

<b>Up-regulated Gene</b>		<b>Down-regulated Gene</b>	
<b>Gene Symbol</b>	<b>Log2 Fold Change</b>	<b>Gene Symbol</b>	<b>Log2 Fold Change</b>
MT4	5.856848545	PLIN4	-6.363007278
SERPINB2	5.608260601	PCSK9	-4.047192668
PTGS2	5.165994115	TMPRSS4	-3.903321609
SAA1	4.834683884	SPRY1	-3.553648733
TPPP3	4.702866376	TGM2	-3.478009955
FN1	4.625770092	ELF5	-3.049661503
KRT17	4.579989588	ETV4	-2.985863187
SEMA5A	4.041063843	MILR1	-2.779381215
SERPINE1	4.037605077	HMGA2	-2.743238156
DCLK1	4.018308863	AKR1B10	-2.698720976
ALPP	3.997077457	S100A9	-2.681487505
EPSTI1	3.958919799	MND1	-2.661054921
INHA	3.931834577	CAPN8	-2.648464882
DCLK2	3.841516623	SCD	-2.629485761
IFI6	3.786939797	BUB1	-2.590230646
DUSP1	3.672447965	CDCA7	-2.579563534
OLR1	3.60000575	VSNL1	-2.56614365
CCL5	3.548273195	KIAA0101	-2.533061487
IFI44L	3.546786896	ETV5	-2.515154166
MFAP5	3.501953134	C3	-2.485595421
FAM198B	3.447426645	ABCC3	-2.457030672
SAA2	3.439625084	C9orf47	-2.437336508
TNNT2	3.429837549	GINS2	-2.402927437
SMIM5	3.402580024	TRIB3	-2.362208659
ID3	3.360977929	DUSP4	-2.338011544
PSG5	3.334317913	AGR2	-2.316430085
ATF3	3.305344445	ALDH1A1	-2.310272301

INHBA	3.273859024	SLCO4C1	-2.304568614
CPA4	3.201942258	CTNNAL1	-2.294956084
KRT4	3.180134737	PHLDA1	-2.246447165
C8orf4	3.173604678	NDC80	-2.175541453
IGFBP3	3.157345136	ALDOC	-2.134695924
DUSP22	3.128918276	CSMD2	-2.122957685
AQP3	3.116295806	ACAT2	-2.11976219
GPR176	3.098864885	RNF157	-2.105790995
COL16A1	3.09519858	SKAP1	-2.101012258
EPB41L5	3.078520275	CDKN2C	-2.092650315
SLC7A7	3.076151528	CENPH	-2.084085238
PPBP	3.058465372	HMGB2	-2.08262771
KRTAP2-3	3.031961113	DDIT4	-2.080148877
GALNT9	3.024296801	NEK2	-2.069986467
HSPB8	3.011135732	GJA5	-2.067041756
KCNB1	2.989075571	DEPDC1B	-2.066901908
EDN1	2.978462817	CEACAM5	-2.063598364
TNFRSF9	2.943478187	POLE2	-2.058225283
FAM134B	2.913879267	TIMP4	-2.030717764
CCDC80	2.901333325	RAD51AP1	-2.026078561
TNFAIP3	2.896598523	RRM2	-2.018187604
NEURL3	2.847984084	GPR20	-1.992722191
TNFRSF19	2.82505635	ERICH1	-1.974859281
KRT16	2.811616524	SPC25	-1.974194498
CYR61	2.809904128	GSDMC	-1.961575527
MX2	2.797086842	DTL	-1.951749265
FSTL3	2.77433585	TMEM97	-1.935739407
OXTR	2.765074167	CELA3B	-1.934346711
OTUD1	2.73466517	CDK1	-1.924259638
WNT6	2.721521126	MSMO1	-1.923845571

CFB	2.713339671	IDI1	-1.921787866
IFIT1	2.697630559	FAM64A	-1.910714628
COL5A1	2.692995885	MELK	-1.906566333
IL32	2.683661645	PRIM1	-1.903067278
AHNAK2	2.681988898	INSIG1	-1.892699844
CDKN1C	2.679652112	CBR3	-1.891313492
BIRC3	2.677232247	CENPK	-1.88858494
OLFML2A	2.66603172	MALL	-1.883948695
HEG1	2.618067063	GALNTL4	-1.878943344
UBD	2.567702563	MCM6	-1.866885026
C15orf56	2.553642792	HSD17B7	-1.864285398
DDX60L	2.549042356	ACSL1	-1.862667941
MUC1	2.522785115	BRIP1	-1.860191245
TGFB2	2.52183715	BIRC5	-1.860145047
TAC3	2.515429738	HMMR	-1.839288581
MFI2	2.514520933	LOC100128130	-1.823675235
DKK1	2.508540929	ORC1	-1.817536006
XAF1	2.504717521	CCNA2	-1.816103122
PDLIM4	2.504339099	EGR1	-1.807291022
ISG15	2.500098027	ACSS2	-1.80512321
TLR2	2.498034718	CDCA5	-1.79898615
LAMA3	2.485630567	GDF15	-1.798283935
RELB	2.470445	PHGDH	-1.788535671
C1S	2.442716008	SPRED2	-1.78777913
OASL	2.439849914	CDC25C	-1.779969486
PON3	2.434613861	FAM72A	-1.774001964
NLRP7	2.414093572	NT5E	-1.77001598
WDR66	2.411080875	GMNN	-1.767088697
BATF2	2.407328683	PBK	-1.767000137
TUBA1A	2.400743473	MESP1	-1.764511502

PDZK1IP1	2.400280152	MCM5	-1.76322775
CDR2L	2.389616969	G0S2	-1.753011479
LIMS2	2.388089959	CCNB2	-1.751026922
RTP4	2.379751858	PPARG	-1.749146256
LTB	2.379128388	DEPDC1	-1.748723738
PKDCC	2.367797695	SSPN	-1.74592618
VASN	2.363732601	LGALS1	-1.737646831
NKAIN4	2.350901123	PCDHGC3	-1.722146191
FAT4	2.336340929	MCM10	-1.721768662
IL23A	2.33498111	HELLS	-1.72099086
ACE2	2.334227625	GLIS1	-1.719863203
TMEM52B	2.325021235	ESX1	-1.719681359
C7orf29	2.312673719	ASNS	-1.717331833
FSTL1	2.307479023	IRAK3	-1.715970293
IGFBP1	2.297912743	ZKSCAN7	-1.707645957
DRAM1	2.293582819	FANCI	-1.707199124
FBN1	2.289809263	LMNB1	-1.696974815
SLC31A2	2.288180546	MN1	-1.687464129
DEGS1	2.268643012	PSAT1	-1.68026343
MB21D2	2.262486007	CCNE2	-1.678050165
SLC7A5	2.253755948	CENPW	-1.675776249
FILIP1L	2.245524691	POLM	-1.674772947
LBH	2.23986916	ASPH	-1.672948914
PTRF	2.238860197	EXO1	-1.671942713
PHLDB2	2.231613739	LYRM1	-1.671088556
RRAD	2.227500128	CDCA3	-1.658769337
FAM49A	2.206068286	CCNG1	-1.656779293
TIMP2	2.204287132	ZWINT	-1.631406674
PI3	2.2002638	LPAR1	-1.629867267
IGFBP5	2.18945627	CDC6	-1.625075658

HPSE	2.188070884	MAATS1	-1.624834856
CD24	2.181447979	CMBL	-1.616033607
HES2	2.175913315	NCAPH	-1.611020208
PLA2G4A	2.172485662	S100A2	-1.607435896
CYB5R1	2.163385914	CEP55	-1.60547525
RASSF2	2.162470642	CDC45	-1.601366771
GBP4	2.146632922	SGOL1	-1.595492759
PLGLB1	2.145712282	RFX7	-1.594214787
MAMDC2	2.128142537	OIP5	-1.593950184
CDKN2B-AS1	2.127938518	TOP2A	-1.588924116
SOGA2	2.127457771	TYMS	-1.586440987
KRT6A	2.122425119	EBP	-1.581155794
LOXL4	2.121325194	TRIB2	-1.579235284
AIM1L	2.117795406	MIR205HG	-1.576599025
ZNF365	2.101614929	MT2A	-1.576211538
GADD45A	2.099759319	ACP6	-1.572727943
DAPK1	2.096534377	PCDH20	-1.571330234
STX11	2.092017543	PECAM1	-1.570472121
ZG16	2.082026449	PLK4	-1.565599857
EXPH5	2.06337087	TTK	-1.5623189
CLIC5	2.062350874	MT1A	-1.560940971
KIAA0513	2.060243745	FAM83D	-1.559692372
TMEM140	2.052283678	USP13	-1.555506115
GATA6	2.049690105	UBE2T	-1.553318824
BDNF	2.049095542	NUSAP1	-1.552621572
CD55	2.046739837	HMGA1	-1.550190791
ANXA8	2.016551509	BCL2L14	-1.549719078
VLDLR	2.013592891	MVK	-1.548937003
SCD5	2.005403374	METTTL7A	-1.547295676
EVPLL	2.004103656	PRSS1	-1.543737661

MSLN	1.990735315	TOX2	-1.541041701
SPANXD	1.988128499	SKA3	-1.538807187
SYNPO	1.988086478	SHMT1	-1.515599546
EVA1C	1.985203098	TK1	-1.515520179
ACAP1	1.975040629	OBFC1	-1.511992883
HECW2	1.963220856	NUDT4P1	-1.508701627
SEMA7A	1.961062561	CENPI	-1.507644316
PLAUR	1.958691497	GSTO2	-1.50142052
PTGIS	1.953207921	HSCB	-1.500614679
AOX1	1.953132519	TMEM156	-1.498814536
GAB2	1.953088807	CDKN3	-1.487182959
TMEM255A	1.950602535	SPRY2	-1.48545702
GPR1	1.947396049	DLEU1	-1.484321286
ARSI	1.946452623	SHCBP1	-1.482221032
CRISPLD2	1.946230036	TUBE1	-1.480274595
MOB3B	1.943649186	LSS	-1.477779694
MX1	1.935607072	SQLE	-1.474615954
SPANXB1	1.935515049	CABYR	-1.473278072
NMU	1.928164228	GNG4	-1.470202771
ZNFX1	1.916790134	CENPM	-1.469781137
ANKRD33B	1.916637089	MOCOS	-1.469418633
OAS3	1.914080323	CHEK1	-1.454908468
WNT11	1.912586026	CALB2	-1.453072586
SYNGR3	1.910394998	LRP8	-1.448189519
CHST3	1.907648143	PCNA	-1.445631943
ADAMTS6	1.903393037	APOC1	-1.443604964
SRCRB4D	1.899866429	CYP51A1	-1.442082963
NFKBIZ	1.88185217	DLGAP5	-1.434698069
DENND3	1.880630527	TMEM37	-1.434154102
ID4	1.873909181	HIST1H3J	-1.429404291

H19	1.873404478	KLHL2	-1.428961627
KLK7	1.870565241	UBALD2	-1.424924361
CDA	1.869811986	CCK	-1.424688098
FRAS1	1.865450869	TMEM71	-1.423981138
PDZK1	1.860628894	MAD2L1	-1.415015476
RGS9	1.860504244	F2RL2	-1.414159922
TUFT1	1.860454202	ID1	-1.412152671
CDC42EP3	1.856574734	RFC4	-1.409884525
AKAP12	1.856314662	AURKB	-1.407277386
LAMB3	1.847731831	LOC100507855	-1.399846363
IFITM1	1.845655396	CDT1	-1.39885809
GJA1	1.841685219	DDB2	-1.392502382
OSBP2	1.835856827	ASPM	-1.386142845
TAGLN	1.833528318	DUT	-1.385570209
KLHL29	1.832738478	OSBPL3	-1.384881358
DSC2	1.829375962	AGPAT9	-1.383883389
RASSF1	1.823906807	KIFC1	-1.383401885
TRIB1	1.820887245	RFC5	-1.381763007
TNFRSF11B	1.818194504	C3orf33	-1.379158314
TLR1	1.816683964	FDPS	-1.377413947
MFAP3L	1.816248691	DONSON	-1.376756467
GPRC5A	1.813808491	BAIAP2L1	-1.375803509
WNT10A	1.813574282	PLAU	-1.375276691
DGAT2	1.804248148	DHCR7	-1.374781983
ZFP36L2	1.802464344	CENPA	-1.37378798
ALDH1A2	1.799846167	HES1	-1.373513158
ICAM1	1.797211214	BLM	-1.359440455
MYD88	1.795430522	LAMA4	-1.358323278
ISG20	1.795248611	DTYMK	-1.354250845
IFITM2	1.793027278	SLC50A1	-1.353211023

GNPTAB	1.789491832	CEACAM6	-1.3523081
SLC9A9	1.788739007	SKA1	-1.350629154
GSN	1.788338546	GALR2	-1.34564787
SAMD9	1.786488066	TMEM135	-1.345477285
MITF	1.785338026	THG1L	-1.344109759
MFSD12	1.785177328	KIF11	-1.342337613
KANK4	1.783137545	SLC25A21	-1.338474657
GATA3	1.78198982	GNE	-1.336974435
PCDHB2	1.78197565	FDFT1	-1.335184175
IL1RN	1.780613964	P2RX5	-1.333611192
TMEM165	1.777058269	NGF	-1.331699761
GGTA1P	1.770143534	DPCD	-1.328241045
SLCO3A1	1.766423136	ITGB3BP	-1.327963012
CDKN2B	1.765314803	RHNO1	-1.326267461
SLC17A5	1.758917322	GNG11	-1.321992726
DAGLB	1.757452902	ESPL1	-1.311029385
CPEB2	1.749734716	BLVRA	-1.306459723
SH3PXD2B	1.747486737	BARD1	-1.305899474
STAT2	1.739522345	LIN9	-1.304505692
BMP1	1.736977127	CMSS1	-1.303701026
MYH15	1.723008131	COL9A2	-1.283519609
A4GALT	1.722677837	TSPAN2	-1.281340884
TLE1	1.717084129	TROAP	-1.281086194
IL4I1	1.711705688	GTSE1	-1.280299176
AGR3	1.710826427	ELOVL6	-1.278294632
ZNF385B	1.710141319	ANP32AP1	-1.275852782
AP4E1	1.707332082	RAD51	-1.275712612
EDN2	1.705936334	TCAM1P	-1.275186062
SPANXC	1.7049666	ARHGAP11A	-1.272406853
SLC16A1	1.703611231	ABCA4	-1.270058064



C12orf75	1.699696661	SLC2A6	-1.268979341
CRISP3	1.697724795	EXOSC8	-1.267315817
SPTBN1	1.694840002	BHLHE41	-1.265903155
P4HA2	1.693824921	KIF20A	-1.264243676
CYP4B1	1.688333264	CCDC124	-1.263020832
MALAT1	1.679925878	COPG2	-1.2598626
MAMLD1	1.679077833	TMEM38B	-1.258959603
NR4A2	1.675355398	TNIK	-1.258741869
FLNC	1.673821674	FASN	-1.254228852
SPTAN1	1.672371903	CDCA2	-1.253527144
BIRC7	1.666215364	CSTA	-1.252958583
IFIT3	1.665359055	ETV1	-1.251110939
FAM46A	1.660959114	RFC3	-1.248734968
C1QTNF6	1.660599324	CCDC77	-1.247059899
ABAT	1.649334334	ARL6IP6	-1.244569175
B4GALT4	1.649224966	LDLR	-1.241113104
PTPRR	1.643604945	STK39	-1.240681222
AGAP3	1.642288872	PHB2	-1.23995741
ATP10D	1.639590069	CLEC2D	-1.238789476
AHRR	1.639121912	DOK7	-1.23848235
SLIT2	1.639004856	CYP4F2	-1.237450809
FLVCR2	1.634651329	UBASH3B	-1.232787217
TFPI2	1.634206305	HINT3	-1.23236225
STARD13	1.631671209	GSTA4	-1.229996542
HIST1H2BD	1.630974863	ACPL2	-1.229015373
COL12A1	1.629248108	BRCA1	-1.227608902
C1orf116	1.628871333	ATAD2	-1.225625623
SH3TC1	1.620690631	LBR	-1.224073581
SKIL	1.619877584	MMAB	-1.22337068
RND3	1.613685447	SPTSSB	-1.220457501

RNF144B	1.608458142	POLD2	-1.215952322
SORCS2	1.607815549	COQ7	-1.215841919
MUC15	1.607592775	SPATC1L	-1.215348599
FOSB	1.606452348	MVD	-1.215033708
SH2B2	1.604517323	PCOLCE2	-1.214227855
CCRN4L	1.601912106	PAQR4	-1.214211054
TMEM40	1.601206142	SEPT6	-1.214104033
MARCKSL1	1.594402553	AMIGO2	-1.211968506
OR11H6	1.591823049	LTV1	-1.211344586
HPS5	1.591363057	THSD4	-1.209502536
FABP3	1.58856481	RAB38	-1.208886335
IRF9	1.583277401	CYP39A1	-1.207207003
TMEM50B	1.57638719	PMS2	-1.207168044
ABI3BP	1.576062318	WDR12	-1.206351319
MMP14	1.575316606	CENPN	-1.20370268
DUSP10	1.574488278	SPRED1	-1.201653381
CD47	1.571949172	FADS1	-1.19956384
WWC1	1.568703869	GPD1L	-1.199248023
PBXIP1	1.568321898	DLG2	-1.198931964
DNAJB2	1.563753085	SLC25A1	-1.196446454
TMEM132A	1.563627442	KYNU	-1.19625196
BPGM	1.562206287	EEPD1	-1.195426421
THRB	1.562069746	CYP4F3	-1.195324717
MYO1B	1.558540116	MGAM	-1.195239928
ADPRH	1.556984728	SAPCD2	-1.192660802
BEX4	1.556386564	ALDH3A1	-1.19177282
MYPN	1.552801314	ERAL1	-1.189646953
APOL6	1.552399225	WDR31	-1.188968357
GPC4	1.549616097	EFHC1	-1.188866108
ANKRD34B	1.548641014	RRM1	-1.18667962

PSG1	1.546700213	SPAG5	-1.185043515
CST6	1.546229431	PTPLA	-1.184232425
RGCC	1.544885193	CDCA8	-1.183436383
CDH1	1.541676905	CCDC109B	-1.182635084
SNX29	1.540842183	CKS1B	-1.182319702
SUSD2	1.538130417	RNF212	-1.181580339
TUBA4A	1.532306332	C11orf82	-1.181514734
MXD1	1.531100812	NDUFAF2	-1.180849345
CCDC50	1.525382613	HADH	-1.178885668
C10orf54	1.524668267	MICA	-1.177658844
A2ML1	1.522212378	CC2D2A	-1.176342549
TACC1	1.519136203	DNA2	-1.173563528
CFD	1.51719294	FAM43A	-1.172712688
TTYH1	1.517140758	TRPV2	-1.170799437
TNFAIP1	1.514130299	CENPO	-1.169096675
MYH9	1.512946599	IRX3	-1.168046819
SGTB	1.511747708	ASCC3	-1.167482846
TUBB6	1.51114661	DPYD	-1.165585402
SIK1	1.508505069	HINT2	-1.164155032
ITGAV	1.507256344	WHSC1	-1.164152558
PALM3	1.506575503	C2orf68	-1.162538599
WNT4	1.505909347	CCNB1	-1.161536906
CTC1	1.503409149	TMPO	-1.160651967
IL1RL1	1.501719451	HNRNPA1P10	-1.159404373
BIK	1.499537346	STC2	-1.158392493
NEDD9	1.499524072	COQ3	-1.157116206
PDGFD	1.499334758	AADACL3	-1.156950521
CRIP2	1.497069028	RPL39L	-1.155769535
PRPS1	1.496884291	EXOSC2	-1.155619071
MBOAT1	1.495198399	SSX2IP	-1.153232917

RRBP1	1.494088108	PPP1R12B	-1.153135621
CDK14	1.49398845	STMN3	-1.152178343
RGL1	1.491137797	CFI	-1.151611846
WDR69	1.489096241	PKMYT1	-1.144623128
ARID5B	1.486087511	TMEM61	-1.144057728
CLU	1.485130153	ADAL	-1.143806347
LPHN2	1.482476963	ZNF22	-1.142365239
CES2	1.480026566	DPH5	-1.141238949
FERMT2	1.478984426	RAVER2	-1.139005864
PRCC	1.47788504	PRC1	-1.138971556
N4BP2L2	1.476111896	S100P	-1.138829005
THBS1	1.475678175	MTFR2	-1.138507656
ULK1	1.473678041	CCDC24	-1.136035873
LOC101059921	1.472218244	SYK	-1.136035699
FOLR1	1.470982409	RIBC2	-1.133472139
COL4A4	1.469681714	ABHD3	-1.132391675
DOCK11	1.469394406	FOPNL	-1.131330852
C4orf19	1.465716135	LINC00467	-1.130255483
IFIT2	1.461431329	ABI2	-1.129936032
FAM65A	1.46047635	EVX2	-1.127133776
MFSD6	1.458860384	RPS2P32	-1.125428116
WFS1	1.456995617	LTA4H	-1.12463359
OR1N2	1.455327861	ADCY3	-1.124508778
GPSM1	1.454400851	TPX2	-1.124004484
EXT1	1.454021792	HJURP	-1.123793266
KANK1	1.453210068	IDH1	-1.121755487
COL7A1	1.452323512	CCBL1	-1.121659027
SMPDL3A	1.452009047	CENPJ	-1.121097682
GLS	1.449675564	COLEC12	-1.117760275
TAPBPL	1.44886348	MCM2	-1.115051941

HTR1D	1.448556623	TRIM16L	-1.114110225
CPZ	1.448231195	KRT15	-1.112125384
FYN	1.446932111	FABP6	-1.111789226
CYP26B1	1.445072038	GINS4	-1.110979949
EML6	1.442253511	LETMD1	-1.10900059
C1R	1.440538957	THAP11	-1.106777881
CLIP1	1.437466098	CETN3	-1.106761975
JPH2	1.435351218	PDK3	-1.105962193
SLC26A2	1.434589787	C19orf48	-1.104443485
CDK6	1.433895847	SULT1C2	-1.104384369
IFIH1	1.432445332	CES1	-1.104123719
COL4A6	1.431505466	LTBP2	-1.103914807
ALPPL2	1.427464511	FAM92A1	-1.103782369
C11orf95	1.427299089	XRCC6BP1	-1.100287856
UGCG	1.425475383	TSEN2	-1.100227135
DYNC1H1	1.423394686	KIAA1467	-1.098407673
SOX4	1.421261075	EME1	-1.097468219
BAG1	1.421166014	MS4A1	-1.097431999
SAT1	1.419043045	HAUS8	-1.097062267
PCSK6	1.417607966	BRI3BP	-1.096032689
PCSK5	1.416565323	HMGCS1	-1.095260742
ITPKC	1.416515352	HCAR1	-1.093050528
HSPA2	1.414534035	CHEK2	-1.092818258
RCAN2	1.413083795	ADD2	-1.092122748
UBE2J1	1.412519092	MED30	-1.092028609
EIF2AK3	1.410775662	LOC101060634	-1.090808772
CAMK1D	1.410498927	XDH	-1.08789712
TRAF2	1.408658459	TIAM1	-1.087431758
SQSTM1	1.407924335	CAT	-1.085613209
CYTL1	1.404510773	C4B	-1.084849406

HMHA1	1.402949731	CCDC34	-1.084384361
PRSS23	1.402352587	MSANTD3	-1.084249911
ALS2CL	1.40162483	RAB26	-1.077070836
AFF1	1.400070646	MXD3	-1.074109135
TOB1	1.395356842	SLC16A5	-1.072088924
PLA2G10	1.394595017	TSEN15	-1.07188962
OSBPL2	1.394018996	COL4A2	-1.070410405
MTF1	1.393067552	NOB1	-1.067314016
SLC36A1	1.384940542	PHF19	-1.067190864
ADORA2A	1.382143383	TMEM253	-1.063892351
OPTN	1.38192381	NINJ2	-1.063684818
C14orf159	1.380609745	NEIL3	-1.063347675
CAMSAP3	1.378751046	GSR	-1.063086161
COL4A5	1.378557156	OLFML3	-1.063035079
RARRES2	1.376567144	SLC7A11	-1.060904233
LTBP1	1.369064304	HS3ST1	-1.057415453
CDH2	1.365438076	PLP2	-1.057010823
CDH3	1.363774112	THNSL2	-1.056623424
ERAP1	1.360790218	KIAA1524	-1.055220853
TAP1	1.359755863	ENTPD6	-1.055006416
QPCT	1.357308902	ZNF367	-1.050959427
CCL26	1.355808925	RAN	-1.050861266
MID1	1.355270821	QRICH2	-1.04969904
CACNA1I	1.354060753	RAB12	-1.049674919
MYADM	1.353029625	ELFN2	-1.048664665
LINGO2	1.352866061	AGBL5	-1.048051365
DNAJC3	1.352490981	SNX12	-1.046937147
ANXA2	1.35102028	AURKA	-1.045840894
DENND2C	1.350516324	ITGA6	-1.044409685
KLF6	1.350148397	TTF2	-1.044219982

SLITRK4	1.349377726	GOLT1A	-1.040455625
CHI3L2	1.349277252	SNRNP25	-1.040072049
SLC4A11	1.34816031	RDM1	-1.03857043
FAM53B	1.348056974	LYAR	-1.038355321
CRIP1	1.347863653	UBE2C	-1.038145562
PSCA	1.346290457	MRPL11	-1.038119881
GAA	1.346187606	ZFAND1	-1.036206626
FEM1C	1.345216321	TRAIP	-1.036038709
CHPF2	1.342415181	UBL4A	-1.035387724
MAFK	1.341244877	CIT	-1.035311221
GGT1	1.340572513	STOX1	-1.03409966
PHACTR2	1.339531227	PADI4	-1.032800674
CTSA	1.339461939	MTHFD2	-1.03258816
B4GALNT1	1.339181342	GRB14	-1.032471311
SERPING1	1.337853193	HAUS1	-1.027412717
SP5	1.335199222	C5orf45	-1.027331193
PARP14	1.333995319	KNSTRN	-1.027099419
ZMIZ2	1.333503773	CKLF	-1.025687835
MAST4	1.328679143	NASP	-1.024725745
COBLL1	1.328335331	ME1	-1.024292904
DAPP1	1.328204504	EXOSC9	-1.024114186
HIVEP2	1.32758041	HSD17B12	-1.024023709
TAGLN2	1.327548055	C20orf27	-1.023263822
LOC79015	1.32642141	PKIA	-1.021568319
C3orf58	1.31951273	RBMX	-1.021491866
GATA2	1.314726722	ACSL3	-1.017454048
LUZP1	1.314131921	IGFLR1	-1.014848271
ALDH1A3	1.314073799	HIST1H1D	-1.014473203
LATS2	1.311153745	CHAC2	-1.013962738
OCLN	1.309732174	NR1H3	-1.008233825

TRIM29	1.30937004	RFXAP	-1.007935569
FBXO32	1.3071687	YARS	-1.007402846
RASSF5	1.305088999	LY9	-1.007342907
BAMBI	1.303029416	ERCC6L	-1.007227039
IDUA	1.302683801	CDC7	-1.00675952
EDNRB	1.300411192	PARP16	-1.005421747
PARP12	1.298490639	TRMT11	-1.004953014
TCN2	1.297974328	ASF1A	-1.003901873
C1orf106	1.294402576	CHAF1A	-1.003492904
JUN	1.294337538	CENPQ	-1.002932428
DSP	1.291134976	PSIP1	-1.002512072
PPP2R3A	1.288880318	HNMT	-1.000523083
CYP2J2	1.287818809	MREG	-0.998336621
PML	1.287532379	PLEK2	-0.998082821
GPR37	1.287061648	DTD1	-0.998018769
IGSF9	1.284831631	RPIA	-0.995940596
EHD2	1.284151541	REG3G	-0.993783839
ETS2	1.283427602	ITGB5	-0.993557246
LHFPL2	1.283137705	DHODH	-0.99219272
PLCD3	1.282823828	LHX1	-0.991465293
RRP12	1.278853227	CEP290	-0.991386264
CSGALNACT1	1.27878501	ERMP1	-0.987901078
OAS1	1.277576	DTWD1	-0.987873328
TUBB3	1.276642715	RNASEH2A	-0.987621547
PLEKHA4	1.275862598	NTHL1	-0.986866999
LAMC1	1.272916617	ORC6	-0.985581481
HSPA9	1.270715941	MGST1	-0.985096302
CXCL16	1.270601077	MAN1A1	-0.984847537
UNC13D	1.268627108	NSMCE4A	-0.983812161
LHFP	1.267432723	NEK4	-0.983608047



KCNK1	1.266060682	UHRF1	-0.982890666
DST	1.265928309	AKR1C1	-0.981784412
ABTB2	1.264387758	PHEX	-0.98124566
CTSO	1.264338324	STEAP2	-0.98089163
WFDC12	1.263474433	DHRS11	-0.978983463
TMEM139	1.26022897	FKBP5	-0.978346028
PVRL3	1.259726325	DNMBP	-0.97550094
PLEKHG6	1.259134475	PBX1	-0.973982386
PROSAPIP1	1.255390431	LYPLA1	-0.973868175
LPCAT1	1.253004182	TRIM7	-0.973423197
CYB561D2	1.252065736	IGFBP2	-0.972746013
CD74	1.251805993	ZAK	-0.972225221
GAS6	1.250122012	DCTN3	-0.97203471
SLC9A2	1.250076317	TDRKH	-0.971014712
LAYN	1.249311594	SESN2	-0.967856746
STXBP6	1.248736208	PHOSPHO2-KLHL23	-0.967188616
KL	1.247610516	FHIT	-0.966965283
HIVEP1	1.247482399	GGH	-0.965520591
AFF4	1.246826788	NMNAT3	-0.964211908
WEE1	1.241871947	BTBD16	-0.963566246
MLLT11	1.241273112	HDHD1	-0.963487515
CR2	1.235435673	ADA	-0.962721911
TGM1	1.234209135	SLC1A5	-0.962068774
VGLL4	1.234142255	RNASE7	-0.961385321
ITGAM	1.23411799	EYA1	-0.960620452
THBS3	1.232441486	EIF2A	-0.960239739
GLIS3	1.231509901	RSL1D1	-0.960180612
PSMB9	1.229202875	AKR1C2	-0.958669436
LOC100134361	1.227846989	CDC20	-0.957643296
PCBP4	1.226685001	E2F4	-0.954979688

FA2H	1.224019926	RCL1	-0.95474353
CITED2	1.223768461	SLC20A1	-0.954459541
SLC12A8	1.221861313	CPNE7	-0.954374417
LOXL2	1.218818411	LOC100129034	-0.953720114
ITPRIP	1.217510513	NCAPG2	-0.952850358
FAM114A1	1.216460347	TAS2R10	-0.952654571
CD99L2	1.214513133	PODXL	-0.951914867
PPP2R5B	1.21260474	CALHM3	-0.951102332
SUPT5H	1.212416895	BORA	-0.950888232
KDM2A	1.212084056	RAB4B	-0.949625178
FAM107B	1.210018501	AGPHD1	-0.948693924
IFI44	1.209956091	LOC100129480	-0.948180629
STK38L	1.209384973	RMDN1	-0.948124163
SYT1	1.207223036	DBI	-0.948121398
GPM6A	1.206420527	HIRIP3	-0.947805626
NOTCH2	1.204690634	NINJ1	-0.946849503
DENND5A	1.204517402	KIF2C	-0.946815139
PGBD3	1.203911834	UBE2E3	-0.946588859
PISD	1.201902961	FERMT1	-0.94646385
C4BPB	1.201114115	DET1	-0.946460386
GBA2	1.200585801	METAP1	-0.94485433
ZNF761	1.199552345	HPRT1	-0.943136688
TFAP2A	1.196589123	TNFRSF10A	-0.94310612
CLEC7A	1.196467025	MRGPRX2	-0.942681831
ARHGEF4	1.195647356	ACTA2	-0.94106847
SLC35C1	1.195303842	GPX2	-0.938650548
ENPP5	1.195051274	C11orf49	-0.938425866
NFKBIA	1.194960736	SOX7	-0.937754792
OSBPL7	1.194611378	PTTG3P	-0.937703491
CASKIN2	1.193417315	DYNC2LI1	-0.93768186

HIST1H4H	1.19301025	ARV1	-0.936597264
CD59	1.192583298	LOC101059911	-0.93498716
KAZN	1.192234577	UNG	-0.934918994
ATG14	1.19197826	UMPS	-0.934571857
C19orf70	1.191159663	ZNF474	-0.933443092
C19orf21	1.190717772	RFC2	-0.932723006
SCN1B	1.190635827	METAP1D	-0.931304817
IRF1	1.190254871	ISYNA1	-0.930849591
DGCR2	1.18785109	NARS2	-0.930241472
NCALD	1.187735383	PROSC	-0.929516689
SLC22A5	1.187424227	INO80C	-0.928678538
MAN2B1	1.186128388	MYEOV	-0.928472778
GDPD5	1.185348025	KIAA1468	-0.926083761
ARID4B	1.182571307	DNAH14	-0.925879381
GLCCI1	1.179340963	NRP1	-0.925879381
IGSF23	1.178777783	C4orf32	-0.925838587
B4GALT1	1.177926893	NGEF	-0.925671753
AKAP2	1.176889559	C11orf85	-0.924044776
JAG2	1.176781681	C19orf40	-0.922456466
TAPBP	1.176483362	PDSS1	-0.922209369
ZHX3	1.176209613	ABCC2	-0.922174703
FUT1	1.174079912	GAMT	-0.920454829
SEMA3C	1.173164486	FNIP2	-0.918382789
SLC20A2	1.170572825	GLYCTK	-0.918358052
GYS1	1.168513912	CCDC113	-0.918012702
PLAC8	1.167784498	ILKAP	-0.915551043
DAB2	1.167668288	PDE7A	-0.915332256
TNFRSF21	1.16724821	SRR	-0.915323049
BCAR1	1.167195935	POLR1D	-0.914430772
TET3	1.166978904	LOC285074	-0.913120677

AQP1	1.166667594	HS3ST3A1	-0.91305861
STEAP4	1.166452976	GLS2	-0.910797183
LEPROT	1.16526944	RBP3	-0.91011793
ASAH1	1.162642161	CYB5R4	-0.909681778
GCNT3	1.161489245	C1orf112	-0.909599528
ERCC6	1.159433456	SLC27A2	-0.909349422
AMPD2	1.158891258	ST20	-0.909118827
RTKN2	1.158805928	PER3	-0.909084852
TRPM4	1.158453001	ALDH1L1	-0.908682921
PID1	1.156388321	GBAS	-0.90794905
KRT80	1.154894829	IQCG	-0.907148863
ACAA1	1.154019378	C11orf93	-0.90666874
FXYD4	1.153645833	PAQR5	-0.905474327
MKL1	1.153128234	TIFA	-0.903568408
DUSP16	1.152088063	STX10	-0.903167136
IVL	1.151765768	MMEL1	-0.903030509
SELM	1.151284535	MRPS34	-0.902999373
MAP7D1	1.150940739	PFKFB1	-0.902739825
HSPG2	1.150788845	BLOC1S1	-0.90202277
RAB31	1.149025076	AP2S1	-0.901530631
PTHLH	1.147136848	LIAS	-0.901317653
F3	1.146054011	FANCL	-0.898898361
DAPK3	1.145786642	SC5DL	-0.896607961
WIPF3	1.14556522	MAP3K1	-0.896603296
NDFIP2	1.145034375	MEF2C	-0.896464562
XKR6	1.1440752	LSM2	-0.896035718
SLC5A6	1.143275871	MRPL30	-0.896025474
TEAD1	1.140825546	GPR19	-0.893319951
LINC00338	1.140758041	YWHAE	-0.891536996
ANKRD10	1.1395458	C11orf70	-0.889313194

NPLOC4	1.13917009	ACYP1	-0.884478069
TGOLN2	1.138751686	CA5A	-0.883520127
SLC24A6	1.138021616	DNM1	-0.883122364
COL18A1	1.137810191	BAGE2	-0.882652239
PPM1H	1.136934374	SFRP1	-0.882600683
CD97	1.135285893	COX7A2L	-0.879585913
MGAT4A	1.135236682	KNTC1	-0.879464899
IFI27	1.135153848	CDKN2D	-0.879154534
SGSH	1.133604806	TACC3	-0.878452093
KRT5	1.133473995	CTSC	-0.877773723
KIAA1462	1.133123308	KRT81	-0.876468981
C8orf46	1.13237291	TTLL1	-0.876131409
DOCK1	1.132053384	MCM7	-0.876062116
EPHA10	1.131508669	METAP2	-0.874878112
FGFR1	1.130622064	RASA1	-0.873496337
ZNF425	1.13044809	COL4A1	-0.872428935
LGALS3BP	1.130165081	RPL17-C18orf32	-0.871913103
NDST1	1.129428239	C14orf93	-0.871383968
KIAA0247	1.125784164	H2AFJ	-0.871350457
PINK1	1.125547278	NOXO1	-0.871083898
ZC3H12A	1.124991531	SUPT3H	-0.869558798
PITPNM1	1.122429474	ITGA2	-0.869473379
BTN2A1	1.121035449	TEX30	-0.86943801
IFNGR1	1.120886963	PAICS	-0.869356435
PCSK7	1.120568475	MSRB1	-0.867874587
ZBTB43	1.119727398	SMC4	-0.867765222
C6orf222	1.117326743	TRA2B	-0.867417536
NANOS3	1.11513206	C16orf95	-0.865466225
MYO1E	1.114046051	FAM3D	-0.864004971
APC	1.111299088	ZCCHC24	-0.863515242

EPB41L2	1.110126719	GLO1	-0.862980268
ADCY9	1.109957598	RAB23	-0.860541689
KIAA1644	1.109397179	RBM12	-0.860521575
CSRP2	1.109361873	PQBP1	-0.860365924
GFOD1	1.107696653	NCAPD2	-0.860086092
HIST1H2AC	1.107597355	CHST4	-0.859997988
TM4SF1	1.105821167	VEGFC	-0.859265573
ZNF211	1.105043899	APIP	-0.8578166
JUP	1.101521898	ACAT1	-0.857794766
TGFA	1.100904393	SLC29A2	-0.857726207
SLC46A3	1.099514353	IGBP1	-0.856413523
GMIP	1.099404903	LOC100653034	-0.855788519
SMPD1	1.099196561	SERPINB1	-0.854981221
NTN4	1.098953136	CLPSL2	-0.854674733
GBP3	1.098331352	CDCA7L	-0.853276151
PPP1R13B	1.097326229	ERCC2	-0.852917303
NNMT	1.096525752	TAF1A	-0.851901785
PAWR	1.096170277	CCNB1IP1	-0.851316356
TMEM57	1.096127905	PYROXD2	-0.849426424
C7orf41	1.095968693	EPHX1	-0.849116943
KIF13A	1.094961337	POC1A	-0.848869248
DSG2	1.093629147	PIR	-0.84844633
ZNF654	1.093216965	MRPL24	-0.848175433
CLDN4	1.092469803	UBA2	-0.847325786
AKAP13	1.090781919	CD58	-0.846615121
MICALL2	1.090204107	DPM3	-0.846324286
STAT3	1.090022243	HLTF	-0.844552464
PSAP	1.089234497	CYC1	-0.843994334
INPPL1	1.08880512	LSM6	-0.843894154
EIF2S1	1.087895307	CALHM2	-0.842893411

LAMB2	1.086575225	UTP6	-0.841700186
RAB42	1.085154405	VAMP4	-0.841463631
ASPHD1	1.084422943	HYAL1	-0.84144996
GGTLC1	1.081356351	ALKBH8	-0.841064974
COPG1	1.079700997	CYHR1	-0.840590136
DNAJC15	1.07929093	PCBD1	-0.840113017
CYLD	1.078211989	KIF4A	-0.840081462
TNIP1	1.077216058	CHAC1	-0.839864641
PDE5A	1.076410089	FGFR3	-0.83850537
FNIP1	1.076299504	AK4	-0.838354355
TRAFD1	1.076116324	NUP88	-0.838352537
PTPN14	1.074954671	FAM86B3P	-0.837610056
DBN1	1.07471612	EPAS1	-0.83738258
CCDC126	1.072812274	LPCAT3	-0.836580096
PP14571	1.070319765	EMP2	-0.836286808
EDC4	1.068763865	ACN9	-0.836260905
AVPI1	1.068668145	PPIH	-0.83617658
DGKD	1.067063169	TMEM107	-0.835536567
RAPGEF2	1.066817381	TMEM194A	-0.83545183
ZNF611	1.066520711	CEP57	-0.834246274
PLXNA1	1.066367099	HDHD2	-0.83229512
PPL	1.064943645	RLN2	-0.832048276
BST1	1.064622293	WDFY2	-0.831792655
TFRC	1.064458162	CETN2	-0.831505605
SNPH	1.063526329	LOC728769	-0.831285875
TXLNA	1.063380684	LOC93622	-0.83111908
ZBTB10	1.062663909	ROCK1	-0.830883639
CKB	1.059885022	MTR	-0.830683948
TOM1	1.05936583	WARS2	-0.830045688
ARFGAP1	1.058792828	MAFA	-0.829446519

ARHGAP26	1.057715099	PRSS21	-0.826738828
ACTN4	1.056583312	ARMC8	-0.825468097
AFP	1.056363168	ADSL	-0.824978222
GPC1	1.056075486	SCNN1A	-0.823986613
SMCR8	1.055546796	TRMT10A	-0.823918556
RAB32	1.055325369	KIF23	-0.823719006
FBLIM1	1.055145946	GMDS	-0.82319061
TUBB2A	1.054709662	FAM175A	-0.822812424
CSRNP2	1.054424598	MUTYH	-0.822401616
ABHD2	1.05352792	QPCTL	-0.822228665
EPHA1	1.052720217	MSH6	-0.82104077
FOSL2	1.051946561	WRB	-0.820859235
FOXN2	1.051786581	MAPKAPK5-AS1	-0.820410364
ZBED1	1.050787292	LEPR	-0.81994186
FAM126A	1.049497341	ANXA1	-0.819446868
CRIM1	1.049366357	AP3B2	-0.819441243
SEC24D	1.048559758	ELP5	-0.819117717
LAMC2	1.048483449	SIGMAR1	-0.819022343
CLTB	1.047858372	MEGF9	-0.816502454
FAM212B	1.047266017	SNRPA	-0.816488067
PPFIBP1	1.046704376	GPR116	-0.816428933
BEND6	1.046519789	FBXO16	-0.81623887
ELMO2	1.046315956	SGCE	-0.816052822
SLC29A3	1.045909153	NBEAL2	-0.815599938
EFNA1	1.045415938	SLC51A	-0.815599938
ATG4D	1.044906906	BUB1B	-0.815335381
PURB	1.043574886	EEF1B2	-0.814950846
SLC30A7	1.04294162	COPE	-0.813545013
ARL4A	1.041671066	ABCB7	-0.8129901
EGFL8	1.041542612	CPSF4	-0.808900029



CBX6	1.041283223	FLOT1	-0.808655276
PIGG	1.041227612	PIK3R3	-0.808198815
ADAMTS9	1.04002146	BMPR1B	-0.808192092
SIK3	1.039457192	IRAK1BP1	-0.807368508
DAG1	1.037889142	USP28	-0.807324221
ANKLE2	1.037826293	MPP6	-0.807198314
TMEM133	1.037017486	TTC12	-0.806699543
INPP4A	1.035013712	PRR15	-0.805560855
KIAA0930	1.034592723	CCP110	-0.805476347
NPR3	1.034556913	EXOSC5	-0.804827191
C20orf141	1.034129451	NRIP1	-0.804817778
NAV2	1.03269704	QPRT	-0.803966465
RARB	1.03269699	DYX1C1	-0.803538833
CREB3L2	1.032337705	CYP4V2	-0.803338206
SLC15A3	1.032260469	MSH2	-0.802141247
GRK4	1.032260469	HSDL2	-0.801906564
ATF6B	1.031780565	CASP6	-0.801561274
PDGFA	1.027752087	CHCHD6	-0.801484053
CHPF	1.02769634	PRKACB	-0.801388145
PNRC1	1.027685535	MRPS15	-0.801333633
SGK1	1.027077922	GLOD5	-0.799045301
PXDN	1.02655863	GRPEL2	-0.798912024
SORBS2	1.026515759	FAM81B	-0.798497138
IGF2R	1.02649505	AP3M2	-0.798204488
HIST1H3D	1.025904099	ERCC8	-0.797615198
GBA	1.025647255	DAAM1	-0.796874995
ZSWIM4	1.024116518	TBC1D8	-0.794540453
ABHD16A	1.023556099	NRM	-0.79444793
PRKRIP1	1.02288753	ZNRD1	-0.794305678
SLC22A4	1.02285092	PRMT3	-0.793393075

TULP4	1.022480306	C20orf196	-0.792899555
MAP4	1.022371874	OSGEPL1	-0.792558008
RIN2	1.021638184	SPCS2	-0.792366201
GPR158	1.020815742	C1QBP	-0.792268421
MAGEC2	1.020735125	CENPF	-0.791582849
COL17A1	1.020732199	TRAF3IP3	-0.790898005
ATG2A	1.020465832	E2F7	-0.790785781
YTHDF1	1.020258149	SOX13	-0.790667887
GAB3	1.01926264	MKI67	-0.790394064
TP53BP2	1.019141122	HFE	-0.790208244
FAM102A	1.018937235	SORCS1	-0.789822604
TPRA1	1.018667521	CCDC111	-0.789171091
MED15	1.018133897	FOXRED1	-0.788183705
CCDC146	1.017819721	PABPC1	-0.786653488
HSPA5	1.017614179	TFAM	-0.783654414
OPN3	1.017544864	MCM4	-0.782991791
SNTA1	1.016879137	ACOXL	-0.782636879
DNAJC13	1.016127077	USP37	-0.782411132
TTC9	1.016122876	APITD1	-0.781792552
SOD3	1.014791969	RHEBL1	-0.78129284
QSOX1	1.014706388	ADSS	-0.780940617
ZFP36L1	1.01417228	PGD	-0.779977746
BAI2	1.013592891	TAF1L	-0.77980302
PIGT	1.012755578	HSD17B8	-0.779573978
SNORA25	1.011861742	IL1A	-0.779327882
DOK4	1.011549333	SEPT10	-0.779069854
ENC1	1.010322868	UNCX	-0.778838193
IL1RAP	1.009625567	ERRFI1	-0.777925064
PRRG1	1.00961061	C16orf93	-0.777569489
ECE2	1.008471804	MRPS2	-0.777250533

HIST2H4B	1.008331707	ATP2C2	-0.774101107
SLC6A8	1.006975245	C22orf32	-0.774078329
PNPLA4	1.006847035	PLAT	-0.77344384
MAGED2	1.006824238	POLR1E	-0.77283775
FGF18	1.006486372	BSPRY	-0.772815749
SERF2	1.006126602	SNRPD1	-0.771077671
EXT2	1.006113598	FOXC1	-0.770982912
FKBP7	1.004572197	NUDT6	-0.77073328
MUM1L1	1.003731793	NFIL3	-0.769838592
ZNF185	1.003540613	NUDT2	-0.769746886
TEX14	1.002645726	LOC344887	-0.768888953
PPP3CC	1.002332577	SPDL1	-0.768150302
ARHGAP17	1.001087967	PMF1	-0.768075635
NFKBIE	1.00036924	CFDP1	-0.766725705
KCNAB2	1.000243747	NCR3LG1	-0.766231392
TSPAN3	1.000027082	C4orf27	-0.766153716
MRAS	0.999931256	CD72	-0.766140688
TMEM127	0.999438434	COPS6	-0.765954689
LOC101060462	0.999108054	DARS	-0.765913018
PTRH1	0.998849432	MST4	-0.765449681
VIM	0.997506512	C16orf55	-0.764200039
SERTAD1	0.997452497	SEC22C	-0.764194196
EGLN1	0.997112184	ELOVL5	-0.764071538
ZBTB20	0.996606473	DYRK1B	-0.763299658
NPC1	0.996150632	TTC32	-0.763031818
FBXO31	0.996078638	METTLL17	-0.762609818
TECPR2	0.995918424	FABP5P3	-0.76155979
MCAM	0.995325483	HYLS1	-0.761117563
C15orf52	0.995102485	CINP	-0.760992802
SDC3	0.994877608	C12orf45	-0.760863486

GOLIM4	0.994432485	CKS2	-0.759691746
ZNF880	0.994295531	CT62	-0.759684872
MICAL2	0.994198474	TMEM116	-0.759681957
MED23	0.993385279	MCCD1	-0.759577966
ALDH3B1	0.993218985	VMP1	-0.759407194
NCEH1	0.993092546	MDFIC	-0.758592873
CALD1	0.992889626	STIL	-0.758206583
NFE2	0.992382915	SLCO1B1	-0.757312917
RHBDF1	0.992045392	SUSD3	-0.757221096
ABCC10	0.991473049	PEG10	-0.756784593
MAP1B	0.991361393	GALNT11	-0.756654883
MAP2	0.990273122	HMG2	-0.756646671
CLN8	0.989354146	MRPS28	-0.755844195
PEA15	0.988021753	DHFR	-0.75516301
INPP5K	0.986830808	TMEM17	-0.754428774
TSPAN8	0.985788576	CHAF1B	-0.754215208
EIF2C2	0.985070986	LIPT2	-0.752727008
DNAJB11	0.984846675	RPL23	-0.751137329
ZSWIM8	0.984037656	POT1	-0.751126486
CERS6	0.983460995	MARC1	-0.750752094
SLC38A7	0.983256754	SPAG4	-0.750643314
KLK5	0.982514944	NUP54	-0.750154777
NFATC1	0.981213387	TP53TG1	-0.749957261
PALLD	0.980401374	EIF3E	-0.749288618
MAGI1	0.979891306	SETDB1	-0.74918448
RAB11FIP5	0.979071961	RAD54L	-0.748834544
HIST1H1C	0.978747318	PKIB	-0.748476792
NKX2-1	0.978581685	VGLL1	-0.747898147
IRGQ	0.97838867	CENPE	-0.747257586
PROS1	0.978174241	COMP	-0.746950326

SETX	0.977615687	NMNAT1	-0.746743162
LOC338963	0.975126868	MAGEF1	-0.746028162
IGSF11	0.974518564	ZNF846	-0.744737005
NFKB1	0.97439896	RPS4X	-0.744420779
KIAA0226	0.972923639	ELP4	-0.744382491
LRP10	0.972401581	TRNP1	-0.743828319
ZNF175	0.97182487	CDC25B	-0.743303998
NPFFR2	0.971127681	CKAP2L	-0.743204228
FAT3	0.970919166	TM7SF2	-0.743171231
STAT1	0.969364679	GSTZ1	-0.742935871
CYTH1	0.969295118	TTC21B	-0.742435587
HLA-F	0.96867305	NFU1	-0.742253003
CTBP1-AS1	0.968354976	SHMT2	-0.742246892
KCTD17	0.967257631	LOC100505876	-0.742140598
ZDHHC7	0.965550058	ACACA	-0.742135901
CALM1	0.964437192	COA1	-0.74102045
ZNF114	0.964368957	C10orf11	-0.740569025
C18orf25	0.963709387	PRTFDC1	-0.740557792
SPINT1	0.96263788	F2R	-0.739746074
HCFC1	0.961300503	LPIN1	-0.739493862
CLCN7	0.960481666	FIGNL1	-0.738068367
ZSCAN18	0.960095604	TMIE	-0.737969812
MICALL1	0.959858644	MPHOSPH9	-0.737032336
AP2B1	0.959421049	TEX36	-0.735437773
GGT6	0.95841034	SHBG	-0.734443611
SCYL2	0.958260637	SNAPC1	-0.734201673
ATG4A	0.957607232	LOC100505940	-0.734070586
ZBTB4	0.956791855	UBE2NL	-0.732956988
CHFR	0.956743683	CMTM7	-0.731972916
PIP4K2C	0.955580574	GLE1	-0.731483196

PER1	0.955310512	C6orf223	-0.731209227
LEPREL1	0.954790904	RPS10-NUDT3	-0.730978578
GRAMD4	0.954758957	TMEM48	-0.730945748
TRANK1	0.954687748	UTP23	-0.730505389
ETV7	0.954687748	ENOSF1	-0.729300237
HEATR5A	0.953708465	GATC	-0.729213397
FOXL2	0.95281715	MRPL19	-0.728843603
MCF2L	0.952311175	ASB13	-0.728670391
CLDN1	0.951378057	NUBPL	-0.726952569
ALDH18A1	0.949987442	LOC286094	-0.726800188
SPAG9	0.947357312	PTH1R	-0.726516299
SLC47A2	0.945656017	HAUS2	-0.72639679
LMO7	0.945433775	LOC100996481	-0.725563215
PVR	0.945250078	ANO1	-0.725517915
PANX1	0.945233278	TTC39A	-0.725145765
SNAP23	0.944743949	NRARP	-0.724708715
ITGB2	0.944373123	POLR3G	-0.72332121
SERPINB7	0.94395666	GLRB	-0.72266853
UPK2	0.943222641	TOM1L1	-0.722565744
PLS3	0.942747961	WDR76	-0.722480434
TPST1	0.941917893	DUSP13	-0.722245958
DKK3	0.94174009	SPP1	-0.72195241
PPP1R12C	0.941731338	SRFBP1	-0.720155859
LOC283070	0.940798587	UTP18	-0.71992123
BRD4	0.940783693	CKAP2	-0.719516462
DLX3	0.939362584	PRSS12	-0.719413376
ATG9A	0.939032396	THOC3	-0.718305027
SOWAHC	0.938570441	FOXJ1	-0.717707977
PSEN1	0.938228977	OR4D9	-0.717566792
CD14	0.937821885	PIGV	-0.717469894

RC3H1	0.936775381	TMEM42	-0.71705929
MGAT1	0.936707307	SLC2A12	-0.716800831
FAM108B1	0.936694173	PXK	-0.716534752
WWC2	0.936172893	CCDC101	-0.715780078
RNMT	0.935538858	RPE	-0.715592963
HMGXB3	0.935321945	HKDC1	-0.715007742
ZFYVE27	0.934512428	ACLY	-0.714945091
KDM5B	0.934025491	TMEM218	-0.714540122
NDRG4	0.933422313	FOXM1	-0.713793
SKI	0.933069684	NUDT16P1	-0.713517161
DVL3	0.931512987	ADORA1	-0.713485324
CGN	0.931268396	TMEM101	-0.713479093
VPS37B	0.930675461	SPAG16	-0.713119155
ACP2	0.930195331	RPS4Y2	-0.712306066
RASEF	0.930014629	GAR1	-0.7122795
HYOU1	0.928835623	PDDC1	-0.711173472
ETS1	0.9284572	SPA17	-0.710889639
URGCP	0.926835278	PIBF1	-0.709996435
SLC12A9	0.92665004	ELP6	-0.709981316
FAM21C	0.92637309	SRSF3	-0.707399656
MAP3K9	0.926160569	H2AFZ	-0.70703505
MAGED1	0.926033585	KCNJ18	-0.705343339
PDLIM1	0.923885077	SMN2	-0.705302432
MAOA	0.923014738	SIVA1	-0.704426966
ZNF282	0.922173761	MRPS14	-0.704008053
DHDDS	0.921979212	MBNL1	-0.703256122
AP5Z1	0.920255018	MTIF2	-0.702964333
IFRD1	0.919996233	LRRC69	-0.702033947
LEPRE1	0.919522531	ANP32A	-0.701737533
BTBD3	0.918498425	NCAPH2	-0.700538553

NUAK2	0.917471993	FAM213A	-0.70046264
NDEL1	0.917454187	MAPK10	-0.700141784
DNAJB9	0.917149567	PDK1	-0.700047116
KPNA1	0.916241566	AMN1	-0.698905878
FOXI1	0.915294355	ETFA	-0.698901203
HRH1	0.915275683	HDGFRP3	-0.698656862
MORN3	0.914657621	NBR2	-0.698419163
MTMR1	0.913908756	LIN52	-0.698056403
CACNB3	0.913528841	TRUB1	-0.697190227
FAM109A	0.913395873	PSPH	-0.696121247
BTN2A2	0.912921498	RAB20	-0.695696844
PAPSS2	0.912706528	TMA16	-0.695076748
SUN1	0.912684318	PEMT	-0.694858189
ZHX2	0.912052462	U2AF1	-0.694795083
TUBA4B	0.911751239	GCA	-0.694180842
ALCAM	0.91115468	TNNI2	-0.693160535
CREBRF	0.91081481	SNRPF	-0.692123419
AVEN	0.910651919	TMEM70	-0.691996974
LPPR2	0.910240574	CRYL1	-0.691887674
MAN2A1	0.909524958	TYW3	-0.691674441
GPATCH2	0.909220174	PCK2	-0.690229778
RCAN1	0.908115082	CLDN12	-0.690207702
CTTNBP2NL	0.907698371	RPL29	-0.69019173
VANGL2	0.90765412	EPS8	-0.689822555
C10orf118	0.907000356	MRPS18A	-0.689693355
POLR2A	0.906737909	PPP1CC	-0.689363047
KANSL1L	0.906608724	MYBL2	-0.689267982
FLII	0.906208378	EARS2	-0.689103716
LURAP1L	0.905823765	DNAJC17	-0.688980738
ATG16L1	0.905450735	TPM4	-0.687954293



CYP2E1	0.905235867	FAHD2B	-0.687649519
INA	0.90507133	SLC1A6	-0.687051118
AMOTL2	0.904442	OR4K17	-0.687002979
NEBL	0.904180847	FAM216A	-0.686978927
NRCAM	0.9041045	ALDH1L2	-0.686689554
GFM1	0.903810861	OR10AD1	-0.686438056
EDC3	0.902984593	PMM1	-0.685889055
TRIP12	0.902112651	NUP35	-0.685670391
PAM	0.901996742	RBBP8NL	-0.685564506
GABARAPL1	0.901265304	DUSP28	-0.684751253
GPNMB	0.900604776	RGS3	-0.684393865
PPP1R10	0.900230531	POLR3GL	-0.684271823
STK10	0.899661248	HPGD	-0.684086275
HERC5	0.897745956	RANBP1	-0.683150275
FGF12	0.895879399	LARP6	-0.682925355
HSD17B1	0.895302562	MYL6B	-0.682003356
YPEL2	0.895245737	CDK2	-0.681549928
KLF4	0.893037524	NPHP1	-0.681245953
BMPR2	0.892861767	GJB2	-0.680980045
MMRN2	0.891159867	PRELID2	-0.680958088
SESN1	0.891117244	MORN4	-0.680910956
KLHL15	0.890596997	ATPBD4	-0.68025313
ZFYVE1	0.890252361	FAM81A	-0.67822008
ANXA3	0.889488881	WDYHV1	-0.678195737
GPX8	0.887447302	LRAT	-0.67817152
CLYBL	0.887160089	SMAD6	-0.678147302
SAMD4B	0.886645328	GCLM	-0.678011538
MUC20	0.886091421	MNF1	-0.677905319
NFKBIB	0.885146268	MRPS9	-0.677735231
CTSB	0.884439483	MZT1	-0.677584258

ITGBL1	0.884364316	ETAA1	-0.677510783
MYOZ1	0.88315043	ALG9	-0.677485747
ATP2B4	0.882904583	RNMTL1	-0.677259146
CCSER2	0.882832788	CARD8	-0.677251775
ERC1	0.882693121	GATM	-0.677127217
PPM1K	0.882095528	MYB	-0.677027575
KIAA1958	0.881163827	BANF1	-0.67679851
RAB5A	0.880376783	NDUFAF7	-0.676762317
ARTN	0.879721058	DCLRE1CP1	-0.676400494
OBSL1	0.879176004	GPN3	-0.676070561
CD151	0.87842032	FBXO4	-0.675995587
PDGFB	0.876745255	COA6	-0.675925078
KLF5	0.876546911	MRPL49	-0.674395543
ZBTB8A	0.876392891	PTGDS	-0.673657173
LOC101060404	0.875930429	DCLRE1A	-0.673581212
ELF1	0.874774078	GNL3	-0.673470077
AMIGO1	0.874190811	MRPL12	-0.672944296
PRRG2	0.873958166	PARP2	-0.672545043
LAMA5	0.873354456	FAH	-0.672109874
EPS8L1	0.872205802	TMEM55A	-0.672040295
LIG4	0.871290352	PARPBP	-0.671839648
FBXO33	0.871178443	AQP7	-0.671811787
FBXO34	0.871043986	TRIM2	-0.67161956
PLEKHB2	0.870283806	CCDC15	-0.67139842
EPHB6	0.870273322	EIF3L	-0.671109781
ZFP36	0.87013156	ATP5H	-0.67053478
BST2	0.86967695	PAGE1	-0.670108541
ACTRT3	0.869613525	COMMD10	-0.66970891
BTN3A1	0.868949492	ANAPC11	-0.669580351
GNA15	0.868626451	CLK3	-0.668936282

ANKRD13C	0.868345201	DMC1	-0.668821852
C11orf52	0.868250452	SREBF1	-0.66879897
FKRP	0.86818225	PPIL6	-0.667710772
SULT2B1	0.8670155	NFIA	-0.667612304
ANKRD13A	0.866109537	DCAF16	-0.66751776
VPS53	0.866073211	CNTLN	-0.667417021
SLC9A1	0.865304997	NPM3	-0.666842797
SFT2D2	0.865070214	HBE1	-0.666317619
ITSN1	0.865032065	RHOBTB2	-0.665503725
SCARA3	0.864987263	SKAP2	-0.665344483
PACSIN2	0.86396306	NSMCE1	-0.665261293
SLC35F6	0.863652943	C4orf52	-0.664874114
USP6NL	0.863503923	KIAA0020	-0.664633037
UNC45A	0.863190559	HENMT1	-0.664267364
PROSER2	0.862908998	THRA	-0.664209415
EIF2AK2	0.862766803	RNPC3	-0.663778655
PLEKHF1	0.862749264	NXT1	-0.662652576
TMEM87A	0.862565814	FANCG	-0.66261268
SYNJ2	0.861672635	ETNK1	-0.662407781
SLC35F5	0.861573739	SRM	-0.661920483
AJUBA	0.861538192	RPSA	-0.661840684
FSCN1	0.861433809	PHPT1	-0.661834588
KAT2B	0.861231691	CDCA4	-0.661804967
MGLL	0.860939517	DHPS	-0.66178266
TRIM8	0.860654314	MANEA	-0.661668008
UBFD1	0.859142281	MRPL37	-0.661245257
ZNF44	0.858271181	PPP1R1C	-0.66122759
C12orf70	0.858044512	NDUFC1	-0.661048283
ARMCX5-GPRASP2	0.857886594	C19orf43	-0.661047562
BREA2	0.85762212	TKT	-0.660408017

HDAC9	0.85760012	LRRC6	-0.65992706
AP1S3	0.857256519	LOC441455	-0.659801037
ZNF613	0.855687504	ESD	-0.659445182
TM7SF3	0.855064163	ZNF598	-0.659208793
UBR4	0.854947515	C10orf10	-0.659172215
IL12A	0.85467387	F2RL1	-0.659079449
CEP170B	0.854579431	LOC646021	-0.658820021
NOMO2	0.853910364	FAM86B2	-0.658416433
GRAMD3	0.853509059	IPO5	-0.65784115
ODF3B	0.853363398	UBXN2A	-0.657798269
ASAP3	0.853044999	RPUSD4	-0.657145618
ZNF721	0.852804541	ZIC3	-0.656128905
CUX1	0.852733925	CCT2	-0.655786978
ARMC5	0.851605236	CNIH	-0.655656684
SLC25A25	0.8504762	DCAKD	-0.655151566
ADAM8	0.850326036	CBS	-0.655102286
TRIM11	0.849654782	LZIC	-0.655082923
UBL3	0.848483304	DUSP5	-0.654910043
WIPI1	0.848309498	C11orf83	-0.654876399
SOCS2	0.846867891	SPNS3	-0.654326499
PLXNB2	0.846246603	WDR35	-0.652318459
NPEPPS	0.844603387	ATP5SL	-0.651750326
TMEM81	0.84459334	RAB40B	-0.651719817
FRAT2	0.844365943	EPHX3	-0.651621307
SWAP70	0.84406162	MED31	-0.651576569
APOBEC3D	0.844013194	GALNT14	-0.651575508
SYNM	0.843936413	TACO1	-0.651195037
GDPD3	0.843465693	ST3GAL6	-0.650875948
ATP9A	0.843052819	HRCT1	-0.650507387
PVRL4	0.842566172	GSG2	-0.650482701

ARHGEF17	0.841806955	RPL14	-0.650182194
INTS5	0.841633271	AKR1B1	-0.649933025
UGGT1	0.841618392	THAP10	-0.649487309
DENND2A	0.84135156	MMD	-0.64933495
ABCF3	0.84095794	DNAL1	-0.648044261
SYTL4	0.840854777	FARS2	-0.647802524
TSPAN14	0.840569158	GOT1	-0.647575942
USP47	0.840387032	FAM98C	-0.647493619
PSME4	0.84020289	NT5C3L	-0.646663475
RNF40	0.839616136	AUH	-0.646352768
NAGK	0.837486303	RPS3A	-0.645796091
PPP1R21	0.837405835	GNPAT	-0.645768244
PIK3CD	0.837001706	ZZZ3	-0.644963868
C11orf24	0.836238695	CLPP	-0.64399906
KIAA1919	0.83598149	C16orf74	-0.643917936
DOCK10	0.835393931	ZNF511	-0.643734376
NMNAT2	0.834806705	POLB	-0.643063889
GIT2	0.834174859	MINOS1	-0.641862341
NUB1	0.833648628	AHCY	-0.641556582
PWWP2B	0.833474656	OR2Y1	-0.641532934
C3orf52	0.833378923	PLK1	-0.641449088
PPP3CA	0.833170043	EGF	-0.64099485
CD38	0.832441322	LYRM7	-0.640770675
PLEKHA1	0.832133412	RNF165	-0.640212564
HBP1	0.831708151	SLC25A40	-0.640093003
SIN3B	0.831223546	ZNF277	-0.639237314
BLNK	0.830766902	ANP32B	-0.638722714
TLR3	0.830300081	UGT8	-0.637441457
UNC5A	0.82995879	AKIP1	-0.636588851
MOSPD1	0.829524616	OXA1L	-0.63551868

ERBB2IP	0.829186632	LMNB2	-0.635352353
ARL14	0.829116805	CHP1	-0.635283514
ZDHHC17	0.828270361	CC2D2B	-0.635036407
ATP11A	0.827690478	HMGCR	-0.634980911
ARMCX3	0.827499825	MTFP1	-0.634927864
CAPN14	0.827472964	SLC44A1	-0.634848752
RUSC2	0.826722776	CAPN1	-0.634666929
OAS2	0.826625157	ATF1	-0.633960447
DIAPH1	0.826454494	PAFAH1B3	-0.63317027
PTPRJ	0.826326651	AASDH	-0.632953047
PHF15	0.826057754	TRMT10B	-0.632744964
TCF4	0.825282417	CFHR3	-0.632734121
PPIC	0.825276394	ULK2	-0.632703874
ZNF296	0.82494719	MRPL22	-0.632649665
YOD1	0.824837547	RNF32	-0.632333405
PDCD11	0.823199716	MME	-0.632233274
SHANK3	0.823190946	IAPP	-0.632125278
NAGLU	0.823182434	ASL	-0.632043096
SFXN3	0.823175443	HNRNPA1	-0.631945053
MFAP2	0.823049109	ESRP1	-0.631708618
PTPRM	0.822909766	VEPH1	-0.631102643
DIDO1	0.822432873	RBX1	-0.630858297
FARP1	0.822186508	H2AFV	-0.630727635
NOMO1	0.821873554	MASTL	-0.630318977
KLF11	0.821160468	ULBP1	-0.629840129
LLGL2	0.821125491	DDX1	-0.629828745
RIMBP3C	0.820972544	CBLC	-0.629252775
TRAM2	0.820647677	ZNF383	-0.628170005
TMEM206	0.820225906	AP1S1	-0.627807394
TRIM47	0.820067584	ISY1	-0.627479885

COBL	0.81991332	DBP	-0.62744285
CACNG4	0.819227183	VPS52	-0.62692984
QKI	0.818855837	PPP5C	-0.626746535
SLC38A10	0.818529833	SMPD2	-0.626719581
COL1A1	0.817459297	RMND1	-0.626527804
PSORS1C1	0.817266784	TRNAU1AP	-0.626462779
TAX1BP1	0.817078425	PALD1	-0.625847721
KIAA1324	0.817025961	ZBTB7B	-0.625788136
CARD14	0.816542785	CUEDC1	-0.625091966
NCK2	0.815882374	INTS7	-0.624878773
SNX33	0.815827985	DLG1	-0.62451964
B3GALTL	0.813642633	CALB1	-0.624125451
SLC1A1	0.813619269	AUNIP	-0.624031168
F11R	0.812512237	PCGF5	-0.624020115
BCL2L11	0.812362079	RPL4	-0.622752377
B3GALNT1	0.809381151	DCK	-0.622635026
HSPH1	0.809320961	MRPL43	-0.621338385
PIGA	0.809253598	EMG1	-0.620210331
TBC1D3G	0.809218732	C15orf41	-0.619944716
VTCN1	0.807958262	POLR3K	-0.619687472
RNF149	0.807615634	TRIP13	-0.619645194
UBLCP1	0.807592263	LGMN	-0.619388211
RELL1	0.807181574	STK32C	-0.618393357
IKBKE	0.8070315	PPIE	-0.618053412
SYTL2	0.806918304	KIAA1147	-0.617776915
PIEZO1	0.80663105	SSBP4	-0.617541109
KLHL21	0.805910208	ANKRD2	-0.617210229
USP9X	0.805885256	BCCIP	-0.616017393
GRK5	0.805359103	ATXN10	-0.615955091
PHTF2	0.804936407	ARL6IP1	-0.61586654

TMEM106A	0.804333636	GTF3A	-0.615405059
CD109	0.80402036	NOVA1	-0.614990191
CELSR3	0.803689947	IMPA2	-0.61473027
SDC4	0.803153004	GMPS	-0.614709236
GFOD2	0.802325394	PSMG4	-0.6146537
COL6A2	0.802140264	COPZ1	-0.614019884
RN7SK	0.801879335	CBR1	-0.613875819
SETD8	0.801701535	CHRNB1	-0.613686456
ZGPAT	0.801684722	LCMT1	-0.613646164
TPRG1L	0.801575865	MNAT1	-0.613147981
FRAT1	0.801552229	RPL26	-0.612951933
CYCS	0.801337488	EEF1D	-0.612943445
REPIN1	0.801184745	CTU2	-0.612830831
SYNRG	0.800611544	PPIA	-0.612210018
RELN	0.799626044	RNASEH2B	-0.611807127
DTX3L	0.799149805	PDHB	-0.611180584
SMG5	0.799064157	TGFBI	-0.610975971
CRAMP1L	0.798399564	NUDT1	-0.61080953
SLC7A1	0.798348736	IK	-0.610477216
MAPRE2	0.798189451	ZFYVE19	-0.610306597
ZNF45	0.796927701	STK24	-0.610243245
SALL4	0.79682549	MIIP	-0.610224184
CASP10	0.79668754	NOL12	-0.610104022
PDGFRL	0.796578707	CAPN12	-0.609708895
TM2D3	0.796526381	INSIG2	-0.608951007
FLNA	0.795823721	DENND4A	-0.608333625
KRAS	0.795642905	MRPS35	-0.60809095
LIPH	0.795294081	BCKDHA	-0.607570345
GABBR2	0.79521137	SRSF10	-0.607315949
RIMKLB	0.79516162	C8orf40	-0.60722871



VAT1	0.794790271	MIB1	-0.606542724
SYNCRIP	0.794084434	FBXW9	-0.606431164
ZDHHC14	0.793977262	MRPL2	-0.606219631
SACS	0.793411155	RERG	-0.606190206
SEMA3B	0.793376934	RCVRN	-0.605964104
LHFPL3-AS2	0.792465306	C9orf41	-0.605600087
GOLGA8B	0.792154561	ZWILCH	-0.605295921
HGS	0.791779103	TNC	-0.605019937
RNF38	0.791301492	C17orf58	-0.604896801
ADCK5	0.791139639	SLC37A1	-0.604456946
SMCR7	0.791123203	IFT80	-0.60431869
ACTBL2	0.790670755	ALDH3A2	-0.604318139
KIAA1211L	0.789505392	ZC3HC1	-0.604249917
MOXD1	0.789380114	LOC729852	-0.603967959
SNORD52	0.789110004	TCEA1	-0.603938256
ADAMTSL5	0.788589207	KIF26B	-0.60386956
SLC12A7	0.78850755	RUVBL2	-0.603212791
TAOK2	0.788260702	GSS	-0.603167809
TMEM163	0.78672376	MTHFD1	-0.602978619
RIPK2	0.78616831	CSTF2	-0.602760251
CBFA2T2	0.786105439	PRDX2	-0.60231606
ATP13A1	0.785488153	GTF2H2	-0.601940661
SLC41A1	0.78489208	AMACR	-0.601926036
TAOK1	0.78476851	PXMP2	-0.601658856
JAK1	0.784757912	KIAA1244	-0.601504905
OSGIN2	0.783907289	ADPRM	-0.600892329
YIF1A	0.783555745	OR9G4	-0.600322141
CCBP2	0.782862383	ATM	-0.600163879
CDK2AP1	0.782637101	C5orf34	-0.599739576
APP	0.782495071	AQR	-0.599630916

GAK	0.782163095	MLX	-0.599615638
YPEL1	0.782147592	RRNAD1	-0.599233102
PRKD2	0.781187606	SMAD2	-0.598879135
TMEM234	0.781074868	GPT2	-0.598275994
ZDHHC5	0.781034535	MAD2L2	-0.597786947
USP31	0.780505634	POPDC3	-0.597093134
TMEM45A	0.779959815	ARHGAP18	-0.596707805
HIST1H2BK	0.779683688	TOMM22	-0.596008577
CDH5	0.778298455	NSMCE2	-0.595892907
CYP26A1	0.77789206	NDUFB10	-0.59564152
SLC12A6	0.777814922	GNAI3	-0.595502728
MEX3D	0.776675912	MACROD1	-0.595481313
FSHB	0.776464579	SIRT3	-0.595477464
IFITM3	0.775410764	ZNF573	-0.595430791
ZFAND5	0.775388578	CCL18	-0.59521719
RECQL5	0.775026632	POLR2G	-0.594699613
CHD4	0.77408524	AMD1	-0.594699004
HSD3B7	0.773865269	MPV17	-0.594291412
CLDN3	0.773728799	UQCRC2	-0.592933948
N4BP1	0.773248252	RAD23B	-0.592415294
CALCOCO1	0.772776739	DFFA	-0.592408689
ARHGEF37	0.772506087	AAMP	-0.59234044
FAM96B	0.772323806	ATPIF1	-0.592297154
TMEM33	0.770876976	EZH2	-0.591894899
SLC22A23	0.770557781	MEIS2	-0.591616434
TJP2	0.77039853	SERGEF	-0.591530882
C2	0.770264435	ZNF558	-0.591260946
NDRG1	0.769733595	KIAA0146	-0.591172202
KPNA4	0.769427282	NUP85	-0.591081263
WDR24	0.76926815	USP7	-0.591059631

IRF6	0.768339566	CLK2	-0.590993584
GBF1	0.768204531	ITGAE	-0.590937293
JHDM1D	0.766606681	LOC100506737	-0.590712159
FNBP1	0.766355013	GTF2H4	-0.5904785
APH1B	0.765530326	FAM195A	-0.589759075
SLC26A11	0.765514644	HRG	-0.589516493
FTSJ1	0.765273825	TUBGCP4	-0.589484703
EPPK1	0.765018492	CCDC104	-0.588842907
CRIPAK	0.764456538	LRRC58	-0.588650522
MAD1L1	0.76433557	POLR2I	-0.588608878
HIP1R	0.764312163	VPS29	-0.588497025
PLXNB1	0.764305242	GCAT	-0.588221161
S1PR3	0.762383834	WDR34	-0.588087012
LDOC1	0.761965304	TIMM21	-0.58807266
GTF3C1	0.760902648	ELP2	-0.587362317
FBXL3	0.760039009	MRPL48	-0.587031842
RNF13	0.759978064	MECR	-0.586552075
RANGAP1	0.759265767	TRAP1	-0.586450542
RPS19	0.758925401	ATP11B	-0.585332939
MORC2	0.758832471	SDHB	-0.584659046
ISL2	0.758098799	FAM228B	-0.584612643
MAN2B2	0.757767761	UGP2	-0.584404917
CCDC102A	0.757439712	MCRS1	-0.58402215
CYB561D1	0.757421247	IL17RD	-0.583679854
PLA2G7	0.757307512	ARPC1A	-0.583531411
C8orf47	0.757018465	MXD4	-0.583478003
TVP23C-CDRT4	0.756949653	ABCE1	-0.583132071
CLEC16A	0.756824223	ACADM	-0.582890241
ZDHHC23	0.756784593	MROH1	-0.58284143
SPTBN2	0.756479269	SLC52A3	-0.582728765

UBE2Q2	0.755625467	GEMIN2	-0.582389958
TNFSF4	0.755375987	ZCCHC7	-0.582182421
LRFN4	0.754870444	SPATA24	-0.580798862
DYNC1LI2	0.754544494	LYPD4	-0.580795443
ANTXR1	0.753985132	TSPAN31	-0.579914597
TTR	0.753566706	TFF1	-0.579889729
TMEM144	0.753457614	FARSB	-0.579628366
ITFG3	0.75335782	CEP89	-0.579446405
TRAF6	0.75323634	UPK1A	-0.579135382
UCA1	0.752681319	DLAT	-0.578988478
UBP1	0.751922618	LOC101060028	-0.578878069
ADAM10	0.750848317	FEZ1	-0.578473143
TRIM56	0.750837815	BOLA3	-0.57844095
COPZ2	0.750831432	PAX6	-0.578254141
USB1	0.750077418	DDHD2	-0.577646077
PHF17	0.749980342	TBC1D4	-0.577484897
ITPRIPL2	0.749858261	CRYZ	-0.577255681
SLC39A14	0.749670958	FUZ	-0.576980945
RBPMS	0.749512875	DDAH1	-0.576846631
GAS2L1	0.749441353	MRPS31	-0.576451969
TGFBR3	0.749424805	BLOC1S6	-0.576317502
ARSD	0.74891	IMPDH2	-0.576300303
PCDHGA12	0.748800514	TIMELESS	-0.576128432
DGKQ	0.748715481	KIAA0141	-0.57591988
KCMF1	0.748625881	TRIOBP	-0.575901992
HCST	0.74850914	HIST1H4B	-0.575640589
TM2D2	0.748388809	SPEF2	-0.575484301
CYTH3	0.748116002	FAM211A	-0.57427879
RUNDC1	0.747852125	PRKCD	-0.57360149
WBP1L	0.747219985	RAD51C	-0.573058841

BRWD3	0.747212485	SRXN1	-0.573054045
SCFD1	0.746196747	C11orf74	-0.572754941
HS3ST5	0.746003086	SUV420H1	-0.572159954
SLC6A9	0.74564935	ACOT11	-0.571804469
TTC17	0.745451237	GSTO1	-0.571205561
PNPLA2	0.744711278	SNX5	-0.570731103
TAX1BP3	0.744478567	CLNS1A	-0.570621278
BTBD7	0.74429035	SRP9	-0.570500365
SOCS4	0.743694698	ARIH2OS	-0.569687274
MLXIP	0.743404296	LOC646862	-0.569368378
ATP2A2	0.743291269	FPGT	-0.569288361
SETBP1	0.743232168	C11orf1	-0.569058862
PFKFB2	0.743140131	POLG2	-0.568690281
YPEL5	0.743006693	PRPSAP1	-0.56855331
KPNA7	0.74296387	PPP1R9A	-0.568408137
NLN	0.742802424	KIAA0586	-0.567912976
SEZ6L2	0.742666062	RPL36	-0.567353614
RAB37	0.742408688	TMEM223	-0.567116874
CORO7	0.74239074	TXN2	-0.567004432
SPIN1	0.742024966	WDHD1	-0.566992732
SEC31A	0.741056713	UXT	-0.566949255
NSFL1C	0.740689347	ASRGL1	-0.566869432
ZRANB1	0.74049162	BCL7C	-0.566549291
SH3BP4	0.739194467	E2F2	-0.565809568
STK38	0.738627385	SGOL2	-0.565652212
TRAF5	0.738587137	NLE1	-0.565573527
KITLG	0.737437252	MCAT	-0.565494688
TNFRSF25	0.737316754	RAD23A	-0.565000114
AMMECR1L	0.736518213	NR2C2AP	-0.5643482
C6orf99	0.736251334	RPL41	-0.564169003

TCIRG1	0.735681537	N6AMT2	-0.563081259
CTDP1	0.73549197	NUDT21	-0.562818604
PIGQ	0.734876953	MRPS7	-0.562281259
TMEM8A	0.734748252	ZNF503-AS2	-0.562109323
CALR	0.734624803	PMS1	-0.561972772
EFHD1	0.734494803	EIF2D	-0.561723248
PROCR	0.734464629	TOP1MT	-0.560557282
C17orf62	0.733715736	TSPAN5	-0.560329677
ZNF594	0.733677292	ATP5S	-0.559973293
TLE2	0.73323855	TMEM69	-0.559821915
SEMA3A	0.732977967	COQ4	-0.559680157
UPK3BL	0.732674688	NAT16	-0.55952865
DTX2	0.732020814	VBP1	-0.558628999
GAL3ST4	0.731619016	TMEM256	-0.558558016
FGD6	0.73158627	EPS15L1	-0.558489543
ATP6AP1	0.731352703	LEF1	-0.558402587
C12orf23	0.731278071	PPIP5K2	-0.558025436
RPS6KA1	0.730808585	AS3MT	-0.556993657
HEXIM2	0.730686351	PHOSPHO2	-0.556062003
KBTBD7	0.730642929	AGMAT	-0.555887374
SNORD36C	0.730578886	PSMC3IP	-0.555779174
PSME2	0.730312701	ACTR3B	-0.555629797
MUM1	0.730115472	CTDSPL2	-0.555419589
TUG1	0.729839544	TAMM41	-0.555390687
MFSD7	0.7294452	MORN2	-0.555319676
TLCD2	0.72941764	NPHP4	-0.554858882
SHOC2	0.729368341	CSNK1G2	-0.554839151
OR111	0.728928836	EIF2B1	-0.554671902
CKAP4	0.728836855	FAM189B	-0.554399545
EHMT1	0.728445934	DTWD2	-0.554236978

PRKAG2	0.728244375	FZD2	-0.554119351
MYOF	0.728121278	ATL2	-0.552907051
USP11	0.727548951	YY2	-0.552809654
TPM1	0.727502251	LYRM5	-0.552379284
ENTHD2	0.7271014	CCDC176	-0.552111673
GLUL	0.726991746	SLC9B2	-0.55177153
PPP1R15A	0.726727967	EIF4EBP1	-0.551626413
TESK1	0.726623378	IFT27	-0.551314258
GSTK1	0.726277575	SPECC1	-0.551254564
LGR4	0.725901542	CMTM8	-0.550459518
LACTB	0.725791012	BRIX1	-0.550422809
ATF5	0.725768975	DGUOK	-0.550140583
CNPPD1	0.725025661	USP8	-0.549800677
PAIP1	0.724959493	KRTAP20-1	-0.549604132
SLC35F3	0.724918557	PQLC3	-0.549441539
ESRP2	0.724531476	ASCC1	-0.548940915
AAK1	0.72360648	NSL1	-0.54842588
POLR3A	0.722638107	EIF3H	-0.548254962
C7orf61	0.722444021	SIRT2	-0.548236102
BTBD9	0.722291786	MTAP	-0.547901721
FUT3	0.721849643	MRPL4	-0.547629039
TIAM2	0.721586009	C16orf91	-0.547388583
CCL28	0.721499427	LAS1L	-0.546845165
LRRC37A3	0.721393256	SIGLEC9	-0.546795014
BCLAF1	0.719901755	THOP1	-0.546646356
MAPT	0.719669576	RPS3	-0.545872828
STK36	0.719638344	RHCE	-0.54586463
GOSR2	0.719390524	TFR2	-0.545338011
TTC39C	0.719384896	PLRG1	-0.545187429
ITM2B	0.719336211	OAZ3	-0.544706937

ZXDB	0.719052742	SDHD	-0.544642141
KIAA0907	0.718922972	LCE4A	-0.544474766
APBB3	0.718889335	MYCBP	-0.544470239
ZNF777	0.718479253	ATPAF1	-0.544395495
TMPPE	0.718390785	C21orf119	-0.544378834
RNF145	0.717750454	CNN3	-0.544240693
SRRM1	0.717638764	KIAA1549L	-0.544022318
CATSPER1	0.716937597	COASY	-0.543630405
MYO1C	0.716898678	TNFSF9	-0.543600206
IQSEC1	0.716861573	C12orf10	-0.542516164
PPP1R15B	0.716811764	CARS	-0.542084717
RPS6KL1	0.716768025	BCKDHB	-0.542076189
ZBTB45	0.715686334	EXTL2	-0.541855639
TMEM120B	0.714508236	NAA15	-0.541818719
MSANTD2	0.714116717	OSBPL1A	-0.541515062
JRKL	0.714074989	NAP1L1	-0.541006251
CXorf28	0.713828836	CHKA	-0.540718026
UBE2H	0.713756371	SMC6	-0.540641847
PARD3B	0.713723867	COQ5	-0.540524158
SAFB2	0.713698225	GBE1	-0.540017523
CDV3	0.713427726	C12orf52	-0.53939191
GOLGA1	0.713383271	PRSS16	-0.539365945
TMPRSS7	0.713286738	NDUFV1	-0.538704134
MEPCE	0.713019713	ATP5G2	-0.538562716
CYBRD1	0.712882144	FBP1	-0.538401506
FHOD1	0.712545235	NFIB	-0.538242415
CXCL1	0.712357751	NMRK2	-0.538132882
TAF11	0.71220197	ZC3H6	-0.537935542
TNF	0.711771014	SRP68	-0.537524356
LPHN1	0.711529291	GGCT	-0.537371662



EHD4	0.710966835	AGPAT5	-0.537277883
ESYT1	0.710910513	MCM3	-0.537182121
PDPR	0.710425165	TICRR	-0.536550773
SEC16A	0.709301555	MLH1	-0.536523502
TP53BP1	0.709202903	AP1AR	-0.536162414
PLSCR3	0.709151517	FAM86DP	-0.536080207
LIFR	0.709078713	LDHD	-0.536042115
MSRB3	0.708841364	XK	-0.535995829
HSPA1B	0.708797948	BCL2L12	-0.535959075
MOB3C	0.708366445	HIAT1	-0.535882834
C1orf63	0.708070384	OR8I2	-0.535747554
FAM53C	0.706960378	HOXA11	-0.535586884
NCS1	0.706930691	COQ10A	-0.535532282
FAM84B	0.706708495	HMGCL	-0.535015446
PLEKHM1	0.706669106	C12orf56	-0.534691078
GOLGA2	0.706284922	TATDN3	-0.534302281
PRR13	0.705796124	ABCD3	-0.534180067
NPY2R	0.705064892	WDR74	-0.534173901
TJP1	0.704942756	EIF3D	-0.533575544
C14orf178	0.704756365	LRR1	-0.533546637
KRT7	0.704403683	ACSM3	-0.533505593
SLC35G3	0.704375947	SLBP	-0.533472466
RIC8B	0.70405314	EXOC6	-0.533434243
SNX8	0.703987528	CDKL3	-0.532758866
KLHL18	0.70390972	LINC00656	-0.532135192
SECISBP2L	0.703144863	C16orf59	-0.532101959
LGALS3	0.702881098	B3GNT1	-0.531965042
RIPK1	0.702318416	SSR2	-0.531951304
ZC2HC1A	0.702123254	INTS8	-0.531337758
ZNF566	0.701880121	UFM1	-0.530854621

TOR1AIP2	0.701665763	PRPF19	-0.530799287
MAP2K3	0.701524074	P2RY6	-0.530520502
KDM3A	0.701177329	OSCP1	-0.530475918
GTF2IRD2P1	0.699728413	ATP5L	-0.530132166
COX6B2	0.699459566	MRS2P2	-0.529274739
COPA	0.699291196	KCNS3	-0.529128381
DNAH5	0.699012519	C12orf65	-0.528858467
APOBEC3A	0.69900126	CCDC138	-0.528665498
BCAT1	0.698896026	GADD45GIP1	-0.52824357
FAM127C	0.698727398	PNP	-0.527998769
BOK	0.698610806	CYP27C1	-0.527637873
SRRM2	0.698528851	KRTCAP3	-0.527493159
GNAI1	0.698263798	NET1	-0.527463236
C1RL	0.698112562	HMBS	-0.526967575
UBE2B	0.697987669	CLPSL1	-0.526421748
DSE	0.697336555	CAPS	-0.526383891
MYO6	0.697089621	TBXA2R	-0.526287103
DENND1A	0.696401072	HNRNPA2B1	-0.52617155
SAMD4A	0.69597561	DFNB59	-0.526152285
DTNB	0.694760629	UACA	-0.526116229
MUC16	0.69436354	TMEM18	-0.52583267
YEATS2	0.694275053	FADS2	-0.525832275
ESRRA	0.694231692	DCPS	-0.525731055
LRRC61	0.694036241	ZCCHC9	-0.525502363
SEL1L3	0.693687218	AMZ2	-0.525443308
XPO6	0.693160823	SNX18	-0.525423567
HPS1	0.693097808	RBMX2	-0.525351783
PTPRF	0.69282971	MPHOSPH6	-0.525310873
CEBPD	0.692197743	SLC41A3	-0.525299405
BICD2	0.691966323	PDE8B	-0.524933393

TCP1	0.691813359	SMARCB1	-0.524751444
PNPLA8	0.691771599	ATG16L2	-0.523772366
UBXN7	0.690013868	RPL38	-0.523571415
RNASEL	0.689341121	MOBP	-0.52326468
IFI30	0.689231144	SEPT9	-0.522593597
DIRC2	0.688855985	OSTC	-0.522350502
XPC	0.688599071	SLC25A3	-0.522205005
NCLN	0.688283333	C14orf1	-0.522195968
GANAB	0.688250132	PEX11A	-0.521365345
SUFU	0.687927528	PCED1B	-0.521352091
SNX2	0.687909489	HCAR3	-0.521330895
EIF4G3	0.687036882	ANP32E	-0.520988994
SCARF2	0.686936019	EIF4E	-0.520933616
OVOL1	0.685672183	TCFL5	-0.520886521
RNF31	0.685505817	UHRF1BP1	-0.520633627
FAM21A	0.685486906	CHCHD3	-0.5200538
ZNF229	0.685179831	ANGPT1	-0.519563609
DDX24	0.684493083	ADK	-0.518903311
TFPI	0.684358604	SUCLG1	-0.518325173
TMEM51	0.683931189	BTF3L4	-0.518256251
ZBTB42	0.68381116	PRLR	-0.517986967
SNX16	0.683408902	TFB1M	-0.517841794
STT3A	0.682930974	PHF6	-0.517584409
ZNF197	0.682925751	PIGU	-0.517051726
SYMPK	0.682746691	CARD10	-0.516710232
PGAP3	0.682406353	C19orf54	-0.516307982
CCL3L1	0.68233234	CENPL	-0.516163176
CXCR7	0.68231981	THOC7	-0.516149728
CTSS	0.681096175	CASC2	-0.516085646
HMOX1	0.680927243	OSTCP1	-0.515876406

EGFR	0.680731919	LGALS8	-0.515438587
CCDC57	0.680469471	STMN1	-0.515163639
ZCCHC6	0.680422048	ENOPH1	-0.515019208
CNNM3	0.680176902	RPS5	-0.514942803
NOL6	0.679523365	SHB	-0.514935338
CYP27B1	0.679258791	PSPC1	-0.514699989
ZNF264	0.679076563	NR2F6	-0.514637804
DSTYK	0.678986613	TCAIM	-0.514453288
JUND	0.678951041	DNAAF3	-0.514368139
SPEN	0.678598318	KIAA1586	-0.514039217
TMEM54	0.678512112	MDP1	-0.513462064
REV3L	0.678474533	MMACHC	-0.513446673
LDB3	0.677857509	EIF3K	-0.51326912
ACIN1	0.677465335	CYB5R2	-0.513104017
SERPIN1	0.676794848	CEP78	-0.513061329
TMEM173	0.676631926	TIMM9	-0.512932409
C1orf198	0.676373652	SCAPER	-0.512457657
DCUN1D2	0.676286563	SELRC1	-0.512412226
RARRES1	0.675973251	CDPF1	-0.511862342
SLC7A6	0.675246209	ASGR1	-0.511599941
HINFP	0.675148375	BUB3	-0.511507502
CARD6	0.67502976	CAPG	-0.511430988
PARP10	0.673800858	RACGAP1	-0.51132645
TOM1L2	0.673516142	FAM169A	-0.510974035
RAB2B	0.673509686	ALDH5A1	-0.510693034
HLA-C	0.673323252	PCGF6	-0.510648112
NGRN	0.673153534	MAPK3	-0.510416703
CFL2	0.671722153	SNRNP70	-0.510082923
IL12RB1	0.67150535	R3HCC1	-0.510069734
RHOBTB1	0.671297957	RAB3B	-0.509897399

MBTPS1	0.671166479	ZMAT5	-0.509838047
VAV1	0.671031338	RAB28	-0.509751378
KRT6B	0.670811682	RFXANK	-0.509281405
ABL2	0.66981538	KCNN4	-0.508837131
CSNK2A2	0.669622847	POLD3	-0.50868512
ABLIM1	0.66890451	NOC3L	-0.506638783
FAM160B1	0.667817768	NUDCD2	-0.506002846
JARID2	0.667783304	TMEM182	-0.505893409
METTL1	0.667739906	ESCO2	-0.505866119
EPN2	0.667602372	METTL15	-0.505842349
RNF216	0.667174373	ITGB4	-0.505824657
NTN1	0.666064773	PIH1D1	-0.50569089
FSTL4	0.666061695	RAB11B	-0.505635717
FAM179A	0.665885209	ZMYM5	-0.505623438
CA11	0.665849442	BTF3	-0.505355537
PSG2	0.665443073	TIMP1	-0.504884835
ZNF83	0.664806644	TMEM245	-0.504500804
B2M	0.664399913	CBX3	-0.504380247
ENO4	0.664205033	RANGRF	-0.504356342
MAP4K3	0.664086015	FTH1	-0.504041954
PRSS53	0.662548454	COX4I2	-0.503752608
PLEKHM2	0.662207989	C3orf14	-0.503208499
TRAPPC2	0.661831048	TOMM70A	-0.502090515
COL4A3BP	0.661739979	STRADB	-0.50184109
RAB22A	0.661590512	ATF4	-0.50171862
GPBP1L1	0.661471637	IFT74	-0.501466644
BTN3A3	0.661454957	AVL9	-0.501321759
RC3H2	0.661419504	NDUFV3	-0.501082374
DENND4C	0.661139131	CYP4F11	-0.501021902
IL11	0.661105441	FOXQ1	-0.500960931

HYAL4	0.660969969	RNF219	-0.500889692
DCAF8	0.660851135	PDE9A	-0.500848536
CYP19A1	0.659863818	MAGEA10-MAGEA5	-0.500716832
UPF1	0.659783304	TMEM126B	-0.500656571
UBAP2	0.659631029	NTAN1	-0.500618512
TBKBP1	0.65926149	FAM172A	-0.500534071
CREB3	0.659013754	ETFB	-0.500286149
HOPX	0.658812714	SH2D3A	-0.499992879
DHX37	0.658521645	MRPL3	-0.499969969
OSTF1	0.657999157	DANCR	-0.499880805
CNEP1R1	0.657956357	RPL5	-0.499697691
GPX7	0.657889997	SSRP1	-0.499523609
ERV3-1	0.657821825	APRT	-0.499437617
DNM2	0.657673622	THUMPD3	-0.499401549
TSPAN9	0.657324372	SERTAD4	-0.499309493
CNNM4	0.657289996	NTRK2	-0.499188185
LEMD2	0.657203153	EHF	-0.49915768
RHPN2	0.655832499	SFT2D3	-0.499044512
DISP1	0.65556389	HLA-DOB	-0.498932931
NKTR	0.655556091	UBE2I	-0.498749768
NUMBL	0.655554071	ARMCX3-AS1	-0.498680306
UPF2	0.654539849	EIF2B3	-0.498185423
OCIAD2	0.654500867	NACA	-0.497969282
TACSTD2	0.654450553	PGLYRP2	-0.49780895
RCOR3	0.653949628	THYN1	-0.497550438
SETD1B	0.653925626	SEC22A	-0.497452451
HLA-DRB1	0.653371347	CASK	-0.496980237
C1orf226	0.653241506	LRRC8B	-0.496975224
MTM1	0.652841049	GSTA5	-0.496855421
RXRB	0.652788684	AIMP1	-0.496452481

ARIH1	0.652612325	PINX1	-0.49637252
SERPINH1	0.652576118	PRKRIR	-0.496277567
RALGDS	0.651554016	SH3BP2	-0.496152734
TMEM167A	0.651547576	B9D1	-0.495683928
HYI	0.651507641	IDH2	-0.495571506
CALU	0.651459457	CHRNA5	-0.495298541
SLPI	0.651364308	ANKRD32	-0.494663958
VILL	0.650436523	VIP	-0.49445203
TLN1	0.649769772	NME6	-0.494154788
FHL2	0.649586896	EXOSC7	-0.493132368
TGIF1	0.649124231	AGER	-0.493047782
IDO1	0.648992559	SLC18B1	-0.492962874
ZNF75A	0.648505647	PPIL3	-0.492930827
ZNF407	0.648414879	ALYREF	-0.492318975
TNNT1	0.648258476	LENG1	-0.492293599
KCNH2	0.647740315	NUPR1	-0.491923498
SLC15A2	0.647660593	DNPH1	-0.491709017
ARFGEF2	0.647429633	STARD10	-0.491563345
DDR1	0.647069123	MTERFD1	-0.491420732
SASH1	0.646881879	KIAA1430	-0.491242863
LOC100653247	0.646335442	MIS18A	-0.490511206
GRIN2D	0.646290692	MED18	-0.490205377
ATRN	0.64623957	S100A4	-0.489976086
DDX58	0.645859927	GALNT3	-0.489596913
XPR1	0.645733725	KAT8	-0.489547606
ZNF468	0.64542436	THAP7	-0.48935731
CPT1B	0.644835749	GCDH	-0.488899075
IER2	0.644210602	CDK4	-0.488288154
DUSP7	0.644145678	ZBED3	-0.488044014
LPIN2	0.644114056	MLST8	-0.487238804

ITFG1	0.643999656	TCEA2	-0.487139314
KLHL24	0.643989246	CEP120	-0.486991813
RELA	0.643888088	LACTB2	-0.486841127
FBXL19	0.643761832	PYCR2	-0.486480432
NUDCD3	0.643697974	SSH3	-0.486471582
ARVCF	0.643325022	GJC1	-0.486383278
NUMA1	0.643077798	TUBG1	-0.486247745
CYP1B1	0.642451699	RPL34	-0.486139886
COX19	0.642233466	ECT2	-0.486043126
PIK3C2B	0.642092041	STEAP3	-0.485958776
SNIP1	0.641931747	TAF1	-0.485773616
RAB3IP	0.641745809	RORC	-0.485722704
SAP30L	0.641463053	TCEANC	-0.485568019
FAM134C	0.640842549	GLOD4	-0.485520797
FKBPL	0.640552966	KATNA1	-0.485512686
TMEM30A	0.640485439	PTGR2	-0.484974325
TIPARP	0.640474924	NOC4L	-0.48491732
PPP4R1	0.640317216	LIG1	-0.484530993
CSF2RA	0.640152616	CARM1	-0.483901425
KIAA1598	0.639974556	HAUS3	-0.483850129
SIX5	0.639965639	ATP6V1E2	-0.483416872
EFEMP2	0.639436951	SULF2	-0.48335108
SMO	0.63925487	FANCD2	-0.48318101
SEMA3F	0.637282494	TNFSF10	-0.483157602
LINC00324	0.636953979	NF1	-0.483044395
RBPM2	0.636945651	PPP1R35	-0.483030361
SETD7	0.636280903	NMRAL1	-0.482945889
LCK	0.636244877	GCFC2	-0.482845053
CDK16	0.635504677	SLC35E3	-0.482617865
GALK1	0.635315541	GGPS1	-0.482495619



PIP5K1A	0.635217507	LSM4	-0.482474572
ABCB8	0.635020299	IAH1	-0.48238412
PGM2L1	0.635020299	SDHAF1	-0.481760499
GBGT1	0.634992834	PNKP	-0.481654634
CLIC3	0.634714242	ZNF101	-0.481613718
BAP1	0.634533677	MRPL35	-0.480901279
DGAT1	0.634517039	PFDN1	-0.480872932
RNF121	0.634388219	LOC100505771	-0.480654646
JMJD4	0.633875121	ARL13B	-0.480625583
PXDC1	0.633123378	EXOSC1	-0.480585912
SLU7	0.633112273	RBL1	-0.480345566
MED10	0.632982815	LRPPRC	-0.480341166
BRD2	0.632780633	FAHD2A	-0.480337978
CTIF	0.632767014	USP39	-0.480143173
NCDN	0.632377841	HP07349	-0.48009051
PRRC2C	0.632147573	OR8H1	-0.479962739
MYZAP	0.631947427	MRPL15	-0.479341558
C17orf103	0.631929938	EIF3IP1	-0.478843844
CHERP	0.631609426	TARBP1	-0.478400379
NAA60	0.630932328	SLC25A5	-0.478180294
CHST15	0.630800215	CS	-0.47810562
COPB2	0.630785549	MRPL34	-0.477986694
STK4	0.630635233	CD68	-0.477853039
TRPC4	0.630451715	RPL36A	-0.477847921
TBC1D9B	0.630364377	MGME1	-0.477610272
ARID1B	0.630229675	POLI	-0.477567997
GRHL1	0.630162561	TRIQQ	-0.477306762
BTG1	0.630006306	PPFIA3	-0.477197596
SDCBP2	0.629817631	RINT1	-0.477184166
LZTS2	0.62965829	INTU	-0.47708769

DYNLRB1	0.62962135	NDUFS4	-0.476952709
RTKN	0.629552874	PDCD6	-0.476571736
ALDH16A1	0.629291117	PPP2R3C	-0.476110498
SLC35E1	0.628644526	MBD4	-0.476025299
BRSK1	0.62857419	ZNF239	-0.475582042
PTK7	0.628301451	ZNF426	-0.475160988
PDXDC1	0.628231534	ANKRD26	-0.475078617
NKX3-1	0.627880722	MAP1LC3A	-0.474933797
BRD3	0.627719839	C17orf75	-0.474878033
SH3BP5L	0.627685308	SYBU	-0.474288161
DTNBP1	0.626873714	MBD2	-0.474178239
KLK10	0.625742591	CCDC62	-0.473817628
FAM89B	0.625444125	HLA-DMA	-0.473649746
OS9	0.625335939	NAA25	-0.473580879
TDRD7	0.62527292	SAP30	-0.473497823
STRIP1	0.625236105	CNBP	-0.473417837
OTUD5	0.625081109	MRPL45	-0.473134762
ZFC3H1	0.624971347	CNOT7	-0.472395632
CLSTN1	0.624636382	LDHC	-0.472123875
DENND5B	0.624401563	COG7	-0.472096078
FGFR1OP2	0.624375872	CNIH4	-0.471870902
ARHGEF5	0.624098611	LARP1B	-0.471074639
ZDHHC18	0.624012047	C20orf96	-0.470969362
TRAM1	0.623859422	SNTB2	-0.470643992
ZNF765	0.623753969	TIMM44	-0.470498579
RCBTB2	0.623734768	ACOT13	-0.470441801
GTPBP4	0.623659789	MRE11A	-0.470307637
TP53INP1	0.623535491	SMIM3	-0.470216571
USP19	0.622997644	GEN1	-0.470178714
LAPTM4A	0.622712702	VDAC1	-0.469751602

FASTKD5	0.622584831	BYSL	-0.469597754
SELL	0.622012028	FUS	-0.469576192
ZNF606	0.621744486	ATP5G1	-0.469523599
LOC151760	0.621657737	PIM1	-0.469450214
SH3RF1	0.620862165	EIF2AK4	-0.469321155
CTCF	0.620353754	GTF3C5	-0.468958621
NBN	0.61851344	RUVBL1	-0.468421111
USP35	0.618448991	HLCS	-0.468235247
AMN	0.618272375	LYPLAL1	-0.467900386
USP40	0.618226958	SLC30A5	-0.467780782
RABGEF1	0.617684836	FAM115A	-0.467737143
SMARCA4	0.617627638	BATF	-0.467628005
ADM	0.617605054	SQRDL	-0.467282112
MMP9	0.617577665	TRIT1	-0.467086835
PAPSS1	0.617200381	SYTL3	-0.467055754
TNPO2	0.616937896	NPPB	-0.467049946
NFKB2	0.616937896	SNCA	-0.467033261
LOC90246	0.616627501	TIPIN	-0.466978102
FBXO6	0.616540776	TXNDC16	-0.466964764
TM9SF4	0.616480178	FBLL1	-0.466763324
DYSF	0.616297993	AGFG1	-0.466629177
MLEC	0.616287546	SRSF1	-0.466008991
EPB41L4A	0.616209213	PIH1D2	-0.465781122
CD163L1	0.615819433	ITGA3	-0.465555659
NAT8L	0.615715595	LOC415056	-0.465148981
SLC35E4	0.615598741	MRPS33	-0.464799522
NFE2L1	0.615257115	TOMM7	-0.464754428
MFAP3	0.615245131	RAPGEF5	-0.464727124
FLNB	0.615071978	HDAC2	-0.464604046
PGRMC2	0.614811527	RNASE1	-0.464487454

MEF2D	0.614220184	FAU	-0.463899056
DPP3	0.614083364	HMG20B	-0.463874457
GRIPAP1	0.613685146	PPHLN1	-0.463608115
CNKSRI	0.61355517	NOP56	-0.463596588
POGK	0.613336964	CEACAM1	-0.46339838
SOCS3	0.613336576	NARF	-0.463323274
TRPS1	0.612681294	PLK1S1	-0.463115165
MLL3	0.612269244	ARNTL	-0.462348363
SRPX2	0.610986534	TRAPPC6A	-0.462238083
SULT1C3	0.61066456	UCK2	-0.462147045
SH3BGRL3	0.61004837	ANAPC16	-0.462126144
RYBP	0.60997579	CCDC115	-0.462086873
SCAP	0.609901553	RAD1	-0.462016532
DPY19L1	0.609786972	RTN4IP1	-0.461811836
NRBF2	0.609537116	DPYSL2	-0.461452735
SERPINB5	0.6095348	SLC37A4	-0.461268962
GALNS	0.609448617	INO80B	-0.460611514
B3GAT3	0.609026254	TRAPPC2L	-0.460554756
NAT2	0.608452587	NOTCH3	-0.460181553
HES4	0.608320551	MCFD2	-0.460110603
VPS39	0.60832016	CMC4	-0.459731072
RORA	0.607811139	IVD	-0.45941068
ELL	0.607028835	HIST3H2A	-0.459346945
PSMD3	0.606892503	SAAL1	-0.459241372
NOVA2	0.606889249	FAM129A	-0.458988318
NNAT	0.606522619	CLEC2B	-0.458814353
TMEM102	0.606276592	FASTKD3	-0.458547798
DOCK8	0.606208281	GTF3C6	-0.458513165
DAP	0.605864459	SNRNP27	-0.45835743
CSPG5	0.605831218	HNF4G	-0.458246447

LIMA1	0.605588347	GALK2	-0.457884666
MPDZ	0.605571687	RPL13	-0.456860849
LPIN3	0.605418037	FANK1	-0.456769193
MYL7	0.605232947	ATP6V0A4	-0.456464231
SVIL	0.605198253	CHURC1	-0.456174249
ZNF274	0.604550642	LOC100288568	-0.456139846
ZNF490	0.604124902	ECH1	-0.455680769
KANSL1	0.603936777	POLE	-0.455673739
IFNAR1	0.603725407	OGG1	-0.455647796
WDR82	0.603345879	NUDT14	-0.455339566
MAPKAPK2	0.603232145	RPL12	-0.45525781
GPR39	0.60289994	FH	-0.455218206
MAP3K8	0.602691906	BTBD18	-0.455064397
TRIM31	0.602623757	AP1M2	-0.455000518
PARP6	0.602179615	FOXO1	-0.454678922
UBE2E2	0.601891053	ANLN	-0.454650356
CLIP3	0.601888513	TGS1	-0.454349227
DNAJC16	0.600370286	CCDC23	-0.454137433
KLF16	0.600323946	NDUFS3	-0.45336924
LMAN2L	0.600276252	LCP1	-0.453069351
GOLGB1	0.600002387	PADI3	-0.452903128
IP6K1	0.599683587	TMEM9	-0.452657025
PSMB10	0.599458819	NOL11	-0.452622007
HIST2H2BE	0.599420706	MTERFD2	-0.452596041
GLYATL3	0.599273912	PPIL4	-0.452556006
DNAJB12	0.598781792	VWA9	-0.452352175
RIOK3	0.598761894	SPDYC	-0.452245903
SON	0.598747352	NXT2	-0.452178829
SHC2	0.598626125	C2orf82	-0.452115442
HTT	0.598541017	RPP25L	-0.451994076

GRN	0.598519009	PDHX	-0.451919025
NDRG3	0.598461051	MAGEB2	-0.451143044
PTPRS	0.598410716	FEN1	-0.450615279
SLC25A13	0.598122569	NUCKS1	-0.450542743
SLC16A6	0.598109425	LOC100507670	-0.449575875
SCAMP2	0.598087177	PAM16	-0.449472837
PSMD2	0.597757556	GNB1	-0.449305522
EPHB4	0.597726588	RALB	-0.449291513
DOCK3	0.597479535	TMEM154	-0.448311307
MOV10	0.597446279	KLHDC4	-0.44822898
CLASP1	0.597190053	MPST	-0.448212287
WASL	0.597180276	TOMM6	-0.448072497
FKBP9	0.596701434	KLHDC9	-0.447776543
TBCC	0.596689892	SERPINB6	-0.447596933
JOSD1	0.59668982	SRSF11	-0.446977381
RGS20	0.59668071	TMEM170A	-0.446786212
MICAL3	0.596508524	ZDHHC6	-0.446542103
SKIV2L	0.596356641	ARHGDIB	-0.446479203
SH3GL1	0.596096003	PPA1	-0.446382863
MYCBP2	0.596031604	DEK	-0.446312363
ZDHHC9	0.595854517	ERBB4	-0.445917012
ZNF791	0.595688691	PCDH7	-0.445571825
STK35	0.595240285	TTC5	-0.445483022
RNF103	0.595104295	OR10G2	-0.445453609
SLFN11	0.594631608	LINC00493	-0.445449588
USP2	0.59459053	AKR7A2	-0.445343019
PCDH9	0.594191907	RPS6KB1	-0.445316598
DHX58	0.593863719	KRTAP19-6	-0.445219957
CCDC71L	0.593602707	PRICKLE4	-0.445165258
UAP1	0.593417534	TSR3	-0.445136391

MAP3K11	0.593367074	SLCO1B3	-0.444791058
POLR1A	0.593365798	PUS7	-0.444623113
POFUT2	0.593340581	NUBP2	-0.444563606
APPBP2	0.593338928	VPS26B	-0.444071032
CDK5R1	0.593271043	EDA	-0.443867094
DDAH2	0.593139456	KIF24	-0.443694865
ADPRHL2	0.592755198	CLTCL1	-0.443580746
CLIP4	0.592504606	NANOS1	-0.443159869
FBXO18	0.592083566	ANXA9	-0.443013373
USP42	0.591959346	PTRHD1	-0.442604766
SIKE1	0.591767365	PHF5A	-0.442512325
NLGN3	0.591757829	H2AFX	-0.442304585
KIAA0895	0.591337667	NUP107	-0.44199547
USP20	0.590891273	EIF3I	-0.44187903
RARRES3	0.590737693	TMEM251	-0.44173747
DYNC1I2	0.590663543	HSD17B6	-0.441682822
LRRC8A	0.590650343	IKBKAP	-0.441588831
KIAA1161	0.590375692	ERI2	-0.440619974
HADHB	0.590099908	CLPX	-0.440430675
BDP1	0.590026698	TRUB2	-0.440089901
HMGN3	0.589537495	C8orf31	-0.43993507
TMEM86A	0.589382258	CRLF1	-0.438998272
GPR37L1	0.589382258	TYSND1	-0.438895782
PLCD1	0.589144513	HACL1	-0.438064154
ZNF84	0.589001662	LOC100128276	-0.437996092
ZNF8	0.588923566	RPS19BP1	-0.437898397
PTP4A1	0.588700351	PXMP4	-0.437330024
RWDD2A	0.588583686	HNRPDL	-0.436947805
ZFYVE26	0.588460172	SNRPD2	-0.436882492
CC2D1B	0.588153654	CUL4B	-0.436864296

ARHGEF3	0.588077166	HOXB6	-0.436847486
BCAM	0.587682151	VIPR1	-0.436551754
ARHGAP21	0.587515943	LPCAT2	-0.436320998
FNDC3B	0.587494744	SKA2	-0.435721128
ETNK2	0.587137628	APEX1	-0.435662038
RBM5	0.586745745	FLJ30375	-0.435258801
GLRX2	0.586248321	POLD1	-0.434973597
STK11IP	0.585986531	PPIL1	-0.434245019
LOC100507507	0.585846874	FGF11	-0.434217999
RNF8	0.585463741	NAA50	-0.433865536
TRIM37	0.585431756	COA5	-0.433677259
EMC10	0.58508692	ATP5O	-0.433562017
TP53RK	0.585083134	SLC25A6	-0.43347846
ISCU	0.584580987	PAG1	-0.433033763
ZMIZ1	0.584268279	PHLPP1	-0.432918798
TARDBP	0.583998456	COA3	-0.432880951
ST14	0.583971879	GTF2H3	-0.432172627
TRMT61A	0.583866551	HAT1	-0.431525306
BRAT1	0.583577679	DNAJC8	-0.431434806
C3orf62	0.583138141	QTRT1	-0.431302928
RAET1L	0.582521078	RAB11FIP2	-0.4310993
ZNF783	0.58203891	PPWD1	-0.43100985
TBC1D13	0.581961036	KIAA1324L	-0.430602072
MUC4	0.581273758	CMIP	-0.430545852
MEX3C	0.580788522	CA12	-0.430505636
PUM1	0.580632333	TMEM126A	-0.430439379
CTPS1	0.580360975	ADCK2	-0.430363563
ZG16B	0.580281601	WDR54	-0.430250631
SELT	0.580191718	FAM161A	-0.429903572
ALS2	0.580000838	HSD17B11	-0.429709557



PTCD1	0.579934191	LAMTOR5	-0.429607686
RPN1	0.579770945	LOC100130502	-0.429014204
TMEM2	0.579745443	LRRC27	-0.428841824
HTRA1	0.57973038	DSCR3	-0.428750933
MBD1	0.579217542	CLIC6	-0.428320521
ZNF488	0.579151898	CASP4	-0.42800377
PDLIM2	0.577703906	COL9A3	-0.427956457
EMP3	0.577450659	MTHFD2L	-0.42791572
TRIM39	0.577135275	OPTC	-0.427880477
PADI2	0.576134742	NDRG2	-0.427632969
MADD	0.576058259	PEX10	-0.427253522
CRTC2	0.576018244	SNRPB	-0.427115941
RPS6KA4	0.575993722	DHRS3	-0.427093077
ATP7B	0.575221593	TRMT13	-0.425833273
F8A1	0.575192305	ZCRB1	-0.425787807
HERC2	0.574754522	DCXR	-0.425559285
SPG11	0.574228508	NT5DC1	-0.425332454
TMEM114	0.574116546	MTA3	-0.425000537
PIWIL4	0.573643339	C14orf2	-0.424846174
PLXNA2	0.573437204	B3GNT2	-0.424642357
SRD5A3	0.573322327	SNRPD3	-0.424396465
C1orf233	0.573175717	EBAG9	-0.424129155
AGRN	0.572828896	CAPN2	-0.423979593
TNXB	0.57234105	CARS2	-0.423155268
NUMB	0.572302763	UBE2N	-0.423087406
ACO2	0.572045789	PRKAG1	-0.423060672
E2F3	0.571973745	XPOT	-0.422964906
OGDH	0.571562139	LNX1	-0.422631501
ZNF592	0.571241785	IARS	-0.422621785
SF3A1	0.570828333	TEX9	-0.422351448

AMDHD2	0.570061789	CPOX	-0.422233904
ABHD4	0.570061296	TMEM231	-0.422148568
GJD3	0.570028363	STMN2	-0.422059211
VCP	0.569930206	CDK5RAP2	-0.421974886
MYO9B	0.569616262	SEMA4F	-0.421900508
TEX2	0.56842094	CRIP1	-0.421843205
SMARCA5	0.568204878	OR1L1	-0.421824741
PTTG1IP	0.568103748	CCDC59	-0.421436533
KCTD21	0.568042672	SRSF9	-0.420556697
SYNGAP1	0.567975518	NDUFAB1	-0.420459002
PPP2CB	0.567709045	TLX1NB	-0.419960951
CTSZ	0.567594225	ATP6V0C	-0.419773683
NACC2	0.567576155	GALNTL6	-0.419580712
PLXND1	0.567562233	IFRD2	-0.419444518
ASB16-AS1	0.567226631	CSE1L	-0.419432455
SLC38A9	0.56696516	ARMC1	-0.419153301
GADD45B	0.566903986	PART1	-0.418956608
BMP2K	0.566520161	DLGAP1	-0.418954048
PLEKHO1	0.565984852	MDH1	-0.418907989
SIAE	0.565856111	VPS13A	-0.418760435
RAB43	0.565687472	ABCF2	-0.418620289
MIDN	0.565352618	TMEM120A	-0.418306878
BRMS1L	0.565103863	WTH3DI	-0.418096182
FRMD5	0.564834921	TRMT2B	-0.417995499
ZNF263	0.564636234	HEBP2	-0.417359428
PLD1	0.56457615	HSBP1	-0.417015689
LMAN1	0.564353503	L2HGDH	-0.416032121
JPH3	0.563858424	ETV6	-0.415465954
SPIRE1	0.563705005	F13A1	-0.415315882
RFX5	0.563487849	RCAN3	-0.415310411

RREB1	0.562959136	PRKY	-0.415127318
PGBD2	0.562851521	FBXO22	-0.415011692
SMAD4	0.562753963	NUDT8	-0.414781029
LOC101060551	0.562446479	CHCHD5	-0.414666223
C17orf85	0.562419928	PTPN3	-0.414633767
HECA	0.562086043	MAGOHB	-0.414533409
ADAM28	0.561954963	BAG2	-0.414158441
ITGB1	0.561583564	CYB5A	-0.414103915
PLEC	0.56108476	C17orf72	-0.413953155
NR3C1	0.561005286	ADPRHL1	-0.413943419
NCOA1	0.560658717	CUEDC2	-0.413649964
CEACAM19	0.56062481	BROX	-0.413412534
TPT1-AS1	0.560488493	C1orf123	-0.412640015
RNH1	0.560445496	CXXC4	-0.412458678
FXR2	0.560253281	BBS2	-0.412260534
PKP3	0.560043161	PEX7	-0.412141616
ARL1	0.55999179	KISS1	-0.411890823
SLC41A2	0.559789423	PPID	-0.411646302
BAG6	0.559629674	GINS1	-0.411618556
ARNTL2	0.559407574	CCNG2	-0.411411261
PLA2G15	0.559132159	MUT	-0.411402981
PARVA	0.558771279	MMP7	-0.411326599
CHSY1	0.55828904	CSHL1	-0.411054849
FNDC3A	0.558123847	PCYT2	-0.41075913
TPM3	0.558021489	ELK4	-0.410703234
PLSCR1	0.557988887	SOWAHD	-0.410632294
MFSD1	0.556593913	TRMT61B	-0.410480256
PCMTD1	0.556570468	NMB	-0.410402943
SLC43A3	0.55595977	IER5L	-0.409625081
NHLRC1	0.555814055	PFKFB4	-0.408867125

JAK3	0.555710584	CHCHD1	-0.408326054
CAP2	0.555668188	PET117	-0.408228654
ZC3H11A	0.555613751	ALKBH7	-0.4074786
RABAC1	0.555302049	HIBADH	-0.407249615
SPPL2A	0.555175291	STK17B	-0.407199856
SDC1	0.555112752	LOC390956	-0.407045737
KCTD2	0.554734412	PTCD3	-0.406810385
CCNL2	0.554653674	PARVB	-0.406460418
RBM42	0.554585924	PET112	-0.406378799
ZNF480	0.554482376	TMEM53	-0.406237215
SLC35A2	0.554092227	TMEM14B	-0.406198596
TCEAL8	0.553910532	MRGBP	-0.406155172
ATXN1	0.553667144	CNKS2	-0.40589491
DNAJC11	0.553424069	TMEM171	-0.405704463
TEAD2	0.552994317	SRP14	-0.405585295
ANKRD22	0.552743938	PSMB8	-0.405297505
TMEM104	0.5526252	TAB2	-0.405183594
MMP15	0.552472179	NAA10	-0.404312055
SCAMP5	0.552400701	VRK3	-0.404263656
NAT1	0.552063075	AKR1C3	-0.403985872
TSNAXIP1	0.552033784	NHP2L1	-0.403970827
TXNDC15	0.55180916	THOC6	-0.403866112
ZNF10	0.551358472	RHOT1	-0.403827616
KIAA1551	0.551195111	RPL13A	-0.403630836
WDR45	0.551154446	MICB	-0.403624863
BAZ1A	0.550870953	CTSL1	-0.403245978
IFFO2	0.550463634	NDUFA7	-0.403114812
AKAP9	0.550289195	TAZ	-0.402766279
SERINC3	0.550151878	HOXB7	-0.402758073
WDR55	0.549716889	LY6E	-0.40274637

RAD54L2	0.549122839	NUDT16	-0.402393114
KIF1A	0.549006951	PPP2R4	-0.402267297
ZNF529	0.548809925	C4orf33	-0.402152376
ATP6AP2	0.548679646	RPS18	-0.402137478
ZNF189	0.548612946	C8orf42	-0.401961529
ZNF416	0.548488492	UCHL5	-0.401778032
ANO7	0.548031448	CDK17	-0.401710401
LPAR2	0.547473645	SMC2	-0.401624733
STRADA	0.547302597	C8orf44	-0.401219272
ANKFY1	0.547242974	MRPL36	-0.400863889
SBNO2	0.546906951	GPR22	-0.400657996
NLGN2	0.546587821	SIRPD	-0.400599308
MAN1B1	0.546549466	BTBD2	-0.400452218
PTPRU	0.546506575	FIG4	-0.400121437
ADPGK	0.546428498	MRPL14	-0.400031389
UBE2Q1	0.546208883	AKR1E2	-0.399926367
FTSJD2	0.545869151	MTFR1	-0.399738953
ZNF812	0.545794913	RPL21	-0.399473901
FAM167B	0.545774862	ATP6V0E1	-0.399343278
CHD8	0.545539274	HDAC8	-0.39907385
LOC100131174	0.545329772	CCDC71	-0.398428348
ZNF823	0.545108585	CPSF3	-0.398419758
PYGB	0.544795744	RRP7A	-0.398157429
CAMK2N1	0.54462113	ZRANB2	-0.397829591
EFCAB14	0.544407826	RABL5	-0.397793421
LARP4B	0.543895902	CUL1	-0.397628239
FAM46B	0.543882132	COIL	-0.397182556
ANO9	0.543823974	FAM45A	-0.396999106
GLB1	0.543548722	ING2	-0.396920782
MINPP1	0.543426795	NIPA1	-0.396818741

TMEM59	0.543178398	TMEM5	-0.396554969
WWC3	0.543005031	PSMF1	-0.3963779
CAB39L	0.54293562	IRS1	-0.396039641
GNS	0.542890986	ACPP	-0.395822337
ARCN1	0.542624321	ENSA	-0.395775943
PHYHD1	0.542522746	NIPSNAP3A	-0.395628525
NR1H2	0.542399633	POLE3	-0.395505811
DERL1	0.541916756	VAMP3	-0.3954833
CORO1C	0.541824667	CERS4	-0.395478753
FAM65B	0.540766108	TEAD4	-0.394964535
FAM109B	0.540438009	FAM83A	-0.39436536
TSNAX	0.540377502	PTCD2	-0.394328045
NLRP2	0.540361013	ZNF32	-0.394145049
ADAMTSL4	0.54025279	PLA2G12A	-0.394137183
SH3D19	0.539711452	SLC25A19	-0.39403493
PDCD1	0.539555072	GRAMD1C	-0.393947155
TLR6	0.539513774	CALN1	-0.393695974
LSM1	0.53858367	MCTS1	-0.393604214
GATAD2A	0.538158416	TWF2	-0.393554894
DCUN1D3	0.538113578	BOD1	-0.393216384
C17orf59	0.537314306	TMEM52	-0.392389411
TBK1	0.537252922	HPN	-0.391843143
TRADD	0.536857287	HNRNPH3	-0.391794515
CC2D1A	0.53678675	NRXN2	-0.391679569
CNST	0.53670997	TSSC1	-0.391550301
HEXIM1	0.536469252	NAA20	-0.391526832
IMPAD1	0.536251218	TIMM17B	-0.391525277
LAMP1	0.536222149	ACO1	-0.391470335
BRPF3	0.536065946	PSMD13	-0.391465413
CXXC1	0.536002191	VDAC3	-0.391096492

C14orf28	0.535963449	IP6K2	-0.390872283
HELZ	0.53593261	IL10RB	-0.390854462
IGSF3	0.535665259	CNTRL	-0.390771018
AP3S1	0.535503601	CORO2A	-0.390730818
RUNX1	0.535472839	C9orf85	-0.390471882
USP22	0.53511854	TRMT112	-0.389923038
C20orf111	0.534975346	TNFRSF18	-0.389847574
NR3C2	0.534821428	TMEM99	-0.389834404
PPOX	0.53445941	CBX5	-0.38979582
THAP5	0.534232105	DIMT1	-0.389771215
CERS5	0.53373324	ST3GAL5	-0.389673017
AHNAK	0.533405951	UBR7	-0.389613858
MTMR4	0.53299578	FNDC5	-0.38955472
GPAT2	0.532828458	GSTCD	-0.389545165
R3HDM2	0.532700484	FRMD3	-0.389305351
DDR2	0.532533817	THOC1	-0.389175429
USP15	0.532258488	NDUFB8	-0.388994922
CAD	0.531795347	EIF1B	-0.388963409
PRR14	0.531736743	HPCAL1	-0.388769316
KRT34	0.531555106	CPD	-0.388453579
MED26	0.531541005	PTGES3L-AARSD1	-0.388269285
ELMSAN1	0.531070307	RBFA	-0.387991073
ZMYM2	0.531006858	LSM7	-0.387645685
SEC24C	0.530808755	DNAJA2	-0.387603787
CHST12	0.530476511	PLS1	-0.387515214
PIGO	0.530243863	YAP1	-0.387492643
ZNF304	0.530011234	SNX7	-0.386894732
WDR7	0.529958001	VSX1	-0.385777423
GALNT1	0.529922923	POLQ	-0.385601095
PILRB	0.529875285	COMMD3	-0.385443077

SURF4	0.529532051	CLASRP	-0.385090456
C7orf10	0.529254868	ARRDC3	-0.384386574
PCNT	0.529243853	STUB1	-0.384185506
FKBP3	0.528920554	PPIF	-0.38417128
VPS11	0.52887915	NDUFA12	-0.383101844
VPS28	0.52882659	FECH	-0.382922535
ARHGEF10L	0.528817933	WDR18	-0.382745537
TSPYL5	0.528553183	C5orf44	-0.382699061
CCDC47	0.528297462	SH3YL1	-0.382640668
DFNA5	0.528059172	OTUD6A	-0.382562787
TYK2	0.527956472	PACSIN3	-0.382515791
ISG20L2	0.527673632	PPP4C	-0.382511372
MGAT4B	0.527572082	PRPSAP2	-0.382479164
PJA2	0.52750258	NR2C1	-0.382309723
SMURF1	0.527202385	PARL	-0.382139894
RASL10A	0.527053896	OBSCN	-0.381906977
INPP5B	0.526850232	BFSP1	-0.381788347
KDM4B	0.526829191	PDHA1	-0.381706052
SP110	0.526714576	PPP1R7	-0.381504834
MAVS	0.526624502	EIF4G2	-0.3811432
SLC35A5	0.526533402	RDH10	-0.380999396
ZNF266	0.526528581	EFNB1	-0.380933315
DBNL	0.526403549	POU3F1	-0.380803334
TTC7A	0.526258535	TAF8	-0.380786153
UPRT	0.526208146	WRAP73	-0.380744946
FUT2	0.526151489	LGALS7B	-0.380564715
BIRC2	0.526073051	EIF3J	-0.380555282
TBC1D23	0.525584857	MAN1A2	-0.380294915
REEP5	0.525314236	TRMT1L	-0.380247708
DIO2	0.525222339	UGT2B28	-0.379977866



RNF39	0.52508734	ACTL10	-0.379851789
DCP2	0.525013644	PLCG2	-0.379701817
MAP1LC3B2	0.524680097	SLC45A4	-0.37966663
DIAPH2	0.524372923	PRDX5	-0.379598347
EFCAB4A	0.524288025	C9orf142	-0.379325258
TMF1	0.523817486	UROD	-0.379010129
LETM1	0.522538593	SHFM1	-0.379002714
SF3B4	0.522464134	HRAS	-0.378994952
UTP3	0.522291253	PIGB	-0.378825785
CSRP2BP	0.522285259	PGP	-0.378717996
RNF25	0.522215827	RCOR2	-0.378616439
CBX2	0.522189926	RPL10A	-0.37860367
NPIPL3	0.521962004	AKD1	-0.378514331
LENEP	0.521839669	MESP2	-0.378424593
HSPA1A	0.521337471	H2AFY	-0.377935794
BAHD1	0.521274102	ING5	-0.377566826
MNT	0.521269747	PAK1	-0.377481638
KIAA0355	0.520919001	HCFC1R1	-0.377227052
LRP12	0.520832906	FAF1	-0.377204177
TAF7	0.520761471	MIF4GD	-0.376272561
ZNF444	0.520034636	SMAD1	-0.376178157
TAF7L	0.519536783	RPL37	-0.375770499
DENND4B	0.519411183	DKC1	-0.375735979
RALGAPB	0.519386153	MRPS16	-0.375589569
FRYL	0.519316549	TMEM155	-0.375518326
VPS8	0.518981535	PGRMC1	-0.375375902
TEX22	0.51886523	MRPL38	-0.375347743
ABCG4	0.518419049	CAPNS1	-0.375287648
FAM63B	0.518374916	CCNF	-0.375258202
MRGPRF	0.517930898	IRF4	-0.375170677

C2orf54	0.517890436	MRPL50	-0.375023526
TMOD3	0.517654301	PALMD	-0.374993079
IL15	0.517593444	MAPKAPK5	-0.374134695
GORASP2	0.517587489	SFXN1	-0.374117606
NPW	0.517487942	SMIM7	-0.3738901
ATG9B	0.517487712	AASDHPPT	-0.373831089
C6orf132	0.517341293	MRPS30	-0.373568707
MPPE1	0.517086258	C5	-0.373516832
NFX1	0.516884465	CA2	-0.373391333
NISCH	0.516693344	TADA3	-0.373371139
ATF7IP	0.516333071	RPS6KA2	-0.373280193
LRRC32	0.516155202	CWC15	-0.373137278
CLC	0.516090324	TATDN1	-0.373126843
SLC25A30	0.516060203	KARS	-0.372783054
ELK1	0.515910343	C11orf57	-0.372704116
BDKRB1	0.515835702	C7orf50	-0.372691412
TIGD7	0.515614189	CPT1A	-0.372392442
NSUN4	0.515429899	LDHB	-0.372368843
TYMP	0.514878926	SIX1	-0.372302448
SEC24A	0.514741344	RPL36AL	-0.372286489
ISPD	0.514673135	MTX2	-0.372267524
APLP2	0.514566296	METTL2B	-0.372014472
NUP98	0.514493956	E2F1	-0.371729503
FBRS	0.514387927	PWP1	-0.371387799
TUBB2B	0.514171061	TMEM161B	-0.370915249
SOX9	0.514101454	OR3A2	-0.370765465
EDA2R	0.51357757	ZNF445	-0.370759873
ARHGEF7	0.513440245	MAF1	-0.370751882
EZR	0.513281832	ZADH2	-0.370657163
ACOX1	0.513243441	C14orf142	-0.37016729

SERPIN8	0.51290093	ASIC3	-0.370107653
PLOD1	0.512521226	IQSEC2	-0.370003499
KIAA1522	0.512518805	ACSS3	-0.369851435
KIAA0319L	0.512063819	LINC00667	-0.36940557
VWA1	0.511979837	MTIF3	-0.369162876
JMY	0.511912531	MOCS2	-0.369016227
REPS1	0.511457733	ABCA1	-0.368810581
FADS3	0.511397411	FAM127A	-0.368731621
GLIPR1	0.511150589	SLK	-0.368600281
SUN2	0.510783813	LOC339666	-0.368550371
SLC2A10	0.510780572	METTL5	-0.368088689
HNRNPH2	0.5102715	C19orf53	-0.367925998
GOLGA3	0.510078195	DLG3	-0.367815263
CRYBB3	0.509970419	FAM172BP	-0.367642701
ABCB6	0.509933738	NPC2	-0.36744576
CHD3	0.509895278	SFT2D1	-0.367315823
ADAMTS16	0.509894216	RPL23A	-0.367047925
PCNXL2	0.509829681	CEBPB	-0.3669731
SLC39A1	0.509637992	PPP3CB	-0.366792241
BTBD10	0.50943064	IRAK1	-0.36625861
TSPAN13	0.509030931	KLF3	-0.366088745
CTNBL1	0.508563327	LEO1	-0.36596109
SOX12	0.508397557	VPS13D	-0.365756864
VASP	0.508334017	NDUFAF4	-0.365583798
CYB5B	0.508047413	HAUS4	-0.365389214
PLEKHG2	0.508000667	GMPR2	-0.365386449
RSBN1	0.507850959	MRPL18	-0.365373979
RIC8A	0.507571608	MKS1	-0.365123286
ZFHX3	0.507418548	NSDHL	-0.365050877
SDCBP	0.507333506	USP44	-0.364636931

SIAH2	0.507046435	ENDOG	-0.364373407
ACAD10	0.506866329	CERKL	-0.364338175
TADA2B	0.506822755	TTC27	-0.364266249
LRRC16A	0.506523589	GABARAPL2	-0.364171899
FANCF	0.506074864	ECI1	-0.36404939
SPEG	0.506005444	ATP5I	-0.363683869
CCM2	0.505712769	TRMT1	-0.363355787
TOR1AIP1	0.505135088	LRRC45	-0.362680937
SLC10A3	0.504895407	RPS11	-0.362623319
AAED1	0.504763107	BAIAP2L2	-0.361700895
FAM193A	0.504713689	NOP58	-0.361632733
MAN2A2	0.504688701	PRR15L	-0.361565462
ECE1	0.504659461	CCT6A	-0.36149614
TMEM185A	0.504645631	FUT9	-0.36111513
C6orf25	0.504548973	PMPCB	-0.361086763
TSC2	0.504499865	PEX14	-0.361081603
UVSSA	0.50428529	METTL21A	-0.360914934
GALNT2	0.503700187	ALDOA	-0.360547313
TMEM19	0.503327089	ARHGAP35	-0.360414693
TOLLIP	0.503256722	CXCR1	-0.359321888
KIN	0.502974901	ATIC	-0.358814542
ELF4	0.502876323	FBL	-0.35840017
VENTXP7	0.502836598	PDCD2L	-0.35810551
FOS	0.502707969	PHKG1	-0.357741713
PTAFR	0.502685192	TCEB1	-0.357622436
TMCO4	0.502578898	PFDN6	-0.357520907
CTAGE11P	0.502578065	SLC29A1	-0.357105665
TMEM25	0.502541069	SNX14	-0.356779679
NCSTN	0.502502112	RPUSD3	-0.356423732
SLC35A4	0.502350778	FCHO1	-0.356355056

TRAF3	0.502321389	DCTPP1	-0.356332709
RASSF7	0.501696931	C4orf26	-0.356271533
GPR6	0.500919242	SLC2A4RG	-0.356211896
TPD52	0.500716531	F12	-0.356200811
ZNF587	0.500516172	TP73	-0.356176834
GPR115	0.500411476	AGBL2	-0.35614638
FBXO10	0.500282552	KDELC1	-0.356116128
MYBBP1A	0.499658429	FZD4	-0.356005593
SEPT8	0.499613702	EXOC3L1	-0.356005189
GPR87	0.499567163	KXD1	-0.355646317
ATP6V0D1	0.499520184	DNAJC9	-0.355531136
STAT5A	0.499422844	THAP3	-0.355364539
AIFM2	0.499207787	SLC38A6	-0.355254585
MPHOSPH8	0.499110284	DOCK9	-0.354831354
PELI1	0.499011127	PIN1	-0.354683419
ASB1	0.498862163	AHR	-0.354593734
OTUD3	0.498839495	POLA2	-0.354511334
AFTPH	0.498553022	MED4	-0.354505502
KCNQ3	0.498403433	TTI1	-0.354345465
TFE3	0.49839706	PTEN	-0.354271602
GPR50	0.498201831	PIGH	-0.354230485
AFAP1L2	0.498177842	WDR19	-0.35420495
KIF1C	0.498084419	APLNR	-0.353941333
OSBPL11	0.497892613	GAPDH	-0.353334009
ANO8	0.49737305	APOBEC3G	-0.353254637
ATMIN	0.497298372	ING4	-0.353065988
ARHGEF2	0.497210874	FLJ27352	-0.35304496
TGFBR1	0.496981758	APOPT1	-0.352897026
IL22RA1	0.496827059	NTPCR	-0.352619833
LOC100129520	0.49673133	RPS21	-0.351628956

MTOR	0.496370492	LCE2A	-0.351617889
FAM117A	0.496114191	ZNF251	-0.351542214
PITPNM3	0.495874371	NOXA1	-0.351436047
PCNXL3	0.49574981	ZMYND8	-0.351245104
HPS4	0.495704051	HMGB3	-0.351158243
STOM	0.495654434	CCDC43	-0.351131389
ZSCAN29	0.495592013	TRAPPC1	-0.350894269
ADAMTS2	0.495483898	ICT1	-0.350695999
CMTM3	0.49528988	MBP	-0.350637279
C16orf70	0.495237521	PRPF40A	-0.350485091
MAST2	0.494749657	PSMA1	-0.350462569
PKP2	0.494605496	RNF183	-0.35042756
PICK1	0.494307587	C3orf70	-0.350413861
LRRK1	0.494229336	SH3BP5	-0.350302084
ARHGEF10	0.494226588	ALDH2	-0.350235553
GLG1	0.494165055	IMMT	-0.350009947
SEPT4	0.494040857	RDBP	-0.349916207
ST6GALNAC6	0.493986159	SLC25A14	-0.349871068
TAB3	0.493892213	MTCH1	-0.349748374
ZNF652	0.493776607	PIGP	-0.349558304
CREM	0.493617667	FLT3LG	-0.349484797
ZFR	0.493537582	CIAO1	-0.349451572
KCNMB3	0.493242293	LOC729678	-0.349450546
EIF5A2	0.493030678	UEVLD	-0.349442812
ATP6V0A2	0.492942359	RNF168	-0.349379672
ZSWIM6	0.492323232	GEMIN6	-0.348854472
TMEM184A	0.492258801	HNRNPC	-0.348700313
LINC00626	0.492222236	IFT52	-0.348451043
BCAR3	0.492203969	AHCYL1	-0.348065401
HCN2	0.49212683	GPATCH4	-0.347997431

RAB30	0.491920452	TSHZ1	-0.347844695
RAB13	0.491877235	ICA1	-0.347301603
CDC42EP5	0.491641001	CCRL2	-0.34730016
RNF111	0.491597981	KLHL12	-0.346919106
BCL9L	0.491569794	EID1	-0.346581947
ZNF3	0.491550031	MRPL23	-0.346387646
PEX5L	0.491428329	ELFN1	-0.346191016
VANGL1	0.491237024	MSRB2	-0.346102405
C5orf28	0.491200328	DDT	-0.345968702
SDPR	0.491008859	DHTKD1	-0.345002787
GLT25D1	0.490772345	TMEM254	-0.34491744
NFRKB	0.490745109	GRPEL1	-0.344823046
SF1	0.490636463	COTL1	-0.34470834
DNAJA1	0.490071816	MRPL42	-0.344446119
ZNF799	0.4898642	C12orf68	-0.343914352
NGFRAP1	0.489710395	TUFM	-0.343859339
NECAP2	0.489597891	MPP5	-0.343833961
CEPT1	0.489536136	GARS	-0.343803897
OR51L1	0.489480016	FAM173B	-0.343676921
RPS6KC1	0.489424487	ARMCX5	-0.343480229
C6orf106	0.489347464	BOLA1	-0.342970313
LDB1	0.489301838	TNPO1	-0.342937535
SNHG11	0.489100595	HSPA12B	-0.342901105
CABIN1	0.488952096	RPL27	-0.342856273
ZMAT3	0.488907804	USP1	-0.342694154
TRIO	0.488711751	MITD1	-0.342180317
BCL2L13	0.488574642	CBL	-0.341870285
SLC39A8	0.488463863	AKNA	-0.341795195
PITPNA	0.487272451	AATF	-0.341446052
SLC39A7	0.48723872	MPI	-0.341444711

DDX23	0.487081044	MRPS17	-0.34129764
RNF122	0.486809095	SNRNP40	-0.341199222
CNFN	0.486591338	PTPRA	-0.340805123
GAN	0.486338626	RPL32	-0.340764829
SCCPDH	0.486299874	ELAVL1	-0.340240481
CCDC120	0.486169397	STK16	-0.340161923
AP2A2	0.486128543	UQCRC1	-0.33976202
AIG1	0.48601646	HYAL3	-0.339742769
IDS	0.485769275	MRPS27	-0.339736297
CATSPERB	0.4855686	MYLIP	-0.339521848
ACTL6B	0.485388944	NDUFS7	-0.339377586
GPR161	0.485143763	NUPL1	-0.339175589
ABCF1	0.485136389	GOLGA6L2	-0.33900096
YIPF3	0.484919875	EPS8L3	-0.33881479
CCR8	0.484868671	CEP72	-0.338588321
SLC38A1	0.484786857	PBX2	-0.338491232
GRIA4	0.484264495	SMYD3	-0.338240268
AP3D1	0.483913255	CCDC14	-0.337673529
ZNF548	0.483873367	NUDT5	-0.337354876
TBC1D25	0.48363125	PDIK1L	-0.33733445
PACS2	0.48361537	PLEKHJ1	-0.33731321
WTIP	0.483587662	MTMR6	-0.337252544
WBP2	0.483496664	CCNY	-0.337152498
THRAP3	0.483360238	NUDT9	-0.336839979
TBC1D20	0.482563605	GLT25D2	-0.336590124
VAV2	0.482549308	HAO2	-0.336208803
WIP12	0.482353277	TIMM10	-0.336155518
DTNA	0.482183386	NDUFB7	-0.336088322
PTPRK	0.48207181	TADA2A	-0.335973493
INF2	0.481936554	KTN1	-0.335850358



SENP5	0.481483878	NPM1	-0.335774929
LCN12	0.481270995	SSX5	-0.33564173
ANO6	0.481162297	ARG2	-0.335316457
MBNL2	0.481128705	PRKAR2B	-0.335102155
ZNF451	0.481003082	TANC1	-0.33454868
ZBTB49	0.480777576	GULP1	-0.334241912
ENTPD4	0.480667436	HNRNPL	-0.333979753
EVI5	0.480610179	BRK1	-0.333931266
GLT8D1	0.480015995	ERI3	-0.333807236
NKX2-5	0.479965681	DBNDD2	-0.333780405
MAP1LC3B	0.479659889	CMTM4	-0.333583797
GCNT2	0.479496668	METTL10	-0.333518765
LY75	0.478912076	DZIP3	-0.333488035
SMG8	0.478836747	TMEM91	-0.333488035
STXBP5L	0.478807278	TRAK1	-0.333410906
MAP3K2	0.478765248	DLG1-AS1	-0.333341209
MIB2	0.478666454	OCIAD1	-0.333202761
SPARC	0.478566713	CCT4	-0.333089971
LUC7L3	0.478409356	PPAP2B	-0.333069899
ZNF701	0.478200402	APOA1BP	-0.332798008
TBC1D22B	0.477991647	ARL2BP	-0.33269997
FOXJ2	0.477929491	ANKEF1	-0.332625066
WDR48	0.476805601	KLHDC3	-0.332606719
NFE2L2	0.476698234	MSL1	-0.332556321
DDX3X	0.476435959	SMAGP	-0.332255497
ORAI2	0.476253163	AK2	-0.332223211
CAPN9	0.476136667	CRMP1	-0.332053448
CASP2	0.476120419	BRAF	-0.331697704
SOCS5	0.475983934	SNX13	-0.331388257
SPRR1A	0.475847544	SNHG3	-0.331313028

IL17D	0.475756497	HNRNPH1	-0.331203897
ALKBH5	0.475617241	IGF2BP3	-0.330961902
SPOCK1	0.475609548	TXNDC12	-0.330854815
SYS1	0.475381837	TET2	-0.330822817
ASXL1	0.475222057	LOC100128340	-0.330668471
ERO1L	0.475209483	CSNK1E	-0.330462297
ADAM9	0.475130572	GLTSCR2	-0.330443615
ACVR1	0.474601449	RALY	-0.330283443
TTC14	0.47457147	KIAA0753	-0.330225772
RECQL	0.474545268	RBM34	-0.330148994
MAL	0.474523801	RABEPK	-0.33001908
USP48	0.474456964	MRTO4	-0.329981805
ZNF419	0.474434776	ACSL4	-0.329687402
ZNF622	0.47433934	SNAPC5	-0.329452078
DUSP14	0.474299688	CRBN	-0.329236459
ZSCAN30	0.474280444	MRPS6	-0.329100822
PABPC4	0.474109414	ERLIN2	-0.329036857
SMPD4	0.474002958	KHK	-0.328821432
HN1	0.47390765	IKZF2	-0.328677623
MLLT6	0.473869731		
PQLC1	0.473732235		
CAMSAP2	0.473246769		
ARAP2	0.473155117		
CYP7B1	0.473021392		
SEC61A1	0.472985126		
MAP6D1	0.4729717		
HIF1A	0.472877989		
SPIRE2	0.472758699		
LAMP2	0.472427731		
ZMYM6	0.472396636		

C12orf5	0.472381886		
CRYBG3	0.472248831		
GSK3B	0.472039965		
MZB1	0.471997485		
CLASP2	0.471941158		
CISD1	0.471910859		
PTPRG	0.471830849		
SEL1L	0.471745744		
KIAA1671	0.471656953		
INHBB	0.471513869		
INPP5A	0.471452203		
FBXO46	0.471443158		
HARS	0.471411275		
MLL5	0.471357848		
HUWE1	0.471201987		
NMT1	0.470882961		
PHLDA3	0.470845699		
RABGGTA	0.47060183		
ATP2C1	0.470536336		
TFIP11	0.470341844		
LANCL2	0.470128547		
SLC38A3	0.469808703		
RRAGB	0.469360097		
SGPL1	0.469013533		
AOC2	0.468963679		
MAGEA10	0.468948721		
GTPBP5	0.46875138		
ANKIB1	0.468447245		
TNFRSF10B	0.468120385		
AGPAT1	0.46811413		

ADNP	0.467611309		
SFN	0.467513157		
FBXO28	0.46727356		
LIMK2	0.467213613		
LMO2	0.46719923		
THAP8	0.466529873		
NEXN	0.466489158		
ENTPD7	0.46605204		
TMCC3	0.465778736		
ZNF516	0.465343323		
TOR1B	0.465311513		
COQ10B	0.465292578		
METRNL	0.465078976		
TXNRD2	0.465054475		
RFX1	0.46488245		
TMEM201	0.464813521		
BBC3	0.464553273		
CDS2	0.464520631		
CWC25	0.464078481		
CCNJL	0.464050184		
SMYD2	0.463943799		
MAX	0.463519565		
MMGT1	0.463396609		
VPS18	0.463389409		
NOL9	0.463034189		
DHRX	0.462625125		
FBXL15	0.462518259		
BAK1	0.462466969		
TCP11L1	0.462377184		
IFT20	0.462299072		

CD164	0.462285646		
GJB5	0.462153476		
WDR11	0.461890437		
GRIP1	0.461555596		
HMG5	0.461544159		
RHOD	0.461442085		
CST5	0.461353456		
POMGNT1	0.461126223		
ACE	0.461031433		
POLRMT	0.460946977		
TFCP2L1	0.460743886		
SLC39A11	0.460726433		
ACADV1	0.460421886		
NEU1	0.460082567		
BRF2	0.460078504		
HSFX2	0.459611115		
TRPC4AP	0.459255358		
KPNA6	0.459171159		
FAM186B	0.45888368		
CACUL1	0.458825528		
AKIRIN2	0.458652531		
CERS1	0.458466904		
TIMP3	0.458358248		
DDA1	0.458256958		
TRPM7	0.458230025		
PHF20	0.4579503		

	Gene Set_KEGG Pathway	Size	ES	NES	NOM $p$ -val	FDR $q$ -val
1	KEGG_CELL_ADHESION_MOLECULES_CAMS	127	0.64	1.69	0	0.025
2	KEGG_TOLL_LIKE_RECEPTOR_SIGNALING_PATHWAY	96	0.64	1.63	0	0.062
3	KEGG_CYTOKINE_CYTOKINE_RECEPTOR_INTERACTION	251	0.58	1.62	0	0.045
4	KEGG_RIG_I_LIKE_RECEPTOR_SIGNALING_PATHWAY	65	0.66	1.62	0	0.036
5	KEGG_LEISHMANIA_INFECTION	68	0.66	1.6	0.001	0.039
6	KEGG_VIRAL_MYOCARDITIS	63	0.65	1.57	0	0.061
7	KEGG_PATHOGENIC_ESCHERICHIA_COLI_INFECTION	54	0.66	1.57	0.001	0.054
8	KEGG_ECM_RECEPTOR_INTERACTION	84	0.63	1.56	0.003	0.054
9	KEGG_LYSOSOME	121	0.59	1.55	0	0.061
10	KEGG_BASAL_CELL_CARCINOMA	55	0.65	1.54	0.007	0.058
11	KEGG_COMPLEMENT_AND_COAGULATION_CASCADES	69	0.62	1.52	0.003	0.077
12	KEGG_MELANOGENESIS	100	0.59	1.51	0.004	0.077
13	KEGG_AXON_GUIDANCE	128	0.58	1.51	0	0.071
14	KEGG_GLYCOSAMINOGLYCAN_BIOSYNTHESIS_CHONDROITIN_SULFATE	22	0.76	1.51	0.013	0.068
15	KEGG_NOD_LIKE_RECEPTOR_SIGNALING_PATHWAY	62	0.62	1.49	0.014	0.082
16	KEGG_SMALL_CELL_LUNG_CANCER	84	0.59	1.48	0.009	0.086
17	KEGG_PATHWAYS_IN_CANCER	324	0.52	1.48	0.001	0.083
18	KEGG_TIGHT_JUNCTION	130	0.56	1.47	0.005	0.091
19	KEGG_FOCAL_ADHESION	198	0.52	1.45	0.004	0.114
20	KEGG_ANTIGEN_PROCESSING_AND_PRESENTATION	64	0.58	1.42	0.021	0.139
21	KEGG_MAPK_SIGNALING_PATHWAY	264	0.5	1.4	0.002	0.166
22	KEGG_ADHERENS_JUNCTION	72	0.56	1.4	0.032	0.162
23	KEGG_CYTOSOLIC_DNA_SENSING_PATHWAY	49	0.59	1.38	0.043	0.191
24	KEGG_PHOSPHATIDYLINOSITOL_SIGNALING_SYSTEM	75	0.55	1.37	0.027	0.196
25	KEGG_HEDGEHOG_SIGNALING_PATHWAY	55	0.57	1.37	0.038	0.194
26	KEGG_LEUKOCYTE_TRANSENDOTHELIAL_MIGRATION	115	0.52	1.35	0.021	0.221

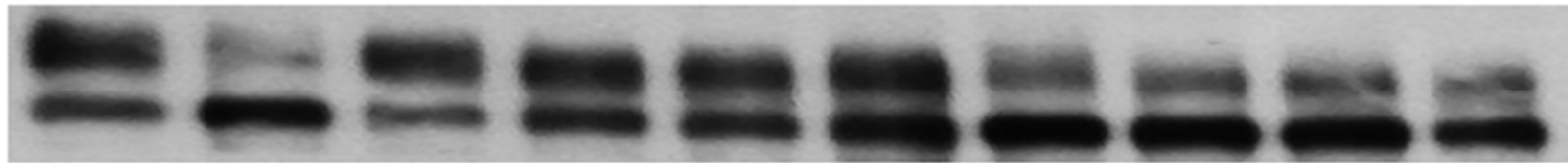
27	KEGG_T_CELL_RECEPTOR_SIGNALING_PATHWAY	107	0.52	1.35	0.021	0.216
28	KEGG_B_CELL_RECEPTOR_SIGNALING_PATHWAY	74	0.55	1.35	0.035	0.212
29	KEGG_ENDOCYTOSIS	176	0.49	1.34	0.018	0.227
30	KEGG_ARRHYTHMOGENIC_RIGHT_VENTRICULAR_CARDIOMYOPATHY_ARVC	73	0.54	1.33	0.044	0.232
31	KEGG_ALLOGRAFT_REJECTION	31	0.62	1.33	0.078	0.227
32	KEGG_DORSO_VENTRAL_AXIS_FORMATION	24	0.64	1.33	0.092	0.221
33	KEGG_VEGF_SIGNALING_PATHWAY	73	0.54	1.33	0.051	0.217
34	KEGG_CALCIIUM_SIGNALING_PATHWAY	175	0.49	1.32	0.02	0.227
35	KEGG_REGULATION_OF_ACTIN_CYTOSKELETON	211	0.48	1.32	0.017	0.227
36	KEGG_EPITHELIAL_CELL_SIGNALING_IN_HELICOBACTER_PYLORI_INFECTION	68	0.54	1.31	0.064	0.227
37	KEGG_CHEMOKINE_SIGNALING_PATHWAY	186	0.48	1.31	0.015	0.22
38	KEGG_GLYCOSAMINOGLYCAN_DEGRADATION	21	0.64	1.3	0.117	0.236

	Gene Symble	RANK IN GENE LIST	RUNNING ES
1	<i>FN1</i>	5	0.0579
2	<i>COL5A1</i>	59	0.0891
3	<i>BIRC3</i>	63	0.1226
4	<i>LAMA3</i>	78	0.1531
5	<i>LAMB3</i>	186	0.1709
6	<i>FLNC</i>	245	0.189
7	<i>ITGAV</i>	316	0.2043
8	<i>PDGFD</i>	323	0.2229
9	<i>THBS1</i>	338	0.2407
10	<i>COL4A4</i>	342	0.259
11	<i>FYN</i>	359	0.2764
12	<i>COL4A6</i>	368	0.294
13	<i>JUN</i>	456	0.3058
14	<i>LAMC1</i>	472	0.3211
15	<i>THBS3</i>	502	0.3351
16	<i>BCAR1</i>	565	0.3466
17	<i>DOCK1</i>	609	0.3586
18	<i>LAMB2</i>	657	0.3699
19	<i>ACTN4</i>	688	0.3816
20	<i>LAMC2</i>	704	0.394
21	<i>PDGFA</i>	734	0.4055
22	<i>PDGFB</i>	998	0.403
23	<i>LAMA5</i>	1005	0.4136
24	<i>PIK3CD</i>	1089	0.4199
25	<i>DIAPH1</i>	1115	0.429
26	<i>COL1A1</i>	1141	0.438

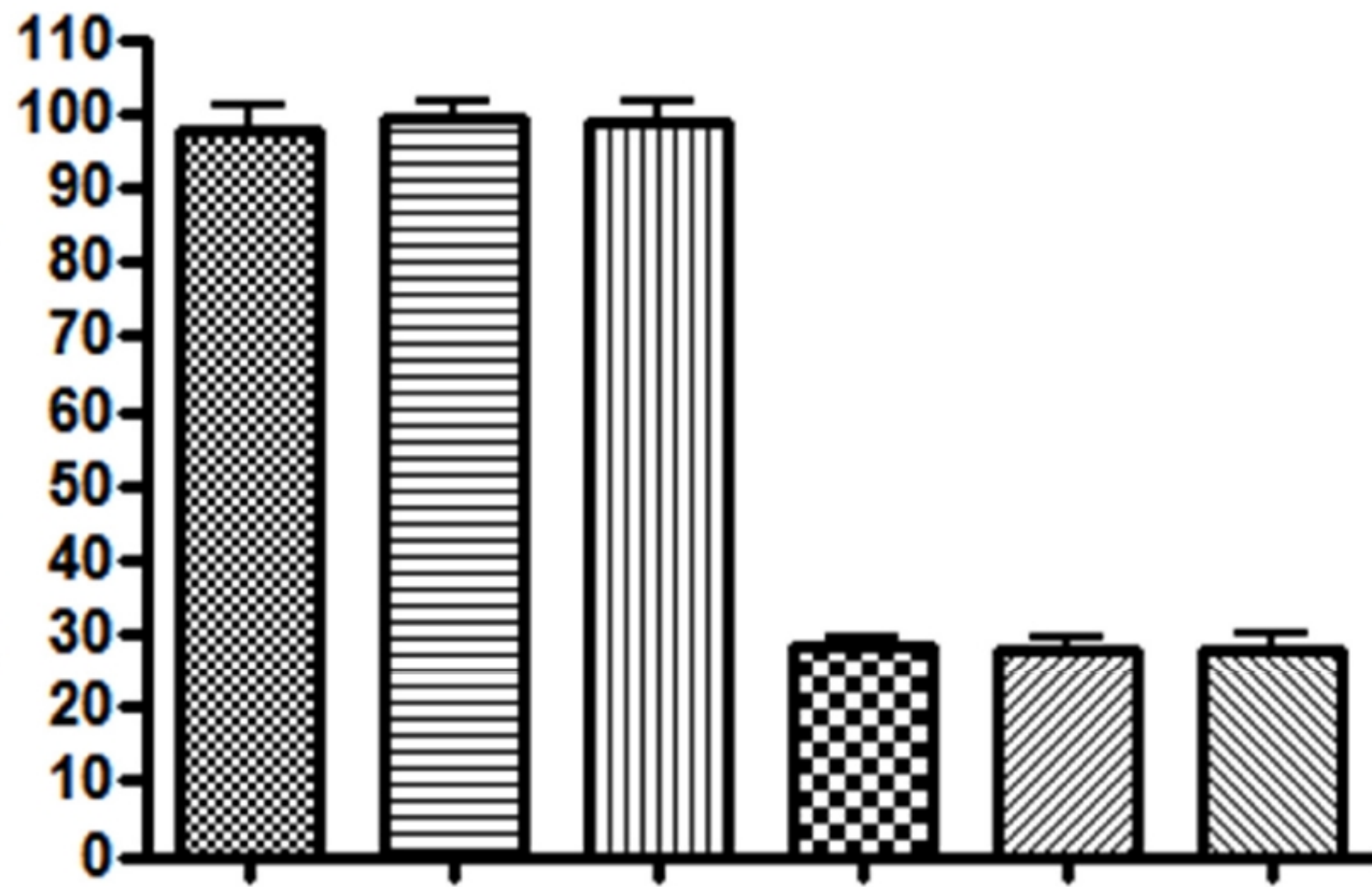


27	<i>COL6A2</i>	1172	0.4466
28	<i>RELN</i>	1181	0.4562
29	<i>FLNA</i>	1192	0.4657
30	<i>EGFR</i>	1527	0.4571
31	<i>VAV1</i>	1558	0.464
32	<i>TLN1</i>	1625	0.4688
33	<i>FLNB</i>	1765	0.4694
34	<i>MYL7</i>	1800	0.4752
35	<i>SHC2</i>	1825	0.4815
36	<i>TNXB</i>	1940	0.4829
37	<i>ITGB1</i>	1984	0.4877
38	<i>PARVA</i>	1998	0.4941
39	<i>BIRC2</i>	2153	0.4928
40	<i>ELK1</i>	2201	0.4968
41	<i>VASP</i>	2240	0.5013
42	<i>VAV2</i>	2392	0.4996
43	<i>GSK3B</i>	2459	0.5021
44	<i>CAV1</i>	2627	0.4992
45	<i>PAK2</i>	2637	0.5043
46	<i>PXN</i>	2773	0.5026
47	<i>MET</i>	2790	0.5071
48	<i>ERBB2</i>	2883	0.5074
49	<i>ITGB6</i>	2928	0.5102
50	<i>GRB2</i>	2968	0.5131
51	<i>CDC42</i>	3042	0.5141
52	<i>PDGFC</i>	3104	0.5156
53	<i>PRKCA</i>	3109	0.5201
54	<i>MYL9</i>	3167	0.5218
55	<i>IGF1R</i>	3290	0.5198
56	<i>SRC</i>	3303	0.5236

gefitinib	0	200	0	0	0	0	200	200	200	200	
MG132	0	0	100	500	1000	2000	100	500	1000	2000	(nM)



Cell viability  
(% of control)



VC  
imat 100  
imat 500  
gefi  
gefi + imat 100  
gefi + imat 500

Drug treatment