

**Supplementary Table S3:** T and B cell funtion related gene expression by USC

B cell Activation				
Colur	GO_ID	GO_Term	Gene	FPKM
1	GO:0030890	positive regulation of B cell proliferation	CD74	43.098
2	GO:0030890	positive regulation of B cell proliferation	CD81	1132.08
3	GO:0030890	positive regulation of B cell proliferation	CDKN1A	3482.68
4	GO:0030890	positive regulation of B cell proliferation	MIF	11968.2
5	GO:0030890	positive regulation of B cell proliferation	SLC39A10	1026.81
6	GO:0030890	positive regulation of B cell proliferation	TFRC	1204.7
7	GO:0002906	negative regulation of mature B cell apoptotic process	BCL10	1277.37
8	GO:0002906	negative regulation of mature B cell apoptotic process	CD74	43.098
9	GO:0002906	negative regulation of mature B cell apoptotic process	MIF	11968.2
10	GO:0030183	B cell differentiation	ABL1	2268.65
11	GO:0030183	B cell differentiation	ADAM17	890.937
12	GO:0030183	B cell differentiation	BAX	1690.06
13	GO:0030183	B cell differentiation	DLL1	19.38
14	GO:0030183	B cell differentiation	EP300	854.54
15	GO:0030183	B cell differentiation	HMGB3	888.631
16	GO:0030183	B cell differentiation	ID2	1000.01
17	GO:0030183	B cell differentiation	INHA	10.797
18	GO:0030183	B cell differentiation	ITGB1	23377.2
19	GO:0030183	B cell differentiation	JAK3	18.058
20	GO:0030183	B cell differentiation	KLF6	3543.27
21	GO:0030183	B cell differentiation	LFNG	1995.44
22	GO:0030183	B cell differentiation	LGALS1	4495.01
23	GO:0030183	B cell differentiation	MALT1	1835.47
24	GO:0030183	B cell differentiation	MMP14	3360.18
25	GO:0030183	B cell differentiation	NOTCH2	997.164
26	GO:0030183	B cell differentiation	PLCL2	39.493
27	GO:0030183	B cell differentiation	PRKDC	2036.56
28	GO:0030183	B cell differentiation	PTK2B	31.633
29	GO:0030183	B cell differentiation	PTPRJ	2223.54
30	GO:0030183	B cell differentiation	SFRP1	74.603
31	GO:0030183	B cell differentiation	TCF3	1055.5
32	GO:0030183	B cell differentiation	VCAM1	1478.45
33	GO:0030183	B cell differentiation	XBP1	1409.54
34	GO:0030183	B cell differentiation	ZFP36L1	4042.17
35	GO:0030183	B cell differentiation	ZFP36L2	873.132
36	GO:0042113	B cell activation	ABL1	2268.65
37	GO:0042113	B cell activation	ADAM17	890.937
38	GO:0042113	B cell activation	BANK1	14.633
39	GO:0042113	B cell activation	BAX	1690.06
40	GO:0042113	B cell activation	BST2	1628.01
41	GO:0042113	B cell activation	CASP3	889.561
42	GO:0042113	B cell activation	CD70	1689.49

43	GO:0042113	B cell activation	CD74	43.098
44	GO:0042113	B cell activation	CD81	1132.08
45	GO:0042113	B cell activation	CDKN1A	3482.68
	GO_ID	GO_Term	Gene	FPKM
46	GO:0042113	B cell activation	DLL1	19.38
47	GO:0042113	B cell activation	EP300	854.54
48	GO:0042113	B cell activation	EXOSC6	1160.69
49	GO:0042113	B cell activation	FOXP3	11.013
50	GO:0042113	B cell activation	HMGB3	888.631
51	GO:0042113	B cell activation	HSPD1	10112.4
52	GO:0042113	B cell activation	ID2	1000.01
53	GO:0042113	B cell activation	IL7R	17.178
54	GO:0042113	B cell activation	INHA	10.797
55	GO:0042113	B cell activation	ITGB1	23377.2
56	GO:0042113	B cell activation	JAK3	18.058
57	GO:0042113	B cell activation	KLF6	3543.27
58	GO:0042113	B cell activation	LFNG	1995.44
59	GO:0042113	B cell activation	LGALS1	4495.01
60	GO:0042113	B cell activation	MALT1	1835.47
61	GO:0042113	B cell activation	MIF	11968.2
62	GO:0042113	B cell activation	MLH1	864.805
63	GO:0042113	B cell activation	MMP14	3360.18
64	GO:0042113	B cell activation	MSH6	1033.07
65	GO:0042113	B cell activation	NBN	1240.6
66	GO:0042113	B cell activation	NOTCH2	997.164
67	GO:0042113	B cell activation	PAWR	1275.01
68	GO:0042113	B cell activation	PKN1	1409.48
69	GO:0042113	B cell activation	PLCL2	39.493
70	GO:0042113	B cell activation	PRKDC	2036.56
71	GO:0042113	B cell activation	PTK2B	31.633
72	GO:0042113	B cell activation	PTPRJ	2223.54
73	GO:0042113	B cell activation	SFRP1	74.603
74	GO:0042113	B cell activation	SKAP2	854.64
75	GO:0042113	B cell activation	SLC39A10	1026.81
76	GO:0042113	B cell activation	STAT6	1713.64
77	GO:0042113	B cell activation	SUPT6H	928.086
78	GO:0042113	B cell activation	TCF3	1055.5
79	GO:0042113	B cell activation	TFRC	1204.7
80	GO:0042113	B cell activation	TGFB1	3254.4
81	GO:0042113	B cell activation	TNFRSF21	1782.16
83	GO:0042113	B cell activation	TXLNA	1257.37
85	GO:0042113	B cell activation	VCAM1	1478.45
87	GO:0042113	B cell activation	ZFP36L1	4042.17
89	GO:0034145	positive regulation of toll-like receptor 4 signaling pathway	F2RL1	2185.14
91	GO:0034145	positive regulation of toll-like receptor 4 signaling pathway	WDFY1	901.583

T cell Activation				
Colur	GO_ID	GO_Term	Gene	FPKM
1	GO:0050870	positive regulation of T cell activation	AKT1	967.93
2	GO:0050870	positive regulation of T cell activation	ANXA1	1379.81
3	GO:0050870	positive regulation of T cell activation	AP3D1	1754.25
4	GO:0050870	positive regulation of T cell activation	BCL10	1277.37
5	GO:0050870	positive regulation of T cell activation	CAV1	8592
6	GO:0050870	positive regulation of T cell activation	CBFB	1337.38
7	GO:0050870	positive regulation of T cell activation	CD274	80.63
8	GO:0050870	positive regulation of T cell activation	CD276	940.898
9	GO:0050870	positive regulation of T cell activation	CD70	1689.49
10	GO:0050870	positive regulation of T cell activation	CD74	43.098
11	GO:0050870	positive regulation of T cell activation	CD81	1132.08
12	GO:0050870	positive regulation of T cell activation	CDC42	5380.9
13	GO:0050870	positive regulation of T cell activation	CSK	979.067
14	GO:0050870	positive regulation of T cell activation	EFNB1	1340.73
15	GO:0050870	positive regulation of T cell activation	EFNB2	1510.45
16	GO:0050870	positive regulation of T cell activation	FADD	997.253
17	GO:0050870	positive regulation of T cell activation	FLOT2	2171.58
18	GO:0050870	positive regulation of T cell activation	FOXP3	11.013
19	GO:0050870	positive regulation of T cell activation	GRB2	1512.05
20	GO:0050870	positive regulation of T cell activation	HAVCR2	31.098
21	GO:0050870	positive regulation of T cell activation	HLA-E	2465.31
22	GO:0050870	positive regulation of T cell activation	HLX	47.958
23	GO:0050870	positive regulation of T cell activation	HMGB1	7657.12
24	GO:0050870	positive regulation of T cell activation	HSPD1	10112.4
25	GO:0050870	positive regulation of T cell activation	HSPH1	2359.55
26	GO:0050870	positive regulation of T cell activation	IL6ST	1890.79
27	GO:0050870	positive regulation of T cell activation	IL7R	17.178
28	GO:0050870	positive regulation of T cell activation	JAK3	18.058
29	GO:0050870	positive regulation of T cell activation	LGALS1	4495.01
30	GO:0050870	positive regulation of T cell activation	MALT1	1835.47
31	GO:0050870	positive regulation of T cell activation	NCK2	867.235
32	GO:0050870	positive regulation of T cell activation	NFKBID	45.868
33	GO:0050870	positive regulation of T cell activation	PAK2	2000.64
34	GO:0050870	positive regulation of T cell activation	PDCD1LG2	19.569
35	GO:0050870	positive regulation of T cell activation	PTPN11	3142.37
36	GO:0050870	positive regulation of T cell activation	RAC1	8263.19
37	GO:0050870	positive regulation of T cell activation	RIPK2	983.707
38	GO:0050870	positive regulation of T cell activation	SART1	1089.09
39	GO:0050870	positive regulation of T cell activation	SIRPA	4626.19
40	GO:0050870	positive regulation of T cell activation	TFRC	1204.7
41	GO:0050870	positive regulation of T cell activation	TGFB1	3254.4
42	GO:0050870	positive regulation of T cell activation	TGFBR2	2004.78

43	GO:0050870	positive regulation of T cell activation	THY1	1034.56
44	GO:0050870	positive regulation of T cell activation	TNFRSF14	59.347
45	GO:0050870	positive regulation of T cell activation	VCAM1	1478.45
Colun	GO_ID	GO_Term	Gene	FPKM
47	GO:0050870	positive regulation of T cell activation	YES1	1849.12
48	GO:0050870	positive regulation of T cell activation	ZBTB16	11.139
49	GO:0030217	T cell differentiation	ABL1	2268.65
50	GO:0030217	T cell differentiation	ADAM17	890.937
51	GO:0030217	T cell differentiation	ANXA1	1379.81
52	GO:0030217	T cell differentiation	AP3D1	1754.25
54	GO:0030217	T cell differentiation	CBFB	1337.38
56	GO:0030217	T cell differentiation	CDK6	4519.15
58	GO:0030217	T cell differentiation	CTNNB1	4666.63
60	GO:0030217	T cell differentiation	FCER1G	14.726
62	GO:0030217	T cell differentiation	HLX	47.958
64	GO:0030217	T cell differentiation	IL7R	17.178
66	GO:0030217	T cell differentiation	LFNG	1995.44
70	GO:0030217	T cell differentiation	PRKDC	2036.56
74	GO:0030217	T cell differentiation	RPS6	15825.6
78	GO:0030217	T cell differentiation	SOX4	3003.48
82	GO:0030217	T cell differentiation	XBP1	1409.54
85	GO:0030217	T cell differentiation	ZFP36L1	4042.17
87	GO:0030217	T cell differentiation	ZFPM1	82.62
89	GO:0031295	T cell costimulation	CAV1	8592
92	GO:0031295	T cell costimulation	CDC42	5380.9
96	GO:0031295	T cell costimulation	GRB2	1512.05
100	GO:0031295	T cell costimulation	PTPN11	3142.37
104	GO:0042102	positive regulation of T cell proliferation	ANXA1	1379.81
108	GO:0042102	positive regulation of T cell proliferation	CD81	1132.08
112	GO:0042102	positive regulation of T cell proliferation	HAVCR2	31.098
116	GO:0042102	positive regulation of T cell proliferation	JAK3	18.058
120	GO:0042102	positive regulation of T cell proliferation	TFRC	1204.7
124	GO_0002457	T cell antigen processing and presentation	HFE	145.081
126	GO_0002457	T cell antigen processing and presentation	ICAM1	326.86

#### T Cell Inhibition

	GO_ID	GO_Term	Gene	FPKM
1	GO:0046007	negative regulation of activated T cell proliferation	CASP3	889.561
2	GO:0046007	negative regulation of activated T cell proliferation	CD274	80.63
3	GO:0046007	negative regulation of activated T cell proliferation	FOXP3	11.013
4	GO:0046007	negative regulation of activated T cell proliferation	LRRC32	68.977
5	GO:0046007	negative regulation of activated T cell proliferation	PDCD1LG2	19.569
6	GO:0046007	negative regulation of activated T cell proliferation	PRKAR1A	2251.75
7	GO:0046007	negative regulation of activated T cell proliferation	PRNP	1400.79
8	GO:0042130	negative regulation of T cell proliferation	CASP3	889.561
9	GO:0042130	negative regulation of T cell proliferation	CD274	80.63

10	GO:0042130	negative regulation of T cell proliferation	CEBPB	1718.08
11	GO:0042130	negative regulation of T cell proliferation	FOXP3	11.013
12	GO:0042130	negative regulation of T cell proliferation	GNRH1	10.742
	GO_ID	GO_Term	Gene	FPKM
13	GO:0042130	negative regulation of T cell proliferation	HAVCR2	31.098
14	GO:0042130	negative regulation of T cell proliferation	LRRC32	68.977
15	GO:0042130	negative regulation of T cell proliferation	PAWR	1275.01
16	GO:0042130	negative regulation of T cell proliferation	PDCD1LG2	19.569
17	GO:0042130	negative regulation of T cell proliferation	PDE5A	26.191
18	GO:0042130	negative regulation of T cell proliferation	PRKAR1A	2251.75
19	GO:0042130	negative regulation of T cell proliferation	PRNP	1400.79
20	GO:0042130	negative regulation of T cell proliferation	SCGB1A1	24.391
21	GO:0042130	negative regulation of T cell proliferation	SDC4	4190.36
22	GO:0042130	negative regulation of T cell proliferation	TGFB1	3254.4
23	GO:0042130	negative regulation of T cell proliferation	TNFRSF14	59.347
24	GO:0042130	negative regulation of T cell proliferation	TNFRSF21	1782.16
25	GO:0042130	negative regulation of T cell proliferation	CD276	940.898
26	GO:0042130	negative regulation of T cell proliferation	TWSG1	1690.01
27	GO:0050728	negative regulation of inflammatory response	CUEDC2	1434.29
28	GO:0050728	negative regulation of inflammatory response	ETS1	3453.77
29	GO:0050728	negative regulation of inflammatory response	FOXP3	11.013
30	GO:0050728	negative regulation of inflammatory response	GPER1	25.545
31	GO:0050728	negative regulation of inflammatory response	GPX1	6793.88
32	GO:0050728	negative regulation of inflammatory response	NPY5R	84.83
33	GO:0050728	negative regulation of inflammatory response	PSMA1	2410.89
34	GO:0050728	negative regulation of inflammatory response	PSMB4	3714.41
35	GO:0050728	negative regulation of inflammatory response	PTGER4	25.087
36	GO:0050728	negative regulation of inflammatory response	RB1	1076.91
37	GO:0050728	negative regulation of inflammatory response	RPS19	4481.85
38	GO:0050728	negative regulation of inflammatory response	SIRPA	4626.19
39	GO:0050728	negative regulation of inflammatory response	SMAD3	1346.9
40	GO:0050728	negative regulation of inflammatory response	SMPDL3B	12.405
41	GO:0050728	negative regulation of inflammatory response	SOCS3	1208.53
42	GO:0050728	negative regulation of inflammatory response	SOD1	1931.16
43	GO:0050728	negative regulation of inflammatory response	TNFAIP8L2	12.05
44	GO:0050728	negative regulation of inflammatory response	TNFRSF1A	2470.47
45	GO:0045077	negative regulation of interferon-gamma production	FOXP3	11.013
46	GO:0045077	negative regulation of interferon-gamma production	INHA	10.797
47	GO:0050860	negative regulation of T cell receptor signaling pathway	DUSP3	928.991
48	GO:0050860	negative regulation of T cell receptor signaling pathway	ELF1	946.147
49	GO:0050860	negative regulation of T cell receptor signaling pathway	EZR	8514.71
50	GO:0050860	negative regulation of T cell receptor signaling pathway	PAWR	1275.01
51	GO:0050860	negative regulation of T cell receptor signaling pathway	PHPT1	1331.75
52	GO:0050860	negative regulation of T cell receptor signaling pathway	PRNP	1400.79

53	GO:0050860	negative regulation of T cell receptor signaling pathway	PTPRJ	2223.54
54	GO:0050860	negative regulation of T cell receptor signaling pathway	THY1	1034.56

#### B Cell Inhibition

	GO_ID	GO_Term	Gene	FPKM
1	GO:0045578	negative regulation of B cell differentiation	HMG3B	888.631
2	GO:0045578	negative regulation of B cell differentiation	ID2	1000.01
3	GO:0045578	negative regulation of B cell differentiation	INHA	10.797
4	GO:0045578	negative regulation of B cell differentiation	SFRP1	74.603
5	GO:0001783	B cell apoptotic process	BAX	1690.06
6	GO:0001783	B cell apoptotic process	BCL10	1277.37
7	GO:0001783	B cell apoptotic process	CD74	43.098
8	GO:0001783	B cell apoptotic process	CRKL	1252.93
9	GO:0001783	B cell apoptotic process	MIF	11968.2
10	GO:0001783	B cell apoptotic process	PKN1	1409.48
11	GO:0001783	B cell apoptotic process	SLC39A10	1026.81
12	GO:0001783	B cell apoptotic process	TNFRSF21	1782.16
13	GO:0030889	negative regulation of B cell proliferation	CASP3	889.561
14	GO:0030889	negative regulation of B cell proliferation	PAWR	1275.01
15	GO:0030889	negative regulation of B cell proliferation	PKN1	1409.48
16	GO:0030889	negative regulation of B cell proliferation	TNFRSF21	1782.16

#### Cytokine Signalling Related Genes

	GO_ID	Go-Term	Gene	FPKM
1	GO:0034097	response to cytokine	ACTG1	84996.1
2	GO:0034097	response to cytokine	GAPDH	58860.5
3	GO:0034097	response to cytokine	HSP90AB1	46209.6
4	GO:0034097	response to cytokine	THBS1	39927.9
5	GO:0034097	response to cytokine	MT2A	36229.9
6	GO:0034097	response to cytokine	VIM	35745.4
7	GO:0034097	response to cytokine	RPL13A	31488.8
8	GO:0034097	response to cytokine	HSP90AA1	29826.3
9	GO:0034097	response to cytokine	FN1	26244.3
10	GO:0034097	response to cytokine	HSPA8	23916.7
11	GO:0034097	response to cytokine	ITGB1	23377.2
12	GO:0034097	response to cytokine	RHOA	16814.2
13	GO:0034097	response to cytokine	UBB	15914.8
14	GO:0034097	response to cytokine	HSP90B1	13275.9
15	GO:0034097	response to cytokine	MIF	11968.2
16	GO:0034097	response to cytokine	GSTP1	11349
17	GO:0034097	response to cytokine	HIF1A	10334.6
18	GO:0034097	response to cytokine	CANX	9880.26
19	GO:0034097	response to cytokine	MSN	9290.01
20	GO:0034097	response to cytokine	CAV1	8592
21	GO:0034097	response to cytokine	ACTR2	8585.55
22	GO:0034097	response to cytokine	PPIA	8303.37
23	GO:0034097	response to cytokine	B2M	7496.41
24	GO:0034097	response to cytokine	UBC	7447.32
25	GO:0034097	response to cytokine	APP	7373.1

26	GO:0034097 response to cytokine	PDIA3	7097.72
27	GO:0034097 response to cytokine	GPS2	6490.35
GO_ID	Go-Term	Gene	FPKM
29	GO:0034097 response to cytokine	AXL	5997.85
30	GO:0034097 response to cytokine	ARF1	5484.86
31	GO:0034097 response to cytokine	CDC42	5380.9
32	GO:0034097 response to cytokine	CNN2	5212.46
33	GO:0034097 response to cytokine	PSMD2	4948.75
34	GO:0034097 response to cytokine	JAK1	4875.63
35	GO:0034097 response to cytokine	SEC61A1	4777.14
36	GO:0034097 response to cytokine	SIRPA	4626.19
37	GO:0034097 response to cytokine	XRCC5	4490.15
38	GO:0034097 response to cytokine	ZYX	4454.59
39	GO:0034097 response to cytokine	RPS3	4398.64
40	GO:0034097 response to cytokine	DDOST	4305.35
41	GO:0034097 response to cytokine	IFITM3	4300.05
42	GO:0034097 response to cytokine	HSPA9	4254.75
43	GO:0034097 response to cytokine	DUSP1	4124.81
44	GO:0034097 response to cytokine	ADAM10	4088.01
45	GO:0034097 response to cytokine	ZFP36L1	4042.17
46	GO:0034097 response to cytokine	PSMB4	3714.41
47	GO:0034097 response to cytokine	CAPZA1	3701.81
48	GO:0034097 response to cytokine	IRAK1	3655.59
49	GO:0034097 response to cytokine	KLF6	3543.27
50	GO:0034097 response to cytokine	CDKN1A	3482.68
51	GO:0034097 response to cytokine	ETS1	3453.77
52	GO:0034097 response to cytokine	DHX9	3357.11
53	GO:0034097 response to cytokine	UBA52	3340.62
54	GO:0034097 response to cytokine	MYO1C	3329.45
55	GO:0034097 response to cytokine	UBE2V1	3310.37
56	GO:0034097 response to cytokine	IMPDH2	3291.62
57	GO:0034097 response to cytokine	TGFB1	3254.4
58	GO:0034097 response to cytokine	MYC	3170.87
59	GO:0034097 response to cytokine	PTPN11	3142.37
60	GO:0034097 response to cytokine	RPS27A	3085.5
61	GO:0034097 response to cytokine	CDC37	3079.33
62	GO:0034097 response to cytokine	CIB1	3054.62
63	GO:0034097 response to cytokine	VAMP3	3020.82
64	GO:0034097 response to cytokine	STAT1	3015.91
65	GO:0034097 response to cytokine	KIF5B	2940.37
66	GO:0034097 response to cytokine	SYNCRIP	2915.12
67	GO:0034097 response to cytokine	PSME3	2868.67
68	GO:0034097 response to cytokine	CRK	2859.91
69	GO:0034097 response to cytokine	PSME1	2818.89
70	GO:0034097 response to cytokine	ADAR	2715.3
71	GO:0034097 response to cytokine	PXDN	2696.09
72	GO:0034097 response to cytokine	SUMO1	2641.42

GO_ID	Go-Term	Gene	FPKM
73	GO:0034097 response to cytokine	JUNB	2567.95
74	GO:0034097 response to cytokine	JUN	2564.67
		Gene	FPKM
75	GO:0034097 response to cytokine	FOXC1	2551.91
76	GO:0034097 response to cytokine	PSMA7	2484.88
77	GO:0034097 response to cytokine	PSMB2	2478.9
78	GO:0034097 response to cytokine	HLA-E	2465.31
79	GO:0034097 response to cytokine	CXCL1	2431.63
80	GO:0034097 response to cytokine	PSMD4	2416.71
81	GO:0034097 response to cytokine	CPNE1	2415.74
82	GO:0034097 response to cytokine	COL1A1	2412.41
83	GO:0034097 response to cytokine	PSMA1	2410.89
84	GO:0034097 response to cytokine	SQSTM1	2393.07
85	GO:0034097 response to cytokine	TRIM44	2385.29
86	GO:0034097 response to cytokine	ADAM9	2357.35
87	GO:0034097 response to cytokine	FASN	2335.6
88	GO:0034097 response to cytokine	PHB	2312.56
89	GO:0034097 response to cytokine	PSMB5	2276.1
90	GO:0034097 response to cytokine	SHMT2	2266.14
91	GO:0034097 response to cytokine	HLA-A	2245.43
92	GO:0034097 response to cytokine	PSMB3	2243.5
93	GO:0034097 response to cytokine	SDC1	2232.31
94	GO:0034097 response to cytokine	PSMC3	2219.42
95	GO:0034097 response to cytokine	F2RL1	2185.14
96	GO:0034097 response to cytokine	IL32	2140.97
97	GO:0034097 response to cytokine	SHC1	2128.33
98	GO:0034097 response to cytokine	MAPKAPK2	2079.97
99	GO:0034097 response to cytokine	LSM14A	2073.9
100	GO:0034097 response to cytokine	IFITM2	2023.78
101	GO:0034097 response to cytokine	LOX	2020.63
102	GO:0034097 response to cytokine	PAK2	2000.64
103	GO:0034097 response to cytokine	PSMB7	1983.32
104	GO:0034097 response to cytokine	NFKBIA	1980.06
105	GO:0034097 response to cytokine	FLNB	1954.97
106	GO:0034097 response to cytokine	SOD1	1931.16
107	GO:0034097 response to cytokine	IL6ST	1890.79
108	GO:0034097 response to cytokine	PSMD3	1870.23
109	GO:0034097 response to cytokine	PSMA4	1851.31
110	GO:0034097 response to cytokine	HLA-C	1845.92
111	GO:0034097 response to cytokine	PSMC4	1831.67
112	GO:0034097 response to cytokine	ACTR3	1826.51
113	GO:0034097 response to cytokine	PSMD7	1799.47
114	GO:0034097 response to cytokine	DAPK1	1785.89
115	GO:0034097 response to cytokine	TNFRSF21	1782.16
116	GO:0034097 response to cytokine	YTHDF2	1763.24
117	GO:0034097 response to cytokine	CXCL5	1728.29
118	GO:0034097 response to cytokine	CEBPB	1718.08

119	GO:0034097 response to cytokine	STAT6	1713.64
120	GO:0034097 response to cytokine	ABCE1	1712.97
GO_ID	Go-Term	Gene	FPKM
121	GO:0034097 response to cytokine	CD70	1689.49
122	GO:0034097 response to cytokine	EDN2	1680.24
123	GO:0034097 response to cytokine	PAFAH1B1	1656.45
124	GO:0034097 response to cytokine	CD44	1654.25
125	GO:0034097 response to cytokine	BST2	1628.01
126	GO:0034097 response to cytokine	CYBA	1599.82
127	GO:0034097 response to cytokine	PSMB6	1599.49
128	GO:0034097 response to cytokine	PADI2	1591.72
129	GO:0034097 response to cytokine	TRIM8	1590.25
130	GO:0034097 response to cytokine	TAB2	1583.57
131	GO:0034097 response to cytokine	CLDN1	1575.98
132	GO:0034097 response to cytokine	PTPN1	1566.1
133	GO:0034097 response to cytokine	PSMD8	1551.36
134	GO:0034097 response to cytokine	UBE2K	1534.57
135	GO:0034097 response to cytokine	INPPL1	1522.11
136	GO:0034097 response to cytokine	GRB2	1512.05
137	GO:0034097 response to cytokine	VCAM1	1478.45
138	GO:0034097 response to cytokine	PSMB1	1470.3
139	GO:0034097 response to cytokine	DAPK3	1469.27
140	GO:0034097 response to cytokine	PSMD1	1468.68
141	GO:0034097 response to cytokine	RAP1B	1443.15
142	GO:0034097 response to cytokine	TIMP2	1436.43
143	GO:0034097 response to cytokine	PSMC5	1416.48
144	GO:0034097 response to cytokine	NFE2L2	1413.06
145	GO:0034097 response to cytokine	XBP1	1409.54
146	GO:0034097 response to cytokine	PSMC1	1402.91
147	GO:0034097 response to cytokine	UBE2N	1396.39
148	GO:0034097 response to cytokine	CUL1	1385.67
149	GO:0034097 response to cytokine	ANXA1	1379.81
150	GO:0034097 response to cytokine	SMAD3	1346.9
151	GO:0034097 response to cytokine	CBFB	1337.38
152	GO:0034097 response to cytokine	PDGFB	1329.84
153	GO:0034097 response to cytokine	CSNK2B	1303.55
154	GO:0034097 response to cytokine	SCRIB	1301.4
155	GO:0034097 response to cytokine	HSPA1A	1291.38
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157	GO:0034097 response to cytokine	TXLNA	1257.37
158	GO:0034097 response to cytokine	CRKL	1252.93
159	GO:0034097 response to cytokine	TP53	1238.42
160	GO:0034097 response to cytokine	RBCK1	1232.56
161	GO:0034097 response to cytokine	SOCS3	1208.53
162	GO:0034097 response to cytokine	TFRC	1204.7
163	GO:0034097 response to cytokine	GAS6	1194.92
164	GO:0034097 response to cytokine	HAX1	1185.7

165	GO:0034097	response to cytokine	TICAM2	1157.92
166	GO:0034097	response to cytokine	BIRC2	1152.31
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168	GO:0034097	response to cytokine	PSMC2	1135.47
169	GO:0034097	response to cytokine	HMOX1	1131.31
170	GO:0034097	response to cytokine	WNK1	1129.12
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172	GO:0034097	response to cytokine	HLA-B	1105.97
173	GO:0034097	response to cytokine	SBNO2	1104.77
174	GO:0034097	response to cytokine	HSPA1B	1100.33
175	GO:0034097	response to cytokine	MED1	1099.36
176	GO:0034097	response to cytokine	AGPAT2	1097.42
177	GO:0034097	response to cytokine	STAT3	1094.89
178	GO:0034097	response to cytokine	MAVS	1080.28
179	GO:0034097	response to cytokine	NFIL3	1055.3
180	GO:0034097	response to cytokine	MAPK1	1054.39
181	GO:0034097	response to cytokine	OTUD4	1047.93
182	GO:0034097	response to cytokine	SMAD7	1035.56
183	GO:0034097	response to cytokine	PSMA3	1034.66
184	GO:0034097	response to cytokine	OXSR1	1028.15
185	GO:0034097	response to cytokine	OTUB1	1006.54
186	GO:0034097	response to cytokine	FADD	997.253
187	GO:0034097	response to cytokine	PSMD12	996.821
188	GO:0034097	response to cytokine	TNIP2	995.336
189	GO:0034097	response to cytokine	RIPK2	983.707
190	GO:0034097	response to cytokine	RELA	976.845
191	GO:0034097	response to cytokine	CEBDP	973.302
192	GO:0034097	response to cytokine	AKT1	967.93
193	GO:0034097	response to cytokine	PSMD11	952.277
194	GO:0034097	response to cytokine	PSMD5	949.138
195	GO:0034097	response to cytokine	ELF1	946.147
196	GO:0034097	response to cytokine	PRKACA	944.976
197	GO:0034097	response to cytokine	EIF2AK2	935.537
198	GO:0034097	response to cytokine	VEGFA	934.492
199	GO:0034097	response to cytokine	MAPKAPK3	917.824
200	GO:0034097	response to cytokine	RAB12	905.316
201	GO:0034097	response to cytokine	TRIM38	899.442
202	GO:0034097	response to cytokine	CTR9	894.977
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204	GO:0034097	response to cytokine	CASP3	889.561
205	GO:0034097	response to cytokine	PIM1	883.738
206	GO:0034097	response to cytokine	LIF	877.453
207	GO:0034097	response to cytokine	ZFP36L2	873.132
208	GO:0034097	response to cytokine	LTBR	866.292
209	GO:0034097	response to cytokine	SETD2	863.807
210	GO:0034097	response to cytokine	TRIM56	855.407

211	GO:0034097	response to cytokine	PSMD10	854.381
212	GO:0034097	response to cytokine	TRIM25	850.391
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213	GO:0034097	response to cytokine	PSMD13	849.859
214	GO:0034097	response to cytokine	PSME2	846.147
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216	GO:0034097	response to cytokine	APPL1	840.329
217	GO:0034097	response to cytokine	FOXO3	837.152
218	GO:0034097	response to cytokine	NR1H2	814.482
219	GO:0034097	response to cytokine	IFITM1	810.542
220	GO:0034097	response to cytokine	IFNGR2	805.687
221	GO:0034097	response to cytokine	NMI	800.873
222	GO:0034097	response to cytokine	KAT2A	798.469
223	GO:0034097	response to cytokine	PSMA2	764.52
224	GO:0034097	response to cytokine	PSMB8	761.902
225	GO:0034097	response to cytokine	RIF1	748.869
226	GO:0034097	response to cytokine	PRKCA	747.619
227	GO:0034097	response to cytokine	NFKB1	746.412
228	GO:0034097	response to cytokine	SKIL	745.464
229	GO:0034097	response to cytokine	NFKB2	735.285
230	GO:0034097	response to cytokine	RIPK1	733.649
231	GO:0034097	response to cytokine	WNT5A	729.665
232	GO:0034097	response to cytokine	TRIM26	724.312
233	GO:0034097	response to cytokine	TCIRG1	720.997
234	GO:0034097	response to cytokine	SH2B3	704.525
235	GO:0034097	response to cytokine	PSMA6	703.851
236	GO:0034097	response to cytokine	JAGN1	694.385
237	GO:0034097	response to cytokine	IGBP1	688.679
238	GO:0034097	response to cytokine	IFNGR1	685.053
239	GO:0034097	response to cytokine	KRAS	682.361
240	GO:0034097	response to cytokine	BCL2	671.034
241	GO:0034097	response to cytokine	ASA1H	664.196
242	GO:0034097	response to cytokine	PSMD6	659.696
243	GO:0034097	response to cytokine	STK39	655.122
244	GO:0034097	response to cytokine	HYAL2	651.73
245	GO:0034097	response to cytokine	FBXW11	632.096
246	GO:0034097	response to cytokine	TRIM32	630.908
247	GO:0034097	response to cytokine	CBL	629.807
248	GO:0034097	response to cytokine	NUB1	629.625
249	GO:0034097	response to cytokine	SNX10	625.191
250	GO:0034097	response to cytokine	IFNAR1	619.331
251	GO:0034097	response to cytokine	PIAS3	613.51
252	GO:0034097	response to cytokine	PIK3CD	612.918
253	GO:0034097	response to cytokine	PSMD14	612.836
254	GO:0034097	response to cytokine	APPL2	607.637
255	GO:0034097	response to cytokine	MUL1	604.102
256	GO:0034097	response to cytokine	IL1R1	593.898

257	GO:0034097	response to cytokine	PIK3CB	589.031
258	GO:0034097	response to cytokine	PARP14	572.596
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262	GO:0034097	response to cytokine	STXBP2	565.925
263	GO:0034097	response to cytokine	MAP2K7	565.61
264	GO:0034097	response to cytokine	CD40	561.503
265	GO:0034097	response to cytokine	TYK2	560.43
266	GO:0034097	response to cytokine	MMP9	557.041
267	GO:0034097	response to cytokine	HIPK1	556.11
268	GO:0034097	response to cytokine	BAD	554.076
269	GO:0034097	response to cytokine	METTL3	543.982
270	GO:0034097	response to cytokine	RAPGEF1	539.412
271	GO:0034097	response to cytokine	PRKCD	535.046
272	GO:0034097	response to cytokine	EDN1	532.998
273	GO:0034097	response to cytokine	SOS1	531.38
274	GO:0034097	response to cytokine	SPPL2A	527.961
275	GO:0034097	response to cytokine	RNF31	526.179
276	GO:0034097	response to cytokine	SOCS5	525.443
277	GO:0034097	response to cytokine	IP6K2	523.326
278	GO:0034097	response to cytokine	CXCL6	515.882
279	GO:0034097	response to cytokine	RARA	511.71
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281	GO:0034097	response to cytokine	CLCF1	509.873
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283	GO:0034097	response to cytokine	TRIM21	501.785
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286	GO:0034097	response to cytokine	EPS8	495.314
287	GO:0034097	response to cytokine	IRF3	488.896
288	GO:0034097	response to cytokine	MAPK14	485.936
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292	GO:0034097	response to cytokine	PSMB10	467.308
293	GO:0034097	response to cytokine	TRAF3	462.702
294	GO:0034097	response to cytokine	IRF2	460.121
295	GO:0034097	response to cytokine	PSMA5	459.407
296	GO:0034097	response to cytokine	RC3H1	452.704
297	GO:0034097	response to cytokine	VPS26B	451.796
298	GO:0034097	response to cytokine	PML	448.245
299	GO:0034097	response to cytokine	ZFP36	447.286
300	GO:0034097	response to cytokine	RABGEF1	440.501
301	GO:0034097	response to cytokine	MAPK3	439.779
302	GO:0034097	response to cytokine	TNFSF13	434.909

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304	GO:0034097	response to cytokine	TRIM22	429.164
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307	GO:0034097	response to cytokine	PDE12	423.097
308	GO:0034097	response to cytokine	GBP3	422.857
309	GO:0034097	response to cytokine	TRAF2	422.505
310	GO:0034097	response to cytokine	PSMC6	421.196
311	GO:0034097	response to cytokine	MYD88	419.92
312	GO:0034097	response to cytokine	CSF1	410.475
313	GO:0034097	response to cytokine	CXCL2	410.09
314	GO:0034097	response to cytokine	CACTIN	404.652
315	GO:0034097	response to cytokine	SIRT1	402.375
316	GO:0034097	response to cytokine	EGR1	399.595
317	GO:0034097	response to cytokine	PIAS1	397.455
318	GO:0034097	response to cytokine	TOLLIP	392.274
319	GO:0034097	response to cytokine	ISG15	385.999
320	GO:0034097	response to cytokine	STX4	385.228
321	GO:0034097	response to cytokine	ZC3H12A	382.553
322	GO:0034097	response to cytokine	BIRC3	374.928
323	GO:0034097	response to cytokine	STXBP3	374.05
324	GO:0034097	response to cytokine	SRC	371.676
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326	GO:0034097	response to cytokine	CALCOCO2	370.799
327	GO:0034097	response to cytokine	JARID2	370.379
328	GO:0034097	response to cytokine	IL10RB	369.992
329	GO:0034097	response to cytokine	TBK1	358.711
330	GO:0034097	response to cytokine	TAB1	347.24
331	GO:0034097	response to cytokine	IFI6	344.629
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333	GO:0034097	response to cytokine	ZEB1	342.685
334	GO:0034097	response to cytokine	CDC42EP2	341.57
335	GO:0034097	response to cytokine	IL18BP	340.41
336	GO:0034097	response to cytokine	IFI35	338.158
337	GO:0034097	response to cytokine	TNFSF12	338.094
338	GO:0034097	response to cytokine	IFNAR2	337.4
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340	GO:0034097	response to cytokine	IRS2	327.894
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342	GO:0034097	response to cytokine	PLSCR1	323.813
343	GO:0034097	response to cytokine	GSN	321.083
344	GO:0034097	response to cytokine	IFIT3	320.831
345	GO:0034097	response to cytokine	IL4R	318.51
346	GO:0034097	response to cytokine	LRCH1	317.958
347	GO:0034097	response to cytokine	IRF9	313.043
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352	GO:0034097	response to cytokine	TAB3	289.695
353	GO:0034097	response to cytokine	CD58	289.269
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355	GO:0034097	response to cytokine	PELI1	285.629
356	GO:0034097	response to cytokine	RAB20	284.409
357	GO:0034097	response to cytokine	PARP9	281.113
358	GO:0034097	response to cytokine	RELB	276.321
359	GO:0034097	response to cytokine	STAT5B	272.297
360	GO:0034097	response to cytokine	CAMK2D	258.344
361	GO:0034097	response to cytokine	IRF7	257.477
362	GO:0034097	response to cytokine	SHPK	256.782
363	GO:0034097	response to cytokine	CAMK2G	255.112
364	GO:0034097	response to cytokine	TMEM102	253.371
365	GO:0034097	response to cytokine	MID1	253.188
366	GO:0034097	response to cytokine	IL27RA	252.764
367	GO:0034097	response to cytokine	IRF6	249.822
368	GO:0034097	response to cytokine	LTB	246.609
369	GO:0034097	response to cytokine	SP100	243.842
370	GO:0034097	response to cytokine	CD27	241.624
371	GO:0034097	response to cytokine	ARHGEF2	240.365
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373	GO:0034097	response to cytokine	ALAD	238.879
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376	GO:0034097	response to cytokine	BTRC	228.576
377	GO:0034097	response to cytokine	STXBP1	228.298
378	GO:0034097	response to cytokine	GBP1	224.647
379	GO:0034097	response to cytokine	CASP8	223.802
380	GO:0034097	response to cytokine	TNF	223.039
381	GO:0034097	response to cytokine	PTPN2	217.413
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387	GO:0034097	response to cytokine	OAS3	211.615
388	GO:0034097	response to cytokine	PIK3R1	206.532
389	GO:0034097	response to cytokine	IL17RC	205.323
390	GO:0034097	response to cytokine	SOX9	204.424
391	GO:0034097	response to cytokine	MUC1	201.018
392	GO:0034097	response to cytokine	SLC12A2	197.455
393	GO:0034097	response to cytokine	TRAF6	196.228
394	GO:0034097	response to cytokine	SLC26A6	194.529

395	GO:0034097	response to cytokine	CHUK	193.971
396	GO:0034097	response to cytokine	DDX58	193.8
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399	GO:0034097	response to cytokine	SAA1	185.561
400	GO:0034097	response to cytokine	CXCL16	182.905
401	GO:0034097	response to cytokine	CSF2	181.295
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403	GO:0034097	response to cytokine	VEGFC	175.759
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405	GO:0034097	response to cytokine	MMP1	170.537
406	GO:0034097	response to cytokine	CYLD	169.371
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408	GO:0034097	response to cytokine	NR1H3	163.316
409	GO:0034097	response to cytokine	STXBP4	163.016
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411	GO:0034097	response to cytokine	TRIM68	162.442
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413	GO:0034097	response to cytokine	CCR10	160.798
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426	GO:0034097	response to cytokine	IL7	140.894
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431	GO:0034097	response to cytokine	IL6R	126.072
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434	GO:0034097	response to cytokine	IFI16	119.77
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436	GO:0034097	response to cytokine	RUNX1	115.758
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445	GO:0034097	response to cytokine	COL1A2	89.536
446	GO:0034097	response to cytokine	LRP8	87.589
447	GO:0034097	response to cytokine	NR1H4	86.157
448	GO:0034097	response to cytokine	CXCL3	85.296
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450	GO:0034097	response to cytokine	CD274	80.63
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452	GO:0034097	response to cytokine	IL11	79.72
453	GO:0034097	response to cytokine	TNFRSF11A	79.004
454	GO:0034097	response to cytokine	ZNF675	76.713
455	GO:0034097	response to cytokine	SFRP1	74.603
456	GO:0034097	response to cytokine	HDAC4	68.99
457	GO:0034097	response to cytokine	MX1	66.49
458	GO:0034097	response to cytokine	ECM1	64.781
459	GO:0034097	response to cytokine	HLA-DPB1	62.826
460	GO:0034097	response to cytokine	IFIT2	61.029
461	GO:0034097	response to cytokine	GCH1	60.931
462	GO:0034097	response to cytokine	TNFRSF14	59.347
463	GO:0034097	response to cytokine	CYP27B1	59.148
464	GO:0034097	response to cytokine	MME	58.369
465	GO:0034097	response to cytokine	IFNLR1	57.67
466	GO:0034097	response to cytokine	ACKR4	56.207
467	GO:0034097	response to cytokine	HLA-F	55.55
468	GO:0034097	response to cytokine	PF4V1	54.389
469	GO:0034097	response to cytokine	SOCS1	54.078
470	GO:0034097	response to cytokine	RPS6KA5	53.467
471	GO:0034097	response to cytokine	SH2B2	52.905
472	GO:0034097	response to cytokine	CORO1A	52.457
473	GO:0034097	response to cytokine	IL18R1	51.29
474	GO:0034097	response to cytokine	MAP3K8	47.305
475	GO:0034097	response to cytokine	TEC	46.966
476	GO:0034097	response to cytokine	IL15	46.957
477	GO:0034097	response to cytokine	KLF4	45.46
478	GO:0034097	response to cytokine	CD74	43.098
479	GO:0034097	response to cytokine	NOD1	42.323
480	GO:0034097	response to cytokine	IL1RAP	41.421
481	GO:0034097	response to cytokine	CX3CL1	39.544
482	GO:0034097	response to cytokine	HLA-DPA1	39.514
483	GO:0034097	response to cytokine	ADAMTS13	39.051
484	GO:0034097	response to cytokine	TRPV1	38.84
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487	GO:0034097 response to cytokine	FLT3LG	35.872
488	GO:0034097 response to cytokine	CIITA	32.63
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490	GO:0034097 response to cytokine	GBP2	28.65
491	GO:0034097 response to cytokine	TSLP	27.626
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493	GO:0034097 response to cytokine	FOS	26.304
494	GO:0034097 response to cytokine	TNFRSF13C	25.55
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496	GO:0034097 response to cytokine	EREG	24.83
497	GO:0034097 response to cytokine	CCL20	24.811
498	GO:0034097 response to cytokine	SCGB1A1	24.391
499	GO:0034097 response to cytokine	NLRC5	23.304
500	GO:0034097 response to cytokine	IL1RL2	23.265
501	GO:0034097 response to cytokine	IL31RA	22.584
502	GO:0034097 response to cytokine	IFNE	22.502
503	GO:0034097 response to cytokine	SYNGR1	21.802
504	GO:0034097 response to cytokine	ASS1	21.72
505	GO:0034097 response to cytokine	CASP1	21.612
506	GO:0034097 response to cytokine	LAMP3	19.84
507	GO:0034097 response to cytokine	SELPLG	18.308
508	GO:0034097 response to cytokine	PLCB1	18.163
509	GO:0034097 response to cytokine	JAK3	18.058
510	GO:0034097 response to cytokine	MST1R	18.043
511	GO:0034097 response to cytokine	USP18	17.78
512	GO:0034097 response to cytokine	LEF1	17.653
513	GO:0034097 response to cytokine	IL7R	17.178
514	GO:0034097 response to cytokine	PLVAP	16.423
515	GO:0034097 response to cytokine	KLF2	16.414
516	GO:0034097 response to cytokine	TNFSF15	16.195
517	GO:0034097 response to cytokine	EBI3	14.741
518	GO:0034097 response to cytokine	FCER1G	14.726
519	GO:0034097 response to cytokine	CXCL12	13.35
520	GO:0034097 response to cytokine	SLIT2	13.171
521	GO:0034097 response to cytokine	XAF1	12.773
522	GO:0034097 response to cytokine	IRAK3	12.771
523	GO:0034097 response to cytokine	CLDN18	12.205
524	GO:0034097 response to cytokine	WAS	11.924
525	GO:0034097 response to cytokine	RORA	11.668
526	GO:0034097 response to cytokine	CEBPA	10.791
527	GO:0034097 response to cytokine	IL1R2	10.779
528	GO:0034097 response to cytokine	DCST1	10.374
529	GO:0034097 response to cytokine	GBP4	9.267
530	GO:0034097 response to cytokine	LCN2	9.201
531	GO:0034097 response to cytokine	ACKR2	8.652
532	GO:0034097 response to cytokine	POU4F1	8.366

533	GO:0034097	response to cytokine	EDA	7.392
534	GO:0034097	response to cytokine	OAS1	7.261
GO_ID	Go-Term		Gene	FPKM
535	GO:0034097	response to cytokine	IL12A	6.959
536	GO:0034097	response to cytokine	ITGB2	6.265
537	GO:0034097	response to cytokine	CD4	6.195
538	GO:0034097	response to cytokine	ISG20	5.784
539	GO:0034097	response to cytokine	CEACAM1	5.14
540	GO:0034097	response to cytokine	MEFV	4.91
541	GO:0034097	response to cytokine	INPP5D	4.733
542	GO:0034097	response to cytokine	SPI1	4.574
543	GO:0034097	response to cytokine	IL1A	4.456
544	GO:0034097	response to cytokine	UBD	4.353
545	GO:0034097	response to cytokine	CXCR4	4.255
546	GO:0034097	response to cytokine	TNFRSF17	4.232
547	GO:0034097	response to cytokine	OASL	4.051
548	GO:0034097	response to cytokine	SMPD3	3.964
549	GO:0034097	response to cytokine	CSF1R	3.674
550	GO:0034097	response to cytokine	TNFSF4	3.601
551	GO:0034097	response to cytokine	IL18	3.601
552	GO:0034097	response to cytokine	TNFRSF18	3.454
553	GO:0034097	response to cytokine	VAV1	3.325
554	GO:0034097	response to cytokine	APOA1	3.323
555	GO:0034097	response to cytokine	DTX1	3.236
556	GO:0034097	response to cytokine	AQP4	3.157
557	GO:0034097	response to cytokine	CCL5	3.13
558	GO:0034097	response to cytokine	TNFSF13B	3.094
559	GO:0034097	response to cytokine	PTAFR	3.016
560	GO:0034097	response to cytokine	CD80	2.956
561	GO:0034097	response to cytokine	IL13RA2	2.91
562	GO:0034097	response to cytokine	STAP1	2.859
563	GO:0034097	response to cytokine	TXK	2.726
564	GO:0034097	response to cytokine	LTA	2.724
565	GO:0034097	response to cytokine	TLR4	2.701
566	GO:0034097	response to cytokine	HLA-G	2.684
567	GO:0034097	response to cytokine	IL16	2.611
568	GO:0034097	response to cytokine	ARG1	2.408
569	GO:0034097	response to cytokine	IFI27	2.277
570	GO:0034097	response to cytokine	MPL	2.224
571	GO:0034097	response to cytokine	SLC11A1	2.182
572	GO:0019221	cytokine-mediated signaling pathway	HSP90AB1	46209.6
573	GO:0019221	cytokine-mediated signaling pathway	MT2A	36229.9
574	GO:0019221	cytokine-mediated signaling pathway	VIM	35745.4
575	GO:0019221	cytokine-mediated signaling pathway	HSP90AA1	29826.3
576	GO:0019221	cytokine-mediated signaling pathway	FN1	26244.3
577	GO:0019221	cytokine-mediated signaling pathway	HSPA8	23916.7
578	GO:0019221	cytokine-mediated signaling pathway	ITGB1	23377.2

579	GO:0019221	cytokine-mediated signaling pathway	UBB	15914.8
580	GO:0019221	cytokine-mediated signaling pathway	HSP90B1	13275.9
GO_ID	Go-Term		Gene	FPKM
581	GO:0019221	cytokine-mediated signaling pathway	MIF	11968.2
582	GO:0019221	cytokine-mediated signaling pathway	GSTP1	11349
583	GO:0019221	cytokine-mediated signaling pathway	HIF1A	10334.6
584	GO:0019221	cytokine-mediated signaling pathway	CANX	9880.26
585	GO:0019221	cytokine-mediated signaling pathway	MSN	9290.01
586	GO:0019221	cytokine-mediated signaling pathway	CAV1	8592
587	GO:0019221	cytokine-mediated signaling pathway	PPIA	8303.37
588	GO:0019221	cytokine-mediated signaling pathway	B2M	7496.41
589	GO:0019221	cytokine-mediated signaling pathway	UBC	7447.32
590	GO:0019221	cytokine-mediated signaling pathway	GPS2	6490.35
591	GO:0019221	cytokine-mediated signaling pathway	ANXA2	6488.94
592	GO:0019221	cytokine-mediated signaling pathway	AXL	5997.85
593	GO:0019221	cytokine-mediated signaling pathway	ARF1	5484.86
594	GO:0019221	cytokine-mediated signaling pathway	CDC42	5380.9
595	GO:0019221	cytokine-mediated signaling pathway	CNN2	5212.46
596	GO:0019221	cytokine-mediated signaling pathway	PSMD2	4948.75
597	GO:0019221	cytokine-mediated signaling pathway	JAK1	4875.63
598	GO:0019221	cytokine-mediated signaling pathway	IFITM3	4300.05
599	GO:0019221	cytokine-mediated signaling pathway	HSPA9	4254.75
600	GO:0019221	cytokine-mediated signaling pathway	PSMB4	3714.41
601	GO:0019221	cytokine-mediated signaling pathway	CAPZA1	3701.81
602	GO:0019221	cytokine-mediated signaling pathway	IRAK1	3655.59
603	GO:0019221	cytokine-mediated signaling pathway	KLF6	3543.27
604	GO:0019221	cytokine-mediated signaling pathway	CDKN1A	3482.68
605	GO:0019221	cytokine-mediated signaling pathway	UBA52	3340.62
606	GO:0019221	cytokine-mediated signaling pathway	UBE2V1	3310.37
607	GO:0019221	cytokine-mediated signaling pathway	TGFB1	3254.4
608	GO:0019221	cytokine-mediated signaling pathway	MYC	3170.87
609	GO:0019221	cytokine-mediated signaling pathway	PTPN11	3142.37
610	GO:0019221	cytokine-mediated signaling pathway	RPS27A	3085.5
611	GO:0019221	cytokine-mediated signaling pathway	CDC37	3079.33
612	GO:0019221	cytokine-mediated signaling pathway	CIB1	3054.62
613	GO:0019221	cytokine-mediated signaling pathway	STAT1	3015.91
614	GO:0019221	cytokine-mediated signaling pathway	PSME3	2868.67
615	GO:0019221	cytokine-mediated signaling pathway	CRK	2859.91
616	GO:0019221	cytokine-mediated signaling pathway	PSME1	2818.89
617	GO:0019221	cytokine-mediated signaling pathway	ADAR	2715.3
618	GO:0019221	cytokine-mediated signaling pathway	PXDN	2696.09
619	GO:0019221	cytokine-mediated signaling pathway	SUMO1	2641.42
620	GO:0019221	cytokine-mediated signaling pathway	JUNB	2567.95
621	GO:0019221	cytokine-mediated signaling pathway	FOXC1	2551.91
622	GO:0019221	cytokine-mediated signaling pathway	PSMA7	2484.88
623	GO:0019221	cytokine-mediated signaling pathway	PSMB2	2478.9
624	GO:0019221	cytokine-mediated signaling pathway	HLA-E	2465.31

625	GO:0019221	cytokine-mediated signaling pathway	CXCL1	2431.63
626	GO:0019221	cytokine-mediated signaling pathway	PSMD4	2416.71
GO_ID	Go-Term		Gene	FPKM
627	GO:0019221	cytokine-mediated signaling pathway	CPNE1	2415.74
628	GO:0019221	cytokine-mediated signaling pathway	PSMA1	2410.89
629	GO:0019221	cytokine-mediated signaling pathway	SQSTM1	2393.07
630	GO:0019221	cytokine-mediated signaling pathway	TRIM44	2385.29
631	GO:0019221	cytokine-mediated signaling pathway	PSMB5	2276.1
632	GO:0019221	cytokine-mediated signaling pathway	HLA-A	2245.43
633	GO:0019221	cytokine-mediated signaling pathway	PSMB3	2243.5
634	GO:0019221	cytokine-mediated signaling pathway	SDC1	2232.31
635	GO:0019221	cytokine-mediated signaling pathway	PSMC3	2219.42
636	GO:0019221	cytokine-mediated signaling pathway	F2RL1	2185.14
637	GO:0019221	cytokine-mediated signaling pathway	IL32	2140.97
638	GO:0019221	cytokine-mediated signaling pathway	SHC1	2128.33
639	GO:0019221	cytokine-mediated signaling pathway	LSM14A	2073.9
640	GO:0019221	cytokine-mediated signaling pathway	IFITM2	2023.78
641	GO:0019221	cytokine-mediated signaling pathway	PAK2	2000.64
642	GO:0019221	cytokine-mediated signaling pathway	PSMB7	1983.32
643	GO:0019221	cytokine-mediated signaling pathway	NFKBIA	1980.06
644	GO:0019221	cytokine-mediated signaling pathway	SOD1	1931.16
645	GO:0019221	cytokine-mediated signaling pathway	IL6ST	1890.79
646	GO:0019221	cytokine-mediated signaling pathway	PSMD3	1870.23
647	GO:0019221	cytokine-mediated signaling pathway	PSMA4	1851.31
648	GO:0019221	cytokine-mediated signaling pathway	HLA-C	1845.92
649	GO:0019221	cytokine-mediated signaling pathway	PSMC4	1831.67
650	GO:0019221	cytokine-mediated signaling pathway	PSMD7	1799.47
651	GO:0019221	cytokine-mediated signaling pathway	YTHDF2	1763.24
652	GO:0019221	cytokine-mediated signaling pathway	CXCL5	1728.29
653	GO:0019221	cytokine-mediated signaling pathway	STAT6	1713.64
654	GO:0019221	cytokine-mediated signaling pathway	ABCE1	1712.97
655	GO:0019221	cytokine-mediated signaling pathway	CD70	1689.49
656	GO:0019221	cytokine-mediated signaling pathway	EDN2	1680.24
657	GO:0019221	cytokine-mediated signaling pathway	PAFAH1B1	1656.45
658	GO:0019221	cytokine-mediated signaling pathway	CD44	1654.25
659	GO:0019221	cytokine-mediated signaling pathway	BST2	1628.01
660	GO:0019221	cytokine-mediated signaling pathway	PSMB6	1599.49
661	GO:0019221	cytokine-mediated signaling pathway	PADI2	1591.72
662	GO:0019221	cytokine-mediated signaling pathway	TRIM8	1590.25
663	GO:0019221	cytokine-mediated signaling pathway	TAB2	1583.57
664	GO:0019221	cytokine-mediated signaling pathway	PTPN1	1566.1
665	GO:0019221	cytokine-mediated signaling pathway	PSMD8	1551.36
666	GO:0019221	cytokine-mediated signaling pathway	UBE2K	1534.57
667	GO:0019221	cytokine-mediated signaling pathway	INPPL1	1522.11
668	GO:0019221	cytokine-mediated signaling pathway	GRB2	1512.05
669	GO:0019221	cytokine-mediated signaling pathway	VCAM1	1478.45
670	GO:0019221	cytokine-mediated signaling pathway	PSMB1	1470.3

671	GO:0019221	cytokine-mediated signaling pathway	PSMD1	1468.68
672	GO:0019221	cytokine-mediated signaling pathway	RAP1B	1443.15
GO_ID	Go-Term		Gene	FPKM
673	GO:0019221	cytokine-mediated signaling pathway	PSMC5	1416.48
674	GO:0019221	cytokine-mediated signaling pathway	PSMC1	1402.91
675	GO:0019221	cytokine-mediated signaling pathway	UBE2N	1396.39
676	GO:0019221	cytokine-mediated signaling pathway	CUL1	1385.67
677	GO:0019221	cytokine-mediated signaling pathway	ANXA1	1379.81
678	GO:0019221	cytokine-mediated signaling pathway	CBFB	1337.38
679	GO:0019221	cytokine-mediated signaling pathway	PDGFB	1329.84
680	GO:0019221	cytokine-mediated signaling pathway	CSNK2B	1303.55
681	GO:0019221	cytokine-mediated signaling pathway	SCRIB	1301.4
682	GO:0019221	cytokine-mediated signaling pathway	HSPA1A	1291.38
683	GO:0019221	cytokine-mediated signaling pathway	YTHDF3	1268.16
684	GO:0019221	cytokine-mediated signaling pathway	TXLNA	1257.37
685	GO:0019221	cytokine-mediated signaling pathway	CRKL	1252.93
686	GO:0019221	cytokine-mediated signaling pathway	TP53	1238.42
687	GO:0019221	cytokine-mediated signaling pathway	RBCK1	1232.56
688	GO:0019221	cytokine-mediated signaling pathway	SOCS3	1208.53
689	GO:0019221	cytokine-mediated signaling pathway	GAS6	1194.92
690	GO:0019221	cytokine-mediated signaling pathway	TICAM2	1157.92
691	GO:0019221	cytokine-mediated signaling pathway	BIRC2	1152.31
692	GO:0019221	cytokine-mediated signaling pathway	PSMF1	1150.09
693	GO:0019221	cytokine-mediated signaling pathway	PSMC2	1135.47
694	GO:0019221	cytokine-mediated signaling pathway	HMOX1	1131.31
695	GO:0019221	cytokine-mediated signaling pathway	WNK1	1129.12
696	GO:0019221	cytokine-mediated signaling pathway	CNOT7	1110.87
697	GO:0019221	cytokine-mediated signaling pathway	HLA-B	1105.97
698	GO:0019221	cytokine-mediated signaling pathway	HSPA1B	1100.33
699	GO:0019221	cytokine-mediated signaling pathway	MED1	1099.36
700	GO:0019221	cytokine-mediated signaling pathway	AGPAT2	1097.42
701	GO:0019221	cytokine-mediated signaling pathway	STAT3	1094.89
702	GO:0019221	cytokine-mediated signaling pathway	MAVS	1080.28
703	GO:0019221	cytokine-mediated signaling pathway	OTUD4	1047.93
704	GO:0019221	cytokine-mediated signaling pathway	PSMA3	1034.66
705	GO:0019221	cytokine-mediated signaling pathway	OXSR1	1028.15
706	GO:0019221	cytokine-mediated signaling pathway	FADD	997.253
707	GO:0019221	cytokine-mediated signaling pathway	PSMD12	996.821
708	GO:0019221	cytokine-mediated signaling pathway	TNIP2	995.336
709	GO:0019221	cytokine-mediated signaling pathway	RIPK2	983.707
710	GO:0019221	cytokine-mediated signaling pathway	RELA	976.845
711	GO:0019221	cytokine-mediated signaling pathway	CEBDP	973.302
712	GO:0019221	cytokine-mediated signaling pathway	AKT1	967.93
713	GO:0019221	cytokine-mediated signaling pathway	PSMD11	952.277
714	GO:0019221	cytokine-mediated signaling pathway	PSMD5	949.138
715	GO:0019221	cytokine-mediated signaling pathway	ELF1	946.147
716	GO:0019221	cytokine-mediated signaling pathway	PRKACA	944.976

717	GO:0019221	cytokine-mediated signaling pathway	VEGFA	934.492
718	GO:0019221	cytokine-mediated signaling pathway	TRIM38	899.442
GO_ID	Go-Term		Gene	FPKM
719	GO:0019221	cytokine-mediated signaling pathway	CTR9	894.977
720	GO:0019221	cytokine-mediated signaling pathway	ADAM17	890.937
721	GO:0019221	cytokine-mediated signaling pathway	CASP3	889.561
722	GO:0019221	cytokine-mediated signaling pathway	PIM1	883.738
723	GO:0019221	cytokine-mediated signaling pathway	LIF	877.453
724	GO:0019221	cytokine-mediated signaling pathway	LTBR	866.292
725	GO:0019221	cytokine-mediated signaling pathway	PSMD10	854.381
726	GO:0019221	cytokine-mediated signaling pathway	TRIM25	850.391
727	GO:0019221	cytokine-mediated signaling pathway	PSMD13	849.859
728	GO:0019221	cytokine-mediated signaling pathway	PSME2	846.147
729	GO:0019221	cytokine-mediated signaling pathway	APPL1	840.329
730	GO:0019221	cytokine-mediated signaling pathway	FOXO3	837.152
731	GO:0019221	cytokine-mediated signaling pathway	NR1H2	814.482
732	GO:0019221	cytokine-mediated signaling pathway	IFITM1	810.542
733	GO:0019221	cytokine-mediated signaling pathway	IFNGR2	805.687
734	GO:0019221	cytokine-mediated signaling pathway	NMI	800.873
735	GO:0019221	cytokine-mediated signaling pathway	PSMA2	764.52
736	GO:0019221	cytokine-mediated signaling pathway	PSMB8	761.902
737	GO:0019221	cytokine-mediated signaling pathway	NFKB1	746.412
738	GO:0019221	cytokine-mediated signaling pathway	RIPK1	733.649
739	GO:0019221	cytokine-mediated signaling pathway	WNT5A	729.665
740	GO:0019221	cytokine-mediated signaling pathway	TRIM26	724.312
741	GO:0019221	cytokine-mediated signaling pathway	SH2B3	704.525
742	GO:0019221	cytokine-mediated signaling pathway	PSMA6	703.851
743	GO:0019221	cytokine-mediated signaling pathway	JAGN1	694.385
744	GO:0019221	cytokine-mediated signaling pathway	IFNGR1	685.053
745	GO:0019221	cytokine-mediated signaling pathway	KRAS	682.361
746	GO:0019221	cytokine-mediated signaling pathway	BCL2	671.034
747	GO:0019221	cytokine-mediated signaling pathway	PSMD6	659.696
748	GO:0019221	cytokine-mediated signaling pathway	STK39	655.122
749	GO:0019221	cytokine-mediated signaling pathway	FBXW11	632.096
750	GO:0019221	cytokine-mediated signaling pathway	TRIM32	630.908
751	GO:0019221	cytokine-mediated signaling pathway	CBL	629.807
752	GO:0019221	cytokine-mediated signaling pathway	IFNAR1	619.331
753	GO:0019221	cytokine-mediated signaling pathway	PIAS3	613.51
754	GO:0019221	cytokine-mediated signaling pathway	PIK3CD	612.918
755	GO:0019221	cytokine-mediated signaling pathway	PSMD14	612.836
756	GO:0019221	cytokine-mediated signaling pathway	APPL2	607.637
757	GO:0019221	cytokine-mediated signaling pathway	MUL1	604.102
758	GO:0019221	cytokine-mediated signaling pathway	IL1R1	593.898
759	GO:0019221	cytokine-mediated signaling pathway	PIK3CB	589.031
760	GO:0019221	cytokine-mediated signaling pathway	PARP14	572.596
761	GO:0019221	cytokine-mediated signaling pathway	CXCR5	570.252
762	GO:0019221	cytokine-mediated signaling pathway	PSME4	568.242

763	GO:0019221	cytokine-mediated signaling pathway	CD40	561.503
764	GO:0019221	cytokine-mediated signaling pathway	TYK2	560.43
GO_ID	Go-Term		Gene	FPKM
765	GO:0019221	cytokine-mediated signaling pathway	MMP9	557.041
766	GO:0019221	cytokine-mediated signaling pathway	HIPK1	556.11
767	GO:0019221	cytokine-mediated signaling pathway	BAD	554.076
768	GO:0019221	cytokine-mediated signaling pathway	METTL3	543.982
769	GO:0019221	cytokine-mediated signaling pathway	RAPGEF1	539.412
770	GO:0019221	cytokine-mediated signaling pathway	PRKCD	535.046
771	GO:0019221	cytokine-mediated signaling pathway	EDN1	532.998
772	GO:0019221	cytokine-mediated signaling pathway	SOS1	531.38
773	GO:0019221	cytokine-mediated signaling pathway	SPPL2A	527.961
774	GO:0019221	cytokine-mediated signaling pathway	RNF31	526.179
775	GO:0019221	cytokine-mediated signaling pathway	SOCS5	525.443
776	GO:0019221	cytokine-mediated signaling pathway	IP6K2	523.326
777	GO:0019221	cytokine-mediated signaling pathway	CXCL6	515.882
778	GO:0019221	cytokine-mediated signaling pathway	SKP1	511.587
779	GO:0019221	cytokine-mediated signaling pathway	CLCF1	509.873
780	GO:0019221	cytokine-mediated signaling pathway	MAP3K7	505.46
781	GO:0019221	cytokine-mediated signaling pathway	TRIM21	501.785
782	GO:0019221	cytokine-mediated signaling pathway	RBM15	497.925
783	GO:0019221	cytokine-mediated signaling pathway	IRF3	488.896
784	GO:0019221	cytokine-mediated signaling pathway	STAT2	477.906
785	GO:0019221	cytokine-mediated signaling pathway	SAMHD1	477.356
786	GO:0019221	cytokine-mediated signaling pathway	PSMB10	467.308
787	GO:0019221	cytokine-mediated signaling pathway	TRAF3	462.702
788	GO:0019221	cytokine-mediated signaling pathway	IRF2	460.121
789	GO:0019221	cytokine-mediated signaling pathway	PSMA5	459.407
790	GO:0019221	cytokine-mediated signaling pathway	PML	448.245
791	GO:0019221	cytokine-mediated signaling pathway	RABGEF1	440.501
792	GO:0019221	cytokine-mediated signaling pathway	MAPK3	439.779
793	GO:0019221	cytokine-mediated signaling pathway	TNFSF13	434.909
794	GO:0019221	cytokine-mediated signaling pathway	TRIM22	429.164
795	GO:0019221	cytokine-mediated signaling pathway	FER	425.734
796	GO:0019221	cytokine-mediated signaling pathway	TRAF2	422.505
797	GO:0019221	cytokine-mediated signaling pathway	PSMC6	421.196
798	GO:0019221	cytokine-mediated signaling pathway	MYD88	419.92
799	GO:0019221	cytokine-mediated signaling pathway	CSF1	410.475
800	GO:0019221	cytokine-mediated signaling pathway	CXCL2	410.09
801	GO:0019221	cytokine-mediated signaling pathway	CACTIN	404.652
802	GO:0019221	cytokine-mediated signaling pathway	SIRT1	402.375
803	GO:0019221	cytokine-mediated signaling pathway	EGR1	399.595
804	GO:0019221	cytokine-mediated signaling pathway	PIAS1	397.455
805	GO:0019221	cytokine-mediated signaling pathway	TOLLIP	392.274
806	GO:0019221	cytokine-mediated signaling pathway	ISG15	385.999
807	GO:0019221	cytokine-mediated signaling pathway	STX4	385.228
808	GO:0019221	cytokine-mediated signaling pathway	BIRC3	374.928

809	GO:0019221	cytokine-mediated signaling pathway	TNFSF9	371.234
810	GO:0019221	cytokine-mediated signaling pathway	IL10RB	369.992
GO_ID	Go-Term		Gene	FPKM
811	GO:0019221	cytokine-mediated signaling pathway	TBK1	358.711
812	GO:0019221	cytokine-mediated signaling pathway	TAB1	347.24
813	GO:0019221	cytokine-mediated signaling pathway	IFI6	344.629
814	GO:0019221	cytokine-mediated signaling pathway	TRIM5	344.413
815	GO:0019221	cytokine-mediated signaling pathway	ZEB1	342.685
816	GO:0019221	cytokine-mediated signaling pathway	IL18BP	340.41
817	GO:0019221	cytokine-mediated signaling pathway	IFI35	338.158
818	GO:0019221	cytokine-mediated signaling pathway	TNFSF12	338.094
819	GO:0019221	cytokine-mediated signaling pathway	IFNAR2	337.4
820	GO:0019221	cytokine-mediated signaling pathway	SPHK1	335.384
821	GO:0019221	cytokine-mediated signaling pathway	IRS2	327.894
822	GO:0019221	cytokine-mediated signaling pathway	ICAM1	326.86
823	GO:0019221	cytokine-mediated signaling pathway	IFIT3	320.831
824	GO:0019221	cytokine-mediated signaling pathway	IL4R	318.51
825	GO:0019221	cytokine-mediated signaling pathway	IRF9	313.043
826	GO:0019221	cytokine-mediated signaling pathway	TNFAIP3	297.681
827	GO:0019221	cytokine-mediated signaling pathway	PYCARD	296.272
828	GO:0019221	cytokine-mediated signaling pathway	IRF1	292.439
829	GO:0019221	cytokine-mediated signaling pathway	TAB3	289.695
830	GO:0019221	cytokine-mediated signaling pathway	BCL6	286.076
831	GO:0019221	cytokine-mediated signaling pathway	PELI1	285.629
832	GO:0019221	cytokine-mediated signaling pathway	PARP9	281.113
833	GO:0019221	cytokine-mediated signaling pathway	STAT5B	272.297
834	GO:0019221	cytokine-mediated signaling pathway	CAMK2D	258.344
835	GO:0019221	cytokine-mediated signaling pathway	IRF7	257.477
836	GO:0019221	cytokine-mediated signaling pathway	CAMK2G	255.112
837	GO:0019221	cytokine-mediated signaling pathway	MID1	253.188
838	GO:0019221	cytokine-mediated signaling pathway	IL27RA	252.764
839	GO:0019221	cytokine-mediated signaling pathway	IRF6	249.822
840	GO:0019221	cytokine-mediated signaling pathway	LTB	246.609
841	GO:0019221	cytokine-mediated signaling pathway	SP100	243.842
842	GO:0019221	cytokine-mediated signaling pathway	CD27	241.624
843	GO:0019221	cytokine-mediated signaling pathway	LEPR	235.826
844	GO:0019221	cytokine-mediated signaling pathway	PPARG	230.392
845	GO:0019221	cytokine-mediated signaling pathway	BTRC	228.576
846	GO:0019221	cytokine-mediated signaling pathway	GBP1	224.647
847	GO:0019221	cytokine-mediated signaling pathway	CASP8	223.802
848	GO:0019221	cytokine-mediated signaling pathway	TNF	223.039
849	GO:0019221	cytokine-mediated signaling pathway	PTPN2	217.413
850	GO:0019221	cytokine-mediated signaling pathway	PIK3CA	213.185
851	GO:0019221	cytokine-mediated signaling pathway	TRIM6	212.194
852	GO:0019221	cytokine-mediated signaling pathway	IKBKG	211.796
853	GO:0019221	cytokine-mediated signaling pathway	OAS3	211.615
854	GO:0019221	cytokine-mediated signaling pathway	PIK3R1	206.532

855	GO:0019221	cytokine-mediated signaling pathway	IL17RC	205.323
856	GO:0019221	cytokine-mediated signaling pathway	MUC1	201.018
GO_ID	Go-Term		Gene	FPKM
857	GO:0019221	cytokine-mediated signaling pathway	TRAF6	196.228
858	GO:0019221	cytokine-mediated signaling pathway	CHUK	193.971
859	GO:0019221	cytokine-mediated signaling pathway	SYK	189.817
860	GO:0019221	cytokine-mediated signaling pathway	IKBKB	188.028
861	GO:0019221	cytokine-mediated signaling pathway	SAA1	185.561
862	GO:0019221	cytokine-mediated signaling pathway	CSF2	181.295
863	GO:0019221	cytokine-mediated signaling pathway	MMP1	170.537
864	GO:0019221	cytokine-mediated signaling pathway	CYLD	169.371
865	GO:0019221	cytokine-mediated signaling pathway	NR1H3	163.316
866	GO:0019221	cytokine-mediated signaling pathway	IFIT1	162.901
867	GO:0019221	cytokine-mediated signaling pathway	TRIM68	162.442
868	GO:0019221	cytokine-mediated signaling pathway	TREX1	161.532
869	GO:0019221	cytokine-mediated signaling pathway	CCR10	160.798
870	GO:0019221	cytokine-mediated signaling pathway	IRAK4	158.876
871	GO:0019221	cytokine-mediated signaling pathway	PTPN6	158.703
872	GO:0019221	cytokine-mediated signaling pathway	PSMD9	155.786
873	GO:0019221	cytokine-mediated signaling pathway	PSMB9	154.03
874	GO:0019221	cytokine-mediated signaling pathway	FYN	153.875
875	GO:0019221	cytokine-mediated signaling pathway	IL17RA	150.308
876	GO:0019221	cytokine-mediated signaling pathway	TRIM62	147.95
877	GO:0019221	cytokine-mediated signaling pathway	IL20RB	147.331
878	GO:0019221	cytokine-mediated signaling pathway	IRAK2	142.647
879	GO:0019221	cytokine-mediated signaling pathway	IL7	140.894
880	GO:0019221	cytokine-mediated signaling pathway	IKBKE	140.575
881	GO:0019221	cytokine-mediated signaling pathway	S1PR1	129.428
882	GO:0019221	cytokine-mediated signaling pathway	IL6R	126.072
883	GO:0019221	cytokine-mediated signaling pathway	TRIM34	124.892
884	GO:0019221	cytokine-mediated signaling pathway	JAK2	124.768
885	GO:0019221	cytokine-mediated signaling pathway	CCL2	116.527
886	GO:0019221	cytokine-mediated signaling pathway	RUNX1	115.758
887	GO:0019221	cytokine-mediated signaling pathway	IFI30	104.897
888	GO:0019221	cytokine-mediated signaling pathway	LCP1	101.603
889	GO:0019221	cytokine-mediated signaling pathway	CASP4	100.427
890	GO:0019221	cytokine-mediated signaling pathway	RNASEL	93.432
891	GO:0019221	cytokine-mediated signaling pathway	GAB2	92.246
892	GO:0019221	cytokine-mediated signaling pathway	COL1A2	89.536
893	GO:0019221	cytokine-mediated signaling pathway	LRP8	87.589
894	GO:0019221	cytokine-mediated signaling pathway	NR1H4	86.157
895	GO:0019221	cytokine-mediated signaling pathway	CXCL3	85.296
896	GO:0019221	cytokine-mediated signaling pathway	IRF5	80.035
897	GO:0019221	cytokine-mediated signaling pathway	IL11	79.72
898	GO:0019221	cytokine-mediated signaling pathway	TNFRSF11A	79.004
899	GO:0019221	cytokine-mediated signaling pathway	ZNF675	76.713
900	GO:0019221	cytokine-mediated signaling pathway	MX1	66.49

901	GO:0019221	cytokine-mediated signaling pathway	ECM1	64.781
902	GO:0019221	cytokine-mediated signaling pathway	HLA-DPB1	62.826
GO_ID	Go-Term		Gene	FPKM
903	GO:0019221	cytokine-mediated signaling pathway	IFIT2	61.029
904	GO:0019221	cytokine-mediated signaling pathway	TNFRSF14	59.347
905	GO:0019221	cytokine-mediated signaling pathway	IFNLR1	57.67
906	GO:0019221	cytokine-mediated signaling pathway	ACKR4	56.207
907	GO:0019221	cytokine-mediated signaling pathway	HLA-F	55.55
908	GO:0019221	cytokine-mediated signaling pathway	PF4V1	54.389
909	GO:0019221	cytokine-mediated signaling pathway	SOCS1	54.078
910	GO:0019221	cytokine-mediated signaling pathway	RPS6KA5	53.467
911	GO:0019221	cytokine-mediated signaling pathway	SH2B2	52.905
912	GO:0019221	cytokine-mediated signaling pathway	IL18R1	51.29
913	GO:0019221	cytokine-mediated signaling pathway	MAP3K8	47.305
914	GO:0019221	cytokine-mediated signaling pathway	TEC	46.966
915	GO:0019221	cytokine-mediated signaling pathway	IL15	46.957
916	GO:0019221	cytokine-mediated signaling pathway	CD74	43.098
917	GO:0019221	cytokine-mediated signaling pathway	NOD1	42.323
918	GO:0019221	cytokine-mediated signaling pathway	IL1RAP	41.421
919	GO:0019221	cytokine-mediated signaling pathway	CX3CL1	39.544
920	GO:0019221	cytokine-mediated signaling pathway	HLA-DPA1	39.514
921	GO:0019221	cytokine-mediated signaling pathway	IL23A	36.364
922	GO:0019221	cytokine-mediated signaling pathway	FLT3LG	35.872
923	GO:0019221	cytokine-mediated signaling pathway	CIITA	32.63
924	GO:0019221	cytokine-mediated signaling pathway	PTK2B	31.633
925	GO:0019221	cytokine-mediated signaling pathway	GBP2	28.65
926	GO:0019221	cytokine-mediated signaling pathway	TSLP	27.626
927	GO:0019221	cytokine-mediated signaling pathway	ACKR3	27.242
928	GO:0019221	cytokine-mediated signaling pathway	FOS	26.304
929	GO:0019221	cytokine-mediated signaling pathway	TNFRSF13C	25.55
930	GO:0019221	cytokine-mediated signaling pathway	EREG	24.83
931	GO:0019221	cytokine-mediated signaling pathway	CCL20	24.811
932	GO:0019221	cytokine-mediated signaling pathway	NLRC5	23.304
933	GO:0019221	cytokine-mediated signaling pathway	IL1RL2	23.265
934	GO:0019221	cytokine-mediated signaling pathway	IL31RA	22.584
935	GO:0019221	cytokine-mediated signaling pathway	IFNE	22.502
936	GO:0019221	cytokine-mediated signaling pathway	CASP1	21.612
937	GO:0019221	cytokine-mediated signaling pathway	PLCB1	18.163
938	GO:0019221	cytokine-mediated signaling pathway	JAK3	18.058
939	GO:0019221	cytokine-mediated signaling pathway	MST1R	18.043
940	GO:0019221	cytokine-mediated signaling pathway	USP18	17.78
941	GO:0019221	cytokine-mediated signaling pathway	IL7R	17.178
942	GO:0019221	cytokine-mediated signaling pathway	PLVAP	16.423
943	GO:0019221	cytokine-mediated signaling pathway	TNFSF15	16.195
944	GO:0019221	cytokine-mediated signaling pathway	EBI3	14.741
945	GO:0019221	cytokine-mediated signaling pathway	FCER1G	14.726
946	GO:0019221	cytokine-mediated signaling pathway	CXCL12	13.35

947	GO:0019221	cytokine-mediated signaling pathway	SLIT2	13.171
948	GO:0019221	cytokine-mediated signaling pathway	XAF1	12.773
GO_ID	Go-Term		Gene	FPKM
949	GO:0019221	cytokine-mediated signaling pathway	IRAK3	12.771
950	GO:0019221	cytokine-mediated signaling pathway	CLDN18	12.205
951	GO:0019221	cytokine-mediated signaling pathway	RORA	11.668
952	GO:0019221	cytokine-mediated signaling pathway	CEBPA	10.791
953	GO:0019221	cytokine-mediated signaling pathway	IL1R2	10.779
954	GO:0019221	cytokine-mediated signaling pathway	DCST1	10.374
955	GO:0019221	cytokine-mediated signaling pathway	LCN2	9.201
956	GO:0019221	cytokine-mediated signaling pathway	ACKR2	8.652
957	GO:0019221	cytokine-mediated signaling pathway	EDA	7.392
958	GO:0019221	cytokine-mediated signaling pathway	OAS1	7.261
959	GO:0019221	cytokine-mediated signaling pathway	IL12A	6.959
960	GO:0019221	cytokine-mediated signaling pathway	ITGB2	6.265
961	GO:0019221	cytokine-mediated signaling pathway	CD4	6.195
962	GO:0019221	cytokine-mediated signaling pathway	ISG20	5.784
963	GO:0019221	cytokine-mediated signaling pathway	CEACAM1	5.14
964	GO:0019221	cytokine-mediated signaling pathway	INPP5D	4.733
965	GO:0019221	cytokine-mediated signaling pathway	SPI1	4.574
966	GO:0019221	cytokine-mediated signaling pathway	IL1A	4.456
967	GO:0019221	cytokine-mediated signaling pathway	CXCR4	4.255
968	GO:0019221	cytokine-mediated signaling pathway	TNFRSF17	4.232
969	GO:0019221	cytokine-mediated signaling pathway	OASL	4.051
970	GO:0019221	cytokine-mediated signaling pathway	CSF1R	3.674
971	GO:0019221	cytokine-mediated signaling pathway	TNFSF4	3.601
972	GO:0019221	cytokine-mediated signaling pathway	IL18	3.601
973	GO:0019221	cytokine-mediated signaling pathway	TNFRSF18	3.454
974	GO:0019221	cytokine-mediated signaling pathway	VAV1	3.325
975	GO:0019221	cytokine-mediated signaling pathway	APOA1	3.323
976	GO:0019221	cytokine-mediated signaling pathway	CCL5	3.13
977	GO:0019221	cytokine-mediated signaling pathway	TNFSF13B	3.094
978	GO:0019221	cytokine-mediated signaling pathway	PTAFR	3.016
979	GO:0019221	cytokine-mediated signaling pathway	CD80	2.956
980	GO:0019221	cytokine-mediated signaling pathway	IL13RA2	2.91
981	GO:0019221	cytokine-mediated signaling pathway	STAP1	2.859
982	GO:0019221	cytokine-mediated signaling pathway	TXK	2.726
983	GO:0019221	cytokine-mediated signaling pathway	LTA	2.724
984	GO:0019221	cytokine-mediated signaling pathway	HLA-G	2.684
985	GO:0019221	cytokine-mediated signaling pathway	IL16	2.611
986	GO:0019221	cytokine-mediated signaling pathway	ARG1	2.408
987	GO:0019221	cytokine-mediated signaling pathway	IFI27	2.277
988	GO:0019221	cytokine-mediated signaling pathway	MPL	2.224
989	GO:0033209	tumor necrosis factor-mediated signaling pathway	GSTP1	11349
990	GO:0033209	tumor necrosis factor-mediated signaling pathway	GPS2	6490.35
991	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMD2	4948.75
992	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMB4	3714.41

993	GO:0033209	tumor necrosis factor-mediated signaling pathway	STAT1	3015.91
994	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSME3	2868.67
995	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSME1	2818.89
996	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMA7	2484.88
997	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMB2	2478.9
998	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMD4	2416.71
999	GO:0033209	tumor necrosis factor-mediated signaling pathway	CPNE1	2415.74
1000	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMA1	2410.89
1001	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMB5	2276.1
1002	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMB3	2243.5
1003	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMC3	2219.42
1004	GO:0033209	tumor necrosis factor-mediated signaling pathway	F2RL1	2185.14
1005	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMB7	1983.32
1006	GO:0033209	tumor necrosis factor-mediated signaling pathway	NFKBIA	1980.06
1007	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMD3	1870.23
1008	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMA4	1851.31
1009	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMC4	1831.67
1010	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMD7	1799.47
1011	GO:0033209	tumor necrosis factor-mediated signaling pathway	CD70	1689.49
1012	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMB6	1599.49
1013	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMD8	1551.36
1014	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMB1	1470.3
1015	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMD1	1468.68
1016	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMC5	1416.48
1017	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMC1	1402.91
1018	GO:0033209	tumor necrosis factor-mediated signaling pathway	HSPA1A	1291.38
1019	GO:0033209	tumor necrosis factor-mediated signaling pathway	RBC1	1232.56
1020	GO:0033209	tumor necrosis factor-mediated signaling pathway	GAS6	1194.92
1021	GO:0033209	tumor necrosis factor-mediated signaling pathway	BIRC2	1152.31
1022	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMF1	1150.09
1023	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMC2	1135.47
1024	GO:0033209	tumor necrosis factor-mediated signaling pathway	HSPA1B	1100.33
1025	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMA3	1034.66
1026	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMD12	996.821
1027	GO:0033209	tumor necrosis factor-mediated signaling pathway	RELA	976.845
1028	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMD11	952.277
1029	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMD5	949.138
1030	GO:0033209	tumor necrosis factor-mediated signaling pathway	ADAM17	890.937
1031	GO:0033209	tumor necrosis factor-mediated signaling pathway	LTBR	866.292
1032	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMD10	854.381
1033	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMD13	849.859
1034	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSME2	846.147
1035	GO:0033209	tumor necrosis factor-mediated signaling pathway	FOXO3	837.152
1036	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMA2	764.52
1037	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMB8	761.902
1038	GO:0033209	tumor necrosis factor-mediated signaling pathway	RIPK1	733.649

1039	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMA6	703.851
1040	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMD6	659.696
GO_ID	Go-Term		Gene	FPKM
1041	GO:0033209	tumor necrosis factor-mediated signaling pathway	TRIM32	630.908
1042	GO:0033209	tumor necrosis factor-mediated signaling pathway	PIAS3	613.51
1043	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMD14	612.836
1044	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSME4	568.242
1045	GO:0033209	tumor necrosis factor-mediated signaling pathway	CD40	561.503
1046	GO:0033209	tumor necrosis factor-mediated signaling pathway	HIPK1	556.11
1047	GO:0033209	tumor necrosis factor-mediated signaling pathway	SPPL2A	527.961
1048	GO:0033209	tumor necrosis factor-mediated signaling pathway	RNF31	526.179
1049	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMB10	467.308
1050	GO:0033209	tumor necrosis factor-mediated signaling pathway	TRAF3	462.702
1051	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMA5	459.407
1052	GO:0033209	tumor necrosis factor-mediated signaling pathway	TNFSF13	434.909
1053	GO:0033209	tumor necrosis factor-mediated signaling pathway	TRAF2	422.505
1054	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMC6	421.196
1055	GO:0033209	tumor necrosis factor-mediated signaling pathway	BIRC3	374.928
1056	GO:0033209	tumor necrosis factor-mediated signaling pathway	TNFSF9	371.234
1057	GO:0033209	tumor necrosis factor-mediated signaling pathway	TNFSF12	338.094
1058	GO:0033209	tumor necrosis factor-mediated signaling pathway	SPHK1	335.384
1059	GO:0033209	tumor necrosis factor-mediated signaling pathway	TNFAIP3	297.681
1060	GO:0033209	tumor necrosis factor-mediated signaling pathway	PYCARD	296.272
1061	GO:0033209	tumor necrosis factor-mediated signaling pathway	LTB	246.609
1062	GO:0033209	tumor necrosis factor-mediated signaling pathway	CD27	241.624
1063	GO:0033209	tumor necrosis factor-mediated signaling pathway	CASP8	223.802
1064	GO:0033209	tumor necrosis factor-mediated signaling pathway	TNF	223.039
1065	GO:0033209	tumor necrosis factor-mediated signaling pathway	PTPN2	217.413
1066	GO:0033209	tumor necrosis factor-mediated signaling pathway	IKBKG	211.796
1067	GO:0033209	tumor necrosis factor-mediated signaling pathway	CHUK	193.971
1068	GO:0033209	tumor necrosis factor-mediated signaling pathway	SYK	189.817
1069	GO:0033209	tumor necrosis factor-mediated signaling pathway	IKBKB	188.028
1070	GO:0033209	tumor necrosis factor-mediated signaling pathway	CYLD	169.371
1071	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMD9	155.786
1072	GO:0033209	tumor necrosis factor-mediated signaling pathway	PSMB9	154.03
1073	GO:0033209	tumor necrosis factor-mediated signaling pathway	JAK2	124.768
1074	GO:0033209	tumor necrosis factor-mediated signaling pathway	CASP4	100.427
1075	GO:0033209	tumor necrosis factor-mediated signaling pathway	NR1H4	86.157
1076	GO:0033209	tumor necrosis factor-mediated signaling pathway	TNFRSF11A	79.004
1077	GO:0033209	tumor necrosis factor-mediated signaling pathway	ZNF675	76.713
1078	GO:0033209	tumor necrosis factor-mediated signaling pathway	TNFRSF14	59.347
1079	GO:0033209	tumor necrosis factor-mediated signaling pathway	PTK2B	31.633
1080	GO:0033209	tumor necrosis factor-mediated signaling pathway	TNFRSF13C	25.55
1081	GO:0033209	tumor necrosis factor-mediated signaling pathway	CASP1	21.612
1082	GO:0033209	tumor necrosis factor-mediated signaling pathway	PLVAP	16.423
1083	GO:0033209	tumor necrosis factor-mediated signaling pathway	TNFSF15	16.195
1084	GO:0033209	tumor necrosis factor-mediated signaling pathway	CLDN18	12.205

1085	GO:0033209	tumor necrosis factor-mediated signaling pathway	EDA	7.392
1086	GO:0033209	tumor necrosis factor-mediated signaling pathway	TNFRSF17	4.232
GO_ID	Go-Term		Gene	FPKM
1087	GO:0033209	tumor necrosis factor-mediated signaling pathway	TNFSF4	3.601
1088	GO:0033209	tumor necrosis factor-mediated signaling pathway	TNFRSF18	3.454
1089	GO:0033209	tumor necrosis factor-mediated signaling pathway	APOA1	3.323
1090	GO:0033209	tumor necrosis factor-mediated signaling pathway	TNFSF13B	3.094
1091	GO:0033209	tumor necrosis factor-mediated signaling pathway	LTA	2.724

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