-10	TME
0.010717485	Metabolism
0.980403569	Metabolism
0.206378368	Metabolism
0.391331106	Metabolism
0.624212193	Metabolism
0.005735582	TME
0.029642107	TME
0.03827784	TME
0.559998875	TME
0.844932683	TME
0.017888533	TME
0.022298206	TME
0.775040595	TME
0.061386539	TME
0.000149891	Proliferation/Metastasis
3.74E-05	Proliferation/Metastasis

0.396590611	Metabolism
0.398045163	Metabolism
0.058398564	TME
0.006182569	Metabolism
0.368503288	Metabolism
0.139633653	TME
0.535795471	Proliferation/Metastasis
0.035274131	Proliferation/Metastasis
0.163840438	TME
0.000428533	Metabolism
0.012751837	Metabolism
0.004628402	Proliferation/Metastasis
0.047016921	Proliferation/Metastasis
0.051016426	TME
0.911590911	TME
0.07217862	TME
0.001100593	TME
0.045209005	Proliferation/Metastasis
0.546727295	TME
0.233707557	TME
3.27E-06	Metabolism
0.161425655	TME
0.836092109	TME
0.308557331	TME
0.056201819	TME
0.163669317	Metabolism
0.904401716	Metabolism
0.497132833	Metabolism
0.011283841	TME
0.012919933	Metabolism
0.948361603	TME
0.764089415	TME
0.177641676	TME
0.556274138	TME
0.118987537	TME
0.00879425	Metabolism
0.000131243	Proliferation/Metastasis
0.534306763	Metabolism
0.485048505	Proliferation/Metastasis
0.001346426	Metabolism
0.175276477	Metabolism
2.61E-07	Metabolism
0.021789753	Metabolism

0.024839881	Metabolism
0.000258492	Metabolism
0.137584198	Metabolism
0.351077545	Metabolism
9.34E-05	Metabolism
0.12981413	Metabolism
0.002531771	Metabolism
9.95E-05	Metabolism
0.081358115	Metabolism
0.829661016	Metabolism
0.352095123	TME
0.457037584	Proliferation/Metastasis
3.35E-05	Metabolism
0.002434851	Proliferation/Metastasis
0.007847644	TME
0.002328059	Proliferation/Metastasis
0.03080332	Proliferation/Metastasis
0.015323007	TME
9.57E-06	TME
4.72E-08	Metabolism
0.047801308	Metabolism
0.091836507	Proliferation/Metastasis
0.011480301	Proliferation/Metastasis
0.058274375	Proliferation/Metastasis
0.000245534	Metabolism
0.048980714	Metabolism
0.000180089	Metabolism
6.34E-05	Proliferation/Metastasis
0.039360153	TME
0.001287887	TME
0.032336655	Metabolism
0.843745279	Proliferation/Metastasis
0.001217826	Metabolism
0.01157645	TME
0.065716333	TME
0.005449792	TME
0.016419759	TME
9.00E-05	Metabolism
0.324540308	TME
4.41E-10	Proliferation/Metastasis
0.013840864	TME
4.50E-05	Proliferation/Metastasis
0.648175798	Proliferation/Metastasis

0.003298655	Metabolism
0.207400449	Proliferation/Metastasis
0.684218694	TME
0.134318111	Metabolism
0.975022799	TME
0.025677714	TME
0.007937915	TME
0.512259228	TME
0.011093889	TME
0.000625576	TME
0.570063357	Metabolism
0.002135422	TME
0.989106721	Metabolism
0.816440488	Metabolism
0.140300156	Proliferation/Metastasis
0.04946085	Proliferation/Metastasis
0.023504241	Metabolism
0.092079137	Metabolism
0.024223599	Metabolism
0.06133656	Metabolism
1.04E-10	Proliferation/Metastasis
0.202736176	Proliferation/Metastasis
0.139555944	Metabolism
0.235538326	Metabolism
0.954518984	Metabolism
0.000943672	TME
4.33E-06	Metabolism
0.799306096	Metabolism
0.169121931	Metabolism
0.023953155	Metabolism
0.001416499	Proliferation/Metastasis
0.006329059	Metabolism
0.536469532	Metabolism
0.052326536	Metabolism
0.896466013	Metabolism
0.646697549	Metabolism
0.373986639	Metabolism
0.591681645	Proliferation/Metastasis
0.001587728	Metabolism
0.003091747	Metabolism
0.727743637	Proliferation/Metastasis
0.077107023	Metabolism
0.174552566	Metabolism

0.085264018	Metabolism
0.660035505	Metabolism
0.030406641	Metabolism
0.011167401	Metabolism
0.020025671	Metabolism
0.214420971	Metabolism
0.26323934	TME
0.268389115	TME
0.94031138	TME
0.561664214	TME
0.036514468	TME
0.000672899	Metabolism
0.572264431	Metabolism
0.701380586	Proliferation/Metastasis
0.00080493	Metabolism
0.00133061	Proliferation/Metastasis
0.004941296	Metabolism
0.373645444	TME
9.16E-08	Metabolism
0.00021869	Metabolism
0.001655176	Metabolism
0.355116009	Metabolism
2.32E-05	TME
9.24E-05	TME
0.369970186	Proliferation/Metastasis
0.192016444	Metabolism
0.353990109	Proliferation/Metastasis
0.301955573	Proliferation/Metastasis
0.088345232	TME
0.978020473	TME
0.180289503	TME
0.003512225	TME
0.431121914	Metabolism
2.56E-06	Proliferation/Metastasis
0.00021812	Metabolism
1.90E-05	Metabolism
0.175577344	Proliferation/Metastasis
0.004029075	Proliferation/Metastasis
2.06E-05	Metabolism
0.020671588	Metabolism
0.926652498	Metabolism
0.50530719	Metabolism
0.181504506	TME

0.04436773	TME
0.033893284	TME
0.122930266	TME
0.890400127	TME
0.220727557	Metabolism
8.63E-13	Metabolism
0.55741782	Metabolism
5.28E-08	Metabolism
0.59025696	Metabolism
2.02E-12	TME
4.34E-05	TME
0.764914487	TME
0.231264432	TME
0.2277347	TME
0.00298797	TME
0.006393216	TME
0.001580333	TME
0.004178026	TME
0.571317825	Proliferation/Metastasis
4.37E-15	Proliferation/Metastasis
0.002173382	Metabolism
0.632612193	Metabolism
0.000229439	TME
0.223828652	Metabolism
5.24E-13	Metabolism
0.761558749	TME
3.37E-09	Proliferation/Metastasis
0.002172274	Proliferation/Metastasis
0.006272666	TME
1.29E-07	Metabolism
5.88E-15	Metabolism
0.172656598	Proliferation/Metastasis
2.50E-05	Proliferation/Metastasis
0.212595491	TME
0.006124651	TME
0.106996628	TME
0.828237841	TME
0.54052888	Proliferation/Metastasis
0.000131121	TME
0.665408508	TME
0.068267768	Metabolism
0.000665896	TME
7.52E-05	TME

0.004498048	TME
0.00102352	TME
0.223510143	Metabolism
0.234084341	Metabolism
1.80E-12	Metabolism
3.44E-07	TME
4.31E-08	Metabolism
0.140969655	TME
0.977168621	TME
0.143878734	TME
5.59E-06	TME
3.14E-06	TME
9.37E-07	Metabolism
0.901384849	Proliferation/Metastasis
2.57E-12	Metabolism
1.10E-06	Proliferation/Metastasis
3.54E-11	Metabolism
7.59E-07	Metabolism
5.35E-09	Metabolism
2.91E-09	Metabolism
0.039606422	Metabolism
0.358598229	Metabolism
0.985239269	Metabolism
0.782965614	Metabolism
0.910917427	Metabolism
0.406887578	Metabolism
0.590863263	Metabolism
0.272342414	Metabolism
0.000360298	Metabolism
8.01E-08	Metabolism
0.025454779	TME
1.30E-09	Proliferation/Metastasis
0.115288025	Metabolism
0.068065517	Proliferation/Metastasis
0.016212721	TME
0.000564171	Proliferation/Metastasis
4.08E-08	Proliferation/Metastasis
0.725462228	TME
0.748652453	TME
6.97E-12	Metabolism
6.17E-23	Metabolism
0.825802559	Proliferation/Metastasis
0.161235278	Proliferation/Metastasis

1.30E-07	Proliferation/Metastasis
0.00110294	Metabolism
0.017031785	Metabolism
0.663122787	Metabolism
0.085158513	Proliferation/Metastasis
5.88E-09	TME
0.263805032	TME
0.029888313	Metabolism
1.45E-11	Proliferation/Metastasis
3.57E-22	Metabolism
0.522694957	TME
0.252969026	TME
0.015853779	TME
4.28E-11	TME
5.76E-10	Metabolism
0.003894063	TME
1.58E-08	Proliferation/Metastasis
0.123575411	TME
0.006012633	Proliferation/Metastasis
0.066235774	Proliferation/Metastasis
2.10E-08	Metabolism
0.000140487	Proliferation/Metastasis
0.07998969	TME
0.578521858	Metabolism
0.900675847	TME
0.418951397	TME
0.208970088	TME
0.189920703	TME
0.13538395	TME
0.229370625	TME
3.49E-05	Metabolism
0.0162596	TME
0.862644396	Metabolism
0.005603934	Metabolism
9.97E-08	Proliferation/Metastasis
0.015489053	Proliferation/Metastasis
0.008067463	Metabolism
0.308595844	Metabolism
0.000891283	Metabolism
1.17E-14	Metabolism
0.979404779	Proliferation/Metastasis
0.002356058	Proliferation/Metastasis
0.514028339	Metabolism

6.04E-07	Metabolism
1.07E-06	Metabolism
0.022502621	TME
1.86E-08	Metabolism
0.000290927	Metabolism
0.427630394	Metabolism
0.003332102	Metabolism
0.219989876	Proliferation/Metastasis
2.45E-05	Metabolism
2.82E-05	Metabolism
0.698597129	Metabolism
3.33E-07	Metabolism
1.51E-06	Metabolism
0.000139689	Metabolism
0.038797535	Proliferation/Metastasis
0.00026021	Metabolism
1.14E-08	Metabolism
1.33E-11	Proliferation/Metastasis
2.48E-10	Metabolism
6.82E-08	Metabolism
0.000458954	Metabolism
2.83E-12	Metabolism
0.009556062	Metabolism
4.82E-06	Metabolism
0.334030562	Metabolism
1.10E-06	Metabolism
0.16664627	TME
0.620142854	TME
0.224140799	TME
0.058701362	TME
0.000566624	TME
0.771994238	Metabolism
2.31E-08	Metabolism
3.82E-08	Proliferation/Metastasis
2.70E-11	Metabolism
2.36E-08	Proliferation/Metastasis
0.009471585	Metabolism
0.168967575	TME
1.11E-10	Metabolism
1.63E-05	Metabolism
0.049722739	Metabolism
0.15724948	Metabolism
0.002439797	TME

0.000750899	TME
0.721764366	Proliferation/Metastasis
0.024018372	Metabolism
0.163166095	Proliferation/Metastasis
0.000793155	Proliferation/Metastasis
5.54E-05	TME
7.98E-09	TME
4.56E-05	TME
1.43E-14	TME
5.52E-08	Metabolism
2.50E-21	Proliferation/Metastasis
0.010695221	Metabolism
1.27E-06	Metabolism
1.80E-14	Proliferation/Metastasis
4.34E-12	Proliferation/Metastasis
0.015471601	Metabolism
0.320964308	Metabolism
0.052706052	Metabolism
0.612680828	Metabolism
1.33E-10	TME
0.997611082	TME
0.000464661	TME
3.39E-19	TME
0.034066448	TME
0.040675197	Metabolism
3.09E-09	Metabolism
0.44123211	Metabolism
5.18E-16	Metabolism
2.20E-05	Metabolism
1.39E-06	TME
0.001261574	TME
0.35962934	TME
1.67E-08	TME
0.003472389	TME
4.20E-10	TME
1.38E-10	TME
8.65E-15	TME
2.36E-11	TME
1.25E-15	Proliferation/Metastasis
0.888917468	Proliferation/Metastasis
5.34E-14	Metabolism
9.36E-16	Metabolism
1.01E-12	TME

0.016696231	Metabolism
0.012967041	Metabolism
0.407082472	TME
5.64E-15	Proliferation/Metastasis
3.58E-32	Proliferation/Metastasis
1.01E-06	TME
0.034431631	Metabolism
4.70E-13	Metabolism
3.35E-23	Proliferation/Metastasis
7.52E-15	Proliferation/Metastasis
9.10E-06	TME
0.07879283	TME
1.15E-10	TME
2.51E-06	TME
2.14E-17	Proliferation/Metastasis
0.000423063	TME
0.00156772	TME
0.888738154	Metabolism
7.58E-06	TME
0.039143561	TME
2.49E-12	TME
0.002658135	TME
0.730306788	Metabolism
0.851698936	Metabolism
7.03E-07	Metabolism
5.84E-06	TME
1.01E-09	Metabolism
0.000128385	TME
0.00019572	TME
1.67E-14	TME
8.03E-14	TME
0.390237957	TME
1.52E-08	Metabolism
6.75E-17	Proliferation/Metastasis
6.43E-09	Metabolism
5.41E-12	Proliferation/Metastasis
3.57E-06	Metabolism
9.78E-10	Metabolism
0.851616378	Metabolism
9.95E-05	Metabolism
6.34E-07	Metabolism
6.22E-08	Metabolism
1.01E-10	Metabolism

0.295108089	Metabolism
4.08E-18	Metabolism
6.26E-09	Metabolism
1.50E-12	Metabolism
2.07E-07	Metabolism
0.212220855	Metabolism
2.27E-13	Metabolism
0.684314731	TME
1.63E-17	Proliferation/Metastasis
5.85E-05	Metabolism
0.809082025	Proliferation/Metastasis
2.81E-11	TME
0.256693543	Proliferation/Metastasis
0.09326644	Proliferation/Metastasis
0.111656973	TME
0.334616281	TME
0.07761512	Metabolism
8.23E-06	Metabolism
1.45E-12	Proliferation/Metastasis
3.97E-25	Proliferation/Metastasis
0.154263559	Proliferation/Metastasis
0.001974854	Metabolism
0.396250907	Metabolism
0.384324209	Metabolism
1.99E-07	Proliferation/Metastasis
0.030386721	TME
0.351401138	TME
8.07E-08	Metabolism
0.00819026	Proliferation/Metastasis
0.000647917	Metabolism
6.07E-07	TME
0.004362419	TME
3.72E-07	TME
5.82E-05	TME
0.009445982	Metabolism
3.13E-10	TME
0.711238722	Proliferation/Metastasis
0.06212566	TME
0.308699021	Proliferation/Metastasis
1.18E-20	Proliferation/Metastasis
7.21E-05	Metabolism
4.36E-28	Proliferation/Metastasis
0.006810515	TME

0.080821598	Metabolism
3.40E-11	TME
0.019873005	TME
0.010257801	TME
1.40E-07	TME
7.41E-15	TME
1.42E-09	TME
2.34E-09	Metabolism
0.163221436	TME
7.44E-07	Metabolism
0.039263981	Metabolism
0.077933258	Proliferation/Metastasis
7.43E-19	Proliferation/Metastasis
5.35E-28	Metabolism
3.46E-12	Metabolism
4.92E-06	Metabolism
1.11E-15	Metabolism
3.55E-06	Proliferation/Metastasis
2.02E-06	Proliferation/Metastasis
4.05E-06	Metabolism
0.000348194	Metabolism
1.02E-17	Metabolism
0.000234553	TME
0.002167391	Metabolism
7.93E-10	Metabolism
0.003232589	Metabolism
0.000440342	Metabolism
1.41E-15	Proliferation/Metastasis
1.37E-11	Metabolism
0.04201848	Metabolism
0.136989329	Metabolism
7.41E-32	Metabolism
3.19E-27	Metabolism
2.70E-05	Metabolism
3.51E-08	Proliferation/Metastasis
0.000270287	Metabolism
1.88E-06	Metabolism
4.27E-12	Proliferation/Metastasis
0.014534666	Metabolism
5.38E-21	Metabolism
1.41E-05	Metabolism
2.98E-05	Metabolism
0.001733467	Metabolism

1.51E-05	Metabolism
0.705295848	Metabolism
2.02E-09	Metabolism
2.92E-10	TME
0.000395085	TME
7.57E-05	TME
4.99E-08	TME
1.24E-11	TME
0.011150881	Metabolism
1.01E-14	Metabolism
2.36E-27	Proliferation/Metastasis
0.000630858	Metabolism
0.058766182	Proliferation/Metastasis
0.329412854	Metabolism
0.060490832	TME
0.9133879	Metabolism
0.00549598	Metabolism
2.33E-06	Metabolism
0.001232328	Metabolism
4.09E-10	TME
0.186866278	TME
0.004353173	Proliferation/Metastasis
0.336708189	Metabolism
0.021758017	Proliferation/Metastasis
5.59E-20	Proliferation/Metastasis
0.001217791	TME
1.78E-05	TME
0.219994877	TME
6.90E-05	TME
1.71E-05	Metabolism
1.71E-11	Proliferation/Metastasis
1.64E-07	Metabolism
6.23E-12	Metabolism
0.014164171	Proliferation/Metastasis
0.003649904	Proliferation/Metastasis
4.70E-08	Metabolism
1.39E-05	Metabolism
0.001995127	Metabolism
0.000451432	Metabolism
0.000573274	TME
0.485250795	TME
0.065973437	TME
7.22E-06	TME

0.594715055	TME
0.324857986	Metabolism
3.73E-08	Metabolism
0.549239083	Metabolism
7.86E-12	Metabolism
0.039133975	Metabolism
6.01E-05	TME
0.04335796	TME
0.080367008	TME
6.01E-05	TME
0.194542838	TME
0.022145868	TME
0.015071487	TME
6.85E-06	TME
0.013878726	TME
0.229025257	Proliferation/Metastasis
2.00E-06	Proliferation/Metastasis
4.35E-06	Metabolism
2.64E-05	Metabolism
0.000656681	TME
0.002309422	Metabolism
0.001304903	Metabolism
0.373343883	TME
1.16E-11	Proliferation/Metastasis
1.28E-07	Proliferation/Metastasis
1.33E-08	TME
5.57E-07	Metabolism
7.55E-20	Metabolism
0.000428578	Proliferation/Metastasis
4.30E-06	Proliferation/Metastasis
0.152077656	TME
0.809671204	TME
0.016966748	TME
0.660907025	TME
0.003868158	Proliferation/Metastasis
2.05E-05	TME
0.014030285	TME
0.024069405	Metabolism
0.450772563	TME
0.648844702	TME
9.74E-05	TME
0.517033114	TME
0.057770974	Metabolism

0.407475851	Metabolism
3.57E-08	Metabolism
0.001278325	TME
3.28E-10	Metabolism
0.01155789	TME
0.007289801	TME
0.000739728	TME
3.39E-08	TME
0.235683191	TME
7.35E-17	Metabolism
0.091876582	Proliferation/Metastasis
3.74E-16	Metabolism
1.22E-06	Proliferation/Metastasis
1.83E-13	Metabolism
4.08E-14	Metabolism
1.20E-06	Metabolism
1.54E-10	Metabolism
2.65E-09	Metabolism
0.503948442	Metabolism
0.061294193	Metabolism
0.411429421	Metabolism
0.083798291	Metabolism
0.89123481	Metabolism
0.580941653	Metabolism
0.765326231	Metabolism
6.84E-06	Metabolism
2.60E-10	Metabolism
0.992425837	TME
2.02E-13	Proliferation/Metastasis
0.378396106	Metabolism
0.120031322	Proliferation/Metastasis
0.02018929	TME
0.89914477	Proliferation/Metastasis
0.079593018	Proliferation/Metastasis
0.001059517	TME
0.001494952	TME
9.17E-08	Metabolism
7.83E-14	Metabolism
0.009422917	Proliferation/Metastasis
5.70E-06	Proliferation/Metastasis
0.015477884	Proliferation/Metastasis
3.21E-05	Metabolism
0.601186993	Metabolism

0.104492831	Metabolism
0.522028788	Proliferation/Metastasis
0.060162725	TME
0.512060377	TME
0.721757441	Metabolism
0.000146206	Proliferation/Metastasis
8.89E-15	Metabolism
0.109949826	TME
0.000531474	TME
0.0109693	TME
0.000156357	TME
2.57E-10	Metabolism
0.001435065	TME
2.60E-06	Proliferation/Metastasis
0.127774651	TME
0.000237584	Proliferation/Metastasis
1.03E-07	Proliferation/Metastasis
2.31E-09	Metabolism
5.27E-10	Proliferation/Metastasis
0.45322253	TME
0.021669499	Metabolism
7.16E-07	TME
0.593047399	TME
0.812361639	TME
0.00263576	TME
0.007654871	TME
0.116649873	TME
2.75E-08	Metabolism
0.074221921	TME
0.002656436	Metabolism
0.595279071	Metabolism
0.090832615	Proliferation/Metastasis
6.95E-05	Proliferation/Metastasis
3.15E-06	Metabolism
0.204781799	Metabolism
0.151409237	Metabolism
1.40E-16	Metabolism
0.914449064	Proliferation/Metastasis
0.133137214	Proliferation/Metastasis
0.012086119	Metabolism
6.47E-12	Metabolism
4.82E-17	Metabolism
0.038265792	TME

1.98E-12	Metabolism
1.13E-06	Metabolism
0.004336059	Metabolism
6.97E-09	Metabolism
0.012612614	Proliferation/Metastasis
5.87E-17	Metabolism
0.006829058	Metabolism
0.645649734	Metabolism
2.66E-16	Metabolism
3.75E-16	Metabolism
1.73E-05	Metabolism
0.000165242	Proliferation/Metastasis
2.15E-12	Metabolism
6.87E-09	Metabolism
3.88E-08	Proliferation/Metastasis
0.726426476	Metabolism
6.78E-17	Metabolism
0.002588294	Metabolism
1.88E-06	Metabolism
3.19E-11	Metabolism
1.84E-10	Metabolism
0.218479487	Metabolism
5.23E-07	Metabolism
0.004839498	TME
0.015512724	TME
0.221922665	TME
0.003960114	TME
0.000954962	TME
0.071002576	Metabolism
5.24E-16	Metabolism
1.84E-13	Proliferation/Metastasis
6.41E-12	Metabolism
0.185789294	Proliferation/Metastasis
0.003961342	Metabolism
0.006602221	TME
2.31E-07	Metabolism
1.36E-08	Metabolism
6.15E-09	Metabolism
0.030050304	Metabolism
0.027377793	TME
0.921711999	TME
0.123626945	Proliferation/Metastasis
0.096044748	Metabolism

0.065625712	Proliferation/Metastasis
3.71E-08	Proliferation/Metastasis
0.640186548	TME
0.257501595	TME
0.297308843	TME
0.018621141	TME
0.002504092	Metabolism
0.161836964	Proliferation/Metastasis
1.42E-12	Metabolism
9.79E-06	Metabolism
8.03E-10	Proliferation/Metastasis
2.00E-13	Proliferation/Metastasis
1.28E-16	Metabolism
4.78E-09	Metabolism
3.22E-06	Metabolism
5.31E-08	Metabolism
0.036721041	TME
3.45E-06	TME
0.303568845	TME
0.00506966	TME
1.30E-10	TME
0.000358954	Metabolism
0.607656469	Metabolism
0.001629892	Metabolism
0.461594196	Metabolism
0.145334763	Metabolism
2.72E-06	TME
7.47E-07	TME
6.02E-08	TME
0.885901503	TME
0.664895307	TME
6.31E-07	TME
3.12E-06	TME
0.527855419	TME
0.000329814	TME
1.34E-10	Proliferation/Metastasis
1.21E-05	Proliferation/Metastasis
0.043780435	Metabolism
0.661097249	Metabolism
3.02E-05	TME
0.001309831	Metabolism
0.484218193	Metabolism
0.017788803	TME

0.066871054	Proliferation/Metastasis
0.000195526	Proliferation/Metastasis
0.003335496	TME
1.76E-07	Metabolism
0.002096986	Metabolism
2.62E-07	Proliferation/Metastasis
1.91E-06	Proliferation/Metastasis
0.001217295	TME
0.15078863	TME
0.007706972	TME
1.06E-07	TME
0.006138552	Proliferation/Metastasis
0.928300523	TME
0.002197087	TME
5.13E-09	Metabolism
0.815629636	TME
0.080847067	TME
0.110706444	TME
0.147382796	TME
0.898280187	Metabolism
0.527838961	Metabolism
0.601258217	Metabolism
1.26E-05	TME
0.070835715	Metabolism
0.15828689	TME
0.046127103	TME
0.026045853	TME
0.250538227	TME
9.21E-05	TME
1.60E-07	Metabolism
3.89E-10	Proliferation/Metastasis
0.039282912	Metabolism
0.019494131	Proliferation/Metastasis
5.61E-07	Metabolism
0.009109386	Metabolism
7.18E-10	Metabolism
0.000460618	Metabolism
9.87E-05	Metabolism
1.92E-08	Metabolism
0.008907183	Metabolism
0.0320602	Metabolism
6.62E-08	Metabolism
6.00E-07	Metabolism

6.31E-07	Metabolism
5.24E-13	Metabolism
0.103703204	Metabolism
0.428903637	Metabolism
0.000179098	TME
0.218502716	Proliferation/Metastasis
2.73E-07	Metabolism
1.36E-12	Proliferation/Metastasis
6.90E-07	TME
4.24E-13	Proliferation/Metastasis
2.22E-06	Proliferation/Metastasis
1.40E-07	TME
2.13E-13	TME
2.20E-06	Metabolism
0.95225125	Metabolism
0.007035828	Proliferation/Metastasis
0.000857228	Proliferation/Metastasis
5.49E-06	Proliferation/Metastasis
9.83E-08	Metabolism
0.323354012	Metabolism
4.05E-07	Metabolism
6.97E-11	Proliferation/Metastasis
4.14E-07	TME
3.52E-10	TME
7.93E-06	Metabolism
0.010327779	Proliferation/Metastasis
0.049660109	Metabolism
0.000150101	TME
3.21E-07	TME
1.98E-05	TME
4.42E-05	TME
2.05E-09	Metabolism
1.33E-06	TME
7.17E-13	Proliferation/Metastasis
9.79E-06	TME
0.001366509	Proliferation/Metastasis
0.423508764	Proliferation/Metastasis
0.37259408	Metabolism
0.004696017	Proliferation/Metastasis
0.154533803	TME
0.000440679	Metabolism
0.34819129	TME
0.000747235	TME

6.15E-06	TME
0.709902811	TME
2.46E-07	TME
2.20E-07	TME
0.221959306	Metabolism
2.00E-10	TME
0.896022634	Metabolism
0.968756454	Metabolism
7.34E-06	Proliferation/Metastasis
0.000160351	Proliferation/Metastasis
0.000104429	Metabolism
2.57E-05	Metabolism
4.68E-08	Metabolism
0.450238027	Metabolism
5.74E-13	Proliferation/Metastasis
0.000847394	Proliferation/Metastasis
0.068692662	Metabolism
0.008118764	Metabolism
0.234581726	Metabolism
6.29E-06	TME
1.17E-11	Metabolism
0.278423529	Metabolism
0.835881357	Metabolism
0.08116243	Metabolism
7.70E-08	Proliferation/Metastasis
1.11E-05	Metabolism
0.275480166	Metabolism
0.272294076	Metabolism
0.447631984	Metabolism
0.134769963	Metabolism
0.381821004	Metabolism
0.445350522	Proliferation/Metastasis
4.96E-06	Metabolism
0.014531687	Metabolism
0.021554081	Proliferation/Metastasis
0.202008692	Metabolism
0.861814424	Metabolism
0.650312585	Metabolism
0.781253558	Metabolism
0.000167422	Metabolism
2.63E-05	Metabolism
1.58E-05	Metabolism
0.070391917	Metabolism

0.057570009	TME
0.041274837	TME
0.854120822	TME
0.129051389	TME
8.81E-06	TME
3.14E-08	Metabolism
0.737098576	Metabolism
0.329839031	Proliferation/Metastasis
8.05E-06	Metabolism
1.10E-09	Proliferation/Metastasis
8.69E-09	Metabolism
0.37364789	TME
4.62E-12	Metabolism
9.53E-05	Metabolism
2.38E-09	Metabolism
0.229716696	Metabolism
6.19E-10	TME
2.44E-08	TME
0.212551997	Proliferation/Metastasis
0.081007838	Metabolism
0.15705112	Proliferation/Metastasis
0.311388587	Proliferation/Metastasis
0.946161527	TME
0.028926399	TME
0.033035981	TME
0.00426085	TME
0.669737584	Metabolism
1.07E-05	Proliferation/Metastasis
0.501207637	Metabolism
0.038352259	Metabolism
0.009540901	Proliferation/Metastasis
0.064311735	Proliferation/Metastasis
0.370943767	Metabolism
0.105770407	Metabolism
0.066043152	Metabolism
0.295814857	Metabolism
0.023596581	TME
0.609463502	TME
0.092607868	TME
0.003655327	TME
0.002911214	TME
0.000465456	Metabolism
0.053788383	Metabolism

0.310829861	Metabolism
0.063895271	Metabolism
0.21619111	Metabolism
0.034462312	TME
0.274746205	TME
0.770357812	TME
0.041643795	TME
0.067299058	TME
0.024770466	TME
0.019677135	TME
0.00301247	TME
0.008582409	TME
0.000803068	Proliferation/Metastasis
0.600203986	Proliferation/Metastasis
0.272179593	Metabolism
0.059986461	Metabolism
0.013610547	TME
0.745580564	Metabolism
0.313323416	Metabolism
0.462470106	TME
0.001539821	Proliferation/Metastasis
0.002257323	Proliferation/Metastasis
0.164590059	TME
0.214237588	Metabolism
0.110498568	Metabolism
0.000386449	Proliferation/Metastasis
0.018557794	Proliferation/Metastasis
0.144354748	TME
0.307492871	TME
0.038460235	TME
0.022192276	TME
0.001032869	Proliferation/Metastasis
0.589228294	TME
0.187817061	TME
0.890439264	Metabolism
0.036054206	TME
0.373632543	TME
0.004946813	TME
0.006511347	TME
0.008335539	Metabolism
0.372298518	Metabolism
0.686655199	Metabolism
0.242572753	TME

0.464256306	Metabolism
0.217600889	TME
0.402974191	TME
0.008600238	TME
0.002487517	TME
0.993001609	TME
0.063381182	Metabolism
0.000642226	Proliferation/Metastasis
0.003230917	Metabolism
0.046993212	Proliferation/Metastasis
0.299288202	Metabolism
0.223133409	Metabolism
0.788350291	Metabolism
0.869724777	Metabolism
0.168902332	Metabolism
0.34696089	Metabolism
0.575356349	Metabolism
0.037945753	Metabolism
0.105813783	Metabolism
0.881096671	Metabolism
0.529272347	Metabolism
0.436323753	Metabolism
0.353591699	Metabolism
0.18603612	Metabolism
0.756165809	TME
0.020476968	Proliferation/Metastasis
0.001099291	Metabolism
0.544979828	Proliferation/Metastasis
0.017100564	TME
0.685242339	Proliferation/Metastasis
0.87179821	Proliferation/Metastasis
0.511907195	TME
0.890157703	TME
0.306101467	Metabolism
0.221155142	Metabolism
0.000566183	Proliferation/Metastasis
0.000488767	Proliferation/Metastasis
0.514871949	Proliferation/Metastasis
0.519233683	Metabolism
0.006044647	Metabolism
0.020130787	Metabolism
0.773090981	Proliferation/Metastasis
0.720579008	TME

0.862994338	TME
0.000420634	Metabolism
0.141048168	Proliferation/Metastasis
0.403414555	Metabolism
0.054406039	TME
0.298915728	TME
0.155568656	TME
0.141495879	TME
0.63985219	Metabolism
0.036661699	TME
0.268812733	Proliferation/Metastasis
0.236880983	TME
0.142707619	Proliferation/Metastasis
0.000281674	Proliferation/Metastasis
0.073624189	Metabolism
0.000470109	Proliferation/Metastasis
0.121611535	TME
0.398515711	Metabolism
0.031479016	TME
0.653151158	TME
0.247795625	TME
0.007079745	TME
0.000237142	TME
0.010126339	TME
0.006158111	Metabolism
0.353790144	TME
0.998665607	Metabolism
0.108096599	Metabolism
0.725677117	Proliferation/Metastasis
0.005170738	Proliferation/Metastasis
0.001807725	Metabolism
0.946406037	Metabolism
0.007881651	Metabolism
0.023061956	Metabolism
0.287732046	Proliferation/Metastasis
0.002608231	Proliferation/Metastasis
0.125255108	Metabolism
0.25354994	Metabolism
0.000573406	Metabolism
0.159047924	TME
0.654093165	Metabolism
0.594240585	Metabolism
0.097999707	Metabolism

0.028985354	Metabolism
2.32E-05	Proliferation/Metastasis
0.135229427	Metabolism
0.139213927	Metabolism
0.387010713	Metabolism
0.005921411	Metabolism
0.002601927	Metabolism
0.877506901	Metabolism
0.000448724	Proliferation/Metastasis
0.741903293	Metabolism
0.252831081	Metabolism
0.004060955	Proliferation/Metastasis
0.04550484	Metabolism
0.010557666	Metabolism
0.013564519	Metabolism
0.420755924	Metabolism
0.234917016	Metabolism
0.625745263	Metabolism
0.019103157	Metabolism
0.182541465	Metabolism
0.009501472	TME
0.027902647	TME
0.12601299	TME
0.009049817	TME
0.008704876	TME
0.830150538	Metabolism
0.020033971	Metabolism
0.020778606	Proliferation/Metastasis
0.848574577	Metabolism
0.448566127	Proliferation/Metastasis
0.435305783	Metabolism
0.557426285	TME
0.295203889	Metabolism
0.102829934	Metabolism
0.024250196	Metabolism
0.250240358	Metabolism
0.310127145	TME
0.186041627	TME
0.653808138	Proliferation/Metastasis
0.963235226	Metabolism
0.048911533	Proliferation/Metastasis
0.001455602	Proliferation/Metastasis
3.78E-08	TME

0.000843129	TME
0.020151757	TME
0.000952356	TME
0.760032715	Metabolism
0.847845402	Proliferation/Metastasis
1.53E-05	Metabolism
0.03888585	Metabolism
0.017732559	Proliferation/Metastasis
8.16E-15	Proliferation/Metastasis
3.07E-22	Metabolism
0.007897547	Metabolism
1.03E-08	Metabolism
0.214820813	Metabolism
0.008730338	TME
3.66E-20	TME
0.06105785	TME
0.001703096	TME
1.09E-37	TME
0.620045853	Metabolism
0.615277914	Metabolism
0.71077637	Metabolism
8.45E-05	Metabolism
2.09E-07	Metabolism
8.45E-08	TME
0.005714175	TME
4.15E-10	TME
3.09E-05	TME
0.088371612	TME
0.005160988	TME
0.008749097	TME
5.51E-07	TME
0.000471144	TME
6.07E-06	Proliferation/Metastasis
5.78E-16	Proliferation/Metastasis
0.000437189	Metabolism
0.140198129	Metabolism
5.37E-06	TME
0.937032213	Metabolism
0.403863702	Metabolism
5.61E-07	TME
0.42695024	Proliferation/Metastasis
9.79E-05	Proliferation/Metastasis
0.000864942	TME

1.58E-07	Metabolism
1.98E-12	Metabolism
6.25E-07	Proliferation/Metastasis
1.55E-11	Proliferation/Metastasis
0.061000411	TME
4.56E-08	TME
0.000959518	TME
0.02074357	TME
4.77E-06	Proliferation/Metastasis
0.008175687	TME
3.55E-08	TME
1.51E-11	Metabolism
0.000236252	TME
3.72E-06	TME
0.000583645	TME
0.732250767	TME
0.092192749	Metabolism
0.264168201	Metabolism
0.006131487	Metabolism
7.01E-07	TME
0.005622479	Metabolism
5.84E-05	TME
0.932197772	TME
1.10E-05	TME
8.68E-08	TME
0.455895308	TME
0.018221547	Metabolism
2.79E-09	Proliferation/Metastasis
0.002298301	Metabolism
0.018555086	Proliferation/Metastasis
0.045601981	Metabolism
2.45E-05	Metabolism
6.36E-11	Metabolism
0.654342693	Metabolism
0.553018574	Metabolism
2.94E-07	Metabolism
0.017064561	Metabolism
0.017949519	Metabolism
8.65E-08	Metabolism
0.000286269	Metabolism
2.95E-18	Metabolism
5.85E-09	Metabolism
2.86E-09	Metabolism

0.024532828	Metabolism
0.004933268	TME
0.959807432	Proliferation/Metastasis
2.04E-05	Metabolism
1.47E-07	Proliferation/Metastasis
0.000258061	TME
6.42E-19	Proliferation/Metastasis
1.27E-11	Proliferation/Metastasis
0.0018086	TME
7.15E-13	TME
0.005092906	Metabolism
0.399286387	Metabolism
0.80712526	Proliferation/Metastasis
0.00043865	Proliferation/Metastasis
1.76E-16	Proliferation/Metastasis
1.72E-13	Metabolism
0.062494347	Metabolism
1.64E-13	Metabolism
0.000327132	Proliferation/Metastasis
0.013868721	TME
0.003745578	TME
0.704383169	Metabolism
1.97E-10	Proliferation/Metastasis
0.627209439	Metabolism
0.531590365	TME
0.085872912	TME
0.000349652	TME
2.82E-08	TME
1.74E-11	Metabolism
0.00025295	TME
5.63E-06	Proliferation/Metastasis
6.76E-17	TME
0.271215765	Proliferation/Metastasis
0.106156996	Proliferation/Metastasis
0.682418706	Metabolism
0.000539152	Proliferation/Metastasis
0.000637562	TME
2.11E-07	Metabolism
0.000679337	TME
0.01357553	TME
0.012781066	TME
3.44E-06	TME
0.750952261	TME

0.004148953	TME
1.34E-05	Metabolism
3.67E-21	TME
1.64E-08	Metabolism
0.022636838	Metabolism
7.27E-05	Proliferation/Metastasis
0.001010561	Proliferation/Metastasis
0.188178579	Metabolism
0.051062572	Metabolism
0.854652701	Metabolism
0.009160899	Metabolism
6.12E-19	Proliferation/Metastasis
0.351246784	Proliferation/Metastasis
0.00222788	Metabolism
0.015770125	Metabolism
0.959968831	Metabolism
5.65E-09	TME
2.21E-11	Metabolism
0.003008962	Metabolism
0.007019632	Metabolism
0.016847029	Metabolism
0.59815637	Proliferation/Metastasis
0.106477424	Metabolism
7.87E-07	Metabolism
4.33E-07	Metabolism
0.611600519	Metabolism
0.24028581	Metabolism
0.037825289	Metabolism
0.187793327	Proliferation/Metastasis
8.53E-17	Metabolism
1.50E-06	Metabolism
0.130277524	Proliferation/Metastasis
0.001865843	Metabolism
0.00470524	Metabolism
0.967203604	Metabolism
0.414338097	Metabolism
0.639532761	Metabolism
5.51E-11	Metabolism
0.000804844	Metabolism
0.004917412	Metabolism
6.00E-07	TME
4.28E-06	TME
4.31E-10	TME

2.35E-09	TME
7.11E-05	TME
0.040889746	Metabolism
0.016053961	Metabolism
0.781421235	Proliferation/Metastasis
0.937308417	Metabolism
1.03E-16	Proliferation/Metastasis
0.259216617	Metabolism
2.97E-09	TME
1.19E-09	Metabolism
0.705296736	Metabolism
1.25E-07	Metabolism
4.11E-05	Metabolism
2.45E-14	TME
2.49E-08	TME
2.05E-11	Proliferation/Metastasis
0.030915256	Metabolism
0.001550393	Proliferation/Metastasis
0.607023611	Proliferation/Metastasis
0.185591243	TME
0.004602305	TME
0.943838401	TME
0.003475385	TME
0.60559708	Metabolism
0.007208756	Proliferation/Metastasis
3.22E-14	Metabolism
0.001447032	Metabolism
0.013598891	Proliferation/Metastasis
0.475426532	Proliferation/Metastasis
6.02E-16	Metabolism
0.000373552	Metabolism
0.015209789	Metabolism
0.140570635	Metabolism
0.153763705	TME
0.112894472	TME
0.082774888	TME
0.028704501	TME
0.338834665	TME
0.050048409	Metabolism
0.00014783	Metabolism
0.109436035	Metabolism
0.090083307	Metabolism
0.413228308	Metabolism

4.95E-11	TME
0.000739415	TME
0.032176264	TME
0.010766774	TME
0.314903005	TME
0.0831266	TME
0.09415169	TME
0.007642928	TME
0.025402185	TME
0.002978425	Proliferation/Metastasis
8.36E-32	Proliferation/Metastasis
0.185770292	Metabolism
0.043065662	Metabolism
6.45E-07	TME
0.100908647	Metabolism
1.30E-05	Metabolism
0.761918536	TME
1.99E-12	Proliferation/Metastasis
0.031853938	Proliferation/Metastasis
1.21E-08	TME
3.87E-05	Metabolism
1.02E-17	Metabolism
0.031968318	Proliferation/Metastasis
0.011159991	Proliferation/Metastasis
0.038510338	TME
0.352154031	TME
0.758886897	TME
0.376835536	TME
8.70E-10	Proliferation/Metastasis
5.59E-06	TME
0.646826722	TME
0.000655746	Metabolism
0.026270312	TME
0.122549389	TME
8.81E-06	TME
4.71E-07	TME
0.743713704	Metabolism
0.031983532	Metabolism
0.011566758	Metabolism
0.036286588	TME
0.000154011	Metabolism
0.73995634	TME
0.799997171	TME

0.058034197	TME
2.70E-09	TME
0.107277362	TME
4.31E-10	Metabolism
1.06E-05	Proliferation/Metastasis
0.002942681	Metabolism
0.016995678	Proliferation/Metastasis
0.001485203	Metabolism
0.000269874	Metabolism
1.54E-14	Metabolism
1.08E-05	Metabolism
0.015006238	Metabolism
5.27E-07	Metabolism
0.590347441	Metabolism
0.469479196	Metabolism
0.083493457	Metabolism
0.012463275	Metabolism
0.113203986	Metabolism
0.279847476	Metabolism
0.370831353	Metabolism
0.005204896	Metabolism
0.978125681	TME
0.000137554	Proliferation/Metastasis
6.10E-06	Metabolism
0.09750263	Proliferation/Metastasis
0.001338472	TME
0.738701838	Proliferation/Metastasis
0.016080991	Proliferation/Metastasis
0.039340411	TME
0.048897848	TME
1.23E-13	Metabolism
2.60E-21	Metabolism
0.337329514	Proliferation/Metastasis
0.086354574	Proliferation/Metastasis
0.055983198	Proliferation/Metastasis
2.52E-15	Metabolism
1.84E-06	Metabolism
0.684797419	Metabolism
0.057311911	Proliferation/Metastasis
0.524059456	TME
0.690354866	TME
2.42E-07	Metabolism
0.002176129	Proliferation/Metastasis

2.25E-16	Metabolism
0.023816022	TME
0.001194467	TME
0.794167804	TME
0.000109912	TME
1.92E-07	Metabolism
0.000311602	TME
3.33E-15	Proliferation/Metastasis
0.58729556	TME
0.853443202	Proliferation/Metastasis
0.001743692	Proliferation/Metastasis
4.93E-18	Metabolism
0.564745725	Proliferation/Metastasis
0.961462518	TME
0.001051023	Metabolism
6.38E-05	TME
0.00096048	TME
0.002476458	TME
0.030896061	TME
0.044356196	TME
0.457510761	TME
0.405319337	Metabolism
0.720522199	TME
2.94E-05	Metabolism
0.574894846	Metabolism
0.000413389	Proliferation/Metastasis
0.124059883	Proliferation/Metastasis
0.504485828	Metabolism
0.000537797	Metabolism
1.28E-15	Metabolism
3.72E-16	Metabolism
0.000227606	Proliferation/Metastasis
0.001917368	Proliferation/Metastasis
0.590547296	Metabolism
0.198167957	Metabolism
0.458271257	Metabolism
0.598015478	TME
7.89E-14	Metabolism
2.18E-06	Metabolism
0.374052482	Metabolism
7.15E-21	Metabolism
0.015354328	Proliferation/Metastasis
8.00E-05	Metabolism

0.00060598	Metabolism
0.005961791	Metabolism
2.43E-05	Metabolism
1.38E-07	Metabolism
0.007815335	Metabolism
0.00079858	Proliferation/Metastasis
0.000192045	Metabolism
0.002432588	Metabolism
1.35E-15	Proliferation/Metastasis
1.46E-05	Metabolism
2.16E-30	Metabolism
6.78E-11	Metabolism
0.557809794	Metabolism
0.007334224	Metabolism
0.000663718	Metabolism
0.000539327	Metabolism
0.016460793	Metabolism
0.172366268	TME
0.156661308	TME
0.595740036	TME
0.014697526	TME
0.023183182	TME
3.97E-06	Metabolism
0.395442651	Metabolism
1.16E-12	Proliferation/Metastasis
0.002232308	Metabolism
0.000262188	Proliferation/Metastasis
0.00090413	Metabolism
0.075658372	TME
3.83E-14	Metabolism
0.000168552	Metabolism
0.006223882	Metabolism
0.489098404	Metabolism
0.800864123	TME
0.038017485	TME
0.041638109	Proliferation/Metastasis
0.028260051	Metabolism
0.172905833	Proliferation/Metastasis
0.550619218	Proliferation/Metastasis
4.12E-06	TME
0.012890293	TME
0.307248106	TME
0.153386152	TME

1.05E-13	Metabolism
1.39E-13	Proliferation/Metastasis
0.136985112	Metabolism
8.15E-06	Metabolism
1.38E-07	Proliferation/Metastasis
0.244585686	Proliferation/Metastasis
0.010680585	Metabolism
1.72E-08	Metabolism
8.94E-08	Metabolism
0.256424843	Metabolism
0.939093016	TME
0.075079472	TME
0.393637203	TME
0.007250431	TME
0.046471823	TME
0.078602359	Metabolism
7.31E-05	Metabolism
0.009878406	Metabolism
0.090259287	Metabolism
0.082247611	Metabolism
0.744513619	TME
0.087802763	TME
0.191389633	TME
0.598691436	TME
0.407871556	TME
0.180683678	TME
0.403412059	TME
0.081061646	TME
0.013549777	TME
2.46E-07	Proliferation/Metastasis
0.020451415	Proliferation/Metastasis
9.32E-06	Metabolism
1.91E-12	Metabolism
0.003517596	TME
1.92E-05	Metabolism
0.045372543	Metabolism
0.99123422	TME
1.66E-15	Proliferation/Metastasis
1.03E-12	Proliferation/Metastasis
0.95737886	TME
0.59848239	Metabolism
1.75E-14	Metabolism
2.40E-09	Proliferation/Metastasis

0.172074996	Proliferation/Metastasis
0.139858549	TME
0.778968527	TME
0.49746148	TME
0.399583659	TME
2.45E-08	Proliferation/Metastasis
0.979877734	TME
0.823816751	TME
0.198719286	Metabolism
0.457274164	TME
0.4837429	TME
0.186688559	TME
2.43E-20	TME
0.002708672	Metabolism
0.004366028	Metabolism
2.38E-13	Metabolism
0.01303908	TME
6.55E-11	Metabolism
0.659975677	TME
0.968075688	TME
0.559240451	TME
0.000514016	TME
0.017026013	TME
2.87E-05	Metabolism
3.05E-06	Proliferation/Metastasis
8.74E-08	Metabolism
0.07547765	Proliferation/Metastasis
5.04E-08	Metabolism
3.89E-06	Metabolism
0.001197115	Metabolism
1.31E-06	Metabolism
1.52E-08	Metabolism
2.99E-07	Metabolism
0.02299694	Metabolism
0.041954629	Metabolism
0.048600873	Metabolism
0.021505773	Metabolism
0.014289492	Metabolism
0.004376664	Metabolism
0.128564556	Metabolism
4.70E-12	Metabolism
0.795237619	TME
0.485512026	Proliferation/Metastasis

0.000366773	Metabolism
0.000216762	Proliferation/Metastasis
0.673060887	TME
0.043962984	Proliferation/Metastasis
0.469875368	Proliferation/Metastasis
0.655213056	TME
0.002368147	TME
0.077978414	Metabolism
0.048892142	Metabolism
1.90E-08	Proliferation/Metastasis
1.11E-25	Proliferation/Metastasis
0.254395703	Proliferation/Metastasis
0.009108282	Metabolism
0.064938117	Metabolism
1.49E-05	Metabolism
0.013776568	Proliferation/Metastasis
0.058944825	TME
0.055551188	TME
7.91E-12	Metabolism
0.460097573	Proliferation/Metastasis
0.020174425	Metabolism
0.964719078	TME
0.413874468	TME
0.484385665	TME
0.00657636	TME
0.295445265	Metabolism
0.129091108	TME
0.883890976	Proliferation/Metastasis
0.57413186	TME
0.251953479	Proliferation/Metastasis
9.26E-12	Proliferation/Metastasis
0.685404362	Metabolism
2.88E-17	Proliferation/Metastasis
0.596809618	TME
0.033281642	Metabolism
0.748633336	TME
0.556639225	TME
0.0828141	TME
0.136981069	TME
5.72E-05	TME
0.004739146	TME
4.39E-05	Metabolism
0.037562185	TME

1.32E-07	Metabolism
2.36E-05	Metabolism
0.682212536	Proliferation/Metastasis
0.326576556	Proliferation/Metastasis
1.74E-16	Metabolism
1.18E-06	Metabolism
1.10E-06	Metabolism
4.21E-11	Metabolism
5.78E-05	Proliferation/Metastasis
0.033998626	Proliferation/Metastasis
0.496333116	Metabolism
0.110110065	Metabolism
2.87E-05	Metabolism
0.508791157	TME
0.089958382	Metabolism
2.52E-05	Metabolism
0.47625002	Metabolism
0.035652713	Metabolism
0.011979624	Proliferation/Metastasis
2.46E-05	Metabolism
0.053204334	Metabolism
3.61E-06	Metabolism
8.22E-31	Metabolism
5.97E-28	Metabolism
3.26E-15	Metabolism
1.45E-11	Proliferation/Metastasis
0.21056002	Metabolism
4.80E-10	Metabolism
4.50E-06	Proliferation/Metastasis
6.69E-10	Metabolism
0.109463366	Metabolism
0.343970803	Metabolism
0.93954237	Metabolism
8.08E-17	Metabolism
0.430937648	Metabolism
0.772526315	Metabolism
7.66E-07	Metabolism
0.681450247	TME
0.304597193	TME
0.635365668	TME
0.99212379	TME
0.018698542	TME
6.01E-05	Metabolism

1.58E-11	Metabolism
0.4858718	Proliferation/Metastasis
0.068588874	Metabolism
0.384639168	Proliferation/Metastasis
3.65E-12	Metabolism
1.95E-09	TME
0.142892933	Metabolism
8.21E-07	Metabolism
0.013820297	Metabolism
0.0001227	Metabolism
0.58484684	TME
0.030019323	TME
0.38110336	Proliferation/Metastasis
6.10E-07	Metabolism
2.18E-07	Proliferation/Metastasis
0.000142902	Proliferation/Metastasis
0.848553819	TME
0.374362804	TME
0.127661996	TME
0.761855629	TME
3.15E-07	Metabolism
0.000653766	Proliferation/Metastasis
0.596174563	Metabolism
0.723943828	Metabolism
1.40E-19	Proliferation/Metastasis
0.299452376	Proliferation/Metastasis
3.78E-06	Metabolism
0.500117547	Metabolism
4.93E-13	Metabolism
1.80E-06	Metabolism
0.994795042	TME
0.016087097	TME
0.000131872	TME
0.006541933	TME
0.308828027	TME
0.000603273	Metabolism
0.127686109	Metabolism
0.005478801	Metabolism
0.196033573	Metabolism
0.093909553	Metabolism
2.56E-07	TME
1.86E-10	TME
0.812775078	TME

0.239002913	TME
0.680604596	TME
0.068105939	TME
0.122554808	TME
0.54424097	TME
0.601387644	TME
0.038129238	Proliferation/Metastasis
0.001523867	Proliferation/Metastasis
0.000675663	Metabolism
0.016309074	Metabolism
0.03796438	TME
0.002177338	Metabolism
0.000909026	Metabolism
0.235069553	TME
2.36E-10	Proliferation/Metastasis
5.17E-11	Proliferation/Metastasis
0.007403881	TME
0.001793228	Metabolism
0.002000844	Metabolism
0.001046699	Proliferation/Metastasis
0.003483278	Proliferation/Metastasis
0.003129851	TME
0.276338881	TME
0.002540973	TME
8.55E-06	TME
0.016629224	Proliferation/Metastasis
1.23E-09	TME
0.546297543	TME
0.21613072	Metabolism
4.97E-05	TME
0.002047254	TME
0.764923006	TME
4.83E-16	TME
0.004577302	Metabolism
0.008643925	Metabolism
0.000128432	Metabolism
7.21E-07	TME
0.46244107	Metabolism
0.034357955	TME
0.550250484	TME
0.273755545	TME
0.012596066	TME
0.001714208	TME

2.83E-07	Metabolism
0.087021347	Proliferation/Metastasis
6.59E-12	Metabolism
0.00659524	Proliferation/Metastasis
0.697524141	Metabolism
0.087892324	Metabolism
1.19E-05	Metabolism
1.14E-07	Metabolism
5.04E-05	Metabolism
7.85E-16	Metabolism
0.000803497	Metabolism
0.151126161	Metabolism
2.47E-05	Metabolism
1.78E-06	Metabolism
0.885187599	Metabolism
0.251187085	Metabolism
0.043145206	Metabolism
4.91E-05	Metabolism
0.091286789	TME
0.276706589	Proliferation/Metastasis
0.459878072	Metabolism
0.348215354	Proliferation/Metastasis
0.777556037	TME
0.269413644	Proliferation/Metastasis
0.18861417	Proliferation/Metastasis
0.594582537	TME
0.000551316	TME
0.348307107	Metabolism
0.000979804	Metabolism
0.015394752	Proliferation/Metastasis
0.00158591	Proliferation/Metastasis
0.000666224	Proliferation/Metastasis
0.738343502	Metabolism
0.001750578	Metabolism
0.034588061	Metabolism
0.000231155	Proliferation/Metastasis
0.130255662	TME
0.742900308	TME
3.76E-08	Metabolism
0.017853817	Proliferation/Metastasis
0.001902453	Metabolism
0.17033944	TME
0.232591291	TME

0.042119246	TME
1.59E-09	TME
0.718801727	Metabolism
9.42E-07	TME
0.301229192	Proliferation/Metastasis
0.000365517	TME
0.86057502	Proliferation/Metastasis
0.037178307	Proliferation/Metastasis
1.97E-22	Metabolism
0.028799153	Proliferation/Metastasis
0.563687064	TME
0.017197663	Metabolism
0.093749291	TME
0.02607146	TME
0.045033342	TME
0.588831494	TME
6.81E-08	TME
0.000577407	TME
2.02E-12	Metabolism
0.000418999	TME
0.001289235	Metabolism
0.210355131	Metabolism
0.020851546	Proliferation/Metastasis
0.001100731	Proliferation/Metastasis
0.000708165	Metabolism
0.00170328	Metabolism
4.53E-21	Metabolism
5.89E-05	Metabolism
0.544731494	Proliferation/Metastasis
1.40E-15	Proliferation/Metastasis
0.00041352	Metabolism
0.111179765	Metabolism
2.19E-07	Metabolism
1.89E-06	TME
0.007263975	Metabolism
0.018759914	Metabolism
0.947611981	Metabolism
0.281834543	Metabolism
0.007979088	Proliferation/Metastasis
0.103081717	Metabolism
0.601730134	Metabolism
0.961785152	Metabolism
2.05E-10	Metabolism

1.11E-10	Metabolism
0.000147635	Metabolism
4.09E-08	Proliferation/Metastasis
0.913680364	Metabolism
0.790498874	Metabolism
5.05E-21	Proliferation/Metastasis
0.43712017	Metabolism
0.000172801	Metabolism
0.000655243	Metabolism
0.071973764	Metabolism
0.101120956	Metabolism
0.033435017	Metabolism
1.45E-06	Metabolism
0.001818646	Metabolism
0.01742851	TME
0.367163633	TME
1.12E-06	TME
0.013097257	TME
0.082743119	TME
0.04233444	Metabolism
0.34290441	Metabolism
0.262073857	Proliferation/Metastasis
0.000818796	Metabolism
0.000616039	Proliferation/Metastasis
0.978055997	Metabolism
0.003954611	TME
0.145242317	Metabolism
0.001645095	Metabolism
0.028782359	Metabolism
0.535445667	Metabolism
0.454472292	TME
0.020795405	TME
0.660170257	Proliferation/Metastasis
2.31E-07	Metabolism
0.006893746	Proliferation/Metastasis
0.010210438	Proliferation/Metastasis
1.62E-12	TME
1.03E-06	TME
4.35E-09	TME
2.65E-13	TME
1.66E-07	Metabolism
1.87E-10	Proliferation/Metastasis
0.000859908	Metabolism

7.72E-11	Metabolism
0.281341784	Proliferation/Metastasis
1.56E-16	Proliferation/Metastasis
4.60E-22	Metabolism
1.08E-07	Metabolism
3.34E-18	Metabolism
0.019269396	Metabolism
0.000219242	TME
7.17E-21	TME
1.97E-09	TME
0.01092534	TME
1.09E-18	TME
0.081632598	Metabolism
0.0154463	Metabolism
0.025123048	Metabolism
0.268559883	Metabolism
0.000125205	Metabolism
6.03E-06	TME
0.131275838	TME
4.41E-19	TME
1.79E-10	TME
5.20E-06	TME
8.36E-08	TME
3.05E-08	TME
6.38E-18	TME
1.11E-09	TME
0.394065768	Proliferation/Metastasis
1.77E-09	Proliferation/Metastasis
0.112683524	Metabolism
0.012510857	Metabolism
3.23E-14	TME
0.711038957	Metabolism
0.001205318	Metabolism
3.98E-19	TME
0.000362536	Proliferation/Metastasis
0.214409786	Proliferation/Metastasis
1.98E-09	TME
0.006005986	Metabolism
2.75E-19	Metabolism
0.550454504	Proliferation/Metastasis
9.51E-12	Proliferation/Metastasis
0.00027644	TME
1.58E-19	TME

6.69E-08	TME
0.000290102	TME
0.145900037	Proliferation/Metastasis
0.088904938	TME
2.02E-19	TME
1.10E-07	Metabolism
8.00E-12	TME
3.20E-14	TME
8.26E-12	TME
0.15581548	TME
0.698140893	Metabolism
0.725721678	Metabolism
0.000269705	Metabolism
0.001792678	TME
0.003342849	Metabolism
4.35E-14	TME
0.00629766	TME
2.87E-13	TME
8.09E-13	TME
0.000106553	TME
1.02E-12	Metabolism
0.120032975	Proliferation/Metastasis
1.57E-19	Metabolism
0.764554676	Proliferation/Metastasis
3.95E-09	Metabolism
2.04E-06	Metabolism
1.83E-15	Metabolism
1.94E-09	Metabolism
7.08E-08	Metabolism
2.38E-11	Metabolism
0.017194438	Metabolism
1.32E-10	Metabolism
8.26E-07	Metabolism
2.35E-10	Metabolism
1.65E-20	Metabolism
2.03E-11	Metabolism
8.32E-06	Metabolism
0.017491052	Metabolism
1.14E-10	TME
0.209648442	Proliferation/Metastasis
0.004620568	Metabolism
2.38E-23	Proliferation/Metastasis
1.18E-10	TME

5.30E-37	Proliferation/Metastasis
7.40E-29	Proliferation/Metastasis
1.80E-15	TME
3.40E-22	TME
0.476603741	Metabolism
6.58E-05	Metabolism
1.38E-05	Proliferation/Metastasis
0.765991365	Proliferation/Metastasis
1.71E-20	Proliferation/Metastasis
0.000450795	Metabolism
0.003689492	Metabolism
1.19E-05	Metabolism
4.95E-13	Proliferation/Metastasis
3.92E-13	TME
9.37E-13	TME
0.319408577	Metabolism
3.05E-17	Proliferation/Metastasis
0.004226888	Metabolism
0.000223849	TME
2.11E-07	TME
0.005721202	TME
3.11E-08	TME
1.44E-08	Metabolism
0.000233441	TME
0.079021039	Proliferation/Metastasis
2.59E-27	TME
0.084240037	Proliferation/Metastasis
3.08E-05	Proliferation/Metastasis
0.886418942	Metabolism
0.528181081	Proliferation/Metastasis
2.50E-12	TME
0.422630389	Metabolism
3.94E-11	TME
0.005380569	TME
0.255143013	TME
5.19E-16	TME
0.00475919	TME
1.03E-06	TME
1.24E-15	Metabolism
1.05E-25	TME
2.90E-08	Metabolism
0.010390796	Metabolism
7.71E-20	Proliferation/Metastasis

0.00017852	Proliferation/Metastasis
0.016426366	Metabolism
1.92E-06	Metabolism
0.025751687	Metabolism
8.04E-11	Metabolism
8.51E-38	Proliferation/Metastasis
0.023789156	Proliferation/Metastasis
2.41E-05	Metabolism
1.15E-05	Metabolism
8.36E-11	Metabolism
7.97E-05	TME
1.45E-13	Metabolism
2.41E-09	Metabolism
0.005835175	Metabolism
1.23E-05	Metabolism
2.75E-12	Proliferation/Metastasis
5.10E-12	Metabolism
0.000159692	Metabolism
0.029453393	Metabolism
0.001259036	Metabolism
0.000417168	Metabolism
0.029565688	Metabolism
0.143983249	Proliferation/Metastasis
5.12E-09	Metabolism
6.70E-11	Metabolism
0.603896337	Proliferation/Metastasis
0.017034017	Metabolism
0.012953438	Metabolism
0.032384593	Metabolism
1.05E-06	Metabolism
0.246507858	Metabolism
6.68E-06	Metabolism
0.063795058	Metabolism
0.378577047	Metabolism
1.50E-12	TME
1.94E-17	TME
6.21E-18	TME
4.42E-15	TME
2.63E-09	TME
0.137828444	Metabolism
0.572923281	Metabolism
0.716668169	Proliferation/Metastasis
0.114651324	Metabolism

2.01E-28	Proliferation/Metastasis
0.001281115	Metabolism
0.009231194	TME
4.13E-07	Metabolism
0.031953352	Metabolism
1.18E-10	Metabolism
0.312470847	Metabolism
6.51E-12	TME
0.079733412	TME
9.32E-23	Proliferation/Metastasis
7.97E-10	Metabolism
0.008184952	Proliferation/Metastasis
0.032037849	Proliferation/Metastasis
0.106613733	TME
0.390294675	TME
0.208933519	TME
0.874469983	TME
3.27E-06	Metabolism
0.000521915	Proliferation/Metastasis
5.94E-06	Metabolism
0.18149051	Metabolism
2.21E-11	Proliferation/Metastasis
0.371192429	Proliferation/Metastasis
0.000586607	Metabolism
0.364571887	Metabolism
2.19E-07	Metabolism
0.154433363	Metabolism
0.074378654	TME
0.005806302	TME
0.127209286	TME
0.044612908	TME
0.051014292	TME
0.159308617	Metabolism
0.003579395	Metabolism
0.000313296	Metabolism
0.790116868	Metabolism
0.658599851	Metabolism
0.135846417	TME
0.000238622	TME
0.317966235	TME
0.672399697	TME
0.064429956	TME
0.025187822	TME

0.060442714	TME
0.652193159	TME
0.573878049	TME
4.44E-16	Proliferation/Metastasis
9.91E-09	Proliferation/Metastasis
7.85E-11	Metabolism
0.000189722	Metabolism
0.607425951	TME
5.36E-09	Metabolism
1.55E-06	Metabolism
0.293111061	TME
3.97E-06	Proliferation/Metastasis
1.47E-15	Proliferation/Metastasis
0.374413266	TME
9.93E-11	Metabolism
0.494910871	Metabolism
9.60E-17	Proliferation/Metastasis
0.1166177	Proliferation/Metastasis
0.510643412	TME
0.749937986	TME
0.264245383	TME
0.031826405	TME
4.36E-10	Proliferation/Metastasis
0.416734373	TME
0.514170194	TME
0.00045328	Metabolism
0.243443967	TME
0.833415894	TME
0.425942733	TME
0.074463642	TME
0.052941099	Metabolism
0.089029647	Metabolism
6.36E-06	Metabolism
0.004736782	TME
0.803247681	Metabolism
0.792083442	TME
0.538578782	TME
0.198038434	TME
0.876240029	TME
0.282390939	TME
0.172321152	Metabolism
6.21E-18	Proliferation/Metastasis
0.018648315	Metabolism

0.344226296	Proliferation/Metastasis
0.858001519	Metabolism
0.955523627	Metabolism
0.005161606	Metabolism
0.018090249	Metabolism
0.000583217	Metabolism
0.720570508	Metabolism
0.929578502	Metabolism
0.493477308	Metabolism
0.218735859	Metabolism
0.150054155	Metabolism
0.791034066	Metabolism
0.100019732	Metabolism
0.640591522	Metabolism
0.000160537	Metabolism
0.175360843	TME
0.662126291	Proliferation/Metastasis
7.84E-07	Metabolism
0.000269564	Proliferation/Metastasis
0.142123181	TME
0.690217061	Proliferation/Metastasis
0.522075605	Proliferation/Metastasis
0.354322474	TME
0.016673218	TME
1.52E-05	Metabolism
0.003982856	Metabolism
7.27E-11	Proliferation/Metastasis
2.17E-12	Proliferation/Metastasis
0.097793995	Proliferation/Metastasis
2.46E-10	Metabolism
0.000243551	Metabolism
1.57E-06	Metabolism
0.5858263	Proliferation/Metastasis
0.769831262	TME
0.895983219	TME
0.301800907	Metabolism
0.001850912	Proliferation/Metastasis
6.19E-06	Metabolism
0.7221528	TME
0.042569128	TME
0.102100543	TME
0.032550352	TME
8.35E-05	Metabolism

0.943435868	TME
7.67E-17	Proliferation/Metastasis
0.122400312	TME
0.079340922	Proliferation/Metastasis
6.08E-10	Proliferation/Metastasis
0.419706233	Metabolism
1.51E-11	Proliferation/Metastasis
0.540481663	TME
0.003914086	Metabolism
0.286436347	TME
0.147578545	TME
0.006734724	TME
0.470698997	TME
0.005097772	TME
0.017830376	TME
0.001255562	Metabolism
0.006223691	TME
0.000213925	Metabolism
0.654563565	Metabolism
0.649464349	Proliferation/Metastasis
0.290977586	Proliferation/Metastasis
3.19E-12	Metabolism
0.055144521	Metabolism
0.076015897	Metabolism
0.247978527	Metabolism
0.107528474	Proliferation/Metastasis
0.004106834	Proliferation/Metastasis
0.518413557	Metabolism
0.495616625	Metabolism
6.87E-09	Metabolism
0.004375157	TME
0.004971853	Metabolism
0.473802098	Metabolism
0.247047295	Metabolism
0.011535698	Metabolism
3.23E-08	Proliferation/Metastasis
0.048804328	Metabolism
2.82E-09	Metabolism
0.0013253	Metabolism
3.43E-06	Metabolism
9.39E-07	Metabolism
8.97E-07	Metabolism
0.468026451	Proliferation/Metastasis

0.000264122	Metabolism
0.536865836	Metabolism
0.937815893	Proliferation/Metastasis
0.000308547	Metabolism
4.13E-07	Metabolism
0.000657519	Metabolism
0.692392098	Metabolism
0.003145103	Metabolism
6.51E-06	Metabolism
0.797382837	Metabolism
0.002374172	Metabolism
0.014188368	TME
0.265955018	TME
0.004227819	TME
0.006886058	TME
0.09797359	TME
0.000281388	Metabolism
2.13E-05	Metabolism
0.001581247	Proliferation/Metastasis
0.546706304	Metabolism
0.616506685	Proliferation/Metastasis
0.119080249	Metabolism
0.790503531	TME
0.000118824	Metabolism
0.046462882	Metabolism
0.932205224	Metabolism
0.011290517	Metabolism
0.073571242	TME
0.016600706	TME
0.002290413	Proliferation/Metastasis
5.68E-07	Metabolism
0.465793154	Proliferation/Metastasis
0.969611181	Proliferation/Metastasis
0.010875157	TME
0.60451861	TME
0.697991256	TME
0.774087161	TME
0.004648606	Metabolism
0.945398934	Proliferation/Metastasis
0.634644592	Metabolism
0.833432326	Metabolism
0.704302021	Proliferation/Metastasis
0.392269057	Proliferation/Metastasis

0.130532337	Metabolism
0.701391704	Metabolism
0.151281282	Metabolism
0.294564017	Metabolism
0.909765703	TME
0.086573105	TME
0.546323272	TME
0.908509208	TME
0.104185212	TME
0.164653715	Metabolism
0.629905123	Metabolism
0.635804978	Metabolism
0.222848135	Metabolism
0.451556911	Metabolism
0.234407245	TME
0.902760268	TME
0.949462188	TME
0.810952978	TME
0.643260108	TME
0.721556301	TME
0.74182078	TME
0.835469936	TME
0.919648246	TME
0.158269489	Proliferation/Metastasis
1.45E-05	Proliferation/Metastasis
0.069580422	Metabolism
0.133593086	Metabolism
0.061414834	TME
0.497823421	Metabolism
0.001423186	Metabolism
0.856400994	TME
0.186004417	Proliferation/Metastasis
0.461644365	Proliferation/Metastasis
0.322177824	TME
0.648864082	Metabolism
0.37460929	Metabolism
0.147354909	Proliferation/Metastasis
0.24166666	Proliferation/Metastasis
0.608589012	TME
0.944074387	TME
0.721170313	TME
0.421374161	TME
0.032165921	Proliferation/Metastasis

0.231599515	TME
0.780047611	TME
0.047595414	Metabolism
0.656354497	TME
0.763141768	TME
0.768091746	TME
0.830401792	TME
0.075173759	Metabolism
0.007098559	Metabolism
0.711972013	Metabolism
0.116858095	TME
0.513746902	Metabolism
0.668108876	TME
0.739033476	TME
0.660159776	TME
0.323956689	TME
0.639838543	TME
0.621638514	Metabolism
0.051025169	Proliferation/Metastasis
0.594307759	Metabolism
0.018865937	Proliferation/Metastasis
0.734831505	Metabolism
0.160897684	Metabolism
0.451116893	Metabolism
0.439331224	Metabolism
0.975366877	Metabolism
0.03240759	Metabolism
0.783657913	Metabolism
0.007667101	Metabolism
0.367061772	Metabolism
0.336477412	Metabolism
0.558852013	Metabolism
0.643218651	Metabolism
0.862759897	Metabolism
0.078413273	Metabolism
0.483421932	TME
0.917663267	Proliferation/Metastasis
0.835020811	Metabolism
0.481386358	Proliferation/Metastasis
0.717435345	TME
0.404441103	Proliferation/Metastasis
0.771109665	Proliferation/Metastasis
0.418288764	TME

0.469922795	TME
0.894153356	Metabolism
0.001906787	Metabolism
0.835499996	Proliferation/Metastasis
0.017947327	Proliferation/Metastasis
0.210058131	Proliferation/Metastasis
0.347553009	Metabolism
0.701859004	Metabolism
0.000381872	Metabolism
0.918286125	Proliferation/Metastasis
0.606721939	TME
0.97691048	TME
0.215951249	Metabolism
0.084222837	Proliferation/Metastasis
0.000271799	Metabolism
0.898128805	TME
0.51512368	TME
0.051953901	TME
0.619882596	TME
0.269580603	Metabolism
0.893410499	TME
0.281277593	Proliferation/Metastasis
0.487179851	TME
0.014950578	Proliferation/Metastasis
0.247304871	Proliferation/Metastasis
0.787215228	Metabolism
0.272775972	Proliferation/Metastasis
0.687840723	TME
0.781998959	Metabolism
0.653389913	TME
0.698973309	TME
0.168397272	TME
0.781182	TME
0.518116981	TME
0.704678588	TME
0.408002482	Metabolism
0.813790733	TME
0.451045344	Metabolism
0.932039801	Metabolism
0.975242333	Proliferation/Metastasis
0.16117965	Proliferation/Metastasis
0.855997394	Metabolism
0.908597101	Metabolism

0.044382148	Metabolism
0.672272602	Metabolism
0.491315555	Proliferation/Metastasis
0.106839227	Proliferation/Metastasis
0.939803275	Metabolism
0.654558796	Metabolism
0.340967459	Metabolism
0.089109216	TME
0.764743372	Metabolism
0.464366069	Metabolism
0.296413619	Metabolism
0.653946897	Metabolism
0.945570534	Proliferation/Metastasis
0.279982193	Metabolism
0.131775875	Metabolism
0.012155029	Metabolism
0.812331792	Metabolism
0.800630226	Metabolism
0.046658332	Metabolism
0.264648888	Proliferation/Metastasis
0.062753184	Metabolism
0.469701948	Metabolism
0.476883792	Proliferation/Metastasis
0.465148498	Metabolism
0.085830522	Metabolism
0.702124018	Metabolism
0.261528182	Metabolism
0.672102544	Metabolism
0.676434328	Metabolism
0.566908463	Metabolism
0.744143956	Metabolism
0.994292595	TME
0.851209068	TME
0.713780878	TME
0.38939914	TME
0.296328426	TME
0.24919177	Metabolism
0.384201343	Metabolism
0.488833821	Proliferation/Metastasis
0.28309688	Metabolism
0.649461308	Proliferation/Metastasis
0.009630015	Metabolism
0.151508864	TME

0.484019321	Metabolism
0.105782526	Metabolism
0.563649839	Metabolism
0.008955119	Metabolism
0.95542112	TME
0.034580552	TME
0.014398192	Proliferation/Metastasis
0.792460429	Metabolism
0.513110852	Proliferation/Metastasis
0.58380632	Proliferation/Metastasis
0.629961933	TME
0.491182276	TME
0.079416022	TME
0.707225	TME
0.029281273	Metabolism
0.857717265	Proliferation/Metastasis
0.383430583	Metabolism
0.391097159	Metabolism
0.330564417	Proliferation/Metastasis
0.01007475	Proliferation/Metastasis
0.396934771	Metabolism
0.773768844	Metabolism
0.201864955	Metabolism
0.677372632	Metabolism
0.721275645	TME
0.523306335	TME
0.019641564	TME
0.880086836	TME
0.853719404	TME
0.410626381	Metabolism
0.056107111	Metabolism
0.216918667	Metabolism
0.83631483	Metabolism
0.526748393	Metabolism
0.024542757	TME
0.013666565	TME
0.265949752	TME
0.352464822	TME
0.39036891	TME
0.659099391	TME
0.498800494	TME
0.208278801	TME
0.427751811	TME

0.592598642	Proliferation/Metastasis
0.132616098	Proliferation/Metastasis
0.40835788	Metabolism
0.098968314	Metabolism
0.556574128	TME
0.125028966	Metabolism
0.036113498	Metabolism
0.046422975	TME
0.009616777	Proliferation/Metastasis
0.77557518	Proliferation/Metastasis
0.835661185	TME
0.54555865	Metabolism
0.214526751	Metabolism
0.612772305	Proliferation/Metastasis
0.010550083	Proliferation/Metastasis
0.172841412	TME
0.069473809	TME
0.214077857	TME
0.214955348	TME
0.235846292	Proliferation/Metastasis
0.072063828	TME
0.040683357	TME
0.927726117	Metabolism
0.121211106	TME
0.05354987	TME
0.708311436	TME
0.320138108	TME
0.424723034	Metabolism
0.428359795	Metabolism
0.378733284	Metabolism
0.305640952	TME
0.593676995	Metabolism
0.179744349	TME
0.512737029	TME
0.305224965	TME
0.773229257	TME
0.705862991	TME
0.883818537	Metabolism
0.223056725	Proliferation/Metastasis
0.081453737	Metabolism
0.197138215	Proliferation/Metastasis
0.867034583	Metabolism
0.730925377	Metabolism

0.870044147	Metabolism
0.918365353	Metabolism
0.563526294	Metabolism
0.970225141	Metabolism
0.176633761	Metabolism
0.564963393	Metabolism
0.273680873	Metabolism
0.646041539	Metabolism
0.150977125	Metabolism
0.280083151	Metabolism
0.655889116	Metabolism
0.789935618	Metabolism
0.085807009	TME
0.012735894	Proliferation/Metastasis
0.587751526	Metabolism
0.234485351	Proliferation/Metastasis
0.842443394	TME
0.205189739	Proliferation/Metastasis
0.101106516	Proliferation/Metastasis
0.364796242	TME
0.748828907	TME
0.168502603	Metabolism
0.00947387	Metabolism
0.9921827	Proliferation/Metastasis
0.218631259	Proliferation/Metastasis
0.03285569	Proliferation/Metastasis
0.160265739	Metabolism
0.926067432	Metabolism
0.162719386	Metabolism
0.196286707	Proliferation/Metastasis
0.066084964	TME
0.044688543	TME
0.452532607	Metabolism
0.850822909	Proliferation/Metastasis
0.04283957	Metabolism
0.788860571	TME
0.480159572	TME
0.767561074	TME
0.003413126	TME
0.197629799	Metabolism
0.198174033	TME
0.052138214	Proliferation/Metastasis
0.117757465	TME

0.365369711	Proliferation/Metastasis
0.37082108	Proliferation/Metastasis
0.019591852	Metabolism
0.741555496	Proliferation/Metastasis
0.061629492	TME
0.007564056	Metabolism
0.520948903	TME
0.018382266	TME
0.035477603	TME
0.099734991	TME
0.604868278	TME
0.146886981	TME
0.136755899	Metabolism
0.032680436	TME
0.253813696	Metabolism
0.98189895	Metabolism
0.122275996	Proliferation/Metastasis
0.021446502	Proliferation/Metastasis
0.682328461	Metabolism
0.109019784	Metabolism
0.856381638	Metabolism
0.1356733	Metabolism
0.982379207	Proliferation/Metastasis
0.244300561	Proliferation/Metastasis
0.228738015	Metabolism
0.441772622	Metabolism
0.462633884	Metabolism
0.445033575	TME
0.932925643	Metabolism
0.290609292	Metabolism
0.203756792	Metabolism
0.021197127	Metabolism
0.892804986	Proliferation/Metastasis
0.794702473	Metabolism
0.624356421	Metabolism
0.103359375	Metabolism
0.770646818	Metabolism
0.405624258	Metabolism
0.831916276	Metabolism
0.472898232	Proliferation/Metastasis
0.292338618	Metabolism
0.358670443	Metabolism
0.150828883	Proliferation/Metastasis

0.030024154	Metabolism
0.015284161	Metabolism
0.042972804	Metabolism
0.162580761	Metabolism
0.380466894	Metabolism
0.547437086	Metabolism
0.119531552	Metabolism
0.247294346	Metabolism
0.113682584	TME
0.124356006	TME
0.066014699	TME
0.30638763	TME
0.378398305	TME
0.119111251	Metabolism
0.797181015	Metabolism
0.019436621	Proliferation/Metastasis
0.77425206	Metabolism
0.100908993	Proliferation/Metastasis
0.23652329	Metabolism
0.069612525	TME
0.536785813	Metabolism
0.800295326	Metabolism
0.530892844	Metabolism
0.392867646	Metabolism
0.015821261	TME
0.788440236	TME
0.231373399	Proliferation/Metastasis
0.354258455	Metabolism
0.176495674	Proliferation/Metastasis
0.018274466	Proliferation/Metastasis
0.035261176	TME
0.911591801	TME
0.374019354	TME
0.869971553	TME
0.056911856	Metabolism
0.016839659	Proliferation/Metastasis
0.245463545	Metabolism
0.043622825	Metabolism
0.518554003	Proliferation/Metastasis
0.082882542	Proliferation/Metastasis
0.658623531	Metabolism
0.061693795	Metabolism
0.075165804	Metabolism

0.053401724	Metabolism
0.846822786	TME
4.98E-05	TME
0.589285547	TME
0.534209751	TME
0.053087486	TME
0.771806421	Metabolism
0.002548648	Metabolism
0.559849698	Metabolism
0.104643585	Metabolism
0.246290708	Metabolism
0.000670985	TME
0.024014191	TME
0.311381306	TME
0.995805065	TME
0.24309942	TME
0.480136862	TME
0.544989474	TME
0.609090301	TME
0.477602757	TME
0.288925844	Proliferation/Metastasis
0.052373268	Proliferation/Metastasis
0.006900364	Metabolism
0.00537323	Metabolism
0.217089836	TME
0.655001608	Metabolism
0.141022761	Metabolism
0.508461212	TME
0.000213065	Proliferation/Metastasis
0.000842275	Proliferation/Metastasis
0.755269696	TME
0.351370057	Metabolism
0.001129303	Metabolism
0.003924146	Proliferation/Metastasis
0.005080616	Proliferation/Metastasis
0.300413118	TME
0.181765989	TME
0.534236196	TME
0.454074287	TME
0.004420087	Proliferation/Metastasis
0.035767059	TME
0.627556544	TME
0.199349199	Metabolism

0.198834377	TME
0.19769575	TME
0.932509441	TME
0.772106501	TME
0.862016778	Metabolism
0.26333586	Metabolism
0.001029675	Metabolism
0.004064063	TME
0.046568778	Metabolism
0.361535509	TME
0.67682396	TME
0.614816321	TME
0.421474529	TME
0.138129197	TME
0.043614213	Metabolism
0.173636472	Proliferation/Metastasis
0.562954031	Metabolism
0.003601744	Proliferation/Metastasis
0.057592019	Metabolism
0.013380991	Metabolism
0.546711141	Metabolism
0.334273963	Metabolism
0.187523645	Metabolism
0.187514882	Metabolism
0.01949644	Metabolism
0.084372147	Metabolism
0.907731998	Metabolism
0.034201595	Metabolism
0.285508595	Metabolism
0.167019713	Metabolism
0.105847471	Metabolism
0.007275576	Metabolism
0.523930583	TME
3.82E-05	Proliferation/Metastasis
0.426700106	Metabolism
0.352473855	Proliferation/Metastasis
0.952856096	TME
0.391397698	Proliferation/Metastasis
0.41597439	Proliferation/Metastasis
0.325380939	TME
0.338225498	TME
0.395681599	Metabolism
0.485457071	Metabolism

0.749899615	Proliferation/Metastasis
3.26E-07	Proliferation/Metastasis
0.026720064	Proliferation/Metastasis
0.090009299	Metabolism
0.034312361	Metabolism
0.086966078	Metabolism
0.744344101	Proliferation/Metastasis
0.465450636	TME
0.272935873	TME
0.815405274	Metabolism
0.011427689	Proliferation/Metastasis
0.525045813	Metabolism
0.945621924	TME
0.868537946	TME
0.098486256	TME
0.002274806	TME
0.341834526	Metabolism
0.475628071	TME
0.230576159	Proliferation/Metastasis
0.390929578	TME
0.688374611	Proliferation/Metastasis
0.003824358	Proliferation/Metastasis
0.184742966	Metabolism
6.88E-05	Proliferation/Metastasis
0.399532215	TME
0.217551145	Metabolism
0.361875829	TME
0.028892016	TME
0.185657979	TME
0.877718745	TME
0.003809602	TME
0.234027672	TME
0.366317741	Metabolism
0.294424039	TME
0.760128278	Metabolism
0.189438838	Metabolism
0.957348803	Proliferation/Metastasis
0.002136854	Proliferation/Metastasis
0.017065608	Metabolism
0.719712413	Metabolism
0.531149028	Metabolism
0.002496023	Metabolism
0.87516274	Proliferation/Metastasis

0.627464121	Proliferation/Metastasis
0.565891445	Metabolism
0.020820224	Metabolism
0.001296768	Metabolism
0.001426837	TME
0.877905885	Metabolism
0.217657054	Metabolism
0.557593296	Metabolism
0.051277289	Metabolism
0.441850199	Proliferation/Metastasis
0.001024206	Metabolism
0.820249226	Metabolism
0.288231963	Metabolism
4.59E-06	Metabolism
5.59E-07	Metabolism
0.004732991	Metabolism
0.565034326	Proliferation/Metastasis
0.691919442	Metabolism
0.310467705	Metabolism
0.003318796	Proliferation/Metastasis
0.184215179	Metabolism
0.184936618	Metabolism
0.74411604	Metabolism
0.295342152	Metabolism
0.019081904	Metabolism
0.734469249	Metabolism
0.047992623	Metabolism
0.165445392	Metabolism
0.372904562	TME
0.874744024	TME
0.466404379	TME
0.675839596	TME
0.761011148	TME
0.002278965	Metabolism
0.001878096	Metabolism
4.96E-05	Proliferation/Metastasis
0.132131745	Metabolism
0.249910763	Proliferation/Metastasis
0.148563086	Metabolism
0.172609006	TME
0.398720452	Metabolism
0.009141782	Metabolism
0.533761119	Metabolism

0.04431081	Metabolism
0.446096778	TME
0.000466158	TME
0.809122001	Proliferation/Metastasis
0.243050867	Metabolism
0.632022992	Proliferation/Metastasis
0.001910395	Proliferation/Metastasis
0.084192215	TME
0.712199609	TME
0.494204602	TME
0.883688714	TME
0.784529348	Metabolism
0.378013429	Proliferation/Metastasis
0.51076434	Metabolism
0.073118584	Metabolism
0.503282843	Proliferation/Metastasis
0.114824046	Proliferation/Metastasis
0.649581797	Metabolism
0.301468386	Metabolism
0.037006441	Metabolism
0.311569853	Metabolism
0.014149232	TME
0.063453347	TME
0.336633998	TME
0.646280358	TME
0.796254694	TME
0.003132246	Metabolism
0.66893715	Metabolism
0.11779245	Metabolism
0.54128041	Metabolism
0.465090145	Metabolism
0.236706882	TME
0.041618806	TME
0.344173549	TME
0.950762752	TME
0.606215122	TME
0.680076537	TME
0.840750985	TME
0.74156307	TME
0.586841618	TME
0.316341676	Proliferation/Metastasis
0.809902735	Proliferation/Metastasis
0.461095454	Metabolism

0.749671986	Metabolism
0.540995313	TME
0.478722888	Metabolism
0.351356821	Metabolism
0.295850602	TME
0.275046233	Proliferation/Metastasis
0.328934642	Proliferation/Metastasis
0.778299487	TME
0.287937922	Metabolism
0.248324977	Metabolism
0.791664591	Proliferation/Metastasis
0.093907561	Proliferation/Metastasis
0.792371113	TME
0.494570833	TME
0.529563009	TME
0.235645344	TME
0.000947091	Proliferation/Metastasis
0.105556788	TME
0.662825692	TME
0.447208461	Metabolism
0.120225551	TME
0.274363374	TME
0.761735563	TME
0.951633637	TME
0.078573729	Metabolism
0.7257895	Metabolism
0.512364412	Metabolism
0.080705758	TME
0.819693129	Metabolism
0.919568866	TME
0.439437835	TME
0.496072936	TME
0.763958063	TME
0.327658907	TME
0.278136343	Metabolism
0.557826607	Proliferation/Metastasis
0.82782024	Metabolism
0.19778953	Proliferation/Metastasis
0.674029764	Metabolism
0.348935057	Metabolism
0.209247767	Metabolism
0.506657748	Metabolism
0.400850924	Metabolism

0.131481284	Metabolism
0.047142799	Metabolism
0.040898762	Metabolism
0.149527979	Metabolism
0.004414793	Metabolism
0.413242307	Metabolism
0.363168275	Metabolism
0.726977549	Metabolism
0.452199185	Metabolism
0.419559093	TME
0.122064199	Proliferation/Metastasis
0.425273968	Metabolism
0.368565033	Proliferation/Metastasis
0.485787971	TME
0.147165224	Proliferation/Metastasis
0.105368426	Proliferation/Metastasis
0.333924475	TME
0.171048116	TME
0.001669827	Metabolism
0.307685296	Metabolism
0.014753904	Proliferation/Metastasis
0.311213441	Proliferation/Metastasis
0.199210451	Proliferation/Metastasis
0.829838621	Metabolism
0.352645858	Metabolism
0.82451065	Metabolism
0.209634288	Proliferation/Metastasis
0.411899789	TME
0.328801188	TME
0.745773797	Metabolism
0.04538795	Proliferation/Metastasis
0.404236439	Metabolism
0.582266487	TME
0.795501248	TME
0.311142151	TME
0.080671426	TME
0.1725519	Metabolism
0.120893561	TME
0.114599512	Proliferation/Metastasis
0.437179742	TME
0.863879385	Proliferation/Metastasis
0.38223278	Proliferation/Metastasis
0.132990555	Metabolism

0.613709959	Proliferation/Metastasis
0.396388988	TME
0.26717077	Metabolism
0.680831016	TME
0.074124347	TME
0.859778355	TME
0.847896646	TME
0.674555635	TME
0.403842368	TME
0.056444658	Metabolism
0.295035523	TME
0.691452783	Metabolism
0.357951226	Metabolism
0.594989953	Proliferation/Metastasis
0.731902182	Proliferation/Metastasis
0.605144321	Metabolism
0.84644014	Metabolism
0.004545125	Metabolism
0.679088351	Metabolism
0.349441194	Proliferation/Metastasis
8.82E-05	Proliferation/Metastasis
0.434892779	Metabolism
0.336838496	Metabolism
0.105536829	Metabolism
0.245258074	TME
0.955163802	Metabolism
0.190774875	Metabolism
0.605688462	Metabolism
0.104860557	Metabolism
0.207427836	Proliferation/Metastasis
0.282421144	Metabolism
0.943055179	Metabolism
0.926134316	Metabolism
0.824915688	Metabolism
0.38282924	Metabolism
0.88168492	Metabolism
0.849417839	Proliferation/Metastasis
0.256381943	Metabolism
0.310546997	Metabolism
0.011095499	Proliferation/Metastasis
0.702655146	Metabolism
0.469035497	Metabolism
0.42069736	Metabolism

0.029519386	Metabolism
0.184498815	Metabolism
0.066971102	Metabolism
0.245136506	Metabolism
0.573864027	Metabolism
0.518087759	TME
0.778989024	TME
0.582035079	TME
0.923074573	TME
0.421960872	TME
0.76800909	Metabolism
0.871523597	Metabolism
0.099016642	Proliferation/Metastasis
0.981798709	Metabolism
0.304862391	Proliferation/Metastasis
0.391807283	Metabolism
0.42460042	TME
0.730191229	Metabolism
0.100094516	Metabolism
0.682894125	Metabolism
0.219631175	Metabolism
0.119085158	TME
0.746970255	TME
0.825340411	Proliferation/Metastasis
0.69765141	Metabolism
0.482387946	Proliferation/Metastasis
0.087325474	Proliferation/Metastasis
0.606468659	TME
0.000341512	TME
0.000918796	TME
0.001031785	TME
0.786026052	Metabolism
0.000599072	Proliferation/Metastasis
0.00175262	Metabolism
0.000543835	Metabolism
0.006241241	Proliferation/Metastasis
0.024228786	Proliferation/Metastasis
3.09E-06	Metabolism
0.462141969	Metabolism
0.526866601	Metabolism
0.032768458	Metabolism
0.149727458	TME
0.220732195	TME

8.01E-05	TME
0.095995596	TME
0.000792867	TME
0.873174253	Metabolism
0.073959117	Metabolism
0.820023319	Metabolism
0.113084165	Metabolism
0.07735503	Metabolism
0.00128112	TME
0.019897685	TME
0.00052218	TME
0.051802407	TME
0.000123244	TME
0.001958482	TME
0.00101855	TME
0.000767767	TME
0.014567039	TME
0.087487127	Proliferation/Metastasis
0.014515075	Proliferation/Metastasis
0.96481878	Metabolism
0.091875118	Metabolism
0.774523767	TME
0.986930654	Metabolism
0.648061646	Metabolism
0.000299656	TME
0.387531886	Proliferation/Metastasis
0.953860645	Proliferation/Metastasis
0.121725425	TME
0.013326441	Metabolism
0.00158663	Metabolism
0.362078585	Proliferation/Metastasis
0.264100489	Proliferation/Metastasis
0.049563677	TME
2.61E-05	TME
0.003553174	TME
0.048105649	TME
0.29063639	Proliferation/Metastasis
0.276423213	TME
7.12E-05	TME
0.000551402	Metabolism
0.000277814	TME
9.99E-06	TME
0.001471332	TME

0.104786992	TME
0.497769648	Metabolism
0.483454541	Metabolism
0.069033779	Metabolism
0.388441161	TME
0.106039128	Metabolism
0.002528367	TME
0.007466984	TME
0.01439717	TME
0.046313437	TME
0.013016781	TME
0.003524598	Metabolism
0.088381464	Proliferation/Metastasis
3.94E-06	Metabolism
0.531795846	Proliferation/Metastasis
0.000428858	Metabolism
0.000466554	Metabolism
0.00092951	Metabolism
0.05498025	Metabolism
0.13014106	Metabolism
0.785155136	Metabolism
0.519042191	Metabolism
0.005280701	Metabolism
0.011540239	Metabolism
0.002346887	Metabolism
3.42E-05	Metabolism
0.003242857	Metabolism
0.255773636	Metabolism
0.480564822	Metabolism
0.001395854	TME
0.959700964	Proliferation/Metastasis
0.029508634	Metabolism
0.000102142	Proliferation/Metastasis
0.006071738	TME
5.61E-05	Proliferation/Metastasis
8.58E-06	Proliferation/Metastasis
4.24E-06	TME
0.000304277	TME
0.735951081	Metabolism
0.2560222	Metabolism
0.901312696	Proliferation/Metastasis
0.092537016	Proliferation/Metastasis
1.15E-05	Proliferation/Metastasis

0.075375166	Metabolism
0.266075782	Metabolism
0.173636513	Metabolism
9.80E-06	Proliferation/Metastasis
2.07E-05	TME
0.00025831	TME
0.191134977	Metabolism
0.846771714	Proliferation/Metastasis
0.349788847	Metabolism
0.001507831	TME
0.003828734	TME
0.703316532	TME
0.026503351	TME
0.006141834	Metabolism
5.11E-06	TME
0.118759192	Proliferation/Metastasis
3.20E-07	TME
0.884162251	Proliferation/Metastasis
0.026379094	Proliferation/Metastasis
0.001649288	Metabolism
0.70251181	Proliferation/Metastasis
0.000532484	TME
0.001094448	Metabolism
0.000132906	TME
0.000664537	TME
0.009817978	TME
0.000420701	TME
0.000141851	TME
3.79E-05	TME
0.094049205	Metabolism
1.19E-07	TME
0.003599242	Metabolism
0.025238236	Metabolism
6.11E-05	Proliferation/Metastasis
0.440042035	Proliferation/Metastasis
0.537233706	Metabolism
0.005036999	Metabolism
0.645012143	Metabolism
0.243609864	Metabolism
7.09E-05	Proliferation/Metastasis
0.84767327	Proliferation/Metastasis
0.498239242	Metabolism
0.033582238	Metabolism

0.001594215	Metabolism
0.373444867	TME
0.023862635	Metabolism
0.118446651	Metabolism
0.874260121	Metabolism
0.807549529	Metabolism
0.029293709	Proliferation/Metastasis
0.04713889	Metabolism
0.851285744	Metabolism
0.031915095	Metabolism
0.496515505	Metabolism
0.055420397	Metabolism
0.763615011	Metabolism
0.667136636	Proliferation/Metastasis
0.022658626	Metabolism
6.34E-06	Metabolism
0.193628338	Proliferation/Metastasis
0.928752554	Metabolism
0.396965775	Metabolism
1.81E-05	Metabolism
0.560208336	Metabolism
0.025185384	Metabolism
0.200938999	Metabolism
0.027251947	Metabolism
0.111163354	Metabolism
0.001089109	TME
2.44E-06	TME
0.000106175	TME
0.000230081	TME
2.84E-05	TME
0.320207579	Metabolism
0.649626302	Metabolism
0.152512292	Proliferation/Metastasis
0.523630898	Metabolism
7.26E-06	Proliferation/Metastasis
0.076030483	Metabolism
0.156481288	TME
0.0690658	Metabolism
0.36282601	Metabolism
0.007766237	Metabolism
0.601707172	Metabolism
0.111475464	TME
0.544177917	TME

0.000280413	Proliferation/Metastasis
0.109713278	Metabolism
0.001143512	Proliferation/Metastasis
0.073656244	Proliferation/Metastasis
0.741501534	TME
0.669020628	TME
0.648673432	TME
0.959033213	TME
0.712488767	Metabolism
0.241184406	Proliferation/Metastasis
0.117811507	Metabolism
0.844710427	Metabolism
0.912340357	Proliferation/Metastasis
0.162212414	Proliferation/Metastasis
0.264757488	Metabolism
0.871525896	Metabolism
0.752239211	Metabolism
0.567863554	Metabolism
0.071922861	TME
0.139658457	TME
0.853667742	TME
0.837517763	TME
0.425076412	TME
0.502708761	Metabolism
0.785315567	Metabolism
0.593019328	Metabolism
0.186197222	Metabolism
0.161720901	Metabolism
0.448605044	TME
0.848623684	TME
0.486873408	TME
0.829082874	TME
0.974698422	TME
0.790745371	TME
0.871149765	TME
0.958554255	TME
0.619875805	TME
0.014818663	Proliferation/Metastasis
0.110363938	Proliferation/Metastasis
0.992816397	Metabolism
0.794167683	Metabolism
0.625268079	TME
0.15364715	Metabolism

0.148954503	Metabolism
0.605211657	TME
0.483927043	Proliferation/Metastasis
0.835918054	Proliferation/Metastasis
0.849704763	TME
0.07303574	Metabolism
0.065967332	Metabolism
0.213523333	Proliferation/Metastasis
0.063032396	Proliferation/Metastasis
0.624464455	TME
0.453586978	TME
0.879858298	TME
0.306453326	TME
0.116059901	Proliferation/Metastasis
0.026754055	TME
0.613392271	TME
0.720533365	Metabolism
0.167600774	TME
0.404890927	TME
0.789091302	TME
0.827384321	TME
0.624635443	Metabolism
0.362773075	Metabolism
0.419987989	Metabolism
0.017369463	TME
0.35716833	Metabolism
0.466822384	TME
0.434867443	TME
0.492287629	TME
0.68942651	TME
0.415925744	TME
0.386643498	Metabolism
0.047211	Proliferation/Metastasis
0.535706455	Metabolism
0.100454702	Proliferation/Metastasis
0.034679022	Metabolism
0.016142372	Metabolism
0.004362522	Metabolism
0.833946208	Metabolism
0.706330814	Metabolism
0.793579928	Metabolism
0.615148363	Metabolism
0.931757892	Metabolism

0.919202464	Metabolism
0.53020715	Metabolism
0.837007845	Metabolism
0.271534531	Metabolism
0.313552819	Metabolism
0.174905644	Metabolism
0.569635428	TME
0.107021087	Proliferation/Metastasis
0.58260065	Metabolism
0.594874891	Proliferation/Metastasis
0.7211729	TME
0.926647659	Proliferation/Metastasis
0.472210715	Proliferation/Metastasis
0.896005841	TME
0.702453052	TME
0.195702371	Metabolism
0.128369565	Metabolism
0.000498747	Proliferation/Metastasis
0.499025454	Proliferation/Metastasis
0.425031106	Proliferation/Metastasis
0.022347968	Metabolism
0.152878249	Metabolism
0.628674544	Metabolism
0.801964114	Proliferation/Metastasis
0.646035287	TME
0.311494715	TME
0.32667972	Metabolism
0.164729909	Proliferation/Metastasis
0.106368135	Metabolism
0.707201336	TME
0.707247943	TME
0.176062476	TME
0.04845494	TME
0.031250869	Metabolism
0.36951198	TME
0.055951869	Proliferation/Metastasis
0.705902947	TME
0.967311213	Proliferation/Metastasis
0.703086916	Proliferation/Metastasis
0.927164191	Metabolism
0.826645894	Proliferation/Metastasis
0.384290825	TME
0.985687541	Metabolism

0.968220099	TME
0.65891292	TME
0.281340886	TME
0.631697373	TME
0.960589544	TME
0.899857308	TME
0.492866	Metabolism
0.931036805	TME
0.197912165	Metabolism
0.336698922	Metabolism
0.724586474	Proliferation/Metastasis
0.419715277	Proliferation/Metastasis
0.85166197	Metabolism
0.695089114	Metabolism
0.949307155	Metabolism
0.165345133	Metabolism
0.351352351	Proliferation/Metastasis
0.262545836	Proliferation/Metastasis
0.610478085	Metabolism
0.288221011	Metabolism
0.269321239	Metabolism
0.047804016	TME
0.895950899	Metabolism
0.221884093	Metabolism
0.815797615	Metabolism
0.728693214	Metabolism
0.826623906	Proliferation/Metastasis
0.459673575	Metabolism
0.58083829	Metabolism
0.647210287	Metabolism
0.276134046	Metabolism
0.423467256	Metabolism
0.935478215	Metabolism
0.999751272	Proliferation/Metastasis
0.196411654	Metabolism
0.322426635	Metabolism
0.90993653	Proliferation/Metastasis
0.294685056	Metabolism
0.093679313	Metabolism
0.189279515	Metabolism
0.797671389	Metabolism
0.014431109	Metabolism
0.348413427	Metabolism

0.427853644	Metabolism
0.384307114	Metabolism
0.426349702	TME
0.990149336	TME
0.57977758	TME
0.874021776	TME
0.831362431	TME
0.13731664	Metabolism
0.014262721	Metabolism
0.020662314	Proliferation/Metastasis
0.67582551	Metabolism
0.744760325	Proliferation/Metastasis
0.075210904	Metabolism
0.688721039	TME
0.244467301	Metabolism
0.387843825	Metabolism
0.941880191	Metabolism
0.345974817	Metabolism
0.078812315	TME
0.220169039	TME
0.447836548	Proliferation/Metastasis
0.116040447	Metabolism
0.611812808	Proliferation/Metastasis
0.001287599	Proliferation/Metastasis
0.028490882	TME
6.17E-06	TME
0.005853488	TME
0.003821658	TME
0.248667619	Metabolism
0.000429826	Proliferation/Metastasis
1.37E-05	Metabolism
0.363033585	Metabolism
0.254301907	Proliferation/Metastasis
0.000296007	Proliferation/Metastasis
7.15E-09	Metabolism
0.001314386	Metabolism
0.117350144	Metabolism
0.188208879	Metabolism
0.025851823	TME
3.97E-08	TME
0.006848527	TME
3.47E-06	TME
3.47E-09	TME

0.42683134	Metabolism
0.0143488	Metabolism
0.559598241	Metabolism
0.050218774	Metabolism
0.042026558	Metabolism
0.001916825	TME
0.119355274	TME
0.000101407	TME
0.000311445	TME
2.05E-06	TME
0.000167623	TME
0.00040113	TME
0.001458762	TME
0.03487086	TME
0.00627419	Proliferation/Metastasis
8.03E-07	Proliferation/Metastasis
0.037817717	Metabolism
0.282512247	Metabolism
0.000902325	TME
0.099731247	Metabolism
8.37E-05	Metabolism
1.86E-06	TME
0.849213342	Proliferation/Metastasis
0.070397965	Proliferation/Metastasis
0.000887992	TME
0.000501925	Metabolism
5.62E-05	Metabolism
0.002759554	Proliferation/Metastasis
0.000637894	Proliferation/Metastasis
0.012178731	TME
0.000290102	TME
0.000223329	TME
0.001076134	TME
0.282529084	Proliferation/Metastasis
0.069616583	TME
1.51E-05	TME
0.000630552	Metabolism
0.087475232	TME
0.008320999	TME
0.000503225	TME
0.195857751	TME
0.729695303	Metabolism
0.407726815	Metabolism

0.116384119	Metabolism
0.001044605	TME
0.055862276	Metabolism
0.00045686	TME
0.033082183	TME
0.00448371	TME
0.001328107	TME
0.0001824	TME
0.000100713	Metabolism
0.000170719	Proliferation/Metastasis
0.000135797	Metabolism
0.021716445	Proliferation/Metastasis
1.78E-05	Metabolism
0.001710899	Metabolism
1.88E-05	Metabolism
2.94E-06	Metabolism
0.083725803	Metabolism
0.000126272	Metabolism
0.005579972	Metabolism
0.00103507	Metabolism
1.59E-05	Metabolism
1.93E-05	Metabolism
1.70E-06	Metabolism
0.002825239	Metabolism
0.054858881	Metabolism
0.517582507	Metabolism
0.000369687	TME
0.025647602	Proliferation/Metastasis
0.079315241	Metabolism
0.006647144	Proliferation/Metastasis
0.001125907	TME
2.17E-06	Proliferation/Metastasis
6.05E-05	Proliferation/Metastasis
1.68E-05	TME
9.53E-09	TME
0.014467943	Metabolism
0.767051122	Metabolism
0.870454957	Proliferation/Metastasis
0.179845847	Proliferation/Metastasis
1.87E-06	Proliferation/Metastasis
0.000611636	Metabolism
0.000553268	Metabolism
0.002990772	Metabolism

0.000196378	Proliferation/Metastasis
0.00566478	TME
7.07E-06	TME
0.648637989	Metabolism
0.009623879	Proliferation/Metastasis
0.960341384	Metabolism
0.06047811	TME
0.00354878	TME
4.31E-05	TME
0.000560632	TME
4.24E-06	Metabolism
0.000756182	TME
5.12E-06	Proliferation/Metastasis
1.01E-05	TME
0.547966815	Proliferation/Metastasis
0.824479744	Proliferation/Metastasis
0.006932989	Metabolism
0.004343485	Proliferation/Metastasis
0.000266302	TME
0.046765352	Metabolism
0.002355047	TME
0.000668641	TME
0.809257936	TME
0.000173096	TME
0.09428165	TME
6.34E-05	TME
0.00070273	Metabolism
1.69E-06	TME
0.118522241	Metabolism
0.405655804	Metabolism
0.000675018	Proliferation/Metastasis
0.013744521	Proliferation/Metastasis
0.000327333	Metabolism
0.024888436	Metabolism
0.000137898	Metabolism
0.0026203	Metabolism
3.44E-06	Proliferation/Metastasis
0.931505262	Proliferation/Metastasis
0.167451845	Metabolism
0.006041776	Metabolism
0.018038464	Metabolism
0.001102786	TME
0.001815996	Metabolism

0.010229628	Metabolism
0.891944383	Metabolism
0.560567361	Metabolism
0.011414467	Proliferation/Metastasis
0.002951911	Metabolism
0.233919186	Metabolism
3.26E-06	Metabolism
0.497178381	Metabolism
0.476950993	Metabolism
0.237860355	Metabolism
0.010721219	Proliferation/Metastasis
7.66E-05	Metabolism
0.037245281	Metabolism
0.009660306	Proliferation/Metastasis
0.004728466	Metabolism
3.13E-06	Metabolism
0.792677525	Metabolism
0.268902367	Metabolism
0.022165753	Metabolism
0.000914417	Metabolism
0.619756261	Metabolism
0.392601162	Metabolism
7.07E-05	TME
0.002505305	TME
0.00287207	TME
0.000615344	TME
6.00E-05	TME
0.072920556	Metabolism
0.796534823	Metabolism
0.872653906	Proliferation/Metastasis
0.036878378	Metabolism
0.000214043	Proliferation/Metastasis
0.005013359	Metabolism
0.127498222	TME
0.001536077	Metabolism
0.747424126	Metabolism
4.93E-08	Metabolism
0.016033337	Metabolism
1.11E-07	TME
0.000863333	TME
1.04E-05	Proliferation/Metastasis
0.000183362	Metabolism
0.402503203	Proliferation/Metastasis

0.280366363	Proliferation/Metastasis
0.865030019	TME
0.164065627	TME
0.000573729	TME
0.003866789	TME
0.797623191	Metabolism
0.250407691	Proliferation/Metastasis
0.001005045	Metabolism
0.083769405	Metabolism
0.339539556	Proliferation/Metastasis
0.750328593	Proliferation/Metastasis
1.77E-06	Metabolism
4.33E-05	Metabolism
0.00030117	Metabolism
0.000505268	Metabolism
0.059031904	TME
0.3304123	TME
0.000688948	TME
0.193496802	TME
0.005685415	TME
0.000210104	Metabolism
0.173931538	Metabolism
0.000581566	Metabolism
0.438775319	Metabolism
3.05E-06	Metabolism
0.007094361	TME
0.489393642	TME
0.014013775	TME
0.042140474	TME
0.379626632	TME
0.011735837	TME
0.008605223	TME
0.002573921	TME
0.000941321	TME
0.001304207	Proliferation/Metastasis
2.69E-06	Proliferation/Metastasis
0.02705607	Metabolism
0.058426256	Metabolism
0.088368754	TME
0.826004144	Metabolism
0.006928111	Metabolism
0.150393457	TME
0.205034067	Proliferation/Metastasis

0.953482375	Proliferation/Metastasis
0.163339376	TME
5.17E-09	Metabolism
1.20E-06	Metabolism
0.071260951	Proliferation/Metastasis
0.019573357	Proliferation/Metastasis
0.000263737	TME
0.008158819	TME
0.00574367	TME
0.005509645	TME
2.77E-06	Proliferation/Metastasis
0.002738547	TME
0.017455509	TME
0.616873399	Metabolism
0.000161918	TME
0.001135658	TME
0.005253835	TME
1.73E-05	TME
0.153298502	Metabolism
0.552097062	Metabolism
0.710891098	Metabolism
0.074372004	TME
0.000365888	Metabolism
0.012997774	TME
0.766055963	TME
0.001928346	TME
0.015916695	TME
0.920291589	TME
0.008543129	Metabolism
0.001282091	Proliferation/Metastasis
0.013052464	Metabolism
0.020968327	Proliferation/Metastasis
0.072979857	Metabolism
0.001775965	Metabolism
0.046311086	Metabolism
0.000149805	Metabolism
0.022994876	Metabolism
0.011992504	Metabolism
0.856149475	Metabolism
0.001335616	Metabolism
0.007130433	Metabolism
0.006345016	Metabolism
0.000218235	Metabolism

1.95E-05	Metabolism
0.000151263	Metabolism
0.522837685	Metabolism
0.003987814	TME
0.758683997	Proliferation/Metastasis
4.22E-06	Metabolism
0.007331244	Proliferation/Metastasis
0.009506018	TME
0.97654451	Proliferation/Metastasis
0.101531927	Proliferation/Metastasis
0.449101222	TME
0.160129053	TME
1.13E-05	Metabolism
0.00025967	Metabolism
0.068703796	Proliferation/Metastasis
6.89E-06	Proliferation/Metastasis
0.622357042	Proliferation/Metastasis
0.000119006	Metabolism
0.047221672	Metabolism
0.009595867	Metabolism
0.831944785	Proliferation/Metastasis
0.004608123	TME
0.145556115	TME
0.325200122	Metabolism
0.945938082	Proliferation/Metastasis
0.118239515	Metabolism
8.91E-05	TME
0.011785916	TME
0.708690734	TME
0.009649882	TME
4.69E-08	Metabolism
0.482708248	TME
0.002653953	Proliferation/Metastasis
0.024456004	TME
0.077398176	Proliferation/Metastasis
0.001008093	Proliferation/Metastasis
0.241988364	Metabolism
0.040122012	Proliferation/Metastasis
0.003880101	TME
0.958373972	Metabolism
0.052684826	TME
0.758076749	TME
0.11314008	TME

0.006368967	TME
7.01E-08	TME
0.03696114	TME
0.661544847	Metabolism
0.070525624	TME
0.048342335	Metabolism
0.81904361	Metabolism
0.058357299	Proliferation/Metastasis
0.059605585	Proliferation/Metastasis
5.24E-06	Metabolism
0.074305318	Metabolism
1.44E-05	Metabolism
0.034439471	Metabolism
0.003131758	Proliferation/Metastasis
0.094837226	Proliferation/Metastasis
0.052685411	Metabolism
0.000569874	Metabolism
0.000208122	Metabolism
0.177082005	TME
1.72E-09	Metabolism
1.13E-07	Metabolism
0.077294105	Metabolism
0.470628026	Metabolism
0.380004044	Proliferation/Metastasis
1.77E-07	Metabolism
0.00069563	Metabolism
0.000549318	Metabolism
0.497891936	Metabolism
0.685338097	Metabolism
0.350979417	Metabolism
0.159398004	Proliferation/Metastasis
1.74E-08	Metabolism
0.001235676	Metabolism
0.533819385	Proliferation/Metastasis
5.72E-06	Metabolism
0.000170178	Metabolism
0.800063302	Metabolism
0.740472976	Metabolism
0.030672874	Metabolism
1.43E-07	Metabolism
0.79686718	Metabolism
0.905881675	Metabolism
0.009400497	TME

0.002195448	TME
0.005452732	TME
0.037723381	TME
0.021232232	TME
0.970467193	Metabolism
0.574453993	Metabolism
0.182651467	Proliferation/Metastasis
0.040408145	Metabolism
0.916311985	Proliferation/Metastasis
3.55E-07	Metabolism
0.504599668	TME
3.85E-13	Metabolism
0.354155019	Metabolism
0.747726336	Metabolism
0.381160686	Metabolism
0.00609889	TME
0.428107984	TME
0.321157337	Proliferation/Metastasis
5.78E-05	Metabolism
0.026799852	Proliferation/Metastasis
0.017863449	Proliferation/Metastasis
0.340056749	TME
0.96633192	TME
0.930616634	TME
0.379139881	TME
0.411029235	Metabolism
0.150701732	Proliferation/Metastasis
0.013633867	Metabolism
0.004258852	Metabolism
0.694498535	Proliferation/Metastasis
0.00781889	Proliferation/Metastasis
0.010966727	Metabolism
0.417224803	Metabolism
0.61827695	Metabolism
0.22846022	Metabolism
0.626575581	TME
0.722038585	TME
0.570810594	TME
0.917957599	TME
0.598317203	TME
0.003084183	Metabolism
0.048791267	Metabolism
0.4261986	Metabolism

0.341223381	Metabolism
0.082650882	Metabolism
0.028132214	TME
0.003285048	TME
0.429811392	TME
0.859261286	TME
0.538005851	TME
0.763435492	TME
0.857914886	TME
0.458136266	TME
0.911603242	TME
3.30E-07	Proliferation/Metastasis
0.019482505	Proliferation/Metastasis
0.028494695	Metabolism
0.07655518	Metabolism
0.365048389	TME
0.271244188	Metabolism
0.705541112	Metabolism
0.932192824	TME
0.631089177	Proliferation/Metastasis
0.000434104	Proliferation/Metastasis
0.709373263	TME
0.00337717	Metabolism
0.71682474	Metabolism
2.83E-07	Proliferation/Metastasis
0.444061393	Proliferation/Metastasis
0.542427493	TME
0.237707718	TME
0.762427311	TME
0.88889812	TME
9.09E-05	Proliferation/Metastasis
0.018088461	TME
0.486327453	TME
0.275708742	Metabolism
0.672631353	TME
0.347557714	TME
0.656743993	TME
0.039218335	TME
0.003743749	Metabolism
0.030336272	Metabolism
0.913795536	Metabolism
0.188025463	TME
0.427798333	Metabolism

0.923822227	TME
0.262051722	TME
0.807092417	TME
0.31779761	TME
0.742382509	TME
0.845746612	Metabolism
1.03E-06	Proliferation/Metastasis
0.620467404	Metabolism
0.014872433	Proliferation/Metastasis
0.432496936	Metabolism
0.020266617	Metabolism
0.586622063	Metabolism
0.931121499	Metabolism
0.411029623	Metabolism
0.092169085	Metabolism
0.447843962	Metabolism
0.032675524	Metabolism
0.06688708	Metabolism
0.945842686	Metabolism
0.780407999	Metabolism
0.000594146	Metabolism
0.050101918	Metabolism
0.20723496	Metabolism
0.252933502	TME
0.971861726	Proliferation/Metastasis
0.000188128	Metabolism
0.139699155	Proliferation/Metastasis
0.552597986	TME
0.578914155	Proliferation/Metastasis
0.530378174	Proliferation/Metastasis
0.986518985	TME
0.533353337	TME
0.259026632	Metabolism
0.423443695	Metabolism
4.24E-09	Proliferation/Metastasis
0.00032161	Proliferation/Metastasis
0.6937077	Proliferation/Metastasis
0.006316645	Metabolism
0.523553019	Metabolism
0.002996203	Metabolism
0.464533724	Proliferation/Metastasis
0.426149752	TME
0.931828675	TME

0.104935414	Metabolism
0.243157242	Proliferation/Metastasis
0.247347365	Metabolism
0.945583729	TME
0.849899082	TME
0.006282443	TME
0.048575285	TME
0.033089803	Metabolism
0.026804208	TME
0.020134819	Proliferation/Metastasis
0.274485099	TME
0.461258862	Proliferation/Metastasis
3.15E-08	Proliferation/Metastasis
0.257616208	Metabolism
5.90E-05	Proliferation/Metastasis
0.745963631	TME
0.003298984	Metabolism
0.782520393	TME
0.001388941	TME
0.796609433	TME
0.549102053	TME
0.065137629	TME
0.918251305	TME
0.348545868	Metabolism
0.105834415	TME
0.241285218	Metabolism
0.000456989	Metabolism
0.945929757	Proliferation/Metastasis
0.078495548	Proliferation/Metastasis
0.012174563	Metabolism
3.71E-05	Metabolism
0.011217813	Metabolism
0.155445758	Metabolism
0.074836794	Proliferation/Metastasis
0.518546776	Proliferation/Metastasis
0.189911205	Metabolism
0.442026353	Metabolism
0.915982966	Metabolism
0.007606171	TME
0.125658416	Metabolism
0.021409732	Metabolism
0.275172209	Metabolism
0.579068541	Metabolism

0.91423218	Proliferation/Metastasis
0.691407429	Metabolism
0.013273207	Metabolism
0.77656088	Metabolism
9.43E-05	Metabolism
0.000109523	Metabolism
0.573734153	Metabolism
8.46E-06	Proliferation/Metastasis
0.057990816	Metabolism
0.013152828	Metabolism
0.371068251	Proliferation/Metastasis
1.13E-05	Metabolism
0.88509158	Metabolism
0.049850733	Metabolism
0.849415452	Metabolism
0.04402758	Metabolism
0.414682686	Metabolism
0.000189435	Metabolism
0.425891316	Metabolism
0.545964573	TME
0.858919498	TME
0.64586253	TME
0.608624529	TME
0.935271604	TME
0.312848704	Metabolism
0.336682427	Metabolism
0.533146634	Proliferation/Metastasis
0.559792755	Metabolism
0.399790889	Proliferation/Metastasis
0.004457137	Metabolism
0.071489005	TME
0.020808839	Metabolism
0.059127721	Metabolism
0.007191265	Metabolism
0.430107568	Metabolism
0.958558355	TME
0.317647829	TME
0.772084538	Proliferation/Metastasis
0.830929954	Metabolism
0.902106278	Proliferation/Metastasis
0.88532561	Proliferation/Metastasis
0.388994022	TME
0.217728397	TME

0.464479268	TME
0.187828855	TME
0.220786668	Metabolism
0.03607327	Proliferation/Metastasis
0.026214028	Metabolism
0.026173546	Metabolism
0.40629591	Proliferation/Metastasis
0.307430478	Proliferation/Metastasis
0.013355057	Metabolism
0.000781958	Metabolism
0.702722262	Metabolism
0.015357079	Metabolism
0.030023775	TME
0.570596542	TME
0.477070475	TME
0.304258157	TME
0.05000774	TME
0.087480256	Metabolism
0.015924231	Metabolism
0.822118957	Metabolism
0.303655561	Metabolism
0.278344007	Metabolism
0.643076698	TME
0.44157958	TME
0.423201506	TME
0.19815841	TME
0.038293721	TME
0.211680044	TME
0.202927331	TME
0.484665799	TME
0.627378228	TME
0.833850534	Proliferation/Metastasis
0.442296598	Proliferation/Metastasis
0.291603562	Metabolism
0.163833105	Metabolism
0.440866094	TME
0.526628714	Metabolism
0.000259467	Metabolism
0.388422966	TME
0.387014586	Proliferation/Metastasis
0.976588801	Proliferation/Metastasis
0.168814749	TME
0.04122751	Metabolism

0.01534755	Metabolism
0.626447133	Proliferation/Metastasis
0.154262144	Proliferation/Metastasis
0.756874057	TME
0.411186741	TME
0.25889838	TME
0.285080175	TME
0.097047085	Proliferation/Metastasis
0.124277154	TME
0.169255684	TME
0.000473036	Metabolism
0.997442873	TME
0.529546136	TME
0.169311936	TME
0.278215573	TME
0.868211579	Metabolism
0.855433618	Metabolism
0.001793451	Metabolism
0.454332116	TME
0.177254446	Metabolism
0.260044089	TME
0.562009827	TME
0.157390795	TME
0.396622976	TME
0.025200887	TME
0.017372692	Metabolism
0.814636128	Proliferation/Metastasis
0.000373631	Metabolism
0.329506652	Proliferation/Metastasis
0.003296555	Metabolism
0.008206923	Metabolism
0.035744605	Metabolism
0.025863696	Metabolism
0.004928036	Metabolism
0.042796212	Metabolism
0.005299129	Metabolism
0.022759721	Metabolism
0.411360967	Metabolism
0.169150851	Metabolism
0.554465924	Metabolism
0.018398826	Metabolism
0.705443794	Metabolism
0.342026378	Metabolism

0.489163636	TME
0.069319035	Proliferation/Metastasis
0.139493769	Metabolism
0.093056475	Proliferation/Metastasis
0.256291147	TME
0.021237675	Proliferation/Metastasis
0.120886267	Proliferation/Metastasis
0.077437802	TME
0.110179387	TME
0.45615994	Metabolism
0.806622039	Metabolism
0.207915821	Proliferation/Metastasis
0.522394789	Proliferation/Metastasis
0.303742788	Proliferation/Metastasis
0.00149737	Metabolism
0.059739288	Metabolism
0.38715581	Metabolism
0.002091304	Proliferation/Metastasis
0.723233243	TME
0.602334339	TME
0.869299744	Metabolism
0.057763684	Proliferation/Metastasis
0.080363076	Metabolism
0.853176817	TME
0.384480729	TME
0.294067429	TME
0.806869553	TME
0.018445155	Metabolism
0.081347211	TME
0.49106544	Proliferation/Metastasis
0.290040301	TME
0.979326265	Proliferation/Metastasis
0.06385198	Proliferation/Metastasis
0.888064058	Metabolism
0.534024395	Proliferation/Metastasis
0.484932235	TME
0.004416708	Metabolism
0.237390253	TME
0.475648089	TME
0.055766725	TME
0.385619357	TME
0.237533379	TME
0.218018256	TME

0.309925476	Metabolism
0.140382379	TME
0.607036034	Metabolism
0.638894562	Metabolism
0.206762526	Proliferation/Metastasis
0.120021303	Proliferation/Metastasis
0.02463574	Metabolism
0.815732783	Metabolism
0.078091456	Metabolism
0.019315002	Metabolism
0.006645541	Proliferation/Metastasis
0.701338343	Proliferation/Metastasis
0.213381452	Metabolism
0.016924203	Metabolism
0.003767342	Metabolism
0.441780813	TME
0.052485967	Metabolism
0.5136913	Metabolism
0.037186976	Metabolism
0.612414578	Metabolism
0.035669893	Proliferation/Metastasis
0.01213459	Metabolism
0.914471028	Metabolism
0.041828504	Metabolism
0.041990178	Metabolism
0.451883331	Metabolism
0.985498129	Metabolism
0.007430348	Proliferation/Metastasis
0.032180406	Metabolism
0.013358682	Metabolism
0.75624907	Proliferation/Metastasis
0.296987643	Metabolism
0.257058896	Metabolism
0.015224469	Metabolism
0.030712984	Metabolism
0.079668906	Metabolism
0.000666762	Metabolism
0.036923064	Metabolism
0.79660945	Metabolism
0.146881451	TME
0.576864423	TME
0.596866655	TME
0.561175169	TME

0.283095138	TME
0.759442548	Metabolism
0.183080915	Metabolism
0.627218005	Proliferation/Metastasis
0.006348792	Metabolism
0.100908044	Proliferation/Metastasis
0.291463298	Metabolism
0.375239087	TME
0.036156778	Metabolism
0.977089215	Metabolism
0.340853726	Metabolism
0.253208523	Metabolism
0.044089747	TME
0.196231891	TME
0.015743785	Proliferation/Metastasis
0.19196583	Metabolism
0.067885733	Proliferation/Metastasis
0.580693099	Proliferation/Metastasis
0.004118336	TME
0.004771467	TME
0.149279459	TME
0.024301793	TME
0.835383577	Metabolism
2.87E-05	Proliferation/Metastasis
0.010340083	Metabolism
0.008739501	Metabolism
0.191020758	Proliferation/Metastasis
0.022020095	Proliferation/Metastasis
0.007158687	Metabolism
0.03782416	Metabolism
0.770960899	Metabolism
0.461160174	Metabolism
0.571113712	TME
0.022182313	TME
0.04978408	TME
0.001285788	TME
0.001227806	TME
0.838505462	Metabolism
0.038974423	Metabolism
0.924442383	Metabolism
0.026239539	Metabolism
0.359325307	Metabolism
0.001105774	TME

0.240331839	TME
0.000635599	TME
0.03932797	TME
0.052496598	TME
0.013441284	TME
0.016451419	TME
0.009871652	TME
0.1331228	TME
0.157036631	Proliferation/Metastasis
0.00378192	Proliferation/Metastasis
0.685796	Metabolism
0.630874342	Metabolism
0.000349131	TME
0.821198404	Metabolism
0.059930836	Metabolism
0.001496462	TME
0.241816662	Proliferation/Metastasis
0.084111249	Proliferation/Metastasis
0.031328958	TME
0.444412924	Metabolism
0.078816647	Metabolism
0.134288464	Proliferation/Metastasis
0.367994264	Proliferation/Metastasis
0.1811942	TME
0.003359052	TME
0.054252215	TME
0.118327364	TME
0.081968342	Proliferation/Metastasis
0.164511071	TME
0.000719514	TME
0.121425823	Metabolism
0.024573232	TME
0.002317322	TME
0.005404055	TME
0.140877396	TME
0.066094248	Metabolism
0.493181535	Metabolism
0.018201676	Metabolism
0.045043611	TME
0.004261005	Metabolism
0.051618558	TME
0.745534506	TME
0.027603335	TME

0.003495768	TME
0.054582823	TME
0.006311686	Metabolism
0.041785	Proliferation/Metastasis
0.003172205	Metabolism
0.044195892	Proliferation/Metastasis
0.005324512	Metabolism
0.004029842	Metabolism
0.002243455	Metabolism
0.005190659	Metabolism
0.008654273	Metabolism
0.169064408	Metabolism
0.931828943	Metabolism
0.024806572	Metabolism
0.056662308	Metabolism
0.000771536	Metabolism
0.001890423	Metabolism
0.19888789	Metabolism
0.627804207	Metabolism
0.692003	Metabolism
0.004496351	TME
0.531601164	Proliferation/Metastasis
0.740374543	Metabolism
0.006157109	Proliferation/Metastasis
0.002853344	TME
0.000237075	Proliferation/Metastasis
0.0014017	Proliferation/Metastasis
0.013716357	TME
0.003358108	TME
0.333260556	Metabolism
0.09536224	Metabolism
0.238924458	Proliferation/Metastasis
0.912855747	Proliferation/Metastasis
0.004183715	Proliferation/Metastasis
0.068099433	Metabolism
0.115017642	Metabolism
0.002341561	Metabolism
0.000431303	Proliferation/Metastasis
0.028339053	TME
0.060757158	TME
0.317068751	Metabolism
0.000648626	Proliferation/Metastasis
0.503229064	Metabolism

0.384463238	TME
0.049279878	TME
0.000150678	TME
0.007190445	TME
0.135653001	Metabolism
0.051495135	TME
0.001244289	Proliferation/Metastasis
5.70E-05	TME
0.968984612	Proliferation/Metastasis
0.047009199	Proliferation/Metastasis
0.490205769	Metabolism
0.087769384	Proliferation/Metastasis
0.020295266	TME
0.030004918	Metabolism
0.083880468	TME
0.967691449	TME
0.476011062	TME
0.012554707	TME
0.846942479	TME
0.067097033	TME
2.26E-05	Metabolism
2.58E-05	TME
0.537271816	Metabolism
0.277518601	Metabolism
0.025766306	Proliferation/Metastasis
0.014579255	Proliferation/Metastasis
0.020131525	Metabolism
0.470242964	Metabolism
0.078476527	Metabolism
0.00012047	Metabolism
0.000196259	Proliferation/Metastasis
0.39499546	Proliferation/Metastasis
0.626386461	Metabolism
0.642561071	Metabolism
0.124491324	Metabolism
0.009534538	TME
0.017679884	Metabolism
0.0026857	Metabolism
0.393804341	Metabolism
0.00012583	Metabolism
0.023176551	Proliferation/Metastasis
0.474735294	Metabolism
0.198099735	Metabolism

0.007912955	Metabolism
0.962275027	Metabolism
0.609778399	Metabolism
0.698084194	Metabolism
0.152180407	Proliferation/Metastasis
0.102480735	Metabolism
0.136659258	Metabolism
0.286567571	Proliferation/Metastasis
0.39414626	Metabolism
9.56E-05	Metabolism
0.779724174	Metabolism
0.006095195	Metabolism
0.001015687	Metabolism
0.813018261	Metabolism
0.670800553	Metabolism
0.858746524	Metabolism
0.003617295	TME
0.015714302	TME
0.005634615	TME
0.010786238	TME
0.033490479	TME
0.348821527	Metabolism
0.60759287	Metabolism
0.002526761	Proliferation/Metastasis
0.088418734	Metabolism
1.81E-05	Proliferation/Metastasis
0.58011509	Metabolism
0.01154949	TME
0.132320392	Metabolism
0.032178353	Metabolism
1.10E-05	Metabolism
0.126588157	Metabolism
0.01155171	TME
0.277873743	TME
0.15566435	Proliferation/Metastasis
0.000350035	Metabolism
0.033699352	Proliferation/Metastasis
0.867392425	Proliferation/Metastasis
0.639968671	TME
0.164980526	TME
0.771774082	TME
0.45760242	TME
0.035934035	Metabolism

0.211267053	Proliferation/Metastasis
0.013304785	Metabolism
0.361502299	Metabolism
0.02052422	Proliferation/Metastasis
0.144729415	Proliferation/Metastasis
0.013276828	Metabolism
0.048608688	Metabolism
0.345741557	Metabolism
0.004856908	Metabolism
0.150867159	TME
0.329897675	TME
0.828353435	TME
0.237287686	TME
0.025921309	TME
0.1853834	Metabolism
0.564199608	Metabolism
0.972359589	Metabolism
0.282026207	Metabolism
0.652353548	Metabolism
0.90454334	TME
0.560801574	TME
0.719534991	TME
0.486310248	TME
0.223454128	TME
0.600483685	TME
0.628014823	TME
0.794746032	TME
0.773237049	TME
0.090252037	Proliferation/Metastasis
0.299007723	Proliferation/Metastasis
0.935802358	Metabolism
0.032149593	Metabolism
0.941795334	TME
0.925886404	Metabolism
0.001418799	Metabolism
0.182084319	TME
0.001533752	Proliferation/Metastasis
0.00167538	Proliferation/Metastasis
0.482892427	TME
0.013939913	Metabolism
0.004391167	Metabolism
0.026255003	Proliferation/Metastasis
0.018859001	Proliferation/Metastasis

0.778045128	TME
0.982304143	TME
0.572102318	TME
0.880813841	TME
0.726408798	Proliferation/Metastasis
0.735363768	TME
0.41042121	TME
0.012959559	Metabolism
0.379540204	TME
0.5416174	TME
0.732133585	TME
0.635878077	TME
0.03487096	Metabolism
0.908349019	Metabolism
0.339575801	Metabolism
0.487287432	TME
0.316897724	Metabolism
0.582087398	TME
0.035019137	TME
0.56319396	TME
0.767384688	TME
0.060315482	TME
0.118139463	Metabolism
0.060263441	Proliferation/Metastasis
0.0168165	Metabolism
0.027055255	Proliferation/Metastasis
0.013765254	Metabolism
0.195349771	Metabolism
0.160198044	Metabolism
0.015107078	Metabolism
0.240978115	Metabolism
0.000735911	Metabolism
0.489666188	Metabolism
0.004250241	Metabolism
0.00057682	Metabolism
0.443545903	Metabolism
0.144869662	Metabolism
0.098757684	Metabolism
0.9850021	Metabolism
0.323860752	Metabolism
0.759776607	TME
0.356252854	Proliferation/Metastasis
0.089313042	Metabolism

0.259319334	Proliferation/Metastasis
0.699958759	TME
0.137479104	Proliferation/Metastasis
0.445384684	Proliferation/Metastasis
0.299405525	TME
0.015664881	TME
0.01660279	Metabolism
0.147823994	Metabolism
0.137106547	Proliferation/Metastasis
0.420376209	Proliferation/Metastasis
0.792394582	Proliferation/Metastasis
0.035251525	Metabolism
0.124603577	Metabolism
0.87667987	Metabolism
0.078023162	Proliferation/Metastasis
0.94521055	TME
0.114203913	TME
0.620554152	Metabolism
0.664518117	Proliferation/Metastasis
0.556480775	Metabolism
0.405628959	TME
0.851116362	TME
0.819403988	TME
0.990919435	TME
0.001627094	Metabolism
0.507162064	TME
0.977041395	Proliferation/Metastasis
0.629599493	TME
0.09857192	Proliferation/Metastasis
0.647504437	Proliferation/Metastasis
0.440960672	Metabolism
0.068123821	Proliferation/Metastasis
0.571823037	TME
0.020644012	Metabolism
0.45992629	TME
0.213294758	TME
0.02423984	TME
0.580954473	TME
0.394855725	TME
0.528683486	TME
0.67754255	Metabolism
0.356885277	TME
0.166160169	Metabolism

0.053953087	Metabolism
0.598422732	Proliferation/Metastasis
0.320884856	Proliferation/Metastasis
0.913394779	Metabolism
0.210578744	Metabolism
0.004054914	Metabolism
0.082550995	Metabolism
0.018834796	Proliferation/Metastasis
0.368025025	Proliferation/Metastasis
0.12253149	Metabolism
0.000111168	Metabolism
0.01029541	Metabolism
0.884817313	TME
0.106905633	Metabolism
0.64294743	Metabolism
0.124707402	Metabolism
0.401470976	Metabolism
0.668096491	Proliferation/Metastasis
2.84E-06	Metabolism
0.469619016	Metabolism
0.368401066	Metabolism
0.00214237	Metabolism
4.90E-05	Metabolism
0.783356927	Metabolism
0.004310072	Proliferation/Metastasis
0.003410757	Metabolism
0.002260694	Metabolism
0.936729137	Proliferation/Metastasis
0.88145734	Metabolism
0.847234521	Metabolism
0.318955258	Metabolism
0.668430486	Metabolism
0.660334193	Metabolism
0.005861878	Metabolism
0.062949181	Metabolism
0.517202604	Metabolism
0.543991095	TME
0.800575164	TME
0.936169645	TME
0.526891203	TME
0.440377982	TME
0.992585462	Metabolism
0.02712577	Metabolism

0.053112764	Proliferation/Metastasis
0.001491209	Metabolism
0.327343859	Proliferation/Metastasis
0.087852171	Metabolism
0.939795159	TME
0.014583918	Metabolism
0.378961325	Metabolism
0.141923322	Metabolism
0.801248651	Metabolism
0.013950823	TME
0.052731674	TME
0.026693242	Proliferation/Metastasis
0.271318244	Metabolism
0.173070922	Proliferation/Metastasis
0.676052967	Proliferation/Metastasis

Sheet2: Correlation between PSPGs and cytokines in different cancers

Gene	Cytokines	Cancer	Correlation	p-value
UPP1	TGFB1	ACC	0.108385809	0.341703959
UPP1	TGFB2	ACC	-0.017533597	0.878106676
UPP1	TGFB3	ACC	0.010303411	0.928190744
UPP1	VEGFA	ACC	0.073839936	0.517808982
UPP1	VEGFB	ACC	0.21353768	0.058815548
UPP1	VEGFC	ACC	0.203579189	0.071938732
UPP1	CCL11	ACC	0.058240123	0.610169377
UPP1	CCL13	ACC	0.136159569	0.231499726
UPP1	CCL14	ACC	-0.036103563	0.752090806
UPP1	CCL14-CCL15	ACC	0.15490371	0.172847042
UPP1	CCL15	ACC	0.048552214	0.670899494
UPP1	CCL1	ACC	0.019929456	0.861605541
UPP1	CCL16	ACC	0.021233423	0.852649011
UPP1	CCL17	ACC	0.206601488	0.067728626
UPP1	CCL18	ACC	0.327634693	0.003203743
UPP1	CCL19	ACC	0.002667215	0.981387926
UPP1	CCL20	ACC	0.316673842	0.004464007
UPP1	CCL21	ACC	-0.004886082	0.965911603
UPP1	CCL22	ACC	0.151049583	0.183914884
UPP1	CCL23	ACC	0.12606245	0.268280338
UPP1	CCL24	ACC	0.050583559	0.657972694
UPP1	CCL25	ACC	0.083434389	0.464756625
UPP1	CCL26	ACC	0.239071954	0.033844222
UPP1	CCL2	ACC	0.248642531	0.027134127
UPP1	CCL27	ACC	-0.015617842	0.891338971
UPP1	CCL28	ACC	-0.070873524	0.534811376
UPP1	CCL3	ACC	0.372071585	0.000734348
UPP1	CCL3L1	ACC	0.325383359	0.003433014
UPP1	CCL3L3	ACC	0.273456591	0.01474971
UPP1	CCL4	ACC	0.34036178	0.002146511
UPP1	CCL4L2	ACC	0.333939303	0.002632724
UPP1	CCL5	ACC	0.205612351	0.069084059
UPP1	CCL7	ACC	0.397350519	0.00028792
UPP1	CCL8	ACC	0.362938178	0.001011518
UPP1	CROCCL1	ACC	-0.016589437	0.884624135
UPP1	CROCCL2	ACC	-0.113718757	0.318334904
UPP1	CXCL10	ACC	0.325585521	0.003411844
UPP1	CXCL11	ACC	0.273128028	0.014874503
UPP1	CXCL12	ACC	0.243600853	0.030513222
UPP1	CXCL1	ACC	0.182775066	0.10690549
UPP1	CXCL13	ACC	0.32644824	0.003322805

UPP1	CXCL14	ACC	-0.151825244	0.181647078
UPP1	CXCL16	ACC	0.208199204	0.065584613
UPP1	CXCL17	ACC	-0.119577667	0.293874136
UPP1	CXCL2	ACC	0.254258216	0.023748484
UPP1	CXCL3	ACC	0.225387912	0.04581019
UPP1	CXCL5	ACC	0.291971337	0.009030729
UPP1	CXCL6	ACC	0.020461668	0.857947775
UPP1	CXCL9	ACC	0.266949413	0.017396886
UPP1	IL10	ACC	0.350021075	0.001566165
UPP1	IL11	ACC	0.063784886	0.576526771
UPP1	IL12A	ACC	0.231057467	0.040485369
UPP1	IL12B	ACC	0.019160766	0.866893682
UPP1	IL13	ACC	-0.022942399	0.840938928
UPP1	IL15	ACC	0.170901734	0.132093173
UPP1	IL16	ACC	0.163555851	0.14979287
UPP1	IL17A	ACC	-0.118612841	0.297814849
UPP1	IL17B	ACC	0.138322539	0.224101057
UPP1	IL17C	ACC	0.284504842	0.011047995
UPP1	IL17D	ACC	-0.038548678	0.735896545
UPP1	IL17F	ACC	-0.156392797	0.168704296
UPP1	IL18	ACC	0.186264991	0.100261064
UPP1	IL19	ACC	0.06132694	0.591334402
UPP1	IL1A	ACC	0.228155274	0.043142991
UPP1	IL1B	ACC	0.259801067	0.020765972
UPP1	IL2	ACC	-0.144984391	0.202359698
UPP1	IL20	ACC	0.0800383	0.483188827
UPP1	IL21	ACC	NA	NA
UPP1	IL22	ACC	NA	NA
UPP1	IL24	ACC	0.103223371	0.365323958
UPP1	IL25	ACC	-0.290394889	0.009427506
UPP1	IL26	ACC	-0.038106023	0.738820019
UPP1	IL27	ACC	0.285912203	0.010640208
UPP1	IL29	ACC	0.022667856	0.842817874
UPP1	IL3	ACC	-0.060199592	0.598182816
UPP1	IL31	ACC	0.012973899	0.909649013
UPP1	IL32	ACC	0.21201023	0.060691514
UPP1	IL33	ACC	0.144001712	0.205468292
UPP1	IL34	ACC	0.063139792	0.580396442
UPP1	IL4	ACC	0.03601592	0.752673314
UPP1	IL5	ACC	0.035110673	0.75869795
UPP1	IL6	ACC	0.210902751	0.062081852
UPP1	IL7	ACC	0.100363025	0.378830908
UPP1	IL8	ACC	0.221578235	0.049703382

UPP1	IL9	ACC	NA	NA
UPP1	TGFB1	BLCA	0.268944081	3.43E-08
UPP1	TGFB2	BLCA	0.154148652	0.001791503
UPP1	TGFB3	BLCA	0.160934738	0.001106148
UPP1	VEGFA	BLCA	-0.042158023	0.395705829
UPP1	VEGFB	BLCA	0.282214565	6.58E-09
UPP1	VEGFC	BLCA	0.382462616	1.16E-15
UPP1	CCL11	BLCA	0.272146724	2.32E-08
UPP1	CCL13	BLCA	0.354923065	1.48E-13
UPP1	CCL14	BLCA	0.101997272	0.039465858
UPP1	CCL14-CCL15	BLCA	-0.133695661	0.006843082
UPP1	CCL15	BLCA	-0.151881748	0.002095768
UPP1	CCL1	BLCA	0.207722391	2.35E-05
UPP1	CCL16	BLCA	0.016730039	0.736179463
UPP1	CCL17	BLCA	0.215271146	1.15E-05
UPP1	CCL18	BLCA	0.368168906	1.52E-14
UPP1	CCL19	BLCA	0.241616283	7.86E-07
UPP1	CCL20	BLCA	0.323285965	2.22E-11
UPP1	CCL21	BLCA	0.228014916	3.27E-06
UPP1	CCL22	BLCA	0.158494498	0.001318442
UPP1	CCL23	BLCA	0.281094131	7.59E-09
UPP1	CCL24	BLCA	0.160394709	0.001150214
UPP1	CCL25	BLCA	0.173477885	0.000431455
UPP1	CCL26	BLCA	0.323020191	2.31E-11
UPP1	CCL2	BLCA	0.309191935	1.73E-10
UPP1	CCL27	BLCA	0.099488441	0.044602107
UPP1	CCL28	BLCA	0.033797576	0.496012233
UPP1	CCL3	BLCA	0.385688666	6.40E-16
UPP1	CCL3L1	BLCA	0.328980974	9.40E-12
UPP1	CCL3L3	BLCA	0.051866283	0.295959696
UPP1	CCL4	BLCA	0.337798516	2.39E-12
UPP1	CCL4L2	BLCA	0.303118031	4.06E-10
UPP1	CCL5	BLCA	0.37237897	7.24E-15
UPP1	CCL7	BLCA	0.326694822	1.33E-11
UPP1	CCL8	BLCA	0.371451323	8.54E-15
UPP1	CROCCL1	BLCA	-0.238853382	1.06E-06
UPP1	CROCCL2	BLCA	-0.307560906	2.18E-10
UPP1	CXCL10	BLCA	0.287013178	3.54E-09
UPP1	CXCL11	BLCA	0.283060736	5.90E-09
UPP1	CXCL12	BLCA	0.151377461	0.002169574
UPP1	CXCL1	BLCA	0.341838483	1.26E-12
UPP1	CXCL13	BLCA	0.212989956	1.43E-05
UPP1	CXCL14	BLCA	-0.091135122	0.065912237

UPP1	CXCL16	BLCA	0.180385619	0.000249747
UPP1	CXCL17	BLCA	-0.000721079	0.988414806
UPP1	CXCL2	BLCA	0.36503107	2.64E-14
UPP1	CXCL3	BLCA	0.299052736	7.11E-10
UPP1	CXCL5	BLCA	0.268051463	3.83E-08
UPP1	CXCL6	BLCA	0.160792871	0.001117571
UPP1	CXCL9	BLCA	0.256596632	1.48E-07
UPP1	IL10	BLCA	0.238740367	1.07E-06
UPP1	IL11	BLCA	0.279363184	9.45E-09
UPP1	IL12A	BLCA	0.054660528	0.270668311
UPP1	IL12B	BLCA	0.127883727	0.009714628
UPP1	IL13	BLCA	0.116602961	0.01846892
UPP1	IL15	BLCA	0.338585104	2.11E-12
UPP1	IL16	BLCA	0.207514349	2.39E-05
UPP1	IL17A	BLCA	0.023316012	0.638655633
UPP1	IL17B	BLCA	0.217080572	9.68E-06
UPP1	IL17C	BLCA	0.084011578	0.090124467
UPP1	IL17D	BLCA	0.006555436	0.894977581
UPP1	IL17F	BLCA	-0.041078659	0.407924331
UPP1	IL18	BLCA	0.281633818	7.09E-09
UPP1	IL19	BLCA	0.068975981	0.164338065
UPP1	IL1A	BLCA	0.365000772	2.65E-14
UPP1	IL1B	BLCA	0.355173135	1.42E-13
UPP1	IL2	BLCA	0.062053227	0.211016996
UPP1	IL20	BLCA	0.141935228	0.004069647
UPP1	IL21	BLCA	0.103833883	0.036031041
UPP1	IL22	BLCA	0.121523024	0.014040588
UPP1	IL24	BLCA	0.327279447	1.22E-11
UPP1	IL25	BLCA	-0.021151054	0.670131711
UPP1	IL26	BLCA	0.147734494	0.002777327
UPP1	IL27	BLCA	0.317224268	5.45E-11
UPP1	IL29	BLCA	0.286117344	3.98E-09
UPP1	IL3	BLCA	0.070490172	0.155249414
UPP1	IL31	BLCA	0.020900239	0.673817233
UPP1	IL32	BLCA	0.37191348	7.87E-15
UPP1	IL33	BLCA	0.084971933	0.086494857
UPP1	IL34	BLCA	0.166858337	0.000714941
UPP1	IL4	BLCA	-0.021517816	0.664756703
UPP1	IL5	BLCA	0.020721755	0.676444669
UPP1	IL6	BLCA	0.349065748	3.91E-13
UPP1	IL7	BLCA	0.056335992	0.256232109
UPP1	IL8	BLCA	0.307714567	2.14E-10
UPP1	IL9	BLCA	-0.055483184	0.263512131

UPP1	TGFB1	DLBC	0.243510645	0.095349299
UPP1	TGFB2	DLBC	0.24479745	0.093557712
UPP1	TGFB3	DLBC	0.385959072	0.006740921
UPP1	VEGFA	DLBC	-0.10586294	0.47391553
UPP1	VEGFB	DLBC	0.575071914	1.91E-05
UPP1	VEGFC	DLBC	0.024721674	0.867537354
UPP1	CCL11	DLBC	0.3493068	0.014954694
UPP1	CCL13	DLBC	0.012813205	0.931119866
UPP1	CCL14	DLBC	-0.028478727	0.847629135
UPP1	CCL14-CCL15	DLBC	0.128678634	0.383402914
UPP1	CCL15	DLBC	0.295471907	0.041459938
UPP1	CCL1	DLBC	0.095985357	0.516352765
UPP1	CCL16	DLBC	-0.206121619	0.159856485
UPP1	CCL17	DLBC	0.18523653	0.207500182
UPP1	CCL18	DLBC	0.056202487	0.7043772
UPP1	CCL19	DLBC	0.045047966	0.761105849
UPP1	CCL20	DLBC	0.187275903	0.202452252
UPP1	CCL21	DLBC	-0.028296645	0.848591906
UPP1	CCL22	DLBC	0.113250201	0.44343321
UPP1	CCL23	DLBC	0.24774425	0.089553357
UPP1	CCL24	DLBC	-0.068292903	0.644644933
UPP1	CCL25	DLBC	0.237793028	0.103632853
UPP1	CCL26	DLBC	0.02054987	0.889738345
UPP1	CCL2	DLBC	0.175180575	0.233681009
UPP1	CCL27	DLBC	0.061491543	0.67800334
UPP1	CCL28	DLBC	-0.14388782	0.329215153
UPP1	CCL3	DLBC	0.336842276	0.019228709
UPP1	CCL3L1	DLBC	0.583406373	1.35E-05
UPP1	CCL3L3	DLBC	-0.306028058	0.034397524
UPP1	CCL4	DLBC	0.0202408	0.891386664
UPP1	CCL4L2	DLBC	0.176156095	0.231046468
UPP1	CCL5	DLBC	0.416154592	0.003261759
UPP1	CCL7	DLBC	0.204096617	0.164090309
UPP1	CCL8	DLBC	0.025648185	0.862619827
UPP1	CROCCL1	DLBC	-0.103802263	0.482612803
UPP1	CROCCL2	DLBC	-0.381307307	0.007495366
UPP1	CXCL10	DLBC	-0.004367384	0.976497206
UPP1	CXCL11	DLBC	-0.027902534	0.850676542
UPP1	CXCL12	DLBC	-0.12827809	0.384897702
UPP1	CXCL1	DLBC	0.474998941	0.000646295
UPP1	CXCL13	DLBC	0.09803454	0.507395089
UPP1	CXCL14	DLBC	0.096554684	0.513856116
UPP1	CXCL16	DLBC	0.239517004	0.101079007

UPP1	CXCL17	DLBC	0.321798819	0.025719833
UPP1	CXCL2	DLBC	0.213216878	0.145651932
UPP1	CXCL3	DLBC	0.234318581	0.108930138
UPP1	CXCL5	DLBC	0.237365746	0.104273419
UPP1	CXCL6	DLBC	0.313972875	0.029764327
UPP1	CXCL9	DLBC	-0.300286095	0.038104415
UPP1	IL10	DLBC	-0.161190178	0.273737004
UPP1	IL11	DLBC	0.334865282	0.019993385
UPP1	IL12A	DLBC	-0.042983806	0.771751456
UPP1	IL12B	DLBC	0.240960635	0.098977982
UPP1	IL13	DLBC	0.135162236	0.359687753
UPP1	IL15	DLBC	0.097148045	0.511260551
UPP1	IL16	DLBC	-0.118691275	0.42169313
UPP1	IL17A	DLBC	0.099102325	0.502758918
UPP1	IL17B	DLBC	0.297874852	0.039756029
UPP1	IL17C	DLBC	0.282896507	0.051378635
UPP1	IL17D	DLBC	-0.301353724	0.037391366
UPP1	IL17F	DLBC	-0.119732674	0.417602237
UPP1	IL18	DLBC	0.428329028	0.00238798
UPP1	IL19	DLBC	-0.081492751	0.58188535
UPP1	IL1A	DLBC	0.251394121	0.084780066
UPP1	IL1B	DLBC	0.050830988	0.731518482
UPP1	IL2	DLBC	-0.185790922	0.206119277
UPP1	IL20	DLBC	0.164056779	0.265181528
UPP1	IL21	DLBC	-0.225638351	0.123067996
UPP1	IL22	DLBC	-0.060746891	0.681694425
UPP1	IL24	DLBC	-0.032532883	0.826251917
UPP1	IL25	DLBC	0.03095931	0.834535339
UPP1	IL26	DLBC	-0.172742081	0.240356356
UPP1	IL27	DLBC	-0.038026125	0.797486844
UPP1	IL29	DLBC	0.000701933	0.99622208
UPP1	IL3	DLBC	-0.014736487	0.920811595
UPP1	IL31	DLBC	0.080600144	0.586041135
UPP1	IL32	DLBC	0.346196658	0.015937082
UPP1	IL33	DLBC	-0.485982639	0.000462162
UPP1	IL34	DLBC	0.460980692	0.00097587
UPP1	IL4	DLBC	0.073257763	0.620718925
UPP1	IL5	DLBC	-0.197818137	0.177735651
UPP1	IL6	DLBC	0.067541858	0.64829625
UPP1	IL7	DLBC	-0.375375946	0.0085627
UPP1	IL8	DLBC	0.517167853	0.000167337
UPP1	IL9	DLBC	0.042465461	0.774431368
UPP1	TGFB1	UCEC	0.32133651	2.88E-14

UPP1	TGFB2	UCEC	-0.049554068	0.253428959
UPP1	TGFB3	UCEC	-0.036545846	0.399772944
UPP1	VEGFA	UCEC	0.091163746	0.035367952
UPP1	VEGFB	UCEC	0.320874619	3.14E-14
UPP1	VEGFC	UCEC	-0.060533444	0.162858483
UPP1	CCL11	UCEC	0.209832536	1.02E-06
UPP1	CCL13	UCEC	0.159390352	0.000220043
UPP1	CCL14	UCEC	0.017721606	0.683122041
UPP1	CCL14-CCL15	UCEC	-0.11335666	0.008809877
UPP1	CCL15	UCEC	-0.190449243	9.55E-06
UPP1	CCL1	UCEC	-0.059986927	0.166695555
UPP1	CCL16	UCEC	-0.009520295	0.826430359
UPP1	CCL17	UCEC	0.214581684	5.71E-07
UPP1	CCL18	UCEC	0.146621852	0.000685162
UPP1	CCL19	UCEC	0.079421875	0.066923623
UPP1	CCL20	UCEC	0.167592127	0.000101236
UPP1	CCL21	UCEC	-0.028836674	0.506484581
UPP1	CCL22	UCEC	0.283408703	2.65E-11
UPP1	CCL23	UCEC	0.133957644	0.001939317
UPP1	CCL24	UCEC	0.075433059	0.081876868
UPP1	CCL25	UCEC	0.085873388	0.047529833
UPP1	CCL26	UCEC	0.258195172	1.45E-09
UPP1	CCL2	UCEC	0.125046356	0.003834093
UPP1	CCL27	UCEC	-0.134027568	0.001928656
UPP1	CCL28	UCEC	0.015481266	0.721395002
UPP1	CCL3	UCEC	0.385496202	2.50E-20
UPP1	CCL3L1	UCEC	0.304348791	6.92E-13
UPP1	CCL3L3	UCEC	0.090655945	0.036407101
UPP1	CCL4	UCEC	0.295844455	3.15E-12
UPP1	CCL4L2	UCEC	0.299138482	1.76E-12
UPP1	CCL5	UCEC	0.289367294	9.68E-12
UPP1	CCL7	UCEC	0.17372139	5.53E-05
UPP1	CCL8	UCEC	0.185858422	1.57E-05
UPP1	CROCCL1	UCEC	-0.127556032	0.00317769
UPP1	CROCCL2	UCEC	-0.180211924	2.85E-05
UPP1	CXCL10	UCEC	0.104223372	0.016080079
UPP1	CXCL11	UCEC	0.131227751	0.002400159
UPP1	CXCL12	UCEC	-0.014714984	0.73465301
UPP1	CXCL1	UCEC	0.173007183	5.94E-05
UPP1	CXCL13	UCEC	0.171984668	6.58E-05
UPP1	CXCL14	UCEC	-0.03797009	0.381647332
UPP1	CXCL16	UCEC	0.376031163	2.40E-19
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UPP1	CXCL2	UCEC	0.110939683	0.010372884
UPP1	CXCL3	UCEC	0.133384682	0.002028723
UPP1	CXCL5	UCEC	-0.038298651	0.377538409
UPP1	CXCL6	UCEC	0.113361405	0.008807027
UPP1	CXCL9	UCEC	0.109666345	0.011291502
UPP1	IL10	UCEC	0.101831868	0.018694496
UPP1	IL11	UCEC	0.230645619	7.24E-08
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UPP1	IL12B	UCEC	0.119769552	0.0056302
UPP1	IL13	UCEC	-0.042924916	0.322600531
UPP1	IL15	UCEC	0.228920847	9.10E-08
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UPP1	IL17A	UCEC	-0.137437715	0.001469437
UPP1	IL17B	UCEC	0.079137966	0.067908057
UPP1	IL17C	UCEC	0.170770136	7.42E-05
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UPP1	IL17F	UCEC	-0.02382233	0.583164762
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UPP1	IL1A	UCEC	0.300677833	1.34E-12
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UPP1	IL34	UCEC	0.173002878	5.94E-05
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UPP1	IL6	UCEC	0.335619999	1.69E-15
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UPP1	TGFB1	SKCM	0.060706712	0.540423988
UPP1	TGFB2	SKCM	-0.417843476	1.02E-05

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UPP1	CCL14	SKCM	0.056084359	0.571745187
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UPP1	CCL15	SKCM	-0.069335166	0.48431515
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UPP1	CCL16	SKCM	-0.278774771	0.004161738
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UPP1	TGFB1	HNSC	0.372744804	1.39E-18
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UPP1	TGFB3	HNSC	-0.152563343	0.0004811

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UPP1	VEGFB	HNSC	0.107172928	0.014481867
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UPP1	CCL13	HNSC	0.060228249	0.170264196
UPP1	CCL14	HNSC	-0.199683914	4.46E-06
UPP1	CCL14-CCL15	HNSC	-0.154355152	0.000411555
UPP1	CCL15	HNSC	-0.147543106	0.000738447
UPP1	CCL1	HNSC	-0.027792212	0.527153658
UPP1	CCL16	HNSC	-0.14556701	0.00087096
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UPP1	CCL3L1	HNSC	0.12203567	0.005326969
UPP1	CCL3L3	HNSC	-0.04499351	0.305807191
UPP1	CCL4	HNSC	-0.046644254	0.28838512
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UPP1	CCL5	HNSC	-0.002788492	0.949420507
UPP1	CCL7	HNSC	0.101787641	0.020256529
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UPP1	CROCCL1	HNSC	-0.250667253	6.83E-09
UPP1	CROCCL2	HNSC	-0.428783329	1.14E-24
UPP1	CXCL10	HNSC	-0.034133409	0.437327109
UPP1	CXCL11	HNSC	0.071077356	0.105455721
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UPP1	CXCL13	HNSC	-0.206110499	2.14E-06
UPP1	CXCL14	HNSC	0.269219246	4.38E-10
UPP1	CXCL16	HNSC	-0.174844922	6.11E-05
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UPP1	IL10	HNSC	-0.052009557	0.236433782
UPP1	IL11	HNSC	0.312107607	3.27E-13
UPP1	IL12A	HNSC	-0.341565853	1.13E-15
UPP1	IL12B	HNSC	-0.215927551	6.67E-07
UPP1	IL13	HNSC	-0.080722168	0.065867936
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UPP1	IL18	HNSC	0.520919564	1.65E-37
UPP1	IL19	HNSC	0.045230251	0.303266748
UPP1	IL1A	HNSC	0.601785067	1.54E-52
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UPP1	TGFB1	PRAD	0.675401215	1.78E-67
UPP1	TGFB2	PRAD	0.188237597	2.40E-05
UPP1	TGFB3	PRAD	0.330957678	3.62E-14
UPP1	VEGFA	PRAD	0.144470148	0.001239664

UPP1	VEGFB	PRAD	0.355588743	2.93E-16
UPP1	VEGFC	PRAD	0.399516862	1.81E-20
UPP1	CCL11	PRAD	0.420693984	9.77E-23
UPP1	CCL13	PRAD	0.388924734	2.14E-19
UPP1	CCL14	PRAD	0.52388811	2.22E-36
UPP1	CCL14-CCL15	PRAD	0.19578149	1.10E-05
UPP1	CCL15	PRAD	0.249574948	1.71E-08
UPP1	CCL1	PRAD	0.151973883	0.000675678
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UPP1	CCL21	PRAD	0.46082879	1.69E-27
UPP1	CCL22	PRAD	0.38175988	1.09E-18
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UPP1	CROCCL1	PRAD	0.142431043	0.001454882
UPP1	CROCCL2	PRAD	0.12956153	0.003812042
UPP1	CXCL10	PRAD	0.096573881	0.031351551
UPP1	CXCL11	PRAD	0.056163821	0.211328057
UPP1	CXCL12	PRAD	0.29633618	1.56E-11
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UPP1	IL10	PRAD	0.289895298	4.44E-11
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UPP1	IL17F	PRAD	0.072793937	0.105039932
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UPP1	IL1A	PRAD	0.142010948	0.00150328
UPP1	IL1B	PRAD	0.310403829	1.46E-12
UPP1	IL2	PRAD	0.181712615	4.61E-05
UPP1	IL20	PRAD	0.344645847	2.62E-15
UPP1	IL21	PRAD	0.075296833	0.093584743
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UPP1	TGFB1	KIRP	0.330657185	7.48E-09
UPP1	TGFB2	KIRP	-0.020785067	0.724029391
UPP1	TGFB3	KIRP	0.169063589	0.003822559
UPP1	VEGFA	KIRP	0.10596027	0.071097968
UPP1	VEGFB	KIRP	0.357515852	3.36E-10

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UPP1	CCL11	KIRP	0.123740378	0.034868463
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UPP1	CCL16	KIRP	0.011975625	0.838809202
UPP1	CCL17	KIRP	0.205653192	0.000414153
UPP1	CCL18	KIRP	0.019424566	0.741427741
UPP1	CCL19	KIRP	0.136935271	0.019444102
UPP1	CCL20	KIRP	0.179477136	0.002115867
UPP1	CCL21	KIRP	0.19260839	0.000958314
UPP1	CCL22	KIRP	0.214096614	0.000233923
UPP1	CCL23	KIRP	0.10143803	0.084093384
UPP1	CCL24	KIRP	0.032256264	0.583674754
UPP1	CCL25	KIRP	0.105233667	0.07306806
UPP1	CCL26	KIRP	0.174185792	0.002869125
UPP1	CCL2	KIRP	0.160842265	0.005961701
UPP1	CCL27	KIRP	0.173386085	0.003002098
UPP1	CCL28	KIRP	-0.006804137	0.907992037
UPP1	CCL3	KIRP	0.217915641	0.000179329
UPP1	CCL3L1	KIRP	0.230209407	7.38E-05
UPP1	CCL3L3	KIRP	0.011190181	0.84925072
UPP1	CCL4	KIRP	0.198503492	0.000660204
UPP1	CCL4L2	KIRP	0.251039541	1.47E-05
UPP1	CCL5	KIRP	0.318884561	2.66E-08
UPP1	CCL7	KIRP	0.070471019	0.230737224
UPP1	CCL8	KIRP	0.084327691	0.151318971
UPP1	CROCCL1	KIRP	0.075130542	0.201277046
UPP1	CROCCL2	KIRP	-0.062059028	0.291375675
UPP1	CXCL10	KIRP	0.041922923	0.476225342
UPP1	CXCL11	KIRP	0.05821998	0.32230923
UPP1	CXCL12	KIRP	0.090470216	0.123603484
UPP1	CXCL1	KIRP	0.036540492	0.534692652
UPP1	CXCL13	KIRP	0.101748576	0.083143723
UPP1	CXCL14	KIRP	-0.148068032	0.011440924
UPP1	CXCL16	KIRP	0.132430392	0.023862868
UPP1	CXCL17	KIRP	0.120477793	0.039991345
UPP1	CXCL2	KIRP	0.170507719	0.003528283
UPP1	CXCL3	KIRP	0.197994397	0.000682082
UPP1	CXCL5	KIRP	0.073174065	0.213296274
UPP1	CXCL6	KIRP	-0.043764939	0.457047665

UPP1	CXCL9	KIRP	0.046886042	0.425560323
UPP1	IL10	KIRP	0.032290978	0.583269643
UPP1	IL11	KIRP	0.297932972	2.24E-07
UPP1	IL12A	KIRP	0.020331426	0.729815415
UPP1	IL12B	KIRP	0.037614411	0.522745974
UPP1	IL13	KIRP	0.162522406	0.005452797
UPP1	IL15	KIRP	0.107052017	0.068219481
UPP1	IL16	KIRP	0.13954567	0.017224009
UPP1	IL17A	KIRP	0.040638123	0.489857145
UPP1	IL17B	KIRP	0.224820841	0.000109604
UPP1	IL17C	KIRP	0.277439932	1.53E-06
UPP1	IL17D	KIRP	-0.003210501	0.956511746
UPP1	IL17F	KIRP	-0.125516016	0.032322546
UPP1	IL18	KIRP	0.175641908	0.002640663
UPP1	IL19	KIRP	0.02014286	0.732225027
UPP1	IL1A	KIRP	0.057713626	0.326542793
UPP1	IL1B	KIRP	0.171731067	0.003295211
UPP1	IL2	KIRP	0.105727344	0.071724745
UPP1	IL20	KIRP	0.154615401	0.008239479
UPP1	IL21	KIRP	-0.020271803	0.730577024
UPP1	IL22	KIRP	-0.02468957	0.674906491
UPP1	IL24	KIRP	-0.016591395	0.778074455
UPP1	IL25	KIRP	0.10032745	0.087561249
UPP1	IL26	KIRP	-0.043235463	0.46251554
UPP1	IL27	KIRP	0.186222987	0.001417754
UPP1	IL29	KIRP	0.01305294	0.824533764
UPP1	IL3	KIRP	0.031845732	0.588475474
UPP1	IL31	KIRP	0.008918002	0.879598693
UPP1	IL32	KIRP	-0.043048646	0.464453419
UPP1	IL33	KIRP	0.049390045	0.401235245
UPP1	IL34	KIRP	0.262478033	5.68E-06
UPP1	IL4	KIRP	0.118605828	0.043207658
UPP1	IL5	KIRP	-0.066055582	0.261352117
UPP1	IL6	KIRP	0.242106926	2.99E-05
UPP1	IL7	KIRP	-0.248989812	1.73E-05
UPP1	IL8	KIRP	0.131122088	0.025298505
UPP1	IL9	KIRP	0.034635523	0.556215952
UPP1	TGFB1	PAAD	0.500854115	1.08E-12
UPP1	TGFB2	PAAD	0.169732665	0.023511304
UPP1	TGFB3	PAAD	0.124433071	0.097947594
UPP1	VEGFA	PAAD	0.218960037	0.003320162
UPP1	VEGFB	PAAD	0.317332785	1.59E-05
UPP1	VEGFC	PAAD	0.145779217	0.05218313

UPP1	CCL11	PAAD	0.079735419	0.290058219
UPP1	CCL13	PAAD	0.125725747	0.09448193
UPP1	CCL14	PAAD	-0.085493498	0.256514336
UPP1	CCL14-CCL15	PAAD	-0.117893285	0.117048837
UPP1	CCL15	PAAD	-0.144399249	0.054474501
UPP1	CCL1	PAAD	0.096965788	0.197882798
UPP1	CCL16	PAAD	-0.157046889	0.036303312
UPP1	CCL17	PAAD	0.163741783	0.028965284
UPP1	CCL18	PAAD	0.26148436	0.000422525
UPP1	CCL19	PAAD	0.05403482	0.473769727
UPP1	CCL20	PAAD	0.277478124	0.000176945
UPP1	CCL21	PAAD	-0.053535417	0.477872429
UPP1	CCL22	PAAD	0.139420085	0.063444074
UPP1	CCL23	PAAD	0.152468393	0.042179459
UPP1	CCL24	PAAD	0.01419725	0.850806144
UPP1	CCL25	PAAD	-0.162577596	0.030141933
UPP1	CCL26	PAAD	0.189453159	0.011315771
UPP1	CCL2	PAAD	0.092370538	0.220079087
UPP1	CCL27	PAAD	0.124534513	0.097672036
UPP1	CCL28	PAAD	0.034463236	0.647891552
UPP1	CCL3	PAAD	0.180550439	0.015877183
UPP1	CCL3L1	PAAD	0.125647244	0.094689581
UPP1	CCL3L3	PAAD	-0.04690061	0.534161532
UPP1	CCL4	PAAD	0.10061176	0.181462828
UPP1	CCL4L2	PAAD	0.154943221	0.038911194
UPP1	CCL5	PAAD	0.078069276	0.300287197
UPP1	CCL7	PAAD	0.374839258	2.54E-07
UPP1	CCL8	PAAD	0.041163385	0.585375174
UPP1	CROCCL1	PAAD	0.054999481	0.465899491
UPP1	CROCCL2	PAAD	-0.031099525	0.680269125
UPP1	CXCL10	PAAD	0.10624459	0.158099783
UPP1	CXCL11	PAAD	0.029222732	0.698596466
UPP1	CXCL12	PAAD	-0.120611415	0.108784616
UPP1	CXCL1	PAAD	0.175513057	0.019110987
UPP1	CXCL13	PAAD	-0.001208331	0.987228347
UPP1	CXCL14	PAAD	0.056406213	0.454552768
UPP1	CXCL16	PAAD	0.18632693	0.012765519
UPP1	CXCL17	PAAD	0.154447383	0.039548343
UPP1	CXCL2	PAAD	0.13393802	0.074682998
UPP1	CXCL3	PAAD	0.180160555	0.016109219
UPP1	CXCL5	PAAD	0.240253235	0.001236858
UPP1	CXCL6	PAAD	0.116523464	0.121394832
UPP1	CXCL9	PAAD	-0.023763533	0.752871083

UPP1	IL10	PAAD	0.045682485	0.544845068
UPP1	IL11	PAAD	0.367548233	4.49E-07
UPP1	IL12A	PAAD	0.016982731	0.821980975
UPP1	IL12B	PAAD	0.075034072	0.319526899
UPP1	IL13	PAAD	-0.032116492	0.670415043
UPP1	IL15	PAAD	0.165831177	0.026951711
UPP1	IL16	PAAD	-0.027579403	0.714788724
UPP1	IL17A	PAAD	-0.167933195	0.02504809
UPP1	IL17B	PAAD	0.179981806	0.016216584
UPP1	IL17C	PAAD	0.209404642	0.005027069
UPP1	IL17D	PAAD	0.032177531	0.66982536
UPP1	IL17F	PAAD	-0.000645614	0.993175876
UPP1	IL18	PAAD	0.299775066	4.80E-05
UPP1	IL19	PAAD	-0.007051164	0.925575751
UPP1	IL1A	PAAD	0.36744565	4.53E-07
UPP1	IL1B	PAAD	0.110662189	0.141416538
UPP1	IL2	PAAD	-0.020780258	0.78307063
UPP1	IL20	PAAD	0.015404395	0.838287523
UPP1	IL21	PAAD	-0.030453576	0.686556529
UPP1	IL22	PAAD	0.010457407	0.889813618
UPP1	IL24	PAAD	0.064468537	0.39258015
UPP1	IL25	PAAD	-0.043960728	0.560122927
UPP1	IL26	PAAD	-0.202043044	0.006839711
UPP1	IL27	PAAD	0.350119042	1.66E-06
UPP1	IL29	PAAD	0.191995047	0.010245912
UPP1	IL3	PAAD	-0.006267188	0.933830512
UPP1	IL31	PAAD	0.032874917	0.663102455
UPP1	IL32	PAAD	0.371119765	3.40E-07
UPP1	IL33	PAAD	-0.221316752	0.002989301
UPP1	IL34	PAAD	0.179783716	0.016336294
UPP1	IL4	PAAD	-0.161564177	0.031199121
UPP1	IL5	PAAD	-0.08242608	0.274035776
UPP1	IL6	PAAD	0.116576504	0.121224259
UPP1	IL7	PAAD	-0.15099877	0.04422704
UPP1	IL8	PAAD	0.2292891	0.002079282
UPP1	IL9	PAAD	-0.054426595	0.470564704
UPP1	TGFB1	SARC	0.484027745	8.57E-17
UPP1	TGFB2	SARC	-0.364934346	1.13E-09
UPP1	TGFB3	SARC	-0.076348484	0.218062023
UPP1	VEGFA	SARC	0.117555002	0.057395124
UPP1	VEGFB	SARC	0.376011906	3.18E-10
UPP1	VEGFC	SARC	0.424353327	7.07E-13
UPP1	CCL11	SARC	0.215410591	0.000445811

UPP1	CCL13	SARC	0.346311402	8.52E-09
UPP1	CCL14	SARC	0.110525546	0.074110011
UPP1	CCL14-CCL15	SARC	0.154932921	0.012039048
UPP1	CCL15	SARC	0.18688595	0.002386649
UPP1	CCL1	SARC	0.329225265	4.86E-08
UPP1	CCL16	SARC	0.018887211	0.76091338
UPP1	CCL17	SARC	0.248960123	4.60E-05
UPP1	CCL18	SARC	0.457294763	6.06E-15
UPP1	CCL19	SARC	0.220048764	0.000332129
UPP1	CCL20	SARC	0.353511799	3.96E-09
UPP1	CCL21	SARC	0.136076443	0.027643291
UPP1	CCL22	SARC	0.304352244	5.10E-07
UPP1	CCL23	SARC	0.359993767	1.95E-09
UPP1	CCL24	SARC	0.06060311	0.328492379
UPP1	CCL25	SARC	-0.080982066	0.191318437
UPP1	CCL26	SARC	0.408081872	6.18E-12
UPP1	CCL2	SARC	0.410972483	4.24E-12
UPP1	CCL27	SARC	0.094339278	0.127730688
UPP1	CCL28	SARC	-0.092468427	0.135495936
UPP1	CCL3	SARC	0.42482789	6.63E-13
UPP1	CCL3L1	SARC	0.32128058	1.05E-07
UPP1	CCL3L3	SARC	0.099675446	0.107466708
UPP1	CCL4	SARC	0.474546082	4.05E-16
UPP1	CCL4L2	SARC	0.406787043	7.31E-12
UPP1	CCL5	SARC	0.442228699	5.70E-14
UPP1	CCL7	SARC	0.409435567	5.18E-12
UPP1	CCL8	SARC	0.353429422	3.99E-09
UPP1	CROCCL1	SARC	-0.110500237	0.074176667
UPP1	CROCCL2	SARC	-0.317618826	1.49E-07
UPP1	CXCL10	SARC	0.332548067	3.49E-08
UPP1	CXCL11	SARC	0.266003868	1.28E-05
UPP1	CXCL12	SARC	-0.018943616	0.760221098
UPP1	CXCL1	SARC	0.290346255	1.75E-06
UPP1	CXCL13	SARC	0.30784816	3.71E-07
UPP1	CXCL14	SARC	0.020723801	0.738473163
UPP1	CXCL16	SARC	0.380323705	1.92E-10
UPP1	CXCL17	SARC	-0.11605901	0.0606634
UPP1	CXCL2	SARC	0.328961581	4.99E-08
UPP1	CXCL3	SARC	0.38114584	1.74E-10
UPP1	CXCL5	SARC	0.215301519	0.000448875
UPP1	CXCL6	SARC	0.205203849	0.000833991
UPP1	CXCL9	SARC	0.285338544	2.67E-06
UPP1	IL10	SARC	0.426993242	4.92E-13

UPP1	IL11	SARC	0.051192265	0.409258975
UPP1	IL12A	SARC	0.035473214	0.567580379
UPP1	IL12B	SARC	0.148848616	0.015897831
UPP1	IL13	SARC	0.114682595	0.063804416
UPP1	IL15	SARC	0.394175733	3.60E-11
UPP1	IL16	SARC	0.308114835	3.62E-07
UPP1	IL17A	SARC	-0.025395328	0.682422387
UPP1	IL17B	SARC	-0.047787857	0.441148249
UPP1	IL17C	SARC	-0.104716412	0.090735206
UPP1	IL17D	SARC	-0.132006513	0.032691577
UPP1	IL17F	SARC	0.033736406	0.586706317
UPP1	IL18	SARC	0.491827356	2.30E-17
UPP1	IL19	SARC	0.180113762	0.003439939
UPP1	IL1A	SARC	0.223608948	0.000263853
UPP1	IL1B	SARC	0.382718664	1.45E-10
UPP1	IL2	SARC	0.100706715	0.103859559
UPP1	IL20	SARC	0.046359197	0.454941028
UPP1	IL21	SARC	0.073386335	0.236500678
UPP1	IL22	SARC	-0.00822756	0.894557055
UPP1	IL24	SARC	0.179881835	0.003482516
UPP1	IL25	SARC	-0.119738611	0.052887093
UPP1	IL26	SARC	0.189890766	0.002021262
UPP1	IL27	SARC	0.353033207	4.17E-09
UPP1	IL29	SARC	0.213296537	0.000508791
UPP1	IL3	SARC	0.008671826	0.888899206
UPP1	IL31	SARC	0.064090519	0.301370779
UPP1	IL32	SARC	0.439927627	7.94E-14
UPP1	IL33	SARC	-0.001544231	0.980153828
UPP1	IL34	SARC	0.1371455	0.026433805
UPP1	IL4	SARC	0.044473644	0.473508918
UPP1	IL5	SARC	0.125711556	0.042036114
UPP1	IL6	SARC	0.359832711	1.99E-09
UPP1	IL7	SARC	0.164228665	0.007729282
UPP1	IL8	SARC	0.315553178	1.82E-07
UPP1	IL9	SARC	-0.061331834	0.322698878
UPP1	TGFB1	CEC	0.460296661	2.12E-17
UPP1	TGFB2	CEC	0.126878288	0.026712233
UPP1	TGFB3	CEC	-0.054255596	0.344996789
UPP1	VEGFA	CEC	0.10746733	0.060853004
UPP1	VEGFB	CEC	0.01686673	0.769234662
UPP1	VEGFC	CEC	0.266782257	2.29E-06
UPP1	CCL11	CEC	0.097729533	0.088409935
UPP1	CCL13	CEC	0.258546109	4.77E-06

UPP1	CCL14	CESC	-0.092774833	0.105861172
UPP1	CCL14-CCL15	CESC	-0.127033512	0.02652551
UPP1	CCL15	CESC	-0.20183095	0.000389758
UPP1	CCL1	CESC	0.168481821	0.00316282
UPP1	CCL16	CESC	-0.115311791	0.044190216
UPP1	CCL17	CESC	0.161440791	0.004707021
UPP1	CCL18	CESC	0.294987952	1.54E-07
UPP1	CCL19	CESC	0.029520135	0.607572212
UPP1	CCL20	CESC	0.257075315	5.42E-06
UPP1	CCL21	CESC	0.154411637	0.006895834
UPP1	CCL22	CESC	0.23012825	4.97E-05
UPP1	CCL23	CESC	0.111203254	0.052364094
UPP1	CCL24	CESC	0.03829334	0.505243122
UPP1	CCL25	CESC	-0.051454465	0.370510708
UPP1	CCL26	CESC	0.303862679	6.18E-08
UPP1	CCL2	CESC	0.170380182	0.002833921
UPP1	CCL27	CESC	0.187567294	0.000996431
UPP1	CCL28	CESC	-0.179787711	0.001617719
UPP1	CCL3	CESC	0.368459383	3.06E-11
UPP1	CCL3L1	CESC	0.246756095	1.30E-05
UPP1	CCL3L3	CESC	0.042467127	0.459940644
UPP1	CCL4	CESC	0.269393284	1.81E-06
UPP1	CCL4L2	CESC	0.228958244	5.44E-05
UPP1	CCL5	CESC	0.212558031	0.000184205
UPP1	CCL7	CESC	0.226233451	6.70E-05
UPP1	CCL8	CESC	0.19711065	0.000535614
UPP1	CROCCL1	CESC	-0.347121314	4.60E-10
UPP1	CROCCL2	CESC	-0.421342484	1.48E-14
UPP1	CXCL10	CESC	0.271920179	1.43E-06
UPP1	CXCL11	CESC	0.305761155	5.06E-08
UPP1	CXCL12	CESC	-0.11761118	0.040103018
UPP1	CXCL1	CESC	0.224767621	7.49E-05
UPP1	CXCL13	CESC	0.207650745	0.000260761
UPP1	CXCL14	CESC	0.016983724	0.767679626
UPP1	CXCL16	CESC	0.065587056	0.253472564
UPP1	CXCL17	CESC	0.007492054	0.89632301
UPP1	CXCL2	CESC	0.154595329	0.006828658
UPP1	CXCL3	CESC	0.054162427	0.34582706
UPP1	CXCL5	CESC	0.008364723	0.884326914
UPP1	CXCL6	CESC	0.079877287	0.164075936
UPP1	CXCL9	CESC	0.168582752	0.003144498
UPP1	IL10	CESC	0.215804272	0.00014573
UPP1	IL11	CESC	0.335429898	1.87E-09

UPP1	IL12A	CESC	-0.336192816	1.71E-09
UPP1	IL12B	CESC	-0.036918103	0.520666371
UPP1	IL13	CESC	0.12357467	0.030962573
UPP1	IL15	CESC	0.169373694	0.003004214
UPP1	IL16	CESC	0.140539934	0.014027813
UPP1	IL17A	CESC	-0.00190123	0.973620955
UPP1	IL17B	CESC	0.135238104	0.018127688
UPP1	IL17C	CESC	0.032933338	0.566678679
UPP1	IL17D	CESC	-0.241673341	1.98E-05
UPP1	IL17F	CESC	0.024000745	0.676317084
UPP1	IL18	CESC	0.443366752	4.05E-16
UPP1	IL19	CESC	0.005666255	0.921494498
UPP1	IL1A	CESC	0.585334208	1.95E-29
UPP1	IL1B	CESC	0.457872747	3.27E-17
UPP1	IL2	CESC	-0.093712285	0.102365746
UPP1	IL20	CESC	0.261787202	3.58E-06
UPP1	IL21	CESC	0.00266335	0.963053205
UPP1	IL22	CESC	0.133353567	0.01981821
UPP1	IL24	CESC	0.338620182	1.28E-09
UPP1	IL25	CESC	0.015260754	0.790671508
UPP1	IL26	CESC	0.046543931	0.417965354
UPP1	IL27	CESC	0.177310861	0.001880057
UPP1	IL29	CESC	0.206537762	0.000281836
UPP1	IL3	CESC	0.031627583	0.582167356
UPP1	IL31	CESC	0.007973709	0.889698872
UPP1	IL32	CESC	0.270735114	1.60E-06
UPP1	IL33	CESC	0.057462919	0.317188186
UPP1	IL34	CESC	0.043622055	0.447816849
UPP1	IL4	CESC	-0.02813475	0.624536142
UPP1	IL5	CESC	0.047907566	0.404442713
UPP1	IL6	CESC	0.199790215	0.000447576
UPP1	IL7	CESC	0.009557163	0.867978217
UPP1	IL8	CESC	0.279811197	6.83E-07
UPP1	IL9	CESC	0.043864214	0.445297915
UPP1	TGFB1	COAD	0.306093908	2.79E-11
UPP1	TGFB2	COAD	-0.056412969	0.230792756
UPP1	TGFB3	COAD	0.099021725	0.035124875
UPP1	VEGFA	COAD	-0.028543363	0.544543892
UPP1	VEGFB	COAD	0.098823539	0.035493909
UPP1	VEGFC	COAD	0.133117626	0.004538847
UPP1	CCL11	COAD	0.039151715	0.405796495
UPP1	CCL13	COAD	0.294111043	1.72E-10
UPP1	CCL14	COAD	0.041565227	0.377450762

UPP1	CCL14-CCL15	COAD	-0.045651134	0.332320495
UPP1	CCL15	COAD	0.057093889	0.225203696
UPP1	CCL1	COAD	0.109931459	0.019263531
UPP1	CCL16	COAD	-0.026830656	0.568960559
UPP1	CCL17	COAD	0.201378133	1.57E-05
UPP1	CCL18	COAD	0.261095182	1.70E-08
UPP1	CCL19	COAD	0.150285918	0.001336356
UPP1	CCL20	COAD	-0.017993083	0.702510349
UPP1	CCL21	COAD	0.106513756	0.023377604
UPP1	CCL22	COAD	0.206993017	8.93E-06
UPP1	CCL23	COAD	0.229118286	8.28E-07
UPP1	CCL24	COAD	-0.141115044	0.002610392
UPP1	CCL25	COAD	0.045602801	0.332833174
UPP1	CCL26	COAD	0.167921445	0.000331119
UPP1	CCL2	COAD	0.206905788	9.01E-06
UPP1	CCL27	COAD	0.119086683	0.011191991
UPP1	CCL28	COAD	0.058585993	0.213294846
UPP1	CCL3	COAD	0.424268198	3.22E-21
UPP1	CCL3L1	COAD	0.350754664	1.47E-14
UPP1	CCL3L3	COAD	0.155704889	0.000883752
UPP1	CCL4	COAD	0.344468828	4.58E-14
UPP1	CCL4L2	COAD	0.341830492	7.33E-14
UPP1	CCL5	COAD	0.354638435	7.16E-15
UPP1	CCL7	COAD	0.261109884	1.70E-08
UPP1	CCL8	COAD	0.290447496	2.96E-10
UPP1	CROCCL1	COAD	-0.083303169	0.076529336
UPP1	CROCCL2	COAD	-0.073190791	0.119812559
UPP1	CXCL10	COAD	0.245448643	1.22E-07
UPP1	CXCL11	COAD	0.235043886	4.20E-07
UPP1	CXCL12	COAD	-0.07395321	0.115994806
UPP1	CXCL1	COAD	0.267070416	7.75E-09
UPP1	CXCL13	COAD	0.23751381	3.14E-07
UPP1	CXCL14	COAD	-0.256927803	2.91E-08
UPP1	CXCL16	COAD	0.204808017	1.11E-05
UPP1	CXCL17	COAD	0.143105138	0.002264648
UPP1	CXCL2	COAD	0.133764202	0.004344904
UPP1	CXCL3	COAD	0.213720199	4.45E-06
UPP1	CXCL5	COAD	0.243007831	1.64E-07
UPP1	CXCL6	COAD	0.173535019	0.000206054
UPP1	CXCL9	COAD	0.195789244	2.71E-05
UPP1	IL10	COAD	0.221087142	2.02E-06
UPP1	IL11	COAD	0.330838984	4.95E-13
UPP1	IL12A	COAD	-0.009681745	0.837181679

UPP1	IL12B	COAD	0.119447447	0.010946989
UPP1	IL13	COAD	0.174243396	0.000193878
UPP1	IL15	COAD	0.240688194	2.16E-07
UPP1	IL16	COAD	0.108004045	0.021498473
UPP1	IL17A	COAD	-0.075828798	0.10700832
UPP1	IL17B	COAD	0.141410868	0.002556125
UPP1	IL17C	COAD	0.212039916	5.30E-06
UPP1	IL17D	COAD	0.02974694	0.52770167
UPP1	IL17F	COAD	-0.04609562	0.327629605
UPP1	IL18	COAD	0.204996389	1.09E-05
UPP1	IL19	COAD	0.141320169	0.002572653
UPP1	IL1A	COAD	0.239111734	2.60E-07
UPP1	IL1B	COAD	0.323563088	1.68E-12
UPP1	IL2	COAD	0.004523009	0.923519523
UPP1	IL20	COAD	0.108640597	0.020736669
UPP1	IL21	COAD	0.126490095	0.007026491
UPP1	IL22	COAD	0.107989574	0.02151607
UPP1	IL24	COAD	0.291173612	2.66E-10
UPP1	IL25	COAD	0.122534973	0.009037073
UPP1	IL26	COAD	-0.056004239	0.234194467
UPP1	IL27	COAD	0.199349085	1.92E-05
UPP1	IL29	COAD	0.099007356	0.035151521
UPP1	IL3	COAD	0.121425203	0.009686418
UPP1	IL31	COAD	0.120332438	0.010365985
UPP1	IL32	COAD	0.243829328	1.48E-07
UPP1	IL33	COAD	0.041789112	0.374884446
UPP1	IL34	COAD	-0.078267657	0.096155716
UPP1	IL4	COAD	0.126317038	0.007105298
UPP1	IL5	COAD	0.089566358	0.056796297
UPP1	IL6	COAD	0.29224587	2.27E-10
UPP1	IL7	COAD	0.068306083	0.146642978
UPP1	IL8	COAD	0.316997259	4.94E-12
UPP1	IL9	COAD	0.120376664	0.010337681
UPP1	TGFB1	LUSC	0.380602386	9.47E-19
UPP1	TGFB2	LUSC	-0.101448821	0.023014243
UPP1	TGFB3	LUSC	0.046439956	0.29905118
UPP1	VEGFA	LUSC	0.104725968	0.018923715
UPP1	VEGFB	LUSC	0.146483517	0.000996171
UPP1	VEGFC	LUSC	0.248864428	1.59E-08
UPP1	CCL11	LUSC	0.192177188	1.45E-05
UPP1	CCL13	LUSC	0.17175085	0.000110038
UPP1	CCL14	LUSC	-0.01396992	0.754861174
UPP1	CCL14-CCL15	LUSC	0.093460002	0.036316294

UPP1	CCL15	LUSC	0.099838668	0.025290518
UPP1	CCL1	LUSC	-0.056396964	0.207147403
UPP1	CCL16	LUSC	-0.011104686	0.80398597
UPP1	CCL17	LUSC	0.18580178	2.80E-05
UPP1	CCL18	LUSC	0.110816538	0.012978803
UPP1	CCL19	LUSC	-0.076890374	0.085248988
UPP1	CCL20	LUSC	0.28264209	1.13E-10
UPP1	CCL21	LUSC	0.082000746	0.066391911
UPP1	CCL22	LUSC	0.222436098	4.79E-07
UPP1	CCL23	LUSC	0.164074143	0.000222475
UPP1	CCL24	LUSC	0.212200584	1.61E-06
UPP1	CCL25	LUSC	-0.083858623	0.060448692
UPP1	CCL26	LUSC	0.252430676	9.76E-09
UPP1	CCL2	LUSC	0.089919755	0.044036559
UPP1	CCL27	LUSC	-0.016529386	0.711793232
UPP1	CCL28	LUSC	0.005834504	0.896250473
UPP1	CCL3	LUSC	0.221818748	5.16E-07
UPP1	CCL3L1	LUSC	0.188858808	2.05E-05
UPP1	CCL3L3	LUSC	0.006330877	0.887480205
UPP1	CCL4	LUSC	0.0975031	0.028936344
UPP1	CCL4L2	LUSC	0.130296914	0.003449569
UPP1	CCL5	LUSC	0.029885204	0.504089761
UPP1	CCL7	LUSC	0.158763164	0.000355687
UPP1	CCL8	LUSC	0.099370827	0.025987298
UPP1	CROCCL1	LUSC	-0.273178809	4.84E-10
UPP1	CROCCL2	LUSC	-0.330089814	3.17E-14
UPP1	CXCL10	LUSC	0.046103978	0.302564627
UPP1	CXCL11	LUSC	0.080301816	0.072238915
UPP1	CXCL12	LUSC	-0.071954253	0.107347777
UPP1	CXCL1	LUSC	0.365843469	2.41E-17
UPP1	CXCL13	LUSC	-0.04996642	0.263813642
UPP1	CXCL14	LUSC	0.064688319	0.147821911
UPP1	CXCL16	LUSC	0.179472825	5.25E-05
UPP1	CXCL17	LUSC	0.117524191	0.008395235
UPP1	CXCL2	LUSC	0.240353516	4.98E-08
UPP1	CXCL3	LUSC	0.281202872	1.41E-10
UPP1	CXCL5	LUSC	0.31134771	9.57E-13
UPP1	CXCL6	LUSC	0.162071029	0.000266
UPP1	CXCL9	LUSC	-0.079457559	0.075297172
UPP1	IL10	LUSC	0.100628858	0.024150234
UPP1	IL11	LUSC	0.306256147	2.32E-12
UPP1	IL12A	LUSC	-0.229951685	1.90E-07
UPP1	IL12B	LUSC	-0.054959969	0.218975391

UPP1	IL13	LUSC	-0.007293615	0.870509906
UPP1	IL15	LUSC	0.027541865	0.538116458
UPP1	IL16	LUSC	-0.044936049	0.314990296
UPP1	IL17A	LUSC	-0.053209077	0.234030854
UPP1	IL17B	LUSC	0.08180314	0.06705135
UPP1	IL17C	LUSC	0.193450289	1.27E-05
UPP1	IL17D	LUSC	-0.10759426	0.015879091
UPP1	IL17F	LUSC	-0.075891796	0.089395672
UPP1	IL18	LUSC	0.338071106	6.91E-15
UPP1	IL19	LUSC	-0.067341941	0.131869701
UPP1	IL1A	LUSC	0.597661473	6.21E-50
UPP1	IL1B	LUSC	0.445745775	7.08E-26
UPP1	IL2	LUSC	-0.082754263	0.063926028
UPP1	IL20	LUSC	0.139681581	0.001705658
UPP1	IL21	LUSC	-0.067827976	0.129097685
UPP1	IL22	LUSC	0.001045452	0.981358852
UPP1	IL24	LUSC	0.35573702	2.02E-16
UPP1	IL25	LUSC	-0.032957391	0.461255266
UPP1	IL26	LUSC	-0.033678917	0.45149761
UPP1	IL27	LUSC	0.031495057	0.481386991
UPP1	IL29	LUSC	0.151166337	0.000678707
UPP1	IL3	LUSC	-0.002341496	0.958264686
UPP1	IL31	LUSC	0.019761634	0.658702103
UPP1	IL32	LUSC	0.200348475	6.08E-06
UPP1	IL33	LUSC	0.062406444	0.162680153
UPP1	IL34	LUSC	-0.107335701	0.016134733
UPP1	IL4	LUSC	-0.010421734	0.815818183
UPP1	IL5	LUSC	-0.010383767	0.816477216
UPP1	IL6	LUSC	0.233491565	1.21E-07
UPP1	IL7	LUSC	0.102346274	0.021824212
UPP1	IL8	LUSC	0.38849474	1.56E-19
UPP1	IL9	LUSC	0.043808227	0.327302176
UPP1	TGFB1	READ	0.349699649	5.44E-06
UPP1	TGFB2	READ	-0.06591166	0.40613606
UPP1	TGFB3	READ	0.133157742	0.092196235
UPP1	VEGFA	READ	-0.115519372	0.1444976
UPP1	VEGFB	READ	0.205718371	0.008844743
UPP1	VEGFC	READ	0.185252625	0.018638745
UPP1	CCL11	READ	0.304597706	8.55E-05
UPP1	CCL13	READ	0.332271534	1.66E-05
UPP1	CCL14	READ	0.155795504	0.048440032
UPP1	CCL14-CCL15	READ	-0.079812753	0.314210708
UPP1	CCL15	READ	0.086068355	0.277659774

UPP1	CCL1	READ	0.194828647	0.013263445
UPP1	CCL16	READ	-0.07511982	0.3436002
UPP1	CCL17	READ	0.294286891	0.000151105
UPP1	CCL18	READ	0.24722728	0.001568248
UPP1	CCL19	READ	0.082917524	0.295695173
UPP1	CCL20	READ	-0.194306972	0.013516774
UPP1	CCL21	READ	0.293688592	0.000156084
UPP1	CCL22	READ	0.292843616	0.000163377
UPP1	CCL23	READ	0.252079182	0.001255945
UPP1	CCL24	READ	-0.14705452	0.062672607
UPP1	CCL25	READ	-0.150179734	0.057234198
UPP1	CCL26	READ	0.129624723	0.101242511
UPP1	CCL2	READ	0.304388476	8.65E-05
UPP1	CCL27	READ	0.108817881	0.169420105
UPP1	CCL28	READ	-0.049482998	0.533048874
UPP1	CCL3	READ	0.423660705	2.15E-08
UPP1	CCL3L1	READ	0.324844446	2.62E-05
UPP1	CCL3L3	READ	0.091417006	0.248774818
UPP1	CCL4	READ	0.279803507	0.000324743
UPP1	CCL4L2	READ	0.288980324	0.000200951
UPP1	CCL5	READ	0.223054073	0.004453593
UPP1	CCL7	READ	0.248314546	0.00149267
UPP1	CCL8	READ	0.291198602	0.000178495
UPP1	CROCCL1	READ	-0.012335146	0.876583385
UPP1	CROCCL2	READ	-0.030585492	0.700124352
UPP1	CXCL10	READ	0.216437014	0.005821948
UPP1	CXCL11	READ	0.075687317	0.339956618
UPP1	CXCL12	READ	0.066095638	0.404824237
UPP1	CXCL1	READ	0.148630021	0.059880289
UPP1	CXCL13	READ	0.055810505	0.481939583
UPP1	CXCL14	READ	-0.040367711	0.611155255
UPP1	CXCL16	READ	0.049900958	0.529591056
UPP1	CXCL17	READ	0.012566219	0.874290301
UPP1	CXCL2	READ	-0.06323902	0.425474818
UPP1	CXCL3	READ	0.083106399	0.294592644
UPP1	CXCL5	READ	0.154593258	0.050221558
UPP1	CXCL6	READ	0.061668309	0.437084342
UPP1	CXCL9	READ	0.065761173	0.407210951
UPP1	IL10	READ	0.275933946	0.000395653
UPP1	IL11	READ	0.324573775	2.66E-05
UPP1	IL12A	READ	-0.313161123	5.24E-05
UPP1	IL12B	READ	-0.13500726	0.087723801
UPP1	IL13	READ	0.03376024	0.670725241

UPP1	IL15	READ	0.10051687	0.204550222
UPP1	IL16	READ	0.081981969	0.301196619
UPP1	IL17A	READ	-0.160435865	0.042049507
UPP1	IL17B	READ	0.4156094	4.19E-08
UPP1	IL17C	READ	0.112499935	0.155358549
UPP1	IL17D	READ	0.144966548	0.066536623
UPP1	IL17F	READ	-0.062130264	0.433651296
UPP1	IL18	READ	0.236002406	0.002579185
UPP1	IL19	READ	0.265443887	0.000666209
UPP1	IL1A	READ	0.136417092	0.084432419
UPP1	IL1B	READ	0.190714067	0.015379373
UPP1	IL2	READ	-0.013743415	0.862624875
UPP1	IL20	READ	0.226132667	0.003921553
UPP1	IL21	READ	0.11052511	0.162787035
UPP1	IL22	READ	0.105012097	0.184925674
UPP1	IL24	READ	0.253439677	0.001179215
UPP1	IL25	READ	0.112267735	0.156218528
UPP1	IL26	READ	0.030931752	0.696895203
UPP1	IL27	READ	0.216078623	0.005905783
UPP1	IL29	READ	0.177608204	0.024196997
UPP1	IL3	READ	0.114256945	0.148966281
UPP1	IL31	READ	0.114238363	0.149032829
UPP1	IL32	READ	0.240379137	0.00213009
UPP1	IL33	READ	0.026229976	0.741184908
UPP1	IL34	READ	0.155220618	0.049285246
UPP1	IL4	READ	0.114161774	0.149307351
UPP1	IL5	READ	-0.02458035	0.756936456
UPP1	IL6	READ	0.194383684	0.013479259
UPP1	IL7	READ	-0.123058687	0.119900778
UPP1	IL8	READ	0.255162607	0.001088206
UPP1	IL9	READ	0.11189385	0.157610764
UPP1	TGFB1	KIRC	0.122855908	0.00446724
UPP1	TGFB2	KIRC	-0.146625335	0.000676998
UPP1	TGFB3	KIRC	0.098789054	0.022424564
UPP1	VEGFA	KIRC	-0.213846125	6.10E-07
UPP1	VEGFB	KIRC	0.459502458	2.99E-29
UPP1	VEGFC	KIRC	0.097921652	0.023638475
UPP1	CCL11	KIRC	0.192386471	7.56E-06
UPP1	CCL13	KIRC	0.160588797	0.000194178
UPP1	CCL14	KIRC	0.077728632	0.072702416
UPP1	CCL14-CCL15	KIRC	-0.317679628	5.50E-14
UPP1	CCL15	KIRC	-0.306314685	4.60E-13
UPP1	CCL1	KIRC	0.130657191	0.002484798

UPP1	CCL16	KIRC	0.087652241	0.042902467
UPP1	CCL17	KIRC	0.010474558	0.809175276
UPP1	CCL18	KIRC	0.068333302	0.114744989
UPP1	CCL19	KIRC	0.098545717	0.022759531
UPP1	CCL20	KIRC	0.077700944	0.072804697
UPP1	CCL21	KIRC	0.253979083	2.63E-09
UPP1	CCL22	KIRC	-0.125933148	0.003557889
UPP1	CCL23	KIRC	0.107396512	0.013023146
UPP1	CCL24	KIRC	0.094492062	0.029011191
UPP1	CCL25	KIRC	0.225984155	1.30E-07
UPP1	CCL26	KIRC	0.303245573	8.04E-13
UPP1	CCL2	KIRC	-0.060665391	0.161547146
UPP1	CCL27	KIRC	0.087111219	0.044207979
UPP1	CCL28	KIRC	-0.240633723	1.80E-08
UPP1	CCL3	KIRC	0.059187698	0.172024418
UPP1	CCL3L1	KIRC	-0.031765899	0.463848133
UPP1	CCL3L3	KIRC	-0.067893244	0.117105577
UPP1	CCL4	KIRC	-0.042931419	0.322071525
UPP1	CCL4L2	KIRC	-0.046981291	0.278489527
UPP1	CCL5	KIRC	0.010061607	0.81656204
UPP1	CCL7	KIRC	0.241883473	1.51E-08
UPP1	CCL8	KIRC	0.063762785	0.141155044
UPP1	CROCCL1	KIRC	0.070510439	0.103610943
UPP1	CROCCL2	KIRC	-0.086747891	0.045103346
UPP1	CXCL10	KIRC	-0.14647803	0.000685592
UPP1	CXCL11	KIRC	-0.179516849	3.01E-05
UPP1	CXCL12	KIRC	-0.188201728	1.20E-05
UPP1	CXCL1	KIRC	0.073383679	0.090247567
UPP1	CXCL13	KIRC	0.025237492	0.560617111
UPP1	CXCL14	KIRC	-0.445660981	2.03E-27
UPP1	CXCL16	KIRC	-0.12194283	0.004774855
UPP1	CXCL17	KIRC	0.203801841	2.05E-06
UPP1	CXCL2	KIRC	0.180446617	2.73E-05
UPP1	CXCL3	KIRC	0.145409741	0.000751008
UPP1	CXCL5	KIRC	0.079742591	0.065571479
UPP1	CXCL6	KIRC	0.00340902	0.937356539
UPP1	CXCL9	KIRC	-0.199360699	3.44E-06
UPP1	IL10	KIRC	-0.09174613	0.034038621
UPP1	IL11	KIRC	0.389585654	8.46E-21
UPP1	IL12A	KIRC	0.002572589	0.952705749
UPP1	IL12B	KIRC	0.153038558	0.000386517
UPP1	IL13	KIRC	0.112373967	0.009351255
UPP1	IL15	KIRC	0.044967488	0.299634186

UPP1	IL16	KIRC	-0.258865729	1.27E-09
UPP1	IL17A	KIRC	0.06432759	0.137659162
UPP1	IL17B	KIRC	0.237132588	2.92E-08
UPP1	IL17C	KIRC	0.181696823	2.40E-05
UPP1	IL17D	KIRC	0.31263953	1.43E-13
UPP1	IL17F	KIRC	-0.031323405	0.470100175
UPP1	IL18	KIRC	0.296950982	2.48E-12
UPP1	IL19	KIRC	0.23625618	3.29E-08
UPP1	IL1A	KIRC	0.180730194	2.65E-05
UPP1	IL1B	KIRC	-0.047533951	0.272868195
UPP1	IL2	KIRC	0.062202357	0.151167067
UPP1	IL20	KIRC	0.36271778	4.77E-18
UPP1	IL21	KIRC	0.014308655	0.741480996
UPP1	IL22	KIRC	0.038675306	0.372411464
UPP1	IL24	KIRC	-0.026904425	0.535011134
UPP1	IL25	KIRC	0.098856542	0.022332424
UPP1	IL26	KIRC	-0.03220582	0.457678497
UPP1	IL27	KIRC	0.162819264	0.000157505
UPP1	IL29	KIRC	0.063565874	0.142389697
UPP1	IL3	KIRC	-0.030059142	0.488216181
UPP1	IL31	KIRC	0.07831738	0.070555183
UPP1	IL32	KIRC	-0.121988968	0.004758864
UPP1	IL33	KIRC	-0.06849025	0.113912169
UPP1	IL34	KIRC	0.061191538	0.157934986
UPP1	IL4	KIRC	0.129838163	0.002646564
UPP1	IL5	KIRC	-0.03286508	0.448519355
UPP1	IL6	KIRC	0.237400954	2.81E-08
UPP1	IL7	KIRC	-0.347810712	1.25E-16
UPP1	IL8	KIRC	0.201157631	2.79E-06
UPP1	IL9	KIRC	-0.074950523	0.083564995
UPP1	TGFB1	LIHC	0.354470485	1.75E-12
UPP1	TGFB2	LIHC	0.049948527	0.336034986
UPP1	TGFB3	LIHC	0.277202127	5.25E-08
UPP1	VEGFA	LIHC	-0.059617313	0.25073793
UPP1	VEGFB	LIHC	0.479844623	7.08E-23
UPP1	VEGFC	LIHC	0.112428089	0.029935223
UPP1	CCL11	LIHC	0.22157003	1.57E-05
UPP1	CCL13	LIHC	0.321138491	2.15E-10
UPP1	CCL14	LIHC	-0.002876523	0.955844857
UPP1	CCL14-CCL15	LIHC	-0.266057012	1.83E-07
UPP1	CCL15	LIHC	-0.141378783	0.006236815
UPP1	CCL1	LIHC	0.108273473	0.036596422
UPP1	CCL16	LIHC	-0.22588499	1.06E-05

UPP1	CCL17	LIHC	0.329563515	6.72E-11
UPP1	CCL18	LIHC	0.041756592	0.421340534
UPP1	CCL19	LIHC	0.211605794	3.79E-05
UPP1	CCL20	LIHC	0.242635044	2.12E-06
UPP1	CCL21	LIHC	0.20012001	9.97E-05
UPP1	CCL22	LIHC	0.246612188	1.42E-06
UPP1	CCL23	LIHC	0.123317775	0.017182951
UPP1	CCL24	LIHC	-0.106419299	0.039952817
UPP1	CCL25	LIHC	0.031572343	0.543274902
UPP1	CCL26	LIHC	0.428232942	4.57E-18
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UPP1	CCL27	LIHC	0.234244209	4.82E-06
UPP1	CCL28	LIHC	0.223417158	1.33E-05
UPP1	CCL3	LIHC	0.250995487	9.10E-07
UPP1	CCL3L1	LIHC	0.167322224	0.001180383
UPP1	CCL3L3	LIHC	-0.02951529	0.569868282
UPP1	CCL4	LIHC	0.236991313	3.70E-06
UPP1	CCL4L2	LIHC	0.169919364	0.000985396
UPP1	CCL5	LIHC	0.293912724	7.22E-09
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UPP1	CCL8	LIHC	0.021990879	0.672047127
UPP1	CROCCL1	LIHC	-0.150195166	0.003643015
UPP1	CROCCL2	LIHC	-0.083513252	0.107330331
UPP1	CXCL10	LIHC	-0.058920116	0.256331968
UPP1	CXCL11	LIHC	-0.000662603	0.989824026
UPP1	CXCL12	LIHC	0.06189181	0.233080571
UPP1	CXCL1	LIHC	0.387940502	7.62E-15
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UPP1	CXCL14	LIHC	0.215105432	2.79E-05
UPP1	CXCL16	LIHC	0.288855491	1.33E-08
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UPP1	CXCL2	LIHC	0.172230862	0.000837303
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UPP1	CXCL9	LIHC	0.003804189	0.94162726
UPP1	IL10	LIHC	0.172779466	0.000805315
UPP1	IL11	LIHC	0.369647429	1.61E-13
UPP1	IL12A	LIHC	0.175707308	0.000652881
UPP1	IL12B	LIHC	0.087217665	0.092567716
UPP1	IL13	LIHC	-0.034775669	0.503126816
UPP1	IL15	LIHC	0.353054676	2.17E-12
UPP1	IL16	LIHC	0.090487156	0.080930289

UPP1	IL17A	LIHC	-0.174898774	0.00069206
UPP1	IL17B	LIHC	0.361779169	5.62E-13
UPP1	IL17C	LIHC	0.078431233	0.130532702
UPP1	IL17D	LIHC	0.325492067	1.18E-10
UPP1	IL17F	LIHC	-0.073991957	0.153816019
UPP1	IL18	LIHC	0.424231724	9.99E-18
UPP1	IL19	LIHC	0.116666481	0.024237633
UPP1	IL1A	LIHC	0.140642132	0.00651499
UPP1	IL1B	LIHC	0.183696939	0.000362107
UPP1	IL2	LIHC	0.101718115	0.049645753
UPP1	IL20	LIHC	0.079652744	0.124629765
UPP1	IL21	LIHC	-0.05544943	0.285460097
UPP1	IL22	LIHC	0.068603219	0.186148435
UPP1	IL24	LIHC	0.133535363	0.009825432
UPP1	IL25	LIHC	0.065770011	0.205034072
UPP1	IL26	LIHC	0.114935887	0.026439749
UPP1	IL27	LIHC	-0.243587557	1.93E-06
UPP1	IL29	LIHC	0.027264325	0.599658392
UPP1	IL3	LIHC	-0.131673386	0.01090924
UPP1	IL31	LIHC	-0.00316874	0.951364567
UPP1	IL32	LIHC	0.268930923	1.34E-07
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UPP1	IL34	LIHC	0.344521415	7.81E-12
UPP1	IL4	LIHC	0.125327479	0.015439262
UPP1	IL5	LIHC	-0.097907432	0.058878313
UPP1	IL6	LIHC	0.177759485	0.000562477
UPP1	IL7	LIHC	-0.120375144	0.02004582
UPP1	IL8	LIHC	0.249528985	1.06E-06
UPP1	IL9	LIHC	0.065274441	0.208475193
UPP1	TGFB1	BRCA	0.36726752	2.30E-36
UPP1	TGFB2	BRCA	0.128839493	1.87E-05
UPP1	TGFB3	BRCA	-0.166454586	2.93E-08
UPP1	VEGFA	BRCA	0.268097912	1.63E-19
UPP1	VEGFB	BRCA	0.321171975	9.68E-28
UPP1	VEGFC	BRCA	0.204845143	7.40E-12
UPP1	CCL11	BRCA	0.25001545	4.27E-17
UPP1	CCL13	BRCA	0.478609933	6.95E-64
UPP1	CCL14	BRCA	-0.000433313	0.988562394
UPP1	CCL14-CCL15	BRCA	-0.011713661	0.698357187
UPP1	CCL15	BRCA	-0.040211353	0.183235172
UPP1	CCL1	BRCA	0.181118459	1.52E-09
UPP1	CCL16	BRCA	0.060300571	0.045851818
UPP1	CCL17	BRCA	0.358762897	1.16E-34

UPP1	CCL18	BRCA	0.463355393	1.77E-59
UPP1	CCL19	BRCA	0.190398703	2.05E-10
UPP1	CCL20	BRCA	0.42760139	5.45E-50
UPP1	CCL21	BRCA	0.162844187	5.84E-08
UPP1	CCL22	BRCA	0.256157656	6.77E-18
UPP1	CCL23	BRCA	0.395700165	1.96E-42
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UPP1	CCL26	BRCA	0.445079164	1.73E-54
UPP1	CCL2	BRCA	0.440505831	2.76E-53
UPP1	CCL27	BRCA	0.171208367	1.15E-08
UPP1	CCL28	BRCA	0.014780425	0.624833965
UPP1	CCL3	BRCA	0.407550777	3.81E-45
UPP1	CCL3L1	BRCA	0.215733925	5.11E-13
UPP1	CCL3L3	BRCA	0.016423772	0.586862623
UPP1	CCL4	BRCA	0.418978263	7.25E-48
UPP1	CCL4L2	BRCA	0.331266381	1.66E-29
UPP1	CCL5	BRCA	0.436967942	2.29E-52
UPP1	CCL7	BRCA	0.464400015	8.97E-60
UPP1	CCL8	BRCA	0.393361771	6.52E-42
UPP1	CROCCL1	BRCA	0.178805779	2.47E-09
UPP1	CROCCL2	BRCA	-0.114444695	0.000145464
UPP1	CXCL10	BRCA	0.345246215	4.60E-32
UPP1	CXCL11	BRCA	0.299998313	3.00E-24
UPP1	CXCL12	BRCA	0.055065595	0.068283538
UPP1	CXCL1	BRCA	0.509224748	2.00E-73
UPP1	CXCL13	BRCA	0.246738095	1.12E-16
UPP1	CXCL14	BRCA	-0.117369432	9.76E-05
UPP1	CXCL16	BRCA	0.4679962	8.53E-61
UPP1	CXCL17	BRCA	0.050091008	0.097274411
UPP1	CXCL2	BRCA	0.399487844	2.74E-43
UPP1	CXCL3	BRCA	0.486263296	3.52E-66
UPP1	CXCL5	BRCA	0.451407991	3.51E-56
UPP1	CXCL6	BRCA	0.360870593	4.43E-35
UPP1	CXCL9	BRCA	0.217661155	3.13E-13
UPP1	IL10	BRCA	0.355673074	4.67E-34
UPP1	IL11	BRCA	0.393013783	7.79E-42
UPP1	IL12A	BRCA	0.324000974	3.14E-28
UPP1	IL12B	BRCA	0.219065818	2.19E-13
UPP1	IL13	BRCA	0.292219744	4.88E-23
UPP1	IL15	BRCA	0.399721199	2.42E-43
UPP1	IL16	BRCA	0.171972189	9.92E-09
UPP1	IL17A	BRCA	0.157685804	1.52E-07

UPP1	IL17B	BRCA	0.167423432	2.43E-08
UPP1	IL17C	BRCA	0.162517674	6.21E-08
UPP1	IL17D	BRCA	0.159868182	1.02E-07
UPP1	IL17F	BRCA	0.179872482	1.98E-09
UPP1	IL18	BRCA	0.348240552	1.25E-32
UPP1	IL19	BRCA	-0.138297165	4.28E-06
UPP1	IL1A	BRCA	0.356993565	2.58E-34
UPP1	IL1B	BRCA	0.285651144	4.82E-22
UPP1	IL2	BRCA	0.171083715	1.18E-08
UPP1	IL20	BRCA	-0.248016929	7.70E-17
UPP1	IL21	BRCA	0.110495405	0.000245626
UPP1	IL22	BRCA	0.168870905	1.83E-08
UPP1	IL24	BRCA	-0.024062086	0.425935083
UPP1	IL25	BRCA	-0.013141023	0.663732096
UPP1	IL26	BRCA	0.274437796	2.09E-20
UPP1	IL27	BRCA	0.312563976	2.75E-26
UPP1	IL29	BRCA	0.259670304	2.31E-18
UPP1	IL3	BRCA	0.074906487	0.013078093
UPP1	IL31	BRCA	-0.017148972	0.570452572
UPP1	IL32	BRCA	0.558233628	6.98E-91
UPP1	IL33	BRCA	0.027033725	0.371040289
UPP1	IL34	BRCA	0.486941265	2.19E-66
UPP1	IL4	BRCA	0.068424941	0.023428453
UPP1	IL5	BRCA	0.089559513	0.002988817
UPP1	IL6	BRCA	0.398577702	4.40E-43
UPP1	IL7	BRCA	0.262161167	1.07E-18
UPP1	IL8	BRCA	0.411223913	5.22E-46
UPP1	IL9	BRCA	-0.051302082	0.089440404
UPP1	TGFB1	OV	0.401898883	2.20E-13
UPP1	TGFB2	OV	-0.32087126	8.34E-09
UPP1	TGFB3	OV	-0.018827207	0.742078716
UPP1	VEGFA	OV	0.045159415	0.429688404
UPP1	VEGFB	OV	0.289018774	2.44E-07
UPP1	VEGFC	OV	-0.107162879	0.060317368
UPP1	CCL11	OV	0.450705796	8.15E-17
UPP1	CCL13	OV	0.372475763	1.43E-11
UPP1	CCL14	OV	0.087089802	0.127233098
UPP1	CCL14-CCL15	OV	0.114914212	0.043881959
UPP1	CCL15	OV	0.021127673	0.711887177
UPP1	CCL1	OV	0.203883995	0.000316383
UPP1	CCL16	OV	0.010148	0.859212196
UPP1	CCL17	OV	0.305130734	4.65E-08
UPP1	CCL18	OV	0.30797757	3.43E-08

UPP1	CCL19	OV	0.265043174	2.39E-06
UPP1	CCL20	OV	0.271592762	1.31E-06
UPP1	CCL21	OV	0.140469079	0.013608135
UPP1	CCL22	OV	0.31058359	2.59E-08
UPP1	CCL23	OV	0.335288132	1.58E-09
UPP1	CCL24	OV	0.313550976	1.88E-08
UPP1	CCL25	OV	0.023846812	0.67677535
UPP1	CCL26	OV	0.34799336	3.39E-10
UPP1	CCL2	OV	0.504160754	2.92E-21
UPP1	CCL27	OV	0.023380588	0.682748734
UPP1	CCL28	OV	0.105840988	0.063572933
UPP1	CCL3	OV	0.474267956	1.11E-18
UPP1	CCL3L1	OV	0.315570252	1.50E-08
UPP1	CCL3L3	OV	0.129808325	0.022696063
UPP1	CCL4	OV	0.542590282	5.62E-25
UPP1	CCL4L2	OV	0.423394715	7.92E-15
UPP1	CCL5	OV	0.459329678	1.76E-17
UPP1	CCL7	OV	0.370262496	1.92E-11
UPP1	CCL8	OV	0.439929112	5.21E-16
UPP1	CROCCL1	OV	-0.300658931	7.45E-08
UPP1	CROCCL2	OV	-0.366807004	3.05E-11
UPP1	CXCL10	OV	0.353016109	1.81E-10
UPP1	CXCL11	OV	0.289482913	2.33E-07
UPP1	CXCL12	OV	0.222401868	8.26E-05
UPP1	CXCL1	OV	0.454675134	4.05E-17
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UPP1	CXCL14	OV	0.21937009	0.000103746
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UPP1	CXCL2	OV	0.245994967	1.26E-05
UPP1	CXCL3	OV	0.298268513	9.54E-08
UPP1	CXCL5	OV	0.197506691	0.000489311
UPP1	CXCL6	OV	0.310194693	2.71E-08
UPP1	CXCL9	OV	0.375019992	1.01E-11
UPP1	IL10	OV	0.452027054	6.46E-17
UPP1	IL11	OV	0.063257266	0.268399735
UPP1	IL12A	OV	0.311569587	2.33E-08
UPP1	IL12B	OV	0.247253233	1.13E-05
UPP1	IL13	OV	0.183953032	0.001182975
UPP1	IL15	OV	0.422080507	9.78E-15
UPP1	IL16	OV	0.245715342	1.29E-05
UPP1	IL17A	OV	0.103724157	0.069086121
UPP1	IL17B	OV	-0.028164561	0.62245501

UPP1	IL17C	OV	0.297995694	9.81E-08
UPP1	IL17D	OV	0.005015055	0.930149661
UPP1	IL17F	OV	-0.030650013	0.592066152
UPP1	IL18	OV	0.311467258	2.36E-08
UPP1	IL19	OV	0.203386174	0.000327495
UPP1	IL1A	OV	0.241835627	1.78E-05
UPP1	IL1B	OV	0.431354785	2.18E-15
UPP1	IL2	OV	0.14641516	0.010081879
UPP1	IL20	OV	0.185186545	0.001094323
UPP1	IL21	OV	0.123042836	0.030863953
UPP1	IL22	OV	0.051481032	0.367901015
UPP1	IL24	OV	0.22574309	6.40E-05
UPP1	IL25	OV	-0.198322796	0.000463099
UPP1	IL26	OV	0.106965596	0.060794324
UPP1	IL27	OV	0.319119501	1.01E-08
UPP1	IL29	OV	0.163549203	0.004001933
UPP1	IL3	OV	0.005162754	0.928097968
UPP1	IL31	OV	-0.030568171	0.593055948
UPP1	IL32	OV	0.307754087	3.52E-08
UPP1	IL33	OV	0.107005334	0.060698003
UPP1	IL34	OV	0.023807987	0.677272026
UPP1	IL4	OV	-0.111529473	0.050526377
UPP1	IL5	OV	-0.216843834	0.000125126
UPP1	IL6	OV	0.322631693	6.84E-09
UPP1	IL7	OV	0.361157055	6.39E-11
UPP1	IL8	OV	0.410260246	6.21E-14
UPP1	IL9	OV	-0.045674906	0.42443597
UPP1	TGFB1	UCS	0.315147384	0.016949911
UPP1	TGFB2	UCS	-0.240560323	0.071462819
UPP1	TGFB3	UCS	-0.24864234	0.062177681
UPP1	VEGFA	UCS	0.219511453	0.100872715
UPP1	VEGFB	UCS	0.131827706	0.328320693
UPP1	VEGFC	UCS	-0.029545741	0.827295798
UPP1	CCL11	UCS	-0.223238676	0.095075016
UPP1	CCL13	UCS	0.407610397	0.001648939
UPP1	CCL14	UCS	0.032591512	0.809808535
UPP1	CCL14-CCL15	UCS	0.158855129	0.237892193
UPP1	CCL15	UCS	0.11879813	0.378773615
UPP1	CCL1	UCS	0.112453329	0.404934405
UPP1	CCL16	UCS	0.122935937	0.362271367
UPP1	CCL17	UCS	0.281905097	0.033630049
UPP1	CCL18	UCS	0.384388388	0.003156159
UPP1	CCL19	UCS	0.09735077	0.471270874

UPP1	CCL20	UCS	0.170389668	0.20508237
UPP1	CCL21	UCS	0.083155621	0.538575316
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UPP1	CCL23	UCS	0.318470263	0.015762943
UPP1	CCL24	UCS	0.129521875	0.336925751
UPP1	CCL25	UCS	0.137709155	0.307005987
UPP1	CCL26	UCS	0.029823722	0.82569618
UPP1	CCL2	UCS	0.241072924	0.070842856
UPP1	CCL27	UCS	0.13743836	0.307967332
UPP1	CCL28	UCS	0.119727328	0.375029203
UPP1	CCL3	UCS	0.32381093	0.014004183
UPP1	CCL3L1	UCS	0.216208781	0.106235601
UPP1	CCL3L3	UCS	0.06350248	0.638865443
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UPP1	VEGFB	THCA	-0.084080239	0.059008417
UPP1	VEGFC	THCA	-0.304304731	2.79E-12
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UPP1	TGFB1	LGG	0.54253111	6.81E-42
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UPP1	TGFB3	LGG	0.365953517	3.07E-18
UPP1	VEGFA	LGG	0.301180601	1.42E-12
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UPP1	VEGFC	LGG	0.298545456	2.26E-12
UPP1	CCL11	LGG	0.127377261	0.003308754
UPP1	CCL13	LGG	0.057396176	0.187059753
UPP1	CCL14	LGG	0.142105186	0.001036434
UPP1	CCL14-CCL15	LGG	0.068049441	0.117645968
UPP1	CCL15	LGG	0.073564083	0.090671391
UPP1	CCL1	LGG	-0.145590934	0.000774446
UPP1	CCL16	LGG	0.072506723	0.095418148
UPP1	CCL17	LGG	0.307975627	4.16E-13
UPP1	CCL18	LGG	0.053430628	0.219432515
UPP1	CCL19	LGG	0.127987986	0.00316034
UPP1	CCL20	LGG	0.433366564	1.12E-25
UPP1	CCL21	LGG	0.174992963	5.11E-05
UPP1	CCL22	LGG	0.353043826	5.30E-17
UPP1	CCL23	LGG	0.262561696	8.34E-10

UPP1	CCL24	LGG	-0.128770152	0.002979106
UPP1	CCL25	LGG	0.184741379	1.87E-05
UPP1	CCL26	LGG	0.269340057	2.92E-10
UPP1	CCL2	LGG	0.483210165	2.32E-32
UPP1	CCL27	LGG	0.318344473	6.02E-14
UPP1	CCL28	LGG	0.148408964	0.000609025
UPP1	CCL3	LGG	0.098340583	0.023567027
UPP1	CCL3L1	LGG	0.058001233	0.182446969
UPP1	CCL3L3	LGG	0.010355739	0.811997043
UPP1	CCL4	LGG	0.111474895	0.010220022
UPP1	CCL4L2	LGG	0.069398822	0.110526056
UPP1	CCL5	LGG	0.536403973	8.08E-41
UPP1	CCL7	LGG	0.301785692	1.27E-12
UPP1	CCL8	LGG	0.197099918	4.84E-06
UPP1	CROCCL1	LGG	0.183193343	2.20E-05
UPP1	CROCCL2	LGG	0.025013313	0.565575383
UPP1	CXCL10	LGG	0.530379774	8.75E-40
UPP1	CXCL11	LGG	0.445187359	3.66E-27
UPP1	CXCL12	LGG	0.14579286	0.000761332
UPP1	CXCL1	LGG	0.150143625	0.000524185
UPP1	CXCL13	LGG	-0.191475492	9.05E-06
UPP1	CXCL14	LGG	0.283917983	2.77E-11
UPP1	CXCL16	LGG	0.43317645	1.18E-25
UPP1	CXCL17	LGG	0.047430771	0.275724709
UPP1	CXCL2	LGG	0.16496502	0.000136193
UPP1	CXCL3	LGG	0.08941331	0.039617801
UPP1	CXCL5	LGG	-0.024847745	0.568151793
UPP1	CXCL6	LGG	0.281103433	4.41E-11
UPP1	CXCL9	LGG	0.438300164	2.73E-26
UPP1	IL10	LGG	0.416399964	1.22E-23
UPP1	IL11	LGG	0.189352655	1.14E-05
UPP1	IL12A	LGG	-0.024876315	0.567706818
UPP1	IL12B	LGG	0.099947136	0.021375354
UPP1	IL13	LGG	0.127436982	0.003293967
UPP1	IL15	LGG	0.597110423	1.63E-52
UPP1	IL16	LGG	0.404484358	2.79E-22
UPP1	IL17A	LGG	-0.004416217	0.919209607
UPP1	IL17B	LGG	0.344996883	2.93E-16
UPP1	IL17C	LGG	0.032160601	0.460006795
UPP1	IL17D	LGG	-0.157780844	0.000265652
UPP1	IL17F	LGG	0.105742815	0.014872614
UPP1	IL18	LGG	0.561930367	1.92E-45
UPP1	IL19	LGG	0.029276727	0.50123127

UPP1	IL1A	LGG	0.37563971	3.32E-19
UPP1	IL1B	LGG	0.23782805	2.99E-08
UPP1	IL2	LGG	0.176471639	4.40E-05
UPP1	IL20	LGG	0.082510029	0.057659679
UPP1	IL21	LGG	0.114092891	0.008563544
UPP1	IL22	LGG	0.096899254	0.025696167
UPP1	IL24	LGG	0.181181244	2.72E-05
UPP1	IL25	LGG	-0.000807618	0.985200998
UPP1	IL26	LGG	0.124102353	0.004218091
UPP1	IL27	LGG	0.406640595	1.60E-22
UPP1	IL29	LGG	0.086305626	0.047042176
UPP1	IL3	LGG	0.040102928	0.356826174
UPP1	IL31	LGG	0.035683484	0.412320429
UPP1	IL32	LGG	0.338355789	1.16E-15
UPP1	IL33	LGG	0.007500263	0.86323017
UPP1	IL34	LGG	0.013438367	0.757581742
UPP1	IL4	LGG	0.092065025	0.034090991
UPP1	IL5	LGG	0.018962291	0.663160954
UPP1	IL6	LGG	0.418736779	6.47E-24
UPP1	IL7	LGG	0.362519615	6.63E-18
UPP1	IL8	LGG	0.191252227	9.27E-06
UPP1	IL9	LGG	-0.203206029	2.40E-06
UPP1	TGFB1	LUAD	0.291254542	1.44E-11
UPP1	TGFB2	LUAD	0.018174952	0.680127477
UPP1	TGFB3	LUAD	0.020624665	0.639877014
UPP1	VEGFA	LUAD	0.227725781	1.66E-07
UPP1	VEGFB	LUAD	0.189822861	1.39E-05
UPP1	VEGFC	LUAD	0.142781659	0.001132516
UPP1	CCL11	LUAD	0.294041984	9.04E-12
UPP1	CCL13	LUAD	0.313998792	2.71E-13
UPP1	CCL14	LUAD	-0.093051401	0.034409617
UPP1	CCL14-CCL15	LUAD	-0.081431151	0.064292857
UPP1	CCL15	LUAD	-0.049832739	0.258038768
UPP1	CCL1	LUAD	0.271900449	3.25E-10
UPP1	CCL16	LUAD	-0.162657717	0.000203796
UPP1	CCL17	LUAD	0.326879332	2.44E-14
UPP1	CCL18	LUAD	0.152658166	0.000495606
UPP1	CCL19	LUAD	0.100123287	0.022799369
UPP1	CCL20	LUAD	0.229071609	1.39E-07
UPP1	CCL21	LUAD	0.126915646	0.003846623
UPP1	CCL22	LUAD	0.24752375	1.17E-08
UPP1	CCL23	LUAD	0.236427583	5.32E-08
UPP1	CCL24	LUAD	0.110792519	0.011707938

UPP1	CCL25	LUAD	0.084369276	0.055220957
UPP1	CCL26	LUAD	0.273583544	2.50E-10
UPP1	CCL2	LUAD	0.309445558	6.18E-13
UPP1	CCL27	LUAD	-0.02368932	0.590983923
UPP1	CCL28	LUAD	0.273095458	2.70E-10
UPP1	CCL3	LUAD	0.320495724	8.17E-14
UPP1	CCL3L1	LUAD	0.258395102	2.48E-09
UPP1	CCL3L3	LUAD	0.016954167	0.700539582
UPP1	CCL4	LUAD	0.259414283	2.14E-09
UPP1	CCL4L2	LUAD	0.284251456	4.58E-11
UPP1	CCL5	LUAD	0.157859018	0.000314239
UPP1	CCL7	LUAD	0.385650055	8.87E-20
UPP1	CCL8	LUAD	0.243328215	2.10E-08
UPP1	CROCCL1	LUAD	-0.16056538	0.000246517
UPP1	CROCCL2	LUAD	-0.243709694	1.99E-08
UPP1	CXCL10	LUAD	0.256098411	3.47E-09
UPP1	CXCL11	LUAD	0.21082101	1.32E-06
UPP1	CXCL12	LUAD	0.018925553	0.66769097
UPP1	CXCL1	LUAD	0.225730172	2.13E-07
UPP1	CXCL13	LUAD	0.087862177	0.045846317
UPP1	CXCL14	LUAD	0.171050639	9.28E-05
UPP1	CXCL16	LUAD	-0.016599746	0.706507079
UPP1	CXCL17	LUAD	-0.04096668	0.352567338
UPP1	CXCL2	LUAD	0.225759368	2.13E-07
UPP1	CXCL3	LUAD	0.160977302	0.000237495
UPP1	CXCL5	LUAD	0.154977923	0.000405171
UPP1	CXCL6	LUAD	0.167977864	0.000124306
UPP1	CXCL9	LUAD	0.090220713	0.040303608
UPP1	IL10	LUAD	0.156887948	0.000342512
UPP1	IL11	LUAD	0.191518199	1.16E-05
UPP1	IL12A	LUAD	0.03545589	0.421117131
UPP1	IL12B	LUAD	0.061503716	0.162598214
UPP1	IL13	LUAD	0.087625916	0.04643525
UPP1	IL15	LUAD	0.33203926	9.01E-15
UPP1	IL16	LUAD	0.003002147	0.945708692
UPP1	IL17A	LUAD	0.001246582	0.977442244
UPP1	IL17B	LUAD	0.106641917	0.015273137
UPP1	IL17C	LUAD	-0.005261319	0.905005043
UPP1	IL17D	LUAD	-0.058954532	0.180764039
UPP1	IL17F	LUAD	-0.045517244	0.30161102
UPP1	IL18	LUAD	0.237351541	4.71E-08
UPP1	IL19	LUAD	-0.114518432	0.009156517
UPP1	IL1A	LUAD	0.403755033	1.08E-21

UPP1	IL1B	LUAD	0.294965355	7.73E-12
UPP1	IL2	LUAD	0.058194902	0.18645756
UPP1	IL20	LUAD	-0.01856789	0.673605902
UPP1	IL21	LUAD	0.006013276	0.891506683
UPP1	IL22	LUAD	-0.037804968	0.390991001
UPP1	IL24	LUAD	0.114133599	0.00939492
UPP1	IL25	LUAD	-0.057977377	0.188112011
UPP1	IL26	LUAD	0.013702657	0.75593256
UPP1	IL27	LUAD	0.305057614	1.35E-12
UPP1	IL29	LUAD	0.178958519	4.27E-05
UPP1	IL3	LUAD	0.030125938	0.494297469
UPP1	IL31	LUAD	-0.04748373	0.28118449
UPP1	IL32	LUAD	0.368620216	4.38E-18
UPP1	IL33	LUAD	-0.144940913	0.000949408
UPP1	IL34	LUAD	0.099724374	0.023349745
UPP1	IL4	LUAD	0.039054422	0.375513065
UPP1	IL5	LUAD	0.012386102	0.778741277
UPP1	IL6	LUAD	0.171941478	8.52E-05
UPP1	IL7	LUAD	0.259657134	2.06E-09
UPP1	IL8	LUAD	0.307085267	9.42E-13
UPP1	IL9	LUAD	0.003084381	0.944223954
UPP1	TGFB1	MESO	0.425324202	4.02E-05
UPP1	TGFB2	MESO	-0.202902646	0.059452366
UPP1	TGFB3	MESO	-0.245824811	0.021728765
UPP1	VEGFA	MESO	0.242997527	0.023338098
UPP1	VEGFB	MESO	0.126585681	0.242668857
UPP1	VEGFC	MESO	0.422742924	4.52E-05
UPP1	CCL11	MESO	0.344619067	0.001080656
UPP1	CCL13	MESO	0.376892069	0.000320405
UPP1	CCL14	MESO	0.06319244	0.560919509
UPP1	CCL14-CCL15	MESO	0.083307972	0.442997707
UPP1	CCL15	MESO	0.203801585	0.058309594
UPP1	CCL1	MESO	0.322239795	0.002336015
UPP1	CCL16	MESO	0.061172945	0.573531549
UPP1	CCL17	MESO	0.267875748	0.012125709
UPP1	CCL18	MESO	0.459496023	7.57E-06
UPP1	CCL19	MESO	0.06348383	0.559110678
UPP1	CCL20	MESO	0.530885788	1.23E-07
UPP1	CCL21	MESO	0.270529265	0.01126795
UPP1	CCL22	MESO	0.224504661	0.036571278
UPP1	CCL23	MESO	0.377885005	0.000308013
UPP1	CCL24	MESO	0.116446875	0.282780778
UPP1	CCL25	MESO	0.019041436	0.861037445

UPP1	CCL26	MESO	0.333324269	0.001606011
UPP1	CCL2	MESO	0.351668509	0.000837579
UPP1	CCL27	MESO	0.096191526	0.375458396
UPP1	CCL28	MESO	0.032805402	0.762923549
UPP1	CCL3	MESO	0.43688395	2.33E-05
UPP1	CCL3L1	MESO	0.339137227	0.001312182
UPP1	CCL3L3	MESO	0.075268848	0.488378279
UPP1	CCL4	MESO	0.407275893	9.04E-05
UPP1	CCL4L2	MESO	0.416873336	5.91E-05
UPP1	CCL5	MESO	0.428280178	3.50E-05
UPP1	CCL7	MESO	0.193072854	0.073178544
UPP1	CCL8	MESO	0.490514149	1.41E-06
UPP1	CROCCL1	MESO	-0.187206779	0.082514579
UPP1	CROCCL2	MESO	-0.351371185	0.00084673
UPP1	CXCL10	MESO	0.273357856	0.010412335
UPP1	CXCL11	MESO	0.28650239	0.007138554
UPP1	CXCL12	MESO	-0.114817629	0.289615937
UPP1	CXCL1	MESO	0.069464398	0.522613236
UPP1	CXCL13	MESO	0.24603861	0.021611023
UPP1	CXCL14	MESO	0.104280327	0.336442708
UPP1	CXCL16	MESO	0.34956242	0.000904387
UPP1	CXCL17	MESO	0.161773017	0.134400266
UPP1	CXCL2	MESO	0.318121177	0.002675621
UPP1	CXCL3	MESO	0.310901583	0.003379181
UPP1	CXCL5	MESO	0.140210954	0.195218802
UPP1	CXCL6	MESO	-0.178051864	0.098953358
UPP1	CXCL9	MESO	0.284206133	0.007634761
UPP1	IL10	MESO	0.077076276	0.477965878
UPP1	IL11	MESO	0.305237112	0.004042472
UPP1	IL12A	MESO	0.303793388	0.004229092
UPP1	IL12B	MESO	0.099580027	0.358791614
UPP1	IL13	MESO	0.374478249	0.000352468
UPP1	IL15	MESO	0.162969511	0.131504676
UPP1	IL16	MESO	-0.274538527	0.010072344
UPP1	IL17A	MESO	0.13823607	0.201647749
UPP1	IL17B	MESO	0.201613677	0.061122747
UPP1	IL17C	MESO	0.137527451	0.203991116
UPP1	IL17D	MESO	-0.166254297	0.12379946
UPP1	IL17F	MESO	0.112066541	0.301403638
UPP1	IL18	MESO	0.027525265	0.800211702
UPP1	IL19	MESO	-0.159481677	0.140080251
UPP1	IL1A	MESO	0.302030107	0.004467403
UPP1	IL1B	MESO	0.261412725	0.014456404

UPP1	IL2	MESO	0.237932812	0.026475562
UPP1	IL20	MESO	0.017843967	0.869697154
UPP1	IL21	MESO	0.115438806	0.286997142
UPP1	IL22	MESO	0.039799253	0.714366171
UPP1	IL24	MESO	0.060334084	0.578808892
UPP1	IL25	MESO	0.031448627	0.77245733
UPP1	IL26	MESO	0.000386307	0.997166626
UPP1	IL27	MESO	0.487905175	1.64E-06
UPP1	IL29	MESO	0.192416952	0.07417828
UPP1	IL3	MESO	0.007920168	0.941959669
UPP1	IL31	MESO	0.048447662	0.655874987
UPP1	IL32	MESO	0.502145584	7.22E-07
UPP1	IL33	MESO	0.013751721	0.899400863
UPP1	IL34	MESO	-0.018660896	0.863787658
UPP1	IL4	MESO	0.287481641	0.006935743
UPP1	IL5	MESO	0.250246482	0.019402284
UPP1	IL6	MESO	0.409859902	8.07E-05
UPP1	IL7	MESO	-0.135905232	0.20942884
UPP1	IL8	MESO	0.366985807	0.000471693
UPP1	IL9	MESO	-0.050692576	0.64100794
UPP1	TGFB1	PCPG	0.167585193	0.023741482
UPP1	TGFB2	PCPG	-0.103250089	0.165431815
UPP1	TGFB3	PCPG	0.306888789	2.51E-05
UPP1	VEGFA	PCPG	0.046904457	0.529504795
UPP1	VEGFB	PCPG	0.306009187	2.66E-05
UPP1	VEGFC	PCPG	0.1946553	0.008458785
UPP1	CCL11	PCPG	0.325064882	7.56E-06
UPP1	CCL13	PCPG	0.184278367	0.012763994
UPP1	CCL14	PCPG	0.164315818	0.026653415
UPP1	CCL14-CCL15	PCPG	-0.052811049	0.478917
UPP1	CCL15	PCPG	0.028948118	0.698073725
UPP1	CCL1	PCPG	0.020210784	0.78653913
UPP1	CCL16	PCPG	0.010015266	0.893255685
UPP1	CCL17	PCPG	0.336026715	3.53E-06
UPP1	CCL18	PCPG	0.265614699	0.00029012
UPP1	CCL19	PCPG	0.262046298	0.000352252
UPP1	CCL20	PCPG	0.488023891	2.79E-12
UPP1	CCL21	PCPG	0.218014878	0.003110867
UPP1	CCL22	PCPG	0.466372484	3.24E-11
UPP1	CCL23	PCPG	0.113906226	0.125749898
UPP1	CCL24	PCPG	0.040618686	0.586148858
UPP1	CCL25	PCPG	0.123529376	0.096635213
UPP1	CCL26	PCPG	0.187067189	0.011450254

UPP1	CCL2	PCPG	0.422450403	2.84E-09
UPP1	CCL27	PCPG	0.204559461	0.005605684
UPP1	CCL28	PCPG	0.011302672	0.879632085
UPP1	CCL3	PCPG	0.217985677	0.003114963
UPP1	CCL3L1	PCPG	0.231268868	0.001682644
UPP1	CCL3L3	PCPG	0.059792865	0.422662986
UPP1	CCL4	PCPG	0.266162173	0.000281543
UPP1	CCL4L2	PCPG	0.275495608	0.000167126
UPP1	CCL5	PCPG	0.428784338	1.55E-09
UPP1	CCL7	PCPG	0.453239207	1.32E-10
UPP1	CCL8	PCPG	0.311014654	1.93E-05
UPP1	CROCCL1	PCPG	-0.17850961	0.015907468
UPP1	CROCCL2	PCPG	-0.267706057	0.000258606
UPP1	CXCL10	PCPG	0.277896119	0.000145702
UPP1	CXCL11	PCPG	0.213279738	0.00384246
UPP1	CXCL12	PCPG	0.129038271	0.082547405
UPP1	CXCL1	PCPG	0.354465639	9.14E-07
UPP1	CXCL13	PCPG	0.086209381	0.247202647
UPP1	CXCL14	PCPG	0.064134091	0.389711412
UPP1	CXCL16	PCPG	0.390374267	5.10E-08
UPP1	CXCL17	PCPG	0.12262926	0.099108489
UPP1	CXCL2	PCPG	0.438285254	6.09E-10
UPP1	CXCL3	PCPG	0.398677089	2.49E-08
UPP1	CXCL5	PCPG	0.285344822	9.44E-05
UPP1	CXCL6	PCPG	0.214075751	0.003709549
UPP1	CXCL9	PCPG	0.194661566	0.008456633
UPP1	IL10	PCPG	0.293141478	5.92E-05
UPP1	IL11	PCPG	0.121673329	0.101789703
UPP1	IL12A	PCPG	-0.137217649	0.064723952
UPP1	IL12B	PCPG	0.048094202	0.519102738
UPP1	IL13	PCPG	0.111284554	0.134753681
UPP1	IL15	PCPG	0.26397124	0.00031735
UPP1	IL16	PCPG	0.103203837	0.165622372
UPP1	IL17A	PCPG	0.008843184	0.90568622
UPP1	IL17B	PCPG	0.103913087	0.162718245
UPP1	IL17C	PCPG	0.07253586	0.33050234
UPP1	IL17D	PCPG	-0.033051133	0.657814128
UPP1	IL17F	PCPG	0.164572463	0.026414257
UPP1	IL18	PCPG	0.428282453	1.63E-09
UPP1	IL19	PCPG	0.163158229	0.027755314
UPP1	IL1A	PCPG	0.263459704	0.000326297
UPP1	IL1B	PCPG	0.25077321	0.000638914
UPP1	IL2	PCPG	0.049495743	0.506984586

UPP1	IL20	PCPG	0.133292119	0.072839911
UPP1	IL21	PCPG	-0.034120425	0.647475994
UPP1	IL22	PCPG	0.085419182	0.251578056
UPP1	IL24	PCPG	0.265386328	0.00029377
UPP1	IL25	PCPG	-0.00303502	0.967564844
UPP1	IL26	PCPG	0.078612059	0.291488882
UPP1	IL27	PCPG	0.328550058	5.95E-06
UPP1	IL29	PCPG	-0.019817191	0.790599205
UPP1	IL3	PCPG	0.06995781	0.348023371
UPP1	IL31	PCPG	-0.020106082	0.78761862
UPP1	IL32	PCPG	0.457048364	8.84E-11
UPP1	IL33	PCPG	0.173074141	0.019466703
UPP1	IL34	PCPG	0.161604039	0.029295817
UPP1	IL4	PCPG	0.014148741	0.849645067
UPP1	IL5	PCPG	0.112170879	0.131656023
UPP1	IL6	PCPG	0.399480621	2.32E-08
UPP1	IL7	PCPG	0.146382208	0.048628749
UPP1	IL8	PCPG	0.394044635	3.72E-08
UPP1	IL9	PCPG	0.200829408	0.006559407
UPP1	TGFB1	TGCT	-0.230005099	0.003870986
UPP1	TGFB2	TGCT	-0.660893487	6.11E-21
UPP1	TGFB3	TGCT	-0.503194881	2.16E-11
UPP1	VEGFA	TGCT	-0.423271363	3.69E-08
UPP1	VEGFB	TGCT	-0.409156878	1.14E-07
UPP1	VEGFC	TGCT	-0.34730678	8.91E-06
UPP1	CCL11	TGCT	-0.06212601	0.441028478
UPP1	CCL13	TGCT	-0.08183993	0.309789233
UPP1	CCL14	TGCT	-0.342811595	1.18E-05
UPP1	CCL14-CCL15	TGCT	-0.589276201	5.86E-16
UPP1	CCL15	TGCT	-0.54644937	1.59E-13
UPP1	CCL1	TGCT	0.171132258	0.032676633
UPP1	CCL16	TGCT	-0.447167355	4.85E-09
UPP1	CCL17	TGCT	-0.074120955	0.357786723
UPP1	CCL18	TGCT	0.300586564	0.000137465
UPP1	CCL19	TGCT	0.173674811	0.030139121
UPP1	CCL20	TGCT	-0.344805786	1.04E-05
UPP1	CCL21	TGCT	0.044639147	0.58003427
UPP1	CCL22	TGCT	0.038136338	0.636453
UPP1	CCL23	TGCT	-0.01691522	0.833990121
UPP1	CCL24	TGCT	0.235378007	0.003097423
UPP1	CCL25	TGCT	-0.384487642	7.22E-07
UPP1	CCL26	TGCT	0.76949924	8.50E-32
UPP1	CCL2	TGCT	0.176712072	0.027329506

UPP1	CCL27	TGCT	0.039595095	0.623597806
UPP1	CCL28	TGCT	0.230393109	0.003809789
UPP1	CCL3	TGCT	0.417155203	6.05E-08
UPP1	CCL3L1	TGCT	0.242883067	0.002249909
UPP1	CCL3L3	TGCT	-0.06620836	0.411536343
UPP1	CCL4	TGCT	0.429945537	2.13E-08
UPP1	CCL4L2	TGCT	0.261305967	0.000984565
UPP1	CCL5	TGCT	0.318898676	4.96E-05
UPP1	CCL7	TGCT	0.345086896	1.03E-05
UPP1	CCL8	TGCT	0.484470822	1.47E-10
UPP1	CROCCL1	TGCT	-0.33899374	1.50E-05
UPP1	CROCCL2	TGCT	-0.562679231	2.09E-14
UPP1	CXCL10	TGCT	0.416879516	6.18E-08
UPP1	CXCL11	TGCT	0.399934139	2.31E-07
UPP1	CXCL12	TGCT	-0.156199671	0.051509312
UPP1	CXCL1	TGCT	-0.402973308	1.83E-07
UPP1	CXCL13	TGCT	0.319647647	4.75E-05
UPP1	CXCL14	TGCT	-0.570035974	8.04E-15
UPP1	CXCL16	TGCT	0.010007802	0.901319061
UPP1	CXCL17	TGCT	-0.368879912	2.15E-06
UPP1	CXCL2	TGCT	-0.181036863	0.023716806
UPP1	CXCL3	TGCT	-0.31463856	6.33E-05
UPP1	CXCL5	TGCT	-0.38400453	7.47E-07
UPP1	CXCL6	TGCT	-0.543305735	2.33E-13
UPP1	CXCL9	TGCT	0.274336091	0.000528984
UPP1	IL10	TGCT	0.310827348	7.84E-05
UPP1	IL11	TGCT	0.24795129	0.001803068
UPP1	IL12A	TGCT	-0.080631507	0.317011528
UPP1	IL12B	TGCT	0.183587292	0.021784911
UPP1	IL13	TGCT	0.038926076	0.629479712
UPP1	IL15	TGCT	0.505422036	1.71E-11
UPP1	IL16	TGCT	-0.051228393	0.525354269
UPP1	IL17A	TGCT	-0.003907699	0.96138567
UPP1	IL17B	TGCT	-0.393975299	3.61E-07
UPP1	IL17C	TGCT	0.364111693	2.97E-06
UPP1	IL17D	TGCT	-0.407294913	1.31E-07
UPP1	IL17F	TGCT	0.153005014	0.056532744
UPP1	IL18	TGCT	0.111680186	0.165133137
UPP1	IL19	TGCT	0.307697708	9.33E-05
UPP1	IL1A	TGCT	0.019553461	0.808561928
UPP1	IL1B	TGCT	0.217394947	0.006408622
UPP1	IL2	TGCT	0.045414171	0.573467913
UPP1	IL20	TGCT	0.510326173	1.01E-11

UPP1	IL21	TGCT	-0.022727211	0.77823783
UPP1	IL22	TGCT	-0.087178318	0.279180784
UPP1	IL24	TGCT	0.311195998	7.68E-05
UPP1	IL25	TGCT	0.035284781	0.661894812
UPP1	IL26	TGCT	0.092613309	0.250180937
UPP1	IL27	TGCT	0.492119733	6.82E-11
UPP1	IL29	TGCT	0.155591119	0.052436613
UPP1	IL3	TGCT	0.187981395	0.018773724
UPP1	IL31	TGCT	0.116282727	0.148289756
UPP1	IL32	TGCT	0.269213736	0.000677812
UPP1	IL33	TGCT	-0.183236103	0.022042604
UPP1	IL34	TGCT	0.150523772	0.060707199
UPP1	IL4	TGCT	-0.090779408	0.259723727
UPP1	IL5	TGCT	0.145586685	0.069765963
UPP1	IL6	TGCT	0.7214548	2.33E-26
UPP1	IL7	TGCT	-0.408343176	1.21E-07
UPP1	IL8	TGCT	-0.069273363	0.390175946
UPP1	IL9	TGCT	0.146454488	0.068098532
UPP1	TGFB1	UVM	0.359523618	0.001055439
UPP1	TGFB2	UVM	0.256624571	0.021571998
UPP1	TGFB3	UVM	-0.020004193	0.860196094
UPP1	VEGFA	UVM	-0.060877461	0.591659459
UPP1	VEGFB	UVM	0.173968922	0.122750695
UPP1	VEGFC	UVM	0.300510035	0.006759864
UPP1	CCL11	UVM	0.089117446	0.431802133
UPP1	CCL13	UVM	0.200112178	0.075119022
UPP1	CCL14	UVM	0.226108544	0.043721975
UPP1	CCL14-CCL15	UVM	0.129574253	0.251983812
UPP1	CCL15	UVM	0.024272474	0.830769902
UPP1	CCL1	UVM	0.038244393	0.736261748
UPP1	CCL16	UVM	0.109348358	0.334270508
UPP1	CCL17	UVM	-0.032825841	0.772535259
UPP1	CCL18	UVM	0.280105872	0.011852465
UPP1	CCL19	UVM	0.196921078	0.079983448
UPP1	CCL20	UVM	0.106707538	0.346144797
UPP1	CCL21	UVM	0.134391308	0.2346307
UPP1	CCL22	UVM	0.31265812	0.00474808
UPP1	CCL23	UVM	0.054756516	0.629513796
UPP1	CCL24	UVM	0.168617291	0.134875095
UPP1	CCL25	UVM	0.140687924	0.213224362
UPP1	CCL26	UVM	0.193707165	0.085133106
UPP1	CCL2	UVM	0.173707756	0.123322302
UPP1	CCL27	UVM	-0.124825377	0.269930782

UPP1	CCL28	UVM	-0.176932543	0.116405654
UPP1	CCL3	UVM	0.295385281	0.007812621
UPP1	CCL3L1	UVM	0.407999391	0.000172177
UPP1	CCL3L3	UVM	0.010043373	0.92954361
UPP1	CCL4	UVM	0.346914696	0.001618318
UPP1	CCL4L2	UVM	0.391613244	0.000327936
UPP1	CCL5	UVM	0.369151896	0.000752541
UPP1	CCL7	UVM	0.129759334	0.251301279
UPP1	CCL8	UVM	0.154524706	0.17112606
UPP1	CROCCL1	UVM	-0.179410703	0.111296541
UPP1	CROCCL2	UVM	-0.24741611	0.02692167
UPP1	CXCL10	UVM	0.256172531	0.02181163
UPP1	CXCL11	UVM	0.156784309	0.164876269
UPP1	CXCL12	UVM	0.108287231	0.339010493
UPP1	CXCL1	UVM	0.351926583	0.0013683
UPP1	CXCL13	UVM	0.207706452	0.064492171
UPP1	CXCL14	UVM	0.171412482	0.128433929
UPP1	CXCL16	UVM	0.359086108	0.001071523
UPP1	CXCL17	UVM	0.059255412	0.601590752
UPP1	CXCL2	UVM	0.223454642	0.046321261
UPP1	CXCL3	UVM	0.077228121	0.495937375
UPP1	CXCL5	UVM	0.168468749	0.13522412
UPP1	CXCL6	UVM	0.220977222	0.048861564
UPP1	CXCL9	UVM	0.218995877	0.050974774
UPP1	IL10	UVM	0.115381532	0.308122135
UPP1	IL11	UVM	0.429889745	6.90E-05
UPP1	IL12A	UVM	-0.126984559	0.261666967
UPP1	IL12B	UVM	0.095225432	0.400780009
UPP1	IL13	UVM	0.064960543	0.56699311
UPP1	IL15	UVM	0.228879658	0.041137991
UPP1	IL16	UVM	-0.211211491	0.060015844
UPP1	IL17A	UVM	NA	NA
UPP1	IL17B	UVM	0.079658569	0.482434895
UPP1	IL17C	UVM	0.010436289	0.926794674
UPP1	IL17D	UVM	-0.087328985	0.441137269
UPP1	IL17F	UVM	NA	NA
UPP1	IL18	UVM	0.245556243	0.028128613
UPP1	IL19	UVM	0.038130047	0.737021606
UPP1	IL1A	UVM	0.146708569	0.194085243
UPP1	IL1B	UVM	0.401200198	0.000225858
UPP1	IL2	UVM	0.121613476	0.282545269
UPP1	IL20	UVM	-0.089149919	0.431633677
UPP1	IL21	UVM	-0.019491578	0.863743813

UPP1	IL22	UVM	NA	NA
UPP1	IL24	UVM	0.143016682	0.205668941
UPP1	IL25	UVM	-0.215607825	0.054761885
UPP1	IL26	UVM	0.023620437	0.83525117
UPP1	IL27	UVM	0.379447798	0.000518039
UPP1	IL29	UVM	0.14021397	0.214785813
UPP1	IL3	UVM	NA	NA
UPP1	IL31	UVM	NA	NA
UPP1	IL32	UVM	0.426605337	7.95E-05
UPP1	IL33	UVM	-0.012675568	0.911145445
UPP1	IL34	UVM	0.433716296	5.84E-05
UPP1	IL4	UVM	-0.025757967	0.820580875
UPP1	IL5	UVM	0.022439319	0.84338194
UPP1	IL6	UVM	0.382791354	0.000457664
UPP1	IL7	UVM	0.158889438	0.159206879
UPP1	IL8	UVM	0.196998546	0.079862456
UPP1	IL9	UVM	NA	NA
UPP1	TGFB1	THYM	0.335656606	0.000178406
UPP1	TGFB2	THYM	0.263487472	0.003640803
UPP1	TGFB3	THYM	0.138876068	0.130348763
UPP1	VEGFA	THYM	0.127765596	0.164328879
UPP1	VEGFB	THYM	0.440975128	4.63E-07
UPP1	VEGFC	THYM	0.060013487	0.514968415
UPP1	CCL11	THYM	0.46447574	9.10E-08
UPP1	CCL13	THYM	0.23468255	0.009878657
UPP1	CCL14	THYM	0.345508638	0.000111104
UPP1	CCL14-CCL15	THYM	-0.056925691	0.536862965
UPP1	CCL15	THYM	0.190259381	0.037395081
UPP1	CCL1	THYM	0.042607878	0.644030796
UPP1	CCL16	THYM	0.091881389	0.318236567
UPP1	CCL17	THYM	-0.008393911	0.927500661
UPP1	CCL18	THYM	0.018567515	0.840475464
UPP1	CCL19	THYM	0.2228802	0.014411642
UPP1	CCL20	THYM	0.404956687	4.48E-06
UPP1	CCL21	THYM	0.399771801	6.08E-06
UPP1	CCL22	THYM	0.181002964	0.047882737
UPP1	CCL23	THYM	0.499188371	6.50E-09
UPP1	CCL24	THYM	0.027439326	0.76609046
UPP1	CCL25	THYM	-0.268865966	0.002984505
UPP1	CCL26	THYM	0.539500239	2.04E-10
UPP1	CCL2	THYM	0.39126664	9.93E-06
UPP1	CCL27	THYM	0.280210893	0.001936684
UPP1	CCL28	THYM	-0.276297499	0.002252839

UPP1	CCL3	THYM	0.406688406	4.04E-06
UPP1	CCL3L1	THYM	0.317567601	0.000408838
UPP1	CCL3L3	THYM	0.116068724	0.206793238
UPP1	CCL4	THYM	0.495393717	8.80E-09
UPP1	CCL4L2	THYM	0.312730795	0.000505949
UPP1	CCL5	THYM	0.565556185	1.69E-11
UPP1	CCL7	THYM	0.311117689	0.000542787
UPP1	CCL8	THYM	0.437148699	5.97E-07
UPP1	CROCCL1	THYM	-0.428965486	1.02E-06
UPP1	CROCCL2	THYM	-0.098545914	0.28424762
UPP1	CXCL10	THYM	0.468742824	6.68E-08
UPP1	CXCL11	THYM	0.486760208	1.73E-08
UPP1	CXCL12	THYM	-0.208660729	0.022191468
UPP1	CXCL1	THYM	0.149970408	0.1020683
UPP1	CXCL13	THYM	0.507936833	3.19E-09
UPP1	CXCL14	THYM	0.245211685	0.00694676
UPP1	CXCL16	THYM	0.481620119	2.56E-08
UPP1	CXCL17	THYM	0.194266397	0.033494405
UPP1	CXCL2	THYM	0.184152841	0.044069152
UPP1	CXCL3	THYM	-0.198393833	0.029841483
UPP1	CXCL5	THYM	0.084549631	0.35854255
UPP1	CXCL6	THYM	-0.068133519	0.459656263
UPP1	CXCL9	THYM	0.40530165	4.39E-06
UPP1	IL10	THYM	0.207072873	0.0232512
UPP1	IL11	THYM	0.189917622	0.03774475
UPP1	IL12A	THYM	0.288776771	0.001380422
UPP1	IL12B	THYM	0.066097638	0.473207794
UPP1	IL13	THYM	0.143214272	0.118649263
UPP1	IL15	THYM	0.300357832	0.000858765
UPP1	IL16	THYM	-0.358753693	5.73E-05
UPP1	IL17A	THYM	0.149099529	0.104097303
UPP1	IL17B	THYM	0.489888072	1.36E-08
UPP1	IL17C	THYM	0.263680417	0.003615183
UPP1	IL17D	THYM	0.036173947	0.694876108
UPP1	IL17F	THYM	-0.355483664	6.77E-05
UPP1	IL18	THYM	0.496861974	7.83E-09
UPP1	IL19	THYM	-0.030898674	0.73761362
UPP1	IL1A	THYM	0.309593611	0.000579844
UPP1	IL1B	THYM	0.26324684	0.003672983
UPP1	IL2	THYM	0.276647586	0.002222765
UPP1	IL20	THYM	0.096637261	0.293723841
UPP1	IL21	THYM	0.19187982	0.035773965
UPP1	IL22	THYM	-0.058904722	0.522777284

UPP1	IL24	THYM	-0.192659449	0.035015344
UPP1	IL25	THYM	0.032771192	0.722343606
UPP1	IL26	THYM	0.270368493	0.002821283
UPP1	IL27	THYM	0.505542164	3.88E-09
UPP1	IL29	THYM	0.314525294	0.00046768
UPP1	IL3	THYM	0.015175045	0.86933456
UPP1	IL31	THYM	0.147359914	0.108244911
UPP1	IL32	THYM	0.349329127	9.21E-05
UPP1	IL33	THYM	0.205421566	0.024398996
UPP1	IL34	THYM	0.028743111	0.755318895
UPP1	IL4	THYM	-0.125954052	0.170443088
UPP1	IL5	THYM	0.01656936	0.857450329
UPP1	IL6	THYM	0.275608765	0.002313081
UPP1	IL7	THYM	0.083319265	0.365604255
UPP1	IL8	THYM	-0.260579997	0.004047107
UPP1	IL9	THYM	-0.046520292	0.613879447
UPP1	TGFB1	CHOL	0.254320081	0.134444549
UPP1	TGFB2	CHOL	-0.175801183	0.3050819
UPP1	TGFB3	CHOL	-0.091218301	0.596736408
UPP1	VEGFA	CHOL	-0.342440665	0.04091338
UPP1	VEGFB	CHOL	0.687316345	3.65E-06
UPP1	VEGFC	CHOL	0.204606769	0.231295143
UPP1	CCL11	CHOL	-0.120341298	0.484481649
UPP1	CCL13	CHOL	0.136423958	0.427559004
UPP1	CCL14	CHOL	0.050074702	0.771795721
UPP1	CCL14-CCL15	CHOL	-0.0032073	0.985188384
UPP1	CCL15	CHOL	-0.122496173	0.47663466
UPP1	CCL1	CHOL	0.032270937	0.851785512
UPP1	CCL16	CHOL	-0.116705089	0.497873027
UPP1	CCL17	CHOL	0.215431425	0.207002818
UPP1	CCL18	CHOL	0.130052407	0.449652086
UPP1	CCL19	CHOL	0.15522156	0.366018177
UPP1	CCL20	CHOL	0.006080201	0.971925054
UPP1	CCL21	CHOL	0.288093459	0.088400692
UPP1	CCL22	CHOL	0.179594754	0.294596637
UPP1	CCL23	CHOL	0.113159374	0.511109916
UPP1	CCL24	CHOL	-0.047377078	0.783789243
UPP1	CCL25	CHOL	-0.017658338	0.918583087
UPP1	CCL26	CHOL	-0.039594826	0.818655566
UPP1	CCL2	CHOL	0.288234216	0.088238295
UPP1	CCL27	CHOL	0.037993255	0.825876046
UPP1	CCL28	CHOL	-0.173221961	0.312344091
UPP1	CCL3	CHOL	0.127091108	0.460126733

UPP1	CCL3L1	CHOL	0.2662439	0.116515841
UPP1	CCL3L3	CHOL	-0.15867079	0.355330029
UPP1	CCL4	CHOL	0.23956069	0.159360824
UPP1	CCL4L2	CHOL	0.233163792	0.171137035
UPP1	CCL5	CHOL	0.308179484	0.067457515
UPP1	CCL7	CHOL	-0.078433839	0.649327788
UPP1	CCL8	CHOL	-0.117789551	0.493859609
UPP1	CROCCL1	CHOL	-0.193432193	0.258328914
UPP1	CROCCL2	CHOL	-0.234858093	0.167959109
UPP1	CXCL10	CHOL	0.157311964	0.359517968
UPP1	CXCL11	CHOL	0.171105105	0.318384996
UPP1	CXCL12	CHOL	0.196678633	0.250268458
UPP1	CXCL1	CHOL	0.074694628	0.665046107
UPP1	CXCL13	CHOL	0.114214394	0.507153051
UPP1	CXCL14	CHOL	0.254986589	0.133391604
UPP1	CXCL16	CHOL	-0.128579232	0.45484675
UPP1	CXCL17	CHOL	0.044597938	0.796196674
UPP1	CXCL2	CHOL	0.091368554	0.596129456
UPP1	CXCL3	CHOL	-0.00724612	0.966544267
UPP1	CXCL5	CHOL	-0.201313663	0.239053941
UPP1	CXCL6	CHOL	0.133474437	0.437710369
UPP1	CXCL9	CHOL	0.173742911	0.310868584
UPP1	IL10	CHOL	0.332874288	0.047284945
UPP1	IL11	CHOL	-0.082365484	0.63295997
UPP1	IL12A	CHOL	0.074352107	0.666493127
UPP1	IL12B	CHOL	0.136825227	0.426188153
UPP1	IL13	CHOL	-0.044437488	0.796914539
UPP1	IL15	CHOL	0.324017466	0.053872079
UPP1	IL16	CHOL	0.199713729	0.242886065
UPP1	IL17A	CHOL	0.000735707	0.996602257
UPP1	IL17B	CHOL	0.004798102	0.977843417
UPP1	IL17C	CHOL	0.144361457	0.40090098
UPP1	IL17D	CHOL	0.081466373	0.636688309
UPP1	IL17F	CHOL	0.111489531	0.51740401
UPP1	IL18	CHOL	0.005876212	0.972866607
UPP1	IL19	CHOL	-0.019585647	0.909731407
UPP1	IL1A	CHOL	-0.042817244	0.804172707
UPP1	IL1B	CHOL	0.146569276	0.393659369
UPP1	IL2	CHOL	0.155015262	0.366663445
UPP1	IL20	CHOL	-0.28347571	0.093856992
UPP1	IL21	CHOL	-0.247875635	0.14494384
UPP1	IL22	CHOL	0.190904901	0.264721512
UPP1	IL24	CHOL	0.110928033	0.51952902

UPP1	IL25	CHOL	-0.038750685	0.822459475
UPP1	IL26	CHOL	0.001112673	0.994861323
UPP1	IL27	CHOL	-0.027357868	0.874154506
UPP1	IL29	CHOL	-0.060488774	0.726004549
UPP1	IL3	CHOL	-0.099650498	0.563099164
UPP1	IL31	CHOL	NA	NA
UPP1	IL32	CHOL	0.417050337	0.011390778
UPP1	IL33	CHOL	-0.144057245	0.401904743
UPP1	IL34	CHOL	0.085929407	0.618269634
UPP1	IL4	CHOL	0.032640519	0.850107194
UPP1	IL5	CHOL	0.112895346	0.512102561
UPP1	IL6	CHOL	0.028094476	0.870794199
UPP1	IL7	CHOL	0.307531485	0.068065883
UPP1	IL8	CHOL	-0.044660937	0.795914856
UPP1	IL9	CHOL	-0.294317998	0.081436226
UPP1	TGFB1	ESCA	0.528956059	1.18E-14
UPP1	TGFB2	ESCA	-0.001342377	0.985571198
UPP1	TGFB3	ESCA	0.188382517	0.010440106
UPP1	VEGFA	ESCA	0.145932634	0.048083338
UPP1	VEGFB	ESCA	0.230772306	0.001623414
UPP1	VEGFC	ESCA	0.305900582	2.41E-05
UPP1	CCL11	ESCA	-0.034566684	0.641337759
UPP1	CCL13	ESCA	0.202708629	0.005786426
UPP1	CCL14	ESCA	-0.241778038	0.000944756
UPP1	CCL14-CCL15	ESCA	-0.271414911	0.000193955
UPP1	CCL15	ESCA	-0.270419037	0.000205177
UPP1	CCL1	ESCA	0.102341351	0.166849647
UPP1	CCL16	ESCA	-0.089065326	0.229247869
UPP1	CCL17	ESCA	-0.003117982	0.966493727
UPP1	CCL18	ESCA	0.156728534	0.033617568
UPP1	CCL19	ESCA	-0.134327737	0.069073184
UPP1	CCL20	ESCA	0.001341553	0.985580056
UPP1	CCL21	ESCA	0.212588404	0.003764745
UPP1	CCL22	ESCA	0.155274899	0.035319188
UPP1	CCL23	ESCA	0.016125211	0.828008453
UPP1	CCL24	ESCA	0.042654813	0.565347595
UPP1	CCL25	ESCA	-0.249954075	0.000621813
UPP1	CCL26	ESCA	0.235081574	0.001317191
UPP1	CCL2	ESCA	-0.044153479	0.551752769
UPP1	CCL27	ESCA	0.529692234	1.06E-14
UPP1	CCL28	ESCA	-0.279895648	0.000119079
UPP1	CCL3	ESCA	0.231304547	0.00158236
UPP1	CCL3L1	ESCA	0.065785471	0.374950848

UPP1	CCL3L3	ESCA	0.04805831	0.517097132
UPP1	CCL4	ESCA	0.136393384	0.064869169
UPP1	CCL4L2	ESCA	0.10082402	0.173262263
UPP1	CCL5	ESCA	0.070085898	0.344467101
UPP1	CCL7	ESCA	0.254294118	0.000495188
UPP1	CCL8	ESCA	0.139290712	0.059327527
UPP1	CROCCL1	ESCA	-0.381570982	9.08E-08
UPP1	CROCCL2	ESCA	-0.244530724	0.000821923
UPP1	CXCL10	ESCA	0.086884724	0.240896391
UPP1	CXCL11	ESCA	0.027248873	0.71349148
UPP1	CXCL12	ESCA	-0.222100063	0.002444581
UPP1	CXCL1	ESCA	0.084797653	0.252426608
UPP1	CXCL13	ESCA	-0.003453815	0.962887277
UPP1	CXCL14	ESCA	0.391819413	3.79E-08
UPP1	CXCL16	ESCA	-0.29373409	5.19E-05
UPP1	CXCL17	ESCA	-0.00711681	0.923615527
UPP1	CXCL2	ESCA	-0.200632039	0.006318425
UPP1	CXCL3	ESCA	-0.160094314	0.029942713
UPP1	CXCL5	ESCA	0.054391724	0.463363086
UPP1	CXCL6	ESCA	0.084137258	0.256153199
UPP1	CXCL9	ESCA	0.026747615	0.718537383
UPP1	IL10	ESCA	0.055434012	0.454825697
UPP1	IL11	ESCA	0.274145823	0.000166045
UPP1	IL12A	ESCA	-0.191150375	0.009343265
UPP1	IL12B	ESCA	-0.117327883	0.112705237
UPP1	IL13	ESCA	0.011792647	0.873764485
UPP1	IL15	ESCA	0.008260222	0.911390011
UPP1	IL16	ESCA	-0.017474956	0.813863809
UPP1	IL17A	ESCA	-0.137754086	0.062215998
UPP1	IL17B	ESCA	0.021849563	0.76845436
UPP1	IL17C	ESCA	-0.108957699	0.140942877
UPP1	IL17D	ESCA	-0.132720528	0.072495519
UPP1	IL17F	ESCA	-0.011877377	0.872865102
UPP1	IL18	ESCA	0.283649023	9.55E-05
UPP1	IL19	ESCA	0.073002037	0.324715352
UPP1	IL1A	ESCA	0.67582483	6.68E-26
UPP1	IL1B	ESCA	0.312486513	1.57E-05
UPP1	IL2	ESCA	-0.093554867	0.206530247
UPP1	IL20	ESCA	0.441717635	3.46E-10
UPP1	IL21	ESCA	-0.02779346	0.708023464
UPP1	IL22	ESCA	0.062507228	0.399264372
UPP1	IL24	ESCA	0.367168173	2.95E-07
UPP1	IL25	ESCA	-0.130200227	0.078138196

UPP1	IL26	ESCA	-0.027646529	0.709497286
UPP1	IL27	ESCA	-0.048877655	0.509969964
UPP1	IL29	ESCA	0.165736075	0.024550347
UPP1	IL3	ESCA	-0.080299074	0.278561044
UPP1	IL31	ESCA	0.035432596	0.633002067
UPP1	IL32	ESCA	-0.154738624	0.035965093
UPP1	IL33	ESCA	-0.106215936	0.151279385
UPP1	IL34	ESCA	-0.071662651	0.333694775
UPP1	IL4	ESCA	-0.011768552	0.874020268
UPP1	IL5	ESCA	-0.147115377	0.046280383
UPP1	IL6	ESCA	0.095207765	0.198588893
UPP1	IL7	ESCA	-0.204142057	0.00544294
UPP1	IL8	ESCA	0.180400963	0.014264169
UPP1	IL9	ESCA	0.056179922	0.448770297
UPP1	TGFB1	STAD	0.202000089	3.39E-05
UPP1	TGFB2	STAD	-0.085085878	0.083408318
UPP1	TGFB3	STAD	-0.072702831	0.139258151
UPP1	VEGFA	STAD	0.144527508	0.003168738
UPP1	VEGFB	STAD	0.122572272	0.012458484
UPP1	VEGFC	STAD	0.044263918	0.368415329
UPP1	CCL11	STAD	0.046366871	0.346078589
UPP1	CCL13	STAD	0.123305021	0.011939144
UPP1	CCL14	STAD	-0.024279916	0.621871048
UPP1	CCL14-CCL15	STAD	-0.019383758	0.693785461
UPP1	CCL15	STAD	0.034942826	0.47776042
UPP1	CCL1	STAD	0.092578491	0.059520727
UPP1	CCL16	STAD	-0.080317734	0.10227942
UPP1	CCL17	STAD	0.055702257	0.25755128
UPP1	CCL18	STAD	0.205406493	2.48E-05
UPP1	CCL19	STAD	-0.096965997	0.048376814
UPP1	CCL20	STAD	0.188863958	0.000108507
UPP1	CCL21	STAD	0.003665792	0.940650052
UPP1	CCL22	STAD	0.073076646	0.13723102
UPP1	CCL23	STAD	0.075148825	0.126402752
UPP1	CCL24	STAD	-0.114231238	0.019929515
UPP1	CCL25	STAD	-0.04067799	0.408511258
UPP1	CCL26	STAD	0.139480475	0.004416234
UPP1	CCL2	STAD	0.097554916	0.047023334
UPP1	CCL27	STAD	0.1235627	0.01176111
UPP1	CCL28	STAD	0.2227407	4.61E-06
UPP1	CCL3	STAD	0.176143527	0.000311283
UPP1	CCL3L1	STAD	0.105612858	0.031474061
UPP1	CCL3L3	STAD	-0.073112516	0.137037704

UPP1	CCL4	STAD	0.108582359	0.026976177
UPP1	CCL4L2	STAD	0.071580888	0.145480248
UPP1	CCL5	STAD	-0.032361697	0.510896988
UPP1	CCL7	STAD	0.218564586	7.01E-06
UPP1	CCL8	STAD	0.119653879	0.014729973
UPP1	CROCCL1	STAD	-0.154744478	0.001567202
UPP1	CROCCL2	STAD	-0.150295361	0.002140802
UPP1	CXCL10	STAD	-0.003110386	0.949629213
UPP1	CXCL11	STAD	0.030277889	0.538496545
UPP1	CXCL12	STAD	-0.117120556	0.016988763
UPP1	CXCL1	STAD	0.241977963	6.07E-07
UPP1	CXCL13	STAD	-0.074051526	0.132051118
UPP1	CXCL14	STAD	-0.091102092	0.06371767
UPP1	CXCL16	STAD	0.177392428	0.000281558
UPP1	CXCL17	STAD	0.08181056	0.096038142
UPP1	CXCL2	STAD	0.128918073	0.008555586
UPP1	CXCL3	STAD	0.130991264	0.007540779
UPP1	CXCL5	STAD	0.066070294	0.179154557
UPP1	CXCL6	STAD	0.248880957	2.81E-07
UPP1	CXCL9	STAD	-0.071760103	0.144472365
UPP1	IL10	STAD	-0.050464537	0.305083206
UPP1	IL11	STAD	0.284795184	3.48E-09
UPP1	IL12A	STAD	0.011885956	0.809234631
UPP1	IL12B	STAD	-0.080579948	0.101160446
UPP1	IL13	STAD	0.117552346	0.016583582
UPP1	IL15	STAD	-0.004749205	0.923157322
UPP1	IL16	STAD	-0.173066506	0.000397467
UPP1	IL17A	STAD	0.127866772	0.009115288
UPP1	IL17B	STAD	0.047529042	0.33411138
UPP1	IL17C	STAD	0.267506027	3.13E-08
UPP1	IL17D	STAD	-0.189698712	0.000101006
UPP1	IL17F	STAD	-0.006720082	0.891436216
UPP1	IL18	STAD	0.18366795	0.000168311
UPP1	IL19	STAD	0.071881208	0.143794305
UPP1	IL1A	STAD	0.37539174	2.46E-15
UPP1	IL1B	STAD	0.253170352	1.72E-07
UPP1	IL2	STAD	-0.069040522	0.160349889
UPP1	IL20	STAD	0.169270468	0.000534344
UPP1	IL21	STAD	-0.032140672	0.513789103
UPP1	IL22	STAD	-0.031837498	0.517769899
UPP1	IL24	STAD	0.182311585	0.000188382
UPP1	IL25	STAD	-0.01868277	0.704329876
UPP1	IL26	STAD	0.034126114	0.488116993

UPP1	IL27	STAD	0.064543462	0.189434783
UPP1	IL29	STAD	0.039734882	0.419471526
UPP1	IL3	STAD	-0.013472372	0.784363069
UPP1	IL31	STAD	-0.076778844	0.118360508
UPP1	IL32	STAD	0.150558588	0.002102141
UPP1	IL33	STAD	-0.085316667	0.082571494
UPP1	IL34	STAD	0.015206205	0.757429954
UPP1	IL4	STAD	0.038365172	0.435692522
UPP1	IL5	STAD	-0.043911222	0.372247205
UPP1	IL6	STAD	0.14111053	0.003971769
UPP1	IL7	STAD	-0.05944112	0.226922681
UPP1	IL8	STAD	0.223027639	4.48E-06
UPP1	IL9	STAD	-0.081732503	0.096356781

Sheet3: Correlation between PSPGs and checkpoints in different car

Gene	Checkpoints	Cancer	Correlation
UPP1	CD274	ACC	0.300481801
UPP1	PDCD1LG2	ACC	0.263331073
UPP1	CD276	ACC	0.348511114
UPP1	VTCN1	ACC	-0.024923392
UPP1	BTLA	ACC	0.234023455
UPP1	CD70	ACC	0.273408375
UPP1	CD47	ACC	-0.097634473
UPP1	LGALS9	ACC	0.242434972
UPP1	SIGLEC15	ACC	0.099149653
UPP1	CD274	BLCA	0.231765247
UPP1	PDCD1LG2	BLCA	0.378083342
UPP1	CD276	BLCA	0.136307994
UPP1	VTCN1	BLCA	-0.078957379
UPP1	BTLA	BLCA	0.196674715
UPP1	CD70	BLCA	0.28903059
UPP1	CD47	BLCA	0.120236617
UPP1	LGALS9	BLCA	0.190105587
UPP1	SIGLEC15	BLCA	-0.148301871
UPP1	CD274	DLBC	-0.11117779
UPP1	PDCD1LG2	DLBC	-0.035038429
UPP1	CD276	DLBC	0.646001024
UPP1	VTCN1	DLBC	0.051223966
UPP1	BTLA	DLBC	-0.497513264
UPP1	CD70	DLBC	0.203980366
UPP1	CD47	DLBC	-0.231391236
UPP1	LGALS9	DLBC	0.208424626
UPP1	SIGLEC15	DLBC	0.2523202
UPP1	CD274	UCEC	0.179764017
UPP1	PDCD1LG2	UCEC	0.250386464
UPP1	CD276	UCEC	0.081613292
UPP1	VTCN1	UCEC	0.041005049
UPP1	BTLA	UCEC	0.026486122
UPP1	CD70	UCEC	0.291527606
UPP1	CD47	UCEC	-0.006510646
UPP1	LGALS9	UCEC	0.240523455
UPP1	SIGLEC15	UCEC	0.176143423
UPP1	CD274	SKCM	-0.014013236
UPP1	PDCD1LG2	SKCM	-0.119294299
UPP1	CD276	SKCM	0.414032089
UPP1	VTCN1	SKCM	-0.184839493
UPP1	BTLA	SKCM	-0.128760581

UPP1	CD70	SKCM	-0.037803327
UPP1	CD47	SKCM	-0.226743162
UPP1	LGALS9	SKCM	0.001719335
UPP1	SIGLEC15	SKCM	0.22545058
UPP1	CD274	HNSC	0.006451016
UPP1	PDCD1LG2	HNSC	0.090808026
UPP1	CD276	HNSC	0.212468424
UPP1	VTCN1	HNSC	-0.270831914
UPP1	BTLA	HNSC	-0.327976486
UPP1	CD70	HNSC	-0.048624059
UPP1	CD47	HNSC	0.28794822
UPP1	LGALS9	HNSC	-0.3616229
UPP1	SIGLEC15	HNSC	-0.15817271
UPP1	CD274	PRAD	0.165742606
UPP1	PDCD1LG2	PRAD	0.368466772
UPP1	CD276	PRAD	-0.041702983
UPP1	VTCN1	PRAD	0.322450464
UPP1	BTLA	PRAD	0.133990731
UPP1	CD70	PRAD	0.335856896
UPP1	CD47	PRAD	0.022819788
UPP1	LGALS9	PRAD	0.60526507
UPP1	SIGLEC15	PRAD	0.138987926
UPP1	CD274	KIRP	-0.064384461
UPP1	PDCD1LG2	KIRP	0.126057582
UPP1	CD276	KIRP	0.220913146
UPP1	VTCN1	KIRP	0.102190696
UPP1	BTLA	KIRP	-0.031347561
UPP1	CD70	KIRP	-0.040905777
UPP1	CD47	KIRP	-0.046560615
UPP1	LGALS9	KIRP	0.251429089
UPP1	SIGLEC15	KIRP	0.130947349
UPP1	CD274	PAAD	-0.057380846
UPP1	PDCD1LG2	PAAD	0.040156779
UPP1	CD276	PAAD	0.386060275
UPP1	VTCN1	PAAD	0.035913571
UPP1	BTLA	PAAD	-0.066462459
UPP1	CD70	PAAD	0.385003015
UPP1	CD47	PAAD	0.094731887
UPP1	LGALS9	PAAD	0.383672625
UPP1	SIGLEC15	PAAD	0.165688796
UPP1	CD274	SARC	0.285230574
UPP1	PDCD1LG2	SARC	0.407770573
UPP1	CD276	SARC	0.191617576

UPP1	VTCN1	SARC	0.004303884
UPP1	BTLA	SARC	0.311487375
UPP1	CD70	SARC	0.447487907
UPP1	CD47	SARC	0.204882267
UPP1	LGALS9	SARC	0.529674491
UPP1	SIGLEC15	SARC	0.395835934
UPP1	CD274	CECSC	0.244981796
UPP1	PDCD1LG2	CECSC	0.354469232
UPP1	CD276	CECSC	0.164501732
UPP1	VTCN1	CECSC	-0.375272401
UPP1	BTLA	CECSC	0.011374099
UPP1	CD70	CECSC	0.3667908
UPP1	CD47	CECSC	0.229489039
UPP1	LGALS9	CECSC	-0.080306822
UPP1	SIGLEC15	CECSC	-0.023466674
UPP1	CD274	COAD	0.302248752
UPP1	PDCD1LG2	COAD	0.243697828
UPP1	CD276	COAD	0.251233316
UPP1	VTCN1	COAD	-0.04193595
UPP1	BTLA	COAD	0.093579642
UPP1	CD70	COAD	0.352697565
UPP1	CD47	COAD	-0.001745812
UPP1	LGALS9	COAD	0.065953968
UPP1	SIGLEC15	COAD	0.189113483
UPP1	CD274	LUSC	0.061350369
UPP1	PDCD1LG2	LUSC	0.084379882
UPP1	CD276	LUSC	0.124218072
UPP1	VTCN1	LUSC	-0.084554137
UPP1	BTLA	LUSC	-0.080665621
UPP1	CD70	LUSC	0.067530984
UPP1	CD47	LUSC	0.218184408
UPP1	LGALS9	LUSC	-0.089418337
UPP1	SIGLEC15	LUSC	0.126821506
UPP1	CD274	READ	0.053008685
UPP1	PDCD1LG2	READ	0.295529734
UPP1	CD276	READ	0.340875447
UPP1	VTCN1	READ	-0.069757433
UPP1	BTLA	READ	-0.051714668
UPP1	CD70	READ	0.233107763
UPP1	CD47	READ	-0.214394876
UPP1	LGALS9	READ	0.135913385
UPP1	SIGLEC15	READ	0.147665091
UPP1	CD274	KIRC	-0.128426714

UPP1	PDCD1LG2	KIRC	-0.216083352
UPP1	CD276	KIRC	0.251843331
UPP1	VTCN1	KIRC	0.050051633
UPP1	BTLA	KIRC	-0.146793713
UPP1	CD70	KIRC	-0.149652155
UPP1	CD47	KIRC	0.001182961
UPP1	LGALS9	KIRC	0.066145021
UPP1	SIGLEC15	KIRC	0.358341449
UPP1	CD274	LIHC	0.063611679
UPP1	PDCD1LG2	LIHC	0.187041768
UPP1	CD276	LIHC	0.319610107
UPP1	VTCN1	LIHC	0.20667143
UPP1	BTLA	LIHC	0.04663299
UPP1	CD70	LIHC	0.400583105
UPP1	CD47	LIHC	0.243589419
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UPP1	CD70	LUAD	0.331997308

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icers

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Table S6: Clinical information of ESCC patients (Single-cell RNA-seq) enrolled i

ID	Gender	Age	Smoking	pT	pN	pM
P4	Female	47	N	3	0	0
P3	Male	77	N	3	0	0
P1	Male	76	N	2	0	0
P5	Male	64	E	3	1	0
P7	Female	74	N	1b	2	0
P9	Female	63	N	2	2	0
P8	Male	76	E	3	1	0
P11	Male	54	E	1b	0	0

in this study

Stage	Ki-67
IIB	80%+
IIB	90%+
IIA	80%+
IIIB	90%+
IIIA	80%+
IIIB	80%+
IIIB	90%+
IB	80%+

Table S7: Marker genes of each cluster in ESCC scRNA-seq data

Sheet 1: Immune cells

Sheet 2: Fibroblasts

Sheet 3: Endothelial cells

Sheet 1: Immune cells

Immune cells	p_val	avg_log2FC	pct.1	pct.2
TSHZ2	0	1.64106541	0.484	0.185
IL7R	0	1.621827	0.859	0.388
FAAH2	0	1.42881799	0.509	0.193
CRYBG1	0	1.288668554	0.677	0.435
ANK3	0	1.247647813	0.417	0.225
BCL11B	0	1.214723279	0.786	0.361
RORA	0	1.208641057	0.737	0.358
ITK	0	1.190046999	0.79	0.364
FYB1	0	1.167487341	0.808	0.485
CMTM8	0	1.130412146	0.296	0.067
BATF	0	1.106111411	0.599	0.323
LEF1	0	1.096853965	0.318	0.074
INPP4B	0	1.073424409	0.586	0.285
TNIK	0	1.059455211	0.676	0.335
CAMK4	0	1.054738378	0.656	0.32
IL6ST	0	1.038164842	0.643	0.448
ZNF831	0	1.035338153	0.668	0.323
NDFIP1	0	1.027038719	0.672	0.493
LEPROTL1	0	1.01088108	0.83	0.561
ICOS	0	1.005425415	0.663	0.284
PRKCA	0	0.988814264	0.546	0.34
SPOCK2	0	0.986827086	0.747	0.377
SARAF	0	0.983881966	0.942	0.838
BTBD11	0	0.982427659	0.296	0.122
KLRB1	0	0.974600891	0.335	0.132
RAPGEF6	0	0.96181354	0.737	0.56
MAF	0	0.960704527	0.518	0.264
SERINC5	0	0.959726541	0.526	0.3
LDLRAD4	0	0.958978667	0.88	0.642
CNOT6L	0	0.949833615	0.92	0.718
GIMAP7	0	0.945381046	0.466	0.233
TBC1D4	0	0.911977062	0.484	0.227
TNFSF8	0	0.911573034	0.394	0.177
ABCC1	0	0.910871123	0.663	0.42
CDC14A	0	0.908550743	0.579	0.365
IKZF1	0	0.901406091	0.777	0.578
CD2	0	0.888613285	0.802	0.43
ICA1	0	0.885776626	0.287	0.125
AP3M2	0	0.870722186	0.325	0.133
FYN	0	0.865113863	0.954	0.627
CD28	0	0.845907732	0.497	0.189

TC2N	0	0.842796246	0.425	0.184
CD6	0	0.836902602	0.494	0.224
HERC1	0	0.834677315	0.757	0.582
TTC39C	0	0.832149162	0.559	0.326
PBX4	0	0.829495916	0.591	0.306
AC010609.1	0	0.82795462	0.407	0.164
IPCEF1	0	0.81437621	0.491	0.246
CD247	0	0.813636165	0.763	0.393
FKBP5	0	0.810837955	0.774	0.672
SAMHD1	0	0.809969311	0.535	0.328
PLCL1	0	0.805805054	0.431	0.214
AAK1	0	0.805053403	0.657	0.424
LTB	0	0.803701785	0.635	0.399
GPRIN3	0	0.798529339	0.593	0.385
RNF125	0	0.791292754	0.57	0.337
PPP2R5C	0	0.787081737	0.881	0.741
MPP7	0	0.783815085	0.508	0.284
RETREG1	0	0.773002308	0.303	0.124
SYNE2	0	0.765418145	0.828	0.536
TRBC2	0	0.764945405	0.683	0.439
PIK3IP1	0	0.755739521	0.673	0.451
TESPA1	0	0.751353584	0.311	0.127
BICDL1	0	0.750837857	0.618	0.359
TRAC	0	0.743016587	0.702	0.38
IQGAP2	0	0.731337664	0.816	0.608
EML4	0	0.731201063	0.824	0.688
ETS1	0	0.729840842	0.871	0.596
PITPNC1	0	0.729606224	0.723	0.515
FXYD5	0	0.725595808	0.715	0.564
PHACTR2	0	0.720742561	0.615	0.396
ANKRD12	0	0.715005598	0.907	0.808
PBXIP1	0	0.712386724	0.615	0.389
CD3E	0	0.706420709	0.707	0.378
TCF7	0	0.705972952	0.367	0.179
IL32	0	0.692618637	0.754	0.445
SKAP1	0	0.685718718	0.768	0.468
RCAN3	0	0.67817459	0.464	0.273
RNF19A	0	0.658290803	0.766	0.597
CTLA4	0	0.655492046	0.468	0.248
PDE3B	0	0.646621827	0.757	0.542
PRKCH	0	0.645895423	0.81	0.526
FOXP1	0	0.64093353	0.854	0.714
PDCD4	0	0.634314628	0.744	0.596

SRGN	0	0.628951918	0.947	0.873
CASK	0	0.626440071	0.653	0.456
DUSP16	0	0.618900738	0.678	0.436
FOXO1	0	0.616991358	0.786	0.586
CD3D	0	0.572669981	0.788	0.408
ARHGDIB	0	0.524295509	0.863	0.785
CDC42SE2	0	0.512337557	0.906	0.78
PTPRC	0	0.488978305	0.969	0.864
TPT1	0	0.485440938	0.957	0.962
CD3G	0	0.419183984	0.644	0.352
MALAT1	0	0.393855522	1	0.983
CD5	6.95E-308	0.509248244	0.267	0.11
PPP1R2	5.75E-303	0.638453942	0.718	0.589
CELF2	1.62E-302	0.657953312	0.81	0.702
EEF1A1	1.26E-301	0.390408098	0.961	0.957
OXNAD1	7.79E-300	0.60666573	0.583	0.391
DDX24	7.54E-299	0.543199012	0.794	0.691
PRKCQ-AS1	7.81E-294	0.612710501	0.262	0.11
TRBC1	1.33E-292	0.789307833	0.467	0.262
AL136456.1	1.45E-288	0.459126216	0.363	0.17
TSC22D3	1.92E-288	0.522282566	0.897	0.825
RORA-AS1	5.19E-288	0.644597184	0.367	0.192
STK4	8.55E-288	0.502303082	0.863	0.767
ARID4B	5.00E-284	0.48118766	0.86	0.764
LDHB	4.20E-283	0.6194633	0.605	0.477
MBNL1	1.00E-279	0.446155232	0.94	0.852
PRKCQ	7.41E-279	0.582944695	0.475	0.274
TRAT1	8.83E-278	0.541714394	0.338	0.162
EPC1	3.44E-277	0.516327963	0.814	0.707
DOCK9	2.70E-275	0.625638117	0.34	0.173
MRPL1	6.07E-275	0.831356494	0.565	0.397
LINC00513	8.11E-275	0.633011479	0.758	0.63
ARID5B	1.25E-274	0.541772868	0.848	0.728
NAP1L4	2.75E-274	0.586830735	0.701	0.546
CD96	1.53E-273	0.540847564	0.666	0.441
TNFAIP3	7.67E-272	0.565008425	0.851	0.68
DDX5	8.33E-272	0.38738021	0.946	0.894
TLK1	1.33E-271	0.607274531	0.655	0.506
GSPT1	4.43E-271	0.648733475	0.676	0.55
SOD1	2.72E-269	0.583978605	0.762	0.646
NR3C1	6.85E-266	0.775986788	0.765	0.664
CREM	5.12E-264	0.592148294	0.863	0.764
FAM177A1	2.74E-259	0.704904839	0.622	0.497

CRY1	2.96E-255	0.673523392	0.51	0.338
THEMIS	1.42E-254	0.599536768	0.395	0.209
C12orf57	2.77E-253	0.573217802	0.621	0.488
CCDC66	2.40E-251	0.633248174	0.393	0.234
SYTL3	1.70E-250	0.512075003	0.797	0.629
RBMS1	2.99E-248	0.957656238	0.513	0.369
ITM2A	1.94E-245	0.564742487	0.496	0.307
UGP2	7.89E-245	0.704820061	0.513	0.362
CYTH1	1.86E-243	0.511079239	0.78	0.672
DOCK10	9.90E-243	0.595733557	0.666	0.529
NCK2	1.42E-242	0.533807588	0.572	0.399
ITPKB	3.25E-236	0.742843011	0.446	0.297
OSBPL8	2.00E-235	0.663831735	0.786	0.694
KLF12	2.65E-235	0.586254306	0.631	0.468
CD7	3.77E-232	0.374819975	0.584	0.357
AC026979.2	2.03E-230	0.562750072	0.303	0.158
LCK	2.16E-229	0.466733761	0.474	0.293
SELL	5.71E-229	0.726766502	0.402	0.253
ODF2L	4.06E-228	0.61524713	0.45	0.294
PCBP3	5.36E-227	0.675168432	0.288	0.143
CD4	7.15E-223	0.581481185	0.346	0.2
ZC3HAV1	4.19E-221	0.494044397	0.773	0.667
LINC01578	2.74E-218	0.509499594	0.727	0.641
PVT1	7.02E-217	0.546393316	0.529	0.366
STAT3	8.57E-217	0.425115583	0.732	0.634
EIF1	1.04E-214	0.346775973	0.949	0.94
CCR6	3.29E-213	0.669695141	0.35	0.205
FAM107B	2.46E-212	0.452239513	0.83	0.732
MAP3K5	2.53E-212	0.53105489	0.58	0.427
ZFP36L2	3.66E-209	0.576146815	0.861	0.808
IL18R1	8.67E-208	0.449168548	0.323	0.177
HECA	1.21E-207	0.550404157	0.594	0.474
TNFRSF4	3.07E-206	0.695951022	0.265	0.13
STAT4	5.99E-206	0.470720074	0.744	0.574
SESN3	6.30E-206	0.824328581	0.496	0.35
ZC3H12D	3.93E-204	0.596902576	0.377	0.229
TXK	5.93E-203	0.665235737	0.277	0.144
LAT	8.13E-202	0.441265648	0.314	0.171
CCR7	1.21E-200	0.721132368	0.387	0.242
B2M	5.63E-200	0.307814074	0.98	0.978
STK17B	6.71E-199	0.376848377	0.872	0.792
TIGIT	1.21E-198	0.719197192	0.44	0.281
ABLIM1	8.99E-195	0.539290377	0.506	0.342

ZEB1	8.25E-193	0.475599693	0.667	0.515
HNRNPLL	1.07E-191	0.537329701	0.45	0.296
MLLT3	5.36E-191	0.489975933	0.436	0.275
MGAT4A	1.92E-190	0.6433694	0.449	0.311
AP000787.1	2.15E-190	0.784753188	0.371	0.231
SMCHD1	8.64E-190	0.405586305	0.885	0.814
CALM1	3.06E-188	0.354717819	0.903	0.867
GLCCI1	4.49E-188	0.556502055	0.569	0.416
EEF1D	2.54E-187	0.341217708	0.87	0.864
CCSER2	7.33E-187	0.393280636	0.672	0.52
EVL	2.49E-186	0.430819993	0.644	0.501
TSPAN5	2.28E-185	0.517437294	0.466	0.307
MFHAS1	2.52E-185	0.6922262	0.329	0.195
CEMIP2	1.76E-182	0.37127585	0.784	0.647
EPB41	2.67E-182	0.520974566	0.597	0.47
SEPTIN6	3.05E-182	0.455508511	0.701	0.605
MPZL3	4.41E-181	0.509723643	0.361	0.22
CXCR4	1.26E-178	0.374793214	0.895	0.799
CNST	2.62E-178	0.501819706	0.467	0.33
CCNH	4.89E-178	0.522043552	0.724	0.641
ARL4C	4.45E-177	0.493874399	0.625	0.481
LINC01619	3.40E-176	0.458966381	0.775	0.642
N4BP2L2	1.76E-174	0.427828454	0.736	0.654
TMEM173	6.38E-173	0.50626356	0.299	0.175
TOMM7	1.91E-169	0.349004255	0.784	0.758
FAM118A	8.51E-167	0.487565103	0.352	0.223
GIMAP5	7.27E-165	0.479879795	0.27	0.151
PCNX1	1.06E-164	0.508383851	0.583	0.479
LIME1	2.47E-164	0.437312753	0.374	0.238
PGAP1	9.24E-163	0.855554195	0.313	0.188
PABPC1	1.03E-162	0.472723213	0.88	0.843
MAP3K4	9.49E-162	0.798021995	0.336	0.223
SF1	4.34E-160	0.452032065	0.665	0.582
PER1	7.56E-160	0.529391314	0.489	0.386
PPP1CB	3.87E-159	0.426540183	0.67	0.584
PATJ	9.34E-159	0.498544732	0.323	0.195
CIRBP	2.70E-155	0.371378652	0.763	0.702
CLEC2D	2.63E-154	0.337211605	0.66	0.507
NIBAN1	6.41E-152	0.463716914	0.665	0.546
YWHAB	7.28E-152	0.458174356	0.753	0.699
NAP1L1	3.53E-151	0.347232479	0.74	0.669
LRRC8C	9.00E-150	0.532708653	0.459	0.337
ARHGEF3	7.66E-149	0.539536684	0.411	0.287

ESYT2	2.36E-148	0.491286963	0.593	0.499
BTG1	8.44E-146	0.259218268	0.967	0.907
STAT5B	2.82E-144	0.405479922	0.522	0.389
RSBN1	4.95E-144	0.460275416	0.453	0.333
RAP1A	9.08E-144	0.416828459	0.669	0.59
SRSF5	3.97E-143	0.349308454	0.798	0.746
GPCPD1	1.62E-142	0.46826902	0.648	0.563
NDUFV2	2.86E-141	0.495678853	0.609	0.539
OGDH	1.83E-140	0.555917215	0.52	0.426
SRSF7	6.29E-140	0.29195381	0.848	0.777
AP001011.1	2.17E-139	0.487151329	0.59	0.466
NOP58	2.22E-138	0.3800029	0.694	0.605
USP3-AS1	8.30E-135	0.551920719	0.366	0.258
ARHGAP15	4.88E-134	0.262238879	0.91	0.829
CNBP	9.91E-134	0.359995665	0.67	0.615
THADA	2.90E-133	0.655912636	0.507	0.406
RBM39	8.33E-132	0.267025553	0.905	0.859
STAM	1.00E-131	0.493682535	0.459	0.345
P2RY10	1.80E-131	0.467959369	0.419	0.299
CHD2	5.85E-131	0.363676273	0.796	0.735
SNHG6	4.93E-129	0.3800917	0.665	0.609
NOP53	7.30E-128	0.32802103	0.74	0.701
FAS	7.67E-127	0.482215701	0.317	0.209
GMFG	8.77E-126	0.364390807	0.684	0.622
ATXN7	1.15E-125	0.444536797	0.461	0.356
SKP1	3.20E-125	0.297610645	0.757	0.713
MXI1	7.83E-125	0.467248514	0.273	0.17
USP3	1.56E-124	0.511425921	0.58	0.518
SLA	1.63E-124	0.286719147	0.624	0.491
TSPYL2	7.58E-124	0.451091645	0.579	0.472
CD226	1.04E-122	0.424553653	0.287	0.178
MCUB	5.06E-122	0.47902775	0.435	0.335
ASXL1	1.78E-121	0.42425786	0.583	0.494
RGCC	3.59E-120	0.445400072	0.563	0.45
CDKN1B	3.31E-118	0.435492285	0.464	0.366
KAT6A	5.79E-118	0.410919873	0.629	0.549
SFXN1	6.31E-118	0.423666819	0.276	0.176
USP15	3.58E-117	0.301127538	0.789	0.734
DDIT4	2.44E-114	0.567306919	0.566	0.489
TNFAIP8	4.42E-114	0.399116216	0.67	0.592
EIF3E	4.86E-114	0.302466964	0.711	0.676
AC044849.1	5.89E-114	0.423677274	0.385	0.274
TNRC6C	8.35E-114	0.417076077	0.349	0.241

DISC1	1.50E-113	0.564891273	0.253	0.16
APBB1IP	3.65E-113	0.339325176	0.658	0.565
CRTC3	7.44E-112	0.49608792	0.358	0.264
ATP2B4	2.89E-110	0.443269776	0.404	0.294
TMEM245	3.43E-110	0.455501232	0.339	0.236
LINC-PINT	2.86E-109	0.33937359	0.717	0.651
WWP1	1.98E-107	0.448994184	0.334	0.238
UQCRB	2.42E-107	0.269757964	0.771	0.76
KLF6	4.87E-107	0.342826058	0.839	0.772
HINT1	4.74E-106	0.287864202	0.764	0.739
GATA3	1.44E-105	0.371785245	0.262	0.161
TNRC6B	3.71E-105	0.312827213	0.749	0.691
KAT6B	6.30E-105	0.438035676	0.559	0.471
PRDX2	7.36E-104	0.350825907	0.434	0.341
CASP8	9.31E-104	0.404096986	0.526	0.432
WAKMAR2	1.59E-103	0.466794883	0.329	0.231
PRKY	2.03E-103	0.408638846	0.266	0.167
MAML2	1.06E-101	0.485977822	0.642	0.566
CERK	1.70E-101	0.427729288	0.297	0.207
CORO1B	2.57E-101	0.488232754	0.349	0.258
DGKA	4.54E-101	0.375596995	0.252	0.164
SCML4	4.61E-101	0.396549633	0.375	0.262
MYH9	4.83E-101	0.30512956	0.724	0.668
ATXN1	2.18E-100	0.275354487	0.775	0.66
ZNRF1	4.86E-100	0.414262885	0.293	0.196
PRORP	5.28E-100	0.467527145	0.332	0.239
GAS5	1.49E-99	0.260841747	0.72	0.677
GALM	4.39E-99	0.386693552	0.508	0.408
SMYD3	2.14E-98	0.413236871	0.621	0.533
GIMAP4	3.12E-97	0.361906088	0.339	0.237
ARID5A	1.62E-96	0.501613519	0.449	0.373
PPP1R16B	2.91E-96	0.335615998	0.681	0.57
PTGES3	5.94E-95	0.304534724	0.75	0.71
TIAM1	6.31E-94	0.415334979	0.332	0.233
MORF4L1	9.09E-94	0.287087597	0.713	0.68
ARNTL	1.52E-93	0.370118626	0.313	0.219
USP47	1.66E-93	0.373538405	0.598	0.528
RHBDD2	2.09E-93	0.412969774	0.314	0.224
HIPK1	5.35E-93	0.447730604	0.41	0.329
COMMD6	6.72E-93	0.267323138	0.678	0.633
AC058791.1	1.14E-92	0.41098105	0.394	0.305
RASA1	3.60E-92	0.404073509	0.51	0.427
MPHOSPH8	3.70E-92	0.362758782	0.561	0.494

RBMX	4.25E-92	0.34931323	0.593	0.533
PTGER4	1.76E-91	0.441944166	0.416	0.328
BICRAL	4.17E-90	0.422994482	0.452	0.369
SFMBT1	2.21E-89	0.325957266	0.405	0.301
HLA-A	6.73E-89	0.273470134	0.939	0.92
NSMCE3	4.44E-88	0.426066321	0.381	0.294
AKT3	6.80E-88	0.395479581	0.573	0.49
JMY	1.88E-87	0.386573899	0.542	0.464
AC068587.4	2.29E-87	0.415552902	0.285	0.195
LPIN2	5.57E-87	0.386847512	0.437	0.353
FBXO32	1.07E-86	0.42115267	0.254	0.168
IRS2	1.72E-86	0.261313178	0.42	0.324
GCC2	5.57E-86	0.337972914	0.589	0.53
AC079793.1	1.02E-85	0.420716367	0.505	0.42
SRSF3	6.11E-85	0.258661719	0.783	0.754
TXNIP	8.60E-85	0.473655373	0.757	0.716
SON	1.20E-84	0.257984859	0.76	0.727
GYPC	1.84E-84	0.381471138	0.539	0.478
RGS10	2.79E-84	0.290501627	0.487	0.394
IDS	3.29E-84	0.369862947	0.595	0.54
CUL3	1.49E-83	0.295822037	0.694	0.628
SPTAN1	1.76E-83	0.371542519	0.535	0.459
TNFRSF18	1.84E-83	0.439830306	0.284	0.19
PAK2	8.31E-83	0.32665945	0.642	0.591
ANXA1	1.38E-82	0.706703017	0.494	0.414
GPHN	1.45E-82	0.464670151	0.449	0.363
SLC7A6	1.97E-82	0.392019297	0.26	0.179
LBH	9.23E-82	0.300427321	0.451	0.352
SATB1	1.37E-81	0.401725165	0.302	0.22
CACYBP	1.64E-81	0.422658982	0.584	0.512
EVI2A	3.03E-81	0.401127397	0.447	0.374
CSGALNACT1	9.43E-81	0.38324703	0.276	0.188
EMB	1.05E-80	0.314170112	0.581	0.501
KIAA1109	1.92E-80	0.404886313	0.426	0.345
H2AFV	7.49E-80	0.340716942	0.546	0.498
SC5D	2.47E-79	0.38346306	0.33	0.242
TOB1	4.19E-79	0.466699257	0.369	0.292
TRERF1	7.96E-79	0.400873447	0.314	0.225
ATXN7L1	1.85E-77	0.398387618	0.284	0.203
TECR	2.24E-77	0.381271126	0.393	0.323
ANAPC16	9.52E-77	0.261878086	0.65	0.611
BIRC3	1.75E-76	0.331979934	0.607	0.531
S100A4	4.08E-76	0.314389512	0.687	0.584

UBE2B	7.45E-76	0.291422508	0.712	0.686
SLC9A9	2.50E-75	0.54254938	0.38	0.304
RSRP1	3.00E-75	0.277907664	0.641	0.597
ANP32B	3.51E-75	0.25579957	0.604	0.561
GPR171	2.36E-74	0.432666793	0.262	0.178
RASGRP1	3.13E-74	0.324866036	0.376	0.281
AL499604.1	1.07E-73	0.407174225	0.266	0.191
ELK3	4.89E-73	0.399427708	0.391	0.322
CMSS1	8.35E-73	0.556879471	0.522	0.443
STK38	1.04E-72	0.427033267	0.319	0.245
ICAM2	2.55E-72	0.384927371	0.262	0.191
PACS1	2.84E-72	0.327554223	0.56	0.482
STK24	6.73E-72	0.376550836	0.533	0.477
G3BP2	1.14E-71	0.341994322	0.59	0.536
SLFN5	1.76E-71	0.299896701	0.386	0.299
SOCS1	1.84E-71	0.326368305	0.455	0.373
RUNX2	1.69E-70	0.47323101	0.353	0.276
ADD3	2.02E-70	0.339747774	0.423	0.344
MRFAP1	1.08E-69	0.351099972	0.488	0.436
RFX3	1.58E-68	0.372253163	0.506	0.431
OCIAD2	2.07E-68	0.307554032	0.413	0.336
ACAP1	1.09E-67	0.276593385	0.522	0.45
GSTK1	7.87E-67	0.313949181	0.487	0.436
ESR2	5.49E-66	0.311365512	0.275	0.198
TLE5	5.57E-66	0.269001345	0.552	0.503
PYHIN1	1.06E-65	0.268703858	0.364	0.266
METTL8	3.09E-65	0.39951044	0.26	0.187
TNRC6A	5.58E-65	0.34382419	0.487	0.427
TBC1D15	5.77E-65	0.308350864	0.515	0.469
RASA3	9.86E-64	0.444782218	0.395	0.331
SLAMF1	1.34E-63	0.313348691	0.253	0.178
STAG1	1.79E-63	0.255462537	0.74	0.701
CCDC88C	3.00E-63	0.309548128	0.474	0.402
NDUFS5	5.27E-63	0.26202262	0.61	0.573
MECP2	7.35E-63	0.323981414	0.506	0.448
AC016831.7	1.10E-62	0.365912377	0.601	0.544
CCDC91	7.88E-62	0.31096372	0.62	0.572
PHTF2	3.70E-61	0.375529203	0.443	0.379
LINC01934	4.63E-61	0.287962222	0.334	0.247
SPATA13	6.37E-61	0.280200393	0.324	0.249
EPC2	1.03E-60	0.330119822	0.487	0.431
LMBR1	1.29E-60	0.387577194	0.374	0.306
ARAP2	1.39E-60	0.381222047	0.533	0.47

CRBN	3.82E-60	0.314640852	0.327	0.26
KIF2A	6.39E-60	0.318764349	0.434	0.371
PSIP1	1.19E-59	0.293797942	0.439	0.374
NCOA2	1.73E-59	0.287205717	0.573	0.519
CHURC1	1.12E-58	0.293487259	0.475	0.427
ZNRF2	1.22E-58	0.347942717	0.461	0.403
NKTR	1.45E-58	0.315066402	0.517	0.465
SVIP	1.53E-58	0.316336163	0.289	0.221
PCNX2	3.03E-58	0.350593229	0.349	0.275
JAK3	4.91E-58	0.300149247	0.323	0.254
DCTN6	7.41E-58	0.360212496	0.296	0.233
TTC33	2.39E-57	0.354577216	0.28	0.215
FOXN2	5.95E-57	0.441407334	0.377	0.316
URI1	2.36E-56	0.297202231	0.442	0.384
MZT2A	3.12E-56	0.265637607	0.473	0.422
OGT	5.22E-56	0.324389369	0.48	0.433
CHIC2	6.26E-55	0.309921887	0.453	0.399
TBL1X	6.46E-55	0.374031679	0.373	0.304
CCM2	1.21E-54	0.423788121	0.369	0.314
ZBTB38	1.87E-53	0.340684788	0.424	0.366
UBE2K	1.94E-53	0.326181966	0.537	0.504
PARP8	4.62E-53	0.293692756	0.685	0.626
CCND3	1.02E-52	0.337986029	0.585	0.542
KANSL1	1.25E-52	0.286338782	0.577	0.532
STK39	1.41E-52	0.331028932	0.283	0.215
USP9Y	2.02E-52	0.311372442	0.326	0.253
MBP	2.39E-52	0.294069545	0.628	0.588
TSPYL1	3.43E-51	0.290119122	0.264	0.203
ARFGEF1	5.83E-51	0.293095786	0.51	0.468
BCAS2	6.42E-51	0.311500947	0.483	0.442
ATM	7.48E-51	0.333106857	0.525	0.482
NCOA7	3.73E-50	0.367561276	0.342	0.284
NUP98	2.25E-49	0.260942047	0.575	0.541
NOSIP	3.02E-49	0.333956643	0.288	0.234
CMTM7	1.22E-48	0.335906269	0.439	0.387
FGD3	1.33E-48	0.284461035	0.321	0.255
LRRC8D	1.50E-48	0.42862288	0.266	0.208
CENPC	2.38E-48	0.295276482	0.49	0.441
FILIP1L	3.50E-48	0.68359954	0.394	0.337
RNASET2	5.91E-48	0.251917061	0.592	0.549
RAB11A	1.08E-47	0.30385809	0.639	0.61
YME1L1	1.27E-47	0.292506081	0.556	0.532
UTY	3.50E-46	0.314508189	0.407	0.344

CDV3	3.57E-46	0.277071622	0.615	0.598
BCLAF1	1.07E-45	0.264189189	0.581	0.562
PPP1R10	3.73E-45	0.263501541	0.6	0.583
PCED1B-AS1	4.26E-45	0.258799075	0.5	0.451
SESN1	1.54E-44	0.486150478	0.314	0.26
PRPF38B	2.67E-44	0.288497375	0.498	0.47
MORC3	3.13E-44	0.326885355	0.383	0.334
HNRNPUL1	3.59E-44	0.275186806	0.535	0.511
HECTD1	4.51E-44	0.451773161	0.461	0.434
METTL16	4.56E-44	0.300190229	0.325	0.267
PLIN2	1.48E-43	0.482697255	0.423	0.367
COG5	2.14E-43	0.323624256	0.516	0.481
TBCC	7.09E-43	0.271744885	0.275	0.217
HBP1	1.02E-42	0.303192952	0.438	0.4
KLF3	1.69E-42	0.34008156	0.292	0.236
BCL2	2.88E-42	0.288414837	0.592	0.546
CEP85L	3.44E-42	0.299883476	0.43	0.379
BRD9	4.10E-42	0.316686499	0.259	0.205
OXCT1	2.33E-41	0.280970862	0.335	0.275
RBL2	5.98E-41	0.272565642	0.296	0.239
TSPAN14	1.11E-40	0.275901361	0.346	0.293
RGS1	1.51E-40	0.327328429	0.659	0.62
STT3B	1.77E-40	0.314436634	0.466	0.436
DHX9	6.65E-40	0.269516146	0.452	0.415
SETD2	7.70E-40	0.287700857	0.555	0.528
ANKH	8.22E-40	0.27633265	0.324	0.269
GADD45A	3.17E-39	0.40380286	0.309	0.257
CAMK1D	3.27E-39	0.307218105	0.6	0.566
NR1D2	3.68E-39	0.313692726	0.345	0.296
NLRC5	1.77E-38	0.267335835	0.346	0.291
KLF9	1.31E-37	0.279327642	0.271	0.22
CHD3	1.52E-37	0.260598311	0.267	0.217
IKZF3	2.72E-37	0.250569966	0.476	0.413
ANKRD13C	5.38E-37	0.332727761	0.317	0.266
ARL6IP5	7.70E-37	0.260562063	0.619	0.597
INPP4A	3.96E-36	0.305589101	0.305	0.257
CUTA	4.59E-36	0.26222891	0.452	0.429
SLC25A26	7.44E-36	0.252629477	0.434	0.389
RNF138	1.13E-35	0.314723525	0.354	0.308
POR	1.16E-35	0.297605994	0.284	0.239
LMNA	6.04E-35	0.357141302	0.484	0.438
CITED2	1.92E-34	0.334229376	0.349	0.306
USP36	2.15E-34	0.303432687	0.462	0.432

SBDS	2.75E-34	0.261825469	0.379	0.343
VSIR	5.28E-34	0.265181726	0.3	0.257
IL2RG	4.72E-33	0.259922428	0.497	0.463
TRPS1	1.07E-32	0.312508362	0.516	0.47
PIM2	1.27E-32	0.278897216	0.276	0.232
P2RY8	1.35E-32	0.36479524	0.374	0.33
SLC16A1	1.68E-32	0.348379651	0.277	0.231
DDX3Y	5.18E-32	0.250032978	0.374	0.324
NLRP1	2.43E-31	0.260483174	0.301	0.253
AHR	3.85E-31	0.260236077	0.43	0.382
HDAC4	3.11E-30	0.267305516	0.418	0.38
ISCA1	3.12E-30	0.253332822	0.336	0.297
PPIL4	3.16E-30	0.261680405	0.364	0.33
ZC3H7A	5.63E-30	0.296820016	0.348	0.313
EPSTI1	2.75E-29	0.460626569	0.458	0.447
RFFL	6.12E-29	0.275597687	0.261	0.219
RANBP9	9.59E-29	0.254340185	0.415	0.381
RPRD2	1.94E-28	0.293636892	0.337	0.296
TOX	2.04E-28	0.315653205	0.424	0.364
AEBP2	1.71E-26	0.283434004	0.319	0.283
GRAMD1B	2.65E-26	0.281495205	0.291	0.245
SMARCA2	4.70E-26	0.256606635	0.532	0.513
AKIRIN1	6.83E-26	0.252887387	0.334	0.302
MAN2A1	1.18E-25	0.382619161	0.474	0.464
H2AFZ	3.25E-25	0.268861767	0.612	0.609
PHLDA1	7.49E-25	0.285644738	0.287	0.246
HBS1L	4.82E-24	0.263291656	0.328	0.297
SPG7	5.52E-24	0.262307706	0.317	0.288
IMMP2L	1.26E-23	0.321175692	0.345	0.305
ARHGAP5	1.78E-23	0.330299053	0.265	0.23
PDCL3	2.50E-23	0.281289054	0.306	0.273
AC087286.2	7.75E-23	0.300883316	0.301	0.269
TP53BP2	1.71E-22	0.294479719	0.318	0.288
AC016831.5	1.91E-22	0.278191869	0.324	0.296
ATP9B	3.18E-22	0.25161665	0.447	0.426
PRKAR2A	1.02E-21	0.275840093	0.377	0.351
KAT2B	6.30E-21	0.265994261	0.333	0.301
ZNF609	9.25E-20	0.312291714	0.345	0.319
IRF1	1.11E-19	0.270330064	0.554	0.551
PIBF1	3.02E-19	0.257260702	0.317	0.285
GLUD1	4.04E-19	0.267665645	0.431	0.412
EXOC6B	4.72E-19	0.253495504	0.267	0.234
CAPN7	1.77E-18	0.254456047	0.362	0.343

REEP3	1.92E-18	0.272966418	0.256	0.23
SGK3	7.84E-17	0.290052622	0.253	0.23
ADAM10	1.15E-15	0.251551462	0.392	0.381
NPC1	2.02E-15	0.261677987	0.364	0.344
TGFBR2	1.34E-14	0.261560033	0.456	0.446
RNF168	6.26E-13	0.268006518	0.325	0.312
KLF2	8.41E-13	0.492851019	0.477	0.502
NFE2L3	3.90E-12	0.301524391	0.291	0.275
IFNAR2	6.69E-12	0.271533516	0.325	0.32
CARD16	8.01E-12	0.374300046	0.362	0.359
DNPH1	6.64E-11	0.256714717	0.268	0.255
BTD	3.37E-10	0.332826358	0.296	0.283
BTG3	2.67E-07	0.277589826	0.311	0.31
GNLY	0	4.438402828	0.502	0.054
NKG7	0	3.64031138	0.888	0.106
CCL5	0	3.613315521	0.958	0.18
CCL4	0	3.161510858	0.807	0.203
GZMB	0	3.151848903	0.736	0.076
GZMA	0	3.131885639	0.806	0.096
CCL4L2	0	2.746859714	0.476	0.118
GZMH	0	2.631540726	0.599	0.035
IFNG	0	2.620134721	0.494	0.042
KLRD1	0	2.311829894	0.511	0.051
GZMK	0	2.19106528	0.557	0.079
PRF1	0	2.138484822	0.619	0.073
CRTAM	0	2.033578249	0.458	0.056
XCL2	0	1.93385282	0.286	0.016
LINC02446	0	1.909447192	0.313	0.017
CST7	0	1.893276738	0.799	0.247
CD8A	0	1.886521083	0.592	0.053
CXCL13	0	1.835707035	0.365	0.076
KLRK1	0	1.833676213	0.64	0.048
AOAH	0	1.765642139	0.527	0.173
KLRC1	0	1.733240748	0.272	0.01
KLRC2	0	1.716422947	0.309	0.011
CD8B	0	1.642179105	0.48	0.041
CTSW	0	1.627662575	0.415	0.033
ATP8B4	0	1.604850904	0.413	0.101
LINC01871	0	1.522770002	0.517	0.074
APOBEC3G	0	1.426004479	0.586	0.187
HCST	0	1.414285688	0.835	0.424
SLA2	0	1.353721251	0.517	0.108
CMC1	0	1.346178848	0.483	0.2

DTHD1	0	1.34162707	0.471	0.086
TRGC2	0	1.323089304	0.379	0.039
LAG3	0	1.316734611	0.421	0.078
CBLB	0	1.308405731	0.927	0.603
ID2	0	1.297196534	0.835	0.422
KLRC3	0	1.282064829	0.284	0.01
SAMD3	0	1.25845126	0.452	0.08
CD3G1	0	1.23010987	0.713	0.341
CD71	0	1.223676529	0.748	0.323
THEMIS1	0	1.20804378	0.533	0.18
NCALD	0	1.20788492	0.531	0.156
PLAAT4	0	1.20537462	0.715	0.332
HOPX	0	1.202489917	0.342	0.056
RAB27A	0	1.201388608	0.647	0.283
LYST	0	1.199200628	0.707	0.435
CD3D1	0	1.197000049	0.779	0.417
ITGA1	0	1.196512141	0.372	0.047
NELL2	0	1.181875101	0.336	0.085
HAVCR2	0	1.175165573	0.392	0.17
PDE3B1	0	1.155186714	0.843	0.526
CCL3	0	1.145050476	0.301	0.117
CD961	0	1.115345189	0.839	0.405
ITGAE	0	1.110468897	0.525	0.247
PARP81	0	1.098733196	0.876	0.582
GZMM	0	1.097721037	0.532	0.152
CLEC2B	0	1.092784305	0.71	0.377
SYTL31	0	1.088940427	0.917	0.604
LINC019341	0	1.072172034	0.543	0.2
SLFN12L	0	1.068204649	0.547	0.18
DUSP2	0	1.057823252	0.737	0.471
RUNX3	0	1.053735281	0.827	0.51
SYTL2	0	1.037155574	0.409	0.098
TNIP3	0	1.028671507	0.411	0.136
TRG-AS1	0	0.997546052	0.37	0.107
PTPN22	0	0.986452666	0.799	0.506
SCML41	0	0.981947337	0.548	0.223
PRKCH1	0	0.980314519	0.884	0.514
PITPNC11	0	0.954666748	0.805	0.499
PIK3R1	0	0.93651792	0.71	0.475
PTMS	0	0.918952572	0.453	0.189
AKNA	0	0.918689307	0.651	0.413
PYHIN11	0	0.896942463	0.539	0.227
AC243829.4	0	0.889632306	0.265	0.025

CMIP	0	0.886101724	0.718	0.484
PPP2R2B	0	0.881016337	0.311	0.085
METRNL	0	0.876583482	0.518	0.301
ABCB1	0	0.868475371	0.336	0.086
IFITM2	0	0.867058747	0.806	0.591
SUPT3H	0	0.86303363	0.521	0.282
PIP4K2A	0	0.862778209	0.796	0.563
CCSER21	0	0.862416001	0.778	0.498
MVB12B	0	0.859378772	0.371	0.106
CHST12	0	0.855841604	0.371	0.117
CD3E1	0	0.851789281	0.759	0.372
YES1	0	0.849260328	0.314	0.099
TOX1	0	0.848735432	0.637	0.316
SLA1	0	0.848666713	0.762	0.461
EVL1	0	0.837269294	0.758	0.477
FYN1	0	0.83529833	0.975	0.628
LY6E	0	0.828276747	0.615	0.408
ATP8A1	0	0.824908464	0.661	0.381
DAPK2	0	0.820853034	0.284	0.075
CLIC3	0	0.808047972	0.251	0.037
LYAR	0	0.795494738	0.391	0.16
PRKCQ1	0	0.784166089	0.569	0.256
GPR1711	0	0.773746596	0.435	0.139
IKZF31	0	0.77318137	0.644	0.375
SYNE1	0	0.766877233	0.524	0.281
PRKX	0	0.764087729	0.458	0.244
SFMBT2	0	0.76015673	0.581	0.344
ITM2A1	0	0.74972895	0.588	0.289
CD99	0	0.749474011	0.753	0.517
MSN	0	0.748126766	0.803	0.598
SH3BGRL3	0	0.747029123	0.921	0.761
PLAAT3	0	0.745920649	0.346	0.099
OASL	0	0.7453904	0.301	0.113
GALNT11	0	0.742553589	0.402	0.22
GFOD1	0	0.734831409	0.372	0.159
SRGAP3	0	0.734637111	0.256	0.092
BICDL11	0	0.733645714	0.64	0.358
ITGA4	0	0.732395271	0.649	0.431
CD21	0	0.730669959	0.837	0.428
TRAC1	0	0.720919945	0.685	0.389
SLFN51	0	0.710776705	0.502	0.273
TRAT11	0	0.710057724	0.387	0.153
APBA2	0	0.703003816	0.268	0.089

KIF21A	0	0.696062327	0.311	0.103
ANXA11	0	0.695883616	0.619	0.386
ATXN11	0	0.694501674	0.862	0.642
DUSP4	0	0.693986005	0.566	0.341
GIMAP41	0	0.691862059	0.442	0.215
RNF19A1	0	0.690063517	0.818	0.588
NFATC2	0	0.687779718	0.519	0.317
TGFBR3	0	0.684934326	0.296	0.116
TRBC11	0	0.676549183	0.535	0.249
ALOX5AP	0	0.667553186	0.572	0.347
ZEB2	0	0.665609539	0.715	0.405
SLC7A5	0	0.656122899	0.62	0.389
ZFYVE28	0	0.655776994	0.368	0.166
STAT41	0	0.654179312	0.785	0.568
ADGRE5	0	0.651329223	0.739	0.523
PAXX	0	0.651016872	0.497	0.276
SLF1	0	0.647981386	0.281	0.103
CRIP1	0	0.646944596	0.877	0.674
ABHD17A	0	0.645668443	0.517	0.314
NAP1L41	0	0.639444722	0.732	0.542
PPP1R16B1	0	0.639239094	0.777	0.549
CD2471	0	0.630441118	0.742	0.405
GNG2	0	0.63011794	0.771	0.568
C12orf75	0	0.626466955	0.329	0.122
PSMB9	0	0.625238834	0.689	0.513
TRBC21	0	0.621759537	0.732	0.432
SH2D1A	0	0.619704865	0.37	0.141
PTPRC1	0	0.61501322	0.983	0.863
HLA-C	0	0.612905174	0.982	0.892
APMAP	0	0.610976885	0.351	0.172
ETS11	0	0.609873854	0.899	0.595
ECI2	0	0.606972041	0.304	0.134
PCED1B-AS11	0	0.604058662	0.628	0.422
GTDC1	0	0.602993161	0.502	0.288
TRERF11	0	0.601987803	0.412	0.204
SH2D2A	0	0.59363034	0.369	0.155
IFITM1	0	0.590797818	0.329	0.153
PDCD1	0	0.590280165	0.253	0.082
MYL12A	0	0.588345804	0.811	0.691
HLA-F	0	0.56855802	0.721	0.532
BTN3A2	0	0.566872885	0.454	0.255
EMB1	0	0.564103472	0.686	0.478
IL2RB	0	0.558112403	0.338	0.134

INPP4B1	0	0.55165792	0.558	0.297
OXNAD11	0	0.544995306	0.608	0.389
HLA-A1	0	0.54412678	0.991	0.908
MRPL10	0	0.53812995	0.291	0.119
LCK1	0	0.537356251	0.536	0.282
RABGAP1L	0	0.536071738	0.903	0.769
GPR174	0	0.525862636	0.281	0.11
NIBAN11	0	0.52309701	0.801	0.516
IL321	0	0.520746266	0.851	0.428
GIMAP71	0	0.51908789	0.476	0.235
TSEN54	0	0.511220389	0.291	0.112
TNFAIP31	0	0.505237172	0.881	0.676
RNF213	0	0.500339508	0.761	0.591
MCTP2	0	0.498765665	0.417	0.176
B2M1	0	0.491676016	0.998	0.974
SEPTIN7	0	0.490930544	0.856	0.716
SKAP11	0	0.484147103	0.803	0.466
TMSB4X	0	0.455357336	0.991	0.943
LEPROTL11	0	0.448817349	0.799	0.573
HLA-B	0	0.437235957	0.99	0.927
LCP1	0	0.410542622	0.801	0.616
SYNE21	0	0.39336272	0.807	0.547
TIGIT1	0	0.390082717	0.516	0.266
CD63	0	0.389794067	0.644	0.415
SAMSN1	9.10E-308	0.387385329	0.864	0.708
RNF1251	2.06E-307	0.629533448	0.572	0.341
TNFSF9	1.21E-305	0.770077131	0.251	0.1
ZBED4	3.71E-305	0.557332275	0.338	0.16
SLC38A1	6.04E-304	0.521607462	0.77	0.581
ABLIM11	4.91E-300	0.743546354	0.547	0.335
CKLF	4.41E-298	0.605950882	0.564	0.369
STAT5B1	7.71E-297	0.608127869	0.579	0.377
GALM1	6.90E-294	0.623367983	0.588	0.391
SIRPG	3.53E-292	0.54663497	0.276	0.115
JAML	1.66E-290	0.59596577	0.358	0.179
TBCD	2.95E-290	0.558156161	0.297	0.136
RALGAPA1	1.48E-289	0.800858915	0.742	0.595
DRAP1	2.09E-289	0.650024629	0.586	0.422
CYTOR	3.89E-284	0.427898586	0.653	0.435
CAMK41	6.50E-284	0.497756743	0.583	0.343
SRSF71	2.24E-283	0.533186967	0.887	0.769
HMGB1	7.03E-282	0.361755446	0.933	0.842
PPP2R5C1	3.24E-280	0.44156925	0.883	0.743

GABARAPL1	1.76E-278	0.612393491	0.443	0.263
IL2RG1	1.80E-276	0.475084825	0.624	0.434
ATP2B41	2.77E-274	0.587306281	0.473	0.28
PTPRJ	1.36E-272	0.509661044	0.624	0.415
MAPRE2	1.76E-271	0.726365813	0.612	0.436
MYL12B	3.13E-271	0.418850899	0.815	0.683
PTPN4	4.78E-271	0.494123814	0.464	0.265
CFL1	1.24E-267	0.380655878	0.924	0.806
RIN3	6.14E-266	0.590778181	0.402	0.224
CNOT6L1	2.28E-265	0.346339119	0.912	0.724
H3F3B	3.64E-264	0.401961444	0.98	0.912
UBB	3.57E-261	0.467128074	0.933	0.831
CD2261	1.58E-260	0.608976562	0.335	0.169
TG	8.93E-260	0.510964541	0.348	0.177
CDK17	4.29E-259	0.622233341	0.683	0.526
PRKACB	8.20E-259	0.62454406	0.46	0.281
STOM	3.22E-258	0.558520787	0.329	0.169
MLLT31	8.56E-258	0.576019375	0.468	0.27
LRBA	3.25E-257	0.510021634	0.785	0.634
OPTN	1.14E-256	0.491610562	0.482	0.294
CD52	3.35E-256	0.542288835	0.81	0.64
BCL11B1	2.58E-255	0.319546437	0.666	0.397
CEMIP21	8.93E-255	0.569352192	0.804	0.644
PAM	1.13E-254	0.620685223	0.525	0.337
ZAP70	1.66E-254	0.395890795	0.261	0.112
CD81	9.71E-254	0.41066175	0.666	0.49
CXCR6	3.21E-253	0.522195099	0.273	0.118
SLAMF6	5.69E-251	0.500117474	0.309	0.148
GALNT2	3.47E-250	0.765170233	0.453	0.294
MGAT4A1	4.84E-250	0.506859584	0.492	0.303
MNAT1	4.10E-249	0.53341082	0.429	0.254
HLA-E	1.20E-246	0.359940459	0.955	0.868
AL137856.1	1.55E-246	0.530858825	0.373	0.201
ISG15	4.68E-245	0.761352296	0.585	0.418
FABP5	1.42E-244	0.485515716	0.498	0.324
BIN2	4.14E-244	0.560832957	0.421	0.257
PSME1	1.75E-242	0.426290407	0.738	0.605
AF165147.1	1.78E-242	0.553965363	0.28	0.127
CLEC2D1	8.65E-242	0.579513607	0.686	0.503
HMGB2	6.67E-240	0.531699822	0.583	0.418
MYO1F	6.95E-240	0.561173477	0.369	0.21
CD69	2.80E-239	0.490485241	0.739	0.538
RNF115	4.79E-238	0.599018954	0.498	0.338

CALM11	6.08E-238	0.385822937	0.953	0.856
CLDND1	7.91E-238	0.623898763	0.456	0.295
WNK1	1.14E-234	0.530425478	0.723	0.59
GRAP2	2.83E-233	0.455510103	0.28	0.13
PSTPIP1	1.47E-231	0.435138875	0.29	0.143
FUT8	1.87E-231	0.68462246	0.509	0.353
GAPDH	1.31E-228	0.339931878	0.926	0.821
APOBEC3C	1.68E-228	0.527880764	0.308	0.163
RASAL3	4.42E-228	0.46921508	0.382	0.22
KIF13B	2.66E-227	0.543316477	0.537	0.371
ARAP21	1.53E-225	0.410595112	0.636	0.448
PTPN7	1.16E-224	0.52259387	0.424	0.26
RABAC1	5.95E-224	0.479352085	0.577	0.429
TC2N1	1.60E-223	0.502697269	0.374	0.2
CARD11	2.17E-223	0.535477345	0.532	0.355
SPN	6.25E-223	0.440204893	0.274	0.134
DOK2	3.41E-222	0.574759962	0.402	0.241
SPON2	3.66E-222	0.608438935	0.257	0.121
JMJD6	7.87E-222	0.570679462	0.404	0.253
SAMD9	6.36E-218	0.569207674	0.421	0.262
ITGAL	1.28E-214	0.520564807	0.368	0.212
CORO1A	2.77E-214	0.425760862	0.732	0.594
DGKZ	7.44E-214	0.434575852	0.298	0.156
ACAP11	7.68E-214	0.442961839	0.601	0.433
MACF1	9.24E-212	0.456107206	0.662	0.507
TUBA4A	1.70E-211	0.637255981	0.558	0.4
GIMAP1	1.71E-210	0.408215228	0.258	0.122
HERPUD2	1.13E-209	0.527774655	0.499	0.344
CLIC1	1.21E-209	0.381800212	0.783	0.646
KLF13	9.74E-208	0.506920291	0.53	0.383
BTN3A1	6.77E-207	0.460966805	0.358	0.205
GUK1	1.19E-206	0.37485269	0.684	0.554
LDHA	1.34E-206	0.429401751	0.709	0.563
GAS7	2.01E-206	0.539686025	0.254	0.122
DENND2D	6.15E-204	0.418386894	0.282	0.143
RAB5IF	3.31E-201	0.515560396	0.472	0.33
ISG20	5.65E-201	0.509607184	0.822	0.7
IER5L	1.05E-200	0.672217741	0.331	0.187
MPZL31	1.42E-200	0.482875229	0.379	0.218
AHI1	7.56E-199	0.651922963	0.492	0.342
MBNL11	2.75E-198	0.306838407	0.941	0.853
SELPLG	3.35E-198	0.496675022	0.331	0.191
MCOLN2	1.18E-197	0.563661218	0.317	0.171

DOCK8	1.02E-195	0.382085433	0.784	0.674
TBC1D2B	1.65E-195	0.473765082	0.332	0.187
RAC2	9.77E-195	0.382086598	0.671	0.526
PLPP1	3.31E-194	0.841705697	0.287	0.155
CCDC85B	1.10E-193	0.456290116	0.487	0.343
ACTN4	1.38E-191	0.450154003	0.509	0.363
MPHOSPH9	4.72E-190	0.456825387	0.287	0.153
C5orf56	3.59E-189	0.482068864	0.376	0.232
IFI16	3.41E-188	0.434934731	0.731	0.619
OTULIN	6.05E-188	0.519284353	0.448	0.303
TSPAN51	9.37E-188	0.35082768	0.491	0.304
BUB3	5.47E-187	0.441722423	0.448	0.302
IFI44L	1.39E-186	0.701558532	0.291	0.159
RBPJ	2.60E-186	0.53651377	0.608	0.478
ARHGAP9	7.18E-185	0.481023499	0.396	0.253
TNFRSF9	1.35E-184	0.443068745	0.285	0.147
BIN1	1.86E-184	0.442949283	0.355	0.216
TMEM50A	2.26E-184	0.422028099	0.598	0.462
PFN1	5.76E-184	0.320247512	0.873	0.749
PCNX21	3.11E-183	0.439883465	0.415	0.261
IFI6	3.82E-183	0.675536004	0.446	0.299
IQGAP1	6.14E-183	0.426011788	0.792	0.686
PSMA1	1.67E-182	0.518821973	0.622	0.508
SNTB2	1.96E-182	0.392782367	0.287	0.152
SIRT2	8.32E-182	0.50897028	0.353	0.219
GBP2	9.42E-182	0.41885227	0.545	0.375
MFSD6	2.34E-180	0.45618417	0.346	0.203
ARL4C1	1.20E-179	0.401938306	0.657	0.476
CCND2	3.80E-178	0.44268075	0.463	0.311
PPP2R5A	1.57E-177	0.461740314	0.418	0.273
DIP2A	2.94E-177	0.459103656	0.337	0.199
B3GNT2	1.49E-176	0.454127272	0.283	0.156
TERF2IP	5.35E-176	0.437121131	0.641	0.52
BRD1	7.46E-176	0.455999286	0.426	0.285
PDCD41	8.07E-173	0.339947843	0.739	0.6
NCOA1	6.08E-172	0.441484322	0.633	0.497
AUTS2	2.85E-170	0.489025981	0.431	0.269
GPR65	4.47E-168	0.46266078	0.359	0.223
NAA50	1.34E-167	0.503548883	0.532	0.402
ARPC5L	3.01E-165	0.440113699	0.386	0.258
CNOT2	6.76E-165	0.570513159	0.638	0.534
ARHGEF1	1.06E-164	0.397883002	0.464	0.32
PCED1B	3.09E-161	0.47081809	0.468	0.316

WHRN	3.09E-161	0.515486683	0.308	0.18
LSP1	5.69E-160	0.355860061	0.572	0.443
RASA2	6.36E-160	0.3873393	0.655	0.525
ABI3	5.11E-159	0.403581539	0.268	0.149
RESF1	2.26E-158	0.372686091	0.675	0.539
SAMD9L	3.88E-158	0.54209381	0.352	0.224
BST2	1.22E-157	0.509378368	0.526	0.405
AKT31	3.40E-157	0.48996581	0.617	0.481
SPATA131	1.36E-156	0.372078618	0.375	0.238
PDE7B	1.98E-156	0.676605495	0.251	0.134
IDH2	3.63E-156	0.460220458	0.365	0.244
PSMB8	6.24E-155	0.397373976	0.574	0.452
IFI44	9.02E-154	0.550705109	0.279	0.163
ARHGEF31	9.89E-154	0.378666638	0.43	0.285
TNFSF10	9.99E-154	0.470198067	0.322	0.196
CD61	2.55E-153	0.324102014	0.406	0.249
AC011476.3	2.58E-153	0.457825345	0.284	0.162
GATA31	4.14E-152	0.32403175	0.289	0.157
ARPC2	4.18E-152	0.265955781	0.862	0.764
GRAMD1B1	1.04E-149	0.485945929	0.365	0.228
CASP81	5.85E-149	0.362986508	0.566	0.425
DGKH	3.76E-148	0.497157107	0.287	0.167
HCP5	3.84E-148	0.417017531	0.343	0.219
STK17A	7.18E-148	0.289398232	0.763	0.624
UTRN	1.28E-146	0.303455543	0.802	0.683
CHST11	6.08E-145	0.275521374	0.86	0.743
TSPYL21	1.67E-144	0.506011087	0.596	0.47
PGK1	2.36E-144	0.400481829	0.674	0.573
TBC1D10C	2.42E-144	0.371300234	0.369	0.236
WIPF1	4.04E-144	0.328709489	0.72	0.61
CARS	5.12E-144	0.563736543	0.281	0.17
IKZF11	5.44E-144	0.26349231	0.731	0.593
DDX3X	3.15E-143	0.383528449	0.757	0.671
AAK11	1.31E-142	0.253309221	0.606	0.44
PEX14	7.88E-142	0.463604395	0.298	0.181
LRMP	3.65E-141	0.335352363	0.369	0.24
KANSL11	1.25E-140	0.374419554	0.642	0.518
FAM160B1	1.86E-140	0.39531508	0.302	0.18
PCID2	2.08E-140	0.381536123	0.252	0.142
EIF2AK2	2.42E-140	0.474216252	0.429	0.309
CLASP1	6.51E-139	0.404135387	0.529	0.409
KLRB11	7.19E-139	0.596760764	0.27	0.15
AL627171.2	2.86E-138	0.366343129	0.45	0.329

LBH1	3.59E-138	0.348388049	0.491	0.344
UBE2S	2.80E-137	0.483125824	0.571	0.458
HNRNPLL1	3.40E-137	0.397177064	0.443	0.301
XAF1	6.92E-136	0.510292835	0.387	0.267
FAM3C	2.35E-135	0.599950581	0.357	0.248
RASGRP11	2.14E-134	0.337027487	0.417	0.273
SPAG1	7.20E-134	0.391364624	0.284	0.168
ARL6IP51	1.79E-133	0.298050738	0.708	0.577
PPP1R12A	5.04E-132	0.318842059	0.7	0.6
SMC4	3.75E-131	0.459478124	0.373	0.257
RAP1B	1.40E-130	0.258553555	0.847	0.758
PPDPF	1.84E-130	0.351735888	0.52	0.409
GIMAP51	7.09E-130	0.304662769	0.268	0.153
SP140	8.64E-130	0.376053435	0.578	0.446
LPIN21	1.22E-129	0.364597625	0.473	0.346
SUN2	2.10E-129	0.410478346	0.373	0.256
APOL6	4.32E-129	0.389848339	0.377	0.258
GPRIN31	1.19E-127	0.256465628	0.553	0.398
LIME11	1.43E-126	0.398621682	0.366	0.243
GLMN	2.06E-125	0.349631127	0.306	0.188
PRKY1	5.77E-125	0.450334982	0.277	0.167
H1FX	6.54E-125	0.416053173	0.51	0.391
YARS	1.25E-124	0.397158247	0.315	0.205
SUB1	2.54E-123	0.278052567	0.824	0.737
SMAD7	3.81E-123	0.390579444	0.458	0.336
MAP2K2	6.12E-123	0.376766204	0.445	0.343
PTPRA	1.53E-122	0.404815845	0.494	0.382
ASXL2	2.61E-122	0.428456874	0.448	0.336
DDX241	3.50E-122	0.257546733	0.798	0.692
RNF38	4.77E-121	0.383179199	0.502	0.386
RASA11	6.16E-118	0.386786947	0.535	0.422
STK391	6.86E-117	0.3340893	0.325	0.207
HIST1H3D	4.53E-116	0.415528959	0.265	0.162
EID1	4.97E-116	0.335457149	0.599	0.505
NEU1	8.23E-116	0.539605267	0.343	0.239
LRRC8C1	1.48E-114	0.354885927	0.461	0.338
TRANK1	1.75E-114	0.365085678	0.301	0.193
ITM2C	1.87E-114	0.40410823	0.251	0.15
LAX1	1.47E-113	0.329775968	0.297	0.184
IFI27L2	3.98E-113	0.38797446	0.375	0.276
SLC9A3R1	1.39E-112	0.326484332	0.279	0.176
GGA2	3.65E-112	0.374342143	0.465	0.35
PRMT2	1.80E-111	0.349364818	0.416	0.307

SRI	2.12E-111	0.332916404	0.413	0.309
HIST1H1E	5.58E-111	0.386433665	0.313	0.204
CHORDC1	8.43E-110	0.419035313	0.581	0.479
AC008569.1	6.89E-109	0.363702559	0.261	0.159
EIF4A2	7.74E-109	0.276710745	0.747	0.667
FBXO321	8.89E-109	0.325625528	0.272	0.165
VAMP2	3.66E-108	0.335511475	0.453	0.347
MAP4	3.71E-108	0.386305373	0.413	0.308
NDUFS51	1.26E-107	0.273232462	0.66	0.562
KLF121	2.94E-106	0.347077892	0.605	0.477
CDC14A1	1.12E-105	0.295875569	0.517	0.384
CREBZF	1.27E-105	0.35963862	0.271	0.172
AHSA1	1.49E-105	0.412784851	0.481	0.383
ENSA	2.94E-105	0.273746645	0.65	0.564
ITPRIP	3.02E-105	0.378802394	0.271	0.175
SEMA4D	6.06E-105	0.3271579	0.504	0.402
PRKCA1	1.12E-104	0.270419318	0.49	0.357
MYLIP	1.36E-104	0.39778927	0.533	0.428
RGCC1	7.50E-104	0.475222426	0.564	0.452
TMEM181	9.19E-104	0.37812064	0.319	0.217
PRDM1	2.33E-103	0.342921787	0.459	0.34
CD38	2.37E-103	0.534885128	0.253	0.161
DUSP10	1.86E-102	0.38316491	0.372	0.267
UBE2E3	1.96E-102	0.40260644	0.356	0.256
MIER1	2.61E-102	0.313659591	0.565	0.469
DEK	1.02E-101	0.276463006	0.637	0.534
ANKRD13D	2.36E-100	0.352165496	0.297	0.198
LMNB1	4.77E-100	0.360766416	0.25	0.158
TRAPPC10	9.74E-100	0.340303916	0.521	0.426
FAM102B	1.67E-99	0.403193909	0.359	0.251
SPATS2L	5.58E-99	0.386566637	0.427	0.313
RSRP11	6.07E-99	0.30995403	0.671	0.59
TLN1	2.14E-98	0.315167405	0.554	0.459
BHLHE40	1.28E-97	0.396333944	0.341	0.237
RPAP2	5.74E-97	0.323314708	0.317	0.215
SEM1	8.45E-97	0.253150885	0.535	0.447
SURF4	1.66E-96	0.383971739	0.41	0.319
RBCK1	3.41E-96	0.328076384	0.322	0.227
ZCCHC2	4.36E-96	0.373790204	0.354	0.253
IL21R	8.47E-96	0.305897164	0.351	0.24
SERTAD1	1.26E-95	0.449065207	0.406	0.312
SNRPB	1.85E-95	0.273248003	0.637	0.56
SHISA5	1.95E-95	0.322406708	0.301	0.207

DHRS7	8.50E-95	0.353798018	0.421	0.329
NCOR1	1.01E-94	0.295962824	0.622	0.537
PARK7	4.69E-94	0.252360244	0.643	0.556
CDC42EP3	1.94E-93	0.385187856	0.394	0.291
NFIL3	5.80E-93	0.323297821	0.299	0.204
LAT1	2.60E-92	0.252992992	0.284	0.181
SSBP4	7.30E-91	0.310903535	0.298	0.206
TMX4	1.59E-90	0.318710529	0.345	0.246
VAV3	1.77E-90	0.360552026	0.53	0.422
XRN1	6.08E-90	0.319751592	0.568	0.483
RUNX21	6.21E-90	0.354747127	0.374	0.272
SEPTIN1	7.70E-90	0.252373888	0.326	0.224
HIBCH	9.52E-90	0.414604518	0.394	0.291
PRDX6	2.92E-89	0.274080017	0.502	0.414
TAF7	5.04E-89	0.306398259	0.535	0.445
PTP4A2	9.34E-89	0.293363606	0.574	0.491
NFATC3	1.52E-88	0.353526463	0.369	0.269
PREP	2.76E-88	0.34140279	0.271	0.181
CMC2	1.85E-87	0.343103704	0.374	0.28
CDK6	1.93E-87	0.41570046	0.405	0.306
CEP85L1	2.69E-87	0.315949737	0.473	0.369
DDX58	8.82E-87	0.374646598	0.279	0.188
MAPK1	9.08E-86	0.320337511	0.451	0.358
AC044849.11	5.34E-85	0.324670559	0.383	0.276
NCOA71	6.74E-85	0.30219895	0.377	0.277
CD2BP2	6.89E-85	0.345576216	0.292	0.208
ITGB2	7.40E-85	0.307542958	0.455	0.351
NUDC	1.63E-84	0.344641519	0.507	0.422
RGS2	2.15E-84	0.378860901	0.636	0.529
ZNRF11	3.96E-84	0.328218053	0.294	0.198
TRPC4AP	9.96E-84	0.359513347	0.45	0.362
SGMS1	1.03E-83	0.315753612	0.496	0.401
SPTAN11	3.41E-83	0.283832514	0.547	0.458
REEP5	4.87E-83	0.288244427	0.509	0.43
HERC5	5.90E-83	0.349328556	0.292	0.199
HMGN4	1.89E-82	0.306718483	0.369	0.28
CD27	3.50E-82	0.427582828	0.375	0.281
SYNRG	4.14E-82	0.313740619	0.449	0.356
WDR83OS	4.80E-82	0.278517012	0.513	0.436
ZNF83	5.51E-82	0.334754182	0.28	0.191
RGS11	2.30E-81	0.377406542	0.706	0.61
C21orf91	3.02E-81	0.302423065	0.254	0.167
SF3B5	8.65E-81	0.258668434	0.535	0.456

IFI35	1.34E-80	0.378309257	0.285	0.204
CASP3	1.52E-80	0.334108539	0.318	0.232
TAF15	1.78E-80	0.267838971	0.547	0.462
NAB1	4.06E-80	0.36697053	0.318	0.229
TAX1BP1	5.74E-80	0.265619917	0.645	0.581
USP25	2.77E-79	0.368640206	0.408	0.319
FAM177A11	3.27E-79	0.354631942	0.586	0.508
CITED21	3.58E-79	0.334872109	0.389	0.297
UBR2	4.50E-79	0.294591382	0.509	0.422
ARF6	1.20E-78	0.295148732	0.492	0.409
POLR2A	1.59E-78	0.3513174	0.549	0.475
BLOC1S1	2.11E-78	0.291030063	0.469	0.384
FGD31	1.02E-77	0.2586423	0.348	0.25
PSME4	1.70E-77	0.337890328	0.516	0.432
CHIC21	3.39E-77	0.276804388	0.483	0.393
TSC22D1	8.37E-77	0.362578487	0.254	0.172
HP1BP3	1.72E-76	0.265694596	0.553	0.477
TBL1XR1	2.92E-76	0.282556258	0.534	0.453
UBE2L6	3.95E-76	0.330514838	0.343	0.262
RFC1	6.54E-76	0.287867586	0.384	0.295
PMF1	1.09E-75	0.256854358	0.419	0.332
KIF2A1	2.25E-75	0.266434005	0.462	0.365
YWHAQ	2.45E-75	0.278162796	0.578	0.502
TAP1	4.44E-75	0.292954371	0.337	0.254
RBL21	6.74E-75	0.287291421	0.323	0.233
PGAM1	2.01E-74	0.295160598	0.434	0.354
BZW1	2.21E-74	0.270831901	0.596	0.518
DIAPH1	8.99E-74	0.280165685	0.502	0.416
RSBN1L	1.43E-73	0.27478117	0.465	0.379
GLS	1.67E-73	0.253607681	0.775	0.694
NUCB2	2.26E-73	0.310397762	0.275	0.194
H2AFX	2.51E-73	0.366882511	0.305	0.222
CDC42SE1	3.12E-73	0.30849502	0.434	0.353
CDK2AP2	3.90E-73	0.317461131	0.303	0.224
GPATCH8	1.17E-72	0.27553457	0.575	0.497
LSM2	1.18E-72	0.298343457	0.307	0.228
SLC38A2	4.44E-72	0.295550973	0.62	0.552
PLP2	4.70E-72	0.297421316	0.46	0.379
SLC4A7	7.44E-72	0.319880511	0.5	0.413
PSMB10	8.25E-72	0.310648583	0.421	0.346
TENT4B	1.02E-71	0.371530283	0.318	0.236
PLEKHA2	2.28E-71	0.290314167	0.528	0.439
S1PR4	4.76E-71	0.27923968	0.28	0.194

ABHD17B	5.09E-70	0.343841644	0.359	0.275
CORO7	5.77E-70	0.322613987	0.38	0.295
FLNA	3.97E-69	0.279688674	0.375	0.289
HELB	1.10E-68	0.259408569	0.257	0.175
RC3H1	1.19E-68	0.28270678	0.563	0.491
LINC00623	1.40E-68	0.253764043	0.301	0.218
PARP9	2.03E-68	0.32235778	0.266	0.189
ABL1	2.44E-68	0.364169487	0.295	0.215
SRSF2	2.66E-68	0.342068335	0.615	0.564
TFDP2	5.85E-68	0.357384274	0.342	0.256
CACYBP1	1.15E-67	0.369921135	0.589	0.512
POLR2K	2.89E-67	0.261208149	0.408	0.33
SMURF2	3.06E-67	0.324424284	0.404	0.32
R3HDM1	3.45E-67	0.30167039	0.32	0.238
MX1	3.62E-67	0.408212201	0.386	0.309
STAT5A	4.25E-67	0.337256423	0.271	0.196
MXD4	9.51E-67	0.324982104	0.385	0.312
IGF2R	3.97E-66	0.258940434	0.424	0.339
KDM5A	1.28E-65	0.26792373	0.513	0.439
PSMA5	1.39E-65	0.251383726	0.449	0.374
TRAF5	1.11E-64	0.28501717	0.342	0.257
NUB1	1.63E-64	0.269555178	0.337	0.258
HIST2H2AC	1.44E-63	0.316600126	0.273	0.198
AC068587.41	1.59E-63	0.413384718	0.276	0.199
TRIM22	1.59E-63	0.321935577	0.434	0.355
CD84	1.70E-63	0.280610969	0.298	0.218
EPS15	2.54E-63	0.250239204	0.52	0.441
HMOX2	3.92E-63	0.263330103	0.31	0.232
FRYL	1.16E-62	0.262907789	0.568	0.491
BUD31	1.93E-62	0.251166031	0.456	0.389
TIAM2	2.16E-62	0.39035866	0.252	0.179
KIAA0319L	1.25E-61	0.302467087	0.287	0.209
TBCC1	1.50E-61	0.263577065	0.294	0.214
ADSS	1.56E-61	0.275657607	0.436	0.361
SELENOI	2.50E-61	0.27153297	0.269	0.193
RFX7	4.38E-61	0.311223474	0.359	0.274
NMRK1	6.21E-61	0.312100438	0.26	0.186
ZMYND11	1.23E-60	0.274645251	0.301	0.223
DYNLL1	1.58E-60	0.272306777	0.686	0.624
STIP1	3.25E-60	0.290992033	0.429	0.354
CHMP4A	5.61E-60	0.268004539	0.444	0.377
CAB39	1.44E-59	0.305564098	0.459	0.388
CCT4	1.11E-58	0.268754165	0.557	0.497

TOB11	2.06E-58	0.284481533	0.37	0.293
ZDHHC20	2.03E-57	0.29561716	0.415	0.338
LNPEP	6.13E-57	0.254293572	0.388	0.312
DR1	8.76E-57	0.25417744	0.278	0.207
PRPF4B	1.04E-56	0.252971164	0.55	0.487
ZNF217	3.81E-56	0.250817075	0.292	0.219
UBE2A	1.84E-55	0.285846799	0.399	0.335
CSNK1G3	7.34E-55	0.261193233	0.394	0.315
ITGB1	1.22E-54	0.270072625	0.525	0.452
IRF9	3.54E-54	0.290169414	0.366	0.296
SUCLG2	5.69E-54	0.251229816	0.471	0.397
NUTM2B-AS1	8.08E-54	0.311173804	0.395	0.325
SEPTIN11	1.19E-53	0.286026799	0.281	0.212
OAT	5.40E-53	0.273286494	0.322	0.253
ANP32E	1.24E-52	0.252137899	0.371	0.302
USP33	1.45E-52	0.268214457	0.348	0.279
ADAR	1.52E-52	0.253235857	0.45	0.388
TTN	2.49E-52	0.255027992	0.259	0.185
MACO1	4.15E-52	0.33110992	0.339	0.273
USP11	1.72E-51	0.26762703	0.277	0.211
STIM1	2.05E-51	0.27026729	0.448	0.375
GNPTAB	9.15E-51	0.337983062	0.383	0.321
MBD5	7.67E-50	0.273934144	0.461	0.387
PPP6R2	1.20E-49	0.25545305	0.363	0.295
ETNK1	2.07E-48	0.271673213	0.408	0.347
RNF166	5.92E-48	0.256921551	0.259	0.197
RASSF1	1.51E-47	0.264667833	0.252	0.19
PPP3CC	3.51E-46	0.26262338	0.439	0.373
MORF4L2	3.61E-45	0.270957877	0.561	0.517
INTS6L	2.10E-43	0.266713271	0.283	0.219
RASA31	4.21E-42	0.325107794	0.391	0.333
LRIF1	6.36E-42	0.286073351	0.287	0.226
HIST1H1D	1.66E-40	0.273648288	0.27	0.208
BAG3	1.82E-40	0.301304721	0.316	0.251
CBX4	9.97E-40	0.267608717	0.272	0.217
TPP2	1.02E-39	0.253683696	0.336	0.279
ABHD3	4.18E-39	0.300167519	0.383	0.321
TRIM26	1.05E-38	0.266748102	0.291	0.235
OSBPL3	9.64E-38	0.262955173	0.396	0.337
ENTPD1-AS1	1.42E-35	0.350459824	0.275	0.223
INPP5F	3.94E-32	0.350123085	0.25	0.199
TGFB1	1.01E-30	0.319183964	0.597	0.575
RHOB	2.68E-30	0.342588463	0.281	0.232

ZFAND2A	6.72E-28	0.288304006	0.318	0.271
GOLGA4	4.12E-25	0.255165364	0.57	0.544
ENTPD1	7.90E-12	0.360217976	0.258	0.242
AFF3	0	3.222494889	0.95	0.16
BANK1	0	3.031361022	0.952	0.101
EBF1	0	2.779622748	0.863	0.094
CD79A	0	2.761053132	0.921	0.145
ARHGAP24	0	2.649875051	0.861	0.117
BACH2	0	2.490755015	0.927	0.441
MS4A1	0	2.489397477	0.905	0.086
PLEKHG1	0	2.484654997	0.84	0.166
GNG7	0	2.425424648	0.915	0.201
LY9	0	2.406485848	0.779	0.164
IGHD	0	2.336467206	0.603	0.017
ADAM28	0	2.323867795	0.825	0.166
TCF4	0	2.303589277	0.778	0.19
FCRL1	0	2.203324485	0.666	0.045
1-Mar	0	2.18258033	0.684	0.134
LYN	0	2.173871862	0.933	0.284
CCSER1	0	2.145077767	0.618	0.106
RALGPS2	0	2.123885537	0.788	0.152
TNFRSF13C	0	2.109166999	0.809	0.093
MEF2C	0	2.094684622	0.844	0.192
KHDRBS2	0	2.048834432	0.551	0.038
MGAT5	0	2.042193243	0.913	0.426
LARGE1	0	2.039946992	0.588	0.093
BCL11A	0	2.039527688	0.684	0.095
PRKCE	0	2.029691304	0.854	0.335
RUBCNL	0	2.000620057	0.661	0.078
ST6GALNAC3	0	1.960614019	0.612	0.147
CD83	0	1.925741595	0.932	0.363
AC120193.1	0	1.915233284	0.677	0.12
COL19A1	0	1.914540204	0.515	0.024
YBX3	0	1.906381297	0.591	0.224
C12orf42	0	1.860401219	0.59	0.067
TMEM156	0	1.833398744	0.667	0.24
ST6GAL1	0	1.833305954	0.824	0.294
CHPT1	0	1.813558418	0.702	0.167
HLA-DRA	0	1.796352123	0.986	0.472
JADE3	0	1.791649732	0.557	0.054
TLE1	0	1.791456441	0.604	0.114
CD37	0	1.791125181	0.955	0.619
LINC00926	0	1.738421243	0.596	0.049

PAX5	0	1.723316224	0.621	0.05
VPREB3	0	1.719547239	0.584	0.051
TCL1A	0	1.697420788	0.438	0.021
INPP5A	0	1.687622726	0.669	0.183
ACSM3	0	1.682064868	0.29	0.029
KLHL5	0	1.651162235	0.635	0.257
SWAP70	0	1.649725543	0.728	0.167
SMAD3	0	1.643156205	0.713	0.273
CD74	0	1.63197112	0.994	0.68
HLA-DQA1	0	1.59706632	0.935	0.334
UBE2E2	0	1.591174885	0.669	0.194
BLK	0	1.582616511	0.59	0.062
CARMIL1	0	1.571653809	0.543	0.124
SNX2	0	1.564050382	0.814	0.353
SSH2	0	1.56320983	0.919	0.625
ZBTB16	0	1.536106837	0.595	0.211
SIPA1L3	0	1.535748453	0.672	0.221
HLA-DQB1	0	1.527678764	0.93	0.351
HLA-DPB1	0	1.516954929	0.968	0.541
HLA-DRB5	0	1.508916306	0.706	0.171
WDFY4	0	1.47647668	0.608	0.114
RERE	0	1.473353289	0.842	0.457
VPS37B	0	1.467546155	0.742	0.411
CDK14	0	1.454156636	0.758	0.254
OSBPL10	0	1.444180358	0.489	0.081
IRF8	0	1.43071955	0.676	0.167
HLA-DQA2	0	1.409437559	0.726	0.215
ANKRD44	0	1.396408233	0.944	0.699
FCHSD2	0	1.392883258	0.781	0.372
AP001011.11	0	1.390073839	0.785	0.445
AUTS21	0	1.383623032	0.657	0.243
THRB	0	1.382897566	0.292	0.026
PLCG2	0	1.381905322	0.755	0.237
GRASP	0	1.379959663	0.617	0.181
SETBP1	0	1.376721771	0.583	0.143
SFMBT11	0	1.373708185	0.646	0.272
LINC02397	0	1.371436104	0.451	0.037
NIBAN3	0	1.351104964	0.47	0.032
SLC49A4	0	1.348198172	0.505	0.18
CD22	0	1.346348849	0.496	0.064
INPP5D	0	1.332017387	0.825	0.448
HDAC9	0	1.31992262	0.496	0.153
SNX29	0	1.314006277	0.69	0.315

TTC3	0	1.312456782	0.715	0.438
LAPTM5	0	1.311995609	0.958	0.667
KCNQ5	0	1.300312217	0.34	0.075
DNMBP	0	1.280745067	0.411	0.101
SIPA1L1	0	1.275812798	0.954	0.638
COBLL1	0	1.260458586	0.516	0.106
CD55	0	1.259360144	0.914	0.524
RCSD1	0	1.257362565	0.686	0.32
HVCN1	0	1.25703188	0.479	0.081
SMCHD11	0	1.250963165	0.954	0.809
ZCCHC7	0	1.250409016	0.754	0.455
RAB30	0	1.222663734	0.608	0.197
CD79B	0	1.219677129	0.537	0.152
TRAK1	0	1.208532507	0.637	0.259
EZR	0	1.208309204	0.962	0.785
PDE7A	0	1.203101198	0.883	0.554
RHOH	0	1.201859756	0.862	0.635
FCER2	0	1.198656899	0.353	0.015
SNED1	0	1.195121063	0.338	0.109
RB1	0	1.19387724	0.751	0.427
STAP1	0	1.191941434	0.439	0.067
STRBP	0	1.190638481	0.625	0.226
MICAL3	0	1.181524059	0.519	0.133
MTSS1	0	1.176243178	0.53	0.192
ORAI2	0	1.171365228	0.545	0.16
SMIM14	0	1.165137947	0.523	0.15
AP002075.1	0	1.162813072	0.4	0.026
AC119396.1	0	1.162022787	0.401	0.076
EIF2AK3	0	1.157453185	0.635	0.325
GNB5	0	1.15652792	0.511	0.189
CD72	0	1.155663093	0.47	0.116
TMEM131L	0	1.153469382	0.673	0.347
HLA-DMB	0	1.128506933	0.637	0.181
SNX9	0	1.115285533	0.918	0.684
HLA-DPA1	0	1.102040116	0.947	0.521
TMEM123	0	1.101974805	0.725	0.479
RBM38	0	1.100562453	0.661	0.293
STEAP1B	0	1.097617247	0.486	0.23
MAP4K4	0	1.097125174	0.863	0.502
FAM49A	0	1.094540822	0.603	0.229
PRDM2	0	1.093365906	0.875	0.613
STAG3	0	1.089378191	0.337	0.06
LY86	0	1.088892972	0.464	0.106

TUBB6	0	1.087984125	0.362	0.124
LSM7	0	1.082646253	0.708	0.417
ABHD15-AS1	0	1.081025997	0.485	0.151
STX7	0	1.080049263	0.527	0.205
TPD52	0	1.076932324	0.613	0.258
DENND5B	0	1.076016809	0.384	0.086
PARP15	0	1.073030831	0.576	0.222
PHACTR1	0	1.072420219	0.504	0.153
HLA-DMA	0	1.068569598	0.756	0.305
UVRAG	0	1.067667961	0.712	0.372
IFT57	0	1.067176261	0.521	0.177
DMXL1	0	1.064194209	0.564	0.275
DLEU2	0	1.063131281	0.701	0.472
BORCS5	0	1.055011158	0.642	0.405
ZNF331	0	1.054629066	0.783	0.585
MEF2A	0	1.050794858	0.682	0.376
IGHM	0	1.046647329	0.756	0.13
CAMK2D	0	1.046360403	0.671	0.435
TRIO	0	1.045727658	0.622	0.233
NOTCH2	0	1.037915139	0.461	0.171
ALG13	0	1.037421602	0.631	0.386
PRKCB	0	1.033641598	0.847	0.554
GAB1	0	1.032104794	0.329	0.105
ZHX2	0	1.030426507	0.853	0.566
HLA-DRB1	0	1.029239814	0.963	0.515
WDFY2	0	1.026820072	0.527	0.268
8-Mar	0	1.026686703	0.488	0.18
PTK2	0	1.026384709	0.415	0.098
MANBA	0	1.025842853	0.626	0.298
EIF1AY	0	1.024317193	0.474	0.167
REV3L	0	1.02043548	0.717	0.453
GRK5	0	1.018898814	0.608	0.338
EEF1B2	0	1.018881437	0.95	0.826
RUBCN	0	1.017784581	0.553	0.22
PKIG	0	1.016082933	0.416	0.079
SEL1L3	0	1.015544226	0.577	0.276
FAM177B	0	1.011342054	0.342	0.058
P2RX5	0	1.003224068	0.42	0.102
PIKFYVE	0	1.000904936	0.511	0.223
CD24	0	1.000270783	0.384	0.053
WASHC4	0	0.999001189	0.606	0.283
FCMR	0	0.989602501	0.631	0.248
AC079921.1	0	0.986587222	0.339	0.069

NIN	0	0.973709952	0.596	0.329
GPR18	0	0.971933235	0.395	0.112
RFTN1	0	0.966163073	0.764	0.547
RASGRP2	0	0.966119079	0.489	0.145
GNA12	0	0.965975213	0.555	0.243
ANGPTL1	0	0.963575625	0.325	0.04
USP6NL	0	0.960325038	0.382	0.097
CMSS11	0	0.956911763	0.661	0.427
TBC1D5	0	0.954936717	0.789	0.521
PARVB	0	0.954074172	0.512	0.209
USP8	0	0.949168815	0.713	0.435
PLEKHA21	0	0.948847762	0.686	0.42
ARHGEF18	0	0.947969357	0.525	0.213
POU2F2	0	0.945099946	0.542	0.226
TMEM131	0	0.943290735	0.677	0.386
STIM2	0	0.942830805	0.688	0.407
FAM210A	0	0.941610487	0.422	0.177
DGKD	0	0.939662121	0.525	0.215
HERPUD1	0	0.935855912	0.856	0.69
FAM30A	0	0.935560719	0.3	0.036
SH2B3	0	0.931255154	0.487	0.185
BTG11	0	0.921431624	0.982	0.909
TMEM243	0	0.920535837	0.671	0.344
CD19	0	0.920159164	0.35	0.035
DENND4A	0	0.917558286	0.888	0.66
SAV1	0	0.911227184	0.397	0.118
AP1B1	0	0.908964196	0.499	0.205
SPIB	0	0.904248059	0.319	0.044
NCF1	0	0.901018157	0.489	0.171
NCOA3	0	0.900220096	0.798	0.51
AP003086.1	0	0.898254261	0.402	0.186
KDM4B	0	0.887396916	0.591	0.3
GSAP	0	0.883591562	0.399	0.13
PDLIM1	0	0.882637395	0.421	0.078
GRK3	0	0.881972938	0.427	0.154
SNX8	0	0.879203259	0.492	0.173
YPEL5	0	0.87527585	0.86	0.651
BMP2K	0	0.873960891	0.44	0.186
OTUD1	0	0.871390849	0.453	0.186
ANKRD13A	0	0.870729943	0.507	0.205
ARRDC2	0	0.867666147	0.459	0.174
CD521	0	0.866398911	0.888	0.638
NGLY1	0	0.862300398	0.541	0.298

KLF21	0	0.860152565	0.764	0.455
NFKBID	0	0.856913335	0.423	0.196
GGA21	0	0.855282042	0.639	0.33
EHMT1	0	0.854471367	0.694	0.445
RIC1	0	0.851758864	0.587	0.335
SKIL	0	0.849556959	0.807	0.526
RRAS2	0	0.849535776	0.448	0.159
EEF1G	0	0.845237293	0.95	0.828
SYK	0	0.842521408	0.434	0.153
ADK	0	0.841850565	0.778	0.575
BPTF	0	0.838204614	0.803	0.607
DRAM2	0	0.837888987	0.471	0.19
RASGEF1B	0	0.837694115	0.619	0.338
E2F5	0	0.835589288	0.296	0.056
ITPR1	0	0.835504059	0.719	0.448
IL16	0	0.832878922	0.46	0.185
ATF7IP2	0	0.829000622	0.547	0.278
RHEX	0	0.827938338	0.297	0.055
SC5D1	0	0.827713554	0.484	0.225
DDX21	0	0.826256847	0.731	0.516
RLF	0	0.817054836	0.683	0.482
UST	0	0.815459057	0.573	0.255
C16orf74	0	0.808797647	0.296	0.039
NR4A2	0	0.808001372	0.737	0.485
ANKRD11	0	0.804091224	0.885	0.72
HIP1R	0	0.803535048	0.373	0.096
SP100	0	0.80202874	0.891	0.688
ZNF10	0	0.79916676	0.55	0.292
SIDT1	0	0.798584642	0.479	0.229
CLEC17A	0	0.796320814	0.255	0.021
PAWR	0	0.794851621	0.306	0.044
PRDM4	0	0.790312736	0.381	0.125
SESTD1	0	0.789591884	0.425	0.157
FARP2	0	0.784901984	0.415	0.178
CNR2	0	0.781040864	0.268	0.031
SKAP2	0	0.780470959	0.533	0.258
CXCR5	0	0.777904764	0.311	0.053
TAF1D	0	0.777071344	0.778	0.557
NOP531	0	0.775207753	0.889	0.681
HLA-DOB	0	0.774580881	0.296	0.04
ZNF318	0	0.774462514	0.297	0.052
ATP2A3	0	0.774420422	0.47	0.194
SLC44A2	0	0.773412458	0.452	0.167

JAZF1	0	0.771607825	0.728	0.46
SP1401	0	0.767256974	0.686	0.438
SESN31	0	0.766178475	0.677	0.333
PPFIBP2	0	0.765635639	0.261	0.073
FAM117B	0	0.764144691	0.364	0.148
SMAP2	0	0.761326412	0.965	0.832
PIGB	0	0.757906354	0.379	0.138
REL	0	0.755977605	0.905	0.63
SPTLC2	0	0.755549139	0.416	0.203
BLNK	0	0.753494725	0.303	0.071
RRM2B	0	0.752999002	0.361	0.12
RABEP2	0	0.751008367	0.35	0.102
TUT4	0	0.750956172	0.688	0.433
CCDC50	0	0.74747133	0.47	0.219
IQSEC1	0	0.745267518	0.456	0.216
TRAPPC8	0	0.743780868	0.448	0.217
TRIM38	0	0.736138275	0.539	0.302
BACH1	0	0.734664283	0.772	0.522
PHF20	0	0.729541609	0.789	0.564
LYL1	0	0.728001777	0.307	0.072
NUP88	0	0.723720417	0.404	0.167
AC027097.2	0	0.723230679	0.258	0.076
ARID1B	0	0.722783494	0.861	0.67
BTK	0	0.722227587	0.348	0.102
CXCR41	0	0.71931588	0.955	0.797
KMT2E	0	0.718231789	0.909	0.754
TBC1D22A	0	0.717931747	0.721	0.503
CAMK1D1	0	0.711097788	0.831	0.533
USP34	0	0.708071982	0.826	0.644
RNASE6	0	0.702327003	0.324	0.101
BTLA	0	0.701522199	0.292	0.074
SNX25	0	0.700322012	0.532	0.288
P2RX1	0	0.699589037	0.256	0.063
BRAF	0	0.69286982	0.806	0.604
FAU	0	0.691204296	0.964	0.908
CD40	0	0.686781195	0.346	0.109
PAN3	0	0.685236989	0.715	0.512
RACK1	0	0.680121212	0.957	0.883
ITSN2	0	0.677944757	0.737	0.526
RASGRP3	0	0.672761334	0.323	0.13
SH3BP5	0	0.672313884	0.55	0.27
YWHAZ	0	0.671629616	0.931	0.804
BCAS4	0	0.669736742	0.372	0.121

CEPT1	0	0.669635549	0.319	0.11
MAPK8IP3	0	0.669425347	0.351	0.132
CCR71	0	0.668756894	0.541	0.229
MYCBP2	0	0.666572016	0.832	0.623
UTRN1	0	0.662555484	0.849	0.684
FGD2	0	0.658339365	0.284	0.081
CDCA7L	0	0.654532437	0.25	0.044
WDR27	0	0.652124467	0.267	0.081
AC079793.11	0	0.649314988	0.665	0.401
DAPP1	0	0.648562931	0.501	0.257
CCND31	0	0.646265909	0.772	0.516
KDM6B	0	0.645710492	0.537	0.286
CHD7	0	0.632520218	0.437	0.185
RNASET21	0	0.631930947	0.769	0.524
ZBTB10	0	0.629870132	0.383	0.168
SLC9A7	0	0.628435369	0.316	0.118
CYBB	0	0.625679622	0.478	0.148
MOB3B	0	0.617953585	0.316	0.123
AP000787.11	0	0.614940844	0.501	0.222
ARHGAP151	0	0.612448083	0.953	0.828
POU2AF1	0	0.603458182	0.294	0.082
SHISAL2A	0	0.599818289	0.267	0.076
RASSF2	0	0.592030235	0.362	0.158
PLAC8	0	0.588008323	0.419	0.167
H3F3A	0	0.582941287	0.963	0.881
TSPAN3	0	0.582812664	0.307	0.112
TSPAN33	0	0.580247406	0.261	0.087
ZFAS1	0	0.577113383	0.896	0.732
EEF1A11	0	0.567612705	0.985	0.954
EEF2	0	0.537892939	0.876	0.722
GAS51	0	0.524826923	0.846	0.661
PFDN5	0	0.513013867	0.923	0.823
NACA	0	0.503411755	0.953	0.886
UBA52	0	0.492944555	0.955	0.891
PDE4B	0	0.4305985	0.834	0.612
PXK	5.30E-306	0.632077092	0.379	0.176
RNF144B	5.90E-306	0.648600835	0.353	0.148
FOXP11	1.04E-304	0.558815351	0.88	0.721
OSER1	2.51E-303	0.645909737	0.537	0.32
XYLT1	3.37E-303	0.889655885	0.597	0.384
RABEP1	1.15E-302	0.674796198	0.576	0.356
CARD111	1.55E-301	0.748417502	0.593	0.357
KDM4C	4.40E-301	0.663274603	0.695	0.491

GNA13	6.51E-301	0.670986922	0.642	0.422
TAPT1	2.46E-300	0.701317874	0.361	0.166
SF11	7.38E-299	0.52360804	0.779	0.571
LAT2	1.88E-298	0.584040481	0.343	0.152
MCTP21	5.97E-298	0.293282852	0.416	0.191
MTFR1	6.65E-298	0.561771341	0.396	0.185
SYPL1	1.10E-297	0.581031479	0.413	0.205
PWP1	2.63E-296	0.607750002	0.403	0.198
CD2AP	3.19E-296	0.736829901	0.503	0.289
PTMA	4.36E-293	0.430185028	0.986	0.945
APPL1	1.65E-290	0.618865217	0.409	0.208
MAP3K1	9.76E-289	0.712387305	0.564	0.343
LTB1	6.19E-288	0.301461022	0.697	0.407
EIF4G3	1.32E-287	0.598990648	0.661	0.445
SMC6	1.68E-286	0.605356159	0.375	0.176
FAM13B	1.70E-285	0.648948699	0.597	0.383
EIF3E1	4.21E-285	0.521914924	0.825	0.661
RNMT	4.22E-284	0.614561946	0.623	0.413
CIITA	1.00E-282	0.501016632	0.32	0.132
TRIM44	3.27E-279	0.636645365	0.466	0.262
CMTM6	2.99E-278	0.551560112	0.638	0.413
DENND3	4.09E-278	0.56137206	0.339	0.155
PILRB	5.86E-278	0.521890358	0.328	0.142
TNRC6B1	7.09E-277	0.528174241	0.845	0.681
RAB11A1	1.06E-276	0.684254733	0.762	0.593
C7orf50	1.71E-276	0.614006592	0.465	0.261
ZCCHC10	9.30E-276	0.622888807	0.459	0.253
FCGR2B	5.09E-274	0.450127148	0.275	0.108
MTMR6	5.29E-274	0.642224558	0.49	0.285
AGPAT5	2.54E-273	0.768398799	0.395	0.195
LRRFIP1	8.18E-273	0.699566078	0.819	0.66
BBX	3.18E-272	0.595015846	0.696	0.496
SP140L	1.08E-271	0.604136594	0.529	0.315
SIPA1	4.66E-271	0.52817384	0.38	0.186
RIC3	1.17E-270	0.469572295	0.275	0.105
FILIP1L1	7.28E-269	0.85124802	0.538	0.319
EAF2	1.40E-268	0.596498236	0.297	0.127
RHBDD1	4.12E-266	0.713796669	0.414	0.217
RBM26	1.08E-265	0.676104326	0.542	0.342
ILRUN	1.27E-265	0.631082993	0.469	0.27
SSBP2	6.27E-265	0.666262105	0.482	0.269
MDM4	1.32E-264	0.588967682	0.559	0.351
ZNF107	1.75E-264	0.623471421	0.369	0.178

MTPN	2.33E-263	0.575232853	0.666	0.469
TGFBR21	2.89E-263	0.724005503	0.625	0.42
HIF1A	8.93E-263	0.446871317	0.743	0.522
STX5	4.04E-261	0.652488475	0.501	0.305
CEP170	4.20E-259	0.698078137	0.422	0.226
CHD9	1.19E-256	0.63092077	0.49	0.291
SNHG7	2.60E-256	0.572835981	0.529	0.321
ELF1	3.87E-256	0.443849922	0.945	0.849
CD48	4.46E-256	0.509538094	0.778	0.575
LIMD2	1.26E-255	0.540851731	0.618	0.387
LMBRD1	2.44E-255	0.675292395	0.537	0.34
TRAF51	4.06E-255	0.580260628	0.453	0.245
PABPC11	9.67E-255	0.37137635	0.95	0.835
ZNF141	7.55E-253	0.597880678	0.297	0.13
SLC12A6	1.43E-250	0.698396492	0.421	0.228
DTNBP1	1.74E-249	0.66828583	0.435	0.246
SMDT1	4.78E-249	0.558948618	0.67	0.484
GAB2	2.23E-248	0.666556673	0.512	0.302
IMMP2L1	8.36E-248	0.844988545	0.485	0.286
ELL2	1.02E-247	0.558062359	0.782	0.6
ELMO1	4.10E-246	0.456012233	0.84	0.678
BTBD9	1.95E-244	0.726541004	0.686	0.508
ATP2B1	7.82E-240	0.325119761	0.829	0.622
ERGIC1	1.31E-239	0.549292962	0.445	0.255
TCOF1	4.07E-239	0.535770232	0.338	0.163
BOD1L1	5.42E-239	0.585550042	0.632	0.447
CD691	6.09E-239	0.645135176	0.762	0.546
TPK1	6.80E-237	0.725240853	0.388	0.208
NFATC1	9.68E-237	0.569486961	0.437	0.24
PARP14	1.42E-236	0.601334194	0.582	0.387
ADD31	1.68E-236	0.666520396	0.535	0.332
STAT6	6.22E-235	0.525585557	0.316	0.15
PALM2-AKAP2	6.47E-235	0.559403276	0.372	0.189
SLC37A1	2.03E-234	0.483313221	0.267	0.112
EEF1D1	4.31E-233	0.383899388	0.939	0.853
AP1S3	9.15E-231	0.588467832	0.254	0.105
TXNIP1	4.48E-230	0.455395888	0.87	0.702
TBC1D9	2.33E-227	0.581289914	0.267	0.116
SNU13	3.17E-227	0.539092846	0.739	0.583
NR3C2	6.12E-227	0.690362763	0.273	0.115
RAB3GAP1	1.45E-226	0.554096573	0.558	0.363
STK17A1	7.67E-226	0.513426792	0.805	0.626
CNTRL	1.11E-225	0.605289008	0.532	0.342

USP12	2.57E-224	0.582879481	0.564	0.365
PMEPA1	1.95E-223	0.636750267	0.459	0.268
USP24	5.07E-223	0.650372228	0.483	0.296
PRKD3	2.53E-221	0.526069981	0.33	0.161
SP110	1.81E-220	0.536525605	0.636	0.437
TP53INP1	2.68E-219	0.639003742	0.449	0.26
ZBTB20	9.43E-218	0.466860144	0.851	0.699
SERP1	2.24E-217	0.470085606	0.809	0.661
MAP3K8	2.21E-216	0.566881013	0.607	0.397
NFX1	1.16E-215	0.587362441	0.404	0.23
MAN1A1	1.69E-213	1.099809251	0.576	0.439
PIK3AP1	3.11E-213	0.419110157	0.375	0.191
AC004687.1	1.34E-212	0.459260737	0.257	0.11
IL13RA1	2.52E-212	0.52911265	0.261	0.115
AGO2	2.63E-212	0.530680916	0.651	0.475
MOB3A	2.92E-211	0.566035566	0.5	0.319
KLF7	6.43E-211	0.530244956	0.311	0.152
ZFP36L21	8.51E-211	0.37781351	0.921	0.802
EVI5	2.45E-209	0.641153335	0.332	0.174
TMEM62	8.06E-207	0.535322103	0.26	0.116
MFSD4B	7.46E-206	0.528916129	0.402	0.226
USPL1	1.22E-205	0.479052942	0.488	0.3
CALHM6	9.19E-205	0.316342242	0.254	0.107
RGS19	1.39E-204	0.52363923	0.359	0.194
PACS11	9.41E-202	0.725423891	0.647	0.475
TAF4B	1.22E-201	0.465833028	0.369	0.191
UXT	9.44E-200	0.46295855	0.681	0.511
RBM391	1.13E-198	0.358586986	0.944	0.856
PDE8A	1.15E-198	0.562716301	0.45	0.268
FNIP1	2.61E-197	0.530433245	0.617	0.444
AL035634.1	1.84E-196	0.40297705	0.267	0.119
C9orf72	4.18E-196	0.379894326	0.419	0.237
CCDC6	7.28E-196	0.4761099	0.531	0.341
DYRK1A	1.08E-195	0.502313428	0.714	0.554
STX17-AS1	8.80E-194	0.568706034	0.292	0.142
DLEU1	1.92E-193	0.541675867	0.464	0.283
PIK3CA	3.63E-193	0.608624184	0.38	0.217
SNHG29	6.28E-193	0.372819633	0.803	0.652
PELI2	3.69E-191	0.490178176	0.321	0.159
SIK3	6.19E-191	0.384696846	0.914	0.806
NR4A3	1.08E-190	0.750696892	0.53	0.347
SPOPL	8.54E-190	0.479872201	0.322	0.167
RBM6	1.18E-189	0.499046248	0.651	0.488

EBLN3P	2.26E-188	0.442940827	0.307	0.154
UTY1	5.24E-188	0.483060532	0.526	0.331
SAMD4A	3.01E-187	0.566296476	0.265	0.122
SLC25A6	3.43E-187	0.437247325	0.822	0.691
CCDC93	5.05E-187	0.506022646	0.393	0.229
ARPC3	9.88E-187	0.36918532	0.895	0.755
NSD3	1.85E-186	0.504351594	0.749	0.6
SMC5	2.27E-186	0.583664976	0.647	0.492
AFF4	2.47E-186	0.460831338	0.705	0.541
SRPK2	4.22E-186	0.507353091	0.696	0.543
DDX17	6.69E-186	0.406123553	0.762	0.622
3-Mar	2.43E-184	0.653914017	0.467	0.29
BIRC31	8.12E-184	0.442609816	0.706	0.522
KLF31	1.93E-182	0.610180193	0.389	0.225
PUM2	2.21E-182	0.450198944	0.68	0.52
SYNGR2	2.47E-181	0.497386751	0.415	0.25
ATL2	3.78E-181	0.464612259	0.363	0.202
SEPTIN71	4.03E-181	0.405684967	0.849	0.726
GIT2	4.56E-181	0.570128712	0.377	0.22
SNX3	1.17E-180	0.44798734	0.611	0.439
POLD4	1.28E-180	0.546628333	0.511	0.35
SRGAP2	1.33E-180	0.535008049	0.417	0.251
PAK1	3.20E-180	0.642564514	0.315	0.167
MARCKSL1	4.20E-180	0.456932169	0.422	0.246
LINC01473	8.78E-180	0.642578405	0.263	0.125
SIRT1	1.26E-178	0.473953687	0.419	0.25
HCG18	4.08E-178	0.529596841	0.339	0.183
EIF1B	4.75E-178	0.481219536	0.539	0.374
ARL4A	6.54E-178	0.514106247	0.455	0.28
GNPTAB1	1.88E-177	0.521031338	0.481	0.309
SETX	2.40E-177	0.513074294	0.578	0.412
GOT1	5.91E-177	0.649473523	0.283	0.142
RHOQ	5.94E-177	0.416762677	0.379	0.212
FYTTD1	1.42E-176	0.50647159	0.414	0.256
PPP4R3A	2.56E-176	0.45507628	0.645	0.481
WDR43	3.80E-176	0.454357191	0.417	0.251
CHCHD10	7.77E-176	0.470629972	0.517	0.355
RNF1381	3.04E-175	0.466720979	0.47	0.294
PPM1K	2.12E-174	0.491363827	0.51	0.336
KLHL24	3.66E-174	0.596887188	0.476	0.317
NRIP1	5.47E-174	0.467637284	0.42	0.252
AMZ1	9.68E-174	0.429733555	0.254	0.12
RHBDF2	2.54E-173	0.486415879	0.341	0.19

AC104365.1	5.24E-173	0.476368575	0.376	0.212
MBNL2	1.30E-171	0.489436854	0.587	0.416
ABCY11	2.88E-171	0.456830532	0.253	0.115
TMEM154	1.25E-170	0.42531427	0.363	0.201
ZNF506	4.56E-170	0.429213195	0.357	0.197
PEAK1	6.51E-170	0.554412466	0.382	0.222
RPA2	1.96E-169	0.425723906	0.349	0.197
SREBF2	4.60E-169	0.461939533	0.467	0.296
TOMM71	1.03E-167	0.336754526	0.864	0.748
AC008014.1	2.75E-167	0.663947246	0.287	0.148
AC092120.3	3.42E-167	0.402617157	0.263	0.127
ATF7IP	3.93E-167	0.644496772	0.737	0.599
CASD1	1.45E-165	0.486794444	0.299	0.156
SEC62	4.70E-165	0.442724296	0.681	0.545
BANP	3.71E-164	0.508111049	0.487	0.321
TBC1D1	4.79E-163	0.493769618	0.465	0.308
LRCH1	7.41E-163	0.601145951	0.43	0.275
RCN2	9.96E-163	0.430025159	0.324	0.179
CDK13	2.24E-162	0.477402309	0.639	0.487
CYFIP2	4.90E-162	0.419527969	0.511	0.331
COMMD10	3.55E-161	0.621295513	0.521	0.369
CD47	9.10E-161	0.457821709	0.594	0.439
SCAF11	2.64E-160	0.432623967	0.745	0.615
FAM214A	6.41E-160	0.505763134	0.551	0.385
RAD51B	1.06E-158	0.651423613	0.508	0.353
UPF2	1.50E-158	0.529233372	0.459	0.308
MECP21	1.80E-158	0.477988836	0.595	0.439
IL4R	2.54E-158	0.671296153	0.407	0.264
PPP3CA	8.11E-158	0.441163384	0.62	0.447
MFN1	2.99E-157	0.420391725	0.283	0.148
AC007384.1	1.25E-156	0.530660096	0.584	0.425
STK41	3.39E-156	0.319551017	0.889	0.771
EIF4B	3.43E-156	0.39351967	0.661	0.514
MIR29B2CHG	4.38E-156	0.432225567	0.315	0.173
TMEM117	1.04E-155	0.624072473	0.297	0.159
OOEP	1.90E-155	0.407135756	0.424	0.265
MTMR1	1.55E-154	0.414139355	0.275	0.141
SIK2	6.13E-154	0.637366802	0.464	0.31
CLASP2	9.56E-154	0.477875328	0.568	0.408
TENT2	1.27E-152	0.466287134	0.6	0.452
SNHG8	1.86E-152	0.436103916	0.586	0.434
PIAS1	7.71E-152	0.423804372	0.647	0.504
RABGAP1	2.41E-151	0.486167034	0.398	0.25

GRB2	4.83E-151	0.323068921	0.738	0.58
CHD1	5.63E-151	0.373519588	0.726	0.585
DDX27	3.35E-149	0.44312107	0.44	0.288
IDI1	4.83E-149	0.484118508	0.628	0.481
CNPY3	6.03E-148	0.436038269	0.38	0.237
DIP2B	6.39E-148	0.423559395	0.513	0.353
LAPTM4A	8.80E-148	0.458928959	0.475	0.328
USF3	9.34E-148	0.424415679	0.292	0.157
BTF3	4.19E-146	0.310790691	0.898	0.79
LINC-PINT1	1.42E-145	0.376546391	0.781	0.646
STAG11	5.05E-144	0.362634626	0.808	0.693
AL050309.1	2.89E-143	0.67759537	0.251	0.128
EIF2S3	7.03E-143	0.405431056	0.503	0.356
HIF1A-AS3	1.20E-142	0.339363675	0.309	0.172
SLC38A11	1.72E-142	0.430026243	0.75	0.596
DCK	2.23E-142	0.375832601	0.258	0.133
CDYL	2.32E-142	0.55450234	0.423	0.281
RILPL2	2.36E-141	0.400498764	0.584	0.424
USP9Y1	9.79E-141	0.394638792	0.407	0.246
RBFOX2	2.06E-140	0.40433908	0.506	0.355
SPIDR	2.19E-140	0.503025038	0.596	0.452
EIF3L	3.92E-140	0.418894675	0.517	0.369
PPARD	7.75E-140	0.410306207	0.351	0.208
ARIH1	3.15E-139	0.374191299	0.854	0.744
EPB41L4A-AS1	3.26E-139	0.391243764	0.379	0.232
ATP1B3	4.18E-139	0.801017567	0.737	0.644
ZNF148	1.43E-137	0.434198651	0.562	0.417
GDI2	6.48E-137	0.440066583	0.557	0.411
ZSWIM6	1.34E-136	0.357544725	0.763	0.618
CCNY	4.39E-136	0.481144818	0.591	0.451
AIDA	5.83E-136	0.400007211	0.292	0.165
ERP29	6.91E-136	0.398558908	0.645	0.51
MYCBP2-AS1	1.42E-135	0.336902939	0.258	0.132
ZFP36L1	1.21E-134	0.37524994	0.641	0.48
MGMT	5.21E-134	0.59115566	0.441	0.309
CSNK1D	5.77E-134	0.397479013	0.54	0.395
CD53	9.05E-134	0.322024753	0.828	0.694
GLO1	1.07E-133	0.432313651	0.324	0.195
MOB1A	4.29E-133	0.378932599	0.609	0.46
MED30	8.58E-133	0.389680633	0.324	0.189
RARA	8.85E-133	0.381771613	0.318	0.185
PHKB	9.86E-133	0.455779029	0.435	0.292
SH3BGRL	7.15E-132	0.419341917	0.663	0.529

PUM1	8.72E-132	0.365943292	0.647	0.511
AC245297.3	1.45E-131	0.40255008	0.406	0.259
TCEA1	2.00E-131	0.417095864	0.612	0.476
ITPR2	3.11E-131	0.452308231	0.633	0.49
ZNF644	4.95E-131	0.392023872	0.696	0.565
BICD1	1.19E-130	0.423266174	0.362	0.219
SENP6	1.81E-130	0.406306029	0.603	0.464
NRF1	5.59E-130	0.422566618	0.459	0.31
CYTIP	6.05E-130	0.362265764	0.847	0.745
FBXW11	6.31E-130	0.403391024	0.545	0.397
IFNGR2	2.09E-129	0.322369268	0.344	0.202
SBNO1	2.18E-128	0.430329811	0.408	0.268
SMARCB1	2.37E-128	0.391142279	0.31	0.183
KAT6A1	2.85E-128	0.392259097	0.677	0.547
USP361	6.07E-128	0.520708995	0.563	0.418
PPIG	2.24E-127	0.408145817	0.634	0.505
SEPTIN9	3.64E-127	0.369613266	0.582	0.433
RSL24D1	4.37E-127	0.410509363	0.571	0.433
SYS1	5.53E-127	0.403409264	0.322	0.192
TASP1	8.77E-127	0.411813227	0.288	0.16
LPGAT1	2.16E-126	0.380861394	0.355	0.22
FAM76B	3.96E-126	0.369768681	0.314	0.182
TRAF3	5.28E-126	0.313545138	0.726	0.572
RUFY1	1.91E-125	0.431108857	0.347	0.218
MED13L	3.31E-125	0.328555779	0.718	0.581
SS18	7.33E-125	0.412232621	0.412	0.273
ZFAND6	1.43E-123	0.41297487	0.611	0.485
PARP1	1.69E-123	0.395243271	0.48	0.337
WIPF2	2.81E-123	0.44090539	0.367	0.235
RRP15	2.85E-122	0.348583135	0.272	0.15
ZNF721	4.28E-122	0.381179627	0.436	0.293
FBXO11	7.50E-122	0.423325293	0.659	0.525
SCAPER	1.14E-121	0.478431481	0.476	0.337
PCGF5	8.20E-121	0.491403148	0.558	0.432
HNRNPK	1.10E-120	0.325365018	0.758	0.631
TGFBR1	3.30E-120	0.467024371	0.285	0.166
ARHGEF7	3.40E-120	0.572058451	0.484	0.354
EIF3D	4.91E-120	0.358066664	0.592	0.457
FAM133B	1.10E-119	0.375147998	0.627	0.502
ATF6	1.41E-119	0.459723522	0.552	0.413
HTT	3.21E-119	0.424059206	0.389	0.256
NIPBL	5.66E-119	0.345315785	0.731	0.613
CD164	6.38E-119	0.39180518	0.622	0.499

TRA2A	1.81E-118	0.368474698	0.708	0.591
RAB11FIP1	2.11E-117	0.341580536	0.633	0.477
PPP6R3	1.32E-116	0.350405659	0.669	0.538
SELENOO	2.79E-116	0.370887122	0.29	0.17
SLBP	5.31E-116	0.395985799	0.491	0.349
DBNL	9.86E-116	0.37900208	0.39	0.261
FBL	1.11E-115	0.353966923	0.389	0.257
DOCK2	1.15E-115	0.340029026	0.698	0.566
HNRNPA1	1.99E-115	0.27294404	0.884	0.784
EIF3F	9.25E-115	0.307373922	0.706	0.573
6-Mar	1.20E-114	0.373647249	0.599	0.468
SETD21	2.02E-114	0.428278985	0.64	0.516
SCFD2	3.70E-114	0.505653073	0.354	0.229
CKAP2	5.90E-114	0.464373586	0.265	0.15
SASH3	1.47E-113	0.388513818	0.263	0.15
EPC21	1.49E-113	0.368831542	0.561	0.424
NUP153	3.75E-113	0.376198812	0.43	0.295
CLCN3	9.78E-113	0.53486115	0.307	0.19
OFD1	8.03E-112	0.361274098	0.488	0.343
CDK19	8.68E-112	0.45631016	0.308	0.189
CYSTM1	2.64E-111	0.388579194	0.444	0.318
INO80	1.03E-110	0.367644835	0.445	0.309
CREBBP	4.01E-110	0.317549344	0.637	0.505
PLEKHM2	1.64E-109	0.382993349	0.335	0.215
DOCK11	4.48E-109	0.414817336	0.443	0.314
LARP4B	4.51E-109	0.40212254	0.511	0.384
KPNA5	8.69E-109	0.346060112	0.296	0.173
COP1	3.03E-108	0.331840597	0.643	0.516
WDPCP	3.04E-108	0.513491356	0.316	0.196
MTREX	4.02E-108	0.376103245	0.447	0.314
FAM3C1	4.46E-108	0.353140097	0.381	0.251
PHF3	6.75E-108	0.346923811	0.57	0.437
BRD4	8.71E-108	0.359197157	0.588	0.466
DDIT3	1.37E-107	0.389868051	0.333	0.209
RCOR1	2.23E-107	0.396037398	0.532	0.395
TGIF1	5.45E-107	0.411974603	0.378	0.251
SETD5	6.77E-107	0.38615224	0.48	0.35
CYB5R4	6.87E-107	0.335964371	0.402	0.275
SHOC2	7.76E-107	0.377279127	0.472	0.346
SLC25A33	5.11E-106	0.369517487	0.332	0.211
XKR6	5.40E-106	0.41558524	0.382	0.253
CWF19L2	1.33E-105	0.318344097	0.487	0.342
NEK1	8.24E-105	0.734004528	0.421	0.3

AC092821.3	1.11E-104	0.358166028	0.392	0.26
SELENOF	1.58E-104	0.360346595	0.553	0.436
GTPBP1	1.67E-104	0.268166102	0.389	0.262
USP9X	2.73E-104	0.331241113	0.612	0.483
ZMYM2	6.11E-103	0.657304886	0.558	0.448
AC025164.1	7.67E-103	0.378387773	0.325	0.201
MIS18BP1	1.08E-102	0.428062581	0.428	0.303
SCPEP1	1.13E-102	0.367712815	0.256	0.151
WDR74	1.73E-101	0.366180364	0.5	0.366
MKMK2	1.84E-101	0.356213284	0.382	0.259
NSA2	2.04E-101	0.326926973	0.622	0.504
CACUL1	2.33E-101	0.383280165	0.302	0.191
CUL31	3.08E-101	0.309526648	0.743	0.626
MCPH1	4.14E-101	0.395494047	0.38	0.254
LRRC41	6.86E-101	0.375900289	0.273	0.165
EIF3H	9.95E-101	0.277219692	0.775	0.666
CMTM71	1.29E-100	0.45836488	0.498	0.381
WAC	3.36E-100	0.309468623	0.724	0.612
RNPS1	1.93E-98	0.336971622	0.471	0.346
HNRNPD	3.65E-98	0.312164394	0.666	0.552
HMGN1	4.23E-98	0.288904664	0.711	0.583
MAPK1IP1L	6.84E-98	0.351714174	0.519	0.402
GPBP1	9.36E-98	0.251667726	0.817	0.709
DDX10	9.49E-98	0.383399904	0.313	0.197
HEXA	1.09E-97	0.452923619	0.37	0.252
SLC35F5	3.59E-97	0.358502585	0.251	0.148
MAP3K2	6.19E-97	0.294843759	0.701	0.586
ZBTB44	1.35E-96	0.382555034	0.335	0.217
SNX10	2.16E-96	0.301497132	0.295	0.182
ZNF791	2.21E-96	0.358366274	0.284	0.176
SDE2	3.50E-96	0.322752942	0.289	0.179
KIAA0355	3.62E-96	0.295394745	0.292	0.177
PTBP2	4.57E-96	0.373454608	0.399	0.277
CIRBP1	8.64E-96	0.2527355	0.811	0.699
CCNI	2.48E-95	0.253668762	0.823	0.723
GTF2F2	3.57E-95	0.377094203	0.391	0.273
NAA15	5.29E-95	0.335482623	0.394	0.272
PHF10	9.42E-95	0.331545288	0.258	0.154
HPS5	6.29E-94	0.363814861	0.323	0.211
LAMTOR5	7.54E-94	0.389587244	0.489	0.378
CNOT4	7.61E-93	0.342232595	0.54	0.418
ABCB7	5.93E-92	0.34660941	0.303	0.193
LRPPRC	1.53E-91	0.327410924	0.374	0.255

MGA	1.79E-91	0.35673878	0.335	0.221
SLC35D1	2.01E-91	0.437054521	0.287	0.179
ZFY	2.66E-91	0.356139732	0.271	0.162
SINHCAF	6.27E-91	0.352196532	0.392	0.273
PPP4R3B	2.42E-90	0.304044422	0.525	0.405
RAB8B	3.55E-90	0.361843275	0.631	0.514
ATM1	4.56E-90	0.308391896	0.597	0.474
LINC02245	7.75E-90	0.355527096	0.32	0.21
AC118549.1	1.15E-89	0.353239548	0.402	0.282
KPNB1	2.82E-89	0.359985397	0.487	0.377
MON2	3.02E-89	0.343348313	0.555	0.442
NSF	6.19E-89	0.362077566	0.347	0.235
UQCRH	7.55E-89	0.277747231	0.734	0.631
PTDSS1	2.19E-88	0.340705761	0.279	0.176
SECISBP2L	3.59E-88	0.392967915	0.336	0.227
FER	4.13E-88	0.393911726	0.299	0.192
RSF1	1.58E-87	0.331658991	0.568	0.456
RFX31	2.47E-87	0.340901884	0.554	0.429
TNPO1	6.38E-87	0.392099011	0.438	0.325
MALT1	1.71E-86	0.255565538	0.668	0.542
COMMD61	5.35E-86	0.253878592	0.739	0.627
MICU2	6.57E-86	0.415103994	0.466	0.355
TET3	7.21E-86	0.389879619	0.27	0.17
OSGEP	7.71E-86	0.279092541	0.25	0.152
AC068282.1	8.77E-86	0.333660807	0.4	0.279
IQCB1	2.49E-85	0.358998413	0.359	0.246
TRPM7	6.46E-85	0.343762246	0.536	0.424
TCERG1	9.50E-85	0.323498067	0.374	0.262
HNRNPDL	1.29E-84	0.274552006	0.755	0.658
ZFAND3	1.91E-84	0.256085202	0.746	0.637
UCP2	2.27E-84	0.332493172	0.521	0.399
SET	2.40E-84	0.286658828	0.662	0.552
WWP2	7.19E-84	0.316369176	0.411	0.297
ZNF652	1.08E-83	0.302979223	0.299	0.192
ARHGAP51	1.92E-83	0.391320436	0.332	0.223
UIMC1	3.83E-83	0.348852239	0.356	0.247
MDN1	4.11E-83	0.333806495	0.297	0.19
EDEM1	1.18E-82	0.332536354	0.339	0.234
ANKRD17	2.31E-82	0.323725624	0.657	0.557
THRAP3	1.30E-81	0.304902657	0.658	0.556
TSC22D2	2.15E-81	0.286952149	0.473	0.351
TASOR2	2.84E-81	0.373538857	0.423	0.313
SCAF8	5.68E-81	0.307416774	0.502	0.383

NIPA2	9.73E-81	0.348598827	0.305	0.205
ITCH	1.16E-80	0.324025943	0.476	0.364
LCOR	1.30E-80	0.322370748	0.511	0.397
SRSF10	5.38E-80	0.251520774	0.665	0.55
GTF2H1	6.03E-80	0.335631049	0.341	0.236
MAP4K3	1.02E-79	0.375213196	0.421	0.314
APP	1.43E-79	0.25178394	0.273	0.17
CYP51A1	3.72E-79	0.307949274	0.315	0.211
UTP6	4.03E-79	0.286445185	0.271	0.174
LINC01004	5.91E-79	0.334097564	0.512	0.405
SNHG14	1.15E-78	0.286394685	0.371	0.256
LUC7L3	4.29E-78	0.29001377	0.536	0.424
ATR	1.36E-77	0.366634053	0.374	0.267
RSL1D1	3.65E-77	0.287046814	0.539	0.428
PRCP	5.01E-77	0.358598093	0.281	0.187
SEC24B	6.27E-77	0.309137468	0.421	0.31
TTC27	9.67E-77	0.294652725	0.25	0.153
SECISBP2	1.10E-76	0.29441479	0.472	0.363
PLEKHF2	1.79E-76	0.323049313	0.266	0.171
CCNT1	2.03E-76	0.278171613	0.393	0.28
BCL21	2.16E-76	0.357225051	0.648	0.541
CBFB	4.58E-76	0.365208821	0.344	0.243
POGZ	1.21E-75	0.314393099	0.324	0.223
NUP214	1.31E-75	0.30695082	0.353	0.247
RBM3	1.94E-75	0.257849603	0.657	0.552
GALNT1	9.18E-75	0.362775282	0.421	0.322
ZNF33A	2.99E-74	0.344808221	0.387	0.285
ZDHHC17	3.48E-74	0.29801679	0.278	0.181
DYM	6.73E-74	0.334528205	0.499	0.399
ACAP2	2.01E-73	0.276307255	0.627	0.524
NEMF	9.05E-73	0.330380085	0.458	0.356
RBBP8	4.95E-72	0.427971137	0.283	0.187
HOMER1	1.40E-71	0.466487789	0.284	0.185
HSH2D	1.67E-71	0.271660822	0.285	0.186
PCNX4	5.57E-71	0.406727015	0.386	0.286
SELENOH	6.04E-71	0.302839614	0.526	0.422
ELMSAN1	1.56E-70	0.326769113	0.258	0.169
CHCHD3	2.50E-70	0.312965296	0.444	0.345
GATAD2B	2.54E-70	0.297753019	0.496	0.392
BLOC1S2	2.77E-70	0.305261892	0.36	0.261
MAP4K5	3.54E-70	0.354380586	0.369	0.269
SMARCA21	3.76E-70	0.28484644	0.609	0.503
RC3H11	8.76E-70	0.277040175	0.591	0.491

SENP5	1.07E-69	0.332803504	0.429	0.332
ADPGK	1.65E-69	0.289307123	0.306	0.214
MTF2	4.25E-69	0.289345701	0.39	0.284
NDUFAF6	5.35E-69	0.379956178	0.406	0.302
PRRC2B	1.97E-68	0.25803564	0.465	0.357
SLC16A7	8.57E-68	0.279963131	0.269	0.173
PCF11	1.20E-67	0.275009832	0.428	0.324
SLC25A32	1.33E-67	0.270350164	0.286	0.192
BDP1	1.59E-67	0.284470418	0.484	0.378
ZNF431	1.65E-67	0.271447208	0.269	0.176
R3HDM2	3.73E-67	0.292441464	0.535	0.432
TXNRD1	8.13E-67	0.279305906	0.53	0.434
LRCH3	8.42E-67	0.317940613	0.414	0.312
SAFB	3.34E-66	0.269348605	0.451	0.35
LPIN1	4.52E-66	0.407945291	0.442	0.351
AFTPH	5.24E-66	0.298856256	0.443	0.344
COPA	1.41E-65	0.286953566	0.544	0.452
DHX15	1.61E-65	0.272626274	0.375	0.278
PARVG	2.37E-65	0.297497491	0.317	0.225
MYO1E	2.52E-65	0.426031975	0.277	0.184
VPS51	3.93E-65	0.273679752	0.351	0.253
NR1H2	1.30E-64	0.286269219	0.331	0.238
OIP5-AS1	1.47E-64	0.279326543	0.324	0.231
CCDC32	1.87E-64	0.304377431	0.307	0.216
RYK	8.42E-64	0.271663346	0.287	0.193
OXR1	8.66E-64	0.327303259	0.254	0.17
TFAM	9.81E-64	0.257870449	0.303	0.209
TTC7A	1.26E-63	0.338116648	0.361	0.268
VEGFB	6.61E-62	0.265374292	0.279	0.194
PDS5A	1.47E-61	0.263434447	0.568	0.47
TTC37	3.73E-61	0.327508525	0.299	0.213
ERBIN	1.62E-60	0.294599349	0.586	0.493
CDC40	2.00E-60	0.251283177	0.385	0.287
MAD1L1	3.24E-60	0.325526259	0.363	0.272
MARF1	3.28E-60	0.262119426	0.253	0.168
PKN2	3.30E-60	0.272738848	0.47	0.375
USP111	9.78E-60	0.258964687	0.302	0.211
ERC1	4.18E-59	0.302391969	0.494	0.401
SLC36A4	4.84E-59	0.314397936	0.278	0.195
UMAD1	5.10E-59	0.293848967	0.429	0.331
EEA1	1.67E-58	0.323860229	0.305	0.22
TTC17	1.73E-58	0.301213495	0.472	0.378
RAPGEF1	1.89E-58	0.290353139	0.689	0.596

ATAD2B	2.24E-58	0.301174658	0.413	0.319
MAGT1	6.40E-58	0.340698424	0.368	0.285
ESF1	8.10E-58	0.276315906	0.27	0.185
GTF2I	1.36E-57	0.277039726	0.412	0.324
CRCP	1.78E-57	0.252244678	0.313	0.223
SOS2	1.91E-56	0.251724916	0.418	0.324
INTS4	5.37E-56	0.251690781	0.259	0.173
MAPK8	6.35E-56	0.393913973	0.458	0.378
BMPR2	6.56E-56	0.399097135	0.333	0.249
SNX5	2.23E-55	0.262428351	0.343	0.259
THUMPD3-AS1	3.01E-55	0.290430608	0.406	0.317
PLEKHO1	7.91E-55	0.25556746	0.332	0.242
DCP1A	1.43E-54	0.254186491	0.409	0.318
UBE3A	1.60E-54	0.282482392	0.464	0.379
TLK2	3.20E-54	0.257533974	0.451	0.36
TMF1	2.36E-52	0.273602303	0.505	0.419
TAF3	2.56E-52	0.29270021	0.405	0.315
WDR70	8.81E-52	0.287887564	0.425	0.34
GTF2E2	1.11E-51	0.254952108	0.259	0.18
PPP1CB1	1.45E-51	0.315559761	0.659	0.592
PLCL2	1.84E-51	0.310354887	0.44	0.352
THEMIS2	4.98E-51	0.274733496	0.253	0.179
HMBOX1	2.55E-50	0.27550691	0.335	0.251
ARL5A	4.59E-50	0.276173311	0.336	0.258
CCDC107	8.36E-50	0.352888439	0.358	0.284
NBDY	1.19E-49	0.285885899	0.436	0.357
ADIPOR2	3.18E-49	0.26999254	0.377	0.293
NFYC	4.21E-49	0.267097748	0.305	0.227
MBD4	2.88E-48	0.308072836	0.29	0.216
RREB1	2.91E-48	0.322613077	0.302	0.225
FBXL17	3.17E-48	0.296358397	0.505	0.423
UBE2E1	5.15E-48	0.251516623	0.356	0.273
EIF2A	1.66E-47	0.251381135	0.423	0.346
ARHGAP25	1.68E-47	0.295690741	0.409	0.325
ZDHHC14	2.00E-47	0.27820216	0.269	0.189
CEP57	2.53E-47	0.261169524	0.385	0.303
ULK4	2.58E-47	0.288293103	0.286	0.207
ABHD17B1	4.61E-47	0.289611888	0.362	0.279
CERT1	8.70E-47	0.262077102	0.462	0.382
SPOP	3.05E-46	0.26009127	0.356	0.277
FOXJ3	3.69E-46	0.286900972	0.421	0.342
CUL5	7.01E-46	0.257718753	0.426	0.345
KLHL6	1.09E-45	0.355353154	0.336	0.264

NR2C2	1.27E-45	0.275234385	0.302	0.226
PUM3	1.33E-45	0.259534896	0.294	0.217
SPEN	1.35E-45	0.25359311	0.363	0.284
FBXO34	2.03E-45	0.262552057	0.521	0.442
RSRC1	3.03E-45	0.259470736	0.444	0.369
PRKRIP1	4.61E-45	0.269908644	0.332	0.256
KCMF1	1.66E-44	0.255140648	0.426	0.351
KPNA1	2.28E-44	0.257329092	0.361	0.286
PMM2	2.51E-44	0.260983399	0.327	0.25
RNGTT	7.48E-44	0.256561245	0.476	0.4
SDCCAG8	3.63E-43	0.282384927	0.314	0.242
VTA1	5.94E-43	0.252969161	0.269	0.195
VRK2	7.26E-43	0.301424299	0.327	0.255
DCTN4	1.09E-42	0.260472165	0.402	0.327
DIAPH2	1.41E-42	0.261789758	0.482	0.404
AP3B1	1.78E-41	0.271313684	0.535	0.473
C1GALT1	2.22E-41	0.253926669	0.301	0.227
ANKRD37	5.37E-41	0.258501546	0.318	0.244
FMNL1	5.38E-41	0.278061002	0.406	0.339
CDC27	1.05E-40	0.261968058	0.337	0.267
HIPK3	1.35E-40	0.262026334	0.379	0.309
MYO9A	6.82E-40	0.274896646	0.279	0.208
SMG1	8.58E-39	0.278633065	0.526	0.461
SLC24A1	1.14E-37	0.253833557	0.274	0.202
FBXO33	1.99E-37	0.257626711	0.449	0.376
CDC37	8.94E-37	0.267278508	0.472	0.408
SIAH2	1.20E-35	0.284030591	0.39	0.323
LCORL	1.84E-35	0.298794549	0.32	0.258
ZMYM4	1.90E-35	0.252147651	0.252	0.19
VPS41	1.46E-34	0.250927939	0.278	0.216
AFF1	4.83E-33	0.251096772	0.521	0.462
CDK11B	7.38E-32	0.250546621	0.318	0.255
ELP4	7.39E-30	0.304310431	0.262	0.205
HIPK2	1.40E-28	0.558059924	0.425	0.384
MYO1D	1.73E-24	0.270954751	0.259	0.207
PBX3	1.98E-21	0.259375997	0.314	0.265
WWOX	6.66E-20	0.306564828	0.391	0.347
GLA	1.58E-17	0.267164597	0.251	0.211
AL136456.11	0	2.738485617	0.739	0.145
TNFRSF41	0	2.275770899	0.599	0.104
IL2RA	0	2.149078815	0.645	0.142
IKZF2	0	2.120405089	0.738	0.187
IL12RB2	0	2.046512859	0.597	0.124

TNFRSF181	0	1.910084993	0.657	0.155
PLCL11	0	1.893943532	0.734	0.2
FAAH21	0	1.854206603	0.686	0.205
CTLA41	0	1.835642643	0.845	0.225
BATF1	0	1.825589858	0.864	0.319
LINC02694	0	1.784056323	0.518	0.117
RTKN2	0	1.733931173	0.53	0.072
LINC02099	0	1.704968196	0.341	0.032
ICOS1	0	1.675012446	0.88	0.298
PHACTR21	0	1.668968988	0.862	0.389
AC093865.1	0	1.638669632	0.486	0.076
MAST4	0	1.622518713	0.675	0.236
LDLRAD41	0	1.618566138	0.975	0.656
TBC1D41	0	1.618484256	0.75	0.222
STAM1	0	1.615839572	0.818	0.313
IL322	0	1.571706087	0.878	0.463
CRADD	0	1.537582924	0.574	0.216
THADA1	0	1.534975786	0.741	0.388
TNIK1	0	1.489917622	0.858	0.349
DUSP161	0	1.464744007	0.892	0.436
CADM1	0	1.43459513	0.354	0.125
TIGIT2	0	1.421378758	0.78	0.257
NIBAN12	0	1.392656784	0.923	0.527
MAP3K51	0	1.390260984	0.826	0.413
GCNT1	0	1.35843137	0.447	0.166
LAIR2	0	1.338286238	0.483	0.087
RORA1	0	1.327509981	0.883	0.38
TSPAN52	0	1.319681912	0.737	0.29
SKAP12	0	1.309275314	0.93	0.48
CD2472	0	1.306982365	0.905	0.415
ICA11	0	1.294209289	0.525	0.113
GLCCI11	0	1.293240205	0.822	0.401
EPSTI11	0	1.285699961	0.745	0.413
FOXP3	0	1.272584632	0.475	0.049
ZEB11	0	1.265135337	0.855	0.508
ZC3H12D1	0	1.258586193	0.646	0.212
CARD161	0	1.251053539	0.688	0.319
HPGD	0	1.237117435	0.377	0.123
DUSP41	0	1.211566615	0.744	0.339
GPHN1	0	1.20683158	0.659	0.347
MAGEH1	0	1.161355896	0.405	0.089
TRAF31	0	1.15835805	0.84	0.563
CD281	0	1.15425155	0.691	0.198

LINC01943	0	1.148725498	0.446	0.095
TNFRSF91	0	1.141345387	0.476	0.136
SMYD31	0	1.135325803	0.833	0.516
ZC2HC1A	0	1.114521414	0.351	0.087
ITK1	0	1.108796255	0.864	0.4
UGP21	0	1.101780409	0.716	0.353
LAYN	0	1.101119892	0.405	0.071
F5	0	1.100530643	0.396	0.053
LY75	0	1.094443398	0.519	0.189
CDK61	0	1.087188226	0.576	0.294
PMAIP1	0	1.080792602	0.702	0.404
MAF1	0	1.065347959	0.691	0.27
TTC39C1	0	1.064800178	0.699	0.333
SPOCK21	0	1.061706382	0.86	0.402
PCBP31	0	1.055226357	0.427	0.141
TSHZ21	0	1.042226787	0.483	0.217
CASK1	0	1.04156775	0.831	0.456
USP471	0	1.026457046	0.782	0.513
FOXO11	0	1.025555862	0.91	0.592
IL1R1	0	1.01917166	0.478	0.124
ZNF8311	0	1.00910099	0.767	0.348
GADD45A1	0	0.997876093	0.498	0.24
PHTF21	0	0.99443205	0.689	0.355
CD23	0	0.993103653	0.89	0.459
MIR4435-2HG	0	0.992340041	0.687	0.378
LTB2	0	0.98667976	0.738	0.411
HERC11	0	0.986043729	0.846	0.59
FANK1	0	0.983466693	0.313	0.029
ABCC11	0	0.97825488	0.758	0.434
GPRIN32	0	0.974590946	0.731	0.39
GBP5	0	0.97229813	0.552	0.216
TOX2	0	0.956109315	0.443	0.108
NCOA21	0	0.953092526	0.784	0.499
FAM184A	0	0.950136016	0.353	0.088
PTPRJ1	0	0.940784612	0.757	0.418
S100A41	0	0.936730151	0.849	0.575
NETO2	0	0.933815649	0.393	0.164
PBXIP11	0	0.932302395	0.787	0.392
FYN2	0	0.926765951	0.99	0.657
CRY11	0	0.926733447	0.644	0.34
SLAMF11	0	0.923303752	0.458	0.161
IL6ST1	0	0.922472788	0.769	0.454
HNRNPLL2	0	0.919103102	0.664	0.286

PBX41	0	0.918507114	0.725	0.32
NOP581	0	0.917770951	0.867	0.593
ARID5B1	0	0.910302965	0.956	0.728
SAMHD11	0	0.908470881	0.661	0.335
CEP120	0	0.903879113	0.502	0.211
TRAC2	0	0.903204476	0.8	0.402
TLK11	0	0.889433007	0.81	0.502
CNST1	0	0.88863588	0.665	0.32
GK	0	0.887902073	0.626	0.237
IPCEF11	0	0.887847317	0.612	0.257
RAPGEF61	0	0.887758391	0.829	0.567
FAS1	0	0.887104129	0.554	0.191
SPATS2L1	0	0.881194412	0.606	0.301
ZNRF21	0	0.880515365	0.705	0.379
SYNE22	0	0.879862932	0.909	0.557
AC013652.1	0	0.871269462	0.304	0.09
CAMK42	0	0.86704657	0.672	0.354
PKIA	0	0.866531438	0.384	0.121
HS3ST3B1	0	0.859966223	0.417	0.146
RHBDD21	0	0.854770544	0.552	0.204
CCR61	0	0.852032141	0.507	0.201
MRPL11	0	0.850127335	0.684	0.401
DOCK101	0	0.847723264	0.799	0.527
ZNF292	0	0.845931426	0.795	0.517
ZC3H12C	0	0.84558533	0.326	0.113
TOX3	0	0.842212432	0.65	0.343
PVT11	0	0.841428144	0.683	0.364
CORO1B1	0	0.827160563	0.518	0.247
ZBTB381	0	0.818883613	0.67	0.342
DNPH11	0	0.817302591	0.521	0.225
CD73	0	0.815245124	0.741	0.362
ZC3H7A1	0	0.81427971	0.607	0.285
VPS54	0	0.81338191	0.449	0.197
KLHL2	0	0.811735279	0.5	0.228
CYTOR1	0	0.810097883	0.766	0.441
RASGRP12	0	0.806668711	0.597	0.264
TAB2	0	0.801757607	0.671	0.409
GBP21	0	0.795882319	0.697	0.372
IL18R11	0	0.795726928	0.515	0.169
APBB1IP1	0	0.79443627	0.832	0.553
SNX91	0	0.794430947	0.948	0.687
USP151	0	0.779173345	0.919	0.724
GATA32	0	0.774812822	0.431	0.151

USP48	0	0.772385716	0.623	0.351
MFHAS11	0	0.771739461	0.457	0.194
CAST	0	0.771582522	0.787	0.567
NPC11	0	0.771207959	0.59	0.318
ETS12	0	0.759768344	0.941	0.617
RORA-AS11	0	0.759143696	0.516	0.192
NDUFV21	0	0.757385016	0.767	0.527
CD271	0	0.757353715	0.58	0.265
CLEC2D2	0	0.754397551	0.797	0.506
UHRF2	0	0.748370082	0.608	0.317
JMY1	0	0.746461334	0.716	0.451
TRBC22	0	0.742667527	0.758	0.456
AC104850.2	0	0.741998691	0.253	0.028
NAB11	0	0.738550961	0.498	0.215
NCK21	0	0.737659112	0.725	0.399
PAM1	0	0.730540598	0.623	0.342
AAK12	0	0.729370044	0.758	0.436
FYB11	0	0.729262858	0.854	0.514
CNOT6L2	0	0.725321932	0.953	0.736
MSI2	0	0.725305796	0.803	0.53
MCF2L2	0	0.725033608	0.423	0.158
SOD11	0	0.723268717	0.855	0.647
BIRC32	0	0.721165033	0.792	0.516
CD41	0	0.717243849	0.506	0.196
AC017002.5	0	0.715937583	0.331	0.095
PHLDA11	0	0.712369139	0.498	0.224
CXCR61	0	0.711724557	0.389	0.118
SETD7	0	0.708926895	0.342	0.125
ASXL11	0	0.707442172	0.762	0.482
JAK1	0	0.705774748	0.937	0.768
IL21R1	0	0.704455207	0.496	0.232
COX10-AS1	0	0.702700522	0.314	0.095
BCL11B2	0	0.701974927	0.818	0.402
CUL32	0	0.696297768	0.842	0.617
ZNRF12	0	0.695963739	0.493	0.182
EPC11	0	0.6944201	0.912	0.707
NAP1L42	0	0.694077132	0.809	0.549
PRKCH2	0	0.690306634	0.887	0.547
TMEM1731	0	0.689507263	0.453	0.17
AC010609.11	0	0.686690117	0.481	0.181
IL2RB1	0	0.682790577	0.427	0.142
PARD6G	0	0.68117411	0.302	0.082
STK17B1	0	0.679839203	0.948	0.791

PAK21	0	0.677563403	0.808	0.576
CDC14A2	0	0.673598647	0.671	0.377
METTL81	0	0.666827302	0.416	0.176
ARNTL1	0	0.664264936	0.494	0.207
ZNF282	0	0.663237074	0.298	0.076
COX10	0	0.659003739	0.342	0.126
PELI1	0	0.658081382	0.785	0.491
HTATIP2	0	0.65518766	0.393	0.144
RCAN31	0	0.65200035	0.567	0.28
STAT42	0	0.647165286	0.875	0.576
LINC02195	0	0.644148372	0.25	0.05
ADAT2	0	0.641345513	0.335	0.094
IL7	0	0.634136054	0.255	0.076
BICDL12	0	0.633061105	0.727	0.373
IRS21	0	0.630779306	0.589	0.313
TNFRSF25	0	0.617250955	0.366	0.091
PTPRC2	0	0.610067938	0.992	0.872
IL7R1	0	0.606488494	0.866	0.437
AL121935.1	0	0.587711573	0.275	0.067
LAPTM4B	0	0.581039257	0.255	0.05
CHST7	0	0.579528341	0.252	0.069
CD3D2	0	0.575718329	0.861	0.439
LRRC37B	0	0.560233312	0.312	0.1
OPRM1	0	0.55431597	0.311	0.104
CCR4	0	0.552056721	0.303	0.075
LCK2	0	0.537737003	0.608	0.296
CUL9	0	0.524694757	0.255	0.064
CD3E2	0	0.484375394	0.782	0.404
SIRPG1	0	0.478416207	0.351	0.121
P2RY101	7.43E-307	0.615902306	0.579	0.292
PRDM11	4.56E-305	0.727506304	0.6	0.333
STAT31	9.11E-303	0.585260747	0.853	0.63
CSGALNACT2	5.58E-302	0.712405672	0.614	0.356
ATXN12	2.95E-301	0.606321321	0.909	0.656
LAX11	2.52E-299	0.664977991	0.419	0.179
AL121933.2	1.23E-298	0.46575297	0.251	0.078
MALT11	1.33E-298	0.895579473	0.771	0.533
LAT3	1.77E-297	0.472356668	0.419	0.173
GSPT11	1.57E-295	0.618769159	0.791	0.549
PYHIN12	4.03E-295	0.637104384	0.538	0.255
HLA-A2	2.51E-294	0.612306164	0.965	0.918
CASP82	2.13E-293	0.706270155	0.686	0.423
TANK	2.35E-293	0.840770193	0.801	0.584

CACYBP2	4.93E-293	0.733069962	0.742	0.5
CCDC661	1.15E-290	0.622206359	0.492	0.239
LMTK2	1.32E-290	0.639222619	0.379	0.157
BTG31	2.27E-290	0.681511962	0.531	0.283
TIAM11	4.79E-290	0.715330936	0.476	0.226
LEF11	5.46E-290	0.601319455	0.297	0.102
DDHD1	2.53E-289	0.735111639	0.57	0.314
ANKRD121	2.96E-288	0.638512518	0.95	0.813
STAT5B2	5.09E-287	0.59074815	0.673	0.384
GLRX	5.04E-285	0.840774308	0.529	0.294
PPM1G	5.12E-284	0.63758658	0.619	0.375
IL2RG2	2.40E-283	0.676407647	0.687	0.444
RAP1A1	8.97E-283	0.670725056	0.8	0.582
RGS12	2.54E-280	0.665350192	0.846	0.601
CCDC141	1.57E-279	0.66234289	0.321	0.12
TRBC12	2.06E-278	0.920726437	0.532	0.276
SH2D2A1	2.60E-278	0.46866463	0.408	0.17
HERC51	1.61E-277	0.769572411	0.419	0.192
PRKCQ2	1.59E-276	0.524228857	0.575	0.283
SGPP2	2.09E-275	0.532733093	0.327	0.124
NDFIP2	2.70E-273	0.445108304	0.275	0.093
RDX	5.29E-272	0.661220988	0.475	0.245
KAT2B1	7.12E-268	0.721437359	0.523	0.281
MBNL12	9.99E-267	0.626955013	0.972	0.857
TMEM2451	8.72E-266	0.646335957	0.47	0.231
CD3G2	4.91E-265	0.340122957	0.725	0.373
RYBP	2.03E-264	0.646666833	0.693	0.453
ARID4B1	3.86E-264	0.534397313	0.928	0.766
TNFRSF1B	7.62E-263	0.734727733	0.678	0.431
31-Mar	1.23E-261	0.645341584	0.541	0.286
FOXN3	6.73E-260	0.649059979	0.888	0.707
CABLES1	8.51E-259	0.676277593	0.256	0.09
EIF3J	2.22E-257	0.707784383	0.662	0.442
FRMD4B	5.45E-257	0.569339687	0.391	0.175
ARHGEF12	1.64E-255	0.561116148	0.33	0.135
OXNAD12	2.87E-255	0.495241302	0.685	0.399
PPP1R16B2	4.43E-255	0.613523605	0.822	0.564
RAB11FIP11	4.27E-254	0.623381494	0.72	0.471
NCALD1	1.64E-253	0.717547145	0.432	0.202
GPCPD11	3.06E-253	0.576943712	0.792	0.554
MLLT32	5.19E-253	0.595611143	0.542	0.279
LINC005131	7.77E-253	0.571334627	0.851	0.632
CLIP1	4.29E-251	0.602501947	0.535	0.3

RNF19A2	9.57E-249	0.597264423	0.842	0.606
OPTN1	2.09E-248	0.501133756	0.557	0.302
LRBA1	2.00E-247	0.569413604	0.861	0.639
UXS1	1.14E-246	0.479869195	0.374	0.166
BACH11	1.29E-246	0.661868608	0.765	0.53
GNG21	3.64E-246	0.542508942	0.834	0.578
LIMA1	4.14E-246	0.490428821	0.334	0.139
FAM122C	4.46E-244	0.61320758	0.299	0.117
CREM1	8.13E-243	0.577823645	0.924	0.767
ATP13A3	1.31E-242	0.559802073	0.546	0.299
DGKE	1.52E-242	0.696918685	0.287	0.113
JAZF11	5.69E-240	0.730518918	0.708	0.471
CDKN1B1	2.08E-239	0.560813869	0.601	0.359
BCL22	5.09E-239	0.642849803	0.773	0.529
CEP128	5.87E-238	0.74502425	0.447	0.228
TTN1	1.02E-237	0.538643155	0.39	0.175
VDR	1.36E-237	0.476762863	0.305	0.124
CCNG2	2.86E-237	0.55884506	0.295	0.119
PGAP11	3.48E-236	0.864811336	0.404	0.19
AF165147.11	2.09E-235	0.564362371	0.329	0.135
G3BP21	1.43E-234	0.644841915	0.733	0.524
ADAM101	2.22E-234	0.669960748	0.585	0.358
CD51	5.15E-234	0.378298724	0.311	0.121
SH2D1A1	6.46E-234	0.422266765	0.378	0.161
MAP3K11	1.15E-233	0.619718972	0.585	0.347
AHR1	2.97E-231	0.645333815	0.611	0.365
SLA3	5.78E-231	0.406285242	0.771	0.487
LINC015781	1.68E-228	0.516003693	0.834	0.637
SLC16A11	1.25E-227	0.634245642	0.431	0.217
MICAL2	1.04E-226	0.47978776	0.313	0.131
CTSC	1.72E-225	0.632344619	0.636	0.402
YIPF6	7.65E-225	0.490929018	0.341	0.154
ACOT9	1.35E-224	0.543773979	0.424	0.219
CSNK1G31	1.79E-223	0.605539269	0.535	0.304
PTPN221	4.32E-222	0.537877127	0.785	0.534
TNFAIP32	4.45E-221	0.408659964	0.932	0.688
TNRC6A1	4.99E-221	0.558904352	0.645	0.414
TUT7	1.92E-219	0.649209228	0.623	0.403
ITM2A2	4.71E-218	0.432345691	0.585	0.316
CDC42SE21	8.99E-218	0.463771411	0.954	0.787
AC009313.1	2.70E-217	0.577908497	0.352	0.161
SH3KBP1	8.05E-217	0.500611905	0.837	0.637
NR3C11	1.32E-215	0.712081233	0.838	0.666

TRIM59	2.92E-214	0.445803108	0.319	0.136
STK241	1.15E-213	0.598068498	0.687	0.464
PTTG1	1.67E-213	0.422702365	0.332	0.145
CCND21	2.09E-212	0.624651908	0.538	0.315
MBOAT1	2.59E-212	0.403094657	0.266	0.102
CALM3	6.43E-212	0.513616634	0.59	0.372
CFAP20	3.80E-211	0.494449739	0.355	0.164
CD58	3.99E-211	0.494980952	0.609	0.364
IFNAR21	7.81E-211	0.534316093	0.512	0.298
ARL6IP52	1.96E-210	0.542168937	0.778	0.58
LINC00649	1.96E-210	0.434222372	0.319	0.136
CBLB1	4.51E-210	0.509948983	0.87	0.64
LEPROTL12	5.84E-210	0.431026269	0.837	0.588
SGMS11	3.79E-209	0.684376432	0.616	0.395
FLNB	5.14E-209	0.48926981	0.263	0.104
VAV31	2.31E-207	0.939960889	0.617	0.421
TRPS11	2.32E-207	0.593445051	0.688	0.454
EIF4E3	2.79E-207	0.318989238	0.277	0.109
MDFIC	5.08E-207	0.658736581	0.55	0.337
AC016831.71	5.28E-207	0.535083969	0.758	0.531
YWHAB1	9.28E-207	0.487900172	0.845	0.693
UBE2B1	1.25E-206	0.479468723	0.838	0.673
TOR1AIP2	3.62E-206	0.553587884	0.42	0.223
THEM4	4.03E-206	0.380128385	0.305	0.128
LUZP1	3.36E-205	0.546188056	0.455	0.245
HIBCH1	3.51E-205	0.763632895	0.498	0.287
SLAIN2	3.44E-204	0.602481159	0.488	0.281
PRDM21	6.05E-203	0.428121985	0.837	0.626
ADK1	2.42E-202	0.559571703	0.786	0.58
PIM21	2.82E-202	0.487591864	0.421	0.219
STIMATE	1.86E-201	0.428871679	0.303	0.132
SEPTIN61	4.83E-201	0.505297959	0.8	0.603
SARAF1	1.88E-200	0.384138542	0.968	0.846
PDE3B2	1.02E-197	0.49005342	0.817	0.557
AC073167.1	1.62E-195	0.47248557	0.316	0.14
FTX	7.89E-195	0.547067747	0.709	0.504
PRMT3	5.26E-194	0.504478012	0.274	0.115
ZDBF2	7.18E-194	0.537034631	0.311	0.138
PPP1R21	9.22E-194	0.518236651	0.787	0.594
PAIP2	3.05E-193	0.508997539	0.706	0.513
UBR5	8.06E-193	0.594852675	0.642	0.438
GALM2	2.75E-192	0.416856396	0.647	0.402
SELL1	3.41E-192	0.40623058	0.485	0.259

RNF2131	1.86E-189	0.478430826	0.792	0.603
RBPJ1	3.91E-189	0.492195133	0.691	0.48
ZNF281	1.30E-188	0.407490733	0.287	0.126
UBE2K1	1.34E-188	0.673587465	0.679	0.49
AL133480.1	7.20E-188	0.376193155	0.25	0.099
WAKMAR21	8.70E-187	0.497708227	0.433	0.229
TSPAN141	1.68E-186	0.439574218	0.493	0.281
RANBP91	1.77E-186	0.555532565	0.576	0.365
LINC016191	4.41E-185	0.499530094	0.859	0.646
HIVEP3	8.76E-185	0.487501347	0.357	0.174
PRDX21	9.84E-185	0.425397155	0.544	0.337
PICALM	1.31E-183	0.506782013	0.763	0.565
FOXP12	1.06E-182	0.638755421	0.879	0.725
CMSS12	6.56E-182	0.722081862	0.646	0.436
NDFIP11	5.66E-180	0.372975575	0.729	0.505
TULP4	5.74E-180	0.459929704	0.466	0.266
DUSP101	1.32E-179	0.480299378	0.467	0.264
STAMBPL1	2.80E-179	0.411989949	0.309	0.14
NEK7	4.48E-179	0.560159748	0.703	0.498
CCM21	5.66E-179	0.670293183	0.498	0.304
GRSF1	3.25E-178	0.418601463	0.349	0.174
DDX242	3.99E-178	0.397700098	0.861	0.694
ODF2L1	4.26E-178	0.424102486	0.526	0.301
SAMSN11	1.56E-177	0.286715599	0.909	0.716
SMAP21	5.22E-177	0.366868205	0.957	0.837
FYCO1	9.71E-177	0.339308169	0.254	0.104
ARHGEF6	1.21E-176	0.403408748	0.377	0.194
BTBD111	1.66E-175	0.469742505	0.308	0.139
ZC3HAV11	2.70E-175	0.482452765	0.857	0.668
CDV31	4.47E-175	0.466108439	0.759	0.582
B2M2	7.46E-175	0.349452998	0.99	0.977
PCED1B1	2.69E-174	0.460853107	0.541	0.32
RAB9A	7.89E-174	0.538831587	0.393	0.214
WHRN1	9.33E-174	0.551868493	0.361	0.185
LRIG1	1.18E-173	0.43514025	0.307	0.14
SCAND1	5.72E-172	0.503800001	0.604	0.411
SAMD12	1.28E-171	0.680668909	0.334	0.164
BABAM2	5.81E-170	0.516232326	0.632	0.423
SESN32	6.72E-170	0.688663721	0.57	0.356
INPP4B2	8.83E-170	0.53690638	0.552	0.321
C16orf87	9.33E-170	0.426238826	0.296	0.138
LRRC8C2	5.26E-169	0.517667577	0.549	0.339
PLIN21	3.65E-168	0.741166933	0.557	0.357

AC104365.11	1.18E-167	0.567268529	0.396	0.215
HIVEP1	1.23E-167	0.488861621	0.599	0.39
PARK71	2.00E-167	0.46647907	0.726	0.554
GBP4	4.95E-167	0.407907063	0.334	0.164
RNF145	1.00E-166	0.468640864	0.55	0.347
KIF5B	1.11E-166	0.441895221	0.666	0.467
JAK31	2.89E-166	0.35967631	0.448	0.246
PGM2L1	2.54E-165	0.682965546	0.26	0.116
PHF21A	3.66E-165	0.551285281	0.49	0.296
NSD31	7.36E-165	0.446930037	0.795	0.599
MRFAP11	2.08E-162	0.435509726	0.616	0.425
TNIP2	3.04E-162	0.394409925	0.369	0.195
GLUD11	5.60E-162	0.568199788	0.593	0.395
LINC-PINT2	1.02E-161	0.407039645	0.829	0.644
TENT5C	1.53E-161	0.390511006	0.695	0.462
MORC31	1.10E-160	0.46907166	0.518	0.322
GRAMD1B2	1.24E-160	0.469182168	0.426	0.233
BARD1	3.17E-160	0.476761049	0.266	0.12
INPP5F1	3.44E-160	0.544081787	0.365	0.19
PIK3IP11	1.52E-159	0.383865193	0.712	0.47
WWP11	3.31E-159	0.403764815	0.426	0.236
CENPC1	3.84E-158	0.481257309	0.627	0.43
ERI1	3.97E-158	0.436412495	0.252	0.112
SGTB	6.41E-158	0.350848695	0.294	0.14
CDKAL1	4.94E-157	0.479862152	0.738	0.552
SDF4	1.01E-156	0.416816399	0.461	0.281
RFX71	1.74E-156	0.509289875	0.459	0.269
YPEL2	2.06E-156	0.42341877	0.325	0.162
ATP2B42	2.15E-156	0.421459251	0.502	0.294
CTNNAL1	5.64E-153	0.489215316	0.287	0.137
FAM53B	2.79E-152	0.408808146	0.438	0.252
GOLGA8B	3.10E-152	0.374496384	0.346	0.176
RANGAP1	6.19E-152	0.360188401	0.339	0.174
SETD1B	1.02E-151	0.367531811	0.254	0.113
IKZF12	1.75E-151	0.35762484	0.808	0.596
TIFA	3.83E-151	0.484876799	0.315	0.158
HPRT1	4.20E-151	0.438261217	0.349	0.188
DLGAP1-AS1	4.83E-151	0.307080636	0.274	0.126
PDCD42	7.16E-151	0.399976738	0.796	0.605
CPEB3	1.09E-150	0.568108656	0.339	0.18
MYO5A	4.74E-150	0.498732912	0.562	0.37
COMMD3	1.30E-149	0.373097213	0.367	0.202
SATB11	1.10E-148	0.430443542	0.392	0.217

CYTIP1	2.39E-148	0.357718052	0.894	0.743
GOLGA8A	8.81E-148	0.334709631	0.307	0.149
GABPB1	2.00E-147	0.441666731	0.501	0.309
PDCL31	2.10E-147	0.345897873	0.448	0.259
L3MBTL3	5.07E-146	0.387050655	0.273	0.128
ARHGDIB1	5.41E-145	0.361968043	0.913	0.787
LRRFIP2	8.34E-145	0.494355839	0.46	0.286
AKIRIN2	2.39E-144	0.469479148	0.549	0.367
KDM5B	2.41E-143	0.370441722	0.405	0.228
SLC25A261	2.66E-143	0.39512287	0.583	0.375
SYTL32	7.29E-143	0.268829403	0.872	0.637
TESPA11	1.56E-142	0.340580135	0.306	0.147
ATXN7L11	3.18E-142	0.470252048	0.367	0.201
LBH2	9.79E-142	0.338491504	0.565	0.348
HBS1L1	2.44E-141	0.405978296	0.469	0.283
CCDC88C1	1.87E-140	0.392880798	0.602	0.394
TAX1BP11	2.93E-140	0.35416683	0.753	0.574
IQGAP11	3.16E-140	0.382452219	0.848	0.689
KIAA11091	3.33E-140	0.449910388	0.529	0.341
REEP31	3.80E-140	0.453038255	0.379	0.217
MRPS6	4.47E-140	0.388641948	0.549	0.362
CMTM72	7.08E-140	0.483215161	0.564	0.377
APOL61	2.93E-138	0.381997768	0.44	0.261
CCSER22	1.64E-137	0.349840434	0.741	0.527
TMEM263	2.48E-137	0.415683126	0.371	0.209
CAB391	2.95E-137	0.480326258	0.561	0.382
FAM160B11	6.55E-137	0.338104189	0.351	0.185
WIPF11	2.03E-136	0.3815838	0.783	0.612
CCDC167	4.32E-136	0.316990349	0.351	0.19
RSBN11	4.35E-136	0.379970874	0.53	0.336
GLB1	8.04E-136	0.425085954	0.338	0.187
RGS101	4.05E-134	0.317281258	0.596	0.391
CERK1	5.26E-134	0.347357518	0.372	0.207
AL035634.11	5.36E-134	0.298601573	0.263	0.124
7-Mar	1.11E-133	0.387889048	0.645	0.467
EED	1.18E-133	0.382308995	0.34	0.184
ZBTB1	2.20E-133	0.412727733	0.733	0.543
CFLAR	2.81E-133	0.32355362	0.792	0.598
SOX4	9.05E-133	0.73765794	0.275	0.14
SEC14L1	1.53E-132	0.425299007	0.54	0.372
AC058791.11	3.44E-132	0.344991567	0.493	0.302
SMC41	4.43E-132	0.356376601	0.436	0.26
TCF12	4.48E-132	0.488402051	0.689	0.517

FGD32	2.05E-131	0.335803725	0.43	0.249
KAT6B1	6.36E-131	0.428473951	0.656	0.469
REXO2	7.38E-129	0.328074322	0.349	0.195
PHLPP1	1.93E-128	0.502102288	0.372	0.214
IL10RA	2.20E-128	0.401993563	0.522	0.347
IFI161	2.68E-128	0.344012662	0.796	0.621
TRAK2	3.44E-128	0.396769185	0.313	0.166
FAM107B1	4.15E-127	0.348989943	0.88	0.736
SRGN1	1.13E-126	0.296286154	0.973	0.878
C9orf16	1.92E-126	0.369679142	0.634	0.468
SLFN52	5.90E-126	0.322047519	0.487	0.296
TCF20	6.26E-126	0.357820017	0.34	0.186
WNK11	9.06E-126	0.355185152	0.77	0.596
CHIC22	2.18E-125	0.36089885	0.577	0.389
MIB1	4.04E-125	0.401521744	0.321	0.173
OGDH1	4.53E-125	0.412343032	0.61	0.425
TG1	7.99E-125	0.277892387	0.357	0.191
KSR1	1.29E-124	0.365010499	0.31	0.165
AC093010.2	6.46E-124	0.369998122	0.295	0.149
CLK1	7.71E-124	0.394724116	0.783	0.623
AP000787.12	1.98E-123	0.473132784	0.414	0.241
ZMYM21	2.38E-123	0.500896572	0.613	0.444
MBD2	4.38E-123	0.366523636	0.605	0.438
FAM13A	5.11E-123	0.509365667	0.31	0.169
SLC12A61	7.11E-123	0.406539315	0.397	0.237
STK42	1.75E-122	0.392737411	0.906	0.772
AC114760.2	2.10E-122	0.293299458	0.268	0.131
NLRC51	2.78E-122	0.315833317	0.465	0.283
BCAS3	1.51E-121	0.483089712	0.582	0.408
ACTN41	4.40E-121	0.341722668	0.547	0.371
FURIN	5.87E-121	0.351201706	0.264	0.134
MSL2	9.86E-121	0.38771364	0.499	0.322
CHD31	5.55E-120	0.281206407	0.37	0.21
ITPKB1	5.94E-120	0.427716535	0.486	0.308
ARPC1B	6.01E-120	0.355531626	0.776	0.615
STX16	1.21E-119	0.322189291	0.413	0.25
TNIP31	2.42E-119	0.384026665	0.323	0.171
HDAC7	2.76E-119	0.308595706	0.264	0.133
NCOA11	2.92E-119	0.378166434	0.686	0.503
WDR7	4.94E-119	0.394541797	0.456	0.288
MINDY2	5.09E-119	0.347788225	0.289	0.151
ASH1L	5.58E-119	0.398714027	0.767	0.598
CREB3L2	6.82E-119	0.332036478	0.336	0.191

PPP4R2	1.05E-118	0.347168985	0.545	0.374
SLC5A3	2.51E-118	0.31979985	0.346	0.195
PSME41	2.85E-118	0.423850614	0.6	0.429
FARS2	5.94E-118	0.377025852	0.481	0.307
TSPYL22	7.33E-118	0.448980433	0.654	0.474
STAT1	9.61E-118	0.425639324	0.545	0.369
ATRX	3.11E-117	0.345336914	0.751	0.587
SAMD91	4.44E-117	0.353512194	0.444	0.273
DIAPH11	4.54E-117	0.360547501	0.594	0.413
IQGAP21	5.59E-117	0.489189829	0.801	0.632
PTPRA1	1.20E-116	0.362663241	0.561	0.384
ITGB11	1.28E-115	0.28620742	0.634	0.445
NT5C3A	2.27E-115	0.397513784	0.544	0.37
TMEM50A1	2.34E-114	0.306821359	0.641	0.469
OGT1	3.45E-114	0.398905765	0.596	0.424
NF1	3.45E-114	0.390671498	0.574	0.4
DGKH1	3.96E-114	0.348608058	0.319	0.174
TMOD3	4.62E-114	0.393219486	0.58	0.412
OCIAD21	4.89E-114	0.25012775	0.522	0.331
TRAF1	3.52E-113	0.255440475	0.403	0.235
NFAT5	1.19E-112	0.387499281	0.713	0.532
ARPP19	3.69E-112	0.327559534	0.546	0.38
IGFLR1	1.40E-111	0.395700604	0.395	0.249
ZFAND5	2.40E-111	0.34316427	0.652	0.474
FXYD51	3.06E-111	0.268581056	0.749	0.576
EVL2	1.00E-110	0.307681273	0.712	0.508
SEC11C	1.58E-110	0.2865254	0.5	0.326
PPP2CA	1.60E-110	0.361742849	0.624	0.458
FAM118A1	3.44E-110	0.303726755	0.393	0.232
NSF1	6.73E-110	0.368534028	0.382	0.234
SAT1	1.97E-109	0.298341248	0.893	0.77
STK392	2.93E-109	0.326715886	0.368	0.212
FILIP1L2	3.48E-109	0.544422434	0.492	0.331
SAR1B	6.04E-109	0.324350946	0.423	0.271
TACC3	2.01E-108	0.260785635	0.286	0.152
HBP11	4.32E-108	0.325298407	0.559	0.389
MTMR61	6.14E-108	0.393307556	0.452	0.296
TMEM1541	1.25E-107	0.27802335	0.359	0.206
MXD41	1.47E-107	0.323700224	0.468	0.308
TBL1XR11	1.61E-107	0.328173586	0.624	0.45
TDRD3	4.70E-107	0.367704105	0.295	0.162
CD962	4.72E-107	0.302643647	0.696	0.461
GMFG1	5.57E-107	0.29659834	0.766	0.619

PPP3CC1	1.87E-106	0.346203609	0.535	0.367
CYTH3	1.91E-106	0.508553181	0.291	0.16
UBE2D2	2.22E-106	0.294630812	0.753	0.607
VPS13C	3.69E-106	0.351937449	0.673	0.507
EVI2A1	1.12E-105	0.36157916	0.537	0.371
TPR	2.54E-105	0.339202192	0.634	0.467
CASP1	2.59E-105	0.288654552	0.328	0.189
DOK21	3.26E-105	0.276695664	0.415	0.254
CCDC911	4.10E-105	0.355005983	0.732	0.563
CCDC61	1.06E-104	0.434485723	0.505	0.35
RICTOR	2.15E-104	0.379537933	0.582	0.417
BICRAL1	2.32E-104	0.352773646	0.542	0.367
SLC9A91	4.75E-104	0.463138014	0.462	0.302
SMAP1	5.96E-103	0.302960411	0.549	0.381
ARL15	1.90E-102	0.395321559	0.65	0.479
CDC37L1	2.88E-102	0.271369421	0.309	0.172
HLA-F1	2.91E-102	0.30918887	0.712	0.55
PMVK	3.81E-102	0.308440222	0.353	0.212
LINC019342	4.06E-102	0.555587516	0.401	0.248
FTO	4.22E-102	0.377128726	0.457	0.3
CREBRF	4.63E-102	0.310144536	0.588	0.422
AL137856.11	5.11E-102	0.268617681	0.374	0.216
PSMD14	7.29E-102	0.368405766	0.509	0.356
SYNJ2	6.11E-101	0.332070912	0.335	0.195
ITGAL1	6.48E-101	0.279007385	0.38	0.225
TMPO	8.48E-101	0.316653094	0.482	0.32
MAT2B	1.15E-100	0.269818062	0.33	0.192
RAP1GDS1	1.30E-100	0.50420847	0.518	0.364
XRN11	2.04E-100	0.348872084	0.644	0.481
OTULIN1	2.04E-100	0.329435012	0.472	0.313
NDUFB8	3.29E-100	0.288101798	0.658	0.507
HELB1	7.90E-100	0.318524167	0.311	0.175
ALDH9A1	9.73E-100	0.264380421	0.279	0.153
GALNT10	4.08E-99	0.297872295	0.408	0.25
KDM6A	4.47E-99	0.363604196	0.676	0.521
TMX3	7.62E-99	0.307934276	0.328	0.193
ITGA41	8.13E-99	0.507938649	0.592	0.458
MFSD61	8.85E-99	0.283901963	0.363	0.213
CAMK2D1	6.25E-98	0.39563472	0.616	0.448
FNBP1	4.55E-97	0.284217804	0.908	0.778
NUDT5	6.10E-97	0.250898478	0.362	0.22
EMB2	1.34E-96	0.329238221	0.673	0.499
EXT1	1.89E-96	0.340769459	0.511	0.349

PCED1B-AS12	1.92E-96	0.280475759	0.615	0.442
CDR2	2.33E-96	0.324868654	0.465	0.309
CEMIP22	4.25E-96	0.29452013	0.835	0.655
AC016831.51	1.74E-95	0.312284895	0.437	0.285
C17orf49	1.75E-95	0.296369102	0.435	0.287
CHD21	1.84E-95	0.368786567	0.864	0.733
CRTC31	1.92E-95	0.310691376	0.418	0.267
MIER11	3.39E-95	0.288644605	0.632	0.47
RBM33	4.03E-95	0.285644518	0.604	0.442
ESR21	5.10E-95	0.26473193	0.341	0.198
GLG1	7.25E-95	0.326549786	0.597	0.441
TBC1D151	8.69E-95	0.309647114	0.621	0.461
ADSS1	1.90E-94	0.290867937	0.521	0.357
FAM214A1	2.13E-94	0.362611978	0.554	0.39
SLTM	2.49E-94	0.282452783	0.703	0.544
TMEM140	2.28E-93	0.25654383	0.291	0.164
AUH	3.55E-93	0.3621384	0.366	0.227
PIK3IP1-AS1	5.08E-93	0.286086085	0.25	0.132
SUMO2	5.68E-93	0.266917471	0.805	0.694
EPB411	6.86E-93	0.375767769	0.646	0.477
KIAA0319L1	3.17E-92	0.376880779	0.344	0.209
CNIH1	4.89E-92	0.327611915	0.349	0.218
HDAC41	9.49E-92	0.33995814	0.531	0.37
RAB2A	1.29E-91	0.311265273	0.747	0.605
SNRNP35	1.42E-91	0.261611101	0.278	0.156
PSMB81	1.68E-91	0.30767481	0.602	0.459
UBR21	2.14E-91	0.359405683	0.575	0.422
OGA	2.25E-90	0.290463848	0.64	0.475
PSPC1	2.46E-90	0.284956597	0.602	0.441
SSH1	3.38E-90	0.285255085	0.317	0.187
ISG151	8.09E-90	0.46326256	0.593	0.432
CLASP11	9.27E-90	0.314522781	0.575	0.414
PIK3R5	1.02E-89	0.286357712	0.52	0.358
GPBP11	8.16E-89	0.276258427	0.849	0.708
MOSMO	1.10E-88	0.354140676	0.328	0.198
CRYBG11	1.65E-88	0.457874944	0.618	0.468
PPHLN1	4.24E-88	0.297252009	0.612	0.457
ZC3H18	7.82E-88	0.282772849	0.417	0.273
STIM11	8.44E-88	0.332188788	0.531	0.371
CHORDC11	1.04E-87	0.424609541	0.634	0.482
SACM1L	1.31E-87	0.286441691	0.354	0.218
MAN1A2	1.88E-87	0.367763756	0.482	0.34
PSMA11	5.49E-87	0.266813691	0.669	0.512

TTC7A1	6.47E-87	0.333235572	0.403	0.266
YAF2	1.82E-86	0.308405486	0.465	0.317
WDR44	3.90E-86	0.392539356	0.309	0.186
ELK31	5.41E-86	0.270609873	0.471	0.319
ATXN2	7.18E-86	0.322099472	0.406	0.267
PTPN1	8.26E-86	0.300398467	0.716	0.563
RFFL1	1.29E-85	0.275585912	0.347	0.213
GTF3C6	2.24E-85	0.268217919	0.458	0.315
IP6K1	2.44E-85	0.275328604	0.46	0.309
RPRD21	3.05E-85	0.321218543	0.438	0.288
PTPN41	3.76E-85	0.490035031	0.428	0.287
GBF1	1.13E-84	0.341345898	0.547	0.4
DDX6	6.20E-84	0.285302016	0.663	0.518
ITFG1	6.50E-84	0.347314121	0.5	0.356
FAM104A	1.81E-83	0.251236844	0.284	0.166
MKLN1	1.98E-83	0.389220048	0.673	0.53
PCNX11	2.24E-83	0.29515336	0.636	0.483
ARAP22	2.27E-83	0.410797466	0.618	0.467
N4BP2L21	1.01E-82	0.25589714	0.799	0.655
AHSA11	8.90E-82	0.341424688	0.529	0.386
PPP1R12A1	9.73E-82	0.264796731	0.753	0.602
NUP58	1.11E-81	0.368925764	0.432	0.298
EGLN1	1.55E-81	0.304766586	0.305	0.184
ABI1	2.64E-81	0.324139211	0.614	0.469
UCP21	4.69E-81	0.307892197	0.544	0.4
ENO1	1.48E-80	0.299745969	0.691	0.545
ATP9B1	2.26E-80	0.309885528	0.567	0.413
RIPOR2	2.79E-80	0.251229838	0.638	0.471
SESN11	3.63E-80	0.519104967	0.383	0.257
ARHGAP12	3.69E-80	0.321076371	0.269	0.157
ARID2	3.90E-80	0.348934025	0.553	0.409
ATG5	5.81E-80	0.293322807	0.51	0.367
IFFO2	8.53E-80	0.283612916	0.288	0.171
EXOC4	1.08E-79	0.357641334	0.687	0.539
MYCBP21	1.24E-79	0.25968773	0.781	0.636
IRF11	1.25E-79	0.290643878	0.679	0.536
CD59	2.78E-79	0.259237926	0.342	0.218
ZC3H8	6.31E-79	0.266934446	0.315	0.191
EML41	1.09E-78	0.314717929	0.844	0.7
ENTPD11	1.46E-78	0.31738829	0.357	0.232
CUTA1	7.64E-78	0.251076413	0.557	0.418
CRLF3	7.69E-78	0.293367306	0.384	0.252
OSBPL81	4.09E-77	0.427359203	0.822	0.699

SPPL2A	4.23E-77	0.289284583	0.461	0.324
SEC11A	4.46E-77	0.255635139	0.608	0.467
ACSL4	6.16E-77	0.268345187	0.371	0.246
DCAF8	6.50E-77	0.260750985	0.356	0.231
FXR1	1.97E-76	0.277120597	0.639	0.499
GMDS	4.12E-76	0.288640826	0.582	0.435
ATXN71	4.73E-76	0.274407701	0.51	0.361
C17orf67	5.64E-76	0.327516457	0.273	0.162
TRPC4AP1	1.39E-75	0.303085095	0.503	0.363
ELOVL5	3.29E-75	0.268224947	0.711	0.558
HLA-C1	3.74E-75	0.265761807	0.946	0.904
OTUD5	4.09E-75	0.325556361	0.362	0.239
PPP2R5C2	5.23E-75	0.259827019	0.881	0.756
ARHGAP251	1.04E-74	0.315787751	0.458	0.321
RASA12	1.05E-74	0.318168679	0.578	0.427
PRKACB1	3.41E-74	0.269025171	0.441	0.3
TRIM14	3.08E-73	0.250344768	0.322	0.202
ASCC3	5.59E-73	0.297304287	0.521	0.381
ANKH1	6.20E-73	0.252680591	0.401	0.265
ESYT21	6.37E-73	0.253829486	0.653	0.501
SORL1	9.95E-73	0.38607533	0.37	0.248
PSMD1	1.32E-72	0.297889754	0.397	0.271
ANKRD13C1	1.67E-72	0.26298775	0.397	0.262
RBM27	2.53E-71	0.306714585	0.542	0.404
MXI11	5.64E-71	0.263607901	0.292	0.179
DYNC1I2	6.30E-71	0.426995882	0.354	0.244
CAPZA2	6.98E-71	0.284822374	0.552	0.419
AEBP21	9.32E-71	0.271230997	0.408	0.276
CYTH11	5.83E-70	0.311003186	0.804	0.681
PACS12	1.16E-69	0.280107171	0.636	0.481
LRRC8D1	1.85E-69	0.373299935	0.32	0.208
ZMYND8	1.45E-68	0.253495279	0.376	0.251
SPG11	1.46E-68	0.261689608	0.438	0.307
ABHD18	3.09E-68	0.254962497	0.342	0.222
ITGAV	4.12E-68	0.357579645	0.311	0.199
VPS13B	4.23E-68	0.266734178	0.723	0.589
SH3GLB1	6.08E-68	0.28225174	0.505	0.382
RUNX22	9.76E-68	0.377138987	0.398	0.278
KANSL12	1.40E-67	0.265768823	0.669	0.526
RELCH	3.05E-67	0.264360331	0.401	0.272
GIGYF2	4.39E-67	0.267882221	0.434	0.31
AGFG1	7.23E-67	0.328442757	0.485	0.361
SH3TC1	2.59E-66	0.255917574	0.26	0.16

C18orf25	1.58E-65	0.303410747	0.402	0.278
DTNB	1.89E-65	0.286667702	0.322	0.208
NPTN	2.09E-65	0.282254986	0.351	0.236
NAA25	1.45E-64	0.262139949	0.272	0.167
IFI61	8.18E-64	0.326179192	0.445	0.313
DGLUCY	1.99E-63	0.256904017	0.28	0.176
PCCA	2.60E-63	0.26159654	0.318	0.209
COX5A	4.25E-63	0.301545313	0.56	0.437
AFTPH1	2.36E-62	0.285986077	0.467	0.344
PKM	1.74E-61	0.276787411	0.542	0.41
AFF11	4.80E-61	0.333605728	0.582	0.456
DCP2	5.73E-61	0.268754111	0.399	0.282
CAPN71	5.01E-60	0.256586082	0.457	0.333
ABTB2	6.81E-58	0.383860191	0.277	0.178
NAA16	1.00E-57	0.259009092	0.283	0.182
STIP11	1.59E-57	0.276016291	0.472	0.356
BCL2L11	4.10E-57	0.304085038	0.468	0.352
SHLD2	6.56E-57	0.317831861	0.376	0.268
TYW1	5.25E-56	0.274129153	0.371	0.257
CEP350	9.67E-56	0.255852707	0.564	0.442
ARHGAP52	2.89E-55	0.26959414	0.331	0.226
SLC4A71	1.21E-54	0.284278106	0.538	0.416
MX11	1.45E-54	0.36101548	0.423	0.312
AHCYL2	1.39E-53	0.251073867	0.305	0.203
TNPO3	1.40E-53	0.256940283	0.436	0.32
XIST	4.24E-53	0.359934232	0.299	0.203
ATP8A11	4.46E-53	0.268303561	0.553	0.419
RFX32	5.06E-53	0.254425239	0.562	0.432
UBE2H	6.14E-53	0.263472642	0.637	0.514
DIP2B1	6.07E-51	0.250932824	0.48	0.362
BTA1F1	8.03E-50	0.262132264	0.502	0.39
STT3B1	2.91E-48	0.250862674	0.541	0.43
SERINC51	1.76E-47	0.3122865	0.447	0.334
CEP83	1.26E-46	0.301646623	0.285	0.197
TMEM65	4.56E-46	0.313742271	0.315	0.222
EXOC6B1	1.43E-44	0.279380309	0.325	0.23
CELF21	1.91E-41	0.252318479	0.817	0.713
PDE4D	3.31E-41	0.461544024	0.598	0.511
SLC1A4	3.89E-37	0.302672736	0.284	0.207
MAP4K31	1.19E-29	0.253691723	0.401	0.319
EREG	0	4.334376524	0.774	0.026
IL1B	0	4.139142763	0.909	0.052
DOCK4	0	3.544039849	0.938	0.098

LYZ	0	3.462298647	0.919	0.077
SLC16A10	0	3.456574117	0.799	0.092
THBS1	0	3.423334822	0.658	0.033
KYNU	0	3.312981737	0.952	0.129
FMN1	0	3.133858808	0.898	0.085
AL078604.4	0	3.087280683	0.833	0.105
TIMP1	0	3.062528476	0.842	0.189
PLXDC2	0	3.02339144	0.941	0.062
IER3	0	3.011206731	0.94	0.167
PID1	0	2.970764922	0.677	0.019
RBM47	0	2.967715569	0.963	0.126
CST3	0	2.96207643	0.933	0.13
VCAN	0	2.894031985	0.61	0.026
SLC8A1	0	2.868271558	0.917	0.055
LRMDA	0	2.865586758	0.913	0.047
G0S2	0	2.848386874	0.753	0.054
FNIP2	0	2.844816232	0.883	0.091
AC099489.1	0	2.824418753	0.753	0.111
IFI30	0	2.786232038	0.943	0.182
CXCL8	0	2.779049065	0.856	0.076
PLAUR	0	2.769480323	0.956	0.092
AIF1	0	2.767031094	0.904	0.089
MCTP1	0	2.70295917	0.911	0.065
EPB41L3	0	2.694690378	0.884	0.034
SOD2	0	2.655092291	0.984	0.53
FCER1G	0	2.613003966	0.903	0.088
ABCA1	0	2.53844352	0.83	0.072
DMXL2	0	2.525360567	0.785	0.041
TYROBP	0	2.490125467	0.936	0.127
DENND5A	0	2.47852379	0.871	0.114
RAB31	0	2.476647256	0.949	0.11
S100A9	0	2.44224925	0.795	0.193
SPP1	0	2.431689851	0.353	0.062
CXCL3	0	2.419396264	0.6	0.028
CTSB	0	2.392157974	0.949	0.221
C15orf48	0	2.357019767	0.752	0.048
ALCAM	0	2.326785971	0.829	0.236
CXCL2	0	2.313685638	0.738	0.034
QKI	0	2.299673008	0.98	0.463
AREG	0	2.285915505	0.789	0.291
C5AR1	0	2.280616575	0.773	0.043
FCGR2A	0	2.269870408	0.907	0.056
FNDC3B	0	2.250696849	0.958	0.359

PAPSS2	0	2.241669674	0.697	0.032
C1QB	0	2.222784616	0.504	0.064
C1QA	0	2.218589861	0.537	0.062
ABL2	0	2.215718965	0.851	0.14
PTGS2	0	2.210507394	0.731	0.033
IRAK3	0	2.179921445	0.928	0.111
ATP13A31	0	2.1568501	0.932	0.277
OLR1	0	2.154154668	0.702	0.024
FMNL2	0	2.150853366	0.632	0.078
PSAP	0	2.148383082	0.958	0.372
FGD4	0	2.116497714	0.898	0.075
CD14	0	2.114559053	0.749	0.037
MS4A6A	0	2.100238208	0.781	0.051
BCL2A1	0	2.094551667	0.902	0.195
ETS2	0	2.082661065	0.913	0.092
MRC1	0	2.081894297	0.683	0.045
PLEK	0	2.075741019	0.921	0.134
CSF2RA	0	2.074889634	0.846	0.039
SESTD11	0	2.0626107	0.788	0.145
RNF144B1	0	2.061028504	0.87	0.12
IL1RN	0	2.057731289	0.662	0.035
FTL	0	2.051223094	0.99	0.922
CCL20	0	2.026934735	0.472	0.077
NLRP3	0	2.019332664	0.75	0.046
DAPK1	0	2.006348124	0.714	0.045
HLA-DRB11	0	2.002840953	0.948	0.546
TYMP	0	2.002345998	0.951	0.376
NFKB1	0	1.998390481	0.983	0.57
LIMS1	0	1.986519057	0.957	0.446
ABR	0	1.982158221	0.872	0.219
ZEB21	0	1.977818162	0.969	0.423
NEAT1	0	1.977406575	0.995	0.814
EMILIN2	0	1.976670442	0.89	0.107
CD163	0	1.968924349	0.696	0.029
CD86	0	1.967130877	0.818	0.098
MAMLD1	0	1.961851477	0.564	0.03
ITGAX	0	1.956815242	0.833	0.056
GLUL	0	1.954030052	0.886	0.173
SIPA1L11	0	1.95373903	0.99	0.656
SRGAP1	0	1.944542471	0.695	0.032
MAP2K1	0	1.939256099	0.934	0.358
ANXA5	0	1.928563058	0.946	0.358
NAMPT	0	1.914259295	0.986	0.51

KMO	0	1.901317303	0.676	0.053
VEGFA	0	1.890888947	0.765	0.042
TET2	0	1.888082109	0.952	0.42
DSE	0	1.880433088	0.867	0.141
IRAK2	0	1.879359728	0.838	0.134
CTSS	0	1.87747595	0.955	0.465
CUX1	0	1.874557892	0.95	0.344
CCL31	0	1.866369491	0.676	0.109
HBEGF	0	1.851219896	0.716	0.047
SERPINA1	0	1.849689849	0.772	0.03
AC025580.2	0	1.838884125	0.718	0.021
CD109	0	1.830563472	0.706	0.087
MANBA1	0	1.828628365	0.894	0.298
FTH1	0	1.827728892	0.995	0.939
GRN	0	1.815866339	0.875	0.157
IFITM3	0	1.811555639	0.781	0.141
GNAQ	0	1.808792377	0.927	0.187
LUCAT1	0	1.793505403	0.739	0.071
ICAM1	0	1.789575261	0.897	0.133
PSD3	0	1.781555527	0.571	0.062
ACSL1	0	1.779929055	0.901	0.193
HLA-DRA1	0	1.775564706	0.978	0.506
LST1	0	1.773585926	0.835	0.085
INHBA	0	1.770861234	0.363	0.017
BASP1	0	1.767417471	0.855	0.25
HLA-DPA11	0	1.75996782	0.917	0.551
MS4A7	0	1.757341894	0.779	0.051
JARID2	0	1.753887197	0.968	0.559
SLC11A1	0	1.752879949	0.674	0.035
MAFB	0	1.752056614	0.728	0.042
TGFBI	0	1.75026285	0.778	0.046
ASAP1	0	1.734328843	0.916	0.424
NPC2	0	1.720144286	0.874	0.283
MXD1	0	1.718136693	0.915	0.21
PRKAG2	0	1.713891473	0.878	0.236
FGL2	0	1.708896358	0.767	0.09
ZFYVE16	0	1.707243505	0.817	0.181
ZMIZ1	0	1.696546836	0.868	0.113
TLR2	0	1.695398176	0.763	0.037
KIF1B	0	1.694916234	0.822	0.223
MYO9B	0	1.694166489	0.921	0.355
ADGRE2	0	1.689943946	0.726	0.028
AZIN1-AS1	0	1.689898299	0.755	0.088

WARS	0	1.688624337	0.681	0.09
CLIC4	0	1.676324164	0.8	0.172
CTSL	0	1.66768287	0.668	0.06
AMPD3	0	1.665720588	0.667	0.075
C1QC	0	1.663312371	0.438	0.039
CPVL	0	1.660042067	0.731	0.033
ARL8B	0	1.655885402	0.934	0.37
CD68	0	1.652708157	0.779	0.061
PIK3R51	0	1.64844102	0.914	0.332
CTSZ	0	1.641661434	0.887	0.291
S100A11	0	1.639628344	0.955	0.569
FPR1	0	1.635710224	0.768	0.031
FCN1	0	1.632017528	0.427	0.007
MOB3B1	0	1.627335076	0.758	0.1
ARHGAP26	0	1.625885285	0.946	0.458
SDS	0	1.619071768	0.476	0.021
FLOT1	0	1.617795803	0.839	0.157
SPAG9	0	1.616710577	0.964	0.452
TCF7L2	0	1.612701254	0.591	0.051
CYBB1	0	1.60953751	0.792	0.144
ANXA2	0	1.590248002	0.928	0.359
IGSF6	0	1.590235055	0.706	0.049
FAM49A1	0	1.58699578	0.918	0.228
NUMB	0	1.577201422	0.867	0.337
FOXO3	0	1.554318431	0.868	0.3
RAB20	0	1.553222796	0.768	0.048
CTSD	0	1.551641767	0.777	0.333
SLC43A2	0	1.544483059	0.807	0.086
PPIF	0	1.543059332	0.762	0.113
CCL3L1	0	1.541441874	0.519	0.064
HCK	0	1.540057105	0.8	0.047
PMP22	0	1.537371138	0.638	0.034
MB21D2	0	1.516634216	0.712	0.091
FCGRT	0	1.514989913	0.801	0.112
LCP2	0	1.514632267	0.917	0.276
SLC1A3	0	1.511901199	0.541	0.024
RABGEF1	0	1.510565053	0.939	0.435
NRP1	0	1.503742926	0.556	0.036
PPARD1	0	1.49975053	0.833	0.178
MARCKS	0	1.498095908	0.762	0.135
CD44	0	1.496595742	0.957	0.773
CD741	0	1.496571837	0.98	0.701
LITAF	0	1.495708927	0.976	0.498

MGAT1	0	1.493346407	0.862	0.203
CCDC88A	0	1.48446511	0.845	0.123
APOE	0	1.478477675	0.352	0.079
RALA	0	1.476315709	0.835	0.345
NRP2	0	1.476141159	0.553	0.028
STX11	0	1.468515865	0.87	0.209
SBF2	0	1.465086515	0.851	0.168
HLA-DPB11	0	1.464991366	0.923	0.573
AQP9	0	1.462715889	0.523	0.025
LGALS1	0	1.458577064	0.926	0.42
TMEM176B	0	1.457741304	0.584	0.039
PSTPIP2	0	1.457677026	0.652	0.053
DPYD	0	1.457575496	0.931	0.475
AC079753.2	0	1.457486749	0.481	0.01
SAT11	0	1.448230517	0.992	0.766
SIRPA	0	1.444861042	0.756	0.04
CLEC7A	0	1.440448917	0.766	0.056
LGALS3	0	1.439606433	0.854	0.307
HIF1A1	0	1.438776229	0.94	0.521
HLA-DQB11	0	1.438423438	0.852	0.395
RIN2	0	1.437939754	0.639	0.029
BNIP3L	0	1.43724316	0.81	0.262
TNFAIP2	0	1.436622941	0.701	0.035
LNCAROD	0	1.434462614	0.361	0.019
ELOVL7	0	1.428852296	0.394	0.014
SH3PXD2B	0	1.418746018	0.663	0.028
AC009093.2	0	1.417724344	0.707	0.135
CD631	0	1.414240789	0.897	0.423
BCAT1	0	1.412480672	0.684	0.078
SGK1	0	1.407672299	0.796	0.17
ALDH2	0	1.406418109	0.715	0.056
MNDA	0	1.40518181	0.665	0.056
FPR3	0	1.403976124	0.654	0.026
CTSH	0	1.403534647	0.808	0.186
THBD	0	1.402155543	0.588	0.029
SLCO3A1	0	1.395537903	0.786	0.165
SLC39A8	0	1.392773526	0.607	0.162
NCOR2	0	1.391091948	0.85	0.197
ATP2B11	0	1.390824822	0.934	0.627
B3GNT5	0	1.390235503	0.735	0.072
LDLRAD3	0	1.389858549	0.577	0.02
FBP1	0	1.388158225	0.569	0.035
CALHM61	0	1.387581463	0.643	0.085

RAB7A	0	1.386860541	0.971	0.573
FCGR3A	0	1.385855352	0.582	0.066
UBE2E21	0	1.381679793	0.867	0.209
GAB21	0	1.381181405	0.903	0.284
ARHGAP31	0	1.381114901	0.745	0.105
C1orf162	0	1.377799074	0.744	0.12
MIR155HG	0	1.371936703	0.595	0.173
CLEC10A	0	1.368018081	0.454	0.012
NPHS1	0	1.363676785	0.351	0.02
VIM	0	1.363306878	0.983	0.749
NINJ1	0	1.361093229	0.797	0.137
GSN	0	1.360190777	0.745	0.122
PTPRE	0	1.3593306	0.834	0.161
CD300E	0	1.35826427	0.459	0.008
ST18	0	1.352795132	0.459	0.015
CSF1R	0	1.352088698	0.683	0.03
CIITA1	0	1.351313062	0.729	0.112
SGMS2	0	1.349808083	0.534	0.025
IFNGR21	0	1.349792582	0.853	0.17
NFE2L2	0	1.349398268	0.962	0.505
PTPN12	0	1.34845498	0.82	0.16
MAML3	0	1.34837151	0.757	0.157
ANPEP	0	1.34675092	0.552	0.015
BID	0	1.344708052	0.8	0.17
RASGEF1B1	0	1.341472265	0.907	0.334
MMP19	0	1.339592129	0.46	0.015
GK1	0	1.337870338	0.878	0.231
GRB21	0	1.336651238	0.957	0.572
SERPINB1	0	1.333363862	0.887	0.361
SPI1	0	1.326954881	0.798	0.083
S100A8	0	1.325854623	0.595	0.142
UPP1	0	1.322982201	0.84	0.2
ARFGAP3	0	1.322166977	0.804	0.237
MAFF	0	1.319295523	0.782	0.122
LGALS2	0	1.317791771	0.53	0.019
FLT1	0	1.315584812	0.415	0.055
RHOQ1	0	1.315252264	0.814	0.188
MAP3K81	0	1.315184668	0.923	0.385
TAOK3	0	1.310597609	0.924	0.534
MIR181A1HG	0	1.307101214	0.705	0.142
S100A10	0	1.305044584	0.929	0.579
RIN31	0	1.297325547	0.809	0.213
BRI3	0	1.296793087	0.872	0.296

CAPG	0	1.29620466	0.77	0.206
PFKFB3	0	1.287899466	0.928	0.377
ATP1B31	0	1.287496675	0.972	0.631
LHFPL2	0	1.285158164	0.59	0.049
SEMA6B	0	1.284727895	0.573	0.011
TREM1	0	1.277421462	0.629	0.026
HLA-DQA11	0	1.271990099	0.784	0.386
ACSL3	0	1.271097327	0.78	0.246
ARHGAP10	0	1.270844183	0.703	0.15
RASAL2	0	1.270655001	0.442	0.028
SDC2	0	1.269585615	0.449	0.022
ASAH1	0	1.26839612	0.829	0.207
RETN	0	1.265022821	0.357	0.008
CREB5	0	1.261982616	0.604	0.039
KCTD12	0	1.261673812	0.662	0.042
KLF4	0	1.258146187	0.696	0.069
GPR183	0	1.246449588	0.88	0.512
FAM151B	0	1.243877875	0.366	0.017
NR4A31	0	1.243787739	0.894	0.33
RNF130	0	1.242076859	0.871	0.174
ITGB8	0	1.239879244	0.42	0.039
GPR137B	0	1.237288367	0.662	0.204
RAPGEF2	0	1.236987879	0.789	0.365
DRAM1	0	1.235834236	0.653	0.095
ZNF267	0	1.231988832	0.875	0.254
TBXAS1	0	1.231701039	0.829	0.147
APOC1	0	1.230283798	0.337	0.042
RNASE1	0	1.227052894	0.271	0.03
NCF2	0	1.225994512	0.725	0.055
FGR	0	1.221293759	0.691	0.041
SULF2	0	1.21944094	0.618	0.08
IL1A	0	1.217817117	0.46	0.016
PILRA	0	1.21479379	0.714	0.072
MFSD1	0	1.214589217	0.771	0.126
SASH1	0	1.210024523	0.377	0.022
TPRA1	0	1.209104198	0.657	0.063
PLSCR1	0	1.201759646	0.866	0.22
AC083837.1	0	1.201449887	0.429	0.066
IL6R	0	1.199060744	0.736	0.116
AXL	0	1.197491564	0.478	0.035
TOM1	0	1.192250222	0.844	0.198
MMP9	0	1.190365747	0.446	0.029
TNS3	0	1.187401233	0.621	0.141

SPRED1	0	1.185755061	0.452	0.033
CD831	0	1.185389922	0.962	0.398
PLXNC1	0	1.184931161	0.727	0.13
RIPK2	0	1.184244795	0.735	0.154
ZSWIM61	0	1.179129252	0.97	0.61
ITGA5	0	1.178927883	0.655	0.07
MSR1	0	1.177529368	0.491	0.028
SLC25A37	0	1.176130284	0.587	0.117
B4GALT5	0	1.176071812	0.735	0.165
CXCL16	0	1.167687531	0.687	0.049
APLP2	0	1.167260541	0.898	0.37
AGAP3	0	1.164704826	0.66	0.064
SH3BP51	0	1.16367398	0.864	0.262
CTNNB1	0	1.16321539	0.884	0.432
ITGAV1	0	1.162939158	0.684	0.173
IL3RA	0	1.159554602	0.598	0.065
TEX14	0	1.156823073	0.774	0.264
SEMA4A	0	1.155451439	0.607	0.126
PACSIN2	0	1.150580622	0.818	0.23
FN1	0	1.1470435	0.274	0.048
SH2B31	0	1.146117585	0.814	0.178
HIVEP2	0	1.145175863	0.883	0.526
RAPH1	0	1.141556267	0.572	0.072
UBASH3B	0	1.139724438	0.653	0.226
PCSK5	0	1.139560941	0.473	0.038
NFIL31	0	1.135064759	0.783	0.176
KCNMA1	0	1.134455024	0.259	0.032
MAPK6	0	1.132185133	0.804	0.225
LPXN	0	1.131568727	0.845	0.419
RNF19B	0	1.131235643	0.69	0.143
WTAP	0	1.129463943	0.929	0.571
CD93	0	1.122327701	0.59	0.022
ZFAND51	0	1.121992014	0.904	0.46
CDKN1A	0	1.119566576	0.821	0.214
TIMP2	0	1.117904722	0.737	0.095
GSTO1	0	1.116008902	0.845	0.294
PDE4A	0	1.114942868	0.866	0.266
CFLAR1	0	1.113737821	0.964	0.591
PLCB1	0	1.113148363	0.424	0.122
ZFAND31	0	1.113005509	0.975	0.625
PHACTR11	0	1.112910491	0.796	0.153
TFEC	0	1.109274361	0.6	0.058
TNFAIP6	0	1.107446541	0.348	0.019

ACTN1	0	1.106631583	0.678	0.073
TJP2	0	1.105417076	0.479	0.036
F13A1	0	1.104952084	0.394	0.019
MS4A4A	0	1.101201199	0.563	0.032
SLC44A1	0	1.100092247	0.603	0.111
RILPL21	0	1.097120284	0.92	0.407
NFAT51	0	1.096207123	0.889	0.524
GCH1	0	1.093955074	0.733	0.266
PIK3AP11	0	1.092087173	0.719	0.175
INSIG1	0	1.088748655	0.731	0.219
PALM2-AKAP2	0	1.088378756	0.521	0.189
MAP2K3	0	1.08570689	0.822	0.225
PLA2G7	0	1.081297433	0.465	0.023
CLEC4E	0	1.075315357	0.501	0.015
IL4I1	0	1.073406225	0.563	0.072
PDE4B1	0	1.070920015	0.965	0.616
S100A6	0	1.070647511	0.928	0.614
OXSRI	0	1.06782314	0.792	0.289
ETV6	0	1.066195332	0.924	0.49
NCOA4	0	1.062035203	0.785	0.196
ANTXR2	0	1.058896571	0.716	0.266
LGMN	0	1.057279444	0.636	0.132
PLD1	0	1.055584339	0.388	0.031
PDXK	0	1.054973154	0.801	0.228
RASGRP31	0	1.054537971	0.496	0.128
NFKBIZ	0	1.052212369	0.92	0.432
ATP6V1H	0	1.050873507	0.741	0.296
TPM4	0	1.050356457	0.91	0.419
RAPGEF11	0	1.048765437	0.955	0.581
TNFSF13B	0	1.048208905	0.684	0.113
LATS2	0	1.04588153	0.62	0.069
OGFRL1	0	1.044085768	0.735	0.196
TRIO1	0	1.042926852	0.824	0.243
TBC1D8	0	1.041729661	0.664	0.156
CUL1	0	1.04159037	0.731	0.342
GAS71	0	1.037951853	0.581	0.112
UBTD2	0	1.037589856	0.543	0.096
RNF13	0	1.037227738	0.826	0.281
STARD13	0	1.03570891	0.367	0.031
TNFRSF21	0	1.031248632	0.48	0.029
CORO1C	0	1.029756698	0.696	0.119
NHSL1	0	1.026535358	0.429	0.03
CPM	0	1.024587277	0.63	0.092

HLA-DMA1	0	1.023530817	0.813	0.33
CHMP4B	0	1.019353117	0.781	0.184
AKAP13	0	1.018817544	0.988	0.858
AP2S1	0	1.016522622	0.803	0.271
TRAF11	0	1.015901293	0.706	0.217
CPQ	0	1.015688485	0.756	0.174
BHLHE401	0	1.015380631	0.78	0.214
ITSN1	0	1.013640337	0.463	0.033
TMEM176A	0	1.013380263	0.496	0.031
CTBP2	0	1.012653002	0.583	0.056
NECTIN2	0	1.008178331	0.605	0.029
PLEKHA6	0	1.007245657	0.33	0.023
ITGB21	0	1.006283605	0.825	0.334
REL1	0	1.004463064	0.973	0.642
GPNMB	0	1.002887432	0.363	0.04
IL18	0	1.000981251	0.548	0.044
COTL1	0	0.997144305	0.921	0.526
TTYH2	0	0.993632987	0.507	0.029
PDE4DIP	0	0.991561423	0.571	0.119
VPS13D	0	0.990713197	0.678	0.317
AL356124.1	0	0.988597587	0.425	0.066
CENPU	0	0.986854996	0.417	0.038
MAP3K20	0	0.983700759	0.489	0.048
H2AFY	0	0.981459444	0.845	0.284
NOCT	0	0.980054648	0.658	0.178
ALOX5	0	0.979363521	0.675	0.093
NCR3LG1	0	0.97541896	0.563	0.035
TBC1D12	0	0.975370498	0.444	0.039
CREG1	0	0.974756167	0.629	0.108
TANC2	0	0.974352353	0.517	0.102
SNX81	0	0.974157411	0.739	0.174
RTN4	0	0.972440304	0.923	0.469
IL13RA11	0	0.971135058	0.704	0.089
WDFY3	0	0.970059317	0.598	0.033
SHB	0	0.964294218	0.503	0.043
ATP2C1	0	0.964279359	0.696	0.288
HEXA1	0	0.962194092	0.67	0.236
PRMT9	0	0.960566888	0.647	0.205
ATP6V1B2	0	0.960340775	0.704	0.122
PHLDA2	0	0.958363033	0.539	0.078
DNAH17	0	0.958182123	0.432	0.02
PKM1	0	0.954277779	0.881	0.388
ZFH3	0	0.954119405	0.633	0.078

CD80	0	0.947443541	0.469	0.083
VSIG4	0	0.94577878	0.399	0.017
ETV3	0	0.945122373	0.654	0.142
GNA121	0	0.943002042	0.786	0.245
PITPNA	0	0.941187435	0.758	0.217
MYOF	0	0.940468311	0.502	0.044
VDR1	0	0.939879484	0.604	0.107
FCGR2B1	0	0.935610389	0.532	0.098
GNA15	0	0.935514891	0.707	0.131
CYFIP1	0	0.934222853	0.633	0.063
NRIP11	0	0.932603385	0.715	0.239
LINC00278	0	0.931898187	0.303	0.08
HLA-DMB1	0	0.93116308	0.743	0.202
CLEC5A	0	0.928604472	0.365	0.014
MITF	0	0.927559663	0.389	0.022
MIR3945HG	0	0.926511313	0.418	0.015
GNS	0	0.926455295	0.686	0.131
ADAM9	0	0.92599702	0.599	0.08
ARHGAP18	0	0.924418925	0.738	0.222
YWHAH	0	0.923996548	0.647	0.25
PHF19	0	0.923800775	0.51	0.125
LACTB	0	0.923089222	0.71	0.122
TMEM51	0	0.921331394	0.483	0.021
HIP1	0	0.920304643	0.575	0.142
KDM6B1	0	0.919144556	0.866	0.276
PPP1R15B	0	0.91895199	0.766	0.223
DOCK5	0	0.918185694	0.625	0.075
ARL5B	0	0.917540368	0.619	0.117
RAC1	0	0.916901304	0.919	0.513
ATF61	0	0.916153869	0.833	0.399
ATP6V1F	0	0.916034317	0.82	0.384
PEAK11	0	0.913020113	0.689	0.208
IL10	0	0.911135386	0.346	0.025
SNTB1	0	0.909453292	0.399	0.078
PAK11	0	0.907275135	0.691	0.146
NOTCH2NLC	0	0.906166354	0.523	0.067
LONRF3	0	0.905520341	0.382	0.042
STK10	0	0.904738948	0.837	0.433
LAIR1	0	0.903192207	0.608	0.075
PHACTR4	0	0.900554785	0.616	0.261
ZNF804A	0	0.895752728	0.412	0.052
CEP1701	0	0.895075356	0.767	0.211
CSTB	0	0.894086958	0.841	0.397

PDGFC	0	0.893557907	0.372	0.022
SLC15A3	0	0.893354408	0.622	0.043
EFHD2	0	0.889896396	0.855	0.315
RUNX1	0	0.887164083	0.896	0.492
CTNNA1	0	0.886432466	0.745	0.183
AL512603.2	0	0.882827417	0.373	0.052
ST3GAL6	0	0.882254096	0.448	0.022
GABARAP	0	0.880860621	0.902	0.56
ZNF710	0	0.88083882	0.6	0.096
SPRED2	0	0.874418651	0.542	0.102
KLF10	0	0.872287251	0.627	0.097
JDP2	0	0.87106344	0.529	0.046
ZNF516	0	0.868372348	0.51	0.047
SMIM25	0	0.86777959	0.497	0.022
GRINA	0	0.865908561	0.632	0.073
KCNE1	0	0.864769004	0.361	0.015
ATP6V0B	0	0.862033541	0.805	0.334
TSC22D21	0	0.860998227	0.795	0.333
HNRNPC	0	0.860300536	0.987	0.841
ZFC3H1	0	0.860147232	0.829	0.336
C9orf721	0	0.859146014	0.748	0.222
ADM	0	0.857952651	0.45	0.036
LILRB4	0	0.855322539	0.534	0.032
RP2	0	0.855209255	0.6	0.094
MGLL	0	0.853943255	0.4	0.05
HEXB	0	0.851715471	0.677	0.127
RTN1	0	0.851050174	0.389	0.014
ATG7	0	0.849894878	0.802	0.316
SLC7A7	0	0.84818308	0.556	0.041
PLAU	0	0.845203023	0.43	0.028
BAZ1A	0	0.841993537	0.915	0.501
MCOLN21	0	0.841978671	0.5	0.175
KCNQ1	0	0.841895084	0.509	0.086
ARPC5	0	0.840113185	0.899	0.493
HMOX1	0	0.838880056	0.476	0.071
NRIP3	0	0.838447759	0.433	0.039
CCDC138	0	0.837164115	0.53	0.21
PEA15	0	0.835978992	0.628	0.088
FAM20C	0	0.835371125	0.379	0.017
GRASP1	0	0.834893119	0.769	0.197
PTAFR	0	0.83376965	0.53	0.031
PTPN11	0	0.830784514	0.924	0.552
LDLR	0	0.830648545	0.585	0.151

ACSL41	0	0.829327392	0.682	0.225
LILRB2	0	0.829217589	0.513	0.017
USP121	0	0.828318353	0.793	0.36
MPP1	0	0.82422317	0.561	0.048
THEMIS21	0	0.823321159	0.725	0.146
STK3	0	0.8227912	0.614	0.134
CLIC2	0	0.822254473	0.399	0.028
ARHGEF2	0	0.82152037	0.621	0.107
SUSD6	0	0.821389965	0.81	0.33
TUBB61	0	0.821300214	0.659	0.116
PIM3	0	0.817462693	0.714	0.232
SLCO2B1	0	0.816232875	0.409	0.025
LINC01471	0	0.816009108	0.262	0.004
RFX2	0	0.815003889	0.551	0.117
SLC25A19	0	0.812970383	0.556	0.096
RCOR11	0	0.812860496	0.819	0.381
MPEG1	0	0.81212672	0.513	0.047
RASSF4	0	0.811973849	0.51	0.04
RASSF5	0	0.808917129	0.798	0.319
DUSP6	0	0.806112604	0.419	0.059
YBX31	0	0.806061345	0.839	0.228
TNFSF13	0	0.80552175	0.522	0.04
PNRC1	0	0.804911722	0.957	0.761
PLSCR2	0	0.804134274	0.277	0.013
PKIB	0	0.803362015	0.3	0.024
EHD1	0	0.803330715	0.686	0.248
TNFRSF1B1	0	0.801561448	0.901	0.422
APP1	0	0.799622051	0.589	0.151
CCRL2	0	0.798681198	0.5	0.028
ATP2B1-AS1	0	0.798526731	0.661	0.202
SERPINB9	0	0.797798597	0.919	0.574
PSEN1	0	0.797046229	0.836	0.375
GPR132	0	0.794749525	0.819	0.282
VAV2	0	0.793540098	0.444	0.073
RGL1	0	0.792670864	0.413	0.036
HOMER11	0	0.79252711	0.506	0.174
SLC8B1	0	0.791179727	0.512	0.086
RASSF3	0	0.789361363	0.721	0.268
ATP1B1	0	0.789311862	0.537	0.132
ACER3	0	0.78918532	0.658	0.171
CTNNBL1	0	0.787094539	0.62	0.237
PRKCE1	0	0.786940007	0.839	0.37
CHMP1B	0	0.784214909	0.771	0.324

CTSC1	0	0.783647824	0.817	0.396
GBP1	0	0.78192847	0.497	0.155
MAN2B1	0	0.780058778	0.689	0.148
SNX101	0	0.779859757	0.685	0.158
BLVRB	0	0.77924903	0.627	0.129
UBE2R2	0	0.779141444	0.816	0.353
SRC	0	0.77794701	0.481	0.03
PIK3R6	0	0.77742917	0.431	0.034
CPEB4	0	0.776836674	0.763	0.269
CD581	0	0.776424966	0.834	0.354
OSM	0	0.776051524	0.437	0.03
CANX	0	0.774467575	0.833	0.346
CD302	0	0.773986567	0.61	0.108
EIF4E	0	0.773605327	0.709	0.294
ZC3H12C1	0	0.772905326	0.516	0.105
AP1S2	0	0.772788723	0.662	0.168
LILRB3	0	0.772339359	0.523	0.022
PYCARD	0	0.768013739	0.69	0.232
CLIP2	0	0.767597419	0.361	0.055
TTYH3	0	0.767298331	0.521	0.061
XYLT11	0	0.766957668	0.764	0.385
TLR4	0	0.766731788	0.466	0.02
VAMP8	0	0.766404756	0.825	0.451
TRPS12	0	0.765934665	0.855	0.449
CERS6	0	0.76390112	0.621	0.202
HK2	0	0.762647647	0.417	0.038
HNMT	0	0.762012202	0.495	0.024
C3AR1	0	0.759979239	0.551	0.067
CD36	0	0.758700564	0.338	0.016
PDE8A1	0	0.757257465	0.693	0.261
GADD45B	0	0.757135663	0.882	0.428
IQCJ-SCHIP1	0	0.757025573	0.321	0.015
AHR2	0	0.756820602	0.821	0.357
AGPAT4	0	0.756544083	0.683	0.254
KLF71	0	0.756418424	0.573	0.141
SDCBP	0	0.755864507	0.943	0.536
CSTA	0	0.754258239	0.597	0.066
SVIL	0	0.753700238	0.505	0.096
VASP	0	0.751630578	0.812	0.3
CYP1B1	0	0.75146152	0.268	0.008
SOAT1	0	0.750747656	0.624	0.17
ERI2	0	0.750462939	0.277	0.021
SLC31A2	0	0.750231182	0.54	0.044

CPNE8	0	0.749033937	0.487	0.071
ACP5	0	0.748876435	0.511	0.174
EPB41L2	0	0.745363465	0.532	0.127
SEMA3C	0	0.744284858	0.27	0.02
RAB32	0	0.743270059	0.512	0.03
TNFRSF10B	0	0.742671337	0.584	0.146
ADAMTSL4-A	0	0.741815287	0.799	0.304
CHST15	0	0.741443266	0.456	0.085
DAB2	0	0.74061434	0.408	0.031
OPN3	0	0.738763628	0.458	0.046
N4BP1	0	0.738761549	0.809	0.397
TFDP1	0	0.738123464	0.559	0.118
CD300A	0	0.738055568	0.513	0.054
GNA131	0	0.737817056	0.863	0.419
CLEC12A	0	0.736122302	0.395	0.016
PLD3	0	0.73569833	0.488	0.126
SSH11	0	0.734357218	0.634	0.167
PPM1L	0	0.731795505	0.406	0.089
PLEKHB2	0	0.731157175	0.774	0.283
SMIM3	0	0.730548084	0.516	0.067
STAB1	0	0.730324078	0.4	0.021
PHLDB1	0	0.729992747	0.398	0.019
TSPO	0	0.729260953	0.795	0.424
EPAS1	0	0.728225311	0.478	0.109
CSF3R	0	0.727605172	0.508	0.025
RNASE61	0	0.726712133	0.554	0.097
TXN	0	0.726400327	0.847	0.457
PPT1	0	0.72620181	0.648	0.16
NIBAN2	0	0.724483679	0.445	0.022
DHX34	0	0.72383548	0.52	0.098
LAP3	0	0.723049408	0.745	0.294
GTF2IRD1	0	0.722819224	0.298	0.019
UBE2D1	0	0.722561834	0.693	0.216
TNIP1	0	0.722278979	0.726	0.273
PLIN22	0	0.721810841	0.76	0.348
UBE2E11	0	0.719650796	0.694	0.251
ARHGAP22	0	0.717627275	0.39	0.02
ATP6V0D1	0	0.716918217	0.798	0.262
RAB10	0	0.715742194	0.874	0.467
LPCAT1	0	0.715215898	0.63	0.13
PABPC4	0	0.714663103	0.77	0.289
RHEB	0	0.714102341	0.84	0.383
IFNGR1	0	0.714067546	0.786	0.256

ARRB2	0	0.713962097	0.709	0.149
ENG	0	0.710783866	0.534	0.054
SHTN1	0	0.710646498	0.488	0.031
PHC2	0	0.708172263	0.585	0.101
ABHD12	0	0.707846193	0.611	0.171
PTEN	0	0.707509837	0.843	0.393
SCUBE2	0	0.706654064	0.254	0.006
MYO1E1	0	0.706587284	0.593	0.165
EMP1	0	0.703232494	0.315	0.058
MIR222HG	0	0.702857536	0.379	0.059
GAS2L3	0	0.702138629	0.383	0.018
LINC01010	0	0.701792159	0.31	0.021
NEDD4L	0	0.701667942	0.406	0.081
METRNL1	0	0.70013013	0.848	0.301
AL138720.1	0	0.69922274	0.464	0.079
ABTB21	0	0.699196339	0.468	0.166
GASK1B	0	0.697604265	0.4	0.014
STK40	0	0.696994034	0.617	0.149
FAM102B1	0	0.696759327	0.694	0.237
LYN1	0	0.696112253	0.93	0.326
AC126696.1	0	0.69534575	0.399	0.06
EMP3	0	0.694528938	0.856	0.462
SNAI1	0	0.693970977	0.435	0.035
ZNF385A	0	0.691074062	0.491	0.027
HES1	0	0.690856537	0.413	0.076
SLC39A11	0	0.690144487	0.617	0.227
LPCAT2	0	0.686270409	0.472	0.027
ATP6V1C1	0	0.685970922	0.604	0.133
BTBD7	0	0.684032635	0.627	0.235
FHIT	0	0.682357545	0.44	0.139
EDEM11	0	0.681410386	0.685	0.213
NQO2	0	0.681231706	0.563	0.09
MTSS11	0	0.680697443	0.565	0.211
QSOX1	0	0.677203586	0.548	0.082
SRGAP21	0	0.677172492	0.669	0.241
AC106865.2	0	0.677140054	0.344	0.015
TPP1	0	0.676273482	0.689	0.173
GPX4	0	0.676184884	0.842	0.456
ENPP2	0	0.676063036	0.315	0.042
SLC22A4	0	0.674187638	0.371	0.012
PNPLA8	0	0.674044592	0.825	0.392
TP53BP21	0	0.674034688	0.732	0.259
RAB1A	0	0.673846892	0.918	0.481

ATP6AP1	0	0.673194559	0.633	0.125
PIK3CB	0	0.6715795	0.539	0.162
TKT	0	0.670786094	0.765	0.284
PLEKHG2	0	0.670492486	0.616	0.171
BTK1	0	0.67007564	0.48	0.107
EIF2AK31	0	0.66881887	0.755	0.336
SEC24A	0	0.666993114	0.581	0.169
GNB4	0	0.666274444	0.534	0.081
IDO2	0	0.666129164	0.36	0.016
IL1RAP	0	0.664879135	0.587	0.122
AC090617.5	0	0.664701955	0.401	0.021
GM2A	0	0.662264102	0.522	0.088
SIGLEC10	0	0.661332911	0.42	0.037
GSTP1	0	0.659387252	0.864	0.431
ELF2	0	0.658940996	0.796	0.388
DPYSL2	0	0.657990204	0.593	0.105
RBBP81	0	0.65629621	0.559	0.171
SAP30	0	0.655290423	0.558	0.136
SLC25A13	0	0.652797296	0.545	0.146
GLIPR2	0	0.652718899	0.63	0.146
AFF41	0	0.652242913	0.917	0.534
GNAI2	0	0.651482838	0.883	0.52
CHML	0	0.651464224	0.454	0.061
ERGIC11	0	0.651208184	0.728	0.245
CLEC4A	0	0.651190496	0.443	0.031
TUBB	0	0.651122903	0.696	0.251
ADA2	0	0.649473103	0.606	0.133
TMEM165	0	0.649340628	0.825	0.39
DNAI2	0	0.646689768	0.301	0.014
IGF2BP2	0	0.646030462	0.318	0.018
FLNA1	0	0.645770542	0.732	0.271
THAP2	0	0.645345842	0.488	0.065
SDCCAG81	0	0.644798141	0.685	0.217
TRPM2	0	0.644147074	0.428	0.041
CFP	0	0.642144309	0.327	0.016
PDLIM5	0	0.641707619	0.598	0.172
PARVB1	0	0.640817642	0.715	0.212
EIF4A1	0	0.640655644	0.941	0.704
NPTN1	0	0.639986623	0.67	0.214
DENND1A	0	0.638021628	0.757	0.303
ADAM17	0	0.637851991	0.68	0.26
LGALS9	0	0.637197571	0.632	0.151
HAVCR21	0	0.63702112	0.69	0.174

PTTG1IP	0	0.635978698	0.685	0.192
AF117829.1	0	0.634643369	0.499	0.107
MAPKAPK2	0	0.634538564	0.752	0.285
SLC6A6	0	0.633697731	0.633	0.189
GNB1	0	0.633399963	0.934	0.561
ZNF438	0	0.631393375	0.454	0.112
SDC4	0	0.629271368	0.452	0.054
CPED1	0	0.628355985	0.331	0.037
CPEB2	0	0.628304151	0.517	0.154
FCGR1A	0	0.625569812	0.361	0.015
SLC43A3	0	0.623691508	0.469	0.042
NOTCH21	0	0.62319484	0.581	0.18
NFKBIE	0	0.622396161	0.527	0.08
RREB11	0	0.621387542	0.633	0.204
PLBD1	0	0.621131044	0.483	0.049
AVPI1	0	0.621050296	0.473	0.068
ITGAM	0	0.62074373	0.392	0.033
NAV1	0	0.620449803	0.333	0.037
SPINT2	0	0.620191043	0.547	0.124
SYK1	0	0.617183601	0.671	0.152
MPHOSPH6	0	0.616867059	0.633	0.152
NRG1	0	0.615727867	0.266	0.009
HIVEP11	0	0.61458592	0.795	0.382
GLA1	0	0.613457219	0.634	0.183
SLC16A3	0	0.61159472	0.696	0.217
DST	0	0.611438962	0.354	0.053
TBC1D2	0	0.610742212	0.371	0.04
SMS	0	0.610367188	0.633	0.212
TMCC3	0	0.610199958	0.504	0.064
ARHGAP21	0	0.610124867	0.495	0.11
GRK31	0	0.609131724	0.566	0.16
LINC00243	0	0.608198712	0.252	0.037
ZBTB43	0	0.607781174	0.578	0.191
FRMD4B1	0	0.607767958	0.54	0.171
ERN1	0	0.607654497	0.805	0.35
ARRB1	0	0.60699341	0.428	0.041
SGPL1	0	0.604340923	0.489	0.093
AC135050.3	0	0.603964202	0.325	0.027
SIAH1	0	0.603897359	0.52	0.102
CTNND1	0	0.603821196	0.536	0.111
GPR157	0	0.603766846	0.293	0.034
ETF1	0	0.603577522	0.861	0.378
FCAR	0	0.602617448	0.257	0.007

LRP1	0	0.601933557	0.421	0.024
GSAP1	0	0.601924531	0.575	0.133
LAPTM51	0	0.600957941	0.965	0.686
SLAMF8	0	0.600215658	0.415	0.022
OSBPL1A	0	0.59997197	0.39	0.033
ATOX1	0	0.597894671	0.682	0.233
LAMP2	0	0.597586513	0.669	0.2
TMEM163	0	0.596258202	0.325	0.08
RGS121	0	0.595456963	0.347	0.034
AC253572.2	0	0.594274844	0.39	0.094
MFSD12	0	0.592469717	0.511	0.106
FRY	0	0.591339159	0.369	0.055
IL15	0	0.591179052	0.372	0.062
RCAN1	0	0.590346679	0.314	0.049
GNG10	0	0.590240886	0.655	0.171
ZNF277	0	0.588286318	0.552	0.187
NFKBID1	0	0.587761483	0.677	0.19
NR4A21	0	0.587156179	0.906	0.488
FPR2	0	0.585649017	0.252	0.008
RAB13	0	0.585426043	0.466	0.048
ADAP2	0	0.585415377	0.412	0.045
SERPINB6	0	0.584204317	0.609	0.106
CLN8	0	0.583510961	0.536	0.116
CHKA	0	0.582964012	0.611	0.177
SLC25A44	0	0.580932863	0.357	0.089
CMTM61	0	0.58089115	0.86	0.41
CCR5AS	0	0.580198617	0.365	0.022
TREM2	0	0.580140525	0.263	0.018
MTHFD1L	0	0.579992	0.481	0.139
CCDC200	0	0.579787243	0.366	0.065
DDX60L	0	0.579343687	0.529	0.192
USP32	0	0.5778616	0.647	0.214
CD300LB	0	0.576784316	0.319	0.009
KIF13A	0	0.575950763	0.38	0.048
SDSL	0	0.574531138	0.41	0.017
ZC3H12A	0	0.572331399	0.582	0.13
TBC1D91	0	0.571962108	0.473	0.11
P2RX4	0	0.570358589	0.528	0.107
SLC12A7	0	0.569763577	0.444	0.067
AMZ11	0	0.567961397	0.461	0.112
GNG5	0	0.566606239	0.84	0.457
BCL6	0	0.56484145	0.643	0.189
YBX1	0	0.563946267	0.946	0.761

FAM20A	0	0.563927677	0.257	0.023
STXBP2	0	0.56390396	0.583	0.156
TNFRSF10D	0	0.562441887	0.438	0.119
RAB7B	0	0.561750051	0.314	0.011
ACSL5	0	0.560562377	0.515	0.122
ATF5	0	0.559807611	0.46	0.095
RGS102	0	0.558446446	0.801	0.382
YTHDF3	0	0.554177171	0.768	0.344
SLC16A6	0	0.551168459	0.312	0.034
SAV11	0	0.550712709	0.473	0.13
AZIN1	0	0.548503417	0.777	0.312
PHLPP11	0	0.548313017	0.543	0.206
AGTPBP1	0	0.54791818	0.61	0.238
C3	0	0.546782962	0.291	0.032
RHBDF21	0	0.543437556	0.643	0.175
LINC00654	0	0.543333819	0.281	0.049
MAD1L11	0	0.542929571	0.643	0.255
SERPINB9P1	0	0.540960516	0.512	0.124
MERTK	0	0.538955018	0.3	0.04
MEFV	0	0.538794902	0.312	0.006
PECAM1	0	0.538335368	0.509	0.113
MMP2-AS1	0	0.537293158	0.305	0.007
MRAS	0	0.537260241	0.313	0.014
CDCA4	0	0.537194732	0.386	0.067
IRF81	0	0.536069803	0.663	0.202
ATP6AP2	0	0.535827679	0.706	0.284
SLC41A2	0	0.534862999	0.405	0.111
BTBD19	0	0.534141102	0.412	0.051
DOT1L	0	0.53406086	0.455	0.08
P2RX7	0	0.533940382	0.3	0.035
ATP6V0C	0	0.533104209	0.888	0.519
LINC00884	0	0.533023217	0.349	0.033
GPAT3	0	0.532152881	0.279	0.043
GPR84	0	0.531809314	0.317	0.009
KANSL1L	0	0.531419714	0.42	0.101
ARHGEF10L	0	0.531194662	0.324	0.014
SQOR	0	0.530701356	0.578	0.163
SLC37A2	0	0.530476519	0.341	0.018
TALDO1	0	0.530256206	0.755	0.286
KIFC3	0	0.529904077	0.376	0.031
C1orf54	0	0.528299149	0.377	0.043
PXDC1	0	0.527856777	0.335	0.047
HRH2	0	0.527729716	0.385	0.028

IL1R2	0	0.526824837	0.457	0.107
VASH1	0	0.524449504	0.396	0.035
FCHO2	0	0.524237949	0.414	0.075
C2orf92	0	0.522281509	0.274	0.036
ASTL	0	0.519937637	0.359	0.076
OAZ2	0	0.519377142	0.494	0.096
PDE2A	0	0.519092238	0.309	0.019
SEC24D	0	0.51894437	0.562	0.18
DNMBP1	0	0.518528181	0.494	0.115
ANKDD1A	0	0.51784905	0.32	0.046
C19orf38	0	0.51777487	0.383	0.041
RNH1	0	0.517358955	0.736	0.298
MDC1	0	0.516953154	0.268	0.064
SMOX	0	0.516892228	0.307	0.02
MMP14	0	0.513307851	0.355	0.019
JAML1	0	0.51112028	0.549	0.186
MFSD2A	0	0.510021548	0.325	0.026
PLBD2	0	0.509945313	0.393	0.043
ST14	0	0.509099907	0.419	0.05
GAA	0	0.507146309	0.448	0.052
ANKRD22	0	0.506519616	0.287	0.017
GPATCH2L	0	0.506349355	0.598	0.204
KCTD20	0	0.505439009	0.627	0.215
TES	0	0.505298457	0.69	0.264
LY96	0	0.504879374	0.573	0.139
PRCP1	0	0.504729978	0.565	0.17
BAIAP2	0	0.504579331	0.386	0.064
CTTNBP2NL	0	0.504156334	0.384	0.052
SESN2	0	0.50407744	0.457	0.109
TENT5A	0	0.503325901	0.387	0.094
TNFRSF1A	0	0.502924995	0.481	0.059
ALDH1A2	0	0.501118975	0.308	0.019
RELT	0	0.5010868	0.499	0.09
SLC11A2	0	0.500693209	0.476	0.101
LILRA5	0	0.500600644	0.289	0.011
PLEKHO11	0	0.500418881	0.647	0.223
TRIM25	0	0.499499981	0.453	0.152
P4HB	0	0.499119532	0.741	0.315
SLC66A2	0	0.498985642	0.588	0.158
NAGK	0	0.498345641	0.479	0.156
PDGFB	0	0.498007165	0.251	0.017
CDK141	0	0.497346266	0.709	0.291
SPHK1	0	0.495768324	0.348	0.018

AC011511.2	0	0.495557515	0.398	0.048
SPDYA	0	0.49304371	0.499	0.165
OSCAR	0	0.493011274	0.381	0.019
SECTM1	0	0.492658839	0.387	0.024
EAF1	0	0.492263658	0.426	0.096
NCEH1	0	0.48949074	0.358	0.06
ANO6	0	0.489431983	0.553	0.19
PGD	0	0.489373372	0.545	0.106
RXRA	0	0.48872162	0.387	0.04
LRRK2	0	0.487926694	0.371	0.053
PPFIA1	0	0.486612594	0.62	0.219
ITPRIP1	0	0.486102516	0.577	0.162
OTUD11	0	0.485215928	0.553	0.195
PGS1	0	0.483088051	0.468	0.098
PLEKHM21	0	0.482718726	0.62	0.2
RHOA	0	0.482630829	0.276	0.017
AHRR	0	0.477897708	0.281	0.038
AC002091.1	0	0.477325681	0.285	0.014
TULP2	0	0.477272951	0.442	0.119
PURB	0	0.477121286	0.531	0.131
SH3BP2	0	0.475201835	0.463	0.076
STX4	0	0.474159452	0.575	0.155
IPMK	0	0.473670298	0.532	0.157
SRA1	0	0.472838464	0.647	0.246
KDM7A	0	0.472491023	0.558	0.2
ARAP1	0	0.472480787	0.506	0.096
VSIR1	0	0.471640107	0.637	0.236
RUFY3	0	0.471167392	0.458	0.12
SKAP21	0	0.469442252	0.744	0.259
CTSA	0	0.468345262	0.579	0.191
EVI51	0	0.467857172	0.567	0.166
RRBP1	0	0.466713404	0.689	0.223
M6PR	0	0.466187528	0.692	0.256
TBC1D30	0	0.465434343	0.253	0.011
NEK6	0	0.464904491	0.42	0.065
SLC2A9	0	0.463761706	0.308	0.025
ARSB	0	0.463693086	0.43	0.128
EEPD1	0	0.463308327	0.354	0.09
LAMP1	0	0.462635844	0.675	0.273
ACAT2	0	0.462530682	0.508	0.156
AC139099.2	0	0.461968134	0.311	0.016
SCARB2	0	0.461141857	0.483	0.116
IL1R11	0	0.459490141	0.535	0.132

IL10RB	0	0.459396386	0.57	0.157
LINC00877	0	0.458576595	0.275	0.034
SERPING1	0	0.458324789	0.327	0.035
NPL	0	0.457846354	0.375	0.062
DUSP3	0	0.456248771	0.405	0.039
RIPOR3	0	0.45429479	0.337	0.076
IRF2BP2	0	0.453791045	0.693	0.255
WBP1L	0	0.451476628	0.483	0.112
FES	0	0.450695305	0.403	0.046
AKR1A1	0	0.450609894	0.601	0.209
CNTLN	0	0.450205012	0.341	0.031
SIPA1L2	0	0.450073027	0.387	0.051
SLC45A4	0	0.449925946	0.412	0.133
TBK1	0	0.449836718	0.656	0.265
SPART	0	0.449533606	0.491	0.092
CHSY1	0	0.44742735	0.492	0.15
FHAD1	0	0.446559662	0.286	0.024
PRPSAP1	0	0.446171881	0.395	0.093
SLC31A1	0	0.445383628	0.389	0.051
CAMKK2	0	0.445374657	0.352	0.064
MOB3A1	0	0.445190293	0.728	0.312
CNDP2	0	0.444875289	0.588	0.185
SIGLEC9	0	0.444555573	0.333	0.014
LSS	0	0.444247279	0.27	0.062
CPPED1	0	0.443990911	0.468	0.084
DENND31	0	0.443289622	0.551	0.15
SMCO4	0	0.441497309	0.454	0.079
AATK	0	0.439929819	0.304	0.03
LAT21	0	0.438849842	0.579	0.145
BCL3	0	0.438423259	0.546	0.137
BAZ2B	0	0.438418793	0.661	0.258
RNF149	0	0.438390032	0.896	0.48
ABCC3	0	0.437741498	0.259	0.012
SPATC1	0	0.437632071	0.264	0.008
MAP3K13	0	0.43762001	0.474	0.153
SRGAP2B	0	0.43755247	0.431	0.112
LACC1	0	0.437112511	0.318	0.028
CYB5D1	0	0.437004972	0.316	0.031
COMT	0	0.436235547	0.612	0.187
ATG3	0	0.435422284	0.687	0.253
ARID3A	0	0.433763769	0.353	0.072
SLC8A1-AS1	0	0.433631578	0.291	0.015
AC013652.11	0	0.433568198	0.35	0.094

AC040970.1	0	0.432600289	0.312	0.034
LAMTOR2	0	0.431948321	0.604	0.216
MSRA	0	0.431670281	0.535	0.151
ZYX	0	0.431076703	0.547	0.124
CAMSAP2	0	0.430101704	0.295	0.033
UBAP1	0	0.428658418	0.722	0.316
ASPH	0	0.426361649	0.464	0.123
PLEC	0	0.425292919	0.556	0.161
TBC1D7	0	0.424852286	0.418	0.076
CD42	0	0.424592733	0.645	0.196
TMEM273	0	0.424379571	0.378	0.072
CD401	0	0.423940053	0.429	0.118
SPECC1	0	0.423202698	0.332	0.047
HSBP1	0	0.422629053	0.662	0.236
TRIB1	0	0.422617764	0.464	0.111
NOD2	0	0.420888872	0.303	0.023
HES4	0	0.419522569	0.325	0.067
ADCY3	0	0.419318094	0.383	0.116
GNB2	0	0.419055124	0.699	0.243
SSBP3	0	0.418930175	0.414	0.122
LINC00641	0	0.41802032	0.348	0.047
CAMK1	0	0.417613563	0.32	0.043
CASP10	0	0.416966066	0.335	0.089
NAIP	0	0.415854605	0.409	0.061
ATP11A	0	0.415665162	0.525	0.164
ZBTB46	0	0.413257766	0.28	0.049
PLIN3	0	0.411868329	0.492	0.109
CD9	0	0.411642491	0.429	0.11
SAMHD12	0	0.410634596	0.786	0.337
SLC25A51	0	0.409828935	0.367	0.087
RBKS	0	0.409023917	0.524	0.173
LAMB3	0	0.409018765	0.279	0.015
CCR1	0	0.408761743	0.311	0.047
MGST2	0	0.40583851	0.401	0.058
ZFP91	0	0.405760376	0.642	0.252
AC008771.1	0	0.40359702	0.402	0.092
CDCP1	0	0.403066615	0.292	0.016
CASP11	0	0.402342147	0.562	0.175
ENOSF1	0	0.401518074	0.455	0.15
KIAA0930	0	0.400961315	0.39	0.061
AC007952.4	0	0.400656959	0.469	0.138
TRAPPC5	0	0.399811364	0.733	0.325
AMPD2	0	0.399644069	0.335	0.03

CLTC	0	0.39910605	0.702	0.286
RGS18	0	0.398380412	0.298	0.017
AP000763.3	0	0.397990544	0.346	0.045
SUSD1	0	0.39752414	0.345	0.056
SCO2	0	0.397458572	0.498	0.127
SERPINB8	0	0.396120411	0.376	0.052
MTF1	0	0.395498589	0.371	0.093
SLC36A41	0	0.394411731	0.557	0.178
MIR22HG	0	0.394265991	0.386	0.059
VPS35	0	0.39390815	0.612	0.201
OLFML2B	0	0.392781652	0.254	0.013
NUCB1	0	0.392635682	0.619	0.226
PLEKHO2	0	0.391531861	0.428	0.07
NUDT16	0	0.391285208	0.405	0.072
ADAM8	0	0.390387679	0.408	0.081
LILRB1	0	0.389124312	0.357	0.06
TCIRG1	0	0.38898239	0.57	0.159
ZMIZ1-AS1	0	0.388923811	0.254	0.012
DISC11	0	0.38853778	0.476	0.154
MCOLN1	0	0.387729434	0.376	0.061
CYP2S1	0	0.387353457	0.286	0.014
CSRNP1	0	0.386646495	0.697	0.246
ZNFX1	0	0.385492037	0.629	0.245
HS3ST3B11	0	0.382711548	0.453	0.153
JAG1	0	0.38072145	0.263	0.03
CMKLR1	0	0.379493003	0.25	0.013
SIGLEC12	0	0.379201116	0.267	0.014
ADCY9	0	0.379102644	0.25	0.036
BLOC1S6	0	0.37880032	0.668	0.264
SPG21	0	0.375459488	0.517	0.127
PRKACA	0	0.374454578	0.401	0.064
TCN2	0	0.373220127	0.276	0.023
SPATA5L1	0	0.373155307	0.287	0.06
LIPA	0	0.373151276	0.387	0.117
SLC9A8	0	0.372431342	0.535	0.174
HK1	0	0.371629775	0.553	0.18
ACOT91	0	0.371413534	0.632	0.21
PLK3	0	0.370863471	0.623	0.216
MTHFD2	0	0.369978241	0.717	0.297
CAPNS1	0	0.369913109	0.642	0.212
GZF1	0	0.369796713	0.35	0.073
GCA	0	0.369005165	0.516	0.132
NFAM1	0	0.368930209	0.287	0.024

AC090617.10	0	0.368384395	0.275	0.014
BLVRA	0	0.367515258	0.43	0.085
ZCCHC14	0	0.367453908	0.362	0.078
FKBP15	0	0.367228678	0.432	0.093
PLK2	0	0.36704263	0.322	0.068
EHD4	0	0.366240241	0.469	0.161
CRK	0	0.364053474	0.556	0.198
SERPINF1	0	0.363976257	0.273	0.041
AP000919.2	0	0.363102789	0.275	0.046
CEACAM4	0	0.362903485	0.261	0.011
ODF3B	0	0.362804974	0.426	0.088
RASSF21	0	0.362249452	0.523	0.158
CD721	0	0.361644119	0.502	0.137
MAFG	0	0.360907479	0.431	0.091
PLAGL1	0	0.360513031	0.394	0.104
DDAH2	0	0.360339304	0.479	0.108
TCEAL9	0	0.359908818	0.282	0.037
NAGA	0	0.359234142	0.356	0.043
PTPN9	0	0.355233447	0.35	0.102
CD300LF	0	0.354865798	0.252	0.014
GAS6	0	0.351521604	0.332	0.049
LTBR	0	0.350436442	0.307	0.02
PLA2G6	0	0.349620124	0.363	0.07
PALLD	0	0.349558462	0.29	0.037
BCKDK	0	0.349340235	0.368	0.054
SORT1	0	0.348899499	0.286	0.022
RRAGD	0	0.347716156	0.304	0.032
IL17RA	0	0.34763587	0.479	0.155
GOLIM4	0	0.347633426	0.418	0.1
ATP6V0A1	0	0.346737943	0.379	0.095
SNCA	0	0.345784319	0.264	0.026
TATDN2	0	0.345140331	0.357	0.094
HGSNAT	0	0.344906495	0.567	0.202
TET31	0	0.344873608	0.474	0.161
INSR	0	0.342695219	0.33	0.086
MIDN	0	0.340013017	0.684	0.272
2-Mar	0	0.339427466	0.443	0.103
COLGALT1	0	0.339379648	0.367	0.062
RAB34	0	0.339269166	0.366	0.047
PNP	0	0.339251588	0.487	0.166
CD33	0	0.33803715	0.258	0.012
AL355075.4	0	0.337226994	0.263	0.043
MYO1F1	0	0.33679283	0.627	0.209

GRAMD4	0	0.335102794	0.439	0.125
FMNL3	0	0.333133521	0.367	0.099
XBP1	0	0.332309081	0.75	0.286
MTHFR	0	0.332155081	0.3	0.067
EHBP1L1	0	0.332100053	0.507	0.139
ITPRID2	0	0.33045476	0.349	0.068
SCAT1	0	0.329141854	0.25	0.034
WDR1	0	0.3288387	0.678	0.257
MYO1G	0	0.328464668	0.495	0.157
FUOM	0	0.328247612	0.435	0.11
UQCRC1	0	0.327366991	0.513	0.141
HEIH	0	0.327134491	0.412	0.091
MSANTD3	0	0.325547459	0.26	0.047
NFIC	0	0.324863027	0.436	0.108
AC090559.1	0	0.324028355	0.266	0.017
PYGL	0	0.323719194	0.269	0.016
SCARB1	0	0.322081817	0.284	0.067
CFLAR-AS1	0	0.320581342	0.37	0.081
AHCYL1	0	0.319712352	0.48	0.153
MKNK1	0	0.31854377	0.457	0.126
VPS37C	0	0.318360903	0.259	0.029
ALAS1	0	0.317863547	0.3	0.079
DBNDD2	0	0.317679916	0.376	0.076
METTL7A	0	0.315893581	0.322	0.07
UNC93B1	0	0.315073662	0.442	0.115
STX3	0	0.314881757	0.314	0.036
FLVCR2	0	0.314089417	0.32	0.069
FERMT3	0	0.312281911	0.604	0.212
NANS	0	0.31086023	0.641	0.249
MBOAT7	0	0.309252029	0.436	0.099
E2F3	0	0.30888104	0.443	0.131
NBPF19	0	0.308126489	0.251	0.034
SLC17A5	0	0.307615672	0.332	0.092
IL10RB-DT	0	0.307532733	0.262	0.019
RHOT1	0	0.306968892	0.396	0.111
SPNS1	0	0.305577944	0.371	0.075
CYB561A3	0	0.303864205	0.376	0.103
ARF3	0	0.302994464	0.498	0.14
RIT1	0	0.302830318	0.507	0.155
LRRC25	0	0.301880356	0.256	0.018
APOBR	0	0.301636089	0.292	0.034
ANXA4	0	0.301629439	0.436	0.11
FUCA2	0	0.299743516	0.397	0.088

PTGER2	0	0.297635735	0.283	0.052
C20orf194	0	0.295906835	0.352	0.094
LGALS3BP	0	0.294463519	0.301	0.066
CTIF	0	0.293648954	0.278	0.045
AC104695.2	0	0.292939446	0.315	0.067
WIPI1	0	0.292442872	0.293	0.066
CHP1	0	0.292149357	0.466	0.132
RALB	0	0.291522898	0.405	0.087
TPD52L2	0	0.291362711	0.429	0.107
TBC1D10A	0	0.29074119	0.318	0.077
AC026202.2	0	0.290291861	0.439	0.134
TICAM1	0	0.289356228	0.32	0.064
DHRS3	0	0.288212512	0.299	0.065
NBPF14	0	0.28622142	0.273	0.05
LINC00847	0	0.284391746	0.288	0.05
SCPEP11	0	0.283729345	0.463	0.141
MYD88	0	0.283643217	0.372	0.079
CSF2RB	0	0.28290061	0.282	0.042
LINC00963	0	0.282867774	0.52	0.159
TSPAN4	0	0.281881174	0.256	0.029
ACADVL	0	0.281698719	0.523	0.169
CAT	0	0.27994924	0.423	0.11
VAMP3	0	0.279451893	0.421	0.094
STX6	0	0.27929433	0.443	0.134
METTL6	0	0.27724473	0.306	0.081
PNPLA6	0	0.27678439	0.323	0.066
TTL	0	0.276291496	0.299	0.071
ITPK1	0	0.274177862	0.4	0.104
PLXND1	0	0.273225319	0.312	0.052
PDLIM7	0	0.271678258	0.256	0.036
HLA-DOA	0	0.271490086	0.327	0.07
CDK2AP1	0	0.271181524	0.372	0.077
SCML1	0	0.268146572	0.428	0.118
AKR1B1	0	0.267657619	0.409	0.119
CARM1	0	0.266682494	0.261	0.053
TWF2	0	0.266402572	0.512	0.175
NCKAP5L	0	0.26608605	0.289	0.053
TUBGCP2	0	0.265872951	0.496	0.151
STARD3NL	0	0.264898779	0.467	0.138
ABHD2	0	0.264218426	0.449	0.139
BMP2K1	0	0.264089943	0.541	0.195
ITPRIPL2	0	0.263846049	0.275	0.04
CDH23	0	0.263505474	0.256	0.039

ADAMTSL4	0	0.263002911	0.254	0.024
EIF4EBP1	0	0.262591249	0.433	0.114
LY861	0	0.26231847	0.477	0.129
TLR1	0	0.261951231	0.336	0.066
MAPKAPK3	0	0.259768124	0.357	0.076
LMO2	0	0.257335644	0.309	0.038
PIP5K1C	0	0.256310716	0.282	0.056
GALNT6	0	0.255369091	0.26	0.051
TMEM106A	0	0.254833567	0.279	0.048
PIGA	0	0.252593224	0.311	0.073
SNX27	0	0.25235622	0.381	0.098
NAAA	0	0.251724584	0.422	0.123
PLXNB2	0	0.250290487	0.261	0.031
NUBP1	0	0.250053157	0.448	0.137
ENO11	7.00E-308	0.5844333	0.881	0.535
TPRG1	1.86E-307	0.591279752	0.267	0.067
NAPA	2.16E-307	0.40983164	0.74	0.323
PGLS	2.29E-307	0.316831636	0.64	0.255
MPZL1	4.43E-307	0.260067601	0.283	0.074
PTPRM	5.22E-307	0.333096379	0.309	0.084
DIAPH21	8.50E-307	0.587433008	0.796	0.384
TYK2	1.19E-306	0.293084423	0.343	0.099
ANXA111	4.10E-306	0.453646758	0.741	0.334
RCC2	4.13E-305	0.287834208	0.444	0.149
TBC1D14	7.51E-305	0.344396413	0.48	0.169
TIPARP	1.28E-301	0.660322872	0.797	0.428
ACTB	2.42E-301	0.762763127	0.972	0.883
IRS22	9.45E-301	0.3314949	0.736	0.312
POR1	5.03E-300	0.278492748	0.582	0.221
PDIA3	1.50E-299	0.606856255	0.859	0.513
IFIH1	1.08E-298	0.402196529	0.488	0.176
MROH1	3.43E-298	0.269021196	0.314	0.088
SYNGR21	3.45E-298	0.332827197	0.614	0.245
ANKS1A	4.75E-298	0.382722443	0.475	0.169
RHOB1	8.59E-298	0.39907776	0.553	0.216
GRAMD1A	3.31E-297	0.331221808	0.466	0.164
RNF1451	8.41E-295	0.452603063	0.739	0.339
CSGALNACT2	4.62E-294	0.47795639	0.761	0.354
TMEM38B	7.68E-294	0.293793063	0.382	0.121
SLC2A3	9.62E-294	0.796160968	0.819	0.445
GPD2	5.26E-293	0.281826974	0.381	0.12
FNDC3A	2.04E-292	0.951613346	0.85	0.501
UBAC2	3.15E-292	0.661772903	0.852	0.452

ZC3H3	4.57E-292	0.273167705	0.285	0.075
ABHD5	3.34E-291	0.410843092	0.494	0.185
FKBP1A	5.05E-289	0.381340157	0.748	0.345
KCNN4	1.91E-288	0.253019471	0.262	0.067
MED13L1	2.09E-287	0.650665841	0.922	0.573
PDSS1	1.48E-286	0.475374231	0.296	0.083
GLRX1	1.80E-286	0.358004238	0.666	0.291
REV3L1	2.76E-286	0.811612953	0.819	0.462
TFRC	2.41E-285	0.880194388	0.686	0.342
TGIF11	4.69E-285	0.272113821	0.613	0.24
GBE1	4.95E-285	0.580863864	0.489	0.185
ATP1A1	2.37E-284	0.397587966	0.771	0.353
CMIP1	5.93E-282	0.557735699	0.895	0.498
SSR1	7.57E-280	0.276744981	0.577	0.227
IER5	8.12E-280	0.452735225	0.81	0.398
TPI1	2.68E-278	0.534126406	0.852	0.492
FNIP11	6.17E-278	0.509367417	0.844	0.437
POLG2	1.32E-277	0.341565861	0.416	0.143
TMSB10	1.73E-277	0.710496144	0.981	0.93
AZI2	3.32E-277	0.307207815	0.458	0.163
RAB5C	4.07E-277	0.346419564	0.734	0.33
DHRX	6.33E-277	0.41724034	0.598	0.249
SUMF1	1.63E-276	0.367892064	0.537	0.21
CSNK1A1	1.73E-276	0.562761401	0.926	0.576
YWHAG	2.26E-275	0.297385326	0.616	0.25
NDRG1	3.09E-275	0.400648308	0.626	0.265
PTK2B	3.63E-275	0.512689832	0.722	0.34
BCL2L1	5.33E-274	0.348310366	0.328	0.101
RDX1	6.68E-274	0.363479142	0.594	0.244
ENTPD12	6.24E-273	0.33885239	0.554	0.221
ERCC1	1.71E-270	0.31410695	0.654	0.276
B4GALT1	3.00E-268	0.546733915	0.893	0.49
ERCC8	9.18E-268	0.32243803	0.265	0.072
CAP1	1.69E-267	0.444782926	0.825	0.435
PICALM1	3.76E-267	0.620062788	0.918	0.56
A2M	6.49E-267	0.318343537	0.306	0.09
ELL21	1.09E-266	0.617908709	0.929	0.6
LMNA1	2.52E-266	0.553741699	0.778	0.42
SLC2A13	1.23E-265	0.272442474	0.346	0.109
NABP1	2.27E-265	0.357966274	0.711	0.321
RBMS11	4.42E-265	0.323329293	0.775	0.368
MCL1	5.29E-265	0.49253704	0.949	0.633
RNF24	1.06E-264	0.320403119	0.442	0.16

AP2A2	1.34E-264	0.27961551	0.395	0.134
ADA	2.20E-262	0.372870862	0.337	0.109
TMEM1231	2.58E-262	0.603228525	0.844	0.485
INTS14	2.70E-262	0.306789086	0.349	0.112
TPM3	1.43E-261	0.527510435	0.926	0.646
HIPK31	2.00E-260	0.379991229	0.663	0.29
PCBP1	2.45E-260	0.446388054	0.822	0.444
H3F3A1	3.76E-260	0.575583732	0.978	0.885
BRCA2	7.99E-259	0.307634544	0.262	0.073
HPS51	9.08E-259	0.283309271	0.523	0.202
GAK	1.93E-257	0.352834767	0.59	0.244
PSME2	1.31E-256	0.6474966	0.784	0.445
NT5C2	2.89E-256	0.406719513	0.639	0.283
LPP	3.78E-256	0.484415674	0.919	0.553
SLAMF7	4.89E-254	0.412482224	0.389	0.14
PAPSS1	1.05E-253	0.250556949	0.446	0.164
N4BP2L1	1.28E-253	0.426056028	0.496	0.197
RAB21	1.31E-253	0.398982318	0.803	0.404
FER1	7.75E-253	0.31514653	0.48	0.184
AC020916.1	7.82E-253	0.393862848	0.65	0.292
NAF1	2.33E-252	0.610585665	0.442	0.174
ATP2A2	9.63E-252	0.363556705	0.679	0.303
EXT11	7.75E-251	0.893657539	0.678	0.342
CAPN2	1.07E-250	0.266309224	0.568	0.23
STK38L	2.35E-250	0.394622515	0.49	0.194
HM13	5.35E-249	0.299882585	0.649	0.282
CAPZB	5.85E-249	0.5270289	0.899	0.559
PRELID1	2.11E-244	0.511437666	0.731	0.388
MTMR3	2.53E-244	0.335540194	0.555	0.235
GDI21	3.21E-243	0.375575335	0.788	0.402
MRTFA	3.88E-243	0.41838385	0.752	0.366
TUBA1C	3.34E-242	0.260290961	0.698	0.318
SNAPC1	8.79E-242	0.546998944	0.439	0.17
NFATC11	1.54E-241	0.415218021	0.573	0.242
UBE2W	1.00E-240	0.301744148	0.573	0.241
DNM2	1.37E-239	0.392422896	0.742	0.351
NBEAL1	2.29E-238	0.291664902	0.512	0.206
TXNDC11	3.18E-238	0.311567125	0.579	0.25
VAPA	8.22E-238	0.456992447	0.871	0.496
TMEM41B	1.76E-236	0.321676142	0.45	0.172
PDPK1	2.59E-235	0.270217173	0.443	0.167
BAG31	3.76E-235	0.642612702	0.55	0.24
VAV1	5.30E-233	0.294468323	0.494	0.2

HOOK3	9.93E-233	0.329159788	0.714	0.331
LAMTOR1	1.15E-231	0.253967202	0.607	0.262
SARNP	3.68E-231	0.710603768	0.737	0.362
BACH12	5.08E-231	0.534465387	0.899	0.528
TACC1	5.88E-231	0.41294806	0.781	0.395
STAT5A1	6.23E-231	0.253159166	0.481	0.189
KCNQ10T1	1.04E-230	0.543933035	0.442	0.176
ACTR3	1.45E-230	0.418831468	0.902	0.573
TSC22D11	1.21E-229	0.286653477	0.436	0.168
LRRFIP11	7.74E-228	0.533766481	0.95	0.66
RHOG	9.30E-228	0.270537584	0.681	0.309
LRRC23	1.66E-227	0.461998226	0.421	0.162
PHLDA12	9.22E-227	0.251578532	0.548	0.23
SNX291	1.42E-226	0.342538496	0.707	0.338
KLHL61	6.39E-225	0.346245851	0.567	0.25
RALGDS	1.73E-224	0.261224739	0.636	0.279
IGF2R1	2.37E-224	0.486317916	0.665	0.33
CLEC16A	3.08E-223	0.732165637	0.525	0.238
STAT11	1.23E-221	0.416535624	0.718	0.361
GEM	1.54E-221	0.30793695	0.336	0.117
P4HA1	5.17E-221	0.266969835	0.632	0.283
MAP4K41	9.93E-221	1.009448661	0.811	0.53
GPCPD12	1.33E-218	0.655260086	0.879	0.556
TFDP21	9.61E-218	0.392440492	0.56	0.249
LINC022451	2.14E-217	0.312486889	0.491	0.203
RNASEK	6.08E-217	0.447439271	0.897	0.634
TWISTNB	9.40E-217	0.621044481	0.491	0.214
ACTR2	9.09E-216	0.429059027	0.918	0.616
EZH2	1.13E-215	0.52864167	0.549	0.249
PAFAH1B2	3.34E-215	0.281856222	0.504	0.21
LCP11	4.26E-215	0.476854517	0.909	0.63
TRAK11	1.05E-214	0.332148106	0.619	0.285
RBPJ2	1.24E-210	0.617329757	0.86	0.474
BLOC1S11	1.87E-210	0.310146603	0.74	0.372
PSMA6	2.34E-210	0.391105685	0.811	0.451
HLA-DQA21	2.64E-210	0.853649145	0.534	0.264
SLC7A51	6.30E-208	0.306829082	0.793	0.403
CYBA	2.91E-206	0.533292026	0.955	0.829
ARPC1B1	1.07E-205	0.474704596	0.884	0.612
DDB1	1.49E-204	0.358940106	0.461	0.194
LRRFIP21	3.04E-203	0.297370807	0.611	0.281
TNFAIP33	7.56E-203	0.359123072	0.972	0.694
PRNP	8.14E-203	0.307359091	0.606	0.271

MICAL21	7.34E-202	0.25830912	0.361	0.134
MFSD4B1	9.07E-202	0.528124536	0.511	0.228
ZBTB101	2.78E-200	0.326769615	0.436	0.178
S100A42	6.21E-200	0.535972873	0.868	0.584
PRDM12	3.08E-199	0.373943532	0.672	0.337
KCNAB2	2.20E-198	0.25324024	0.572	0.253
TMTC2	5.78E-198	0.298508409	0.273	0.09
IVNS1ABP	9.71E-198	0.312130163	0.794	0.431
FRMD4A	1.65E-197	0.651493529	0.286	0.1
HPCAL1	5.70E-197	0.467665115	0.535	0.244
RGS21	9.81E-197	0.394570052	0.863	0.524
IPO7	4.66E-194	0.287568757	0.609	0.282
ZFP36L11	1.08E-193	0.484789872	0.814	0.476
SRGN2	1.77E-193	0.490912017	0.993	0.88
PPA1	1.75E-192	0.781279969	0.651	0.359
TNFAIP81	5.86E-192	0.642298206	0.866	0.587
TTC7A2	2.22E-191	0.31569955	0.563	0.258
CDC371	2.31E-191	0.268984088	0.764	0.388
UBL3	6.37E-191	0.345119015	0.765	0.395
ITM2B	6.76E-191	0.550639305	0.928	0.769
BANP1	1.41E-188	0.381216106	0.643	0.319
ITPR21	1.40E-186	0.400281077	0.828	0.483
SATB1-AS1	5.58E-186	0.251524655	0.374	0.146
NDUFAF2	1.97E-185	0.314080763	0.444	0.189
VAMP5	3.20E-185	0.353149095	0.535	0.25
UBE2O	8.30E-185	0.32725149	0.403	0.166
SPATS2L2	6.16E-184	0.33686593	0.643	0.309
TENT4B1	4.52E-183	0.309697886	0.515	0.23
UBE2D3	1.65E-182	0.469997772	0.962	0.745
TIAM12	8.31E-178	0.305421686	0.514	0.232
ERC11	3.72E-177	0.270899572	0.748	0.387
CRADD1	1.97E-176	0.890924426	0.483	0.236
CALR	2.33E-176	0.481946919	0.835	0.559
SND1	3.31E-176	0.311765386	0.791	0.426
PSMB3	3.91E-176	0.288026793	0.773	0.426
NME2	4.07E-176	0.387119831	0.853	0.6
PPP3R1	7.80E-175	0.417436392	0.705	0.372
GFOD11	1.55E-174	0.293632822	0.422	0.181
MALT12	1.07E-172	0.551696834	0.829	0.537
RHOA	1.38E-168	0.346926336	0.93	0.673
RNASET22	5.87E-168	0.371698299	0.851	0.534
ZFY1	1.26E-167	0.467979439	0.369	0.161
DLEU21	6.27E-167	0.335962855	0.825	0.477

KPNA4	7.88E-167	0.308032557	0.761	0.403
VMP1	7.14E-166	0.469772654	0.881	0.542
HIF1A-AS31	1.08E-162	0.542021625	0.398	0.174
ANKRD33B	1.64E-162	0.315869068	0.329	0.13
AC007384.11	1.33E-160	0.366170109	0.749	0.422
SEPTIN91	3.04E-160	0.486125881	0.745	0.429
GAPDH1	1.19E-159	0.401035272	0.956	0.832
FBXO111	3.02E-159	0.389944306	0.858	0.518
MED13	1.18E-158	0.376782974	0.79	0.448
HLA-DRB51	1.27E-155	0.883942847	0.459	0.226
DBI	5.11E-154	0.337639579	0.806	0.503
FBXO341	7.77E-150	0.313696882	0.755	0.428
SERF2	2.12E-149	0.356589555	0.945	0.852
SERINC52	3.20E-148	0.293569464	0.627	0.323
SPSB1	4.68E-148	0.315136322	0.277	0.109
PHF101	5.83E-148	0.265689013	0.357	0.152
CD811	9.48E-147	0.494678092	0.743	0.506
CLTA	1.19E-144	0.261233307	0.77	0.438
TRAF32	1.34E-143	0.357335248	0.876	0.57
BTBD112	1.81E-143	0.293978	0.336	0.143
AP3B11	7.91E-143	0.39641106	0.785	0.456
POMP	6.71E-142	0.3028418	0.832	0.532
TOP1	9.03E-141	0.412783992	0.909	0.632
CLIC11	2.29E-139	0.37358249	0.876	0.655
PRDX1	3.53E-139	0.380206028	0.815	0.545
MYL6	5.38E-137	0.352503408	0.94	0.824
JMJD1C	1.29E-136	0.499614618	0.954	0.733
DYNC1H1	4.41E-135	0.298468076	0.782	0.444
EPG5	1.89E-133	0.282722253	0.415	0.199
TUBA1B	3.08E-131	0.472394248	0.789	0.55
RYBP1	9.81E-131	0.329758395	0.78	0.455
ERBIN1	2.19E-130	0.397691181	0.792	0.483
SSBP21	9.08E-130	0.609006318	0.521	0.28
TLE4	3.03E-129	0.272734247	0.713	0.406
CYTH12	4.70E-129	0.447253373	0.927	0.675
UST1	3.47E-128	0.41052713	0.53	0.279
CREBBP1	5.87E-128	0.275983452	0.832	0.498
PSMD5	4.95E-127	0.602124591	0.344	0.161
PDZD8	3.85E-124	0.250818996	0.466	0.232
SAMSN12	9.57E-124	0.362244636	0.928	0.722
AHNAK	1.02E-120	0.277264027	0.781	0.468
ARPC31	6.89E-118	0.325432639	0.913	0.763
ECE1	1.47E-117	0.424182618	0.408	0.212

GLS1	1.05E-116	0.425982134	0.924	0.692
ROCK1	3.81E-116	0.267392028	0.878	0.557
AGO21	6.03E-115	0.260363199	0.797	0.475
EIF4A3	4.36E-114	0.258345477	0.793	0.483
HDAC91	8.14E-114	0.270713819	0.38	0.185
SH3BGRL31	1.44E-112	0.360425443	0.926	0.78
ZHX21	2.31E-110	0.389523459	0.85	0.585
PFN11	4.62E-107	0.296263593	0.921	0.761
PELI11	1.07E-103	0.440890388	0.773	0.503
HNRNPU	2.19E-100	0.321743629	0.906	0.639
ARPC21	2.54E-99	0.255243579	0.938	0.77
PPP4R3A1	1.59E-98	0.378039503	0.768	0.481
FOXK2	2.41E-95	0.340236643	0.528	0.292
CHST111	6.25E-88	0.634001903	0.937	0.752
CRIM1	8.47E-87	0.28518992	0.26	0.122
SIK31	1.32E-83	0.343305228	0.97	0.808
ANKH2	3.04E-78	0.418090985	0.456	0.265
MAP3K21	4.49E-73	0.276820377	0.856	0.581
ZFX	5.73E-68	0.407600992	0.493	0.298
STEAP1B1	7.54E-68	0.253439824	0.441	0.251
FOXN31	1.72E-56	0.258371892	0.919	0.711
GZMK1	0	1.88229232	0.563	0.14
CCL51	0	1.265223493	0.836	0.289
GZMA1	0	0.854692958	0.589	0.204
NKG71	0	0.74409461	0.575	0.23
CD8A1	3.82E-295	1.134719934	0.387	0.137
FYN3	2.14E-291	0.761771524	0.952	0.674
CST71	3.26E-283	1.048578215	0.627	0.331
PARP82	8.03E-253	0.871821258	0.821	0.624
TC2N2	1.28E-251	1.041406992	0.472	0.215
CD3D3	1.17E-247	0.788836647	0.779	0.463
ANXA12	9.91E-244	1.329920079	0.662	0.413
GZMM1	6.11E-234	0.889917353	0.445	0.207
CD3G3	2.46E-225	0.837170368	0.665	0.392
IL7R2	1.24E-213	1.05073727	0.7	0.468
CD963	1.30E-213	0.753767778	0.738	0.468
SYTL33	4.22E-207	0.731460408	0.848	0.649
CD3E3	4.60E-205	0.7708662	0.686	0.427
LEPROTL13	5.95E-203	0.768122007	0.783	0.603
CD8B1	2.97E-202	0.922109867	0.3	0.111
KLRK11	1.08E-190	0.857364888	0.35	0.146
EPHA4	3.78E-189	1.01410466	0.29	0.112
THEMIS3	2.82E-187	0.86718295	0.464	0.23

PITPNC12	6.52E-186	0.748871804	0.756	0.542
CCSER23	2.40E-174	0.818477373	0.711	0.539
AOAH1	2.02E-173	1.203104985	0.425	0.226
RNF1252	9.49E-173	0.953043418	0.585	0.369
DTHD11	1.69E-168	0.885279909	0.335	0.146
BCL11B3	2.59E-167	0.638965376	0.684	0.43
PPP2R5C3	5.33E-167	0.633321249	0.859	0.763
RUNX31	9.35E-165	0.756817089	0.719	0.558
CD25	3.68E-164	0.585753916	0.759	0.487
CCL41	1.34E-162	0.77508221	0.537	0.301
CBLB2	1.62E-161	0.571101563	0.838	0.652
TRAT12	7.46E-158	0.82358833	0.374	0.184
PTPRC3	3.21E-157	0.477017696	0.959	0.88
LYAR1	3.33E-156	0.895775263	0.366	0.192
PLAAT41	2.80E-155	0.842419516	0.572	0.392
B2M3	5.05E-153	0.392445113	0.992	0.978
GPR1712	2.70E-151	0.743924726	0.37	0.182
SAMD31	1.20E-150	0.855811416	0.308	0.138
TNFAIP34	1.29E-149	0.697706427	0.85	0.704
ID21	2.25E-148	0.804412578	0.678	0.487
ABLIM12	7.66E-146	1.077886678	0.545	0.363
PRKCH3	5.05E-144	0.582512605	0.779	0.569
CALM12	1.06E-143	0.582842879	0.91	0.872
HCST1	3.26E-143	0.755287628	0.65	0.49
ETS13	7.98E-143	0.568314508	0.821	0.639
ZFP36L22	2.17E-140	0.648257296	0.893	0.813
HLA-A3	8.50E-140	0.415070067	0.957	0.921
SYNE23	1.76E-138	0.563257576	0.776	0.582
RNF19A3	1.48E-137	0.671439508	0.764	0.621
CNOT6L3	2.88E-136	0.516263179	0.883	0.75
IL323	8.22E-136	0.307788848	0.77	0.488
SRSF72	4.86E-135	0.665101758	0.848	0.787
CXCR42	1.79E-133	0.675530437	0.891	0.813
HLA-C2	1.91E-130	0.44750473	0.935	0.907
CD62	2.68E-130	0.7137087	0.446	0.266
H3F3B1	4.41E-129	0.502878085	0.951	0.923
NIBAN13	3.60E-128	0.513330365	0.753	0.556
CRTAM1	2.40E-126	0.777691825	0.273	0.121
DUSP21	1.83E-124	0.866325753	0.651	0.512
ANK31	1.62E-122	0.720802917	0.442	0.25
PIK3R11	7.45E-116	0.782329105	0.628	0.511
STAT43	1.05E-115	0.547529381	0.764	0.597
PIP4K2A1	1.44E-113	0.691292702	0.698	0.6

SCML42	8.16E-112	0.739636171	0.444	0.273
SARAF2	7.50E-110	0.42080293	0.903	0.856
SLA4	1.56E-109	0.626346667	0.653	0.508
BICDL13	1.44E-106	0.642435561	0.581	0.399
TGFBR31	4.53E-99	0.659652215	0.279	0.14
TRBC23	7.74E-99	0.564547495	0.644	0.477
PDE3B3	3.60E-98	0.438577277	0.766	0.572
SYTL21	1.95E-97	0.573547063	0.289	0.147
HLA-B1	2.74E-97	0.370516892	0.963	0.937
SLFN12L1	7.20E-96	0.702597371	0.387	0.24
CD991	5.20E-94	0.584023528	0.643	0.556
RGCC2	7.51E-93	0.866611743	0.584	0.465
SLA21	6.66E-92	0.684552126	0.314	0.176
SYNE11	1.15E-91	0.803972645	0.448	0.318
HLA-F2	1.52E-91	0.58810251	0.639	0.562
EMB3	2.82E-91	0.612709611	0.61	0.511
CD441	4.66E-91	0.400656251	0.857	0.781
RALGAPA11	5.74E-89	0.695071581	0.695	0.617
TUBA4A1	6.45E-89	0.775944777	0.534	0.422
MLLT33	1.36E-88	0.820879965	0.444	0.298
NFATC21	6.45E-88	0.743670743	0.468	0.347
TRAC3	1.23E-87	0.444586183	0.619	0.432
GIMAP72	1.74E-87	0.667535533	0.417	0.27
ATXN13	2.54E-85	0.47568294	0.792	0.675
SRGN3	1.19E-84	0.335958109	0.945	0.884
CMC11	3.47E-84	0.927495369	0.366	0.245
UBE2S1	3.62E-84	0.818577734	0.558	0.473
PPP1R16B3	6.20E-84	0.543427986	0.704	0.584
PDCD43	9.64E-83	0.510316439	0.696	0.621
AKNA1	4.53E-79	0.675134268	0.545	0.452
KIF21A1	3.49E-78	0.583905998	0.251	0.134
MALAT11	6.59E-78	0.264887	1	0.986
CRIP11	1.21E-77	0.553127998	0.781	0.707
AF165147.12	2.27E-76	0.715704765	0.266	0.148
IKZF13	4.70E-76	0.506728967	0.699	0.613
FAM177A12	1.95E-74	0.659085095	0.591	0.518
PLCB11	5.57E-74	0.584362995	0.255	0.136
PRKCQ3	6.68E-74	0.534632541	0.447	0.305
ITM2B1	1.09E-73	0.327794586	0.813	0.778
ZFYVE281	1.30E-73	0.643033643	0.314	0.196
CDK171	3.12E-73	0.654720015	0.63	0.55
HLA-E1	6.43E-73	0.358502227	0.894	0.884
MGAT4A2	1.27E-72	0.600716438	0.45	0.331

LINC018711	2.45E-72	0.57617015	0.273	0.149
ITM2A3	5.99E-71	0.581660007	0.469	0.336
VIM1	1.05E-70	0.477148834	0.843	0.76
LDHA1	2.03E-70	0.533867166	0.652	0.586
CD75	1.04E-68	0.463402636	0.549	0.393
GIMAP42	2.34E-68	0.649831681	0.366	0.249
SLC7A52	2.68E-68	0.618350074	0.515	0.426
CAMK43	7.76E-68	0.394409713	0.539	0.377
CDC42SE22	1.54E-67	0.371689262	0.862	0.801
DDX51	2.99E-67	0.325592918	0.917	0.904
GZMH1	7.76E-67	0.454117746	0.253	0.133
INPP4B3	8.69E-67	0.463740207	0.486	0.336
S100A101	2.70E-66	0.446932773	0.684	0.599
MPZL32	9.96E-66	0.601706519	0.356	0.24
GALM3	1.03E-64	0.661825545	0.518	0.422
BTG12	1.96E-64	0.281206084	0.975	0.915
MVB12B1	2.89E-64	0.607366262	0.253	0.148
AC044849.12	5.60E-64	0.615182879	0.398	0.289
PRF11	9.41E-63	0.481685207	0.287	0.168
CLDND11	1.50E-60	0.730530836	0.407	0.319
TRBC13	3.33E-59	0.435632688	0.437	0.294
IQGAP22	5.94E-59	0.3364814	0.764	0.642
MSN1	4.36E-58	0.47530063	0.672	0.634
SMAD71	5.05E-58	0.693756953	0.436	0.354
ADGRE51	1.06E-57	0.505843373	0.633	0.559
APOBEC3G1	1.38E-57	0.579044125	0.359	0.255
TSC22D31	3.98E-57	0.408408914	0.86	0.838
LIME12	2.26E-56	0.579426124	0.362	0.259
DDX243	3.11E-55	0.403562465	0.729	0.711
MYH91	3.87E-55	0.417779053	0.694	0.678
CALM2	4.26E-55	0.399047517	0.776	0.779
ITK2	6.98E-53	0.33202216	0.594	0.44
ARL4C2	1.52E-52	0.507801952	0.594	0.504
EVL3	5.56E-52	0.454980427	0.601	0.525
RSRP12	9.35E-52	0.51852778	0.623	0.604
PBX42	1.03E-49	0.460424021	0.467	0.357
SKAP13	1.19E-48	0.252402153	0.673	0.518
CD692	3.12E-48	0.474742518	0.66	0.569
TSPYL23	6.13E-46	0.57901759	0.559	0.489
CLEC2B1	2.75E-44	0.453497038	0.512	0.435
AAK13	3.15E-44	0.389341469	0.545	0.466
PYHIN13	4.43E-44	0.513868631	0.381	0.279
RNF2132	2.58E-43	0.436922809	0.651	0.621

RASA32	4.18E-43	0.607577904	0.414	0.339
SH3BGRL32	8.36E-43	0.332531426	0.809	0.79
GNG22	1.05E-41	0.338311103	0.675	0.601
CEMIP23	3.14E-41	0.343957513	0.736	0.67
ATP8A12	2.56E-40	0.462098288	0.509	0.428
KLF122	3.26E-40	0.447558924	0.572	0.496
RABGAP1L1	5.52E-40	0.337360425	0.818	0.792
BTN3A11	5.88E-40	0.540379185	0.304	0.229
SLC38A21	6.05E-40	0.502233795	0.59	0.563
ZBTB201	1.26E-39	0.351508885	0.755	0.717
AKT32	1.61E-39	0.510342661	0.565	0.503
PCED1B-AS13	4.10E-39	0.466723499	0.51	0.457
LCK3	4.50E-39	0.396167141	0.413	0.324
SRSF51	4.54E-39	0.358742617	0.739	0.758
PAXX1	5.97E-39	0.508679455	0.379	0.313
CRYBG12	3.45E-38	0.278671648	0.561	0.478
EIF11	4.59E-38	0.251126145	0.949	0.941
OXNAD13	2.54E-37	0.435454221	0.496	0.425
ZBED41	3.66E-37	0.490688631	0.265	0.188
BTN3A21	4.27E-37	0.5531008	0.354	0.288
STAT5B3	2.15E-36	0.466014887	0.481	0.411
WNK12	2.50E-36	0.391006886	0.637	0.613
FAM102A	2.75E-36	0.531624164	0.382	0.311
KIF13B1	3.84E-36	0.53484199	0.453	0.398
TUBB4B	1.86E-35	0.689377956	0.532	0.51
GTDC11	4.17E-35	0.515687787	0.397	0.323
MPP71	1.68E-34	0.366091896	0.413	0.324
ACAP12	2.25E-34	0.456461799	0.498	0.462
SRSF21	5.93E-34	0.500405832	0.575	0.573
UBB1	5.99E-34	0.463013308	0.845	0.85
AC068587.42	6.86E-34	0.518673116	0.285	0.208
TRERF12	1.21E-33	0.498027942	0.315	0.238
TGFB11	2.40E-33	0.584877881	0.589	0.579
TXNIP2	2.92E-33	0.563765783	0.737	0.724
STK17A2	7.94E-33	0.306465047	0.686	0.647
FUS	9.13E-33	0.391152549	0.714	0.733
SFMBT21	1.00E-32	0.535678254	0.446	0.384
SPOCK22	2.03E-32	0.316347185	0.534	0.446
PPP1R101	2.42E-32	0.442040382	0.593	0.586
JMJD61	2.54E-32	0.544375742	0.335	0.277
SLC38A12	3.76E-32	0.31594548	0.658	0.614
IER5L1	5.62E-32	0.598212158	0.279	0.209
SH2D1A2	7.11E-32	0.452144671	0.253	0.179

GALNT111	2.45E-31	0.571965236	0.312	0.25
MYLIP1	3.38E-31	0.528215048	0.485	0.445
IDS1	6.55E-31	0.435736982	0.565	0.551
ERN11	1.75E-30	0.437311491	0.439	0.38
ATP2B43	1.90E-29	0.508388376	0.376	0.312
MYL12B1	2.21E-29	0.293410794	0.693	0.709
ZNF8312	2.93E-29	0.314978833	0.473	0.388
ISG201	5.84E-29	0.321069547	0.732	0.722
PCNX22	6.21E-29	0.445712875	0.35	0.286
HNRNPLL3	1.08E-28	0.427724347	0.393	0.323
TUBA1A	1.38E-28	0.493635386	0.533	0.499
PPP1R22	1.41E-28	0.365549122	0.622	0.615
LINC005132	2.26E-28	0.380326837	0.663	0.656
KLF61	3.46E-28	0.329714438	0.808	0.784
GUK11	3.85E-28	0.336182896	0.571	0.579
TOB12	5.21E-28	0.59598397	0.355	0.304
MYADM	7.09E-28	0.617894867	0.358	0.308
NDUFS52	4.57E-27	0.351831179	0.579	0.581
TG2	6.53E-27	0.484201756	0.268	0.205
SLFN53	7.53E-27	0.496380443	0.367	0.313
CDC42EP31	1.47E-26	0.545087528	0.362	0.307
SPTAN12	1.89E-26	0.502952125	0.494	0.473
CCNH1	2.77E-26	0.326916086	0.664	0.658
LMNA2	3.01E-26	0.597702133	0.487	0.444
NASP	3.70E-26	0.456927993	0.552	0.553
PRKX1	2.25E-25	0.459968238	0.34	0.281
PSME11	2.71E-25	0.345964943	0.621	0.631
HIST2H2AC1	2.71E-25	0.526556762	0.264	0.209
RESF11	4.61E-25	0.36761423	0.582	0.563
NAA501	1.86E-24	0.455968509	0.452	0.424
ABHD17A1	1.91E-24	0.434699431	0.386	0.35
STOM1	3.91E-24	0.448347565	0.251	0.196
CORO71	1.27E-23	0.488811677	0.354	0.308
RNF1151	2.44E-23	0.502193867	0.398	0.366
EIF4A21	3.56E-23	0.305036031	0.657	0.684
PLP21	8.35E-23	0.453918197	0.418	0.393
SRSF31	2.72E-22	0.28029743	0.733	0.762
TBC1D2B1	3.95E-22	0.458213342	0.263	0.211
NDFIP12	6.15E-22	0.326211983	0.54	0.529
SOD12	8.97E-22	0.269723435	0.668	0.67
SOCS11	9.66E-22	0.457791399	0.425	0.387
CMIP2	1.30E-21	0.403351424	0.547	0.527
DIP2A1	2.45E-21	0.431374654	0.272	0.222

CDC14A3	2.92E-21	0.411367877	0.455	0.405
SERTAD11	3.38E-21	0.566347917	0.36	0.327
HIST1H4C	3.56E-21	0.517758642	0.421	0.392
SAP18	4.78E-21	0.324550232	0.634	0.668
SUPT3H1	1.14E-20	0.422310807	0.375	0.323
HERPUD21	2.35E-20	0.425405908	0.4	0.371
AUTS22	5.60E-20	0.288947893	0.367	0.294
MCUB1	6.32E-20	0.434730342	0.385	0.353
KLF131	6.86E-20	0.43975632	0.422	0.41
OCIAD22	8.30E-20	0.371533641	0.385	0.349
DDX3X1	1.17E-19	0.35251183	0.659	0.69
PIK3IP12	2.06E-19	0.268750764	0.531	0.494
DUSP42	2.15E-19	0.297182333	0.443	0.379
SKP11	2.53E-19	0.252883434	0.68	0.725
NEU11	3.98E-19	0.606652897	0.297	0.256
BIN21	4.11E-19	0.400922493	0.324	0.285
JAML2	5.92E-19	0.366919634	0.262	0.209
LINC016192	6.01E-19	0.352573058	0.693	0.668
RAB27A1	7.33E-19	0.338275696	0.394	0.349
ARAP23	8.26E-19	0.311539964	0.514	0.481
OAT1	9.06E-19	0.498116631	0.302	0.264
EIF5	1.19E-18	0.277969064	0.686	0.729
GSPT12	1.59E-18	0.339417601	0.574	0.576
LINC019343	1.77E-18	0.316792234	0.326	0.26
TGFBR22	3.04E-18	0.302501826	0.47	0.446
CASP83	3.33E-18	0.343136671	0.478	0.449
PPP2R5A1	5.74E-18	0.422973223	0.333	0.298
H2AFX1	9.42E-18	0.50283905	0.275	0.235
ANKRD13D1	1.25E-17	0.391137451	0.256	0.214
MAPRE21	1.29E-17	0.38209904	0.484	0.469
PGK11	1.77E-17	0.312602137	0.572	0.593
LRRC8C3	2.89E-17	0.365767405	0.395	0.359
TMEM50A2	2.90E-17	0.349084364	0.482	0.488
PMEPA11	3.05E-17	0.514733671	0.326	0.292
S1PR41	4.54E-17	0.365042343	0.252	0.207
LYST1	5.44E-17	0.497826416	0.495	0.486
NCALD2	1.26E-16	0.278500341	0.285	0.222
BRD11	1.64E-16	0.420910347	0.337	0.31
LBH3	2.17E-16	0.333432488	0.407	0.369
DOCK81	2.20E-16	0.268002681	0.674	0.697
SUN21	6.08E-16	0.397205959	0.307	0.276
LY6E1	7.99E-16	0.37911691	0.462	0.446
LPIN22	1.84E-15	0.430832947	0.388	0.369

ITGA42	2.45E-15	0.319923894	0.485	0.472
INTS6	4.04E-15	0.45716871	0.504	0.493
POLR2A1	5.27E-15	0.495928391	0.478	0.49
TMEM1811	1.04E-14	0.404514969	0.27	0.233
PSMB91	1.17E-14	0.289745127	0.536	0.547
HMGB21	1.84E-14	0.343428529	0.457	0.448
PTP4A21	3.01E-14	0.347246899	0.488	0.508
TCF71	3.09E-14	0.312159805	0.258	0.214
ARHGEF32	5.70E-14	0.362973427	0.344	0.31
TERF2IP1	1.19E-13	0.280302254	0.527	0.544
CIB1	1.83E-13	0.270987866	0.549	0.575
AL627171.21	2.07E-13	0.537802604	0.362	0.351
SIRT21	2.43E-13	0.405781606	0.27	0.242
OPTN2	2.44E-13	0.341584524	0.354	0.328
H2AFZ1	3.80E-13	0.257913493	0.591	0.611
RASAL31	6.26E-13	0.351442606	0.279	0.249
P2RY81	1.42E-12	0.435568863	0.367	0.337
IKZF32	1.92E-12	0.262365937	0.453	0.424
PATJ1	2.14E-12	0.261635315	0.262	0.218
EIF4A31	2.99E-12	0.328591777	0.497	0.507
PTPN42	3.13E-12	0.251184568	0.34	0.3
PRMT21	3.74E-12	0.388760371	0.338	0.327
MAML21	5.44E-12	0.2813829	0.595	0.58
RCAN32	8.51E-12	0.30193083	0.339	0.309
AHNAK1	1.12E-11	0.261263242	0.494	0.491
C12orf571	1.21E-11	0.267137636	0.505	0.515
ATXN72	1.26E-11	0.309467356	0.388	0.377
GABARAPL11	1.36E-11	0.39631941	0.316	0.296
MACF11	1.70E-11	0.323028871	0.523	0.538
WAKMAR22	1.75E-11	0.361549544	0.279	0.249
TUBA1C1	2.10E-11	0.381328556	0.359	0.346
METRNL2	3.38E-11	0.418441837	0.362	0.341
ODC1	4.34E-11	0.407343248	0.427	0.43
ARHGEF11	4.49E-11	0.346535731	0.357	0.347
C5orf561	6.61E-11	0.387944158	0.28	0.258
BRD2	6.87E-11	0.367297823	0.494	0.531
CITED22	6.98E-11	0.452200486	0.331	0.314
PTPN71	7.30E-11	0.403633749	0.308	0.29
ITGAL2	7.69E-11	0.354118624	0.268	0.24
KANSL13	1.15E-10	0.288717811	0.529	0.542
TECR1	1.73E-10	0.367721725	0.342	0.337
CKLF1	2.42E-10	0.298664605	0.415	0.405
HECA1	2.61E-10	0.282181426	0.488	0.499

RASGRP13	1.04E-09	0.270386282	0.328	0.298
NUFIP2	1.22E-09	0.313405621	0.537	0.571
RIPK1	1.28E-09	0.464449833	0.335	0.33
SEMA4D1	2.08E-09	0.345550684	0.412	0.422
MACO11	2.57E-09	0.390756824	0.297	0.284
H1FX1	2.71E-09	0.286478588	0.419	0.413
RASA13	3.56E-09	0.318675344	0.441	0.444
CCDC85B1	3.59E-09	0.345081705	0.366	0.371
NFE2L31	4.12E-09	0.460017596	0.295	0.277
ENSA1	6.42E-09	0.262663376	0.541	0.583
ODF2L2	7.06E-09	0.275271188	0.343	0.325
PPP1R14B	1.04E-08	0.429540336	0.285	0.274
PPDPF1	1.69E-08	0.300836848	0.415	0.431
AMD1	1.76E-08	0.31505019	0.482	0.512
ITGAE1	2.51E-08	0.372100877	0.314	0.298
SNHG12	3.36E-08	0.371863875	0.271	0.256
EIF1AX	4.17E-08	0.320297822	0.466	0.503
XPC	5.31E-08	0.330077768	0.267	0.251
TLE41	5.61E-08	0.344623733	0.423	0.429
ORAI1	5.69E-08	0.346159632	0.25	0.234
ATP1A11	1.38E-07	0.36022197	0.377	0.385
DYNLL11	1.49E-07	0.293692813	0.588	0.64
PER11	1.57E-07	0.351862655	0.392	0.408
ARHGEF71	2.13E-07	0.270697152	0.374	0.371
NKTR1	2.14E-07	0.279025292	0.454	0.477
SNRK	2.84E-07	0.333579443	0.288	0.278
SLC25A262	2.86E-07	0.3624816	0.39	0.399
HNRNPUL11	3.00E-07	0.317707371	0.474	0.519
PCED1B2	3.30E-07	0.327054557	0.358	0.343
SKI	4.87E-07	0.34415076	0.367	0.375
GPR651	5.48E-07	0.322637047	0.264	0.247
GCC21	6.20E-07	0.254688769	0.509	0.544
BTD1	7.28E-07	0.403569057	0.294	0.285
KIF2A2	1.05E-06	0.2903476	0.377	0.384
GLUD12	1.29E-06	0.322389442	0.408	0.417
RNF381	1.83E-06	0.282481174	0.4	0.409
NCOA12	4.58E-06	0.258319303	0.497	0.525
SLC4A72	4.75E-06	0.28978158	0.42	0.43
TAF71	5.56E-06	0.287575968	0.432	0.464
NLRC52	5.76E-06	0.294857133	0.307	0.302
HMOX21	9.09E-06	0.29317082	0.255	0.246
IFNGR11	9.27E-06	0.324864905	0.298	0.296
SMURF21	9.77E-06	0.334998944	0.333	0.336

HEXIM1	9.91E-06	0.415908825	0.271	0.267
GGA22	1.15E-05	0.338040648	0.363	0.372
DHRS71	1.74E-05	0.310911763	0.335	0.347
REEP51	3.89E-05	0.292720453	0.405	0.448
RBL22	4.26E-05	0.296939181	0.257	0.25
TENT5C1	4.40E-05	0.250221981	0.47	0.489
CCDC97	5.63E-05	0.419264536	0.28	0.284
GSTK11	5.66E-05	0.283402661	0.409	0.45
TBC1D10C1	6.04E-05	0.272158563	0.266	0.261
TARSL2	6.50E-05	0.287714774	0.252	0.243
SURF41	8.63E-05	0.319193195	0.319	0.337
SENP7	9.58E-05	0.273410033	0.304	0.304
HNRNPH1	0.000189835	0.252821539	0.503	0.573
URI11	0.00022887	0.276917965	0.375	0.397
NSMCE31	0.000232059	0.295560291	0.308	0.312
GALNT101	0.000335919	0.292810499	0.27	0.267
PITHD1	0.000385415	0.294672281	0.253	0.254
SMARCA5	0.00051235	0.264666353	0.459	0.514
ARHGAP91	0.000730674	0.255590061	0.276	0.28
PRKAR2A1	0.00080913	0.296697227	0.344	0.357
AC020916.11	0.000857859	0.293358956	0.312	0.319
DYNLT1	0.001190222	0.268484067	0.367	0.397
VCP	0.001268404	0.302612933	0.433	0.487
EVI2A2	0.001464225	0.268155896	0.366	0.391
DOK22	0.001701307	0.348819178	0.27	0.272
GADD45B1	0.001913419	0.368690906	0.442	0.463
C9orf78	0.002395239	0.279238607	0.327	0.352
MAN2A11	0.002708059	0.283725156	0.433	0.469
AC245297.31	0.003112526	0.250166054	0.274	0.28
PDCL32	0.003692829	0.290677571	0.273	0.281
PRKACB2	0.005253154	0.252956226	0.308	0.316
XPO4	0.008879088	0.282416732	0.28	0.292
IGLC2	0	7.656356838	0.82	0.452
IGKC	0	7.394720751	0.968	0.701
IGHG1	0	6.877723358	0.779	0.234
IGLC3	0	6.850794943	0.567	0.175
IGLC1	0	6.763970328	0.701	0.15
IGHG3	0	6.351789973	0.709	0.242
IGHA1	0	6.31442148	0.621	0.267
IGHG4	0	5.930148492	0.716	0.228
IGHGP	0	5.903282035	0.491	0.062
IGHG2	0	5.654448452	0.483	0.055
JCHAIN	0	5.352328689	0.678	0.096

MZB1	0	3.495611353	0.839	0.089
SSR4	0	2.8281346	0.878	0.656
DERL3	0	2.499603257	0.753	0.032
XBP11	0	2.165573838	0.782	0.289
TXNDC5	0	2.120232426	0.722	0.088
FKBP11	0	1.953211765	0.735	0.179
PRDX4	0	1.604382693	0.653	0.13
COBLL11	0	1.453776221	0.662	0.126
SEC11C1	0	1.415245205	0.744	0.317
IFNG-AS1	0	1.384993259	0.519	0.097
ST6GAL11	0	1.370173854	0.738	0.34
JSRP1	0	1.354703681	0.545	0.071
CD381	0	1.325573951	0.617	0.148
GAB11	0	1.314799723	0.552	0.106
CREB3L21	0	1.294947584	0.565	0.182
AC008014.11	0	1.263284782	0.531	0.141
MYO1D1	0	1.255061837	0.614	0.186
RRBP11	0	1.191565468	0.657	0.23
CROCC	0	1.187511051	0.444	0.146
IGLV3-1	0	1.132778087	0.277	0.002
LINC02384	0	1.122892272	0.48	0.062
CFAP54	0	1.12072333	0.345	0.027
ACOXL	0	1.119074035	0.323	0.02
AC007569.1	0	1.101474532	0.381	0.038
ESR1	0	1.085741136	0.409	0.039
ITM2C1	0	1.079436898	0.632	0.136
POU2AF11	0	1.031833402	0.498	0.083
DENND5B1	0	1.018043029	0.491	0.101
SPATS2	0	0.983148367	0.519	0.13
LINC02362	0	0.932072676	0.364	0.022
CLIC41	0	0.924073164	0.587	0.193
FCRL5	0	0.916172091	0.473	0.023
SELENOS	0	0.910438632	0.659	0.255
BLNK1	0	0.910283341	0.462	0.077
SSR3	0	0.908470661	0.717	0.337
SOX5	0	0.86451726	0.403	0.072
EIF2AK4	0	0.864477918	0.571	0.156
BCAR3	0	0.862877023	0.329	0.075
PDK1	0	0.839726055	0.416	0.092
HIST1H2BJ	0	0.836943065	0.321	0.048
SEL1L	0	0.812514127	0.595	0.216
TBC1D92	0	0.794044243	0.407	0.118
ZNF215	0	0.780909765	0.289	0.008

LRRK1	0	0.769518461	0.357	0.087
SLC44A11	0	0.769115824	0.471	0.125
RASSF6	0	0.767275902	0.311	0.03
ZBP1	0	0.764964777	0.45	0.113
SLAMF71	0	0.759199381	0.527	0.132
TNFRSF17	0	0.72912179	0.375	0.007
HIST1H2BD	0	0.72884415	0.345	0.077
SEC24D1	0	0.725426254	0.52	0.186
GNG71	0	0.703589033	0.726	0.268
AL591518.1	0	0.700245713	0.251	0.02
SDF2L1	0	0.684080574	0.588	0.201
AC007952.41	0	0.68241725	0.47	0.141
ERLEC1	0	0.681731566	0.594	0.211
SSPN	0	0.656185834	0.28	0.058
LMAN1	0	0.642089795	0.651	0.281
AC012236.1	0	0.641287019	0.308	0.006
RHEX1	0	0.625060049	0.312	0.072
CD79A1	0	0.621210369	0.719	0.217
TRIB11	0	0.619071734	0.456	0.114
SPAG4	0	0.618776356	0.404	0.034
HIST1H2BC	0	0.612823486	0.318	0.071
KCNN3	0	0.610228323	0.324	0.013
MEI1	0	0.579052531	0.403	0.102
BHLHE41	0	0.55230612	0.375	0.049
GAS61	0	0.54773051	0.335	0.052
NUCB21	0	0.524274107	0.544	0.186
CHST151	0	0.52194079	0.346	0.097
U62317.4	0	0.507906725	0.347	0.041
TRAM2	0	0.503377547	0.256	0.035
SDC1	0	0.493464081	0.297	0.013
CPNE5	0	0.492081325	0.349	0.036
PLPP5	0	0.482497711	0.498	0.125
Z93930.2	0	0.473102088	0.317	0.08
C11orf80	0	0.471737212	0.317	0.071
AC078883.1	0	0.448626486	0.271	0.045
P2RX11	0	0.439279446	0.314	0.073
MANEA	0	0.434066984	0.329	0.059
NUGGC	0	0.430695637	0.261	0.029
ST6GALNAC4	0	0.375345905	0.344	0.062
MEF2B	0	0.356314582	0.309	0.039
SRPRB	0	0.34965837	0.426	0.11
CHST2	0	0.329053701	0.252	0.042
PGM3	0	0.314962987	0.304	0.076

CHPF	0	0.293974948	0.276	0.026
ARSA	0	0.291954108	0.332	0.068
SELENOM	2.77E-305	0.328112993	0.479	0.158
CEP1281	2.39E-303	1.391656827	0.558	0.23
PIP5K1B	4.21E-293	0.538958104	0.289	0.074
MANF	1.32E-291	0.583359791	0.559	0.219
TPD521	1.17E-286	0.731500739	0.656	0.281
CRELD2	1.90E-280	0.397537338	0.445	0.151
ITGA6	1.05E-278	0.487489328	0.271	0.068
SPCS2	9.22E-276	0.761781544	0.777	0.5
PLCG21	7.93E-271	0.938427783	0.643	0.284
RALGPS21	2.32E-269	0.477238818	0.564	0.215
CASP101	1.67E-267	0.481780881	0.319	0.093
LARGE11	1.02E-264	0.325910946	0.429	0.141
TXNDC15	8.44E-264	0.353998073	0.467	0.166
AL021155.5	1.99E-260	0.735214932	0.394	0.135
HM131	6.71E-258	0.590109697	0.632	0.287
AC016074.2	1.06E-253	0.624669935	0.329	0.1
MEF2C1	1.24E-252	0.464864136	0.623	0.256
SIL1	1.51E-250	0.382675597	0.499	0.189
HIST1H2AC	2.19E-250	0.867877083	0.477	0.189
PIK3CG	2.28E-250	0.564835913	0.415	0.149
IGHA2	1.85E-246	4.99641205	0.268	0.079
INSR1	1.57E-245	0.478208268	0.303	0.09
ANKRD28	3.37E-240	1.61873169	0.713	0.443
CLPTM1L	1.21E-239	0.3352415	0.448	0.164
RAB301	1.76E-235	0.565478718	0.555	0.231
FNDC3B1	1.59E-233	1.126462303	0.692	0.383
TEX141	2.17E-230	1.629416854	0.557	0.284
SEC61A1	1.42E-229	0.391208723	0.462	0.178
LARP1B	1.53E-229	0.329903309	0.38	0.13
Z93241.1	3.23E-228	0.445397864	0.276	0.081
TP53INP11	5.79E-225	0.813299303	0.589	0.264
PDIA4	1.31E-224	0.416584497	0.372	0.131
EVI52	6.92E-223	0.440938689	0.459	0.177
TMEM107	1.68E-217	0.566786266	0.414	0.162
TXNDC111	2.84E-205	0.941027872	0.543	0.256
MYDGF	2.54E-203	0.519943956	0.588	0.277
AL162253.2	5.28E-200	0.395777293	0.282	0.09
SPCS3	2.35E-192	0.541682347	0.688	0.373
HDLBP	3.12E-191	0.659025401	0.608	0.297
VOPP1	1.75E-190	0.920831506	0.706	0.409
HERPUD11	4.84E-190	0.784347306	0.856	0.702

HSH2D1	4.71E-187	0.412243545	0.446	0.182
HIST1H1C	5.42E-186	0.57924045	0.479	0.216
TBCEL	6.20E-185	0.553955625	0.255	0.081
STAP11	4.08E-179	0.680232133	0.298	0.105
SEL1L31	5.83E-177	0.806147633	0.588	0.297
TOR3A	1.06E-174	0.435006216	0.362	0.142
THEMIS22	9.64E-173	0.327754587	0.422	0.173
EIF2AK32	3.86E-169	0.814029659	0.636	0.348
TSPAN13	2.57E-168	0.286617163	0.266	0.088
CPEB41	1.67E-167	0.803817338	0.564	0.287
UBE2J1	4.99E-165	0.501335504	0.584	0.296
PRPSAP2	7.29E-165	0.814718402	0.293	0.109
KDELR2	1.15E-164	0.312790178	0.482	0.213
CARMIL11	1.50E-164	0.649989406	0.392	0.166
CCDC88A1	7.86E-158	0.67301158	0.382	0.163
OSBPL101	2.91E-157	0.408177304	0.324	0.123
CDK142	1.03E-155	0.608169095	0.605	0.303
GALNT21	3.08E-155	0.563472823	0.597	0.305
KDELR1	1.27E-150	0.295310445	0.542	0.261
HMCES	7.78E-148	0.334714922	0.425	0.186
SEC24A1	4.21E-147	0.457758393	0.412	0.184
AC012447.1	3.80E-140	0.8659881	0.34	0.149
PECAM11	3.82E-134	0.271375295	0.32	0.13
PIM22	3.08E-131	0.25470111	0.48	0.224
TRIO2	3.00E-129	0.652412998	0.516	0.27
DAP	1.29E-127	0.250124422	0.406	0.185
FBH1	1.43E-124	0.257602132	0.308	0.127
HIPK21	1.50E-119	0.649585565	0.636	0.372
DENND1B	1.47E-118	0.77516172	0.591	0.343
TVP23C	1.38E-117	0.339392101	0.347	0.155
FHIT1	2.39E-116	0.357205597	0.335	0.149
RABAC11	8.84E-114	0.432033155	0.686	0.44
BTD2	4.92E-110	0.483656839	0.506	0.27
PAPSS11	6.58E-108	0.262199026	0.365	0.172
GMDS-DT	1.33E-101	0.399405798	0.432	0.22
TRAM1	1.61E-98	0.320832328	0.637	0.384
FNDC3A1	3.09E-98	0.774620851	0.714	0.514
USP481	3.08E-95	0.466846723	0.614	0.365
RPN2	5.54E-95	0.270160764	0.605	0.339
PDIA6	4.35E-93	0.258859009	0.627	0.362
BICD11	5.94E-88	0.320353885	0.431	0.225
SPCS1	2.91E-86	0.449343895	0.687	0.482
TENT5C2	7.06E-81	0.473503787	0.7	0.473

EHMT11	2.86E-78	0.925939997	0.642	0.467
OSBPL31	1.08E-77	0.379634264	0.555	0.333
DUSP5	1.48E-75	0.34366766	0.44	0.248
CDK62	1.62E-75	0.265940758	0.535	0.309
XIST1	1.21E-72	0.466431342	0.381	0.202
IGHM1	2.37E-68	4.182185946	0.361	0.204
CYBA1	2.28E-67	0.306682437	0.888	0.835
SEC61B	8.26E-66	0.517531213	0.736	0.556
ERN12	2.42E-65	0.349548507	0.591	0.37
PRDM13	5.53E-64	0.364414914	0.562	0.348
KRTCAP2	1.77E-63	0.311735308	0.675	0.469
NDUFAF61	9.22E-59	0.388711174	0.493	0.304
RHBDD11	3.23E-57	0.333208725	0.402	0.233
H1FX2	2.53E-54	0.357637866	0.582	0.401
WWOX1	3.20E-49	0.38446558	0.527	0.341
BCL2L111	1.37E-47	0.308941808	0.542	0.352
LINC00910	3.33E-47	0.428876391	0.332	0.203
EDEM12	3.76E-47	0.262850089	0.39	0.238
FCHSD21	7.27E-47	0.553125076	0.592	0.416
SND11	8.55E-43	0.419834972	0.634	0.441
FBXW7	1.04E-42	0.709089773	0.712	0.556
FAM214A2	4.79E-41	0.400977198	0.585	0.395
FUT81	7.79E-39	0.368226968	0.55	0.371
CYTOR2	1.58E-32	0.618123773	0.63	0.466
MAN1A11	1.22E-31	0.35220667	0.614	0.446
MDM2	4.18E-26	0.511813794	0.399	0.282
WDR741	2.99E-20	0.283849372	0.495	0.376
RAPGEF12	3.47E-12	0.354397418	0.715	0.601
NCOA31	1.86E-11	0.343061146	0.666	0.541
SQSTM1	0.000467914	0.611671056	0.727	0.687
ITPR22	0.0006016	0.373559671	0.585	0.504
APOE1	0	4.120457507	0.526	0.084
SPP11	0	3.848936307	0.386	0.072
C1QA1	0	3.650224021	0.639	0.078
C1QB1	0	3.627961765	0.624	0.078
CCL18	0	3.357546233	0.293	0.031
MMP12	0	3.283629239	0.261	0.025
APOC11	0	3.193069751	0.46	0.05
C1QC1	0	3.030892176	0.585	0.05
RNASE11	0	2.95067925	0.421	0.035
FTL1	0	2.920972835	0.983	0.925
CTSB1	0	2.902741513	0.735	0.259
LYZ1	0	2.81620979	0.659	0.122

CD141	0	2.454531489	0.569	0.073
IFI301	0	2.441568291	0.826	0.217
CTSZ1	0	2.410725714	0.803	0.319
TYROBP1	0	2.397527106	0.677	0.17
AIF11	0	2.348127729	0.665	0.131
CST31	0	2.334999272	0.699	0.172
PSAP1	0	2.314009261	0.775	0.403
CD681	0	2.310557266	0.619	0.097
MRC11	0	2.303297491	0.523	0.077
FCER1G1	0	2.29803929	0.644	0.131
SELENOP	0	2.270135738	0.281	0.025
FCGR2A1	0	2.238542372	0.636	0.101
MS4A6A1	0	2.234177071	0.588	0.088
CTSL1	0	2.233222102	0.554	0.089
GLUL1	0	2.154032327	0.663	0.211
MAFB1	0	2.092288303	0.568	0.076
FMNL21	0	2.05875805	0.573	0.103
TMEM176B1	0	2.041168588	0.543	0.064
GRN1	0	2.038666725	0.67	0.194
GPNMB1	0	2.023926576	0.507	0.049
FCGR3A1	0	1.975569797	0.565	0.088
LRMDA1	0	1.948634657	0.582	0.095
PLXDC21	0	1.934897636	0.6	0.111
LGMN1	0	1.898828894	0.653	0.153
MS4A71	0	1.895593392	0.594	0.088
CD1631	0	1.87944017	0.534	0.063
SLC16A101	0	1.877952445	0.524	0.131
FCGRT1	0	1.870190156	0.612	0.148
F13A11	0	1.844565353	0.337	0.037
IGSF61	0	1.837773306	0.531	0.082
NPC21	0	1.825107516	0.734	0.312
FMN11	0	1.812841935	0.574	0.13
MSR11	0	1.757015044	0.512	0.046
HLA-DRA2	0	1.746816456	0.98	0.526
HLA-DRB12	0	1.744208951	0.933	0.563
CD742	0	1.736771347	0.986	0.713
CAPG1	0	1.715912616	0.653	0.234
HLA-DPA12	0	1.706764638	0.95	0.565
DAB21	0	1.686627924	0.512	0.043
RAB311	0	1.685758733	0.712	0.153
PLD31	0	1.669924437	0.531	0.14
SLC40A1	0	1.665125637	0.367	0.028
CTSS1	0	1.657233228	0.849	0.489

MARCKS1	0	1.654091188	0.69	0.164
MS4A4A1	0	1.646737253	0.507	0.056
PAPSS21	0	1.627984132	0.441	0.069
CYBB2	0	1.622809504	0.732	0.173
TGFBI1	0	1.598935376	0.539	0.085
CXCL31	0	1.570184039	0.38	0.06
SLCO2B11	0	1.553181837	0.493	0.038
PMP221	0	1.546842932	0.52	0.063
SLC8A11	0	1.517835841	0.567	0.103
PLA2G71	0	1.516206099	0.416	0.043
HMOX11	0	1.512217708	0.461	0.088
TIMP21	0	1.48790466	0.579	0.127
FGL21	0	1.480604799	0.544	0.126
RBM471	0	1.477261408	0.685	0.171
KCNMA11	0	1.466232061	0.384	0.037
NRP11	0	1.463713982	0.497	0.06
PLTP	0	1.456288185	0.373	0.034
ABCA11	0	1.45100119	0.554	0.113
CREG11	0	1.448971585	0.549	0.133
TMEM176A1	0	1.432537425	0.457	0.051
FOLR2	0	1.41574625	0.348	0.024
IFITM31	0	1.40969654	0.567	0.175
HLA-DPB12	0	1.40268102	0.947	0.587
MERTK1	0	1.369965775	0.42	0.046
DOCK41	0	1.366142812	0.637	0.144
CTSH1	0	1.360825048	0.706	0.216
KCTD121	0	1.35704665	0.52	0.073
MFSD11	0	1.347980164	0.602	0.159
ASAH11	0	1.322729776	0.664	0.239
CXCL21	0	1.318791315	0.405	0.075
TNS31	0	1.31723516	0.609	0.162
GSN1	0	1.313230914	0.602	0.154
C5AR11	0	1.30745176	0.517	0.083
FPR31	0	1.29612739	0.477	0.059
HLA-DQB12	0	1.293068888	0.892	0.413
CSF1R1	0	1.291124572	0.504	0.064
TREM21	0	1.290312514	0.356	0.025
CXCL81	0	1.288972455	0.488	0.122
SLC1A31	0	1.280978865	0.437	0.049
SH3PXD2B1	0	1.267119151	0.478	0.062
DAPK11	0	1.259660329	0.476	0.082
PDGFC1	0	1.251372629	0.367	0.037
CALHM62	0	1.251368765	0.487	0.114

SPI11	0	1.243166412	0.597	0.12
STAB11	0	1.236819809	0.417	0.036
FRMD4A1	0	1.218911586	0.429	0.103
LHFPL21	0	1.207682653	0.518	0.074
VSIG41	0	1.2046858	0.361	0.035
SPRED11	0	1.204369393	0.443	0.051
SDS1	0	1.19570336	0.342	0.045
CD861	0	1.159803427	0.634	0.135
MITF1	0	1.148756045	0.401	0.037
LNCAROD1	0	1.141806034	0.335	0.034
HBEGF1	0	1.137648669	0.424	0.086
NUPR1	0	1.123973407	0.257	0.024
LST11	0	1.121472811	0.544	0.127
CPVL1	0	1.110934306	0.461	0.072
RASAL21	0	1.103173168	0.392	0.047
TFEC1	0	1.102736143	0.536	0.083
MNDA1	0	1.10045314	0.468	0.089
DMXL21	0	1.096274857	0.506	0.082
HLA-DMB2	0	1.081337538	0.682	0.227
C15orf481	0	1.063472426	0.429	0.089
CXCL161	0	1.054269843	0.472	0.083
TMEM1631	0	1.048853767	0.406	0.087
C3AR11	0	1.048114562	0.464	0.09
FCHO21	0	1.047468867	0.476	0.087
C1orf541	0	1.038485658	0.393	0.056
HNMT1	0	1.037567221	0.446	0.045
PSD31	0	1.032468773	0.406	0.089
CLEC7A1	0	1.024697481	0.472	0.096
LILRB41	0	1.022213394	0.428	0.056
TNFSF131	0	1.019465659	0.42	0.064
FNIP21	0	1.01830849	0.512	0.137
CPM1	0	1.014655705	0.472	0.12
ADAP21	0	1.012986435	0.462	0.058
B3GNT51	0	1.008233213	0.448	0.11
RASSF41	0	0.993043077	0.444	0.062
SERPINA11	0	0.986978835	0.418	0.073
SERPING11	0	0.981015579	0.36	0.046
GM2A1	0	0.980066898	0.448	0.108
SLC11A11	0	0.976833309	0.411	0.071
BNC2	0	0.972154186	0.311	0.04
STARD131	0	0.968803916	0.341	0.046
C2	0	0.961678711	0.338	0.039
ENPP21	0	0.954339863	0.353	0.052

SASH11	0	0.954268852	0.345	0.038
COLEC12	0	0.944311246	0.261	0.019
ITSN11	0	0.939184727	0.352	0.055
EPB41L31	0	0.937249347	0.496	0.083
GPR34	0	0.933964565	0.375	0.058
TLR21	0	0.931156771	0.446	0.078
RAB201	0	0.930076752	0.481	0.088
SRGAP11	0	0.927947877	0.373	0.071
PDK4	0	0.916278679	0.264	0.02
MCTP11	0	0.912300368	0.526	0.114
GNB41	0	0.910973817	0.459	0.103
FUCA1	0	0.900632369	0.325	0.057
TTYH31	0	0.900216027	0.474	0.082
ETS21	0	0.894058124	0.523	0.141
NRP21	0	0.885643278	0.396	0.055
NPL1	0	0.882979864	0.426	0.073
ZFH31	0	0.881804281	0.491	0.107
LAIR11	0	0.877976534	0.47	0.102
SLAMF81	0	0.867127313	0.372	0.04
RGL11	0	0.863613484	0.369	0.053
ADAM91	0	0.85991422	0.451	0.107
RCAN11	0	0.859486784	0.338	0.059
PLAUR1	0	0.85771834	0.569	0.142
RAB131	0	0.847579811	0.392	0.068
IL181	0	0.84666095	0.406	0.07
PLAU1	0	0.845903771	0.34	0.048
FCGR1A1	0	0.844990357	0.326	0.031
EMILIN21	0	0.844251407	0.571	0.151
SLC7A71	0	0.83915138	0.438	0.067
SIRPA1	0	0.832433648	0.464	0.08
MPEG11	0	0.822197511	0.406	0.07
CD163L1	0	0.813958719	0.273	0.016
NCF21	0	0.80958843	0.472	0.092
SLC15A31	0	0.805141576	0.427	0.074
FAM20A1	0	0.804944395	0.288	0.031
SDC21	0	0.785460382	0.284	0.046
KYNU1	0	0.784861516	0.69	0.172
TMEM511	0	0.781891623	0.367	0.044
MPP11	0	0.755241613	0.413	0.075
CLIC21	0	0.754497218	0.292	0.047
CYFIP11	0	0.74530189	0.436	0.094
DST1	0	0.740285858	0.338	0.066
THBD1	0	0.735845385	0.332	0.061

RAB321	0	0.732403033	0.378	0.055
LRP11	0	0.70578132	0.374	0.043
PTAFR1	0	0.697930475	0.384	0.057
JDP21	0	0.69781837	0.368	0.071
WDFY31	0	0.689745654	0.392	0.064
ALOX51	0	0.681795123	0.495	0.124
IDH1	0	0.675808353	0.383	0.081
LPCAT21	0	0.674654615	0.356	0.05
SHTN11	0	0.674428597	0.345	0.055
ADGRE21	0	0.672335614	0.359	0.07
MMP141	0	0.669469901	0.324	0.034
SLC31A11	0	0.666758585	0.353	0.067
GAA1	0	0.664730487	0.391	0.07
GAS2L31	0	0.654440084	0.297	0.036
OSBPL1A1	0	0.653688314	0.348	0.05
TSPAN41	0	0.648675448	0.323	0.036
RIN21	0	0.643263812	0.358	0.065
FGD41	0	0.642083713	0.531	0.123
TCEAL91	0	0.629346926	0.303	0.047
SLC7A8	0	0.628210444	0.268	0.019
CD931	0	0.625688668	0.32	0.056
ENG1	0	0.617996665	0.399	0.079
AXL1	0	0.616224739	0.33	0.059
SMIM251	0	0.612224855	0.33	0.047
CPED11	0	0.606737827	0.308	0.05
NEK61	0	0.602632295	0.415	0.08
CREB51	0	0.600561107	0.371	0.071
HCK1	0	0.590016838	0.448	0.091
FAM20C1	0	0.588461572	0.316	0.035
SLC31A21	0	0.570121244	0.358	0.071
CLEC4A1	0	0.569644509	0.301	0.053
ARHGAP221	0	0.563277016	0.304	0.039
ITGAX1	0	0.563258557	0.446	0.103
CMKLR11	0	0.55800061	0.275	0.022
SIGLEC121	0	0.553437842	0.278	0.025
TCN21	0	0.552730411	0.273	0.034
CSF2RA1	0	0.548508623	0.428	0.088
COLGALT11	0	0.546056756	0.373	0.075
FPR11	0	0.542102615	0.39	0.075
SDSL1	0	0.526329332	0.28	0.038
NECTIN21	0	0.522082868	0.35	0.062
TRPM21	0	0.518845165	0.329	0.06
TLR41	0	0.506187826	0.316	0.044

ST3GAL61	0	0.500925191	0.29	0.045
LRRC251	0	0.496176857	0.29	0.027
SIGLEC1	0	0.493009814	0.268	0.019
MRAS1	0	0.484504219	0.258	0.029
OLFML2B1	0	0.475808221	0.265	0.022
LILRB31	0	0.462929353	0.324	0.05
CD300LF1	0	0.457467116	0.257	0.024
VAT1	0	0.454984022	0.279	0.043
ARHGEF10L1	0	0.445315084	0.265	0.029
ETV5	0	0.443611928	0.263	0.032
SORT11	0	0.436290003	0.271	0.034
GASK1B1	0	0.429690831	0.268	0.035
FHAD11	0	0.398935706	0.251	0.036
OSCAR1	0	0.390943104	0.259	0.039
LTBR1	0	0.375260733	0.268	0.034
GLMP	3.18E-307	0.386227108	0.273	0.044
ACP2	2.94E-304	0.480264814	0.268	0.043
SIGLEC101	9.72E-304	0.477371706	0.311	0.057
TNFRSF211	3.86E-303	0.568445405	0.301	0.054
CCDC88A2	7.51E-303	0.929376016	0.554	0.164
FBP11	3.97E-301	1.140803839	0.332	0.066
DUSP31	1.50E-300	0.439600144	0.311	0.058
OLR11	2.71E-300	0.703242181	0.336	0.065
PILRA1	1.56E-299	0.650228466	0.445	0.109
MOB3B2	7.29E-299	0.878532963	0.505	0.136
SGK11	5.01E-297	1.325184921	0.594	0.203
NHSL11	8.39E-297	0.707131613	0.29	0.052
MCOLN11	2.12E-295	0.500993426	0.358	0.075
SNX82	5.47E-295	1.162063337	0.619	0.202
NCEH11	6.80E-294	0.536648389	0.352	0.073
SLC43A31	9.29E-294	0.526420573	0.329	0.065
HLA-DMA2	4.32E-293	1.227950844	0.783	0.351
KIF13A1	7.13E-293	0.526868655	0.325	0.064
HLA-DQA12	8.94E-293	1.236657195	0.863	0.4
ACP51	1.79E-292	1.663884763	0.559	0.186
TBXAS11	5.62E-290	0.944628716	0.577	0.185
CTSD1	2.84E-288	2.780620807	0.682	0.355
ITGAM1	1.52E-287	0.482538247	0.288	0.052
RNASE62	1.78E-287	0.769708766	0.456	0.12
ZNF804A1	2.32E-287	0.828688048	0.338	0.069
MMP191	1.03E-285	0.613735568	0.253	0.041
PLEK1	6.15E-285	0.722386734	0.588	0.179
CD300A1	8.26E-285	0.609827596	0.36	0.079

LILRB21	8.84E-285	0.447225808	0.27	0.047
SERPINB61	9.93E-283	0.641576936	0.484	0.132
TANC21	5.16E-281	1.008142038	0.453	0.121
ADM1	3.39E-280	0.707784926	0.302	0.059
RNF1301	1.16E-277	0.95971561	0.616	0.212
KLF41	1.99E-277	0.982429848	0.415	0.105
GRINA1	1.41E-276	0.545309393	0.417	0.104
NAIP1	1.21E-275	0.488948396	0.355	0.077
LY961	1.78E-275	0.912142036	0.516	0.159
IER31	1.90E-274	1.542143318	0.597	0.212
CFD	1.76E-273	1.080292558	0.481	0.137
ICAM11	7.13E-272	0.861526554	0.563	0.177
RRAGD1	8.48E-272	0.329529367	0.261	0.045
UNC93B11	3.16E-271	0.695053684	0.461	0.128
PXDC11	4.15E-271	0.508874838	0.305	0.06
IL13RA12	5.53E-270	0.600563044	0.464	0.123
ALCAM1	2.08E-268	1.245395211	0.673	0.266
TNFSF13B1	4.79E-268	0.951546863	0.486	0.144
ARHGAP181	6.07E-268	1.296000927	0.613	0.248
BRI31	6.96E-268	1.51576408	0.679	0.327
ACTN11	7.42E-268	0.568721912	0.423	0.107
FCGR2B2	4.80E-267	0.787159691	0.44	0.12
PLBD11	6.69E-267	0.484283909	0.336	0.072
A2M1	1.87E-266	0.981829755	0.387	0.096
BLVRB1	7.33E-266	0.970071256	0.496	0.154
CTBP21	5.48E-265	0.556533213	0.37	0.085
HEXB1	8.13E-264	0.839343583	0.505	0.156
TNFAIP21	1.03E-263	0.561790399	0.344	0.075
PEA151	1.03E-263	0.644022011	0.438	0.117
SPIRE1	1.28E-260	0.416255768	0.275	0.051
LGALS3BP1	1.70E-259	0.603865765	0.335	0.075
BMP2K2	1.20E-258	0.886932471	0.599	0.207
MMP91	4.38E-258	1.357591714	0.273	0.053
BCAT11	1.01E-257	0.673099441	0.426	0.112
TLR11	2.32E-257	0.39902189	0.343	0.077
ATP6AP11	6.40E-257	0.812064678	0.487	0.151
ALDH21	5.07E-255	0.706272742	0.388	0.096
RHOQ2	1.57E-254	0.867877032	0.623	0.221
HES11	1.64E-252	1.185101713	0.37	0.092
CNTLN1	1.29E-251	0.394073949	0.256	0.046
CEP1702	2.21E-250	0.902680602	0.639	0.239
LY862	2.55E-250	0.583798041	0.494	0.143
PPFIBP21	5.07E-249	0.56681328	0.368	0.089

MGST21	1.11E-248	0.449317551	0.33	0.075
GNS1	1.38E-248	0.782024973	0.509	0.16
UBE2E22	4.86E-248	0.892770953	0.663	0.243
SCARB21	2.09E-247	0.831364625	0.448	0.133
CD91	1.00E-244	0.986804612	0.427	0.123
LIPA1	2.96E-244	0.940660464	0.437	0.126
IL1B1	5.41E-244	0.798008896	0.409	0.106
CLIC42	1.37E-243	1.093291067	0.579	0.206
SNX102	1.82E-242	0.856971352	0.546	0.185
PLXND11	3.19E-242	0.38913378	0.301	0.063
TNFRSF1A1	7.04E-242	0.407980438	0.345	0.082
KIFC31	1.91E-240	0.326849371	0.262	0.05
ATP6V1B21	9.29E-240	0.792905134	0.488	0.154
RNF144B2	1.01E-239	0.634570144	0.531	0.163
ST141	3.60E-239	0.471769767	0.312	0.069
SYK2	5.08E-239	0.649598534	0.545	0.178
SLC43A21	3.36E-236	0.558587236	0.453	0.129
FGD21	5.92E-236	0.500428484	0.384	0.099
Clorf1621	3.06E-235	0.983704959	0.492	0.155
SBF21	1.31E-234	0.787552432	0.586	0.206
CCR11	3.21E-234	0.394038714	0.285	0.059
SCPEP12	4.92E-234	0.712963454	0.488	0.154
ATP6V0A11	8.47E-234	0.609498133	0.394	0.106
S100A91	1.27E-233	1.093477883	0.582	0.226
NAGA1	6.82E-233	0.371746373	0.283	0.059
CAMK11	1.12E-230	0.49340379	0.273	0.056
BLVRA1	2.16E-227	0.568730872	0.379	0.101
ABL21	9.99E-227	1.034332693	0.527	0.181
AP2A21	1.37E-226	0.821172671	0.457	0.142
CD632	3.88E-226	1.887468317	0.735	0.448
NFIC1	4.29E-226	0.564296083	0.426	0.122
CCL32	1.17E-225	1.378371737	0.448	0.141
GOLIM41	2.28E-224	0.519631734	0.408	0.114
CD402	3.88E-223	0.662242059	0.441	0.13
KIAA09301	1.51E-222	0.441181014	0.323	0.077
LGALS11	1.84E-222	1.559771465	0.775	0.446
GNPDA1	4.30E-220	0.462019659	0.367	0.096
IRAK31	4.76E-220	0.319788885	0.51	0.16
TYMP1	1.03E-219	1.593541106	0.715	0.408
IFNGR22	2.34E-219	0.693426338	0.576	0.209
SPINT21	2.44E-219	0.664219941	0.464	0.145
HLA-DOA1	6.41E-219	0.513305678	0.332	0.081
VASH11	4.41E-218	0.37665284	0.264	0.055

PHACTR12	1.80E-217	0.662973508	0.55	0.188
PGD1	2.09E-216	0.574989285	0.428	0.129
TREM11	2.79E-216	0.367625598	0.288	0.063
ITPRIPL21	9.95E-216	0.345604572	0.251	0.05
MAN2B11	2.26E-214	0.686687047	0.514	0.177
GRK32	2.39E-214	0.635284799	0.531	0.178
ZNF385A1	2.53E-214	0.395551613	0.261	0.055
THEMIS23	1.56E-213	0.567755361	0.523	0.177
PLEKHO21	2.11E-213	0.459480685	0.345	0.088
MYO1E2	6.63E-213	1.005643066	0.524	0.185
MB21D21	3.34E-212	0.706178345	0.425	0.127
DSE1	7.68E-212	0.687854922	0.53	0.183
TBC1D93	1.47E-210	0.656198798	0.425	0.126
BCL2A11	2.84E-210	0.752584374	0.617	0.234
CD832	5.61E-208	1.100679449	0.809	0.427
FAM49A2	4.85E-207	0.72994693	0.675	0.265
TCF7L21	7.33E-206	0.5620362	0.329	0.083
AMPD31	1.55E-205	0.629913741	0.388	0.11
CD151	2.76E-205	0.39903739	0.345	0.091
ANXA21	4.15E-205	1.399756995	0.69	0.391
VEGFA1	9.61E-205	0.613413073	0.338	0.087
CD3021	2.47E-203	0.750682337	0.433	0.135
AP2S11	5.91E-203	1.143603822	0.63	0.299
CLIP21	2.28E-202	0.536265293	0.294	0.07
IRF82	2.71E-202	0.643729713	0.609	0.223
PLBD21	7.36E-202	0.337450631	0.275	0.062
CORO1C1	1.13E-201	0.592203397	0.466	0.152
EPB41L21	1.41E-201	0.736702342	0.453	0.146
TBC1D121	1.26E-200	0.405430475	0.275	0.062
PPT11	1.91E-200	0.801237011	0.509	0.185
BTK2	1.99E-200	0.630374509	0.413	0.125
PECAM12	1.58E-199	0.663760483	0.423	0.133
GNAQ1	2.05E-199	0.974661623	0.569	0.231
SCIMP	6.08E-199	0.479948702	0.336	0.088
SNX24	4.36E-196	0.378458951	0.312	0.078
CTSA1	5.59E-196	0.934300407	0.531	0.209
SNAI11	1.01E-195	0.552637545	0.26	0.058
SHB1	1.63E-194	0.513003614	0.289	0.07
LAMP21	1.70E-194	0.876462019	0.547	0.224
ANXA41	8.28E-194	0.506676822	0.408	0.125
AL356124.11	2.34E-193	0.66114413	0.32	0.084
SIPA1L21	2.07E-192	0.311343383	0.287	0.068
AKR1B11	5.81E-192	0.651842204	0.411	0.131

TPP11	8.78E-192	0.727857029	0.529	0.2
SWAP701	2.26E-191	0.624257239	0.612	0.229
MFSD121	2.70E-190	0.535210517	0.404	0.126
11-Mar	4.76E-189	0.381779027	0.557	0.196
LGALS91	1.27E-188	0.762782907	0.492	0.176
CIITA2	3.34E-188	0.513407629	0.458	0.147
SGPL11	8.81E-188	0.549402643	0.381	0.114
SAT12	1.07E-187	1.049951186	0.926	0.778
SOD21	2.22E-187	1.131571808	0.815	0.555
FTH11	2.75E-187	1.297989707	0.989	0.942
PTPN121	1.24E-186	0.506330806	0.541	0.197
GAS62	1.59E-186	0.337082127	0.267	0.063
ZMIZ11	1.83E-186	0.531899382	0.471	0.159
TUBB62	2.90E-186	0.530591405	0.452	0.146
TRIO3	9.91E-186	0.653224644	0.658	0.273
SCARB11	2.18E-185	0.44487601	0.297	0.076
AGAP31	3.24E-185	0.476649005	0.353	0.1
DPYSL21	7.01E-185	0.605884329	0.414	0.132
GBA	7.38E-185	0.276246139	0.267	0.062
SMIM30	3.38E-184	0.47024371	0.351	0.099
NINJ11	1.08E-183	0.71380599	0.489	0.175
TBC1D21	1.19E-183	0.361412346	0.255	0.058
ANXA51	4.70E-183	1.088251969	0.705	0.391
RHOB2	6.25E-182	0.973267909	0.554	0.23
BAIAP21	7.63E-182	0.512125997	0.306	0.08
MGAT11	3.72E-180	0.843097678	0.565	0.241
OGFRL11	2.93E-178	0.722376621	0.567	0.224
PLIN31	3.04E-178	0.530803575	0.401	0.128
ABR1	3.79E-178	0.718347441	0.609	0.255
FHIT2	1.05E-177	0.74419816	0.441	0.152
DUSP61	1.82E-177	0.534335966	0.298	0.078
ATP6V1F1	2.42E-177	1.160210292	0.7	0.406
IL4I11	4.57E-177	0.592465524	0.345	0.1
S100A111	4.72E-176	1.62440672	0.773	0.592
SLC36A1	5.55E-176	0.349841008	0.254	0.059
ATP6V0B1	8.57E-176	1.052097092	0.662	0.359
APP2	9.31E-176	0.825860905	0.479	0.173
RASGEF1B2	1.36E-175	0.916100119	0.73	0.364
MYOF1	2.26E-175	0.41721423	0.282	0.071
COMT1	1.79E-174	0.752203104	0.521	0.208
DBNDD21	2.31E-174	0.398842269	0.325	0.09
LRRK21	3.74E-173	0.394830294	0.276	0.07
HLA-DQA22	3.87E-173	1.057469005	0.606	0.272

LGALS31	4.06E-173	1.514388316	0.624	0.338
YWHAH1	7.20E-173	0.97088572	0.586	0.268
CD1091	8.42E-173	0.901268536	0.386	0.124
AKR1A11	5.91E-171	0.831729106	0.538	0.228
ACSL11	3.27E-170	0.37601283	0.574	0.234
SLC38A6	3.52E-170	0.317926245	0.26	0.062
OAZ21	3.58E-169	0.451307878	0.376	0.116
PHC21	2.44E-168	0.574827617	0.393	0.128
ATP6V0C1	3.67E-168	0.966218176	0.79	0.538
PPM1L1	4.65E-168	0.517170327	0.351	0.104
DRAM11	6.15E-168	0.551179298	0.396	0.128
LYN2	1.52E-167	0.350657673	0.803	0.356
CLCN7	2.42E-167	0.303188294	0.328	0.093
SKAP22	5.37E-167	0.614515517	0.652	0.283
GNG101	3.48E-165	0.65283758	0.504	0.197
CPNE81	6.91E-165	0.393803372	0.328	0.094
LAPTM52	7.64E-165	0.84986926	0.911	0.699
CTTNBP2NL1	1.07E-164	0.350601422	0.273	0.07
CTNND11	1.33E-164	0.511995412	0.407	0.134
AL078604.41	9.66E-164	1.075610764	0.425	0.15
TCEAL4	4.59E-163	0.364552337	0.371	0.116
ARRB11	1.08E-161	0.309221658	0.256	0.064
LACTB1	3.64E-161	0.494236324	0.445	0.156
SYNGR22	6.90E-161	0.613418461	0.602	0.26
SH2B32	1.64E-160	0.468040201	0.559	0.214
SESTD12	1.31E-159	0.590863979	0.492	0.182
QKI1	5.24E-159	1.010607629	0.77	0.492
NAGK1	6.77E-159	0.768508087	0.453	0.17
CTSC2	2.21E-158	1.538619331	0.684	0.418
FKBP151	5.50E-158	0.38447523	0.355	0.11
ATOX11	9.47E-158	1.029727272	0.556	0.256
ASPH1	1.08E-157	0.501649728	0.406	0.139
DDAH21	1.39E-157	0.426992279	0.386	0.127
HSD17B4	2.49E-157	0.446153213	0.396	0.131
IL1RN1	3.83E-157	0.743770445	0.279	0.075
NFKBIE1	3.84E-157	0.420312499	0.341	0.105
G0S21	1.75E-156	0.855314072	0.328	0.098
RAB341	1.78E-156	0.251145653	0.254	0.064
MEF2C2	1.80E-156	0.705418268	0.627	0.268
ARRB21	1.22E-155	0.495740163	0.479	0.18
MSRB2	2.12E-155	0.386017401	0.285	0.078
C20orf1941	1.02E-154	0.41693839	0.344	0.105
KMO1	2.29E-154	0.474962623	0.315	0.092

MGLL1	5.42E-154	0.418444567	0.263	0.069
ACER31	5.71E-153	0.663398422	0.496	0.197
PTTG1IP1	3.26E-152	0.714117639	0.516	0.218
GLA2	3.37E-151	0.711735366	0.504	0.206
EGR3	7.27E-151	0.695071673	0.258	0.069
GSAP2	7.73E-151	0.438676611	0.443	0.156
LRRC231	1.08E-150	1.102327174	0.44	0.172
HEXA2	1.85E-150	0.75670501	0.567	0.258
KIF16B	2.68E-149	0.39786557	0.329	0.1
CSTB1	5.47E-149	1.672251357	0.667	0.422
CSTA1	5.76E-149	0.505572243	0.324	0.097
DOCK7	1.81E-148	0.26607508	0.25	0.064
GSTO11	4.53E-148	1.021577491	0.611	0.326
PEAK12	4.65E-148	0.73323242	0.549	0.233
FUCA21	4.79E-148	0.41699891	0.328	0.103
TCEAL3	7.02E-148	0.267676568	0.267	0.071
CD801	2.33E-147	0.384970297	0.337	0.104
SDCCAG82	2.50E-147	0.610137302	0.56	0.241
LILRB11	3.31E-147	0.304567749	0.272	0.075
ARHGAP211	4.17E-147	0.54402351	0.381	0.13
NCOA41	4.20E-147	0.682632391	0.536	0.229
FRMD4B2	8.75E-146	0.794364708	0.473	0.189
OPN31	2.62E-145	0.312903373	0.261	0.07
LAMP11	8.49E-145	0.763088391	0.596	0.292
NUDT161	1.85E-144	0.353883517	0.303	0.09
METTL7A1	1.27E-143	0.419272692	0.283	0.082
PIK3AP12	4.62E-143	0.420681034	0.522	0.204
AP1B11	5.06E-143	0.532192415	0.554	0.234
PLXNC11	1.38E-142	0.433181643	0.438	0.165
CD812	2.87E-142	1.154447343	0.76	0.515
MPZL11	4.55E-141	0.298557373	0.285	0.082
SRGAP2B1	5.73E-140	0.460110882	0.371	0.127
LAT22	1.95E-139	0.365654766	0.45	0.168
MKNK11	3.14E-139	0.366569029	0.401	0.142
PARVB2	1.26E-138	0.517965312	0.559	0.239
PPARD2	8.58E-138	0.51119296	0.525	0.217
DNASE2	9.95E-138	0.544861806	0.375	0.134
PYCARD1	8.60E-137	0.749988291	0.549	0.256
GABARAP1	4.39E-136	0.889511577	0.813	0.577
ALAS11	3.94E-135	0.397101276	0.293	0.088
PLEKHO12	6.03E-135	0.587888767	0.554	0.244
BCKDK1	1.73E-134	0.278550692	0.254	0.071
ARHGAP101	9.07E-134	0.747334665	0.455	0.182

SUSD11	9.69E-134	0.266204094	0.257	0.072
KIF1B1	2.11E-133	1.031311963	0.541	0.258
CTNNA11	4.70E-133	0.507079322	0.511	0.215
SMCO41	1.14E-132	0.355055203	0.315	0.1
FGR1	3.79E-132	0.290543031	0.28	0.083
FUOM1	4.08E-132	0.476729573	0.358	0.126
TCF41	5.08E-132	0.33858889	0.598	0.258
TIMP11	8.18E-132	0.892377371	0.515	0.228
EVI53	1.14E-131	0.483711304	0.463	0.186
PRDX11	2.28E-131	1.024296382	0.765	0.558
EPAS11	3.16E-131	0.510305298	0.365	0.129
FLOT11	3.23E-131	0.429346785	0.488	0.198
SEMA4A1	2.98E-130	1.121052657	0.401	0.154
ZNF7101	8.82E-130	0.369411342	0.361	0.126
ERRFI1	1.32E-128	0.553490195	0.266	0.079
PDXK1	2.08E-128	0.682163422	0.544	0.261
NQO21	3.39E-128	0.429110561	0.344	0.117
GAB22	6.69E-128	0.468224916	0.657	0.319
BASP11	9.53E-128	0.348081252	0.61	0.284
HLA-DRB52	1.20E-127	1.276814288	0.506	0.234
TEC	2.29E-127	0.365208535	0.289	0.09
ADA21	3.55E-127	0.47297065	0.413	0.16
SLC16A31	1.00E-126	0.505999846	0.544	0.243
LPAR6	1.32E-126	0.445113957	0.411	0.156
WDFY41	3.25E-126	0.362493196	0.446	0.172
CPPED11	7.20E-126	0.320699788	0.32	0.105
LATS21	9.34E-126	0.325881054	0.315	0.103
PEPD	2.49E-125	0.406754871	0.42	0.162
CPQ1	3.53E-125	0.394639972	0.504	0.207
ABHD121	7.95E-125	0.558102295	0.467	0.195
M6PR1	4.43E-124	0.641315135	0.574	0.279
TENT5A1	8.16E-124	0.652355946	0.318	0.108
CNDP21	1.30E-123	0.484464225	0.484	0.206
SLC25A24	1.98E-123	0.365620907	0.401	0.149
RNF131	2.21E-123	0.542279837	0.618	0.311
SH3BP52	2.50E-123	0.529964467	0.614	0.297
SLC8B11	3.04E-123	0.373147398	0.326	0.11
CD591	5.59E-123	0.785218684	0.482	0.223
ATF51	8.48E-123	0.439507833	0.332	0.115
NCF4	1.39E-122	0.424349118	0.458	0.185
H2AFY1	2.38E-122	0.788858789	0.608	0.316
PAK12	3.71E-122	0.360813331	0.451	0.178
CYBA2	1.12E-121	0.763711026	0.921	0.836

RAC11	3.47E-121	0.886132146	0.757	0.536
LYL11	3.58E-121	0.287876337	0.301	0.097
GPX41	4.34E-121	0.819013738	0.747	0.476
ZNF4381	4.65E-121	0.363802854	0.36	0.129
LITAF1	1.11E-120	0.602269594	0.784	0.525
TPD52L21	3.80E-119	0.285089141	0.35	0.124
PRKAG21	1.07E-118	0.571917103	0.576	0.274
ATP6V1C11	1.15E-118	0.373506039	0.414	0.16
SRGAP22	2.01E-118	0.552842081	0.561	0.263
ZFYVE161	4.07E-118	0.410438816	0.51	0.219
EVA1B	7.69E-118	0.280457841	0.265	0.082
TUBB1	3.08E-117	0.687117105	0.559	0.275
TPRA11	6.59E-117	0.339176547	0.301	0.101
NUCB11	1.66E-116	0.599038171	0.525	0.246
EIF4EBP11	2.61E-116	0.353178313	0.354	0.13
GRASP2	7.85E-116	0.326033204	0.54	0.229
SAMD4A1	1.14E-115	0.452950071	0.362	0.134
CDK2AP11	1.45E-115	0.355878041	0.285	0.092
CLN81	8.29E-115	0.383234909	0.373	0.139
PCBD1	1.65E-114	0.407599105	0.348	0.127
HCFC1R1	8.43E-114	0.300669437	0.293	0.097
VAMP81	1.60E-112	1.016736089	0.675	0.472
ALPK1	1.74E-111	0.285621426	0.298	0.1
PTMS1	2.80E-110	0.600904717	0.499	0.23
VEGFB1	7.50E-110	0.379338714	0.461	0.197
SOAT11	1.09E-109	0.459953132	0.455	0.195
DUSP23	2.19E-109	0.2501749	0.31	0.107
TFPT	3.40E-109	0.301211088	0.305	0.105
RIPK21	3.88E-109	0.544517552	0.445	0.189
UPP11	6.08E-109	0.614755055	0.51	0.238
PKM2	1.41E-108	0.725797534	0.686	0.415
LAMTOR21	2.21E-108	0.549726224	0.501	0.236
CCL3L11	4.38E-108	0.647836655	0.273	0.092
ARPC51	2.52E-107	0.761464421	0.75	0.515
QSOX11	2.73E-107	0.271549316	0.312	0.11
ZYX1	3.18E-107	0.394129993	0.379	0.148
GPR137B1	6.44E-107	0.544068251	0.494	0.229
HAVCR22	6.93E-107	0.328317996	0.473	0.203
SLC39A1	7.08E-107	0.268857328	0.305	0.106
ATP6AP21	9.94E-107	0.721722923	0.558	0.307
HSBP11	1.15E-106	0.566167071	0.534	0.259
SPG211	1.22E-106	0.320598343	0.379	0.148
NAMPT1	1.46E-106	0.509019312	0.76	0.538

ARL8A	1.56E-106	0.326966338	0.342	0.126
CRTAP	1.77E-106	0.287884055	0.33	0.119
TALDO11	1.85E-106	0.727169362	0.575	0.312
SNTB11	2.02E-106	0.453393553	0.283	0.096
YBX11	2.59E-106	0.710064399	0.896	0.771
KLF101	4.52E-106	0.376563178	0.343	0.129
NEDD4L1	1.10E-105	0.296365	0.289	0.099
SLC11A21	1.68E-105	0.380957916	0.329	0.121
PDIA41	2.40E-105	0.395567745	0.357	0.139
MXD11	7.32E-105	0.511712631	0.526	0.254
LIMS11	7.44E-105	0.771983233	0.72	0.475
DOP1B	1.25E-104	0.374845115	0.264	0.086
SLC45A41	1.54E-104	0.531667782	0.366	0.146
NME21	1.58E-104	0.699174497	0.833	0.611
PLSCR11	1.60E-104	0.415206038	0.555	0.258
FEZ2	2.38E-104	0.31232897	0.34	0.126
IRAK21	2.86E-104	0.329493273	0.428	0.178
STX41	5.05E-104	0.364680633	0.425	0.178
MANBA2	7.87E-104	0.455195881	0.648	0.332
ATP6V0D11	1.79E-103	0.503987064	0.578	0.292
SLC66A21	2.04E-103	0.32485243	0.435	0.182
DENND32	1.37E-102	0.300281977	0.416	0.171
P4HA11	3.40E-102	0.673705507	0.579	0.299
PTPN6	4.42E-102	0.391754361	0.504	0.227
NTAN1	7.78E-102	0.358781618	0.33	0.123
MGST3	1.14E-101	0.690888769	0.564	0.306
PLEKHM22	2.14E-101	0.377988639	0.494	0.222
VAMP31	3.50E-101	0.298405877	0.308	0.112
CD722	4.75E-101	0.312261733	0.393	0.156
IFNGR12	9.73E-101	0.533356394	0.57	0.286
PTPN91	1.76E-100	0.293254413	0.313	0.114
CANX1	3.97E-100	0.715098723	0.625	0.374
STX71	5.58E-99	0.375684531	0.518	0.239
NXF1	1.11E-98	0.508250792	0.431	0.19
RNH11	4.66E-98	0.624517727	0.584	0.322
ACTB1	6.37E-98	0.778924862	0.96	0.887
USP6NL1	1.95E-97	0.386982618	0.335	0.128
RAB7A1	2.05E-97	0.88600607	0.805	0.596
GAS72	3.56E-97	0.430833415	0.355	0.14
TOM11	4.38E-97	0.432816437	0.504	0.237
AGPAT2	6.14E-97	0.260846084	0.324	0.121
21-Mar	7.55E-97	0.329705293	0.322	0.121
TMBIM1	7.59E-97	0.32618004	0.342	0.131

CBR1	8.96E-97	0.280779292	0.323	0.121
SLC39A111	1.73E-96	0.550039789	0.509	0.247
IL3RA1	2.44E-96	0.36404519	0.279	0.099
KLHL62	4.60E-96	0.547164895	0.529	0.265
ITGA51	5.40E-96	0.349850214	0.298	0.107
RGS191	6.27E-96	0.403904577	0.466	0.208
ANKS1A1	9.98E-96	0.395785797	0.422	0.184
TSPAN331	1.74E-95	0.319060443	0.291	0.104
TNFSF12	3.00E-95	0.337995594	0.364	0.146
P2RX41	3.25E-95	0.315009042	0.336	0.131
CD43	4.48E-95	0.488937955	0.476	0.221
PTPRE1	1.26E-94	0.40972643	0.451	0.203
HSD17B12	1.65E-94	0.274537321	0.309	0.115
TFRC1	1.90E-94	0.86914222	0.616	0.359
STK31	4.70E-94	0.361854504	0.388	0.162
ITGB22	9.94E-94	0.895183127	0.588	0.363
SLC17A51	1.42E-93	0.281654289	0.288	0.104
PRDX3	2.06E-93	0.333036127	0.376	0.155
TPM41	2.69E-93	0.732591959	0.684	0.448
RREB12	7.70E-93	0.38836209	0.487	0.227
GLIPR21	1.10E-92	0.428436125	0.404	0.175
EFHD21	1.51E-92	0.671168711	0.609	0.346
GNA151	2.55E-92	0.387743975	0.395	0.166
FABP51	3.37E-92	1.027565051	0.602	0.348
LRRK11	3.53E-92	0.259074349	0.275	0.099
PDE4DIP1	5.75E-92	0.317679833	0.358	0.145
SPART1	6.49E-92	0.269014563	0.308	0.115
ATP1B11	8.82E-92	0.42875205	0.368	0.155
APLP21	9.79E-92	0.643715895	0.647	0.401
VAV21	2.85E-91	0.296611325	0.267	0.095
SMIM31	2.86E-91	0.275752657	0.269	0.094
ARHGAP311	4.15E-91	0.309701425	0.361	0.146
TSPAN31	2.37E-90	0.29575752	0.331	0.131
CREBL2	2.58E-90	0.348486761	0.322	0.124
TCIRG11	5.05E-90	0.286042025	0.415	0.182
CAT1	5.25E-90	0.303774152	0.324	0.126
GADD45G	9.55E-90	0.443673898	0.271	0.098
LEPROT	1.23E-89	0.293930896	0.363	0.15
PTPN18	1.85E-89	0.269853255	0.389	0.162
RASGRP32	3.68E-89	0.364171427	0.359	0.149
SLC25A131	6.39E-89	0.270707537	0.396	0.168
SLC2A131	7.38E-89	0.282930829	0.313	0.12
GNAI21	1.07E-88	0.633756911	0.757	0.54

SNX271	1.13E-88	0.251176439	0.3	0.113
SDCBP1	1.42E-88	0.594422352	0.788	0.559
NFIL32	3.93E-88	0.343275695	0.461	0.213
OTUD12	4.74E-88	0.546015211	0.451	0.214
GSTP11	5.33E-88	0.634796558	0.69	0.455
TUBA1B1	5.83E-88	0.762544923	0.784	0.56
CHCHD101	1.65E-87	0.507885715	0.641	0.368
PPIF1	1.99E-87	0.291380544	0.37	0.154
FOXO31	2.40E-87	0.497053181	0.614	0.333
VASP1	7.55E-87	0.428355809	0.611	0.328
SAV12	9.24E-87	0.405528076	0.356	0.149
GPD21	2.69E-86	0.30286745	0.332	0.133
NR4A22	2.73E-86	0.845766482	0.752	0.511
CHKA1	4.73E-86	0.350138532	0.44	0.202
VKORC1	7.53E-86	0.324551528	0.41	0.184
P4HB1	2.18E-85	0.626309478	0.576	0.339
AP1S21	2.25E-85	0.450452776	0.429	0.197
TEX142	2.66E-85	0.674067132	0.546	0.294
NFKBID2	3.14E-85	0.528868661	0.456	0.218
PFKL	8.88E-85	0.284986832	0.349	0.144
FERMT31	9.19E-85	0.454017107	0.479	0.233
ZFAND52	1.23E-84	0.780245043	0.72	0.485
VIM2	1.24E-84	0.764114643	0.903	0.761
JOSD2	1.88E-84	0.296502102	0.33	0.133
BCAP31	3.70E-84	0.535805328	0.506	0.267
BAG32	4.18E-84	0.897086354	0.48	0.255
NAAA1	5.43E-84	0.309359603	0.34	0.138
LAP31	8.58E-84	0.678922407	0.565	0.319
RNASET23	8.83E-84	0.565081845	0.793	0.549
RAPH11	9.44E-84	0.335553369	0.277	0.104
CALU	1.41E-83	0.3644174	0.433	0.203
SLC12A71	1.42E-83	0.285066864	0.253	0.09
EHBP1L11	2.43E-83	0.274516146	0.372	0.159
VAC14	3.78E-83	0.290521876	0.323	0.13
RP21	3.83E-83	0.309543099	0.315	0.125
ACSL31	4.99E-83	0.509751097	0.535	0.277
C9orf722	5.87E-83	0.326103071	0.513	0.252
SH3BP21	1.31E-82	0.258223627	0.268	0.099
IER51	2.12E-82	0.812321131	0.656	0.421
EIF4A11	2.39E-82	0.576235084	0.866	0.717
ADPGK1	2.54E-82	0.263602492	0.469	0.217
CNPY31	3.05E-82	0.334842765	0.509	0.247
RIN32	5.59E-82	0.257462931	0.521	0.248

TET32	5.92E-82	0.295035428	0.397	0.176
TNFRSF10D1	7.46E-82	0.442241065	0.326	0.136
S100A102	1.17E-81	0.924344425	0.785	0.598
ATG71	1.56E-81	0.46053956	0.609	0.344
GNA122	1.88E-81	0.333619875	0.549	0.276
ACOT13	1.04E-80	0.256173336	0.34	0.141
NCOR21	3.47E-80	0.323002251	0.491	0.237
GIPC1	4.27E-80	0.475738083	0.277	0.107
CDKN1A1	4.32E-80	0.379813924	0.503	0.251
KLF72	5.83E-80	0.271981565	0.381	0.166
LAMTOR11	6.27E-80	0.476593332	0.526	0.28
TULP21	6.32E-80	0.422686463	0.325	0.137
GUSB	6.63E-80	0.348369649	0.391	0.177
EEPD11	1.61E-79	0.308609313	0.272	0.104
SUMF11	1.74E-79	0.337865347	0.471	0.226
TUBA1C2	3.44E-79	0.581584363	0.589	0.338
RASSF22	3.70E-79	0.2919825	0.396	0.178
WARS1	1.10E-78	0.382404144	0.311	0.128
AHCYL11	1.33E-78	0.298949037	0.38	0.17
SMS1	1.42E-78	0.349791685	0.482	0.235
TUBGCP21	2.31E-78	0.273026942	0.383	0.169
CUX11	2.55E-78	0.337670966	0.668	0.379
DRAM21	2.96E-78	0.366364188	0.456	0.22
RAP2B	3.29E-78	0.411814196	0.418	0.194
MEF2A1	3.93E-78	0.460894958	0.687	0.408
SQOR1	4.18E-78	0.330082901	0.405	0.187
SNX292	4.75E-78	0.435240555	0.627	0.356
RTN41	4.86E-78	0.594537807	0.72	0.495
RHBDF22	9.23E-78	0.278637627	0.432	0.202
CHID1	1.03E-77	0.265512153	0.274	0.107
FNDC3B2	1.62E-77	0.612116995	0.623	0.396
AFDN	2.81E-77	0.266424649	0.295	0.118
SNX31	2.91E-77	0.519500785	0.707	0.453
MAFF1	5.62E-77	0.291267163	0.372	0.164
LAPTM4A1	7.85E-77	0.475430876	0.598	0.339
TBC1D141	1.32E-76	0.342611515	0.398	0.185
TSC22D12	1.61E-76	0.463524701	0.39	0.18
GADD45B2	4.60E-76	0.646684572	0.686	0.454
STX61	9.94E-76	0.367479847	0.345	0.15
NUBP11	1.48E-75	0.318753952	0.352	0.154
RNASEK1	3.87E-75	0.612880533	0.818	0.648
AF117829.11	1.77E-74	0.30906961	0.312	0.13
HIF1A2	1.89E-74	0.608071182	0.778	0.544

SLC44A12	4.10E-74	0.326258824	0.326	0.141
CPEB42	4.42E-74	0.533372037	0.539	0.297
ADAM171	4.64E-74	0.501588512	0.524	0.283
GNB21	5.73E-74	0.386893492	0.518	0.269
RFX21	6.16E-74	0.499643824	0.328	0.143
PHACTR41	7.69E-74	0.679767994	0.514	0.28
ATP13A32	3.33E-73	0.432679779	0.569	0.317
BNIP3L1	7.56E-73	0.467506148	0.534	0.295
BAZ2B1	7.58E-73	0.357533563	0.524	0.28
SLC25A191	7.71E-72	0.276226052	0.299	0.124
VPS351	1.28E-71	0.343211759	0.453	0.224
PABPC41	1.55E-71	0.416761948	0.571	0.316
DENND1A1	2.22E-71	0.380675499	0.588	0.328
UBE2D11	2.33E-71	0.334164223	0.481	0.244
RAB5C1	2.43E-71	0.47196047	0.602	0.351
PAPSS12	3.29E-71	0.292680572	0.382	0.178
TMSB101	4.77E-71	0.661679179	0.983	0.932
ARSB1	6.43E-71	0.290120311	0.33	0.144
ITM2B2	6.94E-71	0.965371325	0.834	0.779
RRBP12	7.96E-71	0.283940658	0.486	0.25
ATP6V1A	9.55E-71	0.343495924	0.473	0.238
NENF	1.04E-70	0.344774666	0.425	0.206
EEA11	3.55E-70	0.268502765	0.459	0.223
SMIM141	1.35E-69	0.344061572	0.404	0.193
YWHAG1	4.98E-69	0.334529706	0.514	0.268
ZFP36L12	2.63E-68	0.57618108	0.732	0.493
CLTA1	4.10E-68	0.547055769	0.671	0.455
NPTN2	1.30E-67	0.303367566	0.476	0.24
C4orf48	1.48E-67	0.308683745	0.463	0.233
TMEM147	2.57E-67	0.329089513	0.405	0.196
IFNAR1	3.15E-67	0.327553084	0.426	0.212
ABHD51	4.66E-67	0.304490728	0.405	0.201
RPN1	1.04E-66	0.349242546	0.431	0.216
UBTD21	1.15E-66	0.293753326	0.292	0.124
PRNP1	1.45E-66	0.440583419	0.524	0.288
GCLC	4.10E-66	0.281946908	0.313	0.136
TRAPPC51	5.90E-66	0.428549255	0.586	0.347
GNA132	6.06E-66	0.512054664	0.696	0.443
IER5L2	9.44E-66	0.321766925	0.416	0.207
ATP2A21	1.55E-65	0.549731415	0.558	0.323
SERF21	1.87E-65	0.619390916	0.927	0.857
CMTM62	2.09E-65	0.459628577	0.709	0.434
LCP21	4.31E-65	0.252688753	0.542	0.316

SIL11	4.60E-65	0.283974826	0.409	0.202
SNX21	5.53E-65	0.317188565	0.68	0.406
ATP2C11	6.35E-65	0.570647065	0.539	0.31
TPI11	7.05E-65	0.609780548	0.716	0.512
PDE8A2	2.46E-64	0.38580982	0.521	0.285
ABI31	3.08E-64	0.285679354	0.355	0.165
CALR1	4.85E-64	0.632956157	0.754	0.574
TMEM30A	9.81E-64	0.267493742	0.376	0.176
DBI1	1.17E-63	0.651072669	0.717	0.519
ODF3B1	2.48E-63	0.260077555	0.26	0.108
TMEM14C	3.38E-63	0.383192362	0.437	0.225
CD841	6.16E-63	0.387144558	0.434	0.225
NRIP12	1.04E-62	0.324880069	0.504	0.266
CAPNS11	1.89E-62	0.310380642	0.456	0.236
PHLDA21	2.27E-62	0.404657596	0.255	0.107
PRCP2	2.38E-62	0.291736946	0.392	0.193
TKT1	4.25E-62	0.343937408	0.549	0.311
VPS8	7.53E-62	0.30862106	0.436	0.224
MIR181A1HG1	1.25E-61	0.296949862	0.369	0.177
GNG72	2.07E-61	0.417396482	0.524	0.29
ARHGAP241	6.40E-61	0.6321921	0.406	0.211
SUMO3	6.72E-61	0.281631919	0.464	0.241
PLEKHB21	1.31E-60	0.34762645	0.554	0.311
FAM210A1	2.10E-60	0.378696039	0.401	0.203
SLC25A331	3.99E-60	0.363238654	0.423	0.22
TSPO1	4.22E-60	0.698196041	0.625	0.446
ARPC32	1.23E-59	0.479669632	0.883	0.77
ECHS1	1.74E-59	0.339216773	0.4	0.201
ARL8B1	2.86E-59	0.37898865	0.649	0.403
CAP11	6.12E-59	0.514393261	0.674	0.456
DBNL1	1.75E-58	0.295102989	0.504	0.27
SIPA1L12	2.54E-58	0.387625957	0.854	0.675
RALA1	4.84E-58	0.525191331	0.592	0.374
MTSS12	1.23E-57	0.333823953	0.441	0.23
RTN3	2.80E-57	0.304842206	0.539	0.309
SGK31	1.05E-56	0.291581331	0.438	0.227
TNFRSF10B1	1.12E-56	0.3738074	0.35	0.173
NFATC12	2.62E-56	0.530624225	0.467	0.259
TXN1	5.32E-56	0.67141012	0.676	0.48
ADCY31	7.75E-56	0.278548412	0.288	0.13
ITPR23	1.33E-55	0.491000694	0.72	0.501
CHD91	2.83E-55	0.305040052	0.545	0.31
AP2M1	8.34E-55	0.335170488	0.521	0.299

CLTC1	9.87E-55	0.37421197	0.527	0.309
GRB22	1.85E-54	0.396258911	0.784	0.595
VPS29	2.12E-54	0.371439779	0.564	0.337
GBP11	1.27E-53	0.365464782	0.353	0.174
RHOG1	2.04E-53	0.30944334	0.566	0.328
CTDNEP1	2.48E-53	0.256647496	0.419	0.219
MYO9B1	2.69E-53	0.324004091	0.622	0.389
KDELR11	7.54E-53	0.374129474	0.476	0.273
CCDC501	1.04E-52	0.343426605	0.452	0.246
ZEB22	1.48E-52	0.254026119	0.71	0.455
SAP301	1.60E-52	0.262773636	0.33	0.162
RHOA1	2.96E-52	0.48448251	0.84	0.687
MAP3K131	3.12E-52	0.259926788	0.345	0.171
HIP11	3.49E-52	0.401539195	0.335	0.169
ATP6V1E1	9.47E-52	0.297840298	0.474	0.261
RBPJ3	1.38E-51	1.466182862	0.675	0.496
H2AFJ	4.89E-51	0.334865736	0.418	0.226
C6orf62	1.10E-50	0.274894376	0.521	0.296
ARPC1B2	1.95E-50	0.54801491	0.801	0.627
OAZ1	3.05E-50	0.385185192	0.926	0.862
COTL11	1.30E-48	0.466670706	0.774	0.548
FCHSD22	2.13E-48	0.261630675	0.663	0.419
MLEC	2.62E-48	0.279817346	0.386	0.207
GDI22	4.59E-48	0.369856021	0.666	0.422
TCOF11	6.84E-48	0.33873258	0.35	0.181
NCKAP1L	6.91E-48	0.294472064	0.508	0.292
NEAT11	1.15E-47	0.623158442	0.856	0.827
BHLHE402	1.36E-47	0.28942981	0.448	0.249
EMP31	1.92E-47	0.483522218	0.677	0.485
MYDGF1	5.79E-47	0.433659537	0.476	0.291
TMBIM6	8.01E-47	0.478033642	0.812	0.674
SPATS21	1.27E-46	0.316370295	0.305	0.15
ANKH3	1.59E-46	0.585370284	0.467	0.273
NAPA1	1.60E-46	0.399090338	0.563	0.347
POLG21	2.25E-46	0.299989765	0.31	0.158
OS9	4.92E-46	0.250971456	0.496	0.291
TIMM8B	4.93E-46	0.27828991	0.399	0.217
RB11	6.40E-46	0.309012487	0.707	0.462
RNF181	1.48E-45	0.286458938	0.474	0.275
PGLS1	1.73E-45	0.302841586	0.486	0.276
CAPZB1	9.67E-45	0.408983503	0.739	0.579
SNAPC11	1.03E-44	0.398214958	0.348	0.185
NR4A32	1.29E-44	0.552063902	0.579	0.365

PIKFYVE1	1.56E-44	0.424529523	0.447	0.256
ATF62	2.02E-44	0.495145103	0.637	0.424
LMNA3	2.13E-44	0.385215184	0.662	0.439
WASHC2A	2.99E-44	0.25013321	0.374	0.2
AC020916.12	9.93E-44	0.354277926	0.512	0.312
SH3BGRL1	1.10E-43	0.408478989	0.746	0.54
ZNF433-AS1	1.73E-43	0.251692686	0.33	0.174
ATP6V0E1	1.77E-43	0.480437133	0.802	0.666
RHEB1	1.91E-43	0.350989772	0.627	0.41
CCSER11	1.93E-43	0.511137652	0.321	0.17
KDM6B2	2.00E-43	0.31488304	0.522	0.313
ATP5PD	2.53E-43	0.392864364	0.624	0.41
RGS103	2.95E-43	0.471725954	0.612	0.406
POMP1	1.05E-42	0.419789761	0.725	0.549
TMEM219	1.28E-42	0.298113741	0.502	0.302
TSC22D22	2.37E-42	0.44444392	0.572	0.36
MAP3K82	3.43E-42	0.294166398	0.647	0.418
NECAP2	4.44E-42	0.257915389	0.391	0.211
RGS22	4.74E-42	0.411411425	0.724	0.543
FKBP1A1	6.18E-42	0.382629436	0.569	0.368
S100A61	7.95E-42	0.731509005	0.732	0.634
CKS2	1.52E-41	0.29255977	0.397	0.226
MOB1A1	1.92E-41	0.314494801	0.699	0.473
CHMP1B1	3.09E-41	0.3777117	0.55	0.351
ENO12	4.51E-41	0.454205548	0.726	0.555
PSMA4	4.81E-41	0.325086584	0.506	0.307
SLC20A1	6.42E-41	0.469812918	0.479	0.291
IFI27	3.76E-40	0.917920045	0.288	0.156
ASAP11	9.66E-40	0.288781294	0.665	0.454
SPAG91	2.12E-39	0.36148241	0.675	0.484
DPP7	2.48E-39	0.303815119	0.564	0.361
NDUFB2	4.14E-39	0.385630192	0.657	0.476
PLIN23	6.98E-39	0.343030596	0.57	0.372
AHR3	1.40E-38	0.303468711	0.593	0.384
GBE11	1.79E-38	0.268380476	0.361	0.202
ERO1A	2.18E-38	0.281909439	0.356	0.197
TPM31	1.68E-37	0.380746596	0.825	0.662
GNG51	1.77E-37	0.410830189	0.66	0.48
GPR1831	2.75E-37	0.36003962	0.735	0.532
RILPL22	3.45E-37	0.279652553	0.66	0.438
ZSWIM62	3.94E-37	0.386250875	0.798	0.631
SSR31	4.00E-37	0.303765254	0.559	0.355
BST21	7.28E-37	0.455278602	0.589	0.422

HOMER12	8.63E-37	0.368333637	0.343	0.194
INSIG11	2.06E-36	0.351964368	0.418	0.251
ETV61	3.75E-36	0.275426907	0.723	0.515
SERPINB11	9.72E-36	0.267118409	0.595	0.393
UST2	1.98E-35	0.355028621	0.471	0.292
RAPGEF13	2.58E-35	0.314874852	0.784	0.602
TXN2	5.92E-35	0.26167204	0.378	0.213
VDAC1	6.23E-35	0.300249284	0.565	0.369
MYL61	9.28E-35	0.42094954	0.89	0.83
DUSP1	9.46E-35	0.458206426	0.843	0.724
MICOS10	1.02E-34	0.297127864	0.608	0.416
CPEB21	1.22E-34	0.31652161	0.318	0.176
PCBP11	1.51E-34	0.362136693	0.675	0.465
SCP2	1.11E-33	0.305607534	0.497	0.301
PDIA61	2.02E-33	0.355734852	0.554	0.373
KCNQ10T11	1.99E-32	0.448265528	0.328	0.191
NFKB11	2.43E-32	0.310349082	0.76	0.596
MYO5A1	3.31E-32	0.252132836	0.573	0.384
PFN12	3.35E-32	0.401198815	0.883	0.769
TAOK31	9.73E-32	0.461162236	0.713	0.558
ATP5F1C	1.43E-31	0.289381723	0.582	0.39
ANKRD33B1	1.75E-31	0.333310903	0.257	0.141
PDIA31	1.33E-30	0.384119646	0.685	0.534
ZFAND2A1	3.04E-30	0.328828065	0.425	0.275
MGMT1	8.77E-30	0.270159517	0.498	0.321
EIF4A32	1.49E-29	0.432931816	0.66	0.501
CLIC12	1.27E-28	0.378470053	0.791	0.668
ZNF706	3.13E-28	0.314434727	0.613	0.426
AFF42	3.66E-28	0.37611738	0.722	0.557
BZW2	4.98E-28	0.257887517	0.423	0.268
TACC11	7.67E-28	0.271581454	0.607	0.417
ATP1B32	1.55E-27	0.283766819	0.798	0.651
HIF1A-AS32	2.85E-27	0.289074664	0.315	0.186
SQSTM11	5.93E-27	0.334162209	0.806	0.686
PSMB31	8.62E-27	0.3604642	0.614	0.446
BLOC1S12	8.99E-27	0.279461891	0.562	0.394
ACTR31	3.31E-26	0.251370605	0.768	0.591
AC120193.11	8.35E-26	0.321780862	0.313	0.192
CD1641	9.51E-26	0.275773303	0.687	0.509
TMED10	1.69E-25	0.262698715	0.557	0.381
PPIB	4.11E-25	0.427596489	0.69	0.567
NFKBIZ1	1.03E-24	0.3022366	0.624	0.463
UQCR10	1.71E-24	0.348291258	0.63	0.479

CFL11	3.65E-24	0.323163132	0.902	0.825
SLC25A5	5.50E-24	0.312594224	0.652	0.479
NOP10	1.90E-23	0.265560646	0.554	0.395
DPYD1	2.06E-23	0.392357693	0.623	0.505
ACTR21	2.24E-23	0.252789124	0.787	0.633
SLAMF72	4.58E-23	0.286353129	0.26	0.155
COX5B	8.18E-23	0.327937894	0.718	0.574
PSMB6	1.44E-22	0.277933714	0.519	0.37
MFSD4B2	2.33E-22	0.364359731	0.376	0.245
PSME21	2.55E-22	0.4607123	0.598	0.465
ATP5PB	2.63E-22	0.253626667	0.524	0.353
GAPDH2	3.17E-21	0.380231274	0.902	0.839
LRPAP1	6.04E-21	0.276517791	0.517	0.37
ATP5MF	2.55E-20	0.254562331	0.588	0.441
PRELID11	7.94E-20	0.275304305	0.562	0.408
ATP5MC3	3.27E-19	0.264893154	0.634	0.482
IFI62	4.10E-19	0.421344002	0.445	0.323
MACF12	6.55E-19	0.256727023	0.675	0.532
BANK11	7.13E-19	0.454175767	0.314	0.213
COX6B1	3.36E-18	0.285931199	0.736	0.612
SARNP1	1.15E-17	0.457257727	0.541	0.385
CCDC1381	1.57E-17	0.370560061	0.338	0.23
ARPC22	2.21E-17	0.250562863	0.866	0.78
VAMP51	2.76E-17	0.391067306	0.381	0.267
ATP5F1E	5.34E-17	0.308827175	0.915	0.85
SLC2A31	1.79E-14	0.284315649	0.611	0.468
NUFIP21	2.02E-14	0.317555713	0.698	0.564
WTAP1	1.30E-12	0.261117135	0.726	0.593
ATF7IP21	1.12E-07	0.276578042	0.398	0.311
ERO1B	2.77E-05	0.283486378	0.399	0.322
HLA-DQA13	0	2.199278356	0.973	0.403
HLA-DQB13	0	2.18154087	0.971	0.416
HLA-DPA13	0	2.155838363	0.979	0.569
HLA-DRB13	0	2.155750441	0.989	0.566
HLA-DRA3	0	2.11777632	0.995	0.531
HLA-DPB13	0	2.079261108	0.981	0.59
CD862	0	2.000550033	0.634	0.141
CD743	0	1.96934117	0.995	0.716
CALCRL	0	1.47461875	0.332	0.03
CSF2RA2	0	1.39281737	0.482	0.09
P2RY6	0	1.310047187	0.279	0.034
ALDH22	0	1.253867519	0.482	0.097
PKIB1	0	1.245068925	0.314	0.039

PPP1R14A	0	1.151530565	0.294	0.017
HLA-DMB3	0	1.151198927	0.762	0.23
CIITA3	0	1.062391652	0.601	0.147
SERPINF11	0	1.0381427	0.354	0.051
GPR1571	0	1.011075604	0.339	0.046
CLECL1	0	1.002012364	0.466	0.091
SPIB1	0	0.942066599	0.443	0.073
CD1C	0	0.939057189	0.291	0.032
PLD4	0	0.808528161	0.323	0.039
SEMA7A	0	0.654633477	0.407	0.056
FLT3	0	0.629893986	0.274	0.033
CD833	2.60E-295	1.476449483	0.942	0.428
FAM49A3	9.99E-291	1.121857137	0.812	0.267
GRASP3	8.65E-289	1.287112522	0.719	0.229
IRF83	7.90E-288	1.204341694	0.727	0.224
HLA-DQA23	5.89E-285	1.80148488	0.743	0.273
ZBTB461	1.38E-283	0.692694692	0.354	0.059
SYNGR23	7.51E-282	1.095844384	0.754	0.261
CLIC22	2.58E-281	0.913007066	0.317	0.05
IFI302	9.51E-280	1.560746474	0.715	0.227
CTSH2	3.10E-276	1.346797753	0.688	0.222
HLA-DMA3	1.55E-273	1.210454759	0.862	0.354
SPINT22	2.22E-262	0.874172878	0.551	0.146
HDAC92	8.56E-260	1.240769672	0.642	0.189
DDAH22	8.82E-259	0.720884161	0.514	0.126
MEF2C3	1.89E-257	1.138195984	0.784	0.268
KYNU2	8.09E-257	0.544873595	0.662	0.179
THEMIS24	5.66E-251	0.927059122	0.605	0.179
CD403	2.06E-245	0.881722752	0.514	0.132
MCOLN22	9.58E-243	1.065208761	0.623	0.189
CTSZ2	5.44E-241	0.95276535	0.8	0.325
SPI12	1.70E-240	0.905852213	0.504	0.128
IL4I12	1.20E-236	1.196469508	0.433	0.101
UBE2E23	1.24E-232	0.934905725	0.739	0.246
FAM160A1	1.05E-231	1.325684617	0.253	0.038
WDFY42	2.35E-228	0.963215407	0.587	0.172
U62317.41	4.67E-222	0.5065243	0.302	0.055
GSN2	7.77E-222	1.369125441	0.54	0.16
DAPK12	3.73E-220	1.006521111	0.396	0.088
GRN2	5.27E-217	0.80526378	0.626	0.2
SNX83	7.01E-217	0.935798964	0.637	0.207
SULF21	1.58E-216	1.050899769	0.441	0.113
OPN32	2.35E-215	0.804748618	0.341	0.07

MNDA2	4.43E-214	0.705032821	0.409	0.095
SH2B33	2.43E-210	0.90794056	0.647	0.216
PRKAR2B	1.32E-209	0.53241626	0.278	0.048
RASSF23	2.94E-209	0.673316775	0.581	0.176
SMIM142	4.25E-209	0.875493691	0.605	0.191
BCL2A12	5.49E-206	0.953075981	0.682	0.237
LY863	1.14E-203	0.745994009	0.514	0.146
CLCN5	1.59E-202	0.50864659	0.265	0.046
LGALS21	4.75E-202	1.178102094	0.281	0.052
CYBB3	5.41E-202	0.732663347	0.596	0.183
PAK13	2.06E-200	0.842228172	0.564	0.178
BASP12	1.41E-197	0.736798242	0.739	0.284
CCSER12	6.47E-196	1.061155069	0.55	0.166
LYN3	1.04E-192	0.621644584	0.901	0.359
PEA152	9.57E-192	0.714989933	0.444	0.121
TSPAN332	2.18E-191	0.575690109	0.411	0.104
C12orf45	1.04E-190	1.023080607	0.466	0.132
CD802	9.06E-190	0.975530712	0.405	0.105
TYROBP2	1.74E-189	1.162694595	0.563	0.178
CSF2RB1	4.12E-187	0.448735191	0.28	0.054
SWAP702	2.73E-186	0.958429275	0.651	0.233
CST32	5.03E-184	2.385111457	0.534	0.182
GRK33	3.06E-181	0.866995857	0.556	0.182
ETV31	3.72E-180	1.111496188	0.517	0.172
PLEK2	5.00E-180	0.731653348	0.564	0.184
CCDC88A3	6.58E-179	0.809826533	0.526	0.169
PHACTR13	2.09E-177	0.772442591	0.579	0.192
GNG73	1.85E-176	0.754892723	0.757	0.287
TCF42	9.81E-176	0.855311942	0.689	0.26
DPYSL22	1.23E-175	0.63457875	0.461	0.134
SLC15A4	1.93E-175	1.133053607	0.489	0.154
RAB312	5.50E-175	0.494679154	0.547	0.163
CDK2AP12	6.83E-174	0.467078703	0.37	0.092
LST12	1.99E-172	1.266781812	0.448	0.134
RHEX2	9.24E-172	1.053979732	0.337	0.082
GPR1832	3.60E-170	1.689672806	0.877	0.531
HLA-DOB1	1.94E-169	0.470690222	0.314	0.069
NFKBID3	1.08E-168	0.788099985	0.617	0.217
AP1S31	2.17E-167	0.645279034	0.426	0.118
RBM472	3.15E-166	0.280366371	0.568	0.179
SRC1	3.18E-166	0.403318534	0.279	0.058
NR4A33	3.41E-166	1.281668015	0.757	0.363
HCK2	4.02E-165	0.310624351	0.381	0.097

HLA-DOA2	4.67E-164	0.382151995	0.348	0.083
P2RY14	1.12E-163	0.519128747	0.292	0.062
ALCAM2	4.83E-163	1.133963663	0.664	0.271
BID1	1.51E-162	1.155731919	0.551	0.209
RNASE63	3.66E-162	0.669470106	0.427	0.125
SLC41A21	7.42E-162	0.950177453	0.424	0.126
NECTIN22	1.64E-161	0.528510273	0.297	0.067
ATF52	2.70E-161	1.001348194	0.404	0.116
IL182	3.17E-156	0.588906409	0.318	0.076
CMTM63	3.45E-155	0.823896742	0.838	0.434
DAPP11	1.02E-154	1.063920858	0.646	0.281
TTYH21	2.78E-153	0.526140921	0.272	0.059
SYK3	9.77E-153	0.603563877	0.535	0.183
LGALS92	1.67E-152	0.569044824	0.53	0.179
LRRK12	2.85E-152	0.574755423	0.365	0.098
FCHSD23	6.90E-152	1.488777961	0.807	0.419
CXCL162	2.05E-151	0.674002422	0.346	0.091
CCDC503	4.58E-151	0.820673409	0.613	0.244
NRARP	2.92E-150	0.588247555	0.366	0.099
TBC1D94	3.35E-150	0.678332949	0.427	0.13
KLF42	4.54E-148	0.616376035	0.387	0.109
GAPT	3.47E-147	0.530180726	0.278	0.063
TUBB63	8.04E-147	0.655457587	0.467	0.149
AIF12	1.36E-146	1.115163747	0.45	0.142
TSPAN131	4.59E-145	0.901239032	0.342	0.094
WARS2	1.55E-144	0.630267741	0.416	0.127
BCL11A1	3.59E-144	0.471046941	0.515	0.167
CAPG3	2.22E-143	0.772943219	0.613	0.239
FGD22	2.82E-141	0.472038549	0.367	0.103
CHAF1A	8.52E-141	0.490087985	0.296	0.072
IL13RA13	1.04E-140	0.56845949	0.419	0.128
HVCN11	1.17E-140	0.532653003	0.422	0.128
AFF31	6.12E-140	0.425130387	0.687	0.257
AXL2	1.36E-139	0.604520385	0.273	0.063
ARHGAP312	6.33E-139	0.65659641	0.448	0.146
EMILIN22	3.41E-137	0.608794417	0.482	0.158
SHTN12	6.56E-137	0.411149875	0.262	0.06
12-Mar	1.09E-136	0.534160395	0.557	0.2
NME23	1.77E-136	0.817333088	0.9	0.612
RAB322	1.11E-135	0.540027088	0.262	0.062
CORO1C2	4.51E-135	0.724951074	0.457	0.156
SPECC11	3.62E-134	0.512453229	0.268	0.063
SMCO42	1.29E-133	0.40367551	0.357	0.101

LILRB42	3.93E-133	0.713724412	0.266	0.065
CDKN1A3	1.21E-132	0.831615241	0.593	0.252
SLC8A12	1.98E-132	1.139801385	0.376	0.113
NME4	1.67E-131	0.292838986	0.294	0.074
PLAC81	7.17E-131	1.156574937	0.501	0.194
ENPP22	3.04E-130	0.479692181	0.252	0.058
REL2	3.29E-128	0.946931598	0.939	0.661
GNA152	5.37E-128	0.808503557	0.463	0.167
RAB11FIP12	1.88E-127	0.987208981	0.825	0.49
SPRED21	3.44E-127	0.732651317	0.402	0.128
IGSF62	5.41E-127	0.671963541	0.33	0.092
PLEKHO14	1.33E-126	0.610227527	0.603	0.246
PTK21	9.03E-126	0.505501463	0.423	0.134
ARID3A1	9.93E-126	0.597922997	0.314	0.088
PARVB3	7.46E-125	0.666611257	0.588	0.242
ANKRD33B2	1.79E-124	1.032638471	0.408	0.139
RIPK22	2.95E-124	0.636202509	0.508	0.19
ETV62	3.93E-124	0.937486537	0.846	0.515
NPC23	1.80E-122	0.628140204	0.695	0.318
CALHM63	3.11E-122	0.600612729	0.384	0.121
MCTP12	5.60E-122	0.280546045	0.401	0.122
IFNGR23	9.97E-122	0.5081554	0.554	0.213
PKIG1	1.46E-121	0.617691343	0.377	0.119
FCER1G2	1.78E-121	0.607861407	0.438	0.142
CTBP22	1.47E-120	0.487385236	0.319	0.09
RNF144B3	1.73E-119	0.466329078	0.484	0.169
PPP1R14B1	8.24E-119	1.013298506	0.589	0.267
IL3RA2	8.41E-119	1.042643038	0.329	0.1
TYMP2	8.77E-119	0.926198142	0.755	0.411
MYO1E3	3.37E-118	0.913676908	0.499	0.19
ZNF7102	2.76E-117	0.511798723	0.389	0.128
TFEC2	2.91E-117	1.283879184	0.316	0.093
STX17-AS11	3.09E-117	0.515724026	0.45	0.155
ENTPD7	3.41E-117	0.549114347	0.259	0.066
C15orf482	3.48E-117	1.563659746	0.319	0.095
FARP21	5.14E-117	0.585880238	0.525	0.202
MYOF2	8.09E-116	0.49164498	0.278	0.074
TCOF12	1.33E-115	0.554411187	0.486	0.18
CPVL2	1.75E-115	1.356672068	0.285	0.08
MOB3B3	4.90E-115	0.515246169	0.423	0.142
HLA-DRB53	9.54E-115	0.828993496	0.578	0.235
DUSP51	1.34E-114	0.991977561	0.56	0.254
SCIMP1	3.21E-114	0.546696826	0.312	0.091

ICAM12	4.20E-114	0.357898644	0.5	0.183
EIF2AK41	5.49E-114	0.578715506	0.467	0.177
ALG2	1.42E-113	0.438420853	0.302	0.086
TRIO4	1.65E-113	0.568975628	0.652	0.277
IRF4	2.15E-113	1.168398064	0.566	0.25
RUFY31	5.82E-113	0.502526175	0.41	0.139
TGFBR11	6.41E-113	0.75668454	0.461	0.175
STX72	4.51E-112	0.506945449	0.587	0.24
GAS63	5.73E-112	0.330432524	0.254	0.066
GNB42	6.24E-112	0.297370398	0.357	0.109
BHLHE403	2.64E-111	0.779215228	0.566	0.249
TRAF4	1.72E-110	0.398590089	0.266	0.07
UNC93B12	2.26E-110	0.425773893	0.392	0.133
PLSCR12	3.55E-110	0.583804717	0.595	0.26
MS4A6A2	3.77E-110	0.827110222	0.329	0.1
ARPC34	1.45E-109	0.687803942	0.953	0.77
CTNND12	6.44E-109	0.550157988	0.399	0.137
DBI3	6.80E-109	0.941904543	0.801	0.519
GABARAP2	2.15E-108	0.729864327	0.864	0.579
VEGFB2	3.66E-108	0.480083196	0.503	0.199
MACC1	4.30E-108	0.619034811	0.258	0.069
MAN2B12	6.54E-108	0.45586988	0.48	0.182
CERS61	6.62E-108	1.098721938	0.521	0.227
PPA12	1.63E-107	1.393787815	0.671	0.373
DST2	6.50E-106	0.465384537	0.262	0.071
GRINA2	9.94E-106	0.309935365	0.347	0.109
UVRAG1	1.40E-105	0.711974805	0.775	0.41
TSPAN32	1.75E-105	0.357657634	0.39	0.132
GABARAPL21	1.76E-105	0.616333778	0.693	0.35
RASSF42	3.03E-105	0.568419804	0.259	0.071
UBE2F	7.15E-105	0.509356007	0.485	0.191
SNX33	8.42E-105	0.763953164	0.79	0.454
DBNL3	6.04E-104	0.516892744	0.608	0.27
ZMIZ12	1.42E-103	0.391027217	0.449	0.163
CDYL1	3.13E-103	1.024145002	0.601	0.293
MOB3A2	3.53E-103	0.59648336	0.68	0.335
GCA1	2.12E-102	0.300069673	0.427	0.154
GDI24	1.37E-101	0.653429411	0.752	0.423
MOB1A3	1.98E-101	0.622501745	0.802	0.473
MARCKSL12	2.73E-101	0.903053049	0.571	0.262
EAF21	5.74E-101	0.459662605	0.403	0.144
NEK62	3.19E-100	0.373426093	0.29	0.086
SKAP23	9.05E-100	0.48489369	0.635	0.287

SNN	7.33E-99	0.326101	0.293	0.088
GNG53	1.03E-98	0.756625476	0.762	0.479
MGST22	3.20E-98	0.27917397	0.274	0.079
DENND5B2	5.41E-98	0.452361058	0.358	0.121
MGLL2	6.19E-98	0.67455732	0.252	0.072
ALOX52	8.51E-98	0.567447241	0.369	0.131
CYBA3	4.42E-97	0.649798517	0.977	0.835
BANK12	1.47E-96	0.992051853	0.498	0.209
PTPN13	4.57E-96	0.753483098	0.856	0.573
SEL1L32	5.99E-96	1.017131672	0.601	0.31
CAT2	9.14E-96	0.351665623	0.368	0.128
RP22	1.27E-95	0.37123086	0.369	0.126
FCGRT2	2.87E-95	0.307060297	0.428	0.158
RASGRP33	4.60E-95	0.468904588	0.408	0.15
HES41	5.42E-95	0.600058721	0.274	0.081
CHML1	1.87E-94	0.496532858	0.281	0.086
CNPY32	1.58E-93	0.448205383	0.567	0.249
UGCG	1.97E-93	0.71426797	0.601	0.297
SIPA1L31	1.99E-93	0.597904512	0.594	0.275
AP1S22	3.64E-93	0.447275712	0.487	0.198
CTSS2	3.97E-93	0.377173563	0.851	0.493
DLGAP4	4.57E-93	0.351260111	0.403	0.145
ZNF5161	4.66E-93	0.351460124	0.265	0.078
TNFSF132	7.04E-93	0.2700472	0.255	0.072
RAPGEF14	8.63E-93	0.705807206	0.867	0.603
REPIN1	9.82E-93	0.256580327	0.263	0.076
LGMN2	1.10E-92	0.320963431	0.434	0.164
FYTDD11	1.18E-92	0.780365224	0.568	0.27
BTK3	1.85E-92	0.339461679	0.369	0.129
NUP62	2.62E-92	0.326085161	0.321	0.105
PGLS3	3.31E-92	0.477406702	0.59	0.276
RALA2	1.03E-91	1.095204426	0.66	0.375
HMGA1	1.97E-91	0.404243101	0.512	0.216
MCM5	3.73E-91	0.288244616	0.337	0.112
APP3	4.18E-91	0.708457361	0.44	0.178
GNA123	6.12E-91	0.581422197	0.597	0.278
SERPINB62	1.11E-90	0.329403734	0.384	0.138
IFNGR13	1.30E-90	0.516712603	0.61	0.288
TOR3A1	1.53E-90	0.44732315	0.396	0.151
DBNDD22	1.80E-90	0.342089487	0.295	0.093
LAT23	3.94E-90	0.540365466	0.431	0.172
MAP3K83	5.40E-90	0.66144443	0.742	0.418
ARF31	9.79E-90	0.3273378	0.423	0.161

VASP3	1.15E-89	0.619466276	0.638	0.331
TENT4A	2.57E-89	0.530986783	0.496	0.212
FUOM2	4.35E-89	0.302495622	0.364	0.129
SUSD12	6.03E-89	0.301395138	0.254	0.074
AF117829.12	7.75E-89	0.423989445	0.365	0.131
ATOX13	5.15E-88	0.506758306	0.561	0.26
BMP2K3	5.21E-88	0.626184411	0.493	0.214
MOB1B	1.03E-87	0.663110178	0.385	0.147
AREG1	3.05E-87	1.385774275	0.596	0.322
SEC61B2	3.21E-87	1.194495838	0.797	0.562
APEX1	1.16E-86	0.409497182	0.537	0.239
GPR137B2	1.70E-86	0.859515918	0.49	0.232
PSME23	1.90E-86	0.759981197	0.748	0.463
PTRHD1	3.40E-86	0.293254172	0.422	0.161
MARCKS2	4.51E-86	0.816095397	0.426	0.176
SCO21	1.12E-85	0.302279202	0.397	0.149
MAP3K132	2.52E-85	0.496520934	0.423	0.171
RGS192	6.45E-85	0.521124472	0.483	0.21
ACTB3	9.27E-85	1.062348509	0.978	0.888
CYSTM11	1.09E-84	0.367960653	0.663	0.327
B3GNT52	2.55E-84	0.548006321	0.33	0.117
CNDP22	2.68E-84	0.362332747	0.492	0.209
PDLIM11	2.92E-84	0.371466704	0.337	0.119
SMIM20	1.12E-82	0.358966302	0.376	0.143
CDK143	2.67E-82	0.504581145	0.649	0.315
PLXDC22	3.35E-82	0.415472609	0.349	0.122
SELENOH2	8.80E-82	0.513177692	0.756	0.429
ARPC53	1.42E-81	0.630338053	0.805	0.517
ADAM19	1.54E-81	0.484785631	0.572	0.269
RUBCN1	1.59E-81	0.800241685	0.532	0.259
SINHCAF1	5.55E-81	0.533277508	0.586	0.282
MB21D22	2.13E-80	0.512633283	0.352	0.132
GALNT3	2.25E-80	0.345437871	0.264	0.083
SPART2	2.76E-80	0.314263111	0.329	0.117
IRF7	5.28E-80	0.905713108	0.482	0.224
RAB8B1	5.61E-80	0.692354462	0.813	0.523
TPM33	6.92E-80	0.589567325	0.892	0.662
KLHL63	1.08E-79	0.553774849	0.557	0.267
PLIN32	2.65E-79	0.269848528	0.356	0.132
C17orf492	8.42E-79	0.521341574	0.595	0.296
HPS52	9.33E-79	0.418670179	0.498	0.22
CYB561A31	1.44E-78	0.372059767	0.327	0.118
TNFSF91	2.92E-78	0.452454308	0.338	0.123

LAP32	3.19E-78	0.545192033	0.617	0.32
P2RX12	4.39E-78	0.420331108	0.261	0.085
JADE31	1.02E-77	0.394787572	0.331	0.117
RNASET24	1.57E-77	0.614490005	0.826	0.551
SIPA1L13	1.66E-77	0.489170404	0.93	0.675
TXN3	1.81E-77	2.32208463	0.698	0.481
Clorf1622	2.13E-77	0.644005542	0.391	0.161
EBF11	2.58E-77	0.79213943	0.445	0.193
GLA3	3.61E-77	0.540680789	0.478	0.21
NUBP12	4.44E-77	0.335967891	0.395	0.155
FNIP22	5.49E-77	0.30668036	0.377	0.144
PIKFYVE2	1.64E-76	0.698592207	0.531	0.256
RELT1	2.01E-76	0.26070354	0.323	0.116
TMEM1311	2.07E-76	0.607265499	0.733	0.418
ACAA1	2.82E-76	0.341272394	0.423	0.176
SNRNP25	3.93E-76	0.268011461	0.311	0.11
DSE2	9.04E-76	0.340380051	0.453	0.189
GAB23	9.75E-76	0.447465607	0.64	0.323
SNHG15	1.89E-75	0.476601188	0.502	0.232
KDM6B3	2.75E-75	0.413909785	0.64	0.312
TMSB103	3.47E-75	0.940449851	0.993	0.932
RIPOR1	3.57E-75	0.341966866	0.255	0.082
MEF2A2	6.40E-75	0.569416341	0.738	0.41
AP003086.11	6.68E-75	0.356429756	0.478	0.209
PRMT91	7.22E-75	0.77980437	0.486	0.232
NFKB12	8.87E-75	0.61531951	0.86	0.595
MFSD122	1.38E-74	0.30034036	0.345	0.131
APPL11	1.75E-74	0.33227555	0.515	0.228
SUMO32	7.64E-74	0.314730891	0.526	0.242
DCK1	8.82E-74	0.294440516	0.374	0.145
RHOQ3	1.09E-73	0.41961135	0.505	0.228
GM2A2	1.56E-73	0.2872687	0.316	0.116
EPB41L22	1.81E-73	0.451285427	0.379	0.152
MIR155HG1	1.87E-73	1.220676612	0.43	0.199
PACSIN21	2.39E-73	0.433138033	0.554	0.267
AC083837.11	3.32E-73	0.390746592	0.266	0.089
MANBA3	5.44E-73	0.428760034	0.655	0.335
BCAR31	7.84E-73	0.537551355	0.26	0.088
TCTN3	1.29E-72	0.51969927	0.335	0.13
ATP6V0B3	1.59E-72	0.463988585	0.656	0.363
TBC1D81	1.75E-72	0.476959978	0.43	0.189
TUBB2	2.93E-72	0.47900827	0.556	0.278
GAB12	4.48E-72	0.473584171	0.336	0.131

POGLUT1	6.39E-72	0.563493388	0.276	0.097
SERPINB12	6.61E-72	0.944457269	0.668	0.394
FTH13	6.76E-72	0.434919964	0.995	0.942
MALT13	6.79E-72	0.811936714	0.811	0.553
EDEM13	8.26E-72	0.387616538	0.518	0.241
PIK3AP13	8.87E-72	0.315523026	0.478	0.209
SH3GL1	2.17E-71	0.322159738	0.338	0.13
AP2S13	2.46E-71	0.449208504	0.593	0.304
ADCY32	2.78E-71	0.457974735	0.336	0.131
AC120193.12	2.91E-71	0.66473335	0.433	0.19
LYZ2	4.21E-71	0.817661099	0.345	0.135
CEP1703	5.33E-71	0.431149043	0.531	0.246
KBTBD8	8.00E-71	0.277447299	0.265	0.089
AC004687.11	8.71E-71	0.313898905	0.332	0.125
KLF102	1.05E-70	0.351096717	0.34	0.132
N4BP2L11	1.22E-70	0.571743727	0.462	0.214
PRMT1	1.28E-70	0.353113889	0.526	0.25
MS4A11	1.43E-70	1.067872326	0.412	0.191
DUSP22	3.19E-70	0.351519754	0.352	0.14
MYL12A1	3.58E-70	0.538543045	0.916	0.708
HIVEP12	4.00E-70	0.76084603	0.69	0.406
CHMP4B1	4.35E-70	0.348358286	0.487	0.223
NQO22	7.34E-70	0.341558011	0.317	0.121
NAGK2	9.11E-70	0.527289851	0.411	0.174
ZNF433-AS11	1.29E-69	0.356653187	0.412	0.174
ATP6V0D12	2.44E-69	0.327491571	0.607	0.295
PFN14	4.44E-69	0.62811981	0.944	0.769
PTPN61	5.34E-69	0.435380358	0.49	0.23
SRGAP23	5.96E-69	0.450424747	0.543	0.267
GOLIM42	1.41E-68	0.321748824	0.317	0.119
VPS352	2.25E-68	0.352567153	0.489	0.226
EIF4A13	3.50E-68	0.557096635	0.924	0.717
GSTP13	3.85E-68	0.954073579	0.683	0.458
IRF2BP21	4.00E-68	0.519629182	0.552	0.282
NR4A23	4.02E-68	0.640627905	0.8	0.512
RNASEK3	6.79E-68	0.458057092	0.875	0.648
ARL5B1	6.94E-68	0.393521957	0.366	0.149
MTPN2	9.98E-68	0.475079857	0.794	0.488
COX5A2	1.41E-67	0.449238332	0.725	0.444
ARPC23	2.06E-67	0.551110689	0.94	0.779
CLIC14	2.28E-67	0.546003792	0.889	0.667
FCGR2B3	2.30E-67	0.499356887	0.314	0.126
ATAD2B1	2.65E-67	0.398075531	0.632	0.325

UBXN2A	3.09E-67	0.304510078	0.42	0.18
CXXC5	3.25E-67	0.313118436	0.27	0.096
TET21	3.49E-67	0.473522358	0.764	0.453
TMSB4X2	3.72E-67	0.62346023	0.996	0.951
SLAMF73	3.79E-67	0.722226581	0.359	0.154
ADAM281	5.26E-67	0.460394713	0.517	0.249
CCR72	6.31E-67	0.836602134	0.525	0.265
SLC25A332	7.73E-67	0.387536029	0.482	0.221
NINJ12	1.67E-66	0.450764519	0.41	0.181
SLC66A22	2.08E-66	0.295120258	0.426	0.185
ENTPD13	2.21E-66	0.567394694	0.484	0.24
TMEM14C1	1.24E-65	0.401758001	0.476	0.227
DCTPP1	1.52E-65	0.269827984	0.284	0.103
CLN82	1.65E-65	0.364025269	0.348	0.142
AKR1A12	2.07E-65	0.330948044	0.494	0.232
G0S22	2.13E-65	0.911452895	0.277	0.102
IER52	2.77E-65	0.76882475	0.679	0.423
RASGEF1B3	3.65E-65	0.4886963	0.673	0.369
RILPL23	5.51E-65	0.451658873	0.751	0.439
LSP12	1.03E-64	0.592528065	0.735	0.461
RGS23	1.24E-64	0.766972956	0.79	0.544
DDX211	1.47E-64	0.514464958	0.831	0.538
HMG31	1.90E-64	0.439527028	0.57	0.293
AFDN1	2.55E-64	0.413855074	0.308	0.12
SIRPA2	2.55E-64	0.267811364	0.257	0.089
H3F3A3	3.92E-64	0.482027788	0.987	0.89
AMZ12	4.32E-64	0.296293953	0.336	0.134
PPIF2	5.51E-64	0.495229607	0.365	0.157
LACTB2	2.79E-63	0.287863802	0.381	0.161
ST8SIA4	3.18E-63	0.688495392	0.593	0.334
SLC25A52	7.60E-63	0.49320771	0.756	0.479
GNAQ2	8.65E-63	0.495233897	0.485	0.237
LAMTOR13	1.46E-62	0.346009197	0.556	0.282
H2AFY3	2.00E-62	0.538826467	0.584	0.32
BAG1	2.74E-62	0.323594324	0.492	0.238
FBRSL1	2.84E-62	0.262677154	0.399	0.171
TRAK12	3.86E-62	0.354915327	0.591	0.303
YBX13	4.37E-62	0.406921388	0.948	0.771
UPF21	4.71E-62	0.486781833	0.597	0.322
EHBP1L12	5.38E-62	0.258364587	0.381	0.161
SERPINB91	5.80E-62	0.867228553	0.811	0.595
RALGPS22	7.26E-62	0.468740711	0.484	0.232
TNFRSF10B2	1.25E-61	0.382180806	0.396	0.174

INPP5F2	1.70E-61	0.429046654	0.449	0.203
SOX41	2.71E-61	0.900563894	0.348	0.15
RELB	2.78E-61	0.480938358	0.712	0.417
GPX43	3.93E-61	0.644924283	0.743	0.479
M6PR2	4.93E-61	0.361093428	0.556	0.283
RNF1302	5.32E-61	0.412619568	0.471	0.22
TEX143	5.45E-61	0.673463486	0.555	0.296
PTMS2	6.36E-61	0.371726941	0.481	0.233
TPM43	6.87E-61	0.430461494	0.72	0.449
EIF5A1	1.45E-60	0.318899181	0.592	0.306
PYCARD3	1.50E-60	0.539126959	0.499	0.26
ATG32	1.53E-60	0.382685759	0.538	0.279
TALDO13	1.78E-60	0.310390332	0.593	0.315
ATP6V1F3	2.23E-60	0.370613366	0.706	0.41
IGFLR11	2.63E-60	0.336030632	0.52	0.259
OGFRL12	2.69E-60	0.511937447	0.469	0.231
LYSMD2	6.95E-60	0.272242931	0.355	0.148
BCAT12	7.48E-60	0.322753515	0.304	0.119
EEF1G2	8.99E-60	0.421906867	0.967	0.841
ST3GAL5	9.17E-60	0.408682554	0.37	0.163
COTL13	1.00E-59	0.839825831	0.771	0.55
ENTPD1-AS11	1.15E-59	0.378110749	0.474	0.227
YWHAH2	1.40E-59	0.649722494	0.519	0.274
EIF61	3.98E-59	0.301051088	0.523	0.259
GNA133	6.98E-59	0.454651766	0.733	0.445
PIM31	9.64E-59	0.461233222	0.513	0.262
CHPT11	1.48E-58	0.341797793	0.485	0.234
LAPTM4A2	1.54E-58	0.361182211	0.627	0.341
PUS10	1.72E-58	0.269457684	0.272	0.102
BLK1	2.02E-58	0.536459026	0.314	0.129
SAT13	2.46E-58	0.591768101	0.947	0.779
CD2AP1	3.33E-58	0.615580948	0.568	0.312
UBA522	3.36E-58	0.391488411	0.983	0.898
NCF11	4.45E-58	0.386835756	0.439	0.209
UST3	7.20E-58	0.393745608	0.571	0.291
POLD42	1.15E-57	0.403505446	0.648	0.366
RRBP13	1.51E-57	0.575477003	0.483	0.252
CD723	1.52E-57	0.377811614	0.365	0.16
TOMM61	1.84E-57	0.387426643	0.761	0.47
BRI33	2.29E-57	0.26768013	0.614	0.333
CAPNS12	2.44E-57	0.27877786	0.494	0.238
RNH13	2.73E-57	0.422955663	0.586	0.325
CKS21	3.50E-57	0.450986031	0.465	0.226

ZBTB102	4.07E-57	0.421362074	0.413	0.192
LGALS13	6.47E-57	0.965850804	0.681	0.452
ATP6V0E11	7.17E-57	0.422323136	0.899	0.666
PRKCE2	7.41E-57	0.340700561	0.704	0.398
ARHGAP242	8.54E-57	0.573381628	0.439	0.213
TMEM39A	9.00E-57	0.485289338	0.377	0.171
ETS22	9.09E-57	0.314321225	0.351	0.149
HOOK31	1.03E-56	0.354548523	0.642	0.353
RAB8A	1.17E-56	0.300767021	0.56	0.29
C1QBP	1.20E-56	0.306362445	0.582	0.307
ACTG11	1.39E-56	0.733083532	0.953	0.836
PFDN21	1.50E-56	0.308893662	0.607	0.326
ZFH32	1.74E-56	0.251473276	0.294	0.116
GPR652	2.38E-56	0.578853087	0.477	0.243
LAMTOR22	3.03E-56	0.292512004	0.483	0.24
FGL22	3.04E-56	0.425168178	0.32	0.136
TNFSF13B2	5.41E-56	0.335668148	0.352	0.151
SLC27A41	6.15E-56	0.307785763	0.521	0.263
PHB21	1.54E-55	0.28517792	0.577	0.297
RREB13	2.37E-55	0.419830524	0.466	0.23
ARPC1B4	2.53E-55	0.535568268	0.874	0.627
MAP4K42	2.54E-55	0.404510404	0.822	0.545
DMXL11	2.87E-55	0.371510037	0.579	0.308
MICAL31	3.38E-55	0.350552138	0.395	0.18
INSR2	3.41E-55	0.352142094	0.26	0.1
PHB1	6.73E-55	0.264431195	0.504	0.252
SH3BP53	8.29E-55	0.394341878	0.555	0.302
AUTS23	8.72E-55	0.41849024	0.561	0.293
RAC13	1.18E-54	0.527656417	0.767	0.538
ARHGAP53	1.56E-54	0.361607105	0.474	0.232
NUB11	1.81E-54	0.506672137	0.512	0.268
DDT1	1.84E-54	0.307429183	0.67	0.385
PRR131	1.87E-54	0.327073965	0.719	0.422
VOPP11	2.29E-54	0.534045225	0.687	0.422
COX171	2.85E-54	0.284725975	0.612	0.331
RBX11	3.10E-54	0.338785904	0.702	0.416
HIP12	4.36E-54	0.584920671	0.367	0.17
PEAK13	4.85E-54	0.373986511	0.477	0.238
VIM4	6.20E-54	0.96270297	0.887	0.763
PRELID13	9.38E-54	0.44963982	0.665	0.407
CAP13	9.40E-54	0.434102858	0.719	0.458
SRGAP2B2	1.24E-53	0.285226392	0.315	0.132
PPIA1	1.57E-53	0.378682579	0.946	0.822

STRBP1	1.73E-53	0.376829019	0.527	0.274
TNFRSF13C1	2.33E-53	0.709199426	0.377	0.185
TRABD	3.34E-53	0.252771284	0.493	0.246
SLC25A25	4.60E-53	0.294285786	0.296	0.121
TFEB	4.82E-53	0.314753401	0.295	0.122
AC008014.12	5.21E-53	0.382656618	0.359	0.162
SERF23	5.33E-53	0.407896666	0.976	0.857
SLC25A62	6.38E-53	0.424034358	0.923	0.703
AC007952.42	8.87E-53	0.304905037	0.352	0.159
VAV22	1.11E-52	0.277734414	0.252	0.097
DRAM22	1.30E-52	0.368559681	0.45	0.223
EIF3L2	1.33E-52	0.38475791	0.675	0.383
GRB23	1.48E-52	0.356456596	0.858	0.595
GNG102	2.22E-52	0.304460417	0.415	0.203
SSR33	4.05E-52	0.387648404	0.63	0.356
LCP12	6.38E-52	0.58927433	0.847	0.646
CFL13	3.37E-51	0.512549981	0.946	0.825
SERP12	3.43E-51	0.368076444	0.904	0.676
IFITM32	4.99E-51	0.874093403	0.373	0.184
STK38L1	6.50E-51	0.352749791	0.426	0.211
CHCHD102	6.91E-51	0.334512018	0.649	0.371
PDIA32	7.45E-51	0.499106386	0.766	0.534
POLB	8.26E-51	0.817362556	0.323	0.149
PHLDA22	2.17E-50	0.472545268	0.266	0.109
RASSF51	3.05E-50	0.347892497	0.621	0.348
PHPT11	7.60E-50	0.262140556	0.554	0.3
SSR11	1.10E-49	0.311891059	0.476	0.248
LTB4	2.14E-49	0.67430463	0.703	0.441
CDC373	2.37E-49	0.372378146	0.686	0.41
PAX51	2.48E-49	0.458579231	0.29	0.124
TWISTNB1	3.64E-49	0.465664482	0.451	0.23
SLC9A71	8.82E-49	0.348288031	0.319	0.141
SNX22	9.22E-49	0.351975655	0.697	0.408
ACTR33	1.39E-48	0.361725994	0.829	0.592
SCPEP13	1.55E-48	0.287455484	0.351	0.161
UTP61	1.72E-48	0.252611586	0.396	0.182
EFHD22	1.84E-48	0.403274525	0.6	0.349
RFTN11	2.50E-48	0.58121751	0.792	0.571
CNN21	3.00E-48	0.254768308	0.541	0.29
ZFAND61	3.09E-48	0.359606801	0.782	0.495
POMP3	3.78E-48	0.411668224	0.799	0.549
TUBA1B3	4.52E-48	0.589939723	0.793	0.563
RACK12	5.94E-48	0.373819756	0.98	0.891

COBLL12	1.03E-47	0.311183512	0.342	0.157
SGK12	1.69E-47	0.385188333	0.418	0.212
PALM2-AKAP2	1.70E-47	0.451552691	0.411	0.209
VAMP83	3.85E-47	0.53361864	0.696	0.474
CSNK2B1	3.89E-47	0.273521557	0.586	0.324
RHEB2	6.41E-47	0.378879633	0.677	0.411
VDAC21	6.86E-47	0.272944785	0.653	0.385
VPS292	7.50E-47	0.287391491	0.592	0.339
PLAGL11	8.34E-47	0.263364506	0.286	0.122
ATP5F1E2	3.79E-46	0.337897167	0.968	0.849
OAZ12	4.31E-46	0.342774436	0.975	0.862
NAAA2	6.92E-46	0.320669437	0.314	0.141
TAPBP	7.08E-46	0.307222953	0.756	0.47
TAP11	1.12E-45	0.285344167	0.499	0.264
RHBDF23	1.30E-45	0.257792283	0.414	0.205
RAB5C3	1.38E-45	0.251789289	0.631	0.354
TAGLN21	1.41E-45	0.383498996	0.795	0.549
ANXA113	1.77E-45	0.334864711	0.613	0.358
UBE2E12	2.32E-45	0.319746201	0.515	0.279
UCP23	2.84E-45	0.348010624	0.679	0.409
PBX31	3.25E-45	0.762864767	0.482	0.266
ECE11	3.27E-45	0.384151542	0.427	0.222
ENY21	3.47E-45	0.273551711	0.698	0.426
MED13L2	3.79E-45	0.395986052	0.832	0.594
PKM3	4.96E-45	0.387277541	0.669	0.419
NGLY11	5.37E-45	0.413662329	0.571	0.325
PLCG22	5.61E-45	0.279765227	0.547	0.301
GRSF11	6.70E-45	0.357962191	0.386	0.189
JAK2	1.05E-44	0.307687044	0.407	0.202
STAP12	1.13E-44	0.345133012	0.268	0.114
USP6NL2	1.43E-44	0.327302275	0.294	0.131
IFT571	1.79E-44	0.373283392	0.425	0.219
MTHFD1L1	1.93E-44	0.261506273	0.344	0.16
GEM1	2.27E-44	0.387348026	0.294	0.13
AC104365.12	3.27E-44	0.284546166	0.448	0.229
STEAP1B3	3.38E-44	0.478022237	0.493	0.259
PSMA21	3.73E-44	0.314040733	0.693	0.444
CD221	4.38E-44	0.358998897	0.274	0.119
ARFGAP31	5.36E-44	0.331370151	0.501	0.274
MX12	8.70E-44	0.439882667	0.548	0.318
TAF101	8.99E-44	0.257463253	0.641	0.38
ORAI21	9.48E-44	0.329381996	0.406	0.208
ARPC41	1.24E-43	0.28287594	0.65	0.38

INSIG12	1.71E-43	0.515259676	0.458	0.252
CD79A2	1.94E-43	0.768198039	0.436	0.246
RBBP82	3.93E-43	0.280866942	0.394	0.196
OTUD13	5.38E-43	0.385516043	0.415	0.217
MKNK21	5.77E-43	0.271215513	0.501	0.271
OSTC1	6.97E-43	0.276137465	0.532	0.302
PLEKHG11	8.66E-43	0.386235307	0.471	0.252
ATP5MF1	1.09E-42	0.285254773	0.693	0.44
BRK11	1.33E-42	0.285098166	0.671	0.416
SUB12	1.87E-42	0.422267443	0.889	0.75
BCL2L112	2.02E-42	0.381545656	0.591	0.359
BCL2L13	2.25E-42	0.268393052	0.354	0.171
FAU2	2.41E-42	0.333196056	0.98	0.914
HIGD2A1	1.10E-41	0.291436544	0.739	0.461
PPIB2	1.27E-41	0.459050069	0.776	0.567
CDC421	1.65E-41	0.35432961	0.912	0.741
LAPTM53	2.13E-41	0.387692624	0.925	0.701
DENND1B1	2.96E-41	0.430285349	0.587	0.354
PSMB33	6.47E-41	0.286821174	0.697	0.446
CCDC1382	7.93E-41	0.494896609	0.429	0.229
GNAI22	8.25E-41	0.361220908	0.78	0.542
UBE2A1	9.04E-41	0.25846858	0.595	0.341
CD1092	1.00E-40	0.427717312	0.285	0.13
C12orf751	1.50E-40	0.552576534	0.32	0.157
SRP141	1.84E-40	0.374840798	0.927	0.776
ACTR22	3.05E-40	0.339689823	0.858	0.633
FHIT3	3.76E-40	0.273586198	0.329	0.158
RBM32	4.39E-40	0.342158295	0.811	0.561
MYO9B2	5.02E-40	0.291190195	0.644	0.391
DRAP12	7.18E-40	0.297036615	0.685	0.447
PDE4A1	8.35E-40	0.328701851	0.531	0.305
MIR181A1HG2	8.37E-40	0.366156348	0.358	0.18
COX6B12	1.54E-39	0.258305508	0.854	0.611
ACSL32	2.51E-39	0.353441999	0.502	0.281
RTN42	2.76E-39	0.393154902	0.732	0.497
SQSTM12	3.13E-39	0.392337765	0.875	0.686
CLEC16A1	4.82E-39	0.283360624	0.471	0.254
POU2F21	5.26E-39	0.452397049	0.459	0.264
CYSLTR1	5.89E-39	0.252375438	0.252	0.109
SLC20A11	6.99E-39	0.458410119	0.507	0.293
OXSR11	9.34E-39	0.32521194	0.543	0.322
TBCA1	9.40E-39	0.287892494	0.771	0.512
HMG12	9.79E-39	0.278562264	0.847	0.594

CHCHD2	1.33E-38	0.298594508	0.923	0.765
HINT12	1.66E-38	0.341650835	0.903	0.741
TACC12	2.36E-38	0.295573387	0.67	0.418
NBDY2	2.50E-38	0.262415121	0.624	0.362
CCT81	2.70E-38	0.265316081	0.631	0.382
ACER32	7.02E-38	0.310528344	0.39	0.203
NIN1	7.58E-38	0.321678418	0.601	0.359
MYL63	7.72E-38	0.427923553	0.952	0.83
USP122	1.58E-37	0.421839081	0.614	0.387
SMDT12	1.69E-37	0.272067156	0.782	0.503
NAPA2	2.07E-37	0.323465107	0.589	0.348
EZR1	2.42E-37	0.552253217	0.942	0.806
RHOA3	4.22E-37	0.292745523	0.886	0.688
AC253572.21	4.87E-37	0.293005096	0.251	0.113
PSME13	1.39E-36	0.300929049	0.837	0.625
MTHFD21	2.25E-36	0.351665941	0.533	0.324
CPNE3	3.48E-36	0.359931927	0.411	0.221
SET2	3.95E-36	0.254780315	0.81	0.561
SEC61G1	5.47E-36	0.292151686	0.66	0.424
TXNRD12	7.09E-36	0.265112043	0.695	0.441
CLINT1	1.07E-35	0.25555078	0.617	0.376
ATP5F1B1	1.14E-35	0.261624605	0.679	0.436
ANXA61	2.01E-35	0.270028113	0.555	0.326
LSM72	2.05E-35	0.294803839	0.709	0.45
SPCS12	2.08E-35	0.3724733	0.723	0.491
CALR2	2.28E-35	0.379533781	0.79	0.575
PTPRE2	2.54E-35	0.432689476	0.375	0.207
GPSM31	2.58E-35	0.279648349	0.669	0.42
ERP292	2.98E-35	0.313858282	0.76	0.523
CD1642	5.43E-35	0.352940864	0.741	0.51
EEF1B22	6.24E-35	0.342823639	0.968	0.84
PRDX62	8.38E-35	0.388100305	0.647	0.425
BST22	1.79E-34	0.29127173	0.654	0.422
ATP5MC31	2.03E-34	0.262414692	0.707	0.482
ITSN21	2.34E-34	0.315562175	0.799	0.549
EEF1A13	4.49E-34	0.265213532	0.996	0.957
GNL3	7.26E-34	0.255564585	0.465	0.263
ANKRD111	9.31E-34	0.355690127	0.92	0.738
UQCRH2	1.02E-33	0.291937241	0.865	0.64
PPT12	1.32E-33	0.277209317	0.365	0.192
PARK73	1.80E-33	0.273300524	0.779	0.568
VRK21	1.97E-33	0.262789199	0.462	0.26
IFI44L1	2.28E-33	0.427620147	0.337	0.18

NACA2	3.52E-33	0.253333217	0.985	0.893
WDFY21	3.85E-33	0.261382108	0.514	0.298
COX6A11	4.26E-33	0.252661107	0.804	0.573
SELENOS1	4.52E-33	0.296343882	0.477	0.277
METRNL3	1.05E-32	0.269179281	0.547	0.337
RGS105	1.10E-32	0.429075325	0.611	0.408
PFKFB31	2.04E-32	0.257263795	0.64	0.413
PDLIM51	2.38E-32	0.273116498	0.372	0.2
ZFAS11	3.37E-32	0.329840697	0.945	0.75
PSMB92	4.47E-32	0.3051135	0.771	0.541
SNHG292	6.10E-32	0.273039509	0.877	0.668
DSTN	6.82E-32	0.305280696	0.446	0.264
PFDN52	6.97E-32	0.265675587	0.965	0.834
BZW11	1.73E-31	0.265861193	0.76	0.527
ANKRD13A1	1.40E-30	0.258405302	0.421	0.242
JAML3	2.03E-30	0.402451698	0.369	0.209
REV3L2	2.81E-30	0.385648175	0.704	0.484
ATP6V1G11	4.33E-30	0.254132653	0.826	0.589
STMN1	5.31E-30	0.259489714	0.311	0.164
TPI12	7.89E-30	0.322617675	0.73	0.514
ENO13	1.67E-29	0.320922685	0.755	0.557
CHMP1B2	2.37E-29	0.300053575	0.566	0.352
NFAT52	3.13E-29	0.482308442	0.752	0.547
SMC61	4.50E-29	0.288236847	0.356	0.199
FAM210A2	4.93E-29	0.334903084	0.368	0.206
RAB7A2	1.04E-28	0.304344409	0.83	0.597
TIMP12	1.34E-28	0.867261434	0.382	0.234
SP1101	1.36E-28	0.326373149	0.688	0.459
MYL12B2	1.57E-28	0.270202907	0.887	0.703
GADD45B3	2.02E-28	0.349642159	0.653	0.457
ABTB22	7.59E-28	0.273508699	0.338	0.185
LPXN1	1.05E-27	0.45396728	0.651	0.446
ARL6IP53	1.10E-27	0.268290468	0.812	0.596
LRRFIP12	1.79E-27	0.377198863	0.859	0.677
COX4I11	2.29E-27	0.259501512	0.926	0.795
INPP5A1	3.12E-27	0.278428542	0.418	0.245
OSBPL102	3.47E-27	0.398222866	0.257	0.134
NFATC13	4.30E-27	0.278561207	0.44	0.262
EMP32	1.32E-25	0.335181357	0.699	0.487
PIK3R52	1.38E-25	0.317255309	0.553	0.371
SMG11	1.71E-25	0.283849853	0.687	0.465
CORO72	4.43E-25	0.328005021	0.48	0.307
MCL11	5.94E-25	0.25386	0.834	0.652

ANXA23	7.10E-25	0.406983528	0.56	0.398
ZFAND2A2	2.00E-24	0.418511181	0.447	0.276
SSBP22	5.17E-24	0.28937064	0.475	0.293
FBXO342	5.85E-24	0.252573625	0.653	0.448
HIVEP31	1.25E-23	0.276037418	0.336	0.191
XYLT12	1.40E-23	0.362191471	0.588	0.409
YWHAZ1	1.76E-23	0.268259569	0.951	0.818
MAN1A12	2.03E-23	0.442356956	0.635	0.453
HERPUD12	2.64E-23	0.543040636	0.854	0.709
LRCH31	2.71E-23	0.319918862	0.495	0.322
CD372	3.70E-23	0.50370228	0.841	0.66
ATP2C12	6.25E-23	0.309373416	0.494	0.314
S100A113	6.34E-23	0.526906154	0.717	0.595
SLC44A13	1.47E-22	0.258849213	0.262	0.145
ERICH1	1.51E-22	0.271217532	0.458	0.288
DENND4A1	2.51E-22	0.31195556	0.862	0.687
USP241	3.74E-22	0.274830784	0.49	0.317
CD79B1	3.83E-22	0.448044631	0.321	0.202
LY91	5.38E-22	0.40481708	0.383	0.244
ISG152	5.75E-21	0.301489338	0.631	0.445
JARID21	7.90E-21	0.316099864	0.76	0.585
SETBP11	1.23E-20	0.280450307	0.331	0.2
LARGE12	1.30E-20	0.382013171	0.27	0.157
ITGB23	8.87E-20	0.31103349	0.527	0.367
COMMD101	1.97E-19	0.300316418	0.568	0.386
CFLAR2	7.77E-19	0.314628081	0.762	0.616
ARHGAP102	3.07E-18	0.417470468	0.309	0.189
ZFAND53	3.57E-18	0.292367888	0.684	0.489
ALOX5AP1	1.28E-17	0.439398088	0.512	0.387
MTSS13	2.99E-17	0.311472714	0.356	0.235
S100A103	3.55E-17	0.687493393	0.72	0.602
RANBP2	6.13E-17	0.515247303	0.743	0.582
AKAP131	7.53E-17	0.281005348	0.952	0.866
ITM2C2	7.79E-17	0.315042641	0.275	0.167
HIPK22	3.44E-16	0.324446753	0.552	0.386
TRAF12	2.27E-15	0.30902364	0.378	0.25
PARP151	1.27E-14	0.290865981	0.386	0.267
HIST1H1C1	2.70E-14	0.29030474	0.349	0.231
S100A63	3.66E-13	0.338070246	0.736	0.635
ZNF3311	1.09E-11	0.336415471	0.72	0.609
BAG33	3.06E-09	0.315731729	0.351	0.261
CD523	7.44E-08	0.38603302	0.727	0.671
LDHA3	3.63E-07	0.293045972	0.695	0.588

BIRC33	3.42E-05	0.477106918	0.654	0.544
ARL4C3	5.87E-05	0.311263606	0.575	0.509
ID22	7.21E-05	0.44444335	0.537	0.5
INPP4A1	0.001260533	0.319337634	0.313	0.265
BANK13	0	1.779838598	0.81	0.203
ARHGAP243	0	1.747457408	0.734	0.207
MS4A12	0	1.552084548	0.722	0.185
BLK2	0	1.526648934	0.577	0.124
LINC01781	0	1.390017393	0.33	0.039
C12orf74	0	1.207971321	0.319	0.039
TNFRSF13C2	5.20E-286	1.526009799	0.648	0.18
CD79A3	1.31E-248	1.365017576	0.742	0.24
TNFRSF13B	1.68E-246	1.204431362	0.394	0.079
GNG74	5.26E-239	1.475763279	0.764	0.288
EBF12	2.21E-234	1.427734042	0.64	0.189
ADAM282	2.19E-216	1.498291658	0.675	0.247
MEF2C4	3.55E-214	1.534507102	0.702	0.271
SSPN1	1.28E-210	1.363541956	0.335	0.067
AFF32	2.11E-209	1.192631416	0.737	0.257
HLA-DRA4	1.21E-201	1.328118468	0.918	0.533
OSBPL103	2.36E-196	1.425208074	0.467	0.13
CD744	1.11E-188	1.264426317	0.946	0.717
SWAP703	1.83E-178	1.339395904	0.603	0.235
CD241	9.89E-161	1.010121949	0.363	0.093
RALGPS23	2.12E-160	1.301091306	0.599	0.231
CD373	1.74E-157	1.257916347	0.859	0.66
LINC009261	3.30E-149	1.076537023	0.406	0.117
HLA-DQA14	1.23E-143	1.030349552	0.8	0.408
VPREB31	5.21E-134	0.994479146	0.393	0.117
13-Mar	4.02E-127	1.256085043	0.512	0.202
HLA-DPB14	2.05E-125	0.983075397	0.87	0.593
HLA-DRB54	2.53E-125	0.993374036	0.566	0.236
LYN4	3.10E-121	0.858180065	0.741	0.364
HLA-DQB14	5.37E-116	0.851673799	0.775	0.422
AC120193.13	1.58E-114	1.290123136	0.481	0.19
LARGE13	1.20E-111	1.087735292	0.43	0.154
WDFY43	2.20E-111	0.996464326	0.451	0.176
EEF1B23	6.62E-111	1.047169246	0.879	0.842
PAX52	5.48E-109	0.925472887	0.374	0.122
CD834	1.65E-108	1.206122031	0.755	0.434
HLA-DQA24	1.12E-107	0.915215791	0.608	0.277
EZR2	9.63E-107	0.978708588	0.905	0.807
SNED11	3.97E-106	1.188688458	0.385	0.134

SCIMP2	1.12E-104	0.911849244	0.3	0.092
IRF84	1.41E-104	1.085531394	0.516	0.23
HLA-DRB14	2.49E-104	0.571997805	0.878	0.569
LY864	1.41E-102	0.962348624	0.393	0.15
COBLL13	2.48E-99	0.913501071	0.412	0.156
HLA-DPA14	1.72E-96	0.674459755	0.844	0.573
LINC023971	8.69E-96	0.861215819	0.292	0.089
SMIM143	2.55E-95	1.066617795	0.445	0.195
LY92	8.17E-95	1.057083726	0.523	0.241
ZFAS12	3.74E-94	0.926401366	0.852	0.752
CHPT12	2.07E-92	0.888569279	0.507	0.234
PLEKHG12	2.69E-89	0.886554197	0.548	0.251
EEF1A14	4.28E-89	0.681114127	0.961	0.958
IFT572	1.06E-85	0.976409879	0.465	0.219
PDLIM12	2.10E-85	0.741449435	0.331	0.12
JADE32	7.65E-85	0.840232812	0.333	0.118
EEF1G3	1.52E-83	0.81425481	0.884	0.843
LAPTM54	5.81E-82	0.797483124	0.866	0.703
FAM49A4	8.41E-82	1.016129075	0.539	0.274
FAU3	1.03E-80	0.735131389	0.915	0.916
AC119396.11	7.39E-80	0.981557903	0.318	0.116
ST6GAL12	1.23E-79	0.870063163	0.633	0.36
POU2F22	9.31E-79	0.957684524	0.506	0.263
MGAT51	1.50E-75	0.890713698	0.725	0.487
SETBP12	2.30E-75	0.942361089	0.434	0.198
SNX23	2.38E-75	0.963646325	0.623	0.411
GRASP4	3.21E-75	1.09102622	0.477	0.235
HIPK23	2.15E-74	1.645943077	0.574	0.386
PKIG2	9.80E-71	0.772181516	0.313	0.121
TRIO5	7.48E-70	0.922492189	0.52	0.281
INPP5A2	2.93E-69	0.906259792	0.478	0.244
TLE11	1.10E-68	0.839349285	0.396	0.176
P2RX51	7.76E-68	0.97099967	0.333	0.141
CARMIL12	4.43E-65	0.960473995	0.386	0.176
WEE1	5.20E-65	0.776175238	0.254	0.091
GAS53	2.53E-64	0.810916899	0.782	0.684
SEL1L33	3.80E-64	1.041699322	0.529	0.312
CD551	4.98E-64	0.653465269	0.746	0.573
KYNU3	2.22E-63	0.675866657	0.412	0.186
ANKRD441	7.07E-63	0.751078243	0.831	0.73
NIBAN31	4.51E-62	0.615420857	0.25	0.088
FCRL11	1.92E-60	0.649131846	0.318	0.125
POU2AF12	2.34E-60	0.763436583	0.277	0.107

HLA-DMA4	3.39E-60	0.745071233	0.595	0.361
ORAI22	1.24E-58	0.787553189	0.407	0.208
CD79B2	2.40E-58	0.795909269	0.401	0.2
UBA523	2.66E-58	0.610256669	0.898	0.9
BCAS41	3.23E-58	0.69681481	0.339	0.151
SIPA1L14	8.00E-57	0.661854441	0.823	0.678
NCOA32	1.90E-56	1.012036584	0.702	0.546
PRDM22	1.32E-55	0.820800498	0.757	0.646
MICAL32	1.69E-55	0.752979287	0.373	0.181
C12orf421	3.46E-55	0.730442452	0.317	0.134
BCL11A2	1.95E-54	0.696979804	0.369	0.171
BASP13	3.82E-54	0.479199219	0.523	0.29
PLCG23	9.10E-54	0.68556926	0.525	0.303
DENND5B3	1.91E-53	0.692535308	0.291	0.123
CDK144	2.45E-53	0.775770551	0.538	0.318
MGMT2	5.43E-53	0.98413328	0.498	0.323
MARCKS3	6.20E-53	0.68898367	0.373	0.178
TPT12	6.60E-53	0.455346334	0.947	0.961
NACA3	1.86E-52	0.624921702	0.88	0.895
PFDN53	1.34E-50	0.665649777	0.856	0.837
DRAM23	1.55E-49	0.728808427	0.4	0.225
BACH21	9.39E-48	0.483687334	0.73	0.502
BTG13	3.10E-47	0.571693949	0.946	0.918
TCF43	1.53E-46	0.660591316	0.474	0.265
NOP532	1.25E-45	0.70192832	0.765	0.708
EIF13	1.52E-45	0.50322628	0.939	0.942
TFEB1	9.07E-45	0.624657561	0.27	0.123
ANKRD13A2	1.06E-44	0.727226897	0.415	0.242
USP6NL3	7.42E-44	0.695274631	0.283	0.132
SLC25A63	1.31E-43	0.668580287	0.762	0.707
TSC22D32	4.37E-43	0.576793341	0.87	0.839
SMAP22	1.09E-42	0.497111666	0.901	0.849
RACK13	2.37E-42	0.571513856	0.888	0.893
HLA-DMB4	3.79E-42	0.665460311	0.425	0.239
PRKCB1	5.72E-42	0.752120187	0.708	0.591
TOMM73	2.03E-41	0.670510057	0.789	0.763
EEF22	8.40E-41	0.579766062	0.793	0.742
UVRAG2	9.49E-41	0.789282378	0.567	0.415
CCDC504	1.39E-40	0.680448188	0.412	0.249
CXCR43	2.30E-40	0.598809324	0.881	0.817
RCSD11	6.58E-40	0.869075108	0.523	0.367
BMP2K4	1.19E-39	0.803358118	0.374	0.217
IL13RA14	1.51E-39	0.69251746	0.271	0.132

CD404	1.67E-38	0.640661762	0.279	0.138
PTMA2	1.17E-37	0.414450401	0.962	0.95
SAMD4A2	1.79E-37	0.629304782	0.284	0.138
KLF22	6.29E-37	0.666300082	0.669	0.494
MAP4K43	7.30E-37	0.60035706	0.691	0.548
AP1S32	9.22E-36	0.659007427	0.254	0.122
INPP5D1	1.19E-35	0.676244155	0.643	0.496
FCMR1	1.63E-35	0.594318804	0.465	0.296
UST4	3.45E-35	0.62921847	0.465	0.294
UBE2E24	4.57E-35	0.717001713	0.425	0.254
CHCHD103	7.19E-35	0.691732587	0.506	0.374
TAF4B1	1.50E-34	0.791107	0.365	0.212
WASHC41	2.39E-34	0.661416731	0.465	0.324
SESN33	1.88E-33	0.447705976	0.556	0.376
CCSER13	2.18E-33	0.761731009	0.322	0.172
CD222	2.99E-33	0.587475886	0.252	0.12
PDE7A1	4.35E-33	0.571541762	0.725	0.596
SNX84	4.74E-32	0.711076024	0.357	0.214
SFMBT12	1.28E-31	0.764756002	0.468	0.319
MALAT12	4.75E-31	0.292566673	0.996	0.987
GSAP3	5.76E-31	0.640808838	0.295	0.164
TMEM2431	5.96E-31	0.650637335	0.516	0.386
PTK22	5.15E-30	0.649967114	0.266	0.139
TMEM1312	6.27E-30	0.695468437	0.542	0.423
HERPUD13	7.18E-30	0.666949917	0.77	0.711
RNASET25	4.37E-29	0.516990349	0.66	0.555
TRAK13	5.70E-29	0.697773963	0.441	0.307
PHF201	6.32E-29	0.602606446	0.671	0.593
TXNIP4	8.14E-29	0.484167261	0.804	0.723
ARHGEF181	9.40E-29	0.660116153	0.386	0.252
GRK34	1.58E-28	0.56670842	0.319	0.188
NIN2	1.85E-28	0.829263016	0.485	0.362
MARCKSL13	2.87E-28	0.809988434	0.403	0.267
TP53INP12	1.24E-27	0.651567681	0.418	0.283
ATP2B12	1.37E-27	0.468885054	0.744	0.648
CD524	2.00E-27	0.569712962	0.777	0.67
BTF32	2.28E-27	0.436938268	0.818	0.804
DENND4A2	2.37E-27	0.598978298	0.761	0.69
SSH21	2.98E-27	0.466545343	0.751	0.663
LTB5	3.27E-27	0.510281418	0.606	0.443
ZBTB202	4.47E-27	0.509660471	0.777	0.718
EIF1AY1	7.06E-27	0.668845761	0.336	0.206
RGS193	2.57E-26	0.557963756	0.336	0.214

YWHAZ2	3.61E-26	0.43742901	0.835	0.821
NFKBID4	3.72E-26	0.812458056	0.346	0.224
SLC44A21	4.44E-26	0.596316164	0.327	0.203
SYPL11	2.83E-25	0.588457587	0.354	0.23
CCR73	2.34E-24	0.488747023	0.414	0.268
MEF2A3	3.20E-24	0.544605006	0.541	0.415
EHMT12	5.42E-24	0.692038946	0.566	0.477
DAPP12	6.41E-24	0.641186468	0.403	0.287
ZHX22	6.92E-24	0.55833317	0.695	0.603
PABPC13	7.51E-24	0.320126613	0.88	0.85
SKIL1	7.89E-24	0.639230937	0.64	0.562
OAZ13	1.02E-23	0.410099191	0.885	0.864
PARVB4	1.93E-23	0.605176847	0.364	0.248
SNHG293	2.18E-23	0.525949501	0.701	0.672
SMARCB11	3.25E-23	0.57712162	0.308	0.198
TCOF13	8.32E-23	0.627345173	0.295	0.185
FCHSD24	1.04E-22	0.513464393	0.549	0.425
MAPK8IP31	1.62E-22	0.580626696	0.265	0.159
SMDT13	2.13E-22	0.539418559	0.583	0.508
CMTM64	4.26E-22	0.561430124	0.536	0.442
STRBP2	5.43E-22	0.542891376	0.405	0.278
REL3	6.33E-22	0.472368366	0.769	0.665
KMT2E1	8.50E-22	0.417714432	0.788	0.775
CTSH3	1.58E-21	0.436629929	0.358	0.23
AP000787.13	1.77E-21	0.454348773	0.387	0.257
RHBDF24	1.82E-21	0.578121073	0.315	0.208
RAB11FIP13	2.08E-21	0.445933776	0.609	0.496
FARP22	2.85E-21	0.628733311	0.316	0.208
RBM392	3.24E-21	0.327320268	0.863	0.868
TBC1D51	3.92E-21	0.546036248	0.636	0.555
MYO1D2	7.48E-21	0.585253444	0.326	0.212
SNHG61	2.28E-20	0.449375459	0.673	0.619
ARID5B2	2.32E-20	0.394172413	0.799	0.752
RB12	2.57E-20	0.656532173	0.549	0.469
TPD522	6.78E-20	0.757334902	0.414	0.304
SKAP24	9.73E-20	0.505637886	0.403	0.293
PIKFYVE3	1.23E-19	0.640290791	0.364	0.26
NPM11	2.76E-19	0.350764572	0.835	0.85
RUBCNL1	4.88E-19	0.340519166	0.265	0.154
CD482	5.80E-19	0.434902334	0.673	0.601
LIMD22	8.70E-19	0.501642622	0.516	0.416
ATP2A31	9.32E-19	0.530377535	0.331	0.229
PRDM41	1.40E-18	0.4927379	0.254	0.158

MTSS14	1.60E-18	0.619420054	0.345	0.235
KLHL51	1.68E-18	0.529727725	0.413	0.306
GRK51	2.86E-18	0.463853481	0.488	0.372
RAB11A2	3.48E-18	0.545668217	0.66	0.615
SP1001	3.81E-18	0.42637797	0.745	0.715
ZDHHC141	3.82E-18	0.602435068	0.3	0.198
UPF22	9.13E-18	0.619094989	0.418	0.327
LGMN3	1.16E-17	0.406027485	0.269	0.168
PARP152	1.26E-17	0.462654388	0.379	0.267
SYK4	1.49E-17	0.585793026	0.285	0.189
IMMP2L2	1.92E-17	0.596280552	0.417	0.311
UTY2	2.13E-17	0.397164905	0.472	0.355
LSM73	2.26E-17	0.582406267	0.518	0.455
ARRDC21	2.90E-17	0.563345328	0.306	0.211
MYCBP22	3.02E-17	0.466912171	0.692	0.651
CCNI2	4.73E-17	0.384163839	0.757	0.736
SNHG82	7.65E-17	0.556693549	0.525	0.453
SINHCAF2	1.11E-16	0.522814706	0.377	0.287
EEF1D3	1.37E-16	0.391817955	0.859	0.865
ARPC35	1.42E-16	0.330897223	0.8	0.774
LAT24	1.67E-16	0.475072326	0.268	0.176
PDE4D1	2.17E-16	1.079571323	0.541	0.52
TNRC6B2	2.50E-16	0.428186378	0.742	0.702
TMEM1561	3.87E-16	0.516288547	0.401	0.296
UBE2I1	5.42E-16	0.45358759	0.494	0.429
DAAM1	7.19E-16	0.535400373	0.289	0.196
TBXAS12	1.11E-15	0.815838189	0.284	0.196
USP341	1.18E-15	0.450795756	0.7	0.668
EIF3E3	1.21E-15	0.373747231	0.695	0.683
EIF4A23	1.65E-15	0.370168351	0.701	0.682
RFX33	2.88E-15	0.543745287	0.525	0.444
ELMO11	4.08E-15	0.33364553	0.754	0.699
CD531	9.14E-15	0.352697491	0.739	0.711
CAMK1D2	1.23E-14	0.285239448	0.665	0.571
NUP881	1.63E-14	0.437701962	0.286	0.197
THEMIS25	3.03E-14	0.486652182	0.27	0.187
NDUFAF62	3.18E-14	0.45035451	0.404	0.314
LMO4	3.79E-14	0.593022259	0.295	0.213
SNHG5	3.82E-14	0.474231548	0.682	0.649
RAPGEF15	4.54E-14	0.453404628	0.674	0.607
TUT41	4.98E-14	0.488769231	0.527	0.466
OTUD14	6.03E-14	0.526146185	0.303	0.22
ATF4	8.15E-14	0.49506804	0.536	0.496

MIDN1	9.82E-14	0.552568647	0.378	0.301
TMEM1542	1.03E-13	0.410051666	0.31	0.221
CD82	1.51E-13	0.442301953	0.327	0.244
BICD12	1.87E-13	0.515672597	0.324	0.236
RFX1	3.40E-13	0.423175716	0.25	0.171
CIRBP3	4.12E-13	0.311755286	0.725	0.714
ATF7IP22	4.23E-13	0.480509367	0.399	0.312
THUMPD3-AS1	4.59E-13	0.573444126	0.396	0.328
CHD71	5.01E-13	0.454363772	0.304	0.217
ITPR11	5.94E-13	0.54368507	0.536	0.483
NAP1L12	6.69E-13	0.394194578	0.698	0.683
VASP4	7.11E-13	0.346012248	0.415	0.336
TCEA12	7.15E-13	0.506059319	0.533	0.494
RERE1	7.85E-13	0.392954775	0.581	0.508
SEPTIN93	8.85E-13	0.381891211	0.513	0.452
HIST1H4C2	1.08E-12	0.514444432	0.46	0.392
CCND32	1.49E-12	0.331655242	0.63	0.549
ZFP36L23	1.66E-12	0.263200911	0.832	0.818
RUBCN2	1.67E-12	0.461957583	0.345	0.263
ITSN22	1.74E-12	0.475095516	0.588	0.554
TAF1D1	1.90E-12	0.433959198	0.603	0.587
SERP13	2.04E-12	0.328127431	0.697	0.681
RASGRP21	2.14E-12	0.419072874	0.272	0.19
DENND33	2.20E-12	0.434177102	0.254	0.178
FAM102A1	2.44E-12	0.427450622	0.399	0.314
SH2B34	2.44E-12	0.504173577	0.303	0.224
COX4I12	2.44E-12	0.307940887	0.795	0.798
GNA124	2.52E-12	0.370111185	0.377	0.283
RASGEF1B4	2.99E-12	0.435290299	0.465	0.375
CALM22	3.30E-12	0.344871893	0.779	0.779
COMMD62	3.37E-12	0.390397545	0.651	0.642
RILPL24	3.49E-12	0.466155321	0.509	0.444
MOB3A3	4.74E-12	0.557817212	0.403	0.342
FUS1	5.25E-12	0.454409401	0.721	0.732
SRSF32	5.64E-12	0.33920563	0.765	0.76
MOB1A4	6.09E-12	0.36996955	0.531	0.48
RAB302	8.46E-12	0.497174524	0.335	0.251
STK17A3	8.67E-12	0.31681159	0.696	0.649
ARID1B1	1.01E-11	0.342538138	0.723	0.695
SP1102	1.06E-11	0.440423091	0.527	0.463
SNHG72	1.30E-11	0.463087586	0.421	0.347
SNHG321	1.40E-11	0.419502302	0.43	0.363
UQCRH3	1.66E-11	0.427747695	0.651	0.645

ERP293	2.21E-11	0.373008628	0.56	0.528
MIR29B2CHG1	2.29E-11	0.496085711	0.263	0.191
AC092821.31	2.54E-11	0.501205377	0.351	0.276
ZFP36L13	2.56E-11	0.576283709	0.546	0.501
HSH2D2	3.61E-11	0.449913838	0.271	0.197
ZFAND62	3.71E-11	0.457195395	0.536	0.501
SREBF21	3.93E-11	0.437572431	0.392	0.317
SIPA1L32	4.69E-11	0.475531637	0.357	0.281
NR4A24	5.44E-11	0.596296321	0.573	0.518
CRIP12	5.77E-11	0.463341267	0.736	0.712
CNPY33	6.48E-11	0.438195189	0.318	0.255
CCDC971	6.57E-11	0.447174287	0.353	0.282
AP001011.12	7.03E-11	0.370734342	0.555	0.49
SRRM2	7.52E-11	0.329237593	0.696	0.704
USP81	9.45E-11	0.450989881	0.509	0.471
SMC62	1.04E-10	0.41924932	0.273	0.201
REV3L3	1.06E-10	0.454795553	0.535	0.488
IDS2	1.14E-10	0.429811063	0.574	0.551
UXT2	1.15E-10	0.425641808	0.562	0.534
RBFOX22	1.20E-10	0.427181219	0.43	0.374
VOPP12	1.41E-10	0.42711709	0.479	0.427
SLC49A41	1.41E-10	0.453753572	0.297	0.222
INTS61	1.67E-10	0.769853906	0.532	0.493
TGFB12	1.94E-10	0.45331084	0.617	0.579
KDM6B4	2.19E-10	0.490675015	0.387	0.319
MIS18BP11	2.31E-10	0.509375321	0.384	0.319
TRIR1	2.89E-10	0.335427726	0.646	0.629
TRAF52	3.35E-10	0.366146802	0.345	0.271
SYS11	3.40E-10	0.386100136	0.273	0.208
DUSP11	5.35E-10	0.343142245	0.761	0.727
SQSTM13	5.98E-10	0.45731968	0.708	0.69
UBB3	6.07E-10	0.337091359	0.831	0.85
SRGAP24	7.08E-10	0.416940163	0.338	0.272
BACH13	7.45E-10	0.339541629	0.604	0.555
HNRNPA12	8.25E-10	0.299836941	0.785	0.798
EIF51	8.60E-10	0.30536672	0.716	0.726
C7orf501	9.86E-10	0.427381317	0.347	0.288
STX73	1.07E-09	0.501774214	0.31	0.247
EIF2S32	1.29E-09	0.41505445	0.421	0.375
ERC12	1.33E-09	0.434565978	0.466	0.413
NRF11	1.49E-09	0.452460367	0.39	0.329
SNX251	1.51E-09	0.359904728	0.388	0.32
RABEP11	1.97E-09	0.399113874	0.435	0.384

H3F3B2	2.34E-09	0.258271117	0.923	0.925
IRAK22	2.44E-09	0.300093195	0.258	0.185
RBM381	2.48E-09	0.486992394	0.403	0.341
MKKNK22	2.77E-09	0.445688815	0.333	0.275
LPIN11	2.84E-09	0.547429595	0.411	0.363
FNBP11	3.02E-09	0.297542827	0.783	0.793
EIF3F1	4.13E-09	0.336341468	0.609	0.59
TRIM381	4.50E-09	0.431522354	0.384	0.333
SNX293	6.42E-09	0.448778578	0.428	0.364
MICU21	8.92E-09	0.513209478	0.418	0.369
SMG12	1.07E-08	0.46475404	0.488	0.469
OOEP2	1.19E-08	0.354226957	0.34	0.286
FAM13B1	1.52E-08	0.409175102	0.455	0.411
CNTRL1	1.54E-08	0.411602233	0.419	0.367
NASP1	1.79E-08	0.397165128	0.576	0.552
SNU132	2.23E-08	0.418009529	0.601	0.604
TUBA1A1	2.25E-08	0.405637995	0.548	0.5
IER53	2.61E-08	0.618198047	0.473	0.428
YPEL51	2.91E-08	0.263593978	0.692	0.679
EPB41L4A-AS1	3.72E-08	0.408281933	0.305	0.25
AFTPH2	4.17E-08	0.388636725	0.401	0.357
ADGRE52	4.24E-08	0.463801586	0.577	0.564
UBE2N1	4.97E-08	0.405363453	0.452	0.426
NR1H21	6.81E-08	0.357753238	0.302	0.249
NCF12	6.86E-08	0.387772151	0.269	0.213
RAB3GAP11	7.07E-08	0.358203141	0.439	0.388
ANKRD371	8.45E-08	0.465891217	0.308	0.252
RIPOR21	1.17E-07	0.340085203	0.545	0.488
RBM34	1.17E-07	0.291344259	0.58	0.566
RPA21	1.23E-07	0.367511047	0.269	0.216
Mar-81	1.35E-07	0.470726371	0.278	0.221
SERTAD12	1.47E-07	0.5483489	0.373	0.328
RAD51B1	1.99E-07	0.398661067	0.425	0.373
PWP11	2.00E-07	0.348468446	0.278	0.225
ABHD15-AS11	2.16E-07	0.363244349	0.256	0.195
KLHL64	2.24E-07	0.527466479	0.32	0.273
TUBA1B4	2.41E-07	0.332088939	0.596	0.567
COX7C1	2.44E-07	0.261959534	0.776	0.789
USP9Y2	2.46E-07	0.28118957	0.335	0.267
MTFR11	2.62E-07	0.330598124	0.269	0.213
SF12	2.72E-07	0.283651438	0.604	0.599
ZCCHC101	3.32E-07	0.370653359	0.326	0.28
EIF3H2	4.86E-07	0.27993505	0.67	0.681

TOMM201	6.67E-07	0.304027799	0.577	0.579
RBM61	7.16E-07	0.411948389	0.518	0.51
SYNGR24	7.77E-07	0.424012405	0.316	0.271
SNHG121	8.42E-07	0.517647777	0.302	0.256
ODC12	9.24E-07	0.480016899	0.458	0.43
TAGLN22	9.68E-07	0.368906126	0.569	0.555
PAN31	1.14E-06	0.323328767	0.556	0.539
ATM2	1.19E-06	0.350664131	0.515	0.49
RUFY11	1.39E-06	0.323257987	0.283	0.235
SP1402	1.58E-06	0.339293047	0.508	0.471
EIF1B2	1.68E-06	0.360834199	0.423	0.395
ZNF5061	1.81E-06	0.30851746	0.27	0.218
DDX212	1.86E-06	0.419439248	0.555	0.545
BBX1	1.86E-06	0.321183582	0.547	0.523
HMGN13	2.02E-06	0.271537725	0.602	0.6
UBXN11	2.02E-06	0.329927528	0.534	0.529
SAP182	2.59E-06	0.331408745	0.653	0.666
KDM4C1	2.86E-06	0.360110827	0.529	0.518
DANCR	3.15E-06	0.433303712	0.278	0.237
PARP141	3.38E-06	0.480571895	0.431	0.413
ALG131	3.69E-06	0.366117109	0.452	0.418
OSER11	4.18E-06	0.369481012	0.379	0.349
AC245297.32	4.52E-06	0.313210179	0.325	0.278
RHOQ4	4.56E-06	0.284056825	0.284	0.233
PLP23	5.04E-06	0.288861422	0.432	0.394
CLIC43	5.14E-06	0.310375419	0.272	0.218
RHBDD12	5.24E-06	0.310373531	0.292	0.243
BRD21	5.49E-06	0.39007249	0.528	0.528
TRIM441	5.51E-06	0.339974029	0.329	0.289
CEP1704	5.75E-06	0.400936661	0.297	0.251
DGKD1	5.76E-06	0.451090257	0.303	0.256
MBD41	5.77E-06	0.478481378	0.266	0.225
TAF72	5.89E-06	0.345282119	0.473	0.461
SPOP1	6.75E-06	0.402692369	0.322	0.287
NSA22	7.43E-06	0.329606983	0.516	0.52
SPIDR1	9.88E-06	0.315035716	0.504	0.471
PRMT11	1.00E-05	0.338237553	0.293	0.256
BPTF1	1.04E-05	0.301942642	0.628	0.634
IFNGR24	1.36E-05	0.328385477	0.265	0.22
PVT12	1.61E-05	0.395809006	0.431	0.398
RBM23	1.71E-05	0.330324633	0.417	0.396
IGHM2	1.77E-05	0.624284336	0.264	0.214
SRPK21	1.83E-05	0.340804444	0.565	0.564

SFPQ	2.03E-05	0.298159949	0.662	0.692
AP1B12	2.08E-05	0.394446454	0.282	0.244
CHD92	2.79E-05	0.399469826	0.344	0.317
POLD43	3.15E-05	0.419047846	0.385	0.372
MECP22	4.06E-05	0.321564469	0.478	0.46
DDIT31	4.51E-05	0.374730058	0.264	0.225
ZBTB441	4.54E-05	0.275611928	0.273	0.232
STAG12	4.66E-05	0.262843895	0.684	0.709
CYSTM12	4.71E-05	0.307439706	0.365	0.334
SERTAD2	4.88E-05	0.318978916	0.254	0.213
CORO1A2	5.23E-05	0.268488239	0.626	0.62
PCF111	6.22E-05	0.37880422	0.357	0.338
PCBP21	6.22E-05	0.262380919	0.546	0.544
Mar-61	6.66E-05	0.266537354	0.499	0.485
RSRC2	6.69E-05	0.300412021	0.597	0.629
ZCCHC71	6.84E-05	0.390730015	0.509	0.496
IDI11	7.32E-05	0.397544436	0.511	0.5
PATJ2	7.40E-05	0.275228017	0.265	0.22
STIM21	7.54E-05	0.356723124	0.46	0.445
GTF2H11	7.63E-05	0.372794195	0.282	0.249
SHOC21	8.71E-05	0.320224657	0.381	0.363
ATF7IP1	9.70E-05	0.331032003	0.606	0.618
PPIG1	0.000101627	0.253432769	0.525	0.523
CKS22	0.000112758	0.424605111	0.265	0.231
TMEM131L1	0.000116137	0.298230961	0.428	0.391
XKR61	0.000131567	0.372660492	0.304	0.27
KDM3B	0.000141251	0.498787235	0.278	0.249
COMMD102	0.000153815	0.323347239	0.413	0.389
ARHGAP45	0.000155075	0.28479202	0.291	0.262
RBM261	0.00017101	0.296355132	0.39	0.368
EEA12	0.000181364	0.386412585	0.265	0.23
MTPN3	0.000200065	0.307987527	0.493	0.496
PHKB1	0.000200271	0.310907124	0.338	0.311
WSB1	0.000211734	0.253588779	0.576	0.581
FBL2	0.000232503	0.270415046	0.3	0.274
RBM25	0.000237002	0.272422993	0.565	0.59
ZNF24	0.00023968	0.294638171	0.27	0.239
PARP12	0.000271425	0.287082808	0.376	0.356
PALM2-AKAP2	0.000279478	0.27690602	0.252	0.213
KLHL241	0.000289371	0.304361088	0.362	0.338
ST131	0.00030323	0.286021055	0.507	0.507
WAC1	0.000321292	0.280500582	0.603	0.628
KLHL18	0.000364225	0.331902237	0.271	0.238

HDAC1	0.000364368	0.29294182	0.255	0.223
SCAF81	0.000369534	0.251660447	0.418	0.399
MTMR62	0.000396878	0.29453282	0.337	0.312
MAP3K12	0.00040262	0.275448246	0.4	0.373
TRAPPC81	0.000418161	0.316903619	0.278	0.248
EIF4B2	0.000438173	0.261066498	0.518	0.534
EIF3L3	0.00045493	0.296734922	0.398	0.389
IL161	0.00051182	0.287299504	0.252	0.221
TUBB4B2	0.000531944	0.567373519	0.504	0.511
SYF21	0.000630038	0.288453573	0.495	0.505
VTI1A	0.000809715	0.256747333	0.514	0.517
ATP5MC21	0.0008146	0.263772477	0.678	0.707
SRSF22	0.000846976	0.273444463	0.559	0.574
NR1D21	0.000898249	0.264931937	0.333	0.305
PHB22	0.00093772	0.265859953	0.323	0.303
CDK131	0.000944102	0.293585141	0.515	0.508
CD471	0.000955529	0.265847368	0.462	0.46
SIRT11	0.001076391	0.29142111	0.3	0.272
SNX34	0.001081256	0.26759825	0.467	0.462
CSNK1D1	0.001099801	0.339940016	0.414	0.415
SP140L1	0.001254852	0.293694959	0.357	0.343
BANF11	0.001267286	0.265309967	0.329	0.314
KDM4B1	0.00129802	0.408858286	0.353	0.339
GNB51	0.001361916	0.263995137	0.263	0.232
UBE2S3	0.001405953	0.597720321	0.468	0.479
RNPS11	0.001657361	0.271558845	0.37	0.363
DYNLL13	0.001869556	0.31231246	0.617	0.636
CLASP21	0.001924143	0.296561982	0.43	0.429
PTPN62	0.001977337	0.295073852	0.259	0.236
WIPF21	0.002013069	0.28466743	0.275	0.252
HPS53	0.00207148	0.260427605	0.25	0.226
PIAS11	0.002116995	0.288929196	0.506	0.523
NFATC14	0.002224397	0.391521061	0.29	0.266
BOD1L11	0.002299923	0.260917867	0.464	0.473
TMX41	0.002314243	0.303401219	0.286	0.264
EPC22	0.002405117	0.264705873	0.439	0.442
TTC171	0.00260767	0.255306679	0.4	0.39
FAM133B1	0.002613487	0.264493863	0.502	0.52
ATP5PO1	0.002922597	0.304845431	0.469	0.485
DMXL12	0.003375058	0.340895032	0.332	0.314
GDI25	0.003438918	0.291157888	0.432	0.431
PPP3CA1	0.003450284	0.259270015	0.475	0.47
SH3BP54	0.003726963	0.299903101	0.33	0.307

TMEM651	0.003770809	0.299874016	0.257	0.232
RSL24D12	0.004824155	0.265282517	0.442	0.452
CD2AP2	0.004915899	0.259694452	0.333	0.318
KRT101	0.005203055	0.253730503	0.427	0.431
LRIF11	0.005232959	0.250566791	0.262	0.237
EIF3D2	0.005262088	0.256785678	0.466	0.475
CD693	0.006541619	0.40490212	0.562	0.576
TBC1D22A1	0.007066858	0.289011692	0.508	0.534
P4HA12	0.008343782	0.360160976	0.318	0.309
RNMT1	0.008496722	0.280613693	0.437	0.442
BCL2L113	0.009272191	0.3043071	0.373	0.364
IL1R21	0	4.791978728	0.587	0.123
AQP91	0	4.621312305	0.7	0.049
NAMPT2	0	4.56526149	0.954	0.537
CXCL82	0	4.563856207	0.716	0.123
ACSL12	0	4.295130173	0.743	0.235
PLAUR2	0	4.218894705	0.789	0.144
KCNJ15	0	3.994811972	0.442	0.02
FGD42	0	3.909808511	0.61	0.127
IRAK32	0	3.902200196	0.692	0.162
CSF3R1	0	3.485754916	0.471	0.052
SOD22	0	3.454435348	0.902	0.557
DOCK42	0	3.322812417	0.663	0.151
G0S23	0	3.276575035	0.493	0.098
AC007271.1	0	3.232680877	0.282	0.019
TREM12	0	3.09777757	0.417	0.064
ADGRG3	0	3.079796962	0.343	0.012
AC005050.3	0	3.009146771	0.278	0.017
SLC11A12	0	2.935655108	0.417	0.076
TNFAIP61	0	2.852148405	0.316	0.038
NEAT12	0	2.677509282	0.941	0.825
LIMK2	6.31E-308	3.681016281	0.517	0.127
DENND5A1	4.35E-303	3.414832205	0.581	0.162
LCP22	3.40E-295	3.840835047	0.723	0.315
PLEK3	1.37E-284	3.572694778	0.595	0.185
S100A81	3.10E-284	4.670857694	0.57	0.168
RBM473	2.71E-280	2.957881645	0.599	0.18
LUCAT11	3.64E-269	3.480554279	0.47	0.114
LITAF2	2.28E-266	3.336350259	0.817	0.528
RNF1491	6.40E-261	3.825353112	0.789	0.505
IL1RAP1	2.14E-256	3.918783702	0.516	0.149
ARHGAP261	2.62E-249	3.158049865	0.787	0.488
BASP14	3.05E-248	3.501041546	0.669	0.287

S100A93	4.95E-244	3.640204037	0.619	0.23
BCL2A13	2.59E-241	3.088080196	0.622	0.24
WDFY32	2.55E-235	3.207374988	0.351	0.069
SLC25A371	8.66E-225	3.227670361	0.486	0.146
PTGS21	1.01E-218	2.947817747	0.366	0.079
AZIN1-AS11	7.74E-211	4.030415006	0.454	0.132
CD552	1.54E-209	3.329685879	0.792	0.572
FPR12	6.34E-207	2.658489356	0.358	0.08
CPD	1.34E-206	3.591768401	0.567	0.224
GK2	2.09E-201	3.229673704	0.616	0.272
TMCC31	3.51E-194	3.189806725	0.369	0.091
HCK3	4.61E-194	2.956741951	0.382	0.097
SLC8A13	2.27E-193	2.901825926	0.419	0.113
SAMSN13	4.25E-192	2.837514469	0.834	0.735
AL078604.42	2.81E-183	3.116201682	0.472	0.153
IL1B2	6.46E-183	2.308485129	0.419	0.11
MXD12	1.87E-172	2.928908927	0.57	0.257
ETS23	1.03E-161	2.486461149	0.44	0.148
PLXDC23	7.06E-157	2.396888645	0.407	0.122
ADAMTSL4-AS1	3.51E-152	3.188636822	0.604	0.336
TLR22	1.79E-151	2.421580031	0.328	0.086
C5AR12	1.50E-150	2.389922893	0.342	0.092
NCF22	3.08E-150	2.563563216	0.349	0.1
IVNS1ABP1	1.07E-148	3.0604404	0.664	0.454
ITGAX2	8.68E-148	2.60463479	0.365	0.109
PDE4B2	1.37E-143	3.327965745	0.748	0.64
SRGN4	3.51E-137	1.461941728	0.902	0.888
DOCK51	4.51E-135	2.774806216	0.355	0.111
MCTP13	1.15E-129	2.689996374	0.376	0.123
IGF1R	9.23E-116	2.849681595	0.314	0.099
FNDC3B3	1.59E-114	2.311340468	0.622	0.399
PELI12	2.88E-113	2.89420652	0.664	0.52
IL1R12	4.20E-112	3.111187199	0.398	0.157
USP321	1.22E-106	3.022333598	0.473	0.241
IER32	2.59E-101	2.072501907	0.473	0.22
LYN5	3.89E-98	2.097548058	0.592	0.367
CREB52	2.46E-96	2.882065374	0.259	0.077
NEDD9	5.93E-96	2.840894314	0.583	0.435
GAB24	7.50E-95	2.394136614	0.536	0.326
RABGEF11	7.95E-93	2.599845589	0.605	0.47
FCGR2A2	9.63E-88	2.06325135	0.318	0.115
PHACTR14	1.54E-86	2.432334643	0.407	0.197
BCL61	3.35E-77	2.623308676	0.412	0.22

GLUL2	8.07E-77	2.076932799	0.429	0.222
ICAM13	1.08E-74	2.434544665	0.38	0.186
IRS23	7.24E-73	2.521692804	0.502	0.34
ELL22	1.97E-72	2.107913914	0.661	0.624
FAM49B	6.11E-69	2.224505152	0.649	0.674
FTH14	8.81E-69	2.022212343	0.831	0.946
SVIL1	7.09E-67	2.417431772	0.294	0.123
MAML31	5.45E-63	2.465492103	0.376	0.199
PGS11	5.24E-62	2.426303952	0.284	0.123
ST6GALNAC31	5.30E-62	2.279082078	0.389	0.206
AC099489.11	1.63E-61	2.332965608	0.333	0.155
SAT14	8.09E-61	1.501918843	0.718	0.785
C9orf723	8.79E-59	2.434712627	0.416	0.258
ELF21	8.08E-58	2.749186471	0.518	0.416
TOM12	3.27E-57	2.335271753	0.401	0.243
RAB313	2.77E-56	2.101910957	0.34	0.169
RNF144B4	6.59E-54	2.395187379	0.336	0.173
ALOX5AP2	4.00E-53	2.297839376	0.496	0.387
PTPRE3	1.21E-51	2.125923828	0.361	0.208
B3GNT53	7.21E-51	2.17907886	0.265	0.119
MCTP22	2.66E-50	3.337283451	0.365	0.219
DDX60L1	3.02E-50	2.505559716	0.364	0.215
ANKRD171	5.19E-50	0.418925369	0.205	0.579
SIPA1L15	1.00E-49	1.32047502	0.7	0.68
BABAM21	3.58E-49	0.279444536	0.139	0.452
KDM6A1	5.88E-49	0.328775583	0.189	0.545
ELOVL51	9.66E-49	0.289028972	0.211	0.583
CPQ2	2.06E-46	2.338209122	0.358	0.215
PILRA2	6.86E-46	2.101458311	0.254	0.118
ABHD52	3.29E-45	2.704286402	0.346	0.205
LAMTOR41	7.43E-45	0.289751676	0.169	0.49
TYROBP3	7.55E-45	1.161822302	0.359	0.184
COPA1	9.51E-45	0.307244322	0.158	0.471
RESF12	4.60E-44	0.282379506	0.212	0.572
PTPN122	7.06E-44	2.244047775	0.346	0.206
PTEN1	1.45E-43	2.786021046	0.489	0.426
ROCK11	2.72E-43	0.279593877	0.225	0.589
SP3	5.08E-42	0.387629841	0.142	0.437
NUMB1	9.36E-42	2.328795843	0.465	0.375
USP31	1.09E-41	0.281896239	0.205	0.538
BRAF1	1.79E-41	2.039779008	0.598	0.632
ERBIN2	9.97E-41	0.369698163	0.194	0.512
TRIP12	2.16E-40	0.400317286	0.171	0.479

SBF22	6.26E-40	2.077670119	0.349	0.217
FCER1G3	6.54E-40	1.361132842	0.295	0.146
TBC1D82	7.38E-40	2.804071824	0.322	0.192
FOXO32	1.43E-39	2.226883966	0.437	0.341
PLXNC12	1.50E-39	2.235621835	0.302	0.172
PAFAH1B1	5.15E-39	0.561540956	0.251	0.624
PKN21	7.26E-39	0.343121956	0.128	0.394
FBXW71	1.15E-38	0.436044388	0.23	0.573
MAPK11	2.51E-38	0.268833953	0.123	0.381
EP300	3.42E-38	0.289285075	0.127	0.392
CD46	4.86E-38	0.265766839	0.116	0.374
GNAQ3	6.40E-38	2.56964785	0.367	0.24
HMGB23	1.62E-37	0.338663724	0.165	0.455
FBXO112	2.02E-37	0.372166669	0.223	0.55
SPAG92	2.12E-37	2.202239876	0.516	0.49
ZNF407	2.29E-37	0.289142675	0.125	0.387
LCP13	2.97E-37	1.850044527	0.594	0.652
ZNF4382	9.56E-37	2.125512492	0.258	0.135
AP2B1	1.33E-35	0.367451612	0.128	0.386
DYRK1A1	2.42E-35	0.355368815	0.245	0.583
LSP13	2.53E-35	0.30249089	0.182	0.473
HECA2	3.46E-35	0.382016437	0.198	0.505
FOXK21	3.96E-35	0.265739659	0.09	0.315
DAZAP2	7.37E-35	0.380389046	0.233	0.565
GABARAPL22	1.76E-34	0.376912046	0.12	0.363
CAPZB3	2.54E-34	0.348929271	0.251	0.591
RASA21	4.38E-34	0.566035872	0.227	0.557
AC016831.72	7.99E-34	0.252107161	0.241	0.562
TLE42	1.01E-33	0.348463832	0.165	0.434
RB1CC1	1.78E-33	0.397282838	0.142	0.401
UBAP11	2.25E-33	2.396526555	0.419	0.345
DDX213	3.60E-33	0.319438247	0.23	0.552
TAOK32	3.74E-33	0.397499034	0.239	0.57
N4BP11	4.21E-33	2.48138396	0.47	0.427
SDCBP2	4.31E-33	1.752323749	0.546	0.567
ACTR23	4.34E-33	0.450114678	0.28	0.646
RUNX11	7.05E-33	0.3132704	0.225	0.528
ANXA114	1.92E-32	0.334446783	0.127	0.369
TOP11	5.07E-32	0.446601875	0.29	0.66
SEMA4D2	6.89E-32	0.341709068	0.165	0.426
VPS13B1	9.28E-32	0.619630969	0.265	0.611
WSB11	1.17E-31	0.421263757	0.254	0.587
DOCK111	2.15E-31	0.326428384	0.11	0.336

PPP2R2A	3.41E-31	0.551543166	0.198	0.484
TAOK1	6.55E-31	0.271627218	0.134	0.368
UTY3	9.14E-31	0.285074671	0.13	0.362
RAB5C4	1.48E-30	0.296869749	0.131	0.365
WDR26	1.95E-30	0.33295246	0.149	0.391
CSNK1A11	2.78E-30	0.482113598	0.269	0.609
CYFIP21	2.84E-30	0.415301515	0.124	0.36
RB13	3.40E-30	0.334403083	0.199	0.477
RNASEK4	6.24E-30	0.455275753	0.296	0.661
RAB1A1	8.63E-30	2.311308718	0.499	0.514
CHMP2A1	1.57E-29	0.25362148	0.131	0.363
EVI2B	1.85E-29	0.49943861	0.222	0.529
XPO6	1.93E-29	2.470188977	0.352	0.26
ST3GAL1	2.20E-29	0.292827613	0.147	0.385
KMT2C	2.25E-29	0.431759907	0.269	0.601
ETV63	2.40E-29	0.422691774	0.23	0.529
PHF20L1	2.50E-29	2.382194978	0.405	0.333
PTBP3	3.03E-29	0.394659325	0.171	0.43
MPP72	5.25E-29	0.257727753	0.118	0.334
USPL11	7.75E-29	0.315277782	0.114	0.33
ZFAND32	8.49E-29	1.735880171	0.571	0.653
CYSTEM13	1.16E-28	2.287664736	0.405	0.334
ADIPOR21	3.19E-28	0.275247017	0.104	0.309
STAT32	3.24E-28	1.96320522	0.575	0.656
DOCK21	4.27E-28	0.552761578	0.264	0.591
ATF63	1.29E-27	0.545294477	0.182	0.437
AFF43	1.36E-27	0.411430885	0.254	0.57
GCA2	1.47E-27	2.163433832	0.261	0.159
RIPOR22	2.27E-27	2.042629487	0.488	0.489
RELB1	3.17E-27	0.272961374	0.18	0.429
FMNL11	3.29E-27	0.326074176	0.131	0.352
RLF1	3.44E-27	0.361259895	0.233	0.515
USP9X1	3.57E-27	0.636083741	0.214	0.507
ESCO1	4.05E-27	0.320245852	0.084	0.271
METTL91	4.90E-27	0.333278265	0.107	0.312
BTBD71	5.83E-27	0.435966171	0.086	0.268
BCAS31	9.67E-27	0.447071091	0.182	0.432
NFE2L21	1.20E-26	1.841358189	0.516	0.54
ATP6V0C2	1.26E-26	0.549947773	0.245	0.553
ACAP21	1.26E-26	0.522584511	0.241	0.544
LBR	1.45E-26	0.409451068	0.095	0.288
CD442	1.46E-26	0.41263535	0.38	0.795
OSBPL9	1.51E-26	0.457619136	0.122	0.33

RUBCNL2	1.63E-26	1.94752656	0.259	0.155
MAML22	1.81E-26	0.311598547	0.29	0.587
ZFP36L14	3.14E-26	0.543786665	0.224	0.508
NCOA13	4.61E-26	0.573167473	0.236	0.529
CNN22	5.47E-26	0.283185933	0.106	0.3
PIAS12	7.22E-26	0.541160584	0.237	0.529
SNRK1	1.24E-25	0.292018931	0.096	0.283
ARID4B2	2.25E-25	0.375631136	0.387	0.792
TBC1D152	5.31E-25	0.795410103	0.208	0.484
MAPRE1	7.40E-25	0.3443527	0.111	0.304
CCNL1	9.96E-25	0.517989755	0.34	0.726
GSK3B	2.39E-24	0.494791857	0.171	0.406
MAP3K22	2.58E-24	0.550802179	0.286	0.609
CHMP2B	3.40E-24	0.292471029	0.102	0.288
PPP1R181	4.22E-24	0.304878872	0.08	0.252
GBP51	5.36E-24	0.331700456	0.084	0.256
TAGLN23	5.72E-24	0.384005875	0.261	0.561
H2AFY4	1.43E-23	0.316079268	0.131	0.33
GSTO13	1.49E-23	0.250511179	0.137	0.34
SSH22	1.74E-23	0.286584725	0.339	0.671
JARID22	2.87E-23	0.425192403	0.288	0.596
CWC25	2.95E-23	0.330367554	0.096	0.275
TBXAS13	3.09E-23	1.872972278	0.292	0.196
DNTTIP2	3.60E-23	0.51900294	0.149	0.363
TSG101	4.44E-23	0.468697927	0.084	0.253
ANKRD112	4.65E-23	0.403521363	0.376	0.75
CSNK1D2	5.88E-23	0.58541558	0.184	0.42
ATP6V1H1	6.09E-23	0.376962701	0.134	0.334
RAB7A3	8.40E-23	1.967781999	0.525	0.604
NCOA22	8.61E-23	0.671275062	0.252	0.536
RALGDS1	9.48E-23	0.344055128	0.12	0.31
CELF22	1.27E-22	0.345162874	0.375	0.731
AGFG11	2.97E-22	0.716866772	0.164	0.379
PCBP1-AS1	4.32E-22	2.314699042	0.307	0.229
TAGAP	4.56E-22	0.821071694	0.177	0.411
GPR1321	5.30E-22	0.345041284	0.134	0.326
VPS26A	6.35E-22	0.411617924	0.122	0.311
TXN4	7.12E-22	0.254731631	0.236	0.492
ECHDC1	9.55E-22	0.772550848	0.108	0.288
CSTB2	1.06E-21	0.491992554	0.199	0.435
NOL10	1.07E-21	0.674414713	0.088	0.252
TSC22D23	1.25E-21	0.35164807	0.165	0.372
CTNNBL11	1.95E-21	0.458931361	0.1	0.269

CAPZA21	2.41E-21	0.607298057	0.2	0.439
FAM172A	2.88E-21	0.909129674	0.257	0.558
TKT2	3.45E-21	0.432654932	0.134	0.324
IRAK23	4.69E-21	1.983257318	0.275	0.185
HIVEP21	7.01E-21	0.671703992	0.276	0.558
CAP14	1.19E-20	0.680763604	0.22	0.469
TRAK14	1.40E-20	0.294096086	0.131	0.314
DOCK82	1.99E-20	0.703475452	0.342	0.702
SHOC22	8.55E-20	0.708238877	0.161	0.367
MIDN2	8.84E-20	0.449323359	0.129	0.307
SCLT1	1.03E-19	0.618389897	0.158	0.359
ASAH12	1.40E-19	2.023003881	0.324	0.252
WWP21	1.63E-19	0.574870216	0.133	0.317
SYNE12	1.83E-19	0.69068008	0.141	0.331
PLCG24	2.17E-19	0.387166632	0.133	0.311
GNB23	2.33E-19	0.381286272	0.113	0.281
NUP581	2.38E-19	0.52816442	0.135	0.316
MAP1LC3B	4.09E-19	0.580805679	0.313	0.637
GNA134	5.28E-19	0.718646744	0.218	0.457
MEF2D	6.53E-19	0.431977489	0.096	0.253
KDM4B2	8.26E-19	0.522881384	0.152	0.344
DDX3Y1	9.82E-19	0.438180776	0.151	0.338
SELL2	1.04E-18	0.413157703	0.117	0.287
FLOT12	1.07E-18	1.869122604	0.284	0.206
SLC12A62	1.28E-18	1.929738357	0.319	0.253
TXNDC112	1.89E-18	0.398838712	0.116	0.278
RASSF52	2.44E-18	0.515642632	0.165	0.359
CCDC931	2.54E-18	0.505248132	0.1	0.255
ATP6V0B4	2.99E-18	0.655214121	0.171	0.374
NAPA3	3.09E-18	0.595369932	0.164	0.358
PFKFB32	5.39E-18	2.005548996	0.424	0.418
JMJD62	7.21E-18	0.321633603	0.123	0.285
DENND1A2	7.22E-18	0.49857827	0.155	0.34
AHCTF1	7.23E-18	0.602267368	0.13	0.302
LGALS33	7.29E-18	0.547923137	0.169	0.352
NRDC	8.20E-18	0.912009075	0.188	0.408
TPM34	8.28E-18	0.475839643	0.339	0.674
NFKB13	1.06E-17	1.410423661	0.54	0.603
EXT12	1.20E-17	0.553895812	0.177	0.371
USP4	1.55E-17	0.445390936	0.112	0.268
TBC1D11	1.87E-17	0.643823807	0.152	0.333
GABARAPL12	2.53E-17	0.473842599	0.133	0.301
APBB1IP2	2.64E-17	0.796061867	0.296	0.59

SOS21	3.20E-17	0.735764454	0.155	0.341
GPCPD13	4.23E-17	0.612168422	0.302	0.586
RNF19B1	4.46E-17	1.857943779	0.258	0.182
RLIM	5.62E-17	0.604024127	0.113	0.269
RILPL25	6.49E-17	1.965096751	0.436	0.446
IRF12	7.56E-17	0.782531686	0.28	0.557
ARHGAP152	9.37E-17	1.497885264	0.641	0.849
BAZ1A1	1.65E-16	0.759347023	0.273	0.538
CHST112	2.37E-16	0.418396351	0.414	0.773
SRGAP25	3.32E-16	0.454306278	0.123	0.277
PTK2B1	3.53E-16	0.552284381	0.181	0.372
ZFC3H11	4.41E-16	0.62711201	0.182	0.377
GTPBP11	5.80E-16	2.202037864	0.325	0.278
ILRUN1	6.59E-16	0.68255483	0.137	0.301
TES1	6.86E-16	0.547498518	0.137	0.299
SDCCAG83	8.31E-16	0.454687541	0.11	0.255
PPFIA11	8.31E-16	0.413174104	0.11	0.252
IFRD1	1.03E-15	2.381944973	0.443	0.473
HCLS1	1.16E-15	0.814805766	0.277	0.546
GNAI3	1.45E-15	0.998883147	0.198	0.402
ATP6V1D	2.37E-15	0.71692014	0.136	0.297
NFKBIZ2	2.68E-15	1.746924113	0.443	0.469
PNRC11	3.03E-15	0.523414883	0.406	0.784
STK101	3.06E-15	0.615075135	0.235	0.468
GABARAP3	5.65E-15	0.628983614	0.301	0.591
FTL3	7.16E-15	0.704613941	0.694	0.932
CREBBP2	8.53E-15	0.865628589	0.267	0.528
PPP1R15B1	8.94E-15	0.486361129	0.122	0.267
PAK14	1.06E-14	1.984823538	0.252	0.186
NDRG12	1.13E-14	0.538223955	0.139	0.295
PPP3CA2	1.15E-14	0.674863393	0.248	0.475
ARFGAP32	1.49E-14	0.408096523	0.134	0.283
MARCKS4	1.51E-14	1.553278553	0.252	0.18
UBE2H1	1.56E-14	0.838117244	0.277	0.533
SUPT6H	1.80E-14	0.751956223	0.167	0.338
GRB24	2.05E-14	0.780634526	0.317	0.607
GTF2H12	2.22E-14	0.551317388	0.112	0.253
ARIH11	2.62E-14	0.588372507	0.406	0.766
RAB8B2	3.50E-14	0.739470754	0.286	0.535
TNIP11	3.59E-14	0.488874725	0.151	0.311
FOXP13	4.17E-14	0.345769044	0.429	0.749
AP1G1	5.43E-14	0.897685888	0.18	0.36
NDEL1	5.43E-14	2.354887615	0.336	0.308

S100A114	5.73E-14	1.10918101	0.53	0.599
SPATA132	8.36E-14	0.647517808	0.125	0.267
PLEKHB22	8.55E-14	0.633340591	0.158	0.323
EFHD23	1.48E-13	0.449272576	0.184	0.359
CSRN11	1.73E-13	0.634012051	0.135	0.283
USP10	2.24E-13	0.72855714	0.135	0.285
NSMCE2	2.85E-13	0.891141349	0.237	0.452
CLTC2	3.69E-13	0.690238973	0.159	0.32
RAPGEF21	4.78E-13	0.764897437	0.208	0.401
NABP11	5.19E-13	2.058986058	0.364	0.35
ZSWIM63	5.25E-13	1.496260447	0.536	0.639
WTAP2	5.93E-13	0.939151846	0.317	0.604
USP152	6.48E-13	1.503064782	0.569	0.749
DSE3	9.91E-13	1.597671981	0.254	0.194
TALDO14	1.12E-12	0.70681846	0.164	0.325
HIPK32	1.45E-12	0.901304478	0.163	0.321
SRPK22	1.73E-12	1.070812629	0.299	0.569
PDXK2	1.99E-12	0.358900261	0.136	0.274
FAM126B	3.12E-12	0.782804882	0.122	0.253
MAPK14	3.22E-12	0.682284912	0.12	0.25
OXS12	3.84E-12	2.020886558	0.347	0.327
MAP4K44	5.77E-12	1.779345171	0.482	0.553
CD582	7.31E-12	0.633312247	0.213	0.394
FBXO343	7.71E-12	0.939263905	0.249	0.457
CREBRF1	7.76E-12	0.950111571	0.233	0.445
TRAF3IP3	8.05E-12	0.78723141	0.13	0.266
YTHDF31	9.13E-12	0.808806715	0.199	0.38
TUT71	9.62E-12	0.740185436	0.233	0.431
MAPKAPK21	1.03E-11	0.631840063	0.166	0.323
UBE2E13	1.21E-11	0.774980576	0.146	0.288
NFAT53	1.65E-11	0.750312156	0.308	0.557
NPTN3	1.65E-11	0.467170574	0.125	0.251
HIVEP13	1.69E-11	0.716118647	0.229	0.417
VSIR2	2.29E-11	0.743023333	0.135	0.269
MGAT12	2.83E-11	0.330688155	0.13	0.255
JOSD1	4.66E-11	0.952909405	0.235	0.434
LAPTM55	6.45E-11	0.362703539	0.405	0.713
IQGAP12	6.52E-11	0.582327672	0.395	0.713
PNPLA81	6.52E-11	1.953674033	0.398	0.425
RAB27A2	9.20E-11	1.009216126	0.19	0.355
KIAA0232	9.48E-11	0.811891499	0.148	0.286
HIF1A3	1.01E-10	1.588865842	0.472	0.554
PSEN11	1.07E-10	1.829900774	0.389	0.41

LIMS12	1.26E-10	0.67113154	0.275	0.488
RNF132	1.47E-10	1.881339998	0.335	0.321
SORL11	1.88E-10	1.903223484	0.294	0.26
ENSA2	2.28E-10	1.025381213	0.318	0.585
CHD11	2.56E-10	1.866869699	0.489	0.606
ADAM172	3.13E-10	0.644879634	0.157	0.295
ARPC54	4.31E-10	0.760607716	0.289	0.528
RTN43	4.81E-10	0.89187966	0.284	0.508
GPR653	5.63E-10	0.690507294	0.129	0.251
EIF4G31	5.89E-10	1.028019697	0.261	0.479
ACTR34	6.62E-10	1.847792827	0.48	0.6
SUSD61	7.08E-10	1.964718621	0.36	0.366
GCH11	9.35E-10	0.80007258	0.166	0.304
MAPK61	1.01E-09	0.516882927	0.148	0.271
ZNF2671	1.17E-09	1.638581277	0.322	0.3
SLC2A32	1.42E-09	1.832174158	0.427	0.474
B4GALT51	2.90E-09	1.695525535	0.251	0.207
PPP1CB2	3.39E-09	0.955816173	0.343	0.607
PHF21A1	7.14E-09	1.037363078	0.178	0.321
BNIP3L2	8.16E-09	0.72365171	0.172	0.306
CD532	9.23E-09	0.69660014	0.396	0.719
PREX1	1.15E-08	1.91708799	0.382	0.416
QKI2	1.23E-08	1.382711663	0.448	0.502
RAB211	1.84E-08	1.133788403	0.248	0.438
UBE2B2	2.29E-08	0.75749713	0.393	0.697
MED13L3	3.01E-08	1.584791688	0.48	0.602
RTN31	5.25E-08	0.857710625	0.183	0.32
LAMP12	5.45E-08	0.87782943	0.173	0.305
CASP41	5.71E-08	1.00343848	0.222	0.39
IL4R1	9.71E-08	0.805602712	0.164	0.286
HNRNPC1	1.13E-07	0.696570423	0.48	0.859
PLSCR13	1.46E-07	1.517486708	0.289	0.268
PDZD81	1.55E-07	0.985375067	0.145	0.252
MTMR31	1.72E-07	1.956374515	0.278	0.259
DIP2B2	2.58E-07	0.978048361	0.223	0.378
CSGALNACT2	3.17E-07	0.874243004	0.23	0.387
PSAP2	3.35E-07	0.498476164	0.253	0.419
SRPK1	3.54E-07	1.05270991	0.146	0.256
SGK13	4.44E-07	1.366845786	0.252	0.216
PPP4R21	4.67E-07	1.153667302	0.231	0.396
PICALM2	5.50E-07	1.658185745	0.467	0.589
ATP11B	6.09E-07	1.465224587	0.294	0.509
ITM2B3	8.27E-07	0.740158821	0.447	0.788

UBE2W1	8.90E-07	1.107995161	0.157	0.268
PCNX12	9.44E-07	1.78437139	0.418	0.502
HPCAL11	9.60E-07	0.992616778	0.158	0.268
SLC16A32	1.43E-06	0.871448328	0.151	0.255
COP11	1.75E-06	1.110074222	0.313	0.538
RALGAPA2	2.66E-06	1.819031675	0.261	0.245
TANK1	3.08E-06	0.960754907	0.371	0.613
KLHL21	3.58E-06	1.078083752	0.154	0.26
TNFAIP35	4.22E-06	0.695420665	0.587	0.717
UBE2D12	4.39E-06	0.754776334	0.153	0.254
SH3BP55	4.44E-06	1.632216581	0.307	0.308
NUP981	4.92E-06	1.162854005	0.324	0.553
FAM49A5	5.72E-06	0.430596606	0.178	0.282
ELMO12	1.20E-05	1.03779495	0.407	0.707
DNM21	1.64E-05	1.076717478	0.234	0.383
RAB5A	1.99E-05	1.134846088	0.213	0.351
RYBP2	2.44E-05	1.141607685	0.292	0.483
MAP3K84	3.12E-05	0.837878982	0.275	0.429
VPS37B1	3.61E-05	1.585390351	0.395	0.457
KIF1B2	5.32E-05	0.783831355	0.173	0.27
CEP1705	5.37E-05	0.589449933	0.163	0.254
AGTPBP11	5.38E-05	1.816370398	0.269	0.266
ATP13A33	5.56E-05	1.507306842	0.313	0.326
NSMAF	6.34E-05	1.073145811	0.163	0.262
TNFRSF1B2	6.69E-05	0.855187683	0.289	0.462
ATG72	8.25E-05	1.636071864	0.325	0.353
MCL12	8.35E-05	1.159531727	0.489	0.66
S100A64	0.000109602	1.238450066	0.488	0.641
TBL1X1	0.000138497	0.913228972	0.204	0.32
POR2	0.000155923	1.007334684	0.16	0.25
MYO9B3	0.000165174	0.980425922	0.252	0.4
GNB11	0.00016805	0.952547777	0.358	0.594
VMP11	0.000176665	1.627245754	0.439	0.57
PACSIN22	0.000178902	1.475923363	0.273	0.274
DPYD2	0.000200667	1.514218568	0.416	0.511
ATP6V0D13	0.000211671	0.806251697	0.198	0.304
CMTM65	0.000272938	1.051026896	0.28	0.447
CAMK1D3	0.000385758	1.534323711	0.453	0.575
MAP2K31	0.000436437	0.852390321	0.178	0.272
APLP22	0.000703232	0.862288623	0.267	0.412
TBK11	0.000790213	1.236904115	0.195	0.297
CTSS3	0.000845474	1.248229676	0.408	0.503
STX111	0.001040674	1.564835889	0.255	0.259

IFITM22	0.00106571	2.126733402	0.463	0.635
PRKDC	0.0011863	2.037715476	0.249	0.391
AZIN11	0.001254736	1.060944754	0.23	0.35
RASSF31	0.00132164	0.9044167	0.206	0.304
ERN13	0.001631678	1.102401318	0.26	0.387
BAZ2B2	0.001640436	1.197820906	0.194	0.29
ETF11	0.002711381	1.726731329	0.347	0.415
PTPRJ2	0.002830733	0.913637519	0.305	0.458
CDC42EP32	0.002904593	0.960409908	0.211	0.313
AC020916.13	0.003660328	1.105089877	0.217	0.321
CCNH2	0.004227707	1.098228569	0.413	0.663
ATG33	0.005185637	1.272191857	0.195	0.287
UBE2R21	0.005542143	1.203964032	0.259	0.391
SKIL2	0.006801372	0.853559462	0.369	0.568
GTDC12	0.007261324	1.207489	0.228	0.33
ATP2B13	0.008801852	1.383865158	0.475	0.653
PRPSAP21	0	3.805285394	0.88	0.117
RAPGEF5	0	3.511527771	0.909	0.041
AC023590.1	0	2.995102281	0.909	0.075
RGS13	0	2.989727406	0.884	0.079
TCL1A1	0	2.988546383	0.921	0.073
LMO21	0	2.927208231	0.868	0.054
CD223	0	2.692840737	0.938	0.118
NEIL1	0	2.536027732	0.888	0.051
BCL7A	0	2.492894411	0.868	0.053
ZNF608	0	2.484992823	0.851	0.027
CCDC144A	0	2.457399025	0.624	0.042
AFF2	0	2.336458225	0.806	0.028
SUGCT	0	2.276940657	0.624	0.017
MEF2B1	0	2.190728821	0.826	0.052
MYBL1	0	2.065775519	0.798	0.078
FGD6	0	2.046769379	0.661	0.061
IGF2BP3	0	2.030698829	0.748	0.028
POU2AF13	0	1.951483867	0.893	0.106
PDGFD	0	1.867268403	0.731	0.045
PEG10	0	1.84448454	0.574	0.037
AC104170.1	0	1.811197517	0.603	0.026
LINC02576	0	1.77548814	0.723	0.062
MME	0	1.745857672	0.682	0.018
KIAA1211	0	1.71331577	0.591	0.01
CFAP299	0	1.711583978	0.43	0.01
DTX1	0	1.534180858	0.632	0.027
HRK	0	1.524667132	0.541	0.013

DMD	0	1.519525634	0.599	0.036
NUGGC1	0	1.514067056	0.636	0.041
SERPINA9	0	1.446435818	0.529	0.003
EML6	0	1.419034351	0.463	0.028
MIR3681HG	0	1.346247056	0.479	0.024
KLHL14	0	1.335086794	0.55	0.027
AC119673.2	0	1.32156971	0.339	0.005
GCSAM	0	1.31952667	0.558	0.033
MYBL2	0	1.278630601	0.5	0.023
ARHGAP44	0	1.265747922	0.434	0.012
AC079163.2	0	1.146222568	0.388	0.007
TCL6	0	1.05321311	0.442	0.01
TRIM55	0	1.039240714	0.252	0.005
ACY3	0	1.012545118	0.421	0.006
AC016168.2	0	1.004790198	0.45	0.009
VNN2	0	0.984815686	0.583	0.047
LINC01991	0	0.965443994	0.368	0.004
AC112196.1	0	0.94573504	0.413	0.004
LOXL2	0	0.915902207	0.368	0.015
PEX5	0	0.893811977	0.405	0.021
SYBU	0	0.890779485	0.368	0.009
FAM81A	0	0.883454481	0.347	0.01
AICDA	0	0.878367585	0.36	0.002
ELL3	0	0.862777871	0.413	0.007
CDCA7	0	0.828606652	0.355	0.015
ASAP3	0	0.690168795	0.285	0.004
AL132996.1	0	0.622871289	0.298	0.01
HTR3A	0	0.589614638	0.331	0.01
ASB13	0	0.580339375	0.289	0.011
RASSF61	3.93E-301	1.476568038	0.558	0.045
SLC2A5	4.34E-301	1.478691658	0.583	0.051
BIK	8.99E-299	0.976275102	0.483	0.035
CDCA2	1.72E-297	0.918875722	0.335	0.016
A4GALT	6.93E-290	0.497876092	0.281	0.012
PAX53	1.14E-272	1.729099484	0.88	0.123
MND1	1.42E-271	0.594278891	0.252	0.01
LINC008771	5.35E-270	1.05193825	0.545	0.049
CPNE51	1.66E-268	1.127555096	0.57	0.054
LINC01857	9.05E-267	1.184915177	0.529	0.045
RNFT2	6.14E-263	0.714062614	0.343	0.019
FAM106A	3.36E-262	1.965856418	0.467	0.038
BLK3	3.00E-261	1.964874182	0.868	0.129
GALNT14	7.33E-259	0.910073871	0.339	0.019

S1PR2	9.65E-254	0.835634151	0.413	0.029
DCAF12	2.29E-249	1.25833181	0.628	0.07
STAP13	6.12E-245	1.711521465	0.798	0.114
CNR21	3.99E-243	1.233044262	0.587	0.06
MTA3	3.91E-237	1.489197636	0.674	0.085
TMED8	3.77E-235	1.565053321	0.756	0.109
PTK23	3.11E-232	1.846519777	0.835	0.137
HHEX	3.78E-231	1.4802254	0.595	0.068
P2RX52	8.14E-231	1.76632994	0.843	0.141
SOX51	2.41E-229	2.783716606	0.674	0.09
SHCBP1	7.32E-229	0.693007094	0.306	0.018
CXCR51	3.39E-228	1.476137549	0.669	0.085
CD79B3	6.58E-228	2.565182211	0.926	0.2
MYO1E4	1.54E-227	2.793645477	0.926	0.193
MS4A13	1.63E-226	2.321508017	0.975	0.192
FCRLA	2.30E-225	1.003000406	0.517	0.05
LRMP1	7.50E-224	3.162318661	0.983	0.26
CD191	4.50E-222	1.038380802	0.632	0.075
OGG1	6.58E-221	0.947654023	0.55	0.058
VPREB32	2.73E-220	2.202352523	0.773	0.119
BCAS42	2.17E-217	1.739723799	0.847	0.151
AC022167.3	5.05E-216	0.540610929	0.277	0.015
EBF13	1.28E-214	2.272586872	0.963	0.194
PCLAF	6.24E-210	1.210334745	0.393	0.032
SPATS22	7.67E-209	1.744289009	0.826	0.152
COBLL14	1.07E-208	1.692623495	0.872	0.157
CR2	7.81E-207	0.704454384	0.384	0.03
KCNH8	6.34E-206	1.030672893	0.483	0.047
E2F51	5.84E-205	1.153569274	0.645	0.085
SCIMP3	1.03E-203	1.190602389	0.665	0.093
GCNT2	3.54E-200	1.252291986	0.529	0.06
LYPLAL1	4.56E-200	1.330287289	0.715	0.11
IRF85	1.35E-196	1.884383606	0.975	0.232
CNR1	5.96E-195	0.672442799	0.347	0.026
IFNLR1	6.85E-191	1.271850888	0.545	0.067
LRRK13	3.42E-186	1.600395402	0.657	0.101
MEF2C5	1.00E-185	2.394358461	0.979	0.276
SH3RF1	1.55E-185	0.8478373	0.401	0.037
PNOC	2.45E-184	0.71120746	0.405	0.038
TERF2	1.31E-182	1.413500196	0.769	0.143
SMIM144	4.19E-182	2.267243221	0.864	0.197
FANCA	5.43E-178	1.309165538	0.529	0.067
BASP15	5.97E-178	2.089178914	0.979	0.291

WDR66	1.61E-177	0.65149102	0.331	0.026
LHFPL6	1.36E-175	1.370902672	0.5	0.06
AC011447.3	1.65E-175	0.787846926	0.314	0.024
RAB303	2.55E-175	2.1514768	0.921	0.248
SWAP704	4.32E-175	1.900294211	0.942	0.238
BCL11A3	1.29E-173	1.748987751	0.835	0.171
PRDM15	7.31E-173	0.866130885	0.384	0.037
CCDC88A4	6.79E-172	1.841747449	0.818	0.173
SEL1L34	1.82E-171	2.376994217	0.967	0.313
TPD523	2.93E-171	2.523612377	0.955	0.302
CD405	8.32E-171	1.323821595	0.744	0.137
MACROD2	1.52E-169	1.384240299	0.438	0.048
CD79A4	2.85E-166	2.035278933	0.95	0.246
FCRL12	5.72E-166	1.27875627	0.74	0.126
USP6NL4	7.34E-166	1.473870593	0.719	0.132
STAG31	3.14E-165	1.462390127	0.616	0.095
CD180	3.40E-165	0.877663695	0.446	0.052
PLCG25	1.67E-164	2.123305838	0.971	0.303
DEF8	5.46E-161	1.177584765	0.595	0.095
BLNK2	8.13E-161	1.174993788	0.624	0.099
SLC1A1	4.97E-160	0.78704009	0.372	0.036
MBD42	1.82E-159	1.572013344	0.876	0.222
CLIC44	1.54E-157	1.791616092	0.88	0.215
HLA-DMB5	2.39E-157	1.717520725	0.917	0.239
SLC30A4	1.18E-156	0.74275885	0.322	0.029
SYVN1	3.44E-155	0.848742248	0.504	0.068
AC012236.11	8.25E-155	0.682447906	0.293	0.024
ZFAND4	3.44E-154	1.121845199	0.558	0.083
LINC02340	4.22E-154	0.823929185	0.388	0.041
ANKRD13A3	5.67E-152	1.719326899	0.872	0.242
ANKRD33B3	1.01E-151	1.384408618	0.727	0.142
OSBPL104	1.69E-151	1.316720925	0.723	0.133
CTPS2	2.38E-151	0.945680767	0.455	0.057
KANK1	3.26E-151	1.324757343	0.442	0.055
AC022182.1	1.04E-150	1.167297493	0.475	0.062
HLA-DOB2	1.86E-150	0.969117399	0.517	0.072
RASL11A	2.27E-150	0.933926949	0.413	0.047
ST6GAL13	1.39E-149	2.182246998	0.988	0.362
BRI3BP	2.18E-148	1.035911753	0.537	0.081
TUBB3	1.04E-147	0.736099169	0.31	0.028
MAPK10	1.70E-147	1.636908651	0.409	0.048
EEPD12	9.98E-147	1.8649365	0.599	0.107
SMIM201	1.20E-146	1.219442523	0.711	0.145

WDFY44	4.25E-145	1.413854538	0.793	0.178
MARCKSL14	1.79E-144	2.186950876	0.884	0.266
MCTP23	5.72E-144	1.448463732	0.872	0.218
EAF22	7.02E-144	1.279372307	0.715	0.146
LILRB12	2.16E-142	0.955534167	0.521	0.08
KNL1	6.64E-142	0.76146636	0.368	0.04
SPRED22	1.22E-140	1.483241016	0.669	0.131
SNX221	1.37E-140	0.490412912	0.256	0.02
COL9A3	7.24E-138	0.966701289	0.314	0.031
AFF33	8.96E-138	1.808897011	0.959	0.263
TMEM1562	6.49E-137	2.044454843	0.921	0.294
CDK191	1.99E-134	1.719406267	0.793	0.201
TNFRSF13C3	2.78E-134	1.245492249	0.831	0.186
ZNF775	8.07E-133	0.589235628	0.322	0.033
BFSP2	8.78E-133	0.841987544	0.492	0.072
GEN1	6.56E-132	0.914194161	0.483	0.071
EHMT13	9.38E-132	2.339221843	0.975	0.476
UBE2J11	1.51E-131	1.654616624	0.909	0.312
SAMD121	2.62E-131	1.308449968	0.785	0.179
SPAG16	3.88E-130	1.115652452	0.438	0.061
RUBCNL3	7.60E-130	1.196133711	0.736	0.153
C12orf741	1.77E-129	0.741152366	0.372	0.043
SLC15A41	1.07E-128	1.077366345	0.727	0.158
PRAG1	4.92E-128	1.304000742	0.645	0.127
BACH22	5.75E-128	2.601339518	0.988	0.504
KCNK12	8.13E-128	0.486103197	0.256	0.022
LPP1	9.88E-128	3.091268855	0.979	0.578
DAAM11	1.38E-124	1.496093727	0.773	0.195
PARP13	1.49E-124	1.827452392	0.901	0.353
LAT25	1.82E-123	1.181299305	0.74	0.174
GRAMD1C	2.61E-123	0.905137433	0.43	0.059
HVCN12	1.97E-122	1.008379599	0.653	0.131
TXNDC51	1.68E-121	0.955145714	0.632	0.126
TMEM131L2	2.71E-121	2.042940283	0.946	0.388
AC012368.1	3.06E-121	1.029712718	0.455	0.069
RASGRP34	6.73E-121	1.101334891	0.694	0.153
HMGA11	9.32E-121	1.302216333	0.793	0.219
DNASE1	2.25E-120	0.739297519	0.409	0.055
STX74	3.88E-120	1.360320542	0.847	0.245
DPH7	1.78E-119	0.829951111	0.459	0.07
UGT8	2.38E-119	0.551022767	0.339	0.039
NEK63	1.96E-118	0.95428176	0.512	0.089
SNX85	2.64E-118	1.29315692	0.81	0.213

CDCA7L1	3.44E-118	0.676689498	0.459	0.069
PKHD1L1	1.52E-117	0.455283237	0.26	0.024
TCEA13	2.64E-117	1.91128085	0.942	0.492
MICAL33	5.90E-117	1.253455281	0.748	0.182
GPR181	7.01E-117	1.350702152	0.674	0.147
AC119396.12	2.03E-116	1.185636522	0.603	0.117
ABR2	2.57E-116	1.771005904	0.864	0.264
AC025569.1	2.25E-114	0.714660761	0.264	0.026
TLR10	3.32E-114	0.56727973	0.285	0.03
KLHL65	3.33E-114	1.720377509	0.839	0.27
RRAS21	3.75E-114	1.301260983	0.769	0.194
SCARB12	1.12E-113	0.934284745	0.479	0.081
SSBP23	1.29E-113	1.556058243	0.905	0.294
ZBTB20-AS5	1.68E-113	1.034490555	0.504	0.086
SPIB2	2.92E-113	0.707397532	0.492	0.079
FAM3C2	6.71E-111	1.645977404	0.826	0.265
SYK5	1.65E-110	1.256388	0.723	0.188
QSOX2	1.98E-110	0.675596286	0.463	0.074
NCOA33	1.15E-109	2.351473128	0.971	0.546
LYN6	2.72E-109	1.552253746	0.979	0.368
HLA-DMA5	5.72E-109	1.609583916	0.926	0.363
SGPP1	3.77E-108	1.268059174	0.669	0.158
RPRD1B	9.50E-108	1.414807643	0.698	0.183
CD382	1.08E-107	1.255175347	0.707	0.176
ST142	2.16E-107	0.849663965	0.45	0.076
PLEKHG13	3.91E-107	1.289992335	0.876	0.253
RAD17	5.45E-107	0.861936646	0.517	0.096
LIMD23	7.23E-107	1.634131499	0.95	0.415
RMI2	5.01E-106	0.76744368	0.438	0.071
ZNF581	1.59E-105	0.838328505	0.521	0.099
MEF2C-AS2	2.87E-105	0.468083972	0.264	0.027
AIM2	2.92E-105	0.91746121	0.554	0.108
CCDC69	5.23E-105	1.193793956	0.773	0.226
NCF13	8.18E-105	1.128534014	0.769	0.211
TCF44	1.36E-104	1.590366199	0.855	0.266
KLHL52	2.05E-104	1.677373076	0.872	0.305
FAM111B	2.66E-104	0.668879731	0.277	0.03
LINC01215	8.98E-104	0.642969983	0.368	0.051
HDAC71	2.69E-103	1.049612712	0.632	0.144
RFC3	4.78E-103	0.70932625	0.326	0.042
XKR62	6.92E-103	1.311869294	0.839	0.267
RAB30-DT	1.60E-102	1.083499403	0.616	0.141
HMCES1	2.19E-102	1.275068257	0.723	0.199

ZNF3181	2.45E-101	0.738102206	0.475	0.083
JSRP11	2.63E-101	0.753995197	0.529	0.099
RFTN12	3.29E-101	1.757961279	0.975	0.574
LY865	1.06E-100	0.956456074	0.649	0.152
TEX9	1.63E-100	0.612396266	0.355	0.049
MAML32	1.66E-100	2.49016685	0.698	0.199
BCAR32	2.72E-100	1.050592522	0.479	0.09
HMGN14	2.95E-100	1.859885253	0.963	0.598
APBB2	4.82E-100	0.588709651	0.298	0.036
AMFR	1.66E-99	1.033411357	0.574	0.124
CPNE31	6.58E-99	1.756509168	0.723	0.223
SHISA8	1.09E-98	0.525900114	0.269	0.03
IL4R2	1.50E-98	1.335564311	0.839	0.28
TMEM1313	1.63E-96	1.622251064	0.93	0.422
ITSN23	2.70E-96	1.48242319	0.975	0.552
ACADM	4.38E-96	0.96208734	0.645	0.16
NLK	6.88E-96	1.417082626	0.748	0.219
GGA23	7.89E-96	1.436941907	0.905	0.369
PAWR1	1.43E-95	0.686664548	0.45	0.077
SEC14L11	1.53E-95	1.488627316	0.893	0.387
STRBP3	1.84E-95	1.245120962	0.843	0.277
SGCE	1.91E-95	0.820511148	0.434	0.074
TEC1	3.66E-95	0.957534839	0.483	0.094
KCNQ51	5.62E-95	1.034732733	0.537	0.108
AC087500.1	2.30E-94	0.540078161	0.326	0.044
CYB561A32	3.84E-94	0.903726769	0.554	0.121
ACTG12	5.25E-94	1.931762644	0.979	0.838
TNFRSF171	7.31E-94	0.476477856	0.26	0.03
FAM76B1	7.74E-94	1.269344288	0.707	0.197
SMARCB12	2.30E-93	1.010809589	0.711	0.197
LAPTM56	4.35E-93	1.471500242	0.983	0.705
BRWD1	5.62E-93	1.438721499	0.872	0.338
LINC023972	1.86E-92	0.669363278	0.492	0.091
MAP4K45	4.43E-92	1.652396269	0.979	0.549
USP53	5.31E-92	1.815229048	0.707	0.217
DAPP13	3.58E-91	1.205295944	0.826	0.287
NUP882	2.05E-90	1.022135281	0.723	0.196
LBR1	2.88E-90	1.25604903	0.798	0.281
POLD44	5.72E-90	1.394803961	0.88	0.369
DOK3	1.79E-89	0.511400032	0.376	0.061
USP342	4.31E-89	1.762349008	0.95	0.667
GNG75	7.79E-89	1.304862358	0.884	0.295
TSPAN132	2.60E-88	0.633023311	0.492	0.098

TMEM1232	3.87E-87	1.561052943	0.946	0.51
GMDS1	6.84E-87	2.721463148	0.868	0.448
EVC2	1.01E-86	0.868338955	0.252	0.031
TCF3	1.38E-85	0.770443027	0.475	0.098
RHOH1	5.05E-85	1.56823601	0.979	0.664
BICD13	5.30E-85	1.105363055	0.76	0.235
TSPAN333	1.04E-84	0.865944457	0.496	0.108
DGKD2	3.80E-84	1.303260944	0.764	0.254
MYO1D3	4.40E-84	1.118248165	0.715	0.212
IFT573	6.48E-84	1.234053157	0.711	0.221
CPB2-AS1	1.39E-83	1.033103162	0.521	0.116
LYPLA11	2.05E-83	1.174741225	0.76	0.259
MBNL21	5.45E-83	1.692344391	0.917	0.436
BANK14	7.77E-83	0.514440704	0.818	0.212
IMP4	1.31E-82	0.899473322	0.661	0.183
BPNT1	4.62E-82	0.489755625	0.298	0.042
LHFPL22	1.57E-81	0.925104878	0.442	0.088
CD863	1.68E-81	0.845027386	0.612	0.149
SORL12	2.45E-81	1.134690533	0.781	0.258
KLHL29	9.52E-81	0.573677266	0.281	0.038
SERF24	2.23E-80	1.335445189	0.988	0.859
PXK1	2.44E-80	0.956643563	0.686	0.201
ZCCHC72	4.33E-80	1.420708465	0.942	0.493
LRCH32	8.01E-80	1.240698629	0.843	0.323
AL390957.1	2.27E-79	0.962386603	0.657	0.186
PIK3AP14	4.17E-79	0.893273239	0.723	0.212
WDR76	7.76E-79	0.567044341	0.306	0.046
SYPL12	1.77E-78	0.972713259	0.736	0.23
AC079921.11	7.46E-78	0.810412892	0.479	0.103
HLA-DQA15	2.04E-77	1.387887522	0.946	0.413
LY86-AS1	4.59E-77	0.611020027	0.322	0.051
PHF6	6.95E-77	1.10344324	0.64	0.184
GDI26	1.65E-76	1.094432473	0.905	0.428
C16orf741	2.42E-76	0.786112385	0.384	0.072
DENND5B4	3.45E-76	0.801727047	0.529	0.124
PPP1CC1	1.59E-74	1.01175925	0.826	0.322
14-Mar	7.54E-74	0.923751673	0.694	0.206
GRHPR	1.57E-73	0.811323765	0.595	0.164
TOX4	1.70E-73	1.244270383	0.909	0.373
POU2F23	2.42E-73	1.09417653	0.756	0.266
FCRL2	5.24E-73	0.556843676	0.281	0.042
RBM62	6.46E-73	1.383981412	0.917	0.508
CCNG21	7.66E-73	0.841864022	0.541	0.135

RRM2B1	9.04E-73	0.877782621	0.566	0.15
LCP14	9.25E-73	1.321257406	0.963	0.649
RBM382	1.56E-72	1.129664071	0.851	0.339
CD745	3.57E-72	1.439587815	0.988	0.721
RHEX3	4.23E-72	0.877244917	0.417	0.086
SLC4A8	7.30E-72	0.487312322	0.293	0.046
SPI13	3.08E-71	0.576192418	0.55	0.134
SNX294	3.70E-71	1.085322675	0.884	0.362
CLEC17A1	1.27E-70	0.537818754	0.31	0.051
UBE2R22	1.61E-70	1.264050528	0.843	0.385
HS2ST1	1.95E-70	1.212328829	0.649	0.202
SLCO3A12	2.67E-70	1.181990495	0.661	0.209
CTSH4	3.72E-70	0.900444253	0.719	0.23
ARHGAP244	4.00E-69	0.472468495	0.752	0.215
SH2B2	6.12E-69	0.473320409	0.326	0.058
ZNF804A2	7.35E-69	1.989141341	0.368	0.077
CLIP22	7.62E-69	0.822506427	0.376	0.076
NEDD4L2	1.18E-68	1.106248142	0.442	0.104
RABGAP1L2	1.67E-68	1.367966423	0.967	0.793
LARGE14	1.90E-68	1.039280685	0.583	0.157
STMN11	2.44E-68	1.373432014	0.566	0.165
KATNAL1	2.75E-68	0.597371921	0.426	0.091
SLC25A53	5.06E-68	1.269719199	0.884	0.483
MAP4K2	5.78E-68	0.709912107	0.384	0.077
OTUD15	9.97E-68	1.122772592	0.669	0.219
SLC9A72	1.08E-67	0.781522765	0.545	0.142
MRPS27	1.27E-67	0.832241758	0.529	0.138
ORAI23	2.19E-67	0.843895103	0.674	0.21
PPP2CA1	2.29E-67	1.263930066	0.901	0.474
MEF2A4	2.64E-67	1.207432438	0.876	0.415
CORO1A3	3.26E-67	1.29612293	0.95	0.618
CD724	4.76E-67	0.799061241	0.579	0.162
PIK3C2B	7.56E-67	0.546995599	0.36	0.069
DEGS1	2.23E-66	1.209542829	0.657	0.234
NIBAN32	2.46E-66	0.629954933	0.421	0.089
CYBB4	2.62E-66	0.638578832	0.665	0.189
PAG1	3.79E-66	1.408856559	0.864	0.436
DENND34	3.94E-66	0.870904269	0.599	0.177
UVRAG3	4.40E-66	1.12721285	0.888	0.415
CD374	6.42E-66	1.27506068	0.959	0.663
HLA-DRA5	1.34E-65	1.197266527	0.983	0.539
HLA-DOA3	1.62E-65	0.551106405	0.405	0.088
RUBCN3	2.31E-65	0.991396914	0.736	0.262

MSI21	3.00E-65	1.633421342	0.938	0.557
SH3KBP11	3.04E-65	1.39025253	0.95	0.657
USP123	3.39E-65	1.206896979	0.86	0.389
ZNF821	4.81E-65	0.820321304	0.504	0.131
MED12L	5.64E-65	0.564254292	0.298	0.051
ANP32B2	6.09E-65	1.258592971	0.909	0.567
EPS151	9.02E-65	1.169667618	0.893	0.453
VGLL4	1.30E-64	0.819283274	0.574	0.166
MFHAS12	1.90E-64	1.008677213	0.678	0.22
HELLS	2.98E-64	0.79054488	0.455	0.107
FAM102A2	4.32E-64	1.123807987	0.793	0.313
DHFR	6.34E-64	0.613548314	0.302	0.054
CAMK2D2	1.11E-63	1.080427355	0.938	0.464
ACTB4	1.53E-63	1.163723629	0.979	0.889
MYO9A1	2.72E-63	0.878553093	0.665	0.215
PRKD31	2.85E-63	0.830675264	0.603	0.182
UBE2E25	3.07E-63	1.004817958	0.748	0.255
PTPN181	7.99E-63	0.84356936	0.558	0.167
C12orf49	9.48E-63	0.714939408	0.467	0.118
CCDC1383	9.52E-63	0.880508132	0.698	0.231
HLA-DRB55	1.30E-62	1.297350394	0.678	0.241
INPP5D2	1.75E-62	1.162718382	0.938	0.496
DNMT1	1.93E-62	1.243935059	0.694	0.261
ATP5MG1	3.98E-62	1.43773586	0.959	0.755
AL592429.2	4.52E-62	0.914618922	0.372	0.08
FBXO30	5.04E-62	0.540856801	0.326	0.062
TRAK15	5.17E-62	0.868370411	0.806	0.307
CDK132	5.21E-61	1.431382502	0.884	0.506
CENPM	5.34E-61	0.66118775	0.471	0.118
BLOC1S61	6.20E-61	0.99136186	0.736	0.291
RB14	1.50E-60	1.11822022	0.909	0.468
TRIM382	2.04E-60	1.277258627	0.773	0.331
ZNF827	2.09E-60	0.64427481	0.45	0.107
SIPA1L33	4.53E-60	0.887854496	0.764	0.279
PLEKHF21	6.14E-60	0.831472327	0.579	0.182
TKT3	6.39E-60	0.970027637	0.785	0.317
THRB1	9.89E-60	0.966817409	0.318	0.061
TMEM2432	2.29E-59	0.944038981	0.868	0.386
OTULIN2	2.97E-59	0.986377012	0.798	0.328
BMP2K5	3.80E-59	0.758628475	0.661	0.218
CENPU1	3.81E-59	0.407565722	0.326	0.065
SCRN1	1.87E-58	0.444418776	0.293	0.055
HMGB12	2.73E-58	1.216535187	0.992	0.859

SNX30	4.15E-58	0.570703322	0.376	0.084
LINC01184	4.52E-58	0.577712192	0.471	0.121
METAP21	5.69E-58	1.446156486	0.785	0.404
GCHFR	6.80E-58	0.777178758	0.603	0.188
ATP2A32	6.88E-58	0.791340225	0.669	0.228
FCRL3	7.45E-58	0.610919505	0.339	0.069
BCL62	7.95E-58	0.741474008	0.649	0.221
CASD11	9.57E-58	0.704541625	0.583	0.173
HDAC11	1.13E-57	0.767808329	0.649	0.221
SYNE13	2.31E-57	1.020385391	0.785	0.324
PLEKHJ1	4.27E-57	0.690309744	0.583	0.18
GIT21	4.45E-57	0.926402178	0.669	0.239
EZR3	1.06E-56	0.998777973	0.988	0.808
TRIO6	1.23E-56	0.936357601	0.748	0.283
BCL2L114	1.28E-56	0.847903723	0.843	0.361
BTK4	1.33E-56	0.619637352	0.488	0.133
SKAP25	1.68E-56	0.867746198	0.744	0.293
CUX12	2.20E-56	1.033505001	0.851	0.386
BPTF2	2.28E-56	1.288668519	0.93	0.632
HSH2D3	4.04E-56	0.817291551	0.612	0.197
PTTG11	5.18E-56	0.856172845	0.545	0.163
KCNMB4	5.42E-56	0.545582646	0.277	0.05
PM20D2	6.48E-56	0.554613236	0.285	0.053
GIHCG	7.82E-56	0.393525511	0.252	0.043
CCDC126	1.18E-55	0.526506589	0.347	0.074
SNED12	1.47E-55	0.749120564	0.504	0.138
MDM41	2.47E-55	0.895014642	0.826	0.377
HMG21	3.08E-55	1.695342502	0.888	0.548
SLC35E3	6.12E-55	0.763010182	0.463	0.129
RHBDD13	8.91E-55	0.925559645	0.669	0.242
RAP1B1	1.01E-54	0.987633898	0.975	0.773
PIK3CG1	1.11E-54	0.847067409	0.525	0.165
LONRF1	1.13E-54	0.555057314	0.347	0.077
CD533	1.24E-54	1.051719919	0.934	0.711
RABEP21	1.34E-54	0.597335732	0.492	0.133
AP1S33	1.51E-54	0.720069674	0.463	0.123
ARPC24	1.59E-54	1.047878255	0.959	0.782
HLA-DQA25	2.12E-54	0.986917032	0.723	0.281
LY93	2.14E-54	0.640759645	0.711	0.244
SUSD3	2.36E-54	0.860626183	0.554	0.172
EPS15L1	2.50E-54	0.801631972	0.537	0.163
TMEM19	2.92E-54	0.721904503	0.339	0.076
USPL12	5.37E-54	0.907892785	0.773	0.323

UCP24	7.47E-54	1.001112361	0.855	0.413
SETDB2	1.42E-53	0.839033906	0.574	0.189
MIS18BP12	1.62E-53	1.102387262	0.752	0.318
TMA16	1.91E-53	0.543821196	0.521	0.15
UBR7	2.35E-53	0.618921879	0.372	0.088
MTMR12	3.00E-53	0.720235389	0.545	0.167
TSBP1-AS1	4.66E-53	0.431724875	0.256	0.045
MTMR14	6.92E-53	0.716135367	0.587	0.195
CARD112	1.08E-52	0.946686097	0.847	0.386
PRDX63	1.08E-52	1.363013513	0.818	0.428
NDUFAF63	1.14E-52	0.930946087	0.764	0.313
P2RY82	1.63E-52	0.999106677	0.793	0.336
HLA-DQB15	1.69E-52	1.141105394	0.884	0.427
MSH6	2.78E-52	0.708269286	0.459	0.127
SLC49A42	4.74E-52	1.25840279	0.612	0.221
EIF2AK33	6.18E-52	1.011986999	0.806	0.364
ZFAND63	6.61E-52	0.909682186	0.909	0.5
BFSP2-AS1	7.72E-52	0.350883499	0.256	0.045
LPIN12	8.77E-52	1.074282889	0.793	0.361
SLC38A9	4.73E-51	0.732907172	0.421	0.112
FAM49A6	1.17E-50	0.953101073	0.723	0.277
SLC23A2	1.56E-50	0.753127719	0.537	0.17
VEZT	3.27E-50	0.967989037	0.752	0.321
NCOA72	3.34E-50	1.101994273	0.707	0.294
RALGPS24	5.78E-50	0.651217796	0.678	0.236
EXT13	8.41E-50	1.316315671	0.789	0.364
OGA1	8.91E-50	0.94857555	0.897	0.491
FADS3	1.16E-49	0.429985359	0.372	0.089
TPCN1	1.25E-49	0.485392106	0.347	0.082
WASHC42	1.85E-49	0.917659582	0.74	0.324
ODC13	2.52E-49	0.835654467	0.847	0.428
LAMTOR52	3.04E-49	0.882290137	0.793	0.391
RAPGEF16	3.18E-49	1.255058704	0.942	0.607
HLA-DRB15	3.27E-49	0.93713027	0.971	0.574
CCNI3	3.46E-49	0.887914993	0.955	0.735
CSK1	5.65E-49	0.775660037	0.674	0.261
DMXL13	5.81E-49	1.018794218	0.731	0.312
TACC13	7.57E-49	0.884225358	0.831	0.421
MMD	8.59E-49	0.554318468	0.314	0.071
MRPS28	1.23E-48	1.228327206	0.583	0.218
CUL33	1.33E-48	0.97438981	0.95	0.64
SCPEP14	1.33E-48	0.639497182	0.517	0.163
PLIN33	1.63E-48	0.583492749	0.459	0.136

UGCG1	2.62E-48	0.771498225	0.74	0.301
RGS16	5.81E-48	0.52641891	0.421	0.113
SRSF91	7.14E-48	1.009883404	0.806	0.426
LSM10	7.53E-48	0.925056125	0.587	0.217
PRKCE3	7.96E-48	0.790230882	0.864	0.403
GPR160	8.74E-48	0.459375352	0.331	0.077
SNRNP251	1.12E-47	0.560359026	0.409	0.113
FCRL51	2.68E-47	0.483461305	0.26	0.052
CDK145	2.92E-47	0.77309397	0.773	0.32
RCSD12	4.03E-47	1.01224864	0.777	0.367
FCHSD25	6.07E-47	0.825820283	0.868	0.425
RBBP4	9.67E-47	0.77355667	0.698	0.299
NANS1	1.09E-46	0.79139319	0.669	0.276
RAB3GAP2	1.18E-46	0.806227127	0.678	0.266
DCUN1D1	1.61E-46	0.68451832	0.533	0.176
GRK35	1.77E-46	0.747107331	0.55	0.189
TSC1	1.93E-46	0.470288113	0.368	0.092
USP7	1.95E-46	0.739275485	0.764	0.338
C12orf752	2.22E-46	0.55733501	0.517	0.159
CERS4	3.18E-46	0.494592063	0.446	0.125
RNF144B5	4.43E-46	0.445622196	0.554	0.174
SNX52	4.73E-46	0.758962479	0.661	0.268
ADGRG5	7.86E-46	0.347939743	0.269	0.054
NIN3	8.07E-46	1.033351499	0.769	0.363
CCDC62	1.09E-45	0.754180515	0.806	0.364
CXXC51	1.19E-45	0.577547251	0.372	0.099
EIPR1	1.49E-45	0.526608093	0.488	0.148
XRCC4	1.59E-45	0.632178977	0.401	0.112
MCOLN23	2.24E-45	0.602212224	0.587	0.197
ENTPD4	2.74E-45	0.633206082	0.554	0.19
MCM51	2.90E-45	0.595267017	0.409	0.115
PVT14	3.42E-45	0.794936712	0.826	0.396
KBTBD81	3.79E-45	0.461491932	0.36	0.092
AC025164.11	6.61E-45	0.797725923	0.595	0.215
ACTR35	7.83E-45	0.80834146	0.934	0.595
CHMP7	1.16E-44	0.614648535	0.426	0.123
PARP111	2.00E-44	0.646781879	0.426	0.123
RABGAP11	3.04E-44	0.693974175	0.678	0.268
MAP1LC3B1	3.99E-44	0.963857288	0.921	0.629
FBXO10	4.11E-44	0.503651419	0.393	0.106
ATM3	4.16E-44	0.958763679	0.868	0.488
ITPKB2	4.86E-44	0.733250926	0.769	0.325
UBE2G1	6.93E-44	0.841522854	0.715	0.316

RFC11	7.28E-44	0.809211362	0.715	0.309
FAM214A3	1.20E-43	0.981755918	0.818	0.405
ADORA2A	1.25E-43	0.393475728	0.293	0.067
UBAP2	1.44E-43	1.162492565	0.678	0.306
RNF121	2.14E-43	0.586302368	0.405	0.115
GAPDH5	2.44E-43	0.876153456	0.967	0.84
MCCC1	2.87E-43	0.471177742	0.351	0.089
PRDM23	3.09E-43	0.982228317	0.934	0.647
ACAP22	3.65E-43	1.027594465	0.888	0.536
ABI11	4.50E-43	0.88192655	0.88	0.483
LMO41	4.57E-43	0.6083837	0.583	0.213
DCK2	5.65E-43	0.659917264	0.463	0.148
ARID1B2	6.12E-43	0.963083704	0.955	0.694
LTB7	9.08E-43	1.258773454	0.826	0.444
EZH21	1.01E-42	0.730931666	0.678	0.269
ARPC36	1.04E-42	0.95004891	0.938	0.773
TERF2IP2	1.11E-42	0.892647011	0.893	0.541
ROCK2	1.42E-42	0.715825705	0.55	0.199
CIITA4	2.23E-42	0.546979426	0.496	0.156
RMND5B	3.74E-42	0.377445242	0.31	0.073
MGAT52	3.94E-42	0.74617619	0.905	0.489
CD814	4.50E-42	0.841539229	0.88	0.522
HERC4	4.68E-42	1.11596769	0.773	0.395
AC009522.1	8.51E-42	0.482560952	0.339	0.087
B3GLCT	1.12E-41	0.592468083	0.5	0.16
RNGTT1	3.95E-41	0.896563529	0.789	0.408
NPAT	4.22E-41	0.672111665	0.583	0.216
UQCC2	4.42E-41	0.65516433	0.488	0.165
AC010894.3	4.84E-41	0.674793364	0.669	0.272
MOB1B1	5.28E-41	0.595917006	0.467	0.151
MCM7	5.91E-41	0.513273045	0.293	0.07
FAM30A1	5.99E-41	0.564983526	0.298	0.07
FARP23	6.76E-41	0.688037543	0.566	0.208
OAZ14	1.23E-40	0.907193801	0.971	0.864
SETBP13	1.48E-40	0.810295677	0.562	0.201
WDR271	1.51E-40	0.516987713	0.376	0.104
RUFY32	1.71E-40	0.547272608	0.455	0.144
LINC02422	1.77E-40	0.3330502	0.314	0.076
ADAM173	1.95E-40	0.718522306	0.678	0.289
SNX35	2.86E-40	0.720268076	0.86	0.46
MEF2C-AS1	3.95E-40	0.476116446	0.264	0.059
HLA-DPA15	4.24E-40	0.636803328	0.955	0.576
PRRG4	4.28E-40	0.480146361	0.277	0.065

HACD2	4.97E-40	0.54895764	0.467	0.15
LINC00426	5.53E-40	0.550039246	0.45	0.138
ARHGAP17	5.67E-40	0.608582087	0.504	0.174
CFL14	1.63E-39	0.866222017	0.963	0.827
STX12	1.78E-39	0.718776675	0.579	0.222
HIP1R1	2.40E-39	0.444521225	0.442	0.132
ARHGAP252	3.53E-39	0.675297234	0.748	0.333
C22orf34	3.54E-39	0.555623675	0.471	0.157
MRPL511	3.54E-39	0.704904802	0.698	0.328
CHD93	3.65E-39	0.806913733	0.707	0.316
HERPUD14	4.31E-39	0.948138635	0.934	0.711
SOCS12	5.50E-39	0.648362036	0.818	0.387
LRCH11	5.62E-39	0.864245751	0.674	0.293
AC073111.4	5.82E-39	0.37601049	0.285	0.067
EIF4ENIF1	5.90E-39	0.398502597	0.318	0.08
SP1403	5.95E-39	0.948531041	0.843	0.469
RBBP7	6.23E-39	0.70420177	0.566	0.222
NUSAP1	7.18E-39	0.557216255	0.38	0.11
MOB3A4	8.51E-39	0.680581373	0.748	0.341
GSTZ1	8.62E-39	0.367127028	0.26	0.06
SS181	1.18E-38	0.695222674	0.669	0.29
KMT2A	1.26E-38	1.094450422	0.777	0.418
TBC1D13	1.76E-38	0.899005394	0.698	0.327
SREBF22	2.03E-38	0.780200946	0.698	0.317
EYA3	2.41E-38	0.795789123	0.525	0.197
CEP571	2.78E-38	0.677483743	0.702	0.312
HDAC93	3.07E-38	0.567475606	0.554	0.198
HLA-DPB15	3.98E-38	0.625196063	0.95	0.597
MPP6	4.52E-38	0.378448045	0.343	0.091
FNBP12	5.11E-38	0.758934482	0.971	0.792
HSD17B121	5.39E-38	0.437903964	0.393	0.12
SNX26	7.31E-38	0.623787231	0.831	0.413
SASH31	8.56E-38	0.472086969	0.488	0.163
HOPX1	9.87E-38	0.572619248	0.38	0.108
SMARCA4	1.47E-37	0.492672248	0.492	0.172
ATXN10	1.56E-37	0.648013405	0.669	0.288
DBNL4	3.36E-37	0.551107251	0.665	0.276
BAG2	3.73E-37	0.433945353	0.31	0.081
EBLN3P1	6.31E-37	0.504250792	0.5	0.173
CD835	1.09E-36	0.660307989	0.88	0.438
MRPL15	1.41E-36	0.549849465	0.343	0.101
MTPN4	1.41E-36	0.723825911	0.851	0.493
CD2AP3	1.45E-36	0.601099679	0.715	0.316

CYB5R3	1.46E-36	0.564129545	0.467	0.163
MAP4K1	1.57E-36	0.418793952	0.438	0.139
AMD11	1.59E-36	0.814387795	0.843	0.508
ANAPC15	1.60E-36	0.408666104	0.401	0.124
RCC21	1.69E-36	0.502844195	0.483	0.169
WDPCP1	2.06E-36	0.721685225	0.55	0.21
OSER12	2.50E-36	0.813223713	0.715	0.348
NET1	2.75E-36	0.377403861	0.26	0.062
XPO1	2.85E-36	0.740177524	0.719	0.34
ARHGEF182	3.52E-36	0.613859906	0.628	0.253
CLCN6	3.66E-36	0.443926228	0.351	0.102
HNRNPD2	6.44E-36	0.765641721	0.864	0.566
SLC44A22	8.56E-36	0.457749566	0.562	0.203
ALOX53	1.44E-35	0.526093721	0.413	0.135
POMP4	1.52E-35	0.730608518	0.88	0.553
LYL12	1.68E-35	0.437359444	0.351	0.102
MAST2	2.01E-35	0.480226959	0.413	0.133
AC005670.3	3.02E-35	0.377976541	0.339	0.095
AL078459.1	3.64E-35	0.538310328	0.281	0.072
QRSL1	3.89E-35	0.482327193	0.36	0.106
TP53INP13	3.97E-35	0.79045139	0.645	0.283
ANO61	4.25E-35	0.722373263	0.545	0.215
ZBTB442	5.64E-35	0.597314541	0.587	0.231
ASB2	6.34E-35	0.36628895	0.293	0.076
ADAM283	6.34E-35	0.293956359	0.657	0.253
PIKFYVE4	7.20E-35	0.591550945	0.62	0.26
BRK12	7.54E-35	0.723861192	0.785	0.419
STIM22	7.96E-35	0.742660356	0.822	0.443
IPO5	9.97E-35	0.363222941	0.372	0.112
LINC022452	1.26E-34	0.561801209	0.562	0.223
PUDP	1.29E-34	0.376747288	0.331	0.092
SMDT14	2.59E-34	0.69476473	0.855	0.507
TTLL3	2.81E-34	0.348623321	0.306	0.082
LY751	4.20E-34	0.597896443	0.566	0.223
DMTF1	4.24E-34	0.517768474	0.628	0.253
ISG202	5.26E-34	1.084442534	0.934	0.722
DENND6B	5.93E-34	0.41607302	0.269	0.069
RAP2A	6.30E-34	0.833829037	0.376	0.124
SFT2D1	7.39E-34	0.566658939	0.661	0.296
RHOA4	9.22E-34	0.659279715	0.938	0.691
ESR22	1.02E-33	0.542845612	0.554	0.212
ILRUN2	1.14E-33	0.61710487	0.661	0.295
LINC01572	1.19E-33	0.614268051	0.281	0.074

ZNF626	1.45E-33	0.352004056	0.339	0.096
ERP44	2.52E-33	0.763835356	0.731	0.378
SIAH21	2.91E-33	0.652895862	0.702	0.33
EHD11	2.91E-33	0.613317069	0.653	0.279
METTL7A2	3.09E-33	0.354023144	0.31	0.088
GABARAPL23	3.79E-33	0.656924681	0.719	0.356
AL133480.11	3.96E-33	0.414100788	0.376	0.114
NFX11	4.43E-33	0.595106728	0.607	0.251
IGHM3	4.67E-33	0.325574396	0.529	0.213
MYL6B	5.14E-33	0.350045756	0.36	0.111
HNRNPA13	5.57E-33	0.716428763	0.963	0.797
MFAP1	6.48E-33	0.463669663	0.525	0.199
REPIN11	7.62E-33	0.37845899	0.289	0.079
MRPL35	8.36E-33	0.35097014	0.289	0.078
UIMC11	9.14E-33	0.534295711	0.612	0.26
UHRF21	9.60E-33	0.618159846	0.736	0.347
PGLS4	9.63E-33	0.563205408	0.64	0.281
SNHG294	1.12E-32	0.739688266	0.909	0.671
PALM2-AKAP2	1.19E-32	0.461385182	0.55	0.212
PCCB	1.24E-32	0.432438108	0.264	0.068
ZCCHC102	1.51E-32	0.543358681	0.645	0.279
PNN	1.56E-32	0.701435529	0.793	0.44
RPAIN	2.78E-32	0.555928714	0.537	0.215
DBI4	3.46E-32	0.834835789	0.835	0.524
ZFAT	3.51E-32	0.418189683	0.38	0.12
FYTTD12	3.66E-32	0.610777736	0.62	0.275
MAD1L12	4.47E-32	0.762838779	0.632	0.282
MPZL12	5.23E-32	0.405903717	0.306	0.088
PPP1CA1	5.33E-32	0.646195204	0.702	0.347
DDX39A1	5.58E-32	0.608591414	0.632	0.281
MGME1	7.62E-32	0.404617319	0.38	0.122
SINHCAF3	8.34E-32	0.613671317	0.649	0.287
GTF2I2	9.00E-32	0.565646236	0.707	0.333
SEC622	9.54E-32	0.66677797	0.876	0.561
FRY1	1.03E-31	0.308000299	0.285	0.077
MYEF2	1.06E-31	0.266493006	0.256	0.064
GTF2E21	1.12E-31	0.463549326	0.5	0.189
PPP3CC2	1.12E-31	0.697069346	0.756	0.383
SELENOH3	1.40E-31	0.666342563	0.781	0.434
BLCAP	1.47E-31	0.381279766	0.355	0.11
H3F3A4	1.99E-31	0.684179497	0.963	0.892
MGMT3	2.08E-31	0.889539573	0.653	0.325
OSBPL32	2.36E-31	0.633743696	0.715	0.346

BAZ2B3	3.28E-31	0.546440496	0.636	0.286
TASOR21	4.97E-31	0.776619361	0.682	0.326
PRDX31	6.42E-31	0.455946231	0.438	0.161
NCF41	1.07E-30	0.445773154	0.5	0.193
WASF21	1.46E-30	0.676905717	0.818	0.48
CAPN1	1.62E-30	0.449765187	0.426	0.152
NT5C21	1.68E-30	0.532678397	0.661	0.307
RAN	1.70E-30	0.725563229	0.88	0.598
ZHX3	2.02E-30	0.373417445	0.289	0.08
OSBPL91	2.11E-30	0.716984677	0.665	0.324
AFTPH3	2.14E-30	0.631666212	0.715	0.355
DEPDC5	2.47E-30	0.544843316	0.343	0.11
SNHG52	2.71E-30	0.637994947	0.909	0.648
RC3H2	2.72E-30	0.563432603	0.55	0.225
CKS1B	3.14E-30	0.382882553	0.31	0.093
NFATC15	4.34E-30	0.531939704	0.624	0.264
PFN15	4.65E-30	0.770921395	0.959	0.772
KHDRBS11	5.64E-30	0.597492386	0.802	0.463
KLHL242	5.83E-30	0.626793375	0.69	0.337
OGFRL13	6.86E-30	0.796759038	0.545	0.234
MSH2	6.94E-30	0.285613569	0.273	0.073
SLC37A11	1.40E-29	0.49207133	0.384	0.131
RNF41	1.67E-29	0.506658647	0.355	0.117
XPNPEP1	1.69E-29	0.368975937	0.285	0.082
CD2BP21	1.85E-29	0.399882433	0.554	0.222
C19orf48	1.91E-29	0.462427555	0.326	0.101
AC024560.5	2.08E-29	0.307426816	0.281	0.078
LSM6	2.24E-29	0.510673546	0.521	0.214
NAA381	2.53E-29	0.53376313	0.607	0.279
UBE2N2	2.76E-29	0.562048009	0.785	0.425
ATP5MC32	2.77E-29	0.582436202	0.814	0.486
RFXANK	4.49E-29	0.358897338	0.384	0.132
GLRX3	5.10E-29	0.412292897	0.508	0.203
ZNF580	5.30E-29	0.355334426	0.331	0.104
ARHGEF72	5.41E-29	0.479000233	0.76	0.369
ZNF532	6.53E-29	0.364778522	0.285	0.082
ITGAE3	6.58E-29	0.447359255	0.661	0.297
SGSM3	8.38E-29	0.263726431	0.306	0.091
KCTD9	8.53E-29	0.383465386	0.326	0.101
RHBDF25	9.68E-29	0.48607031	0.517	0.208
CEP135	9.91E-29	0.471891287	0.43	0.159
CENPP	1.13E-28	0.655141237	0.331	0.107
ITPR12	1.16E-28	0.627784449	0.843	0.482

ATP8A13	1.32E-28	0.555557955	0.818	0.431
CCT82	1.43E-28	0.58858632	0.719	0.386
RMDN1	1.55E-28	0.486416377	0.417	0.155
SNRPE1	1.85E-28	0.507800629	0.665	0.323
FAM13B2	2.64E-28	0.615939785	0.777	0.41
LINC00467	2.95E-28	0.407380832	0.281	0.082
ROMO11	2.96E-28	0.46677202	0.636	0.302
SNAP23	3.30E-28	0.486291285	0.599	0.27
CHAF1A1	3.35E-28	0.393378513	0.269	0.076
KLF123	3.77E-28	0.637897356	0.86	0.499
CNTRL2	3.84E-28	0.658189303	0.702	0.366
CLTC3	3.93E-28	0.578929081	0.653	0.315
SFXN4	4.18E-28	0.349972827	0.273	0.079
AC027644.3	4.18E-28	0.376685203	0.277	0.081
UPF3A	5.11E-28	0.435933794	0.521	0.212
MBD22	5.33E-28	0.612295285	0.785	0.454
CAB39L	5.34E-28	0.340339225	0.273	0.078
PARN	5.83E-28	0.428123827	0.467	0.181
TAPT11	6.55E-28	0.519289151	0.479	0.19
ARPC42	9.21E-28	0.588696567	0.744	0.384
HMGB24	9.62E-28	1.035182563	0.781	0.447
TIAM21	1.13E-27	0.471802311	0.483	0.191
ZNF66	1.52E-27	0.39198398	0.285	0.084
LSM74	1.89E-27	0.687883977	0.781	0.454
RABEP12	2.04E-27	0.625599238	0.731	0.383
PMAIP11	2.23E-27	0.756741433	0.802	0.434
USP22	2.67E-27	0.42455973	0.566	0.242
PPP4C	3.60E-27	0.462187401	0.554	0.241
TADA3	4.19E-27	0.321981263	0.426	0.156
ELF11	4.19E-27	0.674428899	0.992	0.861
AP1B13	4.39E-27	0.485553499	0.558	0.243
PSMA42	4.48E-27	0.506682046	0.649	0.312
RABGEF12	5.21E-27	0.561691706	0.814	0.471
WIPF12	5.27E-27	0.722216147	0.913	0.629
POLR2G	5.64E-27	0.485418555	0.545	0.24
ZNF552	5.81E-27	0.43369168	0.277	0.082
MTF21	6.43E-27	0.528787079	0.632	0.296
BAIAP2L1	7.95E-27	0.542287465	0.298	0.093
RAB11FIP14	8.21E-27	0.566186903	0.839	0.496
COX5A3	8.90E-27	0.714488001	0.764	0.448
BOD1L12	1.07E-26	0.57798823	0.814	0.47
TUT72	1.08E-26	0.81078622	0.748	0.425
COX11	1.25E-26	0.318893835	0.376	0.13

SH3BP56	1.26E-26	0.377468547	0.669	0.305
LYRM4	1.39E-26	0.483771006	0.397	0.149
LUC7L31	1.44E-26	0.538640177	0.785	0.437
YWHAQ2	1.46E-26	0.577967475	0.839	0.515
MBNL3	1.51E-26	0.427018974	0.273	0.081
TRABD1	1.61E-26	0.437583773	0.566	0.25
STK401	1.73E-26	0.498263248	0.455	0.182
ZNF106	1.86E-26	0.483316133	0.545	0.24
SPPL2B	2.04E-26	0.393207427	0.285	0.087
YWHAB4	2.35E-26	0.632487005	0.913	0.709
UGGT1	2.36E-26	0.451355905	0.426	0.163
URM1	3.28E-26	0.314672614	0.459	0.175
PHB23	4.67E-26	0.484477366	0.628	0.301
SLC9B2	4.79E-26	0.353894887	0.335	0.11
SHLD1	5.26E-26	0.35282002	0.455	0.173
RIC11	5.28E-26	0.55667798	0.707	0.367
ATP10D	5.47E-26	0.364343094	0.36	0.127
AL162253.21	6.67E-26	0.395200543	0.31	0.101
FOXN32	6.93E-26	0.794431201	0.95	0.726
ZNF1411	7.02E-26	0.392060984	0.409	0.151
MOB1A5	7.63E-26	0.572704926	0.802	0.479
RASSF32	7.83E-26	0.397007702	0.661	0.3
ATP6V0A12	8.30E-26	0.455407129	0.331	0.115
SNRPA	8.38E-26	0.415388159	0.438	0.171
LSM14A	8.74E-26	0.558392793	0.798	0.471
MARF11	8.84E-26	0.401828723	0.455	0.177
TUFM1	1.15E-25	0.463925665	0.607	0.285
GSTP15	1.22E-25	0.56464219	0.793	0.461
PACS13	1.26E-25	0.546509939	0.851	0.496
TMEM256	1.42E-25	0.422627003	0.537	0.236
ERBIN3	1.55E-25	0.78451816	0.826	0.504
MDH11	1.65E-25	0.547882759	0.603	0.287
C1QBP1	1.75E-25	0.450938993	0.632	0.311
LINC014731	2.12E-25	0.383966135	0.393	0.142
UPF23	2.37E-25	0.529448682	0.653	0.327
RNF103	2.37E-25	0.54297561	0.405	0.157
KDM1B	2.88E-25	0.257868561	0.252	0.073
SYNGR25	3.04E-25	0.468815439	0.591	0.27
TPST2	3.13E-25	0.356501139	0.372	0.137
ARRDC1	3.35E-25	0.367027463	0.306	0.1
ZHX23	4.43E-25	0.835081516	0.893	0.603
ELP6	4.47E-25	0.296095155	0.322	0.107
ZNF814	4.94E-25	0.337783296	0.326	0.108

ACYP2	6.09E-25	0.398185911	0.587	0.264
CCDC1671	6.93E-25	0.495039712	0.483	0.206
MIOS	8.49E-25	0.416047686	0.36	0.13
SIT1	9.31E-25	0.400132603	0.417	0.156
PKIG3	9.98E-25	0.303023942	0.355	0.123
SRP9	1.01E-24	0.548540941	0.64	0.33
ARID5B4	1.06E-24	0.598509931	0.975	0.751
ATP5F1B2	1.14E-24	0.503003568	0.777	0.44
TFEB2	1.59E-24	0.362615683	0.351	0.125
MICU22	1.59E-24	0.775348899	0.678	0.369
MRPL521	1.69E-24	0.449867887	0.587	0.279
ANKRD26	1.73E-24	0.26695099	0.302	0.097
TBC1D22A2	2.22E-24	0.626058245	0.847	0.531
SLC25A31	2.31E-24	0.598463873	0.884	0.636
ARSB2	2.34E-24	0.621521858	0.388	0.149
CCM22	2.36E-24	0.402060644	0.661	0.323
FGD23	2.67E-24	0.318148169	0.318	0.108
TAF1D2	3.53E-24	0.513329582	0.884	0.586
ACTR24	4.13E-24	0.565995783	0.905	0.637
SCAF82	4.14E-24	0.4999119	0.723	0.398
MAPK8IP32	4.24E-24	0.372226934	0.417	0.16
CDR21	4.38E-24	0.684377176	0.632	0.324
GABPB1-AS1	5.05E-24	0.477935167	0.533	0.234
COMMD4	5.11E-24	0.426356443	0.388	0.151
DGUOK1	5.16E-24	0.463151576	0.69	0.354
SEPHS2	5.43E-24	0.403704715	0.397	0.153
LSM81	5.87E-24	0.47940151	0.719	0.38
ATP6V1A1	6.41E-24	0.487239774	0.541	0.244
AF117829.13	8.80E-24	0.341702728	0.364	0.135
ATP5PF	9.53E-24	0.517948467	0.76	0.464
PRDX13	1.01E-23	0.58147868	0.843	0.564
DRAM24	1.03E-23	0.34613124	0.525	0.226
ZRANB3	1.05E-23	0.354037236	0.347	0.122
ACSF3	1.18E-23	0.388518334	0.364	0.136
GON7	1.38E-23	0.279185479	0.26	0.08
EIF2B1	1.56E-23	0.298470537	0.318	0.109
AP5Z1	1.65E-23	0.583230363	0.488	0.218
FO393401.1	1.68E-23	0.293051551	0.273	0.085
ZDHHC21	1.69E-23	0.409693574	0.38	0.144
SHOC23	1.93E-23	0.567118355	0.669	0.361
GLRX5	1.96E-23	0.429116873	0.446	0.187
IDE	2.04E-23	0.408493126	0.285	0.095
IAH1	2.13E-23	0.402553246	0.483	0.208

FAM135A	2.34E-23	0.287910628	0.351	0.126
CDV33	2.90E-23	0.549779054	0.872	0.6
VCPKMT	2.92E-23	0.442948594	0.364	0.138
LARP4B1	3.42E-23	0.634413564	0.715	0.399
ARL2BP	3.44E-23	0.450588885	0.355	0.133
PHF102	3.53E-23	0.409796664	0.413	0.166
MCTS1	4.18E-23	0.40254104	0.483	0.211
SRGAP26	4.25E-23	0.515827222	0.562	0.272
ARPC1B5	4.96E-23	0.612489528	0.876	0.631
HSD17B10	5.16E-23	0.351778272	0.45	0.188
HELZ	5.54E-23	0.597029029	0.756	0.447
EIF2S33	5.56E-23	0.437186345	0.707	0.374
CEPT11	5.65E-23	0.364679796	0.364	0.137
SRGAP2B3	5.72E-23	0.388873393	0.36	0.135
SLC25A333	6.52E-23	0.412568071	0.512	0.225
HTT1	6.59E-23	0.520941762	0.562	0.272
RPAP3	7.11E-23	0.337527606	0.343	0.125
MRPL37	7.48E-23	0.258496873	0.293	0.098
RHOQ5	9.09E-23	0.407138479	0.525	0.233
MCM3	9.46E-23	0.349008109	0.256	0.08
Mar-82	9.85E-23	0.525811479	0.496	0.22
SULF22	1.03E-22	0.395208285	0.331	0.119
CD272	1.04E-22	0.514469581	0.624	0.297
CNN23	1.09E-22	0.414740446	0.607	0.294
LRRC37A2	1.17E-22	0.444020465	0.289	0.099
SLAIN21	1.26E-22	0.673526475	0.595	0.301
SKA2	1.29E-22	0.342712966	0.372	0.142
MRPS14	1.30E-22	0.287092486	0.368	0.137
PIGB1	1.44E-22	0.43705842	0.421	0.169
SELENOT	1.52E-22	0.533320405	0.785	0.485
INTS10	1.64E-22	0.44841932	0.397	0.163
UQCRH4	1.65E-22	0.631093736	0.872	0.644
UBE2H2	1.72E-22	0.573422719	0.831	0.526
HSBP13	1.83E-22	0.405422824	0.57	0.266
ARF5	2.05E-22	0.386777568	0.45	0.192
THOC2	2.19E-22	0.458727201	0.711	0.379
PPP2R1A	2.23E-22	0.305978115	0.492	0.209
COQ7	2.59E-22	0.29832028	0.347	0.126
GGNBP2	2.59E-22	0.535446324	0.678	0.37
CPSF3	2.86E-22	0.278324216	0.277	0.091
DLEU22	2.93E-22	0.707472374	0.81	0.501
TCHP	2.95E-22	0.285903317	0.331	0.117
CCNB1IP1	3.07E-22	0.355533231	0.36	0.135

CPSF6	3.30E-22	0.345583934	0.649	0.31
EEF23	3.44E-22	0.45539831	0.95	0.742
ZNF1071	3.71E-22	0.40465019	0.471	0.202
RBM262	4.62E-22	0.53813066	0.702	0.367
AL450998.2	5.28E-22	0.275516845	0.277	0.091
SAMM50	5.38E-22	0.2829605	0.31	0.11
MFN11	5.43E-22	0.396639902	0.405	0.165
STK17A4	5.43E-22	0.506761286	0.917	0.648
CUL4B	5.84E-22	0.313581256	0.277	0.093
BTBD1	5.96E-22	0.357509682	0.533	0.24
WWC3	6.28E-22	0.250624366	0.252	0.078
QARS	6.37E-22	0.251461698	0.343	0.125
FKBP3	6.41E-22	0.363245447	0.483	0.213
DYNLL15	6.83E-22	0.783997761	0.876	0.635
UNK	7.88E-22	0.312980415	0.388	0.151
CEP1706	9.71E-22	0.425954302	0.541	0.251
ATP6V1E11	9.76E-22	0.422652352	0.554	0.267
IGHD1	1.00E-21	0.382998441	0.289	0.095
CARHSP1	1.06E-21	0.395766947	0.525	0.241
PTEN2	1.07E-21	0.315157293	0.752	0.425
IL162	1.26E-21	0.378071422	0.504	0.22
ASPH2	1.29E-21	0.301000174	0.376	0.147
HCLS11	1.30E-21	0.553798934	0.831	0.538
PPIA2	1.32E-21	0.608175215	0.921	0.824
CBX5	1.36E-21	0.460044226	0.438	0.189
FAM49B1	1.51E-21	0.495584988	0.921	0.672
KLHL42	1.55E-21	0.291712794	0.273	0.09
KIAA03551	1.64E-21	0.306959245	0.463	0.191
MTHFD1L2	1.69E-21	0.509654961	0.393	0.163
PDE7A2	2.13E-21	0.491836468	0.909	0.597
MX13	2.15E-21	0.389854249	0.636	0.322
WDR111	2.20E-21	0.338180406	0.36	0.138
ADA1	2.28E-21	0.307105881	0.335	0.124
PKM4	2.55E-21	0.412839552	0.773	0.422
BRD41	2.76E-21	0.584515893	0.764	0.481
EIF3A	2.86E-21	0.58347795	0.835	0.545
SPECC1L	2.97E-21	0.376303991	0.5	0.223
FAF1	3.16E-21	0.575137862	0.822	0.513
ZNF700	3.44E-21	0.285921968	0.302	0.105
BANF12	3.62E-21	0.341666442	0.628	0.313
TRA2A1	3.65E-21	0.593608627	0.893	0.605
MZT1	3.90E-21	0.30754646	0.36	0.138
UBE2E14	3.92E-21	0.331533979	0.587	0.283

INVS	4.45E-21	0.510500337	0.43	0.184
WAS	4.61E-21	0.350884771	0.595	0.28
DAZAP1	4.76E-21	0.29308403	0.455	0.194
LINC010041	5.54E-21	0.646282412	0.711	0.418
H2AFV3	8.14E-21	0.737002781	0.785	0.506
USP82	9.06E-21	0.483348119	0.781	0.47
CNIH11	9.52E-21	0.370547751	0.5	0.231
ARL5A2	9.98E-21	0.422044057	0.55	0.267
CBR4	1.18E-20	0.293476833	0.277	0.095
POLR2J1	1.21E-20	0.395791819	0.574	0.285
HPS54	1.30E-20	0.474376151	0.483	0.225
PTRHD11	1.33E-20	0.310242296	0.401	0.166
ZNF7211	1.34E-20	0.440148638	0.616	0.311
TRAPPC11	1.34E-20	0.478262117	0.657	0.358
TMEM1543	1.52E-20	0.376130394	0.496	0.221
MAP2K11	1.62E-20	0.351016592	0.736	0.399
ATP6V1H2	1.63E-20	0.454180596	0.632	0.328
MPLKIP	1.82E-20	0.357070955	0.409	0.174
NGLY12	1.87E-20	0.467240818	0.628	0.329
TMC6	1.93E-20	0.427867012	0.504	0.236
NSMCE1	1.96E-20	0.335086269	0.426	0.182
TMEM134	1.97E-20	0.342468081	0.434	0.187
CDYL2	2.04E-20	0.349006782	0.318	0.118
FERMT32	2.09E-20	0.392281826	0.512	0.24
SNRPD11	2.14E-20	0.514419403	0.669	0.392
PSIP12	2.40E-20	0.477380692	0.686	0.386
CCT21	2.44E-20	0.407346051	0.678	0.356
PIP4K2A2	2.86E-20	0.76342418	0.851	0.606
AL050309.11	2.91E-20	0.694728979	0.351	0.143
PAPSS13	3.05E-20	0.393081624	0.417	0.184
LRIF12	3.09E-20	0.407403483	0.512	0.236
RBM42	3.64E-20	0.303873584	0.355	0.14
PABPN1	3.73E-20	0.332187026	0.442	0.193
CAPN72	3.78E-20	0.583926935	0.632	0.345
MTERF4	4.93E-20	0.340473082	0.455	0.197
CLEC16A2	4.96E-20	0.349423004	0.545	0.258
THOC7	5.17E-20	0.304657884	0.492	0.225
TLR12	5.23E-20	0.264634373	0.252	0.085
SMAP23	5.29E-20	0.425739919	0.992	0.849
SUDS3	5.51E-20	0.334848263	0.426	0.183
SPOPL1	6.06E-20	0.330779665	0.43	0.186
TXN21	6.27E-20	0.274558283	0.483	0.217
SNRPD31	6.31E-20	0.470406031	0.607	0.337

NDUFB31	7.26E-20	0.399751504	0.545	0.272
EIF3I1	8.36E-20	0.441123805	0.678	0.376
RO60	8.47E-20	0.622842276	0.558	0.291
ATP5F1A1	8.53E-20	0.426856562	0.669	0.368
WIPI2	8.60E-20	0.428511471	0.537	0.261
ERH1	8.91E-20	0.582641495	0.719	0.447
NSD1	1.01E-19	0.402580548	0.636	0.333
HDAC5	1.13E-19	0.33672404	0.298	0.109
PISD	1.24E-19	0.324878965	0.384	0.157
CBL	1.26E-19	0.437966496	0.483	0.226
SLBP1	1.36E-19	0.46547305	0.661	0.366
ETFB	1.59E-19	0.353411871	0.583	0.3
PRKCB2	1.60E-19	0.475245405	0.884	0.592
GRB25	1.75E-19	0.396273338	0.868	0.6
PTPN63	1.79E-19	0.412791683	0.492	0.235
STRN3	1.96E-19	0.450648628	0.583	0.297
TRAF53	2.07E-19	0.42503012	0.554	0.271
PFDN6	2.28E-19	0.273129908	0.38	0.156
TRANK11	2.32E-19	0.276906805	0.479	0.212
ARFGEF2	2.33E-19	0.351013757	0.566	0.284
ZNF92	2.37E-19	0.315634441	0.517	0.239
SMC63	2.61E-19	0.276162095	0.463	0.201
PRKRIP11	2.80E-19	0.386323468	0.541	0.265
EIF1AY2	3.53E-19	0.521397865	0.438	0.208
PLEKHA22	3.73E-19	0.31474404	0.806	0.454
CCDC115	4.33E-19	0.328397689	0.318	0.124
TEX10	4.75E-19	0.327317639	0.339	0.133
GAS55	5.11E-19	0.394491494	0.93	0.685
MLF2	5.31E-19	0.290563281	0.459	0.211
PUS101	5.36E-19	0.421262048	0.281	0.105
NDUFA71	7.89E-19	0.371273597	0.504	0.249
EWSR1	8.08E-19	0.414262632	0.686	0.394
SMAD5	8.21E-19	0.278644158	0.252	0.087
PRMT12	9.34E-19	0.471257743	0.508	0.255
CYBC1	1.13E-18	0.393587234	0.471	0.221
PPP3CA3	1.36E-18	0.468051548	0.777	0.469
PTK2B2	1.37E-18	0.402373233	0.669	0.367
EIF3H3	1.42E-18	0.418255396	0.921	0.679
INSIG2	1.91E-18	0.44947248	0.322	0.132
RERE2	1.99E-18	0.319289976	0.822	0.507
C7orf502	2.11E-18	0.410859098	0.558	0.287
RUNX12	2.18E-18	0.554354142	0.818	0.52
CNNM4	2.27E-18	0.365732725	0.322	0.127

NUCKS11	2.86E-18	0.491313943	0.818	0.553
RTRAF1	2.87E-18	0.453916936	0.719	0.442
BTF33	2.90E-18	0.505517247	0.926	0.804
MAP2K22	2.91E-18	0.349350254	0.669	0.361
ZNF586	2.94E-18	0.270822042	0.31	0.118
DCTPP11	3.21E-18	0.272807583	0.285	0.106
SLC41A22	3.26E-18	0.568601005	0.322	0.132
AKAP8L	3.47E-18	0.36172382	0.558	0.28
ALPK11	3.72E-18	0.313817032	0.281	0.106
EIF3F2	3.96E-18	0.470746861	0.835	0.589
PPP6R21	4.32E-18	0.49641451	0.57	0.306
IKZF33	4.64E-18	0.352868538	0.764	0.424
MRPS241	4.87E-18	0.37522768	0.587	0.31
CCT31	5.10E-18	0.427121648	0.715	0.434
NSRP1	5.53E-18	0.400025367	0.57	0.3
C1D	5.71E-18	0.298549448	0.508	0.246
TTC13	6.74E-18	0.292816327	0.293	0.11
FIBP	7.15E-18	0.319635244	0.43	0.196
C4orf31	7.17E-18	0.616848893	0.752	0.483
WDR12	8.34E-18	0.31380081	0.566	0.287
NDUFAB11	8.49E-18	0.306734394	0.612	0.313
VHL	8.90E-18	0.271209971	0.368	0.155
CLPTM1L1	9.21E-18	0.302291132	0.405	0.181
EIF2AK42	1.07E-17	0.384116005	0.397	0.182
CCNC	1.15E-17	0.284452747	0.479	0.227
SNHG73	1.17E-17	0.379362904	0.636	0.347
AL645568.1	1.20E-17	0.319248157	0.293	0.112
RAB4A	1.28E-17	0.290307016	0.401	0.179
ATP5MF2	1.28E-17	0.44389572	0.723	0.444
C12orf76	1.36E-17	0.260650286	0.26	0.094
PHAX	1.42E-17	0.3234663	0.43	0.195
CPM2	1.44E-17	0.486304044	0.318	0.131
DARS	1.48E-17	0.318556731	0.624	0.337
ARL14EP	1.59E-17	0.26465127	0.38	0.162
MRPS15	1.60E-17	0.318178643	0.496	0.244
SEPTIN2	1.73E-17	0.418474787	0.702	0.411
NPM12	1.92E-17	0.440091503	0.959	0.849
HNRNPM1	2.45E-17	0.441074853	0.81	0.539
DMAC2L	2.46E-17	0.250063008	0.293	0.112
SF3A2	2.61E-17	0.299467667	0.306	0.12
PLCL21	2.64E-17	0.577059223	0.628	0.362
THRAP31	2.73E-17	0.383010556	0.847	0.568
EED1	2.91E-17	0.349548399	0.438	0.2

ACO2	3.16E-17	0.338045488	0.459	0.219
MRPS361	3.19E-17	0.363804456	0.5	0.248
VRK1	3.36E-17	0.26872613	0.31	0.121
DUT1	3.47E-17	0.689395162	0.496	0.262
BLOC1S21	3.63E-17	0.362805884	0.537	0.272
HNRNPA2B11	3.66E-17	0.429029152	0.963	0.853
UBE2D22	3.86E-17	0.393399482	0.872	0.621
UTP62	3.93E-17	0.26773372	0.409	0.186
IGBP11	4.23E-17	0.368918286	0.653	0.372
NF11	4.61E-17	0.447280019	0.723	0.417
MCPH11	4.75E-17	0.341330481	0.537	0.27
ESD	5.26E-17	0.279154895	0.45	0.209
COMMD1	5.32E-17	0.454748341	0.657	0.357
PPP6R1	5.58E-17	0.28240848	0.434	0.199
COTL14	5.71E-17	0.342106659	0.876	0.554
TIMM13	5.86E-17	0.31802498	0.426	0.2
GMFB	5.89E-17	0.272363828	0.331	0.137
R3HDM11	5.92E-17	0.296638503	0.517	0.252
AC006001.2	6.35E-17	0.35991912	0.273	0.105
POLR1D1	6.45E-17	0.338971606	0.752	0.45
IDH21	6.50E-17	0.526449815	0.512	0.265
SGK14	6.79E-17	0.252715975	0.467	0.215
INO801	7.55E-17	0.457239894	0.595	0.326
TFDP11	7.96E-17	0.329735388	0.351	0.15
TLE43	8.92E-17	0.721695472	0.682	0.427
MTDH	9.54E-17	0.428966845	0.88	0.638
SMYD33	9.71E-17	0.33168381	0.86	0.549
SH2B35	1.04E-16	0.311284129	0.483	0.225
CNST3	1.05E-16	0.29640158	0.669	0.356
ZMYND81	1.11E-16	0.365605965	0.517	0.263
PSMD41	1.11E-16	0.318409459	0.554	0.292
RAB14	1.13E-16	0.337085469	0.649	0.357
RBX12	1.27E-16	0.366472885	0.723	0.421
PDSS11	1.28E-16	0.285059647	0.26	0.098
PANK2	1.31E-16	0.30222221	0.521	0.262
STOML2	1.36E-16	0.284413084	0.372	0.165
LSM51	1.39E-16	0.301552539	0.517	0.26
NIP7	1.41E-16	0.281849497	0.318	0.129
ZFP36L15	1.56E-16	0.463565365	0.769	0.5
CPEB31	1.57E-16	0.367093738	0.421	0.196
UBQLN1	1.61E-16	0.400111952	0.616	0.339
TESK2	1.67E-16	0.30622326	0.273	0.105
ATF7IP23	1.68E-16	0.313573597	0.591	0.312

ATG16L1	1.87E-16	0.302367217	0.426	0.195
RAD51B2	1.88E-16	0.450862963	0.653	0.372
ATP6V1G12	1.94E-16	0.525365034	0.822	0.593
MRPL16	2.13E-16	0.257558389	0.347	0.148
H2AFZ3	2.20E-16	0.702078173	0.855	0.608
NAP1L13	2.30E-16	0.434098685	0.901	0.682
GTF2H13	2.34E-16	0.368121807	0.492	0.249
ELAVL1	2.82E-16	0.309109884	0.421	0.2
RAD9A	2.83E-16	0.330578226	0.318	0.132
ARPC5L2	2.90E-16	0.368041185	0.533	0.281
LNPEP1	2.92E-16	0.350427564	0.599	0.325
RASSF24	2.92E-16	0.255337665	0.405	0.184
CCDC18-AS1	3.02E-16	0.271951214	0.475	0.227
RPIA	3.08E-16	0.263220322	0.31	0.125
DOP1A	3.17E-16	0.310269648	0.409	0.185
PTDSS11	3.20E-16	0.255034567	0.413	0.188
FBXW72	3.25E-16	0.342242333	0.835	0.565
HADHB1	3.84E-16	0.296691569	0.55	0.283
SRSF101	3.98E-16	0.422409834	0.847	0.564
WASHC2A1	4.15E-16	0.462744298	0.426	0.205
IL21R2	4.40E-16	0.350442446	0.517	0.26
INPP5A3	4.50E-16	0.267510786	0.504	0.247
MPC22	4.53E-16	0.3532705	0.583	0.31
MDFIC1	4.54E-16	0.456884875	0.645	0.358
ARGLU1	4.69E-16	0.42743335	0.868	0.602
PLEKHM23	5.17E-16	0.329708368	0.463	0.23
TBPL1	5.29E-16	0.41383998	0.376	0.165
HEIH1	5.51E-16	0.322881902	0.277	0.114
POLA1	5.54E-16	0.387965011	0.256	0.097
NFAT54	5.71E-16	0.805463733	0.798	0.55
SLC5A31	5.82E-16	0.342244145	0.442	0.21
TNPO31	6.20E-16	0.366153162	0.612	0.331
ELMO13	6.25E-16	0.390422125	0.926	0.699
PSMA22	6.34E-16	0.390083608	0.715	0.448
ILF31	6.43E-16	0.384753513	0.62	0.354
ATP5IF11	7.08E-16	0.460280619	0.74	0.507
UBA2	8.02E-16	0.26390635	0.558	0.284
COX7C2	8.28E-16	0.395738249	0.921	0.788
ZMYM41	8.78E-16	0.31027105	0.417	0.197
TRIM13	8.84E-16	0.256712854	0.38	0.168
NCBP3	9.16E-16	0.279294917	0.421	0.193
RACK14	9.24E-16	0.393562213	0.971	0.893
SET3	9.73E-16	0.461337498	0.802	0.565

PRCP3	1.01E-15	0.928150321	0.388	0.199
FBXO31	1.01E-15	0.253170183	0.26	0.099
GNG54	1.06E-15	0.417737726	0.748	0.484
PHTF23	1.27E-15	0.290862527	0.69	0.39
TRIM261	1.28E-15	0.282693672	0.488	0.244
COX6C1	1.30E-15	0.441675421	0.818	0.613
HNRNPR1	1.34E-15	0.361316412	0.769	0.459
CD525	1.34E-15	0.69146058	0.876	0.671
CBX31	1.39E-15	0.381012737	0.707	0.432
HNRNPK2	1.41E-15	0.3986717	0.888	0.647
SRSF4	1.48E-15	0.413222671	0.764	0.492
TNKS	1.56E-15	0.282763899	0.657	0.356
COX6A12	1.63E-15	0.405750676	0.802	0.577
CD242	1.63E-15	0.310674525	0.256	0.097
ATP5ME1	1.63E-15	0.326375314	0.736	0.454
FKBP1A3	1.65E-15	0.291972776	0.669	0.373
TAF9	1.67E-15	0.26028351	0.364	0.163
CARD8	1.73E-15	0.327064269	0.508	0.26
RBM231	1.78E-15	0.335230834	0.686	0.395
TUBB4	1.91E-15	0.582843679	0.517	0.283
SLC25A64	2.05E-15	0.362809699	0.901	0.707
ELOA	2.51E-15	0.288668452	0.343	0.151
UBTF	2.52E-15	0.270347122	0.434	0.206
VCPIP1	3.18E-15	0.270297939	0.351	0.155
MRPS341	3.20E-15	0.294380802	0.496	0.255
ERGIC12	3.51E-15	0.312522265	0.525	0.28
TAGAP1	3.58E-15	0.33754102	0.69	0.405
EIF3L4	3.76E-15	0.376968528	0.649	0.388
DCTN31	4.20E-15	0.289057042	0.529	0.278
AHSA12	4.54E-15	0.357327353	0.674	0.399
CPQ3	4.83E-15	0.258393993	0.442	0.216
COA1	5.26E-15	0.279662156	0.591	0.313
USP331	5.39E-15	0.262301509	0.558	0.29
GRK2	5.84E-15	0.256002639	0.508	0.258
EVI54	5.85E-15	0.297405626	0.405	0.194
LPXN2	5.86E-15	0.353694485	0.748	0.449
EIF1B3	5.88E-15	0.360605339	0.665	0.394
RCBTB2	5.91E-15	0.275284344	0.252	0.099
AKIRIN21	6.04E-15	0.303714447	0.678	0.385
DANCR1	6.34E-15	0.289457605	0.479	0.236
POGZ1	6.35E-15	0.273214167	0.475	0.235
SELENOF1	6.40E-15	0.39548858	0.731	0.45
MAN1A13	6.43E-15	0.727870152	0.69	0.456

ARPC55	7.02E-15	0.431580039	0.798	0.522
CSNK2B2	7.04E-15	0.294796593	0.595	0.328
THUMPD3-AS1	8.87E-15	0.342558565	0.595	0.327
CLEC2D3	9.16E-15	0.293437163	0.847	0.536
TNS32	9.58E-15	0.286592578	0.376	0.176
CDK2AP21	1.01E-14	0.303501186	0.463	0.238
ATP5F1C2	1.10E-14	0.303359486	0.69	0.395
ARID1A	1.12E-14	0.307674362	0.508	0.269
GGCT	1.19E-14	0.332361055	0.289	0.124
HERC2	1.28E-14	0.255987262	0.434	0.211
TPM44	1.44E-14	0.3413286	0.74	0.454
YBX14	1.58E-14	0.356797974	0.946	0.774
STRAP1	1.80E-14	0.299674419	0.669	0.387
RPGR	1.83E-14	0.393932831	0.298	0.129
RBM35	1.84E-14	0.401701668	0.806	0.565
MMADHC1	1.96E-14	0.270244483	0.479	0.247
CCT51	2.02E-14	0.293171463	0.607	0.339
DERA	2.07E-14	0.262085412	0.31	0.136
MRPL4	2.46E-14	0.263515641	0.364	0.168
DDT2	2.59E-14	0.320820714	0.669	0.39
CAP15	2.69E-14	0.314685798	0.74	0.462
RRAGC	2.73E-14	0.287317626	0.285	0.121
ATP6V0D14	2.75E-14	0.276256244	0.562	0.301
NUBPL	2.81E-14	0.305211851	0.335	0.15
REEP52	2.84E-14	0.326501666	0.727	0.443
MZT2B1	3.07E-14	0.484329186	0.789	0.605
AC027097.21	3.30E-14	0.319938613	0.252	0.1
ZBTB103	3.44E-14	0.301740533	0.409	0.196
COX7A2L2	3.55E-14	0.316177334	0.624	0.359
GNAS1	3.73E-14	0.331111267	0.971	0.869
SEPTIN94	3.89E-14	0.284916897	0.748	0.451
FAM126A	3.98E-14	0.280006136	0.471	0.235
MRPL111	4.12E-14	0.286606352	0.388	0.188
TRAPPC82	4.49E-14	0.294968963	0.483	0.247
IL12RB1	4.71E-14	0.256290755	0.264	0.107
WDFY22	4.75E-14	0.592722519	0.529	0.302
SYNE25	5.52E-14	0.300220501	0.901	0.594
SYF22	6.00E-14	0.311694322	0.785	0.503
UQCR101	6.27E-14	0.347410605	0.731	0.483
ATG4B	6.28E-14	0.3513902	0.397	0.196
CLTA3	6.30E-14	0.423171269	0.731	0.461
PNKD	6.62E-14	0.263557259	0.413	0.204
PPP1R12A2	6.87E-14	0.458442184	0.855	0.617

ELOB	8.08E-14	0.348307628	0.822	0.568
SNRPF1	8.48E-14	0.408473415	0.645	0.384
PPP3CB	8.59E-14	0.285105992	0.479	0.247
ATP5PB2	9.30E-14	0.317446419	0.612	0.357
BCL2L131	9.65E-14	0.257955009	0.368	0.174
LYSMD21	1.01E-13	0.297924012	0.335	0.152
CLINT11	1.07E-13	0.323499208	0.653	0.38
RIOK3	1.08E-13	0.282840094	0.657	0.374
IRF2	1.10E-13	0.307701273	0.533	0.289
MRPS61	1.20E-13	0.304620671	0.645	0.381
TBC1D52	1.25E-13	0.302165759	0.851	0.555
MFSD14B	1.26E-13	0.251154929	0.405	0.198
KDM5A1	1.30E-13	0.317697011	0.727	0.451
FAM241A	1.50E-13	0.366397889	0.331	0.151
NUDT21	1.50E-13	0.265159361	0.417	0.208
NUDT1	1.53E-13	0.291758605	0.368	0.177
IQCB11	1.79E-13	0.267591534	0.5	0.26
HNRNPC2	1.83E-13	0.361851644	0.963	0.851
NDUFA111	2.01E-13	0.321739475	0.715	0.461
SLC30A9	2.27E-13	0.354288876	0.45	0.239
SPEN1	2.77E-13	0.36583519	0.521	0.293
NAA502	3.08E-13	0.29652823	0.707	0.425
CHCHD104	3.30E-13	0.372273329	0.62	0.376
EIF4H1	3.59E-13	0.290588587	0.632	0.375
SLC2A132	3.73E-13	0.435208709	0.285	0.126
EIF4G32	4.08E-13	0.278638501	0.752	0.472
COMMD103	4.45E-13	0.311434462	0.645	0.388
COX6B13	4.53E-13	0.323747088	0.851	0.615
ZNF1481	4.55E-13	0.336867078	0.69	0.435
PCBP22	4.82E-13	0.290717484	0.814	0.542
RPA31	5.07E-13	0.358841069	0.537	0.305
ZNF6091	5.09E-13	0.335209206	0.566	0.323
CHD4	5.11E-13	0.273447185	0.554	0.315
SF3B61	5.70E-13	0.31410498	0.694	0.438
DOCK22	6.14E-13	0.339962026	0.839	0.583
UBE2A2	6.69E-13	0.251540984	0.603	0.345
LRPPRC1	8.18E-13	0.291370309	0.504	0.269
ATP5MPL1	8.69E-13	0.320728989	0.69	0.443
SNX252	8.97E-13	0.459249549	0.558	0.32
SUGT1	9.07E-13	0.26114363	0.57	0.324
HMG32	9.26E-13	0.270369996	0.533	0.298
ASH1L1	1.06E-12	0.450433829	0.826	0.615
ECHDC11	1.11E-12	0.318143472	0.508	0.283

ADCY33	1.21E-12	0.369912621	0.293	0.135
SP140L2	1.21E-12	0.291278683	0.599	0.342
POLR2J3	1.34E-12	0.286565404	0.467	0.244
TENT4A1	1.64E-12	0.380707284	0.409	0.218
DDX171	1.69E-12	0.306097511	0.893	0.64
MAPK1IP1L1	1.71E-12	0.310729648	0.694	0.416
DDX61	1.72E-12	0.3760135	0.76	0.533
CHCHD1	1.86E-12	0.256688981	0.417	0.218
CBWD1	1.98E-12	0.270027702	0.285	0.131
SNU133	2.02E-12	0.272980648	0.86	0.603
SYTL1	2.08E-12	0.253819982	0.339	0.16
ANKRD172	2.15E-12	0.303221329	0.822	0.569
CEP85L2	2.19E-12	0.372847668	0.628	0.388
SYNCRIP1	2.31E-12	0.287539368	0.645	0.387
NFKBID5	2.50E-12	0.329896765	0.43	0.225
WASHC2C	2.74E-12	0.322545826	0.397	0.204
PSMD131	2.83E-12	0.258181669	0.521	0.292
KTN1	3.17E-12	0.315213571	0.781	0.525
DEK2	3.20E-12	0.447402847	0.802	0.552
HIP13	3.28E-12	0.330200614	0.347	0.173
HADHA1	3.44E-12	0.273738987	0.616	0.36
CHORDC12	3.52E-12	0.439079059	0.715	0.497
SNX13	4.14E-12	0.252647272	0.438	0.228
SFPQ1	4.26E-12	0.377973202	0.905	0.69
FBXO113	4.32E-12	0.311552644	0.814	0.542
MSL21	4.48E-12	0.45222381	0.566	0.34
MIR181A1HG3	4.83E-12	0.270140457	0.376	0.183
RPA1	5.30E-12	0.270788395	0.256	0.111
UTY4	5.33E-12	0.417748214	0.579	0.356
FAM192A	5.98E-12	0.273826194	0.442	0.235
ZFAS13	6.84E-12	0.317121022	0.917	0.753
TCOF14	7.00E-12	0.284912462	0.376	0.186
NDUFA4	7.26E-12	0.371253377	0.88	0.656
SMC42	7.60E-12	0.360708015	0.496	0.278
ASXL13	8.06E-12	0.367937399	0.777	0.511
SUPT16H	8.35E-12	0.277787744	0.508	0.287
NDUFA122	8.81E-12	0.272027337	0.603	0.365
AC007384.12	8.89E-12	0.341969292	0.702	0.445
TBCA2	9.02E-12	0.423555997	0.723	0.517
SH3TC11	9.76E-12	0.364604665	0.339	0.17
SYAP1	1.17E-11	0.299999142	0.789	0.555
ZBTB8OS1	1.27E-11	0.341454951	0.438	0.247
SDE21	1.28E-11	0.261264252	0.376	0.193

PDE4D2	1.41E-11	0.614096603	0.711	0.52
CYTIP2	1.48E-11	0.286894801	0.959	0.758
EIF4B3	1.72E-11	0.27458893	0.773	0.533
AP1G11	1.77E-11	0.257181549	0.595	0.355
YWHAE1	1.92E-11	0.328076867	0.756	0.519
NDUFA131	1.98E-11	0.2812681	0.88	0.653
ZNF101	2.28E-11	0.45097052	0.554	0.325
SMC3	2.34E-11	0.302139078	0.541	0.308
NDUFA21	2.40E-11	0.297581377	0.583	0.353
VASP5	2.73E-11	0.252889561	0.574	0.337
PNRC2	2.73E-11	0.268570465	0.628	0.37
UBE2I2	2.85E-11	0.301251355	0.665	0.429
SLC35D11	2.88E-11	0.29242785	0.38	0.193
SOS1	3.24E-11	0.325209663	0.669	0.428
RFX3-AS1	3.69E-11	0.331876406	0.36	0.183
SPCS21	3.76E-11	0.31655926	0.769	0.517
KARS	3.77E-11	0.268581877	0.36	0.186
ST132	3.98E-11	0.280736018	0.752	0.506
PAN32	4.56E-11	0.301537647	0.802	0.538
EIF3M1	4.77E-11	0.271980911	0.723	0.467
OLA11	4.82E-11	0.257583384	0.587	0.355
RALY	5.68E-11	0.322898892	0.756	0.507
CIRBP5	5.96E-11	0.304882338	0.901	0.713
NKTR2	6.11E-11	0.362433741	0.698	0.474
RANBP11	6.15E-11	0.369302945	0.496	0.295
ATP5PO2	6.18E-11	0.256909584	0.727	0.483
REL4	7.76E-11	0.315396319	0.913	0.666
APLP23	8.12E-11	0.277008899	0.657	0.408
PSMB11	8.22E-11	0.295255595	0.764	0.53
ATAD2B2	9.47E-11	0.378116082	0.554	0.33
CHCHD31	1.07E-10	0.251310509	0.587	0.357
EVI2B1	1.79E-10	0.320391648	0.748	0.522
SEM12	2.13E-10	0.263688215	0.694	0.462
COPE1	2.17E-10	0.291926293	0.781	0.546
CALM32	2.21E-10	0.355487608	0.624	0.394
PPP4R3A2	2.36E-10	0.329400529	0.748	0.501
ABHD31	2.48E-10	0.304769948	0.562	0.331
ANP32E2	2.85E-10	0.279305886	0.521	0.314
NOP582	2.88E-10	0.256920968	0.851	0.622
UBE2L31	3.07E-10	0.28854719	0.719	0.479
RNF111	3.27E-10	0.254186519	0.554	0.33
TXNL4A1	3.59E-10	0.254444326	0.55	0.333
GNB12	4.01E-10	0.342407542	0.822	0.588

HNRNPA31	4.39E-10	0.312323756	0.855	0.663
ANKRD113	4.51E-10	0.533350324	0.872	0.742
LSM31	4.66E-10	0.283309061	0.521	0.32
RAC23	4.93E-10	0.291361545	0.798	0.552
UBR51	5.40E-10	0.278900795	0.711	0.459
ZC3H151	5.96E-10	0.262952456	0.665	0.446
TACC31	6.95E-10	0.279517568	0.322	0.165
CAPZB4	8.10E-10	0.257833457	0.826	0.583
SLC39A112	8.16E-10	0.259561556	0.442	0.255
NSD2	1.19E-09	0.352731529	0.318	0.167
PAIP21	1.36E-09	0.253573504	0.756	0.532
TBL1XR12	1.44E-09	0.277822169	0.69	0.467
ADNP	1.54E-09	0.256500088	0.64	0.405
SMG13	1.69E-09	0.264179509	0.702	0.468
JAK11	1.84E-09	0.260105643	0.959	0.785
TAF151	2.08E-09	0.298775808	0.694	0.477
CCDC88C2	2.27E-09	0.27827268	0.64	0.415
KDM4B3	2.39E-09	0.301086554	0.541	0.338
ATF41	2.71E-09	0.265482385	0.731	0.495
USP9X2	2.90E-09	0.267713757	0.744	0.499
SRSF33	3.05E-09	0.299314303	0.921	0.759
CLIP11	3.09E-09	0.398181488	0.512	0.325
AGFG12	3.58E-09	0.343766173	0.57	0.374
IARS	3.71E-09	0.252237171	0.401	0.224
PUM11	3.83E-09	0.289213134	0.764	0.528
RSRC21	6.84E-09	0.320993599	0.839	0.627
YEATS2	8.11E-09	0.283205515	0.339	0.181
SUZ12	8.31E-09	0.262048264	0.521	0.318
NEDD81	1.04E-08	0.267242564	0.707	0.479
PDS5A1	1.08E-08	0.250213687	0.707	0.482
RAD21	1.16E-08	0.286451679	0.616	0.407
CHCHD22	1.19E-08	0.268023728	0.888	0.768
TMSB4X3	1.76E-08	0.288982479	0.975	0.952
ERO1B1	1.86E-08	0.28179006	0.521	0.323
PNISR	1.97E-08	0.27640136	0.744	0.523
BTRC	3.44E-08	0.314980258	0.347	0.197
CDC73	5.31E-08	0.26091673	0.645	0.439
BIRC6	6.32E-08	0.259318681	0.831	0.647
CREBBP3	9.49E-08	0.300262192	0.723	0.521
PDS5B	9.74E-08	0.292080819	0.479	0.306
FRYL1	1.93E-07	0.30062702	0.702	0.504
LAMP13	6.98E-07	0.273739801	0.475	0.302
ITPR24	1.97E-06	0.457275694	0.669	0.508

RANBP92	8.29E-06	0.408555615	0.537	0.387
HIST1H4C3	3.15E-05	0.789328092	0.533	0.393
FOXP15	0.003768302	0.335652842	0.822	0.742

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0	0	CRYBG1
0	0	ANK3
0	0	BCL11B
0	0	RORA
0	0	ITK
0	0	FYB1
0	0	CMTM8
0	0	BATF
0	0	LEF1
0	0	INPP4B
0	0	TNIK
0	0	CAMK4
0	0	IL6ST
0	0	ZNF831
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0	0	LEPROTL1
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0	0	SPOCK2
0	0	SARAF
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0	0	KLRB1
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0	0	LDLRAD4
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0	0	RNF125
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0	0	RETREG1
0	0	SYNE2
0	0	TRBC2
0	0	PIK3IP1
0	0	TESPA1
0	0	BICDL1
0	0	TRAC
0	0	IQGAP2
0	0	EML4
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0	0	PITPNC1
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3.39E-303	0	CD5
2.81E-298	0	PPP1R2
7.88E-298	0	CELF2
6.13E-297	0	EEF1A1
3.80E-295	0	OXNAD1
3.68E-294	0	DDX24
3.81E-289	0	PRKCQ-AS1
6.48E-288	0	TRBC1
7.08E-284	0	AL136456.1
9.34E-284	0	TSC22D3
2.53E-283	0	RORA-AS1
4.17E-283	0	STK4
2.44E-279	0	ARID4B
2.05E-278	0	LDHB
4.88E-275	0	MBNL1
3.61E-274	0	PRKCQ
4.30E-273	0	TRAT1
1.68E-272	0	EPC1
1.32E-270	0	DOCK9
2.96E-270	0	MRPL1
3.95E-270	0	LINC00513
6.09E-270	0	ARID5B
1.34E-269	0	NAP1L4
7.47E-269	0	CD96
3.74E-267	0	TNFAIP3
4.06E-267	0	DDX5
6.50E-267	0	TLK1
2.16E-266	0	GSPT1
1.33E-264	0	SOD1
3.34E-261	0	NR3C1
2.49E-259	0	CREM
1.33E-254	0	FAM177A1

1.44E-250	0	CRY1
6.90E-250	0	THEMIS
1.35E-248	0	C12orf57
1.17E-246	0	CCDC66
8.28E-246	0	SYTL3
1.46E-243	0	RBMS1
9.48E-241	0	ITM2A
3.85E-240	0	UGP2
9.08E-239	0	CYTH1
4.83E-238	0	DOCK10
6.92E-238	0	NCK2
1.58E-231	0	ITPKB
9.73E-231	0	OSBPL8
1.29E-230	0	KLF12
1.84E-227	0	CD7
9.89E-226	0	AC026979.2
1.05E-224	0	LCK
2.78E-224	0	SELL
1.98E-223	0	ODF2L
2.61E-222	0	PCBP3
3.49E-218	0	CD4
2.04E-216	0	ZC3HAV1
1.34E-213	0	LINC01578
3.42E-212	0	PVT1
4.18E-212	0	STAT3
5.08E-210	0	EIF1
1.61E-208	0	CCR6
1.20E-207	0	FAM107B
1.23E-207	0	MAP3K5
1.79E-204	0	ZFP36L2
4.23E-203	0	IL18R1
5.90E-203	0	HECA
1.50E-201	0	TNFRSF4
2.92E-201	0	STAT4
3.07E-201	0	SESN3
1.92E-199	0	ZC3H12D
2.89E-198	0	TXK
3.96E-197	0	LAT
5.91E-196	0	CCR7
2.74E-195	0	B2M
3.27E-194	0	STK17B
5.88E-194	0	TIGIT
4.38E-190	0	ABLIM1

4.02E-188	0	ZEB1
5.20E-187	0	HNRNPLL
2.61E-186	0	MLLT3
9.36E-186	0	MGAT4A
1.05E-185	0	AP000787.1
4.21E-185	0	SMCHD1
1.49E-183	0	CALM1
2.19E-183	0	GLCCI1
1.24E-182	0	EEF1D
3.57E-182	0	CCSER2
1.22E-181	0	EVL
1.11E-180	0	TSPAN5
1.23E-180	0	MFHAS1
8.57E-178	0	CEMIP2
1.30E-177	0	EPB41
1.49E-177	0	SEPTIN6
2.15E-176	0	MPZL3
6.14E-174	0	CXCR4
1.28E-173	0	CNST
2.39E-173	0	CCNH
2.17E-172	0	ARL4C
1.66E-171	0	LINC01619
8.60E-170	0	N4BP2L2
3.11E-168	0	TMEM173
9.30E-165	0	TOMM7
4.15E-162	0	FAM118A
3.54E-160	0	GIMAP5
5.18E-160	0	PCNX1
1.21E-159	0	LIME1
4.50E-158	0	PGAP1
5.02E-158	0	PABPC1
4.63E-157	0	MAP3K4
2.12E-155	0	SF1
3.69E-155	0	PER1
1.89E-154	0	PPP1CB
4.55E-154	0	PATJ
1.32E-150	0	CIRBP
1.28E-149	0	CLEC2D
3.13E-147	0	NIBAN1
3.55E-147	0	YWHAB
1.72E-146	0	NAP1L1
4.39E-145	0	LRRC8C
3.74E-144	0	ARHGEF3

1.15E-143	0	ESYT2
4.11E-141	0	BTG1
1.37E-139	0	STAT5B
2.41E-139	0	RSBN1
4.42E-139	0	RAP1A
1.94E-138	0	SRSF5
7.88E-138	0	GPCPD1
1.39E-136	0	NDUFV2
8.93E-136	0	OGDH
3.07E-135	0	SRSF7
1.06E-134	0	AP001011.1
1.08E-133	0	NOP58
4.04E-130	0	USP3-AS1
2.38E-129	0	ARHGAP15
4.83E-129	0	CNBP
1.41E-128	0	THADA
4.06E-127	0	RBM39
4.88E-127	0	STAM
8.78E-127	0	P2RY10
2.85E-126	0	CHD2
2.40E-124	0	SNHG6
3.56E-123	0	NOP53
3.74E-122	0	FAS
4.27E-121	0	GMFG
5.60E-121	0	ATXN7
1.56E-120	0	SKP1
3.82E-120	0	MXI1
7.63E-120	0	USP3
7.95E-120	0	SLA
3.69E-119	0	TSPYL2
5.06E-118	0	CD226
2.47E-117	0	MCUB
8.66E-117	0	ASXL1
1.75E-115	0	RGCC
1.61E-113	0	CDKN1B
2.82E-113	0	KAT6A
3.08E-113	0	SFXN1
1.75E-112	0	USP15
1.19E-109	0	DDIT4
2.15E-109	0	TNFAIP8
2.37E-109	0	EIF3E
2.87E-109	0	AC044849.1
4.07E-109	0	TNRC6C

7.33E-109	0	DISC1
1.78E-108	0	APBB1IP
3.63E-107	0	CRTC3
1.41E-105	0	ATP2B4
1.67E-105	0	TMEM245
1.39E-104	0	LINC-PINT
9.67E-103	0	WWP1
1.18E-102	0	UQCRB
2.37E-102	0	KLF6
2.31E-101	0	HINT1
7.01E-101	0	GATA3
1.81E-100	0	TNRC6B
3.07E-100	0	KAT6B
3.59E-99	0	PRDX2
4.54E-99	0	CASP8
7.74E-99	0	WAKMAR2
9.90E-99	0	PRKY
5.17E-97	0	MAML2
8.30E-97	0	CERK
1.25E-96	0	CORO1B
2.21E-96	0	DGKA
2.25E-96	0	SCML4
2.35E-96	0	MYH9
1.06E-95	0	ATXN1
2.37E-95	0	ZNRF1
2.58E-95	0	PRORP
7.26E-95	0	GAS5
2.14E-94	0	GALM
1.04E-93	0	SMYD3
1.52E-92	0	GIMAP4
7.92E-92	0	ARID5A
1.42E-91	0	PPP1R16B
2.90E-90	0	PTGES3
3.08E-89	0	TIAM1
4.43E-89	0	MORF4L1
7.42E-89	0	ARNTL
8.10E-89	0	USP47
1.02E-88	0	RHBDD2
2.61E-88	0	HIPK1
3.27E-88	0	COMMD6
5.55E-88	0	AC058791.1
1.76E-87	0	RASA1
1.80E-87	0	MPHOSPH8

2.07E-87	0	RBMX
8.57E-87	0	PTGER4
2.04E-85	0	BICRAL
1.08E-84	0	SFMBT1
3.28E-84	0	HLA-A
2.16E-83	0	NSMCE3
3.31E-83	0	AKT3
9.14E-83	0	JMY
1.12E-82	0	AC068587.4
2.71E-82	0	LPIN2
5.20E-82	0	FBXO32
8.39E-82	0	IRS2
2.71E-81	0	GCC2
4.99E-81	0	AC079793.1
2.98E-80	0	SRSF3
4.19E-80	0	TXNIP
5.87E-80	0	SON
8.98E-80	0	GYPC
1.36E-79	0	RGS10
1.61E-79	0	IDS
7.25E-79	0	CUL3
8.56E-79	0	SPTAN1
8.96E-79	0	TNFRSF18
4.05E-78	0	PAK2
6.75E-78	0	ANXA1
7.05E-78	0	GPHN
9.61E-78	0	SLC7A6
4.50E-77	0	LBH
6.67E-77	0	SATB1
8.00E-77	0	CACYBP
1.48E-76	0	EVI2A
4.60E-76	0	CSGALNACT1
5.11E-76	0	EMB
9.35E-76	0	KIAA1109
3.65E-75	0	H2AFV
1.20E-74	0	SC5D
2.04E-74	0	TOB1
3.88E-74	0	TRERF1
9.03E-73	0	ATXN7L1
1.09E-72	0	TECR
4.64E-72	0	ANAPC16
8.54E-72	0	BIRC3
1.99E-71	0	S100A4

3.63E-71	0	UBE2B
1.22E-70	0	SLC9A9
1.46E-70	0	RSRP1
1.71E-70	0	ANP32B
1.15E-69	0	GPR171
1.53E-69	0	RASGRP1
5.21E-69	0	AL499604.1
2.38E-68	0	ELK3
4.07E-68	0	CMSS1
5.06E-68	0	STK38
1.24E-67	0	ICAM2
1.38E-67	0	PACS1
3.28E-67	0	STK24
5.54E-67	0	G3BP2
8.57E-67	0	SLFN5
8.99E-67	0	SOCS1
8.23E-66	0	RUNX2
9.85E-66	0	ADD3
5.29E-65	0	MRFAP1
7.69E-64	0	RFX3
1.01E-63	0	OCIAD2
5.33E-63	0	ACAP1
3.84E-62	0	GSTK1
2.67E-61	0	ESR2
2.71E-61	0	TLE5
5.18E-61	0	PYHIN1
1.50E-60	0	METTL8
2.72E-60	0	TNRC6A
2.81E-60	0	TBC1D15
4.81E-59	0	RASA3
6.55E-59	0	SLAMF1
8.72E-59	0	STAG1
1.46E-58	0	CCDC88C
2.57E-58	0	NDUFS5
3.58E-58	0	MECP2
5.37E-58	0	AC016831.7
3.84E-57	0	CCDC91
1.80E-56	0	PHTF2
2.26E-56	0	LINC01934
3.11E-56	0	SPATA13
5.02E-56	0	EPC2
6.30E-56	0	LMBR1
6.78E-56	0	ARAP2

1.86E-55	0	CRBN
3.12E-55	0	KIF2A
5.82E-55	0	PSIP1
8.43E-55	0	NCOA2
5.48E-54	0	CHURC1
5.95E-54	0	ZNRF2
7.08E-54	0	NKTR
7.48E-54	0	SVIP
1.48E-53	0	PCNX2
2.40E-53	0	JAK3
3.61E-53	0	DCTN6
1.17E-52	0	TTC33
2.90E-52	0	FOXN2
1.15E-51	0	URI1
1.52E-51	0	MZT2A
2.54E-51	0	OGT
3.05E-50	0	CHIC2
3.15E-50	0	TBL1X
5.90E-50	0	CCM2
9.12E-49	0	ZBTB38
9.48E-49	0	UBE2K
2.25E-48	0	PARP8
4.97E-48	0	CCND3
6.11E-48	0	KANSL1
6.89E-48	0	STK39
9.86E-48	0	USP9Y
1.16E-47	0	MBP
1.67E-46	0	TSPYL1
2.84E-46	0	ARFGEF1
3.13E-46	0	BCAS2
3.65E-46	0	ATM
1.82E-45	0	NCOA7
1.10E-44	0	NUP98
1.47E-44	0	NOSIP
5.93E-44	0	CMTM7
6.49E-44	0	FGD3
7.33E-44	0	LRRC8D
1.16E-43	0	CENPC
1.71E-43	0	FILIP1L
2.88E-43	0	RNASET2
5.25E-43	0	RAB11A
6.19E-43	0	YME1L1
1.71E-41	0	UTY

1.74E-41	0	CDV3
5.20E-41	0	BCLAF1
1.82E-40	0	PPP1R10
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7.49E-40	0	SESN1
1.30E-39	0	PRPF38B
1.53E-39	0	MORC3
1.75E-39	0	HNRNPUL1
2.20E-39	0	HECTD1
2.22E-39	0	METTL16
7.20E-39	0	PLIN2
1.04E-38	0	COG5
3.46E-38	0	TBCC
4.99E-38	0	HBP1
8.24E-38	0	KLF3
1.40E-37	0	BCL2
1.68E-37	0	CEP85L
2.00E-37	0	BRD9
1.14E-36	0	OXCT1
2.92E-36	0	RBL2
5.42E-36	0	TSPAN14
7.35E-36	0	RGS1
8.62E-36	0	STT3B
3.24E-35	0	DHX9
3.75E-35	0	SETD2
4.01E-35	0	ANKH
1.54E-34	0	GADD45A
1.59E-34	0	CAMK1D
1.79E-34	0	NR1D2
8.64E-34	0	NLRC5
6.41E-33	0	KLF9
7.41E-33	0	CHD3
1.32E-32	0	IKZF3
2.62E-32	0	ANKRD13C
3.76E-32	0	ARL6IP5
1.93E-31	0	INPP4A
2.24E-31	0	CUTA
3.63E-31	0	SLC25A26
5.51E-31	0	RNF138
5.68E-31	0	POR
2.95E-30	0	LMNA
9.36E-30	0	CITED2
1.05E-29	0	USP36

1.34E-29	0	SBDS
2.57E-29	0	VSIR
2.30E-28	0	IL2RG
5.22E-28	0	TRPS1
6.17E-28	0	PIM2
6.56E-28	0	P2RY8
8.21E-28	0	SLC16A1
2.53E-27	0	DDX3Y
1.19E-26	0	NLRP1
1.88E-26	0	AHR
1.52E-25	0	HDAC4
1.52E-25	0	ISCA1
1.54E-25	0	PPIL4
2.74E-25	0	ZC3H7A
1.34E-24	0	EPSTI1
2.99E-24	0	RFFL
4.68E-24	0	RANBP9
9.45E-24	0	RPRD2
9.93E-24	0	TOX
8.36E-22	0	AEBP2
1.29E-21	0	GRAMD1B
2.29E-21	0	SMARCA2
3.33E-21	0	AKIRIN1
5.76E-21	0	MAN2A1
1.58E-20	0	H2AFZ
3.65E-20	0	PHLDA1
2.35E-19	0	HBS1L
2.69E-19	0	SPG7
6.13E-19	0	IMMP2L
8.66E-19	0	ARHGAP5
1.22E-18	0	PDCL3
3.78E-18	0	AC087286.2
8.35E-18	0	TP53BP2
9.33E-18	0	AC016831.5
1.55E-17	0	ATP9B
4.97E-17	0	PRKAR2A
3.07E-16	0	KAT2B
4.51E-15	0	ZNF609
5.40E-15	0	IRF1
1.47E-14	0	PIBF1
1.97E-14	0	GLUD1
2.30E-14	0	EXOC6B
8.61E-14	0	CAPN7

9.37E-14	0	REEP3
3.82E-12	0	SGK3
5.61E-11	0	ADAM10
9.85E-11	0	NPC1
6.52E-10	0	TGFBR2
3.05E-08	0	RNF168
4.10E-08	0	KLF2
1.90E-07	0	NFE2L3
3.26E-07	0	IFNAR2
3.91E-07	0	CARD16
3.24E-06	0	DNPH1
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0	1	NFATC2
0	1	TGFBR3
0	1	TRBC1
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0	1	ZFYVE28
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0	1	ADGRE5
0	1	PAXX
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0	1	CRIP1
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4.44E-303	1	SAMSN1
1.01E-302	1	RNF125
5.91E-301	1	TNFSF9
1.81E-300	1	ZBED4
2.94E-299	1	SLC38A1
2.40E-295	1	ABLIM1
2.15E-293	1	CKLF
3.76E-292	1	STAT5B
3.37E-289	1	GALM
1.72E-287	1	SIRPG
8.11E-286	1	JAML
1.44E-285	1	TBCD
7.24E-285	1	RALGAPA1
1.02E-284	1	DRAP1
1.89E-279	1	CYTOR
3.17E-279	1	CAMK4
1.09E-278	1	SRSF7
3.43E-277	1	HMGB1
1.58E-275	1	PPP2R5C

8.57E-274	1	GABARAPL1
8.76E-272	1	IL2RG
1.35E-269	1	ATP2B4
6.65E-268	1	PTPRJ
8.59E-267	1	MAPRE2
1.53E-266	1	MYL12B
2.33E-266	1	PTPN4
6.04E-263	1	CFL1
2.99E-261	1	RIN3
1.11E-260	1	CNOT6L
1.77E-259	1	H3F3B
1.74E-256	1	UBB
7.71E-256	1	CD226
4.35E-255	1	TG
2.09E-254	1	CDK17
4.00E-254	1	PRKACB
1.57E-253	1	STOM
4.17E-253	1	MLLT3
1.59E-252	1	LRBA
5.54E-252	1	OPTN
1.63E-251	1	CD52
1.26E-250	1	BCL11B
4.36E-250	1	CEMIP2
5.51E-250	1	PAM
8.11E-250	1	ZAP70
4.73E-249	1	CD81
1.56E-248	1	CXCR6
2.78E-246	1	SLAMF6
1.69E-245	1	GALNT2
2.36E-245	1	MGAT4A
2.00E-244	1	MNAT1
5.85E-242	1	HLA-E
7.55E-242	1	AL137856.1
2.28E-240	1	ISG15
6.91E-240	1	FABP5
2.02E-239	1	BIN2
8.54E-238	1	PSME1
8.70E-238	1	AF165147.1
4.22E-237	1	CLEC2D
3.25E-235	1	HMGB2
3.39E-235	1	MYO1F
1.37E-234	1	CD69
2.33E-233	1	RNF115

2.96E-233	1	CALM1
3.85E-233	1	CLDND1
5.58E-230	1	WNK1
1.38E-228	1	GRAP2
7.15E-227	1	PSTPIP1
9.10E-227	1	FUT8
6.41E-224	1	GAPDH
8.21E-224	1	APOBEC3C
2.16E-223	1	RASAL3
1.30E-222	1	KIF13B
7.45E-221	1	ARAP2
5.63E-220	1	PTPN7
2.90E-219	1	RABAC1
7.82E-219	1	TC2N
1.06E-218	1	CARD11
3.05E-218	1	SPN
1.66E-217	1	DOK2
1.78E-217	1	SPON2
3.84E-217	1	JMJD6
3.10E-213	1	SAMD9
6.25E-210	1	ITGAL
1.35E-209	1	CORO1A
3.63E-209	1	DGKZ
3.74E-209	1	ACAP1
4.50E-207	1	MACF1
8.29E-207	1	TUBA4A
8.33E-206	1	GIMAP1
5.53E-205	1	HERPUD2
5.91E-205	1	CLIC1
4.75E-203	1	KLF13
3.30E-202	1	BTN3A1
5.78E-202	1	GUK1
6.56E-202	1	LDHA
9.80E-202	1	GAS7
3.00E-199	1	DENND2D
1.61E-196	1	RAB5IF
2.76E-196	1	ISG20
5.11E-196	1	IER5L
6.94E-196	1	MPZL3
3.68E-194	1	AHI1
1.34E-193	1	MBNL1
1.63E-193	1	SELPLG
5.74E-193	1	MCOLN2

4.99E-191	1	DOCK8
8.05E-191	1	TBC1D2B
4.76E-190	1	RAC2
1.62E-189	1	PLPP1
5.37E-189	1	CCDC85B
6.75E-187	1	ACTN4
2.30E-185	1	MPHOSPH9
1.75E-184	1	C5orf56
1.66E-183	1	IFI16
2.95E-183	1	OTULIN
4.57E-183	1	TSPAN5
2.67E-182	1	BUB3
6.78E-182	1	IFI44L
1.27E-181	1	RBPJ
3.50E-180	1	ARHGAP9
6.56E-180	1	TNFRSF9
9.04E-180	1	BIN1
1.10E-179	1	TMEM50A
2.81E-179	1	PFN1
1.52E-178	1	PCNX2
1.86E-178	1	IFI6
2.99E-178	1	IQGAP1
8.12E-178	1	PSMA1
9.58E-178	1	SNTB2
4.06E-177	1	SIRT2
4.59E-177	1	GBP2
1.14E-175	1	MFSD6
5.86E-175	1	ARL4C
1.85E-173	1	CCND2
7.67E-173	1	PPP2R5A
1.43E-172	1	DIP2A
7.24E-172	1	B3GNT2
2.61E-171	1	TERF2IP
3.64E-171	1	BRD1
3.93E-168	1	PDCD4
2.96E-167	1	NCOA1
1.39E-165	1	AUTS2
2.18E-163	1	GPR65
6.55E-163	1	NAA50
1.47E-160	1	ARPC5L
3.30E-160	1	CNOT2
5.17E-160	1	ARHGEF1
1.50E-156	1	PCED1B

1.51E-156	1	WHRN
2.77E-155	1	LSP1
3.10E-155	1	RASA2
2.49E-154	1	ABI3
1.10E-153	1	RESF1
1.89E-153	1	SAMD9L
5.97E-153	1	BST2
1.66E-152	1	AKT3
6.65E-152	1	SPATA13
9.66E-152	1	PDE7B
1.77E-151	1	IDH2
3.04E-150	1	PSMB8
4.40E-149	1	IFI44
4.82E-149	1	ARHGEF3
4.87E-149	1	TNFSF10
1.24E-148	1	CD6
1.26E-148	1	AC011476.3
2.02E-147	1	GATA3
2.04E-147	1	ARPC2
5.07E-145	1	GRAMD1B
2.85E-144	1	CASP8
1.83E-143	1	DGKH
1.87E-143	1	HCP5
3.50E-143	1	STK17A
6.25E-142	1	UTRN
2.97E-140	1	CHST11
8.15E-140	1	TSPYL2
1.15E-139	1	PGK1
1.18E-139	1	TBC1D10C
1.97E-139	1	WIPF1
2.50E-139	1	CARS
2.65E-139	1	IKZF1
1.54E-138	1	DDX3X
6.37E-138	1	AAK1
3.84E-137	1	PEX14
1.78E-136	1	LRMP
6.10E-136	1	KANSL1
9.06E-136	1	FAM160B1
1.01E-135	1	PCID2
1.18E-135	1	EIF2AK2
3.17E-134	1	CLASP1
3.50E-134	1	KLRB1
1.40E-133	1	AL627171.2

1.75E-133	1	LBH
1.36E-132	1	UBE2S
1.66E-132	1	HNRNPLL
3.37E-131	1	XAF1
1.14E-130	1	FAM3C
1.05E-129	1	RASGRP1
3.51E-129	1	SPAG1
8.74E-129	1	ARL6IP5
2.46E-127	1	PPP1R12A
1.83E-126	1	SMC4
6.82E-126	1	RAP1B
8.99E-126	1	PPDPF
3.46E-125	1	GIMAP5
4.21E-125	1	SP140
5.95E-125	1	LPIN2
1.02E-124	1	SUN2
2.11E-124	1	APOL6
5.81E-123	1	GPRIN3
6.96E-122	1	LIME1
1.00E-120	1	GLMN
2.81E-120	1	PRKY
3.19E-120	1	H1FX
6.11E-120	1	YARS
1.24E-118	1	SUB1
1.86E-118	1	SMAD7
2.99E-118	1	MAP2K2
7.47E-118	1	PTPRA
1.27E-117	1	ASXL2
1.71E-117	1	DDX24
2.32E-116	1	RNF38
3.00E-113	1	RASA1
3.34E-112	1	STK39
2.21E-111	1	HIST1H3D
2.42E-111	1	EID1
4.01E-111	1	NEU1
7.23E-110	1	LRRC8C
8.53E-110	1	TRANK1
9.13E-110	1	ITM2C
7.17E-109	1	LAX1
1.94E-108	1	IFI27L2
6.78E-108	1	SLC9A3R1
1.78E-107	1	GGA2
8.78E-107	1	PRMT2

1.04E-106	1	SRI
2.72E-106	1	HIST1H1E
4.11E-105	1	CHORDC1
3.36E-104	1	AC008569.1
3.78E-104	1	EIF4A2
4.33E-104	1	FBXO32
1.78E-103	1	VAMP2
1.81E-103	1	MAP4
6.16E-103	1	NDUFS5
1.43E-101	1	KLF12
5.45E-101	1	CDC14A
6.20E-101	1	CREBZF
7.26E-101	1	AHSA1
1.43E-100	1	ENSA
1.47E-100	1	ITPRIP
2.95E-100	1	SEMA4D
5.46E-100	1	PRKCA
6.63E-100	1	MYLIP
3.66E-99	1	RGCC
4.48E-99	1	TMEM181
1.14E-98	1	PRDM1
1.16E-98	1	CD38
9.08E-98	1	DUSP10
9.56E-98	1	UBE2E3
1.27E-97	1	MIER1
5.00E-97	1	DEK
1.15E-95	1	ANKRD13D
2.33E-95	1	LMNB1
4.75E-95	1	TRAPPC10
8.16E-95	1	FAM102B
2.72E-94	1	SPATS2L
2.96E-94	1	RSRP1
1.04E-93	1	TLN1
6.26E-93	1	BHLHE40
2.80E-92	1	RPAP2
4.12E-92	1	SEM1
8.09E-92	1	SURF4
1.66E-91	1	RBCK1
2.13E-91	1	ZCCHC2
4.13E-91	1	IL21R
6.15E-91	1	SERTAD1
9.02E-91	1	SNRNPB
9.51E-91	1	SHISA5

4.14E-90	1	DHRS7
4.91E-90	1	NCOR1
2.29E-89	1	PARK7
9.44E-89	1	CDC42EP3
2.83E-88	1	NFIL3
1.27E-87	1	LAT
3.56E-86	1	SSBP4
7.76E-86	1	TMX4
8.63E-86	1	VAV3
2.97E-85	1	XRN1
3.03E-85	1	RUNX2
3.75E-85	1	SEPTIN1
4.64E-85	1	HIBCH
1.42E-84	1	PRDX6
2.46E-84	1	TAF7
4.55E-84	1	PTP4A2
7.41E-84	1	NFATC3
1.35E-83	1	PREP
9.00E-83	1	CMC2
9.41E-83	1	CDK6
1.31E-82	1	CEP85L
4.30E-82	1	DDX58
4.43E-81	1	MAPK1
2.60E-80	1	AC044849.1
3.28E-80	1	NCOA7
3.36E-80	1	CD2BP2
3.61E-80	1	ITGB2
7.94E-80	1	NUDC
1.05E-79	1	RGS2
1.93E-79	1	ZNRF1
4.86E-79	1	TRPC4AP
5.04E-79	1	SGMS1
1.66E-78	1	SPTAN1
2.38E-78	1	REEP5
2.87E-78	1	HERC5
9.23E-78	1	HMGN4
1.71E-77	1	CD27
2.02E-77	1	SYNRG
2.34E-77	1	WDR83OS
2.68E-77	1	ZNF83
1.12E-76	1	RGS1
1.47E-76	1	C21orf91
4.22E-76	1	SF3B5

6.54E-76	1	IFI35
7.41E-76	1	CASP3
8.70E-76	1	TAF15
1.98E-75	1	NAB1
2.80E-75	1	TAX1BP1
1.35E-74	1	USP25
1.59E-74	1	FAM177A1
1.74E-74	1	CITED2
2.19E-74	1	UBR2
5.87E-74	1	ARF6
7.74E-74	1	POLR2A
1.03E-73	1	BLOC1S1
4.97E-73	1	FGD3
8.30E-73	1	PSME4
1.65E-72	1	CHIC2
4.08E-72	1	TSC22D1
8.37E-72	1	HP1BP3
1.42E-71	1	TBL1XR1
1.93E-71	1	UBE2L6
3.19E-71	1	RFC1
5.30E-71	1	PMF1
1.10E-70	1	KIF2A
1.19E-70	1	YWHAQ
2.16E-70	1	TAP1
3.29E-70	1	RBL2
9.81E-70	1	PGAM1
1.08E-69	1	BZW1
4.38E-69	1	DIAPH1
6.98E-69	1	RSBN1L
8.15E-69	1	GLS
1.10E-68	1	NUCB2
1.22E-68	1	H2AFX
1.52E-68	1	CDC42SE1
1.90E-68	1	CDK2AP2
5.71E-68	1	GPATCH8
5.75E-68	1	LSM2
2.16E-67	1	SLC38A2
2.29E-67	1	PLP2
3.63E-67	1	SLC4A7
4.02E-67	1	PSMB10
5.00E-67	1	TENT4B
1.11E-66	1	PLEKHA2
2.32E-66	1	S1PR4

2.48E-65	1	ABHD17B
2.81E-65	1	CORO7
1.94E-64	1	FLNA
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5.79E-64	1	RC3H1
6.85E-64	1	LINC00623
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1.19E-63	1	ABL1
1.30E-63	1	SRSF2
2.85E-63	1	TFDP2
5.59E-63	1	CACYBP
1.41E-62	1	POLR2K
1.49E-62	1	SMURF2
1.68E-62	1	R3HDM1
1.76E-62	1	MX1
2.07E-62	1	STAT5A
4.63E-62	1	MXD4
1.94E-61	1	IGF2R
6.22E-61	1	KDM5A
6.76E-61	1	PSMA5
5.43E-60	1	TRAF5
7.95E-60	1	NUB1
7.02E-59	1	HIST2H2AC
7.75E-59	1	AC068587.4
7.77E-59	1	TRIM22
8.28E-59	1	CD84
1.24E-58	1	EPS15
1.91E-58	1	HMOX2
5.64E-58	1	FRYL
9.43E-58	1	BUD31
1.05E-57	1	TIAM2
6.08E-57	1	KIAA0319L
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1.22E-56	1	SELENOI
2.13E-56	1	RFX7
3.03E-56	1	NMRK1
6.00E-56	1	ZMYND11
7.71E-56	1	DYNLL1
1.59E-55	1	STIP1
2.74E-55	1	CHMP4A
7.00E-55	1	CAB39
5.42E-54	1	CCT4

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9.89E-53	1	ZDHHC20
2.99E-52	1	LNPEP
4.27E-52	1	DR1
5.09E-52	1	PRPF4B
1.86E-51	1	ZNF217
8.99E-51	1	UBE2A
3.58E-50	1	CSNK1G3
5.94E-50	1	ITGB1
1.73E-49	1	IRF9
2.78E-49	1	SUCLG2
3.94E-49	1	NUTM2B-AS1
5.82E-49	1	SEPTIN11
2.63E-48	1	OAT
6.04E-48	1	ANP32E
7.05E-48	1	USP33
7.40E-48	1	ADAR
1.21E-47	1	TTN
2.02E-47	1	MACO1
8.36E-47	1	USP11
1.00E-46	1	STIM1
4.46E-46	1	GNPTAB
3.74E-45	1	MBD5
5.84E-45	1	PPP6R2
1.01E-43	1	ETNK1
2.89E-43	1	RNF166
7.35E-43	1	RASSF1
1.71E-41	1	PPP3CC
1.76E-40	1	MORF4L2
1.02E-38	1	INTS6L
2.05E-37	1	RASA3
3.10E-37	1	LRIF1
8.07E-36	1	HIST1H1D
8.89E-36	1	BAG3
4.86E-35	1	CBX4
5.00E-35	1	TPP2
2.04E-34	1	ABHD3
5.10E-34	1	TRIM26
4.70E-33	1	OSBPL3
6.91E-31	1	ENTPD1-AS1
1.92E-27	1	INPP5F
4.92E-26	1	TGFB1
1.31E-25	1	RHOB

3.27E-23	1	ZFAND2A
2.01E-20	1	GOLGA4
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2.59E-301	2	PXK
2.88E-301	2	RNF144B
5.06E-300	2	FOXP1
1.22E-298	2	OSER1
1.64E-298	2	XYLT1
5.61E-298	2	RABEP1
7.56E-297	2	CARD11
2.15E-296	2	KDM4C

3.17E-296	2	GNA13
1.20E-295	2	TAPT1
3.60E-294	2	SF1
9.18E-294	2	LAT2
2.91E-293	2	MCTP2
3.24E-293	2	MTFR1
5.36E-293	2	SYPL1
1.28E-291	2	PWP1
1.55E-291	2	CD2AP
2.12E-288	2	PTMA
8.04E-286	2	APPL1
4.76E-284	2	MAP3K1
3.02E-283	2	LTB
6.44E-283	2	EIF4G3
8.17E-282	2	SMC6
8.28E-281	2	FAM13B
2.05E-280	2	EIF3E
2.06E-279	2	RNMT
4.87E-278	2	CIITA
1.59E-274	2	TRIM44
1.46E-273	2	CMTM6
1.99E-273	2	DENND3
2.86E-273	2	PILRB
3.46E-272	2	TNRC6B
5.15E-272	2	RAB11A
8.34E-272	2	C7orf50
4.53E-271	2	ZCCHC10
2.48E-269	2	FCGR2B
2.58E-269	2	MTMR6
1.24E-268	2	AGPAT5
3.99E-268	2	LRRFIP1
1.55E-267	2	BBX
5.27E-267	2	SP140L
2.27E-266	2	SIPA1
5.70E-266	2	RIC3
3.55E-264	2	FILIP1L
6.82E-264	2	EAF2
2.01E-261	2	RHBDD1
5.24E-261	2	RBM26
6.17E-261	2	ILRUN
3.06E-260	2	SSBP2
6.42E-260	2	MDM4
8.55E-260	2	ZNF107

1.14E-258	2	MTPN
1.41E-258	2	TGFBR2
4.35E-258	2	HIF1A
1.97E-256	2	STX5
2.05E-254	2	CEP170
5.82E-252	2	CHD9
1.27E-251	2	SNHG7
1.89E-251	2	ELF1
2.18E-251	2	CD48
6.13E-251	2	LIMD2
1.19E-250	2	LMBRD1
1.98E-250	2	TRAF5
4.72E-250	2	PABPC1
3.68E-248	2	ZNF141
6.98E-246	2	SLC12A6
8.50E-245	2	DTNBP1
2.33E-244	2	SMDT1
1.09E-243	2	GAB2
4.08E-243	2	IMMP2L
4.99E-243	2	ELL2
2.00E-241	2	ELMO1
9.48E-240	2	BTBD9
3.81E-235	2	ATP2B1
6.40E-235	2	ERGIC1
1.98E-234	2	TCOF1
2.64E-234	2	BOD1L1
2.97E-234	2	CD69
3.31E-232	2	TPK1
4.72E-232	2	NFATC1
6.93E-232	2	PARP14
8.18E-232	2	ADD3
3.03E-230	2	STAT6
3.16E-230	2	PALM2-AKAP2
9.89E-230	2	SLC37A1
2.10E-228	2	EEF1D
4.46E-226	2	AP1S3
2.18E-225	2	TXNIP
1.14E-222	2	TBC1D9
1.54E-222	2	SNU13
2.98E-222	2	NR3C2
7.05E-222	2	RAB3GAP1
3.74E-221	2	STK17A
5.41E-221	2	CNTRL

1.25E-219	2	USP12
9.53E-219	2	PMEPA1
2.47E-218	2	USP24
1.23E-216	2	PRKD3
8.84E-216	2	SP110
1.31E-214	2	TP53INP1
4.60E-213	2	ZBTB20
1.09E-212	2	SERP1
1.08E-211	2	MAP3K8
5.67E-211	2	NFX1
8.26E-209	2	MAN1A1
1.52E-208	2	PIK3AP1
6.53E-208	2	AC004687.1
1.23E-207	2	IL13RA1
1.28E-207	2	AGO2
1.42E-206	2	MOB3A
3.14E-206	2	KLF7
4.15E-206	2	ZFP36L2
1.20E-204	2	EVI5
3.93E-202	2	TMEM62
3.64E-201	2	MFSD4B
5.94E-201	2	USPL1
4.48E-200	2	CALHM6
6.76E-200	2	RGS19
4.59E-197	2	PACS1
5.93E-197	2	TAF4B
4.60E-195	2	UXT
5.52E-194	2	RBM39
5.63E-194	2	PDE8A
1.27E-192	2	FNIP1
8.98E-192	2	AL035634.1
2.04E-191	2	C9orf72
3.55E-191	2	CCDC6
5.26E-191	2	DYRK1A
4.29E-189	2	STX17-AS1
9.37E-189	2	DLEU1
1.77E-188	2	PIK3CA
3.06E-188	2	SNHG29
1.80E-186	2	PELI2
3.02E-186	2	SIK3
5.24E-186	2	NR4A3
4.16E-185	2	SPOPL
5.73E-185	2	RBM6

1.10E-183	2	EBLN3P
2.55E-183	2	UTY
1.47E-182	2	SAMD4A
1.67E-182	2	SLC25A6
2.46E-182	2	CCDC93
4.82E-182	2	ARPC3
9.04E-182	2	NSD3
1.10E-181	2	SMC5
1.20E-181	2	AFF4
2.06E-181	2	SRPK2
3.26E-181	2	DDX17
1.19E-179	2	3-Mar
3.96E-179	2	BIRC3
9.39E-178	2	KLF3
1.08E-177	2	PUM2
1.20E-176	2	SYNGR2
1.85E-176	2	ATL2
1.96E-176	2	SEPTIN7
2.22E-176	2	GIT2
5.70E-176	2	SNX3
6.23E-176	2	POLD4
6.47E-176	2	SRGAP2
1.56E-175	2	PAK1
2.05E-175	2	MARCKSL1
4.28E-175	2	LINC01473
6.12E-174	2	SIRT1
1.99E-173	2	HCG18
2.31E-173	2	EIF1B
3.19E-173	2	ARL4A
9.19E-173	2	GNPTAB
1.17E-172	2	SETX
2.88E-172	2	GOT1
2.89E-172	2	RHOQ
6.90E-172	2	FYTDD1
1.25E-171	2	PPP4R3A
1.85E-171	2	WDR43
3.79E-171	2	CHCHD10
1.48E-170	2	RNF138
1.03E-169	2	PPM1K
1.78E-169	2	KLHL24
2.67E-169	2	NRIP1
4.72E-169	2	AMZ1
1.24E-168	2	RHBDF2

2.56E-168	2	AC104365.1
6.34E-167	2	MBNL2
1.40E-166	2	ABCB1
6.10E-166	2	TMEM154
2.22E-165	2	ZNF506
3.17E-165	2	PEAK1
9.56E-165	2	RPA2
2.24E-164	2	SREBF2
5.04E-163	2	TOMM7
1.34E-162	2	AC008014.1
1.67E-162	2	AC092120.3
1.92E-162	2	ATF7IP
7.05E-161	2	CASD1
2.29E-160	2	SEC62
1.81E-159	2	BANP
2.34E-158	2	TBC1D1
3.61E-158	2	LRCH1
4.86E-158	2	RCN2
1.09E-157	2	CDK13
2.39E-157	2	CYFIP2
1.73E-156	2	COMMD10
4.44E-156	2	CD47
1.29E-155	2	SCAF11
3.12E-155	2	FAM214A
5.15E-154	2	RAD51B
7.30E-154	2	UPF2
8.77E-154	2	MECP2
1.24E-153	2	IL4R
3.96E-153	2	PPP3CA
1.46E-152	2	MFN1
6.07E-152	2	AC007384.1
1.65E-151	2	STK4
1.67E-151	2	EIF4B
2.13E-151	2	MIR29B2CHG
5.06E-151	2	TMEM117
9.25E-151	2	OOEP
7.53E-150	2	MTMR1
2.99E-149	2	SIK2
4.66E-149	2	CLASP2
6.19E-148	2	TENT2
9.07E-148	2	SNHG8
3.76E-147	2	PIAS1
1.18E-146	2	RABGAP1

2.36E-146	2	GRB2
2.74E-146	2	CHD1
1.63E-144	2	DDX27
2.36E-144	2	IDI1
2.94E-143	2	CNPY3
3.11E-143	2	DIP2B
4.29E-143	2	LAPTM4A
4.55E-143	2	USF3
2.04E-141	2	BTF3
6.95E-141	2	LINC-PINT
2.46E-139	2	STAG1
1.41E-138	2	AL050309.1
3.43E-138	2	EIF2S3
5.84E-138	2	HIF1A-AS3
8.37E-138	2	SLC38A1
1.09E-137	2	DCK
1.13E-137	2	CDYL
1.15E-136	2	RILPL2
4.77E-136	2	USP9Y
1.00E-135	2	RBFOX2
1.07E-135	2	SPIDR
1.91E-135	2	EIF3L
3.78E-135	2	PPARD
1.54E-134	2	ARIH1
1.59E-134	2	EPB41L4A-AS1
2.04E-134	2	ATP1B3
6.99E-133	2	ZNF148
3.16E-132	2	GDI2
6.53E-132	2	ZSWIM6
2.14E-131	2	CCNY
2.84E-131	2	AIDA
3.37E-131	2	ERP29
6.90E-131	2	MYCBP2-AS1
5.88E-130	2	ZFP36L1
2.54E-129	2	MGMT
2.81E-129	2	CSNK1D
4.41E-129	2	CD53
5.23E-129	2	GLO1
2.09E-128	2	MOB1A
4.18E-128	2	MED30
4.31E-128	2	RARA
4.80E-128	2	PHKB
3.49E-127	2	SH3BGRL

4.25E-127	2	PUM1
7.07E-127	2	AC245297.3
9.76E-127	2	TCEA1
1.51E-126	2	ITPR2
2.41E-126	2	ZNF644
5.78E-126	2	BICD1
8.81E-126	2	SENP6
2.73E-125	2	NRF1
2.95E-125	2	CYTIP
3.08E-125	2	FBXW11
1.02E-124	2	IFNGR2
1.06E-123	2	SBNO1
1.15E-123	2	SMARCB1
1.39E-123	2	KAT6A
2.96E-123	2	USP36
1.09E-122	2	PPIG
1.78E-122	2	SEPTIN9
2.13E-122	2	RSL24D1
2.70E-122	2	SYS1
4.28E-122	2	TASP1
1.05E-121	2	LPGAT1
1.93E-121	2	FAM76B
2.58E-121	2	TRAF3
9.33E-121	2	RUFY1
1.61E-120	2	MED13L
3.57E-120	2	SS18
6.98E-119	2	ZFAND6
8.24E-119	2	PARP1
1.37E-118	2	WIPF2
1.39E-117	2	RRP15
2.09E-117	2	ZNF721
3.66E-117	2	FBXO11
5.58E-117	2	SCAPER
4.00E-116	2	PCGF5
5.38E-116	2	HNRNPK
1.61E-115	2	TGFBR1
1.66E-115	2	ARHGEF7
2.39E-115	2	EIF3D
5.35E-115	2	FAM133B
6.85E-115	2	ATF6
1.57E-114	2	HTT
2.76E-114	2	NIPBL
3.11E-114	2	CD164

8.80E-114	2	TRA2A
1.03E-112	2	RAB11FIP1
6.44E-112	2	PPP6R3
1.36E-111	2	SELENOO
2.59E-111	2	SLBP
4.81E-111	2	DBNL
5.39E-111	2	FBL
5.61E-111	2	DOCK2
9.71E-111	2	HNRNPA1
4.51E-110	2	EIF3F
5.86E-110	2	6-Mar
9.83E-110	2	SETD2
1.80E-109	2	SCFD2
2.88E-109	2	CKAP2
7.16E-109	2	SASH3
7.27E-109	2	EPC2
1.83E-108	2	NUP153
4.77E-108	2	CLCN3
3.91E-107	2	OFD1
4.23E-107	2	CDK19
1.29E-106	2	CYSTM1
5.01E-106	2	INO80
1.96E-105	2	CREBBP
7.98E-105	2	PLEKHM2
2.18E-104	2	DOCK11
2.20E-104	2	LARP4B
4.23E-104	2	KPNA5
1.48E-103	2	COP1
1.48E-103	2	WDPCP
1.96E-103	2	MTREX
2.17E-103	2	FAM3C
3.29E-103	2	PHF3
4.25E-103	2	BRD4
6.66E-103	2	DDIT3
1.09E-102	2	RCOR1
2.65E-102	2	TGIF1
3.30E-102	2	SETD5
3.35E-102	2	CYB5R4
3.78E-102	2	SHOC2
2.49E-101	2	SLC25A33
2.63E-101	2	XKR6
6.46E-101	2	CWF19L2
4.02E-100	2	NEK1

5.42E-100	2	AC092821.3
7.71E-100	2	SELENOF
8.12E-100	2	GTPBP1
1.33E-99	2	USP9X
2.98E-98	2	ZMYM2
3.74E-98	2	AC025164.1
5.27E-98	2	MIS18BP1
5.49E-98	2	SCPEP1
8.41E-97	2	WDR74
8.95E-97	2	MKNK2
9.96E-97	2	NSA2
1.13E-96	2	CACUL1
1.50E-96	2	CUL3
2.02E-96	2	MCPH1
3.34E-96	2	LRRC41
4.85E-96	2	EIF3H
6.28E-96	2	CMTM7
1.64E-95	2	WAC
9.41E-94	2	RNPS1
1.78E-93	2	HNRNPD
2.06E-93	2	HMGN1
3.33E-93	2	MAPK1IP1L
4.57E-93	2	GPBP1
4.63E-93	2	DDX10
5.30E-93	2	HEXA
1.75E-92	2	SLC35F5
3.02E-92	2	MAP3K2
6.57E-92	2	ZBTB44
1.05E-91	2	SNX10
1.08E-91	2	ZNF791
1.71E-91	2	SDE2
1.76E-91	2	KIAA0355
2.23E-91	2	PTBP2
4.21E-91	2	CIRBP
1.21E-90	2	CCNI
1.74E-90	2	GTF2F2
2.58E-90	2	NAA15
4.59E-90	2	PHF10
3.07E-89	2	HPS5
3.68E-89	2	LAMTOR5
3.71E-88	2	CNOT4
2.89E-87	2	ABCB7
7.48E-87	2	LRPPRC

8.74E-87	2	MGA
9.81E-87	2	SLC35D1
1.30E-86	2	ZFY
3.06E-86	2	SINHCAF
1.18E-85	2	PPP4R3B
1.73E-85	2	RAB8B
2.22E-85	2	ATM
3.78E-85	2	LINC02245
5.61E-85	2	AC118549.1
1.37E-84	2	KPNB1
1.47E-84	2	MON2
3.02E-84	2	NSF
3.68E-84	2	UQCRH
1.07E-83	2	PTDSS1
1.75E-83	2	SECISBP2L
2.01E-83	2	FER
7.69E-83	2	RSF1
1.20E-82	2	RFX3
3.11E-82	2	TNPO1
8.36E-82	2	MALT1
2.61E-81	2	COMMD6
3.20E-81	2	MICU2
3.51E-81	2	TET3
3.76E-81	2	OSGEP
4.28E-81	2	AC068282.1
1.21E-80	2	IQCB1
3.15E-80	2	TRPM7
4.63E-80	2	TCERG1
6.28E-80	2	HNRNPDL
9.33E-80	2	ZFAND3
1.10E-79	2	UCP2
1.17E-79	2	SET
3.51E-79	2	WWP2
5.26E-79	2	ZNF652
9.34E-79	2	ARHGAP5
1.87E-78	2	UIMC1
2.00E-78	2	MDN1
5.75E-78	2	EDEM1
1.13E-77	2	ANKRD17
6.34E-77	2	THRAP3
1.05E-76	2	TSC22D2
1.39E-76	2	TASOR2
2.77E-76	2	SCAF8

4.74E-76	2	NIPA2
5.66E-76	2	ITCH
6.34E-76	2	LCOR
2.62E-75	2	SRSF10
2.94E-75	2	GTF2H1
4.98E-75	2	MAP4K3
6.96E-75	2	APP
1.81E-74	2	CYP51A1
1.97E-74	2	UTP6
2.88E-74	2	LINC01004
5.60E-74	2	SNHG14
2.09E-73	2	LUC7L3
6.63E-73	2	ATR
1.78E-72	2	RSL1D1
2.44E-72	2	PRCP
3.06E-72	2	SEC24B
4.71E-72	2	TTC27
5.36E-72	2	SECISBP2
8.75E-72	2	PLEKHF2
9.88E-72	2	CCNT1
1.05E-71	2	BCL2
2.23E-71	2	CBFB
5.90E-71	2	POGZ
6.41E-71	2	NUP214
9.48E-71	2	RBM3
4.48E-70	2	GALNT1
1.46E-69	2	ZNF33A
1.69E-69	2	ZDHHC17
3.28E-69	2	DYM
9.78E-69	2	ACAP2
4.41E-68	2	NEMF
2.41E-67	2	RBBP8
6.83E-67	2	HOMER1
8.15E-67	2	HSH2D
2.72E-66	2	PCNX4
2.94E-66	2	SELENOH
7.59E-66	2	ELMSAN1
1.22E-65	2	CHCHD3
1.24E-65	2	GATAD2B
1.35E-65	2	BLOC1S2
1.73E-65	2	MAP4K5
1.84E-65	2	SMARCA2
4.27E-65	2	RC3H1

5.20E-65	2	SENP5
8.07E-65	2	ADPGK
2.07E-64	2	MTF2
2.61E-64	2	NDUFAF6
9.61E-64	2	PRRC2B
4.18E-63	2	SLC16A7
5.85E-63	2	PCF11
6.51E-63	2	SLC25A32
7.75E-63	2	BDP1
8.07E-63	2	ZNF431
1.82E-62	2	R3HDM2
3.96E-62	2	TXNRD1
4.10E-62	2	LRCH3
1.63E-61	2	SAFB
2.20E-61	2	LPIN1
2.56E-61	2	AFTPH
6.86E-61	2	COPA
7.83E-61	2	DHX15
1.15E-60	2	PARVG
1.23E-60	2	MYO1E
1.92E-60	2	VPS51
6.33E-60	2	NR1H2
7.16E-60	2	OIP5-AS1
9.09E-60	2	CCDC32
4.10E-59	2	RYK
4.22E-59	2	OXR1
4.78E-59	2	TFAM
6.12E-59	2	TTC7A
3.22E-57	2	VEGFB
7.17E-57	2	PDS5A
1.82E-56	2	TTC37
7.90E-56	2	ERBIN
9.75E-56	2	CDC40
1.58E-55	2	MAD1L1
1.60E-55	2	MARF1
1.61E-55	2	PKN2
4.77E-55	2	USP11
2.04E-54	2	ERC1
2.36E-54	2	SLC36A4
2.48E-54	2	UMAD1
8.14E-54	2	EEA1
8.44E-54	2	TTC17
9.20E-54	2	RAPGEF1

1.09E-53	2	ATAD2B
3.12E-53	2	MAGT1
3.95E-53	2	ESF1
6.64E-53	2	GTF2I
8.66E-53	2	CRCP
9.33E-52	2	SOS2
2.62E-51	2	INTS4
3.10E-51	2	MAPK8
3.20E-51	2	BMPR2
1.09E-50	2	SNX5
1.47E-50	2	THUMPD3-AS1
3.86E-50	2	PLEKHO1
6.95E-50	2	DCP1A
7.81E-50	2	UBE3A
1.56E-49	2	TLK2
1.15E-47	2	TMF1
1.25E-47	2	TAF3
4.29E-47	2	WDR70
5.43E-47	2	GTF2E2
7.05E-47	2	PPP1CB
8.97E-47	2	PLCL2
2.43E-46	2	THEMIS2
1.24E-45	2	HMBOX1
2.24E-45	2	ARL5A
4.08E-45	2	CCDC107
5.82E-45	2	NBDY
1.55E-44	2	ADIPOR2
2.05E-44	2	NFYC
1.41E-43	2	MBD4
1.42E-43	2	RREB1
1.55E-43	2	FBXL17
2.51E-43	2	UBE2E1
8.07E-43	2	EIF2A
8.19E-43	2	ARHGAP25
9.77E-43	2	ZDHHC14
1.23E-42	2	CEP57
1.26E-42	2	ULK4
2.25E-42	2	ABHD17B
4.24E-42	2	CERT1
1.49E-41	2	SPOP
1.80E-41	2	FOXJ3
3.42E-41	2	CUL5
5.30E-41	2	KLHL6

6.19E-41	2	NR2C2
6.47E-41	2	PUM3
6.57E-41	2	SPEN
9.90E-41	2	FBXO34
1.48E-40	2	RSRC1
2.25E-40	2	PRKRIP1
8.10E-40	2	KCMF1
1.11E-39	2	KPNA1
1.22E-39	2	PMM2
3.64E-39	2	RNGTT
1.77E-38	2	SDCCAG8
2.90E-38	2	VTA1
3.54E-38	2	VRK2
5.31E-38	2	DCTN4
6.89E-38	2	DIAPH2
8.67E-37	2	AP3B1
1.08E-36	2	C1GALT1
2.62E-36	2	ANKRD37
2.62E-36	2	FMNL1
5.11E-36	2	CDC27
6.58E-36	2	HIPK3
3.33E-35	2	MYO9A
4.18E-34	2	SMG1
5.56E-33	2	SLC24A1
9.70E-33	2	FBXO33
4.36E-32	2	CDC37
5.85E-31	2	SIAH2
8.96E-31	2	LCORL
9.27E-31	2	ZMYM4
7.12E-30	2	VPS41
2.35E-28	2	AFF1
3.60E-27	2	CDK11B
3.60E-25	2	ELP4
6.82E-24	2	HIPK2
8.44E-20	2	MYO1D
9.66E-17	2	PBX3
3.25E-15	2	WWOX
7.70E-13	2	GLA
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0	3	IL2RA
0	3	IKZF2
0	3	IL12RB2

0	3	TNFRSF18
0	3	PLCL1
0	3	FAAH2
0	3	CTLA4
0	3	BATF
0	3	LINC02694
0	3	RTKN2
0	3	LINC02099
0	3	ICOS
0	3	PHACTR2
0	3	AC093865.1
0	3	MAST4
0	3	LDLRAD4
0	3	TBC1D4
0	3	STAM
0	3	IL32
0	3	CRADD
0	3	THADA
0	3	TNIK
0	3	DUSP16
0	3	CADM1
0	3	TIGIT
0	3	NIBAN1
0	3	MAP3K5
0	3	GCNT1
0	3	LAIR2
0	3	RORA
0	3	TSPAN5
0	3	SKAP1
0	3	CD247
0	3	ICA1
0	3	GLCCI1
0	3	EPST11
0	3	FOXP3
0	3	ZEB1
0	3	ZC3H12D
0	3	CARD16
0	3	HPGD
0	3	DUSP4
0	3	GPHN
0	3	MAGEH1
0	3	TRAF3
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0	3	F5
0	3	LY75
0	3	CDK6
0	3	PMAIP1
0	3	MAF
0	3	TTC39C
0	3	SPOCK2
0	3	PCBP3
0	3	TSHZ2
0	3	CASK
0	3	USP47
0	3	FOXO1
0	3	IL1R1
0	3	ZNF831
0	3	GADD45A
0	3	PHTF2
0	3	CD2
0	3	MIR4435-2HG
0	3	LTB
0	3	HERC1
0	3	FANK1
0	3	ABCC1
0	3	GPRIN3
0	3	GBP5
0	3	TOX2
0	3	NCOA2
0	3	FAM184A
0	3	PTPRJ
0	3	S100A4
0	3	NETO2
0	3	PBXIP1
0	3	FYN
0	3	CRY1
0	3	SLAMF1
0	3	IL6ST
0	3	HNRNPLL

0	3	PBX4
0	3	NOP58
0	3	ARID5B
0	3	SAMHD1
0	3	CEP120
0	3	TRAC
0	3	TLK1
0	3	CNST
0	3	GK
0	3	IPCEF1
0	3	RAPGEF6
0	3	FAS
0	3	SPATS2L
0	3	ZNRF2
0	3	SYNE2
0	3	AC013652.1
0	3	CAMK4
0	3	PKIA
0	3	HS3ST3B1
0	3	RHBDD2
0	3	CCR6
0	3	MRPL1
0	3	DOCK10
0	3	ZNF292
0	3	ZC3H12C
0	3	TOX
0	3	PVT1
0	3	CORO1B
0	3	ZBTB38
0	3	DNPH1
0	3	CD7
0	3	ZC3H7A
0	3	VPS54
0	3	KLHL2
0	3	CYTOR
0	3	RASGRP1
0	3	TAB2
0	3	GBP2
0	3	IL18R1
0	3	APBB1IP
0	3	SNX9
0	3	USP15
0	3	GATA3

0	3	USP48
0	3	MFHAS1
0	3	CAST
0	3	NPC1
0	3	ETS1
0	3	RORA-AS1
0	3	NDUFV2
0	3	CD27
0	3	CLEC2D
0	3	UHRF2
0	3	JMY
0	3	TRBC2
0	3	AC104850.2
0	3	NAB1
0	3	NCK2
0	3	PAM
0	3	AAK1
0	3	FYB1
0	3	CNOT6L
0	3	MSI2
0	3	MCF2L2
0	3	SOD1
0	3	BIRC3
0	3	CD4
0	3	AC017002.5
0	3	PHLDA1
0	3	CXCR6
0	3	SETD7
0	3	ASXL1
0	3	JAK1
0	3	IL21R
0	3	COX10-AS1
0	3	BCL11B
0	3	CUL3
0	3	ZNRF1
0	3	EPC1
0	3	NAP1L4
0	3	PRKCH
0	3	TMEM173
0	3	AC010609.1
0	3	IL2RB
0	3	PARD6G
0	3	STK17B

0	3	PAK2
0	3	CDC14A
0	3	METTTL8
0	3	ARNTL
0	3	ZNF282
0	3	COX10
0	3	PELI1
0	3	HTATIP2
0	3	RCAN3
0	3	STAT4
0	3	LINC02195
0	3	ADAT2
0	3	IL7
0	3	BICDL1
0	3	IRS2
0	3	TNFRSF25
0	3	PTPRC
0	3	IL7R
0	3	AL121935.1
0	3	LAPTM4B
0	3	CHST7
0	3	CD3D
0	3	LRRC37B
0	3	OPRM1
0	3	CCR4
0	3	LCK
0	3	CUL9
0	3	CD3E
0	3	SIRPG
3.62E-302	3	P2RY10
2.22E-300	3	PRDM1
4.44E-298	3	STAT3
2.72E-297	3	CSGALNACT2
1.44E-296	3	ATXN1
1.23E-294	3	LAX1
5.98E-294	3	AL121933.2
6.48E-294	3	MALT1
8.61E-293	3	LAT
7.65E-291	3	GSPT1
1.96E-290	3	PYHIN1
1.22E-289	3	HLA-A
1.04E-288	3	CASP8
1.14E-288	3	TANK

2.41E-288	3	CACYBP
5.62E-286	3	CCDC66
6.42E-286	3	LMTK2
1.10E-285	3	BTG3
2.34E-285	3	TIAM1
2.66E-285	3	LEF1
1.23E-284	3	DDHD1
1.44E-283	3	ANKRD12
2.48E-282	3	STAT5B
2.46E-280	3	GLRX
2.50E-279	3	PPM1G
1.17E-278	3	IL2RG
4.37E-278	3	RAP1A
1.24E-275	3	RGS1
7.65E-275	3	CCDC141
1.00E-273	3	TRBC1
1.27E-273	3	SH2D2A
7.87E-273	3	HERC5
7.74E-272	3	PRKCQ
1.02E-270	3	SGPP2
1.32E-268	3	NDFIP2
2.58E-267	3	RDX
3.47E-263	3	KAT2B
4.87E-262	3	MBNL1
4.25E-261	3	TMEM245
2.39E-260	3	CD3G
9.91E-260	3	RYBP
1.88E-259	3	ARID4B
3.72E-258	3	TNFRSF1B
5.97E-257	3	3-Mar
3.28E-255	3	FOXN3
4.15E-254	3	CABLES1
1.08E-252	3	EIF3J
2.66E-252	3	FRMD4B
8.00E-251	3	ARHGEF12
1.40E-250	3	OXNAD1
2.16E-250	3	PPP1R16B
2.08E-249	3	RAB11FIP1
8.02E-249	3	NCALD
1.49E-248	3	GPCPD1
2.53E-248	3	MLLT3
3.79E-248	3	LINC00513
2.09E-246	3	CLIP1

4.66E-244	3	RNF19A
1.02E-243	3	OPTN
9.73E-243	3	LRBA
5.56E-242	3	UXS1
6.30E-242	3	BACH1
1.78E-241	3	GNG2
2.02E-241	3	LIMA1
2.17E-239	3	FAM122C
3.96E-238	3	CREM
6.39E-238	3	ATP13A3
7.41E-238	3	DGKE
2.78E-235	3	JAZF1
1.02E-234	3	CDKN1B
2.48E-234	3	BCL2
2.86E-233	3	CEP128
5.00E-233	3	TTN
6.65E-233	3	VDR
1.39E-232	3	CCNG2
1.70E-231	3	PGAP1
1.02E-230	3	AF165147.1
6.99E-230	3	G3BP2
1.08E-229	3	ADAM10
2.51E-229	3	CD5
3.15E-229	3	SH2D1A
5.61E-229	3	MAP3K1
1.45E-226	3	AHR
2.82E-226	3	SLA
8.21E-224	3	LINC01578
6.08E-223	3	SLC16A1
5.05E-222	3	MICAL2
8.37E-221	3	CTSC
3.73E-220	3	YIPF6
6.57E-220	3	ACOT9
8.73E-219	3	CSNK1G3
2.11E-217	3	PTPN22
2.17E-216	3	TNFAIP3
2.43E-216	3	TNRC6A
9.38E-215	3	TUT7
2.30E-213	3	ITM2A
4.38E-213	3	CDC42SE2
1.32E-212	3	AC009313.1
3.93E-212	3	SH3KBP1
6.43E-211	3	NR3C1

1.42E-209	3	TRIM59
5.60E-209	3	STK24
8.13E-209	3	PTTG1
1.02E-207	3	CCND2
1.26E-207	3	MBOAT1
3.13E-207	3	CALM3
1.85E-206	3	CFAP20
1.95E-206	3	CD58
3.81E-206	3	IFNAR2
9.54E-206	3	ARL6IP5
9.55E-206	3	LINC00649
2.20E-205	3	CBLB
2.85E-205	3	LEPROTL1
1.85E-204	3	SGMS1
2.51E-204	3	FLNB
1.13E-202	3	VAV3
1.13E-202	3	TRPS1
1.36E-202	3	EIF4E3
2.48E-202	3	MDFIC
2.57E-202	3	AC016831.7
4.53E-202	3	YWHAB
6.10E-202	3	UBE2B
1.77E-201	3	TOR1AIP2
1.96E-201	3	THEM4
1.64E-200	3	LUZP1
1.71E-200	3	HIBCH
1.68E-199	3	SLAIN2
2.95E-198	3	PRDM2
1.18E-197	3	ADK
1.38E-197	3	PIM2
9.08E-197	3	STIMATE
2.35E-196	3	SEPTIN6
9.14E-196	3	SARAF
4.98E-193	3	PDE3B
7.89E-191	3	AC073167.1
3.85E-190	3	FTX
2.57E-189	3	PRMT3
3.50E-189	3	ZDBF2
4.50E-189	3	PPP1R2
1.49E-188	3	PAIP2
3.93E-188	3	UBR5
1.34E-187	3	GALM
1.66E-187	3	SELL

9.08E-185	3	RNF213
1.91E-184	3	RBPJ
6.36E-184	3	ZNF281
6.53E-184	3	UBE2K
3.51E-183	3	AL133480.1
4.24E-182	3	WAKMAR2
8.18E-182	3	TSPAN14
8.64E-182	3	RANBP9
2.15E-180	3	LINC01619
4.27E-180	3	HIVEP3
4.80E-180	3	PRDX2
6.37E-179	3	PICALM
5.15E-178	3	FOXP1
3.20E-177	3	CMSS1
2.76E-175	3	NDFIP1
2.80E-175	3	TULP4
6.45E-175	3	DUSP10
1.36E-174	3	STAMBPL1
2.18E-174	3	NEK7
2.76E-174	3	CCM2
1.58E-173	3	GRSF1
1.95E-173	3	DDX24
2.08E-173	3	ODF2L
7.60E-173	3	SAMSN1
2.55E-172	3	SMAP2
4.73E-172	3	FYCO1
5.89E-172	3	ARHGEF6
8.09E-171	3	BTBD11
1.32E-170	3	ZC3HAV1
2.18E-170	3	CDV3
3.64E-170	3	B2M
1.31E-169	3	PCED1B
3.85E-169	3	RAB9A
4.55E-169	3	WHRN
5.75E-169	3	LRIG1
2.79E-167	3	SCAND1
6.22E-167	3	SAMD12
2.83E-165	3	BABAM2
3.28E-165	3	SESN3
4.30E-165	3	INPP4B
4.55E-165	3	C16orf87
2.56E-164	3	LRRC8C
1.78E-163	3	PLIN2

5.78E-163	3	AC104365.1
5.98E-163	3	HIVEP1
9.74E-163	3	PARK7
2.41E-162	3	GBP4
4.89E-162	3	RNF145
5.43E-162	3	KIF5B
1.41E-161	3	JAK3
1.24E-160	3	PGM2L1
1.78E-160	3	PHF21A
3.59E-160	3	NSD3
1.01E-157	3	MRFAP1
1.48E-157	3	TNIP2
2.73E-157	3	GLUD1
4.99E-157	3	LINC-PINT
7.48E-157	3	TENT5C
5.34E-156	3	MORC3
6.06E-156	3	GRAMD1B
1.55E-155	3	BARD1
1.67E-155	3	INPP5F
7.41E-155	3	PIK3IP1
1.61E-154	3	WWP1
1.87E-153	3	CENPC
1.94E-153	3	ERI1
3.13E-153	3	SGTB
2.41E-152	3	CDKAL1
4.92E-152	3	SDF4
8.49E-152	3	RFX7
1.01E-151	3	YPEL2
1.05E-151	3	ATP2B4
2.75E-148	3	CTNNAL1
1.36E-147	3	FAM53B
1.51E-147	3	GOLGA8B
3.02E-147	3	RANGAP1
4.98E-147	3	SETD1B
8.52E-147	3	IKZF1
1.87E-146	3	TIFA
2.05E-146	3	HPRT1
2.35E-146	3	DLGAP1-AS1
3.49E-146	3	PDCD4
5.30E-146	3	CPEB3
2.31E-145	3	MYO5A
6.36E-145	3	COMMD3
5.39E-144	3	SATB1

1.17E-143	3	CYTIP
4.29E-143	3	GOLGA8A
9.77E-143	3	GABPB1
1.02E-142	3	PDCL3
2.47E-141	3	L3MBTL3
2.64E-140	3	ARHGDIB
4.07E-140	3	LRRFIP2
1.16E-139	3	AKIRIN2
1.17E-138	3	KDM5B
1.30E-138	3	SLC25A26
3.55E-138	3	SYTL3
7.60E-138	3	TESPA1
1.55E-137	3	ATXN7L1
4.77E-137	3	LBH
1.19E-136	3	HBS1L
9.11E-136	3	CCDC88C
1.43E-135	3	TAX1BP1
1.54E-135	3	IQGAP1
1.62E-135	3	KIAA1109
1.85E-135	3	REEP3
2.18E-135	3	MRPS6
3.45E-135	3	CMTM7
1.43E-133	3	APOL6
8.00E-133	3	CCSER2
1.21E-132	3	TMEM263
1.44E-132	3	CAB39
3.19E-132	3	FAM160B1
9.89E-132	3	WIPF1
2.11E-131	3	CCDC167
2.12E-131	3	RSBN1
3.92E-131	3	GLB1
1.97E-129	3	RGS10
2.56E-129	3	CERK
2.61E-129	3	AL035634.1
5.41E-129	3	7-Mar
5.77E-129	3	EED
1.07E-128	3	ZBTB1
1.37E-128	3	CFLAR
4.41E-128	3	SOX4
7.48E-128	3	SEC14L1
1.68E-127	3	AC058791.1
2.16E-127	3	SMC4
2.18E-127	3	TCF12

9.97E-127	3	FGD3
3.10E-126	3	KAT6B
3.60E-124	3	REXO2
9.42E-124	3	PHLPP1
1.07E-123	3	IL10RA
1.31E-123	3	IFI16
1.68E-123	3	TRAK2
2.02E-122	3	FAM107B
5.49E-122	3	SRGN
9.35E-122	3	C9orf16
2.88E-121	3	SLFN5
3.05E-121	3	TCF20
4.42E-121	3	WNK1
1.06E-120	3	CHIC2
1.97E-120	3	MIB1
2.21E-120	3	OGDH
3.90E-120	3	TG
6.27E-120	3	KSR1
3.15E-119	3	AC093010.2
3.76E-119	3	CLK1
9.64E-119	3	AP000787.1
1.16E-118	3	ZMYM2
2.14E-118	3	MBD2
2.49E-118	3	FAM13A
3.47E-118	3	SLC12A6
8.52E-118	3	STK4
1.02E-117	3	AC114760.2
1.36E-117	3	NLRC5
7.36E-117	3	BCAS3
2.14E-116	3	ACTN4
2.86E-116	3	FURIN
4.81E-116	3	MSL2
2.71E-115	3	CHD3
2.90E-115	3	ITPKB
2.93E-115	3	ARPC1B
5.89E-115	3	STX16
1.18E-114	3	TNIP3
1.35E-114	3	HDAC7
1.42E-114	3	NCOA1
2.41E-114	3	WDR7
2.48E-114	3	MINDY2
2.72E-114	3	ASH1L
3.33E-114	3	CREB3L2

5.09E-114	3	PPP4R2
1.22E-113	3	SLC5A3
1.39E-113	3	PSME4
2.90E-113	3	FARS2
3.57E-113	3	TSPYL2
4.68E-113	3	STAT1
1.52E-112	3	ATRX
2.16E-112	3	SAMD9
2.21E-112	3	DIAPH1
2.73E-112	3	IQGAP2
5.85E-112	3	PTPRA
6.26E-111	3	ITGB1
1.11E-110	3	NT5C3A
1.14E-109	3	TMEM50A
1.68E-109	3	OGT
1.68E-109	3	NF1
1.93E-109	3	DGKH
2.25E-109	3	TMOD3
2.38E-109	3	OCIAD2
1.72E-108	3	TRAF1
5.78E-108	3	NFAT5
1.80E-107	3	ARPP19
6.84E-107	3	IGFLR1
1.17E-106	3	ZFAND5
1.49E-106	3	FXD5
4.88E-106	3	EVL
7.68E-106	3	SEC11C
7.78E-106	3	PPP2CA
1.68E-105	3	FAM118A
3.28E-105	3	NSF
9.61E-105	3	SAT1
1.43E-104	3	STK39
1.70E-104	3	FILIP1L
2.94E-104	3	SAR1B
9.82E-104	3	TACC3
2.11E-103	3	HBP1
2.99E-103	3	MTMR6
6.08E-103	3	TMEM154
7.15E-103	3	MXD4
7.84E-103	3	TBL1XR1
2.29E-102	3	TDRD3
2.30E-102	3	CD96
2.72E-102	3	GMFG

9.11E-102	3	PPP3CC
9.32E-102	3	CYTH3
1.08E-101	3	UBE2D2
1.80E-101	3	VPS13C
5.44E-101	3	EVI2A
1.24E-100	3	TPR
1.26E-100	3	CASP1
1.59E-100	3	DOK2
2.00E-100	3	CCDC91
5.15E-100	3	CCDC6
1.05E-99	3	RICTOR
1.13E-99	3	BICRAL
2.32E-99	3	SLC9A9
2.91E-98	3	SMAP1
9.27E-98	3	ARL15
1.40E-97	3	CDC37L1
1.42E-97	3	HLA-F
1.86E-97	3	PMVK
1.98E-97	3	LINC01934
2.06E-97	3	FTO
2.26E-97	3	CREBRF
2.49E-97	3	AL137856.1
3.56E-97	3	PSMD14
2.98E-96	3	SYNJ2
3.16E-96	3	ITGAL
4.13E-96	3	TMPO
5.60E-96	3	MAT2B
6.33E-96	3	RAP1GDS1
9.93E-96	3	XRN1
9.94E-96	3	OTULIN
1.60E-95	3	NDUFB8
3.85E-95	3	HELB
4.74E-95	3	ALDH9A1
1.99E-94	3	GALNT10
2.18E-94	3	KDM6A
3.72E-94	3	TMX3
3.96E-94	3	ITGA4
4.31E-94	3	MFSD6
3.05E-93	3	CAMK2D
2.22E-92	3	FNBP1
2.97E-92	3	NUDT5
6.56E-92	3	EMB
9.22E-92	3	EXT1

9.37E-92	3	PCED1B-AS1
1.13E-91	3	CDR2
2.07E-91	3	CEMIP2
8.50E-91	3	AC016831.5
8.55E-91	3	C17orf49
8.98E-91	3	CHD2
9.38E-91	3	CRTC3
1.65E-90	3	MIER1
1.97E-90	3	RBM33
2.49E-90	3	ESR2
3.53E-90	3	GLG1
4.24E-90	3	TBC1D15
9.27E-90	3	ADSS
1.04E-89	3	FAM214A
1.21E-89	3	SLTM
1.11E-88	3	TMEM140
1.73E-88	3	AUH
2.48E-88	3	PIK3IP1-AS1
2.77E-88	3	SUMO2
3.34E-88	3	EPB41
1.55E-87	3	KIAA0319L
2.39E-87	3	CNIH1
4.63E-87	3	HDAC4
6.26E-87	3	RAB2A
6.91E-87	3	SNRNP35
8.18E-87	3	PSMB8
1.04E-86	3	UBR2
1.10E-85	3	OGA
1.20E-85	3	PSPC1
1.65E-85	3	SSH1
3.94E-85	3	ISG15
4.52E-85	3	CLASP1
4.95E-85	3	PIK3R5
3.98E-84	3	GPBP1
5.39E-84	3	MOSMO
8.06E-84	3	CRYBG1
2.07E-83	3	PPHLN1
3.81E-83	3	ZC3H18
4.11E-83	3	STIM1
5.09E-83	3	CHORDC1
6.41E-83	3	SACM1L
9.18E-83	3	MAN1A2
2.67E-82	3	PSMA1

3.15E-82	3	TTC7A
8.87E-82	3	YAF2
1.90E-81	3	WDR44
2.64E-81	3	ELK3
3.50E-81	3	ATXN2
4.03E-81	3	PTPN1
6.30E-81	3	RFFL
1.09E-80	3	GTF3C6
1.19E-80	3	IP6K1
1.49E-80	3	RPRD2
1.83E-80	3	PTPN4
5.51E-80	3	GBF1
3.02E-79	3	DDX6
3.17E-79	3	ITFG1
8.83E-79	3	FAM104A
9.65E-79	3	MKLN1
1.09E-78	3	PCNX1
1.11E-78	3	ARAP2
4.93E-78	3	N4BP2L2
4.34E-77	3	AHSA1
4.74E-77	3	PPP1R12A
5.43E-77	3	NUP58
7.55E-77	3	EGLN1
1.28E-76	3	ABI1
2.29E-76	3	UCP2
7.20E-76	3	ENO1
1.10E-75	3	ATP9B
1.36E-75	3	RIPOR2
1.77E-75	3	SESN1
1.80E-75	3	ARHGAP12
1.90E-75	3	ARID2
2.83E-75	3	ATG5
4.16E-75	3	IFFO2
5.29E-75	3	EXOC4
6.04E-75	3	MYCBP2
6.11E-75	3	IRF1
1.36E-74	3	CD59
3.08E-74	3	ZC3H8
5.33E-74	3	EML4
7.10E-74	3	ENTPD1
3.72E-73	3	CUTA
3.75E-73	3	CRLF3
1.99E-72	3	OSBPL8

2.06E-72	3	SPPL2A
2.17E-72	3	SEC11A
3.00E-72	3	ACSL4
3.17E-72	3	DCAF8
9.60E-72	3	FXR1
2.01E-71	3	GMDS
2.31E-71	3	ATXN7
2.75E-71	3	C17orf67
6.80E-71	3	TRPC4AP
1.61E-70	3	ELOVL5
1.82E-70	3	HLA-C
2.00E-70	3	OTUD5
2.55E-70	3	PPP2R5C
5.05E-70	3	ARHGAP25
5.11E-70	3	RASA1
1.66E-69	3	PRKACB
1.50E-68	3	TRIM14
2.73E-68	3	ASCC3
3.02E-68	3	ANKH
3.11E-68	3	ESYT2
4.85E-68	3	SORL1
6.41E-68	3	PSMD1
8.14E-68	3	ANKRD13C
1.23E-66	3	RBM27
2.75E-66	3	MXI1
3.07E-66	3	DYNC1I2
3.40E-66	3	CAPZA2
4.55E-66	3	AEBP2
2.84E-65	3	CYTH1
5.67E-65	3	PACS1
9.00E-65	3	LRRC8D
7.06E-64	3	ZMYND8
7.12E-64	3	SPG11
1.51E-63	3	ABHD18
2.01E-63	3	ITGAV
2.06E-63	3	VPS13B
2.96E-63	3	SH3GLB1
4.76E-63	3	RUNX2
6.83E-63	3	KANSL1
1.49E-62	3	RELCH
2.14E-62	3	GIGYF2
3.52E-62	3	AGFG1
1.26E-61	3	SH3TC1

7.69E-61	3	C18orf25
9.22E-61	3	DTNB
1.02E-60	3	NPTN
7.04E-60	3	NAA25
3.99E-59	3	IFI6
9.69E-59	3	DGLUCY
1.27E-58	3	PCCA
2.07E-58	3	COX5A
1.15E-57	3	AFTPH
8.50E-57	3	PKM
2.34E-56	3	AFF1
2.79E-56	3	DCP2
2.44E-55	3	CAPN7
3.32E-53	3	ABTB2
4.88E-53	3	NAA16
7.75E-53	3	STIP1
2.00E-52	3	BCL2L11
3.20E-52	3	SHLD2
2.56E-51	3	TYW1
4.71E-51	3	CEP350
1.41E-50	3	ARHGAP5
5.90E-50	3	SLC4A7
7.08E-50	3	MX1
6.79E-49	3	AHCYL2
6.85E-49	3	TNPO3
2.07E-48	3	XIST
2.17E-48	3	ATP8A1
2.47E-48	3	RFX3
2.99E-48	3	UBE2H
2.96E-46	3	DIP2B
3.91E-45	3	BTAf1
1.42E-43	3	STT3B
8.59E-43	3	SERINC5
6.15E-42	3	CEP83
2.22E-41	3	TMEM65
6.95E-40	3	EXOC6B
9.30E-37	3	CELF2
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0	4	CHKA
0	4	SLC25A44
0	4	CMTM6
0	4	CCR5AS
0	4	TREM2
0	4	MTHFD1L
0	4	CCDC200
0	4	DDX60L
0	4	USP32
0	4	CD300LB
0	4	KIF13A
0	4	SDSL
0	4	ZC3H12A
0	4	TBC1D9
0	4	P2RX4
0	4	SLC12A7
0	4	AMZ1
0	4	GNG5
0	4	BCL6
0	4	YBX1

0	4	FAM20A
0	4	STXBP2
0	4	TNFRSF10D
0	4	RAB7B
0	4	ACSL5
0	4	ATF5
0	4	RGS10
0	4	YTHDF3
0	4	SLC16A6
0	4	SAV1
0	4	AZIN1
0	4	PHLPP1
0	4	AGTPBP1
0	4	C3
0	4	RHBDF2
0	4	LINC00654
0	4	MAD1L1
0	4	SERPINB9P1
0	4	MERTK
0	4	MEFV
0	4	PECAM1
0	4	MMP2-AS1
0	4	MRAS
0	4	CDCA4
0	4	IRF8
0	4	ATP6AP2
0	4	SLC41A2
0	4	BTBD19
0	4	DOT1L
0	4	P2RX7
0	4	ATP6V0C
0	4	LINC00884
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0	4	GPR84
0	4	KANSL1L
0	4	ARHGEF10L
0	4	SQOR
0	4	SLC37A2
0	4	TALDO1
0	4	KIFC3
0	4	C1orf54
0	4	PXDC1
0	4	HRH2

0	4	IL1R2
0	4	VASH1
0	4	FCHO2
0	4	C2orf92
0	4	ASTL
0	4	OAZ2
0	4	PDE2A
0	4	SEC24D
0	4	DNMBP
0	4	ANKDD1A
0	4	C19orf38
0	4	RNH1
0	4	MDC1
0	4	SMOX
0	4	MMP14
0	4	JAML
0	4	MFSD2A
0	4	PLBD2
0	4	ST14
0	4	GAA
0	4	ANKRD22
0	4	GPATCH2L
0	4	KCTD20
0	4	TES
0	4	LY96
0	4	PRCP
0	4	BAIAP2
0	4	CTTNBP2NL
0	4	SESN2
0	4	TENT5A
0	4	TNFRSF1A
0	4	ALDH1A2
0	4	RELT
0	4	SLC11A2
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0	4	PLEKHO1
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0	4	NAGK
0	4	PDGFB
0	4	CDK14
0	4	SPHK1

0	4	AC011511.2
0	4	SPDYA
0	4	OSCAR
0	4	SECTM1
0	4	EAF1
0	4	NCEH1
0	4	ANO6
0	4	PGD
0	4	RXRA
0	4	LRRK2
0	4	PPFIA1
0	4	ITPRIP
0	4	OTUD1
0	4	PGS1
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0	4	AHRR
0	4	AC002091.1
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0	4	PURB
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0	4	IPMK
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0	4	KDM7A
0	4	ARAP1
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0	4	RUFY3
0	4	SKAP2
0	4	CTSA
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0	4	RRBP1
0	4	M6PR
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0	4	NEK6
0	4	SLC2A9
0	4	ARSB
0	4	EEPD1
0	4	LAMP1
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0	4	AC139099.2
0	4	SCARB2
0	4	IL1R1

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0	4	SERPING1
0	4	NPL
0	4	DUSP3
0	4	RIPOR3
0	4	IRF2BP2
0	4	WBP1L
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0	4	AKR1A1
0	4	CNTLN
0	4	SIPA1L2
0	4	SLC45A4
0	4	TBK1
0	4	SPART
0	4	CHSY1
0	4	FHAD1
0	4	PRPSAP1
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0	4	CNDP2
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0	4	LSS
0	4	CPPED1
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0	4	LAT2
0	4	BCL3
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0	4	CYB5D1
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0	4	ATG3
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0	4	MSRA
0	4	ZYX
0	4	CAMSAP2
0	4	UBAP1
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0	4	PLEC
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0	4	LAMB3
0	4	CCR1
0	4	MGST2
0	4	ZFP91
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0	4	CASP1
0	4	ENOSF1
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0	4	AC007952.4
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0	4	AMPD2

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0	4	SCO2
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0	4	NUCB1
0	4	PLEKHO2
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0	4	LILRB1
0	4	TCIRG1
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0	4	MCOLN1
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0	4	ZNFX1
0	4	HS3ST3B1
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0	4	ACOT9
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0	4	GCA
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0	4	BCKDK
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0	4	MIDN
0	4	2-Mar
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0	4	AL355075.4
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0	4	GRAMD4
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0	4	XBP1
0	4	MTHFR
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0	4	ITPRID2
0	4	SCAT1
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0	4	CFLAR-AS1
0	4	AHCYL1
0	4	MKNK1
0	4	VPS37C
0	4	ALAS1
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0	4	SPNS1
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0	4	ARF3
0	4	RIT1
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0	4	ANXA4
0	4	FUCA2

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0	4	CHP1
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0	4	DHRS3
0	4	NBPF14
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0	4	CSF2RB
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0	4	ACADVL
0	4	CAT
0	4	VAMP3
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0	4	PLXND1
0	4	PDLIM7
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0	4	CDK2AP1
0	4	SCML1
0	4	AKR1B1
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0	4	NCKAP5L
0	4	TUBGCP2
0	4	STARD3NL
0	4	ABHD2
0	4	BMP2K
0	4	ITPRIPL2
0	4	CDH23

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0	4	LMO2
0	4	PIP5K1C
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0	4	PIGA
0	4	SNX27
0	4	NAAA
0	4	PLXNB2
0	4	NUBP1
3.41E-303	4	ENO1
9.07E-303	4	TPRG1
1.05E-302	4	NAPA
1.12E-302	4	PGLS
2.16E-302	4	MPZL1
2.55E-302	4	PTPRM
4.14E-302	4	DIAPH2
5.81E-302	4	TYK2
2.00E-301	4	ANXA11
2.01E-300	4	RCC2
3.66E-300	4	TBC1D14
6.26E-297	4	TIPARP
1.18E-296	4	ACTB
4.61E-296	4	IRS2
2.45E-295	4	POR
7.31E-295	4	PDIA3
5.27E-294	4	IFIH1
1.67E-293	4	MROH1
1.68E-293	4	SYNGR2
2.32E-293	4	ANKS1A
4.19E-293	4	RHOB
1.61E-292	4	GRAMD1A
4.10E-290	4	RNF145
2.25E-289	4	CSGALNACT2
3.75E-289	4	TMEM38B
4.69E-289	4	SLC2A3
2.56E-288	4	GPD2
9.95E-288	4	FNDC3A
1.54E-287	4	UBAC2

2.23E-287	4	ZC3H3
1.63E-286	4	ABHD5
2.46E-284	4	FKBP1A
9.33E-284	4	KCNN4
1.02E-282	4	MED13L
7.21E-282	4	PDSS1
8.79E-282	4	GLRX
1.35E-281	4	REV3L
1.18E-280	4	TFRC
2.29E-280	4	TGIF1
2.41E-280	4	GBE1
1.16E-279	4	ATP1A1
2.89E-277	4	CMIP
3.69E-275	4	SSR1
3.96E-275	4	IER5
1.30E-273	4	TPI1
3.01E-273	4	FNIP1
6.42E-273	4	POLG2
8.44E-273	4	TMSB10
1.62E-272	4	AZI2
1.98E-272	4	RAB5C
3.09E-272	4	DHRX
7.95E-272	4	SUMF1
8.43E-272	4	CSNK1A1
1.10E-270	4	YWHAG
1.50E-270	4	NDRG1
1.77E-270	4	PTK2B
2.60E-269	4	BCL2L1
3.26E-269	4	RDX
3.04E-268	4	ENTPD1
8.32E-266	4	ERCC1
1.46E-263	4	B4GALT1
4.48E-263	4	ERCC8
8.23E-263	4	CAP1
1.83E-262	4	PICALM
3.16E-262	4	A2M
5.32E-262	4	ELL2
1.23E-261	4	LMNA
5.99E-261	4	SLC2A13
1.11E-260	4	NABP1
2.16E-260	4	RBMS1
2.58E-260	4	MCL1
5.15E-260	4	RNF24

6.52E-260	4	AP2A2
1.07E-257	4	ADA
1.26E-257	4	TMEM123
1.32E-257	4	INTS14
6.99E-257	4	TPM3
9.76E-256	4	HIPK3
1.19E-255	4	PCBP1
1.83E-255	4	H3F3A
3.90E-254	4	BRCA2
4.43E-254	4	HPS5
9.40E-253	4	GAK
6.39E-252	4	PSME2
1.41E-251	4	NT5C2
1.84E-251	4	LPP
2.38E-249	4	SLAMF7
5.13E-249	4	PAPSS1
6.22E-249	4	N4BP2L1
6.39E-249	4	RAB21
3.78E-248	4	FER
3.81E-248	4	AC020916.1
1.14E-247	4	NAF1
4.69E-247	4	ATP2A2
3.78E-246	4	EXT1
5.21E-246	4	CAPN2
1.14E-245	4	STK38L
2.61E-244	4	HM13
2.85E-244	4	CAPZB
1.03E-239	4	PRELID1
1.23E-239	4	MTMR3
1.57E-238	4	GDI2
1.89E-238	4	MRTFA
1.63E-237	4	TUBA1C
4.29E-237	4	SNAPC1
7.49E-237	4	NFATC1
4.87E-236	4	UBE2W
6.66E-235	4	DNM2
1.12E-233	4	NBEAL1
1.55E-233	4	TXNDC11
4.01E-233	4	VAPA
8.60E-232	4	TMEM41B
1.26E-230	4	PDPK1
1.83E-230	4	BAG3
2.58E-228	4	VAV1

4.84E-228	4	HOOK3
5.62E-227	4	LAMTOR1
1.79E-226	4	SARNP
2.48E-226	4	BACH1
2.87E-226	4	TACC1
3.04E-226	4	STAT5A
5.05E-226	4	KCNQ1OT1
7.07E-226	4	ACTR3
5.92E-225	4	TSC22D1
3.77E-223	4	LRRFIP1
4.54E-223	4	RHOG
8.09E-223	4	LRRC23
4.50E-222	4	PHLDA1
6.91E-222	4	SNX29
3.12E-220	4	KLHL6
8.43E-220	4	RALGDS
1.16E-219	4	IGF2R
1.50E-218	4	CLEC16A
5.98E-217	4	STAT1
7.52E-217	4	GEM
2.52E-216	4	P4HA1
4.84E-216	4	MAP4K4
6.46E-214	4	GPCPD1
4.69E-213	4	TFDP2
1.05E-212	4	LINC02245
2.97E-212	4	RNASEK
4.58E-212	4	TWISTNB
4.43E-211	4	ACTR2
5.49E-211	4	EZH2
1.63E-210	4	PAFAH1B2
2.07E-210	4	LCP1
5.10E-210	4	TRAK1
6.03E-206	4	RBPJ
9.14E-206	4	BLOC1S1
1.14E-205	4	PSMA6
1.29E-205	4	HLA-DQA2
3.07E-203	4	SLC7A5
1.42E-201	4	CYBA
5.24E-201	4	ARPC1B
7.25E-200	4	DDB1
1.48E-198	4	LRRFIP2
3.68E-198	4	TNFAIP3
3.97E-198	4	PRNP

3.58E-197	4	MICAL2
4.42E-197	4	MFSD4B
1.36E-195	4	ZBTB10
3.03E-195	4	S100A4
1.50E-194	4	PRDM1
1.07E-193	4	KCNAB2
2.82E-193	4	TMTC2
4.73E-193	4	IVNS1ABP
8.05E-193	4	FRMD4A
2.78E-192	4	HPCAL1
4.78E-192	4	RGS2
2.27E-189	4	IPO7
5.28E-189	4	ZFP36L1
8.65E-189	4	SRGN
8.52E-188	4	PPA1
2.86E-187	4	TNFAIP8
1.08E-186	4	TTC7A
1.13E-186	4	CDC37
3.11E-186	4	UBL3
3.29E-186	4	ITM2B
6.87E-184	4	BANP
6.83E-182	4	ITPR2
2.72E-181	4	SATB1-AS1
9.60E-181	4	NDUFAF2
1.56E-180	4	VAMP5
4.05E-180	4	UBE2O
3.00E-179	4	SPATS2L
2.21E-178	4	TENT4B
8.03E-178	4	UBE2D3
4.05E-173	4	TIAM1
1.82E-172	4	ERC1
9.59E-172	4	CRADD
1.14E-171	4	CALR
1.61E-171	4	SND1
1.90E-171	4	PSMB3
1.98E-171	4	NME2
3.80E-170	4	PPP3R1
7.55E-170	4	GFOD1
5.22E-168	4	MALT1
6.74E-164	4	RHOA
2.86E-163	4	RNASET2
6.16E-163	4	ZFY
3.06E-162	4	DLEU2

3.84E-162	4	KPNA4
3.48E-161	4	VMP1
5.25E-158	4	HIF1A-AS3
7.98E-158	4	ANKRD33B
6.49E-156	4	AC007384.1
1.48E-155	4	SEPTIN9
5.81E-155	4	GAPDH
1.47E-154	4	FBXO11
5.77E-154	4	MED13
6.18E-151	4	HLA-DRB5
2.49E-149	4	DBI
3.79E-145	4	FBXO34
1.04E-144	4	SERF2
1.56E-143	4	SERINC5
2.28E-143	4	SPSB1
2.84E-143	4	PHF10
4.62E-142	4	CD81
5.80E-140	4	CLTA
6.55E-139	4	TRAF3
8.85E-139	4	BTBD11
3.86E-138	4	AP3B1
3.27E-137	4	POMP
4.40E-136	4	TOP1
1.11E-134	4	CLIC1
1.72E-134	4	PRDX1
2.62E-132	4	MYL6
6.27E-132	4	JMJD1C
2.15E-130	4	DYNC1H1
9.21E-129	4	EPG5
1.50E-126	4	TUBA1B
4.78E-126	4	RYBP
1.07E-125	4	ERBIN
4.43E-125	4	SSBP2
1.48E-124	4	TLE4
2.29E-124	4	CYTH1
1.69E-123	4	UST
2.86E-123	4	CREBBP
2.41E-122	4	PSMD5
1.87E-119	4	PDZD8
4.66E-119	4	SAMSN1
4.99E-116	4	AHNAK
3.36E-113	4	ARPC3
7.16E-113	4	ECE1

5.11E-112	4	GLS
1.86E-111	4	ROCK1
2.94E-110	4	AGO2
2.13E-109	4	EIF4A3
3.97E-109	4	HDAC9
7.00E-108	4	SH3BGRL3
1.13E-105	4	ZHX2
2.25E-102	4	PFN1
5.24E-99	4	PELI1
1.07E-95	4	HNRNPU
1.24E-94	4	ARPC2
7.73E-94	4	PPP4R3A
1.17E-90	4	FOXK2
3.04E-83	4	CHST11
4.13E-82	4	CRIM1
6.43E-79	4	SIK3
1.48E-73	4	ANKH
2.19E-68	4	MAP3K2
2.79E-63	4	ZFX
3.67E-63	4	STEAP1B
8.37E-52	4	FOXN3
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0	5	NKG7
1.86E-290	5	CD8A
1.04E-286	5	FYN
1.59E-278	5	CST7
3.92E-248	5	PARP8
6.23E-247	5	TC2N
5.68E-243	5	CD3D
4.83E-239	5	ANXA1
2.98E-229	5	GZMM
1.20E-220	5	CD3G
6.05E-209	5	IL7R
6.35E-209	5	CD96
2.06E-202	5	SYTL3
2.24E-200	5	CD3E
2.90E-198	5	LEPROTL1
1.45E-197	5	CD8B
5.25E-186	5	KLRK1
1.84E-184	5	EPHA4
1.38E-182	5	THEMIS

3.18E-181	5	PITPNC1
1.17E-169	5	CCSER2
9.82E-169	5	AOAH
4.62E-168	5	RNF125
8.22E-164	5	DTHD1
1.26E-162	5	BCL11B
2.60E-162	5	PPP2R5C
4.56E-160	5	RUNX3
1.79E-159	5	CD2
6.54E-158	5	CCL4
7.90E-157	5	CBLB
3.64E-153	5	TRAT1
1.57E-152	5	PTPRC
1.62E-151	5	LYAR
1.36E-150	5	PLAAT4
2.46E-148	5	B2M
1.31E-146	5	GPR171
5.84E-146	5	SAMD3
6.29E-145	5	TNFAIP3
1.10E-143	5	ID2
3.73E-141	5	ABLIM1
2.46E-139	5	PRKCH
5.14E-139	5	CALM1
1.59E-138	5	HCST
3.89E-138	5	ETS1
1.06E-135	5	ZFP36L2
4.14E-135	5	HLA-A
8.59E-134	5	SYNE2
7.22E-133	5	RNF19A
1.40E-131	5	CNOT6L
4.01E-131	5	IL32
2.37E-130	5	SRSF7
8.74E-129	5	CXCR4
9.31E-126	5	HLA-C
1.31E-125	5	CD6
2.15E-124	5	H3F3B
1.75E-123	5	NIBAN1
1.17E-121	5	CRTAM
8.94E-120	5	DUSP2
7.87E-118	5	ANK3
3.63E-111	5	PIK3R1
5.14E-111	5	STAT4
7.04E-109	5	PIP4K2A

3.98E-107	5	SCML4
3.66E-105	5	SARAF
7.60E-105	5	SLA
7.02E-102	5	BICDL1
2.21E-94	5	TGFBR3
3.77E-94	5	TRBC2
1.75E-93	5	PDE3B
9.48E-93	5	SYTL2
1.33E-92	5	HLA-B
3.51E-91	5	SLFN12L
2.54E-89	5	CD99
3.66E-88	5	RGCC
3.24E-87	5	SLA2
5.60E-87	5	SYNE1
7.43E-87	5	HLA-F
1.38E-86	5	EMB
2.27E-86	5	CD44
2.80E-84	5	RALGAPA1
3.14E-84	5	TUBA4A
6.63E-84	5	MLLT3
3.14E-83	5	NFATC2
5.98E-83	5	TRAC
8.47E-83	5	GIMAP7
1.24E-80	5	ATXN1
5.78E-80	5	SRGN
1.69E-79	5	CMC1
1.76E-79	5	UBE2S
3.02E-79	5	PPP1R16B
4.70E-78	5	PDCD4
2.21E-74	5	AKNA
1.70E-73	5	KIF21A
3.21E-73	5	MALAT1
5.88E-73	5	CRIP1
1.11E-71	5	AF165147.1
2.29E-71	5	IKZF1
9.52E-70	5	FAM177A1
2.72E-69	5	PLCB1
3.25E-69	5	PRKCQ
5.32E-69	5	ITM2B
6.35E-69	5	ZFYVE28
1.52E-68	5	CDK17
3.13E-68	5	HLA-E
6.18E-68	5	MGAT4A

1.20E-67	5	LINC01871
2.92E-66	5	ITM2A
5.12E-66	5	VIM
9.92E-66	5	LDHA
5.09E-64	5	CD7
1.14E-63	5	GIMAP4
1.31E-63	5	SLC7A5
3.78E-63	5	CAMK4
7.49E-63	5	CDC42SE2
1.46E-62	5	DDX5
3.78E-62	5	GZMH
4.23E-62	5	INPP4B
1.32E-61	5	S100A10
4.85E-61	5	MPZL3
5.04E-60	5	GALM
9.57E-60	5	BTG1
1.41E-59	5	MVB12B
2.73E-59	5	AC044849.1
4.59E-58	5	PRF1
7.31E-56	5	CLDND1
1.62E-54	5	TRBC1
2.90E-54	5	IQGAP2
2.12E-53	5	MSN
2.46E-53	5	SMAD7
5.19E-53	5	ADGRE5
6.71E-53	5	APOBEC3G
1.94E-52	5	TSC22D3
1.10E-51	5	LIME1
1.51E-50	5	DDX24
1.89E-50	5	MYH9
2.08E-50	5	CALM2
3.40E-48	5	ITK
7.43E-48	5	ARL4C
2.71E-47	5	EVL
4.56E-47	5	RSRP1
5.03E-45	5	PBX4
5.82E-44	5	SKAP1
1.52E-43	5	CD69
2.99E-41	5	TSPYL2
1.34E-39	5	CLEC2B
1.54E-39	5	AAK1
2.16E-39	5	PYHIN1
1.26E-38	5	RNF213

2.04E-38	5	RASA3
4.08E-38	5	SH3BGRL3
5.10E-37	5	GNG2
1.53E-36	5	CEMIP2
1.25E-35	5	ATP8A1
1.59E-35	5	KLF12
2.69E-35	5	RABGAP1L
2.87E-35	5	BTN3A1
2.95E-35	5	SLC38A2
6.16E-35	5	ZBTB20
7.83E-35	5	AKT3
2.00E-34	5	PCED1B-AS1
2.19E-34	5	LCK
2.21E-34	5	SRSF5
2.91E-34	5	PAXX
1.68E-33	5	CRYBG1
2.24E-33	5	EIF1
1.24E-32	5	OXNAD1
1.78E-32	5	ZBED4
2.08E-32	5	BTN3A2
1.05E-31	5	STAT5B
1.22E-31	5	WNK1
1.34E-31	5	FAM102A
1.87E-31	5	KIF13B
9.06E-31	5	TUBB4B
2.03E-30	5	GTDC1
8.18E-30	5	MPP7
1.10E-29	5	ACAP1
2.89E-29	5	SRSF2
2.92E-29	5	UBB
3.35E-29	5	AC068587.4
5.91E-29	5	TRERF1
1.17E-28	5	TGFB1
1.42E-28	5	TXNIP
3.87E-28	5	STK17A
4.45E-28	5	FUS
4.88E-28	5	SFMBT2
9.88E-28	5	SPOCK2
1.18E-27	5	PPP1R10
1.24E-27	5	JMJD6
1.83E-27	5	SLC38A1
2.74E-27	5	IER5L
3.47E-27	5	SH2D1A

1.20E-26	5	GALNT11
1.65E-26	5	MYLIP
3.19E-26	5	IDS
8.55E-26	5	ERN1
9.26E-25	5	ATP2B4
1.08E-24	5	MYL12B
1.43E-24	5	ZNF831
2.85E-24	5	ISG20
3.03E-24	5	PCNX2
5.26E-24	5	HNRNPLL
6.72E-24	5	TUBA1A
6.89E-24	5	PPP1R2
1.10E-23	5	LINC00513
1.69E-23	5	KLF6
1.88E-23	5	GUK1
2.54E-23	5	TOB1
3.46E-23	5	MYADM
2.23E-22	5	NDUFS5
3.18E-22	5	TG
3.67E-22	5	SLFN5
7.16E-22	5	CDC42EP3
9.20E-22	5	SPTAN1
1.35E-21	5	CCNH
1.47E-21	5	LMNA
1.80E-21	5	NASP
1.10E-20	5	PRKX
1.32E-20	5	PSME1
1.32E-20	5	HIST2H2AC
2.25E-20	5	RESF1
9.08E-20	5	NAA50
9.32E-20	5	ABHD17A
1.90E-19	5	STOM
6.19E-19	5	CORO7
1.19E-18	5	RNF115
1.74E-18	5	EIF4A2
4.07E-18	5	PLP2
1.32E-17	5	SRSF3
1.92E-17	5	TBC1D2B
3.00E-17	5	NDFIP1
4.37E-17	5	SOD1
4.71E-17	5	SOCS1
6.33E-17	5	CMIP
1.20E-16	5	DIP2A

1.42E-16	5	CDC14A
1.65E-16	5	SERTAD1
1.74E-16	5	HIST1H4C
2.33E-16	5	SAP18
5.58E-16	5	SUPT3H
1.15E-15	5	HERPUD2
2.73E-15	5	AUTS2
3.08E-15	5	MCUB
3.34E-15	5	KLF13
4.05E-15	5	OCIAD2
5.70E-15	5	DDX3X
1.01E-14	5	PIK3IP1
1.05E-14	5	DUSP4
1.23E-14	5	SKP1
1.94E-14	5	NEU1
2.00E-14	5	BIN2
2.89E-14	5	JAML
2.93E-14	5	LINC01619
3.57E-14	5	RAB27A
4.02E-14	5	ARAP2
4.42E-14	5	OAT
5.80E-14	5	EIF5
7.75E-14	5	GSPT1
8.63E-14	5	LINC01934
1.48E-13	5	TGFBR2
1.62E-13	5	CASP8
2.80E-13	5	PPP2R5A
4.59E-13	5	H2AFX
6.11E-13	5	ANKRD13D
6.31E-13	5	MAPRE2
8.61E-13	5	PGK1
1.41E-12	5	LRRC8C
1.42E-12	5	TMEM50A
1.49E-12	5	PMEPA1
2.21E-12	5	S1PR4
2.65E-12	5	LYST
6.13E-12	5	NCALD
8.01E-12	5	BRD1
1.06E-11	5	LBH
1.07E-11	5	DOCK8
2.97E-11	5	SUN2
3.90E-11	5	LY6E
8.99E-11	5	LPIN2

1.19E-10	5	ITGA4
1.97E-10	5	INTS6
2.57E-10	5	POLR2A
5.06E-10	5	TMEM181
5.68E-10	5	PSMB9
8.96E-10	5	HMGB2
1.47E-09	5	PTP4A2
1.51E-09	5	TCF7
2.78E-09	5	ARHGEF3
5.78E-09	5	TERF2IP
8.92E-09	5	CIB1
1.01E-08	5	AL627171.2
1.19E-08	5	SIRT2
1.19E-08	5	OPTN
1.85E-08	5	H2AFZ
3.05E-08	5	RASAL3
6.91E-08	5	P2RY8
9.36E-08	5	IKZF3
1.04E-07	5	PATJ
1.46E-07	5	EIF4A3
1.52E-07	5	PTPN4
1.82E-07	5	PRMT2
2.65E-07	5	MAML2
4.15E-07	5	RCAN3
5.46E-07	5	AHNAK
5.90E-07	5	C12orf57
6.15E-07	5	ATXN7
6.65E-07	5	GABARAPL1
8.27E-07	5	MACF1
8.54E-07	5	WAKMAR2
1.02E-06	5	TUBA1C
1.65E-06	5	METRNL
2.11E-06	5	ODC1
2.19E-06	5	ARHGEF1
3.22E-06	5	C5orf56
3.35E-06	5	BRD2
3.40E-06	5	CITED2
3.56E-06	5	PTPN7
3.75E-06	5	ITGAL
5.63E-06	5	KANSL1
8.41E-06	5	TECR
1.18E-05	5	CKLF
1.27E-05	5	HECA

5.09E-05	5	RASGRP1
5.94E-05	5	NUFIP2
6.25E-05	5	RIPK1
0.000101541	5	SEMA4D
0.000125201	5	MACO1
0.000132172	5	H1FX
0.000173463	5	RASA1
0.000174997	5	CCDC85B
0.000200627	5	NFE2L3
0.000313083	5	ENSA
0.000343993	5	ODF2L
0.000507962	5	PPP1R14B
0.000824759	5	PPDPF
0.000858941	5	AMD1
0.00122328	5	ITGAE
0.001639382	5	SNHG12
0.002033505	5	EIF1AX
0.002590521	5	XPC
0.002733831	5	TLE4
0.002772269	5	ORAI1
0.006703684	5	ATP1A1
0.007253839	5	DYNLL1
0.007672384	5	PER1
0.010365878	5	ARHGEF7
0.010425957	5	NKTR
0.013834615	5	SNRK
0.013955233	5	SLC25A26
0.014634655	5	HNRNPUL1
0.016108947	5	PCED1B
0.023734164	5	SKI
0.026734926	5	GPR65
0.030209136	5	GCC2
0.035506738	5	BTD
0.050945571	5	KIF2A
0.0627315	5	GLUD1
0.089269302	5	RNF38
0.223066811	5	NCOA1
0.231386064	5	SLC4A7
0.271062278	5	TAF7
0.280903451	5	NLRC5
0.443212122	5	HMOX2
0.451760057	5	IFNGR1
0.476462539	5	SMURF2

0.483171169	5	HEXIM1
0.561652962	5	GGA2
0.847208557	5	DHRS7
1	5	REEP5
1	5	RBL2
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1	5	CCDC97
1	5	GSTK1
1	5	TBC1D10C
1	5	TARSL2
1	5	SURF4
1	5	SENP7
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1	5	URI1
1	5	NSMCE3
1	5	GALNT10
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1	5	ARHGAP9
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1	5	VCP
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1	5	GADD45B
1	5	C9orf78
1	5	MAN2A1
1	5	AC245297.3
1	5	PDCL3
1	5	PRKACB
1	5	XPO4
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0	6	IGKC
0	6	IGHG1
0	6	IGLC3
0	6	IGLC1
0	6	IGHG3
0	6	IGHA1
0	6	IGHG4
0	6	IGHGP
0	6	IGHG2
0	6	JCHAIN

0	6	MZB1
0	6	SSR4
0	6	DERL3
0	6	XBP1
0	6	TXNDC5
0	6	FKBP11
0	6	PRDX4
0	6	COBLL1
0	6	SEC11C
0	6	IFNG-AS1
0	6	ST6GAL1
0	6	JSRP1
0	6	CD38
0	6	GAB1
0	6	CREB3L2
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0	6	MYO1D
0	6	RRBP1
0	6	CROCC
0	6	IGLV3-1
0	6	LINC02384
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0	6	POU2AF1
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0	6	SPATS2
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0	6	SSR3
0	6	SOX5
0	6	EIF2AK4
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0	6	PDK1
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0	6	SEL1L
0	6	TBC1D9
0	6	ZNF215

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0	6	ZBP1
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0	6	TNFRSF17
0	6	HIST1H2BD
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0	6	GNG7
0	6	AL591518.1
0	6	SDF2L1
0	6	AC007952.4
0	6	ERLEC1
0	6	SSPN
0	6	LMAN1
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0	6	CD79A
0	6	TRIB1
0	6	SPAG4
0	6	HIST1H2BC
0	6	KCNN3
0	6	MEI1
0	6	BHLHE41
0	6	GAS6
0	6	NUCB2
0	6	CHST15
0	6	U62317.4
0	6	TRAM2
0	6	SDC1
0	6	CPNE5
0	6	PLPP5
0	6	Z93930.2
0	6	C11orf80
0	6	AC078883.1
0	6	P2RX1
0	6	MANEA
0	6	NUGGC
0	6	ST6GALNAC4
0	6	MEF2B
0	6	SRPRB
0	6	CHST2
0	6	PGM3

0	6	CHPF
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1.35E-300	6	SELENOM
1.16E-298	6	CEP128
2.05E-288	6	PIP5K1B
6.44E-287	6	MANF
5.68E-282	6	TPD52
9.24E-276	6	CRELD2
5.10E-274	6	ITGA6
4.49E-271	6	SPCS2
3.86E-266	6	PLCG2
1.13E-264	6	RALGPS2
8.15E-263	6	CASP10
4.97E-260	6	LARGE1
4.11E-259	6	TXNDC15
9.72E-256	6	AL021155.5
3.27E-253	6	HM13
5.14E-249	6	AC016074.2
6.04E-248	6	MEF2C
7.38E-246	6	SIL1
1.07E-245	6	HIST1H2AC
1.11E-245	6	PIK3CG
9.02E-242	6	IGHA2
7.63E-241	6	INSR
1.64E-235	6	ANKRD28
5.92E-235	6	CLPTM1L
8.57E-231	6	RAB30
7.73E-229	6	FNDC3B
1.06E-225	6	TEX14
6.93E-225	6	SEC61A1
7.48E-225	6	LARP1B
1.58E-223	6	Z93241.1
2.82E-220	6	TP53INP1
6.40E-220	6	PDIA4
3.37E-218	6	EVI5
8.19E-213	6	TMEM107
1.38E-200	6	TXNDC11
1.24E-198	6	MYDGF
2.57E-195	6	AL162253.2
1.15E-187	6	SPCS3
1.52E-186	6	HDLBP
8.52E-186	6	VOPP1
2.36E-185	6	HERPUD1

2.29E-182	6	HSH2D
2.64E-181	6	HIST1H1C
3.02E-180	6	TBCEL
1.99E-174	6	STAP1
2.84E-172	6	SEL1L3
5.18E-170	6	TOR3A
4.70E-168	6	THEMIS2
1.88E-164	6	EIF2AK3
1.25E-163	6	TSPAN13
8.14E-163	6	CPEB4
2.43E-160	6	UBE2J1
3.55E-160	6	PRPSAP2
5.63E-160	6	KDEL2
7.30E-160	6	CARMIL1
3.83E-153	6	CCDC88A
1.42E-152	6	OSBPL10
5.02E-151	6	CDK14
1.50E-150	6	GALNT2
6.21E-146	6	KDEL1
3.79E-143	6	HMCES
2.05E-142	6	SEC24A
1.85E-135	6	AC012447.1
1.86E-129	6	PECAM1
1.50E-126	6	PIM2
1.46E-124	6	TRIO
6.30E-123	6	DAP
6.98E-120	6	FBH1
7.30E-115	6	HIPK2
7.15E-114	6	DENND1B
6.75E-113	6	TVP23C
1.16E-111	6	FHIT
4.31E-109	6	RABAC1
2.40E-105	6	BTD
3.21E-103	6	PAPSS1
6.48E-97	6	GMDS-DT
7.83E-94	6	TRAM1
1.51E-93	6	FNDC3A
1.50E-90	6	USP48
2.70E-90	6	RPN2
2.12E-88	6	PDIA6
2.89E-83	6	BICD1
1.42E-81	6	SPCS1
3.44E-76	6	TENT5C

1.39E-73	6	EHMT1
5.27E-73	6	OSBPL3
7.21E-71	6	DUSP5
7.88E-71	6	CDK6
5.91E-68	6	XIST
1.16E-63	6	IGHM
1.11E-62	6	CYBA
4.03E-61	6	SEC61B
1.18E-60	6	ERN1
2.70E-59	6	PRDM1
8.60E-59	6	KRTCAP2
4.50E-54	6	NDUFAF6
1.58E-52	6	RHBDD1
1.23E-49	6	H1FX
1.56E-44	6	WWOX
6.69E-43	6	BCL2L11
1.62E-42	6	LINC00910
1.83E-42	6	EDEM1
3.54E-42	6	FCHSD2
4.17E-38	6	SND1
5.06E-38	6	FBXW7
2.34E-36	6	FAM214A
3.80E-34	6	FUT8
7.71E-28	6	CYTOR
5.96E-27	6	MAN1A1
2.04E-21	6	MDM2
1.46E-15	6	WDR74
1.69E-07	6	RAPGEF1
9.07E-07	6	NCOA3
1	6	SQSTM1
1	6	ITPR2
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0	7	SPP1
0	7	C1QA
0	7	C1QB
0	7	CCL18
0	7	MMP12
0	7	APOC1
0	7	C1QC
0	7	RNASE1
0	7	FTL
0	7	CTSB
0	7	LYZ

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0	7	IFI30
0	7	CTSZ
0	7	TYROBP
0	7	AIF1
0	7	CST3
0	7	PSAP
0	7	CD68
0	7	MRC1
0	7	FCER1G
0	7	SELENOP
0	7	FCGR2A
0	7	MS4A6A
0	7	CTSL
0	7	GLUL
0	7	MAFB
0	7	FMNL2
0	7	TMEM176B
0	7	GRN
0	7	GPNMB
0	7	FCGR3A
0	7	LRMDA
0	7	PLXDC2
0	7	LGMN
0	7	MS4A7
0	7	CD163
0	7	SLC16A10
0	7	FCGRT
0	7	F13A1
0	7	IGSF6
0	7	NPC2
0	7	FMN1
0	7	MSR1
0	7	HLA-DRA
0	7	HLA-DRB1
0	7	CD74
0	7	CAPG
0	7	HLA-DPA1
0	7	DAB2
0	7	RAB31
0	7	PLD3
0	7	SLC40A1
0	7	CTSS

0	7	MARCKS
0	7	MS4A4A
0	7	PAPSS2
0	7	CYBB
0	7	TGFBI
0	7	CXCL3
0	7	SLCO2B1
0	7	PMP22
0	7	SLC8A1
0	7	PLA2G7
0	7	HMOX1
0	7	TIMP2
0	7	FGL2
0	7	RBM47
0	7	KCNMA1
0	7	NRP1
0	7	PLTP
0	7	ABCA1
0	7	CREG1
0	7	TMEM176A
0	7	FOLR2
0	7	IFITM3
0	7	HLA-DPB1
0	7	MERTK
0	7	DOCK4
0	7	CTSH
0	7	KCTD12
0	7	MFSD1
0	7	ASAH1
0	7	CXCL2
0	7	TNS3
0	7	GSN
0	7	C5AR1
0	7	FPR3
0	7	HLA-DQB1
0	7	CSF1R
0	7	TREM2
0	7	CXCL8
0	7	SLC1A3
0	7	SH3PXD2B
0	7	DAPK1
0	7	PDGFC
0	7	CALHM6

0	7	SPI1
0	7	STAB1
0	7	FRMD4A
0	7	LHFPL2
0	7	VSIG4
0	7	SPRED1
0	7	SDS
0	7	CD86
0	7	MITF
0	7	LNCAROD
0	7	HBEGF
0	7	NUPR1
0	7	LST1
0	7	CPVL
0	7	RASAL2
0	7	TFEC
0	7	MNDA
0	7	DMXL2
0	7	HLA-DMB
0	7	C15orf48
0	7	CXCL16
0	7	TMEM163
0	7	C3AR1
0	7	FCHO2
0	7	C1orf54
0	7	HNMT
0	7	PSD3
0	7	CLEC7A
0	7	LILRB4
0	7	TNFSF13
0	7	FNIP2
0	7	CPM
0	7	ADAP2
0	7	B3GNT5
0	7	RASSF4
0	7	SERPINA1
0	7	SERPING1
0	7	GM2A
0	7	SLC11A1
0	7	BNC2
0	7	STARD13
0	7	C2
0	7	ENPP2

0	7	SASH1
0	7	COLEC12
0	7	ITSN1
0	7	EPB41L3
0	7	GPR34
0	7	TLR2
0	7	RAB20
0	7	SRGAP1
0	7	PDK4
0	7	MCTP1
0	7	GNB4
0	7	FUCA1
0	7	TTYH3
0	7	ETS2
0	7	NRP2
0	7	NPL
0	7	ZFHX3
0	7	LAIR1
0	7	SLAMF8
0	7	RGL1
0	7	ADAM9
0	7	RCAN1
0	7	PLAUR
0	7	RAB13
0	7	IL18
0	7	PLAU
0	7	FCGR1A
0	7	EMILIN2
0	7	SLC7A7
0	7	SIRPA
0	7	MPEG1
0	7	CD163L1
0	7	NCF2
0	7	SLC15A3
0	7	FAM20A
0	7	SDC2
0	7	KYNU
0	7	TMEM51
0	7	MPP1
0	7	CLIC2
0	7	CYFIP1
0	7	DST
0	7	THBD

0	7	RAB32
0	7	LRP1
0	7	PTAFR
0	7	JDP2
0	7	WDFY3
0	7	ALOX5
0	7	IDH1
0	7	LPCAT2
0	7	SHTN1
0	7	ADGRE2
0	7	MMP14
0	7	SLC31A1
0	7	GAA
0	7	GAS2L3
0	7	OSBPL1A
0	7	TSPAN4
0	7	RIN2
0	7	FGD4
0	7	TCEAL9
0	7	SLC7A8
0	7	CD93
0	7	ENG
0	7	AXL
0	7	SMIM25
0	7	CPED1
0	7	NEK6
0	7	CREB5
0	7	HCK
0	7	FAM20C
0	7	SLC31A2
0	7	CLEC4A
0	7	ARHGAP22
0	7	ITGAX
0	7	CMKLR1
0	7	SIGLEC12
0	7	TCN2
0	7	CSF2RA
0	7	COLGALT1
0	7	FPR1
0	7	SDSL
0	7	NECTIN2
0	7	TRPM2
0	7	TLR4

0	7	ST3GAL6
0	7	LRRC25
0	7	SIGLEC1
0	7	MRAS
0	7	OLFML2B
0	7	LILRB3
0	7	CD300LF
0	7	VAT1
0	7	ARHGEF10L
0	7	ETV5
0	7	SORT1
0	7	GASK1B
0	7	FHAD1
0	7	OSCAR
0	7	LTBR
1.55E-302	7	GLMP
1.43E-299	7	ACP2
4.74E-299	7	SIGLEC10
1.88E-298	7	TNFRSF21
3.66E-298	7	CCDC88A
1.93E-296	7	FBP1
7.33E-296	7	DUSP3
1.32E-295	7	OLR1
7.63E-295	7	PILRA
3.55E-294	7	MOB3B
2.44E-292	7	SGK1
4.09E-292	7	NHSL1
1.03E-290	7	MCOLN1
2.67E-290	7	SNX8
3.32E-289	7	NCEH1
4.53E-289	7	SLC43A3
2.11E-288	7	HLA-DMA
3.48E-288	7	KIF13A
4.36E-288	7	HLA-DQA1
8.75E-288	7	ACP5
2.74E-285	7	TBXAS1
1.38E-283	7	CTSD
7.42E-283	7	ITGAM
8.70E-283	7	RNASE6
1.13E-282	7	ZNF804A
5.03E-281	7	MMP19
3.00E-280	7	PLEK
4.03E-280	7	CD300A

4.31E-280	7	LILRB2
4.84E-278	7	SERPINB6
2.51E-276	7	TANC2
1.65E-275	7	ADM
5.63E-273	7	RNF130
9.69E-273	7	KLF4
6.87E-272	7	GRINA
5.92E-271	7	NAIP
8.68E-271	7	LY96
9.25E-270	7	IER3
8.56E-269	7	CFD
3.47E-267	7	ICAM1
4.13E-267	7	RRAGD
1.54E-266	7	UNC93B1
2.02E-266	7	PXDC1
2.70E-265	7	IL13RA1
1.02E-263	7	ALCAM
2.34E-263	7	TNFSF13B
2.96E-263	7	ARHGAP18
3.39E-263	7	BRI3
3.62E-263	7	ACTN1
2.34E-262	7	FCGR2B
3.26E-262	7	PLBD1
9.11E-262	7	A2M
3.57E-261	7	BLVRB
2.67E-260	7	CTBP2
3.96E-259	7	HEXB
5.01E-259	7	TNFAIP2
5.04E-259	7	PEA15
6.24E-256	7	SPIRE1
8.28E-255	7	LGALS3BP
5.83E-254	7	BMP2K
2.14E-253	7	MMP9
4.92E-253	7	BCAT1
1.13E-252	7	TLR1
3.12E-252	7	ATP6AP1
2.47E-250	7	ALDH2
7.67E-250	7	RHOQ
7.99E-248	7	HES1
6.30E-247	7	CNTLN
1.08E-245	7	CEP170
1.24E-245	7	LY86
2.47E-244	7	PPFIBP2

5.40E-244	7	MGST2
6.71E-244	7	GNS
2.37E-243	7	UBE2E2
1.02E-242	7	SCARB2
4.90E-240	7	CD9
1.44E-239	7	LIPA
2.64E-239	7	IL1B
6.67E-239	7	CLIC4
8.86E-238	7	SNX10
1.55E-237	7	PLXND1
3.43E-237	7	TNFRSF1A
9.33E-236	7	KIFC3
4.53E-235	7	ATP6V1B2
4.92E-235	7	RNF144B
1.75E-234	7	ST14
2.48E-234	7	SYK
1.64E-231	7	SLC43A2
2.88E-231	7	FGD2
1.49E-230	7	C1orf162
6.37E-230	7	SBF2
1.57E-229	7	CCR1
2.40E-229	7	SCPEP1
4.13E-229	7	ATP6V0A1
6.18E-229	7	S100A9
3.33E-228	7	NAGA
5.46E-226	7	CAMK1
1.06E-222	7	BLVRA
4.87E-222	7	ABL2
6.68E-222	7	AP2A2
1.89E-221	7	CD63
2.09E-221	7	NFIC
5.71E-221	7	CCL3
1.11E-219	7	GOLIM4
1.89E-218	7	CD40
7.36E-218	7	KIAA0930
8.98E-218	7	LGALS1
2.09E-215	7	GNPDA1
2.32E-215	7	IRAK3
5.04E-215	7	TYMP
1.14E-214	7	IFNGR2
1.19E-214	7	SPINT2
3.12E-214	7	HLA-DOA
2.15E-213	7	VASH1

8.78E-213	7	PHACTR1
1.02E-211	7	PGD
1.36E-211	7	TREM1
4.85E-211	7	ITPRIPL2
1.10E-209	7	MAN2B1
1.17E-209	7	GRK3
1.23E-209	7	ZNF385A
7.60E-209	7	THEMIS2
1.03E-208	7	PLEKHO2
3.23E-208	7	MYO1E
1.63E-207	7	MB21D2
3.74E-207	7	DSE
7.14E-206	7	TBC1D9
1.39E-205	7	BCL2A1
2.73E-203	7	CD83
2.36E-202	7	FAM49A
3.57E-201	7	TCF7L2
7.55E-201	7	AMPD3
1.35E-200	7	CD151
2.02E-200	7	ANXA2
4.68E-200	7	VEGFA
1.20E-198	7	CD302
2.88E-198	7	AP2S1
1.11E-197	7	CLIP2
1.32E-197	7	IRF8
3.59E-197	7	PLBD2
5.53E-197	7	CORO1C
6.89E-197	7	EPB41L2
6.16E-196	7	TBC1D12
9.29E-196	7	PPT1
9.68E-196	7	BTK
7.69E-195	7	PECAM1
1.00E-194	7	GNAQ
2.96E-194	7	SCIMP
2.12E-191	7	SNX24
2.73E-191	7	CTSA
4.93E-191	7	SNAI1
7.95E-190	7	SHB
8.29E-190	7	LAMP2
4.04E-189	7	ANXA4
1.14E-188	7	AL356124.1
1.01E-187	7	SIPA1L2
2.83E-187	7	AKR1B1

4.28E-187	7	TPP1
1.10E-186	7	SWAP70
1.32E-185	7	MFSD12
2.32E-184	7	1-Mar
6.19E-184	7	LGALS9
1.63E-183	7	CIITA
4.29E-183	7	SGPL1
5.24E-183	7	SAT1
1.08E-182	7	SOD2
1.34E-182	7	FTH1
6.06E-182	7	PTPN12
7.76E-182	7	GAS6
8.92E-182	7	ZMIZ1
1.42E-181	7	TUBB6
4.83E-181	7	TRIO
1.06E-180	7	SCARB1
1.58E-180	7	AGAP3
3.42E-180	7	DPYSL2
3.60E-180	7	GBA
1.65E-179	7	SMIM30
5.25E-179	7	NINJ1
5.81E-179	7	TBC1D2
2.29E-178	7	ANXA5
3.05E-177	7	RHOB
3.72E-177	7	BAIAP2
1.81E-175	7	MGAT1
1.43E-173	7	OGFRL1
1.48E-173	7	PLIN3
1.85E-173	7	ABR
5.10E-173	7	FHIT
8.86E-173	7	DUSP6
1.18E-172	7	ATP6V1F
2.23E-172	7	IL4I1
2.30E-171	7	S100A11
2.71E-171	7	SLC36A1
4.18E-171	7	ATP6V0B
4.54E-171	7	APP
6.61E-171	7	RASGEF1B
1.10E-170	7	MYOF
8.75E-170	7	COMT
1.13E-169	7	DBNDD2
1.82E-168	7	LRRK2
1.89E-168	7	HLA-DQA2

1.98E-168	7	LGALS3
3.51E-168	7	YWHAH
4.11E-168	7	CD109
2.88E-166	7	AKR1A1
1.59E-165	7	ACSL1
1.71E-165	7	SLC38A6
1.75E-164	7	OAZ2
1.19E-163	7	PHC2
1.79E-163	7	ATP6V0C
2.27E-163	7	PPM1L
3.00E-163	7	DRAM1
7.39E-163	7	LYN
1.18E-162	7	CLCN7
2.62E-162	7	SKAP2
1.69E-160	7	GNG10
3.37E-160	7	CPNE8
3.73E-160	7	LAPTM5
5.21E-160	7	CTTNBP2NL
6.48E-160	7	CTNND1
4.71E-159	7	AL078604.4
2.24E-158	7	TCEAL4
5.26E-157	7	ARRB1
1.78E-156	7	LACTB
3.36E-156	7	SYNGR2
7.98E-156	7	SH2B3
6.40E-155	7	SESTD1
2.55E-154	7	QKI
3.30E-154	7	NAGK
1.08E-153	7	CTSC
2.68E-153	7	FKBP15
4.62E-153	7	ATOX1
5.26E-153	7	ASPH
6.78E-153	7	DDAH2
1.21E-152	7	HSD17B4
1.87E-152	7	IL1RN
1.87E-152	7	NFKBIE
8.56E-152	7	G0S2
8.65E-152	7	RAB34
8.79E-152	7	MEF2C
5.92E-151	7	ARRB2
1.04E-150	7	MSRB2
4.99E-150	7	C20orf194
1.12E-149	7	KMO

2.64E-149	7	MGLL
2.78E-148	7	ACER3
1.59E-147	7	PTTG1IP
1.64E-146	7	GLA
3.54E-146	7	EGR3
3.77E-146	7	GSAP
5.29E-146	7	LRRC23
9.03E-146	7	HEXA
1.31E-144	7	KIF16B
2.67E-144	7	CSTB
2.81E-144	7	CSTA
8.83E-144	7	DOCK7
2.21E-143	7	GSTO1
2.27E-143	7	PEAK1
2.34E-143	7	FUCA2
3.42E-143	7	TCEAL3
1.14E-142	7	CD80
1.22E-142	7	SDCCAG8
1.61E-142	7	LILRB1
2.03E-142	7	ARHGAP21
2.05E-142	7	NCOA4
4.26E-141	7	FRMD4B
1.28E-140	7	OPN3
4.14E-140	7	LAMP1
9.02E-140	7	NUDT16
6.20E-139	7	METTL7A
2.25E-138	7	PIK3AP1
2.47E-138	7	AP1B1
6.71E-138	7	PLXNC1
1.40E-137	7	CD81
2.22E-136	7	MPZL1
2.79E-135	7	SRGAP2B
9.52E-135	7	LAT2
1.53E-134	7	MKNK1
6.13E-134	7	PARVB
4.18E-133	7	PPARD
4.85E-133	7	DNASE2
4.19E-132	7	PYCARD
2.14E-131	7	GABARAP
1.92E-130	7	ALAS1
2.94E-130	7	PLEKHO1
8.45E-130	7	BCKDK
4.42E-129	7	ARHGAP10

4.72E-129	7	SUSD1
1.03E-128	7	KIF1B
2.29E-128	7	CTNNA1
5.57E-128	7	SMCO4
1.85E-127	7	FGR
1.99E-127	7	FUOM
2.48E-127	7	TCF4
3.99E-127	7	TIMP1
5.57E-127	7	EVI5
1.11E-126	7	PRDX1
1.54E-126	7	EPAS1
1.58E-126	7	FLOT1
1.45E-125	7	SEMA4A
4.30E-125	7	ZNF710
6.43E-124	7	ERRFI1
1.01E-123	7	PDXK
1.65E-123	7	NQO2
3.26E-123	7	GAB2
4.65E-123	7	BASP1
5.87E-123	7	HLA-DRB5
1.12E-122	7	TEC
1.73E-122	7	ADA2
4.90E-122	7	SLC16A3
6.42E-122	7	LPAR6
1.58E-121	7	WDFY4
3.51E-121	7	CPPED1
4.55E-121	7	LATS2
1.21E-120	7	PEPD
1.72E-120	7	CPQ
3.87E-120	7	ABHD12
2.16E-119	7	M6PR
3.98E-119	7	TENT5A
6.33E-119	7	CNDP2
9.66E-119	7	SLC25A24
1.08E-118	7	RNF13
1.22E-118	7	SH3BP5
1.48E-118	7	SLC8B1
2.73E-118	7	CD59
4.13E-118	7	ATF5
6.77E-118	7	NCF4
1.16E-117	7	H2AFY
1.81E-117	7	PAK1
5.46E-117	7	CYBA

1.69E-116	7	RAC1
1.75E-116	7	LYL1
2.12E-116	7	GPX4
2.27E-116	7	ZNF438
5.41E-116	7	LITAF
1.85E-114	7	TPD52L2
5.21E-114	7	PRKAG2
5.59E-114	7	ATP6V1C1
9.79E-114	7	SRGAP2
1.98E-113	7	ZFYVE16
3.75E-113	7	EVA1B
1.50E-112	7	TUBB
3.21E-112	7	TPRA1
8.09E-112	7	NUCB1
1.27E-111	7	EIF4EBP1
3.83E-111	7	GRASP
5.56E-111	7	SAMD4A
7.09E-111	7	CDK2AP1
4.04E-110	7	CLN8
8.02E-110	7	PCBD1
4.11E-109	7	HCFC1R1
7.81E-108	7	VAMP8
8.47E-107	7	ALPK1
1.37E-105	7	PTMS
3.66E-105	7	VEGFB
5.34E-105	7	SOAT1
1.07E-104	7	DUSP23
1.66E-104	7	TFPT
1.89E-104	7	RIPK2
2.96E-104	7	UPP1
6.86E-104	7	PKM
1.08E-103	7	LAMTOR2
2.13E-103	7	CCL3L1
1.23E-102	7	ARPC5
1.33E-102	7	QSOX1
1.55E-102	7	ZYX
3.14E-102	7	GPR137B
3.38E-102	7	HAVCR2
3.45E-102	7	SLC39A1
4.85E-102	7	ATP6AP2
5.62E-102	7	HSBP1
5.94E-102	7	SPG21
7.11E-102	7	NAMPT

7.61E-102	7	ARL8A
8.65E-102	7	CRTAP
9.04E-102	7	TALDO1
9.84E-102	7	SNTB1
1.26E-101	7	YBX1
2.21E-101	7	KLF10
5.37E-101	7	NEDD4L
8.19E-101	7	SLC11A2
1.17E-100	7	PDIA4
3.57E-100	7	MXD1
3.63E-100	7	LIMS1
6.07E-100	7	DOP1B
7.51E-100	7	SLC45A4
7.69E-100	7	NME2
7.82E-100	7	PLSCR1
1.16E-99	7	FEZ2
1.39E-99	7	IRAK2
2.46E-99	7	STX4
3.84E-99	7	MANBA
8.73E-99	7	ATP6V0D1
9.95E-99	7	SLC66A2
6.70E-98	7	DENND3
1.66E-97	7	P4HA1
2.15E-97	7	PTPN6
3.79E-97	7	NTAN1
5.57E-97	7	MGST3
1.04E-96	7	PLEKHM2
1.71E-96	7	VAMP3
2.32E-96	7	CD72
4.75E-96	7	IFNGR1
8.57E-96	7	PTPN9
1.94E-95	7	CANX
2.72E-94	7	STX7
5.42E-94	7	NXF1
2.27E-93	7	RNH1
3.11E-93	7	ACTB
9.48E-93	7	USP6NL
1.00E-92	7	RAB7A
1.74E-92	7	GAS7
2.14E-92	7	TOM1
3.00E-92	7	AGPAT2
3.68E-92	7	2-Mar
3.70E-92	7	TMBIM1

4.37E-92	7	CBR1
8.41E-92	7	SLC39A11
1.19E-91	7	IL3RA
2.24E-91	7	KLHL6
2.63E-91	7	ITGA5
3.05E-91	7	RGS19
4.87E-91	7	ANKS1A
8.49E-91	7	TSPAN33
1.46E-90	7	TNFSF12
1.58E-90	7	P2RX4
2.18E-90	7	CD4
6.15E-90	7	PTPRE
8.03E-90	7	HSD17B12
9.29E-90	7	TFRC
2.29E-89	7	STK3
4.85E-89	7	ITGB2
6.93E-89	7	SLC17A5
1.00E-88	7	PRDX3
1.31E-88	7	TPM4
3.76E-88	7	RREB1
5.36E-88	7	GLIPR2
7.37E-88	7	EFHD2
1.24E-87	7	GNA15
1.64E-87	7	FABP5
1.72E-87	7	LRRK1
2.80E-87	7	PDE4DIP
3.17E-87	7	SPART
4.30E-87	7	ATP1B1
4.77E-87	7	APLP2
1.39E-86	7	VAV2
1.39E-86	7	SMIM3
2.02E-86	7	ARHGAP31
1.16E-85	7	TSPAN3
1.26E-85	7	CREBL2
2.46E-85	7	TCIRG1
2.56E-85	7	CAT
4.66E-85	7	GADD45G
6.01E-85	7	LEPROT
9.03E-85	7	PTPN18
1.79E-84	7	RASGRP3
3.12E-84	7	SLC25A13
3.60E-84	7	SLC2A13
5.19E-84	7	GNAI2

5.51E-84	7	SNX27
6.92E-84	7	SDCBP
1.91E-83	7	NFIL3
2.31E-83	7	OTUD1
2.60E-83	7	GSTP1
2.84E-83	7	TUBA1B
8.04E-83	7	CHCHD10
9.72E-83	7	PPIF
1.17E-82	7	FOXO3
3.68E-82	7	VASP
4.50E-82	7	SAV1
1.31E-81	7	GPD2
1.33E-81	7	NR4A2
2.31E-81	7	CHKA
3.67E-81	7	VKORC1
1.06E-80	7	P4HB
1.10E-80	7	AP1S2
1.30E-80	7	TEX14
1.53E-80	7	NFKBID
4.33E-80	7	PFKL
4.48E-80	7	FERMT3
6.00E-80	7	ZFAND5
6.05E-80	7	VIM
9.16E-80	7	JOSD2
1.80E-79	7	BCAP31
2.04E-79	7	BAG3
2.65E-79	7	NAAA
4.18E-79	7	LAP3
4.31E-79	7	RNASET2
4.60E-79	7	RAPH1
6.88E-79	7	CALU
6.90E-79	7	SLC12A7
1.19E-78	7	EHBP1L1
1.84E-78	7	VAC14
1.87E-78	7	RP2
2.43E-78	7	ACSL3
2.86E-78	7	C9orf72
6.37E-78	7	SH3BP2
1.03E-77	7	IER5
1.17E-77	7	EIF4A1
1.24E-77	7	ADPGK
1.49E-77	7	CNPY3
2.72E-77	7	RIN3

2.89E-77	7	TET3
3.64E-77	7	TNFRSF10D
5.72E-77	7	S100A10
7.63E-77	7	ATG7
9.16E-77	7	GNA12
5.06E-76	7	ACOT13
1.69E-75	7	NCOR2
2.08E-75	7	GIPC1
2.11E-75	7	CDKN1A
2.84E-75	7	KLF7
3.06E-75	7	LAMTOR1
3.08E-75	7	TULP2
3.23E-75	7	GUSB
7.83E-75	7	EEDP1
8.50E-75	7	SUMF1
1.68E-74	7	TUBA1C
1.81E-74	7	RASSF2
5.37E-74	7	WARS
6.47E-74	7	AHCYL1
6.94E-74	7	SMS
1.12E-73	7	TUBGCP2
1.24E-73	7	CUX1
1.45E-73	7	DRAM2
1.60E-73	7	RAP2B
1.92E-73	7	MEF2A
2.04E-73	7	SQOR
2.32E-73	7	SNX29
2.37E-73	7	RTN4
4.50E-73	7	RHBDF2
5.00E-73	7	CHID1
7.91E-73	7	FNDC3B
1.37E-72	7	AFDN
1.42E-72	7	SNX3
2.74E-72	7	MAFF
3.83E-72	7	LAPTM4A
6.44E-72	7	TBC1D14
7.87E-72	7	TSC22D1
2.24E-71	7	GADD45B
4.85E-71	7	STX6
7.20E-71	7	NUBP1
1.88E-70	7	RNASEK
8.61E-70	7	AF117829.1
9.19E-70	7	HIF1A

2.00E-69	7	SLC44A1
2.16E-69	7	CPEB4
2.26E-69	7	ADAM17
2.79E-69	7	GNB2
3.00E-69	7	RFX2
3.75E-69	7	PHACTR4
1.62E-68	7	ATP13A3
3.68E-68	7	BNIP3L
3.69E-68	7	BAZ2B
3.76E-67	7	SLC25A19
6.23E-67	7	VPS35
7.58E-67	7	PABPC4
1.08E-66	7	DENND1A
1.14E-66	7	UBE2D1
1.18E-66	7	RAB5C
1.60E-66	7	PAPSS1
2.32E-66	7	TMSB10
3.13E-66	7	ARSB
3.38E-66	7	ITM2B
3.88E-66	7	RRBP1
4.66E-66	7	ATP6V1A
5.06E-66	7	NENF
1.73E-65	7	EEA1
6.60E-65	7	SMIM14
2.43E-64	7	YWHAG
1.28E-63	7	ZFP36L1
2.00E-63	7	CLTA
6.36E-63	7	NPTN
7.19E-63	7	C4orf48
1.25E-62	7	TMEM147
1.54E-62	7	IFNAR1
2.27E-62	7	ABHD5
5.08E-62	7	RPN1
5.60E-62	7	UBTD2
7.08E-62	7	PRNP
2.00E-61	7	GCLC
2.88E-61	7	TRAPPC5
2.96E-61	7	GNA13
4.60E-61	7	IER5L
7.54E-61	7	ATP2A2
9.14E-61	7	SERF2
1.02E-60	7	CMTM6
2.10E-60	7	LCP2

2.24E-60	7	SIL1
2.70E-60	7	SNX2
3.09E-60	7	ATP2C1
3.44E-60	7	TPI1
1.20E-59	7	PDE8A
1.50E-59	7	ABI3
2.36E-59	7	CALR
4.78E-59	7	TMEM30A
5.73E-59	7	DBI
1.21E-58	7	ODF3B
1.65E-58	7	TMEM14C
3.00E-58	7	CD84
5.05E-58	7	NRIP1
9.20E-58	7	CAPNS1
1.11E-57	7	PHLDA2
1.16E-57	7	PRCP
2.07E-57	7	TKT
3.67E-57	7	VPS8
6.08E-57	7	MIR181A1HG
1.01E-56	7	GNG7
3.12E-56	7	ARHGAP24
3.28E-56	7	SUMO3
6.40E-56	7	PLEKHB2
1.02E-55	7	FAM210A
1.95E-55	7	SLC25A33
2.06E-55	7	TSPO
6.01E-55	7	ARPC3
8.47E-55	7	ECHS1
1.39E-54	7	ARL8B
2.98E-54	7	CAP1
8.55E-54	7	DBNL
1.24E-53	7	SIPA1L1
2.36E-53	7	RALA
5.98E-53	7	MTSS1
1.37E-52	7	RTN3
5.11E-52	7	SGK3
5.48E-52	7	TNFRSF10B
1.28E-51	7	NFATC1
2.59E-51	7	TXN
3.78E-51	7	ADCY3
6.48E-51	7	ITPR2
1.38E-50	7	CHD9
4.07E-50	7	AP2M1

4.81E-50	7	CLTC
9.03E-50	7	GRB2
1.03E-49	7	VPS29
6.21E-49	7	GBP1
9.93E-49	7	RHOG
1.21E-48	7	CTDNEP1
1.31E-48	7	MYO9B
3.68E-48	7	KDELR1
5.06E-48	7	CCDC50
7.21E-48	7	ZEB2
7.79E-48	7	SAP30
1.44E-47	7	RHOA
1.52E-47	7	MAP3K13
1.70E-47	7	HIP1
4.62E-47	7	ATP6V1E1
6.73E-47	7	RBPJ
2.38E-46	7	H2AFJ
5.37E-46	7	C6orf62
9.52E-46	7	ARPC1B
1.49E-45	7	OAZ1
6.36E-44	7	COTL1
1.04E-43	7	FCHSD2
1.28E-43	7	MLEC
2.24E-43	7	GDI2
3.33E-43	7	TCOF1
3.37E-43	7	NCKAP1L
5.61E-43	7	NEAT1
6.64E-43	7	BHLHE40
9.38E-43	7	EMP3
2.82E-42	7	MYDGF
3.90E-42	7	TMBIM6
6.21E-42	7	SPATS2
7.77E-42	7	ANKH
7.82E-42	7	NAPA
1.10E-41	7	POLG2
2.40E-41	7	OS9
2.40E-41	7	TIMM8B
3.12E-41	7	RB1
7.22E-41	7	RNF181
8.43E-41	7	PGLS
4.71E-40	7	CAPZB
5.00E-40	7	SNAPC1
6.29E-40	7	NR4A3

7.59E-40	7	PIKFYVE
9.87E-40	7	ATF6
1.04E-39	7	LMNA
1.46E-39	7	WASHC2A
4.84E-39	7	AC020916.1
5.35E-39	7	SH3BGRL
8.42E-39	7	ZNF433-AS1
8.62E-39	7	ATP6V0E1
9.29E-39	7	RHEB
9.42E-39	7	CCSER1
9.74E-39	7	KDM6B
1.23E-38	7	ATP5PD
1.44E-38	7	RGS10
5.14E-38	7	POMP
6.24E-38	7	TMEM219
1.15E-37	7	TSC22D2
1.67E-37	7	MAP3K8
2.16E-37	7	NECAP2
2.31E-37	7	RGS2
3.01E-37	7	FKBP1A
3.88E-37	7	S100A6
7.40E-37	7	CKS2
9.34E-37	7	MOB1A
1.51E-36	7	CHMP1B
2.20E-36	7	ENO1
2.35E-36	7	PSMA4
3.13E-36	7	SLC20A1
1.84E-35	7	IFI27
4.71E-35	7	ASAP1
1.03E-34	7	SPAG9
1.21E-34	7	DPP7
2.02E-34	7	NDUFB2
3.40E-34	7	PLIN2
6.81E-34	7	AHR
8.75E-34	7	GBE1
1.06E-33	7	ERO1A
8.18E-33	7	TPM3
8.61E-33	7	GNG5
1.34E-32	7	GPR183
1.68E-32	7	RILPL2
1.92E-32	7	ZSWIM6
1.95E-32	7	SSR3
3.55E-32	7	BST2

4.21E-32	7	HOMER1
1.01E-31	7	INSIG1
1.83E-31	7	ETV6
4.74E-31	7	SERPINB1
9.63E-31	7	UST
1.26E-30	7	RAPGEF1
2.89E-30	7	TXN2
3.04E-30	7	VDAC1
4.53E-30	7	MYL6
4.61E-30	7	DUSP1
4.95E-30	7	MICOS10
5.96E-30	7	CPEB2
7.36E-30	7	PCBP1
5.43E-29	7	SCP2
9.87E-29	7	PDIA6
9.69E-28	7	KCNQ1OT1
1.19E-27	7	NFKB1
1.61E-27	7	MYO5A
1.63E-27	7	PFN1
4.74E-27	7	TAOK3
7.00E-27	7	ATP5F1C
8.55E-27	7	ANKRD33B
6.47E-26	7	PDIA3
1.48E-25	7	ZFAND2A
4.28E-25	7	MGMT
7.25E-25	7	EIF4A3
6.20E-24	7	CLIC1
1.53E-23	7	ZNF706
1.79E-23	7	AFF4
2.43E-23	7	BZW2
3.74E-23	7	TACC1
7.57E-23	7	ATP1B3
1.39E-22	7	HIF1A-AS3
2.89E-22	7	SQSTM1
4.20E-22	7	PSMB3
4.38E-22	7	BLOC1S1
1.61E-21	7	ACTR3
4.07E-21	7	AC120193.1
4.64E-21	7	CD164
8.22E-21	7	TMED10
2.00E-20	7	PPIB
5.04E-20	7	NFKBIZ
8.32E-20	7	UQCR10

1.78E-19	7	CFL1
2.68E-19	7	SLC25A5
9.28E-19	7	NOP10
1.00E-18	7	DPYD
1.09E-18	7	ACTR2
2.23E-18	7	SLAMF7
3.99E-18	7	COX5B
7.03E-18	7	PSMB6
1.14E-17	7	MFSD4B
1.24E-17	7	PSME2
1.28E-17	7	ATP5PB
1.55E-16	7	GAPDH
2.95E-16	7	LRPAP1
1.24E-15	7	ATP5MF
3.87E-15	7	PRELID1
1.60E-14	7	ATP5MC3
2.00E-14	7	IFI6
3.19E-14	7	MACF1
3.48E-14	7	BANK1
1.64E-13	7	COX6B1
5.63E-13	7	SARNP
7.64E-13	7	CCDC138
1.08E-12	7	ARPC2
1.34E-12	7	VAMP5
2.60E-12	7	ATP5F1E
8.72E-10	7	SLC2A3
9.85E-10	7	NUFIP2
6.34E-08	7	WTAP
0.005477147	7	ATF7IP2
1	7	ERO1B
0	8	HLA-DQA1
0	8	HLA-DQB1
0	8	HLA-DPA1
0	8	HLA-DRB1
0	8	HLA-DRA
0	8	HLA-DPB1
0	8	CD86
0	8	CD74
0	8	CALCRL
0	8	CSF2RA
0	8	P2RY6
0	8	ALDH2
0	8	PKIB

0	8	PPP1R14A
0	8	HLA-DMB
0	8	CIITA
0	8	SERPINF1
0	8	GPR157
0	8	CLECL1
0	8	SPIB
0	8	CD1C
0	8	PLD4
0	8	SEMA7A
0	8	FLT3
1.27E-290	8	CD83
4.87E-286	8	FAM49A
4.22E-284	8	GRASP
3.85E-283	8	IRF8
2.87E-280	8	HLA-DQA2
6.75E-279	8	ZBTB46
3.66E-277	8	SYNGR2
1.26E-276	8	CLIC2
4.64E-275	8	IFI30
1.51E-271	8	CTSH
7.54E-269	8	HLA-DMA
1.08E-257	8	SPINT2
4.17E-255	8	HDAC9
4.30E-254	8	DDAH2
9.21E-253	8	MEF2C
3.94E-252	8	KYNU
2.76E-246	8	THEMIS2
1.00E-240	8	CD40
4.67E-238	8	MCOLN2
2.65E-236	8	CTSZ
8.29E-236	8	SPI1
5.84E-232	8	IL4I1
6.03E-228	8	UBE2E2
5.14E-227	8	FAM160A1
1.15E-223	8	WDFY4
2.28E-217	8	U62317.4
3.79E-217	8	GSN
1.82E-215	8	DAPK1
2.57E-212	8	GRN
3.42E-212	8	SNX8
7.69E-212	8	SULF2
1.14E-210	8	OPN3

2.16E-209	8	MNDA
1.18E-205	8	SH2B3
6.42E-205	8	PRKAR2B
1.43E-204	8	RASSF2
2.07E-204	8	SMIM14
2.68E-201	8	BCL2A1
5.57E-199	8	LY86
7.75E-198	8	CLCN5
2.32E-197	8	LGALS2
2.64E-197	8	CYBB
1.01E-195	8	PAK1
6.86E-193	8	BASP1
3.15E-191	8	CCSER1
5.09E-188	8	LYN
4.66E-187	8	PEA15
1.06E-186	8	TSPAN33
5.06E-186	8	C12orf45
4.42E-185	8	CD80
8.46E-185	8	TYROBP
2.01E-182	8	CSF2RB
1.33E-181	8	SWAP70
2.45E-179	8	CST3
1.49E-176	8	GRK3
1.81E-175	8	ETV3
2.44E-175	8	PLEK
3.21E-174	8	CCDC88A
1.02E-172	8	PHACTR1
9.00E-172	8	GNG7
4.78E-171	8	TCF4
5.97E-171	8	DPYSL2
9.43E-171	8	SLC15A4
2.68E-170	8	RAB31
3.33E-169	8	CDK2AP1
9.70E-168	8	LST1
4.51E-167	8	RHEX
1.75E-165	8	GPR183
9.47E-165	8	HLA-DOB
5.24E-164	8	NFKBID
1.06E-162	8	AP1S3
1.54E-161	8	RBM47
1.55E-161	8	SRC
1.66E-161	8	NR4A3
1.96E-160	8	HCK

2.28E-159	8	HLA-DOA
5.48E-159	8	P2RY14
2.35E-158	8	ALCAM
7.37E-158	8	BID
1.78E-157	8	RNASE6
3.62E-157	8	SLC41A2
7.98E-157	8	NECTIN2
1.32E-156	8	ATF5
1.54E-151	8	IL18
1.68E-150	8	CMTM6
4.96E-150	8	DAPP1
1.36E-148	8	TTYH2
4.76E-148	8	SYK
8.14E-148	8	LGALS9
1.39E-147	8	LRRK1
3.36E-147	8	FCHSD2
1.00E-146	8	CXCL16
2.23E-146	8	CCDC50
1.42E-145	8	NRARP
1.63E-145	8	TBC1D9
2.21E-143	8	KLF4
1.69E-142	8	GAPT
3.92E-142	8	TUBB6
6.65E-142	8	AIF1
2.24E-140	8	TSPAN13
7.55E-140	8	WARS
1.75E-139	8	BCL11A
1.08E-138	8	CAPG
1.38E-136	8	FGD2
4.16E-136	8	CHAF1A
5.06E-136	8	IL13RA1
5.70E-136	8	HVCN1
2.98E-135	8	AFF3
6.63E-135	8	AXL
3.08E-134	8	ARHGAP31
1.66E-132	8	EMILIN2
3.20E-132	8	SHTN1
5.34E-132	8	1-Mar
8.61E-132	8	NME2
5.42E-131	8	RAB32
2.20E-130	8	CORO1C
1.77E-129	8	SPECC1
6.31E-129	8	SMCO4

1.92E-128	8	LILRB4
5.90E-128	8	CDKN1A
9.67E-128	8	SLC8A1
8.15E-127	8	NME4
3.50E-126	8	PLAC8
1.48E-125	8	ENPP2
1.60E-123	8	REL
2.62E-123	8	GNA15
9.15E-123	8	RAB11FIP1
1.68E-122	8	SPRED2
2.64E-122	8	IGSF6
6.46E-122	8	PLEKHO1
4.40E-121	8	PTK2
4.84E-121	8	ARID3A
3.64E-120	8	PARVB
8.74E-120	8	ANKRD33B
1.44E-119	8	RIPK2
1.92E-119	8	ETV6
8.76E-118	8	NPC2
1.52E-117	8	CALHM6
2.73E-117	8	MCTP1
4.86E-117	8	IFNGR2
7.12E-117	8	PKIG
8.69E-117	8	FCER1G
7.16E-116	8	CTBP2
8.44E-115	8	RNF144B
4.02E-114	8	PPP1R14B
4.10E-114	8	IL3RA
4.27E-114	8	TYMP
1.64E-113	8	MYO1E
1.35E-112	8	ZNF710
1.42E-112	8	TFEC
1.51E-112	8	STX17-AS1
1.66E-112	8	ENTPD7
1.70E-112	8	C15orf48
2.50E-112	8	FARP2
3.94E-111	8	MYOF
6.50E-111	8	TCOF1
8.53E-111	8	CPVL
2.39E-110	8	MOB3B
4.65E-110	8	HLA-DRB5
6.56E-110	8	DUSP5
1.57E-109	8	SCIMP

2.05E-109	8	ICAM1
2.68E-109	8	EIF2AK4
6.93E-109	8	ALG2
8.07E-109	8	TRIO
1.05E-108	8	IRF4
2.84E-108	8	RUFY3
3.13E-108	8	TGFBR1
2.20E-107	8	STX7
2.79E-107	8	GAS6
3.04E-107	8	GNB4
1.29E-106	8	BHLHE40
8.41E-106	8	TRAF4
1.10E-105	8	UNC93B1
1.73E-105	8	PLSCR1
1.84E-105	8	MS4A6A
7.09E-105	8	ARPC3
3.14E-104	8	CTNND1
3.31E-104	8	DBI
1.05E-103	8	GABARAP
1.78E-103	8	VEGFB
2.10E-103	8	MACC1
3.19E-103	8	MAN2B1
3.23E-103	8	CERS6
7.94E-103	8	PPA1
3.17E-101	8	DST
4.85E-101	8	GRINA
6.85E-101	8	UVRAG
8.54E-101	8	TSPAN3
8.58E-101	8	GABARAPL2
1.48E-100	8	RASSF4
3.49E-100	8	UBE2F
4.11E-100	8	SNX3
2.95E-99	8	DBNL
6.92E-99	8	ZMIZ1
1.53E-98	8	CDYL
1.72E-98	8	MOB3A
1.03E-97	8	GCA
6.68E-97	8	GDI2
9.65E-97	8	MOB1A
1.33E-96	8	MARCKSL1
2.80E-96	8	EAF2
1.56E-95	8	NEK6
4.41E-95	8	SKAP2

3.58E-94	8	SNN
5.02E-94	8	GNG5
1.56E-93	8	MGST2
2.64E-93	8	DENND5B
3.02E-93	8	MGLL
4.15E-93	8	ALOX5
2.15E-92	8	CYBA
7.18E-92	8	BANK1
2.23E-91	8	PTPN1
2.92E-91	8	SEL1L3
4.46E-91	8	CAT
6.18E-91	8	RP2
1.40E-90	8	FCGRT
2.24E-90	8	RASGRP3
2.64E-90	8	HES4
9.14E-90	8	CHML
7.70E-89	8	CNPY3
9.62E-89	8	UGCG
9.68E-89	8	SIPA1L3
1.77E-88	8	AP1S2
1.94E-88	8	CTSS
2.23E-88	8	DLGAP4
2.27E-88	8	ZNF516
3.43E-88	8	TNFSF13
4.21E-88	8	RAPGEF1
4.79E-88	8	REPIN1
5.36E-88	8	LGMN
5.77E-88	8	FYTDD1
9.00E-88	8	BTK
1.28E-87	8	NUP62
1.62E-87	8	PGLS
5.03E-87	8	RALA
9.61E-87	8	HMGA1
1.82E-86	8	MCM5
2.04E-86	8	APP
2.98E-86	8	GNA12
5.43E-86	8	SERPINB6
6.32E-86	8	IFNGR1
7.46E-86	8	TOR3A
8.79E-86	8	DBNDD2
1.92E-85	8	LAT2
2.63E-85	8	MAP3K8
4.77E-85	8	ARF3

5.58E-85	8	VASP
1.25E-84	8	TENT4A
2.12E-84	8	FUOM
2.94E-84	8	SUSD1
3.78E-84	8	AF117829.1
2.51E-83	8	ATOX1
2.54E-83	8	BMP2K
5.04E-83	8	MOB1B
1.49E-82	8	AREG
1.56E-82	8	SEC61B
5.67E-82	8	APEX1
8.30E-82	8	GPR137B
9.24E-82	8	PSME2
1.66E-81	8	PTRHD1
2.20E-81	8	MARCKS
5.46E-81	8	SCO2
1.23E-80	8	MAP3K13
3.14E-80	8	RGS19
4.52E-80	8	ACTB
5.30E-80	8	CYSTM1
1.25E-79	8	B3GNT5
1.31E-79	8	CNDP2
1.43E-79	8	PDLIM1
5.44E-78	8	SMIM20
1.30E-77	8	CDK14
1.63E-77	8	PLXDC2
4.29E-77	8	SELENOH
6.91E-77	8	ARPC5
7.49E-77	8	ADAM19
7.73E-77	8	RUBCN
2.71E-76	8	SINHCAF
1.04E-75	8	MB21D2
1.10E-75	8	GALNT3
1.35E-75	8	SPART
2.58E-75	8	IRF7
2.74E-75	8	RAB8B
3.37E-75	8	TPM3
5.27E-75	8	KLHL6
1.29E-74	8	PLIN3
4.11E-74	8	C17orf49
4.55E-74	8	HPS5
7.01E-74	8	CYB561A3
1.42E-73	8	TNFSF9

1.56E-73	8	LAP3
2.14E-73	8	P2RX1
4.99E-73	8	JADE3
7.63E-73	8	RNASET2
8.08E-73	8	SIPA1L1
8.81E-73	8	TXN
1.04E-72	8	C1orf162
1.26E-72	8	EBF1
1.76E-72	8	GLA
2.16E-72	8	NUBP1
2.67E-72	8	FNIP2
8.00E-72	8	PIKFYVE
9.82E-72	8	RELT
1.01E-71	8	TMEM131
1.37E-71	8	ACAA1
1.92E-71	8	SNRNP25
4.41E-71	8	DSE
4.76E-71	8	GAB2
9.21E-71	8	SNHG15
1.34E-70	8	KDM6B
1.69E-70	8	TMSB10
1.74E-70	8	RIPOR1
3.12E-70	8	MEF2A
3.26E-70	8	AP003086.1
3.52E-70	8	PRMT9
4.32E-70	8	NFKB1
6.74E-70	8	MFSD12
8.51E-70	8	APPL1
3.72E-69	8	SUMO3
4.30E-69	8	DCK
5.30E-69	8	RHOQ
7.63E-69	8	GM2A
8.82E-69	8	EPB41L2
9.13E-69	8	MIR155HG
1.16E-68	8	PACSIN2
1.62E-68	8	AC083837.1
2.65E-68	8	MANBA
3.82E-68	8	BCAR3
6.30E-68	8	TCTN3
7.77E-68	8	ATP6V0B
8.54E-68	8	TBC1D8
1.43E-67	8	TUBB
2.18E-67	8	GAB1

3.12E-67	8	POGLUT1
3.22E-67	8	SERPINB1
3.29E-67	8	FTH1
3.31E-67	8	MALT1
4.03E-67	8	EDEM1
4.32E-67	8	PIK3AP1
1.06E-66	8	SH3GL1
1.20E-66	8	AP2S1
1.35E-66	8	ADCY3
1.42E-66	8	AC120193.1
2.05E-66	8	LYZ
2.60E-66	8	CEP170
3.90E-66	8	KBTBD8
4.25E-66	8	AC004687.1
5.11E-66	8	KLF10
5.94E-66	8	N4BP2L1
6.25E-66	8	PRMT1
6.98E-66	8	MS4A1
1.55E-65	8	DUSP22
1.75E-65	8	MYL12A
1.95E-65	8	HIVEP1
2.12E-65	8	CHMP4B
3.58E-65	8	NQO2
4.44E-65	8	NAGK
6.27E-65	8	ZNF433-AS1
1.19E-64	8	ATP6V0D1
2.17E-64	8	PFN1
2.60E-64	8	PTPN6
2.90E-64	8	SRGAP2
6.89E-64	8	GOLIM4
1.10E-63	8	VPS35
1.71E-63	8	EIF4A1
1.88E-63	8	GSTP1
1.95E-63	8	IRF2BP2
1.96E-63	8	NR4A2
3.31E-63	8	RNASEK
3.38E-63	8	ARL5B
4.86E-63	8	MTPN
6.90E-63	8	COX5A
1.00E-62	8	ARPC2
1.11E-62	8	CLIC1
1.12E-62	8	FCGR2B
1.29E-62	8	ATAD2B

1.51E-62	8	UBXN2A
1.58E-62	8	CXXC5
1.70E-62	8	TET2
1.81E-62	8	TMSB4X
1.85E-62	8	SLAMF7
2.56E-62	8	ADAM28
3.07E-62	8	CCR7
3.77E-62	8	SLC25A33
8.13E-62	8	NINJ1
1.01E-61	8	SLC66A2
1.08E-61	8	ENTPD1
6.05E-61	8	TMEM14C
7.42E-61	8	DCTPP1
8.04E-61	8	CLN8
1.01E-60	8	AKR1A1
1.04E-60	8	G0S2
1.35E-60	8	IER5
1.78E-60	8	RASGEF1B
2.69E-60	8	RILPL2
5.01E-60	8	LSP1
6.06E-60	8	RGS2
7.18E-60	8	DDX21
9.27E-60	8	HMGN3
1.24E-59	8	AFDN
1.24E-59	8	SIRPA
1.91E-59	8	H3F3A
2.11E-59	8	AMZ1
2.68E-59	8	PPIF
1.36E-58	8	LACTB
1.55E-58	8	ST8SIA4
3.71E-58	8	SLC25A5
4.22E-58	8	GNAQ
7.11E-58	8	LAMTOR1
9.74E-58	8	H2AFY
1.34E-57	8	BAG1
1.39E-57	8	FBRSL1
1.88E-57	8	TRAK1
2.13E-57	8	YBX1
2.30E-57	8	UPF2
2.62E-57	8	EHBP1L1
2.83E-57	8	SERPINB9
3.54E-57	8	RALGPS2
6.08E-57	8	TNFRSF10B

8.30E-57	8	INPP5F
1.32E-56	8	SOX4
1.36E-56	8	RELB
1.92E-56	8	GPX4
2.40E-56	8	M6PR
2.59E-56	8	RNF130
2.65E-56	8	TEX14
3.10E-56	8	PTMS
3.35E-56	8	TPM4
7.08E-56	8	EIF5A
7.33E-56	8	PYCARD
7.43E-56	8	ATG3
8.70E-56	8	TALDO1
1.09E-55	8	ATP6V1F
1.28E-55	8	IGFLR1
1.31E-55	8	OGFRL1
3.39E-55	8	LYSMD2
3.64E-55	8	BCAT1
4.38E-55	8	EEF1G
4.47E-55	8	ST3GAL5
4.89E-55	8	COTL1
5.60E-55	8	ENTPD1-AS1
6.81E-55	8	YWHAH
1.94E-54	8	EIF6
3.40E-54	8	GNA13
4.70E-54	8	PIM3
7.21E-54	8	CHPT1
7.51E-54	8	LAPTM4A
8.37E-54	8	PUS10
9.83E-54	8	BLK
1.20E-53	8	SAT1
1.62E-53	8	CD2AP
1.64E-53	8	UBA52
2.17E-53	8	NCF1
3.51E-53	8	UST
5.59E-53	8	POLD4
7.36E-53	8	RRBP1
7.43E-53	8	CD72
8.97E-53	8	TOMM6
1.12E-52	8	BRI3
1.19E-52	8	CAPNS1
1.33E-52	8	RNH1
1.70E-52	8	CKS2

1.98E-52	8	ZBTB10
3.16E-52	8	LGALS1
3.50E-52	8	ATP6V0E1
3.61E-52	8	PRKCE
4.17E-52	8	ARHGAP24
4.39E-52	8	TMEM39A
4.43E-52	8	ETS2
5.02E-52	8	HOOK3
5.68E-52	8	RAB8A
5.87E-52	8	C1QBP
6.76E-52	8	ACTG1
7.32E-52	8	PFDN2
8.50E-52	8	ZFHX3
1.16E-51	8	GPR65
1.48E-51	8	LAMTOR2
1.48E-51	8	FGL2
2.64E-51	8	TNFSF13B
3.00E-51	8	SLC27A4
7.52E-51	8	PHB2
1.16E-50	8	RREB1
1.23E-50	8	ARPC1B
1.24E-50	8	MAP4K4
1.40E-50	8	DMXL1
1.65E-50	8	MICAL3
1.66E-50	8	INSR
3.28E-50	8	PHB
4.04E-50	8	SH3BP5
4.25E-50	8	AUTS2
5.76E-50	8	RAC1
7.62E-50	8	ARHGAP5
8.80E-50	8	NUB1
8.98E-50	8	DDT
9.13E-50	8	PRR13
1.11E-49	8	VOPP1
1.39E-49	8	COX17
1.51E-49	8	RBX1
2.13E-49	8	HIP1
2.37E-49	8	PEAK1
3.02E-49	8	VIM
4.57E-49	8	PRELID1
4.58E-49	8	CAP1
6.06E-49	8	SRGAP2B
7.63E-49	8	PPIA

8.42E-49	8	STRBP
1.13E-48	8	TNFRSF13C
1.63E-48	8	TRABD
2.24E-48	8	SLC25A25
2.35E-48	8	TFEB
2.54E-48	8	AC008014.1
2.60E-48	8	SERF2
3.11E-48	8	SLC25A6
4.32E-48	8	AC007952.4
5.42E-48	8	VAV2
6.32E-48	8	DRAM2
6.46E-48	8	EIF3L
7.24E-48	8	GRB2
1.08E-47	8	GNG10
1.97E-47	8	SSR3
3.11E-47	8	LCP1
1.64E-46	8	CFL1
1.67E-46	8	SERP1
2.43E-46	8	IFITM3
3.17E-46	8	STK38L
3.37E-46	8	CHCHD10
3.63E-46	8	PDIA3
4.03E-46	8	POLB
1.06E-45	8	PHLDA2
1.49E-45	8	RASSF5
3.71E-45	8	PHPT1
5.37E-45	8	SSR1
1.05E-44	8	LTB
1.15E-44	8	CDC37
1.21E-44	8	PAX5
1.77E-44	8	TWISTNB
4.30E-44	8	SLC9A7
4.49E-44	8	SNX2
6.77E-44	8	ACTR3
7.58E-44	8	SCPEP1
8.36E-44	8	UTP6
8.98E-44	8	EFHD2
1.22E-43	8	RFTN1
1.46E-43	8	CNN2
1.51E-43	8	ZFAND6
1.85E-43	8	POMP
2.20E-43	8	TUBA1B
2.89E-43	8	RACK1

5.00E-43	8	COBLL1
8.22E-43	8	SGK1
8.28E-43	8	PALM2-AKAP2
1.88E-42	8	VAMP8
1.90E-42	8	CSNK2B
3.13E-42	8	RHEB
3.34E-42	8	VDAC2
3.65E-42	8	VPS29
4.07E-42	8	PLAGL1
1.85E-41	8	ATP5F1E
2.10E-41	8	OAZ1
3.37E-41	8	NAAA
3.45E-41	8	TAPBP
5.47E-41	8	TAP1
6.32E-41	8	RHBDF2
6.73E-41	8	RAB5C
6.85E-41	8	TAGLN2
8.65E-41	8	ANXA11
1.13E-40	8	UBE2E1
1.38E-40	8	UCP2
1.58E-40	8	PBX3
1.60E-40	8	ECE1
1.69E-40	8	ENY2
1.85E-40	8	MED13L
2.42E-40	8	PKM
2.62E-40	8	NGLY1
2.74E-40	8	PLCG2
3.27E-40	8	GRSF1
5.13E-40	8	JAK2
5.51E-40	8	STAP1
6.98E-40	8	USP6NL
8.73E-40	8	IFT57
9.42E-40	8	MTHFD1L
1.11E-39	8	GEM
1.60E-39	8	AC104365.1
1.65E-39	8	STEAP1B
1.82E-39	8	PSMA2
2.14E-39	8	CD22
2.61E-39	8	ARFGAP3
4.24E-39	8	MX1
4.38E-39	8	TAF10
4.62E-39	8	ORAI2
6.02E-39	8	ARPC4

8.33E-39	8	INSIG1
9.47E-39	8	CD79A
1.92E-38	8	RBBP8
2.62E-38	8	OTUD1
2.81E-38	8	MKINK2
3.40E-38	8	OSTC
4.22E-38	8	PLEKHG1
5.31E-38	8	ATP5MF
6.46E-38	8	BRK1
9.10E-38	8	SUB1
9.87E-38	8	BCL2L11
1.10E-37	8	BCL2L13
1.18E-37	8	FAU
5.39E-37	8	HIGD2A
6.18E-37	8	PIIB
8.05E-37	8	CDC42
1.04E-36	8	LAPTM5
1.45E-36	8	DENND1B
3.15E-36	8	PSMB3
3.87E-36	8	CCDC138
4.02E-36	8	GNAI2
4.41E-36	8	UBE2A
4.89E-36	8	CD109
7.32E-36	8	C12orf75
8.97E-36	8	SRP14
1.49E-35	8	ACTR2
1.83E-35	8	FHIT
2.14E-35	8	RBM3
2.45E-35	8	MYO9B
3.50E-35	8	DRAP1
4.07E-35	8	PDE4A
4.08E-35	8	MIR181A1HG
7.49E-35	8	COX6B1
1.22E-34	8	ACSL3
1.35E-34	8	RTN4
1.53E-34	8	SQSTM1
2.35E-34	8	CLEC16A
2.56E-34	8	POU2F2
2.87E-34	8	CYSLTR1
3.41E-34	8	SLC20A1
4.56E-34	8	OXR1
4.58E-34	8	TBCA
4.77E-34	8	HMG1

6.48E-34	8	CHCHD2
8.11E-34	8	HINT1
1.15E-33	8	TACC1
1.22E-33	8	NBDY
1.32E-33	8	CCT8
3.42E-33	8	ACER3
3.69E-33	8	NIN
3.76E-33	8	MYL6
7.70E-33	8	USP12
8.24E-33	8	SMDT1
1.01E-32	8	NAPA
1.18E-32	8	EZR
2.06E-32	8	RHOA
2.37E-32	8	AC253572.2
6.78E-32	8	PSME1
1.10E-31	8	MTHFD2
1.70E-31	8	CPNE3
1.93E-31	8	SET
2.67E-31	8	SEC61G
3.46E-31	8	TXNRD1
5.21E-31	8	CLINT1
5.57E-31	8	ATP5F1B
9.82E-31	8	ANXA6
9.98E-31	8	LSM7
1.01E-30	8	SPCS1
1.11E-30	8	CALR
1.24E-30	8	PTPRE
1.26E-30	8	GPSM3
1.45E-30	8	ERP29
2.65E-30	8	CD164
3.04E-30	8	EEF1B2
4.08E-30	8	PRDX6
8.71E-30	8	BST2
9.88E-30	8	ATP5MC3
1.14E-29	8	ITSN2
2.19E-29	8	EEF1A1
3.54E-29	8	GNL3
4.54E-29	8	ANKRD11
4.96E-29	8	UQCRH
6.43E-29	8	PPT1
8.76E-29	8	PARK7
9.58E-29	8	VRK2
1.11E-28	8	IFI44L

1.72E-28	8	NACA
1.88E-28	8	WDFY2
2.08E-28	8	COX6A1
2.20E-28	8	SELENOS
5.14E-28	8	METRNL
5.38E-28	8	RGS10
9.95E-28	8	PFKFB3
1.16E-27	8	PDLIM5
1.64E-27	8	ZFAS1
2.18E-27	8	PSMB9
2.97E-27	8	SNHG29
3.33E-27	8	DSTN
3.40E-27	8	PFDN5
8.42E-27	8	BZW1
6.81E-26	8	ANKRD13A
9.90E-26	8	JAML
1.37E-25	8	REV3L
2.11E-25	8	ATP6V1G1
2.59E-25	8	STMN1
3.85E-25	8	TPI1
8.13E-25	8	ENO1
1.15E-24	8	CHMP1B
1.53E-24	8	NFAT5
2.19E-24	8	SMC6
2.40E-24	8	FAM210A
5.09E-24	8	RAB7A
6.52E-24	8	TIMP1
6.64E-24	8	SP110
7.67E-24	8	MYL12B
9.83E-24	8	GADD45B
3.70E-23	8	ABTB2
5.12E-23	8	LPXN
5.36E-23	8	ARL6IP5
8.72E-23	8	LRRFIP1
1.12E-22	8	COX4I1
1.52E-22	8	INPP5A
1.69E-22	8	OSBPL10
2.10E-22	8	NFATC1
6.45E-21	8	EMP3
6.71E-21	8	PIK3R5
8.34E-21	8	SMG1
2.16E-20	8	CORO7
2.89E-20	8	MCL1

3.46E-20	8	ANXA2
9.74E-20	8	ZFAND2A
2.52E-19	8	SSBP2
2.85E-19	8	FBXO34
6.10E-19	8	HIVEP3
6.84E-19	8	XYLT1
8.60E-19	8	YWHAZ
9.87E-19	8	MAN1A1
1.29E-18	8	HERPUD1
1.32E-18	8	LRCH3
1.80E-18	8	CD37
3.05E-18	8	ATP2C1
3.09E-18	8	S100A11
7.16E-18	8	SLC44A1
7.38E-18	8	ERICH1
1.22E-17	8	DENND4A
1.82E-17	8	USP24
1.87E-17	8	CD79B
2.62E-17	8	LY9
2.80E-16	8	ISG15
3.85E-16	8	JARID2
6.00E-16	8	SETBP1
6.32E-16	8	LARGE1
4.32E-15	8	ITGB2
9.61E-15	8	COMMMD10
3.79E-14	8	CFLAR
1.50E-13	8	ARHGAP10
1.74E-13	8	ZFAND5
6.26E-13	8	ALOX5AP
1.46E-12	8	MTSS1
1.73E-12	8	S100A10
2.99E-12	8	RANBP2
3.67E-12	8	AKAP13
3.80E-12	8	ITM2C
1.68E-11	8	HIPK2
1.10E-10	8	TRAF1
6.21E-10	8	PARP15
1.32E-09	8	HIST1H1C
1.78E-08	8	S100A6
5.30E-07	8	ZNF331
0.000149101	8	BAG3
0.00362845	8	CD52
0.017696786	8	LDHA

1	8	BIRC3
1	8	ARL4C
1	8	ID2
1	8	INPP4A
0	9	BANK1
0	9	ARHGAP24
0	9	MS4A1
0	9	BLK
0	9	LINC01781
0	9	C12orf74
2.53E-281	9	TNFRSF13C
6.38E-244	9	CD79A
8.19E-242	9	TNFRSF13B
2.56E-234	9	GNG7
1.08E-229	9	EBF1
1.07E-211	9	ADAM28
1.73E-209	9	MEF2C
6.25E-206	9	SSPN
1.03E-204	9	AFF3
5.91E-197	9	HLA-DRA
1.15E-191	9	OSBPL10
5.39E-184	9	CD74
8.90E-174	9	SWAP70
4.82E-156	9	CD24
1.03E-155	9	RALGPS2
8.47E-153	9	CD37
1.61E-144	9	LINC00926
6.00E-139	9	HLA-DQA1
2.54E-129	9	VPREB3
1.96E-122	9	1-Mar
9.97E-121	9	HLA-DPB1
1.23E-120	9	HLA-DRB5
1.51E-116	9	LYN
2.62E-111	9	HLA-DQB1
7.70E-110	9	AC120193.1
5.83E-107	9	LARGE1
1.07E-106	9	WDFY4
3.23E-106	9	EEF1B2
2.67E-104	9	PAX5
8.03E-104	9	CD83
5.47E-103	9	HLA-DQA2
4.69E-102	9	EZR
1.93E-101	9	SNED1

5.45E-100	9	SCIMP
6.87E-100	9	IRF8
1.22E-99	9	HLA-DRB1
6.90E-98	9	LY86
1.21E-94	9	COBLL1
8.38E-92	9	HLA-DPA1
4.24E-91	9	LINC02397
1.24E-90	9	SMIM14
3.99E-90	9	LY9
1.82E-89	9	ZFAS1
1.01E-87	9	CHPT1
1.31E-84	9	PLEKHG1
2.09E-84	9	EEF1A1
5.17E-81	9	IFT57
1.03E-80	9	PDLIM1
3.73E-80	9	JADE3
7.42E-79	9	EEF1G
2.83E-77	9	LAPTM5
4.10E-77	9	FAM49A
5.01E-76	9	FAU
3.60E-75	9	AC119396.1
6.00E-75	9	ST6GAL1
4.54E-74	9	POU2F2
7.32E-71	9	MGAT5
1.12E-70	9	SETBP1
1.16E-70	9	SNX2
1.56E-70	9	GRASP
1.05E-69	9	HIPK2
4.78E-66	9	PKIG
3.65E-65	9	TRIO
1.43E-64	9	INPP5A
5.38E-64	9	TLE1
3.78E-63	9	P2RX5
2.16E-60	9	CARMIL1
2.53E-60	9	WEE1
1.23E-59	9	GAS5
1.85E-59	9	SEL1L3
2.43E-59	9	CD55
1.08E-58	9	KYNU
3.45E-58	9	ANKRD44
2.20E-57	9	NIBAN3
9.37E-56	9	FCRL1
1.14E-55	9	POU2AF1

1.65E-55	9	HLA-DMA
6.04E-54	9	ORAI2
1.17E-53	9	CD79B
1.30E-53	9	UBA52
1.57E-53	9	BCAS4
3.90E-52	9	SIPA1L1
9.26E-52	9	NCOA3
6.44E-51	9	PRDM2
8.26E-51	9	MICAL3
1.69E-50	9	C12orf42
9.48E-50	9	BCL11A
1.86E-49	9	BASP1
4.44E-49	9	PLCG2
9.32E-49	9	DENND5B
1.20E-48	9	CDK14
2.65E-48	9	MGMT
3.02E-48	9	MARCKS
3.22E-48	9	TPT1
9.07E-48	9	NACA
6.52E-46	9	PFDN5
7.58E-45	9	DRAM2
4.58E-43	9	BACH2
1.51E-42	9	BTG1
7.45E-42	9	TCF4
6.10E-41	9	NOP53
7.39E-41	9	EIF1
4.42E-40	9	TFEB
5.16E-40	9	ANKRD13A
3.62E-39	9	USP6NL
6.40E-39	9	SLC25A6
2.13E-38	9	TSC22D3
5.30E-38	9	SMAP2
1.15E-37	9	RACK1
1.85E-37	9	HLA-DMB
2.79E-37	9	PRKCB
9.92E-37	9	TOMM7
4.09E-36	9	EEF2
4.63E-36	9	UVRAG
6.76E-36	9	CCDC50
1.12E-35	9	CXCR4
3.21E-35	9	RCSD1
5.78E-35	9	BMP2K
7.38E-35	9	IL13RA1

8.14E-34	9	CD40
5.72E-33	9	PTMA
8.71E-33	9	SAMD4A
3.07E-32	9	KLF2
3.56E-32	9	MAP4K4
4.49E-31	9	AP1S3
5.78E-31	9	INPP5D
7.95E-31	9	FCMR
1.68E-30	9	UST
2.23E-30	9	UBE2E2
3.50E-30	9	CHCHD10
7.30E-30	9	TAF4B
1.17E-29	9	WASHC4
9.16E-29	9	SESN3
1.06E-28	9	CCSER1
1.46E-28	9	CD22
2.12E-28	9	PDE7A
2.31E-27	9	SNX8
6.24E-27	9	SFMBT1
2.32E-26	9	MALAT1
2.81E-26	9	GSAP
2.91E-26	9	TMEM243
2.51E-25	9	PTK2
3.06E-25	9	TMEM131
3.50E-25	9	HERPUD1
2.13E-24	9	RNASET2
2.78E-24	9	TRAK1
3.08E-24	9	PHF20
3.97E-24	9	TXNIP
4.58E-24	9	ARHGEF18
7.72E-24	9	GRK3
9.01E-24	9	NIN
1.40E-23	9	MARCKSL1
6.06E-23	9	TP53INP1
6.66E-23	9	ATP2B1
9.73E-23	9	CD52
1.11E-22	9	BTF3
1.16E-22	9	DENND4A
1.45E-22	9	SSH2
1.59E-22	9	LTB
2.18E-22	9	ZBTB20
3.44E-22	9	EIF1AY
1.25E-21	9	RGS19

1.76E-21	9	YWHAZ
1.81E-21	9	NFKBID
2.17E-21	9	SLC44A2
1.38E-20	9	SYPL1
1.14E-19	9	CCR7
1.56E-19	9	MEF2A
2.64E-19	9	EHMT1
3.13E-19	9	DAPP1
3.37E-19	9	ZHX2
3.66E-19	9	PABPC1
3.85E-19	9	SKIL
4.96E-19	9	OAZ1
9.40E-19	9	PARVB
1.06E-18	9	SNHG29
1.58E-18	9	SMARCB1
4.06E-18	9	TCOF1
5.06E-18	9	FCHSD2
7.90E-18	9	MAPK8IP3
1.04E-17	9	SMDT1
2.08E-17	9	CMTM6
2.65E-17	9	STRBP
3.08E-17	9	REL
4.15E-17	9	KMT2E
7.71E-17	9	CTSH
8.64E-17	9	AP000787.1
8.85E-17	9	RHBDF2
1.01E-16	9	RAB11FIP1
1.39E-16	9	FARP2
1.58E-16	9	RBM39
1.91E-16	9	TBC1D5
3.65E-16	9	MYO1D
1.11E-15	9	SNHG6
1.13E-15	9	ARID5B
1.25E-15	9	RB1
3.31E-15	9	TPD52
4.74E-15	9	SKAP2
6.01E-15	9	PIKFYVE
1.34E-14	9	NPM1
2.38E-14	9	RUBCNL
2.83E-14	9	CD48
4.24E-14	9	LIMD2
4.54E-14	9	ATP2A3
6.85E-14	9	PRDM4

7.79E-14	9	MTSS1
8.18E-14	9	KLHL5
1.40E-13	9	GRK5
1.70E-13	9	RAB11A
1.86E-13	9	SP100
1.86E-13	9	ZDHHC14
4.45E-13	9	UPF2
5.66E-13	9	LGMN
6.15E-13	9	PARP15
7.27E-13	9	SYK
9.35E-13	9	IMMP2L
1.04E-12	9	UTY
1.10E-12	9	LSM7
1.41E-12	9	ARRDC2
1.47E-12	9	MYCBP2
2.30E-12	9	CCNI
3.73E-12	9	SNHG8
5.41E-12	9	SINHCAF
6.66E-12	9	EEF1D
6.91E-12	9	ARPC3
8.14E-12	9	LAT2
1.06E-11	9	PDE4D
1.22E-11	9	TNRC6B
1.89E-11	9	TMEM156
2.64E-11	9	UBE2I
3.50E-11	9	DAAM1
5.41E-11	9	TBXAS1
5.74E-11	9	USP34
5.92E-11	9	EIF3E
8.02E-11	9	EIF4A2
1.40E-10	9	RFX3
1.99E-10	9	ELMO1
4.46E-10	9	CD53
5.98E-10	9	CAMK1D
7.94E-10	9	NUP88
1.48E-09	9	THEMIS2
1.55E-09	9	NDUFAF6
1.85E-09	9	LMO4
1.86E-09	9	SNHG5
2.22E-09	9	RAPGEF1
2.43E-09	9	TUT4
2.94E-09	9	OTUD1
3.97E-09	9	ATF4

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9.11E-09	9	BICD1
1.66E-08	9	RFX1
2.01E-08	9	CIRBP
2.06E-08	9	ATF7IP2
2.24E-08	9	THUMPD3-AS1
2.44E-08	9	CHD7
2.89E-08	9	ITPR1
3.26E-08	9	NAP1L1
3.47E-08	9	VASP
3.48E-08	9	TCEA1
3.82E-08	9	RERE
4.32E-08	9	SEPTIN9
5.25E-08	9	HIST1H4C
7.27E-08	9	CCND3
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8.13E-08	9	RUBCN
8.46E-08	9	ITSN2
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1.19E-07	9	FAM102A
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1.19E-07	9	COX4I1
1.23E-07	9	GNA12
1.46E-07	9	RASGEF1B
1.61E-07	9	CALM2
1.64E-07	9	COMMD6
1.70E-07	9	RILPL2
2.31E-07	9	MOB3A
2.56E-07	9	FUS
2.75E-07	9	SRSF3
2.97E-07	9	MOB1A
4.12E-07	9	RAB30
4.23E-07	9	STK17A
4.92E-07	9	ARID1B
5.18E-07	9	SP110
6.34E-07	9	SNHG7
6.82E-07	9	SNHG32
8.11E-07	9	UQCRH

1.08E-06	9	ERP29
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1.24E-06	9	AC092821.3
1.25E-06	9	ZFP36L1
1.76E-06	9	HSH2D
1.81E-06	9	ZFAND6
1.92E-06	9	SREBF2
2.29E-06	9	SIPA1L3
2.65E-06	9	NR4A2
2.81E-06	9	CRIP1
3.16E-06	9	CNPY3
3.20E-06	9	CCDC97
3.43E-06	9	AP001011.1
3.67E-06	9	SRRM2
4.61E-06	9	USP8
5.07E-06	9	SMC6
5.18E-06	9	REV3L
5.58E-06	9	IDS
5.60E-06	9	UXT
5.86E-06	9	RBFOX2
6.86E-06	9	VOPP1
6.87E-06	9	SLC49A4
8.15E-06	9	INTS6
9.44E-06	9	TGFB1
1.07E-05	9	KDM6B
1.12E-05	9	MIS18BP1
1.41E-05	9	TRIR
1.63E-05	9	TRAF5
1.66E-05	9	SYS1
2.61E-05	9	DUSP1
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2.96E-05	9	UBB
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3.63E-05	9	BACH1
4.02E-05	9	HNRNPA1
4.19E-05	9	EIF5
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5.23E-05	9	STX7
6.30E-05	9	EIF2S3
6.46E-05	9	ERC1
7.25E-05	9	NRF1
7.35E-05	9	SNX25
9.62E-05	9	RABEP1

0.000114302	9	H3F3B
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0.007144233	9	SERTAD1
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0.010512393	9	ABHD15-AS1
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0.011742298	9	TUBA1B
0.011896296	9	COX7C
0.012007775	9	USP9Y
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0.203958022	9	OSER1
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0.362101797	9	NSA2
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3.08E-303	10	LIMK2
2.12E-298	10	DENND5A
1.66E-290	10	LCP2
6.68E-280	10	PLEK
1.51E-279	10	S100A8
1.32E-275	10	RBM47
1.78E-264	10	LUCAT1
1.11E-261	10	LITAF
3.12E-256	10	RNF149
1.04E-251	10	IL1RAP
1.28E-244	10	ARHGAP26
1.49E-243	10	BASP1

2.41E-239	10	S100A9
1.26E-236	10	BCL2A1
1.24E-230	10	WDFY3
4.22E-220	10	SLC25A37
4.93E-214	10	PTGS2
3.77E-206	10	AZIN1-AS1
7.51E-205	10	CD55
3.09E-202	10	FPR1
6.56E-202	10	CPD
1.02E-196	10	GK
1.71E-189	10	TMCC3
2.25E-189	10	HCK
1.11E-188	10	SLC8A1
2.07E-187	10	SAMSN1
1.37E-178	10	AL078604.4
3.15E-178	10	IL1B
9.12E-168	10	MXD1
5.01E-157	10	ETS2
3.44E-152	10	PLXDC2
1.71E-147	10	ADAMTSL4-AS1
8.75E-147	10	TLR2
7.30E-146	10	C5AR1
1.50E-145	10	NCF2
5.20E-144	10	IVNS1ABP
4.23E-143	10	ITGAX
6.68E-139	10	PDE4B
1.71E-132	10	SRGN
2.20E-130	10	DOCK5
5.59E-125	10	MCTP1
4.50E-111	10	IGF1R
7.76E-110	10	FNDC3B
1.40E-108	10	PELI1
2.05E-107	10	IL1R1
5.96E-102	10	USP32
1.26E-96	10	IER3
1.90E-93	10	LYN
1.20E-91	10	CREB5
2.89E-91	10	NEDD9
3.66E-90	10	GAB2
3.87E-88	10	RABGEF1
4.69E-83	10	FCGR2A
7.53E-82	10	PHACTR1
1.63E-72	10	BCL6

3.93E-72	10	GLUL
5.26E-70	10	ICAM1
3.53E-68	10	IRS2
9.59E-68	10	ELL2
2.98E-64	10	FAM49B
4.30E-64	10	FTH1
3.46E-62	10	SVIL
2.66E-58	10	MAML3
2.56E-57	10	PGS1
2.59E-57	10	ST6GALNAC3
7.93E-57	10	AC099489.1
3.95E-56	10	SAT1
4.29E-54	10	C9orf72
3.94E-53	10	ELF2
1.59E-52	10	TOM1
1.35E-51	10	RAB31
3.21E-49	10	RNF144B
1.95E-48	10	ALOX5AP
5.91E-47	10	PTPRE
3.52E-46	10	B3GNT5
1.30E-45	10	MCTP2
1.47E-45	10	DDX60L
2.53E-45	10	ANKRD17
4.89E-45	10	SIPA1L1
1.75E-44	10	BABAM2
2.87E-44	10	KDM6A
4.71E-44	10	ELOVL5
1.01E-41	10	CPQ
3.34E-41	10	PILRA
1.60E-40	10	ABHD5
3.62E-40	10	LAMTOR4
3.68E-40	10	TYROBP
4.64E-40	10	COPA
2.24E-39	10	RESF1
3.44E-39	10	PTPN12
7.08E-39	10	PTEN
1.33E-38	10	ROCK1
2.48E-37	10	SP3
4.56E-37	10	NUMB
5.34E-37	10	USP3
8.70E-37	10	BRAF
4.86E-36	10	ERBIN
1.05E-35	10	TRIP12

3.05E-35	10	SBF2
3.19E-35	10	FCER1G
3.60E-35	10	TBC1D8
6.99E-35	10	FOXO3
7.31E-35	10	PLXNC1
2.51E-34	10	PAFAH1B1
3.54E-34	10	PKN2
5.59E-34	10	FBXW7
1.22E-33	10	MAPK1
1.67E-33	10	EP300
2.37E-33	10	CD46
3.12E-33	10	GNAQ
7.88E-33	10	HMGB2
9.85E-33	10	FBXO11
1.03E-32	10	SPAG9
1.12E-32	10	ZNF407
1.45E-32	10	LCP1
4.66E-32	10	ZNF438
6.46E-31	10	AP2B1
1.18E-30	10	DYRK1A
1.23E-30	10	LSP1
1.69E-30	10	HECA
1.93E-30	10	FOXK2
3.59E-30	10	DAZAP2
8.58E-30	10	GABARAPL2
1.24E-29	10	CAPZB
2.13E-29	10	RASA2
3.89E-29	10	AC016831.7
4.94E-29	10	TLE4
8.68E-29	10	RB1CC1
1.10E-28	10	UBAP1
1.75E-28	10	DDX21
1.82E-28	10	TAOK3
2.05E-28	10	N4BP1
2.10E-28	10	SDCBP
2.11E-28	10	ACTR2
3.44E-28	10	RUNX1
9.38E-28	10	ANXA11
2.47E-27	10	TOP1
3.36E-27	10	SEMA4D
4.52E-27	10	VPS13B
5.72E-27	10	WSB1
1.05E-26	10	DOCK11

1.66E-26	10	PPP2R2A
3.19E-26	10	TAOK1
4.46E-26	10	UTY
7.23E-26	10	RAB5C
9.49E-26	10	WDR26
1.36E-25	10	CSNK1A1
1.38E-25	10	CYFIP2
1.66E-25	10	RB1
3.04E-25	10	RNASEK
4.21E-25	10	RAB1A
7.64E-25	10	CHMP2A
9.00E-25	10	EVI2B
9.42E-25	10	XPO6
1.07E-24	10	ST3GAL1
1.10E-24	10	KMT2C
1.17E-24	10	ETV6
1.22E-24	10	PHF20L1
1.48E-24	10	PTBP3
2.56E-24	10	MPP7
3.78E-24	10	USPL1
4.14E-24	10	ZFAND3
5.64E-24	10	CYSTM1
1.55E-23	10	ADIPOR2
1.58E-23	10	STAT3
2.08E-23	10	DOCK2
6.28E-23	10	ATF6
6.64E-23	10	AFF4
7.17E-23	10	GCA
1.11E-22	10	RIPOR2
1.54E-22	10	RELB
1.61E-22	10	FMNL1
1.68E-22	10	RLF
1.74E-22	10	USP9X
1.98E-22	10	ESCO1
2.39E-22	10	METTL9
2.84E-22	10	BTBD7
4.72E-22	10	BCAS3
5.83E-22	10	NFE2L2
6.13E-22	10	ATP6V0C
6.14E-22	10	ACAP2
7.08E-22	10	LBR
7.11E-22	10	CD44
7.35E-22	10	OSBPL9

7.92E-22	10	RUBCNL
8.83E-22	10	MAML2
1.53E-21	10	ZFP36L1
2.25E-21	10	NCOA1
2.67E-21	10	CNN2
3.52E-21	10	PIAS1
6.04E-21	10	SNRK
1.10E-20	10	ARID4B
2.59E-20	10	TBC1D15
3.61E-20	10	MAPRE1
4.85E-20	10	CCNL1
1.17E-19	10	GSK3B
1.26E-19	10	MAP3K2
1.66E-19	10	CHMP2B
2.06E-19	10	PPP1R18
2.61E-19	10	GBP5
2.79E-19	10	TAGLN2
6.95E-19	10	H2AFY
7.27E-19	10	GSTO1
8.50E-19	10	SSH2
1.40E-18	10	JARID2
1.44E-18	10	CWC25
1.50E-18	10	TBXAS1
1.76E-18	10	DNTTIP2
2.16E-18	10	TSG101
2.27E-18	10	ANKRD11
2.87E-18	10	CSNK1D
2.97E-18	10	ATP6V1H
4.10E-18	10	RAB7A
4.20E-18	10	NCOA2
4.62E-18	10	RALGDS
6.21E-18	10	CELF2
1.45E-17	10	AGFG1
2.10E-17	10	PCBP1-AS1
2.22E-17	10	TAGAP
2.58E-17	10	GPR132
3.10E-17	10	VPS26A
3.47E-17	10	TXN
4.66E-17	10	ECHDC1
5.17E-17	10	CSTB
5.21E-17	10	NOL10
6.11E-17	10	TSC22D2
9.52E-17	10	CTNBL1

1.18E-16	10	CAPZA2
1.40E-16	10	FAM172A
1.68E-16	10	TKT
2.28E-16	10	IRAK2
3.42E-16	10	HIVEP2
5.81E-16	10	CAP1
6.82E-16	10	TRAK1
9.72E-16	10	DOCK8
4.17E-15	10	SHOC2
4.31E-15	10	MIDN
5.01E-15	10	SCLT1
6.82E-15	10	ASAH1
7.97E-15	10	WWP2
8.93E-15	10	SYNE1
1.06E-14	10	PLCG2
1.14E-14	10	GNB2
1.16E-14	10	NUP58
1.99E-14	10	MAP1LC3B
2.57E-14	10	GNA13
3.18E-14	10	MEF2D
4.03E-14	10	KDM4B
4.79E-14	10	DDX3Y
5.09E-14	10	SELL
5.23E-14	10	FLOT1
6.23E-14	10	SLC12A6
9.21E-14	10	TXNDC11
1.19E-13	10	RASSF5
1.24E-13	10	CCDC93
1.46E-13	10	ATP6V0B
1.51E-13	10	NAPA
2.63E-13	10	PFKFB3
3.51E-13	10	JMJD6
3.52E-13	10	DENND1A
3.53E-13	10	AHCTF1
3.56E-13	10	LGALS3
4.00E-13	10	NRDC
4.04E-13	10	TPM3
5.15E-13	10	NFKB1
5.86E-13	10	EXT1
7.53E-13	10	USP4
9.12E-13	10	TBC1D1
1.23E-12	10	GABARAPL1
1.29E-12	10	APBB1IP

1.56E-12	10	SOS2
2.06E-12	10	GPCPD1
2.17E-12	10	RNF19B
2.74E-12	10	RLIM
3.17E-12	10	RILPL2
3.68E-12	10	IRF1
4.57E-12	10	ARHGAP15
8.07E-12	10	BAZ1A
1.16E-11	10	CHST11
1.62E-11	10	SRGAP2
1.72E-11	10	PTK2B
2.15E-11	10	ZFC3H1
2.83E-11	10	GTPBP1
3.21E-11	10	ILRUN
3.34E-11	10	TES
4.05E-11	10	SDCCAG8
4.05E-11	10	PPFIA1
5.02E-11	10	IFRD1
5.66E-11	10	HCLS1
7.07E-11	10	GNAI3
1.16E-10	10	ATP6V1D
1.31E-10	10	NFKBIZ
1.48E-10	10	PNRC1
1.49E-10	10	STK10
2.75E-10	10	GABARAP
3.49E-10	10	FTL
4.16E-10	10	CREBBP
4.36E-10	10	PPP1R15B
5.18E-10	10	PAK1
5.49E-10	10	NDRG1
5.62E-10	10	PPP3CA
7.28E-10	10	ARFGAP3
7.35E-10	10	MARCKS
7.61E-10	10	UBE2H
8.80E-10	10	SUPT6H
9.97E-10	10	GRB2
1.08E-09	10	GTF2H1
1.28E-09	10	ARIH1
1.71E-09	10	RAB8B
1.75E-09	10	TNIP1
2.04E-09	10	FOXP1
2.65E-09	10	AP1G1
2.65E-09	10	NDEL1

2.79E-09	10	S100A11
4.08E-09	10	SPATA13
4.17E-09	10	PLEKHB2
7.23E-09	10	EFHD2
8.41E-09	10	CSRNP1
1.09E-08	10	USP10
1.39E-08	10	NSMCE2
1.80E-08	10	CLTC
2.33E-08	10	RAPGEF2
2.53E-08	10	NABP1
2.56E-08	10	ZSWIM6
2.89E-08	10	WTAP
3.16E-08	10	USP15
4.83E-08	10	DSE
5.45E-08	10	TALDO1
7.06E-08	10	HIPK3
8.43E-08	10	SRPK2
9.68E-08	10	PDXK
1.52E-07	10	FAM126B
1.57E-07	10	MAPK14
1.87E-07	10	OXSRI
2.81E-07	10	MAP4K4
3.56E-07	10	CD58
3.76E-07	10	FBXO34
3.78E-07	10	CREBRF
3.92E-07	10	TRAF3IP3
4.45E-07	10	YTHDF3
4.69E-07	10	TUT7
5.05E-07	10	MAPKAPK2
5.88E-07	10	UBE2E1
8.05E-07	10	NFAT5
8.06E-07	10	NPTN
8.22E-07	10	HIVEP1
1.12E-06	10	VSIR
1.38E-06	10	MGAT1
2.27E-06	10	JOSD1
3.14E-06	10	LAPTM5
3.18E-06	10	IQGAP1
3.18E-06	10	PNPLA8
4.48E-06	10	RAB27A
4.62E-06	10	KIAA0232
4.94E-06	10	HIF1A
5.21E-06	10	PSEN1

6.14E-06	10	LIMS1
7.18E-06	10	RNF13
9.17E-06	10	SORL1
1.11E-05	10	ENSA
1.25E-05	10	CHD1
1.52E-05	10	ADAM17
2.10E-05	10	ARPC5
2.34E-05	10	RTN4
2.74E-05	10	GPR65
2.87E-05	10	EIF4G3
3.23E-05	10	ACTR3
3.45E-05	10	SUSD6
4.56E-05	10	GCH1
4.94E-05	10	MAPK6
5.72E-05	10	ZNF267
6.93E-05	10	SLC2A3
0.000141334	10	B4GALT5
0.000165177	10	PPP1CB
0.000348091	10	PHF21A
0.000397681	10	BNIP3L
0.00044998	10	CD53
0.00055967	10	PREX1
0.000597829	10	QKI
0.000896162	10	RAB21
0.001118764	10	UBE2B
0.001468049	10	MED13L
0.002559768	10	RTN3
0.00265452	10	LAMP1
0.002785822	10	CASP4
0.004733822	10	IL4R
0.005495827	10	HNRNPC
0.007111559	10	PLSCR1
0.007566434	10	PDZD8
0.008362142	10	MTMR3
0.01258027	10	DIP2B
0.015471745	10	CSGALNACT2
0.016311118	10	PSAP
0.017278571	10	SRPK1
0.021658636	10	SGK1
0.022771793	10	PPP4R2
0.026829293	10	PICALM
0.029679926	10	ATP11B
0.040307085	10	ITM2B

0.043404366	10	UBE2W
0.046030479	10	PCNX1
0.0467966	10	HPCAL1
0.069768091	10	SLC16A3
0.085307421	10	COP1
0.129747778	10	RALGAPA2
0.150330993	10	TANK
0.174360565	10	KLHL2
0.205953249	10	TNFAIP3
0.214024627	10	UBE2D1
0.21658366	10	SH3BP5
0.239860967	10	NUP98
0.278960927	10	FAM49A
0.584661085	10	ELMO1
0.800103333	10	DNM2
0.96914087	10	RAB5A
1	10	RYBP
1	10	MAP3K8
1	10	VPS37B
1	10	KIF1B
1	10	CEP170
1	10	AGTPBP1
1	10	ATP13A3
1	10	NSMAF
1	10	TNFRSF1B
1	10	ATG7
1	10	MCL1
1	10	S100A6
1	10	TBL1X
1	10	POR
1	10	MYO9B
1	10	GNB1
1	10	VMP1
1	10	PACSIN2
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1	10	ATP6V0D1
1	10	CMTM6
1	10	CAMK1D
1	10	MAP2K3
1	10	APLP2
1	10	TBK1
1	10	CTSS
1	10	STX11

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1	10	BAZ2B
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1	10	PTPRJ
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1	10	AC020916.1
1	10	CCNH
1	10	ATG3
1	10	UBE2R2
1	10	SKIL
1	10	GTDC1
1	10	ATP2B1
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0	11	AC023590.1
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0	11	CD22
0	11	NEIL1
0	11	BCL7A
0	11	ZNF608
0	11	CCDC144A
0	11	AFF2
0	11	SUGCT
0	11	MEF2B
0	11	MYBL1
0	11	FGD6
0	11	IGF2BP3
0	11	POU2AF1
0	11	PDGFD
0	11	PEG10
0	11	AC104170.1
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0	11	MME
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0	11	CFAP299
0	11	DTX1
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0	11	SERPINA9
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0	11	MYBL2
0	11	ARHGAP44
0	11	AC079163.2
0	11	TCL6
0	11	TRIM55
0	11	ACY3
0	11	AC016168.2
0	11	VNN2
0	11	LINC01991
0	11	AC112196.1
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0	11	PEX5
0	11	SYBU
0	11	FAM81A
0	11	AICDA
0	11	ELL3
0	11	CDCA7
0	11	ASAP3
0	11	AL132996.1
0	11	HTR3A
0	11	ASB13
1.92E-296	11	RASSF6
2.12E-296	11	SLC2A5
4.38E-294	11	BIK
8.40E-293	11	CDCA2
3.38E-285	11	A4GALT
5.57E-268	11	PAX5
6.90E-267	11	MND1
2.61E-265	11	LINC00877
8.11E-264	11	CPNE5
4.41E-262	11	LINC01857
2.99E-258	11	RNFT2
1.64E-257	11	FAM106A
1.46E-256	11	BLK
3.57E-254	11	GALNT14

4.70E-249	11	S1PR2
1.11E-244	11	DCAF12
2.98E-240	11	STAP1
1.94E-238	11	CNR2
1.91E-232	11	MTA3
1.84E-230	11	TMED8
1.52E-227	11	PTK2
1.84E-226	11	HHEX
3.97E-226	11	P2RX5
1.17E-224	11	SOX5
3.57E-224	11	SHCBP1
1.65E-223	11	CXCR5
3.21E-223	11	CD79B
7.51E-223	11	MYO1E
7.97E-222	11	MS4A1
1.12E-220	11	FCRLA
3.66E-219	11	LRMP
2.20E-217	11	CD19
3.21E-216	11	OGG1
1.33E-215	11	VPREB3
1.06E-212	11	BCAS4
2.46E-211	11	AC022167.3
6.25E-210	11	EBF1
3.04E-205	11	PCLAF
3.74E-204	11	SPATS2
5.20E-204	11	COBLL1
3.81E-202	11	CR2
3.09E-201	11	KCNH8
2.85E-200	11	E2F5
5.02E-199	11	SCIMP
1.72E-195	11	GCNT2
2.22E-195	11	LYPLAL1
6.57E-192	11	IRF8
2.91E-190	11	CNR1
3.34E-186	11	IFNLR1
1.67E-181	11	LRRK1
4.89E-181	11	MEF2C
7.54E-181	11	SH3RF1
1.19E-179	11	PNOC
6.37E-178	11	TERF2
2.04E-177	11	SMIM14
2.65E-173	11	FANCA
2.91E-173	11	BASP1

7.86E-173	11	WDR66
6.64E-171	11	LHFPL6
8.05E-171	11	AC011447.3
1.25E-170	11	RAB30
2.10E-170	11	SWAP70
6.29E-169	11	BCL11A
3.57E-168	11	PRDM15
3.31E-167	11	CCDC88A
8.88E-167	11	SEL1L3
1.43E-166	11	TPD52
4.05E-166	11	CD40
7.42E-165	11	MACROD2
1.39E-161	11	CD79A
2.79E-161	11	FCRL1
3.58E-161	11	USP6NL
1.53E-160	11	STAG3
1.66E-160	11	CD180
8.13E-160	11	PLCG2
2.66E-156	11	DEF8
3.96E-156	11	BLNK
2.42E-155	11	SLC1A1
8.85E-155	11	MBD4
7.52E-153	11	CLIC4
1.16E-152	11	HLA-DMB
5.73E-152	11	SLC30A4
1.67E-150	11	SYVN1
4.02E-150	11	AC012236.1
1.68E-149	11	ZFAND4
2.06E-149	11	LINC02340
2.77E-147	11	ANKRD13A
4.95E-147	11	ANKRD33B
8.23E-147	11	OSBPL10
1.16E-146	11	CTPS2
1.59E-146	11	KANK1
5.07E-146	11	AC022182.1
9.04E-146	11	HLA-DOB
1.11E-145	11	RASL11A
6.77E-145	11	ST6GAL1
1.06E-143	11	BRI3BP
5.06E-143	11	TUBB3
8.31E-143	11	MAPK10
4.86E-142	11	EEPD1
5.83E-142	11	SMIM20

2.07E-140	11	WDFY4
8.73E-140	11	MARCKSL1
2.79E-139	11	MCTP2
3.42E-139	11	EAF2
1.05E-137	11	LILRB1
3.24E-137	11	KNL1
5.95E-136	11	SPRED2
6.67E-136	11	SNX22
3.53E-133	11	COL9A3
4.37E-133	11	AFF3
3.16E-132	11	TMEM156
9.69E-130	11	CDK19
1.36E-129	11	TNFRSF13C
3.93E-128	11	ZNF775
4.28E-128	11	BFSP2
3.20E-127	11	GEN1
4.57E-127	11	EHMT1
7.37E-127	11	UBE2J1
1.28E-126	11	SAMD12
1.89E-125	11	SPAG16
3.71E-125	11	RUBCNL
8.61E-125	11	C12orf74
5.21E-124	11	SLC15A4
2.40E-123	11	PRAG1
2.80E-123	11	BACH2
3.96E-123	11	KCNK12
4.82E-123	11	LPP
6.72E-120	11	DAAM1
7.28E-120	11	PARP1
8.85E-119	11	LAT2
1.27E-118	11	GRAMD1C
9.60E-118	11	HVCN1
8.20E-117	11	TXNDC5
1.32E-116	11	TMEM131L
1.49E-116	11	AC012368.1
3.28E-116	11	RASGRP3
4.54E-116	11	HMGA1
1.09E-115	11	DNASE1
1.89E-115	11	STX7
8.67E-115	11	DPH7
1.16E-114	11	UGT8
9.57E-114	11	NEK6
1.28E-113	11	SNX8

1.68E-113	11	CDCA7L
7.42E-113	11	PKHD1L1
1.29E-112	11	TCEA1
2.88E-112	11	MICAL3
3.42E-112	11	GPR18
9.88E-112	11	AC119396.1
1.26E-111	11	ABR
1.10E-109	11	AC025569.1
1.62E-109	11	TLR10
1.62E-109	11	KLHL6
1.83E-109	11	RRAS2
5.48E-109	11	SCARB1
6.29E-109	11	SSBP2
8.19E-109	11	ZBTB20-AS5
1.42E-108	11	SPIB
3.27E-106	11	FAM3C
8.05E-106	11	SYK
9.63E-106	11	QSOX2
5.63E-105	11	NCOA3
1.33E-104	11	LYN
2.79E-104	11	HLA-DMA
1.84E-103	11	SGPP1
4.63E-103	11	RPRD1B
5.27E-103	11	CD38
1.06E-102	11	ST14
1.91E-102	11	PLEKHG1
2.66E-102	11	RAD17
3.52E-102	11	LIMD2
2.44E-101	11	RMI2
7.73E-101	11	ZNF581
1.40E-100	11	MEF2C-AS2
1.42E-100	11	AIM2
2.55E-100	11	CCDC69
3.99E-100	11	NCF1
6.63E-100	11	TCF4
1.00E-99	11	KLHL5
1.29E-99	11	FAM111B
4.38E-99	11	LINC01215
1.31E-98	11	HDAC7
2.33E-98	11	RFC3
3.37E-98	11	XKR6
7.80E-98	11	RAB30-DT
1.07E-97	11	HMCES

1.19E-96	11	ZNF318
1.28E-96	11	JSRP1
1.60E-96	11	RFTN1
5.17E-96	11	LY86
7.97E-96	11	TEX9
8.10E-96	11	MAML3
1.32E-95	11	BCAR3
1.44E-95	11	HMGN1
2.35E-95	11	APBB2
8.11E-95	11	AMFR
3.21E-94	11	CPNE3
5.34E-94	11	SHISA8
7.33E-94	11	IL4R
7.92E-92	11	TMEM131
1.32E-91	11	ITSN2
2.14E-91	11	ACADM
3.35E-91	11	NLK
3.85E-91	11	GGA2
6.97E-91	11	PAWR
7.47E-91	11	SEC14L1
8.96E-91	11	STRBP
9.29E-91	11	SGCE
1.78E-90	11	TEC
2.74E-90	11	KCNQ5
1.12E-89	11	AC087500.1
1.87E-89	11	CYB561A3
2.56E-89	11	ACTG1
3.56E-89	11	TNFRSF17
3.77E-89	11	FAM76B
1.12E-88	11	SMARCB1
2.12E-88	11	LAPTM5
2.74E-88	11	BRWD1
9.08E-88	11	LINC02397
2.16E-87	11	MAP4K4
2.59E-87	11	USP53
1.75E-86	11	DAPP1
9.98E-86	11	NUP88
1.40E-85	11	LBR
2.79E-85	11	POLD4
8.73E-85	11	DOK3
2.10E-84	11	USP34
3.80E-84	11	GNG7
1.27E-83	11	TSPAN13

1.89E-82	11	TMEM123
3.34E-82	11	GMDS
4.91E-82	11	EVC2
6.73E-81	11	TCF3
2.46E-80	11	RHOH
2.58E-80	11	BICD1
5.07E-80	11	TSPAN33
1.85E-79	11	DGKD
2.15E-79	11	MYO1D
3.16E-79	11	IFT57
6.79E-79	11	CPB2-AS1
9.98E-79	11	LYPLA1
2.66E-78	11	MBNL2
3.79E-78	11	BANK1
6.37E-78	11	IMP4
2.25E-77	11	BPNT1
7.65E-77	11	LHFPL2
8.17E-77	11	CD86
1.19E-76	11	SORL1
4.64E-76	11	KLHL29
1.09E-75	11	SERF2
1.19E-75	11	PXK
2.11E-75	11	ZCCHC7
3.91E-75	11	LRCH3
1.11E-74	11	AL390957.1
2.03E-74	11	PIK3AP1
3.78E-74	11	WDR76
8.61E-74	11	SYPL1
3.64E-73	11	AC079921.1
9.96E-73	11	HLA-DQA1
2.24E-72	11	LY86-AS1
3.39E-72	11	PHF6
8.02E-72	11	GDI2
1.18E-71	11	C16orf74
1.68E-71	11	DENND5B
7.76E-70	11	PPP1CC
3.68E-69	11	1-Mar
7.66E-69	11	GRHPR
8.28E-69	11	TOX
1.18E-68	11	POU2F2
2.55E-68	11	FCRL2
3.15E-68	11	RBM6
3.73E-68	11	CCNG2

4.41E-68	11	RRM2B
4.51E-68	11	LCP1
7.58E-68	11	RBM38
1.74E-67	11	CD74
2.06E-67	11	RHEX
3.56E-67	11	SLC4A8
1.50E-66	11	SPI1
1.80E-66	11	SNX29
6.17E-66	11	CLEC17A
7.86E-66	11	UBE2R2
9.49E-66	11	HS2ST1
1.30E-65	11	SLCO3A1
1.81E-65	11	CTSH
1.95E-64	11	ARHGAP24
2.98E-64	11	SH2B2
3.58E-64	11	ZNF804A
3.72E-64	11	CLIP2
5.75E-64	11	NEDD4L
8.14E-64	11	RABGAP1L
9.24E-64	11	LARGE1
1.19E-63	11	STMN1
1.34E-63	11	KATNAL1
2.47E-63	11	SLC25A5
2.82E-63	11	MAP4K2
4.86E-63	11	OTUD1
5.26E-63	11	SLC9A7
6.17E-63	11	MRPS27
1.07E-62	11	ORAI2
1.12E-62	11	PPP2CA
1.29E-62	11	MEF2A
1.59E-62	11	CORO1A
2.32E-62	11	CD72
3.69E-62	11	PIK3C2B
1.09E-61	11	DEGS1
1.20E-61	11	NIBAN3
1.28E-61	11	CYBB
1.85E-61	11	PAG1
1.92E-61	11	DENND3
2.15E-61	11	UVRAG
3.13E-61	11	CD37
6.55E-61	11	HLA-DRA
7.89E-61	11	HLA-DOA
1.13E-60	11	RUBCN

1.46E-60	11	MSI2
1.48E-60	11	SH3KBP1
1.65E-60	11	USP12
2.35E-60	11	ZNF821
2.75E-60	11	MED12L
2.97E-60	11	ANP32B
4.40E-60	11	EPS15
6.36E-60	11	VGLL4
9.24E-60	11	MFHAS1
1.45E-59	11	HELLS
2.11E-59	11	FAM102A
3.09E-59	11	DHFR
5.43E-59	11	CAMK2D
7.45E-59	11	ACTB
1.32E-58	11	MYO9A
1.39E-58	11	PRKD3
1.50E-58	11	UBE2E2
3.90E-58	11	PTPN18
4.62E-58	11	C12orf49
4.64E-58	11	CCDC138
6.34E-58	11	HLA-DRB5
8.54E-58	11	INPP5D
9.43E-58	11	DNMT1
1.94E-57	11	ATP5MG
2.21E-57	11	AL592429.2
2.46E-57	11	FBXO30
2.52E-57	11	TRAK1
2.54E-56	11	CDK13
2.60E-56	11	CENPM
3.02E-56	11	BLOC1S6
7.33E-56	11	RB1
9.92E-56	11	TRIM38
1.02E-55	11	ZNF827
2.21E-55	11	SIPA1L3
2.99E-55	11	PLEKHF2
3.11E-55	11	TKT
4.82E-55	11	THRB
1.12E-54	11	TMEM243
1.45E-54	11	OTULIN
1.85E-54	11	BMP2K
1.86E-54	11	CENPU
9.12E-54	11	SCRN1
1.33E-53	11	HMGB1

2.02E-53	11	SNX30
2.20E-53	11	LINC01184
2.77E-53	11	METAP2
3.32E-53	11	GCHFR
3.35E-53	11	ATP2A3
3.63E-53	11	FCRL3
3.88E-53	11	BCL6
4.66E-53	11	CASD1
5.50E-53	11	HDAC1
1.13E-52	11	SYNE1
2.08E-52	11	PLEKHJ1
2.17E-52	11	GIT2
5.16E-52	11	EZR
6.01E-52	11	TRIO
6.22E-52	11	BCL2L11
6.51E-52	11	BTK
8.21E-52	11	SKAP2
1.07E-51	11	CUX1
1.11E-51	11	BPTF
1.97E-51	11	HSH2D
2.53E-51	11	PTTG1
2.64E-51	11	KCNMB4
3.16E-51	11	PM20D2
3.81E-51	11	GIHCG
5.73E-51	11	CCDC126
7.15E-51	11	SNED1
1.21E-50	11	MDM4
1.50E-50	11	HMGN2
2.98E-50	11	SLC35E3
4.35E-50	11	RHBDD1
4.92E-50	11	RAP1B
5.43E-50	11	PIK3CG
5.52E-50	11	LONRF1
6.05E-50	11	CD53
6.54E-50	11	RABEP2
7.37E-50	11	AP1S3
7.73E-50	11	ARPC2
1.04E-49	11	HLA-DQA2
1.04E-49	11	LY9
1.15E-49	11	SUSD3
1.22E-49	11	EPS15L1
1.42E-49	11	TMEM19
2.62E-49	11	USPL1

3.64E-49	11	UCP2
6.91E-49	11	SETDB2
7.90E-49	11	MIS18BP1
9.31E-49	11	TMA16
1.14E-48	11	UBR7
1.46E-48	11	MTMR12
2.27E-48	11	TSBP1-AS1
3.37E-48	11	MTMR14
5.25E-48	11	CARD11
5.28E-48	11	PRDX6
5.57E-48	11	NDUFAF6
7.94E-48	11	P2RY8
8.24E-48	11	HLA-DQB1
1.35E-47	11	MSH6
2.31E-47	11	SLC49A4
3.01E-47	11	EIF2AK3
3.22E-47	11	ZFAND6
3.76E-47	11	BFSP2-AS1
4.28E-47	11	LPIN1
2.31E-46	11	SLC38A9
5.72E-46	11	FAM49A
7.63E-46	11	SLC23A2
1.59E-45	11	VEZT
1.63E-45	11	NCOA7
2.82E-45	11	RALGPS2
4.10E-45	11	EXT1
4.35E-45	11	OGA
5.65E-45	11	FADS3
6.12E-45	11	TPCN1
9.03E-45	11	WASHC4
1.23E-44	11	ODC1
1.48E-44	11	LAMTOR5
1.55E-44	11	RAPGEF1
1.59E-44	11	HLA-DRB1
1.68E-44	11	CCNI
2.76E-44	11	CSK
2.83E-44	11	DMXL1
3.69E-44	11	TACC1
4.19E-44	11	MMD
6.00E-44	11	MRPS28
6.46E-44	11	CUL3
6.47E-44	11	SCPEP1
7.94E-44	11	PLIN3

1.28E-43	11	UGCG
2.83E-43	11	RGS16
3.48E-43	11	SRSF9
3.67E-43	11	LSM10
3.88E-43	11	PRKCE
4.26E-43	11	GPR160
5.45E-43	11	SNRNP25
1.31E-42	11	FCRL5
1.42E-42	11	CDK14
1.96E-42	11	RCSD1
2.96E-42	11	FCHSD2
4.71E-42	11	RBBP4
5.31E-42	11	NANS
5.76E-42	11	RAB3GAP2
7.86E-42	11	DCUN1D1
8.61E-42	11	GRK3
9.42E-42	11	TSC1
9.49E-42	11	USP7
1.08E-41	11	C12orf75
1.55E-41	11	CERS4
2.16E-41	11	RNF144B
2.30E-41	11	SNX5
3.83E-41	11	ADGRG5
3.94E-41	11	NIN
5.34E-41	11	CCDC6
5.81E-41	11	CXXC5
7.27E-41	11	EIPR1
7.75E-41	11	XRCC4
1.09E-40	11	MCOLN2
1.34E-40	11	ENTPD4
1.41E-40	11	MCM5
1.67E-40	11	PVT1
1.85E-40	11	KBTBD8
3.22E-40	11	AC025164.1
3.82E-40	11	ACTR3
5.64E-40	11	CHMP7
9.75E-40	11	PARP11
1.48E-39	11	RABGAP1
1.94E-39	11	MAP1LC3B
2.00E-39	11	FBXO10
2.03E-39	11	ATM
2.37E-39	11	ITPKB
3.38E-39	11	UBE2G1

3.55E-39	11	RFC1
5.85E-39	11	FAM214A
6.10E-39	11	ADORA2A
7.01E-39	11	UBAP2
1.05E-38	11	RNF121
1.19E-38	11	GAPDH
1.40E-38	11	MCCC1
1.51E-38	11	PRDM2
1.78E-38	11	ACAP2
2.20E-38	11	ABI1
2.23E-38	11	LMO4
2.75E-38	11	DCK
2.99E-38	11	ARID1B
4.42E-38	11	LTB
4.94E-38	11	EZH2
5.05E-38	11	ARPC3
5.43E-38	11	TERF2IP
6.91E-38	11	ROCK2
1.09E-37	11	CIITA
1.82E-37	11	RMND5B
1.92E-37	11	MGAT5
2.19E-37	11	CD81
2.28E-37	11	HERC4
4.15E-37	11	AC009522.1
5.46E-37	11	B3GLCT
1.93E-36	11	RNGTT
2.06E-36	11	NPAT
2.15E-36	11	UQCC2
2.36E-36	11	AC010894.3
2.57E-36	11	MOB1B
2.88E-36	11	MCM7
2.92E-36	11	FAM30A
3.29E-36	11	FARP2
5.97E-36	11	OAZ1
7.21E-36	11	SETBP1
7.35E-36	11	WDR27
8.36E-36	11	RUFY3
8.65E-36	11	LINC02422
9.50E-36	11	ADAM17
1.39E-35	11	SNX3
1.92E-35	11	MEF2C-AS1
2.07E-35	11	HLA-DPA1
2.09E-35	11	PRRG4

2.42E-35	11	HACD2
2.69E-35	11	LINC00426
2.77E-35	11	ARHGAP17
7.93E-35	11	CFL1
8.69E-35	11	STX12
1.17E-34	11	HIP1R
1.72E-34	11	ARHGAP25
1.73E-34	11	C22orf34
1.73E-34	11	MRPL51
1.78E-34	11	CHD9
2.10E-34	11	HERPUD1
2.68E-34	11	SOCS1
2.74E-34	11	LRCH1
2.84E-34	11	AC073111.4
2.87E-34	11	EIF4ENIF1
2.90E-34	11	SP140
3.04E-34	11	RBBP7
3.50E-34	11	NUSAP1
4.15E-34	11	MOB3A
4.20E-34	11	GSTZ1
5.77E-34	11	SS18
6.13E-34	11	KMT2A
8.60E-34	11	TBC1D1
9.91E-34	11	SREBF2
1.18E-33	11	EYA3
1.35E-33	11	CEP57
1.50E-33	11	HDAC9
1.94E-33	11	HLA-DPB1
2.20E-33	11	MPP6
2.49E-33	11	FNBP1
2.63E-33	11	HSD17B12
3.57E-33	11	SNX2
4.17E-33	11	SASH3
4.81E-33	11	HOPX
7.19E-33	11	SMARCA4
7.61E-33	11	ATXN10
1.64E-32	11	DBNL
1.82E-32	11	BAG2
3.07E-32	11	EBLN3P
5.33E-32	11	CD83
6.86E-32	11	MRPL15
6.88E-32	11	MTPN
7.06E-32	11	CD2AP

7.10E-32	11	CYB5R3
7.67E-32	11	MAP4K1
7.74E-32	11	AMD1
7.81E-32	11	ANAPC15
8.24E-32	11	RCC2
1.01E-31	11	WDPCP
1.22E-31	11	OSER1
1.34E-31	11	NET1
1.39E-31	11	XPO1
1.72E-31	11	ARHGEF18
1.78E-31	11	CLCN6
3.14E-31	11	HNRNPD
4.17E-31	11	SLC44A2
7.04E-31	11	ALOX5
7.40E-31	11	POMP
8.21E-31	11	LYL1
9.79E-31	11	MAST2
1.47E-30	11	AC005670.3
1.77E-30	11	AL078459.1
1.90E-30	11	QRSL1
1.93E-30	11	TP53INP1
2.07E-30	11	ANO6
2.75E-30	11	ZBTB44
3.09E-30	11	ASB2
3.09E-30	11	ADAM28
3.51E-30	11	PIKFYVE
3.68E-30	11	BRK1
3.88E-30	11	STIM2
4.86E-30	11	IPO5
6.14E-30	11	LINC02245
6.27E-30	11	PUDP
1.26E-29	11	SMDT1
1.37E-29	11	TTLL3
2.05E-29	11	LY75
2.07E-29	11	DMTF1
2.56E-29	11	ISG20
2.89E-29	11	DENND6B
3.07E-29	11	RAP2A
3.60E-29	11	SFT2D1
4.50E-29	11	RHOA
4.98E-29	11	ESR2
5.54E-29	11	ILRUN
5.80E-29	11	LINC01572

7.05E-29	11	ZNF626
1.23E-28	11	ERP44
1.42E-28	11	SIAH2
1.42E-28	11	EHD1
1.51E-28	11	METTL7A
1.85E-28	11	GABARAPL2
1.93E-28	11	AL133480.1
2.16E-28	11	NFX1
2.28E-28	11	IGHM
2.51E-28	11	MYL6B
2.72E-28	11	HNRNPA1
3.16E-28	11	MFAP1
3.72E-28	11	REPIN1
4.08E-28	11	MRPL35
4.45E-28	11	UIMC1
4.68E-28	11	UHRF2
4.70E-28	11	PGLS
5.44E-28	11	SNHG29
5.82E-28	11	PALM2-AKAP2
6.06E-28	11	PCCB
7.36E-28	11	ZCCHC10
7.59E-28	11	PNN
1.36E-27	11	RPAIN
1.69E-27	11	DBI
1.71E-27	11	ZFAT
1.79E-27	11	FYTTD1
2.18E-27	11	MAD1L1
2.55E-27	11	MPZL1
2.60E-27	11	PPP1CA
2.72E-27	11	DDX39A
3.71E-27	11	MGME1
4.06E-27	11	SINHCAF
4.39E-27	11	GTF2I
4.65E-27	11	SEC62
5.04E-27	11	FRY
5.18E-27	11	MYEF2
5.47E-27	11	GTF2E2
5.47E-27	11	PPP3CC
6.84E-27	11	SELENOH
7.16E-27	11	BLCAP
9.72E-27	11	H3F3A
1.01E-26	11	MGMT
1.15E-26	11	OSBPL3

1.60E-26	11	BAZ2B
2.42E-26	11	TASOR2
3.13E-26	11	PRDX3
5.20E-26	11	NCF4
7.13E-26	11	WASF2
7.91E-26	11	CAPN1
8.19E-26	11	NT5C2
8.30E-26	11	RAN
9.86E-26	11	ZHX3
1.03E-25	11	OSBPL9
1.04E-25	11	AFTPH
1.20E-25	11	DEPDC5
1.32E-25	11	SNHG5
1.32E-25	11	RC3H2
1.53E-25	11	CKS1B
2.11E-25	11	NFATC1
2.27E-25	11	PFN1
2.75E-25	11	KHDRBS1
2.84E-25	11	KLHL24
3.34E-25	11	OGFRL1
3.38E-25	11	MSH2
6.83E-25	11	SLC37A1
8.16E-25	11	RNF41
8.24E-25	11	XPNPEP1
9.03E-25	11	CD2BP2
9.33E-25	11	C19orf48
1.01E-24	11	AC024560.5
1.09E-24	11	LSM6
1.23E-24	11	NAA38
1.35E-24	11	UBE2N
1.35E-24	11	ATP5MC3
2.19E-24	11	RFXANK
2.49E-24	11	GLRX3
2.58E-24	11	ZNF580
2.64E-24	11	ARHGEF7
3.19E-24	11	ZNF532
3.21E-24	11	ITGAE
4.08E-24	11	SGSM3
4.16E-24	11	KCTD9
4.72E-24	11	RHBDF2
4.83E-24	11	CEP135
5.50E-24	11	CENPP
5.66E-24	11	ITPR1

6.45E-24	11	ATP8A1
6.99E-24	11	CCT8
7.56E-24	11	RMDN1
9.04E-24	11	SNRPE
1.29E-23	11	FAM13B
1.44E-23	11	LINC00467
1.44E-23	11	ROMO1
1.61E-23	11	SNAP23
1.64E-23	11	CHAF1A
1.84E-23	11	KLF12
1.87E-23	11	CNTRL
1.92E-23	11	CLTC
2.04E-23	11	SFXN4
2.04E-23	11	AC027644.3
2.49E-23	11	UPF3A
2.60E-23	11	MBD2
2.60E-23	11	CAB39L
2.84E-23	11	PARN
3.19E-23	11	TAPT1
4.49E-23	11	ARPC4
4.69E-23	11	HMGB2
5.53E-23	11	TIAM2
7.41E-23	11	ZNF66
9.23E-23	11	LSM7
9.93E-23	11	RABEP1
1.09E-22	11	PMAIP1
1.30E-22	11	USP22
1.75E-22	11	PPP4C
2.04E-22	11	TADA3
2.04E-22	11	ELF1
2.14E-22	11	AP1B1
2.18E-22	11	PSMA4
2.54E-22	11	RABGEF1
2.57E-22	11	WIPF1
2.75E-22	11	POLR2G
2.83E-22	11	ZNF552
3.14E-22	11	MTF2
3.87E-22	11	BAIAP2L1
4.00E-22	11	RAB11FIP1
4.34E-22	11	COX5A
5.21E-22	11	BOD1L1
5.29E-22	11	TUT7
6.11E-22	11	COX11

6.16E-22	11	SH3BP5
6.80E-22	11	LYRM4
7.00E-22	11	LUC7L3
7.13E-22	11	YWHAQ
7.34E-22	11	MBNL3
7.84E-22	11	TRABD
8.43E-22	11	STK40
9.08E-22	11	ZNF106
9.96E-22	11	SPPL2B
1.14E-21	11	YWHAB
1.15E-21	11	UGGT1
1.60E-21	11	URM1
2.27E-21	11	PHB2
2.33E-21	11	SLC9B2
2.56E-21	11	SHLD1
2.57E-21	11	RIC1
2.67E-21	11	ATP10D
3.25E-21	11	AL162253.2
3.38E-21	11	FOXN3
3.42E-21	11	ZNF141
3.72E-21	11	MOB1A
3.82E-21	11	RASSF3
4.05E-21	11	ATP6V0A1
4.08E-21	11	SNRPA
4.26E-21	11	LSM14A
4.31E-21	11	MARF1
5.59E-21	11	TUFM
5.96E-21	11	GSTP1
6.14E-21	11	PACS1
6.92E-21	11	TMEM256
7.53E-21	11	ERBIN
8.03E-21	11	MDH1
8.52E-21	11	C1QBP
1.03E-20	11	LINC01473
1.16E-20	11	UPF2
1.16E-20	11	RNF103
1.40E-20	11	KDM1B
1.48E-20	11	SYNGR2
1.53E-20	11	TPST2
1.63E-20	11	ARRDC1
2.16E-20	11	ZHX2
2.18E-20	11	ELP6
2.41E-20	11	ZNF814

2.97E-20	11	ACYP2
3.38E-20	11	CCDC167
4.14E-20	11	MIOS
4.54E-20	11	SIT1
4.86E-20	11	PKIG
4.93E-20	11	SRP9
5.17E-20	11	ARID5B
5.55E-20	11	ATP5F1B
7.73E-20	11	TFEB
7.74E-20	11	MICU2
8.24E-20	11	MRPL52
8.41E-20	11	ANKRD26
1.08E-19	11	TBC1D22A
1.12E-19	11	SLC25A3
1.14E-19	11	ARSB
1.15E-19	11	CCM2
1.30E-19	11	FGD2
1.72E-19	11	TAF1D
2.01E-19	11	ACTR2
2.02E-19	11	SCAF8
2.07E-19	11	MAPK8IP3
2.13E-19	11	CDR2
2.46E-19	11	GABPB1-AS1
2.49E-19	11	COMMD4
2.52E-19	11	DGUOK
2.65E-19	11	SEPHS2
2.86E-19	11	LSM8
3.13E-19	11	ATP6V1A
4.29E-19	11	AF117829.1
4.64E-19	11	ATP5PF
4.94E-19	11	PRDX1
5.03E-19	11	DRAM2
5.12E-19	11	ZRANB3
5.75E-19	11	ACSF3
6.72E-19	11	GON7
7.61E-19	11	EIF2B1
8.06E-19	11	AP5Z1
8.21E-19	11	FO393401.1
8.24E-19	11	ZDHHC21
9.41E-19	11	SHOC2
9.57E-19	11	GLRX5
9.96E-19	11	IDE
1.04E-18	11	IAH1

1.14E-18	11	FAM135A
1.42E-18	11	CDV3
1.42E-18	11	VCPKMT
1.67E-18	11	LARP4B
1.68E-18	11	ARL2BP
1.72E-18	11	PHF10
2.04E-18	11	MCTS1
2.07E-18	11	SRGAP2
2.42E-18	11	ARPC1B
2.51E-18	11	HSD17B10
2.70E-18	11	HELZ
2.71E-18	11	EIF2S3
2.75E-18	11	CEPT1
2.79E-18	11	SRGAP2B
3.18E-18	11	SLC25A33
3.21E-18	11	HTT
3.47E-18	11	RPAP3
3.65E-18	11	MRPL37
4.43E-18	11	RHOQ
4.61E-18	11	MCM3
4.80E-18	11	8-Mar
5.04E-18	11	SULF2
5.09E-18	11	CD27
5.30E-18	11	CNN2
5.68E-18	11	LRRC37A2
6.14E-18	11	SLAIN2
6.30E-18	11	SKA2
6.32E-18	11	MRPS14
7.00E-18	11	PIGB
7.40E-18	11	SELENOT
7.99E-18	11	INTS10
8.03E-18	11	UQCRH
8.39E-18	11	UBE2H
8.90E-18	11	HSBP1
1.00E-17	11	ARF5
1.07E-17	11	THOC2
1.09E-17	11	PPP2R1A
1.26E-17	11	COQ7
1.26E-17	11	GGNBP2
1.39E-17	11	CPSF3
1.43E-17	11	DLEU2
1.44E-17	11	TCHP
1.50E-17	11	CCNB1IP1

1.61E-17	11	CPSF6
1.68E-17	11	EEF2
1.81E-17	11	ZNF107
2.25E-17	11	RBM26
2.58E-17	11	AL450998.2
2.62E-17	11	SAMM50
2.65E-17	11	MFN1
2.65E-17	11	STK17A
2.85E-17	11	CUL4B
2.90E-17	11	BTBD1
3.06E-17	11	WWC3
3.10E-17	11	QARS
3.13E-17	11	FKBP3
3.33E-17	11	DYNLL1
3.84E-17	11	UNK
4.73E-17	11	CEP170
4.76E-17	11	ATP6V1E1
4.87E-17	11	IGHD
5.18E-17	11	CARHSP1
5.21E-17	11	PTEN
6.16E-17	11	IL16
6.30E-17	11	ASPH
6.33E-17	11	HCLS1
6.42E-17	11	PPIA
6.62E-17	11	CBX5
7.36E-17	11	FAM49B
7.56E-17	11	KLHL42
7.99E-17	11	KIAA0355
8.23E-17	11	MTHFD1L
1.04E-16	11	PDE7A
1.05E-16	11	MX1
1.07E-16	11	WDR11
1.11E-16	11	ADA
1.24E-16	11	PKM
1.34E-16	11	BRD4
1.39E-16	11	EIF3A
1.45E-16	11	SPECC1L
1.54E-16	11	FAF1
1.68E-16	11	ZNF700
1.76E-16	11	BANF1
1.78E-16	11	TRA2A
1.90E-16	11	MZT1
1.91E-16	11	UBE2E1

2.17E-16	11	INVS
2.25E-16	11	WAS
2.32E-16	11	DAZAP1
2.70E-16	11	LINC01004
3.97E-16	11	H2AFV
4.42E-16	11	USP8
4.64E-16	11	CNIH1
4.86E-16	11	ARL5A
5.78E-16	11	CBR4
5.90E-16	11	POLR2J
6.35E-16	11	HPS5
6.49E-16	11	PTRHD1
6.51E-16	11	ZNF721
6.54E-16	11	TRAPPC1
7.41E-16	11	TMEM154
7.88E-16	11	MAP2K1
7.92E-16	11	ATP6V1H
8.85E-16	11	MPLKIP
9.12E-16	11	NGLY1
9.42E-16	11	TMC6
9.55E-16	11	NSMCE1
9.60E-16	11	TMEM134
9.96E-16	11	CDYL2
1.02E-15	11	FERMT3
1.05E-15	11	SNRPD1
1.17E-15	11	PSIP1
1.19E-15	11	CCT2
1.39E-15	11	PIP4K2A
1.42E-15	11	AL050309.1
1.49E-15	11	PAPSS1
1.51E-15	11	LRIF1
1.78E-15	11	RBM42
1.82E-15	11	PABPN1
1.84E-15	11	CAPN7
2.40E-15	11	MTERF4
2.42E-15	11	CLEC16A
2.52E-15	11	THOC7
2.55E-15	11	TLR1
2.58E-15	11	SMAP2
2.69E-15	11	SUDS3
2.95E-15	11	SPOPL
3.06E-15	11	TXN2
3.08E-15	11	SNRPD3

3.54E-15	11	NDUFB3
4.08E-15	11	EIF3I
4.13E-15	11	RO60
4.16E-15	11	ATP5F1A
4.19E-15	11	WIPI2
4.34E-15	11	ERH
4.91E-15	11	NSD1
5.52E-15	11	HDAC5
6.04E-15	11	PISD
6.14E-15	11	CBL
6.62E-15	11	SLBP
7.74E-15	11	ETFB
7.79E-15	11	PRKCB
8.53E-15	11	GRB2
8.71E-15	11	PTPN6
9.57E-15	11	STRN3
1.01E-14	11	TRAF5
1.11E-14	11	PFDN6
1.13E-14	11	TRANK1
1.14E-14	11	ARFGEF2
1.16E-14	11	ZNF92
1.27E-14	11	SMC6
1.36E-14	11	PRKRIP1
1.72E-14	11	EIF1AY
1.82E-14	11	PLEKHA2
2.11E-14	11	CCDC115
2.32E-14	11	TEX10
2.49E-14	11	GAS5
2.59E-14	11	MLF2
2.61E-14	11	PUS10
3.85E-14	11	NDUFA7
3.94E-14	11	EWSR1
4.00E-14	11	SMAD5
4.56E-14	11	PRMT1
5.50E-14	11	CYBC1
6.61E-14	11	PPP3CA
6.69E-14	11	PTK2B
6.93E-14	11	EIF3H
9.29E-14	11	INSIG2
9.69E-14	11	RERE
1.03E-13	11	C7orf50
1.06E-13	11	RUNX1
1.11E-13	11	CNNM4

1.40E-13	11	NUCKS1
1.40E-13	11	RTRAF
1.41E-13	11	BTF3
1.42E-13	11	MAP2K2
1.43E-13	11	ZNF586
1.57E-13	11	DCTPP1
1.59E-13	11	SLC41A2
1.69E-13	11	AKAP8L
1.81E-13	11	ALPK1
1.93E-13	11	EIF3F
2.11E-13	11	PPP6R2
2.26E-13	11	IKZF3
2.38E-13	11	MRPS24
2.48E-13	11	CCT3
2.69E-13	11	NSRP1
2.78E-13	11	C1D
3.28E-13	11	TTC13
3.49E-13	11	FIBP
3.50E-13	11	C4orf3
4.06E-13	11	WDR1
4.14E-13	11	NDUFAB1
4.34E-13	11	VHL
4.49E-13	11	CLPTM1L
5.20E-13	11	EIF2AK4
5.58E-13	11	CCNC
5.71E-13	11	SNHG7
5.87E-13	11	AL645568.1
6.24E-13	11	RAB4A
6.25E-13	11	ATP5MF
6.62E-13	11	C12orf76
6.91E-13	11	PHAX
7.03E-13	11	CPM
7.22E-13	11	DARS
7.77E-13	11	ARL14EP
7.81E-13	11	MRPS15
8.45E-13	11	SEPTIN2
9.36E-13	11	NPM1
1.19E-12	11	HNRNPM
1.20E-12	11	DMAC2L
1.27E-12	11	SF3A2
1.29E-12	11	PLCL2
1.33E-12	11	THRAP3
1.42E-12	11	EED

1.54E-12	11	ACO2
1.55E-12	11	MRPS36
1.64E-12	11	VRK1
1.69E-12	11	DUT
1.77E-12	11	BLOC1S2
1.78E-12	11	HNRNPA2B1
1.88E-12	11	UBE2D2
1.92E-12	11	UTP6
2.06E-12	11	IGBP1
2.25E-12	11	NF1
2.32E-12	11	MCPH1
2.56E-12	11	ESD
2.59E-12	11	COMMD1
2.72E-12	11	PPP6R1
2.78E-12	11	COTL1
2.86E-12	11	TIMM13
2.87E-12	11	GMFB
2.89E-12	11	R3HDM1
3.09E-12	11	AC006001.2
3.14E-12	11	POLR1D
3.17E-12	11	IDH2
3.31E-12	11	SGK1
3.68E-12	11	INO80
3.88E-12	11	TFDP1
4.35E-12	11	TLE4
4.65E-12	11	MTDH
4.73E-12	11	SMYD3
5.07E-12	11	SH2B3
5.11E-12	11	CNST
5.39E-12	11	ZMYND8
5.43E-12	11	PSMD4
5.51E-12	11	RAB14
6.19E-12	11	RBX1
6.23E-12	11	PDSS1
6.40E-12	11	PANK2
6.62E-12	11	STOML2
6.80E-12	11	LSM5
6.88E-12	11	NIP7
7.59E-12	11	ZFP36L1
7.64E-12	11	CPEB3
7.86E-12	11	UBQLN1
8.13E-12	11	TESK2
8.19E-12	11	ATF7IP2

9.13E-12	11	ATG16L1
9.18E-12	11	RAD51B
9.44E-12	11	ATP6V1G1
1.04E-11	11	MRPL16
1.07E-11	11	H2AFZ
1.12E-11	11	NAP1L1
1.14E-11	11	GTF2H1
1.38E-11	11	ELAVL1
1.38E-11	11	RAD9A
1.41E-11	11	ARPC5L
1.42E-11	11	LNPEP
1.42E-11	11	RASSF2
1.47E-11	11	CCDC18-AS1
1.50E-11	11	RPIA
1.54E-11	11	DOP1A
1.56E-11	11	PTDSS1
1.58E-11	11	FBXW7
1.87E-11	11	HADHB
1.94E-11	11	SRSF10
2.02E-11	11	WASHC2A
2.14E-11	11	IL21R
2.19E-11	11	INPP5A
2.21E-11	11	MPC2
2.22E-11	11	MDFIC
2.29E-11	11	ARGLU1
2.52E-11	11	PLEKHM2
2.58E-11	11	TBPL1
2.68E-11	11	HEIH
2.70E-11	11	POLA1
2.78E-11	11	NFAT5
2.84E-11	11	SLC5A3
3.02E-11	11	TNPO3
3.05E-11	11	ELMO1
3.09E-11	11	PSMA2
3.13E-11	11	ILF3
3.45E-11	11	ATP5IF1
3.91E-11	11	UBA2
4.03E-11	11	COX7C
4.28E-11	11	ZMYM4
4.31E-11	11	TRIM13
4.47E-11	11	NCBP3
4.51E-11	11	RACK1
4.74E-11	11	SET

4.93E-11	11	PRCP
4.93E-11	11	FBXO31
5.18E-11	11	GNG5
6.18E-11	11	PHTF2
6.23E-11	11	TRIM26
6.36E-11	11	COX6C
6.53E-11	11	HNRNPR
6.53E-11	11	CD52
6.78E-11	11	CBX3
6.86E-11	11	HNRNPK
7.20E-11	11	SRSF4
7.61E-11	11	TNKS
7.93E-11	11	COX6A1
7.94E-11	11	CD24
7.97E-11	11	ATP5ME
8.04E-11	11	FKBP1A
8.12E-11	11	TAF9
8.43E-11	11	CARD8
8.69E-11	11	RBM23
9.32E-11	11	TUBB
1.00E-10	11	SLC25A6
1.22E-10	11	ELOA
1.23E-10	11	UBTF
1.55E-10	11	VCPIP1
1.56E-10	11	MRPS34
1.71E-10	11	ERGIC1
1.74E-10	11	TAGAP
1.83E-10	11	EIF3L
2.05E-10	11	DCTN3
2.21E-10	11	AHSA1
2.35E-10	11	CPQ
2.56E-10	11	COA1
2.63E-10	11	USP33
2.85E-10	11	GRK2
2.85E-10	11	EVI5
2.86E-10	11	LPXN
2.87E-10	11	EIF1B
2.88E-10	11	RCBTB2
2.94E-10	11	AKIRIN2
3.09E-10	11	DANCR
3.10E-10	11	POGZ
3.12E-10	11	SELENOF
3.14E-10	11	MAN1A1

3.42E-10	11	ARPC5
3.43E-10	11	CSNK2B
4.32E-10	11	THUMPD3-AS1
4.46E-10	11	CLEC2D
4.67E-10	11	TNS3
4.92E-10	11	CDK2AP2
5.34E-10	11	ATP5F1C
5.45E-10	11	ARID1A
5.81E-10	11	GGCT
6.22E-10	11	HERC2
7.03E-10	11	TPM4
7.69E-10	11	YBX1
8.78E-10	11	STRAP
8.93E-10	11	RPGR
8.96E-10	11	RBM3
9.53E-10	11	MMADHC
9.83E-10	11	CCT5
1.01E-09	11	DERA
1.20E-09	11	MRPL4
1.26E-09	11	DDT
1.31E-09	11	CAP1
1.33E-09	11	RRAGC
1.34E-09	11	ATP6V0D1
1.37E-09	11	NUBPL
1.39E-09	11	REEP5
1.49E-09	11	MZT2B
1.61E-09	11	AC027097.2
1.68E-09	11	ZBTB10
1.73E-09	11	COX7A2L
1.82E-09	11	GNAS
1.90E-09	11	SEPTIN9
1.94E-09	11	FAM126A
2.01E-09	11	MRPL11
2.19E-09	11	TRAPPC8
2.30E-09	11	IL12RB1
2.32E-09	11	WDFY2
2.69E-09	11	SYNE2
2.93E-09	11	SYF2
3.06E-09	11	UQCR10
3.06E-09	11	ATG4B
3.07E-09	11	CLTA
3.23E-09	11	PNKD
3.35E-09	11	PPP1R12A

3.94E-09	11	ELOB
4.13E-09	11	SNRPF
4.19E-09	11	PPP3CB
4.53E-09	11	ATP5PB
4.70E-09	11	BCL2L13
4.90E-09	11	LYSMD2
5.24E-09	11	CLINT1
5.26E-09	11	RIOK3
5.34E-09	11	IRF2
5.84E-09	11	MRPS6
6.10E-09	11	TBC1D5
6.14E-09	11	MFSD14B
6.36E-09	11	KDM5A
7.29E-09	11	FAM241A
7.30E-09	11	NUDT21
7.44E-09	11	NUDT1
8.71E-09	11	IQCB1
8.94E-09	11	HNRNPC
9.81E-09	11	NDUFA11
1.10E-08	11	SLC30A9
1.35E-08	11	SPEN
1.50E-08	11	NAA50
1.61E-08	11	CHCHD10
1.75E-08	11	EIF4H
1.82E-08	11	SLC2A13
1.99E-08	11	EIF4G3
2.17E-08	11	COMMD10
2.21E-08	11	COX6B1
2.22E-08	11	ZNF148
2.35E-08	11	PCBP2
2.47E-08	11	RPA3
2.48E-08	11	ZNF609
2.49E-08	11	CHD4
2.78E-08	11	SF3B6
2.99E-08	11	DOCK2
3.26E-08	11	UBE2A
3.99E-08	11	LRPPRC
4.24E-08	11	ATP5MPL
4.37E-08	11	SNX25
4.42E-08	11	SUGT1
4.51E-08	11	HMG3
5.16E-08	11	ASH1L
5.44E-08	11	ECHDC1

5.91E-08	11	ADCY3
5.92E-08	11	SP140L
6.52E-08	11	POLR2J3
8.01E-08	11	TENT4A
8.25E-08	11	DDX17
8.34E-08	11	MAPK1IP1L
8.40E-08	11	DDX6
9.06E-08	11	CHCHD1
9.65E-08	11	CBWD1
9.85E-08	11	SNU13
1.01E-07	11	SYTL1
1.05E-07	11	ANKRD17
1.07E-07	11	CEP85L
1.13E-07	11	SYNCRIP
1.22E-07	11	NFKBID
1.34E-07	11	WASHC2C
1.38E-07	11	PSMD13
1.55E-07	11	KTN1
1.56E-07	11	DEK
1.60E-07	11	HIP1
1.68E-07	11	HADHA
1.72E-07	11	CHORDC1
2.02E-07	11	SNX13
2.08E-07	11	SFPQ
2.11E-07	11	FBXO11
2.19E-07	11	MSL2
2.35E-07	11	MIR181A1HG
2.58E-07	11	RPA1
2.60E-07	11	UTY
2.92E-07	11	FAM192A
3.34E-07	11	ZFAS1
3.41E-07	11	TCOF1
3.54E-07	11	NDUFA4
3.70E-07	11	SMC4
3.93E-07	11	ASXL1
4.07E-07	11	SUPT16H
4.29E-07	11	NDUFA12
4.33E-07	11	AC007384.1
4.40E-07	11	TBCA
4.76E-07	11	SH3TC1
5.70E-07	11	SYAP1
6.20E-07	11	ZBTB8OS
6.26E-07	11	SDE2

6.88E-07	11	PDE4D
7.22E-07	11	CYTIP
8.38E-07	11	EIF4B
8.62E-07	11	AP1G1
9.36E-07	11	YWHAE
9.65E-07	11	NDUFA13
1.11E-06	11	ZNF10
1.14E-06	11	SMC3
1.17E-06	11	NDUFA2
1.33E-06	11	VASP
1.33E-06	11	PNRC2
1.39E-06	11	UBE2I
1.40E-06	11	SLC35D1
1.58E-06	11	SOS1
1.80E-06	11	RFX3-AS1
1.83E-06	11	SPCS2
1.84E-06	11	KARS
1.94E-06	11	ST13
2.22E-06	11	PAN3
2.33E-06	11	EIF3M
2.35E-06	11	OLA1
2.77E-06	11	RALY
2.90E-06	11	CIRBP
2.98E-06	11	NKTR
3.00E-06	11	RANBP1
3.01E-06	11	ATP5PO
3.78E-06	11	REL
3.96E-06	11	APLP2
4.01E-06	11	PSMB1
4.62E-06	11	ATAD2B
5.21E-06	11	CHCHD3
8.75E-06	11	EVI2B
1.04E-05	11	SEM1
1.06E-05	11	COPE
1.08E-05	11	CALM3
1.15E-05	11	PPP4R3A
1.21E-05	11	ABHD3
1.39E-05	11	ANP32E
1.40E-05	11	NOP58
1.50E-05	11	UBE2L3
1.60E-05	11	RNF111
1.75E-05	11	TXNL4A
1.96E-05	11	GNB1

2.14E-05	11	HNRNPA3
2.20E-05	11	ANKRD11
2.27E-05	11	LSM3
2.41E-05	11	RAC2
2.63E-05	11	UBR5
2.90E-05	11	ZC3H15
3.39E-05	11	TACC3
3.95E-05	11	CAPZB
3.98E-05	11	SLC39A11
5.78E-05	11	NSD2
6.63E-05	11	PAIP2
7.04E-05	11	TBL1XR1
7.49E-05	11	ADNP
8.22E-05	11	SMG1
8.98E-05	11	JAK1
0.000101169	11	TAF15
0.000110563	11	CCDC88C
0.000116453	11	KDM4B
0.000132341	11	ATF4
0.000141564	11	USP9X
0.000148695	11	SRSF3
0.000150751	11	CLIP1
0.000174644	11	AGFG1
0.000180973	11	IARS
0.000186875	11	PUM1
0.000333424	11	RSRC2
0.000395201	11	YEATS2
0.000404889	11	SUZ12
0.000508573	11	NEDD8
0.00052663	11	PDS5A
0.000565406	11	RAD21
0.000582381	11	CHCHD2
0.000858731	11	TMSB4X
0.00090492	11	ERO1B
0.000958241	11	PNISR
0.001678209	11	BTRC
0.002587501	11	CDC73
0.003078992	11	BIRC6
0.004625879	11	CREBBP
0.004748748	11	PDS5B
0.009430185	11	FRYL
0.03402507	11	LAMP1
0.096116375	11	ITPR2

0.404369222	11	RANBP9
1	11	HIST1H4C
1	11	FOXP1

Sheet 2: Fibroblasts

Fibroblasts	p_val	avg_log2FC	pct.1	pct.2
LAMA2	0	1.990609864	0.996	0.614
ABI3BP	0	1.661850706	0.982	0.371
PID1	3.66E-306	1.692229854	0.958	0.381
ABCA6	1.01E-284	1.355488271	0.941	0.332
DCLK1	6.76E-270	1.6360896	0.935	0.403
TGFBR3	1.57E-268	1.568348059	0.944	0.42
NFIA	1.96E-268	1.481002507	0.989	0.549
TNXB	2.24E-261	1.439076614	0.973	0.341
ABCA8	1.65E-254	1.17065955	0.911	0.288
CELF2	6.36E-253	1.359338358	0.982	0.579
C3	1.11E-248	1.481625685	0.984	0.528
ABLIM1	2.94E-248	1.290733485	0.911	0.342
OGN	6.22E-244	1.402112601	0.929	0.356
SLIT2	7.73E-244	1.453147906	0.95	0.473
ABCA9	3.37E-239	1.115412705	0.822	0.245
MGST1	7.27E-239	1.204017169	0.936	0.339
LINC01239	9.87E-239	1.721903388	0.68	0.153
SCARA5	1.96E-238	1.202198744	0.843	0.238
SVEP1	5.44E-234	1.354837531	0.869	0.347
NLGN1	1.80E-232	1.498295792	0.75	0.217
FGF14	8.76E-221	1.470920589	0.817	0.278
FGF7	9.16E-218	1.150443928	0.904	0.373
ADH1B	3.90E-217	1.399052304	0.855	0.271
CFD	5.75E-214	1.517164001	0.934	0.408
SERPINA3	7.97E-213	1.022249012	0.801	0.226
CCDC80	2.93E-212	1.221692159	0.996	0.8
CLU	4.04E-212	1.279666094	0.974	0.544
NOVA1	1.07E-208	1.025680487	0.821	0.295
EFEMP1	2.17E-208	1.082532131	0.948	0.467
FBLN1	1.59E-206	1.23373932	0.988	0.739
MIR99AHG	2.66E-206	1.337459898	0.958	0.582
ADGRD1	8.74E-206	0.963892601	0.8	0.267
AOX1	3.65E-204	1.062829136	0.738	0.215
SLC9A9	1.41E-203	1.014703904	0.834	0.33
FOXP2	4.34E-203	1.111486469	0.912	0.453
ADD3	2.63E-200	0.98349299	0.954	0.576
PODN	2.31E-199	0.94848734	0.93	0.469
C1orf21	1.35E-197	1.04103854	0.935	0.538
RBMS3	6.15E-197	1.180588591	0.988	0.747
CHRD1	7.04E-196	0.874841763	0.727	0.208
CFH	8.83E-196	1.383818817	0.984	0.72

ZBTB16	9.09E-196	1.112133621	0.973	0.475
ITM2A	1.35E-195	1.100651647	0.87	0.321
IL33	7.68E-195	0.749041893	0.66	0.162
CXCL12	1.92E-193	1.038821515	0.911	0.397
PLA2G2A	7.43E-193	1.65085374	0.781	0.265
MGP	6.17E-192	1.267976617	0.995	0.733
DCN	1.20E-191	1.223540899	0.997	0.899
GSN	1.02E-189	1.176958963	0.994	0.828
NEGR1	2.27E-189	1.237921485	0.879	0.437
EBF1	5.09E-188	1.187231339	0.979	0.586
SFRP1	5.17E-187	1.61802903	0.696	0.21
DLG2	3.98E-186	1.26304811	0.887	0.454
GFRA1	1.63E-185	0.879945802	0.729	0.227
COL4A4	3.45E-184	1.130559096	0.645	0.171
FMNL2	3.86E-182	1.064249258	0.813	0.343
COL14A1	6.57E-181	1.170977382	0.965	0.597
CCN5	8.76E-180	1.235851102	0.735	0.224
PDGFRA	3.93E-179	0.875661419	0.951	0.544
SLIT3	1.20E-178	1.08698425	0.958	0.604
SELENOP	2.27E-178	0.902743851	0.928	0.483
LRP1	1.83E-177	0.853008826	0.98	0.683
METTL7A	2.09E-177	0.72673541	0.827	0.333
ANK2	3.02E-176	1.0998367	0.896	0.44
TFPI	4.86E-174	0.912585984	0.959	0.546
CILP	2.52E-172	0.874590172	0.755	0.242
PCOLCE2	2.56E-171	1.217268186	0.721	0.219
CYBRD1	2.60E-171	0.838978184	0.933	0.557
CST3	3.57E-171	0.961605643	0.996	0.914
LTBP4	4.15E-171	0.968289111	0.955	0.565
ABCA10	1.24E-170	0.981291805	0.71	0.224
ZFPM2	1.81E-170	0.994326655	0.971	0.651
PI16	3.86E-169	1.035623545	0.751	0.234
ADAMTSL3	2.32E-167	0.963529889	0.644	0.185
C1R	3.78E-167	0.840389491	0.995	0.854
3-Mar	2.79E-165	1.21905379	0.773	0.334
USP53	3.78E-164	1.071161251	0.819	0.379
AKR1C1	2.30E-163	0.872636474	0.825	0.342
ELN	5.01E-162	0.921489582	0.896	0.417
DDR2	1.44E-161	1.031542581	0.975	0.744
CD34	3.37E-161	0.65642425	0.756	0.243
KAZN	4.02E-161	1.283452277	0.801	0.39
C1S	7.39E-161	0.812827202	0.995	0.818
MFAP4	1.74E-160	0.978908439	0.971	0.647

RSPO3	3.26E-160	1.03887997	0.674	0.237
CARMIL1	4.73E-159	0.963263572	0.84	0.411
UST	2.56E-158	1.06782793	0.837	0.417
PTGIS	4.11E-158	0.847694619	0.727	0.234
GPX3	3.97E-156	0.828081801	0.854	0.374
SLPI	1.13E-155	1.030465538	0.682	0.208
CNTN4	5.46E-155	1.135251142	0.787	0.356
EGFR	5.53E-155	0.954078783	0.896	0.516
AC108734.4	1.96E-154	0.736177878	0.511	0.112
ZBTB20	2.97E-154	0.831904001	0.997	0.827
SERPING1	3.05E-153	0.767042579	0.994	0.843
PLAC9	3.41E-152	0.836277781	0.979	0.632
PROS1	1.33E-151	0.663049783	0.794	0.346
SMIM14	5.01E-151	0.760571976	0.893	0.52
IGF1	1.34E-148	1.229174987	0.781	0.326
MAPK10	4.24E-148	0.863798733	0.862	0.45
PARD3B	3.25E-147	0.943779731	0.935	0.619
UAP1	7.60E-147	1.046460216	0.911	0.593
SRPX	2.61E-146	0.938811481	0.828	0.412
ALDH1A1	1.75E-145	0.648910671	0.737	0.254
KLF4	2.10E-145	0.906243356	0.891	0.473
PLTP	4.18E-144	0.921608312	0.921	0.551
PCDH9	9.69E-143	1.068127494	0.649	0.238
SFRP2	1.33E-141	1.179602562	0.967	0.692
AL445426.1	4.69E-141	0.705290979	0.564	0.163
LMO3	2.74E-140	0.648206419	0.535	0.142
FBLN2	5.26E-140	0.916438817	0.942	0.598
RARRES1	1.12E-138	1.067601758	0.819	0.391
AP002518.2	1.70E-138	0.939444724	0.68	0.261
TXNIP	1.99E-137	0.916247922	0.972	0.723
SDK1	8.52E-137	1.026126793	0.957	0.645
SERPINF1	9.46E-137	0.815701037	0.986	0.744
ADAMTS5	1.05E-136	0.973574603	0.612	0.204
ELMO1	6.60E-135	0.648705195	0.704	0.276
SERPINE2	8.38E-135	0.928159849	0.861	0.427
SEMA3C	2.57E-134	1.032767378	0.811	0.418
IL6ST	3.07E-134	0.727558041	0.964	0.75
GPNMB	3.08E-133	0.831292954	0.94	0.65
PCSK5	4.01E-133	0.960220594	0.865	0.494
IGFBP6	7.72E-132	0.920007279	0.96	0.679
ADAMTSL4	2.13E-131	0.586203905	0.611	0.194
COL4A3	6.90E-131	0.726086238	0.471	0.112
SPATA6	1.53E-130	0.740087313	0.682	0.288

ADAMTSL1	1.60E-130	1.019549434	0.602	0.206
CREB5	1.69E-130	1.004666286	0.796	0.4
SPTBN1	2.30E-130	0.69947945	0.956	0.678
FBN1	5.69E-130	1.023153415	0.979	0.757
TSHZ2	6.51E-130	0.918775987	0.904	0.531
EFNA5	1.08E-129	0.800288437	0.613	0.214
PLPP3	5.04E-129	0.839288156	0.946	0.644
CP	1.83E-128	0.90896511	0.443	0.099
ZNF385B	1.96E-128	1.073232952	0.56	0.184
DLC1	4.41E-128	0.820471694	0.955	0.701
PRELP	1.13E-126	0.798135694	0.847	0.429
IGSF10	1.32E-126	0.706826708	0.507	0.139
PLSCR4	7.50E-126	0.635474957	0.814	0.427
NFIB	1.15E-124	0.745649054	0.932	0.56
PIK3R1	2.36E-124	0.991754901	0.928	0.662
CACNB4	2.74E-124	0.705318179	0.504	0.144
AL391117.1	4.03E-124	0.621881948	0.341	0.051
LRRN4CL	1.21E-123	0.586576207	0.758	0.337
TTC28	1.94E-123	0.755102694	0.953	0.682
CPVL	4.11E-123	0.620576686	0.511	0.138
MAMDC2	4.79E-123	0.934425376	0.597	0.216
DPYD	4.81E-123	0.741112498	0.931	0.628
TGFBR2	1.49E-122	0.757536866	0.909	0.643
TNFAIP2	2.99E-122	0.809468394	0.718	0.325
FCGRT	3.40E-122	0.669613166	0.949	0.676
VIT	4.90E-122	0.743764746	0.514	0.147
EPB41L3	1.82E-121	0.664423173	0.656	0.262
RAB8B	2.79E-121	0.72757663	0.845	0.509
FGF13	9.83E-121	1.061575143	0.527	0.167
LINC02147	1.20E-120	1.119169287	0.461	0.123
FOXO3	2.60E-120	0.797021939	0.961	0.683
OMD	3.21E-120	0.649960721	0.755	0.337
NFE2L2	5.35E-120	0.632206173	0.945	0.708
LSAMP	5.47E-120	0.782313315	0.848	0.441
LPAR1	9.52E-120	0.726188453	0.773	0.386
SH3D19	1.39E-119	0.721473804	0.921	0.616
PREX2	1.39E-119	0.68058636	0.526	0.159
RDH10	2.19E-119	0.697542505	0.643	0.25
CPQ	1.05E-117	0.706356948	0.939	0.693
ZFP36L2	1.64E-117	0.766442764	0.978	0.755
QSOX1	1.67E-117	0.662136074	0.84	0.48
RTN4	6.39E-117	0.704959348	0.986	0.846
MFAP5	8.62E-117	0.946740321	0.888	0.536

MYOC	2.27E-116	1.322968145	0.459	0.118
SCPEP1	2.36E-116	0.651604062	0.855	0.512
GALNT15	8.24E-116	1.185421496	0.651	0.3
FGL2	1.72E-113	0.604229146	0.549	0.181
DPYSL2	2.29E-113	0.587770036	0.89	0.604
SETBP1	3.35E-113	0.716093955	0.84	0.45
NAALADL2	1.90E-112	0.817934699	0.85	0.515
CLEC3B	2.92E-112	0.746837293	0.55	0.171
RNASE4	5.45E-112	0.676572154	0.844	0.477
MAN1A1	2.23E-109	0.792909361	0.925	0.647
HIF3A	5.05E-108	0.59337732	0.482	0.142
PSAP	1.05E-107	0.590288956	0.991	0.839
SAMHD1	1.08E-107	0.725212766	0.822	0.5
PLXDC2	1.49E-107	0.827471829	0.974	0.664
SCN7A	2.22E-106	0.85452904	0.55	0.19
C1QTNF3	2.72E-106	0.572556975	0.784	0.343
PDZRN4	2.82E-106	1.745928225	0.646	0.326
SRGAP1	1.07E-105	0.7519761	0.883	0.563
CADM3	3.85E-105	0.564868824	0.521	0.156
HELLPAR	8.82E-105	0.71934236	0.525	0.174
RORA	3.39E-104	0.759114145	0.986	0.779
OAF	5.04E-104	0.511269988	0.827	0.436
ALDH2	2.95E-103	0.536271495	0.816	0.403
FXYD1	5.77E-103	0.495440205	0.891	0.453
FHL1	6.97E-103	0.622851342	0.903	0.523
IL15RA	9.64E-103	0.481048817	0.607	0.239
DIAPH2	1.81E-102	0.663001681	0.899	0.647
NAV3	4.55E-102	0.950105572	0.804	0.478
CYP1B1	6.53E-102	0.694789444	0.59	0.223
KCNT2	6.86E-102	0.788796564	0.61	0.258
CHRM3	2.60E-101	0.849143616	0.463	0.152
SOD3	8.95E-101	0.731035866	0.956	0.596
CD302	9.69E-101	0.58715381	0.782	0.439
SH3BP5	2.36E-100	0.565143899	0.851	0.523
CBLB	3.54E-100	0.711733254	0.928	0.667
PBX1	3.92E-100	0.687011856	0.938	0.699
CYP4B1	3.21E-99	0.6340383	0.405	0.102
PMP22	4.99E-99	0.555696122	0.973	0.759
IL18	7.45E-99	0.559632944	0.444	0.129
CRYBG3	1.75E-98	0.679032066	0.688	0.355
LRFN5	2.16E-98	0.743692062	0.442	0.136
ESR1	7.71E-98	0.671120434	0.504	0.183
EPB41L2	1.46E-97	0.626650921	0.941	0.704

ACVRL1	8.44E-97	0.471771372	0.621	0.274
MBP	9.72E-97	0.500710831	0.627	0.266
DPT	1.47E-96	0.717832183	0.813	0.456
TACC1	1.97E-96	0.625213269	0.975	0.749
TCF21	6.21E-96	0.659089455	0.77	0.421
GASK1A	7.49E-96	0.618841459	0.501	0.179
MEDAG	3.76E-95	0.78314156	0.639	0.285
DSCAML1	5.52E-95	0.543539489	0.37	0.09
CFB	1.18E-94	0.479880833	0.707	0.341
CALCRL	1.60E-94	0.856505061	0.572	0.234
SSH2	2.42E-94	0.657568675	0.773	0.451
MEG3	5.17E-94	0.805211522	0.897	0.577
IRAK3	7.68E-94	0.594545396	0.759	0.426
LINC01133	9.69E-94	0.366304021	0.461	0.136
NFIX	1.32E-93	0.475239521	0.815	0.48
LSP1	1.56E-93	0.378870486	0.746	0.338
KANK1	1.70E-93	0.583930518	0.541	0.215
ABCA9-AS1	3.84E-93	0.417664709	0.342	0.075
ECHDC2	1.24E-92	0.527944277	0.727	0.381
XPNPEP2	1.46E-92	0.364017323	0.381	0.097
SLC19A2	1.93E-92	0.693349947	0.71	0.374
FBXL7	2.43E-91	0.690430441	0.936	0.676
PCNX2	3.07E-91	0.605718952	0.607	0.282
AKR1C2	6.76E-91	0.419292073	0.576	0.217
VEGFD	9.52E-91	0.437756003	0.4	0.107
OPHN1	2.67E-90	0.618195379	0.608	0.277
FAM107A	6.87E-90	0.449213041	0.418	0.12
TMEM132C	8.70E-90	0.566549474	0.374	0.097
AKR1C3	1.89E-89	0.419337412	0.614	0.26
C7	2.00E-89	1.422501725	0.494	0.184
FBLN5	2.46E-89	0.489415093	0.781	0.438
GNA14	3.81E-89	0.511530845	0.38	0.102
PAMR1	2.13E-88	0.56440556	0.562	0.227
APLP2	2.70E-88	0.557409864	0.924	0.725
CSGALNACT1	2.91E-88	0.51886499	0.687	0.329
PLBD1	3.30E-88	0.440495965	0.602	0.254
ATP1A1	5.93E-88	0.60959678	0.908	0.659
GPRC5A	7.78E-88	0.79755296	0.612	0.282
SAMD4A	1.16E-87	0.898588543	0.848	0.555
ARHGAP10	2.64E-87	0.604778463	0.905	0.656
GFPT2	6.35E-87	0.815854052	0.842	0.555
BNC2	1.50E-86	0.526124564	0.969	0.627
ITGBL1	1.92E-86	0.690895281	0.813	0.462

LTBP3	1.58E-85	0.489703122	0.837	0.505
RNF217	1.60E-85	0.636791161	0.689	0.379
AC092691.1	2.07E-85	0.705441207	0.283	0.054
SHISA3	2.22E-85	0.454968369	0.369	0.098
SMAD3	2.33E-85	0.462792235	0.65	0.298
APBB1IP	2.99E-85	0.399630107	0.496	0.181
AC007319.1	4.68E-85	0.944250426	0.559	0.248
CAB39L	1.49E-84	0.523800001	0.642	0.32
ASPA	3.48E-84	0.372490376	0.345	0.086
OSR1	4.87E-84	0.368994381	0.43	0.131
EPHA6	5.18E-84	0.545579534	0.273	0.051
LHFPL6	6.45E-84	0.652705751	0.963	0.786
SEMA3E	8.42E-84	0.474219729	0.335	0.082
ABHD5	1.02E-83	0.618595765	0.709	0.394
LIMCH1	1.18E-83	0.498873664	0.55	0.23
LRRK2	1.22E-83	0.366327082	0.416	0.13
CYP1B1-AS1	1.85E-83	0.508525139	0.374	0.109
LINC01697	1.95E-83	0.63838566	0.264	0.045
OLFML3	3.03E-83	0.489053526	0.889	0.528
FAT4	6.58E-83	0.536146643	0.548	0.237
TNFSF13B	8.35E-83	0.558948673	0.522	0.208
LEPR	1.19E-82	0.60396659	0.623	0.285
MATN2	1.23E-82	0.453656766	0.435	0.142
C16orf89	2.55E-82	0.47609533	0.369	0.099
TMTC1	3.02E-82	0.641531641	0.712	0.379
TRIOBP	3.81E-82	0.467495523	0.74	0.412
FKBP5	5.03E-82	0.685732186	0.932	0.699
SPRY1	1.06E-81	0.568684763	0.747	0.407
NID1	1.65E-81	0.508894497	0.812	0.504
IL16	2.19E-81	0.553523041	0.573	0.258
MEIS1	7.09E-81	0.650687286	0.837	0.542
SYNE1	7.35E-81	0.686462172	0.939	0.7
ADAM33	1.22E-80	0.474333859	0.555	0.233
FIBIN	1.39E-80	0.652356475	0.708	0.4
FAXDC2	1.98E-80	0.386249274	0.444	0.155
EEF2K	7.25E-80	0.47299964	0.525	0.219
PDK4	1.35E-79	0.53509863	0.678	0.316
PLAGL1	1.63E-79	0.610100253	0.758	0.442
NPC2	2.64E-79	0.450687915	0.94	0.706
SOX5	3.14E-79	0.347522867	0.95	0.67
ELF1	1.35E-78	0.596264322	0.904	0.673
ARL15	1.70E-78	0.65960257	0.762	0.469
BOC	4.03E-78	0.523457451	0.594	0.287

AL139383.1	5.25E-78	0.553868465	0.35	0.1
SNED1	1.23E-77	0.854581825	0.719	0.436
EHBP1	1.25E-77	0.662268087	0.806	0.535
ASAP2	1.50E-77	0.520817258	0.684	0.362
AGAP1	1.68E-77	0.670119113	0.842	0.584
ANXA1	1.98E-77	0.623375688	0.981	0.835
HIGD1A	2.42E-77	0.421531274	0.743	0.438
LAMC1	2.45E-77	0.584797367	0.903	0.666
LIMA1	3.99E-77	0.455915005	0.912	0.653
FLRT2	8.90E-77	0.539346957	0.651	0.334
GLUL	9.80E-77	0.548029013	0.912	0.682
EPHX1	1.31E-76	0.477553615	0.788	0.46
KIAA0408	3.43E-76	0.453518353	0.41	0.14
TIMP3	3.71E-76	0.548152441	0.988	0.842
AFF1	4.07E-76	0.555519442	0.825	0.544
PARD3	9.64E-76	0.511072683	0.916	0.669
LINC02511	1.74E-75	0.859324367	0.29	0.07
ADAMTS15	1.95E-75	0.474218529	0.342	0.096
FEZ1	2.27E-75	0.464041133	0.745	0.451
FILIP1	3.25E-75	0.508253337	0.737	0.4
PLCB1	3.91E-75	0.630081756	0.838	0.55
SULT1A1	3.99E-75	0.31792926	0.41	0.134
LINC02802	7.10E-75	0.493323526	0.725	0.416
MSR1	7.46E-75	0.544468265	0.257	0.051
RECK	8.02E-75	0.444958239	0.682	0.371
FSTL1	1.33E-74	0.577938281	0.975	0.795
SGCG	2.20E-74	0.379639876	0.355	0.103
STK32B	2.99E-74	0.447850628	0.328	0.092
FTX	3.18E-74	0.626787681	0.952	0.74
MCUB	7.70E-74	0.433548399	0.655	0.335
HMCN2	1.11E-73	0.486732565	0.395	0.133
GHR	1.78E-73	0.546986013	0.581	0.29
CCDC69	2.78E-73	0.273253095	0.465	0.173
VIPR2	3.05E-73	0.402741072	0.371	0.114
CYB5A	4.21E-73	0.484461437	0.84	0.568
DENND2A	4.28E-73	0.422923396	0.541	0.234
DST	4.54E-73	0.461950696	0.982	0.802
LVRN	8.26E-73	0.343042796	0.279	0.062
C17orf58	1.34E-72	0.396037779	0.49	0.194
OSR2	1.35E-72	0.58971022	0.619	0.318
CREG1	2.38E-72	0.415407388	0.786	0.488
LINC01140	7.51E-72	0.346990782	0.45	0.163
PRNP	1.12E-71	0.415352642	0.832	0.554

PCSK6	1.37E-71	0.440156461	0.349	0.105
NCOA1	1.92E-71	0.554609022	0.877	0.643
ALDH1A3	4.22E-71	0.515533907	0.538	0.242
PIEZO2	6.01E-71	0.630541708	0.5	0.219
WNT2B	1.42E-70	0.43895766	0.489	0.205
FMO2	1.56E-70	0.783474932	0.446	0.176
TNFSF10	2.50E-70	0.361356483	0.765	0.414
REV3L	2.54E-70	0.545440123	0.892	0.637
FGFR1	3.06E-70	0.475931824	0.892	0.648
VSIR	3.70E-70	0.359282076	0.619	0.292
PRKAG2	3.84E-70	0.421354527	0.566	0.269
TENT5A	4.77E-70	0.636372482	0.805	0.536
ITM2B	9.57E-70	0.409767475	0.988	0.908
RHOBTB3	1.19E-69	0.54977373	0.921	0.703
GSTM5	1.50E-69	0.389704294	0.494	0.202
SASH1	1.96E-69	0.401837121	0.727	0.413
PHGDH	2.42E-69	0.410887513	0.545	0.247
SESTD1	3.40E-69	0.517053231	0.816	0.541
PXDC1	3.48E-69	0.580384164	0.718	0.448
PTPRS	3.59E-69	0.447609006	0.637	0.352
PLAAT4	8.95E-69	0.352360204	0.735	0.403
PTGFR	1.05E-68	0.327762608	0.355	0.112
C1RL	1.42E-68	0.449057495	0.662	0.363
ACKR3	1.49E-68	0.627623779	0.695	0.398
FGF2	1.95E-68	0.402750188	0.513	0.223
BDH2	2.10E-68	0.396077341	0.765	0.478
ZNF385A	2.23E-68	0.259658009	0.522	0.219
NIPAL2	3.72E-68	0.562624811	0.432	0.171
PPL	1.25E-67	0.378644896	0.444	0.174
ABL1	1.67E-67	0.560874045	0.857	0.608
SPTLC3	2.13E-67	0.281446055	0.25	0.055
CTSF	3.33E-67	0.486317734	0.776	0.496
BCHE	3.42E-67	0.353881059	0.336	0.101
DOCK4	3.91E-67	0.636906991	0.782	0.507
PLEKHA6	5.49E-67	0.329324734	0.374	0.124
DAAM1	1.32E-66	0.534668153	0.781	0.499
MAN1C1	2.02E-66	0.322734146	0.442	0.17
SEMA6A	2.77E-66	0.400361864	0.349	0.112
ARHGEF3	6.10E-66	0.523724932	0.551	0.272
RAMP2	9.76E-66	0.365400197	0.427	0.157
WWP1	2.47E-65	0.480177085	0.668	0.389
ACSS3	3.37E-65	0.431572003	0.468	0.2
PALM	4.58E-65	0.333038958	0.531	0.24

LINC01798	5.46E-65	0.467595618	0.363	0.128
CTSH	7.42E-65	0.425027456	0.649	0.35
CDON	9.96E-65	0.333902405	0.306	0.088
ARL6IP5	3.09E-64	0.392042603	0.949	0.761
BMERB1	3.41E-64	0.432261082	0.811	0.532
SLC16A4	4.19E-64	0.322056122	0.465	0.195
APOD	4.74E-64	0.774537687	0.496	0.213
BICC1	4.79E-64	0.420971932	0.933	0.635
AKAP12	9.11E-64	0.476397001	0.894	0.626
CEP126	9.93E-64	0.374438249	0.442	0.176
MAML2	1.18E-63	0.612099631	0.918	0.691
NAMPT	1.46E-63	0.743083573	0.894	0.721
RUNX1T1	1.58E-63	0.593434749	0.749	0.485
NPR1	1.87E-63	0.283131075	0.342	0.105
GREM2	2.09E-63	0.411757056	0.392	0.144
BHMT2	2.24E-63	0.301005359	0.378	0.133
CLIP4	4.69E-63	0.357077933	0.473	0.206
RBMS3-AS2	4.97E-63	0.372164268	0.396	0.149
CBR3	6.79E-63	0.44613945	0.565	0.281
EMILIN2	7.21E-63	0.427882772	0.45	0.194
TNFAIP8L3	1.06E-62	0.368369512	0.433	0.168
TBC1D12	1.32E-62	0.39625963	0.604	0.331
AC008105.3	4.07E-62	0.268523277	0.304	0.086
JADE1	4.42E-62	0.36314851	0.575	0.278
OLFML1	5.82E-62	0.351815283	0.627	0.336
PROCR	1.22E-61	0.465881153	0.549	0.274
SSC5D	2.21E-61	0.349738706	0.603	0.306
SLC16A7	2.28E-61	0.493676159	0.575	0.303
PCYOX1	3.15E-61	0.338772455	0.71	0.423
ROR1	3.98E-61	0.473903368	0.642	0.348
ADGRB3	6.31E-61	0.612002624	0.417	0.165
GNG11	6.45E-61	0.400132659	0.858	0.595
MIR100HG	6.64E-61	0.386802367	0.733	0.434
NDRG1	9.76E-61	0.359643444	0.823	0.538
AUTS2	2.40E-60	0.447418088	0.962	0.734
SDCBP	3.50E-60	0.452324907	0.899	0.72
RGL1	5.01E-60	0.338120916	0.494	0.218
TMEM176B	1.11E-59	0.417333001	0.912	0.616
AP001528.1	1.14E-59	0.369192534	0.467	0.202
STXBP6	2.81E-59	0.46138034	0.394	0.155
APP	2.93E-59	0.435417294	0.967	0.809
ZNF704	3.64E-59	0.364304885	0.602	0.304
ITGA9	5.25E-59	0.319131235	0.332	0.109

BACH2	6.72E-59	0.444287596	0.707	0.431
KIAA1328	6.93E-59	0.488820276	0.615	0.342
P2RX2	7.89E-59	0.281885762	0.313	0.093
STEAP2	1.16E-58	0.421099604	0.701	0.412
RGMA	1.25E-58	0.338902093	0.446	0.189
FER	1.25E-58	0.461534442	0.812	0.558
LPCAT2	3.24E-58	0.754486017	0.523	0.283
MAGI2	4.22E-58	0.525576892	0.798	0.551
PTGES	4.98E-58	0.305572387	0.448	0.182
RBMS1	5.00E-58	0.434881441	0.947	0.767
AC124852.1	5.85E-58	0.327210943	0.315	0.101
GPSM2	8.02E-58	0.326194625	0.442	0.19
CLIC2	1.96E-57	0.301567623	0.469	0.202
BMP4	2.96E-57	0.427794124	0.604	0.326
AL356124.1	3.13E-57	0.34064993	0.339	0.121
ROBO3	4.05E-57	0.356232802	0.394	0.157
NPDC1	6.79E-57	0.278337315	0.652	0.346
PTPRG	7.79E-57	0.603937051	0.957	0.77
MAGI3	9.71E-57	0.493617192	0.66	0.396
RHOU	1.08E-56	0.316776507	0.375	0.142
CUTC	2.11E-56	0.367672719	0.544	0.282
TMEM176A	2.77E-56	0.375776946	0.845	0.549
AL109930.1	6.24E-56	0.376498392	0.433	0.19
SLC25A37	1.22E-55	0.39317931	0.642	0.37
MYO9A	1.40E-55	0.390806794	0.778	0.513
THRB	3.08E-55	0.394225	0.499	0.241
KLHL13	3.34E-55	0.348509118	0.347	0.122
ARHGAP6	3.76E-55	0.325761543	0.621	0.323
PRKN	4.61E-55	0.440230746	0.605	0.337
FAM198B-AS1	5.81E-55	0.354481853	0.344	0.127
ARHGAP26	7.10E-55	0.3878457	0.65	0.359
MED13L	1.16E-54	0.456825484	0.942	0.741
FBXO42	1.37E-54	0.438732414	0.532	0.287
CYP27A1	1.41E-54	0.315284768	0.496	0.237
PITPNM2	1.95E-54	0.281408847	0.302	0.097
C1QTNF7	5.45E-54	0.377453018	0.412	0.169
NR2F1	5.89E-54	0.461116033	0.639	0.371
NFKBIZ	8.57E-54	0.553337063	0.884	0.682
PTX3	1.06E-53	0.810989426	0.29	0.094
WIF1	1.24E-53	0.746067672	0.254	0.072
FAIM2	1.41E-53	0.26290526	0.277	0.082
CD81	1.47E-53	0.393638892	0.987	0.895
LINC00278	2.09E-53	0.37222467	0.271	0.082

IFIT1	3.55E-53	0.301854064	0.504	0.235
F10	3.63E-53	0.557247237	0.595	0.346
ITGB8	4.03E-53	0.39530592	0.366	0.142
S100A13	5.73E-53	0.323233606	0.943	0.704
HPGD	8.62E-53	0.601298944	0.394	0.165
NTN4	9.49E-53	0.420587577	0.567	0.289
PLD3	1.08E-52	0.369083843	0.881	0.646
LITAF	1.24E-52	0.400231598	0.873	0.629
PXN	1.26E-52	0.379005551	0.458	0.223
VPS13B	1.40E-52	0.371016161	0.897	0.663
ABHD15-AS1	1.42E-52	0.285362582	0.256	0.075
CDKN2C	1.51E-52	0.302563184	0.515	0.257
PIR	4.12E-52	0.264101994	0.315	0.109
PKD2	4.83E-52	0.421975385	0.732	0.481
ERRF11	4.92E-52	0.36693008	0.799	0.539
ACKR4	5.11E-52	0.314018184	0.335	0.124
MEG8	5.64E-52	0.773378341	0.677	0.426
GAS1	8.51E-52	0.627188406	0.712	0.448
DYNC2H1	8.52E-52	0.366011561	0.599	0.333
SPSB1	9.64E-52	0.474817134	0.749	0.516
ARHGAP29	1.02E-51	0.380029631	0.615	0.332
LDB2	1.10E-51	0.417425871	0.683	0.409
FAM227B	1.72E-51	0.315378133	0.304	0.108
DHRS3	1.79E-51	0.34751141	0.604	0.318
NUPR1	4.06E-51	0.36241361	0.957	0.783
KITLG	5.14E-51	0.329508983	0.655	0.39
CC2D2A	5.21E-51	0.353832666	0.514	0.268
ARHGAP21	6.40E-51	0.407185465	0.836	0.614
ZHX3	8.00E-51	0.40513035	0.692	0.443
TMOD2	1.14E-50	0.287351165	0.304	0.106
MYC	1.21E-50	0.289813199	0.65	0.371
SSPN	1.52E-50	0.408152279	0.857	0.608
PNRC1	1.75E-50	0.527103765	0.958	0.841
N4BP2L2	1.91E-50	0.332451421	0.935	0.742
ARHGEF26	4.71E-50	0.339322199	0.341	0.131
DDAH2	5.45E-50	0.288893947	0.874	0.634
PPP3CA	5.93E-50	0.538280211	0.843	0.618
FIGN	7.19E-50	0.432603351	0.419	0.194
FAM172A	8.65E-50	0.365105902	0.801	0.561
CSF1	1.67E-49	0.29339352	0.559	0.301
FAM110B	1.77E-49	0.386451205	0.494	0.254
SPOCK1	2.13E-49	0.463559713	0.625	0.376
NNMT	2.16E-49	0.48629258	0.99	0.852

FAM180A	4.23E-49	0.33456187	0.427	0.195
ARHGAP12	9.23E-49	0.357013595	0.613	0.373
VAT1	1.03E-48	0.304384015	0.703	0.447
CRLF1	2.33E-48	0.374971673	0.317	0.115
TMEM35B	3.91E-48	0.31993548	0.728	0.474
PAM	4.26E-48	0.390750523	0.946	0.731
PBX3	5.18E-48	0.366666438	0.832	0.592
APOL1	7.68E-48	0.278451666	0.574	0.311
MN1	9.30E-48	0.279887671	0.421	0.197
EEA1	1.17E-47	0.375110985	0.832	0.617
BDKRB2	1.84E-47	0.330930038	0.344	0.135
LGALS3	2.40E-47	0.325032091	0.98	0.845
RNF13	2.57E-47	0.288589729	0.706	0.462
GRK5	3.00E-47	0.334048398	0.722	0.443
ZNF638	3.07E-47	0.326609132	0.861	0.637
GREB1	3.18E-47	0.278827656	0.263	0.085
BLVRB	3.37E-47	0.261089621	0.787	0.54
WSB1	3.53E-47	0.373126564	0.958	0.784
AC079298.3	5.30E-47	0.558186752	0.418	0.199
EPHA3	5.50E-47	0.4577311	0.517	0.27
APOL3	5.87E-47	0.265716802	0.385	0.168
TCF7L2	6.63E-47	0.349330713	0.802	0.578
TWIST2	8.54E-47	0.334204111	0.675	0.407
NR3C2	1.35E-46	0.311412178	0.4	0.174
EMP1	1.45E-46	0.515985071	0.911	0.682
ANG	1.47E-46	0.303531818	0.481	0.244
AGTR1	2.86E-46	0.262338721	0.39	0.174
BST1	3.46E-46	0.270528381	0.405	0.182
PGRMC2	3.83E-46	0.265734526	0.722	0.486
TMEM72-AS1	8.23E-46	0.522839153	0.271	0.092
FHIT	1.22E-45	0.476049341	0.492	0.267
CPED1	1.31E-45	0.364589601	0.582	0.334
ABHD14A	2.54E-45	0.257211749	0.499	0.258
KLF9	2.84E-45	0.315574203	0.927	0.734
HGF	2.96E-45	0.251158441	0.36	0.154
TPST1	3.00E-45	0.416671381	0.805	0.57
CFLAR	3.25E-45	0.288489737	0.735	0.494
AC005237.1	3.90E-45	0.32978185	0.319	0.126
SCP2	4.11E-45	0.292216551	0.868	0.667
GLI3	5.22E-45	0.32754694	0.793	0.556
CPNE3	5.33E-45	0.296317972	0.762	0.528
ZFPM2-AS1	6.32E-45	0.404475643	0.642	0.391
SH3PXD2B	6.99E-45	0.47336379	0.831	0.587

CCNL1	8.15E-45	0.441076324	0.906	0.738
GULP1	8.70E-45	0.474819465	0.735	0.501
DIO3OS	1.27E-44	0.264365124	0.304	0.113
CD74	1.95E-44	0.256932431	0.635	0.394
CADPS2	2.39E-44	0.447674179	0.713	0.49
PCDH17	2.84E-44	0.374222371	0.254	0.083
FAM13A	3.44E-44	0.399250472	0.705	0.474
DAPK1	3.44E-44	0.279744193	0.342	0.141
AL033523.1	4.45E-44	0.474157111	0.262	0.092
SPART	4.85E-44	0.255799191	0.729	0.49
ITPKC	5.15E-44	0.335585334	0.411	0.203
EXT1	6.93E-44	0.49826915	0.881	0.68
SYTL4	7.61E-44	0.276914992	0.35	0.148
RASSF4	1.12E-43	0.275712024	0.382	0.172
TANK	1.35E-43	0.29702626	0.744	0.51
LINC01266	2.32E-43	0.434290201	0.317	0.13
ZNF106	3.10E-43	0.351515569	0.742	0.521
DANT2	3.24E-43	0.477913491	0.452	0.241
EPS15	4.33E-43	0.317946935	0.746	0.512
ENOSF1	4.74E-43	0.305144987	0.526	0.294
IGFBP4	4.87E-43	0.554555485	0.982	0.864
ACACB	5.33E-43	0.31994602	0.475	0.243
PDZRN3	5.75E-43	0.380663046	0.851	0.611
ST3GAL1	7.19E-43	0.325156517	0.586	0.359
MOB3B	1.03E-42	0.387319325	0.488	0.253
SGCE	1.26E-42	0.261253608	0.697	0.448
ADH5	1.77E-42	0.308237407	0.859	0.672
GPRC5D-AS1	1.81E-42	0.633767942	0.282	0.109
WARS2-AS1	2.09E-42	0.317112535	0.369	0.167
PAK3	2.97E-42	0.310742849	0.347	0.15
UGDH	2.99E-42	0.427616022	0.759	0.54
TBC1D5	4.37E-42	0.357071713	0.799	0.582
TSC22D3	5.22E-42	0.352463264	0.94	0.742
GSTM3	5.83E-42	0.262173944	0.805	0.58
F3	8.93E-42	0.259795942	0.542	0.293
GPC3	9.28E-42	0.412869652	0.269	0.097
IRF2BP2	9.45E-42	0.293565522	0.757	0.531
SAV1	1.15E-41	0.310123881	0.628	0.403
SEMA3B	1.76E-41	0.282783434	0.39	0.181
PRX	1.78E-41	0.297311087	0.253	0.087
CITED2	2.11E-41	0.472968867	0.687	0.452
CHPT1	3.27E-41	0.310204599	0.629	0.402
MIPOL1	3.38E-41	0.295897926	0.404	0.19

PDLIM1	4.57E-41	0.28422105	0.876	0.669
CD248	5.91E-41	0.345282303	0.736	0.504
AC098829.1	8.07E-41	0.729602236	0.356	0.168
AHR	1.02E-40	0.473306312	0.807	0.574
MBD5	1.23E-40	0.354851934	0.785	0.566
OSBPL9	1.59E-40	0.410024086	0.786	0.592
INTS6	1.85E-40	0.620792604	0.754	0.578
LAMB2	1.89E-40	0.313118427	0.766	0.538
MLH3	2.08E-40	0.280925713	0.47	0.248
FAM43A	3.68E-40	0.318161848	0.435	0.219
MPZL1	4.74E-40	0.292381255	0.822	0.609
HMCN1	6.43E-40	0.351877614	0.586	0.348
TSPAN4	6.92E-40	0.271904613	0.879	0.629
PDE4C	8.06E-40	0.769713262	0.35	0.165
FGD5	1.00E-39	0.271592862	0.315	0.135
SRSF5	1.36E-39	0.257911224	0.951	0.785
TMBIM4	1.61E-39	0.257257785	0.914	0.73
ANKAR	1.78E-39	0.33301567	0.34	0.152
ALPK1	1.79E-39	0.304998247	0.447	0.233
EXOC6B	2.20E-39	0.307663399	0.731	0.505
LGALS3BP	2.34E-39	0.264241336	0.957	0.766
FOXN3	2.45E-39	0.345018135	0.917	0.727
SOD2	2.63E-39	0.711222637	0.927	0.79
AHNAK	3.02E-39	0.30678914	0.972	0.842
C2	4.72E-39	0.307839678	0.627	0.4
NLGN4Y	4.79E-39	0.302449894	0.335	0.147
LRRK1	8.60E-39	0.394443	0.453	0.249
HEXA	1.94E-38	0.289213678	0.704	0.493
GMDS-DT	2.10E-38	0.429518393	0.526	0.315
MEIS2	2.43E-38	0.373936465	0.847	0.623
PDE7A	2.92E-38	0.277122473	0.51	0.293
ASAP3	3.79E-38	0.255960728	0.347	0.16
CHD9	3.99E-38	0.321800579	0.865	0.674
C5orf56	6.28E-38	0.28995706	0.55	0.325
SLC25A13	9.22E-38	0.329890129	0.475	0.269
CTSO	1.10E-37	0.261869859	0.597	0.372
TRPC1	1.35E-37	0.337628375	0.581	0.366
TMEM100	1.51E-37	0.25270204	0.273	0.106
POGLUT3	1.93E-37	0.262587812	0.571	0.357
SDCCAG8	2.46E-37	0.312228733	0.687	0.464
LONRF3	2.52E-37	0.359443239	0.296	0.123
CA12	2.65E-37	0.433791519	0.387	0.197
GAS7	2.98E-37	0.261121558	0.735	0.476

RAI2	6.70E-37	0.29648615	0.487	0.267
UGGT2	7.49E-37	0.348586659	0.684	0.482
HIVEP1	8.45E-37	0.325875581	0.604	0.383
GLRX	8.92E-37	0.287153276	0.723	0.524
ITIH5	9.58E-37	0.372709542	0.498	0.277
ZHX2	9.73E-37	0.279704217	0.71	0.471
GASK1B	1.31E-36	0.304989969	0.624	0.412
DENND1A	1.34E-36	0.282575523	0.577	0.351
IMMP2L	1.60E-36	0.300192429	0.796	0.592
AZI2	1.74E-36	0.326709191	0.681	0.477
AASS	1.82E-36	0.290639516	0.581	0.362
AUH	1.86E-36	0.277127481	0.517	0.302
EVC2	1.86E-36	0.25406473	0.398	0.203
CD55	1.97E-36	0.378840674	0.812	0.61
CDKN1C	2.10E-36	0.344582989	0.785	0.558
RFX2	4.16E-36	0.447856971	0.561	0.346
AL078604.4	6.73E-36	1.019637728	0.502	0.31
LTBP2	8.88E-36	0.359735283	0.594	0.369
TOR1AIP1	1.16E-35	0.257449934	0.629	0.42
NGF	1.66E-35	0.262422019	0.294	0.122
TMEM108	2.71E-35	0.367007201	0.336	0.157
MRNIP	6.91E-35	0.295717046	0.464	0.256
NFATC2	7.14E-35	0.56558102	0.568	0.359
WWOX	8.10E-35	0.361150287	0.816	0.61
AHI1	9.46E-35	0.266429991	0.83	0.601
CACHD1	1.03E-34	0.322169891	0.488	0.28
MAOA	1.39E-34	0.264090517	0.335	0.157
AKAP13	1.70E-34	0.296359336	0.982	0.821
BCKDHB	1.75E-34	0.519939126	0.558	0.363
UCHL1	1.98E-34	0.273405227	0.482	0.274
FNDC3B	2.17E-34	0.33496529	0.982	0.8
NAV1	3.24E-34	0.285690628	0.698	0.48
REXO2	3.62E-34	0.273368669	0.894	0.712
CACNB2	6.93E-34	0.318914383	0.598	0.365
DIAPH2-AS1	8.39E-34	0.301320221	0.29	0.128
MAPK9	8.82E-34	0.674371595	0.457	0.276
PTPN13	1.07E-33	0.302856213	0.575	0.372
FAM171A1	4.46E-33	0.263399342	0.354	0.175
EYA4	4.52E-33	0.323444519	0.337	0.166
DUSP1	5.13E-33	0.359297264	0.971	0.848
DSE	9.71E-33	0.312747946	0.679	0.476
LINC01504	1.24E-32	0.297464019	0.371	0.192
LAPTM4A	1.69E-32	0.276520676	0.963	0.856

CCDC18-AS1	3.19E-32	0.325392239	0.46	0.269
LRIG3	3.74E-32	0.270312265	0.465	0.271
G0S2	6.99E-32	0.532798278	0.35	0.173
DENND4C	8.26E-32	0.29246163	0.625	0.426
IL6	9.17E-32	0.26762183	0.327	0.154
AC004160.1	9.46E-32	0.258709306	0.571	0.348
CMYA5	9.64E-32	0.270795063	0.353	0.178
SLC4A7	1.11E-31	0.268307936	0.688	0.481
UTY	1.11E-31	0.271688296	0.457	0.261
ARHGEF10	1.37E-31	0.273516043	0.535	0.334
PPM1B	1.56E-31	0.257579377	0.569	0.365
STIM1	1.61E-31	0.254789611	0.563	0.358
TRMT11	2.28E-31	0.276521253	0.539	0.338
RAD51B	3.04E-31	0.347651669	0.537	0.342
BBS9	3.72E-31	0.319759238	0.627	0.424
RIN2	3.77E-31	0.263104031	0.781	0.56
PTGS2	4.59E-31	0.391058922	0.298	0.138
SESN1	4.61E-31	0.264679665	0.612	0.406
BDKRB1	6.20E-31	0.339055794	0.319	0.152
ANKS1B	6.71E-31	0.417046901	0.34	0.171
ANTXR2	1.42E-30	0.258731557	0.694	0.493
NR2F1-AS1	1.63E-30	0.262665591	0.519	0.32
RUFY3	1.73E-30	0.281823509	0.693	0.495
HIBADH	1.96E-30	0.279894701	0.499	0.31
ARID5B	2.76E-30	0.323960949	0.959	0.823
GTF2B	3.08E-30	0.337431896	0.604	0.417
LRRC23	4.26E-30	0.60126147	0.52	0.362
HIPK3	5.31E-30	0.284473635	0.76	0.573
MRTFA	6.22E-30	0.3032433	0.837	0.646
STARD9	1.01E-29	0.258352923	0.486	0.295
TRERF1	1.07E-29	0.255624529	0.442	0.256
RFTN2	1.11E-29	0.263328974	0.399	0.222
MID1	3.96E-29	0.266919447	0.482	0.278
BAZ2B	4.15E-29	0.28528535	0.755	0.551
NFKB1	9.81E-29	0.46435927	0.792	0.605
SCAPER	1.09E-28	0.270629346	0.591	0.407
PNISR	1.16E-28	0.275744228	0.837	0.672
TXLNG	2.73E-28	0.256890868	0.492	0.3
SLC10A1	1.17E-27	0.293736822	0.286	0.14
MITF	1.30E-27	0.311871726	0.665	0.464
ADAMTS17	1.41E-27	0.268994013	0.253	0.114
ATP10D	2.09E-27	0.286202545	0.542	0.362
SPRED2	2.38E-27	0.299966693	0.546	0.366

RORA-AS1	2.99E-27	0.258558966	0.327	0.171
SMG6	6.77E-27	0.272945834	0.68	0.49
FHOD3	8.64E-27	0.317744886	0.534	0.351
LINC01473	9.22E-27	0.325525816	0.533	0.343
FST	1.39E-26	0.413481754	0.3	0.149
PRKCE	1.90E-26	0.264858995	0.556	0.363
FNIP2	2.08E-26	0.314583315	0.603	0.421
RSRP1	2.11E-26	0.254076883	0.81	0.644
PDE1A	2.31E-26	0.354794363	0.519	0.336
AC012404.1	4.28E-26	0.255661703	0.365	0.207
SQSTM1	5.28E-26	0.288480305	0.974	0.845
POLG2	7.66E-26	0.313567981	0.499	0.326
B4GALT1	9.63E-26	0.316924642	0.804	0.627
ADAMTSL4-AS1	9.72E-26	0.307194911	0.632	0.438
ATF6	1.28E-25	0.372138723	0.665	0.506
KDM3B	1.43E-25	0.294035005	0.491	0.318
TTC17	4.72E-25	0.254510887	0.641	0.473
WTAP	4.74E-25	0.390651762	0.828	0.687
EIF1B	1.15E-24	0.295642158	0.799	0.632
AC022217.3	1.41E-24	0.368525509	0.504	0.336
TULP2	2.96E-24	0.270447872	0.472	0.301
AL365295.1	3.23E-24	0.333999093	0.304	0.164
ADM	5.50E-24	0.297597005	0.575	0.385
PRKCG	1.14E-23	0.364684661	0.262	0.13
PRICKLE2	1.27E-23	0.290271577	0.711	0.522
ZC3HAV1	1.42E-23	0.383800305	0.719	0.553
SLC9A1	2.46E-23	0.267216274	0.401	0.245
SYN3	2.49E-23	0.284038529	0.334	0.183
CAMK2N1	3.14E-23	0.314622029	0.665	0.486
TAF4B	4.08E-23	0.269261304	0.338	0.192
GALNT17	4.53E-23	0.370675568	0.292	0.154
TSC22D2	1.26E-22	0.391508904	0.654	0.505
SLC41A2	3.88E-22	0.269137567	0.388	0.236
ZFP36L1	6.72E-22	0.32500999	0.935	0.813
LHFPL2	7.89E-22	0.416256066	0.61	0.445
GCH1	8.45E-22	0.275928845	0.332	0.19
SMIM41	1.47E-21	0.306016817	0.295	0.163
THBS1	4.40E-21	0.397967849	0.771	0.631
DEPP1	5.43E-21	0.447778281	0.513	0.36
ELL2	5.46E-21	0.287123262	0.82	0.643
H19	1.26E-20	0.253698044	0.271	0.141
THUMPD3-AS1	1.27E-20	0.286364936	0.535	0.38
MMP19	1.43E-20	0.311503505	0.465	0.308

CPE	1.54E-20	0.446962141	0.711	0.591
NFATC1	3.24E-20	0.685712961	0.491	0.349
PDE4D	1.17E-19	0.320744003	0.712	0.54
CES1	2.23E-19	0.317848875	0.377	0.236
CAMK2D	6.72E-19	0.301116663	0.78	0.626
DPH6	2.71E-18	0.252296287	0.363	0.228
AMPD3	3.01E-18	0.464331902	0.261	0.15
HECTD2	4.71E-18	0.263282956	0.418	0.28
SEMA4A	9.31E-18	0.47713426	0.446	0.308
TNFRSF10B	1.50E-17	0.254138165	0.432	0.298
ULK4	2.14E-17	0.287514734	0.406	0.271
BIN3	1.64E-16	0.409738167	0.466	0.344
UGP2	2.33E-16	0.250016847	0.741	0.611
CCN2	3.56E-16	0.402137179	0.821	0.656
TNFAIP6	5.95E-16	0.355588505	0.699	0.535
ABTB2	8.27E-16	0.56060442	0.393	0.275
A2M	1.03E-15	0.710827626	0.592	0.481
PTGDS	1.78E-15	0.480301644	0.373	0.245
PLEKHG2	2.76E-15	0.414259523	0.399	0.293
SLC39A14	6.07E-15	0.254447756	0.581	0.45
SCLT1	9.01E-14	0.257094903	0.479	0.35
TMTC2	2.61E-13	0.292389078	0.439	0.323
SUPT5H	1.65E-12	0.414862215	0.476	0.381
SLC25A44	2.11E-12	0.312573658	0.281	0.185
GBE1	6.49E-12	0.304735802	0.576	0.461
PMF1	1.96E-11	0.280973251	0.569	0.462
RAB7A	8.13E-10	0.340485418	0.875	0.783
ICAM1	1.28E-09	0.395862128	0.449	0.365
CXCL2	2.31E-09	0.579580925	0.354	0.269
ACSL4	8.60E-08	0.27763423	0.51	0.428
COL11A1	0	2.897416091	0.754	0.049
COL1A1	0	2.89239161	0.991	0.845
POSTN	0	2.553988904	0.856	0.181
KIF26B	0	2.468651512	0.765	0.099
INHBA	0	2.214768096	0.852	0.274
COL5A1	0	1.880057403	0.957	0.575
COL10A1	0	1.838369672	0.7	0.065
WNT5A	0	1.741353227	0.772	0.125
GREM1	0	1.705182591	0.835	0.128
RUNX2	0	1.701950796	0.777	0.097
CDH11	0	1.598941474	0.92	0.312
SDC1	0	1.18795188	0.607	0.04
PLPP4	0	0.999528699	0.612	0.026

ADAM12	8.18E-307	1.492945193	0.726	0.12
MMP11	2.99E-306	3.028267184	0.743	0.145
TANC2	6.61E-303	1.733852425	0.861	0.256
COL3A1	1.78E-299	2.490618644	0.989	0.843
COL12A1	3.58E-299	2.116305976	0.97	0.67
COL1A2	6.56E-298	2.209699989	0.999	0.894
COL5A2	6.86E-294	1.723131032	0.992	0.776
RAI14	3.80E-293	1.348768205	0.823	0.215
TMEM158	3.63E-289	1.527706661	0.679	0.105
PTK7	8.74E-285	1.153800137	0.811	0.227
LOXL2	6.27E-280	1.392237939	0.77	0.163
CTHRC1	1.42E-277	2.071409917	0.873	0.347
TENM3	2.94E-274	1.541519775	0.732	0.156
SUGCT	2.69E-269	1.405957534	0.815	0.231
CSMD2	4.97E-264	1.154504894	0.575	0.065
DSG2	2.07E-262	0.754420209	0.52	0.041
MIR181A1HG	3.27E-261	0.863377137	0.511	0.038
UNC5B	5.16E-256	0.837270737	0.54	0.052
CASC15	1.46E-253	1.506496913	0.873	0.298
PRDM1	2.08E-252	1.121553922	0.661	0.116
ADAMTS12	3.12E-250	1.331713495	0.758	0.185
COL7A1	7.92E-249	1.372393229	0.566	0.073
FAP	1.42E-248	1.316524416	0.914	0.419
PODNL1	4.47E-248	0.72304179	0.521	0.05
GJA1	1.41E-247	1.347816961	0.787	0.246
SLC16A3	1.99E-247	0.949220867	0.641	0.11
NXN	2.92E-247	1.331908591	0.846	0.282
NREP	1.41E-245	1.11725232	0.766	0.205
MME	2.33E-243	1.076674012	0.516	0.048
HMGA2	3.56E-242	0.938733314	0.457	0.028
CHST11	4.37E-236	1.597804464	0.828	0.293
NTM	1.69E-234	1.673595296	0.855	0.343
COL27A1	2.20E-234	0.920674793	0.615	0.101
HS3ST3A1	6.48E-234	1.164634606	0.65	0.125
LRRC15	3.85E-233	0.621904524	0.413	0.017
COL6A3	3.76E-232	1.555255902	0.986	0.732
RNF144A	2.70E-231	0.966629881	0.63	0.116
ZNF469	1.81E-230	0.694401949	0.511	0.056
NRP2	5.54E-229	0.915056215	0.683	0.151
THBS2	6.00E-229	1.486134192	0.942	0.539
SLC24A2	5.53E-222	0.842755066	0.375	0.01
RUNX1	3.81E-221	1.492725964	0.928	0.474
MMP14	3.27E-216	1.308058201	0.83	0.37

GALNT5	4.64E-213	0.659554912	0.481	0.052
FN1	9.23E-211	1.890421757	0.989	0.854
ANTXR1	2.37E-208	1.338036815	0.947	0.65
HECW1	4.40E-208	0.822865112	0.425	0.032
MICAL2	5.35E-208	1.159541337	0.758	0.23
LINC01429	3.36E-207	0.537552714	0.353	0.01
DCBLD1	5.64E-207	0.856591414	0.621	0.13
LINC01705	6.31E-205	1.102036414	0.366	0.014
CHN1	2.38E-204	0.940512592	0.806	0.273
FARP1	2.02E-203	1.058719795	0.864	0.375
SERPINH1	4.30E-200	1.375270329	0.893	0.573
APBA2	7.73E-198	0.614569105	0.49	0.064
CNN2	1.92E-197	0.812939707	0.737	0.23
VCAN	1.99E-195	1.454022581	0.947	0.693
CCN4	4.03E-194	0.765011752	0.622	0.139
GOLM1	9.31E-193	1.111205871	0.839	0.399
MARCKS	1.25E-191	1.218521954	0.947	0.709
LMO7	2.82E-190	0.793400281	0.659	0.177
CDC42EP3	1.95E-187	0.791473315	0.49	0.07
ARL4C	4.43E-187	1.232597128	0.751	0.275
TSPAN5	1.56E-186	1.107585172	0.771	0.27
LMCD1	7.45E-186	1.207201101	0.737	0.239
PMEPA1	1.31E-185	1.023536662	0.884	0.442
DIO2	7.32E-185	1.271845126	0.707	0.212
SPHK1	3.02E-184	0.96518789	0.668	0.201
SPARC	3.86E-184	1.500814756	0.975	0.906
SPATS2L	2.37E-183	1.232451596	0.944	0.676
C1QTNF6	3.28E-181	0.532927188	0.476	0.069
CDH2	6.58E-180	0.570501023	0.34	0.017
FSCN1	5.54E-179	0.759445823	0.685	0.215
IL7R	7.34E-179	1.119333666	0.517	0.091
CADM1	2.32E-178	1.075528591	0.463	0.068
PDGFC	2.71E-178	1.090465457	0.713	0.237
GPR176	4.91E-175	0.896332706	0.6	0.146
NETO1	4.97E-175	0.966384886	0.341	0.021
BASP1	8.80E-175	0.78713807	0.809	0.298
MFAP2	9.98E-175	0.959042187	0.766	0.328
PTPRE	3.25E-174	0.770859481	0.602	0.14
COL6A1	2.38E-173	1.449581955	0.979	0.857
RFX8	5.80E-172	0.732895184	0.397	0.044
ACTN1	7.66E-172	1.003175341	0.845	0.355
SOX4	4.16E-170	1.276937989	0.856	0.413
HHIP	2.84E-169	0.922759075	0.375	0.035

PLOD2	5.63E-169	1.329805137	0.866	0.448
GJB2	7.78E-169	0.776006755	0.409	0.048
ADAMTS14	1.58E-167	0.697991903	0.421	0.056
TANC1	1.76E-167	0.97055824	0.696	0.218
CHST15	1.32E-165	0.586517257	0.525	0.103
ADAMTS2	2.21E-165	1.081419055	0.876	0.471
GLIS3	1.16E-164	1.258387887	0.827	0.341
ALPK2	1.86E-164	0.486224785	0.345	0.026
EGFL6	2.88E-164	0.989552133	0.548	0.116
TGFBI	5.06E-164	1.047655712	0.67	0.2
MYO10	2.41E-163	0.75472753	0.636	0.169
PPFIBP1	2.82E-162	1.022460724	0.902	0.555
SPATA13	5.03E-162	1.043349791	0.654	0.209
CALU	2.79E-161	0.942803786	0.954	0.779
MMP1	3.91E-161	2.518799878	0.411	0.056
LINC00511	4.06E-159	0.915952908	0.425	0.064
RCN3	1.90E-158	0.937758799	0.88	0.573
LINC01929	5.42E-158	0.546370021	0.313	0.018
KIAA1217	8.76E-158	1.249254089	0.818	0.399
ENTPD7	1.68E-157	0.479365153	0.45	0.074
GPM6B	2.51E-156	0.876420221	0.459	0.08
MYH9	8.65E-155	0.873964563	0.936	0.58
STK17B	1.07E-154	0.517086783	0.675	0.204
TCF4	1.51E-153	1.00951047	0.972	0.751
SULF2	1.63E-153	0.779633424	0.696	0.247
SULF1	2.10E-153	1.225887884	0.962	0.713
AOPEP	3.57E-152	1.010557217	0.931	0.604
PLAU	4.61E-152	1.445432928	0.651	0.235
MMP13	5.91E-152	1.738168704	0.303	0.019
ITGB5	3.23E-151	0.940065062	0.903	0.572
VSNL1	8.46E-150	0.341388107	0.318	0.023
PYCR1	1.01E-149	0.491635232	0.525	0.124
EPST11	2.22E-149	0.730480512	0.698	0.252
TTYH3	3.65E-149	0.466615665	0.431	0.074
SYNDIG1	1.29E-148	0.547172873	0.397	0.057
CD82	2.22E-146	0.768311818	0.639	0.214
ADAM19	1.15E-145	0.635976767	0.51	0.114
TSPAN9	1.53E-145	0.721109846	0.713	0.275
LEF1	4.37E-144	0.455512865	0.381	0.05
SERINC2	2.19E-143	0.375376295	0.35	0.039
SHISA2	9.45E-143	0.459617542	0.263	0.011
P3H1	1.03E-141	0.60027355	0.677	0.252
TPST2	1.33E-141	0.460856794	0.461	0.094

PALLD	1.63E-141	0.973857182	0.954	0.687
CREB3L1	2.24E-141	0.65119233	0.649	0.229
RRBP1	3.53E-141	0.772595879	0.949	0.726
AC134312.5	1.00E-140	0.326042782	0.284	0.018
AEBP1	2.60E-140	1.029065585	0.961	0.786
CMTM4	3.68E-140	0.447760409	0.397	0.062
MXRA5	3.87E-140	0.840909098	0.848	0.407
COL24A1	1.90E-139	0.651174725	0.427	0.079
FGD6	2.93E-139	0.564360748	0.467	0.098
GSE1	3.72E-139	0.592239689	0.609	0.186
SEZ6L2	4.66E-139	0.356398882	0.333	0.036
FKBP10	1.14E-138	0.739353789	0.879	0.573
WNT2	2.10E-138	0.629491626	0.444	0.086
CHSY3	4.90E-138	0.961958485	0.655	0.219
CALD1	1.48E-137	0.925719874	0.993	0.933
MARCKSL1	5.93E-137	0.565240853	0.67	0.229
MDFI	2.17E-136	0.360541155	0.354	0.045
C4orf48	3.60E-135	0.497634495	0.692	0.252
RAB31	6.08E-135	0.861555481	0.861	0.489
TRIM59	7.92E-135	0.497634128	0.509	0.128
SIPA1L1	1.60E-134	0.848618135	0.776	0.338
SLC1A3	3.53E-134	0.724777704	0.405	0.073
PMAIP1	1.62E-133	0.547953695	0.456	0.091
RGS3	5.55E-132	0.613337966	0.521	0.133
NKD1	5.82E-132	0.640531082	0.408	0.074
KIFC3	1.46E-131	0.43674927	0.491	0.116
TENM4	1.53E-131	1.022766502	0.767	0.353
TMEM45A	1.56E-131	0.66762874	0.723	0.324
ATXN1	1.64E-130	0.851380737	0.932	0.606
CHPF	5.33E-130	0.723424781	0.653	0.257
CAPZB	9.29E-130	0.707146534	0.957	0.808
PRKD1	1.37E-129	0.972426935	0.722	0.295
P3H4	1.63E-129	0.578583712	0.604	0.207
GLIS1	2.08E-129	0.61443788	0.445	0.094
FNBP1L	8.69E-129	0.665172663	0.608	0.202
NRG1	9.85E-129	0.658591683	0.251	0.013
CDCP1	1.69E-128	0.390356288	0.275	0.021
NUAK1	6.53E-128	0.73838101	0.467	0.113
SGIP1	5.91E-127	0.596866657	0.61	0.189
SEPTIN11	6.60E-127	0.823703467	0.939	0.694
TNFRSF12A	4.01E-125	0.925757688	0.683	0.279
TEAD1	6.11E-125	0.83077398	0.897	0.549
HOPX	2.61E-124	0.656326091	0.511	0.128

ENAH	5.70E-124	0.792187878	0.893	0.529
ASAP1	7.09E-124	0.844467673	0.917	0.566
TRIO	6.75E-123	1.045874884	0.936	0.653
AK5	4.86E-122	0.393542088	0.303	0.034
DERL3	6.31E-122	0.770080066	0.291	0.03
BPGM	6.42E-122	0.582136228	0.535	0.164
RALA	1.54E-120	0.647290857	0.807	0.442
FRMD6	4.87E-120	0.850545895	0.844	0.472
CTSB	1.55E-119	0.729113236	0.918	0.713
HMGA2-AS1	3.87E-119	0.424604542	0.271	0.025
MAP4K4	5.11E-119	0.751187217	0.894	0.547
ZNF281	8.51E-119	0.451234378	0.494	0.133
WIPF1	1.85E-118	0.645221225	0.776	0.364
ACBD3	3.40E-118	0.665707235	0.851	0.53
BMP1	3.86E-118	0.58825509	0.686	0.289
XYLT1	3.90E-118	0.954635464	0.729	0.318
SLC38A5	4.36E-118	0.375685627	0.373	0.067
COL5A3	5.30E-118	1.087680185	0.493	0.146
LIMS1	6.78E-118	0.742578375	0.933	0.66
ZEB1	1.05E-117	0.997856395	0.937	0.693
PLOD1	1.25E-117	0.570724418	0.628	0.242
NKD2	1.97E-117	0.404235806	0.363	0.064
FRMD5	2.80E-117	0.554944983	0.26	0.022
RASGRF2	5.75E-117	0.59771536	0.467	0.121
CDK14	7.15E-117	0.900572558	0.9	0.527
PGM2L1	1.17E-116	0.76579744	0.51	0.153
GRIP1	5.93E-116	0.652758282	0.354	0.061
LOX	2.23E-115	0.701289108	0.719	0.341
PTGER3	2.71E-115	0.82480251	0.637	0.251
SPRED1	2.97E-115	0.792759981	0.764	0.373
BGN	4.67E-115	0.852990448	0.927	0.701
VGLL4	1.14E-114	0.73899224	0.857	0.535
TWIST1	1.27E-114	0.863105573	0.876	0.567
ST6GALNAC5	5.69E-114	0.910783636	0.512	0.152
GPX7	1.52E-113	0.51106955	0.549	0.18
APBB2	3.04E-113	0.822347428	0.902	0.564
STMN1	3.06E-113	0.496122051	0.526	0.156
STARD4-AS1	2.60E-112	0.353194607	0.324	0.049
FUT8	3.06E-112	0.653375136	0.769	0.372
PRRX1	1.07E-111	0.788257011	0.93	0.721
PDPN	2.78E-111	0.696714897	0.839	0.468
NRIP1	3.55E-111	0.751958031	0.862	0.475
TNFRSF6B	6.05E-111	0.599058059	0.423	0.101

ETV1	1.78E-110	0.450359311	0.467	0.123
SLC6A6	2.18E-110	0.362096724	0.362	0.067
P4HB	2.42E-110	0.759366114	0.923	0.762
JCAD	2.76E-110	0.417178688	0.457	0.118
AC015923.1	4.01E-110	0.370089517	0.304	0.043
CDYL2	6.71E-110	0.329792891	0.28	0.034
EVA1A	2.38E-109	0.28254655	0.281	0.034
MDFIC	2.96E-109	0.52549873	0.71	0.318
RCN1	3.09E-109	0.610921604	0.871	0.639
KCND2	1.39E-108	1.433358197	0.701	0.333
STRA6	1.89E-108	0.357227624	0.286	0.036
SEC31A	2.67E-108	0.632340731	0.938	0.711
ITGB1	2.74E-108	0.663694555	0.968	0.845
CCBE1	4.42E-108	0.778444963	0.334	0.059
SPECC1	5.47E-108	0.287387292	0.551	0.156
FOXQ1	1.18E-107	0.434853636	0.316	0.05
MIR4435-2HG	2.07E-107	0.822176109	0.81	0.441
PCDH7	4.35E-107	1.004213967	0.809	0.432
SLC9A3R2	5.12E-107	0.554026218	0.65	0.269
CD109	2.70E-106	0.548032259	0.628	0.252
EMILIN1	2.91E-106	0.666430996	0.855	0.496
ETV6	3.38E-106	0.692178578	0.851	0.45
TPM4	3.47E-106	0.722420117	0.943	0.817
SURF4	5.96E-106	0.564450273	0.843	0.521
MSX2	1.34E-105	0.366507348	0.298	0.044
COL8A1	2.47E-105	0.959433762	0.902	0.588
MYO5A	3.56E-105	0.502283423	0.52	0.165
RAB2A	4.26E-104	0.575771315	0.947	0.785
SIPA1L3	8.61E-104	0.525491713	0.539	0.179
AGPAT4	9.85E-104	0.814629047	0.667	0.287
MCC	2.87E-103	0.790015817	0.775	0.407
VOPP1	1.20E-102	0.489259298	0.702	0.326
ARMC9	3.40E-102	0.607573703	0.54	0.189
DCBLD2	6.77E-102	0.734781291	0.666	0.304
S100A16	2.17E-101	0.624608453	0.781	0.45
LINC00632	2.25E-101	0.41059232	0.542	0.186
TMEM132A	8.07E-101	0.297652046	0.317	0.055
SLC24A3	8.21E-101	0.797915006	0.603	0.237
COL6A6	1.18E-100	0.411613118	0.27	0.036
TCF12	1.43E-100	0.735840857	0.952	0.695
TMEM200A	3.07E-100	0.263659576	0.268	0.034
NEK6	1.07E-99	0.35007028	0.48	0.143
SHB	1.10E-99	0.415219232	0.451	0.124

GBP1	5.53E-99	0.910064302	0.655	0.298
MYO1B	6.57E-99	0.567714576	0.75	0.352
TYMP	7.21E-99	0.754728345	0.855	0.531
LMAN1	7.69E-99	0.649804326	0.894	0.682
IDH2	8.42E-99	0.35477419	0.557	0.192
ZNF608	1.01E-98	0.477807311	0.424	0.115
NID2	1.05E-98	0.564946392	0.652	0.284
ST5	1.06E-98	0.621455568	0.727	0.346
LGALS1	1.31E-98	0.979949371	0.986	0.958
FNDC1	2.02E-98	0.468064702	0.379	0.091
LUZP1	5.21E-98	0.592215443	0.737	0.375
ITGAV	9.30E-98	0.732812971	0.88	0.58
GOLT1B	1.93E-97	0.421101414	0.641	0.272
HS3ST3B1	2.20E-97	0.267183112	0.281	0.041
NCOR2	2.89E-97	0.589934999	0.785	0.444
KLHL5	4.71E-97	0.429369453	0.632	0.249
EDIL3	5.61E-97	0.70445723	0.701	0.314
P4HA3	1.20E-96	0.392777369	0.43	0.118
DIP2C	1.47E-96	0.688848393	0.841	0.495
ROBO1	1.72E-96	0.845311608	0.828	0.484
GUCY1A1	3.47E-96	0.679246853	0.7	0.301
MMD	3.70E-96	0.589111404	0.533	0.2
BX284613.2	4.15E-96	0.755324612	0.359	0.083
TMEM263	5.77E-96	0.61225894	0.852	0.532
GFPT1	6.35E-96	0.577299521	0.74	0.374
PTPN14	1.23E-95	0.530655617	0.606	0.238
CTSK	1.96E-95	1.002060847	0.921	0.736
PLAUR	2.96E-95	0.575702879	0.686	0.33
C1orf198	5.82E-95	0.353487005	0.425	0.117
HHIP-AS1	6.40E-95	0.274789112	0.287	0.046
TOM1	1.55E-94	0.553228672	0.63	0.281
CMTM8	2.18E-94	0.439624926	0.362	0.085
OSTC	2.46E-94	0.649420943	0.868	0.691
ARSI	3.26E-94	0.274715139	0.28	0.045
THY1	1.55E-93	0.854625178	0.92	0.711
ROR2	1.59E-93	0.74675928	0.752	0.38
WHRN	2.57E-93	0.453990093	0.336	0.072
CD276	2.70E-93	0.496451987	0.65	0.295
GPC6	3.28E-93	1.211020131	0.927	0.715
MAFB	3.85E-92	0.927534484	0.705	0.363
PAWR	4.46E-92	0.464125167	0.564	0.201
STAT2	6.26E-92	0.553615499	0.711	0.352
DUSP10	1.84E-91	0.404572722	0.395	0.105

MALT1	2.58E-91	0.393532958	0.573	0.217
SSR3	4.76E-91	0.627679151	0.868	0.676
HS2ST1	4.95E-91	0.64417841	0.641	0.276
TTC39B	7.32E-91	0.491520547	0.538	0.205
IKBIP	1.36E-90	0.508093859	0.746	0.425
TMEFF1	1.40E-90	0.313093919	0.262	0.039
KDELR3	4.32E-90	0.492556113	0.659	0.322
DGKI	1.32E-89	0.64730437	0.399	0.112
P4HA1	1.96E-89	0.692564506	0.856	0.561
PARVA	5.72E-89	0.566127737	0.873	0.602
COL6A2	1.52E-88	0.770537276	0.989	0.9
ANKLE2	2.80E-88	0.432707775	0.637	0.283
SEC61A1	3.96E-88	0.458400864	0.712	0.36
ID1	7.27E-88	0.637295559	0.635	0.282
ZFAND3	8.97E-88	0.680308184	0.945	0.673
ENPP1	1.86E-87	0.391951788	0.322	0.069
ANKRD28	2.68E-87	0.928377446	0.775	0.45
DSEL	3.37E-87	0.59269136	0.648	0.316
HDLBP	9.29E-87	0.492252096	0.924	0.693
SYTL2	9.89E-87	0.415906742	0.5	0.176
MAGED1	1.82E-86	0.488142392	0.694	0.353
NECTIN2	3.24E-86	0.430156729	0.694	0.341
HLA-B	6.74E-86	0.782085396	0.966	0.936
CERCAM	6.78E-86	0.540138294	0.816	0.505
DOCK5	1.14E-85	0.525420655	0.424	0.129
CEMIP2	1.54E-85	0.526490867	0.779	0.412
STXBP5	2.95E-85	0.682158147	0.725	0.382
TTC3	9.02E-85	0.577321095	0.943	0.709
OTULINL	1.48E-84	0.374825728	0.276	0.05
BCAR1	2.16E-84	0.349748558	0.485	0.169
CKAP4	2.97E-84	0.565313913	0.747	0.446
SPON2	5.19E-84	0.993436476	0.921	0.704
FAM114A1	6.58E-84	0.526451041	0.898	0.651
ZNF521	6.61E-84	0.664776311	0.762	0.409
DKK3	9.97E-84	0.438878523	0.749	0.363
NEDD4	2.33E-83	0.613149111	0.594	0.269
SMCO4	2.64E-83	0.323811441	0.449	0.145
CPXM1	3.53E-83	0.255628934	0.489	0.155
GOPC	4.53E-83	0.50150562	0.792	0.478
PTBP3	6.03E-83	0.455504757	0.694	0.334
MYH10	1.18E-82	0.572440991	0.65	0.309
ABCC4	1.24E-82	0.501106981	0.477	0.17
RGS17	2.20E-82	0.332502091	0.308	0.067

OSBPL3	2.47E-82	0.406574774	0.329	0.078
TAF5	1.81E-81	0.28963321	0.4	0.115
YAP1	1.91E-81	0.576475447	0.845	0.503
TNC	3.44E-81	0.687098596	0.526	0.194
TUT7	4.00E-81	0.501756041	0.682	0.34
DPY19L1	4.64E-81	0.366801791	0.442	0.147
PRRC1	6.05E-81	0.389930216	0.609	0.271
KDEL2	7.36E-81	0.51717056	0.864	0.668
CSGALNACT2	7.67E-81	0.512732752	0.724	0.375
ETS1	1.04E-80	0.427007406	0.703	0.336
ITGA4	1.67E-80	0.266529851	0.346	0.086
ITGA5	1.91E-80	0.869691564	0.704	0.378
SHC1	2.31E-80	0.361843081	0.623	0.286
CDH13	3.02E-80	0.640815962	0.387	0.109
TMEM208	3.05E-80	0.474868702	0.735	0.434
MOB1B	3.34E-80	0.450571766	0.502	0.186
PDXDC1	3.71E-80	0.429446319	0.687	0.335
RANBP17	6.47E-80	0.418460564	0.284	0.058
SH3BP4	7.55E-80	0.387045546	0.475	0.167
SEMA3A	7.94E-80	0.547259627	0.457	0.156
WWC2	1.11E-79	0.549292952	0.707	0.365
SH3RF3	1.36E-79	0.712826838	0.792	0.444
PDLIM2	3.79E-79	0.588078997	0.835	0.631
REEP3	5.03E-79	0.468828513	0.788	0.459
MYDGF	5.64E-79	0.603464397	0.864	0.675
C2orf27A	6.53E-79	0.423209284	0.53	0.213
PIIB	6.70E-79	0.666771383	0.929	0.87
FZD6	9.34E-79	0.345257593	0.41	0.128
VMP1	1.28E-78	0.637253047	0.936	0.679
TMEM167A	1.29E-78	0.444144027	0.797	0.488
ABL2	1.35E-78	0.725382586	0.786	0.454
KDM5B	2.56E-78	0.458185308	0.777	0.452
AFAP1	3.23E-78	0.478007285	0.652	0.322
SSH1	5.53E-78	0.498110666	0.583	0.266
EDNRA	7.66E-78	0.423229043	0.516	0.181
NHSL1	9.64E-78	0.560331758	0.452	0.164
PKM	1.06E-77	0.596775236	0.914	0.8
ISG15	3.77E-77	0.96425469	0.741	0.442
LRRC17	8.59E-77	0.713236722	0.648	0.331
BNC21	8.91E-77	0.844092501	0.944	0.65
EVA1B	9.52E-77	0.490932489	0.802	0.532
LAMB1	1.03E-76	0.524531812	0.832	0.48
AC083870.1	1.13E-76	0.658209314	0.59	0.265

DDAH1	1.25E-76	0.655722953	0.443	0.155
SGPL1	1.42E-76	0.32616979	0.424	0.138
TUBB3	1.52E-76	0.422412647	0.587	0.252
MSANTD3	2.07E-76	0.340188269	0.568	0.244
SMYD3	2.12E-76	0.636210844	0.88	0.564
TAOK3	2.26E-76	0.599678573	0.801	0.489
SERINC5	2.59E-76	0.553913772	0.561	0.241
ITGA11	2.60E-76	0.666952615	0.683	0.36
ZNF827	3.29E-76	0.431438046	0.537	0.214
ACTR3	4.65E-76	0.458501502	0.835	0.558
SEC23A	4.91E-76	0.473938372	0.772	0.439
NPAS2	5.33E-76	0.559746773	0.473	0.176
IGF2BP2	5.65E-76	0.555981279	0.707	0.37
IRS1	8.90E-76	0.4626647	0.571	0.251
BICC11	9.50E-76	0.747662777	0.953	0.64
HAPLN3	1.48E-75	0.27986183	0.463	0.158
MEIS3	2.28E-75	0.33192296	0.569	0.24
OLFML2B	2.38E-75	0.578774511	0.511	0.212
NCAM2	3.42E-75	0.711547337	0.423	0.143
B4GALT2	3.45E-75	0.301281285	0.502	0.195
FBLIM1	3.95E-75	0.335799655	0.58	0.239
ATP2C1	4.52E-75	0.465637477	0.614	0.279
SEMA5A	5.11E-75	0.581508693	0.495	0.187
IL32	6.76E-75	0.63447853	0.835	0.555
HOMER3	7.48E-75	0.383755207	0.567	0.25
METRNL	7.57E-75	0.408912312	0.618	0.293
NRXN3	1.14E-74	0.720001433	0.289	0.065
GNAI1	1.82E-74	0.479623051	0.5	0.198
PLEKHO1	1.85E-74	0.312381541	0.597	0.265
MBOAT2	2.62E-74	0.378746713	0.401	0.129
FAT1	2.77E-74	0.393266144	0.702	0.352
PHTF2	7.39E-74	0.418630028	0.589	0.265
CLMP	8.35E-74	0.538330514	0.879	0.554
SRPK2	1.02E-73	0.462572328	0.861	0.56
NT5DC2	1.15E-73	0.341815425	0.498	0.19
TAP1	1.27E-73	0.340964569	0.506	0.199
CHORDC1	1.47E-73	0.699303945	0.718	0.414
TXNDC17	1.60E-73	0.539029395	0.704	0.421
DIO2-AS1	2.08E-73	0.322386344	0.298	0.071
SLC39A13	3.95E-73	0.372469503	0.613	0.287
ADGRA3	7.27E-73	0.432160757	0.425	0.149
ALDH18A1	7.48E-73	0.349274738	0.454	0.166
FMN1	2.20E-72	0.292777401	0.282	0.063

LRP12	2.68E-72	0.330408369	0.437	0.154
WDR27	5.08E-72	0.482749109	0.546	0.233
FRS2	1.41E-71	0.472820447	0.684	0.36
XAF1	1.72E-71	0.518277192	0.732	0.409
ITPRIP	2.14E-71	0.442573353	0.471	0.178
MIB1	2.38E-71	0.430871743	0.666	0.342
SH3PXD2B1	3.20E-71	0.555941763	0.89	0.575
JPT1	3.22E-71	0.371108346	0.62	0.307
COLGALT1	3.72E-71	0.327529648	0.559	0.245
TNS3	5.37E-71	0.53616862	0.436	0.151
CLIP2	7.84E-71	0.383296537	0.481	0.182
PTTG1IP	9.69E-71	0.463478665	0.865	0.637
ARHGAP18	1.14E-70	0.415924932	0.514	0.209
SMARCB1	1.42E-70	0.350734805	0.595	0.277
OXSRI	2.07E-70	0.451410246	0.527	0.227
RSAD2	2.18E-70	0.571502716	0.3	0.076
CLEC11A	2.92E-70	0.514785556	0.824	0.567
CLIC4	3.19E-70	0.612651326	0.934	0.709
MSRB3	9.64E-70	0.37014294	0.831	0.514
SLC5A3	9.74E-70	0.388363559	0.348	0.103
FOXP1	9.80E-70	0.657574884	0.964	0.793
ZNF532	1.15E-69	0.49018477	0.563	0.26
RAB27A	1.20E-69	0.393112549	0.562	0.254
UBTD1	1.79E-69	0.302641392	0.439	0.162
NORAD	2.24E-69	0.479141663	0.879	0.672
SNX25	2.89E-69	0.381264828	0.487	0.192
SH3PXD2A	2.91E-69	0.411064889	0.783	0.466
ROBO2	3.09E-69	0.516172787	0.46	0.166
RASAL2	3.21E-69	0.377140997	0.787	0.418
ARFGAP3	3.91E-69	0.411123453	0.808	0.492
RGS4	3.94E-69	0.35579083	0.267	0.059
FKBP14	4.29E-69	0.421493242	0.634	0.324
C16orf87	6.59E-69	0.291902548	0.397	0.135
AVEN	7.42E-69	0.304544658	0.514	0.212
ADAMTS6	1.21E-68	0.584913326	0.304	0.081
PRKG1	1.68E-68	0.60760403	0.953	0.668
MCTP2	3.37E-68	0.461067598	0.428	0.155
SCARF2	4.22E-68	0.260667725	0.351	0.105
SMARCC1	1.22E-67	0.39736505	0.686	0.359
COTL1	1.24E-67	0.274706215	0.53	0.229
SPATS2	4.60E-67	0.46183306	0.725	0.401
IPMK	4.63E-67	0.585367977	0.525	0.239
UBE2Q2	6.28E-67	0.418096525	0.731	0.412

ODF2L	6.98E-67	0.430681972	0.758	0.438
PDLIM3	7.41E-67	0.638235768	0.937	0.75
STK17A	8.55E-67	0.296436521	0.653	0.326
NEAT1	9.03E-67	0.717375513	0.991	0.865
TLN2	1.26E-66	0.493830913	0.667	0.344
ACVR1	1.32E-66	0.404753235	0.591	0.28
SEC24D	1.71E-66	0.546889421	0.798	0.503
FMNL3	2.03E-66	0.276501525	0.317	0.086
PPP4R1	3.18E-66	0.359854921	0.55	0.241
KCNQ1OT1	3.71E-66	0.627639652	0.772	0.442
PELI1	3.88E-66	0.832797468	0.616	0.311
ABRACL	4.09E-66	0.280746247	0.484	0.195
STK10	5.05E-66	0.271972434	0.407	0.139
BCAT1	6.77E-66	0.402148401	0.646	0.32
RIN21	7.26E-66	0.53607732	0.845	0.545
USP32	8.71E-66	0.471500834	0.67	0.349
SGCD	9.29E-66	0.754841801	0.811	0.517
PRR5	1.26E-65	0.25156619	0.468	0.178
C17orf49	1.45E-65	0.386188521	0.682	0.393
SLC39A7	1.55E-65	0.361606002	0.664	0.363
SUPT3H	1.76E-65	0.457791302	0.546	0.242
CD2AP	2.12E-65	0.38216036	0.595	0.286
HTRA1	2.42E-65	0.865050495	0.9	0.736
ISLR	9.63E-65	0.66845405	0.889	0.67
RABAC1	1.12E-64	0.486427438	0.909	0.862
MMP2	1.32E-64	0.568940857	0.948	0.706
PSD3	1.36E-64	0.69208613	0.814	0.543
TMED9	2.04E-64	0.434597731	0.842	0.652
ARHGAP32	2.38E-64	0.545007979	0.654	0.342
CACNA2D3	2.70E-64	0.592529487	0.369	0.122
BAX	4.61E-64	0.378613719	0.682	0.382
ANGPTL2	7.22E-64	0.509152607	0.766	0.478
TSHZ3	7.58E-64	0.408315068	0.557	0.259
CYTOR	7.83E-64	0.462532526	0.781	0.5
HIVEP3	9.08E-64	0.469199399	0.514	0.219
NDUFC2	9.19E-64	0.52227232	0.871	0.755
GPX8	1.12E-63	0.405846252	0.78	0.506
PLIN3	1.28E-63	0.38145416	0.738	0.445
MAPK6	1.30E-63	0.443280904	0.696	0.37
LRRC59	1.32E-63	0.345384003	0.642	0.336
TIMP2	2.71E-63	0.47837183	0.975	0.857
PRRX2	3.65E-63	0.542547786	0.72	0.435
TBC1D23	4.09E-63	0.433670164	0.715	0.407

DPP4	4.22E-63	0.398412599	0.368	0.124
MIRLET7BHG	4.36E-63	0.341811652	0.406	0.145
MGAT5	2.10E-62	0.530262747	0.595	0.299
SND1	2.16E-62	0.499401181	0.804	0.498
GORASP2	2.95E-62	0.30845399	0.635	0.324
RCC2	3.14E-62	0.271850233	0.427	0.162
PMM2	3.51E-62	0.305876205	0.586	0.275
SMIM3	3.93E-62	0.331752674	0.652	0.327
ARHGAP31	6.05E-62	0.251198959	0.311	0.088
EVL	7.11E-62	0.37998137	0.732	0.42
ARFGAP1	7.23E-62	0.27475929	0.386	0.139
ARF4	7.85E-62	0.434301529	0.935	0.778
TDRP	8.10E-62	0.440627183	0.387	0.142
CASK	1.53E-61	0.444377777	0.771	0.455
GNB4	2.07E-61	0.3913364	0.655	0.347
COPA	2.52E-61	0.439087046	0.836	0.556
GOLGA3	2.58E-61	0.346892953	0.626	0.327
CTTNBP2NL	2.80E-61	0.349487413	0.505	0.225
TARSL2	5.04E-61	0.288167582	0.499	0.206
USPL1	6.03E-61	0.638755455	0.489	0.219
MAP3K4	1.10E-60	0.502066393	0.601	0.306
MARVELD1	1.19E-60	0.321272736	0.598	0.303
SQLE	1.24E-60	0.265283663	0.372	0.126
LRRC1	1.35E-60	0.274302299	0.253	0.06
PAPSS1	1.82E-60	0.350609227	0.574	0.281
ACTR2	2.30E-60	0.344669369	0.847	0.595
CEMIP	4.68E-60	1.329361567	0.301	0.092
LIMK2	4.83E-60	0.290031489	0.331	0.105
GNB1	5.96E-60	0.355080023	0.919	0.677
AC004160.11	6.63E-60	0.68969151	0.628	0.335
PPFIA2	6.98E-60	0.476262191	0.36	0.119
KIAA1211	7.20E-60	0.365094929	0.404	0.15
CHI3L1	7.78E-60	0.705650598	0.252	0.061
AP000331.1	8.56E-60	0.328520883	0.426	0.163
PDIA5	1.27E-59	0.339692091	0.499	0.224
MYO6	1.82E-59	0.415893738	0.623	0.327
MIR193BHG	2.07E-59	0.279499002	0.308	0.09
YWHAG	2.08E-59	0.485667412	0.739	0.441
LMCD1-AS1	2.19E-59	0.481381968	0.396	0.145
EIF4E2	3.20E-59	0.308902253	0.675	0.392
PHF20L1	3.57E-59	0.335117896	0.732	0.435
ATP6V0B	4.01E-59	0.460687003	0.756	0.521
KLF6	5.39E-59	0.597480683	0.92	0.751

IFI30	5.49E-59	0.26880798	0.373	0.133
ZNF609	7.71E-59	0.461600912	0.728	0.418
ITSN1	1.78E-58	0.441320903	0.665	0.367
UQCC2	2.02E-58	0.282451051	0.643	0.341
NEK7	2.21E-58	0.487812205	0.719	0.42
PLXNB2	2.60E-58	0.299216426	0.508	0.223
MDK	3.16E-58	0.560437976	0.685	0.402
SNX8	3.37E-58	0.253334299	0.399	0.149
SOAT1	4.89E-58	0.420709469	0.527	0.248
SEC24A	6.15E-58	0.376967532	0.584	0.287
RNF150	6.95E-58	0.357434314	0.438	0.168
TRPS1	7.00E-58	0.609020132	0.793	0.514
RAPGEF2	8.02E-58	0.480686648	0.724	0.413
AP2S1	8.48E-58	0.411664661	0.801	0.638
PGM3	8.79E-58	0.34103782	0.614	0.326
MYO9B	9.53E-58	0.338522115	0.655	0.344
SMAD1	1.34E-57	0.3530763	0.483	0.213
ERBIN	1.37E-57	0.492821871	0.79	0.512
TNFRSF19	1.64E-57	0.26274366	0.269	0.071
PRDX4	2.44E-57	0.489826266	0.816	0.642
UBA6	4.63E-57	0.36257201	0.563	0.279
TVP23C	5.02E-57	0.388003485	0.444	0.185
AAK1	1.09E-56	0.340295456	0.705	0.398
HEPH	1.15E-56	0.302515812	0.475	0.21
EIF4G3	1.46E-56	0.503865919	0.844	0.572
UHRF2	1.62E-56	0.469330351	0.52	0.24
CACNA1C	2.44E-56	0.327260101	0.831	0.501
CDK2AP1	2.90E-56	0.356262197	0.807	0.604
SPIRE1	3.24E-56	0.400115967	0.563	0.275
PAK2	7.90E-56	0.28785232	0.826	0.531
EFNB2	7.94E-56	0.349221153	0.321	0.105
PHC2	9.21E-56	0.401288919	0.78	0.486
CTSZ	1.01E-55	0.385881152	0.818	0.59
TBX3	1.44E-55	0.362244549	0.345	0.121
KIFAP3	1.72E-55	0.452490571	0.769	0.505
IGF1R	1.99E-55	0.571117606	0.842	0.549
MAPK8	2.56E-55	0.44188989	0.666	0.359
PSTPIP2	2.65E-55	0.255198644	0.297	0.091
EIF2AK4	3.09E-55	0.309957757	0.64	0.348
TMEM87B	4.20E-55	0.285777157	0.474	0.209
SPTY2D1	9.67E-55	0.298320593	0.595	0.3
ZDHHC20	1.27E-54	0.285136303	0.545	0.259
XPR1	1.28E-54	0.46400319	0.593	0.307

FNDC3B1	1.39E-54	0.612474124	0.984	0.807
GOLGA2	1.44E-54	0.349207805	0.75	0.468
CMIP	2.01E-54	0.288205408	0.599	0.296
BMP2	3.85E-54	0.324254589	0.274	0.08
PDLIM5	3.86E-54	0.609976221	0.794	0.529
KIF5B	3.98E-54	0.352366086	0.876	0.632
TBC1D9	4.71E-54	0.40978115	0.428	0.185
LPGAT1	5.00E-54	0.352668496	0.646	0.343
CORO1C	5.10E-54	0.381921183	0.657	0.37
CPEB4	5.24E-54	0.40001636	0.586	0.297
PSME4	5.67E-54	0.515275634	0.689	0.397
CNIH3	6.22E-54	0.442456881	0.346	0.126
NBL1	6.55E-54	0.605383874	0.896	0.759
CRABP2	7.00E-54	0.453232594	0.566	0.297
TGFB1I1	9.22E-54	0.355092818	0.783	0.538
NIBAN2	9.27E-54	0.326707301	0.447	0.196
PLEC	1.54E-53	0.330830324	0.725	0.426
RAB1A	1.58E-53	0.385518602	0.897	0.682
PDXK	1.59E-53	0.293600765	0.652	0.366
AC017002.5	1.63E-53	0.297813459	0.328	0.11
ARHGAP28	2.21E-53	0.335164454	0.3	0.096
CMTM3	2.21E-53	0.357569516	0.653	0.367
MYO1E	2.45E-53	0.613217151	0.727	0.425
GALNT10	3.10E-53	0.399689244	0.647	0.352
DAPK3	3.99E-53	0.298347348	0.609	0.322
ADAR	7.81E-53	0.345343867	0.689	0.393
RARS	8.88E-53	0.267307641	0.588	0.299
PXDN	1.00E-52	0.455112922	0.542	0.28
ENO1	1.04E-52	0.755710343	0.89	0.76
ARNTL2	1.23E-52	0.281912288	0.297	0.094
PDE4D1	1.24E-52	0.521568212	0.821	0.506
TXNDC5	1.26E-52	0.327921578	0.719	0.46
GPC1	1.46E-52	0.269496186	0.38	0.147
NANS	1.49E-52	0.309684142	0.641	0.373
RELB	1.61E-52	0.335686307	0.657	0.348
COPB2	2.14E-52	0.377401223	0.782	0.548
ITGA1	2.67E-52	0.333384856	0.676	0.359
TP53I13	2.72E-52	0.301625716	0.654	0.369
PRR16	3.01E-52	0.701615477	0.58	0.297
P3H3	3.18E-52	0.299810783	0.588	0.308
CLTC	5.80E-52	0.333018056	0.829	0.548
COL8A2	6.13E-52	0.278263585	0.378	0.148
PPP1R14B	6.34E-52	0.425900967	0.803	0.6

KIAA0930	9.47E-52	0.291263544	0.545	0.274
CNTN1	1.08E-51	0.487936335	0.371	0.149
WIPI1	1.12E-51	0.279302776	0.571	0.29
RASA2	1.26E-51	0.373661202	0.606	0.324
HIF1A	1.66E-51	0.436958228	0.852	0.564
ABHD17B	1.71E-51	0.393274095	0.408	0.173
GOLGA4	7.05E-51	0.413300324	0.894	0.669
IBTK	7.22E-51	0.312982571	0.589	0.306
STARD3NL	9.25E-51	0.322317415	0.515	0.253
PAPSS2	9.27E-51	0.524144561	0.773	0.486
KIF13A	9.48E-51	0.428826142	0.816	0.53
FKBP11	1.33E-50	0.300804304	0.675	0.407
RANBP9	1.43E-50	0.436683271	0.72	0.43
PACS1	2.24E-50	0.338285014	0.659	0.36
SYNCRIP	2.26E-50	0.283774093	0.809	0.556
YIF1A	2.71E-50	0.397634268	0.703	0.475
CDKL5	2.83E-50	0.428419194	0.427	0.184
PLK2	3.80E-50	0.344732704	0.594	0.307
ATP6AP1L	4.01E-50	0.263020798	0.271	0.084
HOXB2	4.08E-50	0.331428768	0.528	0.27
DYRK3	4.11E-50	0.444450428	0.523	0.258
GPR173	4.71E-50	0.273134667	0.303	0.102
SPCS3	5.05E-50	0.306048886	0.736	0.455
PTPA	6.77E-50	0.254715865	0.48	0.222
SRGAP2	7.20E-50	0.286642492	0.549	0.275
IL1R1	9.59E-50	0.43769953	0.839	0.575
OSBPL6	9.86E-50	0.26178071	0.299	0.097
TES	1.00E-49	0.323365691	0.499	0.237
CERS6	1.09E-49	0.297401799	0.434	0.184
ISOC2	1.09E-49	0.283178388	0.673	0.385
GBF1	1.25E-49	0.339737929	0.691	0.392
ATP6V1A	1.33E-49	0.294321497	0.487	0.23
VGLL3	1.45E-49	0.404762191	0.65	0.368
SGK1	1.53E-49	0.316940137	0.505	0.241
AFF4	1.98E-49	0.529359114	0.92	0.701
VEZT	2.35E-49	0.350584291	0.662	0.373
GOLIM4	2.39E-49	0.35693156	0.838	0.567
SH3GLB1	2.42E-49	0.318915105	0.832	0.593
IFFO2	3.02E-49	0.305654738	0.295	0.099
ATP13A3	3.35E-49	0.470233857	0.682	0.399
MAN2A1	3.66E-49	0.453521313	0.667	0.387
CLSTN2	5.22E-49	0.469145938	0.34	0.126
CBX3	5.57E-49	0.276170044	0.808	0.584

NBPF15	9.69E-49	0.277408452	0.394	0.163
YEATS2	1.62E-48	0.266372187	0.466	0.216
PLOD3	2.36E-48	0.257735677	0.519	0.253
PLEKHG1	2.54E-48	0.30867925	0.56	0.275
PPIC	2.92E-48	0.372489034	0.819	0.613
NUS1	4.63E-48	0.259830323	0.475	0.222
TCEAL9	6.34E-48	0.345963773	0.875	0.694
ARCNI	6.34E-48	0.271062816	0.693	0.418
TUBA1C	7.52E-48	0.423328223	0.775	0.526
DPYSL3	7.93E-48	0.381703047	0.863	0.594
TMEM30A	1.01E-47	0.328218537	0.73	0.467
MB21D2	1.12E-47	0.32846205	0.413	0.174
RAP1GDS1	1.15E-47	0.257217185	0.509	0.244
PERP	1.78E-47	0.348410762	0.718	0.441
PRKCA	1.83E-47	0.467381028	0.775	0.503
HAS2	2.24E-47	0.824406435	0.496	0.264
FKBP9	2.66E-47	0.270079019	0.765	0.48
STIP1	4.30E-47	0.279337455	0.636	0.356
FHOD31	5.19E-47	0.463731947	0.604	0.332
DAP	5.95E-47	0.282165877	0.638	0.382
TMED3	7.43E-47	0.343041015	0.768	0.523
TMSB10	7.63E-47	0.478240725	0.991	0.973
TDG	8.23E-47	0.255374293	0.586	0.311
FBXO32	1.34E-46	0.42962549	0.594	0.321
EVC	1.43E-46	0.253871585	0.388	0.163
BX322234.1	1.45E-46	0.317111602	0.324	0.121
P4HA2	1.52E-46	0.492674554	0.747	0.518
SMC6	3.02E-46	0.284558873	0.524	0.26
NPC1	3.85E-46	0.327940796	0.497	0.245
SLC39A6	4.97E-46	0.263647566	0.607	0.336
ENC1	6.01E-46	0.32178186	0.456	0.215
TPBG	6.80E-46	0.315904554	0.649	0.383
RASSF8	8.22E-46	0.374441376	0.774	0.491
COL16A1	1.13E-45	0.380612402	0.636	0.377
PLD1	1.16E-45	0.460695791	0.552	0.295
AP3B1	1.20E-45	0.338408005	0.736	0.465
ERN1	1.25E-45	0.463731088	0.617	0.351
USO1	1.42E-45	0.303388201	0.738	0.469
ZCCHC14	1.86E-45	0.409338938	0.554	0.309
SPTLC2	2.26E-45	0.263938783	0.425	0.193
GUCY1A2	2.35E-45	0.343313579	0.422	0.18
PHACTR1	2.97E-45	0.313322973	0.421	0.188
SLC39A10	3.50E-45	0.319069273	0.487	0.246

KDELR1	3.54E-45	0.364557094	0.862	0.754
MRC2	3.61E-45	0.361809345	0.893	0.625
LUM	3.82E-45	0.515308987	0.969	0.793
Clorf122	5.62E-45	0.269159136	0.758	0.544
SUCO	6.87E-45	0.297107943	0.578	0.315
CSNK1G1	9.63E-45	0.341336723	0.55	0.291
TLN1	1.40E-44	0.286161681	0.886	0.668
BMT2	1.50E-44	0.263555777	0.353	0.141
MAP4K5	1.73E-44	0.364525511	0.821	0.554
ADAM10	1.83E-44	0.291834574	0.627	0.35
CHSY1	2.84E-44	0.287950031	0.66	0.373
STAT1	2.94E-44	0.482688114	0.645	0.4
BST2	4.07E-44	0.556486275	0.64	0.374
DRAM1	4.14E-44	0.308114438	0.613	0.339
ZFAND2A	5.11E-44	0.454203588	0.516	0.271
TBCEL	6.63E-44	0.263496218	0.347	0.141
UBTD2	6.66E-44	0.270934305	0.679	0.395
VCAM1	7.16E-44	0.346726929	0.594	0.343
MSC-AS1	7.84E-44	0.355604317	0.712	0.43
FZD1	1.07E-43	0.268408351	0.555	0.294
SEC61G	1.25E-43	0.354944064	0.84	0.713
TMF1	1.25E-43	0.302589375	0.758	0.493
PLEKHA5	1.50E-43	0.715086246	0.874	0.652
BCAR3	1.74E-43	0.283701691	0.383	0.165
G2E3	2.36E-43	0.284372338	0.45	0.218
UBE2H	2.50E-43	0.38990105	0.877	0.638
TRAF3	3.34E-43	0.293545653	0.584	0.318
KLHL2	3.78E-43	0.251421365	0.336	0.135
MACF1	4.54E-43	0.438261011	0.934	0.739
PTPN12	5.81E-43	0.39772947	0.811	0.563
NAA50	7.26E-43	0.336693642	0.685	0.429
LRMDA	7.80E-43	0.533456122	0.683	0.427
TGFBR1	8.32E-43	0.32298851	0.571	0.315
FOXO1	9.73E-43	0.616928893	0.881	0.661
PRRC2C	9.84E-43	0.301556379	0.943	0.755
ATG5	1.07E-42	0.272419778	0.574	0.304
ARPC2	1.15E-42	0.313211134	0.925	0.817
BABAM2	1.37E-42	0.460246516	0.775	0.53
DESI2	1.49E-42	0.30478932	0.725	0.464
PDGFRB	1.52E-42	0.379197564	0.864	0.628
PTPRD	2.22E-42	0.471604293	0.508	0.273
MXD1	2.34E-42	0.416850468	0.441	0.222
SCD5	3.52E-42	0.295130128	0.4	0.181

AZIN1	3.60E-42	0.310248083	0.671	0.407
LPIN2	4.38E-42	0.282529577	0.588	0.327
TPI1	5.08E-42	0.554801387	0.914	0.815
GNPTAB	5.83E-42	0.29464128	0.529	0.29
NOX4	7.22E-42	0.448644585	0.449	0.216
MCU	9.11E-42	0.346570405	0.544	0.293
PTPRM	9.65E-42	0.472899207	0.79	0.527
CDC42BPA	9.85E-42	0.410743473	0.828	0.576
CAMSAP2	1.06E-41	0.32142399	0.711	0.442
CAPG	1.25E-41	0.273199516	0.589	0.329
IFI27	1.33E-41	0.586374859	0.879	0.699
SNAP23	1.45E-41	0.324412788	0.592	0.343
ARHGAP22	1.55E-41	0.267446152	0.251	0.083
ZBED1	1.74E-41	0.264105002	0.386	0.174
YES1	1.82E-41	0.317038974	0.648	0.381
MIR222HG	1.86E-41	0.289585124	0.356	0.151
KIAA0355	2.67E-41	0.262460093	0.425	0.201
TMTC21	3.48E-41	0.466091286	0.539	0.29
KDM2A	3.55E-41	0.324475078	0.743	0.478
DNM1	3.64E-41	0.273317066	0.68	0.399
QKI	4.81E-41	0.389438581	0.952	0.744
DLG1	4.94E-41	0.353811757	0.679	0.424
DOCK1	5.48E-41	0.423539278	0.813	0.567
OLFM2	6.60E-41	0.286665297	0.254	0.086
NCOA3	7.57E-41	0.3805179	0.653	0.39
CTNND1	9.51E-41	0.323750847	0.664	0.399
PPP2R3A	1.16E-40	0.282768478	0.51	0.265
SPON1	1.23E-40	0.350914079	0.692	0.388
ERO1A	1.41E-40	0.29708465	0.499	0.263
MCRIP1	1.62E-40	0.268575091	0.781	0.553
TM9SF3	2.39E-40	0.25471912	0.883	0.655
LRIG1	3.46E-40	0.363164574	0.485	0.252
MACROD2	6.07E-40	0.310208251	0.281	0.103
YTHDF3	8.70E-40	0.320573472	0.615	0.363
SMAD2	8.76E-40	0.272101367	0.651	0.388
TMEM117	9.58E-40	0.307779171	0.441	0.212
LRCH1	1.04E-39	0.423827582	0.567	0.327
SUSD6	1.11E-39	0.274530977	0.593	0.329
RARRES2	1.37E-39	0.657916018	0.932	0.848
PALM2-AKAP2	1.53E-39	0.433920661	0.728	0.468
RDX	2.34E-39	0.262604039	0.806	0.582
PHACTR4	2.73E-39	0.319874667	0.568	0.313
EFEMP2	3.13E-39	0.28878554	0.861	0.685

ABHD3	3.14E-39	0.399678518	0.364	0.164
COLEC12	3.65E-39	0.256217785	0.674	0.39
PTK2	3.98E-39	0.455303379	0.879	0.652
ZNF326	4.27E-39	0.27834181	0.569	0.32
MX1	5.70E-39	0.370562619	0.473	0.245
ATP11B	7.20E-39	0.360193561	0.654	0.392
MAST2	7.31E-39	0.364483018	0.59	0.346
RCN2	8.70E-39	0.299792706	0.747	0.514
SEC61B	9.00E-39	0.30885061	0.892	0.808
IL1RAP	1.01E-38	0.309268962	0.28	0.107
NBAS	1.11E-38	0.348642219	0.675	0.424
TPM1	1.69E-38	0.356012922	0.91	0.808
NRBF2	2.65E-38	0.263018172	0.618	0.368
SLAIN2	3.07E-38	0.339861964	0.659	0.401
RAB6A	3.92E-38	0.314782953	0.723	0.463
CUTA	5.33E-38	0.280007638	0.825	0.667
STX6	8.18E-38	0.260244027	0.333	0.142
VCL	9.28E-38	0.370117673	0.82	0.603
PRICKLE21	1.47E-37	0.411520718	0.77	0.507
PGAM1	1.73E-37	0.391722795	0.822	0.669
MYL12A	2.00E-37	0.447573755	0.892	0.826
BMPR1A	2.14E-37	0.3504593	0.647	0.393
DHRXS	2.25E-37	0.277224558	0.614	0.361
TLE4	2.70E-37	0.374657079	0.733	0.48
BAMBI	2.81E-37	0.43458715	0.308	0.131
PARP14	3.96E-37	0.3911218	0.628	0.392
GLI31	5.28E-37	0.437633288	0.813	0.558
DAB1	5.65E-37	0.387179193	0.363	0.166
PCNX1	7.91E-37	0.333509413	0.704	0.439
PICALM	8.12E-37	0.343878071	0.843	0.611
JMJD1C	8.13E-37	0.400969284	0.966	0.79
ITCH	8.63E-37	0.282510974	0.657	0.401
CNN3	9.02E-37	0.29530144	0.889	0.709
XPO1	1.02E-36	0.297559149	0.645	0.398
MIF	1.05E-36	0.576449955	0.936	0.91
MITF1	1.33E-36	0.422351934	0.71	0.456
KATNBL1	1.48E-36	0.252303904	0.65	0.404
LCOR	1.64E-36	0.29687674	0.582	0.34
FAM171B	1.72E-36	0.340755018	0.375	0.177
FXR1	1.95E-36	0.307208701	0.798	0.566
TMEM41B	2.31E-36	0.287155709	0.469	0.251
STAM	2.36E-36	0.255697216	0.529	0.293
GLS	2.39E-36	0.451097291	0.863	0.623

PPP2R5E	2.52E-36	0.298767573	0.714	0.471
PCOLCE	2.83E-36	0.415305931	0.932	0.824
SLC44A1	3.01E-36	0.329065462	0.708	0.462
DCLK2	3.41E-36	0.259458346	0.326	0.139
PLA2R1	4.03E-36	0.29401147	0.411	0.203
SYAP1	4.21E-36	0.293651373	0.667	0.43
AMOTL1	4.31E-36	0.267133393	0.531	0.289
ATF7IP	4.89E-36	0.260954224	0.61	0.369
SCFD1	4.93E-36	0.257642273	0.776	0.506
PTPN1	5.75E-36	0.351033934	0.69	0.433
CACYBP	8.45E-36	0.400648962	0.747	0.532
RYBP	1.05E-35	0.264832591	0.737	0.475
PAFAH1B1	1.15E-35	0.270330599	0.878	0.657
HMGCS1	1.23E-35	0.426077537	0.472	0.258
ILK	1.25E-35	0.259012766	0.797	0.603
SETD5	1.39E-35	0.34027798	0.777	0.541
GSK3B	1.67E-35	0.366123599	0.691	0.445
ARHGDI1	1.81E-35	0.266546298	0.799	0.588
ZNF618	2.07E-35	0.279660313	0.45	0.233
RGS16	2.21E-35	0.368308875	0.473	0.249
RNF24	2.54E-35	0.319799383	0.563	0.323
RARB	2.75E-35	0.295034431	0.407	0.201
CSNK1G3	3.24E-35	0.278576451	0.569	0.33
MINDY2	3.32E-35	0.302886781	0.646	0.409
MARK3	3.40E-35	0.294860906	0.769	0.51
RAP1B	3.49E-35	0.305530231	0.931	0.774
RNF149	4.07E-35	0.250260474	0.681	0.42
ANKRD10	8.84E-35	0.295715228	0.79	0.527
GNA12	9.23E-35	0.275207721	0.603	0.361
MAPKAPK2	1.00E-34	0.27114447	0.668	0.402
NDEL1	1.01E-34	0.254833521	0.557	0.324
LRRFIP1	1.34E-34	0.332623274	0.8	0.535
RNF145	1.45E-34	0.260485623	0.679	0.429
COPZ2	1.59E-34	0.313139268	0.726	0.532
PDLIM7	1.75E-34	0.316999498	0.674	0.456
UBE2E1	2.13E-34	0.29197452	0.74	0.509
MYOF	2.17E-34	0.339018785	0.846	0.623
USP34	2.60E-34	0.319410582	0.864	0.645
MXRA8	3.12E-34	0.360703174	0.872	0.696
TMCC1	3.63E-34	0.261924799	0.619	0.371
BACH1	5.25E-34	0.328792923	0.679	0.427
LDLR	5.87E-34	0.25869935	0.364	0.171
HECA	5.91E-34	0.267640353	0.558	0.322

TMEM131	6.41E-34	0.329169414	0.676	0.432
UBR5	6.43E-34	0.356623138	0.795	0.544
ASPH	7.73E-34	0.251271972	0.885	0.665
GALNT1	1.02E-33	0.291387589	0.632	0.4
BICD1	1.07E-33	0.336746217	0.597	0.358
CFL1	1.09E-33	0.313093636	0.928	0.905
ISM1	1.39E-33	0.433372571	0.386	0.195
MTDH	1.81E-33	0.278254904	0.942	0.784
SLC16A1	3.33E-33	0.366288962	0.6	0.356
DIP2B	4.86E-33	0.255971227	0.521	0.293
TMEM165	5.14E-33	0.340443957	0.855	0.629
PDZRN31	7.00E-33	0.518576863	0.845	0.623
MLEC	9.19E-33	0.268051121	0.751	0.539
BAG3	1.32E-32	0.43963244	0.758	0.532
SRPX2	2.28E-32	0.273171625	0.654	0.415
PLXDC21	2.40E-32	0.366837956	0.957	0.683
CRY1	2.75E-32	0.417168078	0.706	0.49
LPP	3.31E-32	0.275863366	0.976	0.844
PEAK1	3.68E-32	0.371469843	0.862	0.614
ZSWIM61	4.50E-32	0.29182954	0.884	0.644
SMC4	4.83E-32	0.259232537	0.454	0.243
WNT5B	5.54E-32	0.356646901	0.401	0.208
RFX7	5.61E-32	0.283601965	0.467	0.253
STAG1	8.14E-32	0.389389529	0.922	0.707
ATP1B1	1.01E-31	0.276085558	0.39	0.193
IGFBP3	1.02E-31	0.394883523	0.267	0.108
MLLT3	1.20E-31	0.330703601	0.573	0.343
CCN1	1.44E-31	0.487675323	0.843	0.656
KLHL24	1.76E-31	0.28246278	0.593	0.359
MICU1	1.89E-31	0.257235213	0.684	0.445
ABCA1	1.93E-31	0.328665409	0.723	0.469
PGK1	1.99E-31	0.5271101	0.817	0.658
ZMYM4	2.88E-31	0.262635274	0.636	0.41
LAMA4	3.01E-31	0.290875325	0.867	0.661
DYRK1A	3.32E-31	0.325688209	0.72	0.476
OSBPL8	3.86E-31	0.281822318	0.925	0.72
TIAM2	3.92E-31	0.37877424	0.455	0.259
PRICKLE1	4.40E-31	0.407925711	0.439	0.244
PDE7B	4.44E-31	0.28089235	0.315	0.143
SSR2	4.67E-31	0.259945728	0.881	0.789
RIPK2	5.69E-31	0.299929485	0.449	0.251
RC3H1	9.18E-31	0.353518042	0.661	0.436
FRYL	1.58E-30	0.282866181	0.694	0.445

RGCC	1.76E-30	0.342821984	0.636	0.4
PPME1	2.41E-30	0.290225876	0.457	0.254
LINC00578	3.00E-30	0.695515741	0.351	0.181
FAM214A	3.41E-30	0.362328741	0.508	0.302
TBL1XR1	3.52E-30	0.34928407	0.797	0.586
MED27	4.55E-30	0.269792665	0.56	0.342
RHOC	6.22E-30	0.284470696	0.841	0.708
AFDN	6.44E-30	0.275952305	0.565	0.335
EVI5	1.18E-29	0.251423455	0.754	0.509
EZH2	1.53E-29	0.336437194	0.379	0.195
PAG1	1.62E-29	0.295213806	0.439	0.238
PCNX4	1.87E-29	0.271098592	0.58	0.357
VCP	2.03E-29	0.275150856	0.842	0.666
PRDM2	2.29E-29	0.313685983	0.793	0.565
SLC38A2	2.35E-29	0.414933623	0.95	0.787
MED13	2.79E-29	0.34668921	0.784	0.561
PPM1D	2.88E-29	0.275770288	0.351	0.177
TRA2A	2.98E-29	0.309201501	0.792	0.586
ATP2A2	3.41E-29	0.285197827	0.805	0.569
GOLGB1	3.55E-29	0.250976904	0.843	0.625
FDX1	4.77E-29	0.257523245	0.527	0.317
NUMB	4.86E-29	0.317256441	0.697	0.468
CEP170	7.23E-29	0.27315329	0.71	0.477
GNAQ	8.85E-29	0.294484135	0.833	0.608
RRAS2	9.50E-29	0.278171991	0.484	0.282
ASCC3	1.02E-28	0.251108442	0.695	0.456
GAPDH	1.18E-28	0.456748771	0.954	0.951
ARHGAP5	1.18E-28	0.280143154	0.65	0.426
NHSL2	1.36E-28	0.308492527	0.495	0.286
SERPINE1	2.37E-28	0.340670224	0.58	0.356
AL050309.1	3.01E-28	0.285391546	0.422	0.224
FERMT2	3.65E-28	0.293646449	0.894	0.699
ELOVL5	3.97E-28	0.449859753	0.745	0.509
RERE	4.82E-28	0.357500479	0.858	0.663
STK3	1.02E-27	0.38240376	0.864	0.664
PFKFB3	1.08E-27	0.280584494	0.56	0.346
MAP4K3	1.28E-27	0.252774424	0.638	0.413
RSRC1	1.32E-27	0.279526364	0.698	0.48
BAZ1A	1.37E-27	0.251245075	0.713	0.473
FBXO11	2.13E-27	0.277029661	0.824	0.591
TRANK1	2.38E-27	0.259622343	0.426	0.237
CDK13	7.77E-27	0.272173703	0.711	0.476
JMY	8.37E-27	0.359996465	0.509	0.304

IER5	8.83E-27	0.484650097	0.597	0.416
USP54	1.71E-26	0.625817907	0.397	0.226
EIF2AK3	1.81E-26	0.333213328	0.515	0.309
TPST11	2.39E-26	0.317704416	0.815	0.576
ZFPM2-AS11	4.20E-26	0.398426638	0.609	0.413
VPS13B1	6.63E-26	0.336536542	0.876	0.68
SNTB1	6.75E-26	0.320791617	0.479	0.284
NFAT5	8.64E-26	0.31632918	0.832	0.62
SFMBT2	1.08E-25	0.265882766	0.378	0.201
TWSG1	1.36E-25	0.263217716	0.73	0.519
APCDD1	2.44E-25	0.516590668	0.605	0.422
ABI1	2.68E-25	0.252219762	0.637	0.415
STARD13	2.78E-25	0.299888789	0.661	0.434
FTO	4.46E-25	0.322907178	0.77	0.556
UBE2E2	4.91E-25	0.338549642	0.872	0.662
FOXN31	5.16E-25	0.313113798	0.924	0.732
ATRX	6.24E-25	0.25108282	0.891	0.706
PTBP2	7.34E-25	0.256821496	0.675	0.452
SCMH1	7.36E-25	0.256800411	0.681	0.454
ARID1B	7.93E-25	0.320892511	0.925	0.729
NAV11	1.85E-24	0.287449855	0.711	0.484
HIVEP2	1.88E-24	0.268445498	0.784	0.558
ADIPOR2	2.08E-24	0.310562793	0.521	0.325
DOCK41	5.96E-24	0.273808553	0.775	0.521
SBF2	5.96E-24	0.34167531	0.873	0.674
HLA-C	1.48E-23	0.302588945	0.953	0.919
UGCG	1.52E-23	0.25159792	0.723	0.493
FBXL71	1.53E-23	0.386477264	0.902	0.699
NAV31	2.18E-23	0.311786248	0.756	0.509
WARS	3.55E-23	0.263169157	0.429	0.258
AUTS21	5.85E-23	0.456688425	0.926	0.756
GIPC2	6.98E-23	0.384268379	0.343	0.189
CYP51A1	9.03E-23	0.284577848	0.495	0.317
RND3	2.14E-22	0.343269491	0.845	0.644
GAS71	5.39E-22	0.272065117	0.714	0.495
SMURF2	5.50E-22	0.252950131	0.715	0.492
JAM3	5.53E-22	0.299642083	0.614	0.416
TSPYL2	6.68E-22	0.293546544	0.611	0.426
PAPPA	1.23E-21	0.397767424	0.349	0.192
SIK3	2.11E-21	0.274706825	0.872	0.669
GSTO1	2.41E-21	0.340759732	0.813	0.695
RBP1	2.61E-21	0.315869702	0.632	0.455
ZNF407	4.03E-21	0.262497729	0.539	0.355

FNIP1	1.60E-20	0.253435656	0.763	0.566
CCDC85B	2.14E-20	0.26051552	0.796	0.62
RLF	8.88E-20	0.296406698	0.688	0.494
FLNB	1.78E-19	0.270317862	0.425	0.275
KDM6A	2.18E-19	0.259517957	0.642	0.448
ARHGAP24	3.41E-19	0.360325119	0.649	0.446
PAM1	1.29E-18	0.283745574	0.927	0.746
XIST	1.33E-18	0.551249574	0.309	0.182
SVIL	5.48E-18	0.327462896	0.907	0.739
MRTFA1	1.04E-17	0.263320598	0.856	0.647
TNFRSF21	1.15E-17	0.310097149	0.381	0.245
SORBS1	1.21E-17	0.262172728	0.621	0.425
SAT1	2.48E-17	0.354771867	0.936	0.803
SLC39A141	4.38E-17	0.28353238	0.621	0.441
PRSS23	1.42E-16	0.289730219	0.787	0.626
PHF21A	1.43E-16	0.251184435	0.592	0.414
BNIP3	2.52E-16	0.361027057	0.545	0.398
SFRP4	4.47E-16	0.357316419	0.493	0.347
IFI6	5.60E-16	0.28547979	0.699	0.56
MEIS21	6.09E-16	0.260586167	0.815	0.644
PLAT	6.53E-15	0.253748851	0.594	0.426
TUBA1A	1.08E-14	0.315720106	0.906	0.84
ADAM17	1.48E-14	0.256739827	0.65	0.472
IL1RAPL1	2.86E-14	0.322596168	0.255	0.146
FBXW7	3.77E-14	0.337691408	0.659	0.478
ACTG1	3.90E-14	0.318923776	0.966	0.958
PTGDS1	6.29E-14	0.873257832	0.376	0.249
LSAMP1	1.31E-11	0.500858811	0.655	0.529
TNFAIP3	1.58E-11	0.348790438	0.67	0.531
IFRD1	1.65E-11	0.301623064	0.79	0.64
SLC2A3	4.71E-10	0.383623896	0.672	0.527
ACTB	1.55E-09	0.300141633	0.973	0.961
LTBP1	3.54E-09	0.250088032	0.739	0.599
PBX31	2.39E-06	0.344687192	0.756	0.63
MYH11	3.85E-274	3.692273657	0.652	0.092
CDH6	1.56E-271	1.317065063	0.518	0.034
NOTCH3	1.15E-261	2.152344637	0.736	0.156
GPRC5C	1.61E-254	1.125829143	0.421	0.015
APOLD1	5.73E-254	2.065860011	0.549	0.055
PTP4A3	1.75E-252	1.546789303	0.53	0.049
RYR2	7.12E-251	1.64074351	0.492	0.034
ITGA7	2.72E-246	1.295988489	0.541	0.056
SLC38A11	1.24E-243	1.736638106	0.375	0.008

RGS5	5.03E-243	3.398188752	0.482	0.035
SLC7A2	3.53E-241	1.741327248	0.538	0.057
PARM1	8.49E-241	1.198337456	0.49	0.038
ADAMTS9	4.93E-237	2.594550221	0.516	0.052
DGKB	1.64E-232	1.340770313	0.385	0.012
CASQ2	8.94E-228	0.815026913	0.323	0.002
CTNNA3	3.11E-224	1.392525013	0.367	0.011
HEYL	3.91E-224	1.441313895	0.544	0.068
ATP1A2	3.23E-223	0.823039031	0.33	0.003
MYOCD	1.60E-219	0.921292938	0.367	0.012
PIP5K1B	1.96E-218	1.013993818	0.361	0.011
NRGN	6.63E-216	1.025255016	0.344	0.009
GPR20	4.16E-213	0.644858636	0.3	0.001
TBX2	1.11E-212	1.768398122	0.63	0.129
INPP4B	7.12E-212	1.99911379	0.643	0.132
RERGL	8.02E-212	2.345810888	0.42	0.03
NPNT	4.13E-206	0.777760684	0.334	0.009
WFDC1	4.61E-206	1.23019821	0.446	0.039
LAMA5	2.97E-204	0.755712613	0.377	0.019
COX4I2	3.48E-204	1.481760805	0.438	0.037
AVPR1A	2.72E-201	0.95061733	0.307	0.005
CSPG4	9.60E-200	1.042169502	0.431	0.038
TAGLN	4.64E-197	2.848277155	0.91	0.503
ACTA2	8.73E-197	3.250653518	0.867	0.484
NTRK3	1.99E-196	1.269793826	0.366	0.02
FOXC2	1.13E-195	0.612994169	0.321	0.009
NDUFA4L2	1.36E-193	2.522300485	0.539	0.091
LDB3	3.04E-192	0.818277394	0.305	0.007
TBX2-AS1	1.84E-189	1.008205615	0.426	0.041
TESC	1.87E-189	0.789723651	0.331	0.013
SORT1	2.96E-187	1.631310663	0.58	0.117
AKAP6	1.25E-186	1.241507941	0.37	0.025
NTRK2	3.13E-185	1.527600337	0.502	0.074
PDGFA	3.88E-185	1.516534342	0.566	0.114
MAP2	5.24E-185	0.887877001	0.39	0.03
SCN3A	1.97E-183	0.809066558	0.29	0.006
DMD	1.10E-181	2.219681921	0.639	0.163
LGI4	1.98E-181	0.868659167	0.408	0.038
ECRG4	2.63E-180	1.111677464	0.357	0.023
MYL9	3.75E-180	2.359920632	0.934	0.806
SORBS2	2.22E-178	2.750474206	0.546	0.107
CBFA2T3	4.49E-178	0.620468087	0.292	0.008
SOX6	7.25E-177	1.126712378	0.382	0.032

FAM162B	1.64E-175	1.032050537	0.367	0.027
SYNM	6.11E-172	1.416025679	0.475	0.072
HIGD1B	2.21E-171	1.361261716	0.305	0.013
KCNMB1	2.90E-170	0.75523642	0.346	0.024
SRL	6.84E-170	0.663226921	0.279	0.008
SERPINI1	2.87E-169	1.03245909	0.42	0.05
LMOD1	1.28E-165	1.950256253	0.684	0.24
CLMN	1.07E-164	1.956539668	0.638	0.185
CCDC3	1.82E-164	1.626820873	0.575	0.136
CARMN	4.63E-161	1.817630271	0.536	0.111
CSRP2	7.22E-160	2.153312473	0.741	0.327
HES4	1.34E-157	1.945631466	0.713	0.274
MRVI1	1.72E-157	1.258512821	0.598	0.157
MYLK	2.34E-157	1.656551762	0.779	0.345
PTMA	7.85E-157	1.252060672	0.985	0.973
IGFBP7	1.88E-156	2.1216295	0.946	0.92
RAPGEF5	3.84E-153	0.994883005	0.374	0.04
ADCY5	4.09E-153	0.738387894	0.331	0.027
ADAP2	1.10E-151	0.61667209	0.289	0.016
TPM2	5.64E-151	1.874479875	0.936	0.76
TBC1D1	2.39E-150	1.64798083	0.689	0.263
CACNA1H	1.48E-148	0.577804938	0.32	0.025
EGFLAM	1.78E-148	0.999034932	0.303	0.021
ADGRF5	8.53E-146	1.188372125	0.266	0.012
MEF2C	1.53E-145	1.579026195	0.662	0.242
GJC1	3.97E-145	1.162951762	0.456	0.082
ADAMTS9-AS2	4.31E-143	1.796471119	0.656	0.214
EFHD1	4.52E-143	1.203116847	0.561	0.145
FRY	9.19E-143	1.723082539	0.646	0.224
PPM1L	3.11E-141	1.238458768	0.454	0.083
KLHL23	8.52E-141	1.208572018	0.475	0.097
HRH2	8.49E-137	0.739383179	0.287	0.021
RCSD1	1.78E-135	0.627488542	0.336	0.035
MUSTN1	2.32E-135	2.865395321	0.534	0.146
TRPC6	1.22E-133	1.249917574	0.362	0.046
LINC01197	1.89E-132	0.846190648	0.374	0.05
CRIP2	7.57E-131	1.638859434	0.705	0.324
ISYNA1	7.87E-130	0.938055467	0.428	0.08
RNF152	4.20E-129	1.678483738	0.592	0.191
KCNE4	1.56E-127	1.434436751	0.574	0.166
SEPTIN4	1.71E-127	0.9760121	0.42	0.079
MYOM1	3.17E-127	0.820805713	0.336	0.041
KALRN	5.18E-127	1.423855392	0.572	0.176

LINC00924	7.16E-127	0.658577094	0.266	0.018
RCAN2	7.59E-127	2.200491891	0.726	0.389
FRZB	3.18E-126	1.405703594	0.525	0.142
NEURL1B	1.14E-125	1.027272996	0.433	0.088
ITGA8	1.54E-123	1.260648628	0.405	0.07
CALD11	3.59E-122	1.192960037	0.961	0.948
EBF2	1.15E-120	0.94928469	0.366	0.054
MTHFD2	6.39E-120	1.304697565	0.643	0.259
SUSD5	8.81E-120	0.860207042	0.31	0.037
SNCG	2.83E-118	1.559971133	0.426	0.088
CHCHD10	3.48E-118	1.226393928	0.72	0.321
C1QTNF1	7.70E-117	1.428390323	0.638	0.272
MAP3K7CL	6.64E-114	1.006198792	0.356	0.059
NFASC	8.57E-113	0.871770279	0.446	0.104
JPH2	1.98E-112	0.631374352	0.251	0.021
HEY2	3.49E-112	0.653529045	0.339	0.051
ACTG2	6.91E-111	1.228366057	0.525	0.134
LAMA3	1.73E-110	1.266408817	0.341	0.055
COL4A2	1.62E-109	2.050982604	0.761	0.465
FABP4	3.29E-109	1.133869901	0.325	0.048
MYL6	3.67E-109	1.204974989	0.959	0.957
ANO1	1.03E-108	0.800378529	0.377	0.069
CAV2	1.41E-108	1.333516258	0.657	0.33
RASGRP2	3.07E-108	0.645956612	0.393	0.08
LINC00702	8.83E-108	0.627961916	0.33	0.052
COL4A1	8.98E-108	2.316641605	0.707	0.374
RBPM2	1.53E-107	0.625786768	0.344	0.058
NRARP	4.26E-107	1.04327775	0.366	0.068
TPM11	5.40E-107	1.419820565	0.925	0.819
PDE3A	8.63E-105	1.664351219	0.734	0.429
KCNAB1	3.08E-104	0.766281452	0.321	0.05
CAV1	9.44E-101	1.443808804	0.81	0.637
EDNRA1	2.21E-100	1.104123752	0.58	0.212
CNN1	3.63E-100	1.17251849	0.502	0.158
SGCA	1.28E-99	0.600903707	0.31	0.047
ID4	1.53E-97	1.567564286	0.634	0.291
GRID1	1.13E-96	0.661785131	0.29	0.041
EPS8	1.08E-95	1.717479106	0.741	0.534
DYNC111	1.07E-94	0.884871395	0.361	0.074
DSTN	2.22E-94	1.723833066	0.915	0.921
ADIRF	8.12E-94	2.632083343	0.769	0.578
KCNMA1	9.59E-94	1.035269981	0.31	0.053
DTNA	5.47E-93	0.88993853	0.367	0.08

SYNE2	1.07E-91	1.263467657	0.661	0.345
TMEM38B	1.20E-91	0.798002271	0.395	0.101
CRIP1	4.28E-91	2.238019029	0.764	0.571
ARHGEF17	4.53E-91	0.861853388	0.493	0.169
PPP1R12A	2.48E-89	1.381996263	0.792	0.718
TEX41	2.59E-88	0.897050891	0.32	0.06
DENND3	4.13E-88	0.658082487	0.305	0.055
ADCY3	4.92E-86	1.41140406	0.61	0.32
CSRP1	6.70E-85	1.452251761	0.711	0.486
SYNPO	8.41E-85	0.578144812	0.362	0.085
SPECC11	9.36E-85	1.031569278	0.539	0.21
PLCB4	2.60E-83	1.029053355	0.544	0.204
ARHGEF7	9.22E-83	1.580534335	0.666	0.41
LBH	1.29E-82	1.451871438	0.695	0.422
JAG1	4.89E-82	1.231699772	0.608	0.317
MERTK	3.95E-81	0.535006891	0.275	0.047
PPP1R12B	4.61E-81	1.380250973	0.664	0.413
COL18A1	1.45E-80	1.608628349	0.754	0.615
ANGPT2	4.51E-79	1.116909885	0.392	0.112
SLC22A3	1.15E-77	0.616662578	0.251	0.039
MAGI1	2.42E-77	0.98666221	0.523	0.21
PRKG11	3.31E-77	1.560962511	0.8	0.735
UBA2	4.14E-77	1.204568797	0.667	0.461
AKAP1	4.89E-77	0.744164767	0.366	0.1
ACTN4	2.04E-76	1.181159961	0.739	0.56
TTLL7	3.31E-76	0.775767664	0.416	0.131
ACTB1	5.73E-75	0.9190341	0.966	0.963
PLCE1	7.83E-75	1.392359724	0.577	0.294
IGFBP2	1.33E-74	1.471441379	0.49	0.183
NR2F2-AS1	2.73E-74	1.417972598	0.634	0.343
FLNA	5.39E-74	1.71532388	0.79	0.726
CALM2	2.30E-73	0.841559059	0.893	0.92
DAAM2	3.74E-73	0.863344221	0.474	0.181
MAP1B	1.35E-72	1.294470501	0.766	0.617
SNTA1	4.01E-72	0.605875568	0.38	0.115
SYNPO2	6.34E-72	1.290919035	0.707	0.44
EPAS1	1.24E-71	1.314125402	0.703	0.496
DMPK	3.88E-71	0.683612955	0.393	0.128
TNS1	9.12E-71	1.240112252	0.733	0.577
MOCS1	8.19E-70	0.546276706	0.3	0.069
HIPK2	1.02E-69	1.398139914	0.651	0.4
SEPTIN7	1.77E-69	0.763281217	0.9	0.901
PHLDA2	6.26E-68	1.489497475	0.561	0.279

LPP1	2.08E-66	1.326754839	0.836	0.888
GUCY1B1	2.14E-64	0.835877224	0.533	0.259
PGM5	2.70E-64	0.641466987	0.369	0.117
DOCK8	4.16E-64	0.716788248	0.323	0.085
NR2F2	6.05E-64	1.404595206	0.707	0.585
PAWR1	9.66E-64	0.815973053	0.551	0.251
CPM	4.91E-63	1.337974309	0.418	0.162
DBNDD2	6.13E-62	0.967440825	0.628	0.389
C11orf96	1.83E-61	2.073460293	0.772	0.636
MGLL	2.20E-61	0.865892485	0.584	0.326
ADAMTS4	8.14E-61	1.360350968	0.452	0.194
MARK1	9.24E-61	0.745443133	0.387	0.129
USP2	1.18E-60	0.600176678	0.29	0.075
ACTN11	1.78E-60	0.882675988	0.731	0.441
CAP2	4.57E-60	0.744157387	0.392	0.143
SH3BGRL	4.70E-60	0.955054836	0.803	0.791
ENPEP	1.30E-59	1.322788926	0.389	0.148
MSRB31	1.40E-59	0.969329372	0.736	0.574
RASAL21	2.50E-59	1.234648503	0.698	0.483
SPARCL1	4.37E-59	1.554818317	0.839	0.784
SEMA4B	3.65E-57	0.471943132	0.282	0.073
GUCY1A11	4.43E-57	0.775520489	0.649	0.363
CACNA1C1	7.34E-57	1.467888183	0.71	0.567
RAB20	2.86E-56	0.472645357	0.261	0.064
MFGE8	1.22E-54	1.132586547	0.807	0.807
PTEN	1.36E-54	1.091345463	0.792	0.751
AOC3	3.75E-54	0.77826828	0.451	0.206
A2M1	9.58E-54	0.587822864	0.774	0.464
ITGB11	6.15E-53	0.790445029	0.897	0.875
LINGO1	2.08E-52	0.442731207	0.277	0.076
LCLAT1	1.41E-51	0.698046553	0.416	0.178
MYH91	2.48E-51	0.791221526	0.805	0.652
RBPMS	3.49E-51	0.987635192	0.803	0.811
MPRIP	9.35E-51	0.855217513	0.595	0.405
TSC22D1	1.59E-50	1.36787918	0.787	0.766
NUDT4	3.98E-50	1.047158397	0.651	0.47
RNF180	1.28E-49	0.617852939	0.356	0.129
KIAA0040	6.22E-49	0.65467443	0.443	0.2
MALAT1	4.35E-48	0.752130539	0.931	0.976
SOX51	7.36E-48	1.351141883	0.762	0.753
ARHGAP44	1.16E-46	0.496215423	0.295	0.094
GALNT18	4.28E-46	0.480060813	0.252	0.069
FRMD4A	3.18E-45	0.986911853	0.615	0.42

SMTN	3.66E-45	0.661726429	0.438	0.217
CAVIN3	9.38E-45	0.956447614	0.816	0.802
RASL11A	1.08E-44	0.677697559	0.433	0.201
NCKAP5	1.97E-44	1.396959204	0.354	0.145
AC012409.2	2.10E-44	0.711002361	0.339	0.128
TLN11	2.59E-44	0.85190594	0.754	0.722
NES	2.82E-44	0.603126684	0.325	0.123
PDGFRB1	7.54E-44	1.04726703	0.72	0.687
ATP1B3	1.09E-43	1.710049327	0.741	0.703
PTMS	2.83E-43	0.668500836	0.862	0.812
VPS13D	5.95E-43	1.072495753	0.595	0.435
SELENOW	8.07E-43	0.697192619	0.833	0.854
EHBP1L1	1.26E-42	0.645038395	0.426	0.213
ARHGDIB	1.49E-42	0.731825785	0.339	0.13
CCDC107	1.86E-42	0.94144772	0.623	0.481
COX7A2	5.97E-42	0.716844838	0.813	0.815
COL4A5	1.64E-41	0.643905039	0.328	0.127
MGST3	2.84E-41	0.810637932	0.816	0.843
GNAS	3.20E-41	0.497334519	0.946	0.954
YBX1	3.43E-41	0.547231692	0.911	0.908
GRIP2	4.90E-41	0.462324946	0.27	0.091
HIP1	6.87E-41	0.940406232	0.615	0.435
FADS3	7.27E-41	0.639824127	0.428	0.218
LDLRAD3	1.22E-40	0.679686885	0.39	0.176
PDE5A	1.87E-40	0.849758582	0.61	0.438
ECE1	8.49E-40	0.899367807	0.546	0.376
NOL3	1.25E-39	0.577644705	0.385	0.182
FBLIM11	1.31E-39	0.712431088	0.513	0.297
HMGB1	1.47E-39	0.526843844	0.934	0.936
DGKH	2.33E-39	0.845259562	0.551	0.338
LRRFIP11	4.27E-39	0.678568636	0.734	0.582
DACT3	6.25E-39	0.28594761	0.285	0.105
ANGPT1	1.41E-38	0.790048041	0.466	0.261
WTIP	3.23E-38	0.816152924	0.433	0.244
EHD2	3.63E-38	0.729718162	0.615	0.473
ADAMTS1	3.69E-38	1.471688867	0.677	0.579
PFN1	8.16E-38	0.773880466	0.877	0.88
ROCK1	7.27E-37	0.731890571	0.751	0.717
ARPC1A	8.40E-37	0.808060119	0.613	0.501
FBXO321	1.18E-36	0.915842096	0.566	0.362
MAPRE2	1.70E-36	0.878717258	0.607	0.446
ZFH3	4.09E-36	1.686343696	0.69	0.709
RAMP1	5.64E-36	0.609465376	0.398	0.19

ADCY6	8.64E-36	0.402030435	0.31	0.127
COX5B	8.76E-36	0.519365818	0.821	0.838
UQCRB	2.02E-35	0.532857414	0.88	0.877
UTRN	2.28E-35	0.981116233	0.764	0.79
SYNGR2	2.31E-35	0.381803509	0.264	0.094
COX6A1	2.48E-35	0.609647599	0.803	0.8
SLC25A4	2.68E-34	0.76455734	0.48	0.311
MAP3K20	2.83E-34	0.928624782	0.695	0.668
NDRG2	7.53E-34	0.626781899	0.482	0.281
ZBTB7C	8.97E-34	1.012088596	0.37	0.19
NBEAL1	1.23E-33	0.87801805	0.689	0.632
ARHGAP42	1.78E-33	0.899880007	0.511	0.336
CSRNP3	9.11E-33	0.517721258	0.279	0.109
CRIM1	1.39E-32	0.786382031	0.598	0.423
NCK2	1.89E-32	0.568192377	0.467	0.283
INPP5A	2.00E-32	0.595969317	0.438	0.249
B3GNT2	2.93E-32	0.421184554	0.346	0.16
MAML3	5.05E-32	0.775555653	0.457	0.259
COX7B	1.13E-31	0.597842333	0.754	0.71
MSN	2.50E-31	0.710578047	0.716	0.641
CAMK2G	2.78E-31	0.61872185	0.359	0.185
TNS31	3.10E-31	0.599087085	0.392	0.197
CFL11	3.42E-31	0.611096274	0.918	0.91
FCHSD2	3.71E-31	1.042669664	0.562	0.427
PGF	5.58E-31	0.692969144	0.398	0.216
BCL6	5.79E-31	0.692150063	0.561	0.393
MOB2	6.51E-31	0.701970771	0.461	0.297
SLC44A2	9.06E-31	0.499414841	0.331	0.16
XKR6	9.53E-31	0.476362087	0.284	0.116
A1BG	1.10E-30	0.410107497	0.326	0.147
ITPK1	1.41E-30	0.43558467	0.277	0.114
CACNB21	2.98E-30	0.916313794	0.579	0.408
ARHGAP17	4.48E-30	0.66130236	0.47	0.309
RASD1	5.90E-30	0.951386238	0.338	0.162
CRTC3	8.23E-30	0.67643152	0.53	0.38
ATP8B1	1.71E-29	0.596731085	0.392	0.212
TGFB1I11	3.04E-29	0.606892233	0.682	0.59
PDLIM51	3.07E-29	0.839115354	0.674	0.587
H3F3A	3.28E-29	0.368513983	0.928	0.938
OAZ2	8.31E-29	0.680617822	0.516	0.396
HNRNPA3	9.19E-29	0.520215175	0.793	0.775
LRRC32	1.00E-28	0.429771144	0.343	0.17
ROCK2	1.28E-28	0.733592496	0.685	0.66

SLC35F1	1.54E-28	0.761047293	0.315	0.15
IFITM2	1.63E-28	0.685744646	0.87	0.879
MIR29B2CHG	2.18E-28	0.57685434	0.4	0.224
ETS2	2.50E-28	0.740303387	0.541	0.395
CYCS	3.45E-28	0.896576886	0.656	0.577
NEXN	3.91E-28	0.832675913	0.695	0.611
SYTL21	4.66E-28	0.58711736	0.425	0.232
TOB1	6.89E-28	0.834694378	0.525	0.389
CDC42EP4	7.12E-28	0.526627853	0.367	0.196
PICALM1	7.74E-28	0.736237484	0.71	0.667
SMIM12	1.10E-27	0.47264217	0.416	0.246
WDR1	1.32E-27	0.656450159	0.593	0.485
COBLL1	1.78E-27	0.712033486	0.603	0.486
PLS3	1.18E-26	0.617897651	0.661	0.598
RASL12	1.45E-26	0.597122236	0.4	0.243
ARHGAP61	1.67E-26	0.750001941	0.556	0.385
MEF2D	1.90E-26	0.61587573	0.5	0.355
SKP1	2.13E-26	0.442200867	0.879	0.896
TPM41	2.56E-26	0.674439843	0.889	0.844
COX8A	2.69E-26	0.575579795	0.77	0.748
KLHL29	2.73E-26	0.663894903	0.413	0.241
ATP5MC2	3.13E-26	0.47239102	0.834	0.853
NIBAN1	6.14E-26	0.839774544	0.58	0.447
SH3RF31	8.19E-26	0.772571214	0.633	0.521
GAPDH1	1.28E-25	0.830170073	0.959	0.951
FOXC1	1.45E-25	0.619183475	0.348	0.187
PPIA	3.34E-25	0.513753426	0.939	0.933
S1PR3	3.42E-25	0.496398939	0.354	0.192
HES1	3.48E-25	0.798344541	0.534	0.366
TGFBI1	5.03E-25	0.927715548	0.5	0.294
EPN2	6.29E-25	0.653540796	0.544	0.431
SMARCD3	7.86E-25	0.466749384	0.343	0.194
PPP1R12C	9.36E-25	0.515005174	0.405	0.252
UQCRH	1.14E-24	0.535496687	0.797	0.799
ZNF703	1.64E-24	0.521515221	0.411	0.25
TACC2	1.98E-24	0.494982157	0.359	0.196
B2M	2.12E-24	0.54844014	0.985	0.989
FABP5	3.33E-24	0.829002837	0.446	0.296
PALM2-AKAP2	5.44E-24	0.707655969	0.633	0.521
ATP2B4	5.95E-24	0.658383595	0.597	0.513
NDUFA4	1.31E-23	0.80257448	0.813	0.866
NDUFB10	2.66E-23	0.532004367	0.77	0.751
ODC1	2.73E-23	0.481200677	0.469	0.311

SMIM10	6.41E-23	0.452965433	0.372	0.219
SMOC2	8.71E-23	0.876293202	0.523	0.413
PLXND1	8.83E-23	0.461195063	0.325	0.176
SNRK	1.19E-22	0.580934365	0.39	0.25
ENAH1	1.28E-22	0.657374711	0.698	0.614
ATP5F1B	1.94E-22	0.51212428	0.746	0.746
CDKN1A	4.51E-22	0.926839299	0.61	0.494
RNF1501	5.33E-22	0.785420467	0.372	0.216
OLFML2A	7.02E-22	0.494118625	0.305	0.161
NHS	1.05E-21	0.699199265	0.502	0.348
EOGT	1.16E-21	0.48852127	0.303	0.165
TRAF5	1.59E-21	0.372749287	0.343	0.197
PPP1CB	1.75E-21	0.751520929	0.711	0.739
HSDL2	1.85E-21	0.553687049	0.382	0.245
FAM241A	2.58E-21	0.414052893	0.359	0.201
CHCHD2	2.73E-21	0.416949208	0.892	0.894
NDUFA7	3.01E-21	0.527708793	0.477	0.359
SMAP2	3.41E-21	0.440256779	0.41	0.256
CALM1	4.27E-21	0.444269251	0.918	0.929
GUCY1A21	4.59E-21	0.751035565	0.364	0.223
KTN1	5.42E-21	0.527195628	0.785	0.787
LDHB	8.07E-21	0.483232735	0.731	0.717
ARPC5	9.38E-21	0.5306202	0.744	0.761
CHURC1	1.05E-20	0.54699326	0.711	0.7
CAMTA1	1.07E-20	0.439832049	0.684	0.628
LGALS1	1.18E-20	0.37486492	0.302	0.161
MYO1B1	1.41E-20	0.783276247	0.564	0.44
NDUFB7	1.77E-20	0.471902156	0.761	0.772
NDUFS2	2.00E-20	0.541082012	0.58	0.505
STOM	3.51E-20	0.644258675	0.672	0.645
PDCL3	4.00E-20	0.399733048	0.33	0.194
ADGRE5	4.38E-20	0.317398025	0.344	0.194
ITPR1	4.47E-20	0.518207846	0.549	0.422
NDUFB8	5.63E-20	0.4385512	0.777	0.792
ITGA12	5.72E-20	0.923058271	0.53	0.429
HDAC9	7.58E-20	0.645919199	0.256	0.127
VASP	7.83E-20	0.349573202	0.51	0.372
SLC25A6	9.58E-20	0.413441622	0.852	0.866
YBX3	1.13E-19	0.668138648	0.834	0.88
LBR	1.14E-19	0.37472408	0.349	0.207
VCL1	1.14E-19	0.579803898	0.68	0.658
COX7A1	1.62E-19	0.612752689	0.649	0.589
SBDS	2.05E-19	0.534675153	0.715	0.729

FAM13C	2.29E-19	0.762184893	0.423	0.29
ETS11	2.70E-19	0.609913895	0.536	0.416
ANP32B	2.82E-19	0.517858815	0.707	0.656
PKIG	3.15E-19	0.558142836	0.659	0.597
CPE1	3.21E-19	0.539273697	0.728	0.608
RABGAP1	3.42E-19	0.640184421	0.523	0.428
RSU1	4.91E-19	0.488327547	0.584	0.501
SOX13	5.11E-19	0.352834641	0.254	0.126
PPP2R5A	9.62E-19	0.57534605	0.407	0.28
BCL2	1.05E-18	0.666949671	0.392	0.257
COX6C	1.22E-18	0.416294735	0.83	0.857
AC083870.11	1.47E-18	0.47038647	0.47	0.33
TOB2	1.58E-18	0.566751555	0.477	0.369
RHOB	1.60E-18	1.0167772	0.746	0.767
INF2	1.74E-18	0.374097977	0.315	0.183
GPATCH4	2.19E-18	0.345332267	0.338	0.204
PLEKHO11	2.28E-18	0.431762834	0.47	0.333
ATP5MD	2.73E-18	0.442467782	0.721	0.724
TMSB4X	2.92E-18	0.349347553	0.975	0.988
COX17	3.00E-18	0.540603216	0.544	0.465
SNHG15	3.03E-18	0.560883463	0.377	0.255
BTG1	3.35E-18	0.785825553	0.815	0.824
EPSTI11	3.44E-18	0.261094157	0.19	0.409
ATP5MG	3.48E-18	0.416343324	0.834	0.854
CBX7	3.86E-18	0.336895755	0.279	0.15
ZBTB38	4.08E-18	0.567182148	0.633	0.583
GADD45B	4.35E-18	1.469570401	0.728	0.756
CRYAB	4.82E-18	0.87531351	0.631	0.589
ATP5F1D	5.45E-18	0.395761569	0.787	0.801
PFDN5	6.14E-18	0.332825812	0.907	0.915
ZNRF2	6.17E-18	0.531466726	0.334	0.202
PACSIN2	7.33E-18	0.561601154	0.58	0.493
ATP10A	1.13E-17	0.610689101	0.507	0.395
DOCK10	1.75E-17	0.429205378	0.328	0.19
RERG	2.61E-17	0.668134022	0.544	0.415
CREM	2.78E-17	0.787970236	0.546	0.466
PDE1A1	2.99E-17	0.613480266	0.51	0.368
ARID5A	3.12E-17	0.437255792	0.362	0.238
UQCR11	4.39E-17	0.424541689	0.772	0.773
PITPNC1	4.90E-17	0.790800647	0.515	0.41
ACTR31	5.93E-17	0.430874428	0.684	0.624
FKBP51	6.52E-17	0.719631757	0.772	0.769
SELENOM	6.68E-17	0.520807445	0.889	0.919

ARHGAP15	6.95E-17	0.587391232	0.323	0.19
SLCO3A1	7.60E-17	0.682374449	0.582	0.512
ANXA6	9.89E-17	0.461859732	0.664	0.645
FILIP1L	1.08E-16	0.576231097	0.821	0.791
LARGE1	1.11E-16	0.866190568	0.53	0.442
HLA-F	1.17E-16	0.520345183	0.502	0.408
HNRNPA1	1.23E-16	0.383015141	0.852	0.884
DGKD	1.54E-16	0.397113437	0.339	0.213
ARHGEF25	1.76E-16	0.341858877	0.285	0.169
FGD4	1.83E-16	0.642834325	0.443	0.33
CKB	2.10E-16	0.686238925	0.382	0.263
RRAD	2.19E-16	0.781663206	0.431	0.287
CD151	3.48E-16	0.666437551	0.754	0.804
ARPC21	3.69E-16	0.443370292	0.83	0.85
SGIP11	3.78E-16	1.178715318	0.4	0.284
L3MBTL4	4.16E-16	0.537010251	0.326	0.203
BHLHE40	4.77E-16	0.563639917	0.485	0.374
NACC2	5.22E-16	0.30652274	0.251	0.137
HOPX1	5.50E-16	0.563755279	0.346	0.21
TACC11	5.62E-16	0.707737614	0.779	0.825
MAP7D3	6.68E-16	0.487553528	0.443	0.335
COX14	8.24E-16	0.449765892	0.562	0.515
ARHGAP291	8.35E-16	0.512069591	0.518	0.397
CAP1	9.50E-16	0.525989715	0.71	0.721
SLC25A3	1.08E-15	0.331723777	0.828	0.869
PTK21	1.15E-15	0.486535175	0.715	0.714
IL6R	1.21E-15	0.357112391	0.27	0.15
POMP	1.57E-15	0.396808714	0.739	0.756
AC068888.1	1.94E-15	0.335846217	0.32	0.202
SH3RF1	2.26E-15	0.582046029	0.407	0.288
CCND1	2.59E-15	0.645818607	0.505	0.385
CDS2	2.78E-15	0.392094201	0.321	0.204
MAT2A	3.10E-15	0.630284579	0.57	0.496
ILK1	3.14E-15	0.497097599	0.664	0.654
GLRX5	3.32E-15	0.440351807	0.544	0.48
AFF3	3.68E-15	0.571105826	0.254	0.138
GAMT	5.22E-15	0.419864048	0.334	0.227
MRTFB	5.66E-15	0.617017815	0.411	0.308
RRAS	6.34E-15	0.542772055	0.72	0.709
SORBS11	9.12E-15	0.74697341	0.536	0.467
KANK2	1.09E-14	0.542538849	0.595	0.569
AC025280.3	1.20E-14	0.416148864	0.279	0.167
FILIP11	1.28E-14	0.652414283	0.562	0.489

FOXK2	1.67E-14	0.41630328	0.425	0.32
FAU	2.32E-14	0.279415558	0.941	0.954
CD59	2.74E-14	0.579940989	0.826	0.866
TMEM131L	3.09E-14	0.708778218	0.467	0.371
SNRPB	3.81E-14	0.504110456	0.687	0.668
ENDOD1	4.77E-14	0.327527758	0.266	0.158
NT5DC21	4.82E-14	0.412865111	0.372	0.255
CERS61	5.07E-14	0.564642696	0.346	0.233
MYO1D	5.41E-14	0.625586405	0.597	0.535
PRMT9	7.05E-14	0.479474755	0.257	0.151
SYPL1	7.85E-14	0.36849101	0.577	0.524
MKMK2	8.66E-14	0.474432321	0.415	0.317
ATP5PF	1.04E-13	0.391303209	0.789	0.816
BCAS3	1.13E-13	0.666531669	0.6	0.563
CDH131	1.46E-13	0.422092408	0.28	0.166
SLC25A5	1.47E-13	0.461213244	0.623	0.6
SSBP2	1.67E-13	0.698667616	0.7	0.737
RGS161	1.88E-13	0.924325345	0.416	0.289
PPFIA21	2.35E-13	0.419164393	0.277	0.167
CSDE1	2.37E-13	0.392810172	0.762	0.793
PMEPA11	2.57E-13	0.384376879	0.662	0.543
MRPL33	2.72E-13	0.490852026	0.603	0.573
NR4A3	3.21E-13	0.536406877	0.433	0.309
B3GALNT2	3.60E-13	0.420961883	0.357	0.246
TAX1BP1	3.94E-13	0.380625988	0.703	0.718
SLC25A25	4.21E-13	0.373551627	0.333	0.229
BST21	5.44E-13	0.441685655	0.564	0.424
TLE1	5.70E-13	0.512235889	0.546	0.482
MICU3	5.89E-13	0.404143816	0.395	0.293
TCIM	8.22E-13	0.731290209	0.277	0.17
TNC1	8.96E-13	0.713743773	0.393	0.263
CSNK1A1	9.65E-13	0.42568703	0.751	0.797
RASSF3	9.94E-13	0.292718834	0.272	0.165
AOPEP1	1.12E-12	0.334999318	0.725	0.687
STK38L	1.26E-12	0.384605036	0.456	0.349
PCSK7	1.53E-12	0.370808571	0.357	0.255
CTBP2	2.30E-12	0.514667884	0.58	0.557
PDLIM71	2.56E-12	0.497068813	0.567	0.505
PGM2	2.80E-12	0.277332128	0.264	0.164
GUK1	2.98E-12	0.450617667	0.828	0.845
NDUFB4	3.45E-12	0.422552797	0.754	0.769
PIP4K2A	3.47E-12	0.496226635	0.457	0.376
TGFB1	3.55E-12	0.523041972	0.479	0.387

ANAPC16	6.37E-12	0.445951517	0.679	0.705
FARP11	6.49E-12	0.352677903	0.613	0.487
SRSF3	8.18E-12	0.425631208	0.793	0.844
NRP1	9.94E-12	0.525561002	0.533	0.457
VIM	9.95E-12	0.311555647	0.966	0.985
LIMS2	1.04E-11	0.31286673	0.284	0.185
CPEB41	1.06E-11	0.365047448	0.457	0.36
POR	1.09E-11	0.399506125	0.47	0.399
NDUFS6	1.19E-11	0.388412521	0.692	0.7
NMD3	1.23E-11	0.531019553	0.449	0.372
CHSY11	1.40E-11	0.554173604	0.503	0.441
GPCPD1	1.71E-11	0.324540215	0.484	0.394
RELL1	1.98E-11	0.472931616	0.47	0.397
TRAK1	2.09E-11	0.510539116	0.475	0.398
ABHD2	2.26E-11	0.540338167	0.493	0.432
LURAP1L	2.49E-11	0.521628324	0.37	0.278
ZNF331	2.75E-11	0.87169206	0.407	0.33
BGN1	2.90E-11	0.375122009	0.843	0.747
TBL1X	2.92E-11	0.480606671	0.469	0.385
SSBP3	3.01E-11	0.525011365	0.48	0.426
PLCL1	3.10E-11	0.540429855	0.426	0.328
CBX6	3.64E-11	0.421316552	0.444	0.373
TMEM47	4.59E-11	0.484229614	0.492	0.435
MTUS1	4.74E-11	0.534418661	0.57	0.535
MXI1	4.98E-11	0.435881717	0.457	0.389
TBCA	5.25E-11	0.384732253	0.764	0.801
COX4I1	6.30E-11	0.309258158	0.864	0.891
PHLDA1	7.20E-11	0.616795321	0.644	0.611
ZNF141	8.29E-11	0.491288294	0.28	0.191
ISG151	8.55E-11	0.418329302	0.592	0.51
EIF1AY	8.81E-11	0.442243848	0.284	0.19
HIF1A1	9.00E-11	0.361107907	0.664	0.638
EIF2S3	9.72E-11	0.347478234	0.567	0.524
UBL5	1.00E-10	0.39937745	0.793	0.823
SUN1	1.08E-10	0.388689321	0.464	0.388
NDUFA13	1.15E-10	0.302224481	0.852	0.876
AXL	1.16E-10	0.543630324	0.621	0.628
CAVIN1	1.19E-10	0.435252935	0.785	0.845
COX6B1	1.59E-10	0.345117734	0.805	0.824
HOXB-AS1	1.64E-10	0.404079128	0.361	0.266
MYLIP	2.05E-10	0.598928498	0.531	0.482
HINT1	2.65E-10	0.294067507	0.844	0.856
IK	2.82E-10	0.402358469	0.564	0.533

KLF91	2.85E-10	0.476494695	0.741	0.802
CBL	3.02E-10	0.270777169	0.3	0.203
SLC39A11	3.55E-10	0.469544316	0.346	0.262
PCGF5	3.62E-10	0.380128784	0.489	0.424
ZEB2	3.89E-10	0.546496626	0.705	0.755
OPA3	4.25E-10	0.312887148	0.316	0.22
ADGRB31	4.40E-10	0.583733602	0.325	0.224
KIF1C	4.86E-10	0.350886425	0.297	0.211
NDUFV2	5.27E-10	0.324421085	0.713	0.742
IER5L	5.43E-10	0.524020977	0.569	0.513
NET1	5.45E-10	0.758168571	0.438	0.379
SET	5.53E-10	0.356505628	0.728	0.742
NDUFS5	5.56E-10	0.378164954	0.823	0.861
CYSTM1	6.54E-10	0.399957227	0.626	0.639
UBE2D2	6.87E-10	0.314440465	0.692	0.7
CD9	8.05E-10	0.456885043	0.682	0.684
H3F3B	8.27E-10	0.267438785	0.93	0.954
CPT1A	9.44E-10	0.417693729	0.315	0.232
CDC42	9.44E-10	0.368050136	0.811	0.83
RAB13	9.62E-10	0.436847846	0.705	0.679
NDUFB2	1.03E-09	0.413716787	0.739	0.774
APBB21	1.11E-09	0.560836641	0.656	0.656
TJP1	1.17E-09	0.556929003	0.598	0.591
NCL	1.24E-09	0.362802038	0.761	0.805
SPEN	1.35E-09	0.334100422	0.502	0.427
CSNK1E	1.47E-09	0.368165995	0.536	0.508
KIAA0232	1.61E-09	0.467542872	0.49	0.442
YWHAZ	1.78E-09	0.277415753	0.792	0.835
COX7C	1.90E-09	0.254544415	0.851	0.89
CHMP4A	2.12E-09	0.291179602	0.5	0.446
NDUFA12	2.33E-09	0.327765467	0.644	0.656
C12orf57	2.43E-09	0.338964402	0.839	0.864
DLEU2	3.02E-09	0.472995741	0.449	0.37
EIF4A1	3.16E-09	0.360457033	0.877	0.907
EDIL31	3.32E-09	0.489153033	0.487	0.406
PAG11	4.05E-09	0.739996806	0.361	0.28
VWA8	4.38E-09	0.379490346	0.384	0.293
PCED1B	4.76E-09	0.526326811	0.275	0.191
ATP2A21	5.18E-09	0.302653667	0.646	0.631
NDUFA1	6.28E-09	0.362671754	0.702	0.747
GRK51	6.31E-09	0.586533739	0.557	0.521
ELOB	6.63E-09	0.376118951	0.823	0.852
ETV61	6.64E-09	0.43852376	0.587	0.554

HCFC1R1	8.63E-09	0.446807749	0.689	0.701
LINC00910	9.24E-09	0.417342801	0.251	0.17
RAN	9.31E-09	0.339849355	0.736	0.762
SELENOK	1.06E-08	0.352672161	0.666	0.69
TEAD3	1.07E-08	0.294397959	0.318	0.238
CCT6A	1.08E-08	0.388590033	0.538	0.5
RAPGEF21	1.19E-08	0.388892544	0.541	0.489
ARHGEF12	1.20E-08	0.470853232	0.557	0.537
SMURF1	1.25E-08	0.461560467	0.51	0.455
NDUFB11	1.38E-08	0.392185461	0.746	0.745
PTN	1.50E-08	0.342762177	0.318	0.514
CABIN1	1.53E-08	0.331651725	0.369	0.294
MYO1C	1.68E-08	0.315958793	0.533	0.506
EIF3H	1.79E-08	0.310872716	0.743	0.78
CRISPLD2	1.85E-08	0.962169554	0.682	0.801
MRPL32	1.92E-08	0.365974613	0.477	0.445
UQCRC1	2.32E-08	0.335530896	0.466	0.409
MICOS10	2.65E-08	0.300983771	0.741	0.782
CCT3	2.68E-08	0.34928765	0.59	0.603
PURB	2.69E-08	0.270401009	0.346	0.268
HIST1H4C	2.75E-08	0.496233167	0.484	0.445
SMIM31	2.86E-08	0.328056927	0.47	0.404
ABTB1	3.56E-08	0.307272446	0.277	0.2
OSBPL1A	3.58E-08	0.374145762	0.53	0.509
EXOC2	3.92E-08	0.342540172	0.308	0.235
COX20	4.03E-08	0.377458789	0.502	0.473
TOMM20	4.41E-08	0.309549686	0.723	0.774
ADCY9	5.10E-08	0.351262055	0.3	0.224
SUSD61	5.12E-08	0.317265081	0.454	0.391
NDUFA6	6.14E-08	0.324884008	0.577	0.562
UBXN1	6.34E-08	0.366258192	0.644	0.669
DBI	6.39E-08	0.456716223	0.728	0.779
IDH21	6.91E-08	0.377590907	0.354	0.279
MYO1E1	6.98E-08	0.287275664	0.546	0.5
PSMA7	7.58E-08	0.306574317	0.846	0.882
C5orf24	7.62E-08	0.302615565	0.444	0.396
PABPC1	8.30E-08	0.268612637	0.852	0.894
RASSF1	8.51E-08	0.365486811	0.387	0.32
SLMAP	9.53E-08	0.474011376	0.51	0.491
EHD1	9.98E-08	0.294333775	0.343	0.266
CH25H	1.16E-07	0.349906498	0.141	0.255
INAFM1	1.17E-07	0.355783159	0.461	0.405
SLC7A5	1.19E-07	0.352764097	0.254	0.176

REEP31	1.29E-07	0.339727784	0.577	0.542
HLA-B1	1.42E-07	0.406033762	0.936	0.945
STK39	1.53E-07	0.449351808	0.384	0.324
NDUFA2	1.55E-07	0.380724709	0.605	0.591
C20orf27	1.60E-07	0.464358583	0.298	0.234
EIF5B	1.65E-07	0.361540802	0.626	0.622
HABP4	1.89E-07	0.307564298	0.326	0.259
ARHGEF10L	1.92E-07	0.346359185	0.305	0.238
PHLDB2	1.93E-07	0.419288446	0.541	0.511
EVA1C	2.04E-07	0.411972616	0.395	0.333
PDCD10	2.48E-07	0.335590841	0.498	0.465
MOB3B1	2.71E-07	0.297074339	0.393	0.31
DYNLT1	3.07E-07	0.458579603	0.641	0.675
OLA1	3.12E-07	0.320223469	0.467	0.434
UBE2N	3.40E-07	0.388229389	0.534	0.512
SEPTIN9	3.51E-07	0.346985315	0.462	0.419
NUTF2	3.71E-07	0.282647646	0.405	0.355
FKBP4	4.08E-07	0.260173085	0.321	0.246
ATP5ME	4.15E-07	0.277445607	0.705	0.75
VDAC2	4.19E-07	0.346163632	0.675	0.703
ATP5F1E	4.26E-07	0.345509678	0.905	0.919
BCL9L	4.30E-07	0.275774529	0.295	0.228
PPDPF	4.34E-07	0.617593998	0.703	0.729
HAPLN31	4.57E-07	0.274038443	0.302	0.229
RHOQ	5.13E-07	0.360085191	0.651	0.671
ARHGAP1	5.85E-07	0.336895252	0.438	0.387
ZBTB161	5.90E-07	0.301548367	0.685	0.613
ARHGAP261	5.98E-07	0.56790997	0.477	0.441
C7orf50	6.51E-07	0.295849036	0.475	0.438
TMEM1081	6.54E-07	0.426261905	0.274	0.198
NCALD	7.14E-07	0.437559365	0.398	0.328
H2AFJ	7.38E-07	0.365715329	0.689	0.72
HNRNPM	7.66E-07	0.281346242	0.664	0.7
DYNLT3	8.96E-07	0.278467558	0.477	0.444
PTPRK	1.05E-06	0.421342363	0.651	0.651
NME4	1.11E-06	0.295847503	0.549	0.527
MICOS13	1.14E-06	0.374258053	0.638	0.644
PCBP1	1.18E-06	0.285688704	0.672	0.706
NDUFAF4	1.20E-06	0.276833413	0.279	0.207
UQCRQ	1.26E-06	0.336190206	0.708	0.73
HMG2	1.48E-06	0.349219084	0.736	0.771
ATP5MC3	1.53E-06	0.316414434	0.748	0.785
RWDD1	1.55E-06	0.272048493	0.716	0.72

EGFL61	1.68E-06	0.643824545	0.295	0.222
PJA2	1.70E-06	0.337007816	0.63	0.668
SERPINB6	1.84E-06	0.297578582	0.605	0.606
LDLRAD4	1.86E-06	0.431357466	0.449	0.385
GADD45GIP1	1.90E-06	0.371137691	0.652	0.702
CCNH	1.91E-06	0.679907647	0.639	0.667
ANP32A	1.96E-06	0.29879218	0.462	0.439
NDUFA5	2.06E-06	0.313341011	0.585	0.602
ATP5PB	2.31E-06	0.305424743	0.603	0.61
SRSF51	2.37E-06	0.274047872	0.787	0.844
ST51	2.53E-06	0.426117657	0.477	0.444
CLIC1	2.58E-06	0.329973385	0.825	0.846
MRPS36	2.63E-06	0.375440183	0.492	0.456
PNN	2.66E-06	0.340546731	0.587	0.597
NT5DC1	2.67E-06	0.25145934	0.326	0.261
MYL12A1	2.86E-06	0.432161928	0.815	0.85
SRGN	2.96E-06	0.615375578	0.269	0.198
ARHGEF9	2.97E-06	0.272085023	0.3	0.241
SNTB11	3.11E-06	0.281937047	0.389	0.327
KIRREL1	3.16E-06	0.344366472	0.418	0.38
GADD45A	3.26E-06	0.391510465	0.495	0.448
HRAS	3.46E-06	0.264268724	0.357	0.298
ATP5PO	3.48E-06	0.258688967	0.738	0.773
EMD	3.85E-06	0.308027632	0.39	0.344
COX5A	3.95E-06	0.301417985	0.607	0.608
ARPC3	4.10E-06	0.320050962	0.792	0.832
SEM1	4.13E-06	0.294703051	0.728	0.791
HLA-DRA	4.26E-06	0.253750853	0.21	0.329
CHD1	4.46E-06	0.349732136	0.572	0.56
CCDC102B	4.57E-06	1.067364644	0.285	0.233
H2AFZ	5.85E-06	0.383943921	0.726	0.763
MIF1	6.04E-06	0.628302708	0.916	0.917
CYC1	6.47E-06	0.345391032	0.53	0.534
CDKN1B	6.68E-06	0.262376046	0.361	0.31
RAD23A	6.77E-06	0.35232935	0.593	0.628
TOX2	7.15E-06	0.351297081	0.254	0.192
NDUFB9	7.43E-06	0.297283136	0.628	0.65
RAP2A	8.84E-06	0.297010419	0.354	0.308
TNS2	1.06E-05	0.322414835	0.441	0.406
CCT8	1.15E-05	0.316242471	0.554	0.566
CREB3L2	1.23E-05	0.344206564	0.541	0.548
NAP1L1	1.38E-05	0.292011814	0.833	0.862
ESYT2	1.44E-05	0.505166103	0.687	0.737

FAM50A	1.45E-05	0.279183202	0.518	0.499
PSMD4	1.49E-05	0.312566512	0.58	0.597
VAMP2	1.58E-05	0.291279773	0.559	0.579
ATP5F1A	1.64E-05	0.307759117	0.618	0.663
ABCA5	1.79E-05	0.258317765	0.32	0.264
NAV2	1.88E-05	0.355685375	0.367	0.312
ATP5IF1	2.01E-05	0.331145279	0.703	0.73
YWHAH	2.20E-05	0.289468914	0.59	0.6
RANBP2	2.32E-05	0.324140149	0.521	0.498
SRRM1	2.43E-05	0.274087987	0.675	0.713
IFITM3	2.44E-05	0.315125838	0.948	0.951
KIF5B1	2.61E-05	0.289715138	0.675	0.703
LGALS11	2.80E-05	0.322416239	0.944	0.969
IQCJ-SCHIP1	2.84E-05	0.306388098	0.293	0.229
ATPAF1	2.96E-05	0.257025703	0.282	0.231
HNRNPH3	3.01E-05	0.283376543	0.638	0.677
NDUFAB1	3.02E-05	0.265282202	0.618	0.668
NDUFB1	3.03E-05	0.317241453	0.585	0.606
POLR2K	3.15E-05	0.260234079	0.528	0.539
OSMR	3.19E-05	0.423804127	0.52	0.515
OSBPL5	3.24E-05	0.26662254	0.334	0.288
SIVA1	3.83E-05	0.301551539	0.675	0.705
XRCC5	4.73E-05	0.270824097	0.713	0.78
UBE2M	4.80E-05	0.308132527	0.536	0.546
ARHGAP101	5.87E-05	0.435545312	0.69	0.739
PDK41	6.24E-05	0.637681739	0.475	0.415
AP2M1	6.41E-05	0.334490121	0.687	0.747
ACTR21	6.62E-05	0.272537136	0.639	0.668
CALM3	6.98E-05	0.287152878	0.589	0.63
NTN41	7.10E-05	0.275507921	0.413	0.365
IQSEC1	7.57E-05	0.265045278	0.357	0.313
BCAP29	7.86E-05	0.350489473	0.531	0.547
CAPZA2	7.91E-05	0.267103685	0.62	0.65
MGAT51	8.22E-05	0.255903274	0.418	0.372
NFIL3	9.32E-05	0.474404368	0.528	0.532
SH3KBP1	0.000104477	0.398056017	0.472	0.472
PA2G4	0.000109357	0.261351462	0.593	0.645
R3HCC1	0.000115969	0.251556725	0.321	0.275
CTDSPL	0.000118326	0.347780318	0.505	0.507
JADE11	0.000132014	0.274743884	0.408	0.36
MIDN	0.000134624	0.309204896	0.474	0.453
COPS6	0.000146122	0.282444533	0.595	0.624
BANF1	0.000147068	0.305348259	0.641	0.664

ANGPTL1	0.000157192	0.60095103	0.351	0.324
PDZD2	0.000158518	0.252654081	0.177	0.272
DYNC1LI2	0.000162967	0.351700117	0.562	0.574
SAP18	0.000172773	0.259064164	0.795	0.833
LUC7L2	0.000175617	0.261559825	0.615	0.662
CCT7	0.000200019	0.286343994	0.577	0.611
FBXW5	0.000201752	0.298765074	0.456	0.441
BAG1	0.00021104	0.304916929	0.518	0.528
SPRY2	0.000211223	0.313553548	0.326	0.275
SMG7	0.000216632	0.264969782	0.293	0.252
PSMB6	0.000223371	0.285811898	0.674	0.731
TIPARP	0.000234252	0.391110961	0.525	0.526
ASAP11	0.000236111	0.563497914	0.626	0.668
CDK2AP2	0.000237037	0.259127625	0.325	0.279
NDUFS8	0.000242858	0.356943188	0.595	0.617
UNC5C	0.000244474	0.445667514	0.395	0.367
RNASEH2C	0.00026376	0.305227844	0.584	0.603
SLIRP	0.000303905	0.314520052	0.554	0.573
NGRN	0.00032475	0.291264657	0.538	0.558
DDT	0.000328472	0.305943882	0.584	0.589
SEMA5A1	0.000333207	0.387599254	0.307	0.264
SF1	0.00033922	0.289243882	0.587	0.61
GPHN	0.000382669	0.325687425	0.552	0.576
GADD45G	0.000441085	0.568018267	0.292	0.248
MPDZ	0.000455042	0.262314653	0.436	0.422
HK1	0.00045856	0.258601849	0.354	0.315
ARL6IP4	0.000462029	0.253441179	0.761	0.8
TPI11	0.000481282	0.310994791	0.818	0.847
DYNLRB1	0.000485609	0.260995743	0.721	0.767
MRPL20	0.00049437	0.277984183	0.659	0.697
PHACTR2	0.00049449	0.261885304	0.593	0.622
CNNM2	0.00050676	0.253966438	0.252	0.208
ELL21	0.000511452	0.493115063	0.652	0.705
METRN1	0.000521893	0.268953263	0.416	0.375
MBNL1	0.000575786	0.271896911	0.774	0.854
KNOP1	0.000577485	0.251408781	0.341	0.306
UBE2W	0.000587476	0.25350692	0.367	0.331
CHMP2A	0.000641031	0.2885807	0.674	0.723
SORBS3	0.000648816	0.29737863	0.484	0.495
GMDS	0.000650119	0.261072986	0.403	0.372
NUDC	0.000684461	0.306238888	0.621	0.68
RALGAPA1	0.000776832	0.290790018	0.577	0.604
CYTOR1	0.000835164	0.50704113	0.552	0.581

TAF7	0.00083968	0.28982879	0.533	0.555
PIN1	0.000842788	0.304129861	0.52	0.546
ZNF580	0.000949073	0.290316286	0.334	0.305
IMMT	0.001036441	0.256194504	0.341	0.319
ZC3H13	0.00111334	0.380720422	0.566	0.585
AIG1	0.001134578	0.28233887	0.516	0.512
ARL3	0.001180966	0.320903727	0.515	0.529
TMEM204	0.00123101	0.308049801	0.357	0.327
AURKAIP1	0.001288048	0.271931308	0.616	0.662
RBM3	0.001412247	0.259199348	0.733	0.779
PXDN1	0.00154956	0.270076029	0.382	0.345
FRYL1	0.001636405	0.280760081	0.505	0.514
UBR1	0.001695192	0.616985578	0.51	0.531
NAA10	0.001703455	0.267238145	0.436	0.426
SCLT11	0.001796461	0.319967318	0.403	0.386
PRR161	0.001815156	0.362426047	0.398	0.369
DDX21	0.001891345	0.272850243	0.58	0.609
IMMP2L1	0.001976936	0.625105521	0.616	0.661
NR1H2	0.002137589	0.259082937	0.416	0.409
SLC20A2	0.00214414	0.288352757	0.397	0.374
MRGPRF	0.002164756	0.359409246	0.392	0.396
UGCG1	0.00225952	0.32976969	0.536	0.559
CDC73	0.002452833	0.276663029	0.498	0.505
PSMC3	0.002580126	0.255590441	0.562	0.594
POLR2I	0.002700597	0.34725838	0.508	0.527
CCDC124	0.002944721	0.302766237	0.459	0.474
C1orf54	0.00313364	0.265529678	0.449	0.467
PLEC1	0.003326182	0.346449644	0.489	0.511
HIST1H1C	0.003356913	0.34072044	0.293	0.269
MAGED2	0.003387125	0.284119209	0.63	0.68
PDE8A	0.003526839	0.36403086	0.454	0.452
VDAC1	0.003665716	0.270271579	0.6	0.625
PSMB3	0.00388188	0.276853363	0.679	0.721
MLF2	0.003967173	0.262165417	0.569	0.588
PVT1	0.004361881	0.282292742	0.305	0.269
SPECC1L	0.004592276	0.280102958	0.456	0.457
ASPN	0.004706378	0.344833491	0.338	0.296
MIR4435-2HG1	0.005048666	0.417660145	0.52	0.546
PRXL2C	0.005092542	0.27237107	0.375	0.366
ARGLU1	0.005473189	0.298443075	0.628	0.69
SRSF7	0.00557922	0.272536987	0.734	0.812
PGAP1	0.005838211	0.370088168	0.262	0.233
RB1	0.005973766	0.670584159	0.444	0.452

ZBTB10	0.006012732	0.283921015	0.318	0.298
RTRAF	0.006485551	0.307409619	0.672	0.715
PRXL2A	0.006518846	0.341445938	0.272	0.246
CDC5L	0.006678926	0.309057304	0.518	0.547
RHOC1	0.006938684	0.273154252	0.707	0.751
CEP85L	0.007068873	0.275535396	0.4	0.388
MDM4	0.007942118	0.251407864	0.384	0.374
NME2	0.008292228	0.255095362	0.915	0.928
DDX6	0.009579548	0.255231796	0.461	0.474
ID11	0.009765883	0.506933632	0.387	0.376
ILF3-DT	0.009889332	0.254353111	0.274	0.252
IGFBP61	2.48E-130	1.923216799	0.96	0.73
PLAC91	3.34E-130	1.199517263	0.984	0.694
DCN1	6.73E-123	1.328367177	1	0.916
FBLN11	1.16E-122	1.320196242	0.993	0.784
ITM2A1	2.22E-121	1.251766596	0.894	0.416
SERPING11	4.09E-120	1.028522214	0.984	0.872
SERPINF11	8.27E-119	1.073490282	0.982	0.788
CD811	2.13E-117	1.004442417	0.989	0.911
PI161	7.56E-117	1.486371071	0.801	0.318
CD341	3.80E-114	0.894377578	0.809	0.326
CLU1	6.16E-114	1.417710772	0.951	0.626
CFD1	5.27E-113	1.739828679	0.904	0.508
ITM2B1	1.03E-110	0.743806022	0.987	0.923
PCOLCE21	1.79E-107	1.488000294	0.753	0.304
MFAP51	5.97E-107	1.462346718	0.931	0.592
TNXB1	1.90E-106	1.157324188	0.94	0.46
MFAP41	2.53E-106	1.588029921	0.949	0.709
OGN1	2.32E-100	1.059173755	0.922	0.46
EFEMP11	1.01E-98	1.000240209	0.949	0.554
LTBP41	1.05E-98	1.099224363	0.931	0.639
CLEC3B1	1.50E-97	1.272415752	0.634	0.225
MGP1	1.12E-94	1.11204825	0.991	0.78
FCGRT1	1.08E-93	1.026750269	0.944	0.726
PLTP1	2.15E-93	1.342505705	0.906	0.62
S100A10	4.37E-93	0.997557799	0.993	0.851
MGST11	1.65E-92	1.020209671	0.883	0.455
CADM31	6.20E-90	1.075403312	0.592	0.209
C1S1	2.25E-88	0.821530999	0.993	0.85
PSAP1	5.66E-88	0.855380603	0.973	0.87
CILP1	6.14E-86	1.116356969	0.727	0.339
LSP11	1.22E-85	0.876770171	0.774	0.406
FBLN21	1.33E-85	1.160722136	0.913	0.665

SOD31	5.13E-85	1.195308693	0.953	0.661
PRELP1	9.39E-85	1.087639214	0.852	0.503
C1QTNF31	3.08E-84	0.938717512	0.814	0.417
LGALS3BP1	1.63E-83	0.791858031	0.957	0.801
SERPINA31	2.69E-83	1.199817662	0.744	0.339
SCARA51	1.01E-82	0.962542492	0.782	0.358
RNASE41	2.25E-82	1.029065076	0.85	0.542
ANXA11	4.78E-82	0.88659744	0.969	0.863
ANXA2	6.87E-78	0.732666712	0.987	0.905
SLPI1	4.53E-77	1.472466183	0.657	0.297
C31	1.02E-76	0.895457288	0.978	0.611
CXCL121	2.14E-75	0.862973614	0.881	0.495
CCDC801	2.30E-75	0.936872942	0.993	0.836
PMP221	4.50E-75	0.721498136	0.948	0.802
PODN1	2.41E-74	0.88133678	0.895	0.558
OLFML31	6.31E-74	0.917676244	0.877	0.595
LAPTM4A1	7.08E-74	0.638816495	0.964	0.875
FXYD11	2.34E-73	0.90135213	0.854	0.538
DDAH21	3.13E-72	0.721099419	0.884	0.675
OMD1	3.21E-72	0.713314464	0.776	0.408
PHGDH1	6.39E-72	0.859822798	0.614	0.289
CCN51	1.19E-70	1.229159115	0.69	0.324
NPC21	1.78E-70	0.7555026	0.928	0.75
GPNMB1	1.87E-70	0.89861529	0.924	0.704
CHRD11	2.36E-70	0.70561567	0.702	0.306
SELENOP1	1.38E-69	0.829172977	0.89	0.57
ADH1B1	9.92E-69	1.16970558	0.773	0.39
PLA2G2A1	4.27E-67	1.360544935	0.751	0.363
OAF1	2.22E-66	0.783888971	0.792	0.512
RAMP21	3.40E-64	0.812030891	0.5	0.193
P2RX21	4.74E-64	0.691600929	0.39	0.119
TIMP1	4.88E-64	0.791235988	0.998	0.922
TXNIP1	1.45E-63	0.916298247	0.946	0.772
S100A131	5.13E-63	0.685608634	0.94	0.748
DPT1	2.30E-62	1.091082	0.83	0.517
LGALS31	4.82E-62	0.665922355	0.971	0.871
CTSF1	7.58E-62	0.786593103	0.81	0.541
KLF41	1.27E-61	1.028749172	0.843	0.556
C17orf581	4.28E-61	0.764241855	0.538	0.239
VSIR1	6.52E-61	0.733574611	0.652	0.345
RNH1	1.06E-60	0.657504218	0.901	0.776
CD99	1.56E-60	0.562950531	0.966	0.898
PLBD11	4.17E-60	0.641202084	0.626	0.312

PTGIS1	2.60E-59	0.561056231	0.697	0.328
SCPEP11	2.64E-59	0.670421586	0.856	0.573
EPHX11	3.12E-58	0.748691181	0.778	0.52
PTGES1	4.46E-58	0.586501885	0.514	0.218
GPX31	8.95E-58	1.212763366	0.745	0.479
GPX4	1.11E-57	0.679300534	0.937	0.84
TMEM59	1.20E-57	0.581849964	0.951	0.832
ZFP36L21	1.27E-56	0.747905757	0.968	0.797
AKR1C11	1.88E-56	0.596497377	0.778	0.437
ALDH21	1.14E-55	0.645808961	0.787	0.483
ANXA4	1.38E-55	0.63609867	0.832	0.63
CYBRD11	3.90E-55	0.698891995	0.892	0.631
NPDC11	8.14E-55	0.58124845	0.679	0.396
ALDH1A11	3.40E-54	0.652541991	0.681	0.351
FEZ11	6.36E-54	0.685905136	0.765	0.5
CPVL1	1.04E-53	0.617153953	0.5	0.207
ADAMTSL41	1.36E-53	0.634342705	0.57	0.276
DUSP11	1.57E-53	0.83254227	0.973	0.869
ACKR31	2.54E-53	1.143590413	0.704	0.45
ARL6IP51	3.64E-53	0.567656947	0.937	0.797
NPR11	2.91E-52	0.456315337	0.394	0.139
SRPX1	3.71E-52	0.925246443	0.765	0.498
LRRN4CL1	3.99E-52	0.618958809	0.708	0.421
AKR1C21	5.72E-52	0.649010464	0.581	0.281
LINC011331	5.77E-52	0.571111016	0.471	0.193
SEMA3C1	6.27E-52	0.673868473	0.798	0.491
PLD31	8.27E-52	0.689703509	0.872	0.69
CYP4B11	9.58E-52	0.765798724	0.421	0.154
S100A6	1.51E-51	0.583570542	0.993	0.96
HIGD1A1	2.05E-51	0.667082883	0.727	0.496
F101	2.78E-51	1.027944827	0.641	0.382
REXO21	1.28E-50	0.68258031	0.894	0.744
PRDX1	2.22E-50	0.470282261	0.964	0.864
CD91	5.10E-50	0.62598592	0.892	0.648
FHL11	1.43E-49	0.66985716	0.861	0.599
MYOC1	1.51E-49	1.292646075	0.455	0.18
KLF2	4.53E-49	0.977799619	0.85	0.671
SFRP21	4.76E-49	0.829473368	0.944	0.746
ZNF385A1	6.49E-49	0.638940294	0.538	0.271
PIGT	1.44E-48	0.669992865	0.767	0.581
EEF1A1	1.63E-48	0.430692595	1	0.989
NENF	2.87E-48	0.535209011	0.883	0.746
ABHD14A1	3.21E-48	0.548298467	0.554	0.292

TMBIM41	3.95E-48	0.531365868	0.91	0.764
UAP11	1.39E-47	0.602561411	0.89	0.654
EMP3	2.41E-47	0.657028444	0.944	0.79
VAT11	2.95E-47	0.626938544	0.724	0.489
NUPR11	2.98E-47	0.583938098	0.94	0.817
EIF1	4.55E-47	0.432734006	0.989	0.967
AKR1C31	1.09E-46	0.549342314	0.608	0.325
GNG111	1.46E-46	0.594403809	0.85	0.644
TSPAN41	1.66E-46	0.518807827	0.874	0.675
SMIM141	2.90E-46	0.535768485	0.834	0.598
TAGLN2	3.78E-46	0.593276691	0.946	0.844
GRN	5.78E-46	0.632379475	0.872	0.719
GSTM51	8.06E-46	0.713911212	0.509	0.252
S100A4	1.10E-45	0.671635853	0.978	0.913
DBN1	2.97E-45	0.607249225	0.626	0.389
BST11	5.12E-45	0.503796353	0.466	0.211
SFRP11	7.04E-45	0.684520765	0.634	0.308
ABI3BP1	2.11E-44	0.414387108	0.912	0.494
SH3BGRL3	3.11E-44	0.722323138	0.953	0.829
ATRAID	3.82E-44	0.514262544	0.877	0.725
CTSH1	4.19E-44	0.602161727	0.661	0.402
ELN1	4.58E-44	0.61542033	0.839	0.513
PROCR1	7.80E-44	0.733365391	0.578	0.318
CYP1B11	8.20E-44	0.598295663	0.592	0.289
GYPC	1.15E-43	0.575093667	0.819	0.674
CYB5A1	1.41E-43	0.634604666	0.812	0.622
TMEM109	3.17E-43	0.540263177	0.724	0.497
CTSD	4.75E-43	0.478357181	0.899	0.773
TPPP3	2.83E-42	0.870218982	0.556	0.294
CPQ1	3.44E-42	0.532501049	0.895	0.745
IL181	6.25E-42	0.469932308	0.444	0.186
IFIT11	1.89E-41	0.401734064	0.545	0.276
ABLIM11	3.66E-41	0.390512852	0.819	0.46
OSR11	5.09E-41	0.422662914	0.428	0.185
ITGBL11	1.34E-40	0.607174895	0.789	0.53
TRIOBP1	2.70E-40	0.554817495	0.715	0.475
TIMP31	4.53E-40	0.634261349	0.982	0.869
ABCA81	5.39E-40	0.46260397	0.787	0.421
PDGFRL	8.94E-40	0.618658297	0.652	0.398
LINC028021	2.84E-39	0.502440339	0.704	0.475
LTBP31	3.80E-39	0.544387601	0.787	0.574
TSC22D31	4.44E-39	0.662631408	0.908	0.783
SEMA3B1	7.70E-39	0.55503298	0.44	0.21

TGFBR31	9.33E-39	0.34616735	0.875	0.526
BTF3	4.63E-38	0.362447821	0.962	0.887
HSD3B7	8.54E-38	0.599552747	0.484	0.257
VEGFD1	9.77E-38	0.471941711	0.388	0.162
FAIM21	9.88E-38	0.407368543	0.309	0.112
CD63	3.92E-37	0.358557847	0.996	0.955
FGL21	5.20E-37	0.554443639	0.502	0.256
VEGFB	5.37E-37	0.583572291	0.818	0.664
SERPINE21	1.16E-36	0.5391301	0.785	0.518
CREG11	1.65E-36	0.488874266	0.76	0.546
SSC5D1	2.02E-36	0.484575853	0.583	0.362
LRP11	2.21E-36	0.505776527	0.937	0.744
GSTM31	3.10E-36	0.485532347	0.798	0.622
DHRS31	3.53E-36	0.47209157	0.616	0.368
SGCG1	4.25E-36	0.326727014	0.365	0.147
BLVRB1	5.22E-36	0.484823545	0.765	0.588
OS9	8.73E-36	0.490507435	0.829	0.664
CFH1	1.13E-35	0.422779722	0.957	0.772
LRPAP1	1.24E-35	0.432664699	0.85	0.712
GABARAPL2	1.59E-35	0.417100415	0.861	0.709
BDH21	1.76E-35	0.495331615	0.731	0.535
CSTB	2.12E-35	0.304988805	0.883	0.759
PALM1	3.68E-35	0.441793704	0.525	0.293
ESD	3.71E-35	0.416374469	0.836	0.688
TMEM176B1	4.12E-35	0.506321721	0.884	0.674
CD2481	4.25E-35	0.5606861	0.756	0.543
GSTP1	4.79E-35	0.314573487	0.98	0.904
RARRES11	6.65E-35	0.733614537	0.736	0.482
FKBP8	2.41E-34	0.429994779	0.843	0.716
ROBO31	3.28E-34	0.466458452	0.41	0.197
MATN21	3.39E-34	0.396625528	0.426	0.197
PLAAT41	6.64E-34	0.430635597	0.711	0.466
BMP41	1.06E-33	0.591394787	0.601	0.377
CDKN2C1	1.79E-33	0.433248989	0.525	0.302
ECM1	1.97E-33	0.465077205	0.852	0.669
CFB1	2.09E-33	0.591168289	0.657	0.415
LAMP1	2.22E-33	0.425499096	0.856	0.732
TMEM35B1	2.61E-33	0.474076226	0.72	0.521
CD551	2.70E-33	0.670939269	0.814	0.646
OSR21	3.37E-33	0.574460167	0.605	0.375
FTL	4.09E-33	0.372320421	0.998	0.984
QSOX11	5.03E-33	0.571377945	0.762	0.558
PEBP1	5.05E-33	0.37378009	0.944	0.843

TOMM7	7.82E-33	0.324564976	0.944	0.865
MXRA81	1.46E-32	0.462387502	0.895	0.718
HLA-E	4.10E-32	0.413730723	0.939	0.853
ANG1	5.14E-32	0.472616526	0.495	0.284
SGCE1	7.16E-32	0.469266719	0.684	0.495
TCF211	8.10E-32	0.509053628	0.722	0.492
SSPN1	1.04E-31	0.489808938	0.821	0.659
TFPI1	1.35E-31	0.402992136	0.903	0.63
CYP27A11	1.36E-31	0.411158627	0.505	0.282
SDCBP1	1.47E-31	0.421866269	0.875	0.756
IGFBP41	1.51E-31	0.653930756	0.984	0.885
HSD11B1	1.88E-31	0.400534186	0.37	0.169
SLC29A1	2.42E-31	0.381654183	0.383	0.183
ADI1	4.64E-31	0.478151741	0.767	0.612
ADD31	5.47E-31	0.40895127	0.877	0.657
REX1BD	7.43E-31	0.372345664	0.819	0.654
CBR31	9.81E-31	0.378950174	0.56	0.333
COL14A11	1.45E-30	0.394166874	0.939	0.668
GAS11	1.54E-30	0.734112349	0.699	0.497
SOD1	1.69E-30	0.362342261	0.93	0.833
HEXB	1.86E-30	0.5415286	0.724	0.562
SH3BP51	1.94E-30	0.377279855	0.789	0.593
RTN41	2.00E-30	0.320567537	0.966	0.875
ADAM331	2.77E-30	0.407064308	0.523	0.296
PLP2	2.97E-30	0.461875338	0.765	0.584
FKBP1A	3.62E-30	0.402551965	0.832	0.699
LEPR1	3.96E-30	0.378558251	0.601	0.35
CLTB	4.82E-30	0.470576468	0.819	0.683
EID1	5.31E-30	0.332287446	0.964	0.898
RACK1	6.42E-30	0.286931473	0.987	0.945
CNBP	7.85E-30	0.344965932	0.906	0.798
GALNT151	8.58E-30	0.608602408	0.596	0.373
ABCA61	1.02E-29	0.337599508	0.791	0.468
CALHM2	1.11E-29	0.365091669	0.486	0.29
BCHE1	1.19E-29	0.426745099	0.332	0.144
LRP10	1.21E-29	0.438652077	0.751	0.582
WIF11	1.25E-29	0.845095479	0.273	0.101
NOP53	1.40E-29	0.379054452	0.899	0.799
AOX11	2.52E-29	0.38735908	0.601	0.333
NOVA11	3.71E-29	0.371625845	0.682	0.414
SELENBP1	7.16E-29	0.459725974	0.581	0.382
LY6E	7.26E-29	0.418938374	0.93	0.775
TNFSF101	8.92E-29	0.368844211	0.727	0.484

ANXA5	9.13E-29	0.405633279	0.966	0.89
TNFSF12	9.31E-29	0.35976155	0.614	0.415
PCOLCE1	9.87E-29	0.474385124	0.957	0.836
PRNP1	1.64E-28	0.377207613	0.794	0.611
MYL12B	2.25E-28	0.31310953	0.955	0.88
OAZ1	2.39E-28	0.287344197	0.968	0.902
CIRBP	2.91E-28	0.373899664	0.919	0.825
IL17D	3.10E-28	0.340560973	0.338	0.158
CCDC51	3.16E-28	0.33548177	0.368	0.179
VKORC1	3.22E-28	0.377733939	0.904	0.767
TMEM106C	4.94E-28	0.353373253	0.496	0.3
TRIP10	7.24E-28	0.370797603	0.572	0.383
ADH51	1.65E-27	0.47578073	0.834	0.71
METRNL	1.80E-27	0.564067654	0.639	0.481
LUM1	1.83E-27	0.47838244	0.995	0.814
UCHL11	5.00E-27	0.612814443	0.495	0.309
CITED21	5.43E-27	0.648749126	0.671	0.497
CD14	7.34E-27	0.262402855	0.253	0.097
GUSB	9.56E-27	0.410135183	0.567	0.38
SRI	1.30E-26	0.332628361	0.818	0.679
MAPK3	1.54E-26	0.33699837	0.547	0.359
FNDC5	1.87E-26	0.310181746	0.255	0.099
EIF3F	2.56E-26	0.342230266	0.854	0.764
CREB51	2.81E-26	0.283205069	0.742	0.48
CD70	3.17E-26	0.318114274	0.283	0.12
VIT1	3.27E-26	0.339252989	0.44	0.226
METTL7A1	3.49E-26	0.367216438	0.699	0.444
OLFML11	3.72E-26	0.446113813	0.579	0.396
TMEM176A1	4.22E-26	0.447900958	0.818	0.607
ACKR41	4.93E-26	0.343434887	0.339	0.161
SULT1A11	7.40E-26	0.366918458	0.375	0.189
HTRA3	8.48E-26	0.748799465	0.659	0.465
FIBIN1	1.06E-25	0.536876572	0.646	0.466
GATD3B	1.34E-25	0.293032372	0.39	0.205
COL6A21	1.51E-25	0.274376431	0.991	0.913
PLEKHF1	1.52E-25	0.384645816	0.439	0.257
IGSF8	1.80E-25	0.306712346	0.401	0.221
TXN	2.21E-25	0.428033228	0.937	0.841
SMDT1	2.64E-25	0.330850844	0.747	0.6
CRYL1	3.24E-25	0.337114914	0.458	0.273
RTN3	3.87E-25	0.359079667	0.792	0.627
CLIC3	6.59E-25	0.324703033	0.283	0.126
MYC1	6.93E-25	0.674988305	0.603	0.429

TUBA1B	7.67E-25	0.306517777	0.939	0.871
GABARAP	9.36E-25	0.281942893	0.966	0.886
TMEM98	9.57E-25	0.386618625	0.722	0.561
IGF11	1.26E-24	0.587504488	0.673	0.427
DDIT4	3.45E-24	0.550368764	0.736	0.577
MEDAG1	3.72E-24	0.363787415	0.579	0.359
PRCP	3.77E-24	0.405067073	0.587	0.426
MTCH1	3.92E-24	0.349357962	0.838	0.73
MMP23B	4.67E-24	0.475854105	0.726	0.532
PAMR11	9.08E-24	0.394945582	0.504	0.297
FSTL11	9.50E-24	0.508974736	0.962	0.829
LMAN2	9.89E-24	0.334524261	0.774	0.649
ANKRD35	1.04E-23	0.351709755	0.486	0.305
CPE2	1.55E-23	0.702694668	0.742	0.607
THYN1	1.57E-23	0.334307035	0.538	0.367
SVBP	1.62E-23	0.386486331	0.527	0.365
EIF3E	1.64E-23	0.253062856	0.924	0.837
ERP29	1.74E-23	0.312874001	0.812	0.672
CKS1B	2.71E-23	0.286801916	0.473	0.297
GLUL1	3.52E-23	0.433583442	0.877	0.729
SHISA31	6.61E-23	0.391299922	0.323	0.155
VAMP5	1.18E-22	0.303405644	0.818	0.648
TMSB4X1	1.23E-22	0.264157658	0.996	0.984
BIN1	2.32E-22	0.319685	0.534	0.367
ATP6V0E1	2.37E-22	0.260002733	0.939	0.846
YPEL3	2.43E-22	0.378252008	0.668	0.535
IFNGR2	2.50E-22	0.338070564	0.594	0.415
PPA1	2.57E-22	0.318965256	0.801	0.68
DNASE2	4.62E-22	0.318325161	0.527	0.359
C16orf891	4.67E-22	0.436010222	0.319	0.157
MFGE81	6.26E-22	0.337254759	0.888	0.793
SNHG29	6.29E-22	0.334978062	0.937	0.876
CMBL	8.03E-22	0.315758721	0.417	0.25
ACVRL11	8.96E-22	0.355825025	0.536	0.351
ISCU	1.06E-21	0.285853891	0.838	0.698
CHID1	1.21E-21	0.382203058	0.679	0.522
HSD17B11	1.22E-21	0.331884134	0.578	0.41
CTSA	1.23E-21	0.325867516	0.756	0.623
SFRP41	1.39E-21	0.976679406	0.549	0.359
A4GALT	1.52E-21	0.425361272	0.576	0.425
MCUB1	1.53E-21	0.337900222	0.592	0.403
FBN11	2.32E-21	0.475871907	0.958	0.801
XPNPEP21	2.68E-21	0.341102789	0.318	0.159

TMEM9B	4.81E-21	0.318752758	0.5	0.331
JAM2	7.44E-21	0.319364906	0.453	0.281
PROS11	7.97E-21	0.329641312	0.659	0.45
RARRES21	9.45E-21	0.279517015	0.964	0.854
ORAI3	1.07E-20	0.290734335	0.383	0.226
PPL1	1.07E-20	0.350795133	0.404	0.23
TCN2	1.09E-20	0.258683327	0.296	0.148
PLPP31	1.12E-20	0.280899045	0.89	0.708
CYB5R3	1.15E-20	0.304081514	0.877	0.768
NFE2L21	1.34E-20	0.268315897	0.899	0.759
UROD	1.93E-20	0.360150144	0.529	0.381
IL331	1.99E-20	0.262697675	0.489	0.281
WASHC3	2.17E-20	0.284416234	0.643	0.484
FOXD1	2.21E-20	0.419997029	0.413	0.247
JTB	2.29E-20	0.298643694	0.83	0.693
SCN7A1	2.46E-20	0.467557291	0.464	0.269
C1QTNF2	2.63E-20	0.293039725	0.381	0.216
EFEMP21	2.75E-20	0.32107492	0.841	0.714
ACE	2.99E-20	0.254871063	0.253	0.116
NUCB2	3.16E-20	0.321458116	0.803	0.665
DPP7	4.08E-20	0.366046176	0.733	0.61
RAB34	5.05E-20	0.284622965	0.818	0.7
SLC27A3	6.25E-20	0.2887491	0.336	0.182
BLOC1S1	8.19E-20	0.327795736	0.78	0.665
SCP21	1.18E-19	0.265775486	0.843	0.707
FBLN51	1.24E-19	0.364491435	0.688	0.516
EIF4EBP3	1.37E-19	0.268366127	0.336	0.183
POLR2E	1.44E-19	0.250837866	0.708	0.579
CALCRL1	1.73E-19	0.414418116	0.5	0.307
H191	1.87E-19	0.318161649	0.316	0.156
PYURF	1.97E-19	0.302291644	0.677	0.537
ZFAS1	2.26E-19	0.290872644	0.892	0.828
EIF4A2	2.30E-19	0.287653748	0.906	0.849
NDN	2.90E-19	0.382751035	0.738	0.611
PGRMC1	3.02E-19	0.315593424	0.783	0.639
CRTAP	3.34E-19	0.347348699	0.792	0.679
HEXA1	3.65E-19	0.366601682	0.666	0.538
TMEM179B	4.33E-19	0.317277917	0.67	0.527
CCNDBP1	4.40E-19	0.288265276	0.5	0.347
CDIPT	5.10E-19	0.31649598	0.572	0.425
WDR83OS	8.38E-19	0.25133118	0.87	0.757
G0S21	9.06E-19	0.433610996	0.366	0.202
ATP6V0C	9.79E-19	0.311061795	0.845	0.733

NFIX1	1.04E-18	0.339764781	0.727	0.556
ETFB	1.07E-18	0.253102971	0.709	0.572
AHNAK1	1.14E-18	0.310545944	0.94	0.871
PDLIM1	1.53E-18	0.265137938	0.845	0.712
CD151	1.85E-18	0.261223144	0.892	0.779
MGAT1	1.89E-18	0.345131667	0.699	0.577
RRAGA	1.92E-18	0.298811387	0.65	0.535
SH3GLB2	2.13E-18	0.303505616	0.475	0.318
AKR1B1	2.40E-18	0.280161413	0.558	0.409
TNFAIP21	3.66E-18	0.306358858	0.614	0.414
SDF4	4.07E-18	0.315313828	0.78	0.669
CD320	4.08E-18	0.28127191	0.403	0.251
NUCB1	5.25E-18	0.267392928	0.843	0.732
TCEA3	6.86E-18	0.335056233	0.426	0.273
TMEM91	7.47E-18	0.277579055	0.412	0.256
TUBB4B	7.59E-18	0.419166194	0.796	0.701
PCBD1	8.11E-18	0.323156868	0.583	0.442
CD68	8.35E-18	0.35035988	0.437	0.293
SDHD	1.04E-17	0.297012368	0.69	0.547
DDOST	1.26E-17	0.286249278	0.691	0.564
ANXA7	1.46E-17	0.252113544	0.715	0.595
PRSS231	1.48E-17	0.435947807	0.796	0.648
GNB2	1.64E-17	0.254211855	0.769	0.643
TRAC	1.83E-17	0.345177206	0.33	0.185
CDC42EP2	2.09E-17	0.290920761	0.37	0.224
TMBIM1	2.64E-17	0.293323011	0.561	0.43
SNRPN	2.83E-17	0.303206195	0.675	0.547
FUCA2	4.45E-17	0.288516996	0.592	0.471
TMED4	1.00E-16	0.3049179	0.646	0.526
TUBA1A1	1.00E-16	0.361060193	0.933	0.845
RNF187	1.04E-16	0.292479654	0.59	0.478
ALDH1A31	1.08E-16	0.451956109	0.473	0.306
PSME1	1.17E-16	0.258430143	0.838	0.737
RAB11B	1.21E-16	0.298605201	0.576	0.442
GABARAPL1	1.53E-16	0.338796439	0.659	0.525
HMGN3	1.72E-16	0.306993232	0.756	0.638
RSPO31	1.76E-16	0.259459428	0.531	0.34
THBS3	2.00E-16	0.284734056	0.486	0.341
ECI2	2.81E-16	0.264309348	0.578	0.434
STMN3	3.07E-16	0.276624503	0.449	0.314
APOL11	3.15E-16	0.315446671	0.522	0.367
SLC66A3	3.37E-16	0.271292218	0.473	0.333
CD40	3.70E-16	0.254829478	0.43	0.283

ZNF706	3.88E-16	0.274911084	0.764	0.653
PIK3R11	4.58E-16	0.259438568	0.859	0.722
VAMP21	4.97E-16	0.301118211	0.673	0.559
ITGB1BP1	5.92E-16	0.283303672	0.731	0.623
ADAMTS51	6.05E-16	0.289466315	0.477	0.301
HEBP1	8.18E-16	0.28999721	0.664	0.533
SPTBN11	9.03E-16	0.283533857	0.888	0.739
SDC2	1.04E-15	0.331087471	0.836	0.715
HIGD2A	1.49E-15	0.251507686	0.751	0.626
CBR1	1.64E-15	0.268736386	0.625	0.498
MRFAP1	1.95E-15	0.26294675	0.881	0.793
PPT1	2.03E-15	0.307770134	0.502	0.377
HPGD1	2.08E-15	0.30588063	0.368	0.211
GLIPR2	2.79E-15	0.271651612	0.514	0.38
CERCAM1	3.05E-15	0.340218871	0.702	0.57
GPRC5A1	3.56E-15	0.317096029	0.531	0.356
PXDC11	3.58E-15	0.306615165	0.648	0.509
ARAP1	7.83E-15	0.280868184	0.446	0.312
CUTC1	1.18E-14	0.322564339	0.473	0.341
GAS6	1.32E-14	0.454157437	0.619	0.487
RDH14	1.38E-14	0.272650749	0.478	0.349
GXYLT2	1.50E-14	0.318340192	0.662	0.508
ST3GAL4	1.69E-14	0.263184447	0.523	0.399
NCSTN	2.83E-14	0.349545913	0.413	0.289
TENT5A1	3.25E-14	0.285979284	0.735	0.597
DDIT3	5.21E-14	0.390694121	0.498	0.374
ACTR10	5.30E-14	0.25402543	0.616	0.498
BDKRB11	1.10E-13	0.410823258	0.314	0.183
TMEM1001	1.12E-13	0.270693763	0.256	0.139
EPB41L4A-AS1	1.44E-13	0.253050578	0.57	0.449
WNT2B1	2.61E-13	0.301895077	0.412	0.269
IL15RA1	2.69E-13	0.278755642	0.464	0.33
RHOB1	2.84E-13	0.32737371	0.863	0.747
PCYOX11	3.14E-13	0.274085193	0.616	0.491
LINC011401	4.44E-13	0.261849451	0.363	0.23
ITM2C	5.79E-13	0.375148802	0.704	0.627
H1FX	7.33E-13	0.352455877	0.747	0.67
CAPN2	7.77E-13	0.250537109	0.738	0.655
SOCS1	7.91E-13	0.260189373	0.473	0.335
LOXL1	1.26E-12	0.462349828	0.594	0.486
SNX21	1.68E-12	0.279787887	0.44	0.321
ALDH9A1	1.95E-12	0.25861068	0.46	0.346
SPRY11	2.63E-12	0.260126182	0.652	0.485

CDKN1C1	2.80E-12	0.26627606	0.718	0.611
BSG	3.04E-12	0.259441917	0.841	0.762
FKBP7	3.11E-12	0.267061248	0.594	0.465
LARP6	7.38E-12	0.270255582	0.469	0.353
HIC1	1.03E-11	0.255352121	0.473	0.357
LAMP2	1.31E-11	0.275974532	0.755	0.664
RECK1	1.68E-11	0.267699602	0.57	0.446
C21	1.95E-11	0.339227695	0.556	0.453
ARL4D	2.47E-11	0.290198577	0.426	0.306
MRC21	4.10E-11	0.264499867	0.819	0.677
TUBB2A	5.38E-11	0.284441303	0.489	0.379
APOD1	5.55E-11	0.709776598	0.421	0.277
NBL11	5.68E-11	0.274325411	0.886	0.781
HELLPAR1	5.74E-11	0.348362596	0.388	0.261
C71	6.68E-11	0.504397509	0.397	0.256
PNRC11	8.27E-11	0.256912753	0.93	0.867
FXVD6	8.85E-11	0.311564574	0.475	0.364
AGTRAP	9.70E-11	0.289946427	0.578	0.481
CCS	1.74E-10	0.261376203	0.592	0.508
EIF1B1	1.99E-10	0.295139139	0.758	0.669
F31	6.41E-10	0.301909817	0.466	0.351
MYADM	2.68E-09	0.262800436	0.731	0.655
MMP21	1.35E-08	0.266522597	0.933	0.744
INMT	2.35E-08	0.30637021	0.368	0.265
EMP11	3.96E-08	0.298671393	0.843	0.734
UGDH1	9.34E-08	0.338200279	0.67	0.595
CAMK2N11	7.52E-07	0.272429717	0.601	0.529
VASN	1.39E-06	0.29710101	0.469	0.403
CES11	2.75E-06	0.316715386	0.352	0.266
CSRNP1	4.38E-06	0.250262038	0.44	0.371
IGLC2	0.007167517	0.431029953	0.307	0.256

p_val_adj	cluster	gene
0	0	LAMA2
0	0	ABI3BP
1.78E-301	0	PID1
4.92E-280	0	ABCA6
3.30E-265	0	DCLK1
7.65E-264	0	TGFBR3
9.54E-264	0	NFIA
1.09E-256	0	TNXB
8.05E-250	0	ABCA8
3.10E-248	0	CELF2
5.40E-244	0	C3
1.43E-243	0	ABLIM1
3.03E-239	0	OGN
3.77E-239	0	SLIT2
1.65E-234	0	ABCA9
3.55E-234	0	MGST1
4.81E-234	0	LINC01239
9.54E-234	0	SCARA5
2.65E-229	0	SVEP1
8.77E-228	0	NLGN1
4.27E-216	0	FGF14
4.47E-213	0	FGF7
1.90E-212	0	ADH1B
2.80E-209	0	CFD
3.89E-208	0	SERPINA3
1.43E-207	0	CCDC80
1.97E-207	0	CLU
5.22E-204	0	NOVA1
1.06E-203	0	EFEMP1
7.76E-202	0	FBLN1
1.30E-201	0	MIR99AHG
4.26E-201	0	ADGRD1
1.78E-199	0	AOX1
6.88E-199	0	SLC9A9
2.11E-198	0	FOXP2
1.28E-195	0	ADD3
1.12E-194	0	PODN
6.58E-193	0	C1orf21
3.00E-192	0	RBMS3
3.43E-191	0	CHRD1
4.30E-191	0	CFH

4.43E-191	0	ZBTB16
6.61E-191	0	ITM2A
3.75E-190	0	IL33
9.38E-189	0	CXCL12
3.62E-188	0	PLA2G2A
3.01E-187	0	MGP
5.87E-187	0	DCN
4.97E-185	0	GSN
1.11E-184	0	NEGR1
2.48E-183	0	EBF1
2.52E-182	0	SFRP1
1.94E-181	0	DLG2
7.96E-181	0	GFRA1
1.68E-179	0	COL4A4
1.88E-177	0	FMNL2
3.20E-176	0	COL14A1
4.27E-175	0	CCN5
1.92E-174	0	PDGFRA
5.86E-174	0	SLIT3
1.11E-173	0	SELENOP
8.94E-173	0	LRP1
1.02E-172	0	METTL7A
1.47E-171	0	ANK2
2.37E-169	0	TFPI
1.23E-167	0	CILP
1.25E-166	0	PCOLCE2
1.27E-166	0	CYBRD1
1.74E-166	0	CST3
2.02E-166	0	LTBP4
6.02E-166	0	ABCA10
8.82E-166	0	ZFPM2
1.88E-164	0	PI16
1.13E-162	0	ADAMTSL3
1.84E-162	0	C1R
1.36E-160	0	3-Mar
1.84E-159	0	USP53
1.12E-158	0	AKR1C1
2.44E-157	0	ELN
7.03E-157	0	DDR2
1.64E-156	0	CD34
1.96E-156	0	KAZN
3.60E-156	0	C1S
8.49E-156	0	MFAP4

1.59E-155	0	RSPO3
2.31E-154	0	CARMIL1
1.25E-153	0	UST
2.00E-153	0	PTGIS
1.93E-151	0	GPX3
5.50E-151	0	SLPI
2.66E-150	0	CNTN4
2.70E-150	0	EGFR
9.55E-150	0	AC108734.4
1.45E-149	0	ZBTB20
1.49E-148	0	SERPING1
1.66E-147	0	PLAC9
6.46E-147	0	PROS1
2.44E-146	0	SMIM14
6.55E-144	0	IGF1
2.07E-143	0	MAPK10
1.59E-142	0	PAR3B
3.70E-142	0	UAP1
1.27E-141	0	SRPX
8.54E-141	0	ALDH1A1
1.02E-140	0	KLF4
2.04E-139	0	PLTP
4.73E-138	0	PCDH9
6.50E-137	0	SFRP2
2.28E-136	0	AL445426.1
1.34E-135	0	LMO3
2.56E-135	0	FBLN2
5.44E-134	0	RARRES1
8.28E-134	0	AP002518.2
9.71E-133	0	TXNIP
4.15E-132	0	SDK1
4.61E-132	0	SERPINF1
5.11E-132	0	ADAMTS5
3.22E-130	0	ELMO1
4.09E-130	0	SERPINE2
1.25E-129	0	SEMA3C
1.50E-129	0	IL6ST
1.50E-128	0	GPNMB
1.96E-128	0	PCSK5
3.77E-127	0	IGFBP6
1.04E-126	0	ADAMTSL4
3.36E-126	0	COL4A3
7.45E-126	0	SPATA6

7.78E-126	0	ADAMTSL1
8.25E-126	0	CREB5
1.12E-125	0	SPTBN1
2.77E-125	0	FBN1
3.18E-125	0	TSHZ2
5.26E-125	0	EFNA5
2.45E-124	0	PLPP3
8.91E-124	0	CP
9.54E-124	0	ZNF385B
2.15E-123	0	DLC1
5.50E-122	0	PRELP
6.46E-122	0	IGSF10
3.66E-121	0	PLSCR4
5.63E-120	0	NFIB
1.15E-119	0	PIK3R1
1.33E-119	0	CACNB4
1.96E-119	0	AL391117.1
5.91E-119	0	LRRN4CL
9.44E-119	0	TTC28
2.00E-118	0	CPVL
2.33E-118	0	MAMDC2
2.34E-118	0	DPYD
7.27E-118	0	TGFBR2
1.46E-117	0	TNFAIP2
1.66E-117	0	FCGRT
2.39E-117	0	VIT
8.88E-117	0	EPB41L3
1.36E-116	0	RAB8B
4.79E-116	0	FGF13
5.84E-116	0	LINC02147
1.27E-115	0	FOXO3
1.56E-115	0	OMD
2.61E-115	0	NFE2L2
2.66E-115	0	LSAMP
4.64E-115	0	LPAR1
6.79E-115	0	SH3D19
6.80E-115	0	PREX2
1.07E-114	0	RDH10
5.13E-113	0	CPQ
8.01E-113	0	ZFP36L2
8.12E-113	0	QSOX1
3.11E-112	0	RTN4
4.20E-112	0	MFAP5

1.11E-111	0	MYOC
1.15E-111	0	SCPEP1
4.02E-111	0	GALNT15
8.41E-109	0	FGL2
1.11E-108	0	DPYSL2
1.64E-108	0	SETBP1
9.25E-108	0	NAALADL2
1.42E-107	0	CLEC3B
2.66E-107	0	RNASE4
1.09E-104	0	MAN1A1
2.46E-103	0	HIF3A
5.14E-103	0	PSAP
5.28E-103	0	SAMHD1
7.28E-103	0	PLXDC2
1.08E-101	0	SCN7A
1.32E-101	0	C1QTNF3
1.37E-101	0	PDZRN4
5.20E-101	0	SRGAP1
1.88E-100	0	CADM3
4.30E-100	0	HELLPAR
1.65E-99	0	RORA
2.46E-99	0	OAF
1.44E-98	0	ALDH2
2.81E-98	0	FXYD1
3.40E-98	0	FHL1
4.70E-98	0	IL15RA
8.83E-98	0	DIAPH2
2.22E-97	0	NAV3
3.18E-97	0	CYP1B1
3.35E-97	0	KCNT2
1.27E-96	0	CHRM3
4.36E-96	0	SOD3
4.72E-96	0	CD302
1.15E-95	0	SH3BP5
1.72E-95	0	CBLB
1.91E-95	0	PBX1
1.56E-94	0	CYP4B1
2.43E-94	0	PMP22
3.63E-94	0	IL18
8.53E-94	0	CRYBG3
1.05E-93	0	LRFN5
3.76E-93	0	ESR1
7.12E-93	0	EPB41L2

4.12E-92	0	ACVRL1
4.74E-92	0	MBP
7.18E-92	0	DPT
9.60E-92	0	TACC1
3.03E-91	0	TCF21
3.65E-91	0	GASK1A
1.83E-90	0	MEDAG
2.69E-90	0	DSCAML1
5.74E-90	0	CFB
7.80E-90	0	CALCRL
1.18E-89	0	SSH2
2.52E-89	0	MEG3
3.74E-89	0	IRAK3
4.72E-89	0	LINC01133
6.44E-89	0	NFIX
7.62E-89	0	LSP1
8.30E-89	0	KANK1
1.87E-88	0	ABCA9-AS1
6.03E-88	0	ECHDC2
7.13E-88	0	XPNPEP2
9.43E-88	0	SLC19A2
1.19E-86	0	FBXL7
1.50E-86	0	PCNX2
3.29E-86	0	AKR1C2
4.64E-86	0	VEGFD
1.30E-85	0	OPHN1
3.35E-85	0	FAM107A
4.24E-85	0	TMEM132C
9.19E-85	0	AKR1C3
9.77E-85	0	C7
1.20E-84	0	FBLN5
1.86E-84	0	GNA14
1.04E-83	0	PAMR1
1.32E-83	0	APLP2
1.42E-83	0	CSGALNACT1
1.61E-83	0	PLBD1
2.89E-83	0	ATP1A1
3.79E-83	0	GPRC5A
5.66E-83	0	SAMD4A
1.29E-82	0	ARHGAP10
3.10E-82	0	GFPT2
7.31E-82	0	BNC2
9.37E-82	0	ITGBL1

7.68E-81	0	LTBP3
7.81E-81	0	RNF217
1.01E-80	0	AC092691.1
1.08E-80	0	SHISA3
1.14E-80	0	SMAD3
1.46E-80	0	APBB1IP
2.28E-80	0	AC007319.1
7.27E-80	0	CAB39L
1.70E-79	0	ASPA
2.37E-79	0	OSR1
2.52E-79	0	EPHA6
3.14E-79	0	LHFPL6
4.11E-79	0	SEMA3E
4.96E-79	0	ABHD5
5.74E-79	0	LIMCH1
5.97E-79	0	LRRK2
9.01E-79	0	CYP1B1-AS1
9.51E-79	0	LINC01697
1.48E-78	0	OLFML3
3.21E-78	0	FAT4
4.07E-78	0	TNFSF13B
5.79E-78	0	LEPR
5.97E-78	0	MATN2
1.24E-77	0	C16orf89
1.47E-77	0	TMTC1
1.86E-77	0	TRIOBP
2.45E-77	0	FKBP5
5.15E-77	0	SPRY1
8.04E-77	0	NID1
1.07E-76	0	IL16
3.46E-76	0	MEIS1
3.58E-76	0	SYNE1
5.93E-76	0	ADAM33
6.79E-76	0	FIBIN
9.65E-76	0	FAXDC2
3.53E-75	0	EEF2K
6.59E-75	0	PDK4
7.92E-75	0	PLAGL1
1.29E-74	0	NPC2
1.53E-74	0	SOX5
6.59E-74	0	ELF1
8.26E-74	0	ARL15
1.96E-73	0	BOC

2.56E-73	0	AL139383.1
6.01E-73	0	SNED1
6.11E-73	0	EHBP1
7.33E-73	0	ASAP2
8.20E-73	0	AGAP1
9.67E-73	0	ANXA1
1.18E-72	0	HIGD1A
1.20E-72	0	LAMC1
1.94E-72	0	LIMA1
4.34E-72	0	FLRT2
4.78E-72	0	GLUL
6.38E-72	0	EPHX1
1.67E-71	0	KIAA0408
1.81E-71	0	TIMP3
1.98E-71	0	AFF1
4.70E-71	0	PARD3
8.49E-71	0	LINC02511
9.50E-71	0	ADAMTS15
1.11E-70	0	FEZ1
1.58E-70	0	FILIP1
1.91E-70	0	PLCB1
1.95E-70	0	SULT1A1
3.46E-70	0	LINC02802
3.63E-70	0	MSR1
3.91E-70	0	RECK
6.46E-70	0	FSTL1
1.07E-69	0	SGCG
1.46E-69	0	STK32B
1.55E-69	0	FTX
3.76E-69	0	MCUB
5.42E-69	0	HMCN2
8.67E-69	0	GHR
1.36E-68	0	CCDC69
1.49E-68	0	VIPR2
2.05E-68	0	CYB5A
2.09E-68	0	DENND2A
2.21E-68	0	DST
4.03E-68	0	LVRN
6.52E-68	0	C17orf58
6.58E-68	0	OSR2
1.16E-67	0	CREG1
3.66E-67	0	LINC01140
5.44E-67	0	PRNP

6.66E-67	0	PCSK6
9.36E-67	0	NCOA1
2.06E-66	0	ALDH1A3
2.93E-66	0	PIEZO2
6.95E-66	0	WNT2B
7.61E-66	0	FMO2
1.22E-65	0	TNFSF10
1.24E-65	0	REV3L
1.49E-65	0	FGFR1
1.80E-65	0	VSIR
1.87E-65	0	PRKAG2
2.33E-65	0	TENT5A
4.66E-65	0	ITM2B
5.78E-65	0	RHOBTB3
7.32E-65	0	GSTM5
9.54E-65	0	SASH1
1.18E-64	0	PHGDH
1.66E-64	0	SESTD1
1.70E-64	0	PXDC1
1.75E-64	0	PTPRS
4.36E-64	0	PLAAT4
5.10E-64	0	PTGFR
6.90E-64	0	C1RL
7.27E-64	0	ACKR3
9.50E-64	0	FGF2
1.03E-63	0	BDH2
1.09E-63	0	ZNF385A
1.82E-63	0	NIPAL2
6.08E-63	0	PPL
8.13E-63	0	ABL1
1.04E-62	0	SPTLC3
1.62E-62	0	CTSF
1.67E-62	0	BCHE
1.90E-62	0	DOCK4
2.68E-62	0	PLEKHA6
6.42E-62	0	DAAM1
9.84E-62	0	MAN1C1
1.35E-61	0	SEMA6A
2.98E-61	0	ARHGEF3
4.76E-61	0	RAMP2
1.20E-60	0	WWP1
1.64E-60	0	ACSS3
2.23E-60	0	PALM

2.66E-60	0	LINC01798
3.62E-60	0	CTSH
4.86E-60	0	CDON
1.51E-59	0	ARL6IP5
1.66E-59	0	BMERB1
2.04E-59	0	SLC16A4
2.31E-59	0	APOD
2.33E-59	0	BICC1
4.44E-59	0	AKAP12
4.84E-59	0	CEP126
5.77E-59	0	MAML2
7.10E-59	0	NAMPT
7.68E-59	0	RUNX1T1
9.14E-59	0	NPR1
1.02E-58	0	GREM2
1.09E-58	0	BHMT2
2.29E-58	0	CLIP4
2.42E-58	0	RBMS3-AS2
3.31E-58	0	CBR3
3.52E-58	0	EMILIN2
5.18E-58	0	TNFAIP8L3
6.43E-58	0	TBC1D12
1.98E-57	0	AC008105.3
2.15E-57	0	JADE1
2.84E-57	0	OLFML1
5.94E-57	0	PROCR
1.08E-56	0	SSC5D
1.11E-56	0	SLC16A7
1.54E-56	0	PCYOX1
1.94E-56	0	ROR1
3.07E-56	0	ADGRB3
3.14E-56	0	GNG11
3.24E-56	0	MIR100HG
4.76E-56	0	NDRG1
1.17E-55	0	AUTS2
1.71E-55	0	SDCBP
2.44E-55	0	RGL1
5.40E-55	0	TMEM176B
5.55E-55	0	AP001528.1
1.37E-54	0	STXBP6
1.43E-54	0	APP
1.77E-54	0	ZNF704
2.56E-54	0	ITGA9

3.28E-54	0	BACH2
3.38E-54	0	KIAA1328
3.85E-54	0	P2RX2
5.65E-54	0	STEAP2
6.08E-54	0	RGMA
6.10E-54	0	FER
1.58E-53	0	LPCAT2
2.06E-53	0	MAGI2
2.43E-53	0	PTGES
2.44E-53	0	RBMS1
2.85E-53	0	AC124852.1
3.91E-53	0	GPSM2
9.57E-53	0	CLIC2
1.44E-52	0	BMP4
1.52E-52	0	AL356124.1
1.98E-52	0	ROBO3
3.31E-52	0	NPDC1
3.80E-52	0	PTPRG
4.73E-52	0	MAGI3
5.25E-52	0	RHOU
1.03E-51	0	CUTC
1.35E-51	0	TMEM176A
3.04E-51	0	AL109930.1
5.96E-51	0	SLC25A37
6.85E-51	0	MYO9A
1.50E-50	0	THRB
1.63E-50	0	KLHL13
1.83E-50	0	ARHGAP6
2.25E-50	0	PRKN
2.83E-50	0	FAM198B-AS1
3.46E-50	0	ARHGAP26
5.66E-50	0	MED13L
6.66E-50	0	FBXO42
6.87E-50	0	CYP27A1
9.53E-50	0	PITPNM2
2.66E-49	0	C1QTNF7
2.87E-49	0	NR2F1
4.18E-49	0	NFKBIZ
5.16E-49	0	PTX3
6.06E-49	0	WIF1
6.88E-49	0	FAIM2
7.16E-49	0	CD81
1.02E-48	0	LINC00278

1.73E-48	0	IFIT1
1.77E-48	0	F10
1.97E-48	0	ITGB8
2.79E-48	0	S100A13
4.20E-48	0	HPGD
4.63E-48	0	NTN4
5.26E-48	0	PLD3
6.06E-48	0	LITAF
6.12E-48	0	PXN
6.83E-48	0	VPS13B
6.90E-48	0	ABHD15-AS1
7.38E-48	0	CDKN2C
2.01E-47	0	PIR
2.35E-47	0	PKD2
2.40E-47	0	ERRFI1
2.49E-47	0	ACKR4
2.75E-47	0	MEG8
4.15E-47	0	GAS1
4.15E-47	0	DYNC2H1
4.70E-47	0	SPSB1
5.00E-47	0	ARHGAP29
5.36E-47	0	LDB2
8.38E-47	0	FAM227B
8.71E-47	0	DHRS3
1.98E-46	0	NUPR1
2.50E-46	0	KITLG
2.54E-46	0	CC2D2A
3.12E-46	0	ARHGAP21
3.90E-46	0	ZHX3
5.57E-46	0	TMOD2
5.89E-46	0	MYC
7.42E-46	0	SSPN
8.51E-46	0	PNRC1
9.31E-46	0	N4BP2L2
2.30E-45	0	ARHGEF26
2.66E-45	0	DDAH2
2.89E-45	0	PPP3CA
3.50E-45	0	FIGN
4.22E-45	0	FAM172A
8.14E-45	0	CSF1
8.61E-45	0	FAM110B
1.04E-44	0	SPOCK1
1.05E-44	0	NNMT

2.06E-44	0	FAM180A
4.50E-44	0	ARHGAP12
5.01E-44	0	VAT1
1.14E-43	0	CRLF1
1.91E-43	0	TMEM35B
2.08E-43	0	PAM
2.53E-43	0	PBX3
3.75E-43	0	APOL1
4.53E-43	0	MN1
5.70E-43	0	EEA1
8.99E-43	0	BDKRB2
1.17E-42	0	LGALS3
1.25E-42	0	RNF13
1.46E-42	0	GRK5
1.50E-42	0	ZNF638
1.55E-42	0	GREB1
1.65E-42	0	BLVRB
1.72E-42	0	WSB1
2.58E-42	0	AC079298.3
2.68E-42	0	EPHA3
2.86E-42	0	APOL3
3.23E-42	0	TCF7L2
4.16E-42	0	TWIST2
6.57E-42	0	NR3C2
7.08E-42	0	EMP1
7.16E-42	0	ANG
1.39E-41	0	AGTR1
1.69E-41	0	BST1
1.86E-41	0	PGRMC2
4.01E-41	0	TMEM72-AS1
5.95E-41	0	FHIT
6.39E-41	0	CPED1
1.24E-40	0	ABHD14A
1.38E-40	0	KLF9
1.44E-40	0	HGF
1.46E-40	0	TPST1
1.58E-40	0	CFLAR
1.90E-40	0	AC005237.1
2.01E-40	0	SCP2
2.54E-40	0	GLI3
2.60E-40	0	CPNE3
3.08E-40	0	ZFPM2-AS1
3.41E-40	0	SH3PXD2B

3.97E-40	0	CCNL1
4.24E-40	0	GULP1
6.17E-40	0	DIO3OS
9.48E-40	0	CD74
1.16E-39	0	CADPS2
1.38E-39	0	PCDH17
1.68E-39	0	FAM13A
1.68E-39	0	DAPK1
2.17E-39	0	AL033523.1
2.37E-39	0	SPART
2.51E-39	0	ITPKC
3.38E-39	0	EXT1
3.71E-39	0	SYTL4
5.48E-39	0	RASSF4
6.58E-39	0	TANK
1.13E-38	0	LINC01266
1.51E-38	0	ZNF106
1.58E-38	0	DANT2
2.11E-38	0	EPS15
2.31E-38	0	ENOSF1
2.37E-38	0	IGFBP4
2.60E-38	0	ACACB
2.80E-38	0	PDZRN3
3.51E-38	0	ST3GAL1
5.04E-38	0	MOB3B
6.15E-38	0	SGCE
8.63E-38	0	ADH5
8.85E-38	0	GPRC5D-AS1
1.02E-37	0	WARS2-AS1
1.45E-37	0	PAK3
1.46E-37	0	UGDH
2.13E-37	0	TBC1D5
2.55E-37	0	TSC22D3
2.84E-37	0	GSTM3
4.35E-37	0	F3
4.52E-37	0	GPC3
4.61E-37	0	IRF2BP2
5.62E-37	0	SAV1
8.58E-37	0	SEMA3B
8.70E-37	0	PRX
1.03E-36	0	CITED2
1.59E-36	0	CHPT1
1.65E-36	0	MIPOL1

2.23E-36	0	PDLIM1
2.88E-36	0	CD248
3.94E-36	0	AC098829.1
4.99E-36	0	AHR
6.01E-36	0	MBD5
7.74E-36	0	OSBPL9
9.02E-36	0	INTS6
9.22E-36	0	LAMB2
1.02E-35	0	MLH3
1.79E-35	0	FAM43A
2.31E-35	0	MPZL1
3.14E-35	0	HMCN1
3.37E-35	0	TSPAN4
3.93E-35	0	PDE4C
4.89E-35	0	FGD5
6.65E-35	0	SRSF5
7.86E-35	0	TMBIM4
8.66E-35	0	ANKAR
8.73E-35	0	ALPK1
1.07E-34	0	EXOC6B
1.14E-34	0	LGALS3BP
1.20E-34	0	FOXN3
1.28E-34	0	SOD2
1.47E-34	0	AHNAK
2.30E-34	0	C2
2.34E-34	0	NLGN4Y
4.19E-34	0	LRRK1
9.46E-34	0	HEXA
1.02E-33	0	GMDS-DT
1.18E-33	0	MEIS2
1.43E-33	0	PDE7A
1.85E-33	0	ASAP3
1.94E-33	0	CHD9
3.06E-33	0	C5orf56
4.49E-33	0	SLC25A13
5.36E-33	0	CTSO
6.59E-33	0	TRPC1
7.38E-33	0	TMEM100
9.40E-33	0	POGLUT3
1.20E-32	0	SDCCAG8
1.23E-32	0	LONRF3
1.29E-32	0	CA12
1.45E-32	0	GAS7

3.27E-32	0	RAI2
3.65E-32	0	UGGT2
4.12E-32	0	HIVEP1
4.35E-32	0	GLRX
4.67E-32	0	ITIH5
4.74E-32	0	ZHX2
6.38E-32	0	GASK1B
6.51E-32	0	DENND1A
7.82E-32	0	IMMP2L
8.46E-32	0	AZI2
8.88E-32	0	AASS
9.06E-32	0	AUH
9.06E-32	0	EVC2
9.61E-32	0	CD55
1.02E-31	0	CDKN1C
2.03E-31	0	RFX2
3.28E-31	0	AL078604.4
4.33E-31	0	LTBP2
5.65E-31	0	TOR1AIP1
8.08E-31	0	NGF
1.32E-30	0	TMEM108
3.37E-30	0	MRNIP
3.48E-30	0	NFATC2
3.95E-30	0	WWOX
4.61E-30	0	AHI1
5.04E-30	0	CACHD1
6.80E-30	0	MAOA
8.28E-30	0	AKAP13
8.52E-30	0	BCKDHB
9.67E-30	0	UCHL1
1.06E-29	0	FNDC3B
1.58E-29	0	NAV1
1.77E-29	0	REXO2
3.38E-29	0	CACNB2
4.09E-29	0	DIAPH2-AS1
4.30E-29	0	MAPK9
5.19E-29	0	PTPN13
2.17E-28	0	FAM171A1
2.20E-28	0	EYA4
2.50E-28	0	DUSP1
4.73E-28	0	DSE
6.02E-28	0	LINC01504
8.26E-28	0	LAPTM4A

1.56E-27	0	CCDC18-AS1
1.82E-27	0	LRIG3
3.41E-27	0	G0S2
4.03E-27	0	DENND4C
4.47E-27	0	IL6
4.61E-27	0	AC004160.1
4.70E-27	0	CMYA5
5.39E-27	0	SLC4A7
5.42E-27	0	UTY
6.66E-27	0	ARHGEF10
7.60E-27	0	PPM1B
7.85E-27	0	STIM1
1.11E-26	0	TRMT11
1.48E-26	0	RAD51B
1.81E-26	0	BBS9
1.84E-26	0	RIN2
2.24E-26	0	PTGS2
2.25E-26	0	SESN1
3.02E-26	0	BDKRB1
3.27E-26	0	ANKS1B
6.94E-26	0	ANTXR2
7.96E-26	0	NR2F1-AS1
8.46E-26	0	RUFY3
9.55E-26	0	HIBADH
1.34E-25	0	ARID5B
1.50E-25	0	GTF2B
2.08E-25	0	LRRC23
2.59E-25	0	HIPK3
3.03E-25	0	MRTFA
4.93E-25	0	STARD9
5.21E-25	0	TRERF1
5.43E-25	0	RFTN2
1.93E-24	0	MID1
2.02E-24	0	BAZ2B
4.78E-24	0	NFKB1
5.33E-24	0	SCAPER
5.65E-24	0	PNISR
1.33E-23	0	TXLNG
5.71E-23	0	SLC10A1
6.32E-23	0	MITF
6.87E-23	0	ADAMTS17
1.02E-22	0	ATP10D
1.16E-22	0	SPRED2

1.46E-22	0	RORA-AS1
3.30E-22	0	SMG6
4.21E-22	0	FHOD3
4.50E-22	0	LINC01473
6.77E-22	0	FST
9.28E-22	0	PRKCE
1.01E-21	0	FNIP2
1.03E-21	0	RSRP1
1.13E-21	0	PDE1A
2.08E-21	0	AC012404.1
2.57E-21	0	SQSTM1
3.73E-21	0	POLG2
4.70E-21	0	B4GALT1
4.74E-21	0	ADAMTSL4-AS1
6.23E-21	0	ATF6
6.96E-21	0	KDM3B
2.30E-20	0	TTC17
2.31E-20	0	WTAP
5.62E-20	0	EIF1B
6.89E-20	0	AC022217.3
1.44E-19	0	TULP2
1.58E-19	0	AL365295.1
2.68E-19	0	ADM
5.56E-19	0	PRKCG
6.21E-19	0	PRICKLE2
6.93E-19	0	ZC3HAV1
1.20E-18	0	SLC9A1
1.21E-18	0	SYN3
1.53E-18	0	CAMK2N1
1.99E-18	0	TAF4B
2.21E-18	0	GALNT17
6.13E-18	0	TSC22D2
1.89E-17	0	SLC41A2
3.28E-17	0	ZFP36L1
3.85E-17	0	LHFPL2
4.12E-17	0	GCH1
7.17E-17	0	SMIM41
2.15E-16	0	THBS1
2.65E-16	0	DEPP1
2.66E-16	0	ELL2
6.17E-16	0	H19
6.18E-16	0	THUMPD3-AS1
6.99E-16	0	MMP19

7.53E-16	0	CPE
1.58E-15	0	NFATC1
5.69E-15	0	PDE4D
1.09E-14	0	CES1
3.28E-14	0	CAMK2D
1.32E-13	0	DPH6
1.47E-13	0	AMPD3
2.30E-13	0	HECTD2
4.54E-13	0	SEMA4A
7.33E-13	0	TNFRSF10B
1.04E-12	0	ULK4
8.00E-12	0	BIN3
1.14E-11	0	UGP2
1.74E-11	0	CCN2
2.90E-11	0	TNFAIP6
4.03E-11	0	ABTB2
5.01E-11	0	A2M
8.66E-11	0	PTGDS
1.35E-10	0	PLEKHG2
2.96E-10	0	SLC39A14
4.39E-09	0	SCLT1
1.27E-08	0	TMTC2
8.03E-08	0	SUPT5H
1.03E-07	0	SLC25A44
3.16E-07	0	GBE1
9.55E-07	0	PMF1
3.97E-05	0	RAB7A
6.22E-05	0	ICAM1
0.000112801	0	CXCL2
0.004194341	0	ACSL4
0	1	COL11A1
0	1	COL1A1
0	1	POSTN
0	1	KIF26B
0	1	INHBA
0	1	COL5A1
0	1	COL10A1
0	1	WNT5A
0	1	GREM1
0	1	RUNX2
0	1	CDH11
0	1	SDC1
0	1	PLPP4

3.99E-302	1	ADAM12
1.46E-301	1	MMP11
3.22E-298	1	TANC2
8.67E-295	1	COL3A1
1.75E-294	1	COL12A1
3.20E-293	1	COL1A2
3.35E-289	1	COL5A2
1.85E-288	1	RAI14
1.77E-284	1	TMEM158
4.26E-280	1	PTK7
3.06E-275	1	LOXL2
6.91E-273	1	CTHRC1
1.43E-269	1	TENM3
1.31E-264	1	SUGCT
2.42E-259	1	CSMD2
1.01E-257	1	DSG2
1.59E-256	1	MIR181A1HG
2.52E-251	1	UNC5B
7.11E-249	1	CASC15
1.01E-247	1	PRDM1
1.52E-245	1	ADAMTS12
3.86E-244	1	COL7A1
6.91E-244	1	FAP
2.18E-243	1	PODNL1
6.89E-243	1	GJA1
9.69E-243	1	SLC16A3
1.42E-242	1	NXN
6.86E-241	1	NREP
1.14E-238	1	MME
1.74E-237	1	HMGA2
2.13E-231	1	CHST11
8.25E-230	1	NTM
1.07E-229	1	COL27A1
3.16E-229	1	HS3ST3A1
1.88E-228	1	LRRC15
1.83E-227	1	COL6A3
1.31E-226	1	RNF144A
8.82E-226	1	ZNF469
2.70E-224	1	NRP2
2.92E-224	1	THBS2
2.70E-217	1	SLC24A2
1.86E-216	1	RUNX1
1.60E-211	1	MMP14

2.26E-208	1	GALNT5
4.50E-206	1	FN1
1.16E-203	1	ANTXR1
2.15E-203	1	HECW1
2.61E-203	1	MICAL2
1.64E-202	1	LINC01429
2.75E-202	1	DCBLD1
3.08E-200	1	LINC01705
1.16E-199	1	CHN1
9.83E-199	1	FARP1
2.10E-195	1	SERPINH1
3.77E-193	1	APBA2
9.35E-193	1	CNN2
9.72E-191	1	VCAN
1.96E-189	1	CCN4
4.54E-188	1	GOLM1
6.08E-187	1	MARCKS
1.37E-185	1	LMO7
9.52E-183	1	CDC42EP3
2.16E-182	1	ARL4C
7.61E-182	1	TSPAN5
3.63E-181	1	LMCD1
6.40E-181	1	PMEPA1
3.57E-180	1	DIO2
1.47E-179	1	SPHK1
1.88E-179	1	SPARC
1.16E-178	1	SPATS2L
1.60E-176	1	C1QTNF6
3.21E-175	1	CDH2
2.70E-174	1	FSCN1
3.58E-174	1	IL7R
1.13E-173	1	CADM1
1.32E-173	1	PDGFC
2.39E-170	1	GPR176
2.42E-170	1	NETO1
4.29E-170	1	BASP1
4.87E-170	1	MFAP2
1.59E-169	1	PTPRE
1.16E-168	1	COL6A1
2.83E-167	1	RFX8
3.73E-167	1	ACTN1
2.03E-165	1	SOX4
1.38E-164	1	HHIP

2.74E-164	1	PLOD2
3.79E-164	1	GJB2
7.69E-163	1	ADAMTS14
8.57E-163	1	TANC1
6.43E-161	1	CHST15
1.08E-160	1	ADAMTS2
5.64E-160	1	GLIS3
9.07E-160	1	ALPK2
1.40E-159	1	EGFL6
2.47E-159	1	TGFBI
1.18E-158	1	MYO10
1.38E-157	1	PPFIBP1
2.45E-157	1	SPATA13
1.36E-156	1	CALU
1.91E-156	1	MMP1
1.98E-154	1	LINC00511
9.28E-154	1	RCN3
2.64E-153	1	LINC01929
4.27E-153	1	KIAA1217
8.21E-153	1	ENTPD7
1.22E-151	1	GPM6B
4.22E-150	1	MYH9
5.22E-150	1	STK17B
7.35E-149	1	TCF4
7.94E-149	1	SULF2
1.02E-148	1	SULF1
1.74E-147	1	AOPEP
2.25E-147	1	PLAU
2.88E-147	1	MMP13
1.57E-146	1	ITGB5
4.12E-145	1	VSNL1
4.93E-145	1	PYCR1
1.08E-144	1	EPST11
1.78E-144	1	TTYH3
6.27E-144	1	SYNDIG1
1.08E-141	1	CD82
5.62E-141	1	ADAM19
7.47E-141	1	TSPAN9
2.13E-139	1	LEF1
1.07E-138	1	SERINC2
4.61E-138	1	SHISA2
5.01E-137	1	P3H1
6.47E-137	1	TPST2

7.93E-137	1	PALLD
1.09E-136	1	CREB3L1
1.72E-136	1	RRBP1
4.88E-136	1	AC134312.5
1.27E-135	1	AEBP1
1.79E-135	1	CMTM4
1.89E-135	1	MXRA5
9.27E-135	1	COL24A1
1.43E-134	1	FGD6
1.81E-134	1	GSE1
2.27E-134	1	SEZ6L2
5.54E-134	1	FKBP10
1.02E-133	1	WNT2
2.39E-133	1	CHSY3
7.22E-133	1	CALD1
2.89E-132	1	MARCKSL1
1.06E-131	1	MDFI
1.75E-130	1	C4orf48
2.97E-130	1	RAB31
3.86E-130	1	TRIM59
7.79E-130	1	SIPA1L1
1.72E-129	1	SLC1A3
7.90E-129	1	PMAIP1
2.71E-127	1	RGS3
2.84E-127	1	NKD1
7.10E-127	1	KIFC3
7.47E-127	1	TENM4
7.61E-127	1	TMEM45A
7.99E-126	1	ATXN1
2.60E-125	1	CHPF
4.53E-125	1	CAPZB
6.66E-125	1	PRKD1
7.96E-125	1	P3H4
1.01E-124	1	GLIS1
4.23E-124	1	FNBP1L
4.80E-124	1	NRG1
8.25E-124	1	CDCP1
3.18E-123	1	NUAK1
2.88E-122	1	SGIP1
3.22E-122	1	SEPTIN11
1.96E-120	1	TNFRSF12A
2.98E-120	1	TEAD1
1.27E-119	1	HOPX

2.78E-119	1	ENAH
3.46E-119	1	ASAP1
3.29E-118	1	TRIO
2.37E-117	1	AK5
3.08E-117	1	DERL3
3.13E-117	1	BPGM
7.49E-116	1	RALA
2.37E-115	1	FRMD6
7.54E-115	1	CTSB
1.89E-114	1	HMGA2-AS1
2.49E-114	1	MAP4K4
4.15E-114	1	ZNF281
9.03E-114	1	WIPF1
1.66E-113	1	ACBD3
1.88E-113	1	BMP1
1.90E-113	1	XYLT1
2.13E-113	1	SLC38A5
2.58E-113	1	COL5A3
3.31E-113	1	LIMS1
5.12E-113	1	ZEB1
6.10E-113	1	PLOD1
9.63E-113	1	NKD2
1.37E-112	1	FRMD5
2.80E-112	1	RASGRF2
3.48E-112	1	CDK14
5.72E-112	1	PGM2L1
2.89E-111	1	GRIP1
1.09E-110	1	LOX
1.32E-110	1	PTGER3
1.45E-110	1	SPRED1
2.28E-110	1	BGN
5.57E-110	1	VGLL4
6.19E-110	1	TWIST1
2.77E-109	1	ST6GALNAC5
7.42E-109	1	GPX7
1.48E-108	1	APBB2
1.49E-108	1	STMN1
1.27E-107	1	STARD4-AS1
1.49E-107	1	FUT8
5.19E-107	1	PRRX1
1.36E-106	1	PDPN
1.73E-106	1	NRIP1
2.95E-106	1	TNFRSF6B

8.66E-106	1	ETV1
1.06E-105	1	SLC6A6
1.18E-105	1	P4HB
1.35E-105	1	JCAD
1.95E-105	1	AC015923.1
3.27E-105	1	CDYL2
1.16E-104	1	EVA1A
1.44E-104	1	MDFIC
1.51E-104	1	RCN1
6.79E-104	1	KCND2
9.23E-104	1	STRA6
1.30E-103	1	SEC31A
1.34E-103	1	ITGB1
2.16E-103	1	CCBE1
2.67E-103	1	SPECC1
5.74E-103	1	FOXQ1
1.01E-102	1	MIR4435-2HG
2.12E-102	1	PCDH7
2.50E-102	1	SLC9A3R2
1.32E-101	1	CD109
1.42E-101	1	EMILIN1
1.65E-101	1	ETV6
1.69E-101	1	TPM4
2.91E-101	1	SURF4
6.51E-101	1	MSX2
1.20E-100	1	COL8A1
1.74E-100	1	MYO5A
2.08E-99	1	RAB2A
4.20E-99	1	SIPA1L3
4.80E-99	1	AGPAT4
1.40E-98	1	MCC
5.83E-98	1	VOPP1
1.66E-97	1	ARMC9
3.30E-97	1	DCBLD2
1.06E-96	1	S100A16
1.10E-96	1	LINC00632
3.93E-96	1	TMEM132A
4.00E-96	1	SLC24A3
5.77E-96	1	COL6A6
6.95E-96	1	TCF12
1.49E-95	1	TMEM200A
5.21E-95	1	NEK6
5.35E-95	1	SHB

2.70E-94	1	GBP1
3.20E-94	1	MYO1B
3.52E-94	1	TYMP
3.75E-94	1	LMAN1
4.11E-94	1	IDH2
4.94E-94	1	ZNF608
5.12E-94	1	NID2
5.17E-94	1	ST5
6.38E-94	1	LGALS1
9.87E-94	1	FNDC1
2.54E-93	1	LUZP1
4.53E-93	1	ITGAV
9.39E-93	1	GOLT1B
1.07E-92	1	HS3ST3B1
1.41E-92	1	NCOR2
2.30E-92	1	KLHL5
2.73E-92	1	EDIL3
5.83E-92	1	P4HA3
7.19E-92	1	DIP2C
8.37E-92	1	ROBO1
1.69E-91	1	GUCY1A1
1.81E-91	1	MMD
2.02E-91	1	BX284613.2
2.81E-91	1	TMEM263
3.10E-91	1	GFPT1
6.01E-91	1	PTPN14
9.54E-91	1	CTSK
1.44E-90	1	PLAUR
2.84E-90	1	C1orf198
3.12E-90	1	HHIP-AS1
7.57E-90	1	TOM1
1.06E-89	1	CMTM8
1.20E-89	1	OSTC
1.59E-89	1	ARSI
7.58E-89	1	THY1
7.73E-89	1	ROR2
1.25E-88	1	WHRN
1.32E-88	1	CD276
1.60E-88	1	GPC6
1.88E-87	1	MAFB
2.17E-87	1	PAWR
3.05E-87	1	STAT2
8.96E-87	1	DUSP10

1.26E-86	1	MALT1
2.32E-86	1	SSR3
2.41E-86	1	HS2ST1
3.57E-86	1	TTC39B
6.65E-86	1	IKBIP
6.85E-86	1	TMEFF1
2.10E-85	1	KDELR3
6.45E-85	1	DGKI
9.57E-85	1	P4HA1
2.79E-84	1	PARVA
7.39E-84	1	COL6A2
1.37E-83	1	ANKLE2
1.93E-83	1	SEC61A1
3.54E-83	1	ID1
4.37E-83	1	ZFAND3
9.07E-83	1	ENPP1
1.31E-82	1	ANKRD28
1.65E-82	1	DSEL
4.53E-82	1	HDLBP
4.82E-82	1	SYTL2
8.88E-82	1	MAGED1
1.58E-81	1	NECTIN2
3.29E-81	1	HLA-B
3.31E-81	1	CERCAM
5.57E-81	1	DOCK5
7.49E-81	1	CEMIP2
1.44E-80	1	STXBP5
4.40E-80	1	TTC3
7.23E-80	1	OTULINL
1.05E-79	1	BCAR1
1.45E-79	1	CKAP4
2.53E-79	1	SPON2
3.21E-79	1	FAM114A1
3.22E-79	1	ZNF521
4.86E-79	1	DKK3
1.14E-78	1	NEDD4
1.29E-78	1	SMCO4
1.72E-78	1	CPXM1
2.21E-78	1	GOPC
2.94E-78	1	PTBP3
5.77E-78	1	MYH10
6.03E-78	1	ABCC4
1.07E-77	1	RGS17

1.21E-77	1	OSBPL3
8.80E-77	1	TAFA5
9.31E-77	1	YAP1
1.68E-76	1	TNC
1.95E-76	1	TUT7
2.26E-76	1	DPY19L1
2.95E-76	1	PRRC1
3.59E-76	1	KDEL2
3.74E-76	1	CSGALNACT2
5.07E-76	1	ETS1
8.15E-76	1	ITGA4
9.33E-76	1	ITGA5
1.13E-75	1	SHC1
1.47E-75	1	CDH13
1.49E-75	1	TMEM208
1.63E-75	1	MOB1B
1.81E-75	1	PDXDC1
3.16E-75	1	RANBP17
3.68E-75	1	SH3BP4
3.87E-75	1	SEMA3A
5.43E-75	1	WWC2
6.63E-75	1	SH3RF3
1.85E-74	1	PDLIM2
2.45E-74	1	REEP3
2.75E-74	1	MYDGF
3.19E-74	1	C2orf27A
3.27E-74	1	PIIB
4.55E-74	1	FZD6
6.23E-74	1	VMP1
6.29E-74	1	TMEM167A
6.59E-74	1	ABL2
1.25E-73	1	KDM5B
1.58E-73	1	AFAP1
2.70E-73	1	SSH1
3.73E-73	1	EDNRA
4.70E-73	1	NHSL1
5.16E-73	1	PKM
1.84E-72	1	ISG15
4.19E-72	1	LRRC17
4.35E-72	1	BNC2
4.64E-72	1	EVA1B
5.01E-72	1	LAMB1
5.50E-72	1	AC083870.1

6.10E-72	1	DDAH1
6.90E-72	1	SGPL1
7.41E-72	1	TUBB3
1.01E-71	1	MSANTD3
1.03E-71	1	SMYD3
1.10E-71	1	TAOK3
1.26E-71	1	SERINC5
1.27E-71	1	ITGA11
1.60E-71	1	ZNF827
2.27E-71	1	ACTR3
2.39E-71	1	SEC23A
2.60E-71	1	NPAS2
2.76E-71	1	IGF2BP2
4.34E-71	1	IRS1
4.63E-71	1	BICC1
7.22E-71	1	HAPLN3
1.11E-70	1	MEIS3
1.16E-70	1	OLFML2B
1.67E-70	1	NCAM2
1.68E-70	1	B4GALT2
1.92E-70	1	FBLIM1
2.20E-70	1	ATP2C1
2.49E-70	1	SEMA5A
3.29E-70	1	IL32
3.65E-70	1	HOMER3
3.69E-70	1	METRN
5.55E-70	1	NRXN3
8.85E-70	1	GNAI1
9.00E-70	1	PLEKHO1
1.28E-69	1	MBOAT2
1.35E-69	1	FAT1
3.60E-69	1	PHTF2
4.07E-69	1	CLMP
4.97E-69	1	SRPK2
5.60E-69	1	NT5DC2
6.20E-69	1	TAP1
7.15E-69	1	CHORDC1
7.81E-69	1	TXNDC17
1.01E-68	1	DIO2-AS1
1.93E-68	1	SLC39A13
3.55E-68	1	ADGRA3
3.64E-68	1	ALDH18A1
1.07E-67	1	FMN1

1.30E-67	1	LRP12
2.48E-67	1	WDR27
6.86E-67	1	FRS2
8.38E-67	1	XAF1
1.04E-66	1	ITPRIP
1.16E-66	1	MIB1
1.56E-66	1	SH3PXD2B
1.57E-66	1	JPT1
1.81E-66	1	COLGALT1
2.62E-66	1	TNS3
3.82E-66	1	CLIP2
4.72E-66	1	PTTG1IP
5.58E-66	1	ARHGAP18
6.91E-66	1	SMARCB1
1.01E-65	1	OXSRI
1.06E-65	1	RSAD2
1.42E-65	1	CLEC11A
1.56E-65	1	CLIC4
4.70E-65	1	MSRB3
4.75E-65	1	SLC5A3
4.78E-65	1	FOXP1
5.62E-65	1	ZNF532
5.83E-65	1	RAB27A
8.75E-65	1	UBTD1
1.09E-64	1	NORAD
1.41E-64	1	SNX25
1.42E-64	1	SH3PXD2A
1.51E-64	1	ROBO2
1.57E-64	1	RASAL2
1.91E-64	1	ARFGAP3
1.92E-64	1	RGS4
2.09E-64	1	FKBP14
3.22E-64	1	C16orf87
3.62E-64	1	AVEN
5.91E-64	1	ADAMTS6
8.18E-64	1	PRKG1
1.64E-63	1	MCTP2
2.06E-63	1	SCARF2
5.94E-63	1	SMARCC1
6.06E-63	1	COTL1
2.24E-62	1	SPATS2
2.26E-62	1	IPMK
3.06E-62	1	UBE2Q2

3.40E-62	1	ODF2L
3.61E-62	1	PDLIM3
4.17E-62	1	STK17A
4.40E-62	1	NEAT1
6.14E-62	1	TLN2
6.45E-62	1	ACVR1
8.36E-62	1	SEC24D
9.91E-62	1	FMNL3
1.55E-61	1	PPP4R1
1.81E-61	1	KCNQ1OT1
1.89E-61	1	PELI1
1.99E-61	1	ABRACL
2.46E-61	1	STK10
3.30E-61	1	BCAT1
3.54E-61	1	RIN2
4.25E-61	1	USP32
4.53E-61	1	SGCD
6.15E-61	1	PRR5
7.07E-61	1	C17orf49
7.57E-61	1	SLC39A7
8.59E-61	1	SUPT3H
1.03E-60	1	CD2AP
1.18E-60	1	HTRA1
4.69E-60	1	ISLR
5.44E-60	1	RABAC1
6.43E-60	1	MMP2
6.64E-60	1	PSD3
9.95E-60	1	TMED9
1.16E-59	1	ARHGAP32
1.32E-59	1	CACNA2D3
2.25E-59	1	BAX
3.52E-59	1	ANGPTL2
3.69E-59	1	TSHZ3
3.82E-59	1	CYTOR
4.43E-59	1	HIVEP3
4.48E-59	1	NDUFC2
5.48E-59	1	GPX8
6.22E-59	1	PLIN3
6.34E-59	1	MAPK6
6.44E-59	1	LRRC59
1.32E-58	1	TIMP2
1.78E-58	1	PRRX2
1.99E-58	1	TBC1D23

2.06E-58	1	DPP4
2.13E-58	1	MIRLET7BHG
1.02E-57	1	MGAT5
1.05E-57	1	SND1
1.44E-57	1	GORASP2
1.53E-57	1	RCC2
1.71E-57	1	PMM2
1.92E-57	1	SMIM3
2.95E-57	1	ARHGAP31
3.46E-57	1	EVL
3.53E-57	1	ARFGAP1
3.83E-57	1	ARF4
3.95E-57	1	TDRP
7.47E-57	1	CASK
1.01E-56	1	GNB4
1.23E-56	1	COPA
1.26E-56	1	GOLGA3
1.37E-56	1	CTTNBP2NL
2.46E-56	1	TARSL2
2.94E-56	1	USPL1
5.35E-56	1	MAP3K4
5.82E-56	1	MARVELD1
6.04E-56	1	SQLE
6.57E-56	1	LRRC1
8.89E-56	1	PAPSS1
1.12E-55	1	ACTR2
2.28E-55	1	CEMIP
2.35E-55	1	LIMK2
2.91E-55	1	GNB1
3.23E-55	1	AC004160.1
3.40E-55	1	PPFIA2
3.51E-55	1	KIAA1211
3.79E-55	1	CHI3L1
4.17E-55	1	AP000331.1
6.19E-55	1	PDIA5
8.86E-55	1	MYO6
1.01E-54	1	MIR193BHG
1.01E-54	1	YWHAG
1.07E-54	1	LMCD1-AS1
1.56E-54	1	EIF4E2
1.74E-54	1	PHF20L1
1.96E-54	1	ATP6V0B
2.63E-54	1	KLF6

2.68E-54	1	IFI30
3.76E-54	1	ZNF609
8.67E-54	1	ITSN1
9.86E-54	1	UQCC2
1.08E-53	1	NEK7
1.27E-53	1	PLXNB2
1.54E-53	1	MDK
1.64E-53	1	SNX8
2.38E-53	1	SOAT1
3.00E-53	1	SEC24A
3.39E-53	1	RNF150
3.41E-53	1	TRPS1
3.91E-53	1	RAPGEF2
4.14E-53	1	AP2S1
4.29E-53	1	PGM3
4.65E-53	1	MYO9B
6.55E-53	1	SMAD1
6.69E-53	1	ERBIN
8.00E-53	1	TNFRSF19
1.19E-52	1	PRDX4
2.26E-52	1	UBA6
2.45E-52	1	TVP23C
5.33E-52	1	AAK1
5.63E-52	1	HEPH
7.12E-52	1	EIF4G3
7.89E-52	1	UHRF2
1.19E-51	1	CACNA1C
1.41E-51	1	CDK2AP1
1.58E-51	1	SPIRE1
3.85E-51	1	PAK2
3.87E-51	1	EFNB2
4.49E-51	1	PHC2
4.92E-51	1	CTSZ
7.00E-51	1	TBX3
8.40E-51	1	KIFAP3
9.72E-51	1	IGF1R
1.25E-50	1	MAPK8
1.29E-50	1	PSTPIP2
1.51E-50	1	EIF2AK4
2.05E-50	1	TMEM87B
4.71E-50	1	SPTY2D1
6.20E-50	1	ZDHHC20
6.24E-50	1	XPR1

6.76E-50	1	FNDC3B
7.00E-50	1	GOLGA2
9.81E-50	1	CMIP
1.88E-49	1	BMP2
1.88E-49	1	PDLIM5
1.94E-49	1	KIF5B
2.30E-49	1	TBC1D9
2.44E-49	1	LPGAT1
2.49E-49	1	CORO1C
2.55E-49	1	CPEB4
2.76E-49	1	PSME4
3.03E-49	1	CNIH3
3.20E-49	1	NBL1
3.41E-49	1	CRABP2
4.50E-49	1	TGFB1I1
4.52E-49	1	NIBAN2
7.51E-49	1	PLEC
7.69E-49	1	RAB1A
7.73E-49	1	PDXK
7.96E-49	1	AC017002.5
1.08E-48	1	ARHGAP28
1.08E-48	1	CMTM3
1.20E-48	1	MYO1E
1.51E-48	1	GALNT10
1.94E-48	1	DAPK3
3.81E-48	1	ADAR
4.33E-48	1	RARS
4.88E-48	1	PXDN
5.05E-48	1	ENO1
6.00E-48	1	ARNTL2
6.06E-48	1	PDE4D
6.16E-48	1	TXNDC5
7.10E-48	1	GPC1
7.27E-48	1	NANS
7.86E-48	1	RELB
1.04E-47	1	COPB2
1.30E-47	1	ITGA1
1.32E-47	1	TP53I13
1.47E-47	1	PRR16
1.55E-47	1	P3H3
2.83E-47	1	CLTC
2.99E-47	1	COL8A2
3.09E-47	1	PPP1R14B

4.62E-47	1	KIAA0930
5.28E-47	1	CNTN1
5.45E-47	1	WIPI1
6.16E-47	1	RASA2
8.10E-47	1	HIF1A
8.32E-47	1	ABHD17B
3.44E-46	1	GOLGA4
3.52E-46	1	IBTK
4.51E-46	1	STARD3NL
4.52E-46	1	PAPSS2
4.62E-46	1	KIF13A
6.48E-46	1	FKBP11
6.97E-46	1	RANBP9
1.09E-45	1	PACS1
1.10E-45	1	SYNCRIP
1.32E-45	1	YIF1A
1.38E-45	1	CDKL5
1.85E-45	1	PLK2
1.95E-45	1	ATP6AP1L
1.99E-45	1	HOXB2
2.00E-45	1	DYRK3
2.30E-45	1	GPR173
2.46E-45	1	SPCS3
3.30E-45	1	PTPA
3.51E-45	1	SRGAP2
4.68E-45	1	IL1R1
4.81E-45	1	OSBPL6
4.88E-45	1	TES
5.33E-45	1	CERS6
5.33E-45	1	ISOC2
6.08E-45	1	GBF1
6.47E-45	1	ATP6V1A
7.09E-45	1	VGLL3
7.45E-45	1	SGK1
9.68E-45	1	AFF4
1.15E-44	1	VEZT
1.17E-44	1	GOLIM4
1.18E-44	1	SH3GLB1
1.47E-44	1	IFFO2
1.64E-44	1	ATP13A3
1.79E-44	1	MAN2A1
2.55E-44	1	CLSTN2
2.72E-44	1	CBX3

4.72E-44	1	NBPF15
7.90E-44	1	YEATS2
1.15E-43	1	PLOD3
1.24E-43	1	PLEKHG1
1.42E-43	1	PPIC
2.26E-43	1	NUS1
3.09E-43	1	TCEAL9
3.09E-43	1	ARCN1
3.67E-43	1	TUBA1C
3.87E-43	1	DPYSL3
4.94E-43	1	TMEM30A
5.46E-43	1	MB21D2
5.60E-43	1	RAP1GDS1
8.68E-43	1	PERP
8.90E-43	1	PRKCA
1.09E-42	1	HAS2
1.29E-42	1	FKBP9
2.10E-42	1	STIP1
2.53E-42	1	FHOD3
2.90E-42	1	DAP
3.62E-42	1	TMED3
3.72E-42	1	TMSB10
4.01E-42	1	TDG
6.52E-42	1	FBXO32
6.96E-42	1	EVC
7.05E-42	1	BX322234.1
7.41E-42	1	P4HA2
1.47E-41	1	SMC6
1.88E-41	1	NPC1
2.42E-41	1	SLC39A6
2.93E-41	1	ENC1
3.32E-41	1	TPBG
4.01E-41	1	RASSF8
5.52E-41	1	COL16A1
5.64E-41	1	PLD1
5.84E-41	1	AP3B1
6.09E-41	1	ERN1
6.91E-41	1	USO1
9.07E-41	1	ZCCHC14
1.10E-40	1	SPTLC2
1.15E-40	1	GUCY1A2
1.45E-40	1	PHACTR1
1.71E-40	1	SLC39A10

1.73E-40	1	KDELR1
1.76E-40	1	MRC2
1.86E-40	1	LUM
2.74E-40	1	C1orf122
3.35E-40	1	SUCO
4.70E-40	1	CSNK1G1
6.80E-40	1	TLN1
7.31E-40	1	BMT2
8.44E-40	1	MAP4K5
8.91E-40	1	ADAM10
1.39E-39	1	CHSY1
1.43E-39	1	STAT1
1.98E-39	1	BST2
2.02E-39	1	DRAM1
2.49E-39	1	ZFAND2A
3.23E-39	1	TBCEL
3.25E-39	1	UBTD2
3.49E-39	1	VCAM1
3.82E-39	1	MSC-AS1
5.20E-39	1	FZD1
6.10E-39	1	SEC61G
6.12E-39	1	TMF1
7.30E-39	1	PLEKHA5
8.46E-39	1	BCAR3
1.15E-38	1	G2E3
1.22E-38	1	UBE2H
1.63E-38	1	TRAF3
1.84E-38	1	KLHL2
2.21E-38	1	MACF1
2.83E-38	1	PTPN12
3.54E-38	1	NAA50
3.80E-38	1	LRMDA
4.06E-38	1	TGFBR1
4.74E-38	1	FOXO1
4.80E-38	1	PRRC2C
5.23E-38	1	ATG5
5.60E-38	1	ARPC2
6.66E-38	1	BABAM2
7.27E-38	1	DESI2
7.39E-38	1	PDGFRB
1.08E-37	1	PTPRD
1.14E-37	1	MXD1
1.72E-37	1	SCD5

1.75E-37	1	AZIN1
2.14E-37	1	LPIN2
2.48E-37	1	TPI1
2.84E-37	1	GNPTAB
3.52E-37	1	NOX4
4.44E-37	1	MCU
4.70E-37	1	PTPRM
4.80E-37	1	CDC42BPA
5.19E-37	1	CAMSAP2
6.08E-37	1	CAPG
6.48E-37	1	IFI27
7.06E-37	1	SNAP23
7.54E-37	1	ARHGAP22
8.49E-37	1	ZBED1
8.90E-37	1	YES1
9.07E-37	1	MIR222HG
1.30E-36	1	KIAA0355
1.70E-36	1	TMTC2
1.73E-36	1	KDM2A
1.78E-36	1	DNM1
2.35E-36	1	QKI
2.41E-36	1	DLG1
2.67E-36	1	DOCK1
3.22E-36	1	OLFM2
3.69E-36	1	NCOA3
4.64E-36	1	CTNND1
5.64E-36	1	PPP2R3A
6.00E-36	1	SPON1
6.89E-36	1	ERO1A
7.92E-36	1	MCRIP1
1.16E-35	1	TM9SF3
1.69E-35	1	LRIG1
2.96E-35	1	MACROD2
4.24E-35	1	YTHDF3
4.27E-35	1	SMAD2
4.67E-35	1	TMEM117
5.05E-35	1	LRCH1
5.42E-35	1	SUSD6
6.70E-35	1	RARRES2
7.48E-35	1	PALM2-AKAP2
1.14E-34	1	RDX
1.33E-34	1	PHACTR4
1.53E-34	1	EFEMP2

1.53E-34	1	ABHD3
1.78E-34	1	COLEC12
1.94E-34	1	PTK2
2.08E-34	1	ZNF326
2.78E-34	1	MX1
3.51E-34	1	ATP11B
3.56E-34	1	MAST2
4.24E-34	1	RCN2
4.39E-34	1	SEC61B
4.92E-34	1	IL1RAP
5.44E-34	1	NBAS
8.26E-34	1	TPM1
1.29E-33	1	NRBF2
1.50E-33	1	SLAIN2
1.91E-33	1	RAB6A
2.60E-33	1	CUTA
3.99E-33	1	STX6
4.53E-33	1	VCL
7.16E-33	1	PRICKLE2
8.45E-33	1	PGAM1
9.76E-33	1	MYL12A
1.04E-32	1	BMPR1A
1.10E-32	1	DHRXS
1.32E-32	1	TLE4
1.37E-32	1	BAMBI
1.93E-32	1	PARP14
2.57E-32	1	GLI3
2.76E-32	1	DAB1
3.86E-32	1	PCNX1
3.96E-32	1	PICALM
3.96E-32	1	JMJD1C
4.21E-32	1	ITCH
4.40E-32	1	CNN3
4.98E-32	1	XPO1
5.11E-32	1	MIF
6.51E-32	1	MITF
7.21E-32	1	KATNBL1
8.01E-32	1	LCOR
8.37E-32	1	FAM171B
9.49E-32	1	FXR1
1.13E-31	1	TMEM41B
1.15E-31	1	STAM
1.17E-31	1	GLS

1.23E-31	1	PPP2R5E
1.38E-31	1	PCOLCE
1.47E-31	1	SLC44A1
1.66E-31	1	DCLK2
1.96E-31	1	PLA2R1
2.05E-31	1	SYAP1
2.10E-31	1	AMOTL1
2.38E-31	1	ATF7IP
2.40E-31	1	SCFD1
2.80E-31	1	PTPN1
4.12E-31	1	CACYBP
5.14E-31	1	RYBP
5.61E-31	1	PAFAH1B1
5.99E-31	1	HMGCS1
6.08E-31	1	ILK
6.77E-31	1	SETD5
8.16E-31	1	GSK3B
8.81E-31	1	ARHGDI1
1.01E-30	1	ZNF618
1.08E-30	1	RGS16
1.24E-30	1	RNF24
1.34E-30	1	RARB
1.58E-30	1	CSNK1G3
1.62E-30	1	MINDY2
1.66E-30	1	MARK3
1.70E-30	1	RAP1B
1.99E-30	1	RNF149
4.31E-30	1	ANKRD10
4.50E-30	1	GNA12
4.88E-30	1	MAPKAPK2
4.90E-30	1	NDEL1
6.51E-30	1	LRRFIP1
7.07E-30	1	RNF145
7.75E-30	1	COPZ2
8.55E-30	1	PDLIM7
1.04E-29	1	UBE2E1
1.06E-29	1	MYOF
1.27E-29	1	USP34
1.52E-29	1	MXRA8
1.77E-29	1	TMCC1
2.56E-29	1	BACH1
2.86E-29	1	LDLR
2.88E-29	1	HECA

3.13E-29	1	TMEM131
3.14E-29	1	UBR5
3.77E-29	1	ASPH
4.97E-29	1	GALNT1
5.21E-29	1	BICD1
5.31E-29	1	CFL1
6.77E-29	1	ISM1
8.83E-29	1	MTDH
1.62E-28	1	SLC16A1
2.37E-28	1	DIP2B
2.51E-28	1	TMEM165
3.41E-28	1	PDZRN3
4.48E-28	1	MLEC
6.45E-28	1	BAG3
1.11E-27	1	SRPX2
1.17E-27	1	PLXDC2
1.34E-27	1	CRY1
1.61E-27	1	LPP
1.79E-27	1	PEAK1
2.19E-27	1	ZSWIM6
2.36E-27	1	SMC4
2.70E-27	1	WNT5B
2.74E-27	1	RFX7
3.97E-27	1	STAG1
4.92E-27	1	ATP1B1
4.96E-27	1	IGFBP3
5.87E-27	1	MLLT3
7.02E-27	1	CCN1
8.60E-27	1	KLHL24
9.21E-27	1	MICU1
9.41E-27	1	ABCA1
9.71E-27	1	PGK1
1.40E-26	1	ZMYM4
1.47E-26	1	LAMA4
1.62E-26	1	DYRK1A
1.88E-26	1	OSBPL8
1.91E-26	1	TIAM2
2.15E-26	1	PRICKLE1
2.16E-26	1	PDE7B
2.28E-26	1	SSR2
2.77E-26	1	RIPK2
4.48E-26	1	RC3H1
7.72E-26	1	FRYL

8.60E-26	1	RGCC
1.18E-25	1	PPME1
1.46E-25	1	LINC00578
1.66E-25	1	FAM214A
1.72E-25	1	TBL1XR1
2.22E-25	1	MED27
3.03E-25	1	RHOC
3.14E-25	1	AFDN
5.78E-25	1	EVI5
7.45E-25	1	EZH2
7.89E-25	1	PAG1
9.14E-25	1	PCNX4
9.90E-25	1	VCP
1.12E-24	1	PRDM2
1.15E-24	1	SLC38A2
1.36E-24	1	MED13
1.41E-24	1	PPM1D
1.45E-24	1	TRA2A
1.66E-24	1	ATP2A2
1.73E-24	1	GOLGB1
2.32E-24	1	FDX1
2.37E-24	1	NUMB
3.52E-24	1	CEP170
4.31E-24	1	GNAQ
4.63E-24	1	RRAS2
4.96E-24	1	ASCC3
5.73E-24	1	GAPDH
5.74E-24	1	ARHGAP5
6.65E-24	1	NHSL2
1.15E-23	1	SERPINE1
1.47E-23	1	AL050309.1
1.78E-23	1	FERMT2
1.94E-23	1	ELOVL5
2.35E-23	1	RERE
4.98E-23	1	STK3
5.25E-23	1	PFKFB3
6.23E-23	1	MAP4K3
6.43E-23	1	RSRC1
6.67E-23	1	BAZ1A
1.04E-22	1	FBXO11
1.16E-22	1	TRANK1
3.79E-22	1	CDK13
4.08E-22	1	JMY

4.30E-22	1	IER5
8.35E-22	1	USP54
8.82E-22	1	EIF2AK3
1.16E-21	1	TPST1
2.05E-21	1	ZFPM2-AS1
3.23E-21	1	VPS13B
3.29E-21	1	SNTB1
4.21E-21	1	NFAT5
5.28E-21	1	SFMBT2
6.64E-21	1	TWSG1
1.19E-20	1	APCDD1
1.30E-20	1	ABI1
1.36E-20	1	STARD13
2.18E-20	1	FTO
2.39E-20	1	UBE2E2
2.51E-20	1	FOXN3
3.04E-20	1	ATRX
3.58E-20	1	PTBP2
3.59E-20	1	SCMH1
3.87E-20	1	ARID1B
9.02E-20	1	NAV1
9.17E-20	1	HIVEP2
1.01E-19	1	ADIPOR2
2.90E-19	1	DOCK4
2.91E-19	1	SBF2
7.20E-19	1	HLA-C
7.41E-19	1	UGCG
7.44E-19	1	FBXL7
1.07E-18	1	NAV3
1.73E-18	1	WARS
2.85E-18	1	AUTS2
3.40E-18	1	GIPC2
4.40E-18	1	CYP51A1
1.04E-17	1	RND3
2.63E-17	1	GAS7
2.68E-17	1	SMURF2
2.70E-17	1	JAM3
3.26E-17	1	TSPYL2
5.98E-17	1	PAPPA
1.03E-16	1	SIK3
1.17E-16	1	GSTO1
1.27E-16	1	RBP1
1.96E-16	1	ZNF407

7.80E-16	1	FNIP1
1.04E-15	1	CCDC85B
4.33E-15	1	RLF
8.68E-15	1	FLNB
1.06E-14	1	KDM6A
1.66E-14	1	ARHGAP24
6.28E-14	1	PAM
6.50E-14	1	XIST
2.67E-13	1	SVIL
5.08E-13	1	MRTFA
5.62E-13	1	TNFRSF21
5.91E-13	1	SORBS1
1.21E-12	1	SAT1
2.14E-12	1	SLC39A14
6.93E-12	1	PRSS23
6.98E-12	1	PHF21A
1.23E-11	1	BNIP3
2.18E-11	1	SFRP4
2.73E-11	1	IFI6
2.97E-11	1	MEIS2
3.18E-10	1	PLAT
5.26E-10	1	TUBA1A
7.23E-10	1	ADAM17
1.39E-09	1	IL1RAPL1
1.84E-09	1	FBXW7
1.90E-09	1	ACTG1
3.07E-09	1	PTGDS
6.38E-07	1	LSAMP
7.72E-07	1	TNFAIP3
8.05E-07	1	IFRD1
2.30E-05	1	SLC2A3
7.54E-05	1	ACTB
0.000172788	1	LTBP1
0.116703796	1	PBX3
1.88E-269	2	MYH11
7.60E-267	2	CDH6
5.61E-257	2	NOTCH3
7.83E-250	2	GPRC5C
2.79E-249	2	APOLD1
8.52E-248	2	PTP4A3
3.47E-246	2	RYR2
1.33E-241	2	ITGA7
6.03E-239	2	SLC38A11

2.45E-238	2	RGS5
1.72E-236	2	SLC7A2
4.14E-236	2	PARM1
2.40E-232	2	ADAMTS9
7.97E-228	2	DGKB
4.36E-223	2	CASQ2
1.51E-219	2	CTNNA3
1.91E-219	2	HEYL
1.58E-218	2	ATP1A2
7.79E-215	2	MYOCD
9.56E-214	2	PIP5K1B
3.23E-211	2	NRGN
2.03E-208	2	GPR20
5.39E-208	2	TBX2
3.47E-207	2	INPP4B
3.91E-207	2	RERGL
2.01E-201	2	NPNT
2.25E-201	2	WFDC1
1.45E-199	2	LAMA5
1.70E-199	2	COX4I2
1.32E-196	2	AVPR1A
4.68E-195	2	CSPG4
2.26E-192	2	TAGLN
4.26E-192	2	ACTA2
9.70E-192	2	NTRK3
5.49E-191	2	FOXC2
6.64E-189	2	NDUFA4L2
1.48E-187	2	LDB3
8.95E-185	2	TBX2-AS1
9.09E-185	2	TESC
1.44E-182	2	SORT1
6.11E-182	2	AKAP6
1.52E-180	2	NTRK2
1.89E-180	2	PDGFA
2.56E-180	2	MAP2
9.59E-179	2	SCN3A
5.35E-177	2	DMD
9.63E-177	2	LGI4
1.28E-175	2	ECRG4
1.83E-175	2	MYL9
1.08E-173	2	SORBS2
2.19E-173	2	CBFA2T3
3.53E-172	2	SOX6

7.99E-171	2	FAM162B
2.98E-167	2	SYNM
1.08E-166	2	HIGD1B
1.41E-165	2	KCNMB1
3.34E-165	2	SRL
1.40E-164	2	SERPINI1
6.24E-161	2	LMOD1
5.20E-160	2	CLMN
8.85E-160	2	CCDC3
2.26E-156	2	CARMN
3.52E-155	2	CSRP2
6.55E-153	2	HES4
8.38E-153	2	MRVI1
1.14E-152	2	MYLK
3.83E-152	2	PTMA
9.19E-152	2	IGFBP7
1.87E-148	2	RAPGEF5
1.99E-148	2	ADCY5
5.36E-147	2	ADAP2
2.75E-146	2	TPM2
1.17E-145	2	TBC1D1
7.23E-144	2	CACNA1H
8.68E-144	2	EGFLAM
4.16E-141	2	ADGRF5
7.46E-141	2	MEF2C
1.93E-140	2	GJC1
2.10E-138	2	ADAMTS9-AS2
2.20E-138	2	EFHD1
4.48E-138	2	FRY
1.52E-136	2	PPM1L
4.15E-136	2	KLHL23
4.14E-132	2	HRH2
8.70E-131	2	RCSD1
1.13E-130	2	MUSTN1
5.97E-129	2	TRPC6
9.21E-128	2	LINC01197
3.69E-126	2	CRIP2
3.84E-125	2	ISYNA1
2.05E-124	2	RNF152
7.61E-123	2	KCNE4
8.33E-123	2	SEPTIN4
1.54E-122	2	MYOM1
2.53E-122	2	KALRN

3.49E-122	2	LINC00924
3.70E-122	2	RCAN2
1.55E-121	2	FRZB
5.53E-121	2	NEURL1B
7.50E-119	2	ITGA8
1.75E-117	2	CALD1
5.63E-116	2	EBF2
3.12E-115	2	MTHFD2
4.29E-115	2	SUSD5
1.38E-113	2	SNCG
1.70E-113	2	CHCHD10
3.75E-112	2	C1QTNF1
3.24E-109	2	MAP3K7CL
4.18E-108	2	NFASC
9.67E-108	2	JPH2
1.70E-107	2	HEY2
3.37E-106	2	ACTG2
8.41E-106	2	LAMA3
7.88E-105	2	COL4A2
1.60E-104	2	FABP4
1.79E-104	2	MYL6
5.01E-104	2	ANO1
6.87E-104	2	CAV2
1.50E-103	2	RASGRP2
4.30E-103	2	LINC00702
4.38E-103	2	COL4A1
7.45E-103	2	RBPM2
2.08E-102	2	NRARP
2.63E-102	2	TPM1
4.21E-100	2	PDE3A
1.50E-99	2	KCNAB1
4.60E-96	2	CAV1
1.08E-95	2	EDNRA
1.77E-95	2	CNN1
6.24E-95	2	SGCA
7.44E-93	2	ID4
5.50E-92	2	GRID1
5.28E-91	2	EPS8
5.22E-90	2	DYNC1I1
1.08E-89	2	DSTN
3.96E-89	2	ADIRF
4.68E-89	2	KCNMA1
2.66E-88	2	DTNA

5.21E-87	2	SYNE2
5.83E-87	2	TMEM38B
2.08E-86	2	CRIP1
2.21E-86	2	ARHGEF17
1.21E-84	2	PPP1R12A
1.26E-83	2	TEX41
2.02E-83	2	DENND3
2.40E-81	2	ADCY3
3.27E-80	2	CSRP1
4.10E-80	2	SYNPO
4.56E-80	2	SPECC1
1.27E-78	2	PLCB4
4.50E-78	2	ARHGEF7
6.27E-78	2	LBH
2.38E-77	2	JAG1
1.92E-76	2	MERTK
2.25E-76	2	PPP1R12B
7.08E-76	2	COL18A1
2.20E-74	2	ANGPT2
5.59E-73	2	SLC22A3
1.18E-72	2	MAGI1
1.61E-72	2	PRKG1
2.02E-72	2	UBA2
2.39E-72	2	AKAP1
9.96E-72	2	ACTN4
1.61E-71	2	TTL7
2.79E-70	2	ACTB
3.82E-70	2	PLCE1
6.50E-70	2	IGFBP2
1.33E-69	2	NR2F2-AS1
2.63E-69	2	FLNA
1.12E-68	2	CALM2
1.82E-68	2	DAAM2
6.61E-68	2	MAP1B
1.96E-67	2	SNTA1
3.09E-67	2	SYNPO2
6.04E-67	2	EPAS1
1.89E-66	2	DMPK
4.44E-66	2	TNS1
3.99E-65	2	MOCS1
4.97E-65	2	HIPK2
8.63E-65	2	SEPTIN7
3.05E-63	2	PHLDA2

1.01E-61	2	LPP
1.04E-59	2	GUCY1B1
1.32E-59	2	PGM5
2.03E-59	2	DOCK8
2.95E-59	2	NR2F2
4.71E-59	2	PAWR
2.39E-58	2	CPM
2.99E-57	2	DBNDD2
8.91E-57	2	C11orf96
1.07E-56	2	MGLL
3.97E-56	2	ADAMTS4
4.51E-56	2	MARK1
5.75E-56	2	USP2
8.69E-56	2	ACTN1
2.23E-55	2	CAP2
2.29E-55	2	SH3BGRL
6.34E-55	2	ENPEP
6.84E-55	2	MSRB3
1.22E-54	2	RASAL2
2.13E-54	2	SPARCL1
1.78E-52	2	SEMA4B
2.16E-52	2	GUCY1A1
3.58E-52	2	CACNA1C
1.40E-51	2	RAB20
5.95E-50	2	MFGE8
6.63E-50	2	PTEN
1.83E-49	2	AOC3
4.67E-49	2	A2M
3.00E-48	2	ITGB1
1.02E-47	2	LINGO1
6.87E-47	2	LCLAT1
1.21E-46	2	MYH9
1.70E-46	2	RBPMS
4.56E-46	2	MPRIIP
7.76E-46	2	TSC22D1
1.94E-45	2	NUDT4
6.26E-45	2	RNF180
3.03E-44	2	KIAA0040
2.12E-43	2	MALAT1
3.59E-43	2	SOX5
5.68E-42	2	ARHGAP44
2.09E-41	2	GALNT18
1.55E-40	2	FRMD4A

1.79E-40	2	SMTN
4.57E-40	2	CAVIN3
5.25E-40	2	RASL11A
9.62E-40	2	NCKAP5
1.03E-39	2	AC012409.2
1.26E-39	2	TLN1
1.38E-39	2	NES
3.68E-39	2	PDGFRB
5.34E-39	2	ATP1B3
1.38E-38	2	PTMS
2.90E-38	2	VPS13D
3.94E-38	2	SELENOW
6.15E-38	2	EHBP1L1
7.26E-38	2	ARHGDIB
9.05E-38	2	CCDC107
2.91E-37	2	COX7A2
7.99E-37	2	COL4A5
1.38E-36	2	MGST3
1.56E-36	2	GNAS
1.67E-36	2	YBX1
2.39E-36	2	GRIP2
3.35E-36	2	HIP1
3.54E-36	2	FADS3
5.93E-36	2	LDLRAD3
9.14E-36	2	PDE5A
4.14E-35	2	ECE1
6.10E-35	2	NOL3
6.41E-35	2	FBLIM1
7.18E-35	2	HMGB1
1.14E-34	2	DGKH
2.08E-34	2	LRRFIP1
3.05E-34	2	DACT3
6.85E-34	2	ANGPT1
1.58E-33	2	WTIP
1.77E-33	2	EHD2
1.80E-33	2	ADAMTS1
3.98E-33	2	PFN1
3.54E-32	2	ROCK1
4.09E-32	2	ARPC1A
5.77E-32	2	FBXO32
8.26E-32	2	MAPRE2
1.99E-31	2	ZFH3
2.75E-31	2	RAMP1

4.21E-31	2	ADCY6
4.27E-31	2	COX5B
9.86E-31	2	UQCRB
1.11E-30	2	UTRN
1.12E-30	2	SYNGR2
1.21E-30	2	COX6A1
1.31E-29	2	SLC25A4
1.38E-29	2	MAP3K20
3.67E-29	2	NDRG2
4.37E-29	2	ZBTB7C
5.99E-29	2	NBEAL1
8.70E-29	2	ARHGAP42
4.44E-28	2	CSRNP3
6.77E-28	2	CRIM1
9.20E-28	2	NCK2
9.77E-28	2	INPP5A
1.43E-27	2	B3GNT2
2.46E-27	2	MAML3
5.51E-27	2	COX7B
1.22E-26	2	MSN
1.35E-26	2	CAMK2G
1.51E-26	2	TNS3
1.67E-26	2	CFL1
1.81E-26	2	FCHSD2
2.72E-26	2	PGF
2.82E-26	2	BCL6
3.17E-26	2	MOB2
4.42E-26	2	SLC44A2
4.64E-26	2	XKR6
5.34E-26	2	A1BG
6.86E-26	2	ITPK1
1.45E-25	2	CACNB2
2.19E-25	2	ARHGAP17
2.88E-25	2	RASD1
4.01E-25	2	CRTC3
8.32E-25	2	ATP8B1
1.48E-24	2	TGFB1I1
1.50E-24	2	PDLIM5
1.60E-24	2	H3F3A
4.05E-24	2	OAZ2
4.48E-24	2	HNRNPA3
4.89E-24	2	LRRC32
6.24E-24	2	ROCK2

7.50E-24	2	SLC35F1
7.94E-24	2	IFITM2
1.06E-23	2	MIR29B2CHG
1.22E-23	2	ETS2
1.68E-23	2	CYCS
1.91E-23	2	NEXN
2.27E-23	2	SYTL2
3.36E-23	2	TOB1
3.47E-23	2	CDC42EP4
3.77E-23	2	PICALM
5.36E-23	2	SMIM12
6.42E-23	2	WDR1
8.66E-23	2	COBLL1
5.77E-22	2	PLS3
7.06E-22	2	RASL12
8.12E-22	2	ARHGAP6
9.25E-22	2	MEF2D
1.04E-21	2	SKP1
1.25E-21	2	TPM4
1.31E-21	2	COX8A
1.33E-21	2	KLHL29
1.53E-21	2	ATP5MC2
2.99E-21	2	NIBAN1
3.99E-21	2	SH3RF3
6.25E-21	2	GAPDH
7.06E-21	2	FOXC1
1.63E-20	2	PPIA
1.67E-20	2	S1PR3
1.70E-20	2	HES1
2.45E-20	2	TGFBI
3.07E-20	2	EPN2
3.83E-20	2	SMARCD3
4.57E-20	2	PPP1R12C
5.53E-20	2	UQCRH
7.99E-20	2	ZNF703
9.68E-20	2	TACC2
1.03E-19	2	B2M
1.63E-19	2	FABP5
2.65E-19	2	PALM2-AKAP2
2.90E-19	2	ATP2B4
6.37E-19	2	NDUFA4
1.30E-18	2	NDUFB10
1.33E-18	2	ODC1

3.13E-18	2	SMIM10
4.25E-18	2	SMOC2
4.31E-18	2	PLXND1
5.82E-18	2	SNRK
6.26E-18	2	ENAH
9.46E-18	2	ATP5F1B
2.20E-17	2	CDKN1A
2.60E-17	2	RNF150
3.42E-17	2	OLFML2A
5.14E-17	2	NHS
5.67E-17	2	EOGT
7.73E-17	2	TRAF5
8.52E-17	2	PPP1CB
9.02E-17	2	HSDL2
1.26E-16	2	FAM241A
1.33E-16	2	CHCHD2
1.47E-16	2	NDUFA7
1.66E-16	2	SMAP2
2.08E-16	2	CALM1
2.24E-16	2	GUCY1A2
2.64E-16	2	KTN1
3.93E-16	2	LDHB
4.57E-16	2	ARPC5
5.13E-16	2	CHURC1
5.23E-16	2	CAMTA1
5.73E-16	2	LGALSL
6.87E-16	2	MYO1B
8.64E-16	2	NDUFB7
9.75E-16	2	NDUFS2
1.71E-15	2	STOM
1.95E-15	2	PDCL3
2.13E-15	2	ADGRE5
2.18E-15	2	ITPR1
2.74E-15	2	NDUFB8
2.79E-15	2	ITGA1
3.69E-15	2	HDAC9
3.82E-15	2	VASP
4.67E-15	2	SLC25A6
5.50E-15	2	YBX3
5.54E-15	2	LBR
5.55E-15	2	VCL
7.90E-15	2	COX7A1
9.99E-15	2	SBDS

1.12E-14	2	FAM13C
1.32E-14	2	ETS1
1.37E-14	2	ANP32B
1.54E-14	2	PKIG
1.56E-14	2	CPE
1.67E-14	2	RABGAP1
2.40E-14	2	RSU1
2.49E-14	2	SOX13
4.69E-14	2	PPP2R5A
5.12E-14	2	BCL2
5.94E-14	2	COX6C
7.17E-14	2	AC083870.1
7.71E-14	2	TOB2
7.78E-14	2	RHOB
8.50E-14	2	INF2
1.07E-13	2	GPATCH4
1.11E-13	2	PLEKHO1
1.33E-13	2	ATP5MD
1.42E-13	2	TMSB4X
1.46E-13	2	COX17
1.48E-13	2	SNHG15
1.64E-13	2	BTG1
1.68E-13	2	EPST11
1.70E-13	2	ATP5MG
1.88E-13	2	CBX7
1.99E-13	2	ZBTB38
2.12E-13	2	GADD45B
2.35E-13	2	CRYAB
2.65E-13	2	ATP5F1D
2.99E-13	2	PFDN5
3.01E-13	2	ZNRF2
3.57E-13	2	PACSIN2
5.51E-13	2	ATP10A
8.51E-13	2	DOCK10
1.27E-12	2	RERG
1.35E-12	2	CREM
1.46E-12	2	PDE1A
1.52E-12	2	ARID5A
2.14E-12	2	UQCR11
2.39E-12	2	PITPNC1
2.89E-12	2	ACTR3
3.18E-12	2	FKBP5
3.26E-12	2	SELENOM

3.39E-12	2	ARHGAP15
3.71E-12	2	SLCO3A1
4.82E-12	2	ANXA6
5.26E-12	2	FILIP1L
5.41E-12	2	LARGE1
5.71E-12	2	HLA-F
5.98E-12	2	HNRNPA1
7.52E-12	2	DGKD
8.60E-12	2	ARHGEF25
8.93E-12	2	FGD4
1.02E-11	2	CKB
1.07E-11	2	RRAD
1.70E-11	2	CD151
1.80E-11	2	ARPC2
1.84E-11	2	SGIP1
2.03E-11	2	L3MBTL4
2.33E-11	2	BHLHE40
2.54E-11	2	NACC2
2.68E-11	2	HOPX
2.74E-11	2	TACC1
3.25E-11	2	MAP7D3
4.02E-11	2	COX14
4.07E-11	2	ARHGAP29
4.63E-11	2	CAP1
5.28E-11	2	SLC25A3
5.59E-11	2	PTK2
5.91E-11	2	IL6R
7.66E-11	2	POMP
9.43E-11	2	AC068888.1
1.10E-10	2	SH3RF1
1.26E-10	2	CCND1
1.36E-10	2	CDS2
1.51E-10	2	MAT2A
1.53E-10	2	ILK
1.62E-10	2	GLRX5
1.79E-10	2	AFF3
2.54E-10	2	GAMT
2.76E-10	2	MRTFB
3.09E-10	2	RRAS
4.45E-10	2	SORBS1
5.33E-10	2	KANK2
5.87E-10	2	AC025280.3
6.24E-10	2	FILIP1

8.12E-10	2	FOXK2
1.13E-09	2	FAU
1.33E-09	2	CD59
1.51E-09	2	TMEM131L
1.86E-09	2	SNRPB
2.33E-09	2	ENDOD1
2.35E-09	2	NT5DC2
2.47E-09	2	CERS6
2.64E-09	2	MYO1D
3.44E-09	2	PRMT9
3.83E-09	2	SYPL1
4.22E-09	2	MKNK2
5.06E-09	2	ATP5PF
5.51E-09	2	BCAS3
7.11E-09	2	CDH13
7.15E-09	2	SLC25A5
8.14E-09	2	SSBP2
9.16E-09	2	RGS16
1.15E-08	2	PPFIA2
1.16E-08	2	CSDE1
1.25E-08	2	PMEPA1
1.32E-08	2	MRPL33
1.57E-08	2	NR4A3
1.75E-08	2	B3GALNT2
1.92E-08	2	TAX1BP1
2.05E-08	2	SLC25A25
2.65E-08	2	BST2
2.78E-08	2	TLE1
2.87E-08	2	MICU3
4.01E-08	2	TCIM
4.37E-08	2	TNC
4.71E-08	2	CSNK1A1
4.84E-08	2	RASSF3
5.45E-08	2	AOPEP
6.12E-08	2	STK38L
7.48E-08	2	PCSK7
1.12E-07	2	CTBP2
1.25E-07	2	PDLIM7
1.37E-07	2	PGM2
1.45E-07	2	GUK1
1.68E-07	2	NDUFB4
1.69E-07	2	PIP4K2A
1.73E-07	2	TGFB1

3.11E-07	2	ANAPC16
3.16E-07	2	FARP1
3.99E-07	2	SRSF3
4.85E-07	2	NRP1
4.85E-07	2	VIM
5.05E-07	2	LIMS2
5.18E-07	2	CPEB4
5.32E-07	2	POR
5.79E-07	2	NDUFS6
5.97E-07	2	NMD3
6.85E-07	2	CHSY1
8.32E-07	2	GPCPD1
9.64E-07	2	RELL1
1.02E-06	2	TRAK1
1.10E-06	2	ABHD2
1.22E-06	2	LURAP1L
1.34E-06	2	ZNF331
1.42E-06	2	BGN
1.43E-06	2	TBL1X
1.47E-06	2	SSBP3
1.51E-06	2	PLCL1
1.77E-06	2	CBX6
2.24E-06	2	TMEM47
2.31E-06	2	MTUS1
2.43E-06	2	MXI1
2.56E-06	2	TBCA
3.07E-06	2	COX4I1
3.51E-06	2	PHLDA1
4.04E-06	2	ZNF141
4.17E-06	2	ISG15
4.30E-06	2	EIF1AY
4.39E-06	2	HIF1A
4.74E-06	2	EIF2S3
4.89E-06	2	UBL5
5.28E-06	2	SUN1
5.59E-06	2	NDUFA13
5.66E-06	2	AXL
5.82E-06	2	CAVIN1
7.75E-06	2	COX6B1
8.01E-06	2	HOXB-AS1
1.00E-05	2	MYLIP
1.29E-05	2	HINT1
1.38E-05	2	IK

1.39E-05	2	KLF9
1.47E-05	2	CBL
1.73E-05	2	SLC39A11
1.76E-05	2	PCGF5
1.90E-05	2	ZEB2
2.07E-05	2	OPA3
2.15E-05	2	ADGRB3
2.37E-05	2	KIF1C
2.57E-05	2	NDUFV2
2.64E-05	2	IER5L
2.66E-05	2	NET1
2.69E-05	2	SET
2.71E-05	2	NDUFS5
3.19E-05	2	CYSTM1
3.35E-05	2	UBE2D2
3.92E-05	2	CD9
4.03E-05	2	H3F3B
4.60E-05	2	CPT1A
4.60E-05	2	CDC42
4.69E-05	2	RAB13
5.03E-05	2	NDUFB2
5.40E-05	2	APBB2
5.69E-05	2	TJP1
6.05E-05	2	NCL
6.60E-05	2	SPEN
7.18E-05	2	CSNK1E
7.86E-05	2	KIAA0232
8.70E-05	2	YWHAZ
9.25E-05	2	COX7C
0.000103381	2	CHMP4A
0.000113676	2	NDUFA12
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0.000147313	2	DLEU2
0.000154168	2	EIF4A1
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0.000197409	2	PAG1
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0.000232174	2	PCED1B
0.000252649	2	ATP2A2
0.000306269	2	NDUFA1
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0.000323638	2	ETV6

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0.000747147	2	CABIN1
0.000818963	2	MYO1C
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0.000901442	2	CRISPLD2
0.000934451	2	MRPL32
0.001131447	2	UQCRC1
0.001292336	2	MICOS10
0.001308813	2	CCT3
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0.001342792	2	HIST1H4C
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0.001735858	2	ABTB1
0.001743563	2	OSBPL1A
0.001909389	2	EXOC2
0.001965375	2	COX20
0.002151499	2	TOMM20
0.00248751	2	ADCY9
0.002494857	2	SUSD6
0.002994252	2	NDUFA6
0.003092918	2	UBXN1
0.003116859	2	DBI
0.00336966	2	IDH2
0.0034004	2	MYO1E
0.003693522	2	PSMA7
0.003714643	2	C5orf24
0.004047699	2	PABPC1
0.004146748	2	RASSF1
0.004645557	2	SLMAP
0.004866797	2	EHD1
0.005634047	2	CH25H
0.005723318	2	INAFM1
0.005820663	2	SLC7A5

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0.007442845	2	STK39
0.007562359	2	NDUFA2
0.007779687	2	C20orf27
0.008029747	2	EIF5B
0.009236096	2	HABP4
0.00934323	2	ARHGEF10L
0.00940282	2	PHLDB2
0.009938574	2	EVA1C
0.01208697	2	PDCD10
0.0132248	2	MOB3B
0.014976627	2	DYNLT1
0.015217005	2	OLA1
0.016598294	2	UBE2N
0.017127362	2	SEPTIN9
0.01809238	2	NUTF2
0.019902438	2	FKBP4
0.020211669	2	ATP5ME
0.020431967	2	VDAC2
0.020751273	2	ATP5F1E
0.020976317	2	BCL9L
0.0211694	2	PPDPF
0.022283176	2	HAPLN3
0.024986094	2	RHOQ
0.028529812	2	ARHGAP1
0.028771896	2	ZBTB16
0.02914122	2	ARHGAP26
0.03172918	2	C7orf50
0.031893985	2	TMEM108
0.034809979	2	NCALD
0.035994034	2	H2AFJ
0.037339409	2	HNRNPM
0.043674908	2	DYNLT3
0.051365276	2	PTPRK
0.053870175	2	NME4
0.055645596	2	MICOS13
0.057749849	2	PCBP1
0.05843369	2	NDUFAF4
0.061403253	2	UQCRQ
0.071947325	2	HMG2
0.074727213	2	ATP5MC3
0.075334632	2	RWDD1

0.081715089	2	EGFL6
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0.089642171	2	SERPINB6
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0.093237189	2	CCNH
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0.100550563	2	NDUFA5
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0.115777929	2	SRSF5
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0.144455713	2	SRGN
0.145025577	2	ARHGEF9
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0.154226399	2	KIRREL1
0.158848279	2	GADD45A
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0.187915886	2	EMD
0.192590721	2	COX5A
0.19990409	2	ARPC3
0.201426001	2	SEM1
0.207574956	2	HLA-DRA
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0.222678721	2	CCDC102B
0.285279059	2	H2AFZ
0.294619415	2	MIF
0.315356216	2	CYC1
0.325428215	2	CDKN1B
0.329967476	2	RAD23A
0.348744737	2	TOX2
0.362410628	2	NDUFB9
0.43094549	2	RAP2A
0.515899762	2	TNS2
0.561733756	2	CCT8
0.601396505	2	CREB3L2
0.673880006	2	NAP1L1
0.702238478	2	ESYT2

0.70803812	2	FAM50A
0.724376759	2	PSMD4
0.772263312	2	VAMP2
0.79717869	2	ATP5F1A
0.874656203	2	ABCA5
0.917884441	2	NAV2
0.977719893	2	ATP5IF1
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1	2	IFITM3
1	2	KIF5B
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1	2	IQCJ-SCHIP1
1	2	ATPAF1
1	2	HNRNPH3
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1	2	NDUFB1
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1	2	SIVA1
1	2	XRCC5
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1	2	ARHGAP10
1	2	PDK4
1	2	AP2M1
1	2	ACTR2
1	2	CALM3
1	2	NTN4
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1	2	BCAP29
1	2	CAPZA2
1	2	MGAT5
1	2	NFIL3
1	2	SH3KBP1
1	2	PA2G4
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1	2	CTDSPL
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1	2	MIDN
1	2	COPS6
1	2	BANF1

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1	2	SMG7
1	2	PSMB6
1	2	TIPARP
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1	2	GPHN
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1	2	METRN
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1	2	UBE2W
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1	2	CYTOR

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1	2	RBM3
1	2	PXDN
1	2	FRYL
1	2	UBR1
1	2	NAA10
1	2	SCLT1
1	2	PRR16
1	2	DDX21
1	2	IMMP2L
1	2	NR1H2
1	2	SLC20A2
1	2	MRGPRF
1	2	UGCG
1	2	CDC73
1	2	PSMC3
1	2	POLR2I
1	2	CCDC124
1	2	C1orf54
1	2	PLEC
1	2	HIST1H1C
1	2	MAGED2
1	2	PDE8A
1	2	VDAC1
1	2	PSMB3
1	2	MLF2
1	2	PVT1
1	2	SPECC1L
1	2	ASPN
1	2	MIR4435-2HG
1	2	PRXL2C
1	2	ARGLU1
1	2	SRSF7
1	2	PGAP1
1	2	RB1

1	2	ZBTB10
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1	2	PRXL2A
1	2	CDC5L
1	2	RHOC
1	2	CEP85L
1	2	MDM4
1	2	NME2
1	2	DDX6
1	2	ID1
1	2	ILF3-DT
1.21E-125	3	IGFBP6
1.63E-125	3	PLAC9
3.28E-118	3	DCN
5.68E-118	3	FBLN1
1.08E-116	3	ITM2A
1.99E-115	3	SERPING1
4.03E-114	3	SERPINF1
1.04E-112	3	CD81
3.69E-112	3	PI16
1.85E-109	3	CD34
3.00E-109	3	CLU
2.57E-108	3	CFD
5.03E-106	3	ITM2B
8.71E-103	3	PCOLCE2
2.91E-102	3	MFAP5
9.27E-102	3	TNXB
1.23E-101	3	MFAP4
1.13E-95	3	OGN
4.90E-94	3	EFEMP1
5.12E-94	3	LTBP4
7.31E-93	3	CLEC3B
5.44E-90	3	MGP
5.25E-89	3	FCGRT
1.05E-88	3	PLTP
2.13E-88	3	S100A10
8.03E-88	3	MGST1
3.02E-85	3	CADM3
1.10E-83	3	C1S
2.76E-83	3	PSAP
2.99E-81	3	CILP
5.97E-81	3	LSP1
6.46E-81	3	FBLN2

2.50E-80	3	SOD3
4.58E-80	3	PRELP
1.50E-79	3	C1QTNF3
7.95E-79	3	LGALS3BP
1.31E-78	3	SERPINA3
4.91E-78	3	SCARA5
1.10E-77	3	RNASE4
2.33E-77	3	ANXA1
3.35E-73	3	ANXA2
2.21E-72	3	SLPI
4.99E-72	3	C3
1.05E-70	3	CXCL12
1.12E-70	3	CCDC80
2.19E-70	3	PMP22
1.17E-69	3	PODN
3.08E-69	3	OLFML3
3.45E-69	3	LAPTM4A
1.14E-68	3	FXYP1
1.53E-67	3	DDAH2
1.57E-67	3	OMD
3.12E-67	3	PHGDH
5.78E-66	3	CCN5
8.66E-66	3	NPC2
9.14E-66	3	GPNMB
1.15E-65	3	CHRDL1
6.73E-65	3	SELENOP
4.84E-64	3	ADH1B
2.08E-62	3	PLA2G2A
1.08E-61	3	OAF
1.66E-59	3	RAMP2
2.31E-59	3	P2RX2
2.38E-59	3	TIMP1
7.05E-59	3	TXNIP
2.50E-58	3	S100A13
1.12E-57	3	DPT
2.35E-57	3	LGALS3
3.69E-57	3	CTSF
6.21E-57	3	KLF4
2.09E-56	3	C17orf58
3.18E-56	3	VSIR
5.17E-56	3	RNH1
7.63E-56	3	CD99
2.03E-55	3	PLBD1

1.27E-54	3	PTGIS
1.29E-54	3	SCPEP1
1.52E-53	3	EPHX1
2.17E-53	3	PTGES
4.36E-53	3	GPX3
5.42E-53	3	GPX4
5.83E-53	3	TMEM59
6.20E-52	3	ZFP36L2
9.16E-52	3	AKR1C1
5.56E-51	3	ALDH2
6.72E-51	3	ANXA4
1.90E-50	3	CYBRD1
3.97E-50	3	NPDC1
1.66E-49	3	ALDH1A1
3.10E-49	3	FEZ1
5.08E-49	3	CPVL
6.62E-49	3	ADAMTSL4
7.65E-49	3	DUSP1
1.24E-48	3	ACKR3
1.77E-48	3	ARL6IP5
1.42E-47	3	NPR1
1.81E-47	3	SRPX
1.94E-47	3	LRRN4CL
2.79E-47	3	AKR1C2
2.81E-47	3	LINC01133
3.06E-47	3	SEMA3C
4.03E-47	3	PLD3
4.67E-47	3	CYP4B1
7.35E-47	3	S100A6
1.00E-46	3	HIGD1A
1.35E-46	3	F10
6.25E-46	3	REXO2
1.08E-45	3	PRDX1
2.49E-45	3	CD9
6.99E-45	3	FHL1
7.37E-45	3	MYOC
2.21E-44	3	KLF2
2.32E-44	3	SFRP2
3.16E-44	3	ZNF385A
7.03E-44	3	PIGT
7.95E-44	3	EEF1A1
1.40E-43	3	NENF
1.57E-43	3	ABHD14A

1.93E-43	3	TMBIM4
6.76E-43	3	UAP1
1.18E-42	3	EMP3
1.44E-42	3	VAT1
1.45E-42	3	NUPR1
2.22E-42	3	EIF1
5.33E-42	3	AKR1C3
7.10E-42	3	GNG11
8.10E-42	3	TSPAN4
1.41E-41	3	SMIM14
1.84E-41	3	TAGLN2
2.82E-41	3	GRN
3.93E-41	3	GSTM5
5.37E-41	3	S100A4
1.45E-40	3	DBN1
2.49E-40	3	BST1
3.43E-40	3	SFRP1
1.03E-39	3	ABI3BP
1.52E-39	3	SH3BGRL3
1.86E-39	3	ATRAID
2.04E-39	3	CTSH
2.23E-39	3	ELN
3.80E-39	3	PROCR
4.00E-39	3	CYP1B1
5.61E-39	3	GYPE
6.86E-39	3	CYB5A
1.55E-38	3	TMEM109
2.32E-38	3	CTSD
1.38E-37	3	TPPP3
1.68E-37	3	CPQ
3.05E-37	3	IL18
9.23E-37	3	IFIT1
1.78E-36	3	ABLIM1
2.48E-36	3	OSR1
6.53E-36	3	ITGBL1
1.32E-35	3	TRIOBP
2.21E-35	3	TIMP3
2.63E-35	3	ABCA8
4.36E-35	3	PDGFRL
1.38E-34	3	LINC02802
1.85E-34	3	LTBP3
2.17E-34	3	TSC22D3
3.75E-34	3	SEMA3B

4.55E-34	3	TGFBR3
2.26E-33	3	BTF3
4.16E-33	3	HSD3B7
4.76E-33	3	VEGFD
4.82E-33	3	FAIM2
1.91E-32	3	CD63
2.54E-32	3	FGL2
2.62E-32	3	VEGFB
5.64E-32	3	SERPINE2
8.02E-32	3	CREG1
9.85E-32	3	SSC5D
1.08E-31	3	LRP1
1.51E-31	3	GSTM3
1.72E-31	3	DHRS3
2.07E-31	3	SGCG
2.54E-31	3	BLVRB
4.25E-31	3	OS9
5.50E-31	3	CFH
6.07E-31	3	LRPAP1
7.75E-31	3	GABARAPL2
8.56E-31	3	BDH2
1.03E-30	3	CSTB
1.79E-30	3	PALM
1.81E-30	3	ESD
2.01E-30	3	TMEM176B
2.07E-30	3	CD248
2.33E-30	3	GSTP1
3.24E-30	3	RARRES1
1.17E-29	3	FKBP8
1.60E-29	3	ROBO3
1.65E-29	3	MATN2
3.24E-29	3	PLAAT4
5.15E-29	3	BMP4
8.73E-29	3	CDKN2C
9.60E-29	3	ECM1
1.02E-28	3	CFB
1.08E-28	3	LAMP1
1.27E-28	3	TMEM35B
1.32E-28	3	CD55
1.64E-28	3	OSR2
1.99E-28	3	FTL
2.45E-28	3	QSOX1
2.46E-28	3	PEBP1

3.81E-28	3	TOMM7
7.13E-28	3	MXRA8
2.00E-27	3	HLA-E
2.51E-27	3	ANG
3.49E-27	3	SGCE
3.95E-27	3	TCF21
5.08E-27	3	SSPN
6.57E-27	3	TFPI
6.64E-27	3	CYP27A1
7.17E-27	3	SDCBP
7.35E-27	3	IGFBP4
9.16E-27	3	HSD11B1
1.18E-26	3	SLC29A1
2.26E-26	3	ADI1
2.67E-26	3	ADD3
3.62E-26	3	REX1BD
4.78E-26	3	CBR3
7.08E-26	3	COL14A1
7.53E-26	3	GAS1
8.26E-26	3	SOD1
9.05E-26	3	HEXB
9.45E-26	3	SH3BP5
9.75E-26	3	RTN4
1.35E-25	3	ADAM33
1.45E-25	3	PLP2
1.77E-25	3	FKBP1A
1.93E-25	3	LEPR
2.35E-25	3	CLTB
2.59E-25	3	EID1
3.13E-25	3	RACK1
3.82E-25	3	CNBP
4.18E-25	3	GALNT15
4.95E-25	3	ABCA6
5.40E-25	3	CALHM2
5.81E-25	3	BCHE
5.92E-25	3	LRP10
6.09E-25	3	WIF1
6.82E-25	3	NOP53
1.23E-24	3	AOX1
1.81E-24	3	NOVA1
3.49E-24	3	SELENBP1
3.54E-24	3	LY6E
4.35E-24	3	TNFSF10

4.45E-24	3	ANXA5
4.54E-24	3	TNFSF12
4.81E-24	3	PCOLCE
7.99E-24	3	PRNP
1.10E-23	3	MYL12B
1.17E-23	3	OAZ1
1.42E-23	3	CIRBP
1.51E-23	3	IL17D
1.54E-23	3	CCDC51
1.57E-23	3	VKORC1
2.41E-23	3	TMEM106C
3.53E-23	3	TRIP10
8.04E-23	3	ADH5
8.75E-23	3	METRNL
8.93E-23	3	LUM
2.44E-22	3	UCHL1
2.65E-22	3	CITED2
3.58E-22	3	CD14
4.66E-22	3	GUSB
6.33E-22	3	SRI
7.52E-22	3	MAPK3
9.12E-22	3	FNDC5
1.25E-21	3	EIF3F
1.37E-21	3	CREB5
1.55E-21	3	CD70
1.59E-21	3	VIT
1.70E-21	3	METTL7A
1.81E-21	3	OLFML1
2.06E-21	3	TMEM176A
2.40E-21	3	ACKR4
3.61E-21	3	SULT1A1
4.13E-21	3	HTRA3
5.15E-21	3	FIBIN
6.55E-21	3	GATD3B
7.34E-21	3	COL6A2
7.43E-21	3	PLEKHF1
8.79E-21	3	IGSF8
1.08E-20	3	TXN
1.29E-20	3	SMDT1
1.58E-20	3	CRYL1
1.89E-20	3	RTN3
3.21E-20	3	CLIC3
3.38E-20	3	MYC

3.74E-20	3	TUBA1B
4.56E-20	3	GABARAP
4.66E-20	3	TMEM98
6.12E-20	3	IGF1
1.68E-19	3	DDIT4
1.81E-19	3	MEDAG
1.84E-19	3	PRCP
1.91E-19	3	MTCH1
2.28E-19	3	MMP23B
4.43E-19	3	PAMR1
4.63E-19	3	FSTL1
4.82E-19	3	LMAN2
5.07E-19	3	ANKRD35
7.56E-19	3	CPE
7.66E-19	3	THYN1
7.90E-19	3	SVBP
8.01E-19	3	EIF3E
8.49E-19	3	ERP29
1.32E-18	3	CKS1B
1.71E-18	3	GLUL
3.22E-18	3	SHISA3
5.77E-18	3	VAMP5
6.02E-18	3	TMSB4X
1.13E-17	3	BIN1
1.15E-17	3	ATP6V0E1
1.18E-17	3	YPEL3
1.22E-17	3	IFNGR2
1.25E-17	3	PPA1
2.25E-17	3	DNASE2
2.28E-17	3	C16orf89
3.05E-17	3	MFGE8
3.06E-17	3	SNHG29
3.92E-17	3	CMBL
4.37E-17	3	ACVRL1
5.14E-17	3	ISCU
5.91E-17	3	CHID1
5.93E-17	3	HSD17B11
6.01E-17	3	CTSA
6.78E-17	3	SFRP4
7.39E-17	3	A4GALT
7.47E-17	3	MCUB
1.13E-16	3	FBN1
1.31E-16	3	XPNPEP2

2.34E-16	3	TMEM9B
3.63E-16	3	JAM2
3.88E-16	3	PROS1
4.61E-16	3	RARRES2
5.21E-16	3	ORAI3
5.22E-16	3	PPL
5.29E-16	3	TCN2
5.48E-16	3	PLPP3
5.60E-16	3	CYB5R3
6.55E-16	3	NFE2L2
9.39E-16	3	UROD
9.70E-16	3	IL33
1.06E-15	3	WASHC3
1.08E-15	3	FOXD1
1.11E-15	3	JTB
1.20E-15	3	SCN7A
1.28E-15	3	C1QTNF2
1.34E-15	3	EFEMP2
1.46E-15	3	ACE
1.54E-15	3	NUCB2
1.99E-15	3	DPP7
2.46E-15	3	RAB34
3.05E-15	3	SLC27A3
3.99E-15	3	BLOC1S1
5.75E-15	3	SCP2
6.06E-15	3	FBLN5
6.70E-15	3	EIF4EBP3
7.03E-15	3	POLR2E
8.44E-15	3	CALCRL
9.11E-15	3	H19
9.61E-15	3	PYURF
1.10E-14	3	ZFAS1
1.12E-14	3	EIF4A2
1.42E-14	3	NDN
1.47E-14	3	PGRMC1
1.63E-14	3	CRTAP
1.78E-14	3	HEXA
2.11E-14	3	TMEM179B
2.15E-14	3	CCNDBP1
2.48E-14	3	CDIPT
4.09E-14	3	WDR83OS
4.42E-14	3	G0S2
4.77E-14	3	ATP6V0C

5.07E-14	3	NFIX
5.22E-14	3	ETFB
5.58E-14	3	AHNAK
7.47E-14	3	PDLIM1
9.01E-14	3	CD151
9.21E-14	3	MGAT1
9.37E-14	3	RRAGA
1.04E-13	3	SH3GLB2
1.17E-13	3	AKR1B1
1.78E-13	3	TNFAIP2
1.98E-13	3	SDF4
1.99E-13	3	CD320
2.56E-13	3	NUCB1
3.35E-13	3	TCEA3
3.64E-13	3	TMEM91
3.70E-13	3	TUBB4B
3.95E-13	3	PCBD1
4.07E-13	3	CD68
5.08E-13	3	SDHD
6.15E-13	3	DDOST
7.13E-13	3	ANXA7
7.21E-13	3	PRSS23
8.01E-13	3	GNB2
8.90E-13	3	TRAC
1.02E-12	3	CDC42EP2
1.29E-12	3	TMBIM1
1.38E-12	3	SNRPN
2.17E-12	3	FUCA2
4.89E-12	3	TMED4
4.90E-12	3	TUBA1A
5.05E-12	3	RNF187
5.26E-12	3	ALDH1A3
5.72E-12	3	PSME1
5.89E-12	3	RAB11B
7.45E-12	3	GABARAPL1
8.38E-12	3	HMGN3
8.58E-12	3	RSPO3
9.77E-12	3	THBS3
1.37E-11	3	ECI2
1.49E-11	3	STMN3
1.54E-11	3	APOL1
1.64E-11	3	SLC66A3
1.80E-11	3	CD40

1.89E-11	3	ZNF706
2.23E-11	3	PIK3R1
2.42E-11	3	VAMP2
2.89E-11	3	ITGB1BP1
2.95E-11	3	ADAMTS5
3.99E-11	3	HEBP1
4.40E-11	3	SPTBN1
5.05E-11	3	SDC2
7.25E-11	3	HIGD2A
8.01E-11	3	CBR1
9.52E-11	3	MRFAP1
9.90E-11	3	PPT1
1.02E-10	3	HPGD
1.36E-10	3	GLIPR2
1.49E-10	3	CERCAM
1.74E-10	3	GPRC5A
1.75E-10	3	PXDC1
3.82E-10	3	ARAP1
5.74E-10	3	CUTC
6.45E-10	3	GAS6
6.72E-10	3	RDH14
7.33E-10	3	GXYLT2
8.25E-10	3	ST3GAL4
1.38E-09	3	NCSTN
1.58E-09	3	TENT5A
2.54E-09	3	DDIT3
2.58E-09	3	ACTR10
5.38E-09	3	BDKRB1
5.47E-09	3	TMEM100
7.01E-09	3	EPB41L4A-AS1
1.27E-08	3	WNT2B
1.31E-08	3	IL15RA
1.39E-08	3	RHOB
1.53E-08	3	PCYOX1
2.16E-08	3	LINC01140
2.82E-08	3	ITM2C
3.58E-08	3	H1FX
3.79E-08	3	CAPN2
3.85E-08	3	SOCS1
6.14E-08	3	LOXL1
8.17E-08	3	SNX21
9.49E-08	3	ALDH9A1
1.28E-07	3	SPRY1

1.36E-07	3	CDKN1C
1.48E-07	3	BSG
1.51E-07	3	FKBP7
3.60E-07	3	LARP6
5.02E-07	3	HIC1
6.37E-07	3	LAMP2
8.19E-07	3	RECK
9.48E-07	3	C2
1.20E-06	3	ARL4D
2.00E-06	3	MRC2
2.62E-06	3	TUBB2A
2.70E-06	3	APOD
2.77E-06	3	NBL1
2.80E-06	3	HELLPAR
3.26E-06	3	C7
4.03E-06	3	PNRC1
4.31E-06	3	FXVD6
4.73E-06	3	AGTRAP
8.46E-06	3	CCS
9.69E-06	3	EIF1B
3.13E-05	3	F3
0.0001307	3	MYADM
0.0006592	3	MMP2
0.001145867	3	INMT
0.00193026	3	EMP1
0.004551535	3	UGDH
0.036646337	3	CAMK2N1
0.067667989	3	VASN
0.133990044	3	CES1
0.213409613	3	CSRNP1
1	3	IGLC2

Sheet 3: Endothelial cells

Endothelial cell	p_val	avg_log2FC	pct.1	pct.2
ACKR1	4.92E-185	2.146961348	0.974	0.336
ZNF385D	5.95E-162	1.797973109	0.99	0.601
TLL1	1.59E-161	2.253103288	0.86	0.254
IL1R1	7.86E-139	1.575239708	0.837	0.269
SELP	1.26E-134	1.291537432	0.804	0.204
LRRC1	5.11E-119	1.400721406	0.819	0.286
CCL14	7.96E-115	1.960919642	0.824	0.33
NCOA7	1.79E-110	1.233572983	0.957	0.675
EPB41L3	6.26E-102	1.381226841	0.777	0.283
ADGRG6	1.19E-96	1.148660342	0.53	0.077
CLU	8.87E-94	1.55703769	0.829	0.368
CD74	1.59E-89	1.094521217	0.983	0.77
CNKSR3	2.11E-88	1.49153203	0.892	0.58
RAB3C	2.75E-87	1.075463748	0.508	0.083
ELOVL7	4.09E-86	1.2685871	0.752	0.32
RALGAPA2	6.59E-84	1.146973766	0.988	0.813
ICAM1	1.10E-82	1.294454468	0.884	0.545
TSPAN7	1.38E-82	1.054314176	0.848	0.479
HIPK3	2.92E-82	1.025891726	0.96	0.741
MYRIP	4.27E-82	1.2755714	0.753	0.271
LIFR	8.74E-82	1.11568143	0.873	0.449
CCSER1	1.71E-81	1.459592912	0.519	0.107
POSTN	3.95E-81	1.627111456	0.659	0.221
HLA-DQA1	1.33E-80	1.048552604	0.646	0.202
SOD2	3.44E-80	1.437266785	0.887	0.641
ABLIM1	2.71E-79	1.06117914	0.983	0.824
ADIRF	3.15E-78	0.890588481	0.838	0.437
HLA-DRA	5.36E-78	1.079381066	0.914	0.61
EVA1C	8.23E-78	0.97377792	0.928	0.621
OLFM1	3.72E-76	0.908616891	0.652	0.236
TPD52L1	1.91E-75	0.864114835	0.682	0.251
SELE	2.84E-75	1.624098881	0.674	0.243
CADM3-AS1	8.04E-75	0.710168072	0.436	0.062
CELF2	2.53E-74	1.132535712	0.783	0.374
HLA-DRB1	1.37E-72	1.051760605	0.934	0.702
NPC2	1.67E-72	0.896583615	0.841	0.561
HAPLN3	6.10E-72	0.694107974	0.619	0.212
TGFBR3	8.09E-71	1.092919564	0.836	0.482
DAPK1	1.54E-70	0.935838569	0.509	0.12
HDAC9	1.66E-70	1.264322296	0.605	0.205
NNMT	6.09E-70	0.833301756	0.919	0.636

DAAM1	8.00E-70	0.910078132	0.834	0.512
TFPI	4.54E-66	0.475148363	0.859	0.501
NAMPT	6.61E-65	0.942415417	0.94	0.73
IL33	1.17E-63	0.716596025	0.727	0.302
CCL23	1.70E-62	1.01490813	0.355	0.044
HLA-DPB1	1.70E-62	0.875374129	0.842	0.541
SIK2	2.77E-62	0.985344531	0.878	0.586
SNTG2	5.24E-62	0.956237082	0.908	0.612
HLA-DQA2	9.76E-62	0.886801528	0.496	0.133
HLA-DQB1	8.00E-61	0.758928454	0.711	0.337
HLA-DPA1	1.04E-60	0.827842704	0.838	0.553
CYTH1	5.63E-59	0.791278445	0.927	0.694
KLF7	3.96E-58	0.879202318	0.93	0.693
AL078604.4	4.02E-58	1.501936492	0.551	0.213
IL6	2.56E-57	1.171259851	0.405	0.089
CPXM2	4.36E-56	0.880707419	0.729	0.417
MRTFB	1.97E-55	0.848779664	0.963	0.716
BNC2	1.23E-54	0.85211298	0.716	0.374
PLEKHA7	3.49E-54	0.72190566	0.683	0.338
VWF	1.39E-53	0.713492721	0.995	0.824
C1QTNF1	3.54E-53	0.603468137	0.388	0.084
ARHGAP26	5.01E-53	1.026202107	0.941	0.739
MYOF	7.61E-52	0.62905286	0.902	0.616
MCTP1	2.33E-51	0.801658563	0.991	0.804
UGCG	4.99E-51	0.777042101	0.848	0.607
DNM3	1.20E-50	0.892414718	0.792	0.485
YBX3	1.32E-50	0.642305278	0.979	0.844
PERP	1.95E-50	0.618080217	0.515	0.185
SAMD4A	4.23E-49	0.92677322	0.86	0.583
DOC2B	7.29E-49	0.589740844	0.693	0.366
TESC	7.39E-49	0.584353003	0.463	0.148
FOXP1	3.35E-48	0.677144951	0.982	0.831
SDCBP	1.02E-47	0.642822145	0.906	0.707
DUSP23	2.69E-47	0.671150771	0.787	0.496
ACTN1	3.20E-47	0.554104297	0.892	0.616
PDIA5	8.23E-47	0.585997549	0.589	0.272
SERPINA3	1.34E-46	0.923101116	0.268	0.029
TPO	1.50E-46	0.974072583	0.676	0.34
TACR1	1.95E-46	0.814732786	0.498	0.176
ITPKC	1.97E-46	0.836780298	0.687	0.38
PRXL2A	2.21E-46	0.628440434	0.734	0.462
PLSCR4	4.00E-46	0.813626685	0.65	0.309
NPAS3	1.67E-45	1.162839208	0.387	0.107

CTSC	1.04E-44	0.803111363	0.692	0.398
VCAM1	1.14E-44	1.040897601	0.503	0.199
C7	1.16E-44	0.818469904	0.253	0.028
FBLN2	3.44E-44	0.449892436	0.498	0.162
BIRC3	3.77E-44	0.658825374	0.51	0.195
C2CD4B	5.84E-44	1.119828664	0.576	0.282
SH3BP5	6.79E-44	0.597679123	0.871	0.63
CSF3	2.07E-43	1.095227153	0.282	0.045
TGFBR2	2.30E-43	0.76059928	0.966	0.838
RAB27A	2.51E-43	0.613588733	0.657	0.353
CST3	3.26E-43	0.618443057	0.951	0.828
PLCB4	1.29E-42	0.548679471	0.889	0.628
HLA-DMA	1.36E-42	0.561383699	0.709	0.405
MEOX2	2.94E-42	0.764469624	0.475	0.176
SLC8A1	5.07E-42	0.781127645	0.51	0.203
MYCBP2	1.16E-41	0.64505744	0.92	0.724
PVT1	1.44E-41	0.706398273	0.7	0.394
CPVL	2.61E-41	0.36190105	0.299	0.057
SPARCL1	2.97E-41	0.594913889	0.99	0.863
HLA-DOA	1.12E-40	0.379896899	0.268	0.042
ZBTB20	1.63E-40	0.65948818	0.99	0.847
FNIP2	2.44E-40	0.726084748	0.816	0.571
AL589693.1	4.39E-40	0.926008156	0.482	0.192
ADAMTS9	6.81E-40	1.135974868	0.876	0.705
CARMIL1	7.98E-40	0.593618472	0.559	0.245
LRATD2	9.75E-40	0.433794974	0.435	0.156
ST6GAL1	2.20E-39	0.764566856	0.825	0.584
PDLIM1	3.60E-39	0.489193753	0.973	0.857
CSF2RB	1.29E-38	0.579307135	0.491	0.212
CNTNAP3B	1.66E-38	0.70426649	0.748	0.465
CPE	2.01E-38	1.394146926	0.273	0.055
LYST	2.43E-38	1.084227204	0.672	0.43
LINC02147	2.64E-38	1.359918747	0.379	0.121
PCDH19	3.22E-38	0.539160075	0.269	0.05
SNAP25	3.35E-38	0.619830343	0.333	0.09
KCTD12	5.80E-38	0.362617979	0.814	0.539
AF064858.1	5.94E-38	0.614680658	0.304	0.075
ARNTL2	6.09E-38	0.548567214	0.494	0.215
CCDC68	6.73E-38	0.469162592	0.433	0.153
TNFRSF10B	9.24E-38	0.611864225	0.802	0.55
SPATA6L	1.82E-37	0.649010762	0.504	0.228
SNCG	4.17E-37	0.478288819	0.676	0.393
SESN3	6.69E-37	0.778473201	0.581	0.304

NR2F2	2.23E-36	0.524664488	0.7	0.385
SSH1	6.84E-36	0.757582947	0.853	0.667
CCDC69	9.91E-36	0.445072126	0.657	0.39
MAP3K8	1.03E-35	0.572683511	0.745	0.48
SLC1A1	2.78E-35	0.565690883	0.384	0.13
RORA	3.93E-35	0.634867998	0.882	0.644
MECOM	5.65E-35	0.552996989	0.962	0.731
PDK4	7.44E-35	0.863611282	0.676	0.409
SLC4A7	1.31E-34	0.712588503	0.712	0.445
FAM155A	2.13E-34	0.964607194	0.794	0.536
SAMD5	3.61E-34	0.615832115	0.4	0.149
DOCK11	4.23E-34	0.558373739	0.323	0.091
ADAM23	7.63E-34	0.505809228	0.29	0.073
CLEC1A	8.17E-34	0.525312184	0.652	0.389
SETBP1	8.59E-34	0.850621836	0.439	0.182
CORO2A	8.78E-34	0.390908669	0.285	0.069
IER3	1.51E-33	0.996745189	0.727	0.521
SRSF4	2.52E-33	0.397970908	0.903	0.731
NR2F2-AS1	2.72E-33	0.662020414	0.443	0.18
PIM3	2.87E-33	0.559507112	0.743	0.506
RBP5	2.88E-33	0.310159387	0.326	0.095
ZFPM2	4.53E-33	0.578019702	0.7	0.435
PLSCR1	5.96E-33	0.470553765	0.865	0.657
HLA-DRB5	7.62E-33	0.865209613	0.611	0.363
ZFAND5	8.68E-33	0.567898048	0.862	0.68
CYP1B1	1.10E-32	0.677007965	0.365	0.124
TNFAIP3	1.14E-32	0.819876896	0.704	0.437
TMTC1	1.30E-32	0.646098909	0.907	0.658
SYT15	1.56E-32	0.326491444	0.259	0.056
IRAK3	2.01E-32	0.609775685	0.804	0.582
CDC42EP3	2.01E-32	0.497152337	0.838	0.614
C21orf91	3.03E-32	0.43099189	0.459	0.21
LINC-PINT	4.93E-32	0.548534618	0.617	0.363
PBX1	6.33E-32	0.64799389	0.646	0.39
WTAP	7.54E-32	0.565130907	0.787	0.592
PCAT1	7.67E-32	0.694816312	0.578	0.307
TMTC2	1.23E-31	0.692389906	0.619	0.359
LHFPL2	2.10E-31	0.633006015	0.588	0.353
CA8	2.50E-31	0.715501396	0.41	0.165
CRIM1	2.99E-31	0.683573469	0.951	0.778
SHB	4.09E-31	0.606731895	0.67	0.428
GAS5	5.22E-31	0.389656243	0.881	0.714
NFKBIZ	6.08E-31	0.463525762	0.83	0.578

PHLDA1	1.07E-30	0.616474893	0.58	0.34
TPK1	1.16E-30	0.552641674	0.532	0.272
HIVEP1	1.51E-30	0.634997801	0.759	0.522
PTAFR	2.19E-30	0.368657877	0.284	0.076
SGMS2	3.31E-30	0.658193217	0.33	0.112
SH3BGRL2	4.14E-30	0.482018828	0.634	0.374
MBNL1	4.27E-30	0.581091952	0.985	0.858
AC011511.2	7.29E-30	0.580111513	0.494	0.249
FRY	8.51E-30	0.484242329	0.776	0.534
PRCP	1.07E-29	0.32322805	0.852	0.57
SERPINB1	1.22E-29	0.4390227	0.668	0.442
SYNE2	1.48E-29	0.428480042	0.971	0.811
PKP4	1.62E-29	0.472642919	0.951	0.74
MEOX1	2.11E-29	0.443172943	0.514	0.248
ATP8B1	3.11E-29	0.587298165	0.837	0.616
CFB	5.57E-29	0.289571757	0.28	0.077
RFX2	1.02E-28	0.671006741	0.75	0.521
GATA6	1.23E-28	0.464353339	0.286	0.088
ZNF608	1.31E-28	0.511886152	0.559	0.298
MMP16	2.07E-28	0.53288979	0.389	0.157
IGFBP4	3.05E-28	0.4356155	0.957	0.818
SOCS2	3.34E-28	0.323136264	0.595	0.342
ASPH	4.40E-28	0.429361456	0.808	0.593
DENND4A	5.37E-28	0.628703883	0.858	0.66
LHX6	7.15E-28	0.359874116	0.395	0.168
ADAMTS9-AS1	1.03E-27	0.584973272	0.351	0.14
CYGB	1.07E-27	0.349612014	0.322	0.108
LRIG3	1.42E-27	0.504785925	0.427	0.2
NOP53	1.70E-27	0.330123739	0.875	0.723
TMEM273	2.21E-27	0.395004002	0.561	0.307
RND1	2.78E-27	0.427030023	0.439	0.202
SPTLC2	3.09E-27	0.57688496	0.722	0.515
LPCAT4	3.68E-27	0.353418953	0.337	0.126
GMDS	4.66E-27	0.542409292	0.856	0.642
MKLN1	4.89E-27	0.552363419	0.894	0.734
ETS2	5.60E-27	0.392933963	0.952	0.801
FOXO1	6.36E-27	0.524042693	0.918	0.725
AKAP12	9.95E-27	0.528039891	0.596	0.302
CSRP2	1.37E-26	0.425540905	0.584	0.352
AASS	1.53E-26	0.376848196	0.504	0.272
CTNNAL1	1.58E-26	0.46541528	0.655	0.422
CCNL1	1.59E-26	0.393119108	0.914	0.73
FRMD3	2.61E-26	0.613783012	0.354	0.143

IGF2BP2	2.99E-26	0.436644959	0.492	0.251
IL6ST	3.13E-26	0.401858066	0.967	0.831
AC016831.7	3.28E-26	0.558052856	0.599	0.371
KLF9	3.89E-26	0.406392407	0.858	0.686
NFKB1	1.11E-25	0.483090768	0.808	0.615
MET	1.15E-25	0.46507615	0.594	0.351
GNG12	1.19E-25	0.394271576	0.737	0.481
RELL1	1.20E-25	0.428993881	0.793	0.601
SH3RF3	1.45E-25	0.559989197	0.765	0.537
PPP3CA	2.04E-25	0.596442338	0.939	0.797
IPCEF1	2.18E-25	0.793275236	0.321	0.123
SASH1	2.26E-25	0.483997984	0.982	0.814
LHFPL6	2.62E-25	0.465249508	0.856	0.67
BACE2	2.81E-25	0.624223183	0.832	0.681
GNA14	3.07E-25	0.692442935	0.671	0.442
GNB4	3.27E-25	0.440495033	0.709	0.489
EXOC6	3.52E-25	0.52066359	0.742	0.513
FOXC1	4.35E-25	0.427523547	0.557	0.326
RHOU	4.52E-25	0.527056422	0.4	0.187
DNMBP	4.60E-25	0.455644258	0.482	0.258
FAM241A	6.67E-25	0.5108902	0.765	0.52
NOCT	7.78E-25	0.442900144	0.483	0.257
ANO2	8.75E-25	0.401208054	0.848	0.583
SYBU	9.74E-25	0.445047334	0.431	0.202
RELB	1.04E-24	0.412216411	0.65	0.412
BMERB1	1.70E-24	0.444682357	0.659	0.434
VCAN	1.75E-24	0.677195014	0.341	0.14
JAM2	1.78E-24	0.358705136	0.84	0.625
SLC16A7	2.24E-24	0.483803179	0.506	0.283
ADGRL4	2.75E-24	0.480515093	0.987	0.83
ENPP2	3.46E-24	0.337180319	0.504	0.261
SGMS1	4.32E-24	0.453087744	0.679	0.462
SPHK1	4.58E-24	0.262723612	0.432	0.206
TSHZ2	5.76E-24	0.48453822	0.978	0.812
IL15	7.90E-24	0.475391282	0.542	0.311
HDGFL3	8.60E-24	0.39497178	0.809	0.618
IRF1	8.92E-24	0.587779567	0.709	0.506
AL033504.1	1.03E-23	0.580232891	0.269	0.092
ABLIM3	1.08E-23	0.380517822	0.635	0.379
B4GALT5	1.17E-23	0.434298364	0.654	0.44
RAP1B	1.39E-23	0.382318805	0.946	0.813
OSBPL10	1.49E-23	0.532664479	0.652	0.428
HLA-DMB	1.91E-23	0.289670111	0.395	0.179

NRN1	2.19E-23	0.340785696	0.623	0.394
ZFP36L1	2.22E-23	0.42795989	0.884	0.722
PLA1A	2.58E-23	0.412462792	0.312	0.124
TRPM6	4.19E-23	0.415919495	0.35	0.15
OSMR	4.31E-23	0.43777597	0.7	0.48
DOCK4	4.86E-23	0.413671099	0.98	0.796
CEMIP2	5.17E-23	0.536549406	0.891	0.704
NEURL1B	5.29E-23	0.327787849	0.528	0.288
ICAM4	6.63E-23	0.28159467	0.279	0.101
TEAD1	6.85E-23	0.412611022	0.848	0.645
FKBP5	1.15E-22	0.497492112	0.782	0.568
ATP11C	1.31E-22	0.402618961	0.749	0.556
CFLAR	1.65E-22	0.34373839	0.903	0.754
SLC7A1	1.86E-22	0.402020535	0.491	0.27
ABCG2	2.18E-22	0.326062113	0.371	0.16
PELI2	2.90E-22	0.562223726	0.683	0.475
NFATC2	3.01E-22	0.525390626	0.737	0.518
SEMA6A	3.47E-22	0.404737414	0.627	0.398
MCUB	3.49E-22	0.413736185	0.586	0.353
CPD	3.73E-22	0.333084425	0.67	0.452
LITAF	4.45E-22	0.573507846	0.553	0.347
PLXDC2	4.50E-22	0.375689221	0.782	0.536
LINC01197	5.56E-22	0.320542875	0.316	0.126
PALM2-AKAP2	6.56E-22	0.46698422	0.955	0.822
CLDN5	7.17E-22	0.368877457	0.871	0.667
SNCA	7.82E-22	0.444544129	0.376	0.172
ADM5	9.63E-22	0.459171097	0.36	0.165
MIR99AHG	9.63E-22	0.825800534	0.278	0.104
ARAP2	1.12E-21	0.360396709	0.378	0.176
USP36	1.17E-21	0.287375224	0.559	0.347
BMPR2	1.24E-21	0.418150062	0.974	0.808
ITSN1	1.46E-21	0.474589871	0.529	0.325
IL4R	1.82E-21	0.457419148	0.721	0.531
CMIP	1.92E-21	0.342755812	0.935	0.761
ZC3H12A	2.02E-21	0.292050916	0.311	0.129
TNFRSF10D	2.20E-21	0.4520138	0.846	0.636
GNS	2.37E-21	0.352663238	0.63	0.433
TNFRSF1A	2.55E-21	0.351657005	0.709	0.518
DIXDC1	3.11E-21	0.360577832	0.515	0.289
PEAK1	3.26E-21	0.519888982	0.867	0.692
PABPC1	3.89E-21	0.285557242	0.949	0.851
BAZ1A	3.93E-21	0.395686456	0.8	0.637
TNFRSF6B	4.83E-21	0.399309222	0.525	0.304

RNF122	4.97E-21	0.518843661	0.416	0.214
CLIP1	7.00E-21	0.315764548	0.709	0.502
MED13L	7.31E-21	0.444430779	0.951	0.806
AP002518.2	7.36E-21	0.345785079	0.313	0.13
SMAD3	7.60E-21	0.806926459	0.649	0.459
ZNRF1	8.39E-21	0.383006684	0.628	0.436
TMEM54	1.12E-20	0.251067118	0.271	0.1
EPS8	1.17E-20	0.468803932	0.772	0.575
ERRFI1	1.26E-20	0.509307173	0.408	0.211
CSRN1P1	1.84E-20	0.383254715	0.579	0.362
SLCO3A1	1.99E-20	0.432446927	0.665	0.463
HIVEP2	2.28E-20	0.553940835	0.771	0.605
AKT3	2.45E-20	0.369618827	0.958	0.794
SLC1A5	2.47E-20	0.266760365	0.426	0.23
TPT1	2.53E-20	0.361761578	0.995	0.967
LY6E	3.50E-20	0.475695769	0.737	0.546
ESYT2	4.12E-20	0.414545925	0.881	0.698
SNHG29	4.72E-20	0.302356529	0.874	0.756
TEX14	4.75E-20	0.447048658	0.48	0.266
PARD3	5.48E-20	0.359902514	0.545	0.322
ARL4A	5.72E-20	0.25678745	0.759	0.562
KLHL3	6.68E-20	0.320145676	0.354	0.164
LDLRAD4	7.52E-20	0.309649284	0.864	0.621
AL133268.4	8.56E-20	0.39955196	0.291	0.122
MID1	9.23E-20	0.47222658	0.518	0.322
EBF1	9.92E-20	0.494762795	0.865	0.69
PTGDS	1.01E-19	0.840161611	0.313	0.139
ABCA5	1.20E-19	0.343815893	0.354	0.174
KLF4	1.21E-19	0.533414398	0.734	0.54
PITPNC1	1.48E-19	0.492423594	0.96	0.787
ANKRD12	1.49E-19	0.332859196	0.908	0.77
CYTL1	2.23E-19	0.500888603	0.335	0.16
ANKRD29	2.62E-19	0.345747878	0.439	0.236
ZBTB16	3.03E-19	0.340973878	0.869	0.625
SAV1	4.33E-19	0.393860995	0.64	0.456
SEMA6D	4.58E-19	0.45297558	0.341	0.161
TYMP	5.49E-19	0.271907952	0.55	0.339
AC007681.1	6.71E-19	0.381787158	0.324	0.147
AC016831.5	7.91E-19	0.351682286	0.364	0.188
3-Mar	1.13E-18	0.495860128	0.764	0.552
RALGDS	1.13E-18	0.366380179	0.562	0.369
ITGB4	1.43E-18	0.317460966	0.671	0.465
EGLN3	1.82E-18	0.253097504	0.291	0.125

ROBO1	1.92E-18	0.826683526	0.523	0.334
CXCL2	2.31E-18	0.513640192	0.422	0.228
HINT3	2.56E-18	0.252886462	0.296	0.132
CCL2	2.94E-18	0.508283212	0.371	0.189
PMP22	3.00E-18	0.3245949	0.75	0.554
NOSTRIN	3.38E-18	0.395322966	0.841	0.602
NR3C2	3.54E-18	0.424250727	0.476	0.267
NDRG1	4.04E-18	0.381214955	0.906	0.754
AHNAK	4.54E-18	0.281171273	0.923	0.772
SERTAD2	4.69E-18	0.482945547	0.491	0.315
FGD4	4.86E-18	0.455766971	0.722	0.513
MMP28	5.42E-18	0.322440912	0.384	0.201
NSUN6	5.72E-18	0.520793613	0.486	0.302
CNTNAP3	6.66E-18	0.342011535	0.297	0.135
AHR	7.46E-18	0.323684061	0.814	0.649
HNRNPC	1.12E-17	0.328067054	0.931	0.806
CHN1	1.14E-17	0.46203622	0.589	0.392
ZNF267	1.24E-17	0.385934372	0.513	0.339
MAP3K13	1.27E-17	0.277817201	0.591	0.407
AL049629.1	1.31E-17	0.396680423	0.333	0.164
KIAA0040	1.33E-17	0.307274602	0.373	0.198
FKBP11	1.42E-17	0.265669678	0.422	0.242
PLOD2	1.73E-17	0.582885631	0.536	0.364
SSBP2	1.93E-17	0.298138271	0.623	0.398
MAN1A1	2.99E-17	0.294576642	0.706	0.512
EPB41L4A	3.29E-17	0.37832914	0.89	0.682
CBLB	4.25E-17	0.343013377	0.876	0.682
LAMA3	5.55E-17	0.328543869	0.388	0.203
DLG2	6.01E-17	0.589387688	0.453	0.268
NFKB2	6.30E-17	0.267647436	0.364	0.196
AC105450.1	7.63E-17	0.451951465	0.306	0.145
MAOA	8.33E-17	0.288005898	0.392	0.199
PREX2	8.38E-17	0.259230988	0.963	0.776
AQP1	9.41E-17	0.324261936	0.902	0.729
NFAT5	1.63E-16	0.302247721	0.89	0.716
LYRM1	1.89E-16	0.303596222	0.504	0.317
NFE2L1	1.90E-16	0.277242438	0.665	0.485
PRKAG2	1.90E-16	0.435905263	0.507	0.33
LINC00513	1.94E-16	0.291259282	0.497	0.312
LDHA	2.05E-16	0.259902812	0.87	0.747
SLC9B2	2.79E-16	0.319674057	0.356	0.19
ARRDC3	2.86E-16	0.293876108	0.61	0.424
SAMHD1	3.93E-16	0.276565786	0.578	0.391

REV3L	3.96E-16	0.341017348	0.794	0.627
OVCH1	4.71E-16	0.348892061	0.252	0.107
SAMD12	6.92E-16	0.386965575	0.472	0.279
PITPNB	7.51E-16	0.336548842	0.778	0.61
INPP1	8.71E-16	0.279842896	0.599	0.423
NASP	8.77E-16	0.262301702	0.842	0.686
TRIB1	8.85E-16	0.353220704	0.499	0.318
BRAF	9.34E-16	0.298421199	0.827	0.651
UBE2E2	1.22E-15	0.314194516	0.792	0.601
ATF6	1.27E-15	0.382098895	0.78	0.628
NAV3	1.35E-15	0.674987542	0.421	0.252
BCR	1.56E-15	0.295038984	0.752	0.589
SIK3	1.76E-15	0.326227339	0.895	0.724
PDLIM3	1.83E-15	0.325629899	0.521	0.338
ETV6	1.96E-15	0.37538408	0.869	0.711
RAB11A	1.99E-15	0.26386197	0.905	0.766
THUMPD3-AS1	2.20E-15	0.340049501	0.518	0.336
GNAQ	2.71E-15	0.370175509	0.924	0.767
WWP1	2.76E-15	0.269848321	0.685	0.532
SRSF5	2.89E-15	0.253768477	0.897	0.757
CPNE8	3.36E-15	0.299547443	0.871	0.693
EEF1B2	3.67E-15	0.279591706	0.905	0.826
LINC01473	4.67E-15	0.435127783	0.476	0.308
RAI14	7.15E-15	0.505164584	0.858	0.772
SPAG9	7.50E-15	0.364684138	0.884	0.739
DDX58	8.20E-15	0.434399423	0.594	0.413
AL109930.1	8.91E-15	0.382296537	0.518	0.347
CYSTM1	1.17E-14	0.257516804	0.64	0.472
REL	1.53E-14	0.267213574	0.638	0.457
TACC1	1.76E-14	0.272000028	0.965	0.84
SPDYA	2.03E-14	0.422342111	0.368	0.215
IL3RA	2.07E-14	0.261777173	0.812	0.642
ACER2	2.25E-14	0.563653409	0.317	0.171
SEMA4A	2.42E-14	0.424269024	0.475	0.298
KDM6B	3.01E-14	0.299395924	0.51	0.347
USP53	3.10E-14	0.313213407	0.486	0.315
PDLIM5	3.66E-14	0.292815596	0.935	0.794
LRP5	3.76E-14	0.264550358	0.424	0.25
SHROOM2	4.41E-14	0.31019829	0.399	0.239
NKTR	6.06E-14	0.337306889	0.859	0.706
CSF1	6.60E-14	0.28706623	0.279	0.137
CASZ1	7.83E-14	0.265637749	0.268	0.129
FRMD4A	8.34E-14	0.374237767	0.698	0.534

STEAP1B	8.69E-14	0.366905665	0.486	0.318
ZNF521	9.26E-14	0.350137738	0.825	0.658
SLCO2A1	1.02E-13	0.467951715	0.853	0.658
AHI1	1.07E-13	0.325272358	0.659	0.484
DIPK2B	1.08E-13	0.289825579	0.87	0.712
SNTB2	1.52E-13	0.29066164	0.774	0.621
MIR222HG	1.55E-13	0.277824073	0.446	0.279
FBN1	1.75E-13	0.442505337	0.688	0.528
AL365295.1	1.77E-13	0.484263592	0.482	0.319
RAPH1	1.96E-13	0.307334354	0.608	0.448
CD55	2.10E-13	0.276274118	0.787	0.652
GNA14-AS1	2.23E-13	0.378491249	0.272	0.14
KLHL2	2.35E-13	0.323995537	0.558	0.396
ZNF423	2.39E-13	0.310918467	0.526	0.361
ADAMTS9-AS2	2.47E-13	0.406231745	0.632	0.458
MFHAS1	2.59E-13	0.389291436	0.379	0.235
CORO1C	2.95E-13	0.278242849	0.638	0.486
MIR22HG	3.07E-13	0.290565204	0.382	0.23
ACACB	3.39E-13	0.34639155	0.55	0.376
PTPN1	4.29E-13	0.253187948	0.645	0.466
STOX2	4.66E-13	0.284705515	0.606	0.429
ACKR3	5.31E-13	0.320465063	0.432	0.266
RASA4	5.56E-13	0.256933782	0.295	0.153
ARHGEF3	7.26E-13	0.319893703	0.8	0.635
FTX	7.46E-13	0.390436178	0.919	0.756
DISC1FP1	7.60E-13	0.562598235	0.273	0.137
TBC1D4	8.73E-13	0.364445863	0.61	0.445
RFX3	1.29E-12	0.337339596	0.837	0.686
LRMDA	1.40E-12	0.308770493	0.956	0.796
TRMT11	1.47E-12	0.308066607	0.375	0.228
NFIA	1.48E-12	0.318919363	0.922	0.759
SLC25A29	1.50E-12	0.263866267	0.389	0.242
IMMP2L	1.70E-12	0.344136692	0.704	0.542
HIF1A	1.83E-12	0.38755059	0.836	0.716
RNF115	2.28E-12	0.284281186	0.78	0.611
GALNT15	3.03E-12	0.372657991	0.307	0.169
GLIS3	3.35E-12	0.293700111	0.573	0.406
ZHX2	4.50E-12	0.274322787	0.585	0.434
AFAP1L2	5.55E-12	0.251721923	0.274	0.141
ERG	5.70E-12	0.282949673	0.956	0.83
RAB8B	6.76E-12	0.260704276	0.556	0.397
SVIL	6.94E-12	0.373174415	0.798	0.651
IRAK2	7.03E-12	0.336199377	0.428	0.281

ASAP1	8.17E-12	0.281817847	0.985	0.833
HRH1	9.68E-12	0.281376818	0.568	0.413
NUP210L	1.25E-11	0.517056572	0.313	0.187
ARID5B	1.48E-11	0.272821875	0.838	0.733
RNF217	2.43E-11	0.340050741	0.442	0.299
FBXL2	3.05E-11	0.285669915	0.389	0.248
TAF4B	4.46E-11	0.368017828	0.368	0.224
CHIC2	4.71E-11	0.359108546	0.694	0.566
CDKN1A	4.75E-11	0.292262105	0.665	0.512
GALNT10	6.01E-11	0.314855603	0.501	0.357
PDE7B	6.37E-11	0.464882326	0.643	0.48
FOXO3	8.91E-11	0.382628711	0.705	0.551
ERI2	9.33E-11	0.286018018	0.278	0.152
AC008014.1	1.01E-10	0.291601304	0.337	0.203
ATG7	1.56E-10	0.262725931	0.681	0.531
SUSD6	2.64E-10	0.292410674	0.718	0.583
PRKN	2.70E-10	0.355894033	0.536	0.396
PPP3R1	3.87E-10	0.324963546	0.72	0.588
MBNL2	4.03E-10	0.279332942	0.856	0.723
LRRC49	4.08E-10	0.319301554	0.299	0.179
WBP1L	4.63E-10	0.251083264	0.469	0.34
CUL1	5.05E-10	0.255037701	0.623	0.49
MYO9A	5.21E-10	0.354483631	0.701	0.566
HLA-E	5.41E-10	0.25957197	0.987	0.926
SNAPC1	5.43E-10	0.358868864	0.437	0.31
YPEL2	5.84E-10	0.319778566	0.636	0.508
EGLN1	5.88E-10	0.358180075	0.651	0.53
TRIM69	7.60E-10	0.365068811	0.435	0.303
INPP4B	7.72E-10	0.428045729	0.329	0.205
ZC3HAV1	8.30E-10	0.290764562	0.718	0.574
FAM171A1	8.86E-10	0.262261388	0.684	0.533
SSBP3	1.10E-09	0.261561219	0.564	0.425
LDLRAD3	1.29E-09	0.344311409	0.551	0.41
PPP2R3A	1.52E-09	0.260610297	0.39	0.259
ATP2B1	1.66E-09	0.26852272	0.747	0.617
FBXO31	1.71E-09	0.28069829	0.585	0.452
JAK2	1.92E-09	0.275946434	0.42	0.287
MB21D2	1.98E-09	0.318190584	0.33	0.212
BTBD7	2.48E-09	0.314166263	0.671	0.536
SPIDR	2.53E-09	0.255283196	0.777	0.637
RCAN1	3.23E-09	0.270858308	0.684	0.563
PTPRM	3.24E-09	0.257266049	0.985	0.856
NAALADL2	3.48E-09	0.358867989	0.285	0.169

FBXO11	4.65E-09	0.3174363	0.809	0.666
PCED1B	7.37E-09	0.303497663	0.337	0.22
SH3RF1	8.00E-09	0.426705587	0.389	0.27
LINC01515	8.61E-09	0.35724577	0.267	0.158
SQSTM1	8.69E-09	0.317239513	0.84	0.725
DUSP1	1.32E-08	0.283400401	0.917	0.838
TXNIP	1.53E-08	0.311269757	0.858	0.759
NXN	1.63E-08	0.266808068	0.838	0.727
MTHFD1L	2.15E-08	0.299007388	0.578	0.446
ALPK1	2.20E-08	0.294678046	0.355	0.249
KANSL1L	2.33E-08	0.271015389	0.375	0.261
LINC01117	2.99E-08	0.296683598	0.361	0.243
NFE2L3	3.52E-08	0.342144056	0.471	0.347
SLC30A7	4.63E-08	0.25570326	0.562	0.45
WNT2B	5.63E-08	0.251628415	0.498	0.366
TTY14	6.12E-08	0.320645239	0.408	0.292
MRNIP	6.72E-08	0.274495808	0.295	0.19
GMDS-DT	6.77E-08	0.269379299	0.561	0.438
FER	8.12E-08	0.253553636	0.684	0.566
LARP4B	8.78E-08	0.253326395	0.655	0.545
MAPK8	1.11E-07	0.288254563	0.59	0.485
SNED1	2.16E-07	0.28552352	0.589	0.462
BIN3	2.68E-07	0.301557878	0.528	0.398
CCNH	2.82E-07	0.31954999	0.661	0.54
MOB3B	3.50E-07	0.299856777	0.315	0.21
NTN4	3.68E-07	0.276378571	0.317	0.214
LINC01876	1.07E-06	0.286843669	0.264	0.172
RFX3-AS1	1.17E-06	0.253324998	0.345	0.251
RAPGEF5	1.85E-06	0.528323512	0.818	0.707
AHCYL2	5.39E-06	0.257213746	0.389	0.295
MEF2C-AS1	1.56E-05	0.285464396	0.285	0.201
PHLDB2	3.14E-05	0.387287127	0.512	0.433
INTS6	3.14E-05	0.28469927	0.678	0.582
C11orf96	0.00013295	0.294266411	0.315	0.238
AC018816.1	0.000144921	0.257506761	0.324	0.255
ADAMTS4	0.001349011	0.267154783	0.321	0.261
FMNL2	0.002191449	0.260938613	0.66	0.597
PTPRG	5.71E-115	1.869126659	0.965	0.63
ARL15	1.54E-114	2.06679606	0.971	0.706
CXCL12	1.28E-75	1.652934952	0.533	0.142
INSR	1.70E-74	1.564575583	0.888	0.627
ADAMTS6	4.49E-74	1.501082425	0.729	0.336
FLT1	4.29E-72	1.398233478	0.97	0.749

ADAMTSL2	1.07E-70	0.817541733	0.366	0.048
JAG2	4.50E-70	0.817096686	0.608	0.219
MEF2A	5.75E-70	0.895483865	0.953	0.725
RASGRF2	1.05E-69	1.007301796	0.909	0.557
BTNL9	2.49E-69	1.24965848	0.34	0.036
MPPED2	1.26E-68	0.768925352	0.329	0.031
MIR181A1HG	2.45E-68	0.877774189	0.557	0.163
SYNPO	1.24E-65	0.712612792	0.778	0.401
MLEC	2.48E-65	0.858398984	0.716	0.352
A2M	4.88E-63	0.838621589	0.984	0.889
NES	2.19E-62	0.770550669	0.602	0.214
RAPGEF1	7.16E-62	1.08576722	0.883	0.623
COL4A2	1.02E-61	1.122255518	0.913	0.736
IGFBP3	8.65E-60	1.655209151	0.456	0.116
HEY1	1.01E-58	0.675879764	0.327	0.045
MMP2	2.05E-58	0.788740842	0.592	0.229
DOCK6	3.58E-56	0.667416403	0.74	0.382
CTNNB1	5.78E-56	0.74375482	0.944	0.729
SPARC	9.20E-56	1.029524682	0.925	0.793
CACNA1C	1.04E-55	1.440000288	0.658	0.326
RAPGEF2	6.88E-55	0.837001941	0.904	0.644
ACE	4.01E-53	0.752495049	0.462	0.142
DYSF	1.01E-52	0.884537183	0.679	0.343
SGK1	2.73E-52	0.968911115	0.729	0.402
GRB10	1.37E-51	1.124668236	0.928	0.74
CDH13	3.45E-51	1.119689106	0.788	0.448
CPNE5	1.43E-50	0.657556583	0.482	0.158
PLPP1	2.10E-50	1.310121242	0.905	0.677
ITGA8	2.21E-50	0.822796895	0.401	0.106
EDIL3	1.14E-49	0.825010273	0.451	0.136
NCALD	1.94E-49	0.861121282	0.396	0.101
FMNL3	5.13E-49	0.610062527	0.594	0.262
MIR4435-2HG	2.96E-48	1.128379774	0.637	0.328
AKAP13	1.82E-47	0.647971759	0.99	0.849
ESAM	1.93E-47	0.632536261	0.841	0.594
CLIC5	1.09E-46	0.544883566	0.286	0.046
MYO1B	1.14E-46	0.939013287	0.629	0.309
PDGFD	1.67E-46	0.778001273	0.4	0.109
GJA4	2.49E-46	0.751448027	0.252	0.03
PLXNA2	3.27E-46	0.868016108	0.828	0.561
EXOC3L1	4.93E-46	0.389621613	0.321	0.064
PLXND1	1.17E-45	0.599167621	0.806	0.538
PCDH12	3.19E-45	0.519401386	0.387	0.108

KCNQ1	6.87E-45	0.735301854	0.334	0.078
PTP4A3	1.27E-44	0.442157971	0.374	0.098
ARHGAP29	1.46E-44	0.608763912	0.95	0.8
NAV1	2.02E-44	0.546163918	0.701	0.373
GSN	2.49E-44	0.83675762	0.966	0.794
HEG1	2.73E-44	0.74077558	0.915	0.662
MAP1B	6.71E-44	0.806870972	0.653	0.34
LAMB1	6.77E-44	0.760119218	0.793	0.529
COL13A1	7.03E-44	0.661435678	0.297	0.06
RASGRP3	8.47E-44	0.781871601	0.652	0.343
ADARB1	1.11E-43	0.622279659	0.674	0.356
DLL4	2.80E-43	0.696007356	0.518	0.208
FAP	2.96E-43	0.554852976	0.557	0.232
APP	5.06E-43	0.587934846	0.986	0.9
ITGA1	9.10E-43	0.923617694	0.7	0.403
EML1	9.13E-43	0.583500749	0.509	0.202
EFNB1	2.58E-42	0.500031182	0.429	0.146
CAVIN3	5.54E-42	0.655043592	0.722	0.445
CDH5	7.25E-42	0.560996263	0.909	0.701
SOX5	1.29E-41	0.92148444	0.36	0.096
TCF12	1.32E-41	0.685468122	0.952	0.779
ETS1	2.08E-41	0.668395886	0.931	0.756
CDYL2	2.48E-41	0.533594292	0.501	0.203
VWA1	4.97E-41	0.928286355	0.785	0.553
KCNN3	5.11E-41	0.580266008	0.502	0.204
DHRS3	9.43E-41	0.620450706	0.523	0.219
AC119674.1	1.01E-40	0.807240224	0.544	0.242
PCDH17	3.34E-40	0.807579148	0.793	0.526
PTK2	4.64E-40	0.569421863	0.973	0.802
PLCL2	2.14E-39	0.509777771	0.437	0.154
TMEM204	3.02E-39	0.660527966	0.66	0.362
ASAP2	3.41E-39	0.632443091	0.674	0.387
CCDC3	4.61E-39	0.842339437	0.637	0.341
MAML3	4.77E-39	0.741119721	0.709	0.404
RGS3	5.28E-39	0.641561995	0.682	0.379
EXOC3L2	1.44E-38	0.572898753	0.396	0.137
BGN	3.62E-38	0.592940071	0.411	0.138
RFLNB	3.63E-38	0.571717513	0.522	0.229
CD276	4.34E-38	0.36868116	0.327	0.088
UNC5B	5.12E-38	0.51021359	0.271	0.054
SEMA3F	8.94E-38	0.508730641	0.589	0.293
JUP	9.02E-38	0.490912205	0.478	0.198
SEC14L1	1.58E-37	0.59506991	0.929	0.758

PLVAP	1.70E-37	0.955213131	0.88	0.775
PLCL1	2.52E-37	0.74607396	0.427	0.153
KLHL5	2.95E-37	0.602072329	0.817	0.553
MYO1D	3.05E-37	0.574879278	0.772	0.474
SPRY4	3.91E-37	0.567541431	0.441	0.173
VASH1	5.04E-37	0.533681138	0.512	0.232
RIN3	9.15E-37	0.506534958	0.586	0.284
JCAD	1.01E-36	0.485839271	0.668	0.382
MCF2L	2.16E-36	0.678963162	0.769	0.506
TIE1	2.28E-36	0.520588759	0.843	0.595
APCDD1	2.42E-36	0.482323799	0.332	0.098
SLC6A6	2.45E-36	0.739463753	0.465	0.193
NRCAM	1.33E-35	0.88909126	0.326	0.095
DENND11	1.51E-35	0.557464436	0.51	0.234
ALPK3	2.32E-35	0.496977465	0.44	0.168
ALPL	6.16E-35	0.735249109	0.343	0.108
ITGB1	8.38E-35	0.448514865	0.95	0.851
TBC1D1	1.07E-34	0.569094396	0.825	0.553
ZFH3	1.10E-34	0.654589582	0.629	0.367
PTPN14	3.93E-34	0.733566667	0.828	0.606
ITIH5	3.94E-34	0.955416685	0.453	0.201
TNK2	3.99E-34	0.372493044	0.332	0.101
PDGFB	6.45E-34	0.612708155	0.642	0.352
SFMBT2	6.81E-34	0.709272951	0.766	0.513
RIN2	1.06E-33	0.550109107	0.856	0.594
UACA	2.56E-33	0.557654914	0.883	0.712
HERC1	2.64E-33	0.625791198	0.883	0.665
AC002070.1	2.64E-33	0.569888166	0.361	0.122
SERPINH1	5.67E-33	0.537893574	0.734	0.496
AC008050.1	7.57E-33	0.723407742	0.364	0.125
GPR4	8.39E-33	0.33658185	0.352	0.119
TSC22D1	8.46E-33	0.745721143	0.889	0.715
PLOD1	1.31E-32	0.358164357	0.43	0.175
FCHSD2	3.10E-32	0.624253915	0.839	0.619
AFAP1L1	3.99E-32	0.551435115	0.708	0.448
FGF12	6.36E-32	0.444763197	0.279	0.074
SOX18	9.87E-32	0.384099585	0.774	0.487
ARHGAP4	1.65E-31	0.417354382	0.363	0.131
MYO6	2.75E-31	0.581350656	0.758	0.52
ICAM2	3.59E-31	0.616993082	0.759	0.541
ANGPTL2	4.83E-31	0.347117402	0.388	0.148
LPCAT2	5.04E-31	0.504459465	0.589	0.326
ENG	7.13E-31	0.623768186	0.942	0.813

AIF1L	8.40E-31	0.405752249	0.283	0.079
RDX	1.51E-30	0.511436705	0.923	0.779
ZNF366	1.56E-30	0.415157879	0.517	0.245
ITPRIP	3.90E-30	0.500681842	0.721	0.457
FBLIM1	4.60E-30	0.392713377	0.27	0.072
ITGA9	5.66E-30	0.543132273	0.759	0.484
PINK1	8.90E-30	0.385614656	0.554	0.289
TMEM184B	1.17E-29	0.449496402	0.647	0.401
ST6GALNAC3	1.52E-29	0.569297786	0.957	0.775
PCSK5	1.67E-29	0.898614417	0.44	0.197
TTC28	1.75E-29	0.528729002	0.933	0.753
TMEM233	2.38E-29	0.361416768	0.252	0.063
ACTN4	3.38E-29	0.405845723	0.921	0.735
SMAD6	3.67E-29	0.502904755	0.324	0.108
CCND1	5.12E-29	0.521793331	0.429	0.183
PMEPA1	5.17E-29	0.710578343	0.525	0.289
PHACTR1	5.66E-29	0.552476647	0.674	0.393
FYN	6.03E-29	0.550234309	0.909	0.691
PTPRK	6.33E-29	0.588496512	0.907	0.732
DGKD	1.20E-28	0.593067196	0.43	0.204
ACOT7	1.56E-28	0.31778634	0.425	0.185
SLC12A2	1.81E-28	0.520791061	0.684	0.421
CRIP2	1.99E-28	0.418020697	0.925	0.789
LAMA4	2.72E-28	0.727782088	0.679	0.448
ARHGEF12	3.05E-28	0.454907832	0.88	0.687
C1orf54	3.09E-28	0.469857067	0.719	0.465
CD46	3.12E-28	0.409988423	0.798	0.595
KIAA0355	4.51E-28	0.481624354	0.88	0.69
COLGALT1	6.82E-28	0.385655588	0.448	0.212
TMC7	8.32E-28	0.314648333	0.286	0.088
IQSEC1	1.11E-27	0.555295483	0.653	0.403
EFNB2	1.51E-27	0.821380735	0.743	0.552
HTRA1	1.75E-27	0.569901092	0.735	0.525
DGKH	1.83E-27	0.466269091	0.806	0.578
PDE10A	1.86E-27	0.538364042	0.862	0.586
YWHAH	1.98E-27	0.341426955	0.777	0.533
STT3B	2.32E-27	0.480850761	0.693	0.44
PHLDB1	3.23E-27	0.373667398	0.459	0.212
WDFY3	4.11E-27	0.467045548	0.754	0.513
APBB2	4.92E-27	0.520201954	0.913	0.72
ITSN2	5.92E-27	0.467452422	0.795	0.559
HDAC7	7.31E-27	0.438623377	0.732	0.493
CD34	8.36E-27	0.467617669	0.88	0.68

RAB31	9.76E-27	0.379652865	0.437	0.195
STK10	9.84E-27	0.430673177	0.547	0.304
AFDN	1.06E-26	0.45303866	0.888	0.687
F2RL3	1.08E-26	0.42393911	0.47	0.218
PLAU	1.22E-26	0.295682496	0.252	0.07
CD81	1.64E-26	0.443731917	0.944	0.851
TCIM	1.67E-26	0.406119435	0.674	0.388
OSBPL3	1.68E-26	0.526458359	0.475	0.231
DOCK9	2.39E-26	0.43178782	0.986	0.86
CASKIN2	2.42E-26	0.337636484	0.451	0.212
COL15A1	2.98E-26	0.682372751	0.819	0.692
ZEB1	3.00E-26	0.51146595	0.966	0.837
JAM3	3.14E-26	0.435086708	0.624	0.357
LRRC8A	4.25E-26	0.336291423	0.616	0.36
NOX4	4.68E-26	0.52108071	0.456	0.219
TRAK1	6.51E-26	0.435684744	0.652	0.411
PICALM	6.91E-26	0.442198038	0.976	0.847
DLEU2	7.22E-26	0.517871881	0.774	0.536
TM4SF18	9.17E-26	0.461487039	0.653	0.402
SORBS2	1.56E-25	0.642763272	0.682	0.437
RANBP17	1.84E-25	0.536429798	0.286	0.097
CDC14B	2.08E-25	0.453833046	0.302	0.106
AC004889.1	2.38E-25	0.520839936	0.276	0.094
GTF2I	2.38E-25	0.332927594	0.822	0.618
ABL2	2.45E-25	0.49749903	0.809	0.584
CDC42EP1	2.52E-25	0.26871135	0.392	0.169
KIAA1671	2.92E-25	0.464122711	0.705	0.458
FBXL7	3.27E-25	0.481147959	0.913	0.718
MACF1	3.42E-25	0.392341632	0.971	0.869
SOS1	4.30E-25	0.374091929	0.815	0.585
MCAM	4.98E-25	0.618854244	0.711	0.511
PDE8A	7.22E-25	0.535211465	0.769	0.559
SMARCA2	7.41E-25	0.43540824	0.817	0.617
DDIT4	8.45E-25	0.641248255	0.676	0.449
ISG15	1.03E-24	0.689652376	0.653	0.415
GJC1	1.33E-24	0.257575099	0.263	0.084
RBFOX2	1.38E-24	0.353494646	0.926	0.763
LRP6	1.79E-24	0.38150115	0.596	0.343
RAMP2	2.14E-24	0.448390973	0.926	0.78
NOS3	2.17E-24	0.328744138	0.459	0.23
MMP14	2.48E-24	0.297287622	0.319	0.12
ZNF532	2.94E-24	0.422729334	0.51	0.273
ARAP3	3.07E-24	0.412871457	0.518	0.288

GFOD1	3.15E-24	0.602763349	0.73	0.51
INPP5A	4.17E-24	0.397248983	0.518	0.277
PKD1L1	5.81E-24	0.579262936	0.427	0.212
CHSY3	7.59E-24	0.48264557	0.404	0.186
MAST4	8.36E-24	0.593467859	0.907	0.697
NDST1	8.50E-24	0.359412527	0.539	0.304
KIF13A	8.98E-24	0.531599631	0.814	0.598
CD93	1.03E-23	0.449251104	0.926	0.757
IGFBP5	1.04E-23	1.529907581	0.308	0.121
CYTH3	1.32E-23	0.349325164	0.393	0.174
ROBO4	1.43E-23	0.383254458	0.711	0.516
CD109	1.97E-23	0.500478263	0.721	0.478
CALD1	2.05E-23	0.425925735	0.923	0.736
GIT2	2.12E-23	0.357776629	0.445	0.22
LUZP1	2.13E-23	0.392983367	0.851	0.696
SH3PXD2A	2.21E-23	0.346658908	0.515	0.285
TOX2	2.42E-23	0.448199194	0.403	0.194
PTPRB	2.73E-23	0.400269868	0.968	0.824
UTRN	4.68E-23	0.504601617	0.979	0.866
FSCN1	5.27E-23	0.394312912	0.578	0.366
PKIG	5.58E-23	0.457824069	0.766	0.558
ADAM17	5.79E-23	0.467825109	0.708	0.49
LPP	5.89E-23	0.377534038	0.953	0.823
MYO10	5.98E-23	0.446542471	0.716	0.485
GRPEL2	6.51E-23	0.270842195	0.3	0.112
FUT8	6.88E-23	0.546817132	0.483	0.263
DAB2IP	6.93E-23	0.382966486	0.559	0.316
DOCK1	7.69E-23	0.400715558	0.896	0.712
ZDHHC20	7.81E-23	0.336750586	0.637	0.396
CMTM8	8.46E-23	0.489550548	0.592	0.358
CDC42BPA	8.55E-23	0.473394953	0.857	0.664
TBCD	8.70E-23	0.543895169	0.724	0.526
JAG1	8.99E-23	0.799560323	0.642	0.432
DDI2	1.40E-22	0.347809368	0.414	0.205
CALM1	1.55E-22	0.4675001	0.947	0.882
CYTOR	1.97E-22	0.4020563	0.597	0.362
SPRED2	1.97E-22	0.467457709	0.539	0.315
PCDH1	2.17E-22	0.309014678	0.498	0.263
PTPRE	2.80E-22	0.58030979	0.79	0.605
CYYR1	3.05E-22	0.454462224	0.891	0.706
NSD1	4.05E-22	0.360180554	0.624	0.386
UBE2J1	4.21E-22	0.300007735	0.669	0.452
PLD1	4.31E-22	0.484946664	0.607	0.378

MYO1E	4.53E-22	0.589693938	0.9	0.716
PXDN	5.49E-22	0.493234875	0.737	0.513
KLHL24	5.51E-22	0.400127452	0.604	0.373
OAF	5.75E-22	0.257004343	0.438	0.212
CALCRL	6.70E-22	0.582352803	0.95	0.86
SOX13	6.97E-22	0.293380892	0.311	0.127
PHLPP1	8.20E-22	0.437694456	0.592	0.369
SWAP70	8.55E-22	0.379293682	0.926	0.788
SLC26A2	8.99E-22	0.376352143	0.441	0.22
APLP2	1.04E-21	0.350953694	0.892	0.748
EIF4G2	1.22E-21	0.341641019	0.894	0.764
EOGT	1.47E-21	0.362772004	0.512	0.286
NOVA2	1.55E-21	0.341117451	0.451	0.233
ARHGAP18	1.58E-21	0.525526574	0.575	0.38
CRYBG3	1.71E-21	0.464104877	0.806	0.6
SLC5A4	1.88E-21	0.288563598	0.25	0.087
COL18A1	1.89E-21	0.467267503	0.828	0.649
EIF4G3	2.47E-21	0.338892516	0.9	0.73
SH2D3C	2.66E-21	0.3420155	0.571	0.33
YEATS2	3.16E-21	0.33897102	0.547	0.321
PLCG1	3.35E-21	0.348940097	0.494	0.278
TEK	3.79E-21	0.329929642	0.793	0.585
PRKY	4.26E-21	0.551693601	0.413	0.217
ARHGEF7	4.39E-21	0.53464694	0.746	0.559
VSIR	4.58E-21	0.376212176	0.499	0.289
NEBL	4.59E-21	0.778924322	0.369	0.176
ITGA6	4.65E-21	0.485862784	0.939	0.797
AGAP1	5.06E-21	0.335928702	0.66	0.442
APLNR	5.30E-21	0.511028651	0.539	0.325
REST	5.68E-21	0.298438862	0.517	0.291
MAP4K3	6.36E-21	0.380414472	0.648	0.419
ADAM10	6.39E-21	0.35121031	0.819	0.614
HES4	7.34E-21	0.391302012	0.321	0.134
WDFY1	9.05E-21	0.312043997	0.663	0.431
CLEC14A	9.25E-21	0.41871477	0.897	0.755
LIMS2	9.85E-21	0.349841042	0.703	0.494
VOPP1	1.03E-20	0.398042569	0.706	0.475
HYAL2	1.15E-20	0.312016013	0.902	0.719
DCLK2	1.34E-20	0.375512405	0.4	0.192
TIMP3	1.36E-20	0.838196137	0.839	0.683
NID1	1.85E-20	0.435549706	0.472	0.271
PTBP2	1.89E-20	0.343043468	0.758	0.525
TSPAN13	2.25E-20	0.433992686	0.559	0.343

PLPP3	2.49E-20	0.498121294	0.759	0.557
SRGAP2	2.49E-20	0.386437821	0.727	0.523
HIP1R	3.18E-20	0.322762796	0.39	0.19
XAF1	3.53E-20	0.373470485	0.762	0.528
CRIP1	4.53E-20	0.558155254	0.645	0.42
ULK4	5.05E-20	0.41242775	0.6	0.38
RB1	5.19E-20	0.347573073	0.846	0.645
PKN1	5.41E-20	0.257494319	0.6	0.388
ADD1	5.46E-20	0.336483157	0.767	0.572
ABCG1	5.77E-20	0.44295939	0.671	0.474
MSX1	6.19E-20	0.293845804	0.316	0.134
NAV2	6.86E-20	0.410232716	0.687	0.455
GLG1	7.03E-20	0.324962372	0.758	0.534
NEK7	7.18E-20	0.340605847	0.706	0.48
MAP4K4	1.05E-19	0.327762785	0.86	0.688
SPRED1	1.26E-19	0.409351337	0.547	0.329
CC2D2B	1.37E-19	0.460803232	0.506	0.287
ASS1	1.43E-19	0.365898344	0.348	0.166
INPP5D	1.44E-19	0.375035174	0.504	0.289
SHANK3	1.51E-19	0.309390642	0.788	0.593
FN1	1.67E-19	0.991950958	0.517	0.31
BCAS3	2.04E-19	0.389236599	0.803	0.569
PLS3	2.07E-19	0.432225407	0.791	0.589
FAM214A	2.16E-19	0.367769045	0.676	0.45
ARHGAP24	2.18E-19	0.447926439	0.472	0.258
ITGA5	2.33E-19	0.38718169	0.849	0.693
TAOK1	2.39E-19	0.342333487	0.756	0.552
TMEM47	2.89E-19	0.282695266	0.34	0.156
CPNE2	3.14E-19	0.280322931	0.491	0.28
NREP	3.44E-19	0.369967365	0.573	0.359
ZMIZ1	4.59E-19	0.358589524	0.616	0.402
PELI1	4.64E-19	0.416008135	0.857	0.65
DAB2	4.98E-19	0.291447614	0.618	0.415
EPHA4	5.74E-19	0.490692655	0.708	0.508
COL6A2	6.34E-19	0.371343415	0.482	0.265
MPZL1	7.05E-19	0.270104023	0.526	0.311
CDK19	7.10E-19	0.326958162	0.413	0.206
CDC27	7.24E-19	0.320928104	0.761	0.543
SMAD2	8.49E-19	0.300586576	0.735	0.546
NPTN	8.61E-19	0.372572199	0.591	0.383
COL21A1	1.00E-18	0.392206185	0.25	0.095
TMEM150C	1.06E-18	0.275883067	0.35	0.169
KIAA1217	1.17E-18	0.468291046	0.767	0.571

CADPS2	1.35E-18	0.401780861	0.942	0.762
BCL6B	1.38E-18	0.256751998	0.427	0.228
NAA38	1.45E-18	0.271251626	0.772	0.575
FAM53B	1.45E-18	0.266248067	0.347	0.162
MTSS1	1.62E-18	0.439490179	0.47	0.27
SIPA1L3	1.72E-18	0.377239711	0.507	0.31
ABCB1	1.84E-18	0.61763201	0.811	0.577
TSPAN14	2.26E-18	0.311187002	0.756	0.548
EHD4	2.43E-18	0.374123187	0.833	0.666
PIAS2	2.59E-18	0.301643672	0.488	0.28
PITPNM2	2.65E-18	0.286194673	0.427	0.223
PKN3	2.65E-18	0.272186223	0.525	0.31
TACC2	2.91E-18	0.391473446	0.523	0.325
ACVRL1	2.95E-18	0.336234157	0.693	0.508
NOTCH1	3.37E-18	0.354470764	0.552	0.356
PTPN12	3.76E-18	0.322598042	0.9	0.736
DIAPH2	3.86E-18	0.343729258	0.934	0.752
DENND3	4.28E-18	0.29527871	0.459	0.256
ARHGAP5	4.65E-18	0.309539505	0.515	0.319
PLEKHA1	6.44E-18	0.337400154	0.703	0.505
ARHGAP31	6.73E-18	0.352637662	0.897	0.714
EMCN	7.60E-18	0.484400791	0.917	0.794
TBC1D9	7.67E-18	0.312754908	0.716	0.503
NEAT1	7.85E-18	0.451522894	0.989	0.89
ERC1	8.01E-18	0.36176165	0.884	0.722
PIK3C2B	8.42E-18	0.295182262	0.47	0.258
BMP6	9.18E-18	0.439362553	0.417	0.219
DISC1	9.50E-18	0.395856684	0.708	0.515
NUMB	1.02E-17	0.305705154	0.828	0.638
ATXN1	1.07E-17	0.410175669	0.774	0.547
IL32	1.21E-17	0.367099937	0.57	0.359
YES1	1.56E-17	0.278130985	0.851	0.682
HBEGF	1.76E-17	0.276315965	0.517	0.293
MGAT4A	2.07E-17	0.272526186	0.714	0.495
SNX29	2.87E-17	0.271822647	0.571	0.364
SPIRE1	3.03E-17	0.341223986	0.555	0.343
ADGRG1	3.10E-17	0.288219198	0.612	0.41
SRGAP2B	3.82E-17	0.332704264	0.549	0.347
HPCAL1	4.25E-17	0.395119835	0.581	0.384
SYT11	4.53E-17	0.252109897	0.319	0.152
PRKX	4.60E-17	0.402503069	0.352	0.18
SH3TC1	4.71E-17	0.385196829	0.52	0.33
LRCH1	5.30E-17	0.358781223	0.892	0.729

CLSTN1	5.61E-17	0.297857375	0.517	0.313
ADAMTSL1	6.23E-17	0.64183095	0.429	0.245
PRKD1	6.26E-17	0.415193741	0.602	0.389
CTIF	6.38E-17	0.345895082	0.515	0.323
GAS6	6.58E-17	0.436664594	0.56	0.361
EIF2AK4	6.82E-17	0.279601334	0.583	0.39
ADIPOR2	7.48E-17	0.368860619	0.767	0.557
CALU	7.86E-17	0.255102447	0.737	0.535
LIMCH1	9.06E-17	0.519923104	0.743	0.552
SH3PXD2B	1.12E-16	0.403950279	0.392	0.211
UBE4B	1.57E-16	0.353933722	0.536	0.345
RFTN1	1.85E-16	0.480646457	0.687	0.498
SPG7	2.00E-16	0.358459714	0.637	0.434
SMAD7	2.15E-16	0.270791733	0.4	0.216
FRMD4B	2.23E-16	0.288590465	0.812	0.632
TCF7L1	2.33E-16	0.321244459	0.543	0.35
CCDC85B	2.49E-16	0.300221865	0.875	0.729
TLE3	2.75E-16	0.26381882	0.388	0.21
CDK2AP1	3.36E-16	0.293917225	0.615	0.43
ADGRL2	3.55E-16	0.592394209	0.762	0.623
SLC44A2	3.92E-16	0.276076927	0.624	0.434
ARHGEF10	4.00E-16	0.323303267	0.528	0.325
SORBS1	4.17E-16	0.685530708	0.61	0.43
RNF144A	4.24E-16	0.340166835	0.478	0.293
TMCC1	4.41E-16	0.396594061	0.56	0.363
ENTPD1	4.50E-16	0.313319936	0.867	0.656
PLCG2	5.06E-16	0.30686685	0.543	0.34
JAZF1	5.13E-16	0.307862439	0.559	0.357
XPR1	5.35E-16	0.314371366	0.695	0.487
TJP2	5.39E-16	0.288533984	0.634	0.429
RUNDC3B	5.72E-16	0.426075031	0.555	0.352
ELK3	6.20E-16	0.275380834	0.925	0.79
TAX1BP3	6.80E-16	0.278844779	0.576	0.387
TCF4	8.04E-16	0.285865215	0.997	0.938
WWC2	8.31E-16	0.331962217	0.689	0.483
PIK3R3	8.77E-16	0.458373102	0.86	0.714
PAPSS1	1.59E-15	0.260279691	0.422	0.242
MAGI1	1.61E-15	0.326332551	0.973	0.845
FOXN3	1.71E-15	0.337044226	0.849	0.673
RASAL2	1.74E-15	0.415644065	0.912	0.806
FKBP9	1.82E-15	0.263761925	0.666	0.471
KITLG	1.85E-15	0.267579345	0.443	0.251
EEPD1	1.87E-15	0.333000304	0.372	0.199

MAML2	2.06E-15	0.281227716	0.844	0.653
RNF144B	2.28E-15	0.365118728	0.308	0.149
MPRIIP	2.55E-15	0.283060238	0.703	0.517
ZNF827	2.55E-15	0.257451274	0.339	0.167
LRRC8C	2.72E-15	0.288003092	0.756	0.565
ATP2A2	2.73E-15	0.298564729	0.682	0.481
RHOC	2.90E-15	0.251815365	0.849	0.696
FAT4	3.46E-15	0.316667263	0.514	0.319
SMURF2	4.47E-15	0.381933994	0.785	0.605
CLASP2	4.77E-15	0.253895864	0.623	0.42
NEDD4L	4.90E-15	0.333390535	0.441	0.255
HMOX2	4.92E-15	0.268812099	0.518	0.329
LBH	4.92E-15	0.446215633	0.414	0.251
ADCY4	4.93E-15	0.276827625	0.79	0.622
MCC	5.44E-15	0.379645716	0.648	0.447
FNDC3B	5.85E-15	0.291533216	0.955	0.834
QKI	6.38E-15	0.281208495	0.933	0.784
NRP1	6.45E-15	0.428193586	0.88	0.748
EPAS1	6.50E-15	0.333362353	0.998	0.892
WWTR1	6.80E-15	0.282392551	0.97	0.844
WWC3	7.15E-15	0.298684427	0.48	0.295
TTYH3	7.62E-15	0.278053353	0.353	0.188
PDS5B	9.17E-15	0.299069861	0.697	0.512
HS2ST1	9.77E-15	0.351558137	0.464	0.289
DYNC1H1	1.00E-14	0.275868956	0.806	0.65
CTNND1	1.01E-14	0.256164317	0.864	0.718
PALMD	1.06E-14	0.30720473	0.928	0.76
DST	1.12E-14	0.551585521	0.681	0.545
RABGAP1	1.22E-14	0.333922724	0.756	0.565
RC3H2	1.29E-14	0.256157527	0.587	0.387
CCDC88C	1.35E-14	0.323317115	0.34	0.18
PPP1R13B	1.37E-14	0.283905071	0.746	0.543
ANKRD50	1.39E-14	0.288838702	0.401	0.231
DIP2B	1.60E-14	0.306746216	0.65	0.461
OLFML2A	1.67E-14	0.282796485	0.348	0.189
PPP3CC	1.88E-14	0.273127122	0.551	0.363
RHOB	2.27E-14	0.488631218	0.756	0.598
CHSY1	2.31E-14	0.358497564	0.748	0.58
SLC2A13	2.59E-14	0.278100696	0.276	0.13
TOP2B	2.82E-14	0.256446279	0.608	0.423
FCHO2	2.93E-14	0.296986517	0.803	0.617
TPM1	3.13E-14	0.287789495	0.567	0.387
ZBTB46	3.30E-14	0.321898133	0.465	0.29

EFCAB14	3.35E-14	0.330421766	0.616	0.434
CLIC4	3.44E-14	0.348397533	0.896	0.748
ZNF704	3.61E-14	0.38959344	0.315	0.16
HIPK2	3.86E-14	0.261698055	0.597	0.395
NCKAP1	3.86E-14	0.252733594	0.82	0.656
ERBIN	3.97E-14	0.314278842	0.835	0.669
RALA	4.32E-14	0.259350009	0.687	0.5
GRK5	4.40E-14	0.286098729	0.748	0.564
AL139383.1	4.57E-14	0.299556222	0.252	0.114
FADS3	4.89E-14	0.288704466	0.35	0.193
UNC13B	5.03E-14	0.34600308	0.462	0.29
UBR3	5.32E-14	0.321017924	0.655	0.475
ABLIM2	5.66E-14	0.365025902	0.618	0.437
MAP4K3-DT	6.65E-14	0.263309666	0.358	0.2
UPF3A	7.36E-14	0.253171438	0.665	0.474
EGFL7	7.52E-14	0.262689981	0.91	0.737
ANKRD11	7.86E-14	0.270936778	0.838	0.703
GPHN	9.02E-14	0.258884681	0.817	0.615
COP1	9.06E-14	0.252826798	0.785	0.593
ARHGEF28	9.29E-14	0.3250987	0.658	0.486
KLHL18	9.80E-14	0.329406449	0.416	0.245
DENND5A	1.12E-13	0.264602146	0.689	0.507
FRYL	1.26E-13	0.326339676	0.9	0.752
CCNY	1.26E-13	0.380374198	0.856	0.706
BIRC6	1.32E-13	0.251240242	0.873	0.719
TTC37	1.59E-13	0.292647564	0.579	0.396
ZNF148	1.69E-13	0.273523197	0.73	0.535
MEF2C	1.71E-13	0.28162189	0.934	0.79
MAGI3	1.73E-13	0.316557421	0.571	0.382
MAD1L1	1.80E-13	0.264576304	0.371	0.211
ANKRD28	1.94E-13	0.283604534	0.809	0.641
ST8SIA4	2.89E-13	0.339446315	0.499	0.334
CLASP1	2.91E-13	0.323670454	0.729	0.573
PTPN4	5.25E-13	0.269305883	0.474	0.296
NPC1	5.44E-13	0.285165098	0.578	0.382
SPATA6	5.94E-13	0.25141667	0.337	0.184
OPHN1	6.79E-13	0.293092096	0.538	0.356
AOPEP	7.97E-13	0.30806588	0.88	0.711
GOLIM4	8.10E-13	0.267505518	0.579	0.403
JARID2	8.33E-13	0.265509018	0.708	0.531
LINC00472	1.15E-12	0.355455518	0.39	0.234
EXOC6B	1.17E-12	0.341599362	0.83	0.639
MMRN2	1.34E-12	0.28145372	0.788	0.615

PRRC2B	1.41E-12	0.263616321	0.75	0.598
CTTNBP2NL	1.48E-12	0.273873086	0.819	0.654
IVNS1ABP	1.84E-12	0.378022693	0.668	0.507
EDNRB	1.84E-12	0.473364447	0.313	0.175
LMBR1	1.86E-12	0.284222261	0.812	0.676
ATXN2	2.17E-12	0.259498909	0.726	0.539
SPTBN1	2.41E-12	0.258030449	0.99	0.896
MGAT5	2.94E-12	0.255165298	0.655	0.469
UBE2H	3.18E-12	0.257969496	0.86	0.708
LGALS1	3.92E-12	0.40797241	0.732	0.56
TRIM2	4.41E-12	0.283107551	0.316	0.178
PBX3	4.72E-12	0.282321331	0.403	0.251
MGMT	5.00E-12	0.252970868	0.791	0.612
ZHX3	5.06E-12	0.293049579	0.657	0.487
EMP1	7.21E-12	0.352730121	0.958	0.886
IQCJ-SCHIP1	7.30E-12	0.352578882	0.631	0.461
KLHL29	7.32E-12	0.303972347	0.411	0.248
RAB11FIP3	7.72E-12	0.259534617	0.493	0.318
NLK	7.73E-12	0.340225506	0.673	0.501
CEP350	1.08E-11	0.262796705	0.729	0.565
LDB2	1.14E-11	0.358590207	0.97	0.874
DPYSL3	1.29E-11	0.252384097	0.754	0.611
FBXW7	1.45E-11	0.296409189	0.75	0.587
BDKRB2	1.75E-11	0.322638371	0.482	0.323
ITCH	2.24E-11	0.25167284	0.64	0.468
PGM2L1	2.26E-11	0.261710132	0.49	0.324
IFI27	2.48E-11	0.32526749	0.965	0.857
NRIP1	2.51E-11	0.325713581	0.708	0.549
ZFYVE28	2.55E-11	0.306828727	0.424	0.271
FBXL20	2.76E-11	0.267014064	0.472	0.314
ATXN7L1	3.74E-11	0.264646037	0.445	0.286
VEGFC	3.77E-11	0.348201242	0.652	0.479
STARD13	5.10E-11	0.25713189	0.859	0.684
CSGALNACT1	5.47E-11	0.318442774	0.88	0.73
TNKS	6.45E-11	0.265620848	0.661	0.494
WWOX	7.12E-11	0.364492347	0.695	0.527
THSD7A	1.00E-10	0.434965142	0.851	0.739
GBE1	1.04E-10	0.382818003	0.653	0.491
TJP1	1.10E-10	0.250043883	0.912	0.813
MAP4	1.42E-10	0.272748689	0.864	0.73
ZNF407	1.88E-10	0.298095825	0.687	0.545
BTBD3	1.92E-10	0.27460929	0.417	0.274
NR2C2	2.32E-10	0.269984828	0.486	0.328

RGL1	2.78E-10	0.324741933	0.404	0.261
TANC1	2.99E-10	0.252573059	0.857	0.715
NRP2	6.24E-10	0.32525166	0.599	0.473
MIDN	8.09E-10	0.281206103	0.735	0.569
GAB1	9.34E-10	0.309590147	0.525	0.38
RBMS3	1.68E-09	0.288038233	0.9	0.755
SRPK2	1.97E-09	0.266579928	0.77	0.632
SOX4	2.81E-09	0.302190543	0.628	0.491
DACH1	3.18E-09	0.348766412	0.631	0.483
FSTL1	3.41E-09	0.284877237	0.734	0.594
IFI6	3.57E-09	0.278376383	0.6	0.461
PTPRJ	3.60E-09	0.344997253	0.268	0.157
NFIB	3.74E-09	0.262322323	0.982	0.893
RAPGEF4	5.98E-09	0.350126457	0.881	0.755
NUDT4	9.42E-09	0.328551399	0.453	0.318
SRP14	1.06E-08	0.447244635	0.937	0.879
CASC15	1.51E-08	0.285601071	0.621	0.489
CACHD1	1.73E-08	0.293193779	0.637	0.48
FLNB	1.76E-08	0.259126596	0.803	0.677
LNX1	3.22E-08	0.446709173	0.26	0.154
ATP13A3	4.10E-08	0.429661577	0.507	0.381
PAPSS2	6.28E-08	0.273498097	0.313	0.197
DLC1	6.44E-08	0.268609662	0.798	0.659
CD320	2.83E-07	0.321434065	0.648	0.518
PRSS23	4.69E-07	0.297557608	0.828	0.733
PLEKHG1	7.83E-07	0.254682669	0.944	0.807
MTOR	1.07E-06	0.393998679	0.345	0.236
HMCN1	1.21E-06	0.444479881	0.3	0.203
FILIP1	3.54E-06	0.25140091	0.584	0.472
CRADD	5.95E-06	0.280541616	0.413	0.315
NR5A2	1.19E-05	0.255395101	0.584	0.474
CCDC85A	1.77E-05	0.332085487	0.347	0.253
EMP3	3.55E-05	0.255603951	0.348	0.259
PPARG	4.43E-05	0.338296374	0.321	0.238
SYNJ2	4.61E-05	0.259820947	0.541	0.435
S100A4	4.92E-05	0.365285541	0.315	0.228
SLC2A3	5.10E-05	0.278407264	0.82	0.711
DEPP1	5.33E-05	0.596117267	0.469	0.377
SULF1	0.001770578	0.302708095	0.191	0.274
AL583785.1	0.005212965	0.254399287	0.456	0.393
CCL21	7.30E-52	5.889986062	0.256	0.027
MPP7	1.17E-50	1.21790486	0.292	0.041
MAF	1.65E-38	1.044171876	0.277	0.054

TC2N	3.20E-33	0.970092613	0.253	0.052
FTH1	9.52E-26	1.21384172	0.884	0.955
FTL	8.52E-22	1.042856062	0.869	0.933
RAB11FIP1	2.62E-18	0.717499912	0.298	0.121
LAPTM5	5.18E-16	1.083075315	0.375	0.217
FAM107B	1.49E-12	1.112313216	0.387	0.251
TSPAN5	1.07E-10	1.106452088	0.304	0.178
VAV3	1.47E-10	0.917392177	0.295	0.167
OAZ1	1.16E-09	0.852660319	0.685	0.805
DDX46	1.25E-09	0.392841876	0.396	0.678
B2M	1.91E-09	0.464001852	0.976	0.995
CNOT6L	2.00E-09	0.255774487	0.432	0.767
GYPC	3.97E-09	1.185489473	0.438	0.361
EIF1	6.58E-09	0.511347783	0.893	0.977
ATP5F1E	1.59E-08	0.760370682	0.774	0.915
GNG10	2.87E-08	0.257160106	0.381	0.613
PPM1B	3.04E-08	0.255867878	0.208	0.398
PPFIBP1	3.28E-08	0.514329376	0.485	0.867
UBA52	8.84E-08	0.541744279	0.768	0.93
CHCHD10	1.09E-07	0.477225365	0.28	0.176
ACTB	1.61E-07	0.550701346	0.875	0.957
FAU	3.60E-07	0.51746508	0.824	0.934
RBP1	4.31E-07	0.61708265	0.256	0.165
CLEC2B	5.60E-07	0.30322338	0.47	0.726
SELENOS	5.71E-07	0.272120144	0.342	0.567
RPN2	6.08E-07	0.325443949	0.393	0.649
ATOX1	6.47E-07	0.319460033	0.44	0.701
CMSS1	6.69E-07	0.377604562	0.315	0.51
SMCHD1	8.05E-07	0.55733913	0.47	0.776
EEF1A1	9.89E-07	0.490825462	0.943	0.994
TCEAL4	1.47E-06	0.309118149	0.396	0.641
LARS	1.50E-06	0.26220086	0.375	0.585
LAP3	1.74E-06	0.257569408	0.423	0.653
MYL6	1.93E-06	0.549800331	0.812	0.935
ZMYM2	2.89E-06	0.257899405	0.348	0.578
MYDGF	3.44E-06	0.343867468	0.354	0.594
RCN2	3.66E-06	0.293207708	0.289	0.474
ERCC1	3.92E-06	0.25136864	0.283	0.473
THSD4	5.22E-06	0.763970378	0.277	0.183
TPT11	5.33E-06	0.532780991	0.938	0.99
RAB1A	6.11E-06	0.260684442	0.482	0.742
GNAS	6.25E-06	0.434391394	0.854	0.967
SNRPF	6.94E-06	0.250044204	0.372	0.59

TRIOBP	7.10E-06	0.25398057	0.42	0.666
CD461	7.19E-06	0.277568759	0.497	0.706
HNRNPH3	7.96E-06	0.252480339	0.411	0.663
PYURF	8.55E-06	0.347035276	0.33	0.536
PFKL	1.09E-05	0.283414784	0.211	0.367
NPM1	1.19E-05	0.685170602	0.729	0.89
H3F3A	1.26E-05	0.497271257	0.836	0.946
RALBP1	1.59E-05	0.368423675	0.414	0.649
MCFD2	1.89E-05	0.261971987	0.307	0.504
SSR3	1.93E-05	0.438317764	0.384	0.607
ARHGDIB	2.04E-05	0.421496197	0.369	0.66
TAF1D	2.15E-05	0.303404873	0.467	0.701
LGALS11	2.17E-05	0.72849651	0.616	0.622
KLF12	2.31E-05	0.668509275	0.274	0.186
PHF20L1	2.90E-05	0.331452415	0.342	0.528
ACTR2	3.07E-05	0.254039843	0.554	0.795
SLC38A1	3.10E-05	0.563760799	0.351	0.288
TMEM179B	3.16E-05	0.264923187	0.312	0.504
TIMM9	3.20E-05	0.259454301	0.167	0.296
NRN11	3.24E-05	0.268949035	0.333	0.538
TXNDC17	3.91E-05	0.250020282	0.31	0.489
IFT20	4.21E-05	0.345078361	0.214	0.367
HEBP2	4.41E-05	0.256025311	0.369	0.556
DDX1	4.82E-05	0.29959833	0.256	0.397
PPM1G	5.07E-05	0.255848103	0.405	0.613
S100A10	5.37E-05	0.59248215	0.795	0.926
OCIAD2	5.68E-05	0.316467102	0.301	0.489
PFDN1	6.10E-05	0.319693216	0.345	0.537
TSPAN3	6.16E-05	0.35237937	0.315	0.476
PDCD5	6.55E-05	0.423798717	0.351	0.556
PSMA6	7.35E-05	0.270709406	0.455	0.697
VIM	7.43E-05	0.576395637	0.938	0.992
NDUFB1	8.07E-05	0.293787902	0.36	0.554
TMEM88	8.27E-05	0.428064256	0.232	0.394
NAA381	8.54E-05	0.257587685	0.452	0.689
NDUFA8	9.38E-05	0.408646206	0.292	0.472
NDUFB9	0.0001003	0.284460452	0.372	0.574
SMAP2	0.000107256	0.708139266	0.274	0.212
TRIM38	0.000111336	0.28903974	0.226	0.362
METTL9	0.000112629	0.33911725	0.357	0.56
LMAN1	0.000119943	0.349764417	0.423	0.661
SCP2	0.000130752	0.257823517	0.423	0.654
TMSB10	0.000131141	0.389182401	0.943	0.997

GNG5	0.00013317	0.306916403	0.586	0.825
MRPL51	0.000135009	0.284396014	0.381	0.602
TKT	0.000137531	0.315781047	0.348	0.544
ROMO1	0.000138977	0.281246825	0.339	0.515
ARPC4	0.00014082	0.269911871	0.336	0.528
PPP1R14B	0.00014613	0.349101537	0.402	0.622
HES1	0.000150305	0.281946355	0.435	0.636
SBDS	0.000158311	0.322969179	0.455	0.66
TBRG1	0.000162644	0.259126427	0.333	0.499
GET3	0.000169209	0.252900467	0.19	0.322
SLC25A5	0.000199657	0.253986243	0.423	0.634
PTMA	0.000201097	0.404790465	0.961	0.985
FAM32A	0.000214782	0.330360669	0.214	0.345
HDAC1	0.000224457	0.317862358	0.277	0.437
MMP21	0.000242638	0.268194078	0.25	0.381
CFL1	0.000275185	0.485930843	0.765	0.908
CHMP5	0.000277242	0.344921538	0.378	0.566
LAMP1	0.000298475	0.336415972	0.429	0.661
EML4	0.000321002	0.289572977	0.381	0.594
SNHG16	0.000330396	0.301017877	0.327	0.497
SMIM30	0.000359148	0.261727966	0.211	0.343
HYAL21	0.000364686	0.297056834	0.583	0.83
MAP1LC3A	0.000405343	0.289246681	0.268	0.428
TMSB4X	0.000433792	0.375712631	0.949	0.991
SYF2	0.000452653	0.273078544	0.461	0.667
BRD2	0.000462702	0.363327442	0.458	0.677
LINC01619	0.000464193	0.297476862	0.31	0.484
PFDN4	0.00048831	0.325290993	0.22	0.361
NOP10	0.000488424	0.315986714	0.455	0.66
LSM8	0.000491568	0.282701925	0.339	0.514
KDEL2	0.000491643	0.333269113	0.351	0.544
NDUFB4	0.000502396	0.322898407	0.461	0.678
FKBP3	0.000520589	0.369159882	0.268	0.417
GDI2	0.000527401	0.344812554	0.455	0.669
FILIP1L	0.000529415	0.290007272	0.378	0.562
HHEX	0.000532989	0.273379656	0.238	0.383
ATP5MD	0.000537754	0.255363806	0.426	0.647
MRPL41	0.00055379	0.285687214	0.298	0.46
CD151	0.000594182	0.311548381	0.524	0.811
SERF2	0.000596592	0.451316863	0.804	0.931
COX16	0.000601258	0.300581647	0.342	0.519
XRCC6	0.000607237	0.267503737	0.44	0.645
ARL2	0.000610624	0.305428106	0.446	0.681

COX7A1	0.000611471	0.256869615	0.354	0.523
HADHB	0.00061886	0.308407988	0.381	0.574
GAPDH	0.000667723	0.623962032	0.824	0.931
FABP4	0.000679309	0.809036489	0.259	0.191
KDELRL1	0.000687058	0.289474943	0.464	0.675
PSMD4	0.000697109	0.342517295	0.366	0.547
ATF4	0.000709712	0.251786905	0.47	0.695
FNBP1	0.000715613	0.312246907	0.327	0.53
CANX	0.000727562	0.287625373	0.548	0.794
TMEM123	0.000770948	0.300307976	0.432	0.687
CTSL	0.000771566	0.323134029	0.348	0.537
PSMA4	0.000800619	0.39179562	0.399	0.592
STIP1	0.000816843	0.268231637	0.292	0.436
NDUFA12	0.000860467	0.285681654	0.446	0.661
CNPY2	0.000875593	0.262421464	0.363	0.524
PPIA	0.000875793	0.546839957	0.756	0.912
LDHB	0.000888964	0.493134	0.378	0.59
REEP3	0.000946899	0.276153731	0.39	0.585
MICOS13	0.000973813	0.294438625	0.354	0.529
HNRNPDL	0.000977277	0.294461219	0.542	0.792
ARF5	0.000977677	0.259605718	0.256	0.39
NACA	0.00105387	0.534779594	0.804	0.935
SHC1	0.00107468	0.416651313	0.384	0.585
DBN1	0.001138204	0.290011549	0.223	0.345
MRPL50	0.001152668	0.263926927	0.161	0.261
PSMC3	0.001159208	0.274419796	0.307	0.46
NDUFAB1	0.001165884	0.294472759	0.375	0.56
WDR74	0.001202894	0.261097519	0.208	0.329
ARPC5	0.00122997	0.350790437	0.497	0.728
S100A41	0.001299127	0.729145352	0.301	0.249
H1FX	0.001336802	0.302166214	0.438	0.633
TMX4	0.001354495	0.275081658	0.295	0.434
VPS35	0.00136069	0.338512409	0.312	0.464
ALDH2	0.001388027	0.333900087	0.241	0.376
MTIF3	0.00138968	0.26020526	0.333	0.491
MTCH1	0.001473965	0.269489558	0.432	0.616
STK17A	0.001493916	0.270069889	0.271	0.413
RNH1	0.001526257	0.294352284	0.423	0.65
EEF1G	0.001565772	0.549515384	0.78	0.917
COPS9	0.001619714	0.366626748	0.411	0.604
NCOA4	0.001655259	0.291439284	0.301	0.445
BROX	0.001676822	0.270351127	0.182	0.293
NSA2	0.001763479	0.319449342	0.387	0.578

LAMTOR1	0.001772445	0.416666912	0.369	0.544
POMP	0.001795217	0.331399266	0.562	0.778
HNRNPA0	0.001815857	0.349248737	0.381	0.537
CTNBL1	0.001883676	0.28166286	0.214	0.323
UGP2	0.002000897	0.402834336	0.324	0.477
ARF1	0.002009328	0.298113272	0.586	0.826
PSMB1	0.002234518	0.301301705	0.506	0.751
MAGED2	0.002250373	0.296617488	0.348	0.506
PPIL4	0.002281199	0.270311809	0.315	0.465
COX4I1	0.002284668	0.602841746	0.688	0.836
ACYP2	0.002331594	0.267573085	0.256	0.38
BEX3	0.002448451	0.491035955	0.366	0.542
EIF3G	0.002451322	0.290785253	0.476	0.68
NHP2	0.00246028	0.366068431	0.333	0.494
BUD31	0.002496983	0.253326086	0.36	0.522
LAPTM4A	0.002535743	0.302198982	0.554	0.803
PFN1	0.002541446	0.650226219	0.69	0.842
PPHLN1	0.002565316	0.25272312	0.342	0.492
DDRKG1	0.002570023	0.396244462	0.286	0.419
BAX	0.00263695	0.267465249	0.307	0.458
AAK1	0.002639118	0.297589729	0.387	0.574
BTG3	0.002683768	0.2818782	0.208	0.322
EIF3D	0.002865856	0.314919787	0.461	0.665
CHMP2A	0.002917287	0.353087284	0.485	0.684
CYBA	0.002928985	0.705214015	0.461	0.477
VAMP5	0.002945169	0.3027136	0.515	0.713
PSMB5	0.00298727	0.298632888	0.399	0.597
HAX1	0.00300371	0.273799896	0.277	0.394
CYB5R3	0.003115413	0.449433939	0.482	0.746
EIF3L	0.003116895	0.328825126	0.42	0.619
TBCB	0.00312206	0.253590769	0.318	0.473
HLA-A	0.003197689	0.343566089	0.887	0.983
UFC1	0.003290387	0.295189804	0.42	0.608
SSB	0.003314462	0.386393605	0.461	0.657
FKBP1A	0.003403037	0.275306943	0.732	0.922
CIB1	0.003428426	0.255078499	0.327	0.485
DDIT41	0.003520886	0.254025704	0.399	0.559
PEA15	0.003547397	0.290497141	0.381	0.553
CALM11	0.003594154	0.423614228	0.777	0.935
NHSL1	0.003666874	0.310748709	0.31	0.453
DUT	0.003680575	0.408325615	0.42	0.592
SMIM26	0.003700283	0.283605439	0.327	0.469
TGFB1I1	0.003702862	0.251126935	0.22	0.326

EIF3M	0.00374274	0.291755862	0.396	0.567
NAP1L4	0.003820815	0.293878975	0.384	0.579
NRP21	0.0038259	0.290861277	0.375	0.55
FXYD5	0.003835574	0.416683436	0.551	0.794
ATP5F1B	0.003876067	0.337994262	0.497	0.713
MXRA7	0.003888818	0.311483113	0.387	0.556
COX5A	0.003923459	0.277408248	0.443	0.64
SRP19	0.003988483	0.289873826	0.342	0.49
RHOC1	0.004288787	0.279526182	0.56	0.794
TPI1	0.00432454	0.286204086	0.518	0.76
COX17	0.004541673	0.377980212	0.393	0.56
PHF11	0.004585066	0.317652626	0.229	0.338
STOML2	0.004621872	0.282084348	0.244	0.354
RRAS	0.004791698	0.294696988	0.31	0.452
IFT74	0.004998318	0.267789743	0.164	0.253
COMMD2	0.005013616	0.261664929	0.211	0.312
RAB1B	0.005092912	0.388129058	0.256	0.377
MRPL57	0.00530201	0.392104498	0.339	0.486
CLNS1A	0.005396525	0.287795161	0.262	0.389
ATP5PB	0.005525467	0.36804846	0.384	0.546
RBM3	0.005595247	0.310432049	0.53	0.78
ARL4A1	0.005656693	0.393323195	0.485	0.692
SLC22A23	0.005715787	0.575300212	0.286	0.245
CBX4	0.005806229	0.314556252	0.173	0.257
RWDD1	0.005812872	0.343350453	0.429	0.603
COMT	0.005819851	0.3563	0.351	0.52
TMEM256	0.005958643	0.275559386	0.265	0.393
SKP1	0.005965451	0.501532981	0.646	0.827
IER5L	0.006046657	0.452483573	0.211	0.312
NUCKS1	0.006047958	0.315757268	0.595	0.85
EIF5A	0.006268152	0.310952851	0.408	0.579
RPAIN	0.006291684	0.260269148	0.25	0.359
TOPBP1	0.006293806	0.29202782	0.196	0.288
ESD	0.006296669	0.304621577	0.33	0.483
IFITM3	0.006304905	0.48055848	0.842	0.965
MARCKS	0.006311817	0.343086962	0.488	0.725
SRGN	0.006412807	0.507289019	0.574	0.878
RNF7	0.006477828	0.350851381	0.461	0.635
ATP5MF	0.006514321	0.262578002	0.39	0.544
YWHAZ	0.006514614	0.306345285	0.616	0.857
SET	0.006556734	0.265783562	0.586	0.815
TM4SF181	0.006636275	0.280985895	0.357	0.522
COA1	0.006734299	0.2790953	0.298	0.418

GIMAP7	0.006833638	0.327999018	0.554	0.767
SUMO3	0.006904677	0.281201158	0.339	0.491
PSMB2	0.006936167	0.315086371	0.375	0.551
CARD16	0.00703556	0.330864584	0.333	0.494
HMGN2	0.007095553	0.321772735	0.411	0.594
COX5B	0.007114238	0.379545054	0.562	0.781
BANF1	0.007190192	0.36598265	0.399	0.564
HRAS	0.007201813	0.335645123	0.205	0.307
SNRPB	0.007269876	0.350271311	0.506	0.706
TIMP2	0.007312003	0.297117837	0.408	0.615
SNRPD1	0.007357395	0.297673112	0.408	0.574
SARNP	0.007370386	0.35747623	0.378	0.535
ABHD3	0.007448629	0.255790824	0.173	0.254
CEBPZ	0.007652215	0.282736829	0.351	0.492
ITGB11	0.007918616	0.274694529	0.72	0.924
MDH2	0.007930306	0.374630516	0.33	0.472
PSMD7	0.008075543	0.26415851	0.393	0.551
AURKAIP1	0.008201811	0.326762396	0.408	0.567
DYNLT1	0.008219927	0.371101363	0.375	0.542
TRIM5	0.008703567	0.568835583	0.182	0.26
DMAC1	0.008799291	0.272315438	0.253	0.36
KRT10	0.008856294	0.425487477	0.42	0.589
ZFAND2A	0.009203564	0.360566686	0.223	0.318
MRPS21	0.009238722	0.263214238	0.414	0.578
CALM3	0.009382653	0.314852788	0.327	0.478
TMEM230	0.009431669	0.403620892	0.42	0.597
MRPS15	0.009617887	0.256596654	0.268	0.391
CHCHD1	0.009931761	0.343619053	0.256	0.371

p_val_adj	cluster	gene
2.40E-180	0	ACKR1
2.90E-157	0	ZNF385D
7.73E-157	0	TLL1
3.83E-134	0	IL1R1
6.15E-130	0	SELP
2.49E-114	0	LRRC1
3.88E-110	0	CCL14
8.75E-106	0	NCOA7
3.05E-97	0	EPB41L3
5.82E-92	0	ADGRG6
4.33E-89	0	CLU
7.73E-85	0	CD74
1.03E-83	0	CNKSR3
1.34E-82	0	RAB3C
2.00E-81	0	ELOVL7
3.21E-79	0	RALGAPA2
5.34E-78	0	ICAM1
6.73E-78	0	TSPAN7
1.42E-77	0	HIPK3
2.08E-77	0	MYRIP
4.26E-77	0	LIFR
8.34E-77	0	CCSER1
1.93E-76	0	POSTN
6.51E-76	0	HLA-DQA1
1.68E-75	0	SOD2
1.32E-74	0	ABLIM1
1.54E-73	0	ADIRF
2.61E-73	0	HLA-DRA
4.01E-73	0	EVA1C
1.81E-71	0	OLFM1
9.29E-71	0	TPD52L1
1.38E-70	0	SELE
3.92E-70	0	CADM3-AS1
1.23E-69	0	CELF2
6.70E-68	0	HLA-DRB1
8.15E-68	0	NPC2
2.97E-67	0	HAPLN3
3.94E-66	0	TGFBR3
7.50E-66	0	DAPK1
8.09E-66	0	HDAC9
2.97E-65	0	NNMT

3.90E-65	0	DAAM1
2.22E-61	0	TFPI
3.22E-60	0	NAMPT
5.72E-59	0	IL33
8.27E-58	0	CCL23
8.30E-58	0	HLA-DPB1
1.35E-57	0	SIK2
2.55E-57	0	SNTG2
4.76E-57	0	HLA-DQA2
3.90E-56	0	HLA-DQB1
5.05E-56	0	HLA-DPA1
2.74E-54	0	CYTH1
1.93E-53	0	KLF7
1.96E-53	0	AL078604.4
1.25E-52	0	IL6
2.13E-51	0	CPXM2
9.59E-51	0	MRTFB
5.98E-50	0	BNC2
1.70E-49	0	PLEKHA7
6.80E-49	0	VWF
1.73E-48	0	C1QTNF1
2.44E-48	0	ARHGAP26
3.71E-47	0	MYOF
1.13E-46	0	MCTP1
2.43E-46	0	UGCG
5.86E-46	0	DNM3
6.42E-46	0	YBX3
9.48E-46	0	PERP
2.06E-44	0	SAMD4A
3.55E-44	0	DOC2B
3.60E-44	0	TESC
1.63E-43	0	FOXP1
5.00E-43	0	SDCBP
1.31E-42	0	DUSP23
1.56E-42	0	ACTN1
4.01E-42	0	PDIA5
6.51E-42	0	SERPINA3
7.30E-42	0	TPO
9.51E-42	0	TACR1
9.60E-42	0	ITPKC
1.08E-41	0	PRXL2A
1.95E-41	0	PLSCR4
8.13E-41	0	NPAS3

5.09E-40	0	CTSC
5.56E-40	0	VCAM1
5.63E-40	0	C7
1.68E-39	0	FBLN2
1.84E-39	0	BIRC3
2.85E-39	0	C2CD4B
3.31E-39	0	SH3BP5
1.01E-38	0	CSF3
1.12E-38	0	TGFBR2
1.22E-38	0	RAB27A
1.59E-38	0	CST3
6.28E-38	0	PLCB4
6.63E-38	0	HLA-DMA
1.43E-37	0	MEOX2
2.47E-37	0	SLC8A1
5.64E-37	0	MYCBP2
7.02E-37	0	PVT1
1.27E-36	0	CPVL
1.45E-36	0	SPARCL1
5.45E-36	0	HLA-DOA
7.95E-36	0	ZBTB20
1.19E-35	0	FNIP2
2.14E-35	0	AL589693.1
3.32E-35	0	ADAMTS9
3.89E-35	0	CARMIL1
4.75E-35	0	LRATD2
1.07E-34	0	ST6GAL1
1.76E-34	0	PDLIM1
6.27E-34	0	CSF2RB
8.09E-34	0	CNTNAP3B
9.79E-34	0	CPE
1.18E-33	0	LYST
1.29E-33	0	LINC02147
1.57E-33	0	PCDH19
1.63E-33	0	SNAP25
2.83E-33	0	KCTD12
2.90E-33	0	AF064858.1
2.97E-33	0	ARNTL2
3.28E-33	0	CCDC68
4.50E-33	0	TNFRSF10B
8.89E-33	0	SPATA6L
2.03E-32	0	SNCG
3.26E-32	0	SESN3

1.09E-31	0	NR2F2
3.33E-31	0	SSH1
4.83E-31	0	CCDC69
5.00E-31	0	MAP3K8
1.36E-30	0	SLC1A1
1.92E-30	0	RORA
2.75E-30	0	MECOM
3.63E-30	0	PDK4
6.38E-30	0	SLC4A7
1.04E-29	0	FAM155A
1.76E-29	0	SAMD5
2.06E-29	0	DOCK11
3.72E-29	0	ADAM23
3.99E-29	0	CLEC1A
4.19E-29	0	SETBP1
4.28E-29	0	CORO2A
7.38E-29	0	IER3
1.23E-28	0	SRSF4
1.33E-28	0	NR2F2-AS1
1.40E-28	0	PIM3
1.40E-28	0	RBP5
2.21E-28	0	ZFPM2
2.91E-28	0	PLSCR1
3.71E-28	0	HLA-DRB5
4.23E-28	0	ZFAND5
5.34E-28	0	CYP1B1
5.58E-28	0	TNFAIP3
6.32E-28	0	TMTC1
7.59E-28	0	SYT15
9.78E-28	0	IRAK3
9.81E-28	0	CDC42EP3
1.48E-27	0	C21orf91
2.41E-27	0	LINC-PINT
3.08E-27	0	PBX1
3.68E-27	0	WTAP
3.74E-27	0	PCAT1
6.02E-27	0	TMTC2
1.02E-26	0	LHFPL2
1.22E-26	0	CA8
1.46E-26	0	CRIM1
1.99E-26	0	SHB
2.54E-26	0	GAS5
2.96E-26	0	NFKBIZ

5.21E-26	0	PHLDA1
5.66E-26	0	TPK1
7.35E-26	0	HIVEP1
1.07E-25	0	PTAFR
1.61E-25	0	SGMS2
2.02E-25	0	SH3BGRL2
2.08E-25	0	MBNL1
3.55E-25	0	AC011511.2
4.15E-25	0	FRY
5.22E-25	0	PRCP
5.95E-25	0	SERPINB1
7.21E-25	0	SYNE2
7.90E-25	0	PKP4
1.03E-24	0	MEOX1
1.52E-24	0	ATP8B1
2.72E-24	0	CFB
4.98E-24	0	RFX2
5.98E-24	0	GATA6
6.37E-24	0	ZNF608
1.01E-23	0	MMP16
1.49E-23	0	IGFBP4
1.63E-23	0	SOCS2
2.15E-23	0	ASPH
2.62E-23	0	DENND4A
3.49E-23	0	LHX6
5.01E-23	0	ADAMTS9-AS1
5.20E-23	0	CYGB
6.93E-23	0	LRIG3
8.28E-23	0	NOP53
1.08E-22	0	TMEM273
1.36E-22	0	RND1
1.51E-22	0	SPTLC2
1.79E-22	0	LPCAT4
2.27E-22	0	GMDS
2.38E-22	0	MKLN1
2.73E-22	0	ETS2
3.10E-22	0	FOXO1
4.85E-22	0	AKAP12
6.67E-22	0	CSRP2
7.43E-22	0	AASS
7.68E-22	0	CTNNAL1
7.73E-22	0	CCNL1
1.27E-21	0	FRMD3

1.46E-21	0	IGF2BP2
1.53E-21	0	IL6ST
1.60E-21	0	AC016831.7
1.90E-21	0	KLF9
5.39E-21	0	NFKB1
5.60E-21	0	MET
5.82E-21	0	GNG12
5.87E-21	0	RELL1
7.07E-21	0	SH3RF3
9.95E-21	0	PPP3CA
1.06E-20	0	IPCEF1
1.10E-20	0	SASH1
1.28E-20	0	LHFPL6
1.37E-20	0	BACE2
1.49E-20	0	GNA14
1.60E-20	0	GNB4
1.71E-20	0	EXOC6
2.12E-20	0	FOXC1
2.21E-20	0	RHOU
2.24E-20	0	DNMBP
3.25E-20	0	FAM241A
3.79E-20	0	NOCT
4.26E-20	0	ANO2
4.75E-20	0	SYBU
5.05E-20	0	RELB
8.27E-20	0	BMERB1
8.53E-20	0	VCAN
8.66E-20	0	JAM2
1.09E-19	0	SLC16A7
1.34E-19	0	ADGRL4
1.69E-19	0	ENPP2
2.11E-19	0	SGMS1
2.23E-19	0	SPHK1
2.81E-19	0	TSHZ2
3.85E-19	0	IL15
4.19E-19	0	HDGFL3
4.35E-19	0	IRF1
5.00E-19	0	AL033504.1
5.29E-19	0	ABLIM3
5.71E-19	0	B4GALT5
6.76E-19	0	RAP1B
7.25E-19	0	OSBPL10
9.33E-19	0	HLA-DMB

1.07E-18	0	NRN1
1.08E-18	0	ZFP36L1
1.26E-18	0	PLA1A
2.04E-18	0	TRPM6
2.10E-18	0	OSMR
2.37E-18	0	DOCK4
2.52E-18	0	CEMIP2
2.58E-18	0	NEURL1B
3.23E-18	0	ICAM4
3.34E-18	0	TEAD1
5.62E-18	0	FKBP5
6.37E-18	0	ATP11C
8.03E-18	0	CFLAR
9.08E-18	0	SLC7A1
1.06E-17	0	ABCG2
1.41E-17	0	PELI2
1.47E-17	0	NFATC2
1.69E-17	0	SEMA6A
1.70E-17	0	MCUB
1.82E-17	0	CPD
2.17E-17	0	LITAF
2.19E-17	0	PLXDC2
2.71E-17	0	LINC01197
3.20E-17	0	PALM2-AKAP2
3.49E-17	0	CLDN5
3.81E-17	0	SNCA
4.69E-17	0	ADM5
4.69E-17	0	MIR99AHG
5.46E-17	0	ARAP2
5.73E-17	0	USP36
6.05E-17	0	BMPR2
7.13E-17	0	ITSN1
8.87E-17	0	IL4R
9.35E-17	0	CMIP
9.85E-17	0	ZC3H12A
1.07E-16	0	TNFRSF10D
1.15E-16	0	GNS
1.24E-16	0	TNFRSF1A
1.52E-16	0	DIXDC1
1.59E-16	0	PEAK1
1.90E-16	0	PABPC1
1.92E-16	0	BAZ1A
2.36E-16	0	TNFRSF6B

2.42E-16	0	RNF122
3.41E-16	0	CLIP1
3.56E-16	0	MED13L
3.59E-16	0	AP002518.2
3.71E-16	0	SMAD3
4.09E-16	0	ZNRF1
5.44E-16	0	TMEM54
5.73E-16	0	EPS8
6.14E-16	0	ERRFI1
8.99E-16	0	CSRNP1
9.71E-16	0	SLCO3A1
1.11E-15	0	HIVEP2
1.20E-15	0	AKT3
1.20E-15	0	SLC1A5
1.23E-15	0	TPT1
1.71E-15	0	LY6E
2.01E-15	0	ESYT2
2.30E-15	0	SNHG29
2.31E-15	0	TEX14
2.67E-15	0	PARD3
2.79E-15	0	ARL4A
3.26E-15	0	KLHL3
3.66E-15	0	LDLRAD4
4.17E-15	0	AL133268.4
4.50E-15	0	MID1
4.83E-15	0	EBF1
4.92E-15	0	PTGDS
5.84E-15	0	ABCA5
5.88E-15	0	KLF4
7.19E-15	0	PITPNC1
7.24E-15	0	ANKRD12
1.09E-14	0	CYTL1
1.28E-14	0	ANKRD29
1.48E-14	0	ZBTB16
2.11E-14	0	SAV1
2.23E-14	0	SEMA6D
2.68E-14	0	TYMP
3.27E-14	0	AC007681.1
3.86E-14	0	AC016831.5
5.50E-14	0	3-Mar
5.53E-14	0	RALGDS
6.95E-14	0	ITGB4
8.85E-14	0	EGLN3

9.35E-14	0	ROBO1
1.12E-13	0	CXCL2
1.25E-13	0	HINT3
1.43E-13	0	CCL2
1.46E-13	0	PMP22
1.65E-13	0	NOSTRIN
1.72E-13	0	NR3C2
1.97E-13	0	NDRG1
2.21E-13	0	AHNAK
2.29E-13	0	SERTAD2
2.37E-13	0	FGD4
2.64E-13	0	MMP28
2.79E-13	0	NSUN6
3.25E-13	0	CNTNAP3
3.64E-13	0	AHR
5.46E-13	0	HNRNPC
5.57E-13	0	CHN1
6.06E-13	0	ZNF267
6.20E-13	0	MAP3K13
6.37E-13	0	AL049629.1
6.49E-13	0	KIAA0040
6.92E-13	0	FKBP11
8.41E-13	0	PLOD2
9.40E-13	0	SSBP2
1.46E-12	0	MAN1A1
1.60E-12	0	EPB41L4A
2.07E-12	0	CBLB
2.71E-12	0	LAMA3
2.93E-12	0	DLG2
3.07E-12	0	NFKB2
3.72E-12	0	AC105450.1
4.06E-12	0	MAOA
4.09E-12	0	PREX2
4.59E-12	0	AQP1
7.94E-12	0	NFAT5
9.21E-12	0	LYRM1
9.25E-12	0	NFE2L1
9.28E-12	0	PRKAG2
9.46E-12	0	LINC00513
1.00E-11	0	LDHA
1.36E-11	0	SLC9B2
1.39E-11	0	ARRDC3
1.92E-11	0	SAMHD1

1.93E-11	0	REV3L
2.30E-11	0	OVCH1
3.37E-11	0	SAMD12
3.66E-11	0	PITPNB
4.25E-11	0	INPP1
4.28E-11	0	NASP
4.32E-11	0	TRIB1
4.55E-11	0	BRAF
5.94E-11	0	UBE2E2
6.20E-11	0	ATF6
6.59E-11	0	NAV3
7.62E-11	0	BCR
8.60E-11	0	SIK3
8.93E-11	0	PDLIM3
9.57E-11	0	ETV6
9.72E-11	0	RAB11A
1.07E-10	0	THUMPD3-AS1
1.32E-10	0	GNAQ
1.35E-10	0	WWP1
1.41E-10	0	SRSF5
1.64E-10	0	CPNE8
1.79E-10	0	EEF1B2
2.28E-10	0	LINC01473
3.49E-10	0	RAI14
3.65E-10	0	SPAG9
4.00E-10	0	DDX58
4.34E-10	0	AL109930.1
5.70E-10	0	CYSTM1
7.45E-10	0	REL
8.60E-10	0	TACC1
9.90E-10	0	SPDYA
1.01E-09	0	IL3RA
1.10E-09	0	ACER2
1.18E-09	0	SEMA4A
1.47E-09	0	KDM6B
1.51E-09	0	USP53
1.78E-09	0	PDLIM5
1.83E-09	0	LRP5
2.15E-09	0	SHROOM2
2.96E-09	0	NKTR
3.22E-09	0	CSF1
3.82E-09	0	CASZ1
4.07E-09	0	FRMD4A

4.24E-09	0	STEAP1B
4.51E-09	0	ZNF521
4.98E-09	0	SLCO2A1
5.21E-09	0	AHI1
5.24E-09	0	DIPK2B
7.39E-09	0	SNTB2
7.55E-09	0	MIR222HG
8.55E-09	0	FBN1
8.65E-09	0	AL365295.1
9.58E-09	0	RAPH1
1.03E-08	0	CD55
1.09E-08	0	GNA14-AS1
1.14E-08	0	KLHL2
1.17E-08	0	ZNF423
1.21E-08	0	ADAMTS9-AS2
1.26E-08	0	MFHAS1
1.44E-08	0	CORO1C
1.50E-08	0	MIR22HG
1.65E-08	0	ACACB
2.09E-08	0	PTPN1
2.27E-08	0	STOX2
2.59E-08	0	ACKR3
2.71E-08	0	RASA4
3.54E-08	0	ARHGEF3
3.64E-08	0	FTX
3.70E-08	0	DISC1FP1
4.25E-08	0	TBC1D4
6.27E-08	0	RFX3
6.81E-08	0	LRMDA
7.17E-08	0	TRMT11
7.22E-08	0	NFIA
7.29E-08	0	SLC25A29
8.28E-08	0	IMMP2L
8.90E-08	0	HIF1A
1.11E-07	0	RNF115
1.48E-07	0	GALNT15
1.63E-07	0	GLIS3
2.19E-07	0	ZHX2
2.71E-07	0	AFAP1L2
2.78E-07	0	ERG
3.29E-07	0	RAB8B
3.39E-07	0	SVIL
3.43E-07	0	IRAK2

3.98E-07	0	ASAP1
4.72E-07	0	HRH1
6.08E-07	0	NUP210L
7.20E-07	0	ARID5B
1.18E-06	0	RNF217
1.49E-06	0	FBXL2
2.18E-06	0	TAF4B
2.29E-06	0	CHIC2
2.31E-06	0	CDKN1A
2.93E-06	0	GALNT10
3.10E-06	0	PDE7B
4.34E-06	0	FOXO3
4.55E-06	0	ERI2
4.95E-06	0	AC008014.1
7.61E-06	0	ATG7
1.29E-05	0	SUSD6
1.32E-05	0	PRKN
1.89E-05	0	PPP3R1
1.96E-05	0	MBNL2
1.99E-05	0	LRRC49
2.26E-05	0	WBP1L
2.46E-05	0	CUL1
2.54E-05	0	MYO9A
2.64E-05	0	HLA-E
2.65E-05	0	SNAPC1
2.85E-05	0	YPEL2
2.87E-05	0	EGLN1
3.70E-05	0	TRIM69
3.77E-05	0	INPP4B
4.05E-05	0	ZC3HAV1
4.32E-05	0	FAM171A1
5.36E-05	0	SSBP3
6.29E-05	0	LDLRAD3
7.40E-05	0	PPP2R3A
8.11E-05	0	ATP2B1
8.33E-05	0	FBXO31
9.34E-05	0	JAK2
9.67E-05	0	MB21D2
0.000120925	0	BTBD7
0.000123388	0	SPIDR
0.000157697	0	RCAN1
0.000157987	0	PTPRM
0.000169419	0	NAALADL2

0.000226484	0	FBXO11
0.000359343	0	PCED1B
0.000390075	0	SH3RF1
0.000419615	0	LINC01515
0.000423825	0	SQSTM1
0.00064573	0	DUSP1
0.000745616	0	TXNIP
0.000793723	0	NXN
0.001046285	0	MTHFD1L
0.001072451	0	ALPK1
0.001136129	0	KANSL1L
0.001459018	0	LINC01117
0.001714694	0	NFE2L3
0.002256968	0	SLC30A7
0.002745409	0	WNT2B
0.002983437	0	TTY14
0.00327438	0	MRNIP
0.003299859	0	GMDS-DT
0.003957318	0	FER
0.004279301	0	LARP4B
0.005421888	0	MAPK8
0.010545795	0	SNED1
0.013079401	0	BIN3
0.013770257	0	CCNH
0.01706619	0	MOB3B
0.01793422	0	NTN4
0.05198698	0	LINC01876
0.05722871	0	RFX3-AS1
0.090054432	0	RAPGEF5
0.262898055	0	AHCYL2
0.759951983	0	MEF2C-AS1
1	0	PHLDB2
1	0	INTS6
1	0	C11orf96
1	0	AC018816.1
1	0	ADAMTS4
1	0	FMNL2
2.78E-110	1	PTPRG
7.48E-110	1	ARL15
6.24E-71	1	CXCL12
8.27E-70	1	INSR
2.19E-69	1	ADAMTS6
2.09E-67	1	FLT1

5.22E-66	1	ADAMTSL2
2.19E-65	1	JAG2
2.80E-65	1	MEF2A
5.11E-65	1	RASGRF2
1.21E-64	1	BTNL9
6.14E-64	1	MPPED2
1.19E-63	1	MIR181A1HG
6.05E-61	1	SYNPO
1.21E-60	1	MLEC
2.38E-58	1	A2M
1.07E-57	1	NES
3.49E-57	1	RAPGEF1
4.98E-57	1	COL4A2
4.22E-55	1	IGFBP3
4.94E-54	1	HEY1
1.00E-53	1	MMP2
1.74E-51	1	DOCK6
2.82E-51	1	CTNNB1
4.48E-51	1	SPARC
5.06E-51	1	CACNA1C
3.36E-50	1	RAPGEF2
1.95E-48	1	ACE
4.90E-48	1	DYSF
1.33E-47	1	SGK1
6.69E-47	1	GRB10
1.68E-46	1	CDH13
7.00E-46	1	CPNE5
1.02E-45	1	PLPP1
1.08E-45	1	ITGA8
5.54E-45	1	EDIL3
9.47E-45	1	NCALD
2.50E-44	1	FMNL3
1.44E-43	1	MIR4435-2HG
8.89E-43	1	AKAP13
9.39E-43	1	ESAM
5.32E-42	1	CLIC5
5.54E-42	1	MYO1B
8.14E-42	1	PDGFD
1.21E-41	1	GJA4
1.59E-41	1	PLXNA2
2.41E-41	1	EXOC3L1
5.69E-41	1	PLXND1
1.56E-40	1	PCDH12

3.35E-40	1	KCNQ1
6.18E-40	1	PTP4A3
7.14E-40	1	ARHGAP29
9.84E-40	1	NAV1
1.21E-39	1	GSN
1.33E-39	1	HEG1
3.27E-39	1	MAP1B
3.30E-39	1	LAMB1
3.43E-39	1	COL13A1
4.13E-39	1	RASGRP3
5.39E-39	1	ADARB1
1.36E-38	1	DLL4
1.44E-38	1	FAP
2.47E-38	1	APP
4.44E-38	1	ITGA1
4.45E-38	1	EML1
1.26E-37	1	EFNB1
2.70E-37	1	CAVIN3
3.53E-37	1	CDH5
6.29E-37	1	SOX5
6.43E-37	1	TCF12
1.02E-36	1	ETS1
1.21E-36	1	CDYL2
2.42E-36	1	VWA1
2.49E-36	1	KCNN3
4.60E-36	1	DHRS3
4.91E-36	1	AC119674.1
1.63E-35	1	PCDH17
2.26E-35	1	PTK2
1.04E-34	1	PLCL2
1.47E-34	1	TMEM204
1.66E-34	1	ASAP2
2.25E-34	1	CCDC3
2.33E-34	1	MAML3
2.58E-34	1	RGS3
7.01E-34	1	EXOC3L2
1.76E-33	1	BGN
1.77E-33	1	RFLNB
2.11E-33	1	CD276
2.49E-33	1	UNC5B
4.36E-33	1	SEMA3F
4.40E-33	1	JUP
7.68E-33	1	SEC14L1

8.30E-33	1	PLVAP
1.23E-32	1	PLCL1
1.44E-32	1	KLHL5
1.48E-32	1	MYO1D
1.91E-32	1	SPRY4
2.46E-32	1	VASH1
4.46E-32	1	RIN3
4.91E-32	1	JCAD
1.06E-31	1	MCF2L
1.11E-31	1	TIE1
1.18E-31	1	APCDD1
1.19E-31	1	SLC6A6
6.46E-31	1	NRCAM
7.36E-31	1	DENND11
1.13E-30	1	ALPK3
3.00E-30	1	ALPL
4.08E-30	1	ITGB1
5.21E-30	1	TBC1D1
5.36E-30	1	ZFH3
1.92E-29	1	PTPN14
1.92E-29	1	ITIH5
1.95E-29	1	TNK2
3.15E-29	1	PDGFB
3.32E-29	1	SFMBT2
5.17E-29	1	RIN2
1.25E-28	1	UACA
1.29E-28	1	HERC1
1.29E-28	1	AC002070.1
2.77E-28	1	SERPINH1
3.69E-28	1	AC008050.1
4.09E-28	1	GPR4
4.12E-28	1	TSC22D1
6.39E-28	1	PLOD1
1.51E-27	1	FCHSD2
1.94E-27	1	AFAP1L1
3.10E-27	1	FGF12
4.81E-27	1	SOX18
8.06E-27	1	ARHGAP4
1.34E-26	1	MYO6
1.75E-26	1	ICAM2
2.36E-26	1	ANGPTL2
2.46E-26	1	LPCAT2
3.47E-26	1	ENG

4.09E-26	1	AIF1L
7.38E-26	1	RDX
7.58E-26	1	ZNF366
1.90E-25	1	ITPRIP
2.24E-25	1	FBLIM1
2.76E-25	1	ITGA9
4.34E-25	1	PINK1
5.69E-25	1	TMEM184B
7.43E-25	1	ST6GALNAC3
8.14E-25	1	PCSK5
8.54E-25	1	TTC28
1.16E-24	1	TMEM233
1.65E-24	1	ACTN4
1.79E-24	1	SMAD6
2.49E-24	1	CCND1
2.52E-24	1	PMEPA1
2.76E-24	1	PHACTR1
2.94E-24	1	FYN
3.09E-24	1	PTPRK
5.85E-24	1	DGKD
7.58E-24	1	ACOT7
8.83E-24	1	SLC12A2
9.68E-24	1	CRIP2
1.33E-23	1	LAMA4
1.49E-23	1	ARHGEF12
1.51E-23	1	C1orf54
1.52E-23	1	CD46
2.20E-23	1	KIAA0355
3.33E-23	1	COLGALT1
4.06E-23	1	TMC7
5.39E-23	1	IQSEC1
7.36E-23	1	EFNB2
8.52E-23	1	HTRA1
8.91E-23	1	DGKH
9.08E-23	1	PDE10A
9.66E-23	1	YWHAH
1.13E-22	1	STT3B
1.58E-22	1	PHLDB1
2.00E-22	1	WDFY3
2.40E-22	1	APBB2
2.89E-22	1	ITSN2
3.56E-22	1	HDAC7
4.07E-22	1	CD34

4.76E-22	1	RAB31
4.80E-22	1	STK10
5.15E-22	1	AFDN
5.28E-22	1	F2RL3
5.93E-22	1	PLAU
8.00E-22	1	CD81
8.12E-22	1	TCIM
8.18E-22	1	OSBPL3
1.16E-21	1	DOCK9
1.18E-21	1	CASKIN2
1.45E-21	1	COL15A1
1.46E-21	1	ZEB1
1.53E-21	1	JAM3
2.07E-21	1	LRRC8A
2.28E-21	1	NOX4
3.17E-21	1	TRAK1
3.37E-21	1	PICALM
3.52E-21	1	DLEU2
4.47E-21	1	TM4SF18
7.62E-21	1	SORBS2
8.99E-21	1	RANBP17
1.01E-20	1	CDC14B
1.16E-20	1	AC004889.1
1.16E-20	1	GTF2I
1.19E-20	1	ABL2
1.23E-20	1	CDC42EP1
1.42E-20	1	KIAA1671
1.59E-20	1	FBXL7
1.67E-20	1	MACF1
2.10E-20	1	SOS1
2.43E-20	1	MCAM
3.52E-20	1	PDE8A
3.61E-20	1	SMARCA2
4.12E-20	1	DDIT4
5.00E-20	1	ISG15
6.47E-20	1	GJC1
6.73E-20	1	RBFOX2
8.72E-20	1	LRP6
1.04E-19	1	RAMP2
1.06E-19	1	NOS3
1.21E-19	1	MMP14
1.43E-19	1	ZNF532
1.50E-19	1	ARAP3

1.54E-19	1	GFOD1
2.03E-19	1	INPP5A
2.83E-19	1	PKD1L1
3.70E-19	1	CHSY3
4.07E-19	1	MAST4
4.15E-19	1	NDST1
4.38E-19	1	KIF13A
5.01E-19	1	CD93
5.06E-19	1	IGFBP5
6.44E-19	1	CYTH3
6.97E-19	1	ROBO4
9.61E-19	1	CD109
9.97E-19	1	CALD1
1.04E-18	1	GIT2
1.04E-18	1	LUZP1
1.08E-18	1	SH3PXD2A
1.18E-18	1	TOX2
1.33E-18	1	PTPRB
2.28E-18	1	UTRN
2.57E-18	1	FSCN1
2.72E-18	1	PKIG
2.82E-18	1	ADAM17
2.87E-18	1	LPP
2.91E-18	1	MYO10
3.17E-18	1	GRPEL2
3.35E-18	1	FUT8
3.38E-18	1	DAB2IP
3.75E-18	1	DOCK1
3.81E-18	1	ZDHHC20
4.12E-18	1	CMTM8
4.17E-18	1	CDC42BPA
4.24E-18	1	TBCD
4.38E-18	1	JAG1
6.81E-18	1	DDI2
7.57E-18	1	CALM1
9.60E-18	1	CYTOR
9.61E-18	1	SPRED2
1.06E-17	1	PCDH1
1.37E-17	1	PTPRE
1.49E-17	1	CYYR1
1.98E-17	1	NSD1
2.05E-17	1	UBE2J1
2.10E-17	1	PLD1

2.21E-17	1	MYO1E
2.68E-17	1	PXDN
2.69E-17	1	KLHL24
2.80E-17	1	OAF
3.27E-17	1	CALCRL
3.40E-17	1	SOX13
4.00E-17	1	PHLPP1
4.17E-17	1	SWAP70
4.39E-17	1	SLC26A2
5.05E-17	1	APLP2
5.97E-17	1	EIF4G2
7.18E-17	1	EOGT
7.56E-17	1	NOVA2
7.70E-17	1	ARHGAP18
8.34E-17	1	CRYBG3
9.15E-17	1	SLC5A4
9.23E-17	1	COL18A1
1.20E-16	1	EIF4G3
1.29E-16	1	SH2D3C
1.54E-16	1	YEATS2
1.63E-16	1	PLCG1
1.85E-16	1	TEK
2.08E-16	1	PRKY
2.14E-16	1	ARHGEF7
2.23E-16	1	VSIR
2.24E-16	1	NEBL
2.27E-16	1	ITGA6
2.47E-16	1	AGAP1
2.59E-16	1	APLNR
2.77E-16	1	REST
3.10E-16	1	MAP4K3
3.12E-16	1	ADAM10
3.58E-16	1	HES4
4.41E-16	1	WDFY1
4.51E-16	1	CLEC14A
4.80E-16	1	LIMS2
5.04E-16	1	VOPP1
5.60E-16	1	HYAL2
6.54E-16	1	DCLK2
6.64E-16	1	TIMP3
9.03E-16	1	NID1
9.23E-16	1	PTBP2
1.10E-15	1	TSPAN13

1.21E-15	1	PLPP3
1.21E-15	1	SRGAP2
1.55E-15	1	HIP1R
1.72E-15	1	XAF1
2.21E-15	1	CRIP1
2.46E-15	1	ULK4
2.53E-15	1	RB1
2.64E-15	1	PKN1
2.66E-15	1	ADD1
2.81E-15	1	ABCG1
3.02E-15	1	MSX1
3.34E-15	1	NAV2
3.43E-15	1	GLG1
3.50E-15	1	NEK7
5.14E-15	1	MAP4K4
6.13E-15	1	SPRED1
6.69E-15	1	CC2D2B
6.96E-15	1	ASS1
7.00E-15	1	INPP5D
7.37E-15	1	SHANK3
8.16E-15	1	FN1
9.95E-15	1	BCAS3
1.01E-14	1	PLS3
1.05E-14	1	FAM214A
1.06E-14	1	ARHGAP24
1.13E-14	1	ITGA5
1.16E-14	1	TAOK1
1.41E-14	1	TMEM47
1.53E-14	1	CPNE2
1.68E-14	1	NREP
2.24E-14	1	ZMIZ1
2.26E-14	1	PELI1
2.43E-14	1	DAB2
2.80E-14	1	EPHA4
3.09E-14	1	COL6A2
3.43E-14	1	MPZL1
3.46E-14	1	CDK19
3.53E-14	1	CDC27
4.14E-14	1	SMAD2
4.20E-14	1	NPTN
4.87E-14	1	COL21A1
5.16E-14	1	TMEM150C
5.71E-14	1	KIAA1217

6.58E-14	1	CADPS2
6.71E-14	1	BCL6B
7.06E-14	1	NAA38
7.06E-14	1	FAM53B
7.92E-14	1	MTSS1
8.36E-14	1	SIPA1L3
8.95E-14	1	ABCB1
1.10E-13	1	TSPAN14
1.19E-13	1	EHD4
1.26E-13	1	PIAS2
1.29E-13	1	PITPNM2
1.29E-13	1	PKN3
1.42E-13	1	TACC2
1.44E-13	1	ACVRL1
1.64E-13	1	NOTCH1
1.83E-13	1	PTPN12
1.88E-13	1	DIAPH2
2.08E-13	1	DENND3
2.27E-13	1	ARHGAP5
3.14E-13	1	PLEKHA1
3.28E-13	1	ARHGAP31
3.70E-13	1	EMCN
3.74E-13	1	TBC1D9
3.83E-13	1	NEAT1
3.90E-13	1	ERC1
4.11E-13	1	PIK3C2B
4.47E-13	1	BMP6
4.63E-13	1	DISC1
4.95E-13	1	NUMB
5.19E-13	1	ATXN1
5.92E-13	1	IL32
7.59E-13	1	YES1
8.60E-13	1	HBEGF
1.01E-12	1	MGAT4A
1.40E-12	1	SNX29
1.48E-12	1	SPIRE1
1.51E-12	1	ADGRG1
1.86E-12	1	SRGAP2B
2.07E-12	1	HPCAL1
2.21E-12	1	SYT11
2.24E-12	1	PRKX
2.29E-12	1	SH3TC1
2.58E-12	1	LRCH1

2.74E-12	1	CLSTN1
3.04E-12	1	ADAMTSL1
3.05E-12	1	PRKD1
3.11E-12	1	CTIF
3.21E-12	1	GAS6
3.32E-12	1	EIF2AK4
3.65E-12	1	ADIPOR2
3.83E-12	1	CALU
4.42E-12	1	LIMCH1
5.44E-12	1	SH3PXD2B
7.68E-12	1	UBE4B
9.03E-12	1	RFTN1
9.77E-12	1	SPG7
1.05E-11	1	SMAD7
1.09E-11	1	FRMD4B
1.13E-11	1	TCF7L1
1.21E-11	1	CCDC85B
1.34E-11	1	TLE3
1.64E-11	1	CDK2AP1
1.73E-11	1	ADGRL2
1.91E-11	1	SLC44A2
1.95E-11	1	ARHGEF10
2.03E-11	1	SORBS1
2.07E-11	1	RNF144A
2.15E-11	1	TMCC1
2.20E-11	1	ENTPD1
2.47E-11	1	PLCG2
2.50E-11	1	JAZF1
2.61E-11	1	XPR1
2.63E-11	1	TJP2
2.79E-11	1	RUNDC3B
3.02E-11	1	ELK3
3.32E-11	1	TAX1BP3
3.92E-11	1	TCF4
4.05E-11	1	WWC2
4.28E-11	1	PIK3R3
7.75E-11	1	PAPSS1
7.86E-11	1	MAGI1
8.33E-11	1	FOXN3
8.46E-11	1	RASAL2
8.85E-11	1	FKBP9
9.04E-11	1	KITLG
9.14E-11	1	EEPD1

1.00E-10	1	MAML2
1.11E-10	1	RNF144B
1.24E-10	1	MPRIIP
1.24E-10	1	ZNF827
1.33E-10	1	LRRC8C
1.33E-10	1	ATP2A2
1.42E-10	1	RHOC
1.69E-10	1	FAT4
2.18E-10	1	SMURF2
2.32E-10	1	CLASP2
2.39E-10	1	NEDD4L
2.40E-10	1	HMOX2
2.40E-10	1	LBH
2.40E-10	1	ADCY4
2.65E-10	1	MCC
2.85E-10	1	FNDC3B
3.11E-10	1	QKI
3.14E-10	1	NRP1
3.17E-10	1	EPAS1
3.31E-10	1	WWTR1
3.49E-10	1	WWC3
3.71E-10	1	TTYH3
4.47E-10	1	PDS5B
4.76E-10	1	HS2ST1
4.89E-10	1	DYNC1H1
4.91E-10	1	CTNND1
5.19E-10	1	PALMD
5.48E-10	1	DST
5.95E-10	1	RABGAP1
6.31E-10	1	RC3H2
6.57E-10	1	CCDC88C
6.68E-10	1	PPP1R13B
6.79E-10	1	ANKRD50
7.82E-10	1	DIP2B
8.15E-10	1	OLFML2A
9.17E-10	1	PPP3CC
1.11E-09	1	RHOB
1.13E-09	1	CHSY1
1.26E-09	1	SLC2A13
1.37E-09	1	TOP2B
1.43E-09	1	FCHO2
1.53E-09	1	TPM1
1.61E-09	1	ZBTB46

1.64E-09	1	EFCAB14
1.68E-09	1	CLIC4
1.76E-09	1	ZNF704
1.88E-09	1	HIPK2
1.88E-09	1	NCKAP1
1.93E-09	1	ERBIN
2.11E-09	1	RALA
2.15E-09	1	GRK5
2.23E-09	1	AL139383.1
2.39E-09	1	FADS3
2.45E-09	1	UNC13B
2.60E-09	1	UBR3
2.76E-09	1	ABLIM2
3.24E-09	1	MAP4K3-DT
3.59E-09	1	UPF3A
3.67E-09	1	EGFL7
3.83E-09	1	ANKRD11
4.40E-09	1	GPHN
4.42E-09	1	COP1
4.53E-09	1	ARHGEF28
4.78E-09	1	KLHL18
5.44E-09	1	DENND5A
6.12E-09	1	FRYL
6.15E-09	1	CCNY
6.44E-09	1	BIRC6
7.73E-09	1	TTC37
8.26E-09	1	ZNF148
8.34E-09	1	MEF2C
8.44E-09	1	MAGI3
8.77E-09	1	MAD1L1
9.48E-09	1	ANKRD28
1.41E-08	1	ST8SIA4
1.42E-08	1	CLASP1
2.56E-08	1	PTPN4
2.65E-08	1	NPC1
2.90E-08	1	SPATA6
3.31E-08	1	OPHN1
3.89E-08	1	AOPEP
3.95E-08	1	GOLIM4
4.06E-08	1	JARID2
5.60E-08	1	LINC00472
5.70E-08	1	EXOC6B
6.53E-08	1	MMRN2

6.89E-08	1	PRRC2B
7.22E-08	1	CTTNBP2NL
8.97E-08	1	IVNS1ABP
8.98E-08	1	EDNRB
9.05E-08	1	LMBR1
1.06E-07	1	ATXN2
1.18E-07	1	SPTBN1
1.43E-07	1	MGAT5
1.55E-07	1	UBE2H
1.91E-07	1	LGALS1
2.15E-07	1	TRIM2
2.30E-07	1	PBX3
2.44E-07	1	MGMT
2.47E-07	1	ZHX3
3.52E-07	1	EMP1
3.56E-07	1	IQCJ-SCHIP1
3.57E-07	1	KLHL29
3.77E-07	1	RAB11FIP3
3.77E-07	1	NLK
5.27E-07	1	CEP350
5.54E-07	1	LDB2
6.30E-07	1	DPYSL3
7.07E-07	1	FBXW7
8.51E-07	1	BDKRB2
1.09E-06	1	ITCH
1.10E-06	1	PGM2L1
1.21E-06	1	IFI27
1.22E-06	1	NRIP1
1.24E-06	1	ZFYVE28
1.34E-06	1	FBXL20
1.82E-06	1	ATXN7L1
1.84E-06	1	VEGFC
2.49E-06	1	STARD13
2.67E-06	1	CSGALNACT1
3.14E-06	1	TNKS
3.47E-06	1	WWOX
4.89E-06	1	THSD7A
5.09E-06	1	GBE1
5.36E-06	1	TJP1
6.92E-06	1	MAP4
9.18E-06	1	ZNF407
9.35E-06	1	BTBD3
1.13E-05	1	NR2C2

1.36E-05	1	RGL1
1.46E-05	1	TANC1
3.04E-05	1	NRP2
3.94E-05	1	MIDN
4.55E-05	1	GAB1
8.20E-05	1	RBMS3
9.61E-05	1	SRPK2
0.000136767	1	SOX4
0.000155211	1	DACH1
0.000166078	1	FSTL1
0.000174202	1	IFI6
0.000175742	1	PTPRJ
0.00018232	1	NFIB
0.000291543	1	RAPGEF4
0.000459131	1	NUDT4
0.000515707	1	SRP14
0.000736742	1	CASC15
0.000841688	1	CACHD1
0.000858896	1	FLNB
0.001570896	1	LNK1
0.002000816	1	ATP13A3
0.003062021	1	PAPSS2
0.003141729	1	DLC1
0.013795012	1	CD320
0.022846628	1	PRSS23
0.038192025	1	PLEKHG1
0.052124266	1	MTOR
0.058873934	1	HMCN1
0.172563735	1	FILIP1
0.290076212	1	CRADD
0.580742558	1	NR5A2
0.862174855	1	CCDC85A
1	1	EMP3
1	1	PPARG
1	1	SYNJ2
1	1	S100A4
1	1	SLC2A3
1	1	DEPP1
1	1	SULF1
1	1	AL583785.1
3.56E-47	2	CCL21
5.69E-46	2	MPP7
8.06E-34	2	MAF

1.56E-28	2	TC2N
4.64E-21	2	FTH1
4.15E-17	2	FTL
1.28E-13	2	RAB11FIP1
2.53E-11	2	LAPTM5
7.27E-08	2	FAM107B
5.24E-06	2	TSPAN5
7.16E-06	2	VAV3
5.67E-05	2	OAZ1
6.08E-05	2	DDX46
9.29E-05	2	B2M
9.76E-05	2	CNOT6L
0.000193763	2	GYPC
0.000320561	2	EIF1
0.000774742	2	ATP5F1E
0.00139899	2	GNG10
0.001483164	2	PPM1B
0.001599124	2	PPFIBP1
0.004307968	2	UBA52
0.005333381	2	CHCHD10
0.007827261	2	ACTB
0.01754344	2	FAU
0.021030945	2	RBP1
0.027282475	2	CLEC2B
0.027834874	2	SELENOS
0.029659758	2	RPN2
0.031531302	2	ATOX1
0.032609725	2	CMSS1
0.039227091	2	SMCHD1
0.04822561	2	EEF1A1
0.071502859	2	TCEAL4
0.073354989	2	LARS
0.084601242	2	LAP3
0.094136331	2	MYL6
0.140835583	2	ZMYM2
0.167724949	2	MYDGF
0.178613495	2	RCN2
0.190908338	2	ERCC1
0.254498491	2	THSD4
0.259999219	2	TPT1
0.297811286	2	RAB1A
0.304560414	2	GNAS
0.338247941	2	SNRPF

0.346043553	2	TRIOBP
0.35071995	2	CD46
0.38784246	2	HNRNPH3
0.416711718	2	PYURF
0.529464885	2	PFKL
0.578572301	2	NPM1
0.612079814	2	H3F3A
0.774119627	2	RALBP1
0.920477338	2	MCFD2
0.941684886	2	SSR3
0.995412609	2	ARHGDIB
1	2	TAF1D
1	2	LGALS1
1	2	KLF12
1	2	PHF20L1
1	2	ACTR2
1	2	SLC38A1
1	2	TMEM179B
1	2	TIMM9
1	2	NRN1
1	2	TXNDC17
1	2	IFT20
1	2	HEBP2
1	2	DDX1
1	2	PPM1G
1	2	S100A10
1	2	OCIAD2
1	2	PFDN1
1	2	TSPAN3
1	2	PDCD5
1	2	PSMA6
1	2	VIM
1	2	NDUFB1
1	2	TMEM88
1	2	NAA38
1	2	NDUFA8
1	2	NDUFB9
1	2	SMAP2
1	2	TRIM38
1	2	METTL9
1	2	LMAN1
1	2	SCP2
1	2	TMSB10

1	2	GNG5
1	2	MRPL51
1	2	TKT
1	2	ROMO1
1	2	ARPC4
1	2	PPP1R14B
1	2	HES1
1	2	SBDS
1	2	TBRG1
1	2	GET3
1	2	SLC25A5
1	2	PTMA
1	2	FAM32A
1	2	HDAC1
1	2	MMP2
1	2	CFL1
1	2	CHMP5
1	2	LAMP1
1	2	EML4
1	2	SNHG16
1	2	SMIM30
1	2	HYAL2
1	2	MAP1LC3A
1	2	TMSB4X
1	2	SYF2
1	2	BRD2
1	2	LINC01619
1	2	PFDN4
1	2	NOP10
1	2	LSM8
1	2	KDEL2
1	2	NDUFB4
1	2	FKBP3
1	2	GDI2
1	2	FILIP1L
1	2	HHEX
1	2	ATP5MD
1	2	MRPL41
1	2	CD151
1	2	SERF2
1	2	COX16
1	2	XRCC6
1	2	ARL2

1	2	COX7A1
1	2	HADHB
1	2	GAPDH
1	2	FABP4
1	2	KDELR1
1	2	PSMD4
1	2	ATF4
1	2	FNBP1
1	2	CANX
1	2	TMEM123
1	2	CTSL
1	2	PSMA4
1	2	STIP1
1	2	NDUFA12
1	2	CNPY2
1	2	PPIA
1	2	LDHB
1	2	REEP3
1	2	MICOS13
1	2	HNRNPDL
1	2	ARF5
1	2	NACA
1	2	SHC1
1	2	DBN1
1	2	MRPL50
1	2	PSMC3
1	2	NDUFAB1
1	2	WDR74
1	2	ARPC5
1	2	S100A4
1	2	H1FX
1	2	TMX4
1	2	VPS35
1	2	ALDH2
1	2	MTIF3
1	2	MTCH1
1	2	STK17A
1	2	RNH1
1	2	EEF1G
1	2	COPS9
1	2	NCOA4
1	2	BROX
1	2	NSA2

1	2	LAMTOR1
1	2	POMP
1	2	HNRNPA0
1	2	CTNNBL1
1	2	UGP2
1	2	ARF1
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1	2	ACYP2
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1	2	DDRGK1
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1	2	AAK1
1	2	BTG3
1	2	EIF3D
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1	2	CYBA
1	2	VAMP5
1	2	PSMB5
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1	2	CYB5R3
1	2	EIF3L
1	2	TBCB
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1	2	UFC1
1	2	SSB
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1	2	CIB1
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1	2	CALM1
1	2	NHSL1
1	2	DUT
1	2	SMIM26
1	2	TGFB1I1

1	2	EIF3M
1	2	NAP1L4
1	2	NRP2
1	2	FXYD5
1	2	ATP5F1B
1	2	MXRA7
1	2	COX5A
1	2	SRP19
1	2	RHOC
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1	2	PHF11
1	2	STOML2
1	2	RRAS
1	2	IFT74
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1	2	MRPL57
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1	2	ARL4A
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1	2	RWDD1
1	2	COMT
1	2	TMEM256
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1	2	EIF5A
1	2	RPAIN
1	2	TOPBP1
1	2	ESD
1	2	IFITM3
1	2	MARCKS
1	2	SRGN
1	2	RNF7
1	2	ATP5MF
1	2	YWHAZ
1	2	SET
1	2	TM4SF18
1	2	COA1

1	2	GIMAP7
1	2	SUMO3
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1	2	HMGN2
1	2	COX5B
1	2	BANF1
1	2	HRAS
1	2	SNRPB
1	2	TIMP2
1	2	SNRPD1
1	2	SARNP
1	2	ABHD3
1	2	CEBPZ
1	2	ITGB1
1	2	MDH2
1	2	PSMD7
1	2	AURKAIP1
1	2	DYNLT1
1	2	TRIM5
1	2	DMAC1
1	2	KRT10
1	2	ZFAND2A
1	2	MRPS21
1	2	CALM3
1	2	TMEM230
1	2	MRPS15
1	2	CHCHD1