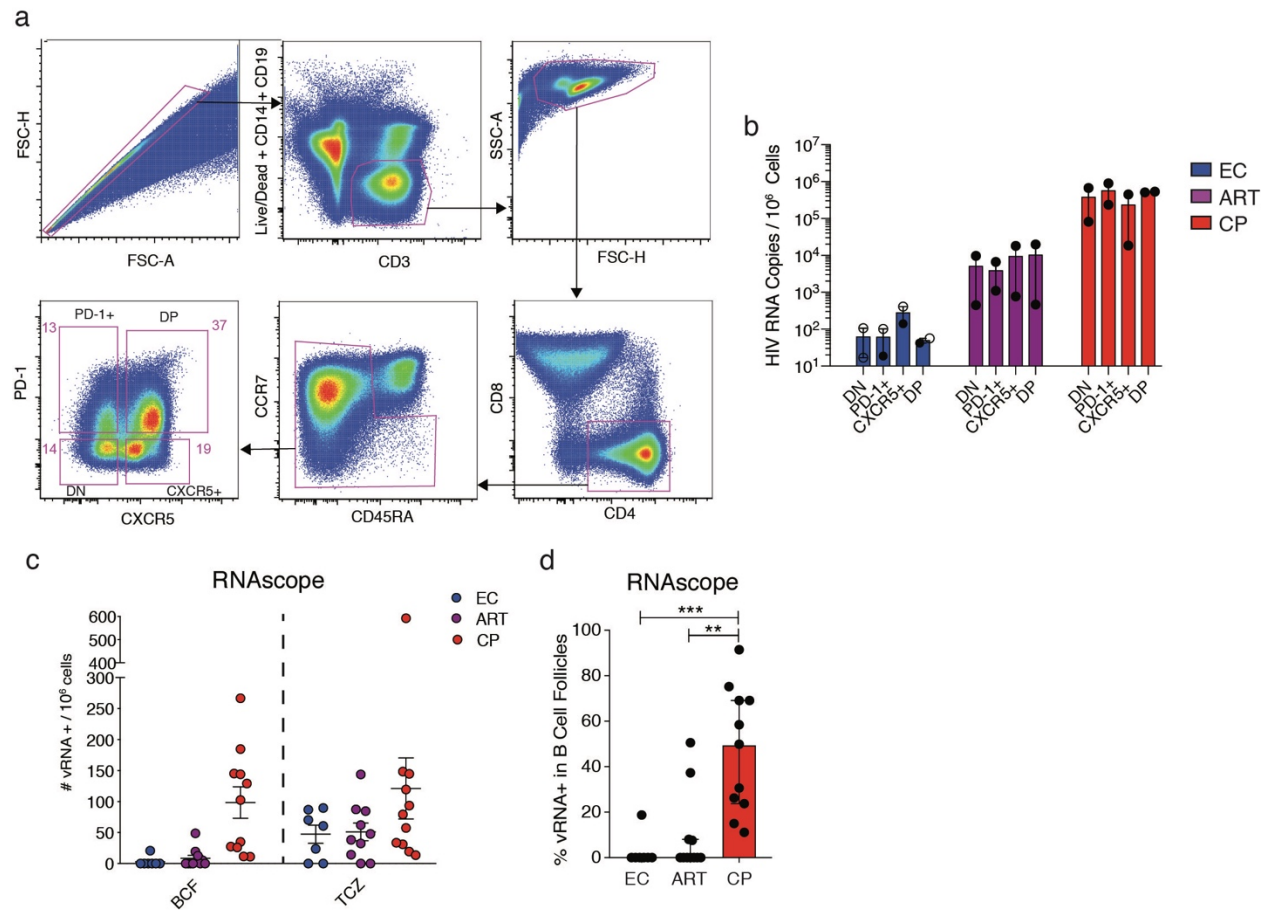# SUPPLEMENTARY MATERIALS

Supplementary Figure 1. HIV RNA is present in B cell follicles and the T cell zone in LNs. **a,** Gating scheme used to sort LN-derived CD4$^+$ T cell subsets for viral quantification. Representative flow plots were generated from the LNs of one EC. **b,** Quantification of HIV RNA in LN-derived CD4$^+$ T cell subsets by qPCR. The limit of detection value was used in the absence of detectable HIV RNA (open circles). **c,** Percent frequency of vRNA$^+$ cells in B cell follicles, as determined by RNAscope. Error bars represent mean and SEM (**b**) or median and interquartile range (**c**). Significance was determined using a two-way ANOVA (**b**) or the Kruskal-Wallis test with Dunn's correction (**c**). ** $p < 0.01$, *** $p < 0.001$.
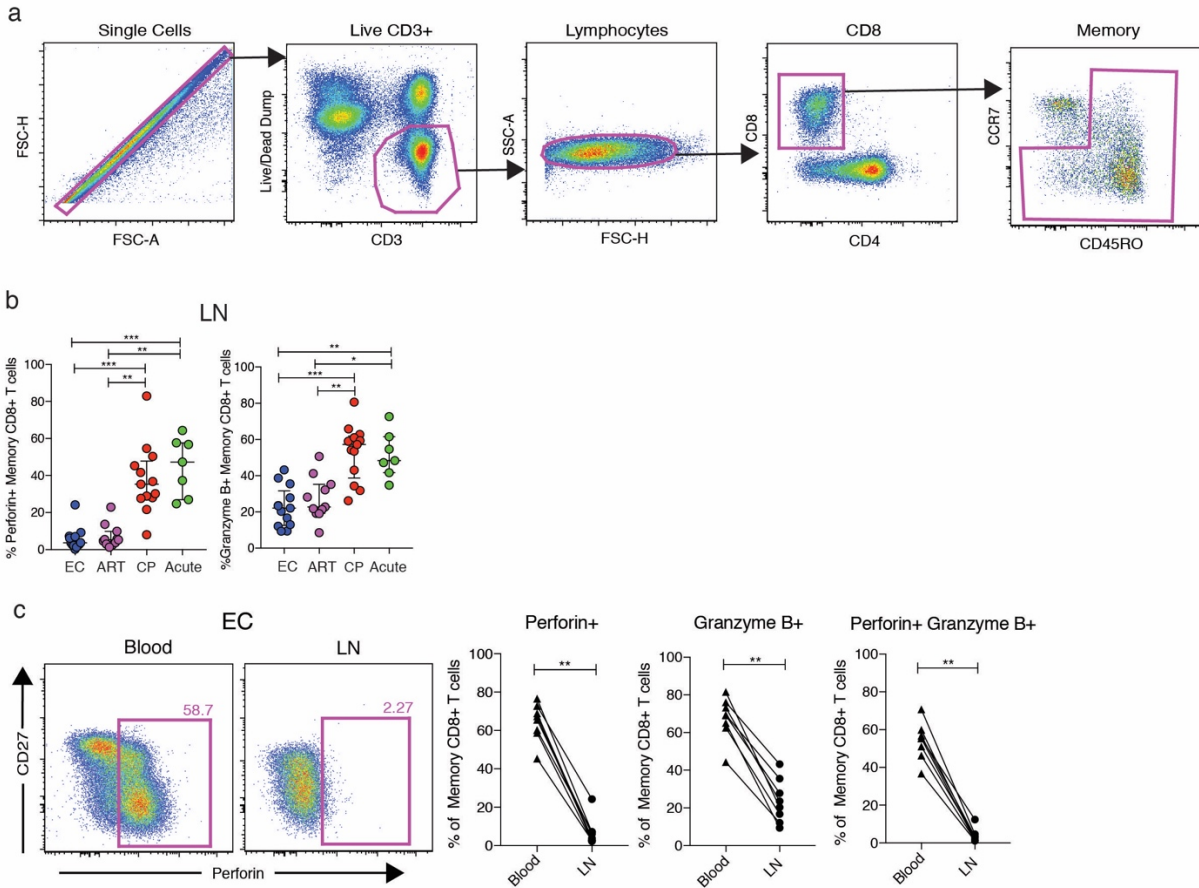
Supplementary Figure 2. CD8^{+} T cells from the LNs of ECs express low levels of perforin and granzyme B. **a**, Gating scheme used in flow cytometry experiments. Representative plots were generated from the LNs of one EC. All flow cytometry data shown in this report were pre-gated on memory CD8^{+} T cells unless specified otherwise. **b**, Quantification of perforin and granzyme B expression in LN-derived CD8^{+} T cells across donor groups. **c**, Representative flow plots showing perforin and granzyme B expression in matched peripheral blood and LN-derived CD8^{+} T cells from one EC (left) and data quantification across donor groups (right). Significance was determined using the Kruskal-Wallis test with Dunn's correction (**b**) or the Wilcoxon matched-pairs signed rank test (**c**). * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.
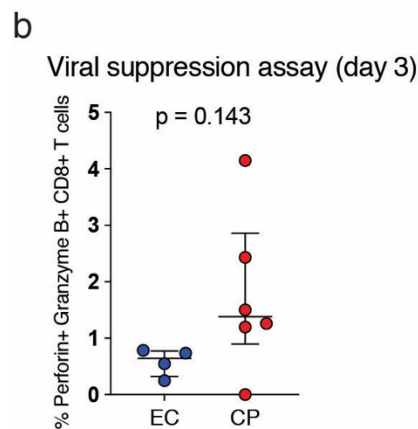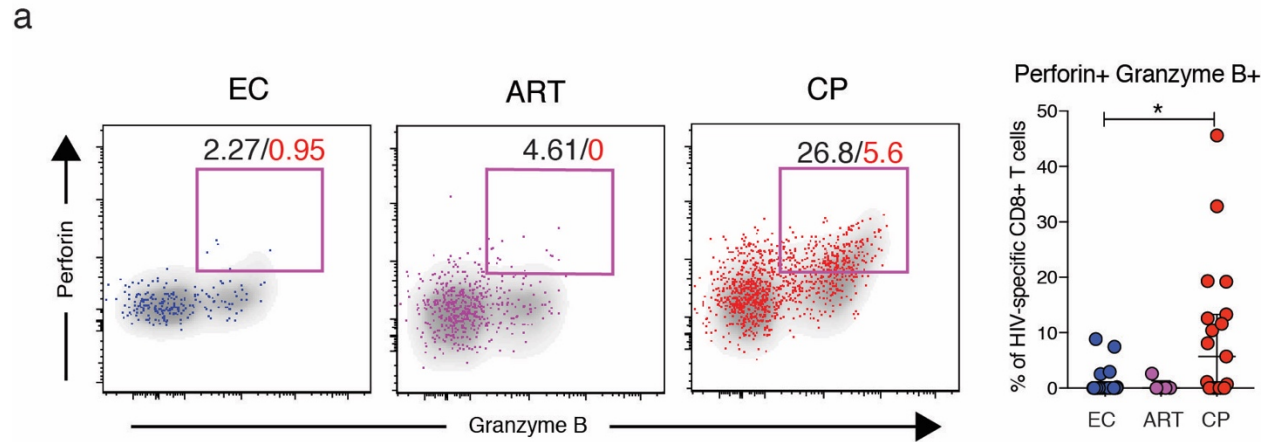
Supplementary Figure 3. CD8$^+$ T cells from the LNs of ECs do not upregulate cytolytic molecules in response to cognate antigen exposure. **a,** LNMCs were stimulated for 6 hours with peptides representing optimal epitopes derived from HIV. Perforin and granzyme B were quantified in HIV-specific CD8$^+$ T cells. Colored dots in the representative flow plots (left) depict HIV-specific CD8$^+$ T cells defined by the expression of at least one of the following markers: CD107a, IFNγ, TNF, MIP-1β, or IL-2. Black and red numbers indicate the frequency of HIV-specific CD8$^+$ T cells before and after background subtraction, respectively. **b,** Frequency of LN-derived perforin$^+$ granzyme B$^+$ CD8$^+$ T cells after 3 days in culture with HIV-infected autologous LN-derived CD4$^+$ T cells, as shown in **Fig. 1c**. Significance was determined using the Kruskal-Wallis test with Dunn's correction (**a**) or an unpaired t-test (**b**). * p < 0.05.

a

4hr redirected killing assay - Target:Effector(6:1)

| Target only | LN CD8 | Tonsil CD8 | Blood CD8 |

Target only:
2.65 | 2.41
94.4 | 0.54

LN CD8:
3.61 (0.96) | 5.89 (3.48)
87.5 | 3.04 (2.5)

Tonsil CD8:
5.06 (2.41) | 14.2 (11.8)
74 | 6.66 (6.12)

Blood CD8:
8.23 (5.58) | 39.6 (37.2)
46.5 | 5.66 (5.12)

L/D Aqua (y-axis) — Active Caspase-3 (x-axis)

b

Breakdown of total killed targets - 4hr redirected killing assay

LN
- 9.41% Casp-Aqua+
- 34.88% Casp+Aqua+
- 55.71% Casp+Aqua-
n = 2

Tonsil
- 15.28% Casp-Aqua+
- 44.17% Casp+Aqua+
- 40.55% Casp+Aqua-
n = 4

Blood
- 0.41% Casp-Aqua+
- 61.72% Casp+Aqua+
- 37.87% Casp+Aqua-
n = 4

c

Target:Effector (6:1)

% Target Killed (y-axis: 0 to 100)

- ● LN
- ■ Tonsil
- ▲ Blood

n.s. above 4hr/24hr LN, Tonsil, Blood groups

x-axis: 4hr 24hr (LN), 4hr 24hr (Tonsil), 4hr 24hr (Blood)

Supplementary Figure 4. Active-caspase 3 detection captures the majority of killed targets. CD8^{+} T cells isolated from LNs, tonsils, and blood of HIV^{-} individuals and were incubated with anti-CD3-coated P815 cells at a ratio of effector:target(6:1) for 4 and 24 hours. **a,** Representative flow plots showing the detection of killed target cells by both live/dead Aqua (L/D Aqua) and active-caspase 3. Numbers represent frequencies of cells within a specific gate before (blue) or after (red) background subtraction. **b**, Breakdown of the total killing after 4 hours. Casp: active-caspase 3, Aqua: live/dead Aqua dye. Each pie chart represents 100% of total killing after background

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subtraction. **c,** Summary plot of redirected killing assays at 4hr and 24hr. %Target killed is the sum of Casp$^-$Aqua$^+$, Casp$^+$Aqua$^+$, and Casp$^+$Aqua$^-$ after background subtraction. Error bars show means and SEMs. Significance was determined using two-way ANOVA (**b**). n.s. not statistically significant.

a
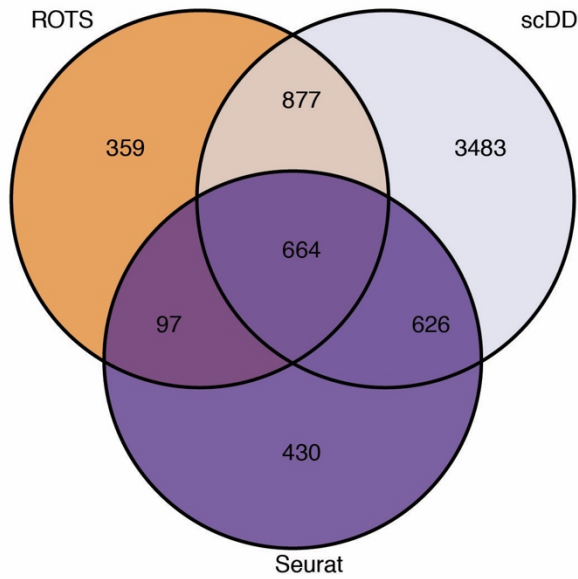
b

Top 25 GO terms enriched in the list of differentially expressed genes
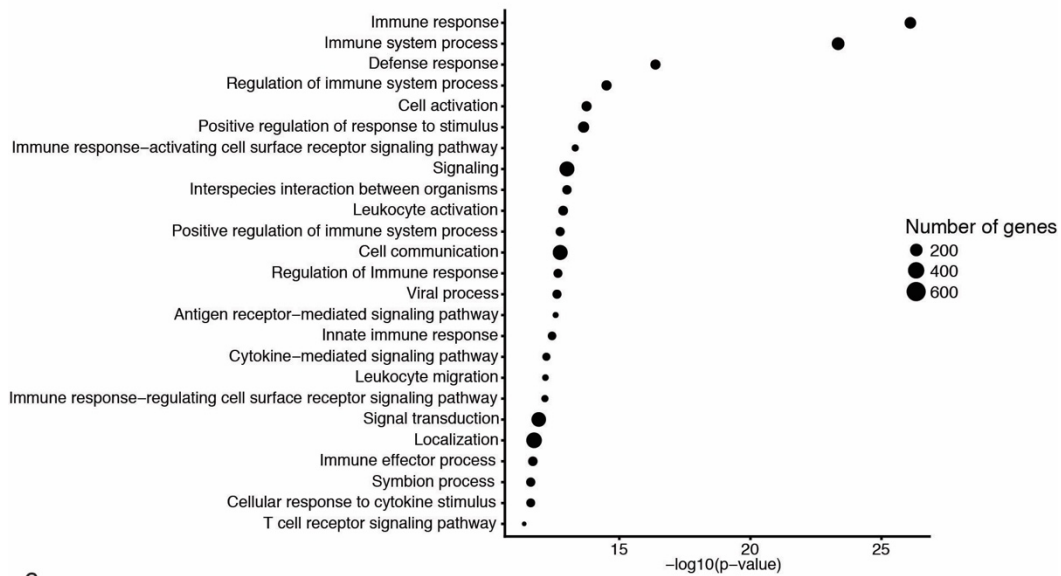
c

Secreted molecules that are upregulated in elite controllers via IPA analysis

Symbol	Gene Name	Expr p-value	Type(s)
IL32	interleukin 32	7.02E-09	cytokine
CCL5	C-C motif chemokine ligand 5	2.04E-04	cytokine
DDHD1	DDHD domain containing 1	2.94E-03	enzyme
IL1B	interleukin 1 beta	1.87E-04	cytokine
CXCL3	C-X-C motif chemokine ligand 3	1.17E-03	cytokine
CXCL2	C-X-C motif chemokine ligand 2	2.54E-03	cytokine
CCL2	C-C motif chemokine ligand 2	2.68E-03	cytokine
RNASE1	ribonuclease A family member 1, pancreatic	9.19E-03	enzyme
LTB	lymphotoxin beta	5.40E-05	cytokine
TNF	tumor necrosis factor	1.18E-09	cytokine
ADAMTS4	ADAM metallopeptidase with thrombospondin type 1 motif 4	1.32E-02	peptidase

Supplementary Figure 5. Differential expression analysis of the scRNAseq data. **a**, Venn diagram showing the overlap of differentially expressed genes detected by each of the three algorithms. A total of 2,264 genes achieved significance (p < 0.05) in at least two of the three algorithms. These genes are listed in **Supplementary Table 2**. **b**, The top 25 GO terms enriched among the 2,264 differentially expressed genes. **c**, List of secreted molecules that were upregulated in ECs, as determined by IPA. Expression p-values were derived from the scDD algorithm. Expr Log Ratio represents log fold-change values obtained from the ROTS algorithm; positive values indicate higher expression levels in ECs relative to CPs.

Supplementary Table 1. Clinical characteristics of donors included in this study. Values represent median and interquartile range.

	EC	ART	CP	Acute
Number	12	14	18	7
Site	San Francisco (USA)	San Francisco (USA), Philadelphia (USA), Mexico City (Mexico)	Mexico City (Mexico)	Mexico City (Mexico)
Age	52 (47-59)	40 (32-58)	31 (24-37)	23 (20-27)
Gender	10 Males / 1 Female / 1 Male to Female	8 Males / 1 Female / 5 No Info	10 Males / 1 Female / 7 No Info	7 Males / 0 Female
Viral Load (copies/mL)	<40	<40	51,396 (12,845-213,173)	1,996,027 (1,297,461-4,421,034)
CD4 Count	881 (660-1172)	544 (359-601)	348 (175-521)	306 (238-370)

Supplementary Table 2. Complete list of 2,264 genes that were differentially expressed between HIV-specific CD8^{+} T cells from the LNs of ECs and HIV-specific CD8^{+} T cells from the LNs of CPs. Expression p-values were derived from all three algorithms. Log fold-change values were obtained from the ROTS algorithm; positive values indicate higher expression levels in ECs relative to CPs.

	Gene	ROTS_p_value	scDD_p_value	Seurat_p_value	ROTS_logFC_ECvsCP
1	FGR	0.000251057	1.28E-10	2.11E-13	-0.603750882
2	ANKIB1	0.046888612	0.04714008	0.016589303	-0.34821919
3	BAD	0.007892305	0.004137142	0.004390725	-0.447335927
4	LASP1	0.000327	0.000284261	6.98E-05	-0.593199005
5	CFLAR	0.035104507	0.041408655	0.005148014	0.384553531
6	ARF5	4.77E-06	0.000300004	0.00062709	-0.75691189
7	CD38	0.000923995	0.003101072	2.91E-07	-0.547019936
8	RBM6	0.014807746	0.000750173	0.029111376	-0.415661586
9	ITGAL	5.68E-06	6.22E-11	8.72E-14	-0.749717502
10	LAMP2	0.005818162	0.037847531	0.003711308	-0.463014331
11	VPS41	0.007360015	0.005975192	0.001128704	-0.451009209
12	PSMB1	0.002769491	9.38E-05	0.003084592	-0.49731471
13	METTL13	0.013500947	0.022199973	0.019799688	-0.419804079
14	NCAPD2	0.002933527	0.007938609	0.005565498	-0.494572658
15	BTK	0.013500947	0.026657218	0.019799688	-0.419804079
16	AGPS	0.039112146	0.268369495	0.01462382	-0.360202179
17	CD74	1.89E-07	3.94E-09	1.02E-09	-0.855310132
18	BTN3A1	3.31E-06	1.52E-13	2.24E-06	-0.768990933
19	BAK1	0.016647592	0.064552513	0.001866069	-0.409489623
20	RANBP3	0.010573638	0.535071442	0.005565498	-0.431328506
21	PNPLA6	0.03828382	0.006889102	0.001272974	-0.361294456
22	LRRC7	0.023400827	0.003602816	0.025385927	-0.391323168
23	SLC4A7	0.036514141	0.013173645	0.008691033	-0.364354579
24	LCP2	5.46E-05	0.009842038	0.000151181	-0.66651015
25	USP28	0.002766429	0.050617417	0.0023975	-0.497369996
26	R3HDM1	0.04832539	0.113764942	0.029912708	-0.346145951
27	TNFRSF9	0.010366075	1.07E-05	7.54E-08	-0.432482473
28	JKAMP	0.000772773	0.058839928	0.000486213	-0.555380938
29	THOC3	0.027548419	0.539311568	0.035341621	-0.381281389
30	TRAPPC3	0.000134051	0.000857572	8.39E-05	-0.630425674
31	PUM2	0.012990468	0.001342027	0.010906521	-0.419971541
32	PRDM1	0.001687046	6.65E-05	0.000116294	-0.52075714
33	PPP1R12A	0.034334922	7.93E-07	9.62E-05	-0.368269933
34	POLD1	0.027225175	0.001187324	0.005148014	-0.381997928
35	INTS13	0.048753456	0.000170775	0.001315844	-0.345590609
36	LPAR2	0.049260306	0.229664858	0.037824004	-0.344933769
37	CHI3L2	1.58E-07	3.40E-19	5.23E-17	-0.913046177
38	KLF6	0	2.54E-06	0.017795065	1.266155811
39	PKM	0.017160501	0.007156632	0.035832649	-0.407836632
40	DHX8	0.001776245	0.005639808	0.018366707	-0.518486903
41	KCNAB2	0.003225806	0.00175451	0.001083067	-0.489975514
42	RORA	0.02001676	2.21E-06	0.01227609	0.420789268

43	ACAP1	0.000811944	0.000636427	1.32E-06	-0.553058745
44	NDE1	0.023074585	0.55098849	0.007558016	-0.392165028
45	SMARCE1	0.005132283	0.00212063	0.049678491	-0.469273808
46	EED	0.004263588	0.000406968	0.034541315	-0.478453809
47	ICAM3	0.001881731	0.158730052	0.005342133	-0.515838157
48	ARHGEF1	0.022795499	0.130403488	0.014584083	-0.392871632
49	GTF3C1	0.036212771	0.001157118	0.000117344	-0.364892975
50	CST7	1.44E-05	3.45E-05	3.23E-05	-0.717640805
51	ARAF	0.001394041	0.032557023	0.000284575	-0.529430801
52	PPP2R5C	0.00074304	3.07E-07	9.32E-05	0.599604528
53	ITM2A	0.000109715	6.00E-12	4.15E-08	-0.639053167
54	SENP1	0.047725933	0.002912815	0.003909206	-0.347016565
55	MEF2C	0.047283726	4.08E-05	0.000318701	-0.347662099
56	PTPRC	1.58E-07	6.98E-13	0.003966539	1.002984548
57	FYB1	3.16E-08	5.16E-08	7.42E-09	-0.971881252
58	BZW1	0	1.69E-11	2.10E-05	1.291785002
59	TRAF5	0.000152042	0.003103598	0.003577576	-0.624436918
60	P2RX5	0.002211161	9.41E-05	6.78E-10	-0.50840055
61	ITGAE	6.31E-08	5.91E-05	3.67E-12	-0.959715493
62	OXCT1	0.016205322	0.052865422	0.000318701	-0.410981499
63	RPS5	0.038063411	0.002550067	0.000772432	-0.361634208
64	PIGS	0.001872136	3.19E-07	2.10E-06	-0.516109519
65	SH3BP2	0.028016539	0.000177576	0.006823684	-0.38024288
66	GNAS	8.09E-05	0.00124832	0.001074882	-0.651571081
67	SIRPG	0.001352187	9.73E-05	1.04E-12	-0.530824631
68	OAS1	0.017055552	0.077384815	0.000163095	-0.40817688
69	LAG3	4.48E-06	7.79E-05	3.46E-07	-0.759245175
70	ZNF268	0.049226027	0.093497352	0.004498867	-0.344973644
71	CDV3	3.74E-05	1.40E-06	0.01185117	0.746675487
72	RNF31	0.045982293	0.06232384	0.023030104	-0.349602155
73	HNRNPC	6.00E-07	0.000120674	0.003541077	-0.829826957
74	PHGDH	0.018034941	0.00997002	0.001847353	-0.405062177
75	EZR	0	2.77E-09	0.011531512	1.150929467
76	MYL6	1.58E-07	8.61E-08	0.025012385	1.033445191
77	COMT	0.046903131	0.048739104	0.017105872	-0.348199269
78	ADA2	0.027445837	0.114578591	0.00011758	-0.381524831
79	CBX5	0.013982261	0.002308931	2.05E-05	-0.418191997
80	DHPS	0.015512499	0.324689476	0.004200076	-0.413341396
81	PSMD8	0.04242027	2.08E-08	0.020453999	-0.355049388
82	NDUFB7	0.000564769	0.036025811	0.049327442	-0.569417353
83	MKNK2	0.018413389	0.248673007	0.02163724	-0.403982555
84	PES1	0.033575784	0.025199006	0.004498867	-0.369653989
85	LGALS1	1.58E-07	6.30E-13	3.72E-07	1.044560573

86	TSPO	0.002484534	0.004166675	0.00568219	-0.502741683
87	RPL3	0	1.95E-15	0.000132025	1.487635259
88	APOL1	0.001077552	0.006059465	0.000279642	-0.541256208
89	MYH9	0.004622372	0.000234753	2.03E-05	-0.474294975
90	GRAP2	0.033371062	0.069058657	0.023666461	0.388111318
91	IL2RB	0.001270248	0.054375269	2.91E-05	-0.533817775
92	GZMH	0.001920586	0.016706695	6.37E-09	-0.514834654
93	GZMB	0.009170286	0.014987311	6.06E-06	-0.4391884
94	NIN	0.001788839	2.30E-05	9.23E-06	-0.518178085
95	ASB2	0.046582791	0.018508604	6.86E-06	-0.348695025
96	SRSF5	3.16E-08	1.81E-08	0.044710245	1.114223557
97	DCAF11	0.001171706	1.80E-08	1.44E-11	-0.537638813
98	SEC23A	0.000940566	0.000288955	0.003823436	-0.54620109
99	IFT52	0.030856228	0.007826656	0.031827118	-0.374793973
100	SLA2	0.015759706	6.36E-05	0.003127023	-0.412526036
101	ADNP	0.001318604	2.54E-07	0.03094358	0.570480472
102	HM13	0.000393946	0.000128415	0.006113988	-0.585254992
103	PPP1R16B	0.016944511	5.12E-05	3.72E-07	-0.408547557
104	ELF4	0.016245187	0.010021168	0.000318701	-0.410841282
105	PIM2	0.001671107	0.009511992	0.022756271	-0.52115605
106	NDFIP2	0.012715012	0.000247674	7.91E-05	-0.42120958
107	ACP5	0.005215201	0.298763873	0.000971926	-0.46838401
108	MAPK3	0.020629506	0.000872067	0.007250457	-0.397942711
109	SETD6	0.035952086	0.018918798	0.019799688	-0.365368024
110	NPRL3	0.004158607	0.148458362	0.026890677	-0.479657263
111	MPG	0.002237548	0.064485402	7.62E-06	-0.507812184
112	COTL1	8.81E-06	0.000101286	0.00110858	-0.734490086
113	GGA2	5.65E-05	1.15E-05	0.000315201	-0.665292353
114	PYCARD	5.14E-06	0.00032436	0.007501187	-0.753032818
115	TRIP4	0.042943059	0.237063684	0.003151349	-0.35425316
116	RIPK2	0.017152452	0.00947356	3.40E-05	-0.407862321
117	GSDMD	0.048734802	0.15108767	0.000164891	-0.345619507
118	KLHDC4	0.001004009	0.003673823	1.31E-06	-0.543261993
119	MAP4K1	0.00016552	6.45E-07	3.49E-08	-0.620818745
120	OAZ1	3.19E-06	1.79E-05	0.000647874	-0.770841945
121	ZNF419	0.031010069	0.142479107	0.014460369	-0.37446166
122	RPS16	4.05E-05	3.90E-10	0.020570137	0.742714546
123	DYRK1B	0.012372357	0.003059904	0.001315844	-0.42276644
124	NKG7	0.008288176	1.94E-10	1.86E-06	-0.44471291
125	TYK2	0.017187835	0.041162654	0.016151007	-0.407750348
126	JAK3	9.22E-06	3.71E-08	2.96E-06	-0.733359805
127	RPL18A	1.86E-06	1.02E-12	0.000114212	0.878639272
128	ELL	0.031206553	0.167303296	0.04469002	-0.374044278

129	ANKMY2	0.009750331	0.030513278	0.000137652	-0.435783667
130	DOCK8	0.045226627	0.099689166	0.017874046	-0.350763146
131	GATA3	0.037568178	0.010036266	0.005796604	-0.362502364
132	ATE1	0.034491288	0.092239765	0.012521955	-0.367970176
133	SPOCK2	0.004583959	1.19E-13	0.004323954	0.50500931
134	MINPP1	0.007387476	0.000137796	0.000578725	-0.450828478
135	GBF1	0.002345906	0.001992957	0.001754899	-0.505564712
136	TSPAN14	0.00540149	0.311415058	0.019427211	-0.466678266
137	RAD51C	0.001581213	0.003712562	0.023666461	-0.523714327
138	MTMR4	0.007342466	0.00048816	0.000427764	-0.451129505
139	CDK5RAP3	0.036042074	0.001174124	0.011206897	-0.365215982
140	BLMH	0.005704911	0.052227945	0.000513823	-0.463942233
141	FTSJ3	0.015462502	0.009987646	0.000355034	-0.413479195
142	SYNGR2	9.43E-05	5.08E-08	8.98E-08	-0.644992466
143	DDX5	0	4.26E-08	0.019799688	1.209404433
144	LGALS3BP	0.009299192	0.200264163	0.008702838	-0.438396975
145	RAB5C	0.010694022	0.013446583	0.002411546	-0.430781231
146	ABI3	0.022576353	1.78E-05	2.78E-06	-0.393414576
147	NEIL3	0.028497254	0.017194555	0.000318701	-0.379273208
148	CTSC	0.000240452	0.000149375	8.04E-08	-0.605583751
149	CRTAM	0.021716779	2.01E-06	0.001505714	-0.395649983
150	DNAJC4	0.000843002	0.035253996	0.01255225	-0.55132669
151	CPT1A	0.019442144	0.01401319	0.000306899	-0.401206688
152	EIF4G2	1.58E-07	7.31E-08	1.47E-06	-0.914653248
153	PDHX	0.005937914	0.099961774	0.019799688	-0.461971307
154	TCIRG1	0.001472098	3.67E-05	0.000139676	-0.526884961
155	ELK3	0.006335427	6.06E-07	0.028283832	0.486876811
156	MAN1A1	0.002548861	0.028200489	0.000117344	-0.501474019
157	SRSF3	1.02E-05	2.02E-07	0.008720379	0.804872939
158	MED23	0.003156777	0.09688448	0.000544711	-0.490904595
159	VNN2	0.000979736	5.25E-05	0.003335986	-0.544426782
160	GMDS	0.00435023	0.093280214	0.018172961	-0.477422708
161	DAP	0.006961335	3.49E-07	0.040790026	0.481734684
162	SUB1	0.000285904	6.60E-05	4.13E-05	-0.59848673
163	SKP1	9.47E-08	1.97E-06	0.005955375	1.070036446
164	SMC4	0.000136008	7.97E-06	2.42E-07	-0.629719747
165	CBLB	0.011554826	0.000860344	0.000206971	-0.426635022
166	NCBP2	0.026273152	0.002970516	0.000318701	-0.384220924
167	ABCC5	0.027442112	0.027732811	0.000841818	-0.381529293
168	DNAH1	0.011558203	0.005699196	0.015689292	-0.426617883
169	NCL	0.011560508	0.004914652	0.003191995	-0.426601784
170	ZAP70	0.012809229	0.002339819	1.63E-05	-0.420765241
171	ACTR3	0.009422385	0.000937079	0.004200076	-0.437724693

172	OTOF	0.025327662	0.015585234	0.025081888	-0.386538918
173	PPM1G	0.000101856	5.28E-06	0.000132025	-0.642277249
174	PPP1R7	0.028763778	0.000981624	0.019799688	-0.378645938
175	PLEK	0.000285746	4.04E-07	4.40E-06	-0.598518464
176	SCP2	2.24E-06	0.000145628	4.98E-05	-0.782753412
177	STXBP3	0.023439303	0.000121801	0.00681695	-0.391231807
178	PARK7	0.020282558	0.005355677	0.001534374	-0.398873139
179	DOCK7	0.047421122	2.96E-06	0.040622788	0.363338636
180	MIIP	0.000573954	0.000942685	1.31E-06	-0.568679117
181	RGS2	0.039991573	3.30E-10	8.49E-05	0.375759474
182	TROVE2	5.37E-07	0.000384095	1.57E-05	-0.831088062
183	ATP6V0B	0.024199198	0.000120038	0.002862431	-0.389283622
184	FASLG	0.004121836	0.021543443	5.73E-05	-0.480142238
185	TNFSF4	0.003873556	0.000257053	0.001315844	-0.482427375
186	RCOR3	0.0488686	0.05860754	0.006402791	-0.345434703
187	KMT2A	0.002120005	0.010782536	0.011136925	-0.510496301
188	FBXO30	0.008627707	0.000128402	0.000318701	-0.442581807
189	SET	6.31E-08	2.53E-11	1.14E-05	1.101990988
190	FLVCR2	0.021954864	0.021052512	0.000486213	-0.395034913
191	YPEL5	3.41E-05	8.58E-06	0.049661001	0.751109661
192	PANK3	0.002777003	0.135652554	0.002330854	-0.497172701
193	MTRF1	0.003802632	0.014536373	0.000114212	-0.483347997
194	PAIP2	0.009942428	2.35E-07	0.026685804	0.459935457
195	EGR1	0.015653336	2.23E-08	0.000338597	0.435521252
196	PTK2B	0.002124014	0.000751532	4.38E-05	-0.510410061
197	TRIM25	0.042068777	0.071236908	0.019799688	-0.355570573
198	ZSCAN18	0.00497355	0.005907566	0.019799688	-0.470793716
199	NAA50	0.028617953	0.007565438	0.030833803	-0.378993778
200	DESI2	0.008687614	0.021423935	0.024726388	-0.442202006
201	CXCR4	5.05E-07	0.000119799	0.021898768	0.934048136
202	UBL3	0.008966574	0.009830732	1.07E-06	-0.440463718
203	SASH3	3.43E-05	0.008713208	3.50E-07	-0.685120363
204	CD244	0.000338489	0.000635424	7.62E-06	-0.591912343
205	SPATA1	0.002676693	0.058477532	0.025854276	-0.499006053
206	CCDC18	0.004225901	0.024681327	0.008057004	-0.478844779
207	WIPF3	0.016501483	0.00144112	0.001315844	-0.409960101
208	RBM19	0.034258475	6.72E-05	0.016683224	0.386333999
209	PKN1	0.004056089	0.002446221	0.003377357	-0.480896505
210	GIPC1	0.000360205	0.00188976	0.00112862	-0.589223382
211	CENPK	0.007781232	0.000248959	3.82E-06	-0.448109551
212	OPTN	0.040865791	0.000820508	0.008116771	-0.357456319
213	PDE1B	0.020088631	0.011421389	2.91E-05	-0.399418946
214	B9D2	0.024069945	0.032623911	0.000306899	-0.389604342

215	MXD4	0.037492993	0.092616414	0.000358261	-0.362646039
216	CKS2	0.016013667	0.073798598	0.001922014	-0.411597292
217	SLC12A4	0.022523831	0.028263562	0.000318701	-0.393559245
218	ZNF831	0.000181081	4.32E-06	1.48E-08	-0.61747856
219	MBOAT7	0.019149075	0.001571339	0.000486213	-0.402154064
220	CHCHD5	1.07E-06	7.31E-05	0.000132025	-0.809253182
221	PSD4	2.64E-05	3.39E-06	1.58E-10	-0.695118224
222	SYMPK	0.012258443	9.73E-05	0.000123352	-0.423291317
223	SNRPB	0.037133041	0.020371305	0.043359082	0.380670773
224	MGME1	0.001946373	0.001452084	0.00176861	-0.514483663
225	HCST	0.024467142	0.131760928	0.001128704	-0.388610142
226	CCR7	0.005570987	1.97E-11	0.001310033	0.494189632
227	IFI6	0.004383877	2.07E-06	3.82E-06	-0.47702242
228	PZP	1.58E-07	2.44E-07	2.85E-08	-0.88085921
229	FAM78A	0.020683574	0.046261036	0.000484326	-0.397819488
230	MAP2K2	0.000884698	4.93E-05	5.08E-05	-0.549096305
231	HELB	0.000865444	0.032771344	0.015689292	-0.550197109
232	POR	0.001123098	0.011759687	0.005148014	-0.539390469
233	STYXL1	0.048802285	0.01376973	0.013407511	-0.345520672
234	TPST2	0.001999242	0.015297311	0.023779154	-0.513212016
235	MPST	0.033965217	0.349065064	0.037937331	-0.368928175
236	CHN1	0.007473518	0.000330184	0.000127592	-0.450221334
237	ORMDL1	0.032274036	0.004704795	0.022745194	-0.371943368
238	TWSG1	0.000874724	0.04987227	0.019799688	-0.549668036
239	LDLR	0.008785683	0.000880799	6.42E-06	-0.441572789
240	BST2	0.027407676	0.000457264	0.001315844	-0.38160215
241	DDA1	0.014030869	0.04396991	0.047144218	-0.41799731
242	MRPL34	0.002092829	0.044138594	0.048148169	-0.51113728
243	LSP1	4.29E-05	3.02E-07	3.55E-05	-0.676198695
244	CAP1	0.033524241	0.153245698	0.019799688	-0.369748557
245	RAB11FIP4	0.016659176	0.001154919	3.64E-05	-0.409452224
246	MRPS25	0.033457421	1.60E-05	0.026890677	-0.369885877
247	NDUFA2	0.000418376	0.009581442	0.000360249	-0.582747993
248	TRIM22	0.041976201	0.137773315	0.022271027	0.37237654
249	PER2	0.002511174	1.19E-11	3.08E-05	0.536253106
250	RPA1	0.017397102	0.044543704	0.019855749	-0.407020335
251	PNISR	0.007346127	0.012481437	0.002704712	-0.451102092
252	UTP3	0.029642668	0.000411197	7.16E-06	-0.377130756
253	H3F3B	0	5.05E-15	1.47E-06	1.2452537
254	ZRANB2	0.002188719	0.000526481	0.038067994	-0.508840927
255	EIF5A	1.58E-07	1.05E-05	0.007373216	1.047512821
256	XAF1	0.003265009	0.00697328	2.91E-05	-0.48938104
257	ERAL1	0.003311817	0.012197265	0.021723815	-0.48862646

258	PCED1A	0.021966448	0.000910779	0.025928333	-0.394996651
259	DCAF8	0.002407392	0.007190662	0.011305081	-0.504311333
260	PATJ	0.031236885	1.29E-06	0.019799688	0.392477474
261	FBXO44	0.004150937	0.010552175	4.21E-06	-0.479756993
262	SLF1	0.043431033	0.022415055	0.047968773	-0.353489303
263	RARRES3	8.36E-05	6.42E-06	2.10E-06	-0.650137795
264	SARAF	0	1.90E-09	0.001137613	1.320001645
265	RNF122	0.001972918	0.010765006	0.00035216	-0.513825012
266	CCNB1	0.021076195	0.0002457	0.000122413	-0.396774765
267	GSTM1	0.027020074	0.081947524	0.005397664	-0.382436511
268	RPS15A	0.01107973	0.031479771	0.012561087	-0.428959454
269	ANXA1	0	2.77E-09	0.002255112	1.231733579
270	SRPK2	0.005818477	0.057998291	0.003934285	-0.463011439
271	KHDC1	0.0297723	0.016446989	0.025081888	-0.376889201
272	PRR5L	0.025937251	0.000473529	0.001186875	-0.385075208
273	ATP5G2	0.024817215	0.002327519	0.001178989	-0.387718072
274	BLOC1S1	0.047872041	0.104869231	0.009321962	-0.346811399
275	ABCB10	0.00907146	0.013733709	0.025708977	-0.439826439
276	CEP350	0.000124866	0.000277482	0.047613733	-0.633252045
277	COX5B	0.002869074	0.00513688	0.005148014	-0.495576269
278	PLXNC1	0.049733824	0.021389594	0.028159506	-0.344352562
279	BORA	0.025166656	0.013670168	0.007130496	-0.386927655
280	SUCLA2	0.012007323	0.000401654	3.32E-05	-0.424403743
281	PHF11	0.001846979	0.029987763	0.028762033	-0.516707927
282	ITM2B	0.000737327	7.13E-06	0.01521175	-0.557572157
283	LCP1	1.75E-05	0.004085265	0.00365617	-0.710657269
284	KDELR2	0.003434379	0.000731802	2.19E-06	-0.48685415
285	CCM2	0.000669023	9.93E-05	0.000151181	-0.56192068
286	CALCOCO2	0.032594344	0.00013068	0.000236208	-0.371334256
287	RTP4	0.016122625	0.044702825	0.025081888	-0.411287681
288	SIT1	0.004455274	0.001789002	3.00E-05	-0.476215613
289	RPS6	0	1.31E-10	0.001333023	1.286223502
290	FOXP4	0.043126034	0.00989913	0.006823684	-0.353964735
291	TMEM14B	0.018418787	0.029575038	0.026791003	0.425628102
292	FGFBP2	0.000713749	0.000153347	0.006594871	-0.558991998
293	NUMA1	0.002488953	0.004779103	0.009960579	-0.502656635
294	SORL1	0.005821886	7.40E-11	0.043811433	0.491718708
295	NUSAP1	0.00983104	0.005688809	2.70E-05	-0.435348954
296	PPM1B	0.031352061	0.011556494	0.009144387	-0.373785348
297	STAMBPL1	0.017376207	0.00244994	3.86E-05	-0.407103105
298	SSB	4.64E-05	0.000205381	0.005313983	-0.672840296
299	PARP9	1.07E-06	8.58E-07	4.24E-07	-0.808149906
300	RGS3	0.041379237	0.024271898	0.000152185	-0.356678194

301	CLSTN3	0.000322391	0.003209134	0.034670074	-0.593817925
302	KLRG1	0.000184995	1.78E-06	1.58E-05	-0.616609051
303	VAMP1	0.003811533	0.030575162	7.42E-06	-0.483211651
304	LPAR6	1.58E-07	2.23E-05	2.10E-05	-0.859155789
305	SLC38A6	0.027580582	0.002138828	0.007463156	-0.381226494
306	SLC27A2	0.045224134	0.003855173	0.000396669	-0.350767837
307	PSTPIP1	0.010405877	0.015696175	0.003151349	-0.432261248
308	PIF1	0.024226722	0.000495269	1.79E-05	-0.389198813
309	NLRC5	0.000125466	0.037284042	0.002714164	-0.633090334
310	MBTPS1	7.88E-05	0.000424159	2.79E-06	-0.652518382
311	NDUFB10	0.00023073	0.001112636	0.001353614	-0.607417127
312	TCF25	0.006176157	0.000584833	0.005148014	-0.460014012
313	TOB1	0.031104507	5.77E-07	0.044023588	0.392751345
314	SKAP1	0.005571839	3.75E-05	3.34E-05	-0.465156566
315	CLTC	0.037404331	0.005443574	0.001926936	-0.362809722
316	ARRB2	5.37E-07	6.18E-05	0.000427764	-0.830567331
317	TBCD	0.036462124	0.028327474	0.007091323	-0.364470887
318	SIRT3	0.036383151	0.067630997	0.001042024	-0.364623792
319	IFITM3	0	1.02E-06	1.99E-05	-0.991570369
320	CAPN10	0.025076573	0.00179277	0.019799688	-0.38713399
321	MYO1F	0.016489331	5.94E-05	3.17E-05	-0.410004123
322	RPL13A	9.47E-08	5.79E-12	0.000367521	1.081636073
323	SH3BGRL3	0	1.57E-09	0.021403411	1.269418729
324	CD53	9.77E-05	0.001011476	0.007245393	-0.643934853
325	MGST3	0.002198567	0.000700372	0.000996238	-0.508635661
326	TPM3	0.001049965	5.11E-05	0.000487779	-0.542498462
327	TTC13	0.049630389	0.014064441	0.001880977	-0.344461959
328	LYST	0	1.67E-15	4.02E-08	-1.067290753
329	ARF1	0.009847169	0.00012664	0.005015992	-0.43526225
330	GALM	6.31E-07	1.92E-09	1.53E-08	-0.824067132
331	RPS27A	9.47E-08	1.93E-10	0.01723886	1.083047738
332	RETREG2	0.002237674	1.06E-08	0.010432844	0.542662268
333	POMGNT2	0.022978474	4.65E-06	0.019799688	-0.392404429
334	RPL32	1.58E-07	4.49E-12	0.017795065	0.975585893
335	LIMD1	0.001932264	0.035180954	0.001315844	-0.514809611
336	ATG3	0.034668676	0.004092463	0.009874361	-0.367643406
337	SSBP2	0.003900669	1.27E-05	0.018655894	0.513474509
338	GTF2H2	0.00163525	0.000439958	0.047735559	-0.522118694
339	FEM1C	0.033191876	0.010843419	0.045659956	-0.370323423
340	PSPH	0.025842087	0.001763344	0.000135777	-0.385299714
341	ATXN7L1	0.000245344	0.001543131	0.002997607	-0.604737013
342	GIGYF1	0.000118143	4.56E-05	2.58E-05	-0.635554586
343	MSN	3.79E-07	4.56E-05	5.41E-05	-0.8408313

344	KRBOX4	0.020565495	0.341371193	0.017618923	-0.398121607
345	IL2RG	4.37E-05	0.001634378	0.024474704	-0.675448206
346	MCPH1	0.007351177	0.004018066	0.002982253	-0.451074204
347	RPL10	0	7.08E-11	0.000353919	1.285320539
348	DOK2	0.000323401	0.030250661	1.64E-07	-0.593639205
349	GOLGA7	0.007194464	0.000519951	0.00047953	-0.45221893
350	CDKN2B	0.033291838	0.002649783	0.019799688	-0.370202471
351	LRSAM1	0.027755792	0.000364665	0.026397601	-0.380843322
352	MTG1	0.014973928	0.042028648	0.032211799	-0.415135008
353	RPS3	0	6.24E-14	0.008206123	1.256002376
354	LAMTOR1	0.026304779	0.045872101	0.0015579	-0.38414305
355	DSN1	0.007248659	0.013886134	0.000481874	-0.451809948
356	TRPT1	0.000142194	0.000105072	1.68E-06	-0.62764856
357	SAP18	0.039339751	0.002782816	0.01928303	-0.359821564
358	CCDC102B	0.013500947	0.003534361	0.019799688	-0.419804079
359	THRB	0.022871283	0.005362655	0.013527975	0.413098314
360	SCLT1	0.015120605	0.008884985	6.06E-06	-0.414643081
361	FAM160B1	0.018237012	0.007440408	0.009182196	-0.404439338
362	GEMIN6	0.019199798	0.008946701	0.025385927	-0.402004728
363	SETBP1	0.019676757	0.000162703	0.025081888	-0.400528722
364	HAUS1	9.47E-07	1.44E-05	0.030716169	-0.812859702
365	PDK1	0.02499637	0.039485398	0.000914791	-0.387302333
366	MBNL1	0.000893473	0.00010753	0.000996534	-0.548631624
367	JAKMIP1	0.002125592	0.028840836	0.000939047	-0.510363462
368	BANK1	0.041049081	0.025852907	0.024347719	-0.357185633
369	NR4A2	0.021148823	0.00492557	0.045385838	0.417398055
370	ASAP1	0.008489742	1.20E-06	0.00051998	-0.44343371
371	CD8A	1.58E-07	6.23E-06	4.69E-06	-0.922012005
372	TRIP12	0.015051985	0.065379962	0.049208412	-0.414843536
373	CERS3	0.018540054	0.01455445	0.019799688	-0.403928487
374	GBP5	0.039366328	0.042752869	0.002299258	-0.359772286
375	C21orf91	0.016716243	0.098614052	0.016659421	-0.409268502
376	MOV10	0.000851461	0.000764057	4.39E-06	-0.550881988
377	TTN	0.001477053	6.52E-08	0.000361339	-0.526697876
378	EEF1A1	0	0	1.37E-06	1.708376739
379	PHKG2	0.029680639	8.29E-06	7.82E-05	-0.377071096
380	RBPMS	0.047702733	0.006328829	0.007957503	-0.347046787
381	ZFHX2-AS1	0.002427372	0.134826185	0.025081888	-0.503935876
382	MX1	0.000309576	0.000373795	1.01E-05	-0.595502973
383	TNFRSF14	0.004282211	0.01661022	0.006177603	-0.478239822
384	AUTS2	0.034620226	4.90E-09	0.000281409	0.385561666
385	MITD1	0.019992046	0.186629265	0.007831109	-0.39968184
386	FAM160B2	0.016516508	0.004373322	0.000225379	-0.409913755

387	MRPL10	0.000430244	1.50E-07	0.00030209	-0.581428363
388	GART	0.031557099	0.020936383	0.004505628	-0.373334061
389	CYB5R1	0.01767764	0.007683475	0.033422686	-0.406121001
390	ADGRG5	0.036218768	0.239354996	0.001948152	-0.364881773
391	CTBP1	6.88E-06	2.99E-08	3.44E-05	-0.743924099
392	CCDC107	0.035586295	0.043899565	0.015432559	-0.365918988
393	U2AF1	0.024796951	0.077709722	0.006483824	-0.387772553
394	RALGDS	0.045236822	0.0003747	0.011305081	-0.350749536
395	ST6GALNAC6	0.006602487	6.04E-05	0.002299932	-0.457032601
396	DEDD2	0.009139764	0.00028899	0.002982253	-0.439385049
397	CD3G	6.31E-07	4.32E-06	3.79E-06	-0.824036754
398	FCRL3	2.30E-05	1.92E-17	5.23E-17	-0.700298301
399	LY6E	1.41E-05	8.31E-05	2.88E-06	-0.718041818
400	USP41	0.034644057	0.11431254	0.026791003	-0.367688645
401	YDJC	0.000917209	0.001984126	0.004273138	-0.547368979
402	LSM12	0.005128085	0.00083867	0.000289318	-0.469299094
403	NXF1	0.026783536	3.31E-05	0.007957503	-0.383000082
404	DHRS3	0.017618616	0.00020075	0.012255157	0.428225348
405	CAMK2N1	0.04304501	1.74E-05	0.04809834	0.370595813
406	SLAMF6	0.000350483	1.51E-06	0.000338597	-0.590391139
407	FLVCR1	0.012507765	0.009189744	0.000318701	-0.422172226
408	FCMR	0.000609021	0.002514616	0.001578589	-0.566110281
409	H3F3A	0.002142794	0.002055389	0.009870549	-0.509952291
410	SMARCAD1	0.028082002	0.025809169	0.003284924	-0.38011189
411	RNF149	0.002056531	0.009894675	0.010211774	-0.511875086
412	ARHGAP25	0.017648475	0.021501712	0.025081888	0.428111889
413	CGGBP1	0.010008775	0.011205071	7.91E-05	-0.434396127
414	TMEM79	0.015719273	0.005284885	0.025708977	-0.412661933
415	EOMES	0.00040714	0.000326619	3.55E-05	-0.583897445
416	MNDA	0.01041178	7.95E-07	3.82E-06	-0.432231787
417	IFI16	0.008351114	0.002476669	0.002127488	-0.444301628
418	YEATS2	0.003451802	0.04064962	0.005839953	-0.486604543
419	GNL3	0.003103844	2.85E-08	0.005276135	0.524312869
420	H2AFZ	0.028025724	0.021671683	0.008237	-0.380226755
421	SHISA5	0.028952086	0.018491618	0.024494487	0.397501626
422	RAD54L2	0.003050817	0.000146923	0.000188516	-0.492637453
423	PPM1M	0.005382362	4.22E-07	7.79E-06	-0.466837585
424	C4orf3	0.000814879	0.001857601	0.001555679	-0.552889953
425	ANXA5	0.02168389	0.002272817	0.003868016	-0.395731358
426	TMEM155	0.000541064	3.89E-05	3.82E-06	-0.571359905
427	PDSS2	0.00335124	0.207146731	0.011305081	-0.488050207
428	RELL2	0.012380279	0.000880102	0.001315844	-0.422723358
429	YWHAZ	3.16E-08	2.72E-07	0.033021971	1.105903871

430	UBAP1	0.0159019	0.027297876	4.49E-05	-0.412005302
431	MELK	0.013500947	0.004444979	0.019799688	-0.419804079
432	METTL3	0.016597311	0.031942874	0.049264973	-0.409616322
433	IFI27	0.02134518	0.065551251	0.001890213	-0.396019572
434	TMX3	0.001779717	0.017688737	0.024726388	-0.518381077
435	WEE1	0.005380405	0.005613416	0.00215646	-0.466857601
436	PRKCB	0.011624708	0.052585039	0.010404931	-0.426291455
437	B2M	0	0	5.95E-11	2.548448559
438	VPS39	0.043663689	0.009042309	0.002053374	-0.353123144
439	PIP4K2C	0.036560602	0.011695208	0.012335496	-0.36427467
440	TSC22D4	0.014075627	0.015851836	0.000318701	-0.417831971
441	RNF214	0.049177482	0.010566204	0.019799688	-0.345043294
442	SGK494	0.049581497	0.001335282	0.005148014	-0.344515593
443	RAB4B	0.001699325	7.56E-05	0.005148014	-0.520463363
444	OTUB1	4.57E-05	0.000287332	0.000185997	-0.673368015
445	ZNF558	0.014756644	0.002540705	0.001905029	-0.415890541
446	ATP5H	3.76E-06	1.66E-05	0.004444059	-0.764772804
447	SRP68	0.010237895	0.008296443	0.017584998	-0.433155167
448	AC090152.1	0.019635566	0.003082891	0.000505584	-0.400633352
449	FTH1	3.16E-08	3.91E-11	0.000482596	1.123006142
450	COPS6	0.00014352	9.30E-05	2.79E-06	-0.627229206
451	PAFAH1B2	0.002678587	0.000125123	0.01968715	-0.498968635
452	TAP1	0.004611893	0.00057519	0.00054841	-0.474406936
453	REEP4	0.006568651	0.039378212	0.007130496	-0.457276723
454	SLC16A4	0.042277097	0.004908808	0.019799688	-0.355267622
455	IL7R	0.002049934	2.50E-12	7.58E-05	0.547507659
456	HNRNPH1	0.002095669	0	5.86E-14	0.546405041
457	CD2BP2	0.020695284	0.105006428	0.010958	-0.397798312
458	SLC50A1	0.001779244	0.00257979	0.000773931	-0.518400851
459	CXCL10	0.001032984	0.002133124	0.001315844	-0.543015516
460	MRPL1	0.034156209	0.203262572	0.000487779	-0.368623644
461	GPR183	0.04504684	4.56E-11	0.0162637	0.367258253
462	CNBP	1.96E-06	1.19E-08	0.004706882	0.874863997
463	TRAPPC1	8.86E-05	8.69E-06	2.74E-06	-0.647567116
464	PYM1	0.010514298	0.008311665	0.024675596	-0.431647032
465	PDGFD	0.003106306	7.19E-06	0.007043456	-0.491690468
466	S1PR1	9.09E-05	6.25E-12	0.034268458	0.704486207
467	C9orf16	0.00096386	0.008976978	0.01776566	-0.545230752
468	NAT1	0.029191244	0.080673951	0.02163724	-0.378117369
469	ZIK1	0.044922827	5.51E-05	7.09E-08	-0.35121242
470	ATF7IP	1.58E-07	2.94E-09	0.0021503	-0.915003739
471	FRMD5	0.049038855	0.00247227	0.005148014	-0.345207372
472	CD8B	1.58E-07	4.87E-05	1.34E-05	-0.864023233

473	CXCR6	0.001645666	7.71E-12	6.24E-12	-0.521830045
474	TP53RK	0.02271154	0.016824564	4.98E-07	-0.393084281
475	ZNF24	0.04567016	1.97E-05	0.023819225	0.366200598
476	CTSW	2.02E-05	1.61E-06	5.21E-07	-0.704498891
477	WASHC2C	0.021297361	0.102433104	0.038836459	-0.39615999
478	CFL1	0	9.49E-06	4.27E-07	-1.106863545
479	NAA16	0.011164857	0.001119843	0.000315201	-0.428550035
480	FAM192A	0.002110725	0.000106983	0.00028474	-0.510715766
481	CES2	0.000875765	0.000876627	7.62E-06	-0.549621268
482	GRK2	0.009616407	0.108865984	0.000567246	-0.436579622
483	VANGL1	0.048901553	0.273938545	0.007325557	-0.345382796
484	ZNF417	0.026321665	0.010719157	0.024347719	-0.384090041
485	TNFRSF10D	0.027145414	0.001691603	0.007376547	-0.382177869
486	UQCRH	0.002253646	0.016371243	0.023893944	-0.507437644
487	SPDYE2B	0.000278328	3.44E-05	5.16E-05	-0.599551968
488	RNF213	1.23E-06	2.17E-07	2.66E-05	-0.806253688
489	ANKRD36C	1.23E-06	2.01E-06	0.003831597	-0.805130602
490	ZNF266	0.015019001	1.39E-06	0.000982988	-0.414972748
491	RPL15	0	7.30E-11	0.000389054	1.351560608
492	DCTN2	0.003160091	0.038278808	1.45E-06	-0.490858971
493	TBC1D10C	2.79E-05	6.66E-07	1.97E-09	-0.69335828
494	UCP2	3.76E-06	5.41E-06	3.40E-07	-0.764347145
495	RNPEP	0.010050092	0.007550887	0.015689292	-0.434135003
496	AC008969.1	0.005265324	0.002547392	0.019799688	-0.467904371
497	DEAF1	0.001204469	0.002934456	0.023030104	-0.53627974
498	TMEM80	0.003421375	9.19E-05	0.002011366	-0.48704893
499	MAN1B1	0.032070482	0.023536302	0.007356941	-0.372348372
500	SAMD9L	0.001213844	0.000974463	0.012243384	-0.535947611
501	HASPIN	0.000192759	4.68E-05	4.94E-11	-0.614985897
502	AP3S1	0.002649233	5.77E-06	0.000929995	-0.499533077
503	GRB2	0.011845938	0.00039755	0.001315334	-0.425183399
504	DMAP1	0.000842434	0.051417965	0.001268353	-0.55136887
505	GRAMD1C	0.001380626	0.019137707	0.038822591	-0.529875699
506	ZNF518B	0.024147024	0.001376754	0.024966998	-0.389421281
507	SLC25A20	0.000406414	0.020614711	0.001560155	-0.58398973
508	LINC00324	0.005635534	0.00018627	0.000127131	-0.464578416
509	C12orf42	0.034719273	0.000499627	0.001315844	-0.367546708
510	DNHD1	0.038327852	0.020125213	0.024970193	-0.361216695
511	ZADH2	0.03697658	0.0010992	0.000564254	-0.363517644
512	TRNAU1AP	0.000450098	7.11E-05	0.000481874	-0.579504156
513	MCFD2	0.025167035	0.00105335	0.006715682	-0.386926471
514	ARHGAP45	0.005304968	0.005478241	0.018247725	-0.467511776
515	PRF1	3.95E-06	4.39E-09	6.06E-14	-0.763383311

516	S1PR5	0.010374313	0.034829392	0.000484326	-0.432427185
517	F2R	0.016398081	5.57E-06	0.001816549	-0.410315993
518	HLA-V	0.027694432	0.02878921	9.87E-05	-0.380976139
519	DHTKD1	0.04924768	0.001032797	0.000127131	-0.344943481
520	TIGIT	3.76E-06	3.24E-11	3.25E-07	-0.764517303
521	C5orf24	0.003737738	0.001898847	0.031077349	-0.484236558
522	IDH2	0.000524146	3.67E-05	0.000116439	-0.57273964
523	AL365277.1	0.018097784	0.005942967	0.024347719	-0.404892668
524	TSEN54	0.008179944	0.01919726	0.017731173	-0.445455185
525	UBA7	0.000838205	1.96E-08	0.000128017	-0.55156499
526	MRPS16	0.017666183	0.010597082	0.003335986	-0.406155197
527	CLN8	0.04813626	0.048862963	0.038761742	-0.346406302
528	RBM10	0.029139417	0.003771765	4.32E-05	-0.378244792
529	DAZAP2	1.58E-07	5.24E-08	0.002997607	1.048023186
530	TMEM50A	6.41E-06	0.000601127	8.15E-05	-0.746299132
531	ST6GALNAC3	0.036824474	0.240148046	0.020067989	-0.363787491
532	PTP4A2	0.00553431	0.007611623	0.04767824	-0.465460525
533	VPS33B	0.00472003	0.040927673	0.042797133	-0.473243327
534	UQCR10	0.000137681	6.47E-06	0.000786427	-0.629137875
535	IRAK1	0.001164541	0.001580771	0.004768182	-0.537944649
536	NELL2	0.004308251	4.04E-08	0.001008665	0.508621453
537	HIST2H2BE	0.009175557	0.004406551	0.001315844	-0.439157046
538	PTRHD1	0.048915473	0.122844547	0.000116294	-0.34536149
539	USP18	0.000190897	0.002858473	2.27E-05	-0.61542723
540	ANO9	0.029478505	0.00113082	0.002053374	-0.377500974
541	IFITM2	4.77E-06	5.24E-06	0.000227312	-0.756695934
542	PRMT3	0.036621299	0.00048697	0.00208965	-0.364156728
543	C16orf52	0.038537561	0.001963927	0.005148014	-0.360868312
544	TRIM69	0.003168329	0.020234182	0.000727766	-0.490733716
545	KATNA1	0.043206048	0.546945563	0.000772432	-0.353833657
546	CMC1	0	1.23E-14	8.72E-14	-1.268689176
547	ZNF546	0.017781832	0.015508893	0.026890677	-0.40580809
548	MT1X	0.002829398	0.025690939	0.001487846	-0.496290451
549	ISG15	5.59E-06	1.83E-06	4.90E-11	-0.750274572
550	RINL	0.005067988	0.018800139	0.000130048	-0.469891077
551	ACTBP11	0.001558361	0.0026414	1.38E-05	-0.524346943
552	ADAT2	0.02239341	3.19E-06	0.010970977	-0.393879756
553	ARID2	0.026003819	0.018413051	0.007926098	-0.384905945
554	TSPYL1	1.36E-06	3.55E-07	0.030948324	0.890383727
555	RRP7A	0.022438104	0.000136313	0.026990306	0.414308456
556	SLC35E2B	0.018653589	0.003323877	0.019799688	-0.403569506
557	HLA-DRB9	0.000652831	0.007541811	0.008241027	-0.56295985
558	AC146944.1	0.011828799	0.001022479	0.002239195	-0.425260645

559	EVL	0.003357774	0.093920247	0.000227312	-0.487959727
560	MYO18A	0.017618711	0.000284997	0.007325557	-0.406305003
561	HDAC2	0.008071934	0.011749874	0.020469602	-0.446184358
562	AC004057.1	0.010138564	0.001408744	0.009843397	-0.433651185
563	NPIPB10P	0.000429266	0.000899769	0.023030104	-0.581527165
564	FLNA	0.038836216	0.054929185	0.000239431	-0.360694263
565	ABCB8	0.011815258	2.70E-06	7.91E-05	-0.425328464
566	ENTPD4	0.008067136	0.000700663	0.015275167	-0.446215464
567	HTT	0.005872862	0.304386868	0.030526126	-0.462496903
568	GSTK1	0.040813585	0.002091621	0.015897266	0.374381629
569	RPS26	0.003086358	0.00086711	0.000837347	-0.492023806
570	HIST1H2BK	0.003208731	0.015782825	0.019799688	-0.490108467
571	S100A6	1.54E-05	3.28E-10	0.011754414	0.787602983
572	IRAK4	0.006903289	0.007514961	0.001575884	-0.454599176
573	TFDP1	0.017536077	0.000702713	0.025708977	-0.406566681
574	AC131392.1	0.036656619	0.000216349	0.000318701	-0.364106655
575	UBL5	0.005741083	0.024592764	0.018969577	-0.463639849
576	HELZ	0.035382457	0.00115857	0.006452465	-0.366292004
577	ITSN2	0.003808503	0.015678533	0.001669704	-0.483260353
578	ANKRD35	0.018545515	0.000460433	0.005148014	-0.403911555
579	HLA-DRB5	0	1.85E-07	5.07E-08	-1.188475658
580	KCNRG	0.013685089	0.000495491	0.019799688	-0.419382237
581	MDM4	7.14E-05	0.000246203	0.002184913	-0.656151645
582	NCOA6	0.046441134	0.073947401	0.001715956	-0.348893921
583	CALM1	0	1.45E-12	1.05E-05	1.201916961
584	CNOT7	0.003212203	0.000119693	0.010101792	-0.490063734
585	GK	0.023194874	0.003733622	0.025385927	-0.391841216
586	TOX	0.002910328	0.001469685	3.72E-07	-0.494914762
587	CD3E	0.021372167	0.134809518	0.00112862	-0.395961281
588	MTND4LP30	0	1.90E-22	1.43E-08	1.870694755
589	DZIP3	0.016936052	0.000454129	2.03E-06	-0.408574214
590	CCDC167	0.001778644	0.009475215	0.014144664	-0.518426524
591	ARMCX6	0.000808661	0.002403443	0.014460369	-0.553243256
592	PJA2	0.019660533	0.000542868	0.001836607	-0.400553471
593	ZNF525	0.04762717	0.162099604	0.005148014	-0.347164695
594	TMEM244	0.013669655	0.000739516	0.019799688	-0.419437901
595	SYS1	0.010291364	0.004651349	0.04469002	-0.432880197
596	PSMB8-AS1	0.0049453	0.019795289	0.007757054	-0.470833872
597	HLA-DRA	3.35E-06	0.000653576	7.98E-08	-0.7687374
598	C6orf47	0.015489616	0.00069654	0.026402336	-0.413419026
599	HLA-E	9.47E-07	0.00526612	0.0060046	-0.81206379
600	SPDYE2	0.023733255	0.001013266	0.001171956	-0.390498494
601	ADGRG1	0.030208636	0.001977091	0.001968785	-0.376042735

602	PRR13	0.044740768	0.012051233	0.047697019	-0.35149121
603	NAP1L4	0.03190493	0.002262611	0.01629774	-0.372670042
604	TMSB4X	0	0	1.61E-07	1.565961645
605	DENND1C	0.000126791	0.022229504	2.00E-07	-0.632682524
606	RNU6-32P	0.004159239	0.000811052	0.007346174	-0.479651013
607	MT-TM	0.001582066	0.000574547	0.001826087	-0.52369452
608	MT-TA	0.000561644	0.135388139	0.014696598	-0.56968092
609	MT-TN	0.000786977	0.021761536	0.003335986	-0.554577593
610	STK38L	0.01586254	0.080262104	0.000318701	-0.412145886
611	IGKC	0.001092008	0.000804986	2.10E-06	-0.540596605
612	IGLV2-23	0.000183006	0.010168553	0.000181333	-0.617065639
613	IGLC3	0.002344612	3.18E-06	1.32E-06	-0.505588336
614	TRBV6-1	0.017653747	0.001300577	0.005148014	-0.406189246
615	TRBV6-5	0.017570608	7.31E-05	2.43E-10	-0.406468389
616	TRBV6-6	0.036001547	0.001300577	0.005148014	-0.365279601
617	TRBV5-1	2.78E-06	1.31E-21	7.37E-13	0.860246258
618	AC245427.1	0	3.31E-16	2.88E-06	1.163906444
619	TRBV28	0	1.32E-15	1.14E-27	-1.224857547
620	TRAV12-2	9.47E-07	8.01E-11	3.08E-05	-0.812369394
621	TRAV26-1	3.22E-06	1.41E-21	2.67E-06	0.854448513
622	TRAV29DV5	0.002511963	5.13E-10	0.007302794	0.536242562
623	TRAV36DV7	0.027126002	0.097478965	0.001911715	-0.382212638
624	TRAV39	0	1.14E-13	9.40E-25	-1.106907426
625	TRAJ59	0.010123982	0.001031694	0.005148014	-0.433722262
626	TRAJ49	0.003430844	1.79E-05	9.57E-14	-0.486908678
627	TRAJ7	0.001986333	4.09E-05	0.005148014	-0.513537229
628	IGHG4	0.043958525	0.00135889	0.001315844	-0.352683692
629	IGHG3	0.016177356	0.000446275	1.79E-05	-0.411084002
630	RPS26P6	0.002670665	0.094527487	0.012257187	-0.499092658
631	AL365357.1	0	0	1.74E-18	-1.743099442
632	TCTEX1D2	0.039710814	0.064104388	2.91E-05	-0.359154606
633	CFL1P2	9.55E-05	0.000439774	0.000318701	-0.644716065
634	PPP1CB	1.26E-07	4.47E-16	2.17E-06	1.055405521
635	IRF9	0.000737927	0.008774963	0.000255865	-0.557554262
636	ITGA1	0.005575847	1.06E-06	0.017483406	0.494131964
637	ATP5HP3	0.003645161	0.000741162	0.005148014	-0.485096951
638	AP1G2	0.001504261	0.057341806	0.036765321	-0.52587139
639	KANSL1-AS1	0.001488858	0.010693677	0.005148014	-0.526359833
640	HNRNPUL2	0.044756486	0.017320851	0.025708977	-0.351466735
641	LINC01347	0.024517676	0.033607279	0.026890677	-0.388495537
642	LINC00612	0.008294331	6.18E-06	9.23E-06	-0.44466837
643	AC141586.1	0.029503882	0.021856337	0.023729587	-0.377439842
644	AC138409.2	0.007665709	0.022414951	0.000199883	-0.448944569

645	GUSBP9	0.001958778	0.000167009	0.005148014	-0.51419166
646	RBMXP1	0.013500947	0.005906587	0.019799688	-0.419804079
647	RPS27AP11	0.001066157	0.000442125	0.025442946	0.581679748
648	GAPDHP63	0.021446563	0.181241539	0.000820616	-0.395831793
649	AL355001.1	0.008327378	0.00638453	0.025081888	-0.444465264
650	DAZAP2P1	1.01E-06	1.40E-14	0.005148014	0.904939389
651	AL591846.1	0	0	2.77E-08	-1.133912549
652	IGHV4-59	0.001032984	0.001338477	0.001315844	-0.543015516
653	HLA-DPB2	0	1.20E-11	4.39E-13	-1.186647927
654	AC012485.1	0.006455337	0.001193761	0.019799688	-0.458199112
655	EIF3LP3	0.006799918	0.017642076	0.001911715	-0.455426886
656	AP4B1-AS1	0.001345717	6.97E-05	0.005148014	-0.531050612
657	ITGB2-AS1	5.59E-06	5.43E-05	5.04E-06	-0.750251752
658	PARP1P1	0.018540054	0.002965245	0.019799688	-0.403928487
659	CFL1P3	0.001159554	0.002997759	0.007325557	-0.538172165
660	MTCO2P12	0	3.73E-08	0.019799688	1.169007348
661	HLA-DRB6	0.002034783	3.77E-06	8.04E-08	-0.512378637
662	MTATP8P2	5.71E-06	4.63E-28	1.58E-16	-0.749661219
663	YWHAZP3	0.002891831	0.065689248	0.035408494	-0.495202305
664	AL450405.1	1.15E-05	5.02E-07	0.005742289	-0.725999327
665	AL078645.1	0.024995644	0.041445785	0.028786683	-0.387303612
666	AC093609.1	0.031116186	0.003468423	0.005148014	-0.374227674
667	AL024493.1	8.84E-07	8.71E-06	3.89E-06	-0.815931422
668	AC111200.2	0.006091219	0.094091673	0.006918179	-0.460634383
669	HLA-DPA1	0.002512468	3.35E-05	4.89E-06	-0.50217706
670	CAP1P2	0.027034152	0.137446442	0.014349119	-0.382402403
671	MTND4P24	9.47E-08	1.16E-08	3.62E-05	-0.94112987
672	TET1P1	0.001032984	0.001069002	0.001315844	-0.543015516
673	RPL18AP7	0.008174547	0.001303162	0.019799688	-0.445503305
674	AF165147.1	0.022593239	0.028664113	0.000124056	-0.393370245
675	EIF3FP3	2.41E-05	0.005406179	0.001452769	-0.698214148
676	AC231533.2	0.03322508	0.618446591	0.026402336	-0.370274994
677	HLA-W	0	5.62E-17	0.001200608	1.377286779
678	AP002004.1	0.044953065	0.000572706	0.047795046	-0.351172278
679	AC146949.1	0.004875576	0.001919202	0.005148014	-0.471548757
680	AC130472.1	0.003645161	0.14307993	0.005148014	-0.485096951
681	CDKN2AIPNL	0.016029039	0.004293651	0.000383415	-0.411543833
682	LINC00987	0.000769112	0.003855002	0.000320907	-0.555599306
683	HLA-DQA2	0.016558772	0.040968919	0.00049096	-0.409754871
684	AC116347.1	0.002502367	0.001182776	0.000132025	-0.502366659
685	AC116366.2	0.02731166	0.017282718	0.001315844	-0.381807273
686	RPS14P8	0	3.22E-17	3.49E-08	-1.492065861
687	AC026877.1	0.000227669	0.026958566	0.000251863	-0.60789474

688	PLCXD2	0.047013856	0.006260528	0.030716169	-0.34803464
689	AF111169.1	0.000323559	0.007991154	0.00059449	-0.593590997
690	ATP5J2	0.009822486	0.01327166	0.019799688	-0.435405855
691	ARPC1A	0.002408181	0.000557885	0.007346174	-0.504297177
692	ATP5O	0.013660596	0.035310343	0.001066071	-0.419478933
693	AL591895.1	0.005112461	0.000819317	0.025081888	-0.469467392
694	RPL13AP23	0.009229689	0.026459696	0.025081888	-0.438822077
695	AC090543.2	7.34E-05	0.00505015	0.001231204	-0.654761075
696	IGKV1-5	0.017700871	1.37E-05	8.85E-07	-0.406045947
697	HLA-L	2.04E-05	2.76E-15	0.040143063	0.773647301
698	APOBEC3C	0.002702007	0.001735669	9.41E-05	-0.498540587
699	MIATNB	0.022604318	0.0525963	0.000486213	-0.39333619
700	UBE2V1	0.000631052	0.049475838	0.021461131	-0.564503186
701	A2M-AS1	0.00090493	0.011898073	0.009182196	-0.54808437
702	TWF2	3.95E-06	1.84E-07	1.51E-10	-0.762917341
703	MTND4P12	1.58E-07	6.15E-11	0.000503667	1.047199989
704	AC093700.1	1.99E-06	9.88E-05	6.88E-07	-0.786290566
705	SCARNA22	0.007056846	0.000334049	7.91E-05	-0.45336878
706	AC022447.7	0.018540054	0.004854399	0.019799688	-0.403928487
707	TPM3P6	0.046593776	0.028311945	0.035225241	-0.348678837
708	MSNP1	0.001347989	0.013266374	0.004868109	-0.530966988
709	GUSBP3	0.023270059	0.000238458	0.001911715	-0.391649187
710	AC146944.3	0.035295152	0.000956672	3.34E-05	-0.366441854
711	SMIM18	0.000365349	0.000125198	0.000239431	-0.588537703
712	AC024568.1	0.012707247	0.00018609	0.019799688	-0.421241799
713	AC138866.1	0.020709835	0.01370234	0.000289318	-0.397771351
714	AC100810.1	0.023687457	0.001171966	0.005148014	-0.390619076
715	AP003084.1	0.006921659	0.000437701	0.000318701	-0.45446763
716	AP005018.2	0.001172653	0.135592386	0.001996246	-0.537596933
717	MIR100HG	0.004995834	0.002864809	0.005148014	-0.470585502
718	AP004608.1	0.013500947	0.006263489	0.019799688	-0.419804079
719	TOMM20P2	0.001825958	0.005112185	0.022299719	-0.517265183
720	PSMC1P9	0.020072817	0.180317496	0.044001819	-0.399449141
721	A2MP1	0.004581939	6.61E-06	0.000538135	-0.474745749
722	AL137779.1	0.0015101	0.065688631	0.047234218	-0.525718051
723	AC007569.1	0.027476264	0.531998178	0.019799688	-0.381455671
724	AL157935.2	0.01249132	0.005477465	0.025928333	-0.422253586
725	PSMA3-AS1	0.00026362	0.000540548	0.007709116	-0.601715869
726	AC008083.2	0.006588946	9.36E-05	1.79E-05	-0.457128009
727	GNRHR2P1	0.00170084	0.002558132	0.002100142	-0.52041658
728	AC111152.2	0.000706931	0.012928315	0.018655894	-0.559409205
729	HMGB1P6	1.02E-05	0.004970685	0.046591939	-0.729632196
730	LINC02367	0.035958178	0.003007826	0.019799688	-0.365356911

731	AC007216.2	0.040047945	0.2440343	0.005148014	-0.358704712
732	AC010168.2	0.04631308	0.005582266	0.005148014	-0.349095666
733	AC015813.1	0.010603087	0.000393158	0.000505584	-0.431178498
734	AC005261.4	0.002641879	0.002307339	0.025708977	-0.499660759
735	AC090181.2	0.021137902	0.001397718	0.005148014	-0.396587219
736	HEATR9	0.004673821	1.50E-05	0.001859817	-0.473726595
737	MTCO3P22	3.03E-05	0.000179123	0.019799688	-0.690669693
738	IGHV3-30	0.036031595	0.025673954	0.019799688	-0.365235425
739	SRGAP2D	0.048180071	0.096038285	0.007130496	-0.346351867
740	AC100814.1	0.025997317	0.008725654	0.019799688	-0.384921492
741	AL160400.1	0.048995423	0.122740851	0.025385927	-0.345259581
742	AC025171.4	0.013500947	0.018087919	0.019799688	-0.419804079
743	AC084036.1	0.049447604	0.002419039	0.005148014	-0.344695301
744	AL359921.2	0.013722366	0.003892369	0.025708977	-0.419230888
745	ZNHIT3	0.035325421	0.029965738	0.017278945	-0.366391585
746	AC022079.1	0.04391178	0.004578362	0.026402336	-0.352750726
747	AC009831.4	0.04240332	0.019126304	0.007346174	-0.355076296
748	CCL18	0.02228341	1.84E-06	1.79E-05	-0.394170695
749	EIF3FP1	0.001032984	0.000673188	0.019799688	-0.543015516
750	CCL3L3	0.032478	1.33E-10	2.12E-13	-0.37157065
751	AC244196.3	0.006583896	0.001821575	0.005148014	-0.457174192
752	AC093462.1	0.027647497	0.005332739	0.019799688	-0.381078267
753	DDX52	0.008457799	0.009063751	0.038186068	-0.443564401
754	AL022322.2	0.029863361	0.017623232	0.019799688	-0.376746614
755	AC009951.1	0.006520011	7.58E-06	6.58E-06	-0.457685495
756	AC005785.2	0.032282053	0.00278016	0.019799688	-0.371928282
757	AC073857.1	0.000711792	0.007115942	0.013517299	-0.559111961
758	AC245100.8	0.047095922	0.064939985	0.036514691	-0.347921332
759	PAGR1	0.005260495	0.001658171	0.005046449	-0.467947191
760	AC245427.5	0.000184332	7.21E-05	0.005148014	0.669321332
761	AC245427.6	2.53E-07	1.10E-17	0.000136546	0.952635712
762	LAP3	0.02859971	0.023666146	0.080702121	-0.379035931
763	ALS2	0.033815195	0.038472828	0.104389905	-0.369226485
764	CROT	0.022244966	0.023375516	0.266518941	-0.394268846
765	MYCBP2	0.0087509	0.041077853	0.420655734	0.467866102
766	CDKL3	0.011163879	0.001416227	0.266518941	-0.428556374
767	TSR3	0.03092349	0.01014764	0.072903683	-0.374650257
768	IL32	2.84E-07	7.02E-09	0.606753903	0.952118024
769	SEC62	0.000295972	0.001964598	0.144446353	0.645914049
770	FYN	3.46E-05	0.000331632	0.343406126	0.750109739
771	PIK3C2A	0.004316457	0.014389554	0.691605072	-0.477820378
772	PLAUR	0.037879301	0.02669652	0.495614735	0.379200786
773	WIZ	0.034544442	0.031297628	0.941552439	-0.367854856

774	PPP5C	0.041049492	0.024128094	0.495614735	-0.357184378
775	TYROBP	0.011254687	0.004054975	0.346379943	0.452520948
776	CD6	0.005442996	0.032477718	0.099826197	-0.46634189
777	YAF2	0.048869926	0.027944363	0.818571126	0.361115477
778	XYLT2	0.013864245	6.37E-05	0.149604624	0.441946052
779	DEF6	0.005575153	0.007233484	0.551177217	-0.465120278
780	VIM	0.002318004	0.001395255	0.99930985	0.540744014
781	CD44	0.010669876	0.000528212	0.978593899	0.455671672
782	ARID4A	0.000801938	0.045502548	0.266518941	-0.553614789
783	RNF19A	0.007361562	0.017885361	0.148817369	-0.450996753
784	SPDL1	0.025969951	0.000332641	0.089123175	-0.38498673
785	EPHA3	0.02582741	0.000191096	NA	-0.385335758
786	ARAP2	0.001491383	2.87E-05	0.285799439	0.56383009
787	MRPS10	0.034279528	0.017566357	0.640856102	0.38628351
788	PIK3CB	0.008710687	0.028388688	0.647733548	-0.442048151
789	MPHOSPH9	0.011955464	0.044063739	0.627257963	-0.424643055
790	ANAPC4	0.032155262	0.011232072	0.333999578	-0.372169137
791	SYNE2	0.000231867	0.014423038	0.469565501	0.657927906
792	NOP58	0.002603276	2.16E-05	0.606753903	0.534262289
793	SZRD1	0.027842308	0.029288754	0.741633972	0.3997883
794	CUL1	0.017265798	0.000256265	0.109963636	0.42952538
795	MRPL43	0.044564358	0.006838775	0.627257963	0.368055135
796	ZFR	0.030666782	0.014775448	0.850745458	0.393815466
797	GDI2	0.000618553	0.022462293	0.276507928	0.608983152
798	PITHD1	0.044980083	0.006396126	0.563233159	0.367358206
799	POLR3E	0.012368569	0.005071502	0.240299542	0.446580905
800	CTDP1	0.033588094	0.018797459	0.154034746	-0.3696289
801	MPC1	0.003380153	0.001845308	0.128034459	0.519649205
802	WAPL	0.047741146	0.032538225	0.551177217	-0.346993163
803	EPN1	0.012801023	0.014945345	0.9945814	-0.42080626
804	HIPK2	0.042502872	0.000147696	0.336649186	0.371505721
805	CTSA	0.02513525	0.007126496	0.875437783	0.406803323
806	GNAI3	0.007971309	0.033953694	0.926226112	0.473528184
807	YBX1	0.01139161	0.004454771	0.74536186	0.451742302
808	PLPP1	0.049768165	0.013599962	0.627257963	-0.344306319
809	RRP15	0.011804179	0.001750063	0.119736454	0.449499637
810	RHOA	0.002879427	0.01348342	0.952577726	0.528501425
811	IARS2	0.036655956	0.001142523	0.640856102	0.381587391
812	WDR1	0.00965422	0.046110792	0.060062946	0.461734885
813	BUD23	0.014154599	0.001961618	0.606753903	0.440721313
814	ST6GAL1	0.020311723	0.028181665	0.811850916	-0.398776977
815	SEMA3A	0.033291838	0.024823741	NA	-0.370202471
816	ACTB	1.48E-06	4.59E-05	0.495614735	0.886568592

817	GPATCH1	0.013525125	0.028860622	0.42897246	-0.419771272
818	MBNL3	0.031066378	0.026379436	0.144446353	-0.374332719
819	UBE2A	0.020598921	0.03407711	0.967517596	0.419022222
820	MLLT10	0.042159838	0.011420805	0.305871368	0.372066211
821	PCM1	0.044693201	0.003856992	0.060450123	-0.351577045
822	THOC1	0.042031753	0.000472851	0.640856102	0.37227843
823	SAR1A	0.030594438	0.004779448	0.640856102	0.393982009
824	PAFAH1B3	0.00570832	0.004293703	0.266518941	-0.463916162
825	CNOT4	0.040794552	0.01076354	0.345059898	0.374420578
826	RSBN1	0.020092513	0.035531473	0.820811727	-0.399412524
827	CXCL2	0.003934474	0.00254289	0.296544194	0.51302724
828	DLG3	0.018897734	0.023825069	0.231743843	-0.402903309
829	PILRA	0.038391516	0.009667977	0.58450159	0.37830295
830	CPNE3	0.042718073	0.016602158	0.974471964	0.371143332
831	EPS15	0.028530743	8.37E-05	0.073256471	-0.379205394
832	B4GALT1	0.001799886	0.000710333	0.773350076	0.554261186
833	CHMP5	0.049497759	0.008365223	0.65975503	-0.344630517
834	RBM22	0.02481712	0.012536345	0.087161363	-0.387718476
835	TXLNG	0.019379742	4.52E-05	0.296544194	0.422759202
836	PPP1R15A	0.004174421	0.004712634	0.529837243	0.51037438
837	KLHL42	0.041962692	0.031024819	0.109481031	-0.355738207
838	PTPN4	0.031876491	0.006170078	0.539079711	-0.372714051
839	RPL6	1.58E-07	5.92E-07	0.266320897	1.002223237
840	RPLP0	0.000432517	0.000315152	0.397687554	0.627526882
841	PEBP1	0.000948551	0.00100735	0.495614735	0.586359132
842	FXYD5	0.000119973	0.000321803	0.670529407	0.690864535
843	ZNF302	0.008173316	0.013233879	0.410691503	-0.445505463
844	YPEL3	0.00383508	0.002347177	0.06662965	-0.482910439
845	GLG1	0.033337447	0.000427869	0.084704613	-0.370105427
846	OSBPL8	0.036014267	0.00300926	0.642994439	-0.365261391
847	LAMB1	0.011345086	0.012806753	0.627257963	-0.427628035
848	CMTM6	0.010032889	0.000502815	0.083528363	-0.434249289
849	PSME1	9.28E-05	0.002329419	0.741633972	0.703519575
850	TOX4	0.015691686	0.031591429	0.785947857	0.435416461
851	CLSPN	0.020999495	0.011009096	0.266518941	-0.396982144
852	HOOK2	0.016088599	0.000958805	0.627257963	-0.411403314
853	BTAF1	0.042986459	0.039661543	0.648764501	-0.354188037
854	WAC	0.005237958	4.07E-06	0.20833475	0.49757598
855	HSP90AB1	0.004307146	0.000367987	0.062544597	0.50865046
856	CIRBP	0.013825169	0.003383439	0.6649977	0.442116878
857	GADD45B	0.040183858	6.39E-06	0.261228282	0.375394955
858	CABIN1	0.028348621	0.005534434	0.266518941	-0.379561224
859	CYTH4	0.034435042	0.012807119	0.912879282	0.385961158

860	SNU13	0.039179439	0.000186608	0.143151757	0.377199368
861	CYB5R3	0.041324822	0.000156107	0.589807233	0.373525574
862	ST13	0.00932599	5.61E-06	0.067075658	0.463883691
863	CERK	0.014479799	0.002327683	0.222129644	0.439654717
864	PSMC6	0.003719431	0.002118471	0.884079585	0.516079148
865	DDHD1	0.000890285	0.002944305	0.627257963	0.589823007
866	DAAM1	0.020852819	6.35E-05	0.627257963	0.41832662
867	ERH	0.047858469	0.000194487	0.464993185	0.362642801
868	YY1	0.048504009	0.036974306	0.606753903	0.361627919
869	RABGGTA	0.007064548	0.031973194	0.495614735	-0.453296682
870	PSMA7	0.000341677	0.008843813	0.640856102	0.639510378
871	RNMT	0.045947857	0.001725442	0.155877982	0.365734441
872	RBBP8	0.026392652	0.000509946	0.085045933	-0.383925147
873	PLP2	0.000480715	8.08E-05	0.09915675	0.622051175
874	MAGED2	0.018248343	1.20E-07	0.714565344	0.42611161
875	DNAJC3	0.024088347	7.22E-07	0.057789016	0.409651108
876	SUPT20H	0.035856575	0.007679053	0.606333524	-0.365450142
877	UBFD1	0.048101509	0.010976498	0.169914657	-0.346454732
878	ZNF106	0.01405511	0.004406843	0.085095192	-0.417899883
879	SPG11	0.008140648	0.00012823	0.138011375	-0.445718994
880	EIF3E	0.009391232	0.01552143	0.652553109	0.463458588
881	EEF1D	0.000211413	2.37E-07	0.832378691	0.662688307
882	LEPROTL1	0.018068683	0.004551287	0.741633972	0.426750567
883	CCDC130	0.000808472	0.000246702	0.177549077	-0.553249684
884	FAM32A	0.016042011	0.000619328	0.327340645	0.433996824
885	TBCB	0.010008964	0.013868583	0.899663927	0.459570344
886	CDC37	0.024993309	0.001014637	0.052529983	-0.387310336
887	ARRDC2	0.023756044	0.01671847	0.177035826	0.410627484
888	RUNDC3B	0.035528597	0.029098343	0.814358224	-0.366030719
889	GTPBP10	0.01195701	0.031736342	0.609509323	-0.424635126
890	SSBP1	0.002458399	0.002255286	0.640856102	0.537501681
891	TAX1BP1	0.00043015	0.00277398	0.640856102	0.62778786
892	GARS	0.017155924	0.000341525	0.085095192	0.429944682
893	RPA3	0.030930939	0.020405344	0.585565794	-0.374631241
894	TMEM176B	0.041099899	0.002621516	0.495614735	0.373924655
895	EIF4H	0.025416009	0.031198111	0.34885889	0.406059457
896	CCDC6	0.015937094	0.041196755	0.154034746	-0.411891601
897	RPL28	0.000326652	1.00E-06	0.370722542	0.641583406
898	P2RX1	0.042688782	0.00643476	0.741633972	-0.354639373
899	RNF167	0.006712234	0.025871671	0.805859721	0.484010856
900	CCL2	0.00540553	0.002683831	0.296544194	0.495868537
901	MLX	0.002799381	0.000353397	0.061290154	-0.496798989
902	RANGRF	0.033707563	0.03233833	0.05719694	-0.369414638

903	SUPT6H	7.83E-06	0.005158573	0.728265686	-0.737919733
904	CLNK	0.016061265	0.024013535	NA	-0.411473125
905	EHD1	0.025296541	0.013209422	0.879789303	0.40639257
906	CCKBR	0.003645161	0.008734403	NA	-0.485096951
907	DDX6	0.004255603	0.019833236	0.627257963	0.509326907
908	AMBRA1	0.026935263	0.032816513	0.262930867	-0.382646826
909	RPS13	1.26E-06	2.64E-07	0.364968765	0.896367024
910	NDUFS8	0.000825863	0.008557167	0.680782684	-0.552313334
911	PRDM4	0.043703838	1.17E-07	0.088403625	0.369464235
912	SELPLG	0.008573543	0.00373506	0.055975497	0.469101276
913	PTGES3	0.018870116	0.003616803	0.483526135	0.424532996
914	C12orf49	0.001062338	0.032028131	0.096265628	-0.541908845
915	TPI1	0.003934726	0.023770111	0.918163965	0.513018399
916	GOLT1B	0.024000253	0.014678593	0.680783536	-0.389790089
917	ADTRP	0.013500947	0.03039077	NA	-0.419804079
918	FBXO5	0.01141058	0.004060533	0.073607426	-0.427299906
919	PTK7	0.000597153	0.000330064	NA	-0.567011327
920	CNOT6	0.001987469	0.008023135	0.542109754	-0.513508137
921	ARRDC3	0.002291806	0.007381982	0.593388389	0.541356949
922	BRIX1	0.021067704	0.002480855	0.084260243	0.417674148
923	ST8SIA4	0.042723818	0.000634486	0.05383061	-0.354580052
924	NR3C1	0.000880311	0.000318215	0.071463114	0.590478797
925	ATP6V0E1	5.71E-06	6.23E-05	0.879298159	0.829149913
926	UBE3A	0.015080172	0.046224782	0.647733548	0.437616065
927	RPL24	4.86E-05	0.000521828	0.606753903	0.733737687
928	SCAP	0.026508522	0.041002481	0.254769117	-0.383659496
929	ABHD14B	0.000590493	0.003907198	0.188227385	-0.567409025
930	EIF4G1	0.020875639	0.026813894	0.899723247	0.418262013
931	DOK1	0.020447952	0.000311441	0.072903683	-0.398379606
932	PDCL3	0.031180513	0.024649008	0.495614735	0.392575384
933	IL1R1	0.003645161	0.007132906	NA	-0.485096951
934	PASK	0.003247207	0.008676505	0.282364998	-0.48966488
935	PRKD3	0.012706363	1.87E-05	0.258994911	0.444867422
936	WIPF1	0.002651884	0.023699709	0.268542367	0.533145794
937	COX7A2L	0.041306736	0.034168368	0.127068762	-0.356795315
938	NFE2L2	0.012562212	1.05E-05	0.193648357	0.445608325
939	EPHA4	0.004614355	0.0012645	0.354896898	0.504610432
940	TMEM59	0.00731207	0.000286734	0.741633972	0.478587122
941	SRSF4	0.010454201	0.004777382	0.369569582	0.456881674
942	HDAC1	0.009777476	0.006891142	0.064963226	0.460958704
943	SFPQ	0.017317467	0.019238465	0.741633972	0.429351631
944	MEF2D	0.010491636	0.005940253	0.50280857	0.456644125
945	PRDM2	0.033816079	0.021810186	0.094727654	-0.369223862

946	CD2	0.000166877	0.002242675	0.704606892	0.673712761
947	GNPAT	0.041685721	0.032672316	0.346379943	-0.356185988
948	MTR	0.00060274	0.007051955	0.147906751	-0.566552436
949	RCN2	0.011649328	1.20E-06	0.606753903	0.450369074
950	SPCS2	0.017178303	0.000609335	0.627257963	0.429869533
951	HMGN3	0.005590966	0.010695369	0.952440918	0.493964877
952	MYL12B	2.37E-06	5.22E-05	0.563581388	0.864999951
953	CCNI	0.000154914	0.003227213	0.627257963	0.677386871
954	UBE2B	0.002152989	5.69E-06	0.378729945	0.544807297
955	NDUFA8	0.001535572	0.037186946	0.234783817	-0.524978323
956	FCF1	0.002125529	0.038346758	0.433814406	-0.510365731
957	IFT43	0.00173335	0.014956345	0.493297094	-0.519567063
958	SLIRP	0.008576226	0.01516664	0.470783579	0.469085949
959	LGALSL	0.013500947	0.017754756	0.266518941	-0.419804079
960	PYROXD2	0.031933274	0.006905897	0.222822765	-0.372610143
961	PCMT1	0.003862351	0.036290007	0.551177217	0.513889893
962	MTERF2	0.019301528	0.040506454	0.640856102	-0.401642909
963	COIL	0.001170318	0.001593316	0.576730826	-0.537708594
964	SPOP	0.011552585	0.016184872	0.971661722	0.450895545
965	PAPD5	0.025642257	0.000213961	0.20833475	-0.385796002
966	RNF2	0.024531595	0.000413724	0.466523975	0.408430759
967	RPL5	2.27E-06	0.000611721	0.886794374	0.869907944
968	HNRNPA2B1	0.002363897	0.045119927	0.585565794	0.539679368
969	SRGN	1.58E-07	9.30E-05	0.70179449	0.967513373
970	PFDN5	0.000287797	0.008921031	0.606753903	0.64736257
971	AGO2	0.000577615	0.00198062	0.09591105	0.612531062
972	CHD6	0.029926614	0.001949061	0.606753903	0.395353342
973	TRERF1	0.047565684	0.002876216	0.160558605	-0.347251329
974	SNRPC	0.002130389	0.000483784	0.3257669	0.54544635
975	TBCC	0.01066148	0.027533456	0.661487852	0.455725029
976	MAD2L1BP	0.026953128	0.005855601	0.249356091	-0.382599864
977	KLHDC3	0.015065021	0.02711809	0.180874701	-0.414797198
978	RREB1	0.040591282	0.001184211	0.531318552	-0.357879918
979	6-Sep	0.029640048	0.020123391	0.812731715	0.395929054
980	NDUFA1	7.90E-05	0.000853005	0.545587899	0.711593924
981	ARMC7	0.015192696	0.000618552	0.589847165	0.4372296
982	IL1B	0.000892273	0.00018696	0.186714706	0.589715706
983	SNRPD2	0.00046689	0.000360771	0.606753903	0.62351423
984	RBCK1	0.031250931	7.03E-06	0.053770031	-0.373972654
985	ZNF133	0.01552099	0.008375317	0.390994099	0.436020178
986	S1PR4	0.03356136	0.010041093	0.551177217	0.3877144
987	HNRNPR	0.002264945	0.000559884	0.963681702	0.541986296
988	ROMO1	0.001247554	0.024070799	0.640856102	0.573399397

989	CEP250	0.038427025	0.021389432	0.089299604	-0.36106658
990	EVI2A	0.000351619	0.007766839	0.130746931	-0.590256541
991	COX7C	0.010166846	0.00588764	0.648757413	0.458593631
992	APOL2	0.030402973	0.012721159	0.261570292	0.394401637
993	POT1	0.029322107	1.45E-06	0.970478149	-0.377829435
994	MINDY2	0.012897323	0.001408512	0.146681809	-0.420387455
995	PHF20L1	0.00818954	1.18E-07	0.217269961	0.471896405
996	RNASE1	0.00761546	0.009191196	0.390994099	0.476270281
997	NEDD8	0.006572628	0.004778358	0.065018881	-0.457243832
998	DAD1	0.04480743	3.25E-06	0.398946534	-0.351385987
999	ZSCAN10	0.015895303	0.011225718	0.627257963	-0.412029955
1000	RPL36	0	1.16E-07	0.349425163	1.167175773
1001	HELZ2	0.037542737	0.04930718	0.249960982	-0.362548261
1002	GMFG	0.001033394	0.001055293	0.640856102	0.583110406
1003	LRRC47	0.000125055	0.015080825	0.26095898	-0.63319182
1004	COX4I1	7.73E-05	0.005525091	0.818836883	0.712518896
1005	SH3BGRL	0.001052648	0.018919006	0.235042598	-0.54237248
1006	SH3BP5	0.044796257	0.006899108	0.979228329	0.367649802
1007	KIF3A	0.005345812	1.99E-05	0.292228439	0.49642658
1008	RPL27	0.008751436	4.24E-05	0.285798932	0.467860196
1009	PDHA1	0.031178272	0.046421797	0.363054345	0.392582076
1010	DNAJB1	6.27E-05	0.002823155	0.627257963	0.722217293
1011	PTPRE	0.023505713	0.026249942	0.960576339	0.411349494
1012	RAN	0.022054353	0.026772154	0.141099008	-0.394766256
1013	DCTN4	0.001595354	0.039693077	0.629277778	-0.523280954
1014	SPART	0.049874819	0.00078336	0.248517793	0.359737368
1015	SRRM1	0.022088157	8.35E-05	0.234934532	0.415319199
1016	RTN3	0.035854902	0.02052412	0.414963542	0.38306569
1017	BTG1	0.001564169	0.007047962	0.072903683	0.561433518
1018	ARL8B	0.00974203	0.000789575	0.494126969	0.461188571
1019	EMC7	7.00E-05	0.000377661	0.264979927	0.717124142
1020	PRPF38B	0.011718862	0.00258502	0.495614735	0.449982583
1021	TSHB	0.006172653	0.029431128	NA	-0.460038506
1022	LAMTOR5	0.02932681	0.034188561	0.300222058	-0.377820681
1023	YWHAQ	1.07E-06	1.55E-05	0.36023221	0.902990265
1024	LDHA	0.000238211	2.95E-05	0.062036132	0.656617738
1025	TIMM17A	0.043028281	0.005660211	0.627257963	-0.354118555
1026	PUM1	0.018074648	0.01905013	0.849970332	0.426731808
1027	CTSL	0.039903447	0.028620893	0.495614735	0.375938232
1028	SNX14	0.001755508	0.013081729	0.627257963	0.555471964
1029	OS9	0.040520106	0.048456354	0.259660593	0.374887309
1030	MPHOSPH6	0.010175526	0.009543043	0.086572518	-0.433485936
1031	ISCU	1.58E-07	1.06E-05	0.074702833	0.973745033

1032	SCYL2	0.048427656	0.006366193	0.287348589	-0.346013191
1033	SLC41A2	0.037198946	0.005774023	0.390994099	0.380574845
1034	RNASEH2B	0.018356291	0.0266803	0.640856102	-0.404074084
1035	RPL13AP25	1.52E-06	2.29E-06	0.266518941	0.885125018
1036	GPNMB	0.039903447	0.031720499	0.495614735	0.375938232
1037	RAC1	0.002331418	0.000332855	0.852500615	0.540438844
1038	RSAD1	0.048552711	0.003028039	0.296544194	0.361562581
1039	MRPL50	0.01009548	0.014680676	0.30133795	-0.433881158
1040	RPL35	0.026934253	0.017541257	0.984282961	0.402013865
1041	CNPY3	0.030849284	0.002294829	0.505975241	0.39336514
1042	CASP1	0.026324822	0.00086553	0.070304743	-0.384081548
1043	LRRC49	0.003645161	0.00892838	0.072903683	-0.485096951
1044	UACA	0.001455558	0.00367099	0.272043811	-0.527439618
1045	PAK6	0.021669686	0.030925446	0.072903683	-0.395759636
1046	IFI44	0.00500101	0.002784954	0.072903683	-0.470530096
1047	RPL7P9	0.036191718	0.005395463	0.266518941	0.382496251
1048	RAB1A	0.039764977	0.024528179	0.941203224	0.376073522
1049	ATRAID	0.040310934	0.038708854	0.636523818	-0.358247986
1050	CH25H	0.013500947	0.03096009	NA	-0.419804079
1051	RPS24	7.73E-06	0.000308888	0.811805847	0.81567932
1052	ASNSD1	0.026033237	3.90E-07	0.13044506	0.404417757
1053	ARHGAP24	0.013500947	0.031515229	0.072903683	-0.419804079
1054	BMPR1B	2.39E-05	3.10E-05	0.640856102	-0.698638223
1055	RAP1GDS1	0.018801749	0.000540688	0.296544194	0.424664305
1056	11-Sep	0.03096124	0.003540012	0.741633972	-0.374561253
1057	SCARB2	0.032123887	0.039641789	0.125068914	-0.372234207
1058	PPP3CA	0.000231393	1.61E-06	0.078928538	0.658062197
1059	SCAF11	0.025549587	0.01453152	0.120120921	-0.386015713
1060	LLPH	0.007704059	0.023811741	0.077857718	-0.448669104
1061	AC078814.1	0.023524967	0.040778684	0.981447702	0.411286698
1062	PHLDA1	0.032723155	0.00026463	0.266518941	0.389280816
1063	GLTP	0.025479641	0.000763277	0.718028848	-0.386165106
1064	KANSL2	0.048562717	0.00041477	0.864234777	0.361544602
1065	GALNT6	0.037726248	0.000276159	0.741633972	-0.362202093
1066	TMBIM6	0	1.49E-07	0.060450123	1.201352978
1067	GPR65	0.044090556	0.023391111	0.640856102	0.368849128
1068	SERF2	0.000367306	9.42E-06	0.797866678	0.635722328
1069	SRP14	1.58E-07	2.17E-06	0.736764777	1.022655065
1070	TLE3	4.13E-05	0.001793801	0.551177217	0.741689619
1071	ARMC5	0.042040149	3.90E-06	0.814999037	-0.35561623
1072	FTO	0.000380342	0.000336486	0.204092451	-0.586781279
1073	KATNB1	0.00916129	0.033399919	0.109481031	-0.439243139
1074	G6PC3	0.038170412	0.020914573	0.741633972	-0.36144608

1075	MINK1	0.009175904	0.015854581	0.222822765	-0.439154489
1076	SLC39A3	0.017673285	0.025663933	0.266518941	-0.406136663
1077	DPP9	0.047864971	0.000350079	0.609690342	0.362635649
1078	SOD1	0.000177672	0.001724377	0.259752408	0.670796254
1079	EMP3	5.43E-06	2.36E-07	0.166715067	0.831335908
1080	ZNF473	0.044322644	0.022312809	0.640856102	-0.352147138
1081	CFAP74	0.021669686	0.002525067	NA	-0.395759636
1082	RPL11	0.000209425	4.15E-07	0.266518941	0.663163776
1083	XCL2	0.011149328	0.025010968	0.782767973	-0.428618255
1084	PPOX	0.03672688	0.034121077	0.356630351	-0.363979023
1085	SETDB1	0.015698535	0.0415381	0.072903683	-0.412737758
1086	MRPL9	0.037630326	0.049916611	0.51938818	0.379693655
1087	C1orf131	0.000932769	0.01750419	0.051369619	-0.546552406
1088	GUK1	0.001189224	0.000915089	0.255524859	0.57611817
1089	MEIS1	0.013500947	0.027111142	0.072903683	-0.419804079
1090	AL078621.1	0.007625876	0.021876007	0.84128288	0.476188003
1091	EAF2	0.011481567	3.38E-05	0.217626851	0.451230879
1092	ECE2	0.016895082	0.007612463	0.811850916	-0.408728715
1093	OCIAD2	0.008376555	6.14E-05	0.495614735	0.470475601
1094	RPS3A	9.25E-06	2.66E-05	0.200111011	0.809131063
1095	NDUFS6	0.018774856	0.044629428	0.42616745	0.424746211
1096	6-Mar	0.003069472	0.048803512	0.849674634	0.524973932
1097	YIPF5	0.034963544	0.001093781	0.640856102	0.384838023
1098	MMS22L	0.002300865	0.041192628	0.342630969	-0.506475886
1099	RARS2	0.019748974	0.036774013	0.486013386	-0.400394474
1100	DYNLT1	0.00083085	0.000104085	0.06158068	-0.552000962
1101	AC004453.1	0.008259232	0.019804163	0.627257963	0.47136877
1102	FRMPD3	0.030251026	0.00492984	0.627257963	-0.375993991
1103	NDUFB9	0.002003219	0.038924981	0.879142142	0.548756976
1104	AK3	0.011145698	0.001860084	0.232298312	0.453126044
1105	ZCCHC7	0.018675241	0.038340286	0.266518941	-0.403502475
1106	CBWD5	0.026511679	0.002189553	0.401152436	0.40311892
1107	SURF2	0.001932927	0.008388328	0.073599917	-0.514792033
1108	GSTO1	0.000581087	0.005590843	0.281561376	-0.568110005
1109	PPRC1	0.020859352	0.004625051	0.086324584	-0.397373179
1110	EIF3M	0.006498138	0.002299593	0.257792189	0.485958656
1111	PTPRJ	0.037777855	0.038404843	0.296544194	0.379405233
1112	EI24	0.017843918	0.042504113	0.551048972	-0.40560336
1113	PPP4C	0.025451329	0.029826319	0.621098709	-0.386231116
1114	TMEM219	0.044976169	0.030357648	0.741633972	0.367365543
1115	ITGB1	0.040283536	0.013385939	0.134555011	0.375211904
1116	PIP4K2A	0.015054353	0.013518142	0.450501818	-0.414833071
1117	UBC	4.42E-07	2.59E-06	0.193824834	0.934596059

1118	FRMD4A	0.008667824	0.026971151	0.05587409	-0.442318611
1119	PARP8	0.042349378	5.89E-07	0.547385325	0.371751478
1120	CACUL1	0.017497664	2.87E-06	0.741633972	0.428666712
1121	MZT2B	0.04495701	0.030549967	0.970478149	0.367389203
1122	ARL14EP	0.034573228	7.39E-07	0.06126599	0.385659087
1123	C18orf25	0.000612619	0.007317976	0.105603372	-0.565759791
1124	HOMER1	2.76E-05	3.68E-05	0.072903683	-0.693642937
1125	PAN3	0.000148886	0.000175389	0.640856102	0.679498007
1126	CWC27	0.011921975	0.003139167	0.685229789	-0.424812586
1127	RANBP2	0.016007859	0.00713928	0.95579127	0.434137434
1128	SPHKAP	0.02849293	0.000205712	NA	-0.379282714
1129	GRAP	0.010322486	0.028138894	0.085045933	-0.432711916
1130	ADAMTS1	0.002044347	0.000491927	NA	-0.512174715
1131	OXNAD1	0.015678082	0.002702983	0.640856102	0.435424812
1132	ELMSAN1	0.000116123	0.000121559	0.330315127	0.692569839
1133	UQCRB	0.001633546	0.009664355	0.728364774	0.559131941
1134	HKDC1	0.003645161	0.007203601	NA	-0.485096951
1135	GALK2	0.018635755	0.006556651	0.495614735	-0.403625594
1136	EIF4A2	3.19E-06	0.000210511	0.170635308	0.855037018
1137	ATP2B2	0.015656082	0.018471454	0.627257963	-0.412857907
1138	RAB28	0.003262768	0.001273943	0.278398527	-0.489426055
1139	TMED4	0.000111672	0.000973544	0.495614735	0.694638272
1140	FCER1G	0.04387384	0.000397162	0.217626851	0.369188932
1141	PAXBP1	0.00287081	0.005220831	0.606753903	0.528654727
1142	CHAF1B	0.014522347	0.00068365	0.627257963	-0.416409259
1143	PTMS	0.04830137	0.032224345	0.627257963	-0.346181917
1144	ADIPOR1	0.003934979	0.000124876	0.533860044	0.513015969
1145	THEM4	0.009722997	2.08E-07	0.071017832	0.46132235
1146	RGL4	0.00573275	0.011739811	0.050093819	-0.463704601
1147	NAE1	0.044901364	1.51E-05	0.242092486	0.367475815
1148	PCNT	0.039052995	0.030570751	0.495614735	-0.360312058
1149	JAML	3.90E-05	0.013440769	0.770434074	0.744460315
1150	LMNA	0.017200808	7.19E-07	0.346379943	0.429786891
1151	ZNF394	0.022385392	3.26E-05	0.675975787	0.414461273
1152	RECQL4	0.018540054	0.028205756	NA	-0.403928487
1153	SQSTM1	0.003167066	0.003519533	0.201347762	0.523212104
1154	MED11	0.033775961	0.008362499	0.872800169	-0.36929622
1155	SLC25A45	0.042611451	0.039862663	0.058534421	-0.354758905
1156	RPL29	0.006624708	1.02E-05	0.05715112	-0.456828522
1157	LAPTM5	1.58E-07	7.18E-08	0.495614735	0.984387649
1158	TM2D1	0.001057414	0.011164406	0.196582302	-0.542118227
1159	ARPC5	0.004174957	0.030504685	0.970418458	0.510367324
1160	BROX	0.010289344	0.034388888	0.286468882	0.457890994

1161	PPP1R21	8.34E-05	0.003000338	0.329691615	-0.650353808
1162	MAPKAPK2	0.037301212	0.013751976	0.111816902	-0.36299647
1163	CTSS	0.046612651	0.008204436	0.258994911	0.364636213
1164	S100A11	0.007841014	0.000819802	0.469625518	0.474496136
1165	S100A9	0.026341708	0.00814489	0.390994099	0.403552606
1166	ATP1A1	0.02103229	0.003370686	0.640856102	-0.396896732
1167	ARPC2	2.21E-07	2.19E-07	0.058222899	0.95898835
1168	TRAT1	0.003180102	0.023618453	0.157388245	0.522988906
1169	PYHIN1	1.58E-07	0.000198699	0.051343337	-0.865897334
1170	TIPARP	0.012904078	0.033672527	0.696161836	0.443873887
1171	U2SURP	0.012996717	0.019488737	0.892039609	0.443419242
1172	CXCL3	0.003860583	0.001165361	0.266518941	0.513917197
1173	RNF168	0.04037021	0.004764237	0.843362785	0.37505657
1174	NDST3	0.002505681	0.005566963	0.741633972	-0.502313139
1175	NSA2	0.002621047	0.00270736	0.266518941	-0.500083452
1176	RPS14	0.004924531	0.001743125	0.062930152	0.500803357
1177	ZNF704	0.039903447	0.021252565	0.495614735	0.375938232
1178	OXR1	0.012220725	0.000752539	0.272763153	-0.423462574
1179	CARD19	0.014301465	0.000391749	0.208934182	0.440204288
1180	STOML2	0.000546777	0.03174033	0.622236813	-0.570895513
1181	NEMF	0.024280285	0.001005362	0.20532134	0.409110698
1182	ARF6	0.028129853	0.000333512	0.496281398	0.39909994
1183	PRPF18	0.007146929	0.00574724	0.29320142	-0.452600385
1184	FUNDC2	0.00241118	0.004899709	0.608368235	-0.504224488
1185	CCDC186	0.048528029	0.020951804	0.843900867	-0.34586722
1186	TAF1D	0.002624929	0.004304984	0.461296732	0.53374159
1187	BAG5	0.001834259	0.003357224	0.222822765	-0.517037306
1188	WBP1L	3.87E-05	0.00079204	0.080892424	-0.680140069
1189	HDGFL3	0.036923079	0.000141098	0.217626851	0.381053855
1190	CPLX4	0.027788618	0.025092691	0.741633972	-0.38076938
1191	SLFN5	0.013536961	0.030484343	0.266518941	-0.41972166
1192	URM1	0.005347295	0.010271306	0.22158431	-0.467130336
1193	SP2	0.022722997	0.008526203	0.266518941	0.413520501
1194	TUBA1A	0.000502651	2.00E-07	0.318270881	0.619790889
1195	ZNF283	0.017876555	0.023112811	0.741633972	-0.405533855
1196	CD320	0.037427656	2.32E-05	0.117108898	0.380109078
1197	SLC3A2	0.008463544	5.68E-05	0.367663188	0.469804431
1198	LMBRD1	0.034680292	0.028201152	0.595105234	0.385451016
1199	MMADHC	0.0120434	0.013176135	0.811850916	0.448203306
1200	ATXN2L	0.003474654	0.026107546	0.125265592	-0.486345408
1201	SLC25A6	0.000914178	0.009487592	0.606753903	0.588374102
1202	XPO6	0.017366612	0.01502551	0.488890137	-0.407141236
1203	AL669983.1	0.003763399	0.000467652	0.433814406	0.515419234

1204	NLGN1	0.014080898	0.003145922	0.640856102	-0.417802198
1205	ZPLD1	0.018540054	0.0311349	NA	-0.403928487
1206	USP38	0.012548955	0.000770442	0.548029411	-0.421976211
1207	SLC16A5	0.045258412	0.031755331	0.268542367	-0.350715027
1208	PA2G4	0.013567231	0.024339563	0.750277184	0.443039594
1209	PFKFB3	0.027746638	0.001763509	0.451402342	0.400045167
1210	ARL6IP1	0.000868506	0.008497435	0.301250897	0.591194389
1211	COMMD5	0.004637334	0.001786662	0.170037513	-0.474106542
1212	KIF5B	0.019227448	0.000685021	0.117108898	0.42332961
1213	POLR1C	0.024277445	0.004472502	0.21513988	0.409119058
1214	ZNF562	0.010553437	0.002790211	0.208421461	-0.431439715
1215	RPS21	0.000503314	7.16E-06	0.522904177	0.619700431
1216	MRPL13	0.043667414	0.00308443	0.804104023	0.369526983
1217	ID4	0.003645161	0.010995318	NA	-0.485096951
1218	MRPL52	0.004628243	0.021823818	0.372208217	-0.474220744
1219	FAM71D	0.012772615	0.027295274	0.741633972	-0.420931907
1220	BNC2	0.03476706	0.041944631	0.741633972	-0.367455896
1221	ARV1	0.035296762	0.042562775	0.354896898	-0.366438072
1222	PPP1R14B	0.044542327	0.013596337	0.583257924	0.368097705
1223	CHD2	7.39E-05	0.002297365	0.266518941	0.714124204
1224	GNG5	0.031724544	0.021687621	0.519332821	-0.373001377
1225	PABPC5	0.04940714	0.000148038	NA	-0.344748493
1226	YIF1A	0.024550123	0.001809538	0.224526959	0.408374216
1227	NDUFA11	0.042025819	0.022223099	0.089123175	-0.355638812
1228	CADM2	0.006455337	0.006380869	NA	-0.458199112
1229	EIF3F	0.000246228	0.007197307	0.299152207	0.654932891
1230	B3GNTL1	0.046524525	7.16E-06	0.217626851	0.364762478
1231	LYSMD3	0.038447794	0.002008071	0.346451476	0.378200888
1232	CDC26	0.000738463	0.002980338	0.422355599	-0.557518505
1233	NAP1L4P1	0.013500947	0.004511507	0.072903683	-0.419804079
1234	DLGAP1-AS1	0.023277003	0.000448411	0.390994099	0.411943995
1235	AC112247.1	0.006033994	0.011320744	0.606753903	0.489589007
1236	IMP3	0.00927675	0.006694815	0.325056103	0.464201659
1237	ODF3B	0.009612335	0.003785281	0.072903683	-0.436603529
1238	RPS3AP5	8.84E-07	6.57E-06	0.537590019	0.91179742
1239	RPL10P16	0.00028502	0.01016106	0.573512337	0.647895938
1240	CD28	0.024337163	0.002663492	0.640856102	-0.388925943
1241	SELENOW	0.021870242	0.021822556	0.163272879	0.415981756
1242	RAD23A	0.000791017	0.003211076	0.787399171	0.596177908
1243	GADD45GIP1	0.01204078	0.002979798	0.050353696	0.448218983
1244	NPM1	1.58E-07	8.32E-07	0.1667774	1.039872678
1245	SETD2	0.002631905	0.000213043	0.178775482	0.533583615
1246	ZNF101	0.030697147	0.015693107	0.878152671	0.393734041

1247	IST1	0.021053942	0.000560846	0.36023221	0.417711937
1248	TP53TG1	0.015222145	0.036372017	0.627257963	-0.414314343
1249	RPS17	0.000654441	0.001594598	0.592139104	0.606102748
1250	ACBD3	0.033875702	0.011555034	0.664351063	0.387083644
1251	AC005037.1	0.034189445	0.017296768	0.272763153	-0.368549668
1252	KIAA2026	0.040499306	0.019028853	0.744600001	0.374921425
1253	EP400	0.031459788	0.002686603	0.188021702	-0.373550526
1254	NPIPA5	0.002754782	0.006892838	0.051517418	-0.497573605
1255	ACTG1	1.27E-05	1.16E-05	0.223802173	0.794965549
1256	TOP1MT	0.038373588	0.023940571	0.081459189	-0.361147212
1257	PDE4B	0.012940439	4.49E-05	0.289211266	0.443695829
1258	NOMO2	0.001162648	0.037401013	0.067415466	-0.538028734
1259	ZFP36L1	0.040423142	0.000698775	0.551177217	0.374961752
1260	RPL12P4	0.000118679	0.000773408	0.362018283	0.691310279
1261	IFITM1	0.004996875	7.57E-08	0.128104602	0.500313715
1262	BLOC1S4	0.001750016	0.00335073	0.741633972	-0.51915098
1263	MKL2	0.024325895	0.005192829	0.067342337	-0.388949328
1264	KIAA1024L	0.003645161	0.002368324	NA	-0.485096951
1265	SMYD4	0.049233824	0.018092124	0.733753027	-0.344963562
1266	LILRB4	0.028937062	0.030896157	0.495614735	0.397547209
1267	RSBN1L	0.026969699	0.002754921	0.186452711	-0.382556123
1268	EXD3	0.037365128	0.04431923	0.214443009	-0.362872741
1269	ZKSCAN4	0.036324317	9.91E-05	0.072903683	-0.364723385
1270	TCEA1	0.020616501	0.028788737	0.73981283	-0.397976827
1271	ARL4C	0.001788681	0.026402409	0.303413829	0.554544568
1272	H3F3C	1.58E-07	5.97E-06	0.080760042	1.0168579
1273	PARVB	0.029060665	0.000532118	0.072903683	-0.378375175
1274	NDUFA4	6.32E-05	7.97E-06	0.144446353	0.721939308
1275	ZKSCAN3	0.013500947	0.028521787	0.266518941	-0.419804079
1276	AC004448.1	0.011296004	0.003318904	0.812731715	0.452287454
1277	HMGB1	0.001687362	0.002434992	0.143328262	0.557491177
1278	TUBB	0.01423092	8.88E-07	0.217626851	0.440453824
1279	ZNF493	0.042557509	0.00353171	0.062355251	-0.35483708
1280	NTNG2	0.044148696	0.028263903	0.085045933	-0.352411293
1281	TSC22D2	0.012627643	0.008748541	0.275061308	0.445269852
1282	NACA	0.002169434	0.000458314	0.974772767	0.544303753
1283	TRAPPC4	0.044826368	0.044698727	0.724448854	-0.351357306
1284	CD47	0.032623098	0.009268985	0.868746627	0.389469574
1285	CASP4	0.034282558	0.019631966	0.781743581	0.386275596
1286	MRPL21	0.041439777	0.043942509	0.44161036	0.37332258
1287	C5orf56	0.002338994	0.003626174	0.459937004	-0.505698718
1288	GPX1P1	0.00112272	0.006357224	0.144446353	-0.539407838
1289	SERPINB2	0.032032037	0.031450711	0.495614735	0.390735514

1290	S100A10	0.014955842	5.09E-06	0.207733555	0.438096772
1291	RPL37A	9.44E-06	0.000346441	0.980183068	0.807668122
1292	OCLN	0.006497349	0.001331997	0.072903683	-0.457879608
1293	RPL12	0	8.83E-09	0.088411703	1.173746256
1294	MBP	0.015386497	0.031261801	0.814358224	-0.413737394
1295	MRPL42	0.046574774	0.02006221	0.11842237	-0.348707147
1296	ENTPD7	0.008546777	0.003632407	0.495614735	-0.443062005
1297	SFI1	0.010767849	0.000512822	0.183812046	-0.430412704
1298	GFPT1	0.014360425	0.000130927	0.364352691	-0.416838892
1299	ZNF583	0.027155577	2.97E-05	NA	-0.382158195
1300	YTHDF2	0.010126539	0.006080871	0.782767973	0.458798031
1301	TLK1	0.020177009	0.012531396	0.640856102	0.420303707
1302	STK39	0.026253961	0.002177498	0.089123175	-0.384269936
1303	MT-ND6	0.003085253	0.014215832	0.101299046	-0.492040629
1304	MTCO3P12	0.002513099	0.002966497	0.741633972	0.536216888
1305	RPL10A	0.000273815	5.17E-05	0.164122963	0.649681816
1306	CD247	0.02537788	0.006020958	0.280395706	0.406170066
1307	HMGN2	3.69E-05	1.22E-05	0.373142857	0.747239966
1308	SELENOM	0.035599678	0.000424667	0.360967858	0.38354805
1309	MT-ND3	1.58E-07	5.41E-10	0.092606224	0.992278137
1310	KTI12	0.001254245	0.02806242	0.072903683	-0.534332184
1311	SELENOT	0.004134303	0.000936766	0.326788853	0.510973264
1312	GRK5	0.011400322	2.31E-05	0.185027845	0.451692768
1313	SMG5	0.006201787	0.000221474	0.217626851	0.488137208
1314	SNORA72	0.015563538	0.005836816	0.072903683	-0.413188028
1315	FCGR3A	0.023472413	0.001414974	0.451402342	0.411453235
1316	ARMCX7P	0.010172211	0.004692207	0.072903683	-0.433503965
1317	LSM2	0.017012846	0.035627789	0.192451268	-0.408309776
1318	AIF1	0.041099899	0.031872592	0.495614735	0.373924655
1319	ZNF814	0.00083448	0.000147791	0.095895021	-0.55178662
1320	HLA-J	0.000677988	5.54E-09	0.279008003	0.604327118
1321	HLA-G	0.00212515	0.001600961	0.981862874	0.545605661
1322	LINC02397	0.013500947	0.002174692	NA	-0.419804079
1323	SLC35B4	0.044498927	0.013862009	0.430064963	-0.351882226
1324	SNX2	0.04134821	0.004111214	0.640856102	0.373480254
1325	SPDYE18	0.001311439	0.009665051	0.066533137	-0.532301857
1326	AC068533.1	0.01638757	0.011175615	0.091873155	-0.410346537
1327	KLRC2	0.037548482	0.000984021	0.346379943	0.379860933
1328	AC068724.1	6.91E-06	4.89E-05	0.151116628	0.821627732
1329	HLA-A	4.06E-05	8.70E-05	0.627257963	0.742554204
1330	MT-TP	0.000879048	0.014332643	0.796112465	0.590573085
1331	MIR320E	0.027814627	0.037089415	0.266518941	-0.380713812
1332	IGLV2-14	0.037041475	0.027599243	0.910213665	0.380824501

1333	TRBV9	0.034115176	4.42E-08	0.085045933	0.386639486
1334	TRBV20-1	0.0071956	5.60E-07	0.072903683	-0.452208256
1335	TRBJ2-1	0.00161546	0.001145912	0.606753903	0.559787511
1336	TRBJ2-2	0.033710719	0.040077855	0.989840835	0.387413666
1337	TRBC2	6.53E-06	0.001951013	0.627257963	0.824373791
1338	TRAV20	0.000256044	5.02E-10	0.627257963	-0.603009825
1339	TRAV22	0.003356796	1.37E-07	0.266518941	-0.487975889
1340	TRAJ29	0.000231677	3.52E-07	NA	-0.607189278
1341	TRAJ24	0.023750647	0.001422063	NA	-0.39045835
1342	TRAJ23	0.008868979	0.00302848	0.266518941	0.467008306
1343	SNORA3B	0.025143772	0.035021488	0.627257963	-0.386970263
1344	ZRSR1	0.024902626	0.015051187	0.266518941	-0.387531095
1345	ST13P5	0.024101635	0.028871449	0.42897246	0.409608813
1346	RPL15P3	0.011127991	0.007038605	0.970478149	0.453229595
1347	YWHAZP4	0.014119595	0.037694335	0.189848755	-0.41766633
1348	CRIP1	0.005500789	0.003977238	0.053056997	-0.465785056
1349	EEF1B2P6	0.044423363	0.020907414	0.974471964	0.368294836
1350	AL513043.1	0.006807146	0.000588287	0.13728178	0.483142366
1351	RPS7P11	0.008954454	0.011861061	0.925380722	0.466455776
1352	NPM1P50	0.003556594	0.0003598	0.403610134	0.51688738
1353	FTH1P3	0.00150464	0.001979846	0.186714706	0.563368725
1354	HMGB1P37	0.007091282	1.64E-05	0.678777108	0.480549341
1355	RPLP0P6	9.73E-05	2.46E-07	0.410623216	0.701677813
1356	AC020898.1	0.000141531	6.63E-06	0.266518941	0.682326549
1357	ACTBP2	1.58E-07	1.92E-11	0.661464352	1.010518275
1358	RPL13AP7	0.006841961	0.004034499	0.27362845	0.482802925
1359	NPM1P33	0.010349568	0.003151226	0.390994099	0.457526107
1360	NUDT19	0.009136134	3.67E-07	0.164095994	0.465198505
1361	PTMAP5	0.001136323	0.00096255	0.212119692	0.578443771
1362	TUBBP2	0.010462408	0.004706718	0.266518941	0.456837259
1363	RPS3AP26	7.26E-07	1.99E-05	0.068766349	0.916241608
1364	TUBAP2	0.002908339	2.47E-06	0.224940076	0.527986838
1365	RPL7P1	0.010962565	0.005304604	0.325470223	0.453958469
1366	AC010468.1	3.95E-06	4.73E-05	0.268542367	0.845200919
1367	DNAJA1P3	0.02335203	0.004964132	0.596346602	0.411742475
1368	DSTNP4	0.03568329	0.028586276	0.495614735	0.383414814
1369	NPM1P24	0.010651253	0.043653657	0.707104349	0.455788917
1370	EEF1A1P29	0.001975412	0.000924396	0.508870182	0.549481653
1371	NPM1P12	0.01569055	0.002198782	0.451402342	0.435422146
1372	ZNF407	0.044193043	0.020280892	0.218910677	0.368669483
1373	CALM2P3	0.002289344	0.000323041	0.30992647	0.541418548
1374	AL596087.1	0.000302348	2.50E-07	0.550194556	0.644864168
1375	AL354702.1	5.69E-05	6.78E-05	0.627257963	0.726587252

1376	RPS4XP7	0.005639985	0.007147111	0.466620039	0.493482302
1377	AL590867.2	0.029130074	0.002744825	0.915610901	0.397179561
1378	GSTM2P1	0.013500947	0.02270988	0.266518941	-0.419804079
1379	FTH1P8	0.0001088	0.000463848	0.309718913	0.696132001
1380	ZNF259P1	0.019967521	0.017054271	0.451402342	0.420943078
1381	AL133260.1	0.000229058	0.000184757	0.095904811	0.658543138
1382	AL161787.1	0.000282968	1.26E-07	0.741633972	0.648153932
1383	VAMP2	0.004470835	0.005432804	0.252519638	-0.476025596
1384	TTC4P1	0.018540054	0.031174348	0.266518941	-0.403928487
1385	RNU6-757P	0.04822669	0.002996031	0.266518941	-0.346290588
1386	SNORD63B	0.010933969	0.019980997	0.072903683	-0.429533514
1387	TMSB4XP4	0.000130989	0.00527916	0.529643804	0.686524683
1388	TINCR	0.003645161	0.011050501	0.266518941	-0.485096951
1389	NSUN5P1	0.000685342	0.040852256	0.59333389	-0.560906516
1390	RPS20P14	0.046632346	0.02340395	0.825730405	0.364600555
1391	DNAJC27-AS	0.018540054	0.028444043	0.072903683	-0.403928487
1392	HAUS1P2	0.013500947	0.009747979	0.266518941	-0.419804079
1393	AC108043.1	0.03122789	0.012628325	0.627257963	0.392501858
1394	RPS27AP16	2.98E-05	0.000192471	0.582429053	0.757966747
1395	AC015987.1	0.007479578	0.003631004	0.085045933	-0.450180283
1396	RPS4XP16	0.001284325	0.003472445	0.551177217	0.571943349
1397	RPL3P7	0.011818414	0.008793793	0.565641658	0.449407554
1398	RPSAP58	0.000147907	0.000823047	0.551177217	0.679910114
1399	ST13P6	0.004766429	0.001198301	0.42897246	0.502761891
1400	RPL35P5	0.002823275	0.032671465	0.257160438	0.529624515
1401	ZNF469	0.013500947	0.030768553	NA	-0.419804079
1402	AL138785.1	0.004596774	0.000627601	0.741633972	0.504825254
1403	MTND2P28	0.001537056	8.24E-05	0.102866991	0.562287363
1404	NPM1P18	0.014925036	0.010451049	0.451402342	0.438236418
1405	GTF2H2B	0.022557414	0.002120643	0.268542367	-0.393462556
1406	SLC25A5P5	0.015358847	0.000465198	0.531968206	0.436599608
1407	HMGN2P7	0.013500947	0.024616808	NA	-0.419804079
1408	FTH1P20	0.022394167	0.044834945	0.431863777	0.414432753
1409	FTLP3	8.89E-05	3.69E-07	0.627257963	0.70559306
1410	LINC01709	0.036357458	0.047646264	0.766725642	0.382202632
1411	TMEM256P2	0.002254624	0.000154586	0.201474106	0.542233147
1412	DANCR	0.002076037	0.000159633	0.172774615	0.546822674
1413	AC005912.1	0.000124897	0.000613931	0.174670093	0.68876746
1414	RPL23AP43	0.004561139	0.001113037	0.475311291	0.505294742
1415	PSME2P6	0.00848526	0.00412439	0.086324584	-0.443468734
1416	LTB	0.024834859	5.40E-05	0.07193637	0.407563941
1417	RPL7P6	0.036965217	0.000222867	0.165158554	0.380960192
1418	HNRNPA1P1	0.02402746	0.039760818	0.537590019	0.409823498

1419	AP000282.1	0.006455337	0.010995318	NA	-0.458199112
1420	RPL3P2	6.39E-05	0.001074153	0.542862618	0.721549946
1421	HLA-U	4.40E-05	5.26E-08	0.135531461	0.738770206
1422	AC007952.2	0.039791617	0.047844239	0.266518941	-0.359034581
1423	ORM2	0.048011237	0.004843915	0.072903683	-0.346596849
1424	FTLP17	0.019746418	0.044475259	0.227312231	-0.400394853
1425	AL109741.2	0.007814658	0.002837965	0.537590019	0.474702127
1426	RPS19P7	0.017339183	0.018147497	0.814999037	0.429269243
1427	OST4	0.003252541	0.00016654	0.656503557	0.521869314
1428	RPL15P18	0.010950066	0.005538007	0.072903683	-0.429447756
1429	EEF1A1P11	3.79E-07	1.15E-05	0.266518941	0.940317064
1430	AF013593.1	0.013500947	0.024242576	0.072903683	-0.419804079
1431	RPS13P2	0.016806388	0.013464649	0.616041698	0.431251099
1432	UBE3AP2	0.022426962	0.008211954	0.451402342	0.414349481
1433	AC006483.1	0.000494539	0.000402675	0.255008281	0.620640355
1434	SEPT7P8	0.004688877	0.002251284	0.346379943	0.50372718
1435	CALM2P2	6.73E-05	1.86E-05	0.650179016	0.719010634
1436	AC026403.1	4.10E-07	1.13E-07	0.236540689	0.93656126
1437	ACTBP1	0.038773278	0.030780064	0.268542367	-0.360790788
1438	RPL4P4	0.007656745	0.038009042	0.970478149	0.475979212
1439	AL359837.1	0.038773278	0.019830347	0.088593586	-0.360790788
1440	PYHIN5P	0.018362666	0.042170621	0.222822765	-0.404072504
1441	TRBV5-4	0.030999179	0.001104709	0.390994099	0.392998663
1442	AC021016.1	0.011413547	0.012958388	0.21339583	0.45161238
1443	RPS23P8	0.002514204	0.008846995	0.765295314	0.536196789
1444	FBXW4P1	0.00497355	0.003821418	0.072903683	-0.470793716
1445	SRGAP2-AS1	0.04780803	0.005664443	0.072903683	-0.346904646
1446	AC079250.1	0.031000537	0.001022335	0.82591456	0.392995156
1447	LINC00326	0.00497355	0.000455786	NA	-0.470793716
1448	RSL24D1P11	0.014925036	0.013227679	0.451402342	0.438236418
1449	LINC01037	0.00041017	0.000595373	NA	-0.583606799
1450	ST13P4	0.025999653	0.005835701	0.296544194	0.404516987
1451	FTH1P7	0.00150524	0.00454988	0.326913791	0.563353815
1452	FTLP2	0.003297014	0.002275806	0.427934775	0.52105404
1453	RPL3P4	0.002936904	6.69E-05	0.219102353	0.527493972
1454	RPL34P27	0.001120889	0.003278784	0.156954969	0.579040724
1455	AL592463.1	0.016550881	0.002531106	0.296544194	0.432088498
1456	EEF1A1P14	0.049980273	0.016659853	0.796837466	0.359605827
1457	WTH3DI	0.000638091	0.029736258	0.252680775	-0.563982524
1458	ERP29P1	0.007957231	0.001219711	0.627257963	0.473617656
1459	EEF1A1P6	7.73E-06	0.000668487	0.268542367	0.815763664
1460	AC007969.1	0.000146582	0.0080624	0.706047676	0.680371798
1461	RPL7P44	0.00381671	0.002547816	0.296544194	0.514583981

1462	RPL10P9	0.004194053	0.014376854	0.741633972	0.510099058
1463	RPL13AP6	0.005916546	0.00084319	0.551177217	0.49078292
1464	RPS4XP11	0.03857752	0.028372807	0.741633972	0.377974156
1465	RPL13AP20	4.50E-05	0.000323211	0.166887518	0.737590879
1466	AC125807.1	0.000761063	0.006873909	0.500203476	0.598258974
1467	MAPKAPK5-A	0.02686374	0.044443287	0.05719694	-0.382801139
1468	AL162151.2	0.04519014	0.006261617	0.653178705	0.367009622
1469	HMGN2P5	0.039491699	0.049111112	0.976013851	0.37658461
1470	EEF1GP5	0.000492646	2.92E-05	0.272763153	0.620866486
1471	RPS3AP6	0.000430844	0.00971257	0.495614735	0.627724453
1472	IQCM	0.013500947	0.001643395	NA	-0.419804079
1473	FTH1P2	4.72E-05	0.000134135	0.196121288	0.735124096
1474	RPL26P37	0.024891674	0.000790879	0.451402342	0.40742401
1475	AC006463.2	0.02304804	0.002909571	0.187865469	-0.39223319
1476	HIPK1-AS1	0.032882583	0.022546557	0.741633972	-0.370921309
1477	AC000089.1	0.000814911	0.000396387	0.432539598	0.594556179
1478	AC239859.3	0.028289218	0.007980193	0.072903683	-0.379690404
1479	AL031729.1	0.006279149	0.003626997	0.266518941	0.48743767
1480	RPL17P36	0.026092829	0.018850302	0.824147475	0.40424033
1481	RPL23AP37	0.001355628	0.004161064	0.461296732	0.568958876
1482	RPL34P34	0.039178998	0.046725281	0.391148469	0.377200173
1483	RPL13AP5	0.001197841	0.001637733	0.66620453	0.57566901
1484	AC116049.1	4.55E-05	0.016838857	0.06126599	-0.673593386
1485	AL356000.1	0.018960072	0.005593539	0.064179293	-0.402703354
1486	RPL19P16	0.026649675	0.000489829	0.985641109	0.402753937
1487	TMSB4XP1	0.000321444	0.001099192	0.385775233	0.642385239
1488	AL732372.2	0.035952086	0.021587208	0.266518941	-0.365368024
1489	AL080243.2	0.010528313	0.000916251	0.852451873	0.456416345
1490	FTH1P11	0.00069601	1.95E-07	0.31428651	0.60311416
1491	RPL30P4	0.00286658	3.96E-05	0.640856102	0.528763887
1492	AC079922.2	0.006455337	0.009857798	NA	-0.458199112
1493	HNRNPA1P3	0.01598668	0.001058774	0.602866515	0.43422869
1494	RPS3AP29	0.001788397	0.000634338	0.242819618	0.554555957
1495	FAM21FP	0.047533331	0.006243264	0.218249348	-0.347283973
1496	RPL9P7	0.001681049	0.011003384	0.627257963	0.557694924
1497	Z95327.2	0.03208437	0.035598028	0.495614735	-0.372317571
1498	AL133477.1	0.009812922	0.029070253	0.268542367	-0.435457229
1499	AC026254.2	0.021803863	0.025103836	0.644840693	0.416118568
1500	AC004865.2	0.011298529	0.004754371	0.266518941	-0.427879258
1501	APOBEC3G	1.64E-05	0.003994151	0.766525253	0.783353215
1502	AC004890.1	0.049754782	0.028554219	0.495614735	0.359909984
1503	AC104563.1	0.007042453	4.17E-05	0.978963955	0.481007867
1504	AC069431.1	0.006455337	0.003192386	NA	-0.458199112

1505	PSMB9	0.012035667	0.00025189	0.255008281	0.448250025
1506	RPSAP12	0.002019033	1.39E-06	0.640856102	0.548349203
1507	AC114876.1	0.017383088	0.024837147	0.439182373	0.429080005
1508	ERICH6-AS1	0.03237908	0.000272042	0.248517793	0.389983923
1509	AC090255.1	0.013500947	0.030372889	0.266518941	-0.419804079
1510	RPL29P2	0.013500947	0.019257069	0.072903683	-0.419804079
1511	AP001024.1	0.008449688	0.042454415	0.27219569	0.469905915
1512	AL121612.1	0.018012878	0.000452169	0.495614735	0.426923727
1513	SEPT7P6	0.015384824	0.006464105	0.913191015	0.436501319
1514	AC104619.1	0.002359384	0.004573774	0.217626851	0.539776833
1515	ARPC4	0.000167351	0.028890599	0.746675535	0.673579553
1516	RPL7AP30	0.039224134	0.001014936	0.847338294	0.377107654
1517	PLEKHO2	0.039652579	0.024903647	0.097607019	-0.359265355
1518	RPL14P3	0.001886971	0.001050014	0.406000202	0.551719077
1519	RPS3AP49	2.32E-05	6.08E-06	0.13728178	0.768402211
1520	RPL7AP11	0.022054416	0.016418811	0.378729945	0.415417391
1521	RPS3AP43	0.030467742	0.02993674	0.495614735	0.394267821
1522	RPS27AP1	0.003148223	0.004365384	0.479286388	0.523550947
1523	SOX2-OT	0.006872956	0.000513887	NA	-0.454839791
1524	FTH1P23	0.010811439	0.020371069	0.536744974	0.454836065
1525	AC010285.1	0.001932264	0.00135901	NA	-0.514809611
1526	RN7SL55P	0.042675178	0.01060721	0.266518941	-0.354660959
1527	RN7SL174P	0.039747491	0.010004654	0.072903683	-0.359106621
1528	AC024940.2	0.002899312	0.000377217	0.684223648	0.528134717
1529	EEF1A1P10	0.00618086	7.86E-06	0.551177217	0.488331003
1530	RPL23AP65	0.005520706	0.000661414	0.185258892	0.494674404
1531	AC110749.1	0.023387412	0.00888065	0.451402342	0.41164999
1532	DUXAP10	0.030792059	0.048227351	0.072903683	-0.374951091
1533	RPL7P23	0.004362193	6.62E-07	0.346379943	0.50788752
1534	AC116533.1	0.015902468	6.25E-05	0.584991546	0.434563517
1535	OR2A1-AS1	0.049284073	0.048198152	0.741633972	-0.344902771
1536	ASLP1	0.01085124	0.014393016	0.35100731	-0.429957261
1537	EEF1A1P4	1.01E-05	0.000340195	0.347602935	0.805129465
1538	AC087521.2	0.020672432	0.025162858	NA	-0.397839688
1539	PCED1B-AS1	0.000868316	1.84E-07	0.824279536	0.591205306
1540	SERBP1P6	0.041011331	0.0416422	0.433814406	0.37401118
1541	MTND5P11	0.007561328	2.66E-06	0.480066535	0.476634996
1542	MTND6P4	0.00988858	0.030247856	0.669382467	0.460249517
1543	EEF1A1P9	1.58E-07	1.59E-07	0.094875875	0.977054576
1544	NPM1P27	0.014328672	0.049034156	0.741633972	0.440081546
1545	AC106864.1	0.047363392	0.030851179	0.266518941	-0.347553972
1546	RAC1P2	0.029227732	0.021125614	0.670444016	0.396924227
1547	AC104619.3	1.39E-06	1.59E-05	0.522904177	0.88942833

1548	EEF1A1P13	3.16E-08	7.03E-07	0.052222896	1.109140035
1549	SMAD1-AS2	0.024620731	0.00099576	0.266518941	-0.388221017
1550	GAPDHP35	5.99E-05	3.29E-08	0.082180077	0.724505832
1551	AC136475.1	0.031876491	0.001152064	0.072903683	-0.372714169
1552	RNU7-181P	0.000988921	0.04820464	0.214443009	-0.543954996
1553	AC027309.2	0.000479073	0.001750485	0.629651274	0.622226015
1554	MYL12AP1	0.049743514	0.01107994	0.312547609	0.359916405
1555	AP001000.1	0.003797203	0.001318615	0.7512648	0.514883416
1556	PKD1P5	0.008056089	0.00772209	0.072903683	-0.446294262
1557	HNRNPCP8	0.018540054	0.031504751	NA	-0.403928487
1558	ARL6IP1P3	0.013500947	0.023338048	0.072903683	-0.419804079
1559	SDHCP4	0.033632978	0.016388903	0.495614735	-0.369540099
1560	CHMP1B	0.028030964	0.040145636	0.859066663	0.399322858
1561	EID1	0.002319203	0.006381257	0.495614735	0.540711455
1562	TRAV1-1	0.013961429	0.000173917	0.248517793	0.441522398
1563	AC092862.1	0.042779717	0.004031668	0.800165229	0.371037464
1564	MTRNR2L8	0.00280036	1.77E-07	0.495614735	0.530069727
1565	PDCD5P1	0.011935389	0.019841339	0.231997842	0.448772591
1566	AC117500.3	0.046575406	0.003300063	0.268542367	-0.348705907
1567	LINC00944	0.033253677	0.013487723	0.266518941	-0.370218224
1568	AL136418.1	0.019482545	0.0168698	0.266518941	-0.401084117
1569	NOP56P3	0.015988069	0.030780064	0.085045933	-0.411700168
1570	HIGD1AP1	0.035973897	0.006294236	0.213355276	-0.365325816
1571	AC008126.1	0.002674736	0.002153144	0.461423041	0.532627979
1572	AC090680.2	0.006172653	0.002644933	NA	-0.460038506
1573	AC023161.2	0.004995834	0.002723527	0.072903683	-0.470585502
1574	AC025431.1	0.00506297	0.003318842	NA	-0.469933255
1575	AC022306.1	0.028260874	0.025431195	0.272763153	-0.379735251
1576	AC015712.2	0.013500947	0.028742573	0.266518941	-0.419804079
1577	EEF1A1P22	0.002500726	9.09E-06	0.648757413	0.53649407
1578	AC111152.3	0.00054965	0.009577972	0.214443009	-0.570623891
1579	AC106028.3	0.003645161	0.010542758	NA	-0.485096951
1580	AC099786.3	0.006455337	0.000918945	NA	-0.458199112
1581	AC002551.1	0.048770122	0.005956411	0.072903683	-0.345566217
1582	AC090079.1	6.37E-05	9.37E-06	NA	-0.66082109
1583	TXNP4	0.001425668	0.000709635	0.248517793	0.566248966
1584	AC068152.1	0.049727637	0.039852562	0.075542654	-0.344361047
1585	RPS7P1	0.003032574	6.88E-05	0.726203401	0.52571034
1586	TIMM23	0.036933558	0.003413483	0.971309462	0.381028638
1587	AC091042.1	0.023370747	0.017751578	0.373142857	0.411695093
1588	AC025198.1	0.025937378	0.032545116	0.266518941	0.404692457
1589	EIF1P5	0.037044189	0.004903082	0.664392091	0.38081832
1590	AC093227.2	0.020681649	0.00918101	0.390994099	0.418809067

1591	AC022706.1	0.037642036	0.018243578	0.98312801	-0.362362398
1592	MTCO2P2	5.93E-05	0.000302506	0.166432283	0.72483112
1593	AC007229.1	0.013500947	0.007414423	0.266518941	-0.419804079
1594	AL158827.2	0.00760659	0.008753164	0.390994099	0.476270281
1595	AL049840.2	0.024165362	0.009535826	0.072903683	-0.389372936
1596	AC027020.2	0.033632978	0.046668393	0.495614735	-0.369540099
1597	MTCO2P22	0.00436939	0.000997711	0.972376871	0.507808859
1598	YTHDF2P1	0.009470488	0.000657661	0.296544194	0.462999198
1599	CCL5	5.21E-06	0.000204384	0.627257963	0.832754681
1600	ATP2B1-AS1	0.031969667	0.030583619	0.495614735	0.390864863
1601	SNORD14A	0.023040023	0.002563666	0.296544194	0.412627151
1602	GTF2IP20	0.001470078	0.009649374	0.247765574	-0.526957929
1603	AL592148.3	0.035952086	0.027535729	0.266518941	-0.365368024
1604	LINC01578	0.007706332	0.02999981	0.970418458	0.475569113
1605	AP000254.1	0.041457105	0.041358815	0.266518941	0.373291427
1606	AL157392.4	0.016397008	0.010901936	0.072903683	-0.410320448
1607	TAF9	0.038878732	0.000286994	0.372557085	0.377747105
1608	LINC01138	0.038870621	0.016952516	0.627257963	0.37776194
1609	AC103691.1	0.036364592	0.020625254	0.072903683	-0.364657409
1610	AC005332.6	0.038088315	9.89E-08	0.119736454	0.378809468
1611	AC002553.4	0.043293069	0.011642966	0.085045933	-0.353696787
1612	VN1R7P	0.003645161	0.007213019	NA	-0.485096951
1613	AC244472.2	3.20E-05	1.60E-10	0.266518941	-0.688466908
1614	AC073534.2	0.045515245	0.03017839	0.741633972	-0.350312762
1615	HIST1H4I	0.021669686	0.006807535	0.072903683	-0.395759636
1616	RBBP4P3	0.021669686	0.028410889	0.072903683	-0.395759636
1617	TRAC	0.001481851	0.013618598	0.11497617	-0.526566858
1618	PSMB3	0.002936904	0.002796023	0.640856102	0.527494176
1619	TRAJ37	0.046621141	0.005838133	0.248517793	0.364621149
1620	AL358852.1	0.019827378	0.020591621	0.222822765	-0.400154718
1621	CR381670.1	0.040735875	0.030082395	NA	-0.357665117
1622	AC138305.3	0.005057256	0.01081295	0.199355334	0.499633297
1623	LINC00216	0.043957421	0.008002057	NA	-0.35268428
1624	LINC02033	0.012117669	0.001193074	NA	-0.423928704
1625	AC013394.1	0.044468594	0.031187046	0.072903683	-0.351929538
1626	AC006511.3	0.002849031	2.61E-06	0.266518941	0.529121337
1627	AL353597.3	0.014756234	2.31E-05	0.266518941	-0.415892237
1628	AC008895.1	0.013892021	0.01957068	0.266518941	-0.418517166
1629	TBC1D22A-A	0.033291838	0.027737825	0.266518941	-0.370202471
1630	FP565260.7	0.033247522	0.03106687	0.811850916	-0.370231729
1631	RPS4Y2	0.007920175	0.008657562	0.390994099	0.473915056
1632	LINC02536	0.017317373	0.025145115	0.266518941	-0.40731965
1633	AC245427.3	0.003000978	1.18E-08	0.085045933	0.526275244

1634	FRG1DP	0.047080109	0.025325629	0.495614735	-0.347946527
1635	AP001206.1	0.011126507	0.004583858	0.346379943	0.453236454
1636	AC116618.1	0.01553936	0.005423569	0.072903683	-0.413263139
1637	AC008038.1	0.005219431	0.020529647	0.963681702	0.497779862
1638	OR5AK4P	0.01553936	0.015326436	NA	-0.413263139
1639	DVL2	0.368151884	0.009928175	0.025385927	-0.209799493
1640	SLC25A5	0.663762799	0.009678759	0.026862368	-0.13074938
1641	WDR54	0.05806903	0.042491557	0.002655982	-0.338891841
1642	IFRD1	0.13049899	0.000354197	0.000914791	-0.285360386
1643	CRAMP1	0.321495265	0.009076121	0.026890677	-0.225340017
1644	TENM1	0.62344489	0.007740477	0.002811291	0.147601303
1645	ZNF207	0.885144341	0.000776011	0.01185117	-0.046681613
1646	UQCRC1	0.789497065	0.014126904	0.033210224	-0.08122654
1647	NISCH	0.945981977	5.66E-07	0.011657248	-0.021843759
1648	LYPLA2	0.181218957	0.02937692	0.006097407	-0.259251204
1649	TTC19	0.329569724	0.000606947	0.001315844	-0.222833456
1650	MAP4K3	0.171250426	0.008598785	0.002159732	-0.264100836
1651	MVP	0.951909854	9.41E-07	0.005148014	0.019366318
1652	NUB1	0.187379048	0.005203934	0.000958526	-0.256482292
1653	ZDHHC6	0.212218926	0.000308941	0.000554984	-0.246582316
1654	NDUFS1	0.366783473	0.029993769	9.01E-06	-0.210321813
1655	ALAS1	0.092210372	0.008141354	0.007043456	-0.310696739
1656	UBR2	0.063370084	0.006203318	0.00069492	-0.334588055
1657	DEPDC1	0.214246386	0.003720871	0.019799688	-0.245929484
1658	SLAMF7	0.421674231	0.000237719	0.003141188	-0.191501662
1659	UBA6	0.401394798	0.003976992	0.012225321	-0.198349951
1660	MAP2K3	0.648142036	0.000197119	9.62E-05	-0.13626697
1661	PEX3	0.312914336	0.013492288	0.007709116	-0.227631639
1662	MAT2B	0.077809198	0.002895912	3.55E-05	-0.322438358
1663	TRIO	0.130924784	0.032567889	0.025081888	-0.28514409
1664	PHF23	0.059436241	0.002565206	0.019799688	-0.338033367
1665	PSMA4	0.976064137	0.039371703	0.017714229	0.009572224
1666	CTNNA1	0.192418913	0.004989026	7.43E-06	-0.254357754
1667	POLR2B	0.390577299	0.030801331	0.043047697	0.207308889
1668	SNX29	0.190925825	0.030234805	0.040642107	-0.254892255
1669	H6PD	0.328922637	0.000135632	0.004990632	-0.223024704
1670	DKK3	0.060882015	0.000416867	0.004918894	-0.33668098
1671	MXD1	0.077608484	0.000252738	0.004577705	-0.322630211
1672	MON2	0.058144309	0.000241533	6.03E-05	-0.338810708
1673	TAF2	0.765825705	0.009980628	0.019799688	-0.090674394
1674	SUGP2	0.36430238	0.045309086	0.034268458	-0.21115536
1675	WDR18	0.131593713	0.014722151	0.001572226	-0.28474719
1676	ADAT1	0.684172937	0.009505173	0.010317263	-0.122859125

1677	SPEN	0.700539013	0.028725377	0.043377364	-0.116409582
1678	CYB5R4	0.880855628	0.001329253	0.028158469	0.048773042
1679	TLE2	0.223681365	0.00655739	0.025708977	-0.243722009
1680	CD84	0.797932738	2.55E-05	0.000127592	0.078729158
1681	ISOC1	0.674170349	0.002468879	0.045650247	-0.126782899
1682	IP6K2	0.123004514	0.025067094	0.002375999	-0.290018794
1683	TGFBR3	0.624891105	0.001262403	0.019971437	-0.144420158
1684	RAB27A	0.294500505	2.18E-05	0.002213769	-0.23320001
1685	CSNK2A2	0.17589947	0.005834553	0.005516137	-0.261870984
1686	RPL31	0.613446026	0.02700363	0.02625602	-0.148443939
1687	SNX13	0.625653968	0.004747579	0.044001819	-0.144131922
1688	CPSF1	0.086225207	0.0026787	0.019799688	-0.315530085
1689	ZFYVE26	0.059177482	0.010047233	0.006823684	-0.33815226
1690	HSD17B10	0.112489363	0.024272218	0.041362933	-0.295445141
1691	NSF	0.721519506	0.017957635	3.40E-05	-0.108286803
1692	CLASP1	0.944263872	0.033483402	0.010283848	-0.022612249
1693	ATP2A3	0.918278265	0.023249495	0.000111702	0.033786197
1694	GTSE1	0.162165993	0.001638964	0.005148014	-0.268689618
1695	MARK3	0.183621994	0.000409766	0.000773931	-0.258160674
1696	PTPN23	0.10299555	0.000557903	0.007130496	-0.302479424
1697	TPD52	0.105210972	1.98E-05	0.048111245	0.312647903
1698	PAG1	0.922725207	0.006134201	0.013407511	0.031950477
1699	CAPZB	0.069175305	0.003582529	0.000402122	-0.329370993
1700	PIAS2	0.204560003	0.031080465	0.039230309	0.257205618
1701	UBE2K	0.588562433	0.000233987	0.005148014	-0.156887678
1702	CLDND1	0.935577331	7.51E-08	0.000886702	0.026401369
1703	CROCCP3	0.066600751	0.046723463	0.046714812	-0.331718951
1704	AP4E1	0.060000758	0.039523717	0.000587399	-0.337474679
1705	HSPB11	0.619515435	5.47E-05	4.68E-05	0.149061581
1706	CYLD	0.887987564	0.01351715	0.00888078	-0.045476904
1707	PPIE	0.219994003	0.001615552	0.016285098	-0.244484713
1708	GSTP1	0.666523641	0.003635094	0.019320561	-0.129751102
1709	EIF3I	0.775034909	0.000280059	0.000146432	0.088052186
1710	TXLNA	0.775281011	0.003736998	0.036833133	-0.086986554
1711	NCOA1	0.059170002	7.30E-06	1.12E-06	-0.338156055
1712	RAB10	0.475480841	0.011676159	0.017731173	-0.175648625
1713	HADHA	0.212924752	0.000174836	0.000982988	-0.246314054
1714	ZFAND6	0.877400701	0.001047607	0.026890677	0.050238532
1715	GMCL1	0.344974402	0.026169984	0.0315851	-0.217637818
1716	AURKA	0.180667066	0.016667319	0.000318701	-0.259506742
1717	TPX2	0.055540686	0.002974163	0.026890677	-0.340921218
1718	FKBP1A	0.10497396	0.039593861	0.007325557	0.312863119
1719	KDM2B	0.071182564	0.033063751	0.014410893	-0.327756285

1720	BIRC5	0.223237706	0.00800224	0.000318701	-0.243795379
1721	LTBP4	0.343554763	0.024582241	0.005313983	-0.218105558
1722	SPAG7	0.115228773	0.003962063	0.011367704	0.304943099
1723	MFSD11	0.326299476	0.040699564	0.000372492	-0.223818741
1724	SH2D3C	0.624074427	0.00440547	0.001712244	0.147379451
1725	FKBP5	0.71708276	9.23E-05	5.85E-06	-0.10977554
1726	IL12RB1	0.788097847	0.048064753	0.014460369	-0.0817741
1727	SH3GLB1	0.113672779	0.021591633	0.011636298	-0.29460183
1728	WASHC2A	0.071662174	0.000945772	0.007501187	-0.327297417
1729	MAST3	0.062840635	0.000168464	0.006336334	-0.335088504
1730	MYO9B	0.911971088	0.030413154	1.83E-07	-0.03623153
1731	CRKL	0.446007007	0.000496846	0.002917434	-0.184214022
1732	GRK3	0.205622751	0.01365211	0.025708977	-0.248753833
1733	SBF1	0.737543179	0.043814505	0.025708977	0.103241508
1734	ASCC2	0.614178429	0.00758363	0.019953515	0.150993758
1735	ABHD4	0.79715119	0.029641532	0.026890677	0.079077001
1736	VRK1	0.701315479	0.022906049	0.021237206	0.117808283
1737	SRP54	0.540263683	0.001465007	0.014520219	-0.168652273
1738	PSME2	0.960918692	4.20E-05	0.00302875	0.015575712
1739	ZMYND8	0.842072817	0.005491174	0.002389873	-0.061017017
1740	NFATC2	0.082190234	0.020871014	0.001094743	-0.319100749
1741	PABPC1L	0.975057919	0.002408424	0.00215646	-0.009999259
1742	NELFCD	0.231510953	0.000293772	0.001726294	-0.242854033
1743	CDS2	0.471214696	0.014847155	0.007993208	-0.176816015
1744	SIRPB1	0.20690916	0.002797522	3.23E-05	-0.24834898
1745	IDH3B	0.065496591	0.005717111	0.031417534	-0.332639683
1746	ATP11C	0.106430307	8.92E-06	0.000578725	-0.29989997
1747	PGK1	0.284659333	3.72E-05	0.019799688	0.24315226
1748	ZDHHC15	0.225898554	0.001087069	0.005148014	-0.243384933
1749	CORO1A	0.26626826	0.01340284	0.001070569	0.246581265
1750	NUP93	0.797641121	0.035050785	0.007655029	0.078853168
1751	MON1B	0.354719052	0.02607945	0.000192342	-0.214283534
1752	NUBP1	0.177724923	0.025526774	0.002624333	-0.260976082
1753	CAPN15	0.063303011	0.002769702	0.019799688	-0.334659287
1754	EHD4	0.094785904	0.006151778	0.003351335	-0.308609196
1755	BMF	0.384623193	0.012738405	0.00208965	-0.204136921
1756	ZDHHC2	0.99519137	0.001226951	0.028583369	-0.002112728
1757	DECR1	0.323296919	0.039048759	0.009461731	-0.224710645
1758	TRPS1	0.131960893	5.93E-06	0.002158973	0.295052053
1759	SNX16	0.068159902	0.037845799	0.032678192	-0.330343628
1760	ECH1	0.101127328	0.003982666	0.018247725	0.315951855
1761	IL27RA	0.104638722	0.046809676	0.005796604	-0.301311056
1762	AKT2	0.77954037	0.02297441	0.044001819	0.086143397

1763	SLC1A5	0.065850672	0.026412513	0.007501187	-0.332375041
1764	NAPA	0.395309703	0.003503986	0.000132025	0.205593361
1765	PLA2G4C	0.050371788	0.00042692	0.006614607	-0.343584291
1766	WDR83OS	0.879257433	5.34E-06	0.001996246	0.049468625
1767	KXD1	0.365576068	0.00062793	0.046389901	0.216472318
1768	PIK3CG	0.987096459	0.006590772	0.007887063	0.005669415
1769	CASP2	0.289121047	0.04003228	0.00309114	-0.234710046
1770	TMEM106B	0.293814721	0.008407858	0.013860252	-0.233428877
1771	ZNF862	0.178107506	0.016998511	0.000158286	-0.260789764
1772	GIMAP2	0.916812922	0.049225915	0.016550509	-0.034234832
1773	TMEM245	0.129741841	0.043792654	0.023300618	-0.285825348
1774	NPDC1	0.160750647	0.006928919	0.000318701	-0.269436933
1775	PLEKHA1	0.063303453	7.77E-07	0.010418185	0.349353844
1776	GLRX3	0.60594549	0.034489374	0.025210215	-0.150922175
1777	SLC25A11	0.050790764	0.003077353	0.007325557	-0.343139822
1778	UTP6	0.650808914	0.032721158	0.028283832	-0.135223256
1779	DHX58	0.155642163	0.000120642	0.026890677	-0.272137787
1780	PRKAR1A	0.205697525	2.23E-06	0.000284575	0.256723049
1781	MANBA	0.148839025	4.73E-07	2.80E-05	-0.275810758
1782	LRP2BP	0.053170791	0.008838517	0.019799688	-0.342660263
1783	MTCH2	0.753537182	0.035074209	0.025081888	0.096651749
1784	VWA5A	0.093966164	0.018775863	0.001797795	-0.309259147
1785	LPXN	0.709488416	0.026645637	0.00195074	0.114446956
1786	FBXO3	0.862002525	0.041447306	0.000846151	-0.054187063
1787	GTF2H1	0.224395935	0.024490144	0.001217071	-0.243609112
1788	CLEC2B	0.957324916	0.018517241	0.036023521	0.017060623
1789	COQ5	0.813905688	0.000373442	0.019799688	-0.072049218
1790	BIN2	0.404817657	0.001665103	0.00309114	-0.197204659
1791	OAS3	0.089064895	0.003488269	0.026402336	-0.313197252
1792	IFNG	0.92414857	0.003346025	1.76E-05	-0.031204395
1793	ENO2	0.071542674	0.01112804	0.023018304	-0.327417875
1794	FGFR1OP2	0.353217695	0.007350656	0.006041929	-0.214797038
1795	TMEM14C	0.054239821	0.029169435	0.027342557	-0.341996382
1796	SERINC1	0.370991225	0.000119252	0.001685357	0.214398781
1797	TRIM38	0.111307241	0.007883273	0.008734076	-0.296250444
1798	NNT	0.809191528	0.017225179	0.000481874	-0.074025444
1799	PFDN1	0.19405631	0.036000529	0.044418219	-0.253645992
1800	IK	0.360261915	0.013042576	0.004420644	-0.212524934
1801	ITK	0.181376555	9.01E-05	0.03844331	-0.25918048
1802	TTC1	0.143913295	0.00018321	0.000128017	-0.278138333
1803	NPRL2	0.771066442	0.023041465	5.79E-05	0.089584205
1804	CYB561D2	0.352684963	0.021080343	0.009874361	0.220881552
1805	SNX4	0.895779086	0.028855231	0.005088212	-0.042681174

1806	GORASP1	0.221675084	0.002728037	0.005148014	-0.244094599
1807	SSR3	0.191165141	0.000748992	0.009501924	-0.254783934
1808	SNX17	0.758185279	0.00448431	0.000679555	-0.093658449
1809	AUP1	0.718004072	0.038951061	0.001226784	-0.109371776
1810	STAT1	0.159419197	0.000661758	0.000996881	-0.27012998
1811	RAB3GAP1	0.213744745	0.000295588	0.03785746	0.253892986
1812	C2orf42	0.093007039	0.002591467	0.001911715	-0.310044505
1813	RPL22	0.106067546	0.016569632	0.00180091	-0.300182546
1814	FBXO6	0.062843507	0.00069537	9.04E-05	-0.335083838
1815	C1orf21	0.293769901	0.003912115	0.000494247	-0.23344005
1816	TBCE	0.125799823	0.000378742	0.021288368	-0.288275396
1817	UAP1	0.40631611	0.000236469	0.041550182	0.201623428
1818	RAB29	0.115650496	0.008092935	0.028926715	-0.29340608
1819	P3H1	0.15366795	0.013453943	0.000244308	-0.273148164
1820	DR1	0.628767944	0.008718496	0.001315844	-0.14294883
1821	RPS6KA1	0.380389969	0.001360016	0.009461731	-0.205454101
1822	ARID1A	0.215144783	0.012154	0.002044906	-0.24567874
1823	RPA2	0.772035351	0.000499159	0.004324198	-0.088165869
1824	STAG1	0.786178713	0.008461884	0.001619245	-0.08257264
1825	LRMP	0.673969573	0.028364976	0.001757749	-0.126872865
1826	FBXL5	0.090583486	0.003768624	0.000119057	-0.312002406
1827	CPSF3	0.637267344	0.01417214	0.001209209	-0.140275302
1828	GLE1	0.10600868	0.032483511	0.01036143	-0.300228501
1829	NRDE2	0.168272142	0.002988548	0.020503951	-0.265624393
1830	SLC17A5	0.15012455	0.031046782	0.000600295	-0.275117329
1831	CNNM1	0.224663784	0.000814312	0.001315844	-0.24356394
1832	GOT1	0.558495139	0.031478484	0.025928333	-0.165746671
1833	GNA13	0.733502778	0.000221064	0.010485806	0.104924141
1834	SLC10A7	0.068682122	0.011704695	0.026402336	-0.329851354
1835	DNAJC15	0.863356764	0.00021454	0.033910754	0.054003745
1836	WASHC3	0.142443564	0.012705935	0.000262494	-0.278952169
1837	FAM117A	0.124979042	0.000927347	0.026402336	-0.288798626
1838	TMEM156	0.106084401	5.31E-07	0.006614607	-0.300170815
1839	ZC3H7A	0.08413787	0.000560145	0.004664829	-0.31737242
1840	EGR2	0.27710981	0.000607428	0.028436632	0.245084322
1841	ACOT9	0.32322972	0.002433067	0.025708977	-0.224729657
1842	ADGRE5	0.193541917	0.000766956	0.000383415	-0.253887584
1843	NCKAP1L	0.714458588	2.73E-05	3.05E-06	-0.110886819
1844	STIL	0.144784515	0.007251132	0.025081888	-0.277670802
1845	METTL8	0.163951234	0.002507553	3.53E-05	-0.267819831
1846	NMI	0.069572849	0.027530793	1.65E-05	-0.329007244
1847	PIGT	0.106424153	0.004081716	0.000376458	-0.299905081
1848	ZNFX1	0.709543716	0.013266338	0.004507093	-0.112808018

1849	ZBP1	0.107313017	0.000991739	0.000647874	-0.299283616
1850	STAMBP	0.115738179	0.012972216	0.024970193	-0.293347559
1851	ZNF45	0.9320107	0.009038148	0.002982253	0.027895008
1852	ATXN1	0.579948709	0.036867331	0.021428695	-0.159708077
1853	LRRFIP1	0.99742532	0.000782162	0.039192624	0.001127093
1854	UPF3B	0.072231425	0.009811435	0.047795046	-0.326784316
1855	ATP5S	0.089729531	0.020522725	0.003293359	-0.312694544
1856	IL37	0.206329493	0.000928229	0.005148014	-0.248533702
1857	SH2D3A	0.13195357	0.029032188	0.007245393	-0.284520055
1858	PSMF1	0.734115807	0.015992276	0.029270812	0.104685629
1859	COX6B1	0.584474086	0.003056051	0.007957503	0.161422935
1860	IRF3	0.955871378	0.023604244	0.008738434	-0.017643814
1861	BECN1	0.808085695	0.006708177	0.001797795	-0.074449332
1862	INTS11	0.115140711	3.86E-05	0.006290705	-0.293753662
1863	PNKD	0.359929266	0.015339279	0.000219353	-0.21264776
1864	PEX1	0.088984849	0.021013133	0.011530006	-0.313271868
1865	RAC2	0.806981567	0.002391837	0.001703048	0.075576095
1866	APOBEC3F	0.096531437	0.010608145	0.000996881	-0.307236034
1867	NDUFA5	0.502432454	0.008739433	0.037682063	0.173863804
1868	ARPP19	0.647370336	0.010280371	0.018847047	0.138947177
1869	SUMF2	0.064594849	0.003800779	0.00069492	-0.333455855
1870	SPCS3	0.81824304	0.001520454	0.009183828	-0.070313882
1871	MPDU1	0.195690234	0.010879534	0.016912523	-0.252941641
1872	ASH2L	0.4551314	0.000850278	0.001933451	-0.181294689
1873	KLHDC7B	0.055363424	0.004273569	0.019799688	-0.341096724
1874	ZBTB46	0.050539833	0.014650217	0.019799688	-0.343402809
1875	TUBGCP2	0.078161985	0.01209002	0.018641828	-0.322155367
1876	TRIM28	0.297701345	0.015451669	0.037618719	-0.23220257
1877	SYNE1	0.853483271	2.49E-07	0.000151123	0.056810033
1878	ACLY	0.157901048	0.00015759	0.001578847	-0.270926969
1879	TOP2A	0.070718263	0.0006428	0.001315844	-0.328179792
1880	FMO5	0.308074774	0.022823535	0.026890677	-0.229103172
1881	DHX30	0.855266776	0.000100537	0.000564254	-0.055628972
1882	JCHAIN	0.378345559	0.000691197	0.000135777	-0.206156768
1883	ALOX5AP	0.773882204	4.63E-05	0.026380035	0.088457353
1884	SLC41A1	0.19513525	0.009002066	0.000481874	-0.253163351
1885	LGR6	0.128816773	0.040704507	0.001948152	-0.286411462
1886	RFC3	0.156320497	0.002787145	0.019799688	-0.271794576
1887	GIMAP4	0.946022442	0.001912512	0.028263632	0.021885475
1888	PPHLN1	0.753129948	0.044350663	0.005811436	-0.095634994
1889	ROCK2	0.134596964	1.49E-05	0.048141576	0.293344501
1890	FBXO18	0.818862572	0.015481143	0.026859654	0.070657216
1891	CDCA8	0.216727479	0.003990501	0.019799688	-0.245248407

1892	OSTF1	0.181720314	0.000682625	0.000117461	-0.259005553
1893	CCDC146	0.49775131	1.08E-05	9.45E-06	-0.170748578
1894	PHF21A	0.390257907	0.000299702	0.032703709	0.20739971
1895	EIF4E2	0.810647497	0.02314243	0.038630854	-0.073414453
1896	VILL	0.088575784	0.040113438	0.001905029	-0.313632594
1897	CHST12	0.152752699	8.79E-06	0.000892183	-0.273655709
1898	AOAH	0.134114702	0.002325733	0.031850237	-0.283223842
1899	NMT1	0.091351083	0.002946383	0.005148014	-0.311407888
1900	TANK	0.496541569	0.003426576	0.003167969	-0.170930518
1901	SAP130	0.65074667	0.001616401	0.016041686	-0.135248751
1902	ARPC5L	0.449744019	0.030863001	0.017207284	-0.182989829
1903	IL11RA	0.055073954	0.024724041	0.026890677	-0.341342008
1904	RNF38	0.389772331	2.09E-06	0.026455516	-0.202323198
1905	CD72	0.191718705	0.003383479	0.019799688	-0.254640788
1906	RAB30	0.232378764	0.044770376	0.008911206	-0.242765341
1907	SQOR	0.071297235	0.00105628	0.019799688	-0.327662898
1908	THBS1	0.951382173	2.50E-05	0.00604478	0.019603632
1909	KIF23	0.063179439	0.017487634	0.001797795	-0.334782625
1910	GTF2B	0.18951373	3.04E-08	0.044777531	0.263973875
1911	IFI44L	0.575226911	0.012696399	0.000244465	-0.16124327
1912	ACTR2	0.921906287	0.000796911	0.000325411	-0.032179904
1913	KIF11	0.187950003	0.011489415	0.007463156	-0.256219193
1914	NAB1	0.490820308	0.00180603	6.03E-07	-0.171976691
1915	SPPL2A	0.054249195	0.000316224	0.008677654	-0.341986496
1916	PARP16	0.259255571	2.23E-05	0.040790026	0.248350622
1917	CENPE	0.615094249	0.004833887	0.027804498	-0.1478489
1918	PAPSS1	0.089548387	0.036282717	0.006059768	-0.312837372
1919	ETNK1	0.439567388	0.000494571	0.004639387	0.190018268
1920	ZCRB1	0.985736664	0.012850881	0.039639572	0.006229029
1921	SLC15A4	0.669484502	0.000968036	0.011134745	-0.128616051
1922	MTMR6	0.163291206	0.01825897	0.013553738	-0.268172188
1923	MAP3K12	0.213184111	0.000159604	7.91E-05	-0.246230122
1924	DENR	0.574460419	6.71E-06	0.002327055	0.164840179
1925	NOVA1	0.213910801	0.026896126	0.001315844	-0.246022892
1926	WARS	0.883286819	0.007318544	0.030211398	0.047733103
1927	CDAN1	0.084447162	0.019101543	0.019799688	-0.317103181
1928	ABHD2	0.627795846	0.001275409	0.000123352	-0.143322405
1929	NCOR1	0.082203112	2.63E-05	0.000234864	-0.319090835
1930	SCRN2	0.079036866	0.001114122	0.024998166	-0.321487529
1931	SS18	0.987293542	0.015603685	0.041362933	-0.005572074
1932	WRAP53	0.150648318	0.032598834	0.025081888	-0.274812341
1933	RAB40B	0.160556562	0.001317025	0.005148014	-0.269546063
1934	PTPRF	0.057232845	0.002944019	0.007043456	-0.339636957

1935	UFC1	0.495827946	0.019851689	0.043785354	0.174773804
1936	FCRL5	0.158031532	0.000948719	7.91E-05	-0.270859433
1937	PRUNE1	0.377630958	0.000363275	0.024726388	0.211901571
1938	SLC39A1	0.560505082	7.88E-07	1.86E-06	-0.165245292
1939	ACP1	0.844139006	0.002122387	0.037491439	0.060716798
1940	SNAP47	0.368590114	0.007969001	0.000439097	-0.209640618
1941	LBR	0.365290796	0.005802257	0.004498867	-0.210852609
1942	PDIA6	0.339770185	0.023994109	0.023657145	0.225506244
1943	HNRNPLL	0.936918345	0.01217041	0.005237409	0.025852997
1944	CALM2	0.297102329	3.23E-09	0.007380103	0.239352008
1945	CIAO1	0.311411085	0.000938512	0.001341339	-0.228104432
1946	RABL2A	0.287991636	0.024041518	0.032703709	-0.235030026
1947	SPAG16	0.097955211	0.00876131	0.007463156	-0.306176549
1948	LRIG1	0.379537498	0.019478244	0.019799688	-0.205735495
1949	RUBCN	0.107713844	3.88E-05	0.003979381	-0.298981954
1950	LYAR	0.376794836	0.000841319	0.044729016	0.212186284
1951	SCD5	0.089811312	0.005161844	0.019799688	-0.312635581
1952	CCNA2	0.318423206	0.027476199	4.13E-05	-0.226370211
1953	PPIP5K2	0.458396913	0.002345136	9.07E-08	-0.18025062
1954	FBXL17	0.059646203	0.001363549	0.002100142	-0.337820942
1955	HIGD2A	0.741089073	4.88E-05	0.01273029	0.101740856
1956	NCAPG2	0.142440976	0.006665494	0.024347719	-0.278955085
1957	ATP6V1B2	0.095005397	0.000653762	0.006290705	-0.30843371
1958	CHMP7	0.08424121	0.041245082	0.000445477	-0.317273975
1959	UTP23	0.155123793	0.003709263	0.000261851	-0.272431915
1960	SLC39A4	0.173243861	0.003198263	0.026890677	-0.263070003
1961	NAPRT	0.184731362	0.033324206	0.039510446	-0.257662932
1962	STOM	0.922001326	0.022665767	0.017618923	-0.032138079
1963	NOTCH1	0.143285399	0.00081581	0.002159732	-0.278464052
1964	MKI67	0.136243103	0.045811719	0.001315844	-0.281945523
1965	HIKESHI	0.134815068	0.047367147	0.003151349	-0.28279346
1966	MTA2	0.053653873	0.000892291	0.037468881	-0.342447234
1967	NUDT22	0.16214917	0.027747246	0.008534929	-0.268697177
1968	FERMT3	0.151985386	0.001602359	0.000126277	-0.274078375
1969	DLG2	0.055681996	0.011031608	0.005148014	-0.340807754
1970	NGLY1	0.87206641	0.002595028	0.001782266	0.052477462
1971	CSNK1G3	0.585498296	5.07E-05	0.000288464	-0.157877043
1972	MMAA	0.329192728	0.00721293	0.025708977	-0.222932765
1973	INPP1	0.971823875	0.031572107	0.027804498	-0.011233995
1974	SACS	0.079351651	0.002337454	0.007346174	-0.32122952
1975	RABGAP1L	0.592990499	0.033395626	0.023541713	-0.155387723
1976	ZNF256	0.225207531	0.008512942	0.005148014	-0.24348358
1977	ZFP36L2	0.122431759	8.96E-12	0.002571306	0.301160584

1978	RMND5A	0.899678398	0.013955891	0.013266602	-0.041373153
1979	CFDP1	0.180568178	0.002407973	0.018847047	-0.259558299
1980	C7orf31	0.215374945	0.004029008	0.019799688	-0.245601623
1981	HS2ST1	0.996666814	0.028065174	0.026304372	0.001464389
1982	ATP5J	0.082516666	0.002313468	0.012427456	-0.318812157
1983	SAMSN1	0.720121552	0.005402762	0.002316646	-0.108512623
1984	PDIA4	0.428308693	6.72E-06	0.012134016	-0.189319091
1985	BATF	0.075946436	0.001278745	6.44E-05	-0.324116294
1986	UBE2L6	0.058524809	0.001413609	0.000363177	-0.338442415
1987	SLC38A10	0.535699735	0.005488811	0.004498867	-0.168931603
1988	LDLRAP1	0.068354207	0.002707599	0.017740611	-0.330143624
1989	EYA3	0.609973739	0.01609484	0.001206681	0.152347077
1990	ADAMTS4	0.655851051	0.01323651	0.027804498	0.13554033
1991	PSMD4	0.714502178	0.001725809	0.03802149	-0.110870754
1992	ATP6V0D1	0.761616659	0.011641864	0.049208412	0.093398191
1993	CALM3	0.983560129	0.000772052	4.61E-06	0.006952123
1994	RRP1B	0.129586579	0.048248107	0.046925991	-0.285916828
1995	ITGB2	0.677040023	6.72E-08	9.76E-06	0.127638076
1996	PCSK7	0.112548671	0.009315674	0.007325557	-0.295405999
1997	FDPS	0.870678903	0.023250939	0.021403411	0.053094274
1998	CCR5	0.831738179	0.002815203	0.023819225	0.065425208
1999	PCYT1A	0.696683259	0.030069391	0.003363397	-0.117993845
2000	SAP30BP	0.06711022	0.000968294	0.047710421	-0.331270741
2001	PRPSAP1	0.465006881	0.029561159	0.004856962	-0.178312466
2002	ITGA5	0.077604129	0.000597629	0.037382848	0.336266769
2003	UBXN1	0.992379427	0.047974778	0.028964883	-0.003319365
2004	MAGOH	0.980882993	0.005357085	0.011305081	-0.007846199
2005	RBBP4	0.099223281	0.040480142	0.041733368	0.317330486
2006	MYSM1	0.926371757	0.028828956	0.005489041	-0.03026939
2007	SLC30A7	0.095048987	0.007951712	0.024970193	-0.308401725
2008	IER5	0.060671801	0.045254622	0.025708977	-0.336887663
2009	YY1AP1	0.97323758	0.028497246	0.007123857	0.010667261
2010	GMPS	0.398246828	0.008870557	0.026890677	-0.199407384
2011	PRMT9	0.740469352	0.00374551	0.007926098	-0.100711819
2012	GRPEL2	0.900731867	0.018759447	0.007325557	0.041140087
2013	CASP3	0.095686636	0.000909245	0.013582681	-0.307912587
2014	ERAP2	0.810035478	0.041455645	0.036444947	0.074362996
2015	COG5	0.616538697	0.029174576	0.003203656	-0.147330252
2016	WASHC5	0.607602361	0.007310711	0.000836239	-0.150321052
2017	FXN	0.115378859	6.36E-06	0.048141576	0.304816709
2018	C9orf64	0.60675636	0.043642184	0.000143144	-0.150619351
2019	SPTSSA	0.05780945	0.026460242	0.001911715	-0.339108157
2020	NUDT5	0.439781074	0.045489255	0.009648316	0.189951504

2021	PRDX3	0.837966479	0.003205081	0.026588069	-0.062388905
2022	PSMC3	0.066622877	8.83E-06	2.25E-06	-0.331697649
2023	SGPL1	0.378493024	0.00031279	0.004272606	0.211559323
2024	RIC3	0.124644972	0.00329392	0.040699924	0.299861492
2025	AKIP1	0.08679935	0.015867333	0.007250457	-0.315023858
2026	BEX3	0.095994792	0.010010833	0.019799688	-0.30767909
2027	PLK1	0.055150022	0.002396996	0.007325557	-0.341284413
2028	IRGQ	0.606508491	0.044847954	0.003923456	-0.150713737
2029	ZNF226	0.156981377	0.042060085	0.005568283	-0.271396605
2030	NDUFV1	0.573418439	0.023931874	0.047477249	-0.161817667
2031	ECI1	0.050225238	0.003862597	0.019799688	-0.343753579
2032	CX3CR1	0.225942586	0.001134684	0.019799688	-0.243377723
2033	STIP1	0.795282495	0.008306631	0.048757785	-0.078966116
2034	SLC20A2	0.061851083	0.00154387	0.000520395	-0.335826065
2035	TMUB2	0.417495171	0.049691818	0.042343713	-0.192998414
2036	STAT3	0.833304274	0.001083744	0.011305081	-0.064248594
2037	C2orf68	0.724413547	0.00272443	9.62E-05	0.108645449
2038	RGS14	0.559982324	0.002979031	8.19E-05	-0.165366815
2039	LMAN2	0.20306117	0.000216457	0.000192361	-0.249779567
2040	PGM2	0.401438167	0.03166926	0.012227655	-0.198330677
2041	LIMS1	0.672773278	0.00938236	0.012107294	0.129380957
2042	CHD3	0.096150653	8.99E-05	6.54E-05	-0.307532755
2043	KCNAB3	0.553297835	0.011241587	0.000559766	0.170419139
2044	AC106795.1	0.543678713	0.025291486	0.019799688	0.171944804
2045	SIK2	0.103831198	0.009386563	0.023319471	-0.301934866
2046	CDK1	0.219784673	0.00278016	0.005148014	-0.24452194
2047	TMED10	0.657805221	0.00032066	0.016394532	-0.13291117
2048	TMEM43	0.742908813	0.003878876	0.042562179	0.101106681
2049	TADA3	0.097595417	0.000207302	0.000914791	-0.306479615
2050	TMEM126A	0.480056278	0.023501599	0.032737774	-0.174437821
2051	MRPL36	0.102405972	0.001812221	0.01255225	-0.302965284
2052	PIK3CD	0.082528975	0.004813529	0.00010987	-0.318809688
2053	PWWP2B	0.129985575	0.010239715	0.007709116	-0.285666018
2054	RRM2	0.219524904	0.002431846	0.005148014	-0.244570751
2055	SRGAP2C	0.713779528	0.026121464	6.03E-05	-0.111163771
2056	NME6	0.216614355	0.000121309	0.0073558	-0.245275485
2057	MBOAT1	0.131377344	0.037311731	0.026890677	-0.284888539
2058	RCAN2	0.41667158	0.00179752	0.000147702	-0.19325626
2059	IL16	0.151282684	0.031358391	0.001711498	-0.274454244
2060	THEMIS	0.61917581	0.001668495	0.017516949	-0.146464611
2061	DCP2	0.457862477	0.0026863	0.000385222	0.184579887
2062	ANKRD13D	0.287907897	0.005283348	0.004805708	-0.23505558
2063	EVC2	0.057491257	0.001107015	0.019799688	-0.33940479

2064	MTX1	0.17546932	0.020628813	0.025442946	-0.26205993
2065	MST1	0.129796604	0.002764012	0.019799688	-0.28578792
2066	CD7	0.717266492	0.021381966	0.001703048	0.111229227
2067	PHOSPHO1	0.255082255	0.020129645	0.026890677	-0.24156681
2068	GPR160	0.225044252	0.00386902	0.019799688	-0.243507911
2069	KIAA1551	0.073579856	0.004570731	0.013876654	-0.325573111
2070	HRAS	0.070731614	0.005946696	0.019799688	-0.32817009
2071	GLMN	0.360263209	0.007353341	0.007302794	-0.212524674
2072	ATR	0.66354198	0.02978243	0.043754632	-0.130823041
2073	YPEL2	0.050690897	0.015725691	7.09E-08	-0.343245953
2074	LSM1	0.197991352	0.007624849	0.039243094	-0.251927665
2075	BAIAP2	0.299004829	0.001794908	0.007962594	-0.231804231
2076	A2M	0.099308724	1.28E-07	3.62E-06	-0.305105144
2077	USF3	0.907294994	0.003189495	0.009906867	0.038385586
2078	ACSF3	0.717253172	0.009914412	0.00140205	-0.109708054
2079	SEC24C	0.096352156	0.01347817	0.007234653	-0.307366395
2080	ZBTB34	0.057243892	0.009753514	0.019799688	-0.339627302
2081	RBM44	0.227545136	0.001481475	0.005148014	-0.243189302
2082	RIC8A	0.355598857	0.003539083	0.000127592	-0.214059012
2083	PDE4DIP	0.448030049	1.54E-08	0.018377337	0.187849195
2084	H3F3AP6	0.899051386	0.000234672	0.035341621	0.041791988
2085	ZNF852	0.078941481	0.004153672	0.026890677	-0.321579297
2086	C17orf62	0.400921785	0.027405832	0.001060421	-0.198499745
2087	GAK	0.293803927	0.005016464	0.004452007	0.240470175
2088	EIF3K	0.081191118	0.022876559	0.033910754	0.333088178
2089	AURKB	0.135215075	0.000331928	0.019799688	-0.282555064
2090	PDXDC1	0.113007386	2.70E-05	0.019799688	-0.295051818
2091	HCLS1	0.496818572	1.16E-06	0.026645344	0.174622823
2092	PAK2	0.164635818	0.000953226	0.043047697	-0.267461599
2093	SLC36A4	0.586624045	0.011971924	0.025385927	-0.157500457
2094	PITPNB	0.502014046	0.001312426	0.019799688	0.173911073
2095	GPR137C	0.209565305	0.002529176	0.019799688	-0.247443713
2096	HIGD1A	0.177455116	3.00E-05	0.021403411	-0.261115458
2097	C3orf58	0.096418629	0.048311237	0.000470783	-0.307314831
2098	SLC9A9	0.081158355	0.046537515	0.001008665	-0.319741171
2099	YBEY	0.065733413	5.73E-05	0.001315844	-0.332457206
2100	SKA2	0.11109608	8.18E-05	0.002072486	-0.296405704
2101	LCK	0.174010795	0.000121194	0.003909206	-0.262706351
2102	CEP63	0.092241872	0.01059704	0.00519679	-0.310674486
2103	ABAT	0.090326873	0.009967298	0.001718755	-0.312215221
2104	TREX2	0.220393346	0.024272724	0.019799688	-0.244390057
2105	TRIM52	0.105807683	0.040278701	0.003351335	-0.300388497
2106	SH2D1A	0.158550754	1.29E-07	8.04E-08	-0.270617439

2107	PPP1R2	0.922198188	0.003637254	0.048148626	0.032188206
2108	TSPYL2	0.477597753	0.004011912	0.008702838	0.178964335
2109	CSF1	0.164409949	0.011145323	0.019799688	-0.267584563
2110	SEMA4B	0.221668329	0.002954962	0.001315844	-0.244095531
2111	ZNF74	0.090413074	0.003847236	0.007130496	-0.312145226
2112	HGS	0.179423048	0.02171309	0.000121171	-0.260128643
2113	WASH3P	0.777181207	0.019614768	0.022192795	0.087143432
2114	UBE2L3	0.326243703	0.045937255	0.024494487	0.230296985
2115	NPIPB4	0.259075595	0.001890721	0.006608985	-0.240881289
2116	C16orf54	0.943892999	0.041643215	0.007998599	0.022827067
2117	TOR3A	0.127679566	0.005985728	0.024966998	-0.287093599
2118	GNG2	0.186187804	0.004218331	0.007346174	-0.257024208
2119	BTN3A2	0.101159428	0.000230869	0.008023017	-0.303863683
2120	NF2	0.29119399	0.007460554	0.007463156	0.241208894
2121	CHP1	0.747395556	0.013253751	0.035259019	0.099226053
2122	TTC24	0.466339751	0.047602716	0.002044906	-0.177948604
2123	ARHGAP11B	0.121824285	0.044061617	0.007709116	-0.29056752
2124	C19orf54	0.304887128	0.042234131	0.021974381	-0.229972843
2125	CNR2	0.57943198	0.012737005	0.001654817	-0.159851604
2126	SF3B3	0.11211849	0.000751148	0.003335986	-0.295695729
2127	HLA-DRB1	0.987506471	2.65E-05	0.000439097	0.005492733
2128	SPATS2L	0.05073638	0.000140221	1.68E-06	-0.343186513
2129	LCOR	0.148785493	2.99E-05	0.036847386	-0.275842496
2130	AC005154.1	0.092311312	0.026803437	2.79E-05	-0.310606663
2131	POM121	0.434531185	0.010292083	0.03418987	0.19174471
2132	CD55	0.336523483	0.006402693	0.00226423	0.226736891
2133	ZNF34	0.222641784	0.011202859	0.019799688	-0.243903328
2134	SULT1A1	0.101809229	0.000135896	0.000875699	-0.303377352
2135	PRPF40A	0.057948772	0.006296526	0.000227164	-0.338999305
2136	HLA-DQA1	0.082413863	0.008494149	3.89E-05	-0.318897937
2137	ZSCAN16	0.05555047	0.000172677	0.019799688	-0.340908201
2138	ANXA6	0.08102058	0.017986326	0.03387025	0.333253755
2139	DTHD1	0.310239789	0.002216979	2.88E-06	-0.228508727
2140	ARRDC1	0.309320466	0.009602127	0.000119057	-0.228782222
2141	SULT1A2	0.085925383	2.89E-06	0.000943034	-0.315808039
2142	ZNF655	0.077992961	0.00163028	0.013909421	0.335913505
2143	ZNF181	0.8238799	0.009941183	0.000616058	-0.067981965
2144	ZNF347	0.222599899	0.005683063	0.025081888	-0.243913146
2145	SNHG12	0.173645161	0.002107151	0.002811291	0.271830947
2146	ASPH	0.065399091	0.004409479	0.000118417	-0.332726334
2147	SMOC1	0.225856922	0.009691188	0.005148014	-0.2433913
2148	SMURF1	0.953933495	0.005940685	0.000151181	0.018509698
2149	OPA1	0.304438546	0.027371141	0.005801235	-0.230110769

2150	RNA5SP151	0.879953444	2.53E-06	0.027776967	0.04916576
2151	AL512646.1	0.091321097	0.000441112	0.002870153	0.324113829
2152	DAXX	0.367529512	0.004114209	0.011690867	-0.21003564
2153	HNRNPCP2	0.606701976	0.000167208	0.038303354	-0.150636199
2154	BRD2	0.315363645	0.008168503	0.007532436	-0.226818241
2155	HLA-DMA	0.916177419	0.000642525	0.006113988	-0.034438616
2156	PSMB8	0.188638722	0.025245036	0.025121213	0.264414983
2157	NEU1	0.415241115	0.023012721	0.000554984	0.198541784
2158	CARD16	0.641713528	0.005428944	0.008038618	0.141061776
2159	HLA-F	0.141147655	0.00049245	0.000912901	-0.27969916
2160	TRIM13	0.582028691	0.003537886	6.58E-06	-0.159020221
2161	SLFN12L	0.392602108	0.00312345	0.024347719	-0.201353216
2162	COLQ	0.221885582	0.003662754	0.019799688	-0.244063462
2163	MIR16-1	0.091675241	0.003795716	0.019799688	-0.311148977
2164	MT-RNR1	0.729779938	0.006804308	0.043762105	0.106412692
2165	TSN	0.746986175	0.000317065	0.004479284	-0.098167805
2166	IGLC2	0.876929076	0.012455351	0.007346174	-0.050135827
2167	TRAV24	0.669095543	0.001591101	0.00208965	-0.128752235
2168	TRAJ39	0.288993245	0.000122158	0.018590406	0.241867562
2169	IGHG1	0.144922827	9.34E-07	1.02E-09	-0.277623743
2170	TAS2R14	0.210356796	0.001143581	0.019799688	-0.247176895
2171	MAP10	0.225039581	0.011318344	0.019799688	-0.243508058
2172	HNRNPA1P3	0.091833439	0.010141373	0.024970193	-0.311014442
2173	ARHGAP19	0.098149675	0.011918099	0.000502877	-0.30603163
2174	CLIC1	0.445890632	1.46E-05	0.001487846	0.188611332
2175	STARD10	0.451467868	0.008256379	0.026890677	-0.182482101
2176	PHB2	0.222757938	0.009915013	0.021656597	-0.243886456
2177	CROCCP2	0.166459788	0.000171636	0.00208965	-0.2665091
2178	AL356432.2	0.337460072	0.005134755	7.18E-05	-0.220181151
2179	VPS52	0.36379067	0.047324998	0.016486065	-0.211337259
2180	HLA-DPB1	0.328571555	1.75E-10	1.96E-05	-0.223110584
2181	AL391244.1	0.365826968	0.028963025	0.026493922	-0.210659103
2182	PSME2P2	0.625005555	0.007113458	0.00055309	-0.144370847
2183	RUSC1-AS1	0.051000947	0.001438216	0.019799688	-0.34293868
2184	PSPHP1	0.81876261	0.04380513	0.000870571	0.070704776
2185	AC016831.1	0.379051038	0.002792598	0.040790026	0.211357377
2186	AL121983.2	0.710847548	0.004375463	0.026890677	-0.112316485
2187	AC004771.1	0.898585096	0.017430578	0.025385927	-0.041795836
2188	POLR2J2	0.951561549	0.014805615	0.006966605	-0.01947202
2189	AC012442.1	0.218965785	0.028455061	0.019799688	-0.244708061
2190	AC006460.1	0.18942794	0.003711257	0.027804498	-0.255550093
2191	PSMD10P1	0.08896023	0.028403979	0.005148014	-0.313289879
2192	KCNQ5-AS1	0.221324506	0.001467948	0.005148014	-0.2441707

2193	PATL2	0.156886907	0.002276156	3.25E-07	-0.271453072
2194	AL022238.2	0.080717221	0.01788874	0.026890677	-0.320109026
2195	TMEM254-A!	0.209337952	0.007165633	0.019799688	-0.247518806
2196	ATP5G2P3	0.06742996	0.001581184	0.019799688	-0.330973206
2197	AC011005.1	0.350125434	0.004658521	0.007325557	-0.215884245
2198	AC078875.1	0.069048955	5.18E-05	0.002053374	-0.32948805
2199	AC211433.1	0.097288113	0.003250121	0.007463156	-0.306673099
2200	TNF	0.162444448	1.18E-09	0.028159506	0.277906953
2201	LINC00342	0.662464175	0.01120326	0.002100142	-0.131184255
2202	AP002381.1	0.139361656	0.006635421	0.026402336	-0.280704313
2203	C12orf75	0.126642573	0.023490434	0.002912582	0.298513919
2204	H3F3AP4	0.099269585	0.010073903	0.021587071	-0.305138406
2205	AL035458.1	0.933022095	0.003664357	0.026890677	0.027442219
2206	MTX1P1	0.089799381	0.008789647	0.023030104	-0.312644329
2207	ARHGEF38	0.166272584	0.001490139	0.005148014	-0.266602445
2208	RGL2	0.307487154	0.031872125	9.23E-06	-0.229289516
2209	AC078785.1	0.45408115	0.007228321	0.026890677	-0.181602549
2210	RDH14	0.349758854	0.017205404	0.007346174	-0.215996816
2211	AC018475.1	0.244201755	0.008458625	0.021403411	-0.242726313
2212	TRBV11-2	0.201495202	0.015924609	0.005148014	-0.250434794
2213	ZNF90P1	0.213726501	0.008642108	0.019799688	-0.246067126
2214	AC002467.1	0.079133388	0.000805185	0.005148014	-0.321413784
2215	EIF6	0.264620889	0.022061323	0.003420712	-0.239566678
2216	HLA-DMB	0.068721735	5.61E-05	0.01723886	-0.329806075
2217	GNG10	0.388377565	0.011766598	0.027804498	-0.202826558
2218	ZNF487	0.120163153	0.018237428	0.019799688	-0.291469324
2219	NEAT1	0.63414696	0.000821249	0.005801235	0.143996853
2220	OIP5-AS1	0.082280348	0.000251723	3.64E-05	-0.31902442
2221	AC008780.2	0.053904615	0.044929816	0.001968785	-0.342263401
2222	AC093809.1	0.958782369	0.005115399	0.003810718	0.016448265
2223	AC104806.1	0.719603687	0.001268098	0.013407511	-0.108732609
2224	ZNF718	0.075865602	0.019874121	0.001315844	-0.324213411
2225	TRAJ55	0.415896471	0.003703665	0.007709116	-0.193483813
2226	AC016065.2	0.089606243	0.005375835	0.025081888	-0.312789637
2227	LINC01289	0.226647781	0.006925287	0.005148014	-0.24328094
2228	AC026191.1	0.222292532	0.029977256	0.019799688	-0.243976267
2229	AC138866.2	0.719793574	0.002279326	0.000158286	-0.108653853
2230	TMEM9B-AS	0.209281958	0.001861385	0.005148014	-0.247538891
2231	AP006621.3	0.107994066	0.000422603	0.001315844	-0.298760477
2232	NPIPB8	0.852356669	0.016375686	0.007962594	0.057303098
2233	AC003002.1	0.930312165	0.005689531	0.024743847	0.02864569
2234	USP30-AS1	0.055705259	0.008890163	0.024970193	-0.340780524
2235	AC010186.2	0.07118995	0.029586713	0.025719797	-0.327750095

2236	LINC00641	0.265204091	0.001189562	0.027804498	-0.239441784
2237	AL049869.3	0.75628704	0.006264869	0.007962594	-0.094420439
2238	AC009554.1	0.210223408	0.022535289	0.019799688	-0.247219182
2239	AC007342.1	0.088893883	0.001348374	0.019799688	-0.313353396
2240	AL356432.3	0.129318635	0.020172039	0.000256453	-0.286101139
2241	AC110079.1	0.194563317	0.040527561	0.026402336	-0.253420163
2242	AC020978.4	0.110893757	0.000495332	0.000624498	-0.296558441
2243	AP001486.2	0.054895587	0.000263074	7.91E-05	-0.341460439
2244	AC138304.1	0.225604223	0.018337125	0.019799688	-0.243425382
2245	PECAM1	0.783424468	0.000432297	0.038397866	-0.083672729
2246	SEC22B	0.74077574	0.048658329	0.008158814	0.10186385
2247	STRADA	0.81533609	0.003881938	0.002876692	-0.071512107
2248	MTRNR2L12	0.091563064	0.000515714	0.04283937	0.323907351
2249	LINC00528	0.943744461	0.032379835	0.000252827	0.022888626
2250	AC024451.4	0.219683069	0.000448067	0.019799688	-0.244540021
2251	AC092687.3	0.05437908	0.007023528	0.019799688	-0.341880013
2252	AL159169.2	0.118377186	0.001134684	0.019799688	-0.292595616
2253	AL122035.2	0.09688817	0.000854564	0.019799688	-0.306945123
2254	AC058791.1	0.719767944	5.90E-06	0.001560155	-0.108662403
2255	SYNRG	0.780878638	0.043964183	0.017408349	-0.084672541
2256	AC243654.2	0.196714728	0.004879441	0.026890677	-0.252494506
2257	CCL4L2	0.97371659	0.022585965	0.002158973	-0.010441715
2258	AC244472.3	0.671160596	0.00897992	0.00215646	0.130048592
2259	CCL3	0.135871788	9.91E-08	3.04E-09	-0.282176838
2260	SMG6-IT1	0.189697336	0.000844115	0.005148014	-0.255440447
2261	AP003108.4	0.210786977	0.006564071	0.025081888	-0.247045714
2262	AC069547.1	0.076735181	0.003293996	0.019799688	-0.32337207
2263	AC012676.5	0.120934474	0.000737856	0.00208965	-0.291024601
2264	AC245088.3	0.220388959	0.02405937	0.001315844	-0.244390406