

Supplementary Materials

Catalogs

cellMarkers	1-45
net_lr	46
TableS1.....	47-50
GSEA-CD3D	51-54
GSEA-IL2RG	55-58
GSEA-MS4A6A	59-62
GSEA-NCF2	63-66
GSVA-CD3D	67
GSVA-IL2RG	68
GSVA-MS4A6A	69
GSVA-NCF2	70
RT-qPCR data	71
code1	72-76
Ethical review reports	77-78
Supplementary Methods.....	79-80

cellMarkers

p_val	avg_log2FC	pct.1	pct.2	p_val_adj	cluster	gene
0	3.079067309	0.897	0.09		0 T_cells	TRAC
0	2.623456359	0.71	0.057		0 T_cells	IL7R
0	2.617683185	0.853	0.077		0 T_cells	CD3D
0	2.131551009	0.873	0.186		0 T_cells	IL32
0	2.113411828	0.768	0.074		0 T_cells	CD3E
0	1.847413667	0.612	0.045		0 T_cells	CD3G
0	1.828759562	0.867	0.394		0 T_cells	LDHB
0	1.630278741	0.691	0.231		0 T_cells	TRBC2
0	1.450797292	0.486	0.06		0 T_cells	CD27
0	1.413928212	0.545	0.187		0 T_cells	TRBC1
0	1.378016079	0.631	0.236		0 T_cells	NOSIP
0	1.261702302	0.458	0.079		0 T_cells	TCF7
0	1.255506679	0.49	0.121		0 T_cells	CCR7
0	1.240098014	0.357	0.019		0 T_cells	TRAT1
0	1.235519722	0.599	0.138		0 T_cells	CD2
0	1.202344235	0.339	0.018		0 T_cells	LEF1
0	1.08994794	0.841	0.42		0 T_cells	LTB
0	1.059397317	0.811	0.412		0 T_cells	GIMAP7
0	1.032434453	0.288	0.016		0 T_cells	MAL
0	1.022504462	0.451	0.117		0 T_cells	PIK3IP1
0	-1.019382003	0.51	0.661		0 T_cells	ITGB2
0	-1.035119087	0.252	0.509		0 T_cells	AP2S1
0	-1.044417558	0.016	0.262		0 T_cells	CD68
0	-1.06397008	0.091	0.337		0 T_cells	FCGRT
0	-1.068790747	0.188	0.446		0 T_cells	CTSD
0	-1.072980252	0.145	0.4		0 T_cells	LTA4H
0	-1.077640427	0.023	0.277		0 T_cells	FAM26F
0	-1.092067495	0.049	0.308		0 T_cells	GCA
0	-1.140647116	0.042	0.299		0 T_cells	NUP214
0	-1.147158313	0.056	0.374		0 T_cells	FGR
0	-1.154094132	0.918	0.962		0 T_cells	H3F3A
0	-1.168509855	0.011	0.313		0 T_cells	LY86
0	-1.183145025	0.216	0.45		0 T_cells	TKT
0	-1.190370789	0.88	0.942		0 T_cells	OAZ1
0	-1.20036413	0.007	0.272		0 T_cells	CSF3R
0	-1.205193007	0.029	0.304		0 T_cells	TNFSF13B
0	-1.205458259	0.085	0.401		0 T_cells	APLP2
0	-1.212642138	0.026	0.25		0 T_cells	RGS2
0	-1.227893853	0.078	0.424		0 T_cells	ZEB2
0	-1.236692553	0.214	0.452		0 T_cells	COTL1
0	-1.238151345	0.055	0.349		0 T_cells	BLVRB
0	-1.268930792	0.004	0.306		0 T_cells	MPEG1
0	-1.294332662	0.004	0.265		0 T_cells	TMEM176B
0	-1.313634885	0.767	0.79		0 T_cells	S100A4
0	-1.315586771	0.157	0.435		0 T_cells	NCF1
0	-1.323771251	0.004	0.299		0 T_cells	CLEC12A
0	-1.327931184	0.195	0.51		0 T_cells	PYCARD
0	-1.330584157	0.038	0.33		0 T_cells	CFP
0	-1.34162957	0.052	0.335		0 T_cells	TYMP
0	-1.354127801	0.006	0.309		0 T_cells	CLEC7A

0	-1.362748664	0.007	0.332	0 T_cells	SPI1	
0	-1.36461214	0.021	0.338	0 T_cells	RNASE6	
0	-1.386376484	0.009	0.297	0 T_cells	CD36	
0	-1.39729898	0.03	0.362	0 T_cells	HLA-DMB	
0	-1.398539514	0.006	0.25	0 T_cells	LGALS2	
0	-1.398894306	0.436	0.611	0 T_cells	TSPO	
0	-1.416677592	0.01	0.37	0 T_cells		1-Mar
0	-1.421230143	0.007	0.297	0 T_cells	DUSP6	
0	-1.428615862	0.101	0.272	0 T_cells	IGKC	
0	-1.451526514	0.013	0.361	0 T_cells	MEF2C	
0	-1.465303063	0.12	0.416	0 T_cells	STXBP2	
0	-1.475444308	0.019	0.349	0 T_cells	FGL2	
0	-1.484017324	0.082	0.296	0 T_cells	FCGR3A	
0	-1.553958486	0.789	0.952	0 T_cells	CYBA	
0	-1.554688591	0.008	0.368	0 T_cells	CYBB	
0	-1.566551555	0.554	0.747	0 T_cells	SRGN	
0	-1.573274927	0.492	0.623	0 T_cells	S100A11	
0	-1.590346266	0.063	0.443	0 T_cells	HLA-DMA	
0	-1.600086958	0.006	0.327	0 T_cells	SERPINA1	
0	-1.620906377	0.205	0.535	0 T_cells	NPC2	
0	-1.675251445	0.068	0.433	0 T_cells	GRN	
0	-1.704761348	0.342	0.692	0 T_cells	GSTP1	
0	-1.714410846	0.868	0.794	0 T_cells	S100A6	
0	-1.76100724	0.211	0.53	0 T_cells	AP1S2	
0	-1.770955888	0.48	0.678	0 T_cells	NEAT1	
0	-1.772496909	0.079	0.299	0 T_cells	CD79B	
0	-1.772979818	0.016	0.277	0 T_cells	FOS	
0	-1.78730225	0.011	0.348	0 T_cells	MS4A6A	
0	-1.793578796	0.969	0.982	0 T_cells	FTH1	
0	-1.795054009	0.023	0.302	0 T_cells	HLA-DQA1	
0	-1.957052047	0.305	0.62	0 T_cells	SAT1	
0	-1.97181427	0.065	0.44	0 T_cells	HLA-DQB1	
0	-1.986460061	0.245	0.604	0 T_cells	PSAP	
0	-2.047034045	0.044	0.4	0 T_cells	CFD	
0	-2.152228635	0.285	0.638	0 T_cells	HLA-DPB1	
0	-2.168419133	0.053	0.484	0 T_cells	HLA-DRB5	
0	-2.207137046	0.272	0.633	0 T_cells	LGALS1	
0	-2.247081454	0.013	0.372	0 T_cells	CD14	
0	-2.319850745	0.206	0.598	0 T_cells	HLA-DPA1	
0	-2.381151156	0.011	0.421	0 T_cells	CSTA	
0	-2.387030432	0.974	0.987	0 T_cells	FTL	
0	-2.448887302	0.009	0.379	0 T_cells	VCAN	
0	-2.478955335	0.266	0.667	0 T_cells	CTSS	
0	-2.485751782	0.057	0.338	0 T_cells	RP11-1143G9.4	
0	-2.503597412	0.299	0.638	0 T_cells	GPX1	
0	-2.514639707	0.203	0.478	0 T_cells	AIF1	
0	-2.632555856	0.016	0.453	0 T_cells	MNDA	
0	-2.809815767	0.15	0.662	0 T_cells	HLA-DRB1	
0	-2.931631297	0.102	0.501	0 T_cells	LST1	
0	-3.024674641	0.024	0.451	0 T_cells	FCN1	
0	-3.123030601	0.016	0.38	0 T_cells	S100A12	

0	-3.273055579	0.479	0.813	0	T_cells	CD74
0	-3.370568931	0.07	0.711	0	T_cells	FCER1G
0	-3.74399962	0.111	0.736	0	T_cells	TYROBP
0	-3.88734955	0.068	0.523	0	T_cells	CST3
0	-4.040480407	0.121	0.705	0	T_cells	HLA-DRA
0	-5.141201312	0.147	0.528	0	T_cells	LYZ
0	-5.331289928	0.18	0.519	0	T_cells	S100A8
0	-5.674906445	0.231	0.567	0	T_cells	S100A9
8.33E-270	-1.240363744	0.283	0.467	2.81E-265	T_cells	MTRNR2L1
8.05E-240	-1.569820158	0.136	0.285	2.71E-235	T_cells	GZMB
1.63E-157	-1.247502478	0.133	0.251	5.48E-153	T_cells	FGFBP2
1.02E-127	-1.517922814	0.219	0.328	3.43E-123	T_cells	GNLY
6.90E-82	-1.244515535	0.203	0.273	2.33E-77	T_cells	PRF1
8.03E-49	-1.031756263	0.302	0.35	2.71E-44	T_cells	NKG7
0	3.857739078	0.965	0.182	0	NK_cell	GNLY
0	3.363872099	1	0.243	0	NK_cell	NKG7
0	3.352269795	0.95	0.109	0	NK_cell	GZMB
0	3.266494435	0.889	0.099	0	NK_cell	FGFBP2
0	3.262673751	0.962	0.146	0	NK_cell	PRF1
0	3.223958547	0.887	0.05	0	NK_cell	KLRF1
0	3.134116599	0.786	0.051	0	NK_cell	SPON2
0	3.029126038	0.595	0.027	0	NK_cell	MYOM2
0	2.847550128	0.747	0.056	0	NK_cell	CLIC3
0	2.801769719	0.968	0.184	0	NK_cell	CST7
0	2.781913405	0.974	0.197	0	NK_cell	GZMA
0	2.69692067	0.916	0.129	0	NK_cell	KLRD1
0	2.539894244	0.951	0.273	0	NK_cell	CTSW
0	2.530274027	0.941	0.192	0	NK_cell	KLRB1
0	2.515691959	0.811	0.144	0	NK_cell	HOPX
0	2.500203491	0.74	0.097	0	NK_cell	CCL4
0	2.482345642	0.823	0.093	0	NK_cell	FCGR3A
0	2.295488815	0.857	0.268	0	NK_cell	CD247
0	2.211606425	0.668	0.05	0	NK_cell	TRDC
0	2.093495769	0.916	0.42	0	NK_cell	CD7
0	2.012003853	0.625	0.138	0	NK_cell	CMC1
0	1.950000965	0.801	0.305	0	NK_cell	ID2
0	1.945384211	0.728	0.125	0	NK_cell	GZMH
0	1.874942174	0.504	0.053	0	NK_cell	IL2RB
0	1.854275317	0.589	0.092	0	NK_cell	MATK
0	1.821061388	0.749	0.245	0	NK_cell	GZMM
0	1.784584093	0.804	0.289	0	NK_cell	CCL5
0	1.711310982	0.91	0.532	0	NK_cell	ITGB2
0	1.704227435	0.873	0.472	0	NK_cell	PLAC8
0	1.65098118	0.602	0.172	0	NK_cell	CHST12
0	1.646470257	0.942	0.638	0	NK_cell	IFITM2
0	1.627409564	0.357	0.025	0	NK_cell	IGFBP7
0	1.617818531	0.373	0.031	0	NK_cell	CD160
0	1.616138511	0.508	0.116	0	NK_cell	APMAP
0	1.581814743	0.711	0.315	0	NK_cell	CD63
0	1.566160382	0.527	0.123	0	NK_cell	RHOC
0	1.563628266	0.384	0.034	0	NK_cell	TTC38

0	1.556630565	0.348	0.012	0 NK_cell	AKR1C3
0	1.54626069	0.757	0.34	0 NK_cell	MYO1F
0	1.507888241	0.387	0.035	0 NK_cell	PRSS23
0	1.503813003	0.469	0.144	0 NK_cell	DDIT4
0	1.489176862	0.361	0.033	0 NK_cell	ADGRG1
0	1.471086493	0.683	0.366	0 NK_cell	JAK1
0	1.468769021	0.478	0.139	0 NK_cell	ABHD17A
0	1.459274933	0.948	0.68	0 NK_cell	HCST
0	1.459198962	0.399	0.045	0 NK_cell	S1PR5
0	1.458671071	0.901	0.261	0 NK_cell	FCER1G
0	1.432406895	0.426	0.082	0 NK_cell	NCR3
0	1.430789394	0.417	0.083	0 NK_cell	CX3CR1
0	1.354746798	0.468	0.145	0 NK_cell	EFHD2
0	1.354308445	0.278	0.027	0 NK_cell	XCL2
0	1.353202256	0.331	0.032	0 NK_cell	PTGDR
0	1.335120461	0.513	0.174	0 NK_cell	PLEK
0	1.32334494	0.514	0.183	0 NK_cell	APOBEC3G
0	1.308195719	0.41	0.113	0 NK_cell	ABI3
0	1.299054121	0.38	0.087	0 NK_cell	CD300A
0	1.279945729	0.334	0.042	0 NK_cell	FCRL6
0	1.274335592	0.382	0.099	0 NK_cell	PYHIN1
0	1.266750108	0.776	0.472	0 NK_cell	RARRES3
0	1.26466505	0.723	0.435	0 NK_cell	BIN2
0	1.263715992	0.998	0.929	0 NK_cell	PFN1
0	1.255507475	0.597	0.3	0 NK_cell	ALOX5AP
0	1.232415818	0.565	0.288	0 NK_cell	XBP1
0	1.214587277	0.556	0.254	0 NK_cell	CTSC
0	1.21295356	0.261	0.008	0 NK_cell	SH2D1B
0	1.208608584	0.937	0.596	0 NK_cell	SRGN
0	1.206681901	0.813	0.582	0 NK_cell	RAC2
0	1.205777725	0.52	0.242	0 NK_cell	DOK2
0	1.202163625	0.312	0.06	0 NK_cell	CEP78
0	1.182736304	0.293	0.031	0 NK_cell	C1orf21
0	1.161624033	0.588	0.326	0 NK_cell	OSTF1
0	1.15866459	0.675	0.42	0 NK_cell	LITAF
0	1.150328584	0.381	0.131	0 NK_cell	TXK
0	1.144419247	0.835	0.539	0 NK_cell	CLIC1
0	1.142919654	0.405	0.136	0 NK_cell	TPST2
0	1.126725226	0.469	0.164	0 NK_cell	C12orf75
0	1.119785714	0.294	0.052	0 NK_cell	PLEKHF1
0	1.112681429	0.69	0.417	0 NK_cell	CD99
0	1.106335586	0.95	0.817	0 NK_cell	UBB
0	1.092401728	0.668	0.43	0 NK_cell	DBI
0	1.087386414	1	0.96	0 NK_cell	HLA-C
0	1.023254498	0.286	0.068	0 NK_cell	GNPTAB
0	1.022654995	0.931	0.797	0 NK_cell	ARPC2
0	1.013241175	0.985	0.839	0 NK_cell	CYBA
0	1.01241524	0.999	0.963	0 NK_cell	HLA-A
0	1.009074541	1	0.981	0 NK_cell	HLA-B
0	-1.007882221	0.997	0.984	0 NK_cell	RPS6
0	-1.025692677	0.997	0.989	0 NK_cell	RPL13

0	-1.029479436	0.995	0.985	0	NK_cell	RPL11
0	-1.029778067	0.528	0.855	0	NK_cell	EIF3E
0	-1.048801734	0.53	0.867	0	NK_cell	RPL36A
0	-1.050137859	0.943	0.977	0	NK_cell	RPL36
0	-1.060493686	0.997	0.984	0	NK_cell	RPS18
0	-1.075681798	0.977	0.981	0	NK_cell	RPS13
0	-1.095069888	0.983	0.98	0	NK_cell	RPS25
0	-1.098705633	0.993	0.983	0	NK_cell	RPL18A
0	-1.10502639	0.999	0.986	0	NK_cell	RPL32
0	-1.137514932	0.986	0.981	0	NK_cell	RPS8
0	-1.144648121	0.995	0.994	0	NK_cell	RPS12
0	-1.150647669	0.998	0.984	0	NK_cell	RPL34
0	-1.23463647	0.995	0.983	0	NK_cell	RPL39
0	-1.308207443	0.366	0.713	0	NK_cell	LDHB
0	-1.40015422	0.397	0.805	0	NK_cell	VIM
0	-1.895046572	0.071	0.596	0	NK_cell	CD3D
0	-2.1932106	0.04	0.495	0	NK_cell	IL7R
0	-2.514652839	0.09	0.629	0	NK_cell	TRAC
0	-2.817497762	0.17	0.73	0	NK_cell	LTB
2.77E-305	1.129838378	0.349	0.111	9.33E-301	NK_cell	RUNX3
6.22E-294	-1.637093305	0.014	0.38	2.10E-289	NK_cell	CCR7
3.48E-284	1.072201984	0.341	0.112	1.17E-279	NK_cell	C5orf56
6.29E-283	1.04779055	0.611	0.369	2.12E-278	NK_cell	CCND3
1.73E-282	1.125855067	0.441	0.188	5.84E-278	NK_cell	ARPC5L
3.31E-278	1.129090462	0.423	0.174	1.12E-273	NK_cell	GPR65
4.09E-277	1.134640627	0.504	0.256	1.38E-272	NK_cell	DHRS7
1.94E-276	1.060590035	0.53	0.264	6.53E-272	NK_cell	CTSD
8.90E-276	1.093169826	0.639	0.409	3.00E-271	NK_cell	LY6E
2.80E-272	1.045725965	0.41	0.157	9.44E-268	NK_cell	FGR
3.74E-271	1.152132177	0.472	0.223	1.26E-266	NK_cell	SPN
3.01E-269	1.056419518	0.61	0.384	1.01E-264	NK_cell	FAM49B
1.64E-258	-1.177779784	0.059	0.422	5.54E-254	NK_cell	CD3G
7.63E-256	-1.122755984	0.146	0.529	2.57E-251	NK_cell	CD3E
8.98E-255	1.047672092	0.393	0.16	3.03E-250	NK_cell	PTPN4
8.61E-254	-1.284884071	0.018	0.349	2.90E-249	NK_cell	CD27
6.96E-248	1.070109854	0.533	0.302	2.34E-243	NK_cell	PPP1R18
4.81E-243	-2.367600896	0.026	0.346	1.62E-238	NK_cell	AIF1
2.02E-236	1.010632332	0.36	0.141	6.80E-232	NK_cell	ZAP70
4.20E-233	-3.328667194	0.077	0.388	1.42E-228	NK_cell	HLA-DRA
5.39E-219	-2.285327986	0.084	0.387	1.82E-214	NK_cell	HLA-DRB1
8.88E-219	-1.370108491	0.035	0.341	2.99E-214	NK_cell	COTL1
5.50E-218	1.028319184	0.523	0.309	1.85E-213	NK_cell	CLEC2B
5.98E-208	-1.006910155	0.113	0.454	2.02E-203	NK_cell	RGS10
3.47E-203	-1.230664978	0.033	0.324	1.17E-198	NK_cell	BIRC3
9.14E-203	1.018703671	0.429	0.215	3.08E-198	NK_cell	ARL4C
8.99E-199	-1.252354946	0.019	0.298	3.03E-194	NK_cell	NCF1
1.54E-149	-2.08514345	0.055	0.286	5.19E-145	NK_cell	LST1
2.10E-147	-1.694545558	0.198	0.462	7.09E-143	NK_cell	GPX1
1.52E-117	-1.578427463	0.171	0.386	5.13E-113	NK_cell	HLA-DPA1
8.47E-107	-4.17145964	0.135	0.337	2.85E-102	NK_cell	S100A8
1.51E-106	-3.91361133	0.125	0.32	5.07E-102	NK_cell	LYZ

1. 55E-103	-1. 049723613	0. 148	0. 361	5. 21E-99 NK_cell	AP1S2
4. 93E-98	-4. 482402854	0. 19	0. 386	1. 66E-93 NK_cell	S100A9
6. 48E-90	-1. 398603768	0. 261	0. 446	2. 18E-85 NK_cell	HLA-DPB1
1. 33E-83	-2. 51909517	0. 112	0. 266	4. 47E-79 NK_cell	CST3
6. 69E-81	-2. 21167007	0. 484	0. 628	2. 26E-76 NK_cell	CD74
5. 98E-65	-1. 248002463	0. 281	0. 444	2. 02E-60 NK_cell	CTSS
1. 75E-42	-1. 365388777	0. 964	0. 981	5. 90E-38 NK_cell	FTL
4. 12E-29	-1. 016014115	0. 797	0. 843	1. 39E-24 NK_cell	S100A6
4. 14E-13	-5. 217435497	0. 359	0. 319	1. 40E-08 NK_cell	HBB
0	6. 713406095	0. 971	0. 224	0 Monocyte	S100A9
0	6. 365572191	0. 929	0. 172	0 Monocyte	S100A8
0	6. 168967031	0. 971	0. 142	0 Monocyte	LYZ
0	4. 795013762	0. 995	0. 076	0 Monocyte	CST3
0	4. 104141635	0. 786	0. 016	0 Monocyte	S100A12
0	4. 001545006	0. 928	0. 024	0 Monocyte	FCN1
0	3. 903655474	0. 968	0. 096	0 Monocyte	LST1
0	3. 656327249	0. 969	0. 159	0 Monocyte	AIF1
0	3. 522159455	0. 903	0. 024	0 Monocyte	MNDA
0	3. 404552126	0. 995	0. 213	0 Monocyte	TYROBP
0	3. 387846973	0. 649	0. 057	0 Monocyte	RP11-1143G9. 4
0	3. 370448915	0. 788	0. 01	0 Monocyte	VCAN
0	3. 309349335	0. 88	0. 01	0 Monocyte	CSTA
0	3. 183252252	0. 999	0. 975	0 Monocyte	FTL
0	3. 151987432	0. 773	0. 012	0 Monocyte	CD14
0	3. 123962386	0. 974	0. 298	0 Monocyte	CTSS
0	2. 997696437	0. 977	0. 285	0 Monocyte	LGALS1
0	2. 948947147	0. 818	0. 038	0 Monocyte	CFD
0	2. 860770324	0. 967	0. 31	0 Monocyte	GPX1
0	2. 760908252	0. 999	0. 8	0 Monocyte	S100A6
0	2. 736513857	0. 976	0. 175	0 Monocyte	FCER1G
0	2. 648967283	0. 939	0. 26	0 Monocyte	PSAP
0	2. 631201783	0. 727	0. 01	0 Monocyte	MS4A6A
0	2. 598462994	0. 566	0. 016	0 Monocyte	FOS
0	2. 544670395	0. 98	0. 443	0 Monocyte	S100A11
0	2. 522608604	0. 901	0. 207	0 Monocyte	AP1S2
0	2. 479735772	0. 95	0. 467	0 Monocyte	NEAT1
0	2. 479427877	0. 912	0. 319	0 Monocyte	SAT1
0	2. 45735731	1	0. 968	0 Monocyte	FTH1
0	2. 402817315	0. 686	0. 005	0 Monocyte	SERPINA1
0	2. 370317227	0. 796	0. 078	0 Monocyte	GRN
0	2. 257994875	0. 862	0. 215	0 Monocyte	NPC2
0	2. 207245162	0. 702	0. 022	0 Monocyte	FGL2
0	2. 202778108	0. 934	0. 405	0 Monocyte	TSPO
0	2. 191864365	0. 995	0. 725	0 Monocyte	S100A4
0	2. 17309762	0. 699	0. 024	0 Monocyte	CYBB
0	2. 151358401	0. 521	0. 006	0 Monocyte	LGALS2
0	2. 145121522	0. 606	0. 01	0 Monocyte	DUSP6
0	2. 121568962	0. 686	0. 031	0 Monocyte	CFP
0	2. 094458876	0. 723	0. 125	0 Monocyte	STXBP2
0	2. 090647832	0. 643	0. 006	0 Monocyte	CLEC7A
0	2. 073885261	0. 608	0. 011	0 Monocyte	CD36

0	2.053792015	0.813	0.191	0 Monocyte	COTL1
0	2.043466783	0.621	0.005	0 Monocyte	CLEC12A
0	2.025530716	0.637	0.055	0 Monocyte	TYMP
0	2.022664132	0.924	0.379	0 Monocyte	GSTP1
0	2.020375372	0.556	0.004	0 Monocyte	TMEM176B
0	1.917589993	0.621	0.027	0 Monocyte	TNFSF13B
0	1.909897918	0.616	0.025	0 Monocyte	SPI1
0	1.901355524	0.774	0.201	0 Monocyte	TKT
0	1.900857745	0.608	0.011	0 Monocyte	MPEG1
0	1.89535711	0.499	0.026	0 Monocyte	RGS2
0	1.89333861	0.564	0.007	0 Monocyte	CSF3R
0	1.861661355	0.823	0.204	0 Monocyte	PYCARD
0	1.83350161	0.642	0.128	0 Monocyte	HLA-DRB5
0	1.799739995	0.663	0.078	0 Monocyte	FCGRT
0	1.798494523	0.588	0.041	0 Monocyte	NUP214
0	1.752722081	0.634	0.065	0 Monocyte	BLVRB
0	1.741076583	0.421	0.013	0 Monocyte	MS4A7
0	1.711084941	0.502	0.004	0 Monocyte	CPVL
0	1.696080175	0.424	0.004	0 Monocyte	RBP7
0	1.686243812	0.859	0.237	0 Monocyte	HLA-DRB1
0	1.617510743	0.942	0.218	0 Monocyte	HLA-DRA
0	1.608501547	0.519	0.012	0 Monocyte	NCF2
0	1.607889644	0.52	0.02	0 Monocyte	CD68
0	1.604868713	0.544	0.055	0 Monocyte	RNASE6
0	1.597232193	0.974	0.551	0 Monocyte	SRGN
0	1.594860017	0.55	0.06	0 Monocyte	GCA
0	1.562211744	0.48	0.005	0 Monocyte	KCTD12
0	1.553572396	0.534	0.05	0 Monocyte	LY96
0	1.550074442	0.384	0.003	0 Monocyte	LINC01272
0	1.53868413	0.402	0.034	0 Monocyte	DUSP1
0	1.526407327	0.785	0.254	0 Monocyte	AP2S1
0	1.522209673	0.551	0.061	0 Monocyte	LGALS3
0	1.517833776	0.456	0.004	0 Monocyte	FPR1
0	1.506746003	0.554	0.039	0 Monocyte	RNF130
0	1.473487179	0.321	0.001	0 Monocyte	CYP11B1
0	1.464202842	0.601	0.112	0 Monocyte	JAML
0	1.459893611	0.414	0.003	0 Monocyte	MGST1
0	1.446270997	0.463	0.008	0 Monocyte	SLC7A7
0	1.445985043	0.622	0.159	0 Monocyte	LTA4H
0	1.443228247	0.617	0.117	0 Monocyte	APLP2
0	1.43513782	0.997	0.821	0 Monocyte	CYBA
0	1.426791468	0.606	0.19	0 Monocyte	NCF1
0	1.420659804	0.993	0.884	0 Monocyte	OAZ1
0	1.420470619	0.452	0.013	0 Monocyte	HCK
0	1.413812622	0.758	0.287	0 Monocyte	ANXA2
0	1.409945472	0.933	0.575	0 Monocyte	C14orf2
0	1.400909829	0.44	0.011	0 Monocyte	IGSF6
0	1.398914225	0.656	0.193	0 Monocyte	TIMP1
0	1.398305221	0.971	0.819	0 Monocyte	GAPDH
0	1.384896023	0.407	0.006	0 Monocyte	ASGR1
0	1.357514074	0.776	0.323	0 Monocyte	FKBP1A

0	1.357444075	0.879	0.571	0 Monocyte	S100A10
0	1.355955693	0.412	0.007	0 Monocyte	CLEC4A
0	1.342685903	0.858	0.431	0 Monocyte	LAMTOR4
0	1.339834915	0.618	0.16	0 Monocyte	ANXA5
0	1.339464757	0.377	0.002	0 Monocyte	TMEM176A
0	1.338836559	0.431	0.011	0 Monocyte	RAB31
0	1.322954262	0.567	0.136	0 Monocyte	VMP1
0	1.321976785	0.376	0.123	0 Monocyte	IFITM3
0	1.29881901	0.586	0.136	0 Monocyte	ASAH1
0	1.291962886	0.696	0.261	0 Monocyte	TALDO1
0	1.290308805	0.995	0.922	0 Monocyte	H3F3A
0	1.284911326	0.663	0.203	0 Monocyte	ATP6VOB
0	1.279954607	0.603	0.126	0 Monocyte	ZEB2
0	1.278440591	0.366	0.004	0 Monocyte	LILRA5
0	1.276196327	0.691	0.248	0 Monocyte	CARD16
0	1.259159726	0.917	0.571	0 Monocyte	TCEB2
0	1.25698073	0.671	0.232	0 Monocyte	SDCBP
0	1.244302597	0.381	0.004	0 Monocyte	CD302
0	1.240215178	0.936	0.707	0 Monocyte	CALM2
0	1.231839995	0.47	0.053	0 Monocyte	LY86
0	1.226468848	0.368	0.002	0 Monocyte	TNFAIP2
0	1.222719734	0.384	0.004	0 Monocyte	TGFBI
0	1.222564994	0.678	0.29	0 Monocyte	HLA-DPA1
0	1.219623308	0.368	0.01	0 Monocyte	IFI30
0	1.212509731	0.543	0.116	0 Monocyte	HSBP1
0	1.211267857	0.524	0.1	0 Monocyte	PTPRE
0	1.208444196	0.314	0.001	0 Monocyte	MAFB
0	1.206589971	0.424	0.039	0 Monocyte	LYN
0	1.197589472	0.651	0.199	0 Monocyte	GLIPR1
0	1.195099882	0.325	0.003	0 Monocyte	CD93
0	1.189560212	0.426	0.056	0 Monocyte	CAPG
0	1.176559107	0.523	0.122	0 Monocyte	TMEM167A
0	1.17556475	0.414	0.031	0 Monocyte	CTSZ
0	1.169292022	0.348	0.003	0 Monocyte	HNMT
0	1.166770377	0.441	0.101	0 Monocyte	SOD2
0	1.156295638	0.998	0.94	0 Monocyte	ATP5E
0	1.150350379	0.712	0.36	0 Monocyte	HLA-DPB1
0	1.147383554	0.323	0.002	0 Monocyte	PLBD1
0	1.147199034	0.944	0.721	0 Monocyte	VIM
0	1.144552303	0.361	0.009	0 Monocyte	RAB32
0	1.133377221	0.375	0.02	0 Monocyte	SMCO4
0	1.131392721	0.666	0.246	0 Monocyte	PGLS
0	1.130949504	0.308	0.001	0 Monocyte	CDA
0	1.129691716	0.463	0.078	0 Monocyte	LYST
0	1.128227133	0.331	0.002	0 Monocyte	PILRA
0	1.125451077	0.647	0.249	0 Monocyte	C10orf54
0	1.124624763	0.345	0.04	0 Monocyte	NAMPT
0	1.121657726	0.551	0.137	0 Monocyte	HLA-DMA
0	1.118043983	0.596	0.174	0 Monocyte	CNPY3
0	1.115663084	0.348	0.015	0 Monocyte	OGFRL1
0	1.115480554	0.739	0.36	0 Monocyte	PRELID1

0	1.112382576	0.479	0.093	0 Monocyte	AGTRAP
0	1.109684121	0.619	0.214	0 Monocyte	CTSD
0	1.101220857	0.359	0.028	0 Monocyte	SLC11A1
0	1.085336199	0.361	0.02	0 Monocyte	CPPED1
0	1.083458775	0.481	0.117	0 Monocyte	PPT1
0	1.082061321	0.478	0.101	0 Monocyte	CTSB
0	1.069501388	0.335	0.008	0 Monocyte	C19orf38
0	1.065762789	0.438	0.065	0 Monocyte	CTSH
0	1.062201528	0.602	0.214	0 Monocyte	H2AFY
0	1.055736215	0.593	0.264	0 Monocyte	MCL1
0	1.040909873	0.551	0.172	0 Monocyte	CASP1
0	1.032070841	0.426	0.095	0 Monocyte	C4orf48
0	1.029966219	0.726	0.344	0 Monocyte	NDUFB1
0	1.029232404	0.252	0.001	0 Monocyte	CLEC4E
0	1.025712227	0.511	0.106	0 Monocyte	FGR
0	1.019323882	0.596	0.222	0 Monocyte	SAMHD1
0	1.017400635	0.81	0.482	0 Monocyte	VAMP8
0	1.016768002	0.385	0.057	0 Monocyte	ATP6V1B2
0	1.010809842	0.33	0.018	0 Monocyte	ALDH2
0	1.009550144	0.577	0.2	0 Monocyte	GNAI2
0	1.007599419	0.553	0.195	0 Monocyte	AHNAK
0	1.00749089	0.36	0.041	0 Monocyte	PGD
0	1.005963	0.381	0.05	0 Monocyte	CECR1
0	1.001626039	0.835	0.488	0 Monocyte	RHOA
0	1.001349355	0.301	0.003	0 Monocyte	LRRC25
0	-1.032307549	0.708	0.866	0 Monocyte	NPM1
0	-1.033884289	0.99	0.979	0 Monocyte	RPL23A
0	-1.055414622	0.025	0.29	0 Monocyte	SKAP1
0	-1.056194828	0.993	0.981	0 Monocyte	RPS3
0	-1.060803927	0.125	0.405	0 Monocyte	TSTD1
0	-1.061008399	0.588	0.792	0 Monocyte	CALM1
0	-1.088737169	0.814	0.937	0 Monocyte	TXNIP
0	-1.10370977	0.659	0.851	0 Monocyte	GLTSCR2
0	-1.106371134	0.291	0.553	0 Monocyte	RARRES3
0	-1.125472291	0.075	0.36	0 Monocyte	TCF7
0	-1.127944619	0.981	0.973	0 Monocyte	RPS29
0	-1.131587322	1	0.991	0 Monocyte	MALAT1
0	-1.134311653	0.16	0.47	0 Monocyte	GYPC
0	-1.137976468	0.069	0.376	0 Monocyte	BIN1
0	-1.138008547	0.035	0.331	0 Monocyte	LBH
0	-1.148822761	0.034	0.326	0 Monocyte	FCMR
0	-1.164106033	0.044	0.357	0 Monocyte	RHOH
0	-1.170938865	0.33	0.642	0 Monocyte	TRAF3IP3
0	-1.171325727	0.268	0.521	0 Monocyte	NOSIP
0	-1.173669772	0.063	0.367	0 Monocyte	LAT
0	-1.177968734	0.981	0.981	0 Monocyte	RPL31
0	-1.179562552	0.627	0.81	0 Monocyte	BTG1
0	-1.180781719	0.044	0.341	0 Monocyte	LINC00861
0	-1.192278006	0.537	0.807	0 Monocyte	HSPA8
0	-1.199993319	0.157	0.482	0 Monocyte	C12orf57
0	-1.204916044	0.066	0.376	0 Monocyte	PIK3IP1

0	-1.212761654	0.986	0.981	0	Monocyte	RPL3
0	-1.225285463	0.448	0.699	0	Monocyte	GIMAP7
0	-1.277073171	0.234	0.57	0	Monocyte	AES
0	-1.299329455	0.888	0.967	0	Monocyte	RPSA
0	-1.326339972	0.042	0.379	0	Monocyte	CD27
0	-1.350880946	0.098	0.462	0	Monocyte	ISG20
0	-1.417689077	0.217	0.604	0	Monocyte	CLEC2D
0	-1.447283546	0.168	0.581	0	Monocyte	ACAP1
0	-1.454033562	0.044	0.357	0	Monocyte	GZMM
0	-1.469880338	0.239	0.55	0	Monocyte	CXCR4
0	-1.470335058	0.145	0.547	0	Monocyte	IL2RG
0	-1.527304608	0.062	0.401	0	Monocyte	IFITM1
0	-1.581058465	0.428	0.736	0	Monocyte	LDHB
0	-1.590372519	0.048	0.395	0	Monocyte	CD247
0	-1.628208418	0.048	0.463	0	Monocyte	CD3G
0	-1.671566844	0.04	0.413	0	Monocyte	CCR7
0	-1.701997	0.079	0.492	0	Monocyte	CD2
0	-1.730743777	0.065	0.547	0	Monocyte	LCK
0	-1.743375437	0.208	0.7	0	Monocyte	EVL
0	-2.026117636	0.058	0.591	0	Monocyte	CD3E
0	-2.084908262	0.071	0.407	0	Monocyte	CTSW
0	-2.128777334	0.051	0.315	0	Monocyte	CST7
0	-2.132612866	0.078	0.564	0	Monocyte	CD7
0	-2.183407176	0.075	0.478	0	Monocyte	TRBC1
0	-2.183786402	0.077	0.535	0	Monocyte	IL7R
0	-2.201052031	0.087	0.605	0	Monocyte	TRBC2
0	-2.249302277	0.058	0.329	0	Monocyte	GZMA
0	-2.311634306	0.093	0.647	0	Monocyte	CD3D
0	-2.51355584	0.305	0.758	0	Monocyte	LTB
0	-2.738153718	0.09	0.686	0	Monocyte	TRAC
0	-2.981688923	0.124	0.709	0	Monocyte	IL32
1.46E-304	-1.061648916	0.061	0.316	4.93E-300	Monocyte	STK17A
1.87E-304	-1.021760596	0.163	0.424	6.31E-300	Monocyte	ANXA6
2.01E-304	-2.422633049	0.064	0.318	6.78E-300	Monocyte	KLRB1
1.07E-294	-1.032230689	0.034	0.276	3.60E-290	Monocyte	ITM2A
7.50E-274	-1.921589991	0.043	0.275	2.53E-269	Monocyte	PRF1
2.99E-268	1.201695524	0.564	0.308	1.01E-263	Monocyte	MTRNR2L1
3.89E-257	-2.763951921	0.165	0.384	1.31E-252	Monocyte	CCL5
1.51E-233	-1.412723225	0.045	0.253	5.09E-229	Monocyte	HOPX
1.88E-221	-3.137183025	0.163	0.358	6.34E-217	Monocyte	NKG7
7.10E-196	-1.026845499	0.135	0.331	2.39E-191	Monocyte	BIRC3
7.86E-164	-3.278251198	0.128	0.295	2.65E-159	Monocyte	GPLY
7.14E-82	-4.225011296	0.436	0.296	2.41E-77	Monocyte	HBB
0	4.147324979	0.982	0.034	0	B_cell	CD79A
0	3.811154021	0.702	0.114	0	B_cell	IGKC
0	3.628257704	0.83	0.036	0	B_cell	IGHM
0	3.461588316	1	0.572	0	B_cell	CD74
0	3.445025351	0.373	0.016	0	B_cell	IGLC3
0	3.423698082	0.942	0.086	0	B_cell	CD79B
0	3.362840369	0.892	0.019	0	B_cell	MS4A1
0	3.348052692	0.443	0.036	0	B_cell	IGLC2

0	3.174942488	1	0.288	0 B_cell	HLA-DRA	
0	3.156247018	0.621	0.014	0 B_cell	TCL1A	
0	3.037789861	0.686	0.01	0 B_cell	IGHD	
0	3.026594625	0.787	0.011	0 B_cell	LINCO0926	
0	2.885269569	0.857	0.06	0 B_cell	HLA-DQA1	
0	2.703014774	0.892	0.145	0 B_cell	HLA-DQB1	
0	2.527234717	0.981	0.299	0 B_cell	HLA-DPA1	
0	2.51854832	0.702	0.013	0 B_cell	BANK1	
0	2.483360415	0.987	0.29	0 B_cell	HLA-DRB1	
0	2.435602875	0.979	0.369	0 B_cell	HLA-DPB1	
0	2.22804238	0.546	0.006	0 B_cell	VPREB3	
0	2.06937926	0.989	0.709	0 B_cell	CD37	
0	2.056789971	0.591	0.051	0 B_cell	HVCN1	
0	2.053512113	0.489	0.007	0 B_cell	FCER2	
0	2.005061375	0.682	0.109	0 B_cell	HLA-DMB	
0	1.828495848	0.475	0.01	0 B_cell	CD22	
0	1.823383129	0.734	0.161	0 B_cell	HLA-DMA	
0	1.795252686	0.435	0.084	0 B_cell	IL4R	
0	1.75131526	0.584	0.108	0 B_cell	MEF2C	
0	1.748440819	0.443	0.046	0 B_cell	PLPP5	
0	1.731659737	0.617	0.106	0 B_cell		1-Mar
0	1.689674857	0.679	0.253	0 B_cell	BIRC3	
0	1.685433515	0.733	0.173	0 B_cell	HLA-DRB5	
0	1.598976224	0.628	0.18	0 B_cell	SNX2	
0	1.581455744	0.455	0.029	0 B_cell	ARHGAP24	
0	1.528895647	0.377	0.009	0 B_cell	TNFRSF13C	
0	1.5099914	0.383	0.006	0 B_cell	HLA-DOB	
0	1.497880109	0.806	0.458	0 B_cell	CXCR4	
0	1.49593883	0.359	0.012	0 B_cell	ADAM28	
0	1.47956062	0.363	0.009	0 B_cell	RP11-693J15.5	
0	1.424195193	0.431	0.049	0 B_cell	IRF8	
0	1.397428923	0.392	0.03	0 B_cell	JCHAIN	
0	1.385731253	0.471	0.116	0 B_cell	STX7	
0	1.377225332	0.323	0.011	0 B_cell	TSPAN13	
0	1.349836595	0.353	0.01	0 B_cell	BLK	
0	1.332568887	0.33	0.005	0 B_cell	FCRLA	
0	1.327710907	0.362	0.024	0 B_cell	SPIB	
0	1.324983957	0.425	0.094	0 B_cell	FAM26F	
0	1.293742338	0.342	0.034	0 B_cell	EAF2	
0	1.288402337	0.343	0.016	0 B_cell	RALGPS2	
0	1.271535533	0.41	0.078	0 B_cell	CYB561A3	
0	1.27030052	0.363	0.03	0 B_cell	SWAP70	
0	1.252903548	0.411	0.046	0 B_cell	PDLIM1	
0	1.252857542	0.322	0.02	0 B_cell	CD40	
0	1.226318788	0.305	0.016	0 B_cell	P2RX5	
0	1.218056223	0.319	0.02	0 B_cell	GNG7	
0	1.18668495	0.269	0.01	0 B_cell	CD72	
0	1.185241951	0.275	0.004	0 B_cell	CD24	
0	1.179808523	0.413	0.107	0 B_cell	ORAI2	
0	1.169164641	0.297	0.019	0 B_cell	BCL11A	
0	1.142455663	0.25	0.007	0 B_cell	KIAA0125	

0	1.136366164	0.319	0.048	0	B_cell	GAPT
0	1.132558797	0.605	0.234	0	B_cell	NCF1
0	1.131326759	0.286	0.022	0	B_cell	HLA-DQB2
0	1.12298387	0.277	0.016	0	B_cell	FAM129C
0	1.111590922	0.338	0.059	0	B_cell	PLEKHF2
0	1.097638116	0.261	0.004	0	B_cell	CD19
0	1.096689108	0.973	0.641	0	B_cell	LTB
0	1.045736287	0.917	0.726	0	B_cell	LAPTM5
0	1.038983651	0.268	0.009	0	B_cell	BLNK
0	1.021384259	0.292	0.058	0	B_cell	IFT57
0	-1.460311675	0.26	0.668	0	B_cell	S100A10
0	-1.475860587	0.08	0.495	0	B_cell	LCK
0	-1.741251677	0.026	0.454	0	B_cell	CD2
0	-1.912090522	0.042	0.589	0	B_cell	GIMAP4
0	-1.977925309	0.034	0.537	0	B_cell	CD3E
0	-1.998508188	0.042	0.617	0	B_cell	FYB
0	-2.092059626	0.038	0.578	0	B_cell	ANXA1
0	-2.172774953	0.036	0.517	0	B_cell	CD7
0	-2.21565907	0.039	0.439	0	B_cell	TRBC1
0	-2.257946398	0.039	0.491	0	B_cell	IL7R
0	-2.284481605	0.134	0.588	0	B_cell	S100A11
0	-2.318985274	0.055	0.592	0	B_cell	CD3D
0	-2.448114887	0.044	0.714	0	B_cell	GIMAP7
0	-2.464566576	0.14	0.683	0	B_cell	SRGN
0	-2.483082307	0.472	0.876	0	B_cell	S100A6
0	-2.484682956	0.119	0.769	0	B_cell	HCST
0	-2.533029077	0.095	0.623	0	B_cell	TRAC
0	-3.135484338	0.067	0.653	0	B_cell	IL32
0	-3.264409938	0.294	0.827	0	B_cell	S100A4
3.68E-305	-1.594447156	0.025	0.422	1.24E-300	B_cell	CD3G
5.89E-301	-1.423093343	0.135	0.541	1.98E-296	B_cell	RARRES3
9.48E-299	-1.182598055	0.64	0.87	3.19E-294	B_cell	GAPDH
3.37E-298	-1.363331255	0.404	0.706	1.14E-293	B_cell	LDHB
8.81E-289	1.022169711	0.47	0.188	2.97E-284	B_cell	SYPL1
2.76E-272	-1.82267162	0.023	0.391	9.29E-268	B_cell	ID2
1.33E-264	-1.177677188	0.528	0.788	4.49E-260	B_cell	VIM
1.90E-264	-1.822150424	0.239	0.593	6.39E-260	B_cell	NEAT1
6.46E-260	-2.135722177	0.023	0.377	2.18E-255	B_cell	CTSW
7.27E-258	1.007264563	0.527	0.243	2.45E-253	B_cell	FCMR
1.58E-255	-1.254735332	0.033	0.386	5.31E-251	B_cell	GIMAP1
8.09E-252	-3.327462758	0.053	0.394	2.73E-247	B_cell	TYROBP
6.32E-246	-1.407971515	0.255	0.604	2.13E-241	B_cell	ITGB2
1.93E-233	-1.532851564	0.03	0.36	6.50E-229	B_cell	CD247
1.73E-230	1.036901131	0.61	0.355	5.81E-226	B_cell	RCSL1
4.11E-229	-2.587803166	0.037	0.358	1.38E-224	B_cell	FCER1G
1.36E-222	-1.126134038	0.08	0.42	4.57E-218	B_cell	LEPROTL1
2.21E-216	-1.152926337	0.113	0.451	7.46E-212	B_cell	RGS10
4.92E-211	-1.430274814	0.022	0.326	1.66E-206	B_cell	GZMM
7.70E-202	-1.18924409	0.184	0.503	2.59E-197	B_cell	NOSIP
3.22E-201	-1.140044043	0.036	0.338	1.09E-196	B_cell	LAT
5.30E-201	-1.297599802	0.052	0.358	1.79E-196	B_cell	MT2A

2.24E-199	-2.300404992	0.046	0.341	7.56E-195 B_cell	AIF1
4.90E-199	-3.636606438	0.055	0.349	1.65E-194 B_cell	NKG7
3.95E-198	-1.350012012	0.06	0.365	1.33E-193 B_cell	IFITM1
5.48E-198	-2.247171637	0.15	0.445	1.85E-193 B_cell	LGALS1
7.81E-196	-1.159209918	0.022	0.312	2.63E-191 B_cell	LINC00861
9.48E-192	-2.331314602	0.021	0.304	3.19E-187 B_cell	GZMA
2.70E-191	-1.06786637	0.03	0.32	9.11E-187 B_cell	SAMHD1
7.45E-189	-2.166234833	0.014	0.291	2.51E-184 B_cell	CST7
4.60E-187	-2.981603073	0.087	0.369	1.55E-182 B_cell	CCL5
8.36E-181	-1.155048098	0.433	0.694	2.82E-176 B_cell	IFITM2
1.73E-177	-2.589171597	0.028	0.295	5.83E-173 B_cell	KLRB1
8.27E-174	-1.097309338	0.028	0.296	2.79E-169 B_cell	DOK2
2.67E-171	-1.165408345	0.038	0.307	8.98E-167 B_cell	TIMP1
2.97E-163	-1.15397197	0.131	0.409	1.00E-158 B_cell	MYO1F
3.56E-159	-1.090761188	0.055	0.316	1.20E-154 B_cell	CTSD
1.69E-156	-1.20437642	0.26	0.532	5.70E-152 B_cell	TSPO
3.74E-156	-1.230195129	0.279	0.53	1.26E-151 B_cell	TRBC2
5.06E-154	-1.940933875	0.016	0.253	1.71E-149 B_cell	PRF1
8.32E-153	-1.028468636	0.079	0.341	2.80E-148 B_cell	XBP1
1.29E-135	-2.871891828	0.05	0.272	4.36E-131 B_cell	CST3
3.50E-130	-3.816891189	0.065	0.284	1.18E-125 B_cell	GNLY
2.03E-94	-3.961360662	0.135	0.317	6.84E-90 B_cell	LYZ
1.03E-87	-4.152903607	0.154	0.333	3.47E-83 B_cell	S100A8
3.78E-87	-4.495000782	0.206	0.383	1.27E-82 B_cell	S100A9
6.83E-84	-1.845529896	0.111	0.278	2.30E-79 B_cell	LST1
4.69E-66	-1.060419118	0.253	0.404	1.58E-61 B_cell	PSAP
1.41E-06	-1.070123514	0.987	0.979	0.047358823 B_cell	FTL
0	6.91377651	1	0.133	0 BM	HBA2
0	6.810266054	1	0.059	0 BM	HBA1
0	5.559394208	1	0.013	0 BM	HBD
0	4.091107092	0.988	0.006	0 BM	AHSP
0	4.016574305	0.988	0.008	0 BM	ALAS2
0	3.99595668	1	0.039	0 BM	SNCA
0	3.570600475	0.838	0.006	0 BM	HBM
0	3.309826136	0.901	0.003	0 BM	CA1
0	3.308874613	1	0.131	0 BM	SLC25A37
0	2.494814939	0.866	0.041	0 BM	BPGM
0	2.454379411	0.964	0.135	0 BM	SLC25A39
0	2.335149652	0.937	0.046	0 BM	DCAF12
0	2.048500546	0.858	0.007	0 BM	HBE1
0	2.0101353	0.866	0.004	0 BM	SELENBP1
0	1.962644713	0.81	0.011	0 BM	HBQ1
0	1.949610254	0.885	0.047	0 BM	STRADB
0	1.928576048	0.802	0.023	0 BM	FECH
0	1.678252252	0.877	0.114	0 BM	ADIPOR1
0	1.676955821	0.83	0.057	0 BM	MPP1
0	1.555166908	0.692	0.002	0 BM	GYPB
0	1.518168651	0.715	0.01	0 BM	SLC4A1
0	1.473670864	0.447	0.001	0 BM	IFIT1B
0	1.470257401	0.502	0.016	0 BM	HEMGN
0	1.368024042	0.439	0.01	0 BM	KRT1

0	1.141103235	0.625	0.045	0 BM	BCL2L1
0	1.121526379	0.534	0.003	0 BM	HBZ
3.83E-277	2.513606471	0.988	0.212	1.29E-272 BM	BNIP3L
1.86E-265	2.074890127	0.957	0.165	6.28E-261 BM	BLVRB
5.51E-233	6.598608041	1	0.316	1.85E-228 BM	HBB
3.10E-219	1.756371049	0.858	0.147	1.05E-214 BM	LGALS3
2.35E-218	2.249616204	0.953	0.235	7.91E-214 BM	MKRN1
1.26E-200	1.505892092	0.877	0.162	4.23E-196 BM	FBX07
5.66E-166	1.622362815	0.846	0.196	1.91E-161 BM	NCOA4
1.86E-162	-4.790807931	0.874	0.998	6.27E-158 BM	B2M
6.69E-162	-4.440421971	0.518	0.994	2.25E-157 BM	MT-CO2
9.83E-162	-5.399141094	0.53	0.994	3.31E-157 BM	RPL10
1.38E-161	-4.260266453	0.605	0.994	4.64E-157 BM	MT-CO3
1.68E-161	-4.958968184	0.644	0.994	5.65E-157 BM	RPLP1
2.79E-161	-4.2097949	0.498	0.993	9.41E-157 BM	MT-ND4
2.96E-161	-5.031436868	0.451	0.992	9.99E-157 BM	RPS27A
3.20E-161	-5.190955361	0.549	0.994	1.08E-156 BM	RPL13A
3.89E-161	-5.327353162	0.597	0.993	1.31E-156 BM	EEF1A1
4.04E-161	-5.147575194	0.364	0.991	1.36E-156 BM	RPS19
4.75E-161	-4.972876557	0.285	0.99	1.60E-156 BM	TMSB10
7.06E-161	-4.206047764	0.771	0.995	2.38E-156 BM	RPL21
7.39E-161	-4.366958298	0.229	0.99	2.49E-156 BM	PTMA
8.27E-161	-6.431264056	0.791	0.995	2.79E-156 BM	MALAT1
1.03E-160	-4.470420688	0.51	0.993	3.46E-156 BM	RPL41
1.11E-160	-4.774252478	0.589	0.993	3.76E-156 BM	RPS15A
1.22E-160	-4.819588738	0.577	0.993	4.11E-156 BM	RPS14
1.28E-160	-3.521467176	0.905	0.996	4.31E-156 BM	MT-CO1
1.35E-160	-4.984573272	0.498	0.991	4.54E-156 BM	RPS2
1.39E-160	-5.535127809	0.526	0.993	4.69E-156 BM	RPS27
1.87E-160	-4.945546221	0.344	0.99	6.32E-156 BM	RPL27A
2.02E-160	-4.886130867	0.617	0.993	6.80E-156 BM	RPLP2
2.04E-160	-5.299937495	0.403	0.991	6.88E-156 BM	RPS18
2.05E-160	-4.572534202	0.332	0.99	6.90E-156 BM	RPL15
2.09E-160	-4.867548081	0.462	0.991	7.06E-156 BM	RPS3A
2.09E-160	-4.88086438	0.265	0.989	7.06E-156 BM	RPL26
2.57E-160	-4.859316489	0.526	0.992	8.65E-156 BM	RPL32
2.63E-160	-4.583553926	0.36	0.99	8.85E-156 BM	HLA-B
3.02E-160	-5.004579418	0.308	0.99	1.02E-155 BM	RPS28
3.09E-160	-4.81988008	0.387	0.99	1.04E-155 BM	RPL28
3.79E-160	-5.151720746	0.328	0.99	1.28E-155 BM	RPL39
4.47E-160	-5.035692929	0.304	0.988	1.51E-155 BM	RPL23A
4.89E-160	-4.928938162	0.308	0.99	1.65E-155 BM	RPS3
5.12E-160	-4.377816114	0.609	0.992	1.72E-155 BM	TPT1
5.24E-160	-4.996414615	0.672	0.993	1.76E-155 BM	RPL13
6.67E-160	-3.998023427	0.874	0.998	2.25E-155 BM	TMSB4X
7.56E-160	-4.658592886	0.53	0.991	2.55E-155 BM	RPL11
7.96E-160	-5.250162546	0.443	0.991	2.68E-155 BM	RPL34
8.51E-160	-4.814226418	0.423	0.989	2.87E-155 BM	RPL18A
1.01E-159	-4.323278906	0.53	0.991	3.40E-155 BM	RPL35A
1.07E-159	-3.852150434	0.526	0.992	3.61E-155 BM	MT-ND2
1.12E-159	-4.361539395	0.486	0.991	3.76E-155 BM	RPL7

1. 30E-159	-4. 895044394	0. 3	0. 988	4. 40E-155 BM	RPS4X
1. 52E-159	-4. 275879879	0. 557	0. 991	5. 12E-155 BM	RPS15
1. 95E-159	-4. 899066735	0. 324	0. 988	6. 58E-155 BM	RPS8
1. 98E-159	-4. 954269473	0. 285	0. 988	6. 67E-155 BM	RPS23
1. 99E-159	-4. 804217871	0. 403	0. 989	6. 70E-155 BM	RPL19
2. 40E-159	-3. 972678323	0. 403	0. 988	8. 09E-155 BM	FAU
2. 48E-159	-4. 948554043	0. 494	0. 99	8. 35E-155 BM	RPS6
2. 66E-159	-4. 879297597	0. 202	0. 986	8. 95E-155 BM	RPL37
2. 66E-159	-4. 195527997	0. 289	0. 987	8. 95E-155 BM	MT-ND3
5. 35E-159	-4. 59784252	0. 229	0. 985	1. 80E-154 BM	RPL37A
5. 70E-159	-4. 105538124	0. 427	0. 988	1. 92E-154 BM	MT-CYB
6. 09E-159	-4. 896299216	0. 352	0. 988	2. 05E-154 BM	RPL3
6. 14E-159	-4. 425973243	0. 553	0. 989	2. 07E-154 BM	RPL30
9. 66E-159	-4. 725533769	0. 328	0. 987	3. 25E-154 BM	RPS25
9. 68E-159	-3. 88954647	0. 917	0. 995	3. 26E-154 BM	RPS12
2. 02E-158	-4. 203890989	0. 344	0. 985	6. 80E-154 BM	RPS24
2. 15E-158	-4. 437889854	0. 249	0. 984	7. 25E-154 BM	RPL18
2. 36E-158	-4. 656246706	0. 312	0. 986	7. 96E-154 BM	RPL9
2. 91E-158	-4. 415355733	0. 213	0. 984	9. 82E-154 BM	RPS9
3. 19E-158	-4. 347204091	0. 292	0. 984	1. 08E-153 BM	RPL8
3. 21E-158	-4. 697800062	0. 245	0. 984	1. 08E-153 BM	RPS20
3. 96E-158	-4. 403467859	0. 372	0. 985	1. 34E-153 BM	RPL12
4. 02E-158	-4. 657250511	0. 221	0. 984	1. 36E-153 BM	RPS16
5. 01E-158	-4. 231020256	0. 328	0. 984	1. 69E-153 BM	RPL6
5. 62E-158	-4. 41533918	0. 209	0. 983	1. 89E-153 BM	RPS7
6. 00E-158	-4. 417280494	0. 209	0. 982	2. 02E-153 BM	RPL27
6. 07E-158	-4. 447754302	0. 375	0. 985	2. 05E-153 BM	RPS17
7. 08E-158	-4. 375892792	0. 241	0. 984	2. 39E-153 BM	RPL35
1. 06E-157	-4. 311731765	0. 249	0. 983	3. 59E-153 BM	RPL29
1. 11E-157	-4. 422363807	0. 209	0. 982	3. 75E-153 BM	RPL14
1. 40E-157	-4. 411983738	0. 415	0. 986	4. 70E-153 BM	RPS13
2. 81E-157	-3. 830468936	0. 589	0. 989	9. 46E-153 BM	MT-ATP6
5. 94E-157	-4. 464128717	0. 198	0. 981	2. 00E-152 BM	RPL36
6. 28E-157	-4. 554199479	0. 241	0. 982	2. 12E-152 BM	RPS29
7. 34E-157	-4. 377193648	0. 451	0. 986	2. 47E-152 BM	RPL31
5. 70E-156	-4. 421003359	0. 221	0. 979	1. 92E-151 BM	RPL10A
1. 44E-155	-4. 276723355	0. 134	0. 976	4. 86E-151 BM	RPS21
2. 39E-155	-4. 157478519	0. 138	0. 974	8. 05E-151 BM	GNB2L1
4. 86E-154	-3. 724021232	0. 498	0. 979	1. 64E-149 BM	RPS11
5. 05E-154	-3. 865883121	0. 372	0. 977	1. 70E-149 BM	RPL38
8. 43E-154	-4. 292991703	0. 233	0. 973	2. 84E-149 BM	RPS5
1. 78E-153	-4. 13971901	0. 217	0. 972	6. 01E-149 BM	RPL7A
5. 98E-153	-4. 214274189	0. 209	0. 971	2. 01E-148 BM	HLA-C
1. 50E-152	1. 064656925	0. 696	0. 12	5. 06E-148 BM	ISCA1
2. 36E-152	-3. 803517048	0. 225	0. 97	7. 94E-148 BM	RPL24
3. 27E-152	-3. 922080526	0. 348	0. 973	1. 10E-147 BM	HLA-A
5. 31E-152	-4. 169870726	0. 134	0. 963	1. 79E-147 BM	RPL23
1. 08E-151	-4. 190453849	0. 245	0. 969	3. 64E-147 BM	RPL5
7. 07E-151	-4. 060663093	0. 158	0. 963	2. 38E-146 BM	RPL22
1. 14E-149	-3. 243983636	0. 569	0. 977	3. 83E-145 BM	MT-ND1
4. 90E-149	-4. 243549516	0. 206	0. 959	1. 65E-144 BM	RPSA

1. 07E-147	-3. 546350487	0. 13	0. 952	3. 61E-143 BM	EEF1D
2. 57E-147	2. 325620001	0. 996	0. 829	8. 65E-143 BM	UBB
8. 87E-147	-4. 291978449	0. 126	0. 95	2. 99E-142 BM	RPS26
6. 35E-146	-3. 215125564	0. 419	0. 962	2. 14E-141 BM	NACA
1. 79E-145	-3. 718243478	0. 269	0. 953	6. 03E-141 BM	RPL4
1. 30E-144	-3. 833695577	0. 111	0. 945	4. 40E-140 BM	PFN1
1. 36E-144	-3. 875327035	0. 162	0. 946	4. 59E-140 BM	RPLP0
8. 25E-143	-2. 025896421	0. 957	0. 99	2. 78E-138 BM	UBA52
4. 18E-142	-4. 024964735	0. 186	0. 939	1. 41E-137 BM	CD52
2. 07E-139	-2. 926563797	0. 443	0. 951	6. 98E-135 BM	PFDN5
1. 98E-138	-3. 461710258	0. 071	0. 92	6. 67E-134 BM	TOMM7
1. 39E-137	-3. 376932588	0. 123	0. 923	4. 67E-133 BM	CFL1
2. 85E-136	-3. 545298339	0. 134	0. 921	9. 61E-132 BM	TXNIP
5. 59E-135	-3. 1637531	0. 138	0. 915	1. 88E-130 BM	COX4I1
2. 96E-133	-2. 953947069	0. 719	0. 99	9. 97E-129 BM	ACTB
3. 53E-133	-2. 205135596	0. 806	0. 977	1. 19E-128 BM	EIF1
1. 29E-132	-3. 618250409	0. 103	0. 906	4. 36E-128 BM	EEF1B2
2. 26E-131	1. 556623161	0. 972	0. 363	7. 61E-127 BM	FKBP8
1. 13E-130	-2. 951899234	0. 265	0. 913	3. 82E-126 BM	COX7C
6. 39E-128	-2. 986936685	0. 123	0. 894	2. 15E-123 BM	ARHGD1B
1. 96E-127	-3. 305357205	0. 091	0. 887	6. 62E-123 BM	NBEAL1
2. 30E-127	-3. 134020345	0. 138	0. 896	7. 75E-123 BM	HLA-E
2. 37E-127	-3. 267590972	0. 13	0. 893	7. 97E-123 BM	RPS10
1. 93E-126	1. 199745905	0. 688	0. 14	6. 49E-122 BM	PITHD1
1. 28E-125	-2. 677050001	0. 407	0. 941	4. 31E-121 BM	H3F3A
2. 39E-124	-3. 116776019	0. 063	0. 873	8. 07E-120 BM	HNRNPA1
2. 53E-124	-2. 851035874	0. 19	0. 894	8. 53E-120 BM	RPL36AL
8. 75E-123	-3. 031688219	0. 107	0. 874	2. 95E-118 BM	CORO1A
1. 40E-122	-2. 861416157	0. 253	0. 903	4. 73E-118 BM	MYL12A
5. 31E-121	-3. 02683593	0. 103	0. 869	1. 79E-116 BM	H3F3B
8. 29E-121	-3. 040251261	0. 17	0. 875	2. 79E-116 BM	EEF2
2. 23E-120	-3. 25962646	0. 142	0. 877	7. 51E-116 BM	ACTG1
4. 66E-119	-2. 667930545	0. 213	0. 877	1. 57E-114 BM	TMA7
2. 33E-118	-2. 633275016	0. 281	0. 889	7. 84E-114 BM	UQCRB
4. 95E-118	-2. 903819202	0. 055	0. 854	1. 67E-113 BM	DDX5
3. 55E-117	-2. 794973971	0. 273	0. 883	1. 20E-112 BM	PABPC1
3. 26E-116	-3. 127838784	0. 043	0. 844	1. 10E-111 BM	NPM1
3. 82E-115	-3. 209946849	0. 138	0. 855	1. 29E-110 BM	GAPDH
4. 49E-115	-3. 432230449	0. 174	0. 861	1. 51E-110 BM	CYBA
7. 69E-113	-4. 031866378	0. 142	0. 845	2. 59E-108 BM	S100A6
5. 43E-112	-2. 876750343	0. 083	0. 833	1. 83E-107 BM	SLC25A6
1. 33E-111	-2. 903384837	0. 099	0. 839	4. 49E-107 BM	RPL36A
1. 51E-111	-2. 778387933	0. 063	0. 83	5. 09E-107 BM	COMMD6
7. 83E-109	-2. 334558687	0. 391	0. 875	2. 64E-104 BM	ATP5L
8. 62E-109	-2. 938859447	0. 063	0. 822	2. 91E-104 BM	GLTSCR2
1. 35E-108	-2. 829270671	0. 083	0. 828	4. 54E-104 BM	EIF3E
5. 34E-108	-2. 847188431	0. 063	0. 819	1. 80E-103 BM	ARPC2
1. 10E-103	-2. 689508017	0. 067	0. 8	3. 70E-99 BM	PPIA
1. 76E-103	-2. 559187663	0. 553	0. 897	5. 92E-99 BM	SH3BGRL3
3. 14E-103	-2. 408410684	0. 85	0. 975	1. 06E-98 BM	FTH1
1. 09E-102	-2. 644578862	0. 119	0. 812	3. 66E-98 BM	HINT1

5. 38E-102	-2. 655098123	0. 063	0. 798	1. 81E-97 BM	ATP5G2
9. 80E-101	-2. 288320937	0. 344	0. 857	3. 30E-96 BM	ITM2B
1. 13E-100	-2. 435011786	0. 123	0. 805	3. 79E-96 BM	SRP14
1. 73E-100	-2. 723348268	0. 036	0. 784	5. 83E-96 BM	RPL17
4. 77E-100	-1. 766708452	0. 715	0. 92	1. 61E-95 BM	BTF3
1. 61E-98	-2. 955691705	0. 059	0. 782	5. 44E-94 BM	BTG1
2. 05E-95	-2. 466631297	0. 043	0. 761	6. 91E-91 BM	SUMO2
9. 62E-95	-2. 684234322	0. 063	0. 763	3. 24E-90 BM	EMP3
1. 59E-94	-3. 048966013	0. 091	0. 77	5. 34E-90 BM	VIM
3. 64E-94	-2. 504162585	0. 055	0. 761	1. 23E-89 BM	GMFG
1. 82E-93	-2. 54179051	0. 036	0. 751	6. 12E-89 BM	LAPTM5
3. 38E-93	-2. 541943213	0. 043	0. 753	1. 14E-88 BM	FXYD5
5. 39E-93	-2. 570716103	0. 02	0. 747	1. 82E-88 BM	PTPRC
7. 72E-93	-2. 632064444	0. 083	0. 762	2. 60E-88 BM	HSPA8
1. 16E-92	-2. 468763542	0. 055	0. 757	3. 91E-88 BM	SRSF5
5. 61E-92	-2. 522256585	0. 146	0. 779	1. 89E-87 BM	SARAF
7. 98E-92	-2. 349438549	0. 091	0. 77	2. 69E-87 BM	HMGB1
1. 08E-91	-4. 262613609	0. 19	0. 782	3. 65E-87 BM	S100A4
4. 75E-90	-2. 584357938	0. 099	0. 759	1. 60E-85 BM	CALM1
2. 35E-89	-2. 68412396	0. 055	0. 742	7. 91E-85 BM	CD37
2. 40E-89	-2. 460629638	0. 142	0. 762	8. 09E-85 BM	ARPC3
3. 66E-88	-2. 459570212	0. 036	0. 729	1. 23E-83 BM	CD48
1. 14E-87	-2. 419906241	0. 158	0. 762	3. 85E-83 BM	MT-ND5
1. 79E-87	-2. 448310169	0. 13	0. 757	6. 03E-83 BM	CALM2
1. 02E-84	-2. 126800899	0. 368	0. 81	3. 45E-80 BM	UBC
1. 59E-84	-2. 316630454	0. 071	0. 724	5. 35E-80 BM	SUB1
4. 03E-84	-2. 385167026	0. 099	0. 74	1. 36E-79 BM	NAP1L1
1. 06E-82	-2. 276095535	0. 067	0. 718	3. 57E-78 BM	HNRNPA2B1
2. 40E-82	-2. 167677206	0. 194	0. 749	8. 09E-78 BM	EIF3K
3. 19E-82	-2. 810876379	0. 063	0. 714	1. 07E-77 BM	HCST
1. 73E-81	-2. 244931145	0. 047	0. 704	5. 82E-77 BM	EDF1
8. 82E-81	1. 164167793	0. 964	0. 406	2. 97E-76 BM	GYPC
1. 15E-80	1. 174953013	0. 842	0. 292	3. 88E-76 BM	BSG
1. 66E-79	-2. 21872198	0. 04	0. 691	5. 60E-75 BM	EIF3F
1. 94E-79	-2. 186150627	0. 059	0. 701	6. 53E-75 BM	COX6C
3. 18E-79	-2. 187866201	0. 087	0. 707	1. 07E-74 BM	SNRPD2
6. 45E-78	-2. 206257252	0. 095	0. 702	2. 17E-73 BM	MYL12B
1. 23E-77	-2. 259577677	0. 071	0. 695	4. 14E-73 BM	LIMD2
1. 83E-77	-2. 73774542	0. 043	0. 684	6. 18E-73 BM	LDHB
2. 90E-75	-2. 315725234	0. 138	0. 707	9. 77E-71 BM	ARPC1B
1. 09E-74	-3. 524495793	0. 059	0. 678	3. 66E-70 BM	LTB
2. 94E-74	-2. 110610496	0. 083	0. 684	9. 92E-70 BM	GPSM3
1. 93E-72	-2. 540880658	0. 079	0. 675	6. 51E-68 BM	IFITM2
2. 16E-72	-2. 215245494	0. 012	0. 646	7. 27E-68 BM	ZNF90
6. 02E-72	-2. 107705322	0. 123	0. 687	2. 03E-67 BM	PSME1
7. 16E-72	-2. 001522459	0. 099	0. 68	2. 41E-67 BM	ATP6V1G1
1. 92E-71	-2. 222215617	0. 04	0. 651	6. 46E-67 BM	ZFAS1
4. 29E-71	-2. 446555467	0. 051	0. 657	1. 45E-66 BM	GIMAP7
1. 01E-70	-2. 091825573	0. 107	0. 68	3. 40E-66 BM	ALDOA
1. 73E-70	-2. 071565645	0. 063	0. 662	5. 82E-66 BM	CIRBP
1. 84E-70	-1. 948224661	0. 206	0. 709	6. 18E-66 BM	CHCHD2

2. 87E-69	-1. 273291078	0. 941	0. 953	9. 67E-65 BM	SERF2
8. 05E-69	-2. 004124878	0. 126	0. 68	2. 71E-64 BM	HSP90AA1
8. 66E-69	-2. 052747885	0. 051	0. 643	2. 92E-64 BM	SSR2
6. 13E-68	-2. 043996605	0. 063	0. 643	2. 06E-63 BM	EIF3H
1. 29E-67	-2. 073560766	0. 04	0. 635	4. 36E-63 BM	PNISR
1. 43E-67	-1. 988506209	0. 13	0. 668	4. 83E-63 BM	COX7A2
5. 82E-67	-2. 058847275	0. 024	0. 624	1. 96E-62 BM	YWHAB
2. 45E-66	-2. 426245287	0. 055	0. 635	8. 26E-62 BM	S100A10
3. 74E-65	-2. 215286367	0. 976	0. 979	1. 26E-60 BM	FTL
4. 03E-65	-1. 994237352	0. 059	0. 632	1. 36E-60 BM	SSR4
4. 16E-65	-2. 034630377	0. 071	0. 637	1. 40E-60 BM	EIF4A2
4. 46E-65	-2. 182279739	0. 079	0. 641	1. 50E-60 BM	NHSL2
6. 16E-65	-1. 942496631	0. 087	0. 643	2. 07E-60 BM	ATP6VOE1
2. 06E-64	-1. 786278393	0. 285	0. 719	6. 95E-60 BM	COX6B1
3. 34E-64	-1. 956857508	0. 067	0. 626	1. 12E-59 BM	C19orf43
4. 13E-64	-2. 141843562	0. 115	0. 648	1. 39E-59 BM	C14orf2
1. 70E-63	1. 040489819	0. 893	0. 407	5. 74E-59 BM	GABARAPL2
6. 91E-63	-1. 949982335	0. 016	0. 6	2. 33E-58 BM	ERP29
1. 10E-62	-1. 939462798	0. 055	0. 617	3. 71E-58 BM	EIF3L
1. 74E-62	-2. 132770543	0. 043	0. 612	5. 85E-58 BM	EVL
1. 81E-62	-1. 822523864	0. 245	0. 705	6. 08E-58 BM	PPDPF
2. 35E-62	-1. 847452155	0. 111	0. 642	7. 91E-58 BM	NDUFA4
2. 46E-62	-2. 059466361	0. 047	0. 611	8. 29E-58 BM	RAC2
1. 11E-61	-2. 689429565	0. 115	0. 636	3. 73E-57 BM	SRGN
1. 69E-61	-1. 953878689	0. 004	0. 582	5. 68E-57 BM	N4BP2L2
1. 81E-61	-3. 30588569	0. 043	0. 603	6. 11E-57 BM	IL32
6. 01E-61	-1. 923933884	0. 083	0. 618	2. 02E-56 BM	COX5B
7. 55E-61	-1. 934715928	0. 071	0. 62	2. 54E-56 BM	UQCRH
4. 87E-60	-2. 035857158	0. 04	0. 591	1. 64E-55 BM	LSP1
1. 66E-59	-1. 927801409	0. 04	0. 588	5. 58E-55 BM	EIF3G
1. 92E-59	-2. 186155722	0. 04	0. 592	6. 48E-55 BM	ACO90498.1
3. 00E-59	-1. 943837834	0. 075	0. 605	1. 01E-54 BM	SERP1
5. 15E-59	-1. 909054882	0. 032	0. 583	1. 73E-54 BM	ENO1
6. 37E-59	-1. 854493646	0. 055	0. 597	2. 15E-54 BM	APRT
8. 38E-59	-1. 963553918	0. 04	0. 588	2. 82E-54 BM	TRAF3IP3
9. 23E-59	-2. 886257041	0. 028	0. 578	3. 11E-54 BM	TRAC
1. 52E-58	-1. 434711121	0. 605	0. 798	5. 12E-54 BM	CCNI
4. 20E-58	-1. 888792255	0. 047	0. 585	1. 42E-53 BM	ARL6IP5
3. 28E-57	-2. 156418366	0. 04	0. 575	1. 11E-52 BM	CLIC1
7. 03E-57	-1. 930062082	0. 012	0. 559	2. 37E-52 BM	TIPIN
2. 68E-56	-1. 873239359	0. 008	0. 553	9. 04E-52 BM	SLC25A3
2. 79E-56	-1. 849000467	0. 047	0. 574	9. 39E-52 BM	SON
3. 75E-56	-1. 434190328	0. 557	0. 799	1. 26E-51 BM	OST4
3. 87E-56	-1. 91682277	0. 047	0. 576	1. 30E-51 BM	ARPC5
6. 97E-56	-1. 844579749	0. 059	0. 583	2. 35E-51 BM	PSMA7
1. 14E-55	-2. 272475388	0. 055	0. 576	3. 82E-51 BM	ITGB2
1. 42E-55	-2. 014703137	0. 043	0. 568	4. 77E-51 BM	FYB
5. 05E-55	-1. 845227832	0. 032	0. 559	1. 70E-50 BM	HNRNPDL
5. 87E-55	-1. 811664271	0. 016	0. 55	1. 98E-50 BM	UXT
2. 94E-54	-1. 985516893	0. 012	0. 543	9. 90E-50 BM	GIMAP4
3. 56E-54	-1. 900611772	0. 024	0. 549	1. 20E-49 BM	VAMP8

1. 08E-53	-3. 897294397	0. 174	0. 617	3. 65E-49 BM	CD74
3. 41E-53	-1. 851286086	0. 051	0. 559	1. 15E-48 BM	SEPT7
4. 58E-53	-1. 737122083	0. 02	0. 544	1. 54E-48 BM	RAN
1. 22E-52	-1. 774014885	0. 032	0. 547	4. 11E-48 BM	ARL6IP4
2. 35E-52	-2. 430630078	0. 04	0. 546	7. 91E-48 BM	CD3D
2. 51E-52	-1. 776324745	0. 055	0. 555	8. 47E-48 BM	SMDT1
3. 94E-52	-1. 889738338	0. 02	0. 535	1. 33E-47 BM	CLEC2D
5. 03E-52	-1. 770692745	0. 02	0. 534	1. 69E-47 BM	TMEM258
6. 23E-52	-1. 839301744	0. 028	0. 537	2. 10E-47 BM	CD53
6. 36E-52	-1. 758401278	0. 047	0. 551	2. 14E-47 BM	CAPZB
1. 37E-51	-1. 746083136	0. 036	0. 541	4. 61E-47 BM	NDUFS5
1. 47E-51	-2. 656881199	0. 055	0. 55	4. 97E-47 BM	S100A11
1. 65E-51	-2. 657831189	0. 083	0. 564	5. 56E-47 BM	NEAT1
2. 04E-51	-2. 125563678	0. 024	0. 532	6. 86E-47 BM	ANXA1
3. 52E-51	-1. 717226484	0. 091	0. 572	1. 19E-46 BM	ANAPC16
5. 98E-51	-1. 768410188	0. 016	0. 528	2. 02E-46 BM	MIF
6. 20E-51	-1. 762343592	0. 02	0. 532	2. 09E-46 BM	HMGN1
1. 49E-50	-1. 769388595	0. 02	0. 524	5. 03E-46 BM	RBM39
3. 25E-50	-1. 818484719	0. 043	0. 538	1. 10E-45 BM	C6orf48
3. 26E-50	-1. 828161557	0. 012	0. 517	1. 10E-45 BM	EVI2B
4. 36E-50	-1. 816298378	0. 047	0. 537	1. 47E-45 BM	PSMB9
4. 59E-50	-1. 687876824	0. 016	0. 521	1. 55E-45 BM	SPCS1
3. 46E-49	-1. 776666737	0. 032	0. 522	1. 17E-44 BM	COX8A
4. 60E-49	-1. 732410081	0. 051	0. 533	1. 55E-44 BM	HIGD2A
9. 38E-49	-1. 708383818	0. 055	0. 533	3. 16E-44 BM	HNRNPC
1. 36E-48	-1. 769935267	0. 091	0. 558	4. 57E-44 BM	RHOA
1. 51E-48	-1. 714400321	0. 016	0. 51	5. 08E-44 BM	VAMP2
1. 64E-48	-1. 216470477	0. 877	0. 887	5. 52E-44 BM	MYL6
2. 34E-48	-1. 733022366	0. 028	0. 515	7. 90E-44 BM	H2AFZ
2. 43E-48	-1. 666335275	0. 032	0. 517	8. 18E-44 BM	RSL24D1
2. 52E-48	-1. 691210874	0. 043	0. 525	8. 49E-44 BM	ATP50
2. 58E-48	-1. 897221182	0. 016	0. 508	8. 70E-44 BM	RARRES3
4. 10E-48	-2. 105130139	0. 032	0. 518	1. 38E-43 BM	PLAC8
5. 47E-48	-1. 738089776	0. 036	0. 517	1. 84E-43 BM	NDUFB2
1. 02E-47	-1. 747805668	0. 028	0. 511	3. 44E-43 BM	CAP1
1. 04E-47	-1. 736077662	0. 071	0. 536	3. 52E-43 BM	TPM3
1. 12E-47	-1. 791507789	0. 024	0. 511	3. 79E-43 BM	AES
1. 13E-47	-1. 670933089	0. 099	0. 553	3. 82E-43 BM	TMBIM6
1. 22E-47	-1. 668322586	0. 02	0. 505	4. 12E-43 BM	CUTA
1. 84E-47	-1. 63987852	0. 036	0. 52	6. 21E-43 BM	NDUFB11
2. 45E-47	-1. 658921828	0. 296	0. 652	8. 24E-43 BM	CDC42
3. 52E-47	-1. 561210793	0. 285	0. 636	1. 18E-42 BM	HNRNPK
1. 06E-46	-1. 602577905	0. 154	0. 574	3. 57E-42 BM	MORF4L1
1. 12E-46	-1. 618892665	0. 107	0. 552	3. 77E-42 BM	USMG5
1. 18E-46	-1. 633092684	0. 032	0. 508	3. 96E-42 BM	C19orf53
1. 41E-46	-1. 684099189	0. 043	0. 514	4. 74E-42 BM	PRR13
1. 87E-46	-1. 655664399	0. 036	0. 508	6. 29E-42 BM	STK4
2. 19E-46	-1. 746047164	0. 036	0. 507	7. 38E-42 BM	ACAP1
2. 49E-46	-1. 668100826	0. 047	0. 513	8. 39E-42 BM	RBM3
4. 51E-46	-1. 670923188	0. 043	0. 511	1. 52E-41 BM	NACA2
6. 75E-46	-1. 624703107	0. 055	0. 517	2. 27E-41 BM	C4orf3

6.82E-46	-2.120608465	0.02	0.495	2.30E-41 BM	CXCR4
7.69E-46	-1.677581976	0.036	0.503	2.59E-41 BM	HMG2
9.40E-46	-1.708470375	0.04	0.505	3.17E-41 BM	PPP1CA
1.04E-45	-1.59654198	0.063	0.522	3.50E-41 BM	UBXN1
1.05E-45	-1.592440691	0.134	0.563	3.55E-41 BM	BRK1
2.79E-45	-1.652888204	0.043	0.504	9.42E-41 BM	SEC61G
3.13E-45	-1.615816137	0.221	0.604	1.05E-40 BM	HSP90AB1
3.48E-45	-1.791968067	0.067	0.52	1.17E-40 BM	TSC22D3
3.99E-45	-2.217840374	0.055	0.511	1.35E-40 BM	TRBC2
6.42E-45	-1.612220574	0.15	0.56	2.16E-40 BM	COX6A1
7.75E-45	-1.492632319	0.336	0.648	2.61E-40 BM	UBL5
7.81E-45	-1.767554023	0.067	0.517	2.63E-40 BM	LAMTOR4
9.53E-45	-1.965665808	0.032	0.494	3.21E-40 BM	CD3E
1.09E-44	-1.606568652	0.004	0.474	3.66E-40 BM	TBCA
1.48E-44	-1.714240765	0.032	0.491	5.00E-40 BM	PPIB
3.67E-44	-1.683929817	0.04	0.497	1.24E-39 BM	CD44
4.02E-44	-1.712737086	0.012	0.475	1.35E-39 BM	PSME2
5.60E-44	-1.62509504	0.047	0.5	1.89E-39 BM	SRSF3
1.33E-43	-1.589411041	0.024	0.48	4.48E-39 BM	ICAM3
1.38E-43	-1.660710552	0.012	0.472	4.65E-39 BM	LRRFIP1
1.55E-43	-1.639312394	0.055	0.501	5.21E-39 BM	GSTK1
2.13E-43	-1.858614555	0.04	0.49	7.18E-39 BM	SELL
2.53E-43	-1.578767201	0.036	0.488	8.53E-39 BM	EIF3M
4.07E-43	-1.687537179	0.075	0.511	1.37E-38 BM	POLR2L
4.13E-43	-1.592095721	0.063	0.503	1.39E-38 BM	PARK7
4.96E-43	-1.624055323	0.024	0.476	1.67E-38 BM	FUS
5.19E-43	-1.655354215	0.036	0.483	1.75E-38 BM	SEC61B
5.46E-43	-1.395287801	0.407	0.68	1.84E-38 BM	UQCR11
5.81E-43	-1.566513338	0.04	0.487	1.96E-38 BM	TRMT112
7.54E-43	-2.185880504	0.024	0.476	2.54E-38 BM	CD7
8.46E-43	-1.733468304	0.024	0.475	2.85E-38 BM	IL2RG
1.00E-42	-1.54616464	0.091	0.523	3.37E-38 BM	UQCR10
1.58E-42	-1.611994481	0.075	0.506	5.31E-38 BM	YWHAZ
1.84E-42	-1.603644759	0.032	0.477	6.21E-38 BM	RPS27L
2.08E-42	-1.562495466	0.024	0.472	7.01E-38 BM	EIF3D
2.15E-42	-1.62332619	0.024	0.472	7.25E-38 BM	POLR2J3
2.39E-42	-1.580172678	0.055	0.494	8.07E-38 BM	DAZAP2
7.52E-42	-1.554903733	0.024	0.468	2.53E-37 BM	ATP5G3
8.59E-42	-1.650475858	0.012	0.459	2.89E-37 BM	DBI
1.36E-41	-2.04423487	0.095	0.51	4.59E-37 BM	TSPO
1.57E-41	-1.658789402	0.059	0.489	5.30E-37 BM	TPI1
1.86E-41	-1.529432331	0.028	0.469	6.26E-37 BM	EIF4B
3.35E-41	-1.537089749	0.091	0.507	1.13E-36 BM	NEDD8
3.58E-41	-1.605858149	0.012	0.456	1.21E-36 BM	SLC25A5
3.73E-41	-1.730238491	0.02	0.46	1.26E-36 BM	LCK
4.41E-41	-1.538086919	0.028	0.465	1.49E-36 BM	HNRNPF
4.56E-41	-1.534027114	0.012	0.453	1.54E-36 BM	ABRACL
6.39E-41	-1.517030695	0.063	0.492	2.15E-36 BM	MZT2B
6.45E-41	-1.498642715	0.028	0.464	2.17E-36 BM	PSMB1
2.10E-40	-2.094741616	0.067	0.487	7.09E-36 BM	GSTP1
2.27E-40	-2.309720074	0.016	0.452	7.66E-36 BM	IL7R

2.28E-40	-1.511991738	0.028	0.46	7.69E-36 BM	ATP5A1
2.88E-40	-1.544155338	0.107	0.512	9.71E-36 BM	ACTR3
3.05E-40	-1.469798439	0.012	0.447	1.03E-35 BM	ERH
4.17E-40	-1.271415857	0.692	0.783	1.41E-35 BM	MTRNR2L8
5.95E-40	-1.497529967	0	0.436	2.00E-35 BM	SF1
6.34E-40	-1.485116293	0.146	0.534	2.13E-35 BM	CNBP
6.48E-40	-1.634672486	0.02	0.451	2.18E-35 BM	LITAF
7.38E-40	-1.551519555	0.024	0.455	2.49E-35 BM	NCL
2.11E-39	-1.483267788	0.134	0.52	7.11E-35 BM	NDUFA1
2.15E-39	-1.471240129	0.016	0.444	7.24E-35 BM	SNRPG
2.31E-39	-1.503715007	0.036	0.459	7.78E-35 BM	NSA2
2.61E-39	-1.499539409	0	0.431	8.79E-35 BM	MTDH
4.39E-39	-1.526422403	0.043	0.464	1.48E-34 BM	C9orf16
7.87E-39	-1.492327482	0.043	0.46	2.65E-34 BM	PGK1
9.24E-39	-1.469496692	0.051	0.466	3.11E-34 BM	UBE2D2
1.10E-38	-1.612663026	0.051	0.469	3.72E-34 BM	BIN2
1.20E-38	-1.525985447	0.024	0.444	4.06E-34 BM	FAM65B
2.12E-38	-1.741350228	0.067	0.477	7.15E-34 BM	NOSIP
2.56E-38	-1.519782827	0.043	0.459	8.61E-34 BM	UQCRQ
3.71E-38	-1.42605721	0.032	0.451	1.25E-33 BM	SPCS2
3.89E-38	-1.509238911	0.02	0.441	1.31E-33 BM	TMEM123
4.16E-38	-1.453604695	0.024	0.441	1.40E-33 BM	SYF2
4.48E-38	-1.609301296	0.016	0.436	1.51E-33 BM	PRELID1
6.15E-38	-1.457857845	0.016	0.434	2.07E-33 BM	C11orf31
2.09E-37	-1.466565237	0.04	0.447	7.06E-33 BM	ATPIF1
2.73E-37	-1.4267137	0.024	0.434	9.18E-33 BM	HNRNPA0
4.66E-37	-1.540705375	0.047	0.449	1.57E-32 BM	CSTB
5.78E-37	-1.599600306	0.024	0.436	1.95E-32 BM	LY6E
7.30E-37	-1.444815276	0.028	0.435	2.46E-32 BM	NDUFB9
7.58E-37	-1.536703849	0.036	0.44	2.56E-32 BM	FOXP1
2.19E-36	-1.398580758	0.012	0.42	7.39E-32 BM	MINOS1
2.57E-36	-1.456691942	0.099	0.48	8.66E-32 BM	EID1
3.30E-36	-1.33921621	0.352	0.611	1.11E-31 BM	PCBP2
4.77E-36	-1.440154989	0.024	0.424	1.61E-31 BM	HNRNPA3
5.75E-36	-1.732799351	0.016	0.418	1.94E-31 BM	CD2
8.41E-36	-1.397101578	0.024	0.423	2.83E-31 BM	SNRPE
8.64E-36	-1.424792876	0.059	0.45	2.91E-31 BM	GTF3A
8.79E-36	-1.483531344	0.012	0.413	2.96E-31 BM	SET
3.36E-35	-1.514319661	0.032	0.424	1.13E-30 BM	C12orf57
3.37E-35	-1.440443594	0.008	0.405	1.13E-30 BM	ANKRD12
4.21E-35	-1.449469379	0.016	0.413	1.42E-30 BM	TCF25
4.55E-35	-1.466072408	0.079	0.461	1.53E-30 BM	PCBP1
5.44E-35	-1.421074203	0.043	0.432	1.83E-30 BM	PSMB8
5.60E-35	-2.528521029	0.043	0.43	1.89E-30 BM	HLA-DPB1
7.17E-35	-1.377668535	0.079	0.462	2.42E-30 BM	SERBP1
1.05E-34	-1.432859595	0.008	0.401	3.53E-30 BM	SEPT6
1.79E-34	-1.511839782	0.012	0.402	6.02E-30 BM	JAK1
1.90E-34	-1.441656202	0.04	0.425	6.39E-30 BM	NDUFB7
2.02E-34	-1.390526952	0.047	0.43	6.79E-30 BM	MYEOV2
2.21E-34	-1.452321056	0.024	0.413	7.45E-30 BM	PCSK7
2.99E-34	-1.372639904	0.051	0.431	1.01E-29 BM	SNU13

3. 23E-34	-1. 436928297	0. 024	0. 411	1. 09E-29 BM	FAM49B
3. 28E-34	-1. 348751191	0. 02	0. 407	1. 11E-29 BM	C14orf166
3. 37E-34	-2. 373128832	0. 051	0. 43	1. 14E-29 BM	CTSS
4. 70E-34	-1. 502173203	0. 028	0. 413	1. 58E-29 BM	FKBP1A
4. 72E-34	-1. 394457782	0. 04	0. 422	1. 59E-29 BM	LDHA
4. 92E-34	-1. 344224413	0. 067	0. 446	1. 66E-29 BM	ATP5J
6. 29E-34	-1. 541813193	0	0. 388	2. 12E-29 BM	CRIP1
6. 78E-34	-1. 383623625	0. 016	0. 401	2. 28E-29 BM	LUC7L3
6. 95E-34	-1. 500080249	0. 032	0. 417	2. 34E-29 BM	LCP1
1. 06E-33	-1. 431192006	0. 028	0. 411	3. 58E-29 BM	RNASSET2
1. 34E-33	-1. 611072555	0. 004	0. 388	4. 53E-29 BM	CD3G
1. 46E-33	-1. 397175186	0. 012	0. 395	4. 91E-29 BM	ACTR2
1. 57E-33	-1. 578680435	0. 02	0. 402	5. 29E-29 BM	JUNB
1. 76E-33	-1. 416197648	0. 024	0. 404	5. 93E-29 BM	NOP10
1. 84E-33	-1. 301118287	0. 182	0. 519	6. 21E-29 BM	SAP18
3. 31E-33	-1. 54720225	0. 075	0. 449	1. 11E-28 BM	CD99
4. 31E-33	-1. 359201804	0. 016	0. 395	1. 45E-28 BM	KMT2E
4. 59E-33	-1. 40066787	0. 016	0. 396	1. 55E-28 BM	HLA-F
5. 30E-33	-1. 410493822	0. 067	0. 438	1. 79E-28 BM	PKM
5. 95E-33	-1. 321733811	0. 012	0. 391	2. 01E-28 BM	RSL1D1
8. 45E-33	-1. 345819465	0. 095	0. 454	2. 85E-28 BM	C11orf58
9. 15E-33	-1. 349087293	0. 024	0. 399	3. 08E-28 BM	PEBP1
1. 07E-32	-1. 556284808	0. 02	0. 395	3. 61E-28 BM	ZFP36L2
1. 08E-32	-1. 342107315	0. 071	0. 433	3. 63E-28 BM	COX7A2L
1. 21E-32	-1. 342266651	0. 024	0. 398	4. 07E-28 BM	LSM7
1. 28E-32	-1. 47172179	0. 079	0. 442	4. 31E-28 BM	PNRC1
1. 32E-32	-1. 374179537	0. 091	0. 446	4. 44E-28 BM	NDUFA11
1. 51E-32	-1. 33938382	0. 024	0. 396	5. 08E-28 BM	SRSF2
1. 58E-32	-1. 38515714	0. 028	0. 402	5. 31E-28 BM	ATP5I
1. 79E-32	-1. 383376987	0. 008	0. 383	6. 02E-28 BM	RCS1D1
2. 01E-32	-1. 350624915	0. 02	0. 392	6. 79E-28 BM	SRRM1
2. 10E-32	-1. 373409241	0. 024	0. 396	7. 09E-28 BM	TUBB
2. 34E-32	-1. 34047257	0. 02	0. 392	7. 88E-28 BM	PRRC2C
2. 48E-32	-1. 314698079	0. 012	0. 385	8. 35E-28 BM	
2. 67E-32	-1. 459988207	0. 008	0. 383	9. 01E-28 BM	PPP2R5C
3. 44E-32	-1. 648655957	0. 016	0. 387	1. 16E-27 BM	MYO1F
3. 65E-32	-1. 280510066	0. 004	0. 376	1. 23E-27 BM	SNRPF
3. 85E-32	-1. 379288003	0. 071	0. 434	1. 30E-27 BM	TRAPPC1
4. 36E-32	-1. 314761074	0. 024	0. 393	1. 47E-27 BM	FBL
8. 15E-32	-1. 295954166	0. 024	0. 39	2. 75E-27 BM	ATP5H
1. 03E-31	-2. 211028029	0. 04	0. 405	3. 47E-27 BM	TRBC1
1. 06E-31	-1. 396525872	0. 032	0. 396	3. 57E-27 BM	MSN
1. 09E-31	-1. 318984825	0. 008	0. 377	3. 67E-27 BM	CYTIP
1. 51E-31	-1. 31721418	0. 012	0. 381	5. 09E-27 BM	RSRP1
1. 70E-31	-1. 399707068	0. 012	0. 378	5. 73E-27 BM	ANXA6
1. 79E-31	-1. 283473894	0. 032	0. 395	6. 04E-27 BM	TOMM20
1. 83E-31	-1. 309223122	0. 008	0. 374	6. 16E-27 BM	SNRPB2
1. 98E-31	-1. 342656803	0. 079	0. 432	6. 65E-27 BM	COPE
2. 27E-31	-1. 511565025	0. 024	0. 388	7. 64E-27 BM	C1orf162
2. 78E-31	-1. 601566787	0. 016	0. 38	9. 38E-27 BM	ANXA2
2. 90E-31	-1. 307424291	0. 008	0. 372	9. 76E-27 BM	SNHG8

15-Sep

3. 15E-31	-1. 303857958	0. 036	0. 396	1. 06E-26 BM	ATP5F1
3. 28E-31	-1. 31759511	0. 012	0. 375	1. 11E-26 BM	EIF2S3
3. 71E-31	-1. 453545757	0. 209	0. 51	1. 25E-26 BM	UCP2
4. 17E-31	-1. 303092306	0. 119	0. 458	1. 41E-26 BM	JTB
4. 21E-31	-1. 316327579	0. 008	0. 372	1. 42E-26 BM	DDX24
5. 22E-31	-1. 366369593	0. 028	0. 387	1. 76E-26 BM	SEC11A
6. 27E-31	-1. 301239484	0. 008	0. 369	2. 11E-26 BM	COX5A
6. 55E-31	-1. 303127822	0. 016	0. 376	2. 21E-26 BM	SNRNP
6. 98E-31	-1. 311353179	0. 02	0. 379	2. 35E-26 BM	HNRNPU
7. 70E-31	-1. 27918609	0. 012	0. 372	2. 59E-26 BM	XRCC5
1. 11E-30	-1. 434237483	0. 008	0. 367	3. 75E-26 BM	IRF1
1. 48E-30	-1. 405811817	0. 043	0. 402	4. 98E-26 BM	TUBA1B
1. 49E-30	-1. 22756156	0. 051	0. 409	5. 02E-26 BM	NDUFB4
1. 78E-30	-1. 369103524	0. 079	0. 424	6. 01E-26 BM	ARPC4
1. 85E-30	-1. 321579197	0. 008	0. 365	6. 22E-26 BM	ATM
1. 85E-30	-1. 326128497	0. 206	0. 504	6. 22E-26 BM	COX7B
2. 19E-30	-1. 326884906	0. 032	0. 389	7. 37E-26 BM	GNG5
2. 21E-30	-1. 306722215	0. 012	0. 368	7. 46E-26 BM	CDC42SE2
2. 76E-30	-1. 286070056	0. 024	0. 378	9. 29E-26 BM	HNRNPM
2. 78E-30	-1. 556696024	0. 004	0. 36	9. 35E-26 BM	CD63
3. 06E-30	-1. 303035042	0. 024	0. 379	1. 03E-25 BM	DDX17
3. 13E-30	-1. 316715314	0. 02	0. 374	1. 05E-25 BM	PSMA4
3. 30E-30	-1. 319585099	0. 012	0. 366	1. 11E-25 BM	ARGLU1
3. 75E-30	-1. 303952559	0. 024	0. 378	1. 26E-25 BM	ARF6
4. 01E-30	-1. 304450365	0. 012	0. 366	1. 35E-25 BM	CELF2
4. 16E-30	-1. 370132016	0. 02	0. 373	1. 40E-25 BM	GLRX
4. 72E-30	-1. 305183364	0. 02	0. 372	1. 59E-25 BM	S1PR4
5. 34E-30	-1. 285518948	0. 036	0. 389	1. 80E-25 BM	EIF4G2
7. 84E-30	-1. 257630355	0. 024	0. 375	2. 64E-25 BM	SRP9
9. 89E-30	-1. 173623931	0. 063	0. 412	3. 33E-25 BM	NDUFB8
1. 00E-29	-1. 323682616	0. 016	0. 366	3. 37E-25 BM	TNRC6B
1. 19E-29	-1. 272294405	0. 036	0. 386	4. 00E-25 BM	PSMB3
1. 20E-29	-1. 348265259	0. 079	0. 42	4. 03E-25 BM	NDUFB1
1. 23E-29	-1. 270625443	0. 087	0. 427	4. 15E-25 BM	DAD1
1. 33E-29	-1. 233198291	0. 016	0. 365	4. 48E-25 BM	UBE2I
1. 33E-29	-1. 274192051	0. 008	0. 358	4. 48E-25 BM	MPHOSPH8
1. 36E-29	-1. 348962059	0. 047	0. 391	4. 57E-25 BM	LEPROTL1
1. 43E-29	-1. 274519796	0. 04	0. 385	4. 81E-25 BM	SF3B5
2. 03E-29	-1. 249269209	0. 012	0. 36	6. 85E-25 BM	CIB1
2. 25E-29	-1. 356189602	0. 051	0. 397	7. 57E-25 BM	CCND3
2. 27E-29	-1. 227100179	0. 02	0. 366	7. 63E-25 BM	SSBP1
2. 29E-29	-1. 305372756	0. 012	0. 359	7. 71E-25 BM	RHOG
2. 42E-29	-1. 291699927	0. 032	0. 376	8. 14E-25 BM	RABAC1
3. 09E-29	-1. 237272343	0. 036	0. 382	1. 04E-24 BM	NDUFB10
3. 14E-29	-1. 234179668	0. 008	0. 354	1. 06E-24 BM	LINC00493
3. 39E-29	-1. 261362488	0. 012	0. 359	1. 14E-24 BM	TNFAIP8
3. 41E-29	-1. 219362897	0. 245	0. 558	1. 15E-24 BM	GPX4
3. 49E-29	-1. 307411945	0. 004	0. 35	1. 18E-24 BM	PLP2
3. 70E-29	-1. 279631802	0. 02	0. 364	1. 25E-24 BM	CAPZA1
5. 17E-29	-1. 331139441	0. 016	0. 359	1. 74E-24 BM	IFI16
8. 45E-29	-1. 248531936	0. 008	0. 35	2. 85E-24 BM	PRPF38B

1. 29E-28	-1. 276394637	0. 016	0. 356	4. 35E-24 BM	GIMAP1
1. 37E-28	-1. 280542156	0. 016	0. 356	4. 61E-24 BM	OSTF1
1. 43E-28	-1. 804285779	0. 02	0. 359	4. 80E-24 BM	ID2
1. 61E-28	-1. 284408386	0. 016	0. 355	5. 43E-24 BM	TSTD1
1. 65E-28	-1. 257131809	0. 016	0. 355	5. 57E-24 BM	EVI2A
1. 91E-28	-1. 38920774	0. 063	0. 396	6. 45E-24 BM	ISG20
2. 24E-28	-1. 269841252	0. 04	0. 376	7. 55E-24 BM	DRAP1
2. 33E-28	-1. 203557541	0. 016	0. 354	7. 86E-24 BM	NDUFA12
2. 61E-28	-2. 748150563	0. 095	0. 42	8. 79E-24 BM	LGALS1
3. 09E-28	-1. 251294974	0. 028	0. 364	1. 04E-23 BM	CCDC85B
3. 55E-28	-1. 206058821	0. 02	0. 356	1. 20E-23 BM	SHFM1
4. 38E-28	-1. 291590011	0. 071	0. 407	1. 48E-23 BM	POMP
4. 57E-28	-1. 214453019	0. 028	0. 362	1. 54E-23 BM	PSMA1
5. 61E-28	-1. 284614591	0. 02	0. 354	1. 89E-23 BM	PDIA3
5. 91E-28	-1. 273573329	0. 012	0. 348	1. 99E-23 BM	RNF213
5. 93E-28	-1. 209722176	0. 012	0. 346	2. 00E-23 BM	DDX18
8. 45E-28	-1. 21196378	0. 024	0. 356	2. 85E-23 BM	MRPS21
1. 10E-27	-1. 224917073	0. 024	0. 355	3. 71E-23 BM	SRSF7
1. 12E-27	-1. 19817208	0. 028	0. 361	3. 76E-23 BM	HSPE1
1. 18E-27	-1. 223504751	0. 032	0. 362	3. 96E-23 BM	SEPT9
1. 27E-27	-1. 202985506	0. 02	0. 351	4. 29E-23 BM	ANXA11
1. 32E-27	-1. 125914905	0. 557	0. 677	4. 44E-23 BM	YBX1
1. 44E-27	-1. 239535463	0. 028	0. 358	4. 84E-23 BM	SCAND1
1. 57E-27	-1. 214135014	0. 012	0. 342	5. 29E-23 BM	ELF1
1. 65E-27	-1. 402670935	0. 178	0. 484	5. 56E-23 BM	TAGLN2
1. 94E-27	-1. 199599586	0. 024	0. 353	6. 53E-23 BM	PPP1R2
1. 94E-27	-1. 18549959	0. 004	0. 334	6. 54E-23 BM	PPIG
2. 07E-27	-1. 19583393	0. 024	0. 357	6. 96E-23 BM	GDI2
2. 25E-27	-2. 29640526	0. 04	0. 367	7. 57E-23 BM	HLA-DPA1
2. 27E-27	-1. 191512267	0. 012	0. 341	7. 66E-23 BM	NDUFS6
2. 97E-27	-1. 169955327	0. 028	0. 356	9. 99E-23 BM	SF3B6
3. 00E-27	-1. 179789492	0. 008	0. 336	1. 01E-22 BM	CHMP4A
3. 12E-27	-2. 595264891	0. 032	0. 359	1. 05E-22 BM	HLA-DRB1
4. 08E-27	-1. 155205361	0. 004	0. 331	1. 37E-22 BM	ZNF706
4. 13E-27	-1. 35445691	0. 008	0. 335	1. 39E-22 BM	CARD16
4. 27E-27	-1. 276898371	0. 008	0. 335	1. 44E-22 BM	CLEC2B
5. 16E-27	-1. 264993694	0. 016	0. 342	1. 74E-22 BM	PRMT2
7. 49E-27	-1. 310614182	0. 008	0. 333	2. 52E-22 BM	HNRNPH1
7. 86E-27	-1. 262117441	0. 047	0. 368	2. 65E-22 BM	CD164
7. 90E-27	-1. 24223357	0. 067	0. 386	2. 66E-22 BM	ATP6V1F
9. 31E-27	-1. 430610841	0. 008	0. 334	3. 14E-22 BM	ALOX5AP
1. 11E-26	-1. 265924587	0. 028	0. 349	3. 75E-22 BM	TBC1D10C
1. 21E-26	-1. 187852739	0. 012	0. 334	4. 07E-22 BM	DDX46
1. 31E-26	-1. 537169425	0. 016	0. 34	4. 41E-22 BM	IFITM1
1. 33E-26	-1. 295303953	0. 091	0. 405	4. 49E-22 BM	BLOC1S1
1. 35E-26	-1. 197685161	0. 032	0. 353	4. 56E-22 BM	HCLS1
1. 55E-26	-1. 175501922	0. 036	0. 356	5. 23E-22 BM	VAPA
1. 64E-26	-1. 144194084	0. 012	0. 334	5. 54E-22 BM	PPA1
2. 22E-26	-1. 18845233	0. 087	0. 397	7. 48E-22 BM	SUMO1
2. 24E-26	-1. 136434857	0. 008	0. 328	7. 56E-22 BM	NDUFC2
2. 27E-26	-1. 144599182	0. 02	0. 343	7. 63E-22 BM	XRCC6

2.38E-26	-2.100083403	0.028	0.346	8.02E-22 BM	CTSW
2.53E-26	-1.236799994	0.024	0.343	8.51E-22 BM	CD47
2.58E-26	-1.337491892	0.071	0.385	8.71E-22 BM	CALR
2.82E-26	-1.224367002	0.024	0.342	9.51E-22 BM	HMG3
2.84E-26	-1.156259564	0.012	0.331	9.58E-22 BM	SF3B2
2.86E-26	-1.176383132	0.036	0.353	9.63E-22 BM	UBE2L3
2.94E-26	-1.14739012	0.008	0.327	9.92E-22 BM	TMED2
3.33E-26	-1.161522231	0.083	0.4	1.12E-21 BM	RAP1A
3.87E-26	-1.702788645	0.024	0.342	1.30E-21 BM	AP1S2
4.08E-26	-1.22950908	0.02	0.338	1.38E-21 BM	RP5-1171I10.5
4.61E-26	-1.169011608	0.02	0.337	1.55E-21 BM	FNBP1
4.65E-26	-1.17021069	0.008	0.325	1.57E-21 BM	SRSF11
4.95E-26	-1.41819732	0.008	0.325	1.67E-21 BM	PYCARD
6.93E-26	-1.312517676	0.004	0.319	2.33E-21 BM	XBP1
9.77E-26	-1.165975751	0.024	0.34	3.29E-21 BM	PGAM1
1.04E-25	-1.581997475	0.028	0.341	3.50E-21 BM	NPC2
1.16E-25	-1.281880149	0.016	0.329	3.91E-21 BM	KLF6
1.16E-25	-1.214237836	0.008	0.321	3.92E-21 BM	ATP5D
1.21E-25	-1.154398317	0.016	0.331	4.07E-21 BM	ADD3
1.24E-25	-1.181559734	0.008	0.321	4.18E-21 BM	BIN1
1.34E-25	-1.225861159	0.016	0.329	4.53E-21 BM	HSP90B1
1.64E-25	-1.191188484	0.02	0.331	5.53E-21 BM	TAPBP
1.70E-25	-1.145178304	0.028	0.339	5.73E-21 BM	MZT2A
1.82E-25	-1.114610808	0.012	0.327	6.14E-21 BM	SSB
1.86E-25	-1.194784406	0.051	0.362	6.25E-21 BM	RWDD1
2.55E-25	-1.286613858	0.016	0.326	8.58E-21 BM	IER2
2.72E-25	-1.105410573	0.02	0.333	9.16E-21 BM	LSM5
2.82E-25	-1.231890433	0.02	0.329	9.50E-21 BM	MCL1
3.08E-25	-1.283233527	0.008	0.318	1.04E-20 BM	CD27
3.09E-25	-1.540585447	0.036	0.345	1.04E-20 BM	CCR7
3.11E-25	-1.157253067	0.02	0.33	1.05E-20 BM	NUCKS1
3.61E-25	-1.133239887	0.016	0.325	1.22E-20 BM	PNN
3.86E-25	-1.10579162	0.004	0.312	1.30E-20 BM	LSM3
3.93E-25	-1.229264732	0.012	0.32	1.32E-20 BM	PIK3IP1
4.63E-25	-1.106718195	0.02	0.327	1.56E-20 BM	TUFM
5.26E-25	-1.106349022	0.036	0.344	1.77E-20 BM	PYURF
7.21E-25	-1.108157915	0.012	0.318	2.43E-20 BM	COX14
7.52E-25	-1.118046803	0.016	0.322	2.53E-20 BM	TMBIM4
7.92E-25	-1.158371949	0.032	0.337	2.67E-20 BM	SELT
8.29E-25	-1.1926354	0.024	0.329	2.79E-20 BM	PGLS
8.95E-25	-1.125992475	0.02	0.328	3.01E-20 BM	SCAF11
9.32E-25	-1.118657068	0.012	0.317	3.14E-20 BM	TRA2B
1.19E-24	-1.153728493	0.047	0.351	4.02E-20 BM	TMEM50A
1.45E-24	-1.130690805	0	0.302	4.88E-20 BM	ATXN8OS
1.57E-24	-1.111766096	0.004	0.306	5.29E-20 BM	SEPW1
1.85E-24	-1.142778373	0.016	0.319	6.24E-20 BM	BST2
1.95E-24	-1.117737434	0.012	0.313	6.56E-20 BM	CLTA
2.03E-24	-1.146650874	0.004	0.305	6.84E-20 BM	RTN4
2.27E-24	-1.131201089	0.028	0.332	7.65E-20 BM	STK17B
2.29E-24	-1.215418048	0.008	0.309	7.71E-20 BM	TCF7
2.37E-24	-1.143219372	0.047	0.346	7.97E-20 BM	DDT

2.41E-24	-1.216093021	0.012	0.312	8.12E-20 BM	LAT
2.58E-24	-1.088584584	0.012	0.312	8.68E-20 BM	RAB7A
2.60E-24	-1.511286358	0.032	0.332	8.77E-20 BM	CD247
2.70E-24	-1.161620668	0.079	0.374	9.08E-20 BM	UFC1
3.25E-24	-1.196859415	0.028	0.329	1.10E-19 BM	PPP1R18
3.75E-24	-1.081264394	0.016	0.315	1.26E-19 BM	CCT8
3.95E-24	-1.212887023	0.02	0.319	1.33E-19 BM	NFKBIA
4.38E-24	-1.105441842	0.016	0.316	1.48E-19 BM	CCDC12
5.03E-24	-1.106532607	0.02	0.319	1.69E-19 BM	ARHGDI1A
5.81E-24	-1.14600346	0.004	0.3	1.96E-19 BM	RHOH
6.29E-24	-1.168803318	0.261	0.49	2.12E-19 BM	TMEM59
6.70E-24	-1.175960403	0.237	0.478	2.26E-19 BM	ATP5J2
9.60E-24	-1.039954703	0.004	0.298	3.23E-19 BM	EIF3I
9.70E-24	-1.192653766	0.016	0.311	3.27E-19 BM	CKLF
9.73E-24	-1.136205307	0.055	0.353	3.28E-19 BM	HSD17B11
9.95E-24	-1.166736221	0.012	0.307	3.35E-19 BM	MYO1G
1.09E-23	-1.307223719	0.036	0.33	3.67E-19 BM	CDC42SE1
1.12E-23	-1.069623181	0.008	0.302	3.78E-19 BM	H2AFV
1.22E-23	-1.081192478	0.02	0.313	4.10E-19 BM	ATP5C1
1.26E-23	-1.094516141	0.008	0.301	4.26E-19 BM	DEK
1.34E-23	-1.07942132	0.004	0.297	4.52E-19 BM	ANKRD44
1.41E-23	-1.072681397	0.012	0.305	4.75E-19 BM	KRT10
1.43E-23	-1.179282687	0.008	0.301	4.81E-19 BM	GABPB1-AS1
1.46E-23	-1.099779369	0.012	0.305	4.91E-19 BM	RBM25
1.57E-23	-1.161451354	0.016	0.309	5.28E-19 BM	PTPN6
1.65E-23	-1.056717952	0.012	0.305	5.56E-19 BM	CCDC109B
1.88E-23	-1.127984748	0.02	0.312	6.34E-19 BM	ARHGAP15
1.92E-23	-1.090972786	0.016	0.31	6.48E-19 BM	ARID4B
2.37E-23	-1.048218337	0.02	0.312	7.99E-19 BM	UQCRFS1
2.52E-23	-1.104282088	0.036	0.328	8.51E-19 BM	EIF1AX
2.71E-23	-1.051719493	0.008	0.298	9.14E-19 BM	CCT3
3.14E-23	-1.124726131	0.008	0.297	1.06E-18 BM	CAST
3.32E-23	-1.227656934	0.02	0.309	1.12E-18 BM	ZFP36L1
3.90E-23	-2.371201296	0.028	0.316	1.31E-18 BM	AIF1
4.62E-23	-1.084042388	0.016	0.304	1.56E-18 BM	ZNF207
4.66E-23	-1.066980376	0.016	0.304	1.57E-18 BM	LSM8
4.93E-23	-1.124870723	0.036	0.328	1.66E-18 BM	C10orf54
5.45E-23	-1.858706385	0.17	0.434	1.84E-18 BM	SAT1
5.66E-23	-1.108263473	0.032	0.319	1.91E-18 BM	DNAJC8
6.12E-23	-1.05872517	0.024	0.311	2.06E-18 BM	AURKAIP1
6.41E-23	-1.044763775	0.02	0.308	2.16E-18 BM	RBMX
7.09E-23	-1.066037805	0	0.285	2.39E-18 BM	ATRX
7.77E-23	-1.082453018	0.02	0.308	2.62E-18 BM	ARHGAP30
7.88E-23	-1.044295198	0	0.285	2.65E-18 BM	CASP4
9.10E-23	-1.319956339	0.028	0.313	3.07E-18 BM	TKT
9.40E-23	-1.065652453	0.016	0.301	3.17E-18 BM	SRRM2
1.00E-22	-1.334145063	0.012	0.297	3.38E-18 BM	BIRC3
1.04E-22	-1.037402469	0.012	0.297	3.50E-18 BM	OSTC
1.13E-22	-1.06831491	0.032	0.317	3.81E-18 BM	NDUFA13
1.20E-22	-1.449792242	0.028	0.312	4.03E-18 BM	COTL1
1.26E-22	-1.114892972	0.012	0.296	4.24E-18 BM	SAMHD1

1. 28E-22	-1. 023626508	0. 012	0. 296	4. 30E-18 BM	PSMC5
1. 30E-22	-1. 112396586	0. 008	0. 291	4. 38E-18 BM	PRKCB
1. 34E-22	-1. 046329359	0. 012	0. 296	4. 53E-18 BM	RNH1
1. 60E-22	-1. 039091926	0. 012	0. 295	5. 40E-18 BM	KRTCAP2
1. 85E-22	-1. 154426327	0. 036	0. 321	6. 23E-18 BM	HMGB2
2. 07E-22	-1. 032105825	0. 02	0. 305	6. 96E-18 BM	MRPL20
2. 22E-22	-1. 119777871	0. 024	0. 306	7. 48E-18 BM	YWHAQ
2. 40E-22	-1. 042795401	0. 012	0. 293	8. 08E-18 BM	GPBP1
2. 56E-22	-1. 193714396	0. 008	0. 288	8. 62E-18 BM	CTSC
3. 07E-22	-1. 014654164	0. 012	0. 292	1. 03E-17 BM	ESD
3. 12E-22	-1. 139564063	0. 123	0. 393	1. 05E-17 BM	WDR83OS
3. 22E-22	-1. 020503434	0. 012	0. 292	1. 08E-17 BM	C19orf70
3. 49E-22	-1. 149401555	0. 008	0. 288	1. 18E-17 BM	GLIPR1
3. 61E-22	-1. 005724973	0. 008	0. 287	1. 22E-17 BM	NDUFB5
4. 08E-22	-1. 023670946	0. 004	0. 282	1. 38E-17 BM	TAF1D
4. 19E-22	-1. 031443579	0. 008	0. 289	1. 41E-17 BM	TECR
4. 59E-22	-1. 757443947	0. 126	0. 392	1. 55E-17 BM	PSAP
4. 95E-22	-1. 321604748	0. 004	0. 283	1. 67E-17 BM	C1orf56
5. 57E-22	-1. 053686888	0. 028	0. 306	1. 88E-17 BM	C19orf60
5. 69E-22	-1. 101397696	0. 028	0. 306	1. 92E-17 BM	WIPF1
5. 77E-22	-1. 009400059	0. 012	0. 289	1. 94E-17 BM	MRPL57
5. 93E-22	-1. 243764728	0. 032	0. 309	2. 00E-17 BM	XIST
6. 19E-22	-1. 048188148	0. 02	0. 297	2. 09E-17 BM	TMEM219
6. 31E-22	-1. 093824272	0. 008	0. 284	2. 13E-17 BM	DHRS7
6. 61E-22	-1. 061232663	0. 024	0. 301	2. 23E-17 BM	HMHA1
6. 95E-22	-1. 013815	0. 004	0. 279	2. 34E-17 BM	DNAJC7
8. 81E-22	-1. 069584173	0. 561	0. 637	2. 97E-17 BM	TCEB2
1. 04E-21	-1. 025671472	0. 008	0. 282	3. 49E-17 BM	GIMAP2
1. 11E-21	-1. 00274295	0. 02	0. 296	3. 75E-17 BM	ALKBH7
1. 12E-21	-1. 00490421	0. 012	0. 287	3. 78E-17 BM	SRI
1. 19E-21	-1. 035980829	0. 016	0. 291	4. 01E-17 BM	ANAPC11
1. 21E-21	-1. 073465851	0. 016	0. 29	4. 07E-17 BM	H2AFY
1. 36E-21	-1. 077209674	0. 012	0. 285	4. 59E-17 BM	CFLAR
1. 40E-21	-1. 041030563	0. 016	0. 291	4. 70E-17 BM	ARHGEF1
1. 49E-21	-1. 062142671	0. 02	0. 293	5. 03E-17 BM	TAF7
1. 66E-21	-1. 119420042	0. 04	0. 313	5. 60E-17 BM	SERPINB1
1. 82E-21	-1. 391220863	0. 028	0. 3	6. 13E-17 BM	GZMM
1. 91E-21	-1. 076606305	0. 024	0. 296	6. 44E-17 BM	SEPT1
2. 15E-21	-1. 017362761	0. 012	0. 283	7. 23E-17 BM	NKTR
2. 39E-21	-1. 039742743	0. 02	0. 292	8. 06E-17 BM	AAK1
2. 53E-21	-1. 018390553	0. 043	0. 317	8. 51E-17 BM	TMEM230
2. 69E-21	-1. 006755949	0. 004	0. 275	9. 06E-17 BM	OCIAD2
3. 26E-21	-1. 015338543	0. 032	0. 304	1. 10E-16 BM	TRAM1
3. 29E-21	-1. 030564428	0. 012	0. 282	1. 11E-16 BM	BAX
3. 38E-21	-1. 051255108	0. 024	0. 295	1. 14E-16 BM	SCP2
3. 69E-21	-1. 138537514	0. 016	0. 287	1. 24E-16 BM	LINC00861
3. 72E-21	-1. 003652215	0. 008	0. 276	1. 25E-16 BM	MRPL33
3. 89E-21	-1. 007772539	0. 012	0. 283	1. 31E-16 BM	PSMB8-AS1
3. 91E-21	-1. 047810389	0. 04	0. 31	1. 32E-16 BM	RBM8A
4. 35E-21	-1. 00221517	0. 012	0. 28	1. 47E-16 BM	HNRNPR
4. 55E-21	-1. 022473625	0. 043	0. 314	1. 53E-16 BM	NDFIP1

5. 10E-21	-1. 017814311	0	0. 266	1. 72E-16 BM	PSMB10
6. 21E-21	-1. 042936202	0. 008	0. 274	2. 09E-16 BM	GNAI2
7. 05E-21	-1. 073705626	0. 059	0. 326	2. 38E-16 BM	MBNL1
7. 66E-21	-1. 014123334	0. 036	0. 304	2. 58E-16 BM	RNPS1
7. 87E-21	-1. 143354495	0. 134	0. 392	2. 65E-16 BM	CALM3
9. 10E-21	-1. 030447914	0. 036	0. 304	3. 07E-16 BM	NCOR1
1. 47E-20	-1. 030345343	0. 032	0. 296	4. 96E-16 BM	SP100
1. 69E-20	-1. 073293736	0. 016	0. 278	5. 68E-16 BM	VAMP5
1. 93E-20	-1. 062901809	0. 024	0. 288	6. 50E-16 BM	PTP4A2
2. 25E-20	-1. 022853173	0. 024	0. 285	7. 59E-16 BM	NAA38
2. 80E-20	-1. 025932222	0. 04	0. 302	9. 43E-16 BM	DDX6
3. 29E-20	-1. 001914206	0. 028	0. 288	1. 11E-15 BM	CHURC1
3. 90E-20	-1. 07916154	0. 099	0. 354	1. 31E-15 BM	NDUFA3
4. 89E-20	-1. 063900509	0. 02	0. 278	1. 65E-15 BM	LBH
4. 96E-20	-1. 016056476	0. 032	0. 291	1. 67E-15 BM	ENY2
5. 09E-20	-1. 007114993	0. 059	0. 317	1. 72E-15 BM	GADD45GIP1
5. 22E-20	-1. 791326524	0. 02	0. 277	1. 76E-15 BM	RPS4Y1
5. 47E-20	-1. 068183486	0. 016	0. 273	1. 84E-15 BM	FCMR
5. 51E-20	-1. 008466256	0. 016	0. 273	1. 86E-15 BM	P4HB
6. 59E-20	-1. 00222655	0. 04	0. 298	2. 22E-15 BM	BCAP31
7. 28E-20	-2. 327401717	0. 024	0. 28	2. 45E-15 BM	GZMA
7. 55E-20	-1. 011133546	0. 016	0. 272	2. 55E-15 BM	BTN3A2
7. 75E-20	-1. 003129652	0. 04	0. 298	2. 61E-15 BM	CYCS
1. 07E-19	-2. 516133061	0. 079	0. 33	3. 62E-15 BM	FCER1G
1. 25E-19	-1. 024199144	0. 008	0. 26	4. 20E-15 BM	VASP
1. 50E-19	-1. 077964156	0	0. 25	5. 05E-15 BM	LTA4H
1. 51E-19	-1. 064745075	0. 012	0. 264	5. 08E-15 BM	ISG15
1. 60E-19	-1. 023810157	0. 02	0. 274	5. 41E-15 BM	MDM4
1. 70E-19	-1. 101980778	0. 02	0. 274	5. 72E-15 BM	DOK2
1. 92E-19	-1. 011717025	0. 055	0. 308	6. 46E-15 BM	EIF2S2
2. 06E-19	-1. 253238881	0. 02	0. 271	6. 93E-15 BM	NCF1
2. 31E-19	-1. 070290875	0. 04	0. 293	7. 79E-15 BM	ATP6VOB
2. 33E-19	-3. 441097724	0. 119	0. 358	7. 84E-15 BM	HLA-DRA
2. 37E-19	-1. 001235835	0. 008	0. 257	7. 99E-15 BM	CNPY3
2. 54E-19	-1. 022856083	0. 055	0. 309	8. 57E-15 BM	CAPZA2
4. 08E-19	-3. 232226273	0. 13	0. 364	1. 38E-14 BM	TYROBP
6. 10E-19	-1. 013360394	0. 02	0. 267	2. 05E-14 BM	TGFB1
7. 23E-19	-1. 006138753	0. 016	0. 262	2. 44E-14 BM	RAP1B
9. 37E-19	-1. 070218269	0. 115	0. 355	3. 16E-14 BM	LAMTOR1
1. 12E-18	-1. 017423018	0. 008	0. 25	3. 79E-14 BM	ANXA5
1. 91E-18	-3. 679248731	0. 083	0. 323	6. 42E-14 BM	NKG7
2. 17E-18	-1. 025490925	0. 024	0. 266	7. 30E-14 BM	AHNAK
2. 46E-18	-1. 082439656	0. 043	0. 285	8. 29E-14 BM	GSTO1
2. 81E-18	-1. 031843683	0. 024	0. 265	9. 46E-14 BM	FLNA
3. 19E-18	-2. 09636648	0. 028	0. 267	1. 08E-13 BM	CST7
4. 11E-18	-1. 035957724	0. 075	0. 315	1. 38E-13 BM	MT-ND4L
6. 02E-18	-1. 151227402	0. 055	0. 293	2. 03E-13 BM	CTSD
1. 88E-17	-1. 158636354	0. 047	0. 28	6. 32E-13 BM	ITGB1
1. 39E-16	-2. 843145165	0. 123	0. 345	4. 68E-12 BM	CCL5
2. 72E-16	-2. 510054182	0. 051	0. 271	9. 17E-12 BM	KLRB1
9. 76E-16	-1. 120322597	0. 067	0. 283	3. 29E-11 BM	TIMP1

3.91E-14	-1.017797142	0.119	0.331	1.32E-09 BM	MT2A
8.62E-14	-2.138401895	0.071	0.264	2.90E-09 BM	LST1
6.83E-12	-4.154850913	0.134	0.302	2.30E-07 BM	LYZ
8.76E-09	-3.825262709	0.134	0.264	0.000295207 BM	GNLY
3.97E-07	-2.709367207	0.146	0.252	0.013391235 BM	CST3
0	5.771289618	0.989	0.025	0 Platelets	ACRBP
0	5.747205286	1	0.061	0 Platelets	SDPR
0	5.562600624	0.989	0.034	0 Platelets	TUBB1
0	5.447840975	1	0.014	0 Platelets	GP9
0	5.334678014	0.9	0.023	0 Platelets	TSC22D1
0	5.245789029	0.944	0.046	0 Platelets	CLU
0	5.24515452	0.933	0.012	0 Platelets	PTCRA
0	4.706100451	0.922	0.008	0 Platelets	TMEM40
0	4.654618976	0.889	0.029	0 Platelets	CD9
0	4.418195741	0.967	0.01	0 Platelets	CMTM5
0	4.416304481	0.878	0.043	0 Platelets	MMD
0	4.386926122	0.933	0.019	0 Platelets	TREML1
0	4.362842277	0.922	0.051	0 Platelets	RUFY1
0	4.237375046	0.778	0.024	0 Platelets	MYL9
0	4.21114601	0.922	0.03	0 Platelets	SPARC
0	3.898783069	0.867	0.014	0 Platelets	ITGA2B
0	3.847615932	0.789	0.006	0 Platelets	CLEC1B
0	3.843758337	0.867	0.01	0 Platelets	CTTN
0	3.805691632	0.756	0.007	0 Platelets	CLDN5
0	3.715951236	0.833	0.023	0 Platelets	AP001189.4
0	3.657044768	0.722	0.013	0 Platelets	C2orf88
0	3.624665192	0.711	0.014	0 Platelets	HIST1H3H
0	3.547513705	0.811	0.009	0 Platelets	HRAT92
0	3.514560658	0.678	0.01	0 Platelets	HIST1H2BJ
0	3.425878302	0.633	0.007	0 Platelets	LCN2
0	3.423511447	0.711	0.012	0 Platelets	PF4V1
0	3.381601863	0.678	0.005	0 Platelets	ESAM
0	3.237929983	0.722	0.013	0 Platelets	AP003068.23
0	3.231076597	0.711	0.012	0 Platelets	NEXN
0	3.197971505	0.656	0.003	0 Platelets	RP11-879F14.2
0	3.165559999	0.7	0.013	0 Platelets	C6orf25
0	3.015501256	0.622	0.006	0 Platelets	ENKUR
0	3.003060546	0.7	0.016	0 Platelets	DMTN
0	2.980486945	0.667	0.018	0 Platelets	PTGS1
0	2.92892677	0.633	0.003	0 Platelets	RP11-501J20.5
0	2.910640961	0.667	0.02	0 Platelets	CA2
0	2.897725669	0.589	0.012	0 Platelets	GAS2L1
0	2.884269121	0.589	0.003	0 Platelets	LY6G6F
0	2.853466784	0.556	0.008	0 Platelets	TNNC2
0	2.844782488	0.644	0.006	0 Platelets	SMOX
0	2.836736956	0.544	0.01	0 Platelets	SMIM5
0	2.713624241	0.578	0.006	0 Platelets	SCN1B
0	2.682022461	0.589	0.012	0 Platelets	GP1BA
0	2.578473982	0.567	0.016	0 Platelets	ABCC3
0	2.566741147	0.578	0.003	0 Platelets	ARHGAP6
0	2.561439494	0.589	0.011	0 Platelets	GMPR

0	2.551124101	0.522	0.005	0	Platelets	C19orf33
0	2.518988067	0.544	0.007	0	Platelets	SH3BGR12
0	2.495591702	0.556	0.012	0	Platelets	PRKAR2B
0	2.49365447	0.556	0.007	0	Platelets	MYLK
0	2.388882093	0.456	0.01	0	Platelets	GFI1B
0	2.355289972	0.533	0.004	0	Platelets	HGD
0	2.324460905	0.422	0.003	0	Platelets	TNFSF4
0	2.295727604	0.511	0.013	0	Platelets	FAXDC2
0	2.193178679	0.4	0.006	0	Platelets	SPX
0	2.187512805	0.389	0.002	0	Platelets	TRAPPC3L
0	2.162330695	0.422	0.003	0	Platelets	MEIS1
0	2.15853661	0.4	0.002	0	Platelets	ALOX12
0	2.130900382	0.433	0.002	0	Platelets	AQP10
0	2.112281267	0.367	0.004	0	Platelets	LGALS12
0	1.925341204	0.267	0.002	0	Platelets	PDGFA
0	1.92406492	0.411	0.002	0	Platelets	ITGB3
0	1.918232045	0.4	0.003	0	Platelets	GUCY1B3
0	1.88378735	0.4	0.003	0	Platelets	GNAZ
0	1.859478152	0.378	0.006	0	Platelets	LINC00989
0	1.826698313	0.378	0.005	0	Platelets	TAL1
0	1.814704797	0.3	0.003	0	Platelets	MYZAP
0	1.803842916	0.344	0.005	0	Platelets	GP6
0	1.795302327	0.344	0.003	0	Platelets	PCP2
0	1.794008028	0.344	0.001	0	Platelets	TDRP
0	1.758598936	0.356	0.002	0	Platelets	LTBP1
0	1.738159644	0.356	0.002	0	Platelets	SELP
0	1.720173651	0.3	0.002	0	Platelets	GATA1
0	1.682539151	0.311	0.001	0	Platelets	ARG2
0	1.67605222	0.311	0.003	0	Platelets	STON2
0	1.663548358	0.289	0.001	0	Platelets	AC137932.6
0	1.655687985	0.267	0.003	0	Platelets	SPOCD1
0	1.608254945	0.289	0.002	0	Platelets	SEPT5
0	1.586276399	0.289	0.001	0	Platelets	LGALSL
0	1.566981676	0.278	0.003	0	Platelets	DNM3
0	1.47738285	0.311	0.004	0	Platelets	PDE5A
0	1.409171458	0.256	0.003	0	Platelets	C1orf198
0	1.348546714	0.267	0.003	0	Platelets	MFAP3L
0	1.320749681	0.256	0.002	0	Platelets	ATP9A
0	1.315156082	0.256	0.001	0	Platelets	FAM212B-AS1
7.02E-303	1.390431996	0.256	0.003	2.36E-298	Platelets	DCLRE1A
2.11E-302	3.620479178	0.867	0.047	7.10E-298	Platelets	F13A1
1.17E-296	2.175528637	0.478	0.013	3.94E-292	Platelets	SENCR
2.97E-288	2.751617506	0.511	0.016	1.00E-283	Platelets	PDZK1IP1
6.83E-282	1.950235204	0.344	0.007	2.30E-277	Platelets	HIST1H2AE
8.25E-279	5.853617527	0.989	0.071	2.78E-274	Platelets	HIST1H2AC
2.31E-274	3.623163149	0.711	0.034	7.79E-270	Platelets	RP11-367G6.3
3.65E-272	3.769384345	0.944	0.065	1.23E-267	Platelets	PGRMC1
4.99E-269	3.878605296	0.9	0.059	1.68E-264	Platelets	2-Mar
3.49E-257	3.033575768	0.611	0.026	1.18E-252	Platelets	DAB2
3.26E-254	1.768683002	0.278	0.005	1.10E-249	Platelets	FRMD3
1.64E-249	3.35237152	0.656	0.031	5.54E-245	Platelets	NFE2

1. 78E-244	3. 153955955	0. 789	0. 046	6. 01E-240 Platelets	SNCA
1. 99E-242	4. 11926246	0. 878	0. 062	6. 71E-238 Platelets	MPP1
5. 59E-240	6. 289426212	1	0. 086	1. 88E-235 Platelets	GNG11
6. 26E-236	5. 589262553	1	0. 088	2. 11E-231 Platelets	RGS18
8. 52E-236	1. 556680587	0. 256	0. 004	2. 87E-231 Platelets	JAM3
3. 03E-232	2. 721342861	0. 489	0. 018	1. 02E-227 Platelets	HIST2H2BE
1. 02E-229	1. 70845185	0. 267	0. 005	3. 43E-225 Platelets	RP11-354E11. 2
2. 28E-229	1. 419154271	0. 267	0. 005	7. 69E-225 Platelets	BEND2
1. 65E-224	3. 416122501	0. 778	0. 051	5. 56E-220 Platelets	TPM1
6. 99E-221	1. 744195035	0. 267	0. 005	2. 36E-216 Platelets	CTNNA1
8. 39E-219	3. 017785182	0. 722	0. 045	2. 83E-214 Platelets	LMNA
6. 87E-218	2. 425460877	0. 533	0. 023	2. 32E-213 Platelets	SMIM3
5. 04E-217	2. 518964348	0. 589	0. 029	1. 70E-212 Platelets	FHL1
7. 11E-217	5. 06703402	0. 989	0. 094	2. 40E-212 Platelets	NRGN
1. 48E-212	2. 09728492	0. 333	0. 009	4. 97E-208 Platelets	FAM212A
1. 26E-205	1. 855083352	0. 289	0. 007	4. 26E-201 Platelets	TBXA2R
2. 99E-203	2. 235006389	0. 456	0. 018	1. 01E-198 Platelets	PPP1R14A
5. 09E-202	3. 473193837	0. 889	0. 078	1. 71E-197 Platelets	PDLIM1
4. 05E-197	3. 186678081	0. 822	0. 067	1. 36E-192 Platelets	TUBA1C
3. 22E-196	2. 47738419	0. 522	0. 025	1. 08E-191 Platelets	GADD45A
1. 31E-192	2. 232661653	0. 433	0. 017	4. 42E-188 Platelets	CDKN1A
1. 14E-189	4. 364336795	0. 911	0. 089	3. 83E-185 Platelets	MAP3K7CL
1. 26E-188	3. 380532371	0. 733	0. 054	4. 25E-184 Platelets	VIM-AS1
8. 97E-188	1. 674211942	0. 322	0. 009	3. 02E-183 Platelets	THBS1
2. 02E-185	3. 048880636	0. 744	0. 057	6. 80E-181 Platelets	PLA2G12A
3. 22E-184	1. 957329355	0. 378	0. 014	1. 09E-179 Platelets	MGLL
1. 51E-182	7. 502071889	1	0. 119	5. 08E-178 Platelets	PF4
1. 16E-180	2. 497544968	0. 611	0. 038	3. 90E-176 Platelets	XPNPEP1
1. 20E-179	2. 424219892	0. 556	0. 031	4. 04E-175 Platelets	AHCTF1
8. 87E-173	3. 076705138	0. 656	0. 046	2. 99E-168 Platelets	HIST1H1C
1. 19E-164	1. 688627544	0. 322	0. 011	4. 01E-160 Platelets	KIFC3
1. 11E-159	1. 918085612	0. 367	0. 015	3. 73E-155 Platelets	MTURN
7. 17E-157	7. 609045351	1	0. 143	2. 42E-152 Platelets	PPBP
1. 71E-153	3. 624605893	0. 911	0. 113	5. 75E-149 Platelets	NGFRAP1
1. 84E-153	2. 446073897	0. 467	0. 025	6. 19E-149 Platelets	RAB27B
2. 53E-153	2. 230731768	0. 511	0. 031	8. 51E-149 Platelets	ARHGAP18
2. 48E-151	3. 154138312	0. 778	0. 078	8. 35E-147 Platelets	DAPP1
1. 86E-148	3. 978262085	0. 978	0. 142	6. 27E-144 Platelets	CTSA
6. 64E-143	4. 090390679	0. 978	0. 15	2. 24E-138 Platelets	TPM4
2. 13E-142	1. 753476194	0. 333	0. 014	7. 18E-138 Platelets	ZNF438
5. 17E-141	2. 462476437	0. 511	0. 034	1. 74E-136 Platelets	TMEM140
1. 70E-132	1. 876629791	0. 344	0. 016	5. 73E-128 Platelets	HIST1H2BG
4. 25E-130	3. 815130033	0. 956	0. 156	1. 43E-125 Platelets	GRAP2
2. 47E-127	1. 662410757	0. 367	0. 019	8. 34E-123 Platelets	FAM63A
1. 89E-126	1. 588795777	0. 322	0. 014	6. 37E-122 Platelets	SCFD2
5. 30E-125	1. 12517316	0. 256	0. 009	1. 78E-120 Platelets	ZNF185
1. 03E-123	3. 667794688	0. 844	0. 119	3. 46E-119 Platelets	CARD19
1. 49E-123	1. 592976952	0. 289	0. 012	5. 01E-119 Platelets	PBX1
2. 73E-123	1. 609699951	0. 378	0. 02	9. 19E-119 Platelets	INF2
2. 52E-122	2. 852837128	0. 7	0. 077	8. 48E-118 Platelets	YWHAH
9. 82E-122	3. 303538109	0. 767	0. 096	3. 31E-117 Platelets	RNF11

2. 95E-121	2. 0987147	0. 444	0. 029	9. 95E-117 Platelets	MEPCE
5. 68E-121	2. 650790908	0. 633	0. 062	1. 91E-116 Platelets	MLH3
8. 50E-118	2. 757535899	0. 678	0. 074	2. 87E-113 Platelets	RAB32
2. 66E-117	1. 582346713	0. 3	0. 013	8. 97E-113 Platelets	SSX2IP
5. 05E-117	1. 389163822	0. 278	0. 011	1. 70E-112 Platelets	SERPINE2
1. 60E-107	4. 891739546	0. 956	0. 199	5. 38E-103 Platelets	NCOA4
2. 24E-106	3. 930368793	0. 844	0. 142	7. 55E-102 Platelets	NT5C3A
1. 05E-105	2. 526511105	0. 522	0. 047	3. 55E-101 Platelets	PARVB
3. 84E-105	1. 486684374	0. 289	0. 014	1. 30E-100 Platelets	MOB3C
4. 57E-104	3. 986083424	0. 944	0. 197	1. 54E-99 Platelets	FERMT3
2. 14E-101	3. 144021658	0. 856	0. 153	7. 22E-97 Platelets	PTPN18
2. 45E-100	1. 468079424	0. 289	0. 015	8. 26E-96 Platelets	FAH
9. 41E-99	2. 32038882	0. 589	0. 064	3. 17E-94 Platelets	GSN
2. 03E-98	3. 022327345	0. 789	0. 127	6. 85E-94 Platelets	ILK
2. 81E-98	4. 644614511	1	0. 263	9. 47E-94 Platelets	TUBA4A
1. 32E-96	2. 516176698	0. 667	0. 087	4. 45E-92 Platelets	VCL
1. 36E-94	1. 76616995	0. 344	0. 022	4. 59E-90 Platelets	F11R
2. 76E-93	2. 41498624	0. 622	0. 076	9. 28E-89 Platelets	MIR4435-2HG
2. 85E-93	3. 598867067	0. 889	0. 191	9. 60E-89 Platelets	MAX
4. 08E-93	2. 215511567	0. 478	0. 044	1. 37E-88 Platelets	SLA2
7. 90E-93	2. 703913785	0. 678	0. 094	2. 66E-88 Platelets	MFSD1
3. 02E-92	3. 656041133	0. 878	0. 187	1. 02E-87 Platelets	LIMS1
4. 58E-92	2. 252933403	0. 467	0. 043	1. 54E-87 Platelets	SNN
6. 46E-92	2. 432429916	0. 578	0. 067	2. 18E-87 Platelets	CD151
2. 57E-89	2. 795391537	0. 778	0. 136	8. 66E-85 Platelets	ACTN1
2. 34E-88	1. 759543405	0. 422	0. 036	7. 87E-84 Platelets	PYGL
1. 93E-87	2. 320877484	0. 544	0. 062	6. 49E-83 Platelets	TAX1BP3
9. 92E-86	2. 033670543	0. 433	0. 039	3. 34E-81 Platelets	MCUR1
1. 91E-85	2. 654459204	0. 711	0. 113	6. 44E-81 Platelets	STOM
8. 46E-85	2. 431319859	0. 533	0. 061	2. 85E-80 Platelets	LYPLAL1
1. 09E-83	1. 634260047	0. 367	0. 028	3. 66E-79 Platelets	PDLIM7
1. 10E-82	2. 143053393	0. 478	0. 05	3. 70E-78 Platelets	TMEM91
1. 42E-80	2. 542759289	0. 756	0. 14	4. 79E-76 Platelets	WBP2
2. 87E-79	1. 436961228	0. 278	0. 017	9. 65E-75 Platelets	STRN4
3. 38E-79	2. 084904445	0. 467	0. 049	1. 14E-74 Platelets	TPTEP1
1. 13E-78	3. 396915724	0. 889	0. 232	3. 80E-74 Platelets	RAB11A
1. 07E-75	4. 30722102	0. 922	0. 281	3. 61E-71 Platelets	GSTO1
2. 06E-75	2. 917138432	0. 767	0. 16	6. 95E-71 Platelets	SNAP23
6. 34E-74	3. 081362808	0. 933	0. 279	2. 14E-69 Platelets	TIMP1
4. 54E-72	4. 451661112	1	0. 433	1. 53E-67 Platelets	GPX1
4. 61E-71	3. 394561351	0. 989	0. 387	1. 55E-66 Platelets	CALM3
6. 65E-70	4. 204615078	0. 978	0. 417	2. 24E-65 Platelets	RGS10
8. 50E-70	2. 030881816	0. 522	0. 069	2. 87E-65 Platelets	CD226
9. 21E-70	2. 091210799	0. 456	0. 053	3. 10E-65 Platelets	CORO1C
1. 33E-69	2. 468063584	0. 578	0. 088	4. 48E-65 Platelets	SPNS1
3. 79E-69	3. 85786153	1	0. 479	1. 28E-64 Platelets	TAGLN2
2. 71E-68	2. 890789042	0. 922	0. 304	9. 14E-64 Platelets	CAPZA2
4. 94E-68	1. 524333519	0. 267	0. 018	1. 66E-63 Platelets	HBQ1
4. 83E-66	2. 872815386	1	0. 34	1. 63E-61 Platelets	CCL5
1. 50E-65	1. 934491728	0. 378	0. 038	5. 04E-61 Platelets	ODC1
5. 00E-65	3. 360475347	0. 989	0. 43	1. 68E-60 Platelets	SAT1

5. 22E-65	1. 626631849	0. 311	0. 026	1. 76E-60 Platelets	PADI4
1. 42E-64	2. 144278041	0. 444	0. 054	4. 80E-60 Platelets	UBA7
3. 02E-64	2. 336965159	0. 678	0. 131	1. 02E-59 Platelets	LINCO0152
5. 30E-64	1. 279533388	0. 278	0. 021	1. 78E-59 Platelets	PRKAR1B
1. 79E-63	2. 400863777	0. 444	0. 055	6. 03E-59 Platelets	SLC40A1
1. 40E-62	2. 114455793	0. 556	0. 088	4. 73E-58 Platelets	TMBIM1
5. 37E-62	2. 539740422	0. 722	0. 162	1. 81E-57 Platelets	TPST2
9. 70E-62	2. 722480122	0. 733	0. 171	3. 27E-57 Platelets	CDKN2D
7. 95E-61	2. 941714308	0. 911	0. 35	2. 68E-56 Platelets	LAMTOR1
1. 70E-60	1. 963892259	0. 389	0. 044	5. 71E-56 Platelets	SWI5
2. 26E-60	3. 331978407	0. 844	0. 27	7. 62E-56 Platelets	TLN1
2. 96E-60	2. 126714287	0. 533	0. 084	9. 98E-56 Platelets	APP
2. 40E-59	3. 242338268	1	0. 904	8. 09E-55 Platelets	OAZ1
3. 06E-59	1. 895626155	0. 411	0. 049	1. 03E-54 Platelets	BCL2L1
3. 37E-59	2. 8525654	0. 9	0. 336	1. 14E-54 Platelets	PRDX6
4. 60E-59	2. 481818882	0. 667	0. 144	1. 55E-54 Platelets	AMD1
4. 62E-59	2. 925333482	1	0. 796	1. 56E-54 Platelets	OST4
5. 92E-59	2. 893180705	1	0. 936	2. 00E-54 Platelets	H3F3A
8. 39E-59	1. 622150314	0. 367	0. 04	2. 83E-54 Platelets	WRB
1. 96E-58	2. 793200277	1	0. 896	6. 62E-54 Platelets	MYL12A
3. 79E-58	2. 515010652	0. 733	0. 184	1. 28E-53 Platelets	YPEL5
2. 11E-57	2. 624427071	0. 689	0. 16	7. 12E-53 Platelets	EMC3
2. 15E-57	2. 858371501	1	0. 732	7. 25E-53 Platelets	NAP1L1
3. 96E-57	2. 654642221	0. 956	0. 433	1. 33E-52 Platelets	PKM
2. 12E-56	1. 746739012	0. 256	0. 02	7. 14E-52 Platelets	HEMGN
3. 45E-56	2. 340197766	0. 467	0. 069	1. 16E-51 Platelets	IFRD1
6. 11E-56	2. 908082862	0. 967	0. 554	2. 06E-51 Platelets	GPX4
9. 17E-56	2. 538655606	0. 922	0. 392	3. 09E-51 Platelets	CCND3
1. 32E-55	3. 079434453	0. 944	0. 355	4. 46E-51 Platelets	MTRNR2L1
5. 93E-55	2. 777297702	0. 933	0. 405	2. 00E-50 Platelets	DYNLL1
2. 07E-54	2. 345026153	0. 6	0. 118	6. 98E-50 Platelets	GLUL
2. 75E-54	2. 376957144	0. 578	0. 112	9. 26E-50 Platelets	TLK1
4. 10E-54	2. 224753845	0. 544	0. 097	1. 38E-49 Platelets	RPA1
7. 02E-54	2. 272901806	0. 578	0. 111	2. 37E-49 Platelets	EIF2AK1
7. 82E-54	1. 686004006	0. 322	0. 033	2. 63E-49 Platelets	WIPI1
1. 73E-53	-3. 587346413	0. 267	0. 992	5. 83E-49 Platelets	RPLP2
1. 79E-53	-3. 266817085	0. 3	0. 988	6. 05E-49 Platelets	RPL7
3. 67E-53	1. 980579051	0. 467	0. 072	1. 24E-48 Platelets	PLEKH01
3. 83E-53	-3. 243230763	0. 367	0. 987	1. 29E-48 Platelets	RPS19
5. 47E-53	2. 083708905	0. 6	0. 123	1. 84E-48 Platelets	RBBP6
6. 61E-53	2. 084939461	0. 467	0. 071	2. 23E-48 Platelets	CMIP
7. 84E-53	-3. 296923464	0. 178	0. 979	2. 64E-48 Platelets	RPS9
9. 59E-53	-3. 444411528	0. 233	0. 982	3. 23E-48 Platelets	RPL9
1. 03E-52	-3. 376558836	0. 344	0. 996	3. 46E-48 Platelets	RPS12
1. 08E-52	-3. 332121354	0. 256	0. 989	3. 65E-48 Platelets	RPL11
1. 21E-52	-3. 414926462	0. 411	0. 992	4. 06E-48 Platelets	RPL13
1. 23E-52	-3. 453162047	0. 233	0. 984	4. 13E-48 Platelets	RPS23
1. 53E-52	-3. 117933512	0. 3	0. 989	5. 15E-48 Platelets	RPS15
1. 94E-52	-3. 237885036	0. 222	0. 978	6. 55E-48 Platelets	RPL29
2. 33E-52	-3. 163749451	0. 456	0. 995	7. 87E-48 Platelets	RPL21
2. 59E-52	-3. 427224574	0. 122	0. 979	8. 73E-48 Platelets	RPL35

2. 63E-52	-2. 763979834	0. 644	0. 992	8. 86E-48 Platelets	RPLP1
2. 69E-52	-3. 5023648	0. 222	0. 984	9. 05E-48 Platelets	RPS8
3. 39E-52	-3. 445880728	0. 233	0. 989	1. 14E-47 Platelets	RPS2
3. 62E-52	-3. 331525447	0. 2	0. 981	1. 22E-47 Platelets	RPL37
3. 98E-52	-3. 236038516	0. 378	0. 991	1. 34E-47 Platelets	RPS14
4. 45E-52	-3. 299280086	0. 156	0. 977	1. 50E-47 Platelets	RPL14
7. 37E-52	-3. 299728207	0. 211	0. 988	2. 48E-47 Platelets	RPL30
7. 63E-52	-3. 04531787	0. 544	0. 989	2. 57E-47 Platelets	RPS27A
7. 86E-52	1. 882611416	0. 333	0. 037	2. 65E-47 Platelets	PSTPIP2
1. 61E-51	-3. 306160535	0. 244	0. 986	5. 42E-47 Platelets	RPL19
1. 88E-51	-3. 356632869	0. 144	0. 982	6. 33E-47 Platelets	RPL12
2. 63E-51	2. 637478033	1	0. 894	8. 85E-47 Platelets	SH3BGRL3
2. 64E-51	2. 895173725	0. 644	0. 155	8. 91E-47 Platelets	ETFA
2. 78E-51	-3. 227561724	0. 278	0. 984	9. 36E-47 Platelets	RPS4X
3. 17E-51	-3. 35148508	0. 356	0. 988	1. 07E-46 Platelets	RPS18
3. 58E-51	-3. 041681311	0. 578	0. 991	1. 21E-46 Platelets	RPL13A
3. 72E-51	-3. 304199109	0. 256	0. 99	1. 25E-46 Platelets	RPL32
3. 83E-51	-3. 380736998	0. 144	0. 982	1. 29E-46 Platelets	RPS17
4. 44E-51	-3. 027417046	0. 411	0. 985	1. 50E-46 Platelets	RPL27A
4. 52E-51	-3. 313152189	0. 211	0. 984	1. 52E-46 Platelets	RPL23A
4. 70E-51	-3. 034672174	0. 322	0. 984	1. 59E-46 Platelets	RPL26
5. 21E-51	-3. 318233375	0. 456	0. 991	1. 75E-46 Platelets	EEF1A1
6. 19E-51	2. 174991314	1	0. 997	2. 09E-46 Platelets	TMSB4X
7. 10E-51	-3. 29058145	0. 333	0. 988	2. 39E-46 Platelets	RPL34
7. 27E-51	-3. 036658442	0. 167	0. 965	2. 45E-46 Platelets	RPL24
8. 38E-51	-3. 136756757	0. 633	0. 99	2. 82E-46 Platelets	RPS27
1. 06E-50	-3. 143076064	0. 311	0. 986	3. 56E-46 Platelets	RPS28
1. 20E-50	-3. 120097377	0. 389	0. 988	4. 04E-46 Platelets	RPS3A
1. 28E-50	-3. 293560654	0. 267	0. 988	4. 32E-46 Platelets	RPS6
1. 31E-50	-3. 223934329	0. 233	0. 983	4. 41E-46 Platelets	RPL31
1. 33E-50	-3. 262346841	0. 156	0. 984	4. 46E-46 Platelets	RPS13
1. 57E-50	-3. 066788173	0. 311	0. 986	5. 30E-46 Platelets	RPL28
1. 74E-50	-3. 225904176	0. 289	0. 984	5. 85E-46 Platelets	RPL3
1. 78E-50	1. 959859532	0. 467	0. 075	6. 01E-46 Platelets	STX11
2. 23E-50	-2. 791366651	0. 5	0. 99	7. 50E-46 Platelets	RPL41
2. 36E-50	-3. 172094159	0. 167	0. 982	7. 96E-46 Platelets	RPS24
2. 70E-50	-3. 227720836	0. 178	0. 978	9. 10E-46 Platelets	RPS29
2. 71E-50	-3. 196767793	0. 167	0. 979	9. 13E-46 Platelets	RPS16
2. 71E-50	-3. 325545136	0. 122	0. 969	9. 14E-46 Platelets	RPS5
2. 81E-50	-3. 079846492	0. 2	0. 98	9. 45E-46 Platelets	RPL18
2. 89E-50	-2. 930633466	0. 622	0. 991	9. 74E-46 Platelets	RPL10
3. 16E-50	-3. 025564667	0. 211	0. 98	1. 06E-45 Platelets	RPL8
3. 95E-50	-3. 04297557	0. 222	0. 98	1. 33E-45 Platelets	RPL37A
4. 09E-50	-2. 877612158	0. 467	0. 99	1. 38E-45 Platelets	RPS15A
4. 40E-50	-3. 031811122	0. 344	0. 985	1. 48E-45 Platelets	TMSB10
4. 65E-50	-2. 979825846	0. 367	0. 985	1. 57E-45 Platelets	RPS3
5. 51E-50	-3. 191290777	0. 233	0. 983	1. 86E-45 Platelets	RPS25
6. 23E-50	2. 26529526	0. 611	0. 138	2. 10E-45 Platelets	AKIRIN2
6. 82E-50	-3. 135208777	0. 322	0. 986	2. 30E-45 Platelets	RPL39
8. 19E-50	-3. 120891178	0. 189	0. 976	2. 76E-45 Platelets	RPL36
8. 56E-50	-3. 251592219	0. 178	0. 986	2. 88E-45 Platelets	RPL18A

1. 26E-49	-2. 985691493	0. 211	0. 977	4. 25E-45 Platelets	RPL27
2. 27E-49	1. 99880226	0. 467	0. 077	7. 65E-45 Platelets	TACC3
2. 45E-49	-3. 224504457	0. 156	0. 965	8. 24E-45 Platelets	RPL5
4. 03E-49	-2. 929189515	0. 211	0. 967	1. 36E-44 Platelets	RPL7A
5. 47E-49	2. 266026782	0. 544	0. 108	1. 84E-44 Platelets	RDH11
6. 34E-49	-3. 081529993	0. 122	0. 97	2. 14E-44 Platelets	RPS21
6. 57E-49	2. 220203007	1	0. 974	2. 21E-44 Platelets	FTH1
7. 12E-49	2. 499570568	0. 878	0. 401	2. 40E-44 Platelets	ARF1
8. 57E-49	-3. 104402597	0. 144	0. 974	2. 89E-44 Platelets	RPL10A
9. 44E-49	-2. 940206334	0. 222	0. 978	3. 18E-44 Platelets	RPS7
1. 04E-48	1. 353464205	0. 256	0. 023	3. 49E-44 Platelets	TRIM58
1. 17E-48	1. 962362415	0. 311	0. 034	3. 95E-44 Platelets	FRMD4B
1. 81E-48	-2. 689460338	0. 433	0. 978	6. 09E-44 Platelets	RPS20
1. 99E-48	-3. 213532125	0. 111	0. 955	6. 69E-44 Platelets	RPSA
2. 13E-48	-3. 214557285	0. 467	0. 995	7. 19E-44 Platelets	MALAT1
3. 04E-48	-2. 426122082	0. 678	0. 99	1. 03E-43 Platelets	TPT1
4. 08E-48	2. 44525962	0. 956	0. 584	1. 37E-43 Platelets	MTRNR2L12
5. 44E-48	-2. 774720283	0. 278	0. 98	1. 83E-43 Platelets	RPL6
6. 27E-48	2. 590020367	0. 678	0. 189	2. 11E-43 Platelets	VDAC3
6. 28E-48	2. 303391284	0. 989	0. 852	2. 12E-43 Platelets	ITM2B
7. 53E-48	-3. 280702749	0. 2	0. 944	2. 54E-43 Platelets	RPS26
1. 00E-47	2. 540986006	0. 611	0. 144	3. 38E-43 Platelets	H2AFJ
1. 33E-47	-2. 802810325	0. 211	0. 974	4. 49E-43 Platelets	RPL38
1. 35E-47	2. 287532462	0. 422	0. 065	4. 55E-43 Platelets	RP6-159A1. 4
3. 19E-47	-2. 962371947	0. 144	0. 958	1. 08E-42 Platelets	RPL22
5. 77E-47	1. 745070867	0. 489	0. 088	1. 94E-42 Platelets	CYB5R3
1. 24E-46	2. 009467954	0. 556	0. 113	4. 17E-42 Platelets	CD68
1. 30E-46	2. 221201963	0. 989	0. 701	4. 38E-42 Platelets	ARPC1B
1. 41E-46	2. 096183976	0. 489	0. 089	4. 75E-42 Platelets	UBXN11
1. 80E-46	-2. 507799312	0. 356	0. 976	6. 06E-42 Platelets	RPS11
3. 78E-46	1. 472834838	0. 311	0. 036	1. 27E-41 Platelets	CLCN3
5. 19E-46	-2. 633298107	0. 167	0. 947	1. 75E-41 Platelets	EEF1D
5. 64E-46	2. 443842062	0. 933	0. 569	1. 90E-41 Platelets	ARPC5
7. 20E-46	-2. 575105983	0. 244	0. 968	2. 43E-41 Platelets	GNB2L1
8. 10E-46	2. 42736459	0. 833	0. 342	2. 73E-41 Platelets	TALDO1
8. 33E-46	1. 477749529	0. 344	0. 044	2. 81E-41 Platelets	CENPT
8. 57E-46	-2. 745390299	0. 189	0. 958	2. 89E-41 Platelets	RPL23
8. 58E-46	1. 962485625	0. 544	0. 113	2. 89E-41 Platelets	TUBB4B
8. 63E-46	-2. 026023153	0. 567	0. 984	2. 91E-41 Platelets	FAU
1. 61E-45	-2. 006541392	0. 544	0. 991	5. 44E-41 Platelets	UBA52
1. 62E-45	-2. 460417434	0. 278	0. 959	5. 45E-41 Platelets	NACA
2. 41E-45	2. 057832061	0. 978	0. 781	8. 13E-41 Platelets	MTRNR2L8
2. 72E-45	-3. 042175849	0. 133	0. 935	9. 16E-41 Platelets	CD52
3. 41E-45	2. 65697527	1	0. 987	1. 15E-40 Platelets	ACTB
5. 24E-45	-2. 006365704	0. 7	0. 987	1. 76E-40 Platelets	RPL35A
9. 12E-45	1. 997688112	0. 567	0. 126	3. 07E-40 Platelets	LEPROT
1. 37E-44	-2. 826390592	0. 144	0. 941	4. 61E-40 Platelets	RPLP0
2. 26E-44	-1. 913756631	0. 722	0. 984	7. 62E-40 Platelets	RPL15
4. 47E-44	2. 30923739	0. 389	0. 059	1. 51E-39 Platelets	FAM110A
6. 42E-44	-2. 5642355	0. 167	0. 948	2. 16E-39 Platelets	PFDN5
6. 66E-44	2. 495516288	0. 944	0. 63	2. 24E-39 Platelets	SRGN

1. 58E-43	2. 349015095	0. 567	0. 134	5. 32E-39 Platelets	KIF2A
2. 39E-43	2. 220925078	0. 656	0. 185	8. 05E-39 Platelets	PDCD10
2. 16E-42	2. 173228388	0. 622	0. 165	7. 28E-38 Platelets	CAPN1
2. 60E-42	1. 768178076	0. 311	0. 039	8. 77E-38 Platelets	AIG1
4. 70E-42	2. 306507182	0. 511	0. 106	1. 58E-37 Platelets	ZCCHC17
1. 58E-41	2. 480432032	0. 733	0. 258	5. 31E-37 Platelets	RAP1B
2. 13E-41	-2. 686471378	0. 144	0. 901	7. 18E-37 Platelets	EEF1B2
5. 07E-41	1. 612083955	0. 367	0. 055	1. 71E-36 Platelets	HDGF
5. 33E-41	-2. 73102809	0. 089	0. 882	1. 80E-36 Platelets	NBEAL1
1. 20E-40	1. 699163633	0. 344	0. 049	4. 05E-36 Platelets	TMEM55A
1. 91E-40	2. 067214133	0. 533	0. 12	6. 43E-36 Platelets	ADIPOR1
5. 43E-40	-2. 259812803	0. 222	0. 909	1. 83E-35 Platelets	COX7C
1. 80E-39	1. 996974069	0. 556	0. 137	6. 05E-35 Platelets	SPINT2
2. 07E-39	2. 202007031	0. 6	0. 164	6. 97E-35 Platelets	SOD2
2. 34E-39	-2. 780939064	0. 078	0. 838	7. 88E-35 Platelets	NPM1
3. 85E-39	2. 297609011	0. 756	0. 276	1. 30E-34 Platelets	ITGB1
3. 93E-39	-2. 262714049	0. 2	0. 914	1. 32E-34 Platelets	TOMM7
5. 01E-39	2. 300745007	0. 744	0. 283	1. 69E-34 Platelets	MTPN
7. 26E-39	1. 934341824	0. 9	0. 526	2. 45E-34 Platelets	MTRNR2L10
8. 91E-39	-2. 467477545	0. 111	0. 868	3. 00E-34 Platelets	HNRNPA1
6. 87E-38	2. 432239132	0. 722	0. 273	2. 32E-33 Platelets	DNAJB6
9. 19E-38	-2. 115176733	0. 211	0. 921	3. 10E-33 Platelets	BTF3
1. 24E-37	2. 115180028	0. 689	0. 238	4. 19E-33 Platelets	NDUFA6
1. 95E-37	-2. 421077956	0. 133	0. 871	6. 58E-33 Platelets	EEF2
2. 58E-37	1. 968954626	0. 511	0. 12	8. 71E-33 Platelets	PYCR2
3. 95E-37	1. 450431203	0. 356	0. 056	1. 33E-32 Platelets	RIT1
8. 61E-37	-2. 346066572	0. 156	0. 888	2. 90E-32 Platelets	RPS10
9. 73E-37	1. 954708371	0. 589	0. 166	3. 28E-32 Platelets	CAMTA1
2. 25E-36	2. 102560833	0. 622	0. 19	7. 59E-32 Platelets	NUTF2
4. 00E-36	2. 640987339	0. 978	0. 887	1. 35E-31 Platelets	MYL6
4. 23E-36	2. 156687628	0. 556	0. 148	1. 42E-31 Platelets	UBAC2
4. 32E-36	-2. 544286648	0. 078	0. 817	1. 46E-31 Platelets	GLTSCR2
6. 99E-36	-2. 373632414	0. 056	0. 829	2. 36E-31 Platelets	SLC25A6
1. 29E-35	1. 554388939	0. 367	0. 062	4. 33E-31 Platelets	PPM1A
1. 77E-35	1. 479468736	0. 978	0. 888	5. 96E-31 Platelets	HLA-E
2. 32E-35	2. 308945024	0. 744	0. 308	7. 82E-31 Platelets	LAT
2. 66E-35	-2. 03661433	0. 222	0. 916	8. 96E-31 Platelets	TXNIP
3. 12E-35	1. 592501932	0. 333	0. 053	1. 05E-30 Platelets	DERA
4. 06E-35	2. 146859354	0. 678	0. 239	1. 37E-30 Platelets	ICAM2
2. 03E-34	1. 849005997	0. 478	0. 111	6. 83E-30 Platelets	MAGED2
2. 24E-34	1. 981415892	0. 7	0. 263	7. 56E-30 Platelets	TGFB1
2. 31E-34	-2. 187814603	0. 167	0. 869	7. 78E-30 Platelets	CORO1A
3. 31E-34	2. 019511555	0. 522	0. 135	1. 11E-29 Platelets	R3HDM4
4. 18E-34	2. 126976368	0. 656	0. 22	1. 41E-29 Platelets	ASAH1
5. 48E-34	-2. 270776681	0. 1	0. 824	1. 85E-29 Platelets	EIF3E
5. 84E-34	2. 056770697	0. 7	0. 262	1. 97E-29 Platelets	WDR1
6. 71E-34	1. 758047307	0. 6	0. 18	2. 26E-29 Platelets	RAB8A
7. 27E-34	-2. 190103979	0. 1	0. 825	2. 45E-29 Platelets	COMMD6
8. 07E-34	1. 438087415	0. 322	0. 051	2. 72E-29 Platelets	TM2D2
1. 23E-33	2. 184681725	0. 644	0. 207	4. 14E-29 Platelets	PLEK
1. 93E-33	2. 088486336	0. 922	0. 7	6. 50E-29 Platelets	PPDPF

1. 96E-33	1. 931210411	0. 878	0. 613	6. 61E-29 Platelets	UQCRH
4. 65E-33	2. 136730544	0. 811	0. 408	1. 57E-28 Platelets	FKBP1A
8. 72E-33	1. 817757453	0. 689	0. 237	2. 94E-28 Platelets	STXBP2
2. 15E-32	-2. 132630575	0. 156	0. 834	7. 23E-28 Platelets	RPL36A
4. 86E-32	1. 336013046	0. 278	0. 04	1. 64E-27 Platelets	PACSIN2
5. 37E-32	1. 75938824	0. 856	0. 5	1. 81E-27 Platelets	YWHAZ
5. 43E-32	-2. 141365696	0. 1	0. 808	1. 83E-27 Platelets	HINT1
5. 48E-32	1. 518134803	0. 311	0. 05	1. 85E-27 Platelets	CDIP1
6. 10E-32	-2. 524808149	0. 133	0. 841	2. 06E-27 Platelets	S100A6
1. 63E-31	2. 009262548	0. 544	0. 16	5. 49E-27 Platelets	HACD4
2. 01E-31	2. 254981302	0. 511	0. 14	6. 77E-27 Platelets	RSU1
2. 01E-31	1. 985008511	0. 733	0. 347	6. 77E-27 Platelets	TMEM50A
3. 03E-31	1. 684991988	0. 289	0. 044	1. 02E-26 Platelets	PTGIR
6. 09E-31	1. 560565963	0. 322	0. 055	2. 05E-26 Platelets	DAAM1
9. 51E-31	1. 880269132	0. 489	0. 123	3. 20E-26 Platelets	CD36
1. 39E-30	-2. 387728688	0. 222	0. 857	4. 69E-26 Platelets	CYBA
1. 83E-30	-2. 152779576	0. 367	0. 067	6. 18E-26 Platelets	HBA1
2. 85E-30	1. 747036073	0. 778	0. 385	9. 59E-26 Platelets	EIF4G2
7. 71E-30	2. 082064515	0. 811	0. 477	2. 60E-25 Platelets	RBX1
8. 04E-30	-1. 052532525	0. 911	0. 99	2. 71E-25 Platelets	MT-CO3
2. 66E-29	-1. 700940769	0. 3	0. 885	8. 96E-25 Platelets	UQCRB
3. 78E-29	-1. 480846237	0. 589	0. 948	1. 27E-24 Platelets	RPL4
8. 06E-29	-1. 940449552	0. 122	0. 793	2. 71E-24 Platelets	ATP5G2
1. 01E-28	-2. 014548387	0. 067	0. 742	3. 41E-24 Platelets	PTPRC
1. 58E-28	1. 870029606	0. 578	0. 2	5. 34E-24 Platelets	IFI27L2
1. 88E-28	-1. 567150765	0. 367	0. 909	6. 33E-24 Platelets	COX4I1
2. 31E-28	-2. 008377919	0. 1	0. 779	7. 77E-24 Platelets	RPL17
2. 84E-28	2. 121850807	0. 567	0. 193	9. 57E-24 Platelets	SVIP
3. 31E-28	1. 307796266	0. 267	0. 041	1. 12E-23 Platelets	ZFYVE21
3. 97E-28	1. 442290196	0. 356	0. 072	1. 34E-23 Platelets	MPST
4. 63E-28	1. 589885792	0. 456	0. 115	1. 56E-23 Platelets	LINC00657
5. 32E-28	-2. 232165447	0. 156	0. 777	1. 79E-23 Platelets	BTG1
1. 04E-27	1. 689971647	0. 333	0. 065	3. 49E-23 Platelets	BET1
1. 40E-27	-2. 025714648	0. 078	0. 724	4. 73E-23 Platelets	CD48
1. 43E-27	1. 32492272	0. 267	0. 042	4. 83E-23 Platelets	MTFR1L
1. 97E-27	-1. 923099461	0. 1	0. 745	6. 65E-23 Platelets	EIF3K
2. 83E-27	-2. 758538049	0. 167	0. 779	9. 53E-23 Platelets	S100A4
3. 98E-27	-1. 714004983	0. 211	0. 849	1. 34E-22 Platelets	DDX5
4. 01E-27	-1. 601512142	0. 333	0. 889	1. 35E-22 Platelets	RPL36AL
4. 58E-27	-2. 167093458	0. 156	0. 765	1. 54E-22 Platelets	VIM
6. 95E-27	1. 833104205	0. 456	0. 124	2. 34E-22 Platelets	RABGAP1L
7. 19E-27	1. 23224197	0. 256	0. 039	2. 42E-22 Platelets	AGPAT1
2. 43E-26	-1. 93367796	0. 122	0. 758	8. 19E-22 Platelets	HSPA8
3. 62E-26	1. 780124312	0. 411	0. 105	1. 22E-21 Platelets	RIOK3
4. 70E-26	1. 975062297	0. 389	0. 092	1. 58E-21 Platelets	ERV3-1
5. 07E-26	-1. 877942444	0. 067	0. 703	1. 71E-21 Platelets	SNRPD2
5. 91E-26	-1. 928219852	0. 067	0. 687	1. 99E-21 Platelets	EIF3F
9. 97E-26	1. 872299573	0. 444	0. 124	3. 36E-21 Platelets	LIPA
1. 20E-25	1. 492525104	0. 356	0. 078	4. 05E-21 Platelets	CERS2
2. 27E-25	-2. 98903541	0. 078	0. 674	7. 64E-21 Platelets	LTB
2. 73E-25	1. 735813492	0. 778	0. 486	9. 21E-21 Platelets	SNX3

3.34E-25	1.776242236	0.478	0.146	1.12E-20 Platelets	RAB4A
4.96E-25	1.711312625	0.489	0.148	1.67E-20 Platelets	ZYX
5.35E-25	1.645279144	0.767	0.444	1.80E-20 Platelets	CD99
5.42E-25	1.870466893	0.767	0.464	1.83E-20 Platelets	BIN2
7.43E-25	1.804035093	0.6	0.238	2.50E-20 Platelets	MYH9
9.27E-25	1.785494915	0.478	0.143	3.12E-20 Platelets	RTN3
1.49E-24	1.941667805	0.567	0.217	5.02E-20 Platelets	ATF4
1.82E-24	1.774703065	0.533	0.187	6.13E-20 Platelets	PIP4K2A
1.82E-24	-2.297612002	0.078	0.671	6.13E-20 Platelets	IFITM2
2.02E-24	1.664073666	0.622	0.256	6.81E-20 Platelets	VASP
2.28E-24	1.233750373	0.356	0.078	7.68E-20 Platelets	MAPRE2
2.53E-24	1.884397892	0.767	0.458	8.54E-20 Platelets	C9orf16
3.46E-24	1.717997334	0.733	0.41	1.17E-19 Platelets	GABARAPL2
4.68E-24	1.427835574	0.889	0.763	1.58E-19 Platelets	HMGB1
4.71E-24	1.336956278	0.967	0.953	1.59E-19 Platelets	SERF2
5.76E-24	1.40076151	0.3	0.06	1.94E-19 Platelets	UBL4A
6.67E-24	1.329714643	0.3	0.059	2.25E-19 Platelets	CYB5R1
8.47E-24	1.774693387	0.589	0.24	2.85E-19 Platelets	MOB1A
8.89E-24	1.237470807	0.956	0.848	2.99E-19 Platelets	GAPDH
1.07E-23	-1.713353224	0.167	0.752	3.60E-19 Platelets	SRSF5
1.09E-23	1.675837923	0.467	0.145	3.67E-19 Platelets	LDLRAP1
1.26E-23	1.67779991	0.644	0.293	4.25E-19 Platelets	TMEM219
1.68E-23	1.783333001	0.522	0.183	5.66E-19 Platelets	RHEB
1.87E-23	1.815030169	0.611	0.261	6.31E-19 Platelets	FLNA
2.29E-23	1.35622811	0.278	0.053	7.71E-19 Platelets	C7orf49
2.63E-23	-1.788465117	0.078	0.683	8.85E-19 Platelets	PSME1
3.24E-23	1.737657862	0.789	0.531	1.09E-18 Platelets	TPM3
5.20E-23	-1.788200197	0.1	0.691	1.75E-18 Platelets	LIMD2
1.42E-22	1.980486144	0.556	0.221	4.78E-18 Platelets	CCNG1
1.47E-22	1.125319595	0.911	0.674	4.96E-18 Platelets	ALDOA
2.18E-22	-1.831538635	0.067	0.642	7.35E-18 Platelets	ZNF90
3.03E-22	1.732369044	0.333	0.078	1.02E-17 Platelets	INSIG1
4.22E-22	1.132483836	0.956	0.886	1.42E-17 Platelets	ARHGDI1B
4.96E-22	-1.931982823	0.089	0.653	1.67E-17 Platelets	GIMAP7
5.95E-22	1.513425904	0.622	0.27	2.00E-17 Platelets	DOK2
7.95E-22	1.599674112	0.322	0.074	2.68E-17 Platelets	PPP1R15A
8.54E-22	1.515517301	0.767	0.535	2.88E-17 Platelets	NDUFS5
9.00E-22	1.804756246	0.511	0.188	3.03E-17 Platelets	YWHAE
1.19E-21	1.201789975	0.256	0.047	4.01E-17 Platelets	CASP3
1.51E-21	1.781712273	0.367	0.096	5.09E-17 Platelets	TBPL1
2.08E-21	-1.718956538	0.156	0.737	7.02E-17 Platelets	CD37
2.81E-21	1.664923198	0.778	0.515	9.46E-17 Platelets	TSC22D3
3.85E-21	-1.742566769	0.056	0.613	1.30E-16 Platelets	EIF3L
6.25E-21	-1.437177733	0.122	0.7	2.10E-16 Platelets	EDF1
6.73E-21	1.548915506	0.444	0.142	2.27E-16 Platelets	SECISBP2
1.30E-20	-1.921371327	0.078	0.632	4.39E-16 Platelets	S100A10
1.68E-20	-2.579645113	0.044	0.599	5.66E-16 Platelets	IL32
1.69E-20	-1.776899627	0.078	0.602	5.71E-16 Platelets	HSP90AB1
1.81E-20	1.367156569	0.789	0.579	6.11E-16 Platelets	ARL6IP5
1.86E-20	-1.565969102	0.089	0.639	6.28E-16 Platelets	SSR2
2.17E-20	-1.755370872	0.067	0.608	7.31E-16 Platelets	RAC2

2. 23E-20	1. 28242789	0. 256	0. 05	7. 50E-16 Platelets	DHRS3
2. 73E-20	-1. 751262325	0. 044	0. 584	9. 20E-16 Platelets	TRAF3IP3
2. 91E-20	-1. 656618744	0. 078	0. 631	9. 81E-16 Platelets	PNISR
3. 11E-20	1. 314195248	0. 267	0. 054	1. 05E-15 Platelets	BTK
4. 34E-20	-1. 800236539	0. 056	0. 588	1. 46E-15 Platelets	LSP1
6. 40E-20	1. 636477812	0. 789	0. 569	2. 16E-15 Platelets	CLIC1
6. 65E-20	1. 546146221	0. 5	0. 185	2. 24E-15 Platelets	BNIP2
1. 03E-19	1. 513443189	0. 3	0. 071	3. 48E-15 Platelets	SLC39A3
1. 09E-19	-2. 099822477	0. 044	0. 573	3. 68E-15 Platelets	ITGB2
1. 20E-19	1. 781230599	0. 556	0. 249	4. 04E-15 Platelets	SQSTM1
1. 34E-19	1. 4829318	0. 622	0. 309	4. 52E-15 Platelets	SERPINB1
1. 45E-19	1. 416368555	0. 322	0. 08	4. 88E-15 Platelets	ITFG1
1. 67E-19	-1. 718430476	0. 033	0. 555	5. 63E-15 Platelets	HNRNPDL
1. 70E-19	1. 14578599	0. 256	0. 052	5. 72E-15 Platelets	IKBK
2. 55E-19	1. 195903771	0. 889	0. 752	8. 60E-15 Platelets	CALM1
2. 87E-19	-2. 366205561	0. 056	0. 575	9. 67E-15 Platelets	TRAC
3. 01E-19	-1. 566963911	0. 122	0. 639	1. 01E-14 Platelets	EIF3H
3. 67E-19	-1. 756813035	0. 044	0. 555	1. 24E-14 Platelets	TIPIN
4. 17E-19	1. 82688313	0. 389	0. 119	1. 40E-14 Platelets	RAP2B
4. 71E-19	1. 531431917	0. 4	0. 125	1. 59E-14 Platelets	ISCA1
5. 70E-19	1. 705908752	0. 522	0. 213	1. 92E-14 Platelets	RHOF
6. 91E-19	-1. 870583478	0. 078	0. 588	2. 33E-14 Platelets	AC090498. 1
8. 05E-19	-1. 744847208	0. 167	0. 679	2. 71E-14 Platelets	LDHB
1. 00E-18	-1. 657055368	0. 044	0. 541	3. 39E-14 Platelets	RAN
1. 03E-18	-1. 571928073	0. 078	0. 594	3. 45E-14 Platelets	APRT
1. 40E-18	-1. 685175858	0. 133	0. 637	4. 71E-14 Platelets	NHSL2
1. 49E-18	1. 380549368	0. 933	0. 87	5. 03E-14 Platelets	ACTG1
1. 57E-18	-1. 385325052	0. 211	0. 746	5. 29E-14 Platelets	LAPTM5
3. 34E-18	1. 82849087	0. 433	0. 155	1. 13E-13 Platelets	RAB10
3. 79E-18	-1. 680132421	0. 033	0. 534	1. 28E-13 Platelets	CD53
4. 06E-18	1. 326159336	0. 289	0. 07	1. 37E-13 Platelets	ARMCX6
6. 08E-18	1. 703806643	0. 678	0. 398	2. 05E-13 Platelets	TUBA1B
6. 69E-18	1. 408870887	0. 289	0. 07	2. 26E-13 Platelets	GNB5
7. 75E-18	-1. 500418153	0. 078	0. 585	2. 61E-13 Platelets	EIF3G
9. 02E-18	1. 480498385	0. 567	0. 268	3. 04E-13 Platelets	EIF1B
1. 63E-17	1. 65389195	0. 633	0. 359	5. 49E-13 Platelets	CCDC85B
1. 71E-17	-3. 088387737	0. 144	0. 615	5. 75E-13 Platelets	CD74
2. 04E-17	-2. 182324274	0. 033	0. 508	6. 88E-13 Platelets	TRBC2
2. 17E-17	-1. 319745823	0. 189	0. 706	7. 30E-13 Platelets	CHCHD2
2. 17E-17	1. 496283192	0. 422	0. 15	7. 32E-13 Platelets	ARF4
2. 32E-17	1. 318494653	0. 389	0. 127	7. 83E-13 Platelets	N4BP2L1
2. 37E-17	1. 286008451	0. 322	0. 088	7. 98E-13 Platelets	CCPG1
3. 68E-17	-1. 671481724	0. 056	0. 539	1. 24E-12 Platelets	GIMAP4
4. 48E-17	-1. 607250244	0. 044	0. 532	1. 51E-12 Platelets	CLEC2D
4. 50E-17	-1. 521097305	0. 056	0. 544	1. 52E-12 Platelets	ARL6IP4
4. 89E-17	-1. 33113829	0. 144	0. 664	1. 65E-12 Platelets	COX7A2
4. 90E-17	-1. 460007096	0. 111	0. 596	1. 65E-12 Platelets	ERP29
6. 13E-17	-1. 503765436	0. 089	0. 569	2. 07E-12 Platelets	ANAPC16
6. 71E-17	1. 298171361	0. 289	0. 073	2. 26E-12 Platelets	RAB37
6. 94E-17	1. 546835077	0. 489	0. 212	2. 34E-12 Platelets	GNAS
7. 14E-17	1. 283160672	0. 756	0. 545	2. 40E-12 Platelets	CAPZB

7.38E-17	1.661129783	0.611	0.339	2.49E-12 Platelets	CD47
7.63E-17	1.582754701	0.378	0.123	2.57E-12 Platelets	MAP2K3
8.41E-17	-1.608755471	0.044	0.513	2.84E-12 Platelets	EVI2B
8.80E-17	1.232649905	0.322	0.091	2.97E-12 Platelets	HK1
1.21E-16	1.777899287	0.656	0.409	4.08E-12 Platelets	SH3BGRL
1.31E-16	-1.502940967	0.056	0.53	4.42E-12 Platelets	HIGD2A
1.36E-16	1.457780454	0.611	0.333	4.59E-12 Platelets	SELT
1.59E-16	2.167225352	0.522	0.247	5.36E-12 Platelets	RASGRP2
1.74E-16	1.077348403	0.267	0.064	5.85E-12 Platelets	NUTM2A-AS1
2.04E-16	1.352483771	0.289	0.075	6.87E-12 Platelets	SEC14L1
2.10E-16	-1.912318059	0.067	0.543	7.07E-12 Platelets	CD3D
3.48E-16	-1.890701895	0.056	0.515	1.17E-11 Platelets	PLAC8
3.84E-16	1.426753485	0.444	0.164	1.29E-11 Platelets	RHOC
3.91E-16	-1.405724594	0.056	0.532	1.32E-11 Platelets	CNBP
4.10E-16	1.415469688	0.433	0.164	1.38E-11 Platelets	CMPK1
4.13E-16	1.271948363	0.389	0.135	1.39E-11 Platelets	SUSD3
5.20E-16	-1.772615073	0.067	0.529	1.75E-11 Platelets	ANXA1
5.68E-16	1.216897751	0.333	0.099	1.91E-11 Platelets	GNAQ
5.89E-16	1.206587946	0.344	0.105	1.98E-11 Platelets	ARF3
6.32E-16	-1.503754921	0.067	0.525	2.13E-11 Platelets	MIF
7.64E-16	-1.482139876	0.056	0.51	2.57E-11 Platelets	RBM3
1.40E-15	1.458485135	0.411	0.154	4.71E-11 Platelets	ABI1
1.64E-15	-1.5726837	0.056	0.495	5.54E-11 Platelets	CD44
2.00E-15	-1.759862065	0.044	0.491	6.75E-11 Platelets	CD3E
2.04E-15	1.342785571	0.422	0.163	6.87E-11 Platelets	RILPL2
2.24E-15	1.215832934	0.278	0.073	7.56E-11 Platelets	SSBP2
2.48E-15	1.945216616	0.5	0.24	8.35E-11 Platelets	NDUFAF3
2.84E-15	-1.271685505	0.222	0.677	9.58E-11 Platelets	YBX1
4.36E-15	-1.532444874	0.078	0.508	1.47E-10 Platelets	AES
4.58E-15	-1.41280881	0.067	0.515	1.54E-10 Platelets	SEC62
4.85E-15	-1.654222941	0.056	0.507	1.63E-10 Platelets	TSPO
5.37E-15	-1.416805393	0.089	0.535	1.81E-10 Platelets	C6orf48
5.75E-15	-1.378298509	0.067	0.514	1.94E-10 Platelets	NDUFB2
5.77E-15	-1.462655093	0.044	0.471	1.94E-10 Platelets	TBCA
6.57E-15	-1.426269115	0.033	0.469	2.21E-10 Platelets	EIF3D
7.65E-15	1.385509377	0.6	0.352	2.58E-10 Platelets	VAPA
7.87E-15	-1.206452875	0.2	0.676	2.65E-10 Platelets	HSP90AA1
8.88E-15	-1.386270976	0.067	0.504	2.99E-10 Platelets	ACAP1
9.74E-15	1.341875028	0.7	0.498	3.28E-10 Platelets	PARK7
1.15E-14	-1.3336977	0.056	0.508	3.88E-10 Platelets	NACA2
1.24E-14	-1.441095002	0.033	0.456	4.17E-10 Platelets	NSA2
1.42E-14	-1.38760643	0.067	0.506	4.78E-10 Platelets	VAMP2
1.43E-14	-2.044924403	0.122	0.546	4.80E-10 Platelets	S100A11
1.44E-14	-1.535238339	0.033	0.456	4.84E-10 Platelets	DBI
1.68E-14	-1.12712688	0.378	0.774	5.67E-10 Platelets	SARAF
1.72E-14	-1.415469115	0.067	0.504	5.78E-10 Platelets	RARRES3
1.76E-14	-1.317550068	0.078	0.513	5.94E-10 Platelets	RSL24D1
2.07E-14	-1.360780076	0.067	0.5	6.99E-10 Platelets	HMGN2
2.78E-14	-1.937123258	0.056	0.473	9.37E-10 Platelets	CD7
2.84E-14	1.812882782	0.5	0.242	9.58E-10 Platelets	MKRN1
2.94E-14	-1.307519029	0.089	0.517	9.91E-10 Platelets	SPCS1

3.64E-14	1.438014123	0.6	0.368	1.23E-09	Platelets	FKBP8
3.84E-14	1.408736952	0.578	0.326	1.29E-09	Platelets	AP2M1
4.58E-14	-1.521304581	0.033	0.457	1.54E-09	Platelets	LCK
5.12E-14	-1.331511175	0.056	0.485	1.72E-09	Platelets	EIF3M
5.24E-14	-1.211276389	0.156	0.619	1.76E-09	Platelets	YWHAB
5.49E-14	-1.255782961	0.133	0.578	1.85E-09	Platelets	N4BP2L2
5.67E-14	1.268443555	0.267	0.074	1.91E-09	Platelets	RGCC
7.70E-14	-1.944876584	0.133	0.561	2.59E-09	Platelets	NEAT1
7.77E-14	-1.282663036	0.067	0.489	2.62E-09	Platelets	MZT2B
8.25E-14	-1.513067434	0.044	0.448	2.78E-09	Platelets	LITAF
8.78E-14	1.078858277	0.3	0.09	2.96E-09	Platelets	SLC44A2
1.14E-13	-1.472755056	0.022	0.434	3.85E-09	Platelets	PRELID1
1.20E-13	1.126329582	0.289	0.086	4.06E-09	Platelets	LINC01089
1.50E-13	-1.596465482	0.078	0.474	5.04E-09	Platelets	NOSIP
1.51E-13	1.420695707	0.289	0.086	5.09E-09	Platelets	ARMCX3
1.57E-13	1.134417804	0.622	0.355	5.29E-09	Platelets	CD63
1.70E-13	1.402546136	0.633	0.392	5.72E-09	Platelets	MSN
1.72E-13	-1.37032922	0.089	0.508	5.79E-09	Platelets	POLR2L
1.85E-13	-1.108901852	0.156	0.614	6.24E-09	Platelets	COX5B
2.03E-13	-1.422659897	0.067	0.472	6.84E-09	Platelets	IL2RG
2.04E-13	-1.353277274	0.044	0.448	6.88E-09	Platelets	GTF3A
2.08E-13	1.319936279	0.378	0.143	7.01E-09	Platelets	UBE2E3
2.41E-13	-1.358873231	0.067	0.48	8.12E-09	Platelets	SEC61B
2.53E-13	-1.420830362	0.011	0.403	8.53E-09	Platelets	ANKRD12
2.92E-13	-1.295122768	0.056	0.473	9.85E-09	Platelets	FUS
3.10E-13	-1.251862823	0.089	0.505	1.05E-08	Platelets	C19orf53
3.11E-13	-1.255071123	0.067	0.477	1.05E-08	Platelets	ICAM3
3.33E-13	-1.437130332	0.022	0.409	1.12E-08	Platelets	FAM49B
3.34E-13	1.209914099	0.3	0.096	1.13E-08	Platelets	UBXN6
3.35E-13	-1.382125107	0.067	0.472	1.13E-08	Platelets	PSME2
3.52E-13	-1.348739281	0.067	0.469	1.18E-08	Platelets	POLR2J3
3.59E-13	1.447276209	0.289	0.089	1.21E-08	Platelets	PTTG1IP
4.16E-13	-1.3351205	0.056	0.452	1.40E-08	Platelets	NCL
4.55E-13	-1.710803873	0.089	0.484	1.53E-08	Platelets	GSTP1
4.81E-13	-1.431926346	0.022	0.413	1.62E-08	Platelets	GYPC
5.09E-13	1.33139639	0.311	0.103	1.71E-08	Platelets	USF2
6.40E-13	-1.216333105	0.133	0.547	2.16E-08	Platelets	UXT
7.19E-13	-1.361004835	0.078	0.487	2.42E-08	Platelets	SELL
9.55E-13	1.478652322	0.522	0.29	3.22E-08	Platelets	SUPT4H1
9.88E-13	-1.450996698	0.011	0.394	3.33E-08	Platelets	ISG20
1.07E-12	-1.556424608	0.089	0.492	3.62E-08	Platelets	CXCR4
1.25E-12	-1.188879469	0.078	0.484	4.21E-08	Platelets	TRMT112
2.11E-12	-1.236216774	0.056	0.441	7.10E-08	Platelets	SNRPG
2.44E-12	-1.439461508	0.056	0.434	8.22E-08	Platelets	LY6E
2.72E-12	-1.208161744	0.089	0.488	9.18E-08	Platelets	PPIB
2.85E-12	1.316200448	0.544	0.317	9.60E-08	Platelets	TERF2IP
3.39E-12	-1.280248669	0.3	0.709	1.14E-07	Platelets	HCST
3.60E-12	-1.106858039	0.067	0.457	1.21E-07	Platelets	ATP5A1
3.82E-12	-1.494064065	0.022	0.392	1.29E-07	Platelets	ZFP36L2
3.98E-12	1.611819426	0.611	0.43	1.34E-07	Platelets	TRAPPC1
4.92E-12	-1.15975043	0.056	0.44	1.66E-07	Platelets	PNRC1

5.49E-12	-1.095398219	0.078	0.466	1.85E-07 Platelets	EIF4B
5.76E-12	-1.309829674	0.022	0.389	1.94E-07 Platelets	LEPROTL1
5.85E-12	-1.107554734	0.056	0.444	1.97E-07 Platelets	ERH
6.36E-12	-1.234352915	0.056	0.433	2.14E-07 Platelets	SF1
8.10E-12	-1.069557175	0.078	0.477	2.73E-07 Platelets	ATP5J2
8.62E-12	-1.262502555	0.033	0.396	2.91E-07 Platelets	PEBP1
8.62E-12	-1.258646218	0.067	0.447	2.91E-07 Platelets	CSTB
8.81E-12	-1.13738299	0.2	0.608	2.97E-07 Platelets	EVL
9.23E-12	1.135378895	0.278	0.089	3.11E-07 Platelets	HMG20B
1.04E-11	-1.311052506	0.022	0.381	3.51E-07 Platelets	RCSL1
1.08E-11	1.293806566	0.467	0.244	3.66E-07 Platelets	NDUFA5
1.26E-11	-1.250677449	0.011	0.37	4.24E-07 Platelets	SNHG8
1.32E-11	-1.228488478	0.033	0.39	4.46E-07 Platelets	FBL
1.37E-11	1.154838596	0.4	0.169	4.60E-07 Platelets	CAPN2
1.40E-11	-1.341332147	0.022	0.375	4.71E-07 Platelets	ANXA6
1.81E-11	-1.231833729	0.011	0.359	6.11E-07 Platelets	HSPE1
1.99E-11	-1.748689321	0.089	0.449	6.72E-07 Platelets	IL7R
2.03E-11	1.092214806	0.344	0.132	6.83E-07 Platelets	UBE2J1
2.08E-11	-1.180594334	0.056	0.417	7.02E-07 Platelets	MINOS1
2.25E-11	1.093312861	0.6	0.338	7.57E-07 Platelets	AP1S2
2.27E-11	-1.103855778	0.122	0.522	7.66E-07 Platelets	ATP5O
2.86E-11	-1.180783493	0.089	0.456	9.63E-07 Platelets	UQCRCQ
2.88E-11	-2.036133875	0.056	0.403	9.71E-07 Platelets	TRBC1
2.90E-11	-1.491897965	0.033	0.384	9.76E-07 Platelets	MYO1F
3.26E-11	1.30473029	0.433	0.209	1.10E-06 Platelets	STRAP
3.38E-11	1.284994406	0.433	0.214	1.14E-06 Platelets	ANAPC5
3.79E-11	-1.347103664	0.044	0.4	1.28E-06 Platelets	JUNB
3.86E-11	-1.401114943	0.033	0.386	1.30E-06 Platelets	CD3G
4.20E-11	-1.035174116	0.056	0.432	1.42E-06 Platelets	C11orf31
5.08E-11	1.346296564	0.567	0.354	1.71E-06 Platelets	AP2S1
5.37E-11	1.319324692	0.3	0.107	1.81E-06 Platelets	SLC2A3
5.60E-11	-1.391625693	0.044	0.386	1.89E-06 Platelets	C1orf162
5.79E-11	1.435334577	0.456	0.238	1.95E-06 Platelets	CMTM6
5.91E-11	-1.236302639	0.022	0.36	1.99E-06 Platelets	RWDD1
5.94E-11	-1.276691186	0.011	0.346	2.00E-06 Platelets	RNF213
7.33E-11	1.249204928	0.411	0.192	2.47E-06 Platelets	GTF3C6
7.81E-11	-1.131004903	0.044	0.395	2.63E-06 Platelets	LSM7
8.11E-11	-1.264214716	0.056	0.415	2.73E-06 Platelets	CD2
8.82E-11	1.096520721	0.311	0.117	2.97E-06 Platelets	UXS1
8.88E-11	-1.115961013	0.067	0.42	2.99E-06 Platelets	SNRPE
9.20E-11	-1.093278408	0.022	0.371	3.10E-06 Platelets	SNRPB2
9.71E-11	-1.997362851	0.078	0.428	3.27E-06 Platelets	CTSS
1.07E-10	-1.323490092	0.044	0.385	3.60E-06 Platelets	CRIP1
1.10E-10	-1.157389693	0.033	0.374	3.72E-06 Platelets	CYTIP
1.13E-10	1.582100441	0.5	0.294	3.80E-06 Platelets	C7orf73
1.13E-10	-1.14318953	0.044	0.388	3.80E-06 Platelets	RSL1D1
1.15E-10	-1.123779832	0.033	0.374	3.88E-06 Platelets	SNRPF
1.19E-10	-1.224979107	0.067	0.415	4.01E-06 Platelets	LCP1
1.21E-10	-1.013494316	0.089	0.464	4.07E-06 Platelets	ATP5G3
1.45E-10	-1.102396211	0.044	0.392	4.87E-06 Platelets	KMT2E
1.66E-10	-1.168712449	0.033	0.367	5.61E-06 Platelets	COX5A

1.89E-10	-2.132646659	0.078	0.418	6.35E-06 Platelets	LGALS1
1.97E-10	-1.130876983	0.044	0.387	6.62E-06 Platelets	PA2G4
2.27E-10	-1.1371089	0.022	0.352	7.64E-06 Platelets	LINC00493
2.49E-10	-1.063753434	0.044	0.388	8.38E-06 Platelets	ATP5H
2.95E-10	-1.226145448	0.033	0.357	9.95E-06 Platelets	IFI16
3.04E-10	-1.138186013	0.022	0.351	1.02E-05 Platelets	HSD17B11
3.22E-10	-1.235275501	0.033	0.365	1.08E-05 Platelets	IRF1
3.61E-10	-1.491683015	0.022	0.343	1.21E-05 Platelets	CCR7
4.82E-10	-1.36065067	0.011	0.33	1.63E-05 Platelets	MT2A
5.19E-10	-2.22357114	0.033	0.357	1.75E-05 Platelets	HLA-DRB1
5.25E-10	-1.049302012	0.067	0.404	1.77E-05 Platelets	C14orf166
5.42E-10	-1.021289459	0.144	0.497	1.83E-05 Platelets	SRSF3
5.58E-10	-1.089422981	0.044	0.373	1.88E-05 Platelets	EIF2S3
5.62E-10	-1.099062297	0.067	0.398	1.89E-05 Platelets	LUC7L3
6.88E-10	-1.055436212	0.056	0.383	2.32E-05 Platelets	SF3B5
8.80E-10	-1.0880813	0.044	0.372	2.96E-05 Platelets	PSMA4
9.59E-10	-1.099313677	0.044	0.37	3.23E-05 Platelets	GLRX
9.63E-10	-1.096581638	0.022	0.335	3.24E-05 Platelets	FNBP1
1.02E-09	-2.916186738	0.044	0.357	3.45E-05 Platelets	HLA-DRA
1.03E-09	1.421882664	0.389	0.187	3.48E-05 Platelets	PRKARIA
1.07E-09	-1.475391403	0.033	0.338	3.61E-05 Platelets	IFITM1
1.08E-09	-1.037084647	0.067	0.392	3.63E-05 Platelets	TOMM20
1.13E-09	-1.139334483	0.022	0.336	3.80E-05 Platelets	RP5-1171I10.5
1.13E-09	-1.036166727	0.033	0.352	3.81E-05 Platelets	NDUFA12
1.18E-09	-1.042262502	0.033	0.351	3.97E-05 Platelets	PPP1R2
1.18E-09	-1.039572458	0.044	0.369	3.99E-05 Platelets	DDX24
1.21E-09	-1.12592009	0.033	0.347	4.08E-05 Platelets	TBC1D10C
1.44E-09	-1.055959298	0.022	0.332	4.86E-05 Platelets	PPA1
1.57E-09	-1.074736931	0.033	0.344	5.27E-05 Platelets	DDX18
1.69E-09	-1.055659993	0.044	0.363	5.70E-05 Platelets	ATM
1.70E-09	-1.193302778	0.056	0.378	5.74E-05 Platelets	ANXA2
1.76E-09	1.406288976	0.344	0.155	5.92E-05 Platelets	ADI1
1.77E-09	-1.060064822	0.056	0.372	5.96E-05 Platelets	UFC1
1.80E-09	-1.028609753	0.1	0.419	6.07E-05 Platelets	LDHA
1.81E-09	1.260861285	0.367	0.171	6.10E-05 Platelets	EIF4E
1.82E-09	-1.054440519	0.067	0.39	6.14E-05 Platelets	SRRM1
1.85E-09	-1.20331585	0.011	0.307	6.25E-05 Platelets	TCF7
1.89E-09	-1.349926937	0	0.295	6.36E-05 Platelets	BIRC3
1.92E-09	-1.037289683	0.067	0.392	6.47E-05 Platelets	ACTR2
2.06E-09	-1.009281884	0.1	0.431	6.96E-05 Platelets	HNRNPA0
2.19E-09	-1.079588299	0.033	0.336	7.38E-05 Platelets	PRDX2
2.29E-09	-2.463964054	0.056	0.363	7.70E-05 Platelets	TYROBP
2.73E-09	-1.014708631	0.022	0.325	9.21E-05 Platelets	TUFM
2.86E-09	-1.154490964	0.033	0.332	9.62E-05 Platelets	CLEC2B
2.94E-09	-1.172566863	0.022	0.317	9.92E-05 Platelets	NFKBIA
3.01E-09	-1.075504295	0.011	0.306	0.000101546 Platelets	ARHGAP30
3.08E-09	-1.062973808	0.044	0.354	0.000103662 Platelets	GIMAP1
3.09E-09	1.371150273	0.4	0.195	0.000104115 Platelets	C12orf75
3.30E-09	-1.089237237	0.067	0.37	0.000111025 Platelets	S1PR4
3.33E-09	-1.089437496	0.033	0.323	0.000112335 Platelets	PNN
3.42E-09	-1.144174628	0.022	0.318	0.000115314 Platelets	PIK3IP1

3.54E-09	-1.057579938	0.044	0.353	0.000119291	Platelets	TSTD1
4.98E-09	-1.03040486	0.056	0.364	0.000167676	Platelets	ARGLU1
5.08E-09	1.129741537	0.3	0.125	0.000171295	Platelets	BEX4
5.16E-09	-1.017326677	0.056	0.36	0.000173928	Platelets	SEPT9
5.21E-09	-1.09476717	0.011	0.299	0.000175423	Platelets	RHOH
5.78E-09	1.16506732	0.267	0.101	0.000194736	Platelets	PGD
5.82E-09	-1.441837001	0.056	0.357	0.000196256	Platelets	ID2
6.29E-09	-1.797018409	0.067	0.365	0.000211875	Platelets	HLA-DPA1
6.63E-09	-1.01360583	0.089	0.411	0.000223461	Platelets	PCSK7
6.69E-09	-1.083150079	0.056	0.348	0.000225472	Platelets	PLP2
6.78E-09	-1.085081497	0.033	0.319	0.000228552	Platelets	BIN1
7.27E-09	1.219234898	0.311	0.133	0.000244853	Platelets	DIAPH1
7.40E-09	1.175954608	0.367	0.174	0.000249256	Platelets	LSM1
7.65E-09	1.293191096	0.811	0.862	0.000257604	Platelets	H3F3B
7.65E-09	-1.02658877	0.011	0.295	0.000257723	Platelets	ANKRD44
7.73E-09	-1.041326154	0.044	0.34	0.000260474	Platelets	HMGN3
8.17E-09	1.12926702	0.4	0.213	0.000275273	Platelets	ANXA7
8.50E-09	-1.287240572	0.044	0.332	0.000286407	Platelets	ALOX5AP
9.08E-09	-1.830558573	0	0.275	0.000306089	Platelets	RPS4Y1
9.38E-09	-1.07138354	0.067	0.364	0.000315938	Platelets	TNRC6B
9.61E-09	1.178739735	0.378	0.185	0.000323964	Platelets	COMMD7
1.01E-08	1.34461225	0.322	0.141	0.000341735	Platelets	IQGAP2
1.17E-08	-1.034153567	0.033	0.314	0.000394321	Platelets	CCDC12
1.22E-08	-1.051417234	0.022	0.3	0.000409471	Platelets	ATXN8OS
1.25E-08	-1.014811524	0.011	0.29	0.000420957	Platelets	AAK1
1.28E-08	-1.090651889	0	0.271	0.00043107	Platelets	FCMR
1.29E-08	-1.08930355	0.033	0.324	0.000435778	Platelets	IER2
1.35E-08	1.142046873	0.544	0.373	0.000454018	Platelets	PRDX5
1.45E-08	-1.265816567	0.044	0.33	0.000487737	Platelets	CD247
1.54E-08	-1.029817884	0.044	0.329	0.00051857	Platelets	TAPBP
1.58E-08	-1.119081106	0.011	0.285	0.000530747	Platelets	LINCO0861
2.19E-08	-1.041932975	0.044	0.327	0.000738481	Platelets	HSP90B1
2.43E-08	-1.024339715	0.044	0.327	0.000818644	Platelets	PGLS
2.74E-08	1.081817143	0.667	0.637	0.0009221	Platelets	NDUFA4
2.81E-08	1.061077006	0.622	0.506	0.000945439	Platelets	CAP1
3.01E-08	1.01680359	0.278	0.114	0.001013063	Platelets	HIGD1A
3.03E-08	1.121569794	0.533	0.368	0.001021181	Platelets	VPS28
3.72E-08	-1.003597566	0.044	0.317	0.001253	Platelets	BST2
3.75E-08	-1.089957559	0.022	0.286	0.001264	Platelets	GLIPR1
3.80E-08	-1.079567516	0.033	0.299	0.001278972	Platelets	GABPB1-AS1
4.18E-08	-1.300673568	0.033	0.298	0.001409148	Platelets	GZMM
4.93E-08	1.101305301	0.267	0.109	0.001661232	Platelets	ORAI1
5.60E-08	-1.065821635	0.044	0.317	0.00188823	Platelets	XBP1
9.30E-08	1.108902808	0.378	0.197	0.003133559	Platelets	HSBP1
1.12E-07	1.059160139	0.567	0.42	0.003777642	Platelets	ARPC4
1.13E-07	-2.527495978	0.022	0.27	0.00382107	Platelets	KLRB1
1.18E-07	-1.081332502	0.056	0.322	0.003961382	Platelets	PYCARD
1.45E-07	1.203217982	0.467	0.302	0.004880887	Platelets	YWHAQ
1.58E-07	1.277206491	0.456	0.293	0.005317377	Platelets	PCNP
1.64E-07	-2.767698588	0.067	0.322	0.005538769	Platelets	NKG7
1.84E-07	-1.745157071	0.056	0.314	0.006210892	Platelets	AIF1

2.28E-07	1.181370255	0.467	0.302	0.007686574	Platelets	WIPF1
3.13E-07	1.006945837	0.3	0.137	0.010553129	Platelets	EHD1
4.07E-07	1.237306906	0.289	0.136	0.013725677	Platelets	UBE2F
4.10E-07	1.502622418	0.478	0.339	0.013821332	Platelets	ELF1
6.52E-07	1.104430812	0.478	0.345	0.021959324	Platelets	PAIP2
6.74E-07	-4.312919852	0.5	0.322	0.022714562	Platelets	HBB
8.40E-07	1.097612113	0.333	0.174	0.028300353	Platelets	DNAJC15
9.26E-07	-1.01945403	0.033	0.27	0.03119508	Platelets	NCF1
1.08E-06	1.110312801	0.4	0.24	0.036432503	Platelets	ACP1
1.14E-06	1.25723202	0.256	0.114	0.038453951	Platelets	PHF20L1

net_lr

source	target	ligand	receptor	prob	pval	interaction_name	interaction_name_2	pathway_name	annotation	evidence
T_cells	Monocyte	CCL5	CCR1	3.00E-06	0	CCL5_CCR1	CCL5 - CCR1	CCL	Secreted Signaling	KEGG: hsa04060
NK_cell	Monocyte	CCL5	CCR1	1.80E-05	0	CCL5_CCR1	CCL5 - CCR1	CCL	Secreted Signaling	KEGG: hsa04060
Platelets	Monocyte	CCL5	CCR1	3.68E-05	0	CCL5_CCR1	CCL5 - CCR1	CCL	Secreted Signaling	KEGG: hsa04060
T_cells	B_cell	MIF	CD74_CXCR4	7.06E-05	0	MIF_CD74_CXCR4	MIF - (CD74+CXCR4)	MIF	Secreted Signaling	PMID: 29637711; PMID: 24760155
NK_cell	B_cell	MIF	CD74_CXCR4	2.35E-05	0	MIF_CD74_CXCR4	MIF - (CD74+CXCR4)	MIF	Secreted Signaling	PMID: 29637711; PMID: 24760155
Monocyte	B_cell	MIF	CD74_CXCR4	2.35E-05	0	MIF_CD74_CXCR4	MIF - (CD74+CXCR4)	MIF	Secreted Signaling	PMID: 29637711; PMID: 24760155
B_cell	B_cell	MIF	CD74_CXCR4	2.35E-05	0	MIF_CD74_CXCR4	MIF - (CD74+CXCR4)	MIF	Secreted Signaling	PMID: 29637711; PMID: 24760155
T_cells	Monocyte	MIF	CD74_CD44	2.89E-05	0	MIF_CD74_CD44	MIF - (CD74+CD44)	MIF	Secreted Signaling	PMID: 29637711; PMID: 26175090
NK_cell	Monocyte	MIF	CD74_CD44	9.65E-06	0	MIF_CD74_CD44	MIF - (CD74+CD44)	MIF	Secreted Signaling	PMID: 29637711; PMID: 26175090
Monocyte	Monocyte	MIF	CD74_CD44	9.65E-06	0	MIF_CD74_CD44	MIF - (CD74+CD44)	MIF	Secreted Signaling	PMID: 29637711; PMID: 26175090
B_cell	Monocyte	MIF	CD74_CD44	9.65E-06	0	MIF_CD74_CD44	MIF - (CD74+CD44)	MIF	Secreted Signaling	PMID: 29637711; PMID: 26175090
T_cells	B_cell	MIF	CD74_CD44	2.35E-05	0	MIF_CD74_CD44	MIF - (CD74+CD44)	MIF	Secreted Signaling	PMID: 29637711; PMID: 26175090
T_cells	Monocyte	IL16	CD4	7.51E-07	0	IL16_CD4	IL16 - CD4	IL16	Secreted Signaling	KEGG: hsa04060
Monocyte	B_cell	TNFSF13B	TNFRSF13C	3.00E-06	0	TNFSF13B_TNFRSF13C	TNFSF13B - TNFRSF13C	BAFF	Secreted Signaling	KEGG: hsa04060
Monocyte	T_cells	LGALS9	PTPRC	4.51E-06	0	LGALS9_CD45	LGALS9 - CD45	GALECTIN	Secreted Signaling	PMID: 30120235
Monocyte	NK_cell	LGALS9	PTPRC	3.75E-06	0	LGALS9_CD45	LGALS9 - CD45	GALECTIN	Secreted Signaling	PMID: 30120235
Monocyte	Monocyte	LGALS9	PTPRC	3.00E-06	0	LGALS9_CD45	LGALS9 - CD45	GALECTIN	Secreted Signaling	PMID: 30120235
Monocyte	B_cell	LGALS9	PTPRC	2.25E-06	0	LGALS9_CD45	LGALS9 - CD45	GALECTIN	Secreted Signaling	PMID: 30120235
Monocyte	T_cells	LGALS9	CD44	2.25E-06	0	LGALS9_CD44	LGALS9 - CD44	GALECTIN	Secreted Signaling	PMID: 25065622
Monocyte	Monocyte	LGALS9	CD44	3.75E-06	0	LGALS9_CD44	LGALS9 - CD44	GALECTIN	Secreted Signaling	PMID: 25065622
Monocyte	B_cell	LGALS9	CD44	7.51E-07	0	LGALS9_CD44	LGALS9 - CD44	GALECTIN	Secreted Signaling	PMID: 25065622

Table S1

seed	sensitivity	specificity	Youden_index	cohort
6		1	0	0 training
6		1	0.022222222	0.022222222 training
6		1	0.044444444	0.044444444 training
6		1	0.066666667	0.066666667 training
6		1	0.088888889	0.088888889 training
6	0.98989899	0.088888889	0.078787879	0.078787879 training
6	0.98989899	0.111111111	0.101010101	0.101010101 training
6	0.97979798	0.111111111	0.090909091	0.090909091 training
6	0.96969697	0.111111111	0.080808081	0.080808081 training
6	0.96969697	0.133333333	0.103030303	0.103030303 training
6	0.96969697	0.155555556	0.125252525	0.125252525 training
6	0.95959596	0.155555556	0.115151515	0.115151515 training
6	0.95959596	0.177777778	0.137373737	0.137373737 training
6	0.94949494	0.177777778	0.127272727	0.127272727 training
6	0.94949494	0.2	0.149494949	0.149494949 training
6	0.94949494	0.222222222	0.171717172	0.171717172 training
6	0.94949494	0.244444444	0.193939394	0.193939394 training
6	0.93939393	0.244444444	0.183838384	0.183838384 training
6	0.92929292	0.244444444	0.173737374	0.173737374 training
6	0.92929292	0.266666667	0.195959596	0.195959596 training
6	0.91919191	0.266666667	0.185858586	0.185858586 training
6	0.91919191	0.288888889	0.208080808	0.208080808 training
6	0.90909090	0.288888889	0.197979798	0.197979798 training
6	0.90909090	0.311111111	0.22020202	0.22020202 training
6	0.90909090	0.333333333	0.242424242	0.242424242 training
6	0.90909090	0.355555556	0.264646465	0.264646465 training
6	0.90909090	0.377777778	0.286868687	0.286868687 training
6	0.89898989	0.377777778	0.276767677	0.276767677 training
6	0.88888888	0.377777778	0.266666667	0.266666667 training
6	0.88888888	0.4	0.288888889	0.288888889 training
6	0.87878787	0.4	0.278787879	0.278787879 training
6	0.86868686	0.4	0.268686869	0.268686869 training
6	0.86868686	0.422222222	0.290909091	0.290909091 training
6	0.85858585	0.422222222	0.280808081	0.280808081 training
6	0.84848484	0.422222222	0.270707071	0.270707071 training
6	0.84848484	0.444444444	0.292929293	0.292929293 training
6	0.83838383	0.444444444	0.282828283	0.282828283 training
6	0.82828282	0.444444444	0.272727273	0.272727273 training
6	0.82828282	0.466666667	0.294949495	0.294949495 training
6	0.81818181	0.466666667	0.284848485	0.284848485 training
6	0.80808080	0.466666667	0.274747475	0.274747475 training
6	0.80808080	0.488888889	0.296969697	0.296969697 training
6	0.80808080	0.511111111	0.319191919	0.319191919 training
6	0.79797979	0.511111111	0.309090909	0.309090909 training
6	0.79797979	0.533333333	0.331313131	0.331313131 training
6	0.79797979	0.555555556	0.353535354	0.353535354 training
6	0.78787878	0.555555556	0.343434343	0.343434343 training
6	0.77777777	0.555555556	0.333333333	0.333333333 training
6	0.77777777	0.577777778	0.355555556	0.355555556 training
6	0.76767676	0.577777778	0.345454545	0.345454545 training

6	0.757575758	0.577777778	0.335353535	training
6	0.747474747	0.577777778	0.325252525	training
6	0.737373737	0.577777778	0.315151515	training
6	0.727272727	0.577777778	0.305050505	training
6	0.727272727	0.6	0.327272727	training
6	0.727272727	0.622222222	0.349494949	training
6	0.717171717	0.622222222	0.339393939	training
6	0.717171717	0.644444444	0.361616162	training
6	0.717171717	0.666666667	0.383838384	training
6	0.717171717	0.688888889	0.406060606	training
6	0.717171717	0.711111111	0.428282828	training
6	0.707070707	0.711111111	0.418181818	training
6	0.707070707	0.733333333	0.44040404	training
6	0.696969697	0.733333333	0.43030303	training
6	0.686868687	0.733333333	0.42020202	training
6	0.676767677	0.733333333	0.41010101	training
6	0.676767677	0.755555556	0.432323232	training
6	0.666666667	0.755555556	0.422222222	training
6	0.656565657	0.755555556	0.412121212	training
6	0.646464646	0.755555556	0.402020202	training
6	0.636363636	0.755555556	0.391919192	training
6	0.626262626	0.755555556	0.381818182	training
6	0.616161616	0.755555556	0.371717172	training
6	0.606060606	0.755555556	0.361616162	training
6	0.595959596	0.755555556	0.351515152	training
6	0.595959596	0.777777778	0.373737374	training
6	0.585858586	0.777777778	0.363636364	training
6	0.575757576	0.777777778	0.353535354	training
6	0.565656566	0.777777778	0.343434343	training
6	0.565656566	0.8	0.365656566	training
6	0.555555556	0.8	0.355555556	training
6	0.545454545	0.8	0.345454545	training
6	0.545454545	0.822222222	0.367676768	training
6	0.545454545	0.844444444	0.38989899	training
6	0.545454545	0.866666667	0.412121212	training
6	0.535353535	0.866666667	0.402020202	training
6	0.525252525	0.866666667	0.391919192	training
6	0.525252525	0.888888889	0.414141414	training
6	0.515151515	0.888888889	0.404040404	training
6	0.505050505	0.888888889	0.393939394	training
6	0.494949495	0.888888889	0.383838384	training
6	0.484848485	0.888888889	0.373737374	training
6	0.474747475	0.888888889	0.363636364	training
6	0.464646465	0.888888889	0.353535354	training
6	0.454545455	0.888888889	0.343434343	training
6	0.444444444	0.888888889	0.333333333	training
6	0.434343434	0.888888889	0.323232323	training
6	0.424242424	0.888888889	0.313131313	training
6	0.414141414	0.888888889	0.303030303	training
6	0.404040404	0.888888889	0.292929293	training
6	0.404040404	0.911111111	0.315151515	training

6	0.393939394	0.911111111	0.305050505	training
6	0.393939394	0.933333333	0.327272727	training
6	0.383838384	0.933333333	0.317171717	training
6	0.373737374	0.933333333	0.307070707	training
6	0.363636364	0.933333333	0.296969697	training
6	0.353535354	0.933333333	0.286868687	training
6	0.343434343	0.933333333	0.276767677	training
6	0.333333333	0.933333333	0.266666667	training
6	0.323232323	0.933333333	0.256565657	training
6	0.313131313	0.933333333	0.246464646	training
6	0.303030303	0.933333333	0.236363636	training
6	0.292929293	0.933333333	0.226262626	training
6	0.292929293	0.955555556	0.248484848	training
6	0.282828283	0.955555556	0.238383838	training
6	0.272727273	0.955555556	0.228282828	training
6	0.262626263	0.955555556	0.218181818	training
6	0.252525253	0.955555556	0.208080808	training
6	0.242424242	0.955555556	0.197979798	training
6	0.232323232	0.955555556	0.187878788	training
6	0.222222222	0.955555556	0.177777778	training
6	0.212121212	0.955555556	0.167676768	training
6	0.202020202	0.955555556	0.157575758	training
6	0.191919192	0.955555556	0.147474747	training
6	0.191919192	0.977777778	0.169696969	training
6	0.181818182	0.977777778	0.159595959	training
6	0.171717172	0.977777778	0.149494949	training
6	0.161616162	0.977777778	0.139393939	training
6	0.151515152	0.977777778	0.129292929	training
6	0.141414141	0.977777778	0.119191919	training
6	0.131313131	0.977777778	0.109090909	training
6	0.121212121	0.977777778	0.098989899	training
6	0.111111111	0.977777778	0.088888889	training
6	0.101010101	0.977777778	0.078787879	training
6	0.101010101	1	0.101010101	training
6	0.090909091	1	0.090909091	training
6	0.080808081	1	0.080808081	training
6	0.070707071	1	0.070707071	training
6	0.060606061	1	0.060606061	training
6	0.050505051	1	0.050505051	training
6	0.04040404	1	0.04040404	training
6	0.03030303	1	0.03030303	training
6	0.02020202	1	0.02020202	training
6	0.01010101	1	0.01010101	training
6	0	1	0	training
6	1	0	0	validation
6	1	0.066666667	0.066666667	validation
6	1	0.133333333	0.133333333	validation
6	1	0.2	0.2	validation
6	1	0.266666667	0.266666667	validation
6	1	0.333333333	0.333333333	validation
6	1	0.4	0.4	validation

6	0.928571429	0.4	0.328571429 validation
6	0.857142857	0.4	0.257142857 validation
6	0.785714286	0.4	0.185714286 validation
6	0.785714286	0.466666667	0.252380952 validation
6	0.785714286	0.533333333	0.319047619 validation
6	0.714285714	0.533333333	0.247619048 validation
6	0.714285714	0.6	0.314285714 validation
6	0.714285714	0.666666667	0.380952381 validation
6	0.642857143	0.666666667	0.30952381 validation
6	0.571428571	0.666666667	0.238095238 validation
6	0.571428571	0.733333333	0.304761905 validation
6	0.5	0.733333333	0.233333333 validation
6	0.5	0.8	0.3 validation
6	0.428571429	0.8	0.228571429 validation
6	0.357142857	0.8	0.157142857 validation
6	0.357142857	0.866666667	0.223809524 validation
6	0.357142857	0.933333333	0.29047619 validation
6	0.285714286	0.933333333	0.219047619 validation
6	0.214285714	0.933333333	0.147619048 validation
6	0.142857143	0.933333333	0.076190476 validation
6	0.071428571	0.933333333	0.004761905 validation
6	0	0.933333333	-0.066666667 validation
6	0	1	0 validation

GSEA-CD3D

GS follow link to MSigDB

	SIZE	ES	NES	NOM p-val	FDR q-val	FWER p-val	RANK AT MAX	LEADING EDGE
KEGG_PARKINSONS_DISEASE	90	0.66	2.42	0	0	0	1869	tags=37%, list=7%, signal=39%
KEGG_OXIDATIVE_PHOSPHORYLATION	94	0.66	2.35	0	0	0	1869	tags=38%, list=7%, signal=41%
KEGG_PROTEASOME	42	0.77	2.27	0	0	0	1596	tags=48%, list=6%, signal=51%
KEGG_HUNTINGTONS_DISEASE	149	0.52	2.26	0	0	0	2987	tags=32%, list=12%, signal=36%
KEGG_RIBOSOME	85	0.88	2.26	0	0	0	1570	tags=75%, list=6%, signal=80%
KEGG_ALZHEIMERS_DISEASE	137	0.52	2.2	0	0	0.001	1957	tags=25%, list=8%, signal=27%
KEGG_SPLICEOSOME	103	0.53	2.14	0	0	0.004	2245	tags=37%, list=9%, signal=40%
KEGG_RNA_DEGRADATION	51	0.6	2.12	0	0	0.004	2141	tags=33%, list=9%, signal=36%
KEGG_CARDIAC_MUSCLE_CONTRACTION	69	0.53	2.11	0	0	0.004	641	tags=14%, list=3%, signal=15%
KEGG_PROTEIN_EXPORT	21	0.81	2.1	0	0	0.008	1992	tags=48%, list=8%, signal=52%
KEGG_NUCLEOTIDE_EXCISION_REPAIR	43	0.6	2.09	0	0.001	0.011	3861	tags=44%, list=15%, signal=52%
KEGG_PYRUVATE_METABOLISM	39	0.58	2.01	0	0.002	0.027	2193	tags=31%, list=9%, signal=34%
KEGG_RNA_POLYMERASE	26	0.65	1.98	0.002	0.002	0.039	2987	tags=50%, list=12%, signal=57%
KEGG_PYRIMIDINE_METABOLISM	90	0.48	1.97	0	0.002	0.042	3253	tags=33%, list=13%, signal=38%
KEGG_DNA_REPLICATION	35	0.62	1.97	0	0.002	0.046	3490	tags=43%, list=14%, signal=50%
KEGG_PROPANOATE_METABOLISM	31	0.6	1.93	0	0.004	0.07	1388	tags=29%, list=6%, signal=31%
KEGG_BASAL_TRANSCRIPTION_FACTORS	35	0.54	1.87	0	0.006	0.114	3814	tags=40%, list=15%, signal=47%
KEGG_HOMOLOGOUS_RECOMBINATION	23	0.6	1.84	0	0.007	0.149	1704	tags=26%, list=7%, signal=28%
KEGG_TERPENOID_BACKBONE_BIOSYNTHESIS	15	0.67	1.83	0.002	0.008	0.165	4209	tags=53%, list=17%, signal=64%
KEGG_PURINE_METABOLISM	142	0.41	1.83	0	0.008	0.166	3382	tags=25%, list=13%, signal=29%
KEGG_MISMATCH_REPAIR	22	0.61	1.81	0.004	0.009	0.194	4273	tags=50%, list=17%, signal=60%
KEGG_N_GLYCAN_BIOSYNTHESIS	44	0.43	1.58	0.018	0.063	0.668	1489	tags=20%, list=6%, signal=22%
KEGG_GLYCOSYLPHOSPHATIDYLINOSITOL_GPI_ANCHOR_BIOSYNTHESIS	25	0.48	1.58	0.026	0.061	0.671	2281	tags=28%, list=9%, signal=31%
KEGG_VALINE_LEUCINE_AND_ISOLEUCINE_DEGRADATION	43	0.45	1.52	0.051	0.087	0.776	3840	tags=33%, list=15%, signal=38%
KEGG_CITRATE_CYCLE_TCA_CYCLE	30	0.45	1.52	0.07	0.085	0.783	3200	tags=30%, list=13%, signal=34%
KEGG_UBIQUITIN_MEDIATED_PROTEOLYSIS	126	0.35	1.5	0.029	0.09	0.814	3457	tags=25%, list=14%, signal=28%
KEGG_SNARE_INTERACTIONS_IN_VESICULAR_TRANSPORT	37	0.39	1.48	0.035	0.096	0.844	2130	tags=22%, list=8%, signal=24%
KEGG_BASE_EXCISION_REPAIR	32	0.45	1.45	0.077	0.11	0.878	3767	tags=38%, list=15%, signal=44%
KEGG_BUTANOATE_METABOLISM	34	0.42	1.44	0.063	0.116	0.893	2637	tags=21%, list=10%, signal=23%
KEGG_METABOLISM_OF_XENOBIOTICS_BY_CYTOCHROME_P450	70	0.37	1.44	0.029	0.113	0.895	5216	tags=27%, list=21%, signal=34%
KEGG_TRYPTOPHAN_METABOLISM	36	0.38	1.41	0.061	0.129	0.926	3840	tags=19%, list=15%, signal=23%
KEGG_PEROXISOME	73	0.34	1.39	0.057	0.142	0.943	5464	tags=34%, list=22%, signal=44%
KEGG_GLYOXYLATE_AND_DICARBOXYLATE_METABOLISM	15	0.49	1.38	0.122	0.143	0.949	1743	tags=20%, list=7%, signal=21%
KEGG_REGULATION_OF_AUTOPHAGY	34	0.38	1.31	0.144	0.198	0.982	2716	tags=24%, list=11%, signal=26%
KEGG_DRUG_METABOLISM_CYTOCHROME_P450	72	0.31	1.26	0.113	0.249	0.995	5216	tags=24%, list=21%, signal=30%
KEGG_CYSTEINE_AND_METHIONINE_METABOLISM	34	0.36	1.25	0.182	0.25	0.995	3643	tags=21%, list=14%, signal=24%
KEGG_ALLOGRAFT_REJECTION	37	0.37	1.23	0.198	0.265	0.996	2992	tags=24%, list=12%, signal=28%
KEGG_GLUTATHIONE_METABOLISM	49	0.33	1.22	0.201	0.276	0.996	3546	tags=24%, list=14%, signal=28%
KEGG_PROXIMAL_TUBULE_BICARBONATE_RECLAMATION	23	0.36	1.2	0.201	0.292	0.998	5279	tags=30%, list=21%, signal=38%
KEGG_OOCYTE_MEIOSIS	108	0.28	1.19	0.188	0.288	0.998	2577	tags=19%, list=10%, signal=22%
KEGG_AUTOIMMUNE_THYROID_DISEASE	52	0.32	1.19	0.242	0.287	0.999	2992	tags=21%, list=12%, signal=24%
KEGG_CYTOSOLIC_DNA_SENSING_PATHWAY	52	0.32	1.17	0.224	0.299	0.999	3532	tags=29%, list=14%, signal=33%
KEGG_TYPE_I_DIABETES_MELLITUS	43	0.33	1.16	0.269	0.308	1	2100	tags=19%, list=8%, signal=20%
KEGG_ONE_CARBON_POOL_BY_FOLATE	17	0.39	1.12	0.318	0.353	1	2521	tags=18%, list=10%, signal=20%
KEGG_ALANINE ASPARTATE AND GLUTAMATE METABOLISM	30	0.32	1.09	0.334	0.398	1	5464	tags=33%, list=22%, signal=43%
KEGG_SYSTEMIC_LUPUS_ERYTHEMATOSUS	56	0.28	1.08	0.329	0.4	1	2992	tags=18%, list=12%, signal=20%

KEGG_ASTHMA	30	0.34	1.07	0.378	0.408	1	3020 tags=17%, list=12%, signal=19%
KEGG_GRAFT_VERSUS_HOST_DISEASE	40	0.32	1.07	0.349	0.402	1	1957 tags=18%, list=8%, signal=19%
KEGG_CELL_CYCLE	114	0.25	0.98	0.465	0.528	1	2577 tags=18%, list=10%, signal=19%
KEGG_PRIMARY_IMMUNODEFICIENCY	35	0.3	0.94	0.521	0.588	1	981 tags=6%, list=4%, signal=6%
KEGG_INTESTINAL_IMMUNE_NETWORK_FOR_IGA_PRODUCTION	48	0.26	0.89	0.597	0.672	1	2992 tags=15%, list=12%, signal=17%
KEGG_PENTOSE_AND_GLUCURONATE_INTERCONVERSIONS	27	0.25	0.86	0.665	0.723	1	4528 tags=22%, list=18%, signal=27%
KEGG_TYROSINE_METABOLISM	40	0.21	0.8	0.802	0.808	1	4960 tags=23%, list=20%, signal=28%
KEGG_ECM_RECEPTOR_INTERACTION	82	0.19	0.78	0.855	0.825	1	6436 tags=27%, list=26%, signal=36%
KEGG_O_GLYCAN_BIOSYNTHESIS	25	0.24	0.78	0.79	0.819	1	4590 tags=28%, list=18%, signal=34%
KEGG_AMINOACYL_TRNA_BIOSYNTHESIS	22	0.24	0.74	0.791	0.858	1	3880 tags=18%, list=15%, signal=21%
KEGG_PRIMARY_BILE_ACID_BIOSYNTHESIS	16	0.25	0.74	0.828	0.848	1	1305 tags=13%, list=5%, signal=13%
KEGG_FC_GAMMA_R_MEDIATED_PHAGOCYTOSIS	88	-0.64	-2.45	0	0	0	1908 tags=39%, list=8%, signal=42%
KEGG_ACUTE_MYELOID_LEUKEMIA	56	-0.66	-2.42	0	0	0	3521 tags=50%, list=14%, signal=58%
KEGG_CHRONIC_MYELOID_LEUKEMIA	72	-0.65	-2.41	0	0	0	3521 tags=50%, list=14%, signal=58%
KEGG_B_CELL_RECEPTOR_SIGNALING_PATHWAY	73	-0.66	-2.38	0	0	0	3558 tags=51%, list=14%, signal=59%
KEGG_NEUROTROPHIN_SIGNALING_PATHWAY	124	-0.58	-2.38	0	0	0	3521 tags=47%, list=14%, signal=54%
KEGG_CHEMOKINE_SIGNALING_PATHWAY	181	-0.54	-2.37	0	0	0	3810 tags=38%, list=15%, signal=44%
KEGG_FC_EPSILON_RI_SIGNALING_PATHWAY	76	-0.61	-2.35	0	0	0	3521 tags=39%, list=14%, signal=46%
KEGG_INSULIN_SIGNALING_PATHWAY	133	-0.56	-2.35	0	0	0	2774 tags=38%, list=11%, signal=42%
KEGG_LEUKOCYTE_TRANSENDOTHELIAL_MIGRATION	108	-0.56	-2.34	0	0	0	1908 tags=29%, list=8%, signal=31%
KEGG_ERBB_SIGNALING_PATHWAY	84	-0.59	-2.33	0	0	0	3521 tags=44%, list=14%, signal=51%
KEGG_NON_SMALL_CELL_LUNG_CANCER	53	-0.67	-2.32	0	0	0	2144 tags=43%, list=9%, signal=47%
KEGG_PANCREATIC_CANCER	69	-0.6	-2.29	0	0	0	2148 tags=38%, list=9%, signal=41%
KEGG_TOLL_LIKE_RECEPTOR_SIGNALING_PATHWAY	99	-0.56	-2.25	0	0	0	3505 tags=40%, list=14%, signal=47%
KEGG_RENAL_CELL_CARCINOMA	66	-0.59	-2.21	0	0	0	2707 tags=44%, list=11%, signal=49%
KEGG_LEISHMANIA_INFECTION	68	-0.6	-2.21	0	0	0	1748 tags=35%, list=7%, signal=38%
KEGG_LONG_TERM_DEPRESSION	64	-0.54	-2.2	0	0	0	2715 tags=27%, list=11%, signal=30%
KEGG_REGULATION_OF_ACTIN_CYTOSKELETON	200	-0.48	-2.2	0	0	0	3621 tags=33%, list=14%, signal=38%
KEGG_VEGF_SIGNALING_PATHWAY	72	-0.55	-2.2	0	0	0	4884 tags=44%, list=19%, signal=55%
KEGG_PROSTATE_CANCER	88	-0.55	-2.19	0	0	0	3521 tags=41%, list=14%, signal=47%
KEGG_MAPK_SIGNALING_PATHWAY	256	-0.47	-2.18	0	0	0	3202 tags=29%, list=13%, signal=33%
KEGG_DORSO_VENTRAL_AXIS_FORMATION	24	-0.71	-2.18	0	0	0	3521 tags=54%, list=14%, signal=63%
KEGG_ADIPOCYTOKINE_SIGNALING_PATHWAY	65	-0.55	-2.18	0	0	0	2774 tags=32%, list=11%, signal=36%
KEGG_NOTCH_SIGNALING_PATHWAY	44	-0.64	-2.18	0	0	0.001	2513 tags=36%, list=10%, signal=40%
KEGG_GAP_JUNCTION	83	-0.53	-2.18	0	0	0.001	3790 tags=35%, list=15%, signal=41%
KEGG_BLADDER_CANCER	39	-0.63	-2.17	0	0	0.001	3521 tags=46%, list=14%, signal=54%
KEGG_ADHERENS_JUNCTION	68	-0.56	-2.17	0	0	0.001	3790 tags=41%, list=15%, signal=48%
KEGG_ENDOCYTOSIS	161	-0.49	-2.17	0	0	0.001	4085 tags=40%, list=16%, signal=48%
KEGG_LYSOSOME	116	-0.57	-2.13	0	0	0.002	3239 tags=40%, list=13%, signal=45%
KEGG_GLIOMA	63	-0.57	-2.13	0	0	0.002	3521 tags=40%, list=14%, signal=46%
KEGG_GNRH_SIGNALING_PATHWAY	98	-0.51	-2.12	0	0	0.002	5099 tags=44%, list=20%, signal=55%
KEGG_PATHWAYS_IN_CANCER	316	-0.44	-2.12	0	0	0.003	3523 tags=30%, list=14%, signal=34%
KEGG_ENDOMETRIAL_CANCER	52	-0.59	-2.07	0	0	0.009	3521 tags=42%, list=14%, signal=49%
KEGG_EPITHELIAL_CELL_SIGNALING_IN_HELICOBACTER_PYLORI_INFECTION	65	-0.51	-2.06	0	0	0.011	2034 tags=37%, list=8%, signal=40%
KEGG_FOCAL_ADHESION	189	-0.44	-2	0	0.001	0.02	2034 tags=23%, list=8%, signal=25%
KEGG_COLORECTAL_CANCER	62	-0.52	-1.98	0	0.001	0.029	3521 tags=37%, list=14%, signal=43%
KEGG_APOPTOSIS	84	-0.47	-1.97	0	0.002	0.035	3505 tags=37%, list=14%, signal=43%

KEGG_TYPE_II_DIABETES_MELLITUS	44	-0.54	-1.96	0	0.002	0.041	5808	tags=50%,	list=23%,	signal=65%
KEGG_JAK_STAT_SIGNALING_PATHWAY	149	-0.44	-1.94	0	0.002	0.054	4832	tags=34%,	list=19%,	signal=42%
KEGG_GLYCOSAMINOGLYCAN_DEGRADATION	21	-0.65	-1.94	0.002	0.002	0.055	5595	tags=57%,	list=22%,	signal=73%
KEGG_MELANOGENESIS	100	-0.46	-1.93	0	0.002	0.057	3521	tags=27%,	list=14%,	signal=31%
KEGG_INOSITOL_PHOSPHATE_METABOLISM	49	-0.53	-1.89	0.002	0.004	0.093	5584	tags=53%,	list=22%,	signal=68%
KEGG_SPHINGOLIPID_METABOLISM	31	-0.54	-1.88	0	0.005	0.107	3744	tags=35%,	list=15%,	signal=42%
KEGG_TIGHT_JUNCTION	122	-0.42	-1.85	0	0.006	0.133	3790	tags=26%,	list=15%,	signal=31%
KEGG_GLYCEROPHOSPHOLIPID_METABOLISM	63	-0.49	-1.85	0.002	0.006	0.138	5409	tags=43%,	list=22%,	signal=54%
KEGG_AXON_GUIDANCE	126	-0.41	-1.83	0	0.007	0.165	4887	tags=33%,	list=19%,	signal=40%
KEGG_PHOSPHATIDYLINOSITOL_SIGNALING_SYSTEM	70	-0.49	-1.83	0.004	0.007	0.169	5584	tags=44%,	list=22%,	signal=57%
KEGG_NATURAL_KILLER_CELL_MEDIATED_CYTOTOXICITY	133	-0.43	-1.83	0.002	0.008	0.179	2991	tags=29%,	list=12%,	signal=33%
KEGG_GALACTOSE_METABOLISM	25	-0.55	-1.82	0.008	0.008	0.184	2444	tags=36%,	list=10%,	signal=40%
KEGG_MTOR_SIGNALING_PATHWAY	47	-0.49	-1.8	0.008	0.009	0.219	2180	tags=30%,	list=9%,	signal=33%
KEGG_THYROID_CANCER	29	-0.55	-1.78	0.006	0.011	0.249	6607	tags=59%,	list=26%,	signal=79%
KEGG_FRUCTOSE_AND_MANNOSE_METABOLISM	32	-0.56	-1.77	0.006	0.011	0.258	4577	tags=50%,	list=18%,	signal=61%
KEGG_LONG_TERM_POTENTIATION	68	-0.43	-1.75	0	0.014	0.306	2144	tags=22%,	list=9%,	signal=24%
KEGG_NOD_LIKE_RECEPTOR_SIGNALING_PATHWAY	55	-0.49	-1.75	0.002	0.013	0.308	3064	tags=40%,	list=12%,	signal=45%
KEGG_ALDOSTERONE_REGULATED_SODIUM_REABSORPTION	40	-0.49	-1.74	0.004	0.015	0.328	5138	tags=38%,	list=20%,	signal=47%
KEGG_VIRAL_MYOCARDITIS	70	-0.46	-1.74	0.008	0.015	0.339	3726	tags=30%,	list=15%,	signal=35%
KEGG_PENTOSE_PHOSPHATE_PATHWAY	26	-0.55	-1.73	0.016	0.015	0.347	4011	tags=42%,	list=16%,	signal=50%
KEGG_GLYCOSAMINOGLYCAN_BIOSYNTHESIS_HEPARAN_SULFATE	26	-0.5	-1.73	0.01	0.016	0.354	4104	tags=35%,	list=16%,	signal=41%
KEGG_STARCH_AND_SUCROSE_METABOLISM	51	-0.46	-1.72	0.013	0.016	0.359	3374	tags=25%,	list=13%,	signal=29%
KEGG_ABC_TRANSPORTERS	44	-0.46	-1.71	0	0.018	0.398	3676	tags=32%,	list=15%,	signal=37%
KEGG_NICOTINATE_AND_NICOTINAMIDE_METABOLISM	21	-0.55	-1.7	0.006	0.02	0.427	5855	tags=48%,	list=23%,	signal=62%
KEGG_T_CELL_RECEPTOR_SIGNALING_PATHWAY	106	-0.42	-1.69	0.004	0.02	0.44	3558	tags=37%,	list=14%,	signal=43%
KEGG_WNT_SIGNALING_PATHWAY	147	-0.39	-1.69	0.004	0.02	0.444	6812	tags=44%,	list=27%,	signal=59%
KEGG_GLYCEROLIPID_METABOLISM	40	-0.45	-1.65	0.014	0.026	0.525	2444	tags=25%,	list=10%,	signal=28%
KEGG_VASCULAR_SMOOTH_MUSCLE_CONTRACTION	109	-0.37	-1.64	0.004	0.028	0.557	5099	tags=32%,	list=20%,	signal=40%
KEGG_MELANOMA	71	-0.41	-1.62	0.008	0.032	0.591	3521	tags=25%,	list=14%,	signal=29%
KEGG_COMPLEMENT_AND_COAGULATION_CASCADES	68	-0.43	-1.61	0.01	0.033	0.608	4094	tags=26%,	list=16%,	signal=32%
KEGG_PANTOTHENATE_AND_COA_BIOSYNTHESIS	16	-0.54	-1.61	0.016	0.033	0.612	3622	tags=44%,	list=14%,	signal=51%
KEGG_PATHOGENIC_ESCHERICHIA_COLI_INFECTION	52	-0.41	-1.57	0.017	0.042	0.686	5255	tags=46%,	list=21%,	signal=58%
KEGG_RENIN_ANGIOTENSIN_SYSTEM	17	-0.55	-1.57	0.019	0.042	0.688	376	tags=18%,	list=1%,	signal=18%
KEGG_CYTOKINE_CYTOKINE_RECEPTOR_INTERACTION	253	-0.32	-1.57	0.004	0.044	0.7	4212	tags=23%,	list=17%,	signal=27%
KEGG_VIBRIO_CHOLERAE_INFECTION	52	-0.42	-1.57	0.024	0.043	0.703	1280	tags=27%,	list=5%,	signal=28%
KEGG_HEMATOPOIETIC_CELL_LINEAGE	86	-0.37	-1.56	0.01	0.044	0.711	3698	tags=31%,	list=15%,	signal=37%
KEGG_VASOPRESSIN_REGULATED_WATER_REABSORPTION	44	-0.4	-1.53	0.018	0.051	0.757	5099	tags=45%,	list=20%,	signal=57%
KEGG_CALCIIUM_SIGNALING_PATHWAY	171	-0.32	-1.51	0.01	0.059	0.797	5769	tags=32%,	list=23%,	signal=41%
KEGG_PRION_DISEASES	35	-0.41	-1.5	0.031	0.064	0.83	2612	tags=29%,	list=10%,	signal=32%
KEGG_PPAR_SIGNALING_PATHWAY	68	-0.35	-1.43	0.055	0.092	0.898	2935	tags=25%,	list=12%,	signal=28%
KEGG_TASTE_TRANSDUCTION	48	-0.38	-1.43	0.049	0.095	0.909	7345	tags=44%,	list=29%,	signal=62%
KEGG_PROGESTERONE_MEDIATED_OOCYTE_MATURATION	84	-0.34	-1.42	0.042	0.097	0.918	5315	tags=40%,	list=21%,	signal=51%
KEGG_AMINO_SUGAR_AND_NUCLEOTIDE_SUGAR_METABOLISM	41	-0.4	-1.41	0.08	0.102	0.924	3185	tags=29%,	list=13%,	signal=33%
KEGG_GLYCOLYSIS_GLUconeogenesis	60	-0.36	-1.4	0.067	0.104	0.935	2201	tags=22%,	list=9%,	signal=24%
KEGG_RIG_I_LIKE_RECEPTOR_SIGNALING_PATHWAY	64	-0.36	-1.39	0.077	0.114	0.952	3476	tags=23%,	list=14%,	signal=27%
KEGG_SMALL_CELL_LUNG_CANCER	82	-0.34	-1.36	0.083	0.128	0.966	2095	tags=20%,	list=8%,	signal=21%
KEGG_BASAL_CELL_CARCINOMA	55	-0.34	-1.35	0.082	0.139	0.973	7510	tags=45%,	list=30%,	signal=65%

KEGG_TGF_BETA_SIGNALING_PATHWAY	84	-0.33	-1.34	0.07	0.141	0.975	3356 tags=21%, list=13%, signal=25%
KEGG_BIOSYNTHESIS_OF_UNSATURATED_FATTY_ACIDS	19	-0.46	-1.34	0.143	0.142	0.977	2327 tags=32%, list=9%, signal=35%
KEGG_GLYCOSAMINOGLYCAN_BIOSYNTHESIS_CHONDROITIN_SULFATE	20	-0.43	-1.33	0.1	0.146	0.979	6818 tags=40%, list=27%, signal=55%
KEGG_DILATED_CARDIOMYOPATHY	90	-0.31	-1.32	0.072	0.152	0.981	6442 tags=34%, list=26%, signal=46%
KEGG_AMYOTROPHIC_LATERAL_SCLEROSIS_ALS	52	-0.33	-1.32	0.07	0.152	0.983	3326 tags=25%, list=13%, signal=29%
KEGG_ARACHIDONIC_ACID_METABOLISM	55	-0.32	-1.3	0.088	0.162	0.987	5086 tags=27%, list=20%, signal=34%
KEGG_CELL_ADHESION_MOLECULES_CAMS	130	-0.29	-1.3	0.069	0.166	0.987	2950 tags=17%, list=12%, signal=19%
KEGG_ARRHYTHMOGENIC_RIGHT_VENTRICULAR_CARDIOMYOPATHY_ARVC	74	-0.31	-1.28	0.083	0.179	0.988	8411 tags=49%, list=33%, signal=73%
KEGG_ALPHA_LINOLENIC_ACID_METABOLISM	17	-0.41	-1.21	0.226	0.245	0.997	2715 tags=18%, list=11%, signal=20%
KEGG_RETINOL_METABOLISM	62	-0.29	-1.18	0.176	0.27	0.998	5832 tags=27%, list=23%, signal=36%
KEGG_LYSINE_DEGRADATION	39	-0.33	-1.17	0.249	0.287	0.998	3365 tags=28%, list=13%, signal=33%
KEGG_DRUG_METABOLISM_OTHER_ENZYMES	48	-0.31	-1.16	0.269	0.296	0.998	5503 tags=33%, list=22%, signal=43%
KEGG_P53_SIGNALING_PATHWAY	64	-0.31	-1.15	0.278	0.305	0.999	3502 tags=22%, list=14%, signal=25%
KEGG_HYPERTROPHIC_CARDIOMYOPATHY_HCM	83	-0.26	-1.15	0.215	0.305	0.999	6442 tags=30%, list=26%, signal=40%
KEGG_ETHER_LIPID_METABOLISM	27	-0.34	-1.13	0.306	0.318	1	2715 tags=19%, list=11%, signal=21%
KEGG_HEDGEHOG_SIGNALING_PATHWAY	56	-0.28	-1.12	0.269	0.328	1	7150 tags=34%, list=28%, signal=47%
KEGG_FATTY_ACID_METABOLISM	40	-0.3	-1.12	0.294	0.334	1	2327 tags=25%, list=9%, signal=28%
KEGG_NITROGEN_METABOLISM	23	-0.34	-1.09	0.329	0.366	1	5484 tags=35%, list=22%, signal=44%
KEGG_ANTIGEN_PROCESSING_AND_PRESENTATION	86	-0.29	-1.08	0.354	0.369	1	3946 tags=24%, list=16%, signal=29%
KEGG_SELENOAMINO_ACID_METABOLISM	24	-0.33	-1.05	0.39	0.416	1	3058 tags=25%, list=12%, signal=28%
KEGG_BETA_ALANINE_METABOLISM	22	-0.33	-1.03	0.406	0.435	1	3361 tags=27%, list=13%, signal=31%
KEGG_HISTIDINE_METABOLISM	27	-0.31	-1.03	0.415	0.437	1	1638 tags=15%, list=7%, signal=16%
KEGG_ASCORBATE_AND_ALDARATE_METABOLISM	25	-0.31	-1.03	0.411	0.436	1	4607 tags=24%, list=18%, signal=29%
KEGG_LINOLEIC_ACID_METABOLISM	27	-0.3	-1.02	0.418	0.442	1	4946 tags=30%, list=20%, signal=37%
KEGG_PHENYLALANINE_METABOLISM	17	-0.33	-1.02	0.428	0.441	1	3098 tags=18%, list=12%, signal=20%
KEGG_MATURITY_ONSET_DIABETES_OF_THE_YOUNG	20	-0.33	-1.01	0.429	0.451	1	9558 tags=55%, list=38%, signal=89%
KEGG_GLYCOSPHINGOLIPID_BIOSYNTHESIS_LACTO_AND_NEOLACTO_SERIES	25	-0.29	-0.97	0.506	0.517	1	6295 tags=32%, list=25%, signal=43%
KEGG_GLYCINE_SERINE_AND_THREONINE_METABOLISM	31	-0.27	-0.92	0.584	0.593	1	6003 tags=32%, list=24%, signal=42%
KEGG_ARGININE_AND_PROLINE_METABOLISM	50	-0.23	-0.88	0.656	0.666	1	5706 tags=24%, list=23%, signal=31%
KEGG_GLYCOSPHINGOLIPID_BIOSYNTHESIS_GANGLIO_SERIES	15	-0.29	-0.87	0.646	0.669	1	1259 tags=13%, list=5%, signal=14%
KEGG_NEUROACTIVE_LIGAND_RECEPTOR_INTERACTION	256	-0.18	-0.85	0.796	0.698	1	6555 tags=22%, list=26%, signal=29%
KEGG_PORPHYRIN_AND_CHLOROPHYLL_METABOLISM	39	-0.24	-0.82	0.704	0.747	1	4826 tags=23%, list=19%, signal=29%
KEGG_STEROID_HORMONE_BIOSYNTHESIS	55	-0.2	-0.79	0.851	0.787	1	4755 tags=22%, list=19%, signal=27%
KEGG_STEROID_BIOSYNTHESIS	15	-0.23	-0.62	0.917	0.965	1	6317 tags=40%, list=25%, signal=53%
KEGG_OLFACTORY_TRANSDUCTION	379	-0.11	-0.53	1	0.988	1	5958 tags=17%, list=24%, signal=22%

GSEA-IL2RG

GS follow link to MSigDB

	SIZE	ES	NES	NOM p-val	FDR	q-val	FWER	p-val	RANK AT MAX	LEADING EDGE
KEGG_BASAL_CELL_CARCINOMA	55	0.5	1.96	0	0.052	0.038	0.038	0.038	4805	tags=36%, list=19%, signal=45%
KEGG_FRUCTOSE_AND_MANNANOSE_METABOLISM	32	0.55	1.79	0.008	0.188	0.21	0.21	0.21	6652	tags=47%, list=26%, signal=64%
KEGG_PRIMARY_IMMUNODEFICIENCY	35	0.56	1.79	0.014	0.136	0.221	0.221	0.221	1480	tags=20%, list=6%, signal=21%
KEGG_INOSITOL_PHOSPHATE_METABOLISM	49	0.48	1.71	0.017	0.208	0.368	0.368	0.368	3132	tags=35%, list=12%, signal=40%
KEGG_GALACTOSE_METABOLISM	25	0.51	1.71	0.01	0.167	0.369	0.369	0.369	2562	tags=24%, list=10%, signal=27%
KEGG_VEGF_SIGNALING_PATHWAY	72	0.43	1.7	0.007	0.151	0.381	0.381	0.381	4767	tags=39%, list=19%, signal=48%
KEGG_GLYCOSAMINOGLYCAN_DEGRADATION	21	0.57	1.69	0.024	0.135	0.394	0.394	0.394	8569	tags=71%, list=34%, signal=108%
KEGG_NOTCH_SIGNALING_PATHWAY	44	0.49	1.66	0.013	0.167	0.498	0.498	0.498	3611	tags=30%, list=14%, signal=34%
KEGG_MAPK_SIGNALING_PATHWAY	256	0.35	1.63	0.006	0.182	0.554	0.554	0.554	5123	tags=32%, list=20%, signal=40%
KEGG_AXON_GUIDANCE	126	0.35	1.6	0.006	0.207	0.615	0.615	0.615	4865	tags=30%, list=19%, signal=37%
KEGG_GLYCEROPHOSPHOLIPID_METABOLISM	63	0.41	1.56	0.025	0.259	0.718	0.718	0.718	4986	tags=38%, list=20%, signal=47%
KEGG_HOMOLOGOUS_RECOMBINATION	23	0.49	1.5	0.045	0.331	0.798	0.798	0.798	1973	tags=30%, list=8%, signal=33%
KEGG_LINOLEIC_ACID_METABOLISM	27	0.45	1.5	0.048	0.324	0.82	0.82	0.82	5440	tags=37%, list=22%, signal=47%
KEGG_GLYCOSAMINOGLYCAN_BIOSYNTHESIS_CHONDROITIN_SULFATE	20	0.48	1.49	0.063	0.319	0.836	0.836	0.836	1856	tags=25%, list=7%, signal=27%
KEGG_TIGHT_JUNCTION	122	0.33	1.47	0.017	0.333	0.861	0.861	0.861	3508	tags=21%, list=14%, signal=25%
KEGG_MELANOGENESIS	100	0.34	1.46	0.016	0.322	0.866	0.866	0.866	6138	tags=36%, list=24%, signal=47%
KEGG_PHOSPHATIDYLINOSITOL_SIGNALING_SYSTEM	70	0.38	1.44	0.075	0.347	0.891	0.891	0.891	3132	tags=29%, list=12%, signal=33%
KEGG_GLUTATHIONE_METABOLISM	49	0.38	1.44	0.054	0.334	0.895	0.895	0.895	2594	tags=22%, list=10%, signal=25%
KEGG_HEMATOPOIETIC_CELL_LINEAGE	86	0.33	1.43	0.033	0.325	0.9	0.9	0.9	3674	tags=20%, list=15%, signal=23%
KEGG_ACUTE_MYELOID_LEUKEMIA	56	0.39	1.41	0.098	0.347	0.914	0.914	0.914	2112	tags=23%, list=8%, signal=25%
KEGG_STEROID_BIOSYNTHESIS	15	0.52	1.4	0.103	0.35	0.924	0.924	0.924	1693	tags=33%, list=7%, signal=36%
KEGG_GLYCEROLIPID_METABOLISM	40	0.37	1.39	0.059	0.344	0.929	0.929	0.929	4677	tags=33%, list=19%, signal=40%
KEGG_STARCH_AND_SUCROSE_METABOLISM	51	0.38	1.39	0.094	0.341	0.939	0.939	0.939	3552	tags=24%, list=14%, signal=27%
KEGG_FC_GAMMA_R_MEDIATED_PHAGOCYTOSIS	88	0.36	1.38	0.1	0.335	0.941	0.941	0.941	5125	tags=39%, list=20%, signal=48%
KEGG_ENDOCYTOSIS	161	0.31	1.38	0.052	0.328	0.945	0.945	0.945	3772	tags=25%, list=15%, signal=29%
KEGG_CALCIIUM_SIGNALING_PATHWAY	171	0.29	1.38	0.023	0.318	0.945	0.945	0.945	4632	tags=27%, list=18%, signal=33%
KEGG_TASTE_TRANSDUCTION	48	0.37	1.37	0.084	0.311	0.949	0.949	0.949	6371	tags=38%, list=25%, signal=50%
KEGG_CYTOKINE_CYTOKINE_RECEPTOR_INTERACTION	253	0.28	1.37	0.029	0.303	0.949	0.949	0.949	4897	tags=21%, list=19%, signal=25%
KEGG_DRUG_METABOLISM_CYTOCHROME_P450	72	0.33	1.37	0.052	0.297	0.949	0.949	0.949	5577	tags=31%, list=22%, signal=39%
KEGG_ADHERENS_JUNCTION	68	0.35	1.37	0.12	0.292	0.952	0.952	0.952	5068	tags=31%, list=20%, signal=39%
KEGG_ALPHA_LINOLENIC_ACID_METABOLISM	17	0.45	1.36	0.098	0.294	0.957	0.957	0.957	4737	tags=41%, list=19%, signal=51%
KEGG_GLYCOLYSIS_GLUONEOGENESIS	60	0.35	1.35	0.082	0.302	0.965	0.965	0.965	4347	tags=27%, list=17%, signal=32%
KEGG_PPAR_SIGNALING_PATHWAY	68	0.33	1.35	0.067	0.294	0.966	0.966	0.966	3458	tags=24%, list=14%, signal=27%
KEGG_WNT_SIGNALING_PATHWAY	147	0.31	1.35	0.063	0.285	0.966	0.966	0.966	4842	tags=29%, list=19%, signal=36%
KEGG_T_CELL_RECEPTOR_SIGNALING_PATHWAY	106	0.34	1.35	0.098	0.278	0.968	0.968	0.968	1996	tags=19%, list=8%, signal=20%
KEGG_NATURAL_KILLER_CELL_MEDIATED_CYTOTOXICITY	133	0.32	1.33	0.105	0.288	0.97	0.97	0.97	4464	tags=28%, list=18%, signal=34%
KEGG_VASOPRESSIN_REGULATED_WATER_REABSORPTION	44	0.34	1.33	0.099	0.286	0.971	0.971	0.971	6014	tags=43%, list=24%, signal=57%
KEGG_LONG_TERM_DEPRESSION	64	0.32	1.32	0.096	0.29	0.974	0.974	0.974	4795	tags=33%, list=19%, signal=40%
KEGG_GNRH_SIGNALING_PATHWAY	98	0.31	1.32	0.099	0.286	0.976	0.976	0.976	6014	tags=39%, list=24%, signal=51%
KEGG_ARACHIDONIC_ACID_METABOLISM	55	0.33	1.32	0.081	0.28	0.976	0.976	0.976	7341	tags=40%, list=29%, signal=56%
KEGG_ARRHYTHMOGENIC_RIGHT_VENTRICULAR_CARDIOMYOPATHY_ARVC	74	0.31	1.32	0.072	0.275	0.977	0.977	0.977	6313	tags=34%, list=25%, signal=45%
KEGG_LYSOSOME	116	0.34	1.31	0.172	0.273	0.98	0.98	0.98	3102	tags=22%, list=12%, signal=24%
KEGG_CHEMOKINE_SIGNALING_PATHWAY	181	0.3	1.31	0.103	0.268	0.981	0.981	0.981	5068	tags=29%, list=20%, signal=36%
KEGG_METABOLISM_OF_XENOBIOTICS_BY_CYTOCHROME_P450	70	0.32	1.3	0.109	0.279	0.983	0.983	0.983	5577	tags=30%, list=22%, signal=38%
KEGG_LEUKOCYTE_TRANSENDOTHELIAL_MIGRATION	108	0.31	1.29	0.145	0.291	0.985	0.985	0.985	2122	tags=15%, list=8%, signal=16%
KEGG_ANTIGEN_PROCESSING_AND_PRESENTATION	86	0.33	1.27	0.177	0.317	0.991	0.991	0.991	3332	tags=23%, list=13%, signal=27%

KEGG_PENTOSE_PHOSPHATE_PATHWAY	26	0.4	1.27	0.188	0.311	0.991	3440	tags=31%,	list=14%,	signal=36%
KEGG_GLYCOSAMINOGLYCAN_BIOSYNTHESIS_HEPARAN_SULFATE	26	0.37	1.25	0.164	0.326	0.992	1025	tags=15%,	list=4%,	signal=16%
KEGG_NEUROACTIVE_LIGAND_RECEPTOR_INTERACTION	256	0.27	1.25	0.091	0.33	0.993	4869	tags=22%,	list=19%,	signal=27%
KEGG_ALDOSTERONE_REGULATED_SODIUM_REABSORPTION	40	0.35	1.24	0.154	0.335	0.994	4431	tags=35%,	list=18%,	signal=42%
KEGG_FC_EPSILON_RI_SIGNALING_PATHWAY	76	0.32	1.24	0.19	0.332	0.994	4767	tags=36%,	list=19%,	signal=44%
KEGG_GLYCOSPHINGOLIPID_BIOSYNTHESIS_GANGLIO_SERIES	15	0.41	1.23	0.189	0.327	0.994	2721	tags=27%,	list=11%,	signal=30%
KEGG_FOCAL_ADHESION	189	0.27	1.23	0.136	0.322	0.994	4464	tags=23%,	list=18%,	signal=27%
KEGG_VASCULAR_SMOOTH_MUSCLE_CONTRACTION	109	0.28	1.22	0.139	0.33	0.995	4767	tags=29%,	list=19%,	signal=36%
KEGG_CELL_ADHESION_MOLECULES_CAMS	130	0.27	1.22	0.145	0.335	0.996	6088	tags=33%,	list=24%,	signal=43%
KEGG_DILATED_CARDIOMYOPATHY	90	0.28	1.21	0.14	0.332	0.996	6572	tags=42%,	list=26%,	signal=57%
KEGG_REGULATION_OF_ACTIN_CYTOSKELETON	200	0.27	1.21	0.17	0.333	0.996	4767	tags=25%,	list=19%,	signal=30%
KEGG_ABC_TRANSPORTERS	44	0.33	1.21	0.178	0.332	0.997	3094	tags=18%,	list=12%,	signal=21%
KEGG_PROXIMAL_TUBULE_BICARBONATE_RECLAMATION	23	0.36	1.2	0.204	0.343	0.997	3163	tags=26%,	list=13%,	signal=30%
KEGG_INSULIN_SIGNALING_PATHWAY	133	0.28	1.2	0.204	0.338	0.997	3751	tags=24%,	list=15%,	signal=28%
KEGG_RENIN_ANGIOTENSIN_SYSTEM	17	0.41	1.19	0.26	0.339	0.997	4532	tags=35%,	list=18%,	signal=43%
KEGG_JAK_STAT_SIGNALING_PATHWAY	149	0.26	1.19	0.165	0.339	0.997	1993	tags=11%,	list=8%,	signal=12%
KEGG_NEUROTROPHIN_SIGNALING_PATHWAY	124	0.29	1.19	0.233	0.334	0.997	3120	tags=22%,	list=12%,	signal=25%
KEGG_HYPERTROPHIC_CARDIOMYOPATHY_HCM	83	0.27	1.19	0.178	0.329	0.997	6572	tags=39%,	list=26%,	signal=52%
KEGG_THYROID_CANCER	29	0.36	1.18	0.234	0.333	0.997	1591	tags=21%,	list=6%,	signal=22%
KEGG_CITRATE_CYCLE_TCA_CYCLE	30	0.35	1.17	0.265	0.338	0.997	1532	tags=20%,	list=6%,	signal=21%
KEGG_LYSINE_DEGRADATION	39	0.33	1.16	0.28	0.353	0.997	4011	tags=31%,	list=16%,	signal=37%
KEGG_PATHWAYS_IN_CANCER	316	0.24	1.16	0.202	0.352	0.997	4464	tags=22%,	list=18%,	signal=26%
KEGG_DRUG_METABOLISM_OTHER_ENZYMES	48	0.31	1.15	0.266	0.354	0.998	3552	tags=25%,	list=14%,	signal=29%
KEGG_PANTOTHENATE_AND_COA_BIOSYNTHESIS	16	0.39	1.15	0.263	0.349	0.998	4864	tags=38%,	list=19%,	signal=46%
KEGG_BASE_EXCISION_REPAIR	32	0.35	1.15	0.276	0.351	0.998	4272	tags=31%,	list=17%,	signal=38%
KEGG_AMINO_SUGAR_AND_NUCLEOTIDE_SUGAR_METABOLISM	41	0.31	1.14	0.272	0.362	0.998	3445	tags=24%,	list=14%,	signal=28%
KEGG_STEROID_HORMONE_BIOSYNTHESIS	55	0.29	1.13	0.249	0.363	0.998	3971	tags=20%,	list=16%,	signal=24%
KEGG_GLYCOSPHINGOLIPID_BIOSYNTHESIS_LACTO_AND_NEOLACTO_SERIES	25	0.33	1.09	0.335	0.423	0.999	3212	tags=24%,	list=13%,	signal=27%
KEGG_GAP_JUNCTION	83	0.26	1.08	0.321	0.429	0.999	4767	tags=27%,	list=19%,	signal=33%
KEGG_RETINOL_METABOLISM	62	0.26	1.07	0.331	0.437	0.999	5486	tags=26%,	list=22%,	signal=33%
KEGG_EPITHELIAL_CELL_SIGNALING_IN_HELICOBACTER_PYLORI_INFECTION	65	0.27	1.07	0.34	0.437	0.999	1288	tags=12%,	list=5%,	signal=13%
KEGG_ETHER_LIPID_METABOLISM	27	0.31	1.05	0.396	0.463	1	4737	tags=30%,	list=19%,	signal=36%
KEGG_TYROSINE_METABOLISM	40	0.28	1.04	0.404	0.48	1	5254	tags=25%,	list=21%,	signal=32%
KEGG_HEDGEHOG_SIGNALING_PATHWAY	56	0.26	1.04	0.39	0.475	1	4842	tags=29%,	list=19%,	signal=35%
KEGG_O_GLYCAN_BIOSYNTHESIS	25	0.32	1.03	0.421	0.477	1	4353	tags=32%,	list=17%,	signal=39%
KEGG_ADIPOCYTOKINE_SIGNALING_PATHWAY	65	0.25	1.01	0.452	0.513	1	2320	tags=17%,	list=9%,	signal=19%
KEGG_CARDIAC_MUSCLE_CONTRACTION	69	0.25	1	0.447	0.516	1	6400	tags=36%,	list=25%,	signal=48%
KEGG_CYTOSOLIC_DNA_SENSING_PATHWAY	52	0.27	1	0.457	0.518	1	2388	tags=13%,	list=10%,	signal=15%
KEGG_PRIMARY_BILE_ACID_BIOSYNTHESIS	16	0.33	1	0.456	0.514	1	5169	tags=38%,	list=21%,	signal=47%
KEGG_GLYOXYLATE_AND_DICARBOXYLATE_METABOLISM	15	0.34	0.99	0.46	0.515	1	3310	tags=27%,	list=13%,	signal=31%
KEGG_PRION_DISEASES	35	0.28	0.99	0.459	0.512	1	5646	tags=31%,	list=22%,	signal=40%
KEGG_B_CELL_RECEPTOR_SIGNALING_PATHWAY	73	0.27	0.99	0.447	0.516	1	2018	tags=16%,	list=8%,	signal=18%
KEGG_PORPHYRIN_AND_CHLOROPHYLL_METABOLISM	39	0.28	0.98	0.466	0.517	1	5486	tags=31%,	list=22%,	signal=39%
KEGG_PHENYLALANINE_METABOLISM	17	0.32	0.98	0.476	0.515	1	5245	tags=29%,	list=21%,	signal=37%
KEGG_HUNTINGTONS_DISEASE	149	0.22	0.95	0.504	0.561	1	2946	tags=16%,	list=12%,	signal=18%
KEGG_ENDOMETRIAL_CANCER	52	0.27	0.93	0.528	0.591	1	3037	tags=19%,	list=12%,	signal=22%
KEGG_GLYCINE_SERINE_AND_THREONINE_METABOLISM	31	0.26	0.91	0.593	0.615	1	5465	tags=26%,	list=22%,	signal=33%

KEGG_NON_SMALL_CELL_LUNG_CANCER	53	0.26	0.91	0.565	0.615	1	4805 tags=28%, list=19%, signal=35%
KEGG_OLFACTORY_TRANSDUCTION	379	0.19	0.88	0.732	0.655	1	8685 tags=35%, list=35%, signal=52%
KEGG_BLADDER_CANCER	39	0.24	0.83	0.716	0.74	1	4805 tags=23%, list=19%, signal=28%
KEGG_SPHINGOLIPID_METABOLISM	31	0.23	0.82	0.734	0.758	1	4982 tags=26%, list=20%, signal=32%
KEGG_AMINOACYL_TRNA_BIOSYNTHESIS	22	0.27	0.82	0.676	0.751	1	5682 tags=36%, list=23%, signal=47%
KEGG_SYSTEMIC_LUPUS_ERYTHEMATOSUS	56	0.21	0.8	0.769	0.762	1	1361 tags=7%, list=5%, signal=8%
KEGG_MATURITY_ONSET_DIABETES_OF_THE_YOUNG	20	0.24	0.75	0.83	0.845	1	3284 tags=15%, list=13%, signal=17%
KEGG_COMPLEMENT_AND_COAGULATION_CASCADES	68	0.17	0.66	0.953	0.93	1	2941 tags=10%, list=12%, signal=12%
KEGG_UBIQUITIN_MEDIATED_PROTEOLYSIS	126	-0.43	-1.86	0.002	0.14	0.13	3802 tags=34%, list=15%, signal=40%
KEGG_PROTEIN_EXPORT	21	-0.66	-1.75	0.028	0.218	0.302	2393 tags=43%, list=10%, signal=47%
KEGG_P53_SIGNALING_PATHWAY	64	-0.44	-1.67	0.009	0.297	0.485	4006 tags=36%, list=16%, signal=43%
KEGG_RNA_DEGRADATION	51	-0.45	-1.62	0.03	0.331	0.61	1913 tags=33%, list=8%, signal=36%
KEGG_VALINE_LEUCINE_AND_ISOLEUCINE_DEGRADATION	43	-0.47	-1.62	0.031	0.272	0.619	4018 tags=37%, list=16%, signal=44%
KEGG_BASAL_TRANSCRIPTION_FACTORS	35	-0.46	-1.59	0.02	0.285	0.682	3572 tags=43%, list=14%, signal=50%
KEGG_SNARE_INTERACTIONS_IN_VESICULAR_TRANSPORT	37	-0.41	-1.53	0.025	0.361	0.784	4675 tags=41%, list=19%, signal=50%
KEGG_OOCYTE_MEIOSIS	108	-0.36	-1.53	0.023	0.323	0.786	2526 tags=24%, list=10%, signal=27%
KEGG_REGULATION_OF_AUTOPHAGY	34	-0.44	-1.5	0.041	0.345	0.834	3366 tags=29%, list=13%, signal=34%
KEGG_N_GLYCAN_BIOSYNTHESIS	44	-0.41	-1.49	0.06	0.32	0.842	4966 tags=36%, list=20%, signal=45%
KEGG_RIBOSOME	85	-0.57	-1.48	0.181	0.32	0.866	4573 tags=61%, list=18%, signal=75%
KEGG_SMALL_CELL_LUNG_CANCER	82	-0.35	-1.4	0.069	0.449	0.942	3451 tags=27%, list=14%, signal=31%
KEGG_PROTEASOME	42	-0.48	-1.4	0.168	0.423	0.946	5593 tags=50%, list=22%, signal=64%
KEGG_CELL_CYCLE	114	-0.36	-1.39	0.083	0.426	0.953	5795 tags=39%, list=23%, signal=50%
KEGG_PARKINSONS_DISEASE	90	-0.38	-1.38	0.148	0.411	0.954	4644 tags=37%, list=18%, signal=45%
KEGG_MISMATCH_REPAIR	22	-0.47	-1.37	0.122	0.415	0.962	4296 tags=55%, list=17%, signal=66%
KEGG_FATTY_ACID_METABOLISM	40	-0.35	-1.35	0.081	0.434	0.972	3455 tags=33%, list=14%, signal=38%
KEGG_MTOR_SIGNALING_PATHWAY	47	-0.35	-1.33	0.125	0.441	0.975	3215 tags=30%, list=13%, signal=34%
KEGG_NUCLEOTIDE_EXCISION_REPAIR	43	-0.4	-1.33	0.134	0.418	0.975	4296 tags=42%, list=17%, signal=50%
KEGG_PATHOGENIC_ESCHERICHIA_COLI_INFECTION	52	-0.35	-1.33	0.11	0.401	0.976	1691 tags=19%, list=7%, signal=21%
KEGG_PROPANOATE_METABOLISM	31	-0.43	-1.33	0.158	0.382	0.976	4450 tags=42%, list=18%, signal=51%
KEGG_PROSTATE_CANCER	88	-0.34	-1.3	0.17	0.432	0.985	4963 tags=35%, list=20%, signal=44%
KEGG_SPLICEOSOME	103	-0.31	-1.28	0.171	0.448	0.986	3459 tags=29%, list=14%, signal=34%
KEGG_BIOSYNTHESIS_OF_UNSATURATED_FATTY_ACIDS	19	-0.43	-1.26	0.19	0.476	0.992	5783 tags=47%, list=23%, signal=61%
KEGG_PROGESTERONE_MEDIATED_OOCYTE_MATURATION	84	-0.3	-1.25	0.16	0.478	0.994	3215 tags=26%, list=13%, signal=30%
KEGG_PANCREATIC_CANCER	69	-0.33	-1.24	0.199	0.473	0.995	5171 tags=38%, list=21%, signal=47%
KEGG_ALZHEIMERS_DISEASE	137	-0.29	-1.22	0.194	0.496	0.997	3267 tags=24%, list=13%, signal=28%
KEGG_LONG_TERM_POTENTIATION	68	-0.3	-1.22	0.163	0.488	0.997	5912 tags=37%, list=24%, signal=48%
KEGG_PEROXISOME	73	-0.29	-1.19	0.205	0.529	0.998	3933 tags=27%, list=16%, signal=32%
KEGG_ASTHMA	30	-0.39	-1.19	0.26	0.52	0.999	8211 tags=67%, list=33%, signal=99%
KEGG_PYRUVATE_METABOLISM	39	-0.35	-1.19	0.28	0.504	0.999	3455 tags=33%, list=14%, signal=39%
KEGG_CYSTEINE_AND_METHIONINE_METABOLISM	34	-0.34	-1.16	0.267	0.555	0.999	544 tags=15%, list=2%, signal=15%
KEGG_RENAL_CELL_CARCINOMA	66	-0.31	-1.15	0.283	0.541	0.999	6080 tags=41%, list=24%, signal=54%
KEGG_NICOTINATE_AND_NICOTINAMIDE_METABOLISM	21	-0.38	-1.15	0.29	0.533	0.999	5516 tags=33%, list=22%, signal=43%
KEGG_RIG_I_LIKE_RECEPTOR_SIGNALING_PATHWAY	64	-0.3	-1.15	0.266	0.519	0.999	3152 tags=23%, list=13%, signal=27%
KEGG_APOPTOSIS	84	-0.27	-1.14	0.251	0.53	0.999	5092 tags=33%, list=20%, signal=42%
KEGG_LEISHMANIA_INFECTION	68	-0.31	-1.13	0.284	0.529	0.999	2946 tags=25%, list=12%, signal=28%
KEGG_TRYPTOPHAN_METABOLISM	36	-0.31	-1.12	0.311	0.544	0.999	3455 tags=25%, list=14%, signal=29%
KEGG_NITROGEN_METABOLISM	23	-0.35	-1.11	0.333	0.547	0.999	9061 tags=52%, list=36%, signal=82%

KEGG_TOLL_LIKE_RECEPTOR_SIGNALING_PATHWAY	99	-0.28	-1.1	0.318	0.545	0.999	3177 tags=24%, list=13%, signal=28%
KEGG_BETA_ALANINE_METABOLISM	22	-0.35	-1.1	0.331	0.532	0.999	3933 tags=36%, list=16%, signal=43%
KEGG_COLORECTAL_CANCER	62	-0.29	-1.1	0.3	0.522	0.999	5917 tags=40%, list=24%, signal=53%
KEGG_BUTANOATE_METABOLISM	34	-0.32	-1.1	0.343	0.524	0.999	3455 tags=29%, list=14%, signal=34%
KEGG_HISTIDINE_METABOLISM	27	-0.33	-1.09	0.335	0.519	0.999	4133 tags=37%, list=16%, signal=44%
KEGG_INTESTINAL_IMMUNE_NETWORK_FOR_IGA_PRODUCTION	48	-0.31	-1.08	0.34	0.528	0.999	3171 tags=27%, list=13%, signal=31%
KEGG_OXIDATIVE_PHOSPHORYLATION	94	-0.3	-1.07	0.364	0.541	0.999	4605 tags=32%, list=18%, signal=39%
KEGG_TGF_BETA_SIGNALING_PATHWAY	84	-0.25	-1.05	0.366	0.563	1	5939 tags=40%, list=24%, signal=53%
KEGG_ONE_CARBON_POOL_BY_FOLATE	17	-0.36	-1.05	0.409	0.563	1	4829 tags=41%, list=19%, signal=51%
KEGG_GLYCOSYLPHOSPHATIDYLINOSITOL_GPI_ANCHOR_BIOSYNTHESIS	25	-0.32	-1.04	0.405	0.553	1	5060 tags=36%, list=20%, signal=45%
KEGG_NOD_LIKE_RECEPTOR_SIGNALING_PATHWAY	55	-0.29	-1.04	0.384	0.547	1	2946 tags=24%, list=12%, signal=27%
KEGG_GLIOMA	63	-0.28	-1.04	0.4	0.547	1	5912 tags=38%, list=24%, signal=50%
KEGG_ARGININE_AND_PROLINE_METABOLISM	50	-0.26	-1.03	0.429	0.558	1	4806 tags=32%, list=19%, signal=39%
KEGG_AMYOTROPHIC_LATERAL_SCLEROSIS_ALS	52	-0.25	-1.03	0.395	0.549	1	4487 tags=27%, list=18%, signal=33%
KEGG_CHRONIC_MYELOID_LEUKEMIA	72	-0.28	-1.01	0.425	0.566	1	5171 tags=38%, list=21%, signal=47%
KEGG_DNA_REPLICATION	35	-0.31	-0.98	0.47	0.609	1	4296 tags=40%, list=17%, signal=48%
KEGG_TERPENOID_BACKBONE_BIOSYNTHESIS	15	-0.36	-0.98	0.478	0.603	1	2336 tags=33%, list=9%, signal=37%
KEGG_ERBB_SIGNALING_PATHWAY	84	-0.25	-0.98	0.479	0.597	1	3215 tags=23%, list=13%, signal=26%
KEGG_PURINE_METABOLISM	142	-0.22	-0.97	0.485	0.6	1	4880 tags=24%, list=19%, signal=30%
KEGG_PYRIMIDINE_METABOLISM	90	-0.23	-0.96	0.49	0.609	1	4862 tags=31%, list=19%, signal=38%
KEGG_SELENOAMINO_ACID_METABOLISM	24	-0.28	-0.9	0.581	0.724	1	1647 tags=17%, list=7%, signal=18%
KEGG_MELANOMA	71	-0.22	-0.88	0.639	0.759	1	5171 tags=24%, list=21%, signal=30%
KEGG_VIRAL_MYOCARDITIS	70	-0.23	-0.87	0.637	0.756	1	3171 tags=19%, list=13%, signal=21%
KEGG_DORSO_VENTRAL_AXIS_FORMATION	24	-0.27	-0.83	0.684	0.834	1	7035 tags=54%, list=28%, signal=75%
KEGG_ALLOGRAFT_REJECTION	37	-0.25	-0.82	0.681	0.841	1	7000 tags=46%, list=28%, signal=64%
KEGG_ECM_RECEPTOR_INTERACTION	82	-0.2	-0.82	0.77	0.828	1	2202 tags=10%, list=9%, signal=11%
KEGG_GRAFT_VERSUS_HOST_DISEASE	40	-0.25	-0.81	0.707	0.834	1	3171 tags=23%, list=13%, signal=26%
KEGG_TYPE_I_DIABETES_MELLITUS	43	-0.23	-0.79	0.743	0.848	1	3171 tags=19%, list=13%, signal=21%
KEGG_TYPE_II_DIABETES_MELLITUS	44	-0.23	-0.79	0.787	0.838	1	2761 tags=18%, list=11%, signal=20%
KEGG_VIBRIO_CHOLERAE_INFECTION	52	-0.2	-0.75	0.846	0.886	1	4719 tags=25%, list=19%, signal=31%
KEGG_RNA_POLYMERASE	26	-0.25	-0.75	0.771	0.874	1	7554 tags=54%, list=30%, signal=77%
KEGG_AUTOIMMUNE_THYROID_DISEASE	52	-0.2	-0.72	0.884	0.903	1	8066 tags=40%, list=32%, signal=59%
KEGG_ALANINE_ASPARTATE_AND_GLUTAMATE_METABOLISM	30	-0.21	-0.7	0.869	0.911	1	1962 tags=13%, list=8%, signal=14%
KEGG_ASCORBATE_AND_ALDARATE_METABOLISM	25	-0.21	-0.68	0.901	0.922	1	5062 tags=28%, list=20%, signal=35%
KEGG_PENTOSE_AND_GLUCURONATE_INTERCONVERSIONS	27	-0.19	-0.65	0.942	0.932	1	1693 tags=11%, list=7%, signal=12%

GSEA-MS4A6A

GS follow link to MSigDB	SIZE	ES	NES	NOM p-val	FDR q-val	FWER p-val	RANK AT MAX	LEADING EDGE
KEGG_PARKINSONS_DISEASE	90	0.66	2.36	0	0	0	2346	tags=36%, list=9%, signal=39%
KEGG_OXIDATIVE_PHOSPHORYLATION	94	0.66	2.3	0	0	0	950	tags=31%, list=4%, signal=32%
KEGG_ALZHEIMERS_DISEASE	137	0.52	2.22	0	0	0	3897	tags=36%, list=16%, signal=42%
KEGG_RIBOSOME	85	0.84	2.15	0	0	0.002	1117	tags=59%, list=4%, signal=61%
KEGG_HUNTINGTONS_DISEASE	149	0.48	2.1	0	0.001	0.006	2654	tags=28%, list=11%, signal=31%
KEGG_PROTEASOME	42	0.72	2.06	0	0.002	0.012	2735	tags=45%, list=11%, signal=51%
KEGG_CARDIAC_MUSCLE_CONTRACTION	69	0.48	1.93	0	0.007	0.055	3875	tags=29%, list=15%, signal=34%
KEGG_PROTEIN_EXPORT	21	0.73	1.89	0	0.011	0.083	2823	tags=52%, list=11%, signal=59%
KEGG_TRYPTOPHAN_METABOLISM	36	0.51	1.88	0	0.011	0.094	2433	tags=22%, list=10%, signal=25%
KEGG_BASAL_TRANSCRIPTION_FACTORS	35	0.53	1.79	0.002	0.026	0.206	3386	tags=34%, list=13%, signal=40%
KEGG_SNARE_INTERACTIONS_IN_VESICULAR_TRANSPORT	37	0.48	1.78	0.004	0.026	0.222	2367	tags=30%, list=9%, signal=33%
KEGG_SPLICEOSOME	103	0.43	1.76	0.011	0.03	0.261	1158	tags=26%, list=5%, signal=27%
KEGG_REGULATION_OF_AUTOPHAGY	34	0.5	1.72	0.006	0.039	0.34	5215	tags=47%, list=21%, signal=59%
KEGG_PROPANOATE_METABOLISM	31	0.55	1.71	0.019	0.04	0.362	2716	tags=35%, list=11%, signal=40%
KEGG_PEROXISOME	73	0.41	1.7	0.006	0.042	0.401	2594	tags=26%, list=10%, signal=29%
KEGG_TERPENOID_BACKBONE_BIOSYNTHESIS	15	0.61	1.67	0.02	0.049	0.461	2529	tags=40%, list=10%, signal=44%
KEGG_NUCLEOTIDE_EXCISION_REPAIR	43	0.49	1.67	0.02	0.046	0.461	2418	tags=28%, list=10%, signal=31%
KEGG_PYRUVATE_METABOLISM	39	0.47	1.58	0.047	0.088	0.672	3062	tags=31%, list=12%, signal=35%
KEGG_GLUTATHIONE_METABOLISM	49	0.42	1.53	0.037	0.113	0.769	2279	tags=22%, list=9%, signal=25%
KEGG_UBIQUITIN_MEDIATED_PROTEOLYSIS	126	0.34	1.49	0.03	0.146	0.838	1896	tags=20%, list=8%, signal=21%
KEGG_N_GLYCAN_BIOSYNTHESIS	44	0.41	1.48	0.052	0.144	0.845	2353	tags=25%, list=9%, signal=28%
KEGG_CITRATE_CYCLE_TCA_CYCLE	30	0.46	1.48	0.086	0.143	0.853	2204	tags=27%, list=9%, signal=29%
KEGG_METABOLISM_OF_XENOBIOTICS_BY_CYTOCHROME_P450	70	0.37	1.46	0.033	0.148	0.869	5643	tags=29%, list=22%, signal=37%
KEGG_MISMATCH_REPAIR	22	0.49	1.42	0.088	0.185	0.917	2770	tags=32%, list=11%, signal=36%
KEGG_SYSTEMIC_LUPUS_ERYTHEMATOSUS	56	0.38	1.41	0.076	0.183	0.92	4320	tags=30%, list=17%, signal=37%
KEGG_PYRIMIDINE_METABOLISM	90	0.35	1.41	0.061	0.178	0.922	3569	tags=24%, list=14%, signal=28%
KEGG_GLYOXYLATE_AND_DICARBOXYLATE_METABOLISM	15	0.5	1.4	0.098	0.181	0.925	1208	tags=20%, list=5%, signal=21%
KEGG_DRUG_METABOLISM_CYTOCHROME_P450	72	0.34	1.4	0.055	0.177	0.931	6332	tags=31%, list=25%, signal=41%
KEGG_RNA_DEGRADATION	51	0.4	1.39	0.113	0.176	0.935	5061	tags=47%, list=20%, signal=59%
KEGG_FATTY_ACID_METABOLISM	40	0.37	1.38	0.071	0.181	0.944	1791	tags=15%, list=7%, signal=16%
KEGG_INTESTINAL_IMMUNE_NETWORK_FOR_IGA_PRODUCTION	48	0.4	1.37	0.105	0.189	0.953	2738	tags=27%, list=11%, signal=30%
KEGG_TYPE_I_DIABETES_MELLITUS	43	0.38	1.34	0.139	0.219	0.966	2738	tags=23%, list=11%, signal=26%
KEGG_VALINE_LEUCINE_AND_ISOLEUCINE_DEGRADATION	43	0.4	1.32	0.146	0.226	0.973	4188	tags=28%, list=17%, signal=33%
KEGG_HISTIDINE_METABOLISM	27	0.39	1.32	0.109	0.222	0.973	1987	tags=19%, list=8%, signal=20%
KEGG_GRAFT_VERSUS_HOST_DISEASE	40	0.4	1.31	0.16	0.226	0.976	2738	tags=25%, list=11%, signal=28%
KEGG_GLYCOSYLPHOSPHATIDYLINOSITOL_GPI_ANCHOR_BIOSYNTHESIS	25	0.38	1.28	0.164	0.257	0.981	1516	tags=20%, list=6%, signal=21%
KEGG_ASTHMA	30	0.42	1.28	0.191	0.25	0.981	3985	tags=33%, list=16%, signal=40%
KEGG_O_GLYCAN_BIOSYNTHESIS	25	0.38	1.25	0.166	0.281	0.988	1999	tags=20%, list=8%, signal=22%
KEGG_DNA_REPLICATION	35	0.39	1.23	0.209	0.303	0.992	2418	tags=23%, list=10%, signal=25%
KEGG_AUTOIMMUNE_THYROID_DISEASE	52	0.34	1.22	0.211	0.313	0.994	5343	tags=38%, list=21%, signal=49%
KEGG_ALLOGRAFT_REJECTION	37	0.37	1.2	0.264	0.332	0.996	2738	tags=24%, list=11%, signal=27%
KEGG_HOMOLOGOUS_RECOMBINATION	23	0.4	1.19	0.253	0.331	0.996	988	tags=22%, list=4%, signal=23%
KEGG_BUTANOATE_METABOLISM	34	0.35	1.18	0.24	0.335	0.996	2529	tags=18%, list=10%, signal=20%
KEGG_PORPHYRIN_AND_CHLOROPHYLL_METABOLISM	39	0.34	1.14	0.275	0.388	0.997	6763	tags=41%, list=27%, signal=56%
KEGG_PENTOSE_AND_GLCURONATE_INTERCONVERSIONS	27	0.33	1.11	0.311	0.434	0.998	5643	tags=37%, list=22%, signal=48%
KEGG_PURINE_METABOLISM	142	0.25	1.09	0.303	0.452	0.999	3569	tags=19%, list=14%, signal=22%

KEGG_BETA_ALANINE_METABOLISM	22	0.34	1.07	0.363	0.49	1	1791 tags=14%, list=7%, signal=15%
KEGG_GLYCOLYSIS_GLUconeogenesis	60	0.27	1.06	0.378	0.495	1	2985 tags=22%, list=12%, signal=25%
KEGG_STEROID_HORMONE_BIOSYNTHESIS	55	0.27	1.06	0.366	0.489	1	5643 tags=35%, list=22%, signal=44%
KEGG_OOCYTE_MEIOSIS	108	0.25	1.04	0.392	0.512	1	3174 tags=19%, list=13%, signal=22%
KEGG_P53_SIGNALING_PATHWAY	64	0.28	1.04	0.382	0.505	1	4855 tags=34%, list=19%, signal=42%
KEGG_CYSTEINE_AND_METHIONINE_METABOLISM	34	0.3	1.03	0.42	0.5	1	3240 tags=26%, list=13%, signal=30%
KEGG_ANTIGEN_PROCESSING_AND_PRESENTATION	86	0.27	1.02	0.44	0.52	1	3057 tags=22%, list=12%, signal=25%
KEGG_PROXIMAL_TUBULE_BICARBONATE_RECLAMATION	23	0.3	0.99	0.47	0.561	1	1029 tags=9%, list=4%, signal=9%
KEGG_CYTOSOLIC_DNA_SENSING_PATHWAY	52	0.27	0.97	0.495	0.583	1	3816 tags=25%, list=15%, signal=29%
KEGG_RNA_POLYMERASE	26	0.31	0.96	0.502	0.584	1	3567 tags=31%, list=14%, signal=36%
KEGG_NOD_LIKE_RECEPTOR_SIGNALING_PATHWAY	55	0.27	0.96	0.474	0.574	1	3844 tags=25%, list=15%, signal=30%
KEGG_ASCORBATE_AND_ALDARATE_METABOLISM	25	0.29	0.96	0.52	0.573	1	5643 tags=36%, list=22%, signal=46%
KEGG_ONE_CARBON_POOL_BY_FOLATE	17	0.33	0.95	0.495	0.58	1	1042 tags=12%, list=4%, signal=12%
KEGG_AMINO_SUGAR_AND_NUCLEOTIDE_SUGAR_METABOLISM	41	0.26	0.93	0.57	0.614	1	3708 tags=24%, list=15%, signal=29%
KEGG_PRIMARY_BILE_ACID_BIOSYNTHESIS	16	0.31	0.92	0.55	0.609	1	3802 tags=31%, list=15%, signal=37%
KEGG_PPAR_SIGNALING_PATHWAY	68	0.23	0.92	0.586	0.606	1	3228 tags=16%, list=13%, signal=19%
KEGG_ECM_RECEPTOR_INTERACTION	82	0.22	0.9	0.621	0.626	1	5321 tags=22%, list=11%, signal=28%
KEGG_DRUG_METABOLISM_OTHER_ENZYMES	48	0.23	0.87	0.681	0.668	1	1104 tags=8%, list=4%, signal=9%
KEGG_BIOSYNTHESIS_OF_UNSATURATED_FATTY_ACIDS	19	0.29	0.83	0.703	0.73	1	5441 tags=37%, list=22%, signal=47%
KEGG_COMPLEMENT_AND_COAGULATION_CASCADES	68	0.17	0.67	0.953	0.949	1	5544 tags=24%, list=22%, signal=30%
KEGG_NEUROACTIVE_LIGAND_RECEPTOR_INTERACTION	256	0.13	0.63	1	0.963	1	5935 tags=21%, list=24%, signal=28%
KEGG_OLFACTORY_TRANSDUCTION	379	0.1	0.47	1	0.996	1	5447 tags=17%, list=22%, signal=21%
KEGG_T_CELL_RECEPTOR_SIGNALING_PATHWAY	106	-0.53	-2.09	0	0.007	0.007	3213 tags=39%, list=13%, signal=44%
KEGG_CHRONIC_MYELOID_LEUKEMIA	72	-0.56	-2.05	0	0.008	0.014	3510 tags=39%, list=14%, signal=45%
KEGG_B_CELL_RECEPTOR_SIGNALING_PATHWAY	73	-0.57	-2.04	0	0.005	0.015	3380 tags=42%, list=13%, signal=49%
KEGG_VEGF_SIGNALING_PATHWAY	72	-0.5	-2.03	0	0.005	0.017	2914 tags=33%, list=12%, signal=38%
KEGG_ADHERENS_JUNCTION	68	-0.52	-2	0	0.006	0.024	6219 tags=53%, list=25%, signal=70%
KEGG_ACUTE_MYELOID_LEUKEMIA	56	-0.56	-2	0	0.005	0.024	2637 tags=38%, list=10%, signal=42%
KEGG_NOTCH_SIGNALING_PATHWAY	44	-0.58	-1.99	0.002	0.006	0.031	3393 tags=41%, list=13%, signal=47%
KEGG_BLADDER_CANCER	39	-0.58	-1.98	0	0.005	0.033	3213 tags=36%, list=13%, signal=41%
KEGG_COLORECTAL_CANCER	62	-0.52	-1.96	0.002	0.006	0.041	4919 tags=45%, list=20%, signal=56%
KEGG_NEUROTROPHIN_SIGNALING_PATHWAY	124	-0.48	-1.94	0.002	0.007	0.05	3561 tags=35%, list=14%, signal=40%
KEGG_LEUKOCYTE_TRANSENDOTHELIAL_MIGRATION	108	-0.47	-1.93	0	0.007	0.055	4813 tags=39%, list=19%, signal=48%
KEGG_NON_SMALL_CELL_LUNG_CANCER	53	-0.56	-1.91	0.006	0.009	0.066	4761 tags=45%, list=19%, signal=56%
KEGG_FC_EPSILON_RI_SIGNALING_PATHWAY	76	-0.49	-1.9	0.004	0.008	0.067	2956 tags=32%, list=12%, signal=36%
KEGG_PATHWAYS_IN_CANCER	316	-0.4	-1.89	0	0.009	0.084	3546 tags=28%, list=14%, signal=32%
KEGG_INOSITOL_PHOSPHATE_METABOLISM	49	-0.52	-1.88	0	0.01	0.092	2598 tags=37%, list=10%, signal=41%
KEGG_ALDOSTERONE_REGULATED_SODIUM_REABSORPTION	40	-0.53	-1.87	0.002	0.01	0.1	6266 tags=45%, list=25%, signal=60%
KEGG_MAPK_SIGNALING_PATHWAY	256	-0.4	-1.87	0	0.009	0.1	3191 tags=25%, list=13%, signal=29%
KEGG_PHOSPHATIDYLINOSITOL_SIGNALING_SYSTEM	70	-0.5	-1.86	0.002	0.009	0.104	2787 tags=36%, list=11%, signal=40%
KEGG_GAP_JUNCTION	83	-0.45	-1.82	0.004	0.013	0.145	3178 tags=27%, list=13%, signal=30%
KEGG_MELANOGENESIS	100	-0.43	-1.81	0	0.015	0.172	3301 tags=26%, list=13%, signal=30%
KEGG_GNRH_SIGNALING_PATHWAY	98	-0.43	-1.81	0	0.015	0.175	3178 tags=28%, list=13%, signal=31%
KEGG_CHEMOKINE_SIGNALING_PATHWAY	181	-0.41	-1.8	0	0.015	0.179	3265 tags=29%, list=13%, signal=33%
KEGG_PANCREATIC_CANCER	69	-0.48	-1.79	0.002	0.016	0.193	3546 tags=38%, list=14%, signal=44%
KEGG_TIGHT_JUNCTION	122	-0.4	-1.79	0	0.015	0.196	4716 tags=30%, list=19%, signal=37%
KEGG_WNT_SIGNALING_PATHWAY	147	-0.4	-1.77	0.002	0.017	0.22	4593 tags=31%, list=18%, signal=37%

KEGG_ERBB_SIGNALING_PATHWAY	84	-0.45	-1.77	0.006	0.017	0.222	3337 tags=29%, list=13%, signal=33%
KEGG_LONG_TERM_DEPRESSION	64	-0.43	-1.76	0.002	0.018	0.234	2487 tags=23%, list=10%, signal=26%
KEGG_AXON_GUIDANCE	126	-0.39	-1.76	0.002	0.018	0.241	5176 tags=33%, list=21%, signal=42%
KEGG_ENDOMETRIAL_CANCER	52	-0.51	-1.73	0.008	0.021	0.29	6303 tags=50%, list=25%, signal=67%
KEGG_FC_GAMMA_R_MEDIATED_PHAGOCYTOSIS	88	-0.45	-1.73	0.011	0.021	0.297	2487 tags=34%, list=10%, signal=38%
KEGG_RENAL_CELL_CARCINOMA	66	-0.47	-1.73	0.014	0.021	0.3	6051 tags=47%, list=24%, signal=62%
KEGG_JAK_STAT_SIGNALING_PATHWAY	149	-0.38	-1.73	0.002	0.021	0.315	3726 tags=28%, list=15%, signal=33%
KEGG_INSULIN_SIGNALING_PATHWAY	133	-0.41	-1.73	0.01	0.021	0.316	3364 tags=30%, list=13%, signal=35%
KEGG_PROSTATE_CANCER	88	-0.44	-1.71	0.006	0.024	0.36	3337 tags=30%, list=13%, signal=34%
KEGG_TYPE_II_DIABETES_MELLITUS	44	-0.46	-1.66	0.012	0.036	0.471	6266 tags=41%, list=25%, signal=54%
KEGG_REGULATION_OF_ACTIN_CYTOSKELETON	200	-0.37	-1.65	0.012	0.036	0.481	3839 tags=26%, list=15%, signal=31%
KEGG_GLIOMA	63	-0.43	-1.63	0.014	0.042	0.535	3337 tags=27%, list=13%, signal=31%
KEGG_GALACTOSE_METABOLISM	25	-0.48	-1.63	0.016	0.042	0.544	3926 tags=44%, list=16%, signal=52%
KEGG_FOCAL_ADHESION	189	-0.36	-1.62	0.014	0.043	0.56	3910 tags=25%, list=16%, signal=30%
KEGG_VASCULAR_SMOOTH_MUSCLE_CONTRACTION	109	-0.36	-1.58	0.004	0.061	0.668	3371 tags=28%, list=13%, signal=32%
KEGG_BASAL_CELL_CARCINOMA	55	-0.41	-1.57	0.02	0.062	0.684	4939 tags=27%, list=20%, signal=34%
KEGG_GLYCOSAMINOGLYCAN_BIOSYNTHESIS_CHONDROITIN_SULFATE	20	-0.49	-1.55	0.031	0.069	0.722	6402 tags=55%, list=25%, signal=74%
KEGG_ABC_TRANSPORTERS	44	-0.42	-1.55	0.029	0.071	0.735	5460 tags=36%, list=22%, signal=46%
KEGG_ENDOCYTOSIS	161	-0.34	-1.51	0.025	0.092	0.818	3539 tags=25%, list=14%, signal=29%
KEGG_PRIMARY_IMMUNODEFICIENCY	35	-0.5	-1.5	0.085	0.098	0.84	4807 tags=51%, list=19%, signal=64%
KEGG_THYROID_CANCER	29	-0.46	-1.49	0.064	0.097	0.844	4178 tags=31%, list=17%, signal=37%
KEGG_LONG_TERM_POTENTIATION	68	-0.36	-1.46	0.044	0.116	0.89	3243 tags=25%, list=13%, signal=29%
KEGG_MTOR_SIGNALING_PATHWAY	47	-0.39	-1.46	0.068	0.116	0.891	1335 tags=19%, list=5%, signal=20%
KEGG_CALCIIUM_SIGNALING_PATHWAY	171	-0.31	-1.43	0.017	0.13	0.916	3243 tags=20%, list=13%, signal=23%
KEGG_ARRHYTHMOGENIC_RIGHT_VENTRICULAR_CARDIOMYOPATHY_ARVC	74	-0.34	-1.43	0.03	0.131	0.922	4054 tags=27%, list=16%, signal=32%
KEGG_PATHOGENIC_ESCHERICHIA_COLI_INFECTION	52	-0.38	-1.43	0.071	0.128	0.923	4796 tags=42%, list=19%, signal=52%
KEGG_AMINOACYL_TRNA_BIOSYNTHESIS	22	-0.51	-1.43	0.092	0.128	0.925	4976 tags=41%, list=20%, signal=51%
KEGG_ADIPOCYTOKINE_SIGNALING_PATHWAY	65	-0.36	-1.42	0.052	0.128	0.926	4329 tags=37%, list=17%, signal=44%
KEGG_CELL_ADHESION_MOLECULES_CAMS	130	-0.31	-1.42	0.022	0.127	0.926	4795 tags=32%, list=19%, signal=39%
KEGG_TGF_BETA_SIGNALING_PATHWAY	84	-0.34	-1.42	0.05	0.13	0.933	6051 tags=40%, list=24%, signal=53%
KEGG_FRUCTOSE_AND_MANNOSE_METABOLISM	32	-0.43	-1.41	0.11	0.13	0.937	7060 tags=47%, list=28%, signal=65%
KEGG_NATURAL_KILLER_CELL_MEDIATED_CYTOTOXICITY	133	-0.32	-1.4	0.058	0.137	0.949	4761 tags=32%, list=19%, signal=40%
KEGG_SMALL_CELL_LUNG_CANCER	82	-0.35	-1.4	0.055	0.136	0.952	3503 tags=29%, list=14%, signal=34%
KEGG_DILATED_CARDIOMYOPATHY	90	-0.33	-1.39	0.044	0.138	0.954	3842 tags=24%, list=15%, signal=29%
KEGG_DORSO_VENTRAL_AXIS_FORMATION	24	-0.45	-1.38	0.118	0.142	0.96	6303 tags=42%, list=25%, signal=56%
KEGG_HEMATOPOIETIC_CELL_LINEAGE	86	-0.32	-1.36	0.048	0.162	0.972	4876 tags=35%, list=19%, signal=43%
KEGG_VIRAL_MYOCARDITIS	70	-0.35	-1.35	0.095	0.166	0.972	3762 tags=33%, list=15%, signal=39%
KEGG_ALANINE_ASPARTATE_AND_Glutamate_Metabolism	30	-0.4	-1.33	0.113	0.178	0.979	3509 tags=30%, list=14%, signal=35%
KEGG_CYTOKINE_CYTOKINE_RECEPTOR_INTERACTION	253	-0.27	-1.33	0.037	0.181	0.983	6112 tags=32%, list=24%, signal=42%
KEGG_TASTE_TRANSDUCTION	48	-0.34	-1.32	0.095	0.185	0.983	7911 tags=40%, list=31%, signal=58%
KEGG_MELANOMA	71	-0.33	-1.32	0.085	0.182	0.984	2456 tags=14%, list=10%, signal=16%
KEGG_GLYCEROPHOSPHOLIPID_METABOLISM	63	-0.35	-1.31	0.105	0.187	0.986	4948 tags=30%, list=20%, signal=37%
KEGG_VASOPRESSIN_REGULATED_WATER_REABSORPTION	44	-0.33	-1.3	0.12	0.198	0.989	1964 tags=23%, list=8%, signal=25%
KEGG_EPITHELIAL_CELL_SIGNALING_IN_HELICOBACTER_PYLORI_INFECTION	65	-0.32	-1.3	0.115	0.196	0.989	6112 tags=48%, list=24%, signal=63%
KEGG_LYSOSOME	116	-0.33	-1.29	0.171	0.198	0.989	5713 tags=44%, list=23%, signal=57%
KEGG_APOPTOSIS	84	-0.31	-1.29	0.126	0.197	0.989	3603 tags=29%, list=14%, signal=33%
KEGG_LYSINE_DEGRADATION	39	-0.37	-1.29	0.172	0.197	0.989	3052 tags=33%, list=12%, signal=38%

KEGG_PHENYLALANINE_METABOLISM	17	-0.42	-1.29	0.141	0.196	0.989	5013 tags=29%, list=20%, signal=37%
KEGG_PENTOSE_PHOSPHATE_PATHWAY	26	-0.4	-1.28	0.17	0.194	0.99	3015 tags=35%, list=12%, signal=39%
KEGG_VIBRIO_CHOLERAE_INFECTION	52	-0.34	-1.28	0.165	0.192	0.99	6120 tags=54%, list=24%, signal=71%
KEGG_SELENOAMINO_ACID_METABOLISM	24	-0.39	-1.25	0.179	0.221	0.997	5251 tags=42%, list=21%, signal=53%
KEGG_TYROSINE_METABOLISM	40	-0.33	-1.24	0.143	0.239	0.997	5013 tags=25%, list=20%, signal=31%
KEGG_PROGESTERONE_MEDIATED_OOCYTE_MATURATION	84	-0.3	-1.24	0.166	0.236	0.997	3459 tags=25%, list=14%, signal=29%
KEGG_LINOLEIC_ACID_METABOLISM	27	-0.37	-1.21	0.205	0.259	0.998	7712 tags=48%, list=31%, signal=69%
KEGG_ETHER_LIPID_METABOLISM	27	-0.36	-1.21	0.193	0.257	0.998	3860 tags=30%, list=15%, signal=35%
KEGG_ARGININE_AND_PROLINE_METABOLISM	50	-0.31	-1.2	0.197	0.266	1	3599 tags=26%, list=14%, signal=30%
KEGG_PRION_DISEASES	35	-0.33	-1.19	0.223	0.271	1	6115 tags=34%, list=24%, signal=45%
KEGG_SPHINGOLIPID_METABOLISM	31	-0.33	-1.18	0.227	0.283	1	7572 tags=48%, list=30%, signal=69%
KEGG_GLYCOSPHINGOLIPID_BIOSYNTHESIS_LACTO_AND_NEOLACTO_SERIES	25	-0.36	-1.17	0.232	0.29	1	5548 tags=32%, list=22%, signal=41%
KEGG_HEDGEHOG_SIGNALING_PATHWAY	56	-0.29	-1.16	0.247	0.303	1	4971 tags=23%, list=20%, signal=29%
KEGG_STEROID_BIOSYNTHESIS	15	-0.43	-1.15	0.295	0.308	1	2238 tags=27%, list=9%, signal=29%
KEGG_LEISHMANIA_INFECTION	68	-0.31	-1.14	0.307	0.314	1	4778 tags=37%, list=19%, signal=45%
KEGG_ALPHA_LINOLENIC_ACID_METABOLISM	17	-0.39	-1.13	0.278	0.318	1	6251 tags=41%, list=25%, signal=55%
KEGG_GLYCEROLIPID_METABOLISM	40	-0.3	-1.12	0.259	0.328	1	4647 tags=25%, list=18%, signal=31%
KEGG_PANTOTHENATE_AND_COA_BIOSYNTHESIS	16	-0.37	-1.12	0.297	0.325	1	759 tags=13%, list=3%, signal=13%
KEGG_STARCH_AND_SUCROSE_METABOLISM	51	-0.31	-1.11	0.318	0.335	1	5713 tags=37%, list=23%, signal=48%
KEGG_RENIN_ANGIOTENSIN_SYSTEM	17	-0.38	-1.09	0.372	0.359	1	1836 tags=18%, list=7%, signal=19%
KEGG_CELL_CYCLE	114	-0.27	-1.08	0.348	0.374	1	5881 tags=35%, list=23%, signal=46%
KEGG_HYPERTROPHIC_CARDIOMYOPATHY_HCM	83	-0.24	-1.05	0.345	0.411	1	3842 tags=20%, list=15%, signal=24%
KEGG_BASE_EXCISION_REPAIR	32	-0.33	-1.04	0.392	0.42	1	3275 tags=31%, list=13%, signal=36%
KEGG_MATURITY_ONSET_DIABETES_OF_THE_YOUNG	20	-0.35	-1.03	0.41	0.434	1	6266 tags=40%, list=25%, signal=53%
KEGG_GLYCOSAMINOGLYCAN_BIOSYNTHESIS_HEPARAN_SULFATE	26	-0.28	-0.99	0.464	0.486	1	4522 tags=27%, list=18%, signal=33%
KEGG_TOLL_LIKE_RECEPTOR_SIGNALING_PATHWAY	99	-0.24	-0.96	0.503	0.528	1	3533 tags=21%, list=14%, signal=25%
KEGG_GLYCOSAMINOGLYCAN_DEGRADATION	21	-0.33	-0.96	0.508	0.537	1	5713 tags=38%, list=23%, signal=49%
KEGG_RIG_I_LIKE_RECEPTOR_SIGNALING_PATHWAY	64	-0.24	-0.95	0.515	0.539	1	3099 tags=22%, list=12%, signal=25%
KEGG_NITROGEN_METABOLISM	23	-0.3	-0.95	0.545	0.536	1	3587 tags=26%, list=14%, signal=30%
KEGG_ARACHIDONIC_ACID_METABOLISM	55	-0.23	-0.92	0.6	0.583	1	6956 tags=35%, list=28%, signal=48%
KEGG_AMYOTROPHIC_LATERAL_SCLEROSIS_ALS	52	-0.22	-0.91	0.606	0.596	1	4517 tags=25%, list=18%, signal=30%
KEGG_NICOTINATE_AND_NICOTINAMIDE_METABOLISM	21	-0.27	-0.84	0.666	0.716	1	7030 tags=38%, list=28%, signal=53%
KEGG_GLYCOSPHINGOLIPID_BIOSYNTHESIS_GANGLIO_SERIES	15	-0.27	-0.82	0.722	0.744	1	3515 tags=20%, list=14%, signal=23%
KEGG_RETINOL_METABOLISM	62	-0.18	-0.73	0.937	0.864	1	5472 tags=21%, list=22%, signal=27%
KEGG_GLYCINE_SERINE_AND_THREONINE_METABOLISM	31	-0.18	-0.63	0.964	0.948	1	5010 tags=19%, list=20%, signal=24%

GSEA-NCF2

GS follow link to MSigDB

	SIZE	ES	NES	NOM p-val	FDR q-val	FWER p-val	RANK AT MAX	LEADING EDGE
KEGG_COMPLEMENT_AND_COAGULATION_CASCADES	68	0.46	1.76	0.01	0.351	0.29	6958	tags=51%, list=28%, signal=71%
KEGG_O_GLYCAN_BIOSYNTHESIS	25	0.53	1.69	0.006	0.318	0.43	3519	tags=36%, list=14%, signal=42%
KEGG_LEUKOCYTE_TRANSENDOTHELIAL_MIGRATION	108	0.41	1.65	0.018	0.297	0.525	4996	tags=35%, list=20%, signal=44%
KEGG_STARCH_AND_SUCROSE_METABOLISM	51	0.44	1.6	0.024	0.336	0.646	3945	tags=31%, list=16%, signal=37%
KEGG_ALPHA_LINOLENIC_ACID_METABOLISM	17	0.53	1.57	0.042	0.335	0.713	4124	tags=41%, list=16%, signal=49%
KEGG_NICOTINATE_AND_NICOTINAMIDE_METABOLISM	21	0.51	1.55	0.049	0.302	0.736	4525	tags=48%, list=18%, signal=58%
KEGG_FC_GAMMA_R_MEDIATED_PHAGOCYTOSIS	88	0.42	1.55	0.05	0.275	0.749	4366	tags=39%, list=17%, signal=47%
KEGG_INOSITOL_PHOSPHATE_METABOLISM	49	0.43	1.54	0.048	0.258	0.763	1891	tags=20%, list=8%, signal=22%
KEGG_GLYCEROPHOSPHOLIPID_METABOLISM	63	0.39	1.46	0.048	0.385	0.877	5177	tags=43%, list=21%, signal=54%
KEGG_TYPE_II_DIABETES_MELLITUS	44	0.39	1.4	0.095	0.489	0.935	4709	tags=36%, list=19%, signal=45%
KEGG_REGULATION_OF_AUTOPHAGY	34	0.39	1.4	0.069	0.449	0.936	3741	tags=32%, list=15%, signal=38%
KEGG_PRIMARY_BILE_ACID_BIOSYNTHESIS	16	0.47	1.39	0.1	0.432	0.942	4876	tags=38%, list=19%, signal=46%
KEGG_PHOSPHATIDYLINOSITOL_SIGNALING_SYSTEM	70	0.36	1.34	0.119	0.503	0.967	1891	tags=19%, list=8%, signal=20%
KEGG_FC_EPSILON_RI_SIGNALING_PATHWAY	76	0.35	1.34	0.112	0.47	0.968	4324	tags=30%, list=17%, signal=36%
KEGG_REGULATION_OF_ACTIN_CYTOSKELETON	200	0.3	1.33	0.096	0.457	0.972	4605	tags=28%, list=18%, signal=33%
KEGG_ADIPOCYTOKINE_SIGNALING_PATHWAY	65	0.34	1.33	0.106	0.442	0.974	4709	tags=34%, list=21%, signal=42%
KEGG_INSULIN_SIGNALING_PATHWAY	133	0.31	1.3	0.128	0.481	0.986	4986	tags=34%, list=20%, signal=42%
KEGG_SNARE_INTERACTIONS_IN_VESICULAR_TRANSPORT	37	0.34	1.29	0.121	0.471	0.987	4445	tags=32%, list=18%, signal=39%
KEGG_ETHER_LIPID_METABOLISM	27	0.39	1.29	0.141	0.46	0.99	4124	tags=37%, list=16%, signal=44%
KEGG_RENAL_CELL_CARCINOMA	66	0.35	1.27	0.198	0.476	0.992	6587	tags=50%, list=26%, signal=68%
KEGG_NATURAL_KILLER_CELL_MEDIATED_CYTOTOXICITY	133	0.3	1.25	0.151	0.484	0.995	2033	tags=17%, list=8%, signal=19%
KEGG_PPAR_SIGNALING_PATHWAY	68	0.31	1.25	0.154	0.482	0.996	2328	tags=18%, list=9%, signal=19%
KEGG_MATURITY_ONSET_DIABETES_OF_THE_YOUNG	20	0.41	1.24	0.175	0.467	0.996	3625	tags=25%, list=14%, signal=29%
KEGG_MTOR_SIGNALING_PATHWAY	47	0.33	1.24	0.159	0.449	0.996	4556	tags=36%, list=18%, signal=44%
KEGG_ALDOSTERONE_REGULATED_SODIUM_REABSORPTION	40	0.35	1.23	0.203	0.457	0.998	4717	tags=33%, list=19%, signal=40%
KEGG_ARACHIDONIC_ACID_METABOLISM	55	0.31	1.23	0.138	0.441	0.998	2060	tags=16%, list=8%, signal=18%
KEGG_CYTOKINE_CYTOKINE_RECEPTOR_INTERACTION	253	0.25	1.19	0.137	0.503	0.999	4074	tags=23%, list=16%, signal=27%
KEGG_GALACTOSE_METABOLISM	25	0.36	1.18	0.252	0.512	0.999	2711	tags=28%, list=11%, signal=31%
KEGG_VEGF_SIGNALING_PATHWAY	72	0.3	1.17	0.213	0.5	0.999	4368	tags=31%, list=17%, signal=37%
KEGG_ERBB_SIGNALING_PATHWAY	84	0.3	1.16	0.231	0.502	0.999	4366	tags=30%, list=17%, signal=36%
KEGG_PANTOTHENATE_AND_COA_BIOSYNTHESIS	16	0.39	1.16	0.263	0.502	0.999	4782	tags=38%, list=19%, signal=46%
KEGG_NEUROACTIVE_LIGAND_RECEPTOR_INTERACTION	256	0.24	1.14	0.198	0.52	0.999	5501	tags=24%, list=22%, signal=31%
KEGG_LEISHMANIA_INFECTION	68	0.32	1.14	0.297	0.509	0.999	854	tags=13%, list=3%, signal=14%
KEGG_MAPK_SIGNALING_PATHWAY	256	0.25	1.13	0.243	0.503	0.999	4535	tags=27%, list=18%, signal=33%
KEGG_P53_SIGNALING_PATHWAY	64	0.29	1.1	0.315	0.56	0.999	3023	tags=25%, list=12%, signal=28%
KEGG_CHEMOKINE_SIGNALING_PATHWAY	181	0.25	1.08	0.313	0.579	0.999	5020	tags=29%, list=20%, signal=36%
KEGG_LONG_TERM_DEPRESSION	64	0.27	1.08	0.327	0.566	0.999	5105	tags=27%, list=20%, signal=33%
KEGG_APOPTOSIS	84	0.26	1.08	0.337	0.555	0.999	1554	tags=17%, list=6%, signal=18%
KEGG_JAK_STAT_SIGNALING_PATHWAY	149	0.24	1.06	0.336	0.572	1	4560	tags=24%, list=18%, signal=29%
KEGG_ABC_TRANSPORTERS	44	0.29	1.06	0.372	0.573	1	4344	tags=32%, list=17%, signal=38%
KEGG_TERPENOID_BACKBONE_BIOSYNTHESIS	15	0.39	1.05	0.396	0.562	1	355	tags=13%, list=1%, signal=14%
KEGG_DORSO_VENTRAL_AXIS_FORMATION	24	0.34	1.04	0.398	0.572	1	7394	tags=46%, list=29%, signal=65%
KEGG_GNRH_SIGNALING_PATHWAY	98	0.26	1.04	0.378	0.567	1	5600	tags=32%, list=22%, signal=41%
KEGG_AMYOTROPHIC_LATERAL_SCLEROSIS_ALS	52	0.26	1.03	0.399	0.568	1	3831	tags=25%, list=15%, signal=29%
KEGG_NOD_LIKE_RECEPTOR_SIGNALING_PATHWAY	55	0.27	0.99	0.443	0.635	1	4008	tags=25%, list=16%, signal=30%
KEGG_VASCULAR_SMOOTH_MUSCLE_CONTRACTION	109	0.22	0.96	0.513	0.682	1	4902	tags=25%, list=20%, signal=31%

KEGG_OLFACTORY_TRANSDUCTION	379	0.2	0.96	0.54	0.672	1	5630	tags=23%,	list=22%,	signal=29%
KEGG_SPHINGOLIPID_METABOLISM	31	0.27	0.94	0.53	0.698	1	3606	tags=23%,	list=14%,	signal=26%
KEGG_ADHERENS_JUNCTION	68	0.24	0.94	0.54	0.701	1	4008	tags=22%,	list=16%,	signal=26%
KEGG_EPITHELIAL_CELL_SIGNALING_IN_HELICOBACTER_PYLORI_INFECTION	65	0.24	0.93	0.564	0.702	1	4376	tags=22%,	list=17%,	signal=26%
KEGG_NOTCH_SIGNALING_PATHWAY	44	0.27	0.92	0.56	0.702	1	3638	tags=25%,	list=14%,	signal=29%
KEGG_RIG_I_LIKE_RECEPTOR_SIGNALING_PATHWAY	64	0.23	0.91	0.603	0.701	1	4158	tags=25%,	list=17%,	signal=30%
KEGG_GLYCOSPHINGOLIPID_BIOSYNTHESIS_LACTO_AND_NEOLACTO_SERIES	25	0.28	0.91	0.592	0.697	1	1876	tags=16%,	list=7%,	signal=17%
KEGG_PANCREATIC_CANCER	69	0.25	0.91	0.554	0.685	1	4008	tags=29%,	list=16%,	signal=34%
KEGG_FOCAL_ADHESION	189	0.21	0.91	0.611	0.676	1	4605	tags=23%,	list=18%,	signal=28%
KEGG_TOLL_LIKE_RECEPTOR_SIGNALING_PATHWAY	99	0.23	0.9	0.583	0.682	1	4008	tags=20%,	list=16%,	signal=24%
KEGG_ENDOCYTOSIS	161	0.2	0.88	0.645	0.709	1	2650	tags=15%,	list=11%,	signal=17%
KEGG_LINOLEIC_ACID_METABOLISM	27	0.26	0.86	0.672	0.74	1	4124	tags=22%,	list=16%,	signal=27%
KEGG_NON_SMALL_CELL_LUNG_CANCER	53	0.24	0.81	0.69	0.805	1	4324	tags=28%,	list=17%,	signal=34%
KEGG_MELANOGENESIS	100	0.19	0.8	0.805	0.825	1	6992	tags=36%,	list=28%,	signal=50%
KEGG_GLYCOSPHINGOLIPID_BIOSYNTHESIS_GANGLIO_SERIES	15	0.26	0.79	0.739	0.817	1	4040	tags=27%,	list=16%,	signal=32%
KEGG_RENIN_ANGIOTENSIN_SYSTEM	17	0.28	0.78	0.769	0.82	1	5019	tags=29%,	list=20%,	signal=37%
KEGG_HEDGEHOG_SIGNALING_PATHWAY	56	0.19	0.77	0.87	0.824	1	5523	tags=23%,	list=22%,	signal=30%
KEGG_NITROGEN_METABOLISM	23	0.23	0.74	0.864	0.86	1	6675	tags=43%,	list=27%,	signal=59%
KEGG_HYPERTROPHIC_CARDIOMYOPATHY_HCM	83	0.15	0.65	0.992	0.932	1	4527	tags=19%,	list=18%,	signal=23%
KEGG_LYSINE_DEGRADATION	39	-0.61	-2.09	0	0.01	0.005	4769	tags=44%,	list=19%,	signal=54%
KEGG_PROTEIN_EXPORT	21	-0.73	-1.92	0.002	0.048	0.06	2813	tags=48%,	list=11%,	signal=54%
KEGG_INTESTINAL_IMMUNE_NETWORK_FOR_IGA_PRODUCTION	48	-0.54	-1.86	0.002	0.065	0.122	3068	tags=35%,	list=12%,	signal=40%
KEGG_DNA_REPLICATION	35	-0.58	-1.82	0.01	0.074	0.176	4424	tags=57%,	list=18%,	signal=69%
KEGG_NUCLEOTIDE_EXCISION_REPAIR	43	-0.53	-1.81	0.006	0.063	0.183	5486	tags=49%,	list=22%,	signal=62%
KEGG_ASTHMA	30	-0.59	-1.8	0.011	0.064	0.212	3068	tags=40%,	list=12%,	signal=46%
KEGG_GLYOXYLATE_AND_DICARBOXYLATE_METABOLISM	15	-0.63	-1.76	0.004	0.079	0.279	1379	tags=33%,	list=5%,	signal=35%
KEGG_MISMATCH_REPAIR	22	-0.59	-1.74	0.006	0.09	0.334	4273	tags=50%,	list=17%,	signal=60%
KEGG_BASE_EXCISION_REPAIR	32	-0.53	-1.71	0.01	0.102	0.393	4337	tags=50%,	list=17%,	signal=60%
KEGG_N_GLYCAN_BIOSYNTHESIS	44	-0.47	-1.7	0.016	0.1	0.413	3784	tags=34%,	list=15%,	signal=40%
KEGG_PROTEASOME	42	-0.57	-1.68	0.043	0.107	0.455	4721	tags=50%,	list=19%,	signal=61%
KEGG_BUTANOATE_METABOLISM	34	-0.49	-1.67	0.008	0.105	0.47	4620	tags=41%,	list=18%,	signal=50%
KEGG_PYRUVATE_METABOLISM	39	-0.5	-1.66	0.024	0.105	0.495	2773	tags=36%,	list=11%,	signal=40%
KEGG_CITRATE_CYCLE_TCA_CYCLE	30	-0.5	-1.65	0.031	0.104	0.515	2182	tags=30%,	list=9%,	signal=33%
KEGG_CELL_CYCLE	114	-0.42	-1.65	0.019	0.097	0.515	3653	tags=32%,	list=15%,	signal=37%
KEGG_DRUG_METABOLISM_OTHER_ENZYMES	48	-0.43	-1.64	0.014	0.104	0.554	5208	tags=42%,	list=21%,	signal=52%
KEGG_ALLOGRAFT_REJECTION	37	-0.5	-1.64	0.037	0.099	0.556	4997	tags=51%,	list=20%,	signal=64%
KEGG_SELENOAMINO_ACID_METABOLISM	24	-0.5	-1.63	0.02	0.095	0.559	1060	tags=21%,	list=4%,	signal=22%
KEGG_PYRIMIDINE_METABOLISM	90	-0.39	-1.61	0.012	0.105	0.601	6107	tags=46%,	list=24%,	signal=60%
KEGG_PENTOSE_AND_GLUCURONATE_INTERCONVERSIONS	27	-0.47	-1.58	0.02	0.127	0.672	3478	tags=33%,	list=14%,	signal=39%
KEGG_RNA_POLYMERASE	26	-0.51	-1.57	0.043	0.128	0.686	3230	tags=42%,	list=13%,	signal=48%
KEGG_PURINE_METABOLISM	142	-0.36	-1.56	0.014	0.131	0.704	3230	tags=27%,	list=13%,	signal=31%
KEGG_SPLICEOSOME	103	-0.38	-1.53	0.038	0.16	0.768	6789	tags=51%,	list=27%,	signal=70%
KEGG_PRION_DISEASES	35	-0.42	-1.51	0.032	0.166	0.782	3711	tags=29%,	list=15%,	signal=33%
KEGG_PRIMARY_IMMUNODEFICIENCY	35	-0.49	-1.51	0.058	0.165	0.79	4262	tags=49%,	list=17%,	signal=58%
KEGG_TYPE_I_DIABETES_MELLITUS	43	-0.43	-1.51	0.056	0.159	0.792	4997	tags=42%,	list=20%,	signal=52%
KEGG_VIBRIO_CHOLERAE_INFECTION	52	-0.4	-1.5	0.049	0.158	0.802	4905	tags=27%,	list=20%,	signal=33%
KEGG_ONE_CARBON_POOL_BY_FOLATE	17	-0.52	-1.5	0.063	0.159	0.812	1647	tags=29%,	list=7%,	signal=31%

KEGG_PROPANOATE_METABOLISM	31	-0.49	-1.5	0.067	0.153	0.812	4620 tags=42%, list=18%, signal=51%
KEGG_VALINE_LEUCINE_AND_ISOLEUCINE_DEGRADATION	43	-0.44	-1.49	0.066	0.151	0.817	4941 tags=44%, list=20%, signal=55%
KEGG_VIRAL_MYOCARDITIS	70	-0.38	-1.48	0.064	0.163	0.839	3211 tags=24%, list=13%, signal=28%
KEGG_HUNTINGTONS_DISEASE	149	-0.34	-1.47	0.072	0.161	0.843	3153 tags=26%, list=13%, signal=30%
KEGG_AUTOIMMUNE_THYROID_DISEASE	52	-0.4	-1.46	0.059	0.165	0.863	1352 tags=23%, list=5%, signal=24%
KEGG_OOCYTE_MEIOSIS	108	-0.34	-1.45	0.057	0.169	0.872	3852 tags=26%, list=15%, signal=30%
KEGG_AMINOACYL_TRNA_BIOSYNTHESIS	22	-0.49	-1.45	0.077	0.172	0.882	2019 tags=32%, list=8%, signal=35%
KEGG_OXIDATIVE_PHOSPHORYLATION	94	-0.4	-1.41	0.133	0.214	0.924	4010 tags=30%, list=16%, signal=35%
KEGG_PARKINSONS_DISEASE	90	-0.38	-1.4	0.128	0.213	0.926	3107 tags=28%, list=12%, signal=32%
KEGG_RNA_DEGRADATION	51	-0.4	-1.4	0.09	0.216	0.931	6702 tags=49%, list=27%, signal=67%
KEGG_GRAFT_VERSUS_HOST_DISEASE	40	-0.43	-1.39	0.13	0.212	0.931	4075 tags=40%, list=16%, signal=48%
KEGG_PEROXISOME	73	-0.34	-1.37	0.065	0.24	0.949	4269 tags=33%, list=17%, signal=39%
KEGG_ASCORBATE_AND_ALDARATE_METABOLISM	25	-0.41	-1.36	0.092	0.245	0.952	5208 tags=36%, list=21%, signal=45%
KEGG_PENTOSE_PHOSPHATE_PATHWAY	26	-0.43	-1.36	0.114	0.243	0.952	6698 tags=50%, list=27%, signal=68%
KEGG_DRUG_METABOLISM_CYTOCHROME_P450	72	-0.33	-1.35	0.079	0.242	0.955	5880 tags=29%, list=23%, signal=38%
KEGG_ALZHEIMERS_DISEASE	137	-0.31	-1.34	0.105	0.254	0.966	3795 tags=25%, list=15%, signal=29%
KEGG_METABOLISM_OF_XENOBIOTICS_BY_CYTOCHROME_P450	70	-0.34	-1.33	0.102	0.256	0.969	6231 tags=34%, list=25%, signal=45%
KEGG_ALANINE_ASPARTATE_AND_GLUTAMATE_METABOLISM	30	-0.39	-1.33	0.127	0.258	0.973	4646 tags=40%, list=18%, signal=49%
KEGG_RIBOSOME	85	-0.54	-1.3	0.265	0.283	0.977	2921 tags=38%, list=12%, signal=42%
KEGG_ARGININE_AND_PROLINE_METABOLISM	50	-0.34	-1.3	0.11	0.283	0.979	5331 tags=30%, list=21%, signal=38%
KEGG_THYROID_CANCER	29	-0.4	-1.29	0.152	0.288	0.979	4785 tags=38%, list=19%, signal=47%
KEGG_SYSTEMIC_LUPUS_ERYTHEMATOSUS	56	-0.34	-1.29	0.143	0.293	0.979	4204 tags=32%, list=17%, signal=39%
KEGG_GLYCOLYSIS_GLUCCONEOGENESIS	60	-0.33	-1.28	0.146	0.293	0.981	4996 tags=35%, list=20%, signal=44%
KEGG_SMALL_CELL_LUNG_CANCER	82	-0.32	-1.28	0.137	0.295	0.981	4745 tags=33%, list=19%, signal=40%
KEGG_CYSTEINE_AND_METHIONINE_METABOLISM	34	-0.36	-1.27	0.146	0.299	0.981	2399 tags=21%, list=10%, signal=23%
KEGG_WNT_SIGNALING_PATHWAY	147	-0.29	-1.26	0.132	0.311	0.982	4007 tags=21%, list=16%, signal=25%
KEGG_STEROID_HORMONE_BIOSYNTHESIS	55	-0.31	-1.24	0.147	0.333	0.986	6392 tags=38%, list=25%, signal=51%
KEGG_BLADDER_CANCER	39	-0.36	-1.23	0.202	0.338	0.986	3600 tags=31%, list=14%, signal=36%
KEGG_PROGESTERONE_MEDIATED_OOCYTE_MATURATION	84	-0.3	-1.23	0.17	0.334	0.987	5347 tags=30%, list=21%, signal=38%
KEGG_T_CELL_RECEPTOR_SIGNALING_PATHWAY	106	-0.3	-1.22	0.209	0.337	0.987	3772 tags=28%, list=15%, signal=33%
KEGG_PROSTATE_CANCER	88	-0.32	-1.22	0.191	0.336	0.988	3211 tags=24%, list=13%, signal=27%
KEGG_HEMATOPOIETIC_CELL_LINEAGE	86	-0.28	-1.22	0.157	0.332	0.988	3052 tags=23%, list=12%, signal=26%
KEGG_COLORECTAL_CANCER	62	-0.33	-1.22	0.223	0.329	0.988	3211 tags=26%, list=13%, signal=30%
KEGG_UBIQUITIN_MEDIATED_PROTEOLYSIS	126	-0.28	-1.2	0.198	0.35	0.991	5238 tags=35%, list=21%, signal=44%
KEGG_ENDOMETRIAL_CANCER	52	-0.35	-1.19	0.24	0.357	0.992	3211 tags=29%, list=13%, signal=33%
KEGG_BASAL_TRANSCRIPTION_FACTORS	35	-0.34	-1.17	0.263	0.387	0.995	8386 tags=46%, list=33%, signal=69%
KEGG_FATTY_ACID_METABOLISM	40	-0.31	-1.17	0.224	0.382	0.995	4846 tags=35%, list=19%, signal=43%
KEGG_VASOPRESSIN_REGULATED_WATER_REABSORPTION	44	-0.29	-1.14	0.247	0.423	0.998	3547 tags=25%, list=14%, signal=29%
KEGG_CELL_ADHESION_MOLECULES_CAMS	130	-0.25	-1.14	0.202	0.419	0.998	2235 tags=16%, list=9%, signal=18%
KEGG_GLYCOSAMINOGLYCAN_BIOSYNTHESIS_HEPARAN_SULFATE	26	-0.34	-1.14	0.271	0.413	0.998	4838 tags=35%, list=19%, signal=43%
KEGG_FRUCTOSE_AND_MANNANOSE_METABOLISM	32	-0.35	-1.13	0.302	0.43	0.999	4612 tags=34%, list=18%, signal=42%
KEGG_BASAL_CELL_CARCINOMA	55	-0.29	-1.12	0.268	0.428	0.999	3131 tags=18%, list=12%, signal=21%
KEGG_HOMOLOGOUS_RECOMBINATION	23	-0.36	-1.12	0.309	0.433	1	4273 tags=30%, list=17%, signal=37%
KEGG_TRYPTOPHAN_METABOLISM	36	-0.3	-1.11	0.306	0.434	1	4769 tags=28%, list=19%, signal=34%
KEGG_BETA_ALANINE_METABOLISM	22	-0.36	-1.11	0.311	0.429	1	2773 tags=27%, list=11%, signal=31%
KEGG_PATHOGENIC_ESCHERICHIA_COLI_INFECTIOIN	52	-0.28	-1.11	0.303	0.426	1	4121 tags=25%, list=16%, signal=30%
KEGG_PATHWAYS_IN_CANCER	316	-0.23	-1.1	0.267	0.438	1	4785 tags=24%, list=19%, signal=29%

KEGG_PORPHYRIN_AND_CHLOROPHYLL_METABOLISM	39	-0.32	-1.09	0.331	0.449	1	5208	tags=33%, list=21%, signal=42%
KEGG_CYTOSOLIC_DNA_SENSING_PATHWAY	52	-0.29	-1.08	0.364	0.465	1	2496	tags=19%, list=10%, signal=21%
KEGG_ANTIGEN_PROCESSING_AND_PRESENTATION	86	-0.28	-1.07	0.357	0.465	1	3068	tags=23%, list=12%, signal=26%
KEGG_GLUTATHIONE_METABOLISM	49	-0.29	-1.07	0.341	0.462	1	3242	tags=18%, list=13%, signal=21%
KEGG_GLYCINE_SERINE_AND_THREONINE_METABOLISM	31	-0.32	-1.07	0.353	0.461	1	2518	tags=16%, list=10%, signal=18%
KEGG_GLYCEROLIPID_METABOLISM	40	-0.3	-1.06	0.372	0.467	1	2882	tags=20%, list=11%, signal=23%
KEGG_NEUROTROPHIN_SIGNALING_PATHWAY	124	-0.26	-1.06	0.366	0.465	1	4384	tags=27%, list=17%, signal=33%
KEGG_B_CELL_RECEPTOR_SIGNALING_PATHWAY	73	-0.29	-1.04	0.4	0.488	1	3061	tags=26%, list=12%, signal=30%
KEGG_AMINO_SUGAR_AND_NUCLEOTIDE_SUGAR_METABOLISM	41	-0.28	-1.04	0.415	0.495	1	2229	tags=20%, list=9%, signal=21%
KEGG_GLYCOSYLPHOSPHATIDYLINOSITOL_GPI_ANCHOR_BIOSYNTHESIS	25	-0.32	-1.03	0.434	0.5	1	8762	tags=56%, list=35%, signal=86%
KEGG_CHRONIC_MYELOID_LEUKEMIA	72	-0.28	-1.03	0.412	0.496	1	4544	tags=31%, list=18%, signal=37%
KEGG_RETINOL_METABOLISM	62	-0.25	-1.02	0.433	0.505	1	5551	tags=27%, list=22%, signal=35%
KEGG_LONG_TERM_POTENTIATION	68	-0.25	-1.01	0.424	0.517	1	3061	tags=21%, list=12%, signal=23%
KEGG_HISTIDINE_METABOLISM	27	-0.29	-1	0.443	0.531	1	2773	tags=19%, list=11%, signal=21%
KEGG_STEROID_BIOSYNTHESIS	15	-0.36	-1	0.468	0.528	1	3281	tags=33%, list=13%, signal=38%
KEGG_AXON_GUIDANCE	126	-0.22	-0.99	0.447	0.528	1	3737	tags=21%, list=15%, signal=24%
KEGG_LYSOSOME	116	-0.26	-0.99	0.467	0.53	1	4845	tags=28%, list=19%, signal=35%
KEGG_GLYCOSAMINOGLYCAN_BIOSYNTHESIS_CHONDROITIN_SULFATE	20	-0.31	-0.98	0.479	0.542	1	4987	tags=35%, list=20%, signal=44%
KEGG_TYROSINE_METABOLISM	40	-0.25	-0.96	0.505	0.564	1	2226	tags=15%, list=9%, signal=16%
KEGG_MELANOMA	71	-0.24	-0.95	0.509	0.584	1	5219	tags=27%, list=21%, signal=34%
KEGG_GLIOMA	63	-0.25	-0.93	0.558	0.605	1	4455	tags=29%, list=18%, signal=35%
KEGG_GLYCOSAMINOGLYCAN_DEGRADATION	21	-0.32	-0.92	0.535	0.621	1	2849	tags=29%, list=11%, signal=32%
KEGG_TIGHT_JUNCTION	122	-0.21	-0.92	0.643	0.625	1	5352	tags=26%, list=21%, signal=33%
KEGG_PROXIMAL_TUBULE_BICARBONATE_RECLAMATION	23	-0.28	-0.91	0.598	0.631	1	6091	tags=35%, list=24%, signal=46%
KEGG_GAP_JUNCTION	83	-0.22	-0.91	0.641	0.63	1	3120	tags=17%, list=12%, signal=19%
KEGG_ACUTE_MYELOID_LEUKEMIA	56	-0.25	-0.9	0.58	0.638	1	5045	tags=32%, list=20%, signal=40%
KEGG_BIOSYNTHESIS_OF_UNSATURATED_FATTY_ACIDS	19	-0.3	-0.9	0.589	0.638	1	5784	tags=42%, list=23%, signal=55%
KEGG_CALCIIUM_SIGNALING_PATHWAY	171	-0.19	-0.87	0.734	0.672	1	2954	tags=13%, list=12%, signal=15%
KEGG_TGF_BETA_SIGNALING_PATHWAY	84	-0.21	-0.85	0.71	0.705	1	3768	tags=19%, list=15%, signal=22%
KEGG_CARDIAC_MUSCLE_CONTRACTION	69	-0.22	-0.84	0.7	0.716	1	4136	tags=19%, list=16%, signal=22%
KEGG_PHENYLALANINE_METABOLISM	17	-0.26	-0.81	0.741	0.772	1	1768	tags=18%, list=7%, signal=19%
KEGG_ECM_RECEPTOR_INTERACTION	82	-0.2	-0.81	0.827	0.765	1	7661	tags=33%, list=30%, signal=47%
KEGG_ARRHYTHMOGENIC_RIGHT_VENTRICULAR_CARDIOMYOPATHY_ARVC	74	-0.19	-0.8	0.839	0.769	1	4785	tags=22%, list=19%, signal=27%
KEGG_DILATED_CARDIOMYOPATHY	90	-0.16	-0.68	0.972	0.921	1	4136	tags=14%, list=16%, signal=17%
KEGG_TASTE_TRANSDUCTION	48	-0.17	-0.62	0.973	0.955	1	8278	tags=31%, list=33%, signal=47%

GSVA-CD3D

ID	score
OXIDATIVE_PHOSPHORYLATION	10.729157
MYC_TARGETS_V1	9.9610395
DNA_REPAIR	7.2864298
IL6_JAK_STAT3_SIGNALING	-7.011065
MITOTIC_SPINDLE	-6.698179
CHOLESTEROL_HOMEOSTASIS	-6.505212
REACTIVE_OXYGEN_SPECIES_PATHWAY	-5.992948
TNFA_SIGNALING_VIA_NFKB	-5.782745
WNT_BETA_CATENIN_SIGNALING	-5.724965
FATTY_ACID_METABOLISM	5.3808835
MTORC1_SIGNALING	5.3036425
INFLAMMATORY_RESPONSE	-5.223444
ALLOGRAFT_REJECTION	5.045728
ESTROGEN_RESPONSE_EARLY	-4.976428
EPITHELIAL_MESENCHYMAL_TRANSITION	-4.869214
APICAL_JUNCTION	-4.356655
APOPTOSIS	-4.317404
XENOBIOTIC_METABOLISM	-4.134617
HYPOXIA	-4.064024
UV_RESPONSE_DN	-3.934062
NOTCH_SIGNALING	-3.752993
BILE_ACID_METABOLISM	3.6151678
APICAL_SURFACE	-3.548103
COMPLEMENT	-3.297004
ESTROGEN_RESPONSE_LATE	-3.145306
MYOGENESIS	-3.109212
E2F_TARGETS	2.9097862
COAGULATION	-2.893737
PEROXISOME	2.8516404
MYC_TARGETS_V2	2.7905537
ANGIOGENESIS	-2.482607
PI3K_AKT_MTOR_SIGNALING	-2.444168
TGF_BETA_SIGNALING	-2.393022
HEME_METABOLISM	-2.070085
KRAS_SIGNALING_DN	-1.872252
GLYCOLYSIS	-1.844939
INTERFERON_GAMMA_RESPONSE	-1.746601
PROTEIN_SECRETION	-1.345311
IL2_STAT5_SIGNALING	-1.162559
G2M_CHECKPOINT	-1.130813
HEDGEHOG_SIGNALING	-1.121871
ANDROGEN_RESPONSE	0.9781321
UNFOLDED_PROTEIN_RESPONSE	0.8889562
PANCREAS_BETA_CELLS	0.8638894
UV_RESPONSE_UP	0.4170485
INTERFERON_ALPHA_RESPONSE	-0.402763
ADIPOGENESIS	-0.364431
P53_PATHWAY	0.3564109
KRAS_SIGNALING_UP	-0.133183
SPERMATOGENESIS	0.1223772

GSVA-IL2RG

ID	score
ANDROGEN_RESPONSE	-5.746921
PROTEIN_SECRETION	-5.560854
E2F_TARGETS	-4.777298
ANGIOGENESIS	3.8666594
COMPLEMENT	-3.634923
MYC_TARGETS_V1	-3.492267
CHOLESTEROL_HOMEOSTASIS	3.458809
TGF_BETA_SIGNALING	-3.398578
HYPOXIA	3.3914472
MYOGENESIS	3.1268813
NOTCH_SIGNALING	2.8698178
XENOBIOTIC_METABOLISM	2.7760722
MITOTIC_SPINDLE	2.6842171
APICAL_JUNCTION	2.6803403
INFLAMMATORY_RESPONSE	2.499167
ADIPOGENESIS	-2.32427
KRAS_SIGNALING_UP	-2.13646
ESTROGEN_RESPONSE_EARLY	1.9426971
MTORC1_SIGNALING	-1.901444
PEROXISOME	-1.888238
KRAS_SIGNALING_DN	1.8273861
WNT_BETA_CATENIN_SIGNALING	1.7783666
UNFOLDED_PROTEIN_RESPONSE	-1.630691
INTERFERON_ALPHA_RESPONSE	-1.609575
G2M_CHECKPOINT	-1.563393
OXIDATIVE_PHOSPHORYLATION	-1.545585
APOPTOSIS	-1.532684
INTERFERON_GAMMA_RESPONSE	-1.513934
COAGULATION	1.4476307
TNFA_SIGNALING_VIA_NFKB	1.3618607
P53_PATHWAY	1.2750786
IL2_STAT5_SIGNALING	1.2568505
PI3K_AKT_MTOR_SIGNALING	-1.17528
UV_RESPONSE_DN	-1.127802
DNA_REPAIR	-1.125822
BILE_ACID_METABOLISM	-1.061391
ESTROGEN_RESPONSE_LATE	-0.961842
ALLOGRAFT_REJECTION	-0.92997
HEDGEHOG_SIGNALING	-0.920573
FATTY_ACID_METABOLISM	-0.873371
REACTIVE_OXYGEN_SPECIES_PATHWAY	0.8540427
EPITHELIAL_MESENCHYMAL_TRANSITION	-0.835324
GLYCOLYSIS	-0.833064
SPERMATOGENESIS	0.4522566
HEME_METABOLISM	-0.432411
MYC_TARGETS_V2	-0.385452
IL6_JAK_STAT3_SIGNALING	0.3493695
PANCREAS_BETA_CELLS	0.3223708
UV_RESPONSE_UP	0.2270148
APICAL_SURFACE	0.1649965

GSVA-MS4A6A

ID	score
OXIDATIVE_PHOSPHORYLATION	8.1405348
WNT_BETA_CATENIN_SIGNALING	-6.134234
CHOLESTEROL_HOMEOSTASIS	-5.500869
MITOTIC_SPINDLE	-5.205316
APICAL_JUNCTION	-4.99393
MYC_TARGETS_V1	4.2330032
HYPOXIA	-4.222799
PROTEIN_SECRETION	4.0196699
UV_RESPONSE_DN	-3.992096
TGF_BETA_SIGNALING	-3.919795
ESTROGEN_RESPONSE_LATE	-3.835212
EPITHELIAL_MESENCHYMAL_TRANSITION	-3.446536
DNA_REPAIR	3.1660424
FATTY_ACID_METABOLISM	3.0238325
G2M_CHECKPOINT	-2.760507
APICAL_SURFACE	-2.588687
APOPTOSIS	-2.417011
ESTROGEN_RESPONSE_EARLY	-2.181685
GLYCOLYSIS	-1.96282
IL6_JAK_STAT3_SIGNALING	-1.95942
ANGIOGENESIS	-1.934446
PI3K_AKT_MTOR_SIGNALING	1.8773297
KRAS_SIGNALING_DN	-1.729306
INTERFERON_ALPHA_RESPONSE	1.6615808
BILE_ACID_METABOLISM	1.638036
ANDROGEN_RESPONSE	1.532389
MTORC1_SIGNALING	1.5147741
MYOGENESIS	-1.45048
ALLOGRAFT_REJECTION	1.4314247
REACTIVE_OXYGEN_SPECIES_PATHWAY	-1.358352
ADIPOGENESIS	1.3562755
PEROXISOME	1.3476366
MYC_TARGETS_V2	-1.337704
UNFOLDED_PROTEIN_RESPONSE	-1.298853
XENOBIOTIC_METABOLISM	-1.243449
NOTCH_SIGNALING	-1.233895
COAGULATION	-1.179689
P53_PATHWAY	-0.962961
HEDGEHOG_SIGNALING	-0.866868
PANCREAS_BETA_CELLS	0.8660526
TNFA_SIGNALING_VIA_NFKB	-0.85073
KRAS_SIGNALING_UP	0.6001211
COMPLEMENT	-0.597655
INFLAMMATORY_RESPONSE	-0.568818
INTERFERON_GAMMA_RESPONSE	0.5380981
IL2_STAT5_SIGNALING	0.5220095
SPERMATOGENESIS	-0.498684
E2F_TARGETS	0.4488889
HEME_METABOLISM	0.2950324
UV_RESPONSE_UP	0.1180031

GSVA-NCF2

ID	score
KRAS_SIGNALING_UP	5.9281006
MYC_TARGETS_V1	-4.052554
DNA_REPAIR	-4.020934
MYC_TARGETS_V2	-3.976574
FATTY_ACID_METABOLISM	-3.854752
UNFOLDED_PROTEIN_RESPONSE	-3.796773
IL6_JAK_STAT3_SIGNALING	3.7377007
PANCREAS_BETA_CELLS	3.419959
MTORC1_SIGNALING	-3.052616
ESTROGEN_RESPONSE_EARLY	2.976356
IL2_STAT5_SIGNALING	-2.781477
WNT_BETA_CATENIN_SIGNALING	-2.769742
PI3K_AKT_MTOR_SIGNALING	2.657473
ALLOGRAFT_REJECTION	-2.62422
OXIDATIVE_PHOSPHORYLATION	-2.599736
MYOGENESIS	2.4962542
UV_RESPONSE_UP	2.4816292
HEME_METABOLISM	2.3970595
INTERFERON_GAMMA_RESPONSE	-2.118948
TGF_BETA_SIGNALING	-2.084341
P53_PATHWAY	-2.014871
SPERMATOGENESIS	1.9015166
MITOTIC_SPINDLE	1.8715471
G2M_CHECKPOINT	1.7410118
ANGIOGENESIS	1.7387014
EPITHELIAL_MESENCHYMAL_TRANSITION	1.6807595
GLYCOLYSIS	-1.525884
E2F_TARGETS	-1.449828
ANDROGEN_RESPONSE	1.3839716
COAGULATION	1.3040363
PROTEIN_SECRETION	-1.173546
TNFA_SIGNALING_VIA_NFKB	1.0634315
BILE_ACID_METABOLISM	1.0560838
ADIPOGENESIS	1.0247184
KRAS_SIGNALING_DN	0.9708748
HYPOXIA	0.8500531
PEROXISOME	-0.727493
INTERFERON_ALPHA_RESPONSE	-0.722237
UV_RESPONSE_DN	-0.650538
INFLAMMATORY_RESPONSE	0.6416738
ESTROGEN_RESPONSE_LATE	0.5968317
CHOLESTEROL_HOMEOSTASIS	-0.556699
REACTIVE_OXYGEN_SPECIES_PATHWAY	0.4868087
HEDGEHOG_SIGNALING	-0.377263
COMPLEMENT	-0.311358
APICAL_JUNCTION	-0.208431
NOTCH_SIGNALING	0.2040854
APOPTOSIS	-0.093749
XENOBIOTIC_METABOLISM	-0.089589
APICAL_SURFACE	-0.009074

RT-qPCR data

HC						
CD3D	0.725965455	0.919392188	1.754916165	0.688611007	0.764114126	1.147001058
IL2RG	1.118116755	0.647525945	0.804343657	1.325542681	1.088726055	1.015744908
MS4A6A	1.450720593	0.830719508	1.264648753	1.055692696	0.972239828	0.425978621
NCF2	1.137822728	0.694804748	1.109670216	1.132654709	1.179470907	0.745576691
MS						
CD3D	37.1164217	25.62948537	24.7427868	29.38283934	13.58903591	20.10210198
IL2RG	1.262526084	1.010859179	0.979290318	0.735799903	0.695006128	0.41643248
MS4A6A	1.665251875	1.665444525	0.985259357	1.506629362	1.832760682	1.312935698
NCF2	0.878405484	0.465688867	0.253303059	0.370396349	0.632345294	0.443007341
NMO						
CD3D	0.387189162	0.717566878	0.651383341	0.357155421		
IL2RG	0.119526217	0.769362555	0.423732207	0.104327609		
MS4A6A	0.240403186	1.293659373	1.054680348	0.199634887		
NCF2	0.054754284	0.745039182	1.163161325	0.114231056		

code1

```
# load R packages
library(glmnet)
library(survival)
library(pheatmap)
library(gplots)
library(survcomp)
library(survivalROC)
library(pROC)
library(ggplot2)
# customized function
display.progress = function (index, totalN, breakN=20) {

  if ( index %% ceiling(totalN/breakN) ==0 ) {
    cat(paste(round(index*100/totalN), "% ", sep=""))
  }

}

# set colors
jco <- c("#2874C5", "#EABF00", "#868686", "#C6524A", "#80A7DE")

tpms <- read.table("ARGexp.txt", sep = "\t", row.names = 1, check.names = F, stringsAsFactors =
F, header = T)
tpms[is.na(tpms)] <- 0
colnames(tpms) <- gsub("-", "_", colnames(tpms))
tum.sam <- rownames(tpms)

geo1.tpms <- read.csv("1.txt", sep = "\t", row.names = 1, check.names = F, stringsAsFactors =
F, header = T)
geo1.tpms=log2(geo1.tpms+1)
geo1.tpms[is.na(geo1.tpms)] <- 0
colnames(geo1.tpms) <- gsub("-", "_", colnames(geo1.tpms))

comgene <- intersect(colnames(tpms), colnames(geo1.tpms))
length(comgene)
tpms <- tpms[,comgene]
geo1.tpms <- geo1.tpms[,comgene]

outTab <- NULL
for (seed in 1:100) {
  #seed = 6 # please set this after referring to outTab.txt

  risk <- NULL
```

```

set.seed(seed = seed)
tmp <- tpms[tum.sam,]
colnames(tmp) <- make.names(colnames(tmp))
#-----#
#                                     #
cvfit = cv.glmnet(scale(as.matrix(tmp[,-1])),
                 tmp$Tissue,
                 family = "gaussian",
                 alpha = 1,
                 nfold = 10) #
myCoefs <- coef(cvfit, s='lambda.min');
fea <- rownames(coef(cvfit, s = 'lambda.min'))[coef(cvfit, s = 'lambda.min')[,1]!= 0]

lasso_fea <- fea
lasso_coef <- myCoefs@x; names(lasso_coef) <- lasso_fea

lasso_coef.hr <- data.frame(gene = names(lasso_coef),
                          coef = lasso_coef,
                          stringsAsFactors = F)

lasso_coef.hr <- lasso_coef.hr[intersect(comgene,names(lasso_coef)),]
lasso_coef.hr <- lasso_coef.hr[order(lasso_coef.hr$coef,decreasing = F),]
#-----#

if(nrow(lasso_coef.hr) > 1) {
  # risk score in training
  tmp <- scale(as.matrix(tpms[tum.sam,rownames(lasso_coef.hr)]))
  risk.score <- apply(tmp,1,function(x) {x %*% lasso_coef.hr$coef})
  risk.score.train <- risk.score

  tmp <- tpms[names(risk.score),1:2]

  tmp$risk.score <- as.numeric(risk.score)
  tmp$RiskGroup <- ifelse(tmp$risk.score > median(risk.score) ,"HRisk","LRisk")
  risk <- rbind.data.frame(risk,
                          data.frame(samID = tum.sam,
                                      riskscore = tmp$risk.score,
                                      riskgroup = tmp$RiskGroup,
                                      cohort = "GEO training",
                                      stringsAsFactors = F),
                          stringsAsFactors = F)

  fit <- glm(Tissue ~ risk.score, data=tmp, family = "gaussian")

```

```

predicted <- predict(fit, tmp, type = "response")
rocobj <- roc(tmp$Tissue,tmp$risk.score)
auc <- round(auc(tmp$Tissue,tmp$risk.score), 4)

## risk score in validate
tmp.validate <- scale(as.matrix(geo1.tpms[,rownames(lasso_coef.hr)]))
risk.score <- apply(tmp.validate,1,function(x) {x %*% lasso_coef.hr$coef})
risk.score.validate <- risk.score

tmp.validate <- geo1.tpms[names(risk.score),1:2]
tmp.validate$risk.score <- as.numeric(risk.score)
tmp.validate$RiskGroup <- ifelse(tmp.validate$risk.score >
median(risk.score) ,"HRisk","LRisk")
risk <- rbind.data.frame(risk,
                        data.frame(samID = rownames(geo1.tpms),
                                   riskscore = tmp.validate$risk.score,
                                   riskgroup = tmp.validate$RiskGroup,
                                   cohort = "GEO test",
                                   stringsAsFactors = F),
                        stringsAsFactors = F)

predicted.test <- predict(fit, tmp.validate, type = "response")
rocobj.test <- roc(tmp.validate$Tissue,tmp.validate$risk.score)
auc.test <- round(auc(tmp.validate$Tissue,tmp.validate$risk.score), 4)

if(auc > 0.1 & auc.test > 0.1) {
  cat(paste0("seed=",seed,"; auc.train=",auc,"; auc.test=",auc.test,"\n"))
  cat("\n")
  outTab <- rbind.data.frame(outTab,data.frame(seed=seed,

modelgene.num=nrow(lasso_coef.hr),

                                auc.rain=auc,
                                auc.test=auc.test,

modelgene=paste(gsub("-", "_",rownames(lasso_coef.hr)),collapse = ","),

                                stringsAsFactors = F),
                                stringsAsFactors = F)

### plot(rocobj)

```

```

p1 <- ggroc(rocobj,color = "red",linetype = 1, size = 1, alpha =1,legacy.axes = T) +
  geom_abline(intercept=0,slope=1,color="grey",size=1,linetype=1) +
  labs(x="Specificity",
       y="Sensitivity",
       title = "GEO train") +
  annotate("text",x=.8,y=.1,label=paste0("AUC = ",auc),
         size =5,family="serif") +
  coord_cartesian(xlim=c(0,1),ylim=c(0,1)) +
  theme_bw() +
  theme(panel.background = element_rect(fill='transparent'),
        axis.ticks.length = unit(0.4,"lines"),
        axis.ticks = element_line(color='black'),
        axis.line = element_line(size=.5, colour='black'),
        axis.title = element_text(colour='black',size=12,face="bold"),
        axis.text = element_text(colour='black',size=10,face="bold"),
        text = element_text(colour='black',size=8,family="serif"))
p2 <- ggroc(rocobj.test,color = "red",linetype = 1, size = 1, alpha =1,legacy.axes = T) +
  geom_abline(intercept=0,slope=1,color="grey",size=1,linetype=1) +
  labs(x="Specificity",
       y="Sensitivity",
       title = "GEO test") +
  annotate("text",x=.8,y=.1,label=paste0("AUC = ",auc.test),
         size =5,family="serif") +
  coord_cartesian(xlim=c(0,1),ylim=c(0,1)) +
  theme_bw() +
  theme(panel.background = element_rect(fill='transparent'),
        axis.ticks.length = unit(0.4,"lines"),
        axis.ticks = element_line(color='black'),
        axis.line = element_line(size=.5, colour='black'),
        axis.title = element_text(colour='black',size=12,face="bold"),
        axis.text = element_text(colour='black',size=10,face="bold"),
        text = element_text(colour='black',size=8,family="serif"))
pdf(file = paste0("survivalROC for training dataset",seed,".pdf"),width = 4,height = 4)
print(p1)
dev.off()
pdf(file = paste0("survivalROC for validation dataset",seed,".pdf"),width = 4,height = 4)
print(p2)
dev.off()
}
}
write.table(outTab,paste0("outTab",seed,".txt"),sep = "\t",row.names = F,quote = F)
}
write.table(outTab,"outTab.txt",sep = "\t",row.names = F,quote = F)
write.table(risk,"risk.txt",sep = "\t",row.names = F,quote = F)

```

```

darkred <- "#F2042C"
darkblue <- "#21498D"

cutoff <- 0.1
lasso_coef.hr$gene <- gsub("_","-",lasso_coef.hr$gene)
lasso_coef.hr$group <- as.character(cut(lasso_coef.hr$coef, breaks = c(-Inf, -cutoff, cutoff,
Inf),labels = c("#21498D","#EABF00","#21498D")))
pdf("lasso_coef_hr.pdf",width = 5,height = 2.5)
par(bty="n", mgp = c(1.7,.33,0),mar=c(2.5,2.7,1,1)+.1, las=1, tcl=-.25,xpd = T)
a <- barplot(lasso_coef.hr$coef,col = lasso_coef.hr$group,border = NA,
             horiz = T,xlim = c(-1,1),add=F,xaxt = "n")
axis(side = 1, at = c(-1,-0.8,-0.6,-0.4,-0.2,0,0.2,0.4,0.6,0.8,1),
     labels = c("-1","-.8","-.6","-.4","-.2","0",".2",".4",".6",".8","1"))
for (i in 1:nrow(lasso_coef.hr)) {
  text(y = a[,1][i],x = ifelse(lasso_coef.hr$coef[i] > 0,-0.0001,0.0001),pos =
ifelse(lasso_coef.hr$coef[i] > 0,2,4),labels = lasso_coef.hr$gene[i],adj =
ifelse(lasso_coef.hr$coef[i]>0,0,1))
}
###points(0.6,2,pch = 15, cex = 1.5)
points(0.6,1,pch = 19, cex = 1.5)
###text(0.6,2,"log2(HR)",pos = 4)
text(0.6,1,"Coefficient",pos = 4)
invisible(dev.off())
write.table(lasso_coef.hr[,1:2], "lasso coefficient.txt",sep = "\t",row.names = F,col.names =
T,quote = F)

# 2. lasso details
pdf("lasso.pdf",width = 4.5,height = 4)
par(bty="o", mgp = c(1.9,.33,0), mar=c(4.1,4.1,2.1,2.1)+.1, las=1, tcl=-.25,xpd = F)
plot(cvfit$glmnet.fit, "lambda", label=F)
abline(v=log(cvfit$lambda.min),lwd=2,col="grey60",lty=4)
invisible(dev.off())

pdf("cvfit.pdf",width = 4.5,height = 4)
par(bty="o", mgp = c(1.9,.33,0), mar=c(4.1,4.1,2.1,2.1)+.1, las=1, tcl=-.25)
plot(cvfit)
abline(h=min(cvfit$cvm),lwd=2,col="black",lty=4)
points(log(cvfit$lambda.min),min(cvfit$cvm),pch=18,cex=2,col="black")
points(log(cvfit$lambda.min),min(cvfit$cvm),pch=18,cex=1.5,col="#008B8A")
invisible(dev.off())

save.image("Heng.RData")

```

苏州大学附属第一医院医学伦理委员会伦理审查批件

批件号：(2023) 伦审批第 117 号

项目名称	中枢神经系统自身免疫性疾病多中心注册登记研究		
研究类别	临床科研项目		
申办方/发起方	首都医科大学宣武医院		
主要研究者	薛群	承担科室	神经内科
伦理受理号	2023117	受理时间	2023-04-25
审查时间	2023-04-30	审查类别	初始审查
审查委员	王进红, 朱志伟	审查方式	快速审查
审查意见	依据我国相关法律、法规和国际伦理准则, 伦理委员会对本项研究的研究方案、知情同意书、受试者招募材料及其他有关内容进行了快速审查, 审查结果为同意开展本项研究。		
跟踪审查频率	本研究项目批准后 <u>每 12 个月</u> 向本伦理委员会递交研究进展报告。		
主任委员 (签名):		苏州大学附属第一医院医学伦理委员会 (盖章)	
		日期: 2023 年 05 月 04 日	
<p>研究者/申办方须知:</p> <ol style="list-style-type: none"> 1. 请遵循 CFDA/GCP 和《赫尔辛基宣言》的原则、遵循伦理委员会批准的方案开展研究, 保护受试者的健康和权利。研究者应严格按照所批准方案规定的期限和受试者例数完成研究, 不得随意更改。 2. 对已批准的临床研究方案、知情同意书等材料的任何修改及主要研究者更换等, 须再次提交伦理委员会重新审查, 获得批准后方可执行。 3. 暂停/提前终止临床研究, 请及时向伦理委员会报告。 4. 研究过程中发生需要上报的安全性事件, 请按照要求向伦理委员会报告。 5. 发生违背方案的情况须及时向本伦理委员会报告。 6. 根据伦理委员会批件中规定的年度/定期跟踪审查频率, 无论试验开始与否, 请在持续审查日到期前 1 个月提出持续审查的申请并递交研究进展报告。 7. 完成临床研究, 须及时提交结题报告供伦理委员会审查。 8. 本批件有效期一年 (自批准之日起)。 			

审查文件清单



1. 临床研究方案（版本号：3.0，日期：2022-01-17）
2. 知情同意书（版本号：3.0，日期：2022-01-17）
3. 组长单位伦理审查批件（批件号：临研审[2021]017号-修正2）
4. 主要研究者简历
5. 研究者声明
6. 研究团队分工明细表
7. 涉及人的遗传资源使用管理声明（日期：2023-04-08）

Supplementary Methods

Single-cell analysis

After reading in the single cell data, the PercentageFeatureSet function of the Seurat package was used to calculate the mitochondrial content of the cells. Low quality cells were filtered based on the threshold $nFeature_{RNA} > 50$ & $percent.mt < 10$. The data was then normalized using the NormalizeData function, and then the genes with the highest variance changes were obtained by the FindVariableFeatures function. The single cell data was downscaled using PCA, and the optimal PC number was observed to be 11, and t-SNE clustered cell subpopulations by ElbowPlot. The cellular subgroups were annotated using the SingleR package. Marker genes for each cell subtype were calculated using the FindAllMarkers function with min.pct set to 0.25.

Ligand-receptor interaction analysis (CellChat)

Use the createCellChat function to construct the cellchat object, with species selection CellChatDB.human. then preprocess the data. Use identifyOverExpressedGenes function to identify overexpressed genes and identifyOverExpressedInteractions function to identify overexpressed ligand-receptor pairs. The cellular communication network was then inferred using the computeCommunProb function to calculate the probability of cellular interactions. The communication results of all ligand-receptor interactions for each signaling pathway were calculated using computeCommunProbPathway. Use aggregateNet to calculate cell communication results for integration between cell types and count the number of times each cell communicates.

Predictive model construction

The lasso model was constructed using the `cv.glmnet` function with `family = "gaussian"`, `alpha = 1`, `nfold = 10` to find the minimum lambda value of 0.0001682887. As λ decreases, the compression parameter decreases, and the absolute value of the coefficients increase. The `coef` function was then used to calculate the coefficients for each lasso gene. When the lambda value reaches the minimum, the combination of genes is 4, suggesting 4 genes to construct the model with minimum error. According to the expression of the 4 genes * lasso coefficient to get the model score, using the `predict` function to construct the training set and validation set model respectively, the AUC of the training set and validation set are above 0.7, suggesting that the model is more stable.

GSEA analysis (Gene set enrichment analysis) and GSVA analysis (gene set variance analysis)

The KEGG pathways involved in the key genes were analyzed using GSEA software (JAVA version). First, we constructed a sample matrix, divided the patients into high and low expression groups according to the median value of key gene expression, uploaded the matrix, selected C2 CP KEGG for the background set, set the number of permutations to 1000, set the phenotype labels to the samples of the high and low expression groups, and set the others to the defaults, and analyzed KEGG pathways involved in the key genes. pathway.GSVA analysis was performed to quantify the level of hallmark pathway by GSVA package, and then divided into high and low expression groups according to the median value of key gene expression respectively to see the difference of pathway level in the two groups of patients.