

Supplemental Data

Figure S1. RNA-seq based oncogenic pathway analysis. A) oncogenic Kras signaling pathway was significantly activated in the lung tumors of adenoma and ADC mouse model compared to the normal control mice as detected by BD-Func program. * denotes Dunnett's P values less than 0.05. For this comparison, we used a cohort comprising lung ADC mice and normal control mice and collected primary lung tumor samples characterized as either adenoma or ADC, as well as normal lung tissues from control mice (each group had 8 samples). B) comparing the airway gene expression patterns between lung ADC mice and normal mice also showed upregulated oncogenic Kras pathway activity according to GSEA analysis.

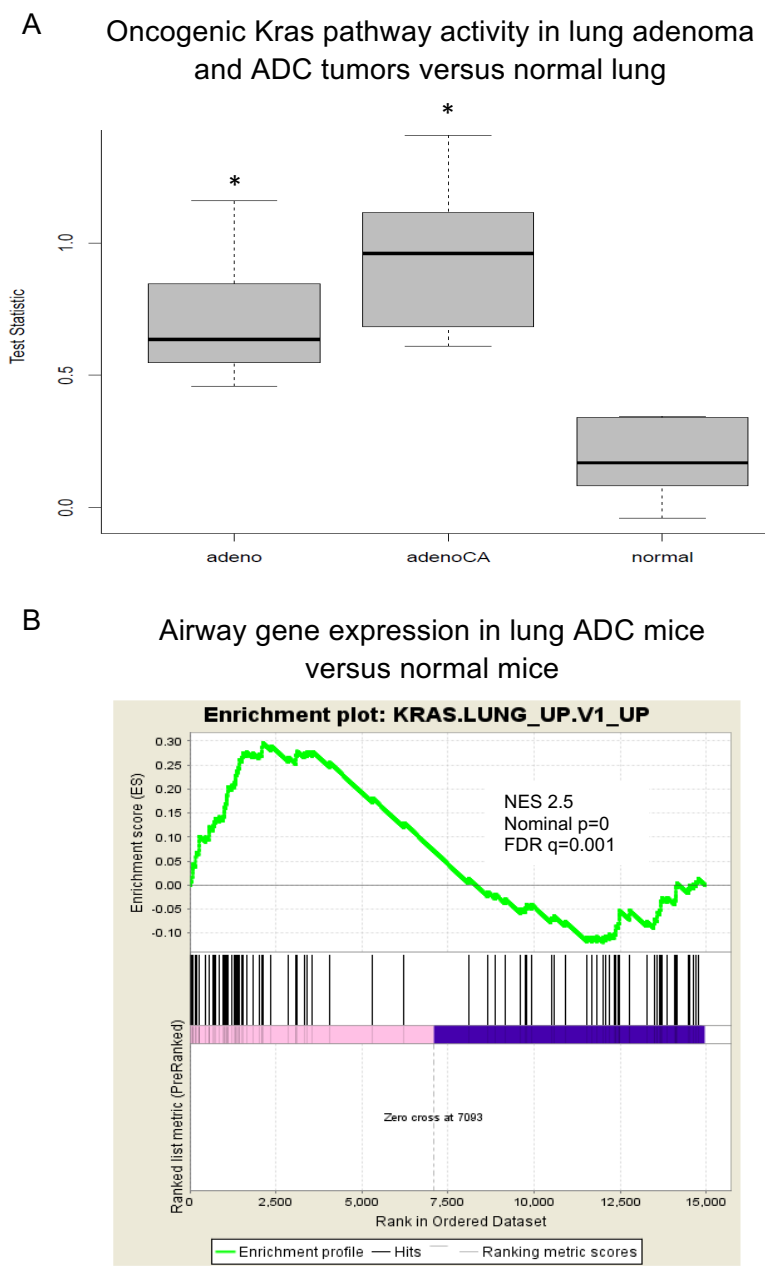


Figure S2. The down-regulation of key glycolytic enzymes by pioglitazone treatment in the bronchial airway of mice harboring ADC lesions. The schematic plot of the functions of the down-regulated glycolytic enzymes in glucose metabolism.

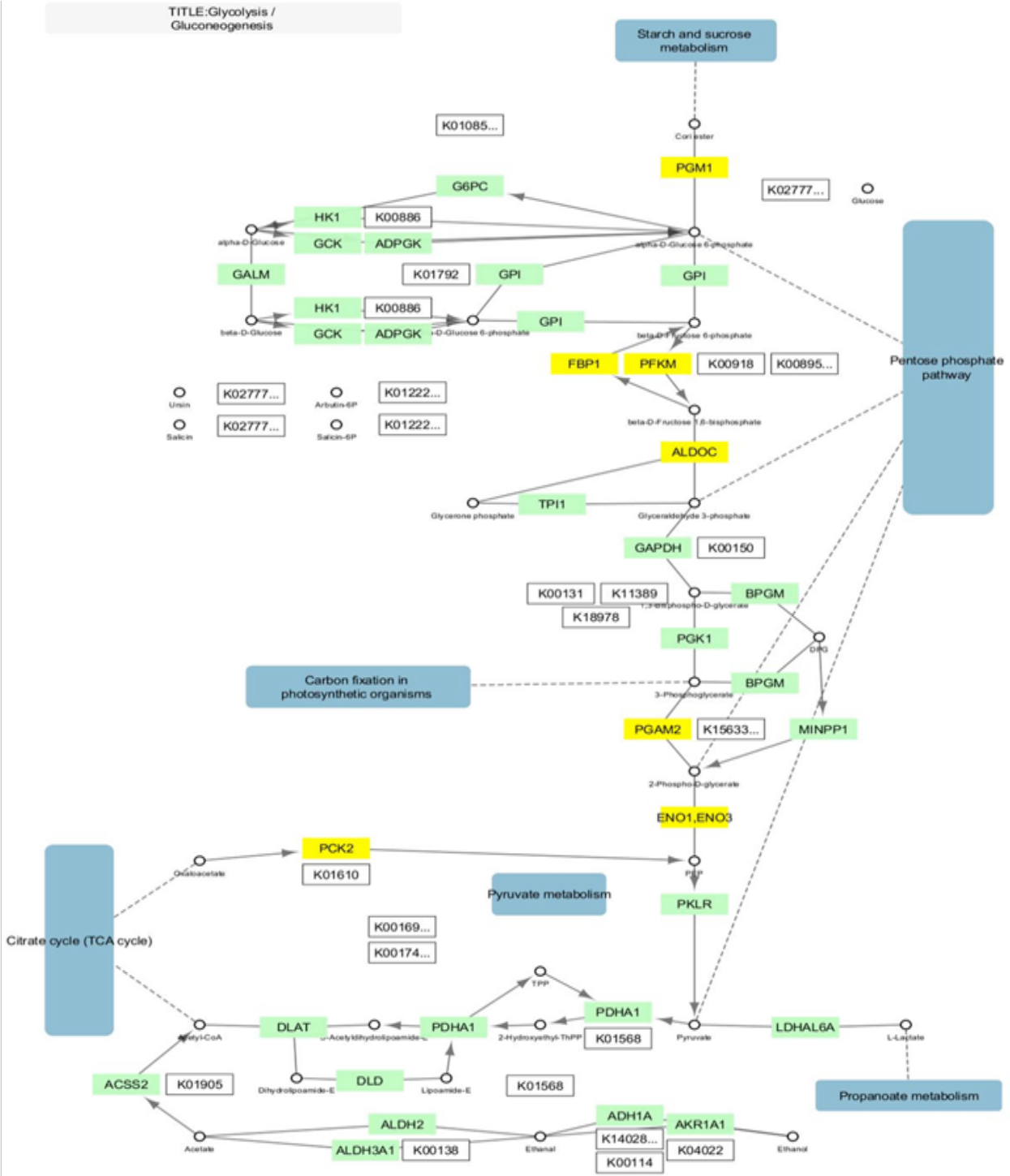


Figure S3. The down-regulation of the oncogenic Kras signaling activity in the lung adenocarcinoma tumors of mice treated by pioglitazone, which reversed the activity of oncogenic Kras signaling to normal level. Groups: ADC - lung adenocarcinoma tumors of mice without pioglitazone treatment; normal: normal lung tissues from corresponding A/J mice; piogli: lung adenocarcinoma tumors of mice subjected to pioglitazone treatment. * denotes Dunnett's P values less than 0.05.

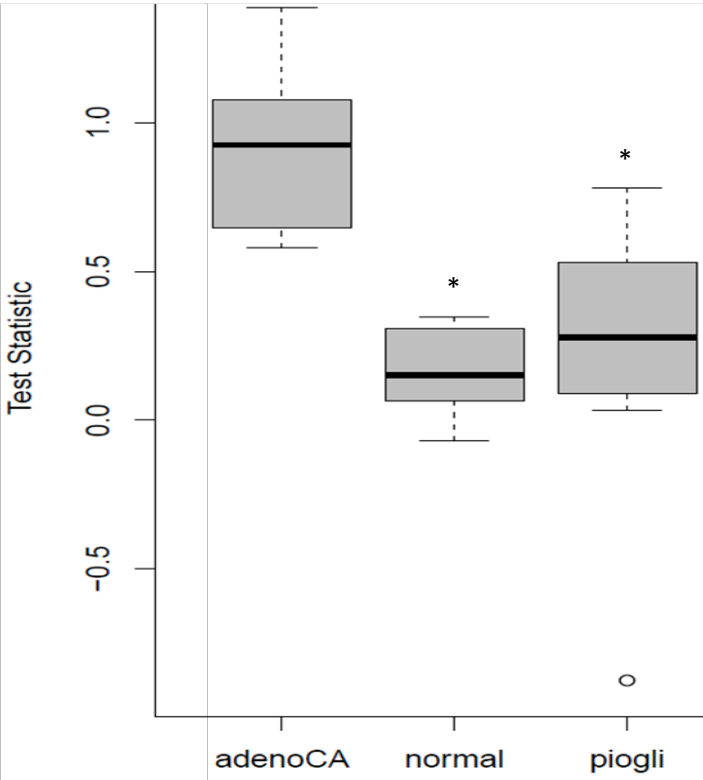


Figure S4. Heatmap showing the thirty glucose metabolism genes (A) down-regulated in the airways of tumor-bearing mice after pioglitazone treatment were (B) similarly down-regulated in the lung ADCs of mice treated with pioglitazone compared to the tumors of non-treated mice.

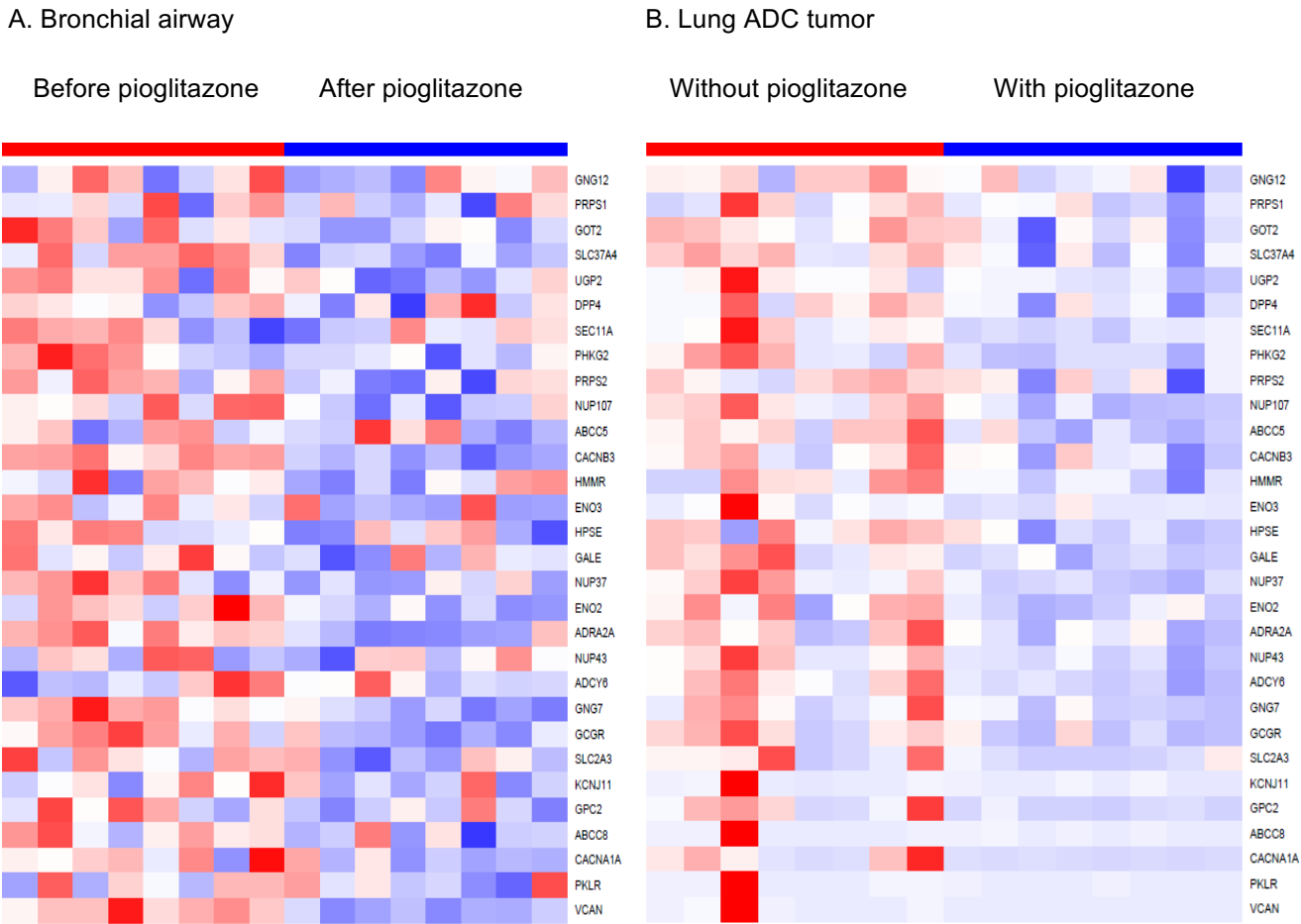


Figure S5. Kaplan-Meier analysis showing that the expression signatures of the pioglitazone treatment regulated glucose metabolism geneset (“Piog_Glu_LungADC”) was significantly associated with the overall survival outcome across the four human lung ADC datasets. Red curve denoted high risk group based on the high expression of the “Piog_Glu_LungADC” geneset, green curve denoted low risk group based on the low expression of this geneset.

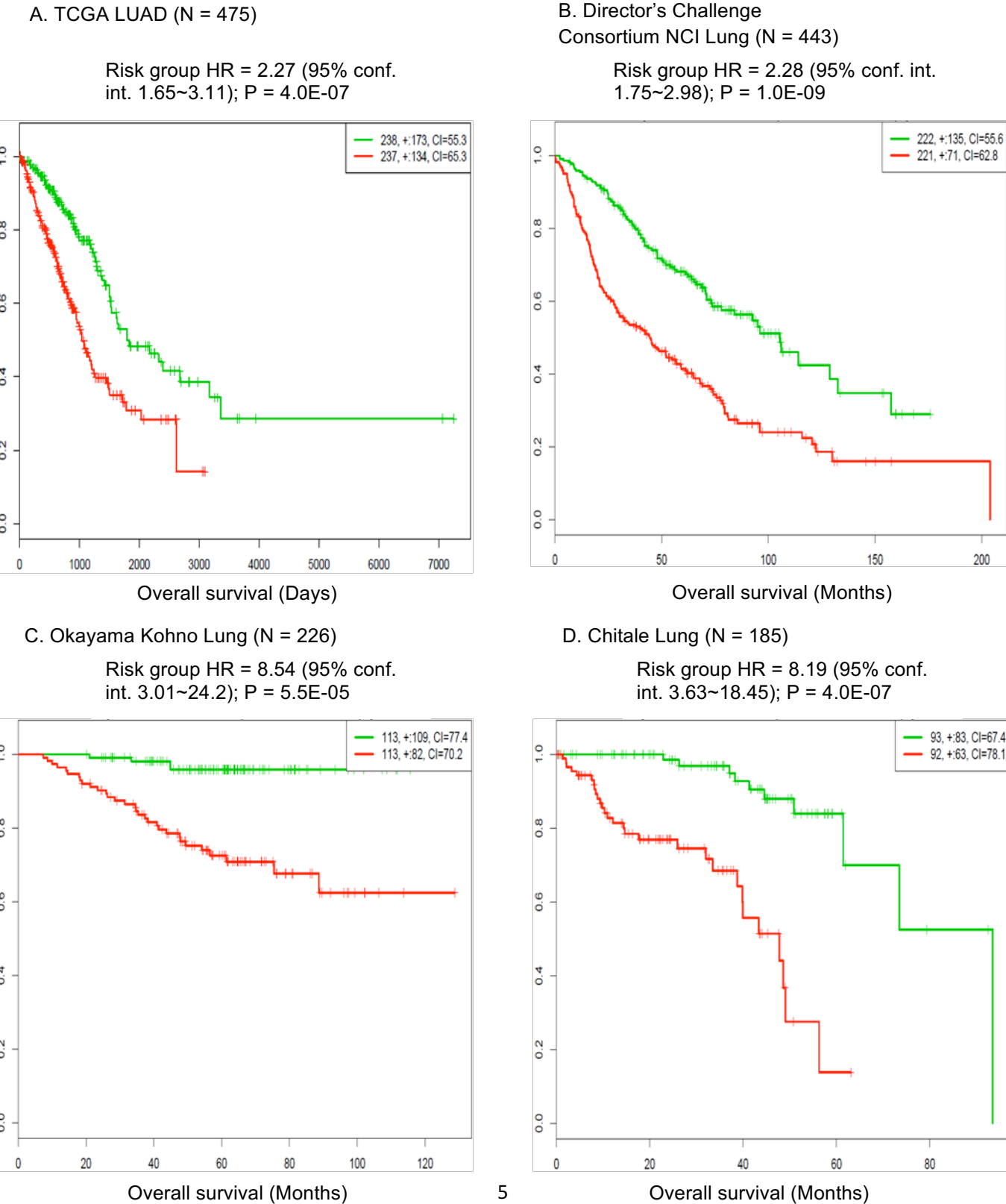


Figure S6. The glucose metabolism gene expression changes between the lung tumors collected from the VC (vinyl carbamate) - induced lung ADC mice model and the normal lung tissues collected from the control healthy mice. Among the 77 significantly changed glucose metabolism genes (FDR < 0.05), 70 genes were up-regulated and 7 were down-regulated.

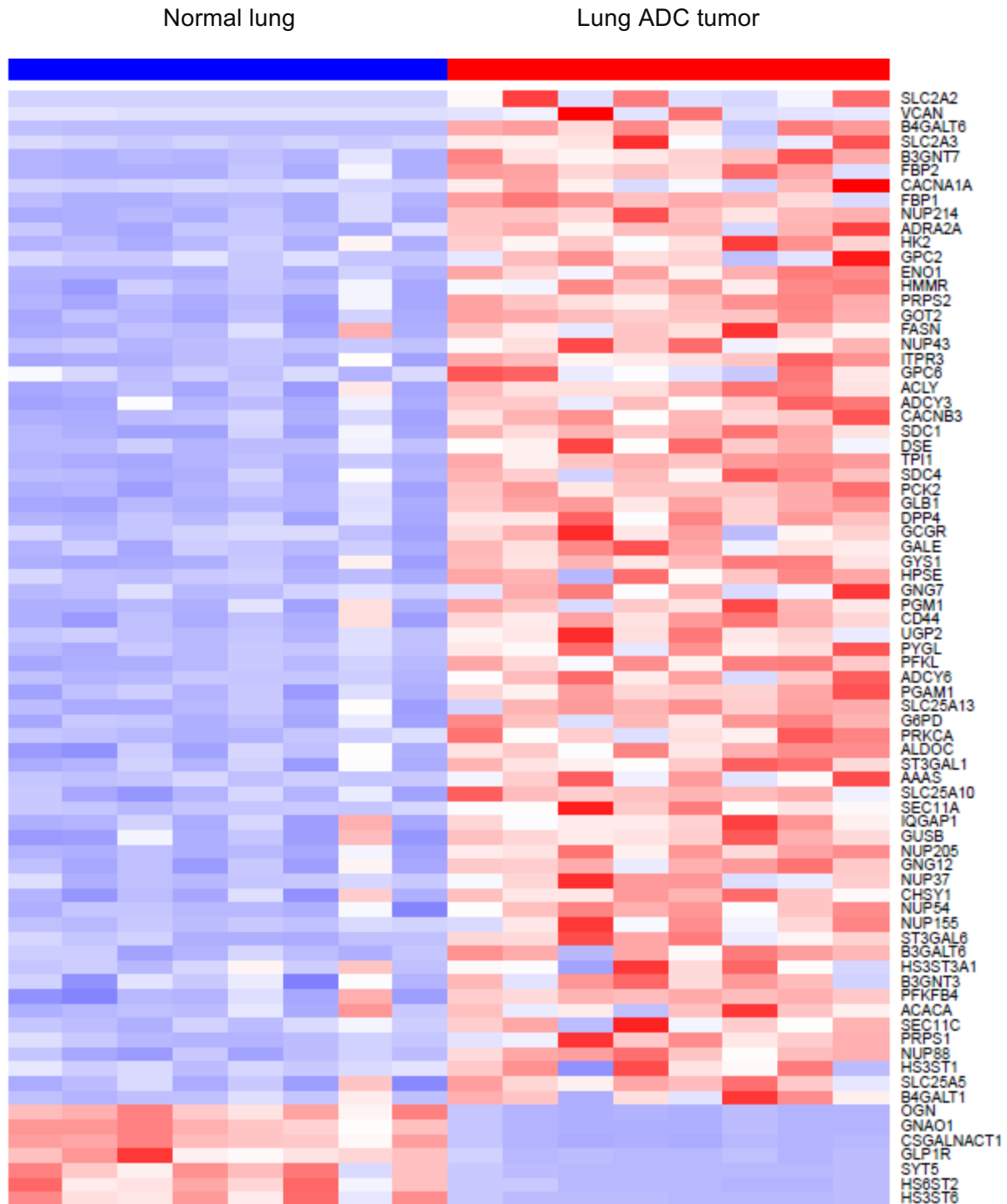
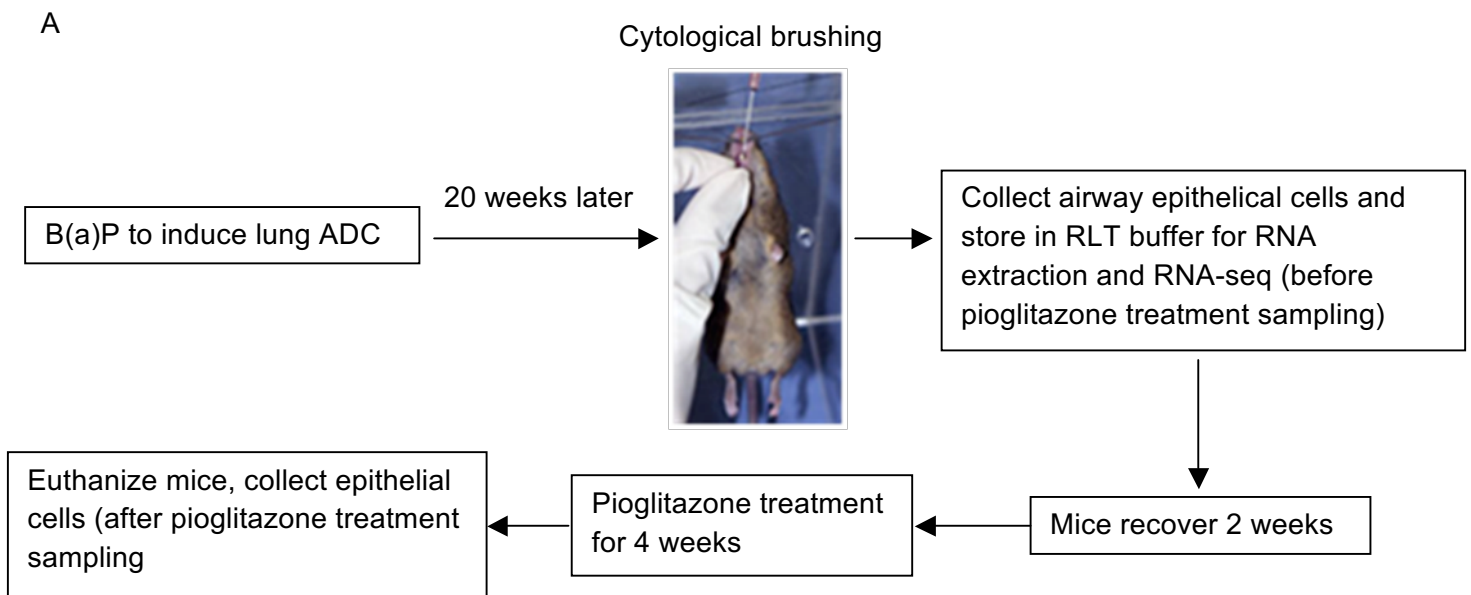


Figure S7. The procedures for airway brushing techniques. A) the “trachea-bronchial brushing” technique was illustrated. A cytological brush was used to collect epithelial cells from the trachea-bronchus region of anesthetized mice as “before pioglitazone treatment samples”, and stored in RLT buffer for RNA extraction and RNA-seq. The mice were given 2 weeks for recovery from brushing, and then treated with chemopreventive agent - pioglitazone. After 4 weeks of the treatment, epithelial cells were collected from the same mouse as “after treatment samples.” B) The “trachea-bronchial brushing” technique was successful at harvesting lung epithelial cells. Based on the H&E staining, over 95% of brushed cells were confirmed to be bronchial epithelial cells. Also, most of the harvested cells were shown to have intact epithelial cell membrane and morphology.



B

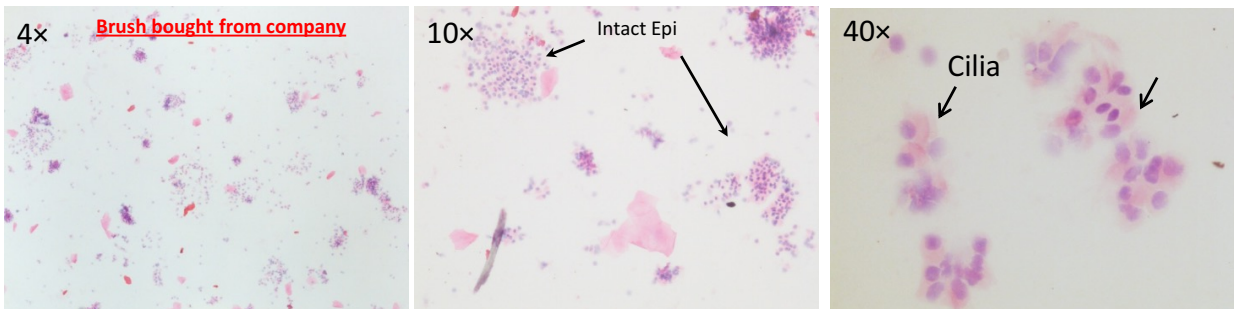
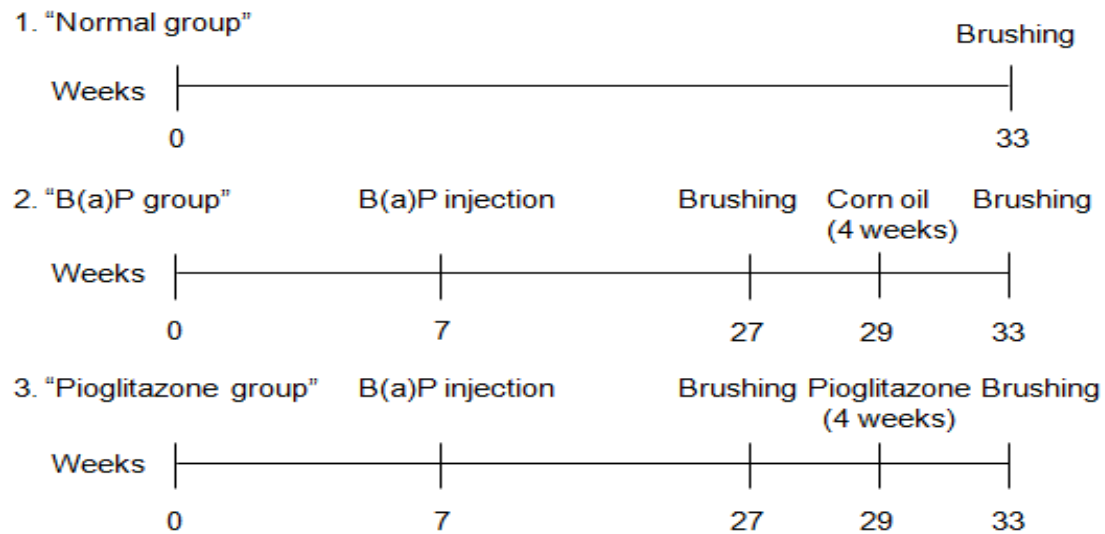


Figure S8. Timing of the experiments and sample collections in different groups of mice. A) timing of the bronchial airway epithelium samples collection by brushing and different treatment in the three groups of mice; B) timing of the lung tissue samples (normal lung or lung ADC tumors) collection and different treatment in the three groups of mice.

A. Airway epithelium samples



B. Lung tissue samples

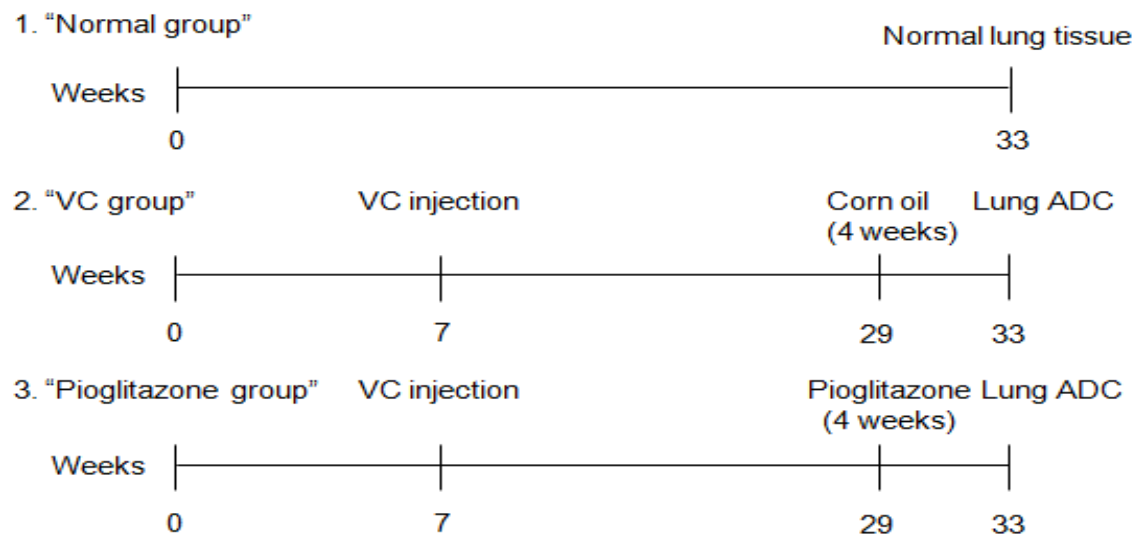


Table S1. Pioglitazone treatment led to 2,020 significantly up-regulated genes (FDR < 0.05) in the bronchial airway epithelial cells of B(a)P induced mouse lung ADC model.

Gene	logFC	logCPM	LR	PValue	FDR
COL10A1	4.36	0.56	14.34	1.53E-04	1.34E-03
HSPA1B	3.47	6.05	659.30	2.12E-145	3.24E-141
CTLA4	3.34	-1.80	19.90	8.16E-06	1.15E-04
HSPA1A	3.32	5.48	338.06	1.69E-75	1.29E-71
CXCR5	3.20	-1.43	9.36	2.21E-03	1.15E-02
SERPINE1	2.89	4.29	49.79	1.71E-12	1.26E-10
FOSL1	2.66	0.77	70.72	4.11E-17	6.90E-15
CLEC4E	2.58	2.95	43.50	4.24E-11	2.42E-09
PPBP	2.55	2.01	102.74	3.82E-24	1.48E-21
OCSTAMP	2.48	-1.73	11.96	5.45E-04	3.81E-03
MMP19	2.45	3.16	43.49	4.25E-11	2.42E-09
COL24A1	2.42	-1.39	9.15	2.48E-03	1.26E-02
IL10	2.42	-1.49	13.69	2.15E-04	1.78E-03
STAC2	2.40	0.25	26.41	2.77E-07	6.18E-06
RNF183	2.39	-1.68	14.24	1.61E-04	1.39E-03
AREG	2.38	1.64	83.76	5.60E-20	1.43E-17
GDF15	2.21	2.16	21.13	4.28E-06	6.59E-05
KCNQ3	2.20	-1.53	11.41	7.30E-04	4.85E-03
OLR1	2.18	2.29	27.37	1.68E-07	4.03E-06
CNIH3	2.18	-1.92	8.41	3.74E-03	1.75E-02
F10	2.17	1.91	29.63	5.23E-08	1.43E-06
PER2	2.05	5.90	109.36	1.35E-25	6.88E-23
FPR2	2.05	1.05	23.57	1.20E-06	2.20E-05
CXCR1	2.03	0.92	19.13	1.22E-05	1.62E-04
PTHLH	1.99	2.00	66.21	4.05E-16	5.79E-14
MYO1A	1.98	1.66	43.41	4.44E-11	2.51E-09
NAT8	1.97	2.51	107.79	2.99E-25	1.39E-22
NRG1	1.91	0.63	36.09	1.89E-09	7.59E-08
GPNMB	1.89	5.00	30.96	2.64E-08	7.77E-07
MMP12	1.88	2.00	28.95	7.41E-08	1.93E-06
FOSB	1.88	4.76	75.08	4.51E-18	8.62E-16
TFEC	1.85	0.04	14.63	1.31E-04	1.17E-03
KRT20	1.84	0.11	22.68	1.91E-06	3.27E-05
ORC1	1.83	-1.43	9.42	2.15E-03	1.12E-02
ATP12A	1.79	1.98	15.13	1.00E-04	9.39E-04
ATP6V0D2	1.77	3.77	25.23	5.09E-07	1.04E-05
TNFRSF9	1.77	-0.71	15.76	7.19E-05	7.17E-04
SH2D5	1.77	-1.10	11.72	6.17E-04	4.24E-03

GCNT4	1.76	-1.51	10.31	1.32E-03	7.72E-03
MARCO	1.75	2.61	20.27	6.73E-06	9.73E-05
ANKRD30B	1.74	-0.23	20.48	6.02E-06	8.85E-05
CHIA	1.72	5.38	13.46	2.44E-04	1.97E-03
KLK6	1.72	0.20	9.20	2.43E-03	1.23E-02
USH1G	1.71	1.10	38.48	5.52E-10	2.53E-08
RGS1	1.70	0.49	19.18	1.19E-05	1.58E-04
MMP8	1.69	-1.08	6.52	1.07E-02	4.02E-02
CIART	1.69	1.72	32.97	9.36E-09	3.14E-07
HIF3A	1.67	2.02	32.31	1.31E-08	4.26E-07
CXCL9	1.65	0.12	10.81	1.01E-03	6.21E-03
DNAJA1	1.65	7.64	230.56	4.50E-52	1.38E-48
FOS	1.65	6.82	114.92	8.19E-27	4.81E-24
BNC1	1.64	1.33	48.63	3.09E-12	2.19E-10
TSC22D3	1.64	6.20	139.73	3.05E-32	2.59E-29
HSPA8	1.62	10.77	133.35	7.57E-31	5.51E-28
CYBB	1.61	6.21	52.45	4.41E-13	3.71E-11
CLEC6A	1.60	3.93	26.93	2.11E-07	4.90E-06
PDCD1	1.59	-0.19	13.76	2.08E-04	1.73E-03
SUCNR1	1.57	-0.75	9.26	2.34E-03	1.20E-02
CSF3	1.57	0.35	15.73	7.29E-05	7.25E-04
RUFY4	1.57	0.35	12.50	4.06E-04	3.01E-03
F7	1.56	2.40	15.58	7.91E-05	7.74E-04
MNDA	1.56	0.56	19.00	1.30E-05	1.72E-04
HSPH1	1.55	7.69	168.94	1.26E-38	2.14E-35
MYO3B	1.55	-0.96	7.45	6.35E-03	2.65E-02
NLRC4	1.55	-0.47	15.43	8.57E-05	8.27E-04
LARS2	1.52	11.49	31.70	1.80E-08	5.59E-07
SPP1	1.52	4.33	37.00	1.18E-09	5.02E-08
POU3F1	1.51	-1.49	6.45	1.11E-02	4.13E-02
NEFH	1.51	-0.63	7.90	4.95E-03	2.19E-02
FPR1	1.51	0.62	6.79	9.14E-03	3.53E-02
CPVL	1.50	1.12	25.21	5.14E-07	1.05E-05
LILRA5	1.49	2.31	34.38	4.53E-09	1.66E-07
GPR171	1.48	-0.45	13.38	2.55E-04	2.04E-03
FKBP5	1.48	4.56	150.76	1.18E-34	1.39E-31
NR4A3	1.47	0.04	16.97	3.80E-05	4.21E-04
HVCN1	1.45	3.81	21.09	4.38E-06	6.72E-05
BCL3	1.44	5.62	137.02	1.19E-31	9.59E-29
LILRA6	1.43	0.89	12.56	3.93E-04	2.93E-03
PLEK	1.43	5.07	27.66	1.45E-07	3.52E-06
DPPA3	1.42	-1.43	6.38	1.16E-02	4.26E-02
ALDH1A3	1.42	2.61	39.76	2.87E-10	1.39E-08

CDR2	1.42	3.38	71.35	2.99E-17	5.08E-15
SOCS3	1.41	5.87	40.27	2.21E-10	1.09E-08
TNFRSF12A	1.41	3.39	51.81	6.13E-13	4.95E-11
TREML4	1.41	1.59	15.03	1.06E-04	9.83E-04
GPR18	1.41	-1.44	6.36	1.16E-02	4.28E-02
CTGF	1.40	5.44	57.22	3.90E-14	4.00E-12
CHORDC1	1.40	5.26	153.62	2.81E-35	3.90E-32
CSF2RB	1.40	3.64	34.12	5.18E-09	1.86E-07
CLEC4D	1.40	2.49	25.98	3.46E-07	7.49E-06
ANGPTL7	1.39	-0.66	9.99	1.58E-03	8.86E-03
CD2	1.38	0.80	16.69	4.41E-05	4.76E-04
CCL4	1.38	0.93	11.49	7.00E-04	4.70E-03
DNAJB1	1.38	7.42	177.04	2.15E-40	4.68E-37
DHRS9	1.37	7.11	56.13	6.78E-14	6.64E-12
TNIP3	1.35	1.71	20.55	5.81E-06	8.61E-05
CD22	1.34	1.93	14.56	1.36E-04	1.21E-03
CCL18	1.34	2.65	14.65	1.29E-04	1.16E-03
MUC13	1.32	4.83	50.67	1.09E-12	8.49E-11
NRP2	1.32	3.51	30.06	4.18E-08	1.17E-06
LANCL3	1.31	0.11	10.30	1.33E-03	7.77E-03
RNASE3	1.30	1.76	12.39	4.31E-04	3.15E-03
CXCL2	1.29	2.42	29.25	6.36E-08	1.69E-06
GZMA	1.29	1.06	24.70	6.71E-07	1.32E-05
ITGB2	1.29	5.53	18.10	2.10E-05	2.57E-04
KRT16	1.28	4.32	9.60	1.95E-03	1.04E-02
ANXA10	1.28	0.34	10.70	1.07E-03	6.54E-03
AHSA2	1.27	4.01	85.51	2.30E-20	6.06E-18
ATF3	1.27	4.02	38.39	5.79E-10	2.62E-08
TLR7	1.27	1.59	14.28	1.57E-04	1.36E-03
WEE1	1.27	4.07	60.28	8.23E-15	9.46E-13
RHBDL1	1.27	-1.31	6.38	1.15E-02	4.25E-02
NRXN3	1.27	-0.05	6.99	8.22E-03	3.25E-02
COL11A2	1.26	0.03	13.29	2.67E-04	2.12E-03
LAMA1	1.26	-0.91	7.83	5.14E-03	2.25E-02
LILRA2	1.25	1.84	19.71	9.01E-06	1.26E-04
KRT6A	1.24	7.54	23.33	1.36E-06	2.45E-05
KYNU	1.24	-0.17	10.32	1.32E-03	7.71E-03
ICOS	1.24	-0.55	9.22	2.40E-03	1.22E-02
PTGS2	1.23	3.78	46.08	1.14E-11	7.16E-10
PCDH19	1.22	1.22	30.09	4.12E-08	1.16E-06
HS3ST1	1.22	4.43	107.37	3.70E-25	1.66E-22
CD84	1.21	2.99	19.20	1.18E-05	1.57E-04
HSPA1L	1.20	-0.28	7.89	4.96E-03	2.19E-02

GPR141	1.20	0.06	9.27	2.32E-03	1.20E-02
SYK	1.20	3.86	30.33	3.64E-08	1.04E-06
SLC5A3	1.19	5.37	106.70	5.19E-25	2.20E-22
TNFRSF10D	1.18	2.49	48.71	2.97E-12	2.11E-10
MYC	1.18	4.07	106.92	4.63E-25	2.02E-22
CDC6	1.18	0.33	16.22	5.63E-05	5.84E-04
AIPL1	1.16	-0.96	8.13	4.36E-03	1.98E-02
CCNE2	1.15	0.05	12.13	4.95E-04	3.53E-03
LPL	1.15	5.81	14.57	1.35E-04	1.20E-03
PER1	1.15	5.53	52.08	5.32E-13	4.39E-11
TNNI3	1.14	-0.14	8.08	4.48E-03	2.02E-02
CD207	1.14	0.67	9.91	1.65E-03	9.16E-03
ATP8B4	1.14	-0.10	6.83	8.97E-03	3.48E-02
ZBTB16	1.14	2.74	26.42	2.74E-07	6.14E-06
ERICH5	1.12	3.35	34.90	3.47E-09	1.32E-07
LILRB2	1.12	1.72	15.22	9.55E-05	9.02E-04
CD68	1.11	5.31	21.76	3.09E-06	5.00E-05
ASB14	1.11	0.25	8.82	2.99E-03	1.46E-02
ORM2	1.10	2.44	21.68	3.23E-06	5.18E-05
DSG3	1.10	4.93	37.48	9.24E-10	4.05E-08
DOCK10	1.10	2.24	18.29	1.90E-05	2.36E-04
GPR155	1.10	7.89	33.13	8.64E-09	2.93E-07
B4GALT5	1.09	5.80	51.47	7.29E-13	5.80E-11
CXCL1	1.09	0.48	13.52	2.36E-04	1.92E-03
IGSF6	1.09	1.11	6.93	8.45E-03	3.32E-02
GNGT2	1.08	1.75	12.76	3.55E-04	2.68E-03
TRIM65	1.07	2.73	31.73	1.77E-08	5.52E-07
PBLD	1.07	-0.02	12.10	5.05E-04	3.57E-03
TSPAN4	1.07	3.84	68.08	1.57E-16	2.33E-14
MAB21L3	1.07	2.90	17.06	3.63E-05	4.06E-04
MCMD2C	1.06	0.32	10.53	1.17E-03	7.01E-03
CCDC88A	1.06	2.91	16.48	4.93E-05	5.21E-04
FCGR3A	1.06	1.31	7.19	7.35E-03	2.98E-02
TAS2R4	1.06	-0.19	10.30	1.33E-03	7.77E-03
MS4A6E	1.06	1.73	13.11	2.94E-04	2.29E-03
KRT6C	1.05	5.90	12.39	4.32E-04	3.16E-03
GCSAM	1.05	-0.68	6.33	1.19E-02	4.35E-02
P2RY10	1.05	-0.20	10.86	9.84E-04	6.10E-03
KRT14	1.05	6.05	22.87	1.74E-06	3.01E-05
BANP	1.04	3.67	57.83	2.85E-14	3.03E-12
PHLDA1	1.03	4.96	39.55	3.19E-10	1.53E-08
PLAUR	1.03	4.74	50.98	9.35E-13	7.33E-11
CD80	1.03	0.22	9.51	2.04E-03	1.08E-02

PLD5	1.03	0.39	11.83	5.84E-04	4.03E-03
HIVEP2	1.03	5.08	77.46	1.35E-18	2.79E-16
S100A9	1.02	4.82	50.03	1.51E-12	1.14E-10
CACYBP	1.02	5.49	111.53	4.53E-26	2.47E-23
SLC11A1	1.02	1.91	14.85	1.16E-04	1.07E-03
DUSP6	1.02	6.39	67.31	2.32E-16	3.41E-14
HSP90AA1	1.01	9.67	79.52	4.77E-19	1.04E-16
CTSK	1.01	5.68	36.94	1.22E-09	5.15E-08
KIRREL3	1.01	0.24	9.16	2.48E-03	1.26E-02
ARG1	1.01	7.31	29.02	7.15E-08	1.88E-06
TFRC	1.01	6.18	101.19	8.34E-24	3.04E-21
ZC3H12D	1.00	1.71	16.74	4.29E-05	4.66E-04
CD244	1.00	2.99	34.81	3.63E-09	1.37E-07
TRA2A	1.00	5.61	84.07	4.77E-20	1.23E-17
UCP3	1.00	0.19	8.28	4.01E-03	1.85E-02
ICAM1	0.99	6.12	88.94	4.07E-21	1.20E-18
AHNAK	0.99	8.90	71.67	2.55E-17	4.37E-15
CREBBP	0.99	4.99	38.57	5.28E-10	2.44E-08
PDK4	0.99	3.96	37.99	7.10E-10	3.16E-08
MCEMP1	0.98	1.29	7.66	5.65E-03	2.43E-02
BDNF	0.98	-0.24	7.12	7.63E-03	3.07E-02
HPX	0.98	-0.59	6.03	1.40E-02	4.96E-02
IGFBP3	0.98	6.55	80.22	3.35E-19	7.76E-17
CLEC7A	0.98	4.10	11.65	6.43E-04	4.38E-03
CCND2	0.97	7.18	53.31	2.85E-13	2.52E-11
BAZ1A	0.97	4.83	109.43	1.31E-25	6.88E-23
MSR1	0.97	0.80	8.08	4.46E-03	2.01E-02
CYR61	0.96	2.90	20.44	6.15E-06	9.00E-05
COQ10B	0.96	5.58	83.25	7.21E-20	1.78E-17
VSIG1	0.96	0.61	9.23	2.38E-03	1.22E-02
PRRG4	0.96	2.86	24.04	9.46E-07	1.78E-05
SREK1	0.96	4.08	36.32	1.68E-09	6.86E-08
RSRP1	0.96	6.04	33.84	5.98E-09	2.12E-07
HAS3	0.95	4.89	42.85	5.90E-11	3.24E-09
CD53	0.95	3.80	20.89	4.86E-06	7.37E-05
BCAR3	0.95	3.52	51.99	5.57E-13	4.55E-11
SLA	0.94	2.98	21.87	2.91E-06	4.74E-05
MYO1G	0.94	1.55	11.38	7.43E-04	4.92E-03
ALPK1	0.94	2.79	25.87	3.65E-07	7.85E-06
LIPA	0.94	5.87	13.45	2.45E-04	1.98E-03
UPRT	0.94	0.82	9.92	1.63E-03	9.11E-03
SERPINH1	0.94	6.14	69.81	6.54E-17	1.06E-14
REP15	0.94	-0.21	7.35	6.70E-03	2.77E-02

DUSP1	0.94	6.71	34.93	3.42E-09	1.31E-07
ATP2B2	0.93	1.50	10.27	1.35E-03	7.85E-03
PLCB2	0.93	2.62	25.28	4.97E-07	1.02E-05
ELK4	0.93	3.00	25.17	5.24E-07	1.07E-05
P4HA1	0.93	5.12	72.73	1.49E-17	2.65E-15
CLCA1	0.92	0.82	8.68	3.21E-03	1.55E-02
TLR8	0.92	1.25	6.11	1.34E-02	4.79E-02
SYT10	0.92	0.61	9.12	2.52E-03	1.28E-02
PTPRC	0.91	3.91	15.24	9.46E-05	8.95E-04
SYT16	0.91	0.26	6.12	1.33E-02	4.77E-02
PDP1	0.91	5.13	59.24	1.40E-14	1.54E-12
NOD2	0.91	2.18	22.88	1.73E-06	2.99E-05
EDN1	0.91	1.51	18.56	1.65E-05	2.09E-04
SRGN	0.90	3.96	31.27	2.25E-08	6.77E-07
BDP1	0.90	4.29	29.82	4.74E-08	1.31E-06
LCP2	0.90	1.99	17.04	3.66E-05	4.10E-04
GADD45G	0.90	2.99	12.74	3.57E-04	2.70E-03
REST	0.89	3.56	27.27	1.77E-07	4.22E-06
PRPF38B	0.89	4.81	45.66	1.41E-11	8.66E-10
PPRC1	0.89	4.47	68.63	1.19E-16	1.83E-14
SIGLEC1	0.89	2.53	6.38	1.16E-02	4.26E-02
MYO5A	0.88	3.72	28.14	1.13E-07	2.81E-06
NAA16	0.88	2.07	19.98	7.81E-06	1.11E-04
CLCA2	0.88	1.90	13.77	2.06E-04	1.72E-03
TRIM10	0.88	0.54	7.79	5.26E-03	2.29E-02
FST	0.88	0.57	10.93	9.45E-04	5.91E-03
KCNJ2	0.88	4.36	33.78	6.18E-09	2.18E-07
KIF17	0.88	0.99	10.89	9.69E-04	6.03E-03
KMT2D	0.87	5.81	32.20	1.39E-08	4.47E-07
TOP1	0.87	6.20	89.75	2.70E-21	8.09E-19
BAG3	0.87	6.34	92.68	6.14E-22	1.96E-19
SPDL1	0.87	0.35	7.34	6.74E-03	2.78E-02
STIP1	0.87	7.27	79.23	5.52E-19	1.17E-16
PIK3R5	0.87	4.07	18.80	1.45E-05	1.88E-04
CCAR1	0.87	4.86	55.72	8.35E-14	8.02E-12
TCF24	0.87	3.48	26.23	3.03E-07	6.67E-06
TMPRSS11E	0.87	1.75	14.56	1.35E-04	1.21E-03
ADRB2	0.87	4.79	74.46	6.18E-18	1.14E-15
FLRT2	0.86	2.47	26.32	2.90E-07	6.40E-06
ZC3H12A	0.86	5.01	52.21	4.99E-13	4.17E-11
CSF2RA	0.86	3.39	14.40	1.48E-04	1.30E-03
HSPA2	0.85	6.90	51.44	7.39E-13	5.85E-11
FOXP3	0.85	2.33	14.11	1.72E-04	1.47E-03

NCF4	0.85	2.10	12.81	3.45E-04	2.63E-03
FGR	0.85	2.75	7.35	6.71E-03	2.77E-02
GAN	0.85	1.11	14.98	1.09E-04	1.00E-03
ALAS1	0.85	9.68	50.14	1.43E-12	1.09E-10
PNN	0.85	4.24	40.61	1.86E-10	9.27E-09
ATP7B	0.85	5.90	46.08	1.14E-11	7.16E-10
OVOL3	0.85	0.83	10.16	1.44E-03	8.24E-03
CDKL5	0.85	2.25	13.21	2.79E-04	2.20E-03
RASD1	0.85	1.59	10.49	1.20E-03	7.15E-03
ITGA4	0.85	1.89	12.34	4.42E-04	3.22E-03
CD177	0.84	8.95	20.42	6.21E-06	9.08E-05
HPGDS	0.84	3.02	24.34	8.08E-07	1.55E-05
NFATC2	0.84	3.35	22.95	1.66E-06	2.90E-05
CHML	0.84	3.57	25.92	3.56E-07	7.68E-06
KLF10	0.84	5.84	59.68	1.12E-14	1.25E-12
TMEM2	0.84	4.90	69.50	7.64E-17	1.23E-14
ZEB2	0.83	2.54	12.20	4.79E-04	3.43E-03
GNAT3	0.83	3.96	27.34	1.71E-07	4.09E-06
CD300LF	0.83	1.46	11.45	7.15E-04	4.77E-03
TRPM2	0.82	2.39	16.25	5.56E-05	5.78E-04
1-Mar	0.82	1.21	7.66	5.63E-03	2.42E-02
EMP1	0.82	9.27	19.36	1.08E-05	1.46E-04
NKTR	0.82	4.86	29.80	4.80E-08	1.32E-06
LHFPL2	0.82	3.06	13.16	2.86E-04	2.23E-03
HLA-C	0.82	3.81	38.98	4.28E-10	2.01E-08
USP42	0.81	3.48	26.35	2.85E-07	6.33E-06
KRT17	0.81	6.41	15.18	9.75E-05	9.19E-04
TIMP3	0.81	7.94	35.09	3.16E-09	1.21E-07
SBNO2	0.81	5.90	87.81	7.20E-21	2.00E-18
DUOX2	0.81	3.00	16.91	3.91E-05	4.31E-04
CRY1	0.81	4.58	69.26	8.63E-17	1.37E-14
IKZF4	0.81	0.65	6.80	9.14E-03	3.53E-02
RBM26	0.81	4.10	40.91	1.60E-10	8.07E-09
LRP8	0.80	0.98	8.68	3.22E-03	1.55E-02
ZFH3	0.80	3.99	16.64	4.51E-05	4.85E-04
PIGA	0.80	4.18	31.84	1.68E-08	5.27E-07
LILRA1	0.80	0.75	6.95	8.40E-03	3.30E-02
EGR1	0.80	4.83	25.42	4.61E-07	9.55E-06
PARM1	0.80	5.31	41.57	1.14E-10	5.87E-09
FFAR4	0.80	5.82	63.98	1.26E-15	1.69E-13
11-Sep	0.80	5.15	55.10	1.15E-13	1.08E-11
THEMIS2	0.80	1.62	10.26	1.36E-03	7.88E-03
MAT2A	0.79	7.18	60.72	6.57E-15	7.91E-13

KIAA0907	0.79	4.87	48.46	3.38E-12	2.34E-10
LCOR	0.79	2.23	13.94	1.89E-04	1.59E-03
HBEGF	0.79	4.45	20.80	5.09E-06	7.68E-05
APBB1IP	0.79	2.43	11.78	6.00E-04	4.14E-03
SLFN12	0.79	4.06	17.62	2.70E-05	3.19E-04
ANKRD12	0.79	3.63	21.47	3.59E-06	5.64E-05
RAB32	0.79	4.25	48.71	2.97E-12	2.11E-10
GLUL	0.78	9.35	48.58	3.16E-12	2.23E-10
SLC7A2	0.78	4.17	27.06	1.97E-07	4.62E-06
C3orf52	0.78	0.76	8.01	4.66E-03	2.08E-02
ZC3H8	0.78	2.13	14.63	1.31E-04	1.17E-03
VPREB3	0.78	6.43	63.87	1.33E-15	1.77E-13
SUSD1	0.78	0.76	7.28	6.98E-03	2.86E-02
LUC7L	0.77	4.96	37.34	9.94E-10	4.30E-08
FAM46A	0.77	5.11	60.34	7.98E-15	9.31E-13
CEP170	0.77	3.24	27.69	1.42E-07	3.46E-06
GK	0.77	5.41	64.24	1.10E-15	1.49E-13
TTLL3	0.77	2.78	12.28	4.59E-04	3.32E-03
SLX4	0.76	2.82	17.81	2.44E-05	2.92E-04
PGLYRP4	0.76	2.91	15.21	9.62E-05	9.08E-04
PHLDB2	0.76	3.01	17.01	3.71E-05	4.14E-04
CCRL2	0.76	3.70	30.44	3.44E-08	9.86E-07
FUT4	0.75	2.44	17.39	3.04E-05	3.51E-04
ITGAX	0.75	4.66	10.24	1.38E-03	7.96E-03
SERPINB2	0.75	5.30	28.75	8.24E-08	2.12E-06
F2RL1	0.75	3.94	39.10	4.03E-10	1.90E-08
PCDH7	0.75	3.16	19.37	1.08E-05	1.46E-04
SSH1	0.75	3.08	16.85	4.05E-05	4.43E-04
MCC	0.75	4.10	25.57	4.27E-07	8.95E-06
ARHGAP30	0.75	2.54	11.29	7.80E-04	5.11E-03
FRMD4A	0.75	3.54	21.55	3.45E-06	5.48E-05
SAMSN1	0.74	0.77	7.61	5.81E-03	2.48E-02
EPHA2	0.74	6.76	55.74	8.27E-14	8.00E-12
POTEB2	0.74	1.76	9.90	1.65E-03	9.17E-03
BCLAF1	0.74	5.82	38.26	6.18E-10	2.79E-08
HSPA5	0.74	9.27	41.35	1.27E-10	6.55E-09
SERPINA3	0.74	1.78	7.35	6.70E-03	2.77E-02
TRIP11	0.74	4.52	30.22	3.86E-08	1.10E-06
SLC26A2	0.74	5.87	43.97	3.34E-11	1.94E-09
FZD5	0.74	3.77	31.80	1.71E-08	5.34E-07
TIA1	0.74	3.15	22.95	1.66E-06	2.90E-05
LONRF3	0.74	2.17	17.04	3.66E-05	4.10E-04
TRIM15	0.74	3.01	24.10	9.15E-07	1.73E-05

NCF1	0.73	3.32	14.78	1.21E-04	1.10E-03
MPHOSPH10	0.73	3.61	41.31	1.30E-10	6.65E-09
TPPP	0.73	4.63	21.67	3.23E-06	5.18E-05
RYS2	0.73	1.81	8.61	3.34E-03	1.60E-02
ADAMTSL4	0.73	5.44	53.78	2.24E-13	2.00E-11
SPEN	0.73	5.44	24.04	9.42E-07	1.77E-05
SLC7A11	0.73	4.32	22.94	1.67E-06	2.90E-05
PLET1	0.73	9.62	36.26	1.73E-09	7.00E-08
JDP2	0.73	5.23	60.29	8.17E-15	9.46E-13
S100A8	0.73	2.73	10.86	9.81E-04	6.09E-03
DCTD	0.73	0.96	9.51	2.04E-03	1.08E-02
FNIP2	0.73	3.94	27.24	1.80E-07	4.29E-06
CTSS	0.73	6.35	14.65	1.29E-04	1.16E-03
ARID4B	0.72	4.55	38.30	6.07E-10	2.75E-08
CCDC173	0.72	3.15	23.47	1.27E-06	2.30E-05
ZFP1	0.72	2.77	21.75	3.10E-06	5.02E-05
ZBED6	0.72	3.49	11.00	9.11E-04	5.75E-03
MAP1B	0.72	6.52	23.28	1.40E-06	2.51E-05
CCKBR	0.72	2.06	9.66	1.89E-03	1.02E-02
DTHD1	0.72	2.32	14.02	1.81E-04	1.54E-03
CD3E	0.72	0.48	7.12	7.63E-03	3.07E-02
BAIAP2L1	0.72	7.90	40.47	2.00E-10	9.90E-09
FAM199X	0.72	3.06	17.14	3.47E-05	3.91E-04
LAPTM5	0.72	5.97	11.71	6.22E-04	4.27E-03
PFKFB3	0.71	3.20	21.63	3.31E-06	5.29E-05
HIVEP3	0.71	3.10	14.97	1.09E-04	1.01E-03
AHCTF1	0.71	5.32	52.02	5.50E-13	4.52E-11
ATP10B	0.71	5.66	59.43	1.27E-14	1.40E-12
LRP4	0.71	5.21	46.54	8.96E-12	5.78E-10
DUSP7	0.71	4.51	33.41	7.46E-09	2.57E-07
TET2	0.71	3.76	19.48	1.02E-05	1.39E-04
PHF20L1	0.71	4.90	29.33	6.11E-08	1.64E-06
CCDC117	0.71	5.19	43.03	5.40E-11	3.00E-09
NFE2L2	0.71	8.27	59.05	1.54E-14	1.68E-12
C1orf116	0.71	6.46	63.50	1.60E-15	2.05E-13
SLC15A3	0.71	2.62	8.44	3.67E-03	1.73E-02
PXDC1	0.71	1.76	9.91	1.65E-03	9.16E-03
ZFP57	0.71	1.71	10.21	1.40E-03	8.05E-03
JADE3	0.71	2.30	16.07	6.09E-05	6.26E-04
SRSF10	0.70	6.65	44.79	2.19E-11	1.30E-09
HIPK2	0.70	2.61	15.28	9.29E-05	8.83E-04
FAM107A	0.70	3.59	23.18	1.48E-06	2.63E-05
SPI1	0.70	2.98	11.45	7.16E-04	4.78E-03

KLHL6	0.70	0.74	6.03	1.40E-02	4.97E-02
TUBB6	0.70	3.61	25.25	5.03E-07	1.03E-05
SLC39A2	0.70	1.88	9.20	2.42E-03	1.23E-02
RORC	0.70	4.16	34.62	4.01E-09	1.49E-07
FSCN1	0.70	2.45	13.23	2.76E-04	2.18E-03
ZNF202	0.69	1.04	8.32	3.93E-03	1.82E-02
DST	0.69	6.17	36.31	1.68E-09	6.86E-08
PTPN12	0.69	4.55	47.06	6.88E-12	4.50E-10
RBM15	0.69	2.96	20.33	6.52E-06	9.46E-05
DOCK2	0.69	2.89	11.23	8.05E-04	5.25E-03
MCTP1	0.69	1.10	8.17	4.25E-03	1.94E-02
ANKK1	0.69	2.87	18.90	1.38E-05	1.80E-04
MDN1	0.69	3.14	15.51	8.22E-05	7.99E-04
NGF	0.69	0.78	6.44	1.12E-02	4.14E-02
HSPA4L	0.69	6.91	55.84	7.85E-14	7.64E-12
SLTM	0.69	4.78	60.76	6.46E-15	7.84E-13
TIPARP	0.69	5.06	48.49	3.32E-12	2.32E-10
DSCAML1	0.69	2.68	16.97	3.80E-05	4.21E-04
NUDT17	0.69	2.04	11.23	8.05E-04	5.25E-03
STYK1	0.68	2.55	20.66	5.50E-06	8.22E-05
IGSF3	0.68	3.36	26.19	3.10E-07	6.80E-06
CDHR1	0.68	5.71	17.70	2.58E-05	3.07E-04
AVIL	0.68	3.57	19.36	1.08E-05	1.46E-04
RAPGEF2	0.68	4.20	31.41	2.09E-08	6.36E-07
LONRF1	0.68	4.41	35.72	2.27E-09	8.98E-08
FIGF	0.68	2.06	9.96	1.60E-03	8.95E-03
KIAA0895L	0.68	1.74	8.53	3.49E-03	1.66E-02
PLEC	0.67	8.22	27.75	1.38E-07	3.37E-06
DUSP4	0.67	4.24	41.83	9.95E-11	5.19E-09
ABCG1	0.67	5.51	21.95	2.79E-06	4.58E-05
MUC4	0.67	8.30	32.89	9.77E-09	3.26E-07
TLR2	0.67	4.48	16.07	6.10E-05	6.27E-04
HLF	0.67	4.51	21.45	3.63E-06	5.68E-05
BOD1L1	0.67	4.31	19.74	8.89E-06	1.24E-04
BMX	0.67	5.33	43.17	5.03E-11	2.81E-09
HERPUD1	0.67	8.22	46.52	9.05E-12	5.81E-10
ACIN1	0.67	6.00	39.67	3.01E-10	1.45E-08
SNRNP48	0.67	2.42	13.42	2.49E-04	2.01E-03
PRR15L	0.67	7.04	60.07	9.17E-15	1.04E-12
PPIG	0.67	4.63	32.35	1.29E-08	4.20E-07
CCNT1	0.66	3.18	16.41	5.10E-05	5.37E-04
NRCAM	0.66	1.66	11.08	8.73E-04	5.59E-03
KIAA1551	0.66	5.04	34.07	5.30E-09	1.90E-07

XPNPEP3	0.66	3.15	15.48	8.34E-05	8.09E-04
MNS1	0.66	6.12	54.34	1.68E-13	1.52E-11
PER3	0.66	4.98	18.45	1.74E-05	2.19E-04
FAM179B	0.66	6.16	40.24	2.25E-10	1.11E-08
TAF4B	0.66	3.25	18.06	2.14E-05	2.61E-04
TGFB1	0.66	3.88	12.70	3.65E-04	2.74E-03
MID2	0.66	3.70	18.70	1.53E-05	1.96E-04
HSPD1	0.66	6.90	54.61	1.47E-13	1.34E-11
SH3RF1	0.66	4.93	35.19	2.99E-09	1.15E-07
ST13	0.66	6.42	52.89	3.52E-13	2.99E-11
ARID5A	0.66	3.14	11.97	5.41E-04	3.78E-03
MPP2	0.66	3.96	18.34	1.85E-05	2.31E-04
LRRC8C	0.66	1.60	7.95	4.80E-03	2.13E-02
UBXN2B	0.66	3.58	24.80	6.37E-07	1.27E-05
CERS6	0.66	4.07	15.64	7.66E-05	7.55E-04
SMEK1	0.66	5.39	46.41	9.57E-12	6.12E-10
DUOXA2	0.66	2.99	9.91	1.64E-03	9.14E-03
LUC7L3	0.65	4.17	25.38	4.72E-07	9.74E-06
CWH43	0.65	4.47	19.94	7.98E-06	1.13E-04
OSMR	0.65	4.61	31.45	2.05E-08	6.26E-07
CCRN4L	0.65	4.22	29.35	6.05E-08	1.63E-06
FCGR2B	0.65	2.52	9.80	1.75E-03	9.57E-03
KANSL1L	0.65	3.52	16.60	4.61E-05	4.92E-04
ARGLU1	0.65	4.47	32.98	9.32E-09	3.14E-07
TBC1D2	0.65	4.34	31.41	2.09E-08	6.36E-07
FAM217B	0.65	1.66	8.61	3.34E-03	1.60E-02
KIF23	0.65	2.38	11.88	5.69E-04	3.95E-03
ESF1	0.65	3.18	15.29	9.20E-05	8.76E-04
EFNB2	0.65	4.23	36.93	1.23E-09	5.18E-08
YLPM1	0.65	5.02	27.91	1.27E-07	3.14E-06
ANXA1	0.65	10.47	29.92	4.49E-08	1.26E-06
CDK12	0.65	4.86	27.24	1.80E-07	4.29E-06
KBTBD8	0.64	1.89	8.30	3.96E-03	1.83E-02
HMG5	0.64	4.14	24.28	8.35E-07	1.59E-05
ZNF326	0.64	3.31	16.40	5.12E-05	5.39E-04
NANOS1	0.64	1.82	9.76	1.79E-03	9.75E-03
PRRC2C	0.63	6.09	14.21	1.63E-04	1.40E-03
OSBPL8	0.63	4.35	22.97	1.64E-06	2.88E-05
HK2	0.63	4.56	35.37	2.72E-09	1.05E-07
TRIB1	0.63	5.29	29.39	5.91E-08	1.60E-06
INTS8	0.63	4.73	39.41	3.43E-10	1.63E-08
SFPQ	0.63	6.68	54.36	1.67E-13	1.52E-11
RAPH1	0.63	4.42	29.02	7.17E-08	1.88E-06

PTK2B	0.63	4.00	17.54	2.82E-05	3.30E-04
MOB3C	0.63	2.99	16.03	6.24E-05	6.39E-04
GNL3	0.63	3.55	25.58	4.24E-07	8.95E-06
AGO2	0.62	4.78	25.54	4.34E-07	9.07E-06
DMXL2	0.62	3.52	12.10	5.04E-04	3.57E-03
HTR1B	0.62	2.55	12.71	3.64E-04	2.74E-03
CSPP1	0.62	5.02	23.07	1.57E-06	2.76E-05
EFCAB5	0.62	2.23	10.46	1.22E-03	7.24E-03
MCL1	0.62	7.66	49.14	2.38E-12	1.73E-10
VNN3	0.62	2.79	10.81	1.01E-03	6.23E-03
SOWAHC	0.62	4.79	34.49	4.29E-09	1.58E-07
SLC16A1	0.62	3.19	12.96	3.19E-04	2.45E-03
CPSF6	0.62	5.27	34.87	3.53E-09	1.34E-07
FILIP1L	0.62	3.09	15.41	8.65E-05	8.32E-04
CDK6	0.62	2.56	11.41	7.30E-04	4.85E-03
PARP3	0.61	3.60	18.64	1.57E-05	2.01E-04
LMNA	0.61	7.46	29.76	4.89E-08	1.34E-06
NOP56	0.61	4.56	32.01	1.53E-08	4.86E-07
DNTTIP2	0.61	4.83	47.59	5.26E-12	3.52E-10
IL7R	0.61	1.61	7.69	5.56E-03	2.40E-02
IFFO2	0.61	6.21	48.81	2.82E-12	2.02E-10
KMT2A	0.61	5.16	13.90	1.92E-04	1.62E-03
ALMS1	0.61	3.92	23.81	1.07E-06	1.97E-05
ABHD2	0.61	5.91	32.73	1.06E-08	3.51E-07
FMR1	0.61	4.55	24.09	9.21E-07	1.74E-05
SYTL5	0.61	1.96	8.54	3.47E-03	1.66E-02
NRROS	0.61	2.04	6.41	1.13E-02	4.19E-02
RBM25	0.61	5.15	28.91	7.59E-08	1.98E-06
HCK	0.61	3.23	13.20	2.79E-04	2.20E-03
CHD1	0.60	4.95	30.98	2.61E-08	7.73E-07
CLCN5	0.60	2.41	9.67	1.87E-03	1.01E-02
HOMER1	0.60	2.90	19.33	1.10E-05	1.48E-04
NR1D2	0.60	6.67	36.05	1.92E-09	7.69E-08
MAFF	0.60	5.42	43.29	4.72E-11	2.65E-09
TEX9	0.60	2.59	12.58	3.90E-04	2.91E-03
HLA-B	0.60	5.36	32.63	1.12E-08	3.69E-07
LYSMD3	0.60	3.86	22.47	2.14E-06	3.61E-05
ZFR	0.60	6.09	37.47	9.28E-10	4.05E-08
ATXN2	0.60	5.35	26.02	3.38E-07	7.34E-06
FAM178A	0.60	4.15	19.83	8.46E-06	1.19E-04
TRA2B	0.60	6.18	33.27	8.00E-09	2.74E-07
ELF3	0.60	8.85	38.05	6.89E-10	3.09E-08
PGAP1	0.60	2.65	13.21	2.78E-04	2.19E-03

SRRM2	0.60	7.60	17.49	2.88E-05	3.36E-04
LIN9	0.60	1.84	8.33	3.90E-03	1.81E-02
GNAZ	0.60	2.39	10.41	1.25E-03	7.41E-03
SULT1B1	0.60	6.00	40.22	2.27E-10	1.12E-08
FAM83B	0.59	2.93	13.75	2.09E-04	1.73E-03
BCORL1	0.59	3.49	18.07	2.13E-05	2.59E-04
REV1	0.59	3.18	17.57	2.77E-05	3.26E-04
NFKBIZ	0.59	6.35	29.21	6.49E-08	1.72E-06
YWHAG	0.59	6.61	46.82	7.79E-12	5.06E-10
PSIP1	0.59	5.00	29.79	4.81E-08	1.32E-06
C1orf52	0.59	2.63	13.63	2.23E-04	1.82E-03
FRAS1	0.59	1.85	6.81	9.07E-03	3.51E-02
APC	0.59	6.14	26.44	2.72E-07	6.10E-06
VAV1	0.59	2.82	12.96	3.18E-04	2.44E-03
CCDC88C	0.59	5.75	20.63	5.58E-06	8.34E-05
DNAJC21	0.59	4.34	31.51	1.98E-08	6.08E-07
ANKRD10	0.59	3.54	15.63	7.71E-05	7.58E-04
INO80D	0.59	4.90	22.03	2.69E-06	4.43E-05
CCDC68	0.59	2.20	10.08	1.50E-03	8.51E-03
CEP290	0.59	5.15	19.51	1.00E-05	1.38E-04
KLHL11	0.59	2.12	10.21	1.39E-03	8.04E-03
APOBR	0.59	4.10	25.49	4.44E-07	9.24E-06
AKAP2	0.59	5.64	36.99	1.19E-09	5.04E-08
MGAT4A	0.59	6.61	34.17	5.05E-09	1.82E-07
FHAD1	0.59	6.18	30.80	2.86E-08	8.34E-07
ERICH3	0.59	4.57	19.41	1.06E-05	1.44E-04
IL3RA	0.59	1.40	7.17	7.41E-03	3.00E-02
CNTRL	0.59	4.70	18.64	1.58E-05	2.02E-04
APOL3	0.59	4.19	14.66	1.28E-04	1.16E-03
SMPDL3B	0.58	2.98	10.12	1.46E-03	8.35E-03
PLA2G7	0.58	3.28	10.63	1.11E-03	6.73E-03
ST8SIA6	0.58	4.64	18.37	1.82E-05	2.28E-04
RIF1	0.58	4.94	25.57	4.27E-07	8.95E-06
CCNL1	0.58	4.17	15.31	9.13E-05	8.70E-04
JMJD6	0.58	3.53	20.88	4.90E-06	7.43E-05
RGS13	0.58	2.08	8.50	3.56E-03	1.69E-02
ATAD2	0.58	2.73	14.16	1.68E-04	1.43E-03
CHD7	0.58	4.01	24.51	7.38E-07	1.43E-05
IL1RN	0.58	5.35	14.17	1.67E-04	1.43E-03
FAM60A	0.58	5.94	36.35	1.65E-09	6.77E-08
NASP	0.58	3.86	23.93	9.99E-07	1.86E-05
HEATR1	0.58	4.15	24.00	9.65E-07	1.81E-05
LRRC58	0.58	5.97	26.94	2.10E-07	4.89E-06

CAMSAP1	0.58	4.62	33.81	6.07E-09	2.14E-07
IFI30	0.58	5.60	25.37	4.72E-07	9.74E-06
CCDC112	0.58	1.87	9.24	2.37E-03	1.22E-02
LRRC16A	0.58	4.24	18.35	1.84E-05	2.30E-04
PAPD7	0.58	4.64	34.67	3.90E-09	1.46E-07
SNRNP70	0.58	5.78	37.27	1.03E-09	4.44E-08
LNPEP	0.58	4.38	11.27	7.88E-04	5.16E-03
ARID4A	0.57	4.05	19.77	8.74E-06	1.23E-04
UPK3A	0.57	1.21	6.39	1.15E-02	4.23E-02
ZMAT1	0.57	1.84	6.47	1.10E-02	4.10E-02
DNAJB4	0.57	5.61	26.17	3.13E-07	6.87E-06
FCER1G	0.57	3.32	7.30	6.90E-03	2.84E-02
BMS1	0.57	4.49	27.49	1.58E-07	3.81E-06
FGD6	0.57	4.13	25.57	4.26E-07	8.95E-06
LRMP	0.57	3.96	22.71	1.89E-06	3.24E-05
TRIM16	0.57	5.00	42.50	7.07E-11	3.85E-09
FAM102B	0.57	4.06	24.64	6.91E-07	1.35E-05
QPCT	0.57	1.70	9.00	2.70E-03	1.35E-02
CLIC4	0.57	6.55	33.70	6.42E-09	2.25E-07
LMO7	0.57	8.00	38.62	5.16E-10	2.40E-08
EXOG	0.57	2.60	12.06	5.15E-04	3.63E-03
ZC3H12C	0.57	3.57	14.81	1.19E-04	1.08E-03
BPTF	0.57	5.58	20.02	7.68E-06	1.09E-04
SAFB	0.57	5.78	37.37	9.75E-10	4.23E-08
AP1S2	0.57	2.25	10.88	9.73E-04	6.05E-03
SPSB1	0.57	5.52	30.74	2.95E-08	8.55E-07
HIC2	0.57	2.01	8.96	2.77E-03	1.38E-02
MAL	0.57	8.24	16.66	4.47E-05	4.81E-04
ZFAT	0.57	2.17	11.17	8.30E-04	5.38E-03
NR4A2	0.57	2.73	12.11	5.01E-04	3.54E-03
GATAD2B	0.56	3.09	10.13	1.46E-03	8.33E-03
VPS13A	0.56	5.01	28.84	7.88E-08	2.04E-06
FYB	0.56	2.81	9.86	1.69E-03	9.32E-03
FIP1L1	0.56	5.45	35.52	2.52E-09	9.89E-08
UBA6	0.56	3.85	21.66	3.26E-06	5.22E-05
FAM167A	0.56	5.76	33.18	8.38E-09	2.85E-07
PHRF1	0.56	5.45	28.69	8.49E-08	2.18E-06
LURAP1L	0.56	4.45	20.20	6.98E-06	1.01E-04
USP31	0.56	3.90	20.44	6.14E-06	9.00E-05
ROCK1	0.56	6.09	24.96	5.86E-07	1.18E-05
DSP	0.56	8.69	31.29	2.23E-08	6.71E-07
P2RY1	0.56	3.56	16.30	5.41E-05	5.64E-04
ATRX	0.56	5.50	17.42	2.99E-05	3.47E-04

ARHGAP21	0.56	5.62	25.81	3.78E-07	8.09E-06
ZNF236	0.56	4.43	12.02	5.27E-04	3.70E-03
MMP23B	0.56	2.92	14.29	1.56E-04	1.36E-03
BAZ1B	0.55	5.93	28.86	7.77E-08	2.02E-06
F5	0.55	6.59	16.78	4.19E-05	4.55E-04
DYDC2	0.55	3.33	16.86	4.03E-05	4.41E-04
IL2RG	0.55	2.38	7.65	5.69E-03	2.44E-02
UTP14C	0.55	2.13	6.37	1.16E-02	4.27E-02
LMLN	0.55	3.40	12.26	4.64E-04	3.35E-03
TYROBP	0.55	4.23	8.18	4.24E-03	1.94E-02
MPEG1	0.55	6.60	9.43	2.14E-03	1.12E-02
RASSF4	0.55	4.04	9.26	2.35E-03	1.21E-02
CCDC37	0.55	5.46	33.52	7.04E-09	2.45E-07
ZSWIM6	0.55	4.60	18.70	1.53E-05	1.96E-04
TLE1	0.55	4.26	24.77	6.44E-07	1.28E-05
TMEM245	0.55	3.06	8.83	2.96E-03	1.46E-02
CCDC108	0.55	7.39	19.90	8.15E-06	1.15E-04
ZBTB11	0.55	3.97	17.43	2.99E-05	3.46E-04
REL	0.55	2.38	7.82	5.16E-03	2.25E-02
ELF4	0.55	2.60	7.64	5.71E-03	2.45E-02
C8orf4	0.55	3.57	19.12	1.23E-05	1.63E-04
INPP5D	0.54	3.24	9.73	1.81E-03	9.84E-03
SPRED1	0.54	5.48	34.88	3.50E-09	1.33E-07
DENND5B	0.54	3.44	15.55	8.04E-05	7.86E-04
FXYS5	0.54	4.08	10.04	1.53E-03	8.66E-03
HEHZ	0.54	3.77	13.13	2.91E-04	2.27E-03
PROCR	0.54	3.03	10.38	1.28E-03	7.51E-03
RC3H2	0.54	4.87	21.69	3.20E-06	5.15E-05
ENTPD7	0.54	3.75	13.45	2.45E-04	1.98E-03
PPP1R12A	0.54	4.68	25.57	4.26E-07	8.95E-06
BRWD3	0.54	2.72	12.12	4.98E-04	3.54E-03
CEP162	0.54	3.94	13.31	2.64E-04	2.10E-03
SLC39A14	0.54	3.08	12.71	3.63E-04	2.74E-03
SNTB2	0.54	3.26	14.72	1.24E-04	1.13E-03
HYOU1	0.54	7.17	23.50	1.25E-06	2.26E-05
TNFRSF1B	0.54	5.51	15.48	8.35E-05	8.09E-04
NBEAL1	0.54	4.29	13.38	2.55E-04	2.04E-03
PLXNA2	0.54	3.57	18.09	2.11E-05	2.58E-04
PALMD	0.54	3.83	19.64	9.35E-06	1.30E-04
DPEP2	0.54	2.13	9.51	2.05E-03	1.08E-02
C7orf55-	0.54	5.77	27.37	1.68E-07	4.03E-06
LUC7L2					
ARID5B	0.54	5.41	29.07	6.99E-08	1.84E-06

DSC2	0.54	6.69	12.86	3.36E-04	2.57E-03
MST1R	0.54	4.22	20.02	7.66E-06	1.09E-04
MICU3	0.54	2.85	14.27	1.59E-04	1.37E-03
EP300	0.54	6.22	22.82	1.78E-06	3.07E-05
ARHGAP42	0.54	2.97	9.90	1.65E-03	9.17E-03
MSN	0.54	5.79	17.83	2.41E-05	2.90E-04
CEP350	0.54	5.40	18.87	1.40E-05	1.83E-04
KPNA2	0.54	6.36	37.26	1.03E-09	4.44E-08
CCDC88B	0.54	1.89	8.07	4.51E-03	2.03E-02
OTUD3	0.53	4.53	19.21	1.17E-05	1.56E-04
FOXJ1	0.53	9.57	25.69	4.00E-07	8.51E-06
NSRP1	0.53	3.74	16.06	6.15E-05	6.31E-04
KIAA1147	0.53	2.71	9.56	1.99E-03	1.06E-02
LRRIQ1	0.53	5.15	19.09	1.25E-05	1.65E-04
LYN	0.53	6.53	37.53	9.00E-10	3.95E-08
PCF11	0.53	4.69	22.58	2.02E-06	3.45E-05
ZNF428	0.53	2.37	11.36	7.51E-04	4.96E-03
PHIP	0.53	5.47	14.91	1.13E-04	1.04E-03
UVSSA	0.53	3.17	7.87	5.02E-03	2.21E-02
DDX17	0.53	6.98	28.80	8.01E-08	2.07E-06
JMJD4	0.53	3.42	9.97	1.59E-03	8.92E-03
DDX21	0.53	5.71	35.85	2.13E-09	8.44E-08
ERCC6	0.53	3.42	11.46	7.12E-04	4.76E-03
C16orf96	0.53	5.43	22.54	2.05E-06	3.49E-05
DLL1	0.53	2.63	8.08	4.48E-03	2.02E-02
MED13L	0.53	5.37	15.79	7.09E-05	7.10E-04
CCND1	0.53	8.12	23.91	1.01E-06	1.88E-05
FAM110C	0.52	4.23	23.56	1.21E-06	2.21E-05
RBM5	0.52	5.79	21.28	3.96E-06	6.16E-05
RRS1	0.52	4.05	22.40	2.21E-06	3.72E-05
SOS2	0.52	5.08	22.97	1.64E-06	2.88E-05
SPAG17	0.52	5.35	17.43	2.99E-05	3.46E-04
KCNK5	0.52	3.95	18.67	1.55E-05	1.98E-04
WHSC1	0.52	4.45	19.11	1.24E-05	1.63E-04
RBM15B	0.52	4.64	29.65	5.17E-08	1.41E-06
PRPF3	0.52	3.86	19.87	8.28E-06	1.17E-04
JAG1	0.52	6.71	26.23	3.02E-07	6.66E-06
ABI2	0.52	4.96	20.44	6.14E-06	9.00E-05
MAP3K19	0.52	5.50	22.02	2.70E-06	4.45E-05
TMF1	0.52	5.19	26.50	2.63E-07	5.97E-06
AKNA	0.52	5.57	26.98	2.05E-07	4.78E-06
CEP83	0.52	5.99	31.23	2.29E-08	6.86E-07
PRR18	0.52	6.30	22.70	1.89E-06	3.25E-05

FAM84A	0.52	7.38	34.24	4.87E-09	1.76E-07
ATAD2B	0.52	4.22	19.61	9.51E-06	1.32E-04
SRSF1	0.52	6.61	30.97	2.63E-08	7.75E-07
SDPR	0.52	5.22	18.21	1.97E-05	2.44E-04
ZBBX	0.52	3.64	16.01	6.30E-05	6.44E-04
VNN1	0.52	3.81	13.47	2.43E-04	1.96E-03
NUFIP2	0.52	5.73	22.45	2.16E-06	3.65E-05
USP37	0.52	4.43	17.74	2.53E-05	3.02E-04
SERPINB10	0.52	4.18	18.38	1.81E-05	2.27E-04
NOLC1	0.52	4.83	30.52	3.31E-08	9.55E-07
PNISR	0.52	3.69	12.75	3.55E-04	2.69E-03
BCAR1	0.52	5.48	32.27	1.34E-08	4.33E-07
NIN	0.52	5.36	23.10	1.53E-06	2.71E-05
PPID	0.52	4.68	22.27	2.36E-06	3.95E-05
SMG1	0.52	5.58	9.82	1.73E-03	9.50E-03
NDUFAF4	0.52	3.20	11.71	6.23E-04	4.27E-03
TUBB2A	0.52	4.29	12.20	4.79E-04	3.43E-03
SH3PXD2B	0.51	5.17	18.98	1.32E-05	1.74E-04
SWT1	0.51	3.37	13.43	2.47E-04	1.99E-03
RNF145	0.51	5.72	34.54	4.18E-09	1.55E-07
PTPRS	0.51	5.23	14.08	1.76E-04	1.49E-03
STK40	0.51	6.04	31.64	1.85E-08	5.72E-07
CDC73	0.51	4.66	26.38	2.81E-07	6.25E-06
MALT1	0.51	4.02	18.19	2.00E-05	2.46E-04
KLHL42	0.51	4.23	16.27	5.50E-05	5.73E-04
HEXIM1	0.51	6.25	30.98	2.61E-08	7.73E-07
PROM1	0.51	8.79	26.13	3.19E-07	6.98E-06
CBLB	0.51	5.31	23.97	9.78E-07	1.83E-05
KIAA1217	0.51	6.12	19.23	1.16E-05	1.55E-04
IFIT1B	0.51	6.10	9.74	1.80E-03	9.80E-03
AFF1	0.51	6.70	29.15	6.69E-08	1.77E-06
TRIP10	0.51	4.66	27.37	1.68E-07	4.03E-06
KIAA0895	0.51	2.60	11.57	6.69E-04	4.53E-03
FKBP4	0.51	7.81	27.85	1.31E-07	3.23E-06
MPP5	0.51	5.54	30.87	2.76E-08	8.06E-07
UBN2	0.51	4.72	10.95	9.37E-04	5.88E-03
CD44	0.51	7.61	15.81	7.00E-05	7.02E-04
PSCA	0.51	8.05	9.24	2.36E-03	1.21E-02
ACTN1	0.51	7.44	27.88	1.29E-07	3.19E-06
CLIP1	0.51	7.20	32.63	1.12E-08	3.69E-07
FLNB	0.51	6.73	21.90	2.87E-06	4.69E-05
PTMA	0.51	9.27	22.59	2.01E-06	3.43E-05
C1orf87	0.50	4.57	19.36	1.08E-05	1.46E-04

BACH1	0.50	5.02	29.41	5.85E-08	1.58E-06
ST3GAL1	0.50	5.44	21.40	3.72E-06	5.83E-05
ARHGAP39	0.50	4.87	17.80	2.45E-05	2.93E-04
ADAMDEC1	0.50	5.99	34.17	5.05E-09	1.82E-07
MARCKS	0.50	5.47	29.41	5.87E-08	1.59E-06
STX3	0.50	4.03	20.82	5.05E-06	7.62E-05
USP2	0.50	5.73	20.39	6.31E-06	9.20E-05
TEF	0.50	7.94	22.47	2.13E-06	3.61E-05
ZFP36	0.50	7.00	27.09	1.95E-07	4.58E-06
GCNT2	0.50	6.35	31.98	1.56E-08	4.94E-07
EDRF1	0.50	3.77	16.43	5.06E-05	5.33E-04
PLEKHH1	0.50	5.25	25.85	3.69E-07	7.93E-06
SETD2	0.50	5.74	19.23	1.16E-05	1.55E-04
CHSY1	0.50	3.19	12.66	3.74E-04	2.80E-03
RANBP2	0.50	6.52	24.37	7.94E-07	1.53E-05
IL4R	0.50	5.70	29.33	6.11E-08	1.64E-06
CASP5	0.50	4.41	21.50	3.53E-06	5.58E-05
KIF21A	0.50	8.02	23.12	1.53E-06	2.70E-05
ROBO1	0.50	3.84	11.94	5.50E-04	3.84E-03
HSP90AB1	0.50	10.47	20.27	6.74E-06	9.75E-05
GALNT3	0.49	6.23	28.32	1.03E-07	2.60E-06
MYO10	0.49	5.03	25.84	3.70E-07	7.95E-06
AZIN1	0.49	7.27	32.54	1.17E-08	3.84E-07
OGT	0.49	5.84	13.83	2.00E-04	1.68E-03
TNFAIP3	0.49	4.54	15.94	6.53E-05	6.63E-04
QKI	0.49	5.20	26.67	2.42E-07	5.53E-06
SLC36A4	0.49	3.22	13.40	2.52E-04	2.02E-03
ZBED4	0.49	3.62	16.65	4.48E-05	4.81E-04
LLPH	0.49	4.72	19.38	1.07E-05	1.46E-04
ZBTB41	0.49	4.13	16.66	4.48E-05	4.81E-04
SIK2	0.49	4.67	21.25	4.04E-06	6.25E-05
TIMM9	0.49	2.30	7.32	6.81E-03	2.81E-02
ZC3H3	0.49	4.19	19.48	1.02E-05	1.39E-04
DNAAF2	0.49	4.96	27.83	1.32E-07	3.25E-06
PLCH1	0.49	5.79	22.40	2.21E-06	3.72E-05
TRPM6	0.49	2.27	6.15	1.31E-02	4.72E-02
TMSB10	0.49	5.91	27.10	1.93E-07	4.56E-06
FMN1	0.49	3.65	18.09	2.11E-05	2.58E-04
PLEKHA7	0.49	4.67	26.50	2.64E-07	5.97E-06
ZNF800	0.49	3.56	15.86	6.82E-05	6.89E-04
RRP15	0.49	2.73	9.06	2.61E-03	1.31E-02
PPP1R9B	0.49	6.72	27.09	1.95E-07	4.58E-06
SNAPC3	0.49	2.12	6.76	9.32E-03	3.59E-02

KLF5	0.49	7.29	17.36	3.10E-05	3.56E-04
PHF3	0.49	6.20	19.55	9.79E-06	1.35E-04
SCLT1	0.49	3.18	11.63	6.48E-04	4.41E-03
FOXN2	0.49	3.92	14.85	1.16E-04	1.07E-03
RDH10	0.49	6.77	30.72	2.98E-08	8.62E-07
KIAA2026	0.49	4.19	12.42	4.24E-04	3.12E-03
TNRC6A	0.48	5.62	12.10	5.05E-04	3.57E-03
PRSS12	0.48	3.55	13.22	2.77E-04	2.18E-03
ITGAM	0.48	5.01	17.34	3.13E-05	3.59E-04
DOCK11	0.48	4.34	22.04	2.67E-06	4.41E-05
SAMD8	0.48	4.97	23.98	9.74E-07	1.82E-05
SLC25A25	0.48	4.52	15.54	8.07E-05	7.87E-04
SEC14L3	0.48	12.22	13.12	2.92E-04	2.28E-03
KMT2C	0.48	5.21	10.16	1.44E-03	8.25E-03
LARP4	0.48	5.65	22.56	2.04E-06	3.47E-05
NOL8	0.48	3.37	10.91	9.58E-04	5.98E-03
PRDM2	0.48	5.46	16.56	4.71E-05	5.01E-04
ZBTB1	0.48	4.12	21.33	3.87E-06	6.04E-05
IFNGR2	0.48	6.10	24.74	6.57E-07	1.29E-05
KPNA4	0.48	5.57	32.03	1.52E-08	4.83E-07
FAM193A	0.48	4.60	14.26	1.60E-04	1.38E-03
NEURL1B	0.48	2.71	6.71	9.59E-03	3.68E-02
TTF1	0.48	4.06	12.52	4.02E-04	2.99E-03
ARL5B	0.48	3.15	11.34	7.57E-04	4.99E-03
NFAT5	0.48	5.77	12.36	4.40E-04	3.20E-03
YWHAH	0.48	7.20	29.55	5.45E-08	1.49E-06
CBLL1	0.48	3.87	15.37	8.83E-05	8.46E-04
BTAF1	0.48	5.25	19.62	9.45E-06	1.31E-04
GCNT1	0.48	6.20	17.96	2.26E-05	2.74E-04
MAST4	0.48	5.14	22.08	2.62E-06	4.33E-05
TRIM56	0.48	3.14	11.71	6.22E-04	4.27E-03
IQUB	0.48	5.27	21.96	2.78E-06	4.57E-05
LSM12	0.48	3.92	18.77	1.48E-05	1.90E-04
BTBD10	0.48	4.40	20.70	5.38E-06	8.06E-05
TNFRSF21	0.47	6.69	29.86	4.65E-08	1.29E-06
ATP11C	0.47	4.21	15.62	7.73E-05	7.59E-04
AKAP13	0.47	6.47	14.99	1.08E-04	1.00E-03
NOP58	0.47	4.56	15.38	8.80E-05	8.43E-04
IRS1	0.47	3.17	8.83	2.97E-03	1.46E-02
BRD4	0.47	5.81	17.03	3.68E-05	4.11E-04
ETS2	0.47	7.53	30.09	4.13E-08	1.16E-06
SCAF4	0.47	4.60	19.31	1.11E-05	1.49E-04
PIK3AP1	0.47	3.05	7.18	7.36E-03	2.98E-02

REV3L	0.47	4.92	14.78	1.21E-04	1.10E-03
CCDC40	0.47	7.33	22.52	2.08E-06	3.54E-05
EEF1E1	0.47	3.02	8.53	3.50E-03	1.67E-02
PRSS22	0.47	5.92	8.29	3.98E-03	1.84E-02
MORC3	0.47	4.54	21.52	3.51E-06	5.56E-05
PDS5A	0.47	5.36	20.51	5.94E-06	8.78E-05
FAM20C	0.47	3.86	16.61	4.58E-05	4.90E-04
ATG16L2	0.47	1.55	6.04	1.40E-02	4.94E-02
PFKFB2	0.47	6.42	21.91	2.85E-06	4.66E-05
MYH9	0.47	8.08	16.39	5.15E-05	5.41E-04
TCF20	0.47	5.45	19.44	1.04E-05	1.42E-04
YTHDC1	0.47	5.18	21.31	3.90E-06	6.08E-05
SYNCRIP	0.47	6.08	25.20	5.17E-07	1.05E-05
SLCO1A2	0.47	5.31	23.14	1.51E-06	2.68E-05
SH3D21	0.47	2.33	7.31	6.85E-03	2.82E-02
FAM126A	0.47	5.48	21.16	4.23E-06	6.52E-05
CNOT4	0.47	4.34	16.64	4.53E-05	4.85E-04
RABEP1	0.47	4.79	23.04	1.59E-06	2.80E-05
TRIM39-RPP21	0.47	4.14	16.58	4.67E-05	4.98E-04
CXorf23	0.47	2.16	6.69	9.67E-03	3.70E-02
JMJD1C	0.47	5.46	19.02	1.30E-05	1.71E-04
MOB1B	0.47	5.16	18.96	1.34E-05	1.75E-04
BHLHE40	0.47	7.20	22.44	2.17E-06	3.66E-05
PRDM15	0.46	3.10	10.36	1.29E-03	7.59E-03
MS4A8	0.46	2.41	8.61	3.34E-03	1.60E-02
AHR	0.46	6.15	21.12	4.31E-06	6.62E-05
NOP2	0.46	4.43	21.75	3.10E-06	5.02E-05
USPL1	0.46	4.72	24.18	8.78E-07	1.67E-05
NEK1	0.46	5.10	18.78	1.47E-05	1.90E-04
ZBTB38	0.46	3.92	7.85	5.07E-03	2.23E-02
SMC4	0.46	3.70	13.18	2.82E-04	2.22E-03
SOCS4	0.46	2.78	6.69	9.69E-03	3.70E-02
SNAPC1	0.46	2.22	7.04	7.98E-03	3.18E-02
C5orf42	0.46	4.96	13.75	2.09E-04	1.73E-03
SAMD9L	0.46	4.95	20.44	6.15E-06	9.00E-05
DMXL1	0.46	5.05	17.00	3.73E-05	4.16E-04
RHOBTB2	0.46	4.58	21.60	3.35E-06	5.34E-05
RNF32	0.46	3.39	11.30	7.76E-04	5.10E-03
STIM2	0.46	6.44	23.46	1.27E-06	2.30E-05
EIF3A	0.46	7.02	29.03	7.14E-08	1.88E-06
METTL17	0.46	2.97	7.77	5.31E-03	2.31E-02
ZFP36L2	0.46	6.06	25.71	3.97E-07	8.47E-06
FGD4	0.46	2.80	8.69	3.21E-03	1.55E-02

MED13	0.46	6.00	13.89	1.94E-04	1.63E-03
DNAJB6	0.46	7.20	27.63	1.47E-07	3.57E-06
GDA	0.46	5.64	28.82	7.95E-08	2.06E-06
DNAJA4	0.46	8.00	25.59	4.21E-07	8.89E-06
CA8	0.46	7.95	26.09	3.26E-07	7.10E-06
TRIB2	0.46	6.27	26.58	2.52E-07	5.74E-06
IQGAP1	0.46	8.46	20.46	6.09E-06	8.94E-05
ATP2B1	0.46	6.70	28.68	8.52E-08	2.18E-06
ZCCHC7	0.46	2.84	9.37	2.20E-03	1.15E-02
C2	0.46	5.36	9.22	2.39E-03	1.22E-02
UPF3B	0.46	3.10	8.91	2.83E-03	1.41E-02
RNF111	0.46	4.94	11.95	5.46E-04	3.82E-03
BRPF3	0.46	4.56	15.42	8.61E-05	8.29E-04
ISG20L2	0.46	4.52	16.72	4.34E-05	4.69E-04
UHMK1	0.46	3.02	8.26	4.04E-03	1.86E-02
BBX	0.46	4.94	10.98	9.22E-04	5.81E-03
ZC3H18	0.46	5.08	19.64	9.34E-06	1.30E-04
ITGAV	0.46	5.83	23.17	1.48E-06	2.64E-05
MTRF1L	0.46	1.96	6.15	1.32E-02	4.73E-02
FXR1	0.46	5.36	23.10	1.53E-06	2.71E-05
MAK16	0.45	4.11	17.46	2.93E-05	3.40E-04
DNAJB9	0.45	5.24	18.54	1.66E-05	2.10E-04
SIK1	0.45	7.15	21.91	2.86E-06	4.66E-05
ENKUR	0.45	6.24	26.40	2.77E-07	6.18E-06
PCM1	0.45	6.52	21.26	4.02E-06	6.23E-05
DOT1L	0.45	4.31	15.64	7.67E-05	7.56E-04
PDLIM5	0.45	6.25	30.80	2.87E-08	8.34E-07
KCNK1	0.45	6.00	21.64	3.28E-06	5.25E-05
ADPGK	0.45	3.61	11.53	6.83E-04	4.60E-03
MGAT5	0.45	4.72	10.59	1.14E-03	6.85E-03
BRD1	0.45	6.24	24.63	6.94E-07	1.35E-05
ARAP2	0.45	3.82	7.19	7.33E-03	2.97E-02
ZDHHC13	0.45	5.26	23.80	1.07E-06	1.97E-05
TRMT44	0.45	2.41	7.83	5.14E-03	2.25E-02
NIPBL	0.45	5.64	15.90	6.68E-05	6.76E-04
KAT6A	0.45	6.11	16.37	5.21E-05	5.46E-04
PAWR	0.45	4.97	24.77	6.45E-07	1.28E-05
SNAPC4	0.45	3.05	9.38	2.19E-03	1.14E-02
TPR	0.45	6.20	21.07	4.43E-06	6.80E-05
ARHGAP5	0.45	5.83	23.57	1.20E-06	2.19E-05
ADH7	0.45	7.73	17.61	2.72E-05	3.20E-04
CD274	0.45	4.70	10.71	1.07E-03	6.52E-03
OSBPL3	0.45	6.37	22.95	1.66E-06	2.90E-05

PMAIP1	0.45	3.25	10.30	1.33E-03	7.76E-03
KIAA0040	0.45	4.83	15.72	7.35E-05	7.29E-04
B2M	0.45	7.95	12.46	4.15E-04	3.06E-03
GTPBP4	0.45	5.24	21.53	3.48E-06	5.53E-05
SLC39A6	0.45	6.31	19.56	9.75E-06	1.35E-04
PDLIM1	0.44	7.51	20.56	5.78E-06	8.58E-05
ALYREF	0.44	4.37	17.52	2.84E-05	3.32E-04
THOC2	0.44	4.45	16.14	5.90E-05	6.09E-04
SNX16	0.44	2.91	7.63	5.74E-03	2.46E-02
SYNPO	0.44	5.64	16.25	5.54E-05	5.76E-04
ASH1L	0.44	5.73	12.77	3.52E-04	2.67E-03
DIEXF	0.44	2.77	9.13	2.52E-03	1.27E-02
VWA3A	0.44	6.35	17.15	3.45E-05	3.89E-04
NOC3L	0.44	2.97	6.86	8.79E-03	3.43E-02
ANKRD52	0.44	4.79	16.95	3.84E-05	4.25E-04
FAM220A	0.44	4.08	13.34	2.59E-04	2.07E-03
SOCS7	0.44	4.83	15.62	7.74E-05	7.60E-04
PDIA4	0.44	7.53	18.61	1.61E-05	2.05E-04
FASTKD3	0.44	2.36	6.10	1.35E-02	4.81E-02
SPTY2D1	0.44	5.37	24.26	8.41E-07	1.60E-05
FCAMR	0.44	3.75	9.21	2.41E-03	1.23E-02
RBM6	0.44	5.20	23.51	1.24E-06	2.26E-05
MXD1	0.44	6.44	14.18	1.66E-04	1.42E-03
TMTCS	0.44	5.10	17.28	3.23E-05	3.69E-04
THBS1	0.44	4.72	6.11	1.35E-02	4.80E-02
NBN	0.44	3.93	15.08	1.03E-04	9.63E-04
LRP12	0.44	3.81	9.30	2.29E-03	1.18E-02
ANKRD11	0.44	5.57	15.41	8.66E-05	8.32E-04
DNAH2	0.44	6.51	12.36	4.38E-04	3.20E-03
STOM	0.44	7.29	24.30	8.26E-07	1.58E-05
SLC38A2	0.44	6.65	23.62	1.17E-06	2.15E-05
PPIL4	0.44	4.44	14.36	1.51E-04	1.32E-03
FERMT1	0.44	4.73	17.40	3.03E-05	3.50E-04
GOLGB1	0.44	6.66	14.03	1.80E-04	1.52E-03
MED21	0.44	4.40	14.48	1.42E-04	1.25E-03
FAM208A	0.44	4.75	10.25	1.37E-03	7.93E-03
EZR	0.44	10.26	16.89	3.95E-05	4.35E-04
TRMT1L	0.44	4.54	17.21	3.35E-05	3.79E-04
FOXP1	0.44	5.23	20.18	7.04E-06	1.01E-04
MRPS6	0.44	5.90	25.11	5.42E-07	1.10E-05
SAFB2	0.44	4.90	18.96	1.34E-05	1.75E-04
DNAJC2	0.44	4.02	16.94	3.87E-05	4.27E-04
HIF1A	0.44	5.71	19.80	8.59E-06	1.21E-04

FAT1	0.44	7.74	12.22	4.73E-04	3.39E-03
RUNX1	0.43	7.31	17.39	3.05E-05	3.51E-04
DDHD1	0.43	3.54	10.40	1.26E-03	7.46E-03
FLVCR1	0.43	4.95	17.02	3.71E-05	4.13E-04
RC3H1	0.43	5.45	16.75	4.26E-05	4.63E-04
ARHGEF26	0.43	4.64	16.64	4.53E-05	4.85E-04
RHBDF1	0.43	5.66	22.15	2.52E-06	4.19E-05
SPATA5	0.43	2.78	7.43	6.42E-03	2.68E-02
FBXW7	0.43	3.78	13.81	2.03E-04	1.69E-03
FAM102A	0.43	6.64	27.43	1.63E-07	3.92E-06
SMARCA5	0.43	5.67	21.86	2.93E-06	4.76E-05
ITSN2	0.43	5.29	20.04	7.60E-06	1.08E-04
GRK5	0.43	2.10	6.15	1.32E-02	4.73E-02
LATS2	0.43	4.79	23.10	1.54E-06	2.72E-05
UBXN4	0.43	6.18	24.74	6.54E-07	1.29E-05
ROCK2	0.43	5.83	17.55	2.81E-05	3.29E-04
DNAAF1	0.43	5.90	20.37	6.38E-06	9.30E-05
KIF27	0.43	5.07	17.42	3.00E-05	3.47E-04
SRSF6	0.43	6.44	27.00	2.04E-07	4.75E-06
ANKIB1	0.43	4.39	15.40	8.72E-05	8.38E-04
CREB1	0.43	5.14	21.30	3.93E-06	6.12E-05
SELPLG	0.43	3.66	6.65	9.94E-03	3.78E-02
PRPF4B	0.43	4.99	21.84	2.96E-06	4.81E-05
GNL3L	0.43	5.35	19.14	1.22E-05	1.61E-04
C18orf25	0.43	3.39	8.49	3.56E-03	1.69E-02
CTPS1	0.43	3.39	9.75	1.79E-03	9.77E-03
SBNO1	0.43	6.38	13.21	2.79E-04	2.20E-03
ZNF654	0.43	3.85	12.31	4.52E-04	3.28E-03
PPP1R13L	0.43	5.30	13.66	2.19E-04	1.80E-03
SOS1	0.43	4.55	11.89	5.64E-04	3.92E-03
IL6R	0.43	4.46	11.52	6.89E-04	4.63E-03
CD200	0.43	3.30	8.09	4.45E-03	2.01E-02
MTCL1	0.43	3.60	8.19	4.22E-03	1.93E-02
PDE12	0.43	5.35	20.51	5.94E-06	8.78E-05
ADGB	0.43	5.80	15.16	9.86E-05	9.26E-04
TTLL4	0.42	4.15	11.57	6.71E-04	4.55E-03
SYNGAP1	0.42	3.64	7.72	5.47E-03	2.36E-02
STK35	0.42	6.06	16.38	5.19E-05	5.45E-04
SASS6	0.42	3.18	10.53	1.18E-03	7.02E-03
MT1E	0.42	7.27	22.41	2.20E-06	3.71E-05
PUS7	0.42	3.79	10.25	1.37E-03	7.93E-03
CCDC86	0.42	3.51	12.76	3.54E-04	2.68E-03
TRIM7	0.42	2.82	6.64	9.98E-03	3.79E-02

MYO5C	0.42	6.74	16.89	3.96E-05	4.35E-04
TPBG	0.42	3.23	9.18	2.45E-03	1.24E-02
UPF2	0.42	4.65	14.30	1.56E-04	1.36E-03
UBFD1	0.42	5.05	19.62	9.43E-06	1.31E-04
RSC1A1	0.42	3.61	8.59	3.39E-03	1.62E-02
TMEM56- RWDD3	0.42	5.02	18.67	1.55E-05	1.98E-04
F3	0.42	8.96	17.15	3.45E-05	3.89E-04
RNF20	0.42	5.44	17.67	2.63E-05	3.12E-04
ACSL3	0.42	7.14	20.09	7.37E-06	1.05E-04
MIS12	0.42	3.87	12.62	3.82E-04	2.85E-03
RBM47	0.42	6.08	17.26	3.25E-05	3.70E-04
URB1	0.42	3.92	9.11	2.54E-03	1.28E-02
SECTM1	0.42	4.92	12.23	4.70E-04	3.39E-03
RBM39	0.42	6.67	18.63	1.58E-05	2.02E-04
TAF1L	0.42	5.09	13.62	2.24E-04	1.83E-03
FZD1	0.42	4.66	16.87	4.00E-05	4.39E-04
PURB	0.42	6.73	24.64	6.91E-07	1.35E-05
TMED5	0.42	4.16	14.49	1.41E-04	1.25E-03
CASP8AP2	0.42	2.77	6.40	1.14E-02	4.22E-02
NRIP1	0.42	4.18	10.48	1.21E-03	7.16E-03
HES6	0.42	6.32	18.07	2.13E-05	2.60E-04
ZNF652	0.42	4.14	9.36	2.21E-03	1.15E-02
PDXK	0.42	7.88	17.34	3.12E-05	3.58E-04
PGGT1B	0.42	2.93	8.79	3.04E-03	1.48E-02
WDR43	0.42	4.75	19.98	7.85E-06	1.11E-04
ATP10A	0.42	6.22	17.46	2.93E-05	3.40E-04
PLCE1	0.42	5.07	13.52	2.37E-04	1.92E-03
KITLG	0.42	6.06	12.58	3.89E-04	2.90E-03
CXCL16	0.42	5.19	17.92	2.30E-05	2.78E-04
FAM136A	0.41	4.08	15.16	9.88E-05	9.28E-04
RPGRIP1L	0.41	6.34	12.84	3.40E-04	2.59E-03
RBBP8	0.41	3.57	10.33	1.31E-03	7.66E-03
SECISBP2	0.41	2.96	7.42	6.47E-03	2.69E-02
FBXO11	0.41	5.64	18.98	1.32E-05	1.73E-04
RALGDS	0.41	6.65	20.13	7.24E-06	1.04E-04
SHROOM2	0.41	4.29	15.54	8.08E-05	7.88E-04
SMG7	0.41	5.75	14.61	1.32E-04	1.18E-03
TBCK	0.41	2.83	6.21	1.27E-02	4.58E-02
EXOC8	0.41	4.75	20.95	4.70E-06	7.18E-05
TCHH	0.41	2.66	6.10	1.36E-02	4.83E-02
C11orf63	0.41	4.11	12.65	3.76E-04	2.82E-03
CEBPB	0.41	5.76	14.04	1.79E-04	1.52E-03

SPTBN1	0.41	8.61	11.83	5.84E-04	4.03E-03
TRIM8	0.41	6.30	21.47	3.60E-06	5.66E-05
USP36	0.41	5.24	16.84	4.06E-05	4.44E-04
CYP2A6	0.41	12.45	9.06	2.61E-03	1.31E-02
CCDC109B	0.41	2.46	6.28	1.22E-02	4.44E-02
PRKAR1B	0.41	3.53	10.59	1.13E-03	6.83E-03
HSPE1	0.41	5.10	18.86	1.41E-05	1.83E-04
LMBRD2	0.41	3.28	7.57	5.94E-03	2.52E-02
ZCCHC2	0.41	4.77	19.16	1.20E-05	1.59E-04
MPP6	0.41	3.87	11.69	6.28E-04	4.30E-03
NUFIP1	0.41	3.08	8.11	4.40E-03	1.99E-02
EVI5	0.41	5.02	20.35	6.46E-06	9.41E-05
MAP7D1	0.41	5.71	17.82	2.43E-05	2.92E-04
C1GALT1	0.41	4.88	13.64	2.21E-04	1.82E-03
TEC	0.41	3.22	8.21	4.16E-03	1.91E-02
BAIAP2	0.41	7.02	20.34	6.48E-06	9.42E-05
CBFB	0.41	5.29	21.21	4.11E-06	6.35E-05
STRN	0.41	4.25	14.20	1.64E-04	1.41E-03
TTC17	0.41	4.88	15.83	6.92E-05	6.96E-04
NOL10	0.41	3.58	9.64	1.91E-03	1.03E-02
CEP135	0.41	3.18	9.99	1.57E-03	8.86E-03
GRIPAP1	0.41	3.91	14.50	1.40E-04	1.24E-03
OGFOD1	0.41	4.05	12.99	3.14E-04	2.42E-03
PPP4R2	0.41	6.21	26.15	3.17E-07	6.93E-06
KIAA1958	0.41	3.10	8.34	3.89E-03	1.81E-02
MORC2	0.41	4.30	13.31	2.64E-04	2.10E-03
B4GALT3	0.41	5.66	18.31	1.87E-05	2.33E-04
PPAN-P2RY11	0.41	3.41	11.11	8.59E-04	5.52E-03
LY75	0.41	4.31	11.70	6.25E-04	4.28E-03
SPATA18	0.41	6.70	10.87	9.80E-04	6.08E-03
NUP54	0.41	3.85	12.51	4.06E-04	3.01E-03
ANKHD1	0.41	5.84	12.94	3.22E-04	2.47E-03
CLEC2A	0.41	5.39	10.60	1.13E-03	6.80E-03
ZBTB2	0.41	3.71	11.92	5.55E-04	3.87E-03
HMOX1	0.41	6.60	7.41	6.48E-03	2.70E-02
AKT3	0.41	4.10	8.42	3.71E-03	1.75E-02
NFKB2	0.40	5.22	20.77	5.17E-06	7.79E-05
PVRL1	0.40	5.03	17.28	3.23E-05	3.68E-04
KDM1B	0.40	4.28	12.61	3.83E-04	2.86E-03
C3orf17	0.40	2.82	6.79	9.17E-03	3.54E-02
RBBP6	0.40	5.47	19.09	1.24E-05	1.64E-04
THAP1	0.40	2.67	6.23	1.25E-02	4.54E-02
REPIN1	0.40	4.15	12.48	4.11E-04	3.04E-03

KCTD12	0.40	5.57	19.81	8.53E-06	1.20E-04
MORC1	0.40	2.95	6.24	1.25E-02	4.53E-02
SPIN1	0.40	5.78	22.05	2.66E-06	4.40E-05
OTUD4	0.40	6.12	17.26	3.25E-05	3.70E-04
NHLRC2	0.40	4.30	13.44	2.47E-04	1.99E-03
PTPN6	0.40	4.88	14.05	1.78E-04	1.51E-03
POM121	0.40	5.21	16.43	5.05E-05	5.33E-04
TTC3	0.40	5.85	14.17	1.67E-04	1.43E-03
THOC1	0.40	3.69	9.75	1.79E-03	9.76E-03
CREM	0.40	2.82	6.49	1.09E-02	4.07E-02
REEP6	0.40	6.49	17.24	3.30E-05	3.75E-04
NUP98	0.40	6.50	19.53	9.91E-06	1.37E-04
SUMO2	0.40	7.31	20.23	6.85E-06	9.90E-05
DNAH11	0.40	5.80	10.03	1.54E-03	8.71E-03
INO80	0.40	4.45	12.39	4.31E-04	3.16E-03
ZNF565	0.40	4.09	9.02	2.67E-03	1.34E-02
STK33	0.40	3.47	8.94	2.79E-03	1.39E-02
RNASEH2B	0.40	3.53	10.34	1.30E-03	7.63E-03
RBM34	0.40	3.59	9.80	1.74E-03	9.56E-03
AEBP2	0.40	5.26	19.89	8.21E-06	1.16E-04
ZCCHC6	0.40	5.21	15.76	7.19E-05	7.17E-04
KDM6B	0.40	5.91	12.44	4.20E-04	3.09E-03
SHROOM3	0.40	6.78	21.71	3.17E-06	5.11E-05
GOLGA4	0.40	6.58	16.99	3.75E-05	4.17E-04
GOLIM4	0.40	5.50	19.19	1.18E-05	1.58E-04
JUNB	0.40	6.93	16.57	4.70E-05	5.00E-04
ODF2L	0.40	5.01	20.32	6.54E-06	9.49E-05
NOTCH1	0.40	5.41	10.41	1.26E-03	7.41E-03
PTPN23	0.40	5.33	13.09	2.96E-04	2.30E-03
BUD13	0.40	3.63	8.51	3.53E-03	1.68E-02
SGMS2	0.40	6.88	20.70	5.36E-06	8.04E-05
PSTPIP2	0.40	3.50	8.16	4.28E-03	1.95E-02
PNPT1	0.40	4.55	12.48	4.12E-04	3.05E-03
IQCG	0.40	7.07	22.18	2.48E-06	4.12E-05
PHF6	0.40	4.00	12.10	5.05E-04	3.57E-03
EEA1	0.40	4.72	9.23	2.38E-03	1.22E-02
C4orf33	0.40	3.93	10.22	1.39E-03	8.03E-03
KIAA0319	0.40	4.11	8.27	4.02E-03	1.86E-02
SLC35E2B	0.40	3.64	7.28	6.96E-03	2.86E-02
TEX26	0.40	3.11	7.06	7.87E-03	3.15E-02
GTF2F1	0.40	4.84	16.50	4.86E-05	5.15E-04
SUGP2	0.40	2.54	6.18	1.29E-02	4.65E-02
CCDC96	0.40	5.91	16.67	4.45E-05	4.80E-04

TANC2	0.40	6.19	9.72	1.83E-03	9.92E-03
TMEM201	0.40	4.08	9.81	1.73E-03	9.51E-03
SPIRE1	0.39	3.21	7.01	8.11E-03	3.22E-02
ELMSAN1	0.39	5.05	14.43	1.45E-04	1.28E-03
DHX37	0.39	4.67	12.77	3.52E-04	2.67E-03
TCERG1	0.39	4.59	16.37	5.22E-05	5.46E-04
SLC28A3	0.39	6.11	16.95	3.84E-05	4.25E-04
CRYBG3	0.39	5.40	16.86	4.03E-05	4.41E-04
METTL6	0.39	3.65	10.61	1.13E-03	6.80E-03
PIM2	0.39	3.93	9.46	2.10E-03	1.11E-02
MLXIP	0.39	6.28	14.60	1.33E-04	1.19E-03
PCP4L1	0.39	7.96	8.16	4.28E-03	1.95E-02
EIF4G3	0.39	6.69	15.91	6.65E-05	6.74E-04
CCDC101	0.39	3.85	10.47	1.22E-03	7.21E-03
SPEF2	0.39	4.99	14.67	1.28E-04	1.15E-03
SEC14L2	0.39	4.68	15.54	8.06E-05	7.86E-04
KDM7A	0.39	4.80	11.08	8.73E-04	5.59E-03
NCL	0.39	7.48	21.50	3.54E-06	5.58E-05
ASXL2	0.39	4.79	12.46	4.16E-04	3.07E-03
XK	0.39	3.49	7.61	5.79E-03	2.47E-02
YTHDF3	0.39	6.12	13.35	2.58E-04	2.06E-03
SORD	0.39	6.79	19.40	1.06E-05	1.44E-04
NEMF	0.39	4.33	12.12	4.99E-04	3.54E-03
ZNF710	0.39	5.04	12.76	3.54E-04	2.68E-03
BBS7	0.39	3.66	7.47	6.29E-03	2.63E-02
DZIP1	0.39	5.47	17.70	2.58E-05	3.07E-04
UBXN2A	0.39	4.95	14.67	1.28E-04	1.15E-03
CCDC92	0.39	5.05	15.26	9.39E-05	8.91E-04
FAM84B	0.39	8.82	16.81	4.14E-05	4.50E-04
ARL13B	0.39	5.36	16.40	5.13E-05	5.39E-04
SEN5	0.39	4.71	15.79	7.10E-05	7.10E-04
HSF2	0.39	3.99	9.30	2.29E-03	1.18E-02
PAXBP1	0.39	3.32	7.01	8.10E-03	3.21E-02
EIF5B	0.39	5.49	21.22	4.09E-06	6.32E-05
RBM27	0.39	5.09	15.81	7.02E-05	7.04E-04
SSB	0.39	5.84	19.43	1.04E-05	1.43E-04
ZNF830	0.39	3.32	8.93	2.81E-03	1.40E-02
KRR1	0.39	4.75	17.04	3.66E-05	4.10E-04
TJP1	0.39	6.73	16.33	5.32E-05	5.57E-04
C9orf171	0.39	5.23	15.43	8.56E-05	8.26E-04
ACBD3	0.39	5.76	19.96	7.90E-06	1.12E-04
DYNLL1	0.39	8.43	14.88	1.14E-04	1.05E-03
LPAR3	0.39	5.24	14.82	1.18E-04	1.08E-03

TSPAN2	0.39	6.16	16.47	4.94E-05	5.23E-04
TOX3	0.39	4.03	7.66	5.65E-03	2.43E-02
FAM212B	0.39	3.31	7.37	6.64E-03	2.75E-02
SLC5A1	0.39	5.68	9.30	2.29E-03	1.18E-02
C9orf116	0.39	6.62	20.95	4.71E-06	7.18E-05
NUPL1	0.39	4.55	10.95	9.38E-04	5.89E-03
ELAVL1	0.39	5.86	17.47	2.91E-05	3.39E-04
MAP9	0.39	4.32	10.71	1.07E-03	6.52E-03
CCNYL1	0.38	3.75	9.89	1.66E-03	9.23E-03
CEP104	0.38	5.43	12.40	4.30E-04	3.15E-03
ZNF217	0.38	5.38	15.63	7.69E-05	7.58E-04
ASS1	0.38	4.38	11.26	7.91E-04	5.18E-03
TGFBR1	0.38	6.00	18.60	1.61E-05	2.05E-04
SLK	0.38	6.18	20.93	4.77E-06	7.25E-05
KRT19	0.38	10.28	12.57	3.92E-04	2.92E-03
URB2	0.38	4.14	13.82	2.01E-04	1.68E-03
CIDEA	0.38	4.74	12.25	4.65E-04	3.36E-03
AHI1	0.38	3.48	10.60	1.13E-03	6.82E-03
AEN	0.38	4.99	15.36	8.89E-05	8.51E-04
CCDC6	0.38	5.67	17.47	2.91E-05	3.39E-04
NOP16	0.38	4.04	11.14	8.43E-04	5.44E-03
KRIT1	0.38	3.69	8.84	2.94E-03	1.45E-02
KRT5	0.38	8.57	13.26	2.71E-04	2.14E-03
SMEK2	0.38	5.89	16.98	3.77E-05	4.19E-04
GPD2	0.38	5.90	17.75	2.51E-05	3.00E-04
TGIF1	0.38	5.42	17.18	3.39E-05	3.83E-04
RANGAP1	0.38	5.49	16.09	6.05E-05	6.23E-04
MGAT2	0.38	5.51	17.61	2.71E-05	3.20E-04
KIF5B	0.38	6.96	17.33	3.14E-05	3.59E-04
XRN1	0.38	3.98	7.03	8.02E-03	3.19E-02
MYD88	0.38	5.38	13.67	2.18E-04	1.80E-03
YES1	0.38	4.76	13.16	2.87E-04	2.24E-03
GAS8	0.38	5.50	20.96	4.70E-06	7.18E-05
AKAP9	0.38	7.08	9.06	2.61E-03	1.31E-02
LYAR	0.38	3.22	7.22	7.21E-03	2.94E-02
ZCRB1	0.38	3.63	8.33	3.89E-03	1.81E-02
MKL2	0.38	5.91	11.29	7.79E-04	5.11E-03
NXF1	0.38	5.22	13.08	2.99E-04	2.32E-03
ZBTB18	0.38	5.63	17.55	2.80E-05	3.29E-04
KIF19	0.38	7.23	13.18	2.82E-04	2.22E-03
PTPN13	0.38	6.96	16.13	5.92E-05	6.11E-04
PTPN2	0.38	4.21	13.27	2.69E-04	2.13E-03
APOBEC1	0.38	4.44	9.47	2.09E-03	1.10E-02

AKAP8	0.38	5.13	14.54	1.37E-04	1.22E-03
FGD3	0.38	3.38	7.52	6.09E-03	2.56E-02
ITPRIPL2	0.38	5.85	16.97	3.81E-05	4.22E-04
LRCH3	0.38	4.55	11.68	6.31E-04	4.31E-03
RUSC2	0.38	3.74	10.07	1.50E-03	8.54E-03
SON	0.38	7.18	13.17	2.84E-04	2.23E-03
TAOK3	0.38	4.92	12.85	3.37E-04	2.57E-03
KMT2E	0.38	5.96	9.01	2.68E-03	1.34E-02
GRWD1	0.38	3.41	8.88	2.89E-03	1.43E-02
CXCL17	0.38	9.30	12.81	3.44E-04	2.61E-03
ZBTB7A	0.38	6.56	17.68	2.62E-05	3.10E-04
KIF2A	0.38	5.02	12.52	4.02E-04	2.99E-03
PTGES3	0.38	7.98	17.09	3.57E-05	4.01E-04
MTHFD1L	0.38	4.04	9.56	1.99E-03	1.06E-02
ZBTB21	0.38	3.73	8.37	3.81E-03	1.78E-02
ASUN	0.38	4.14	10.45	1.23E-03	7.28E-03
CYB5D1	0.38	3.02	7.48	6.24E-03	2.62E-02
OTUD1	0.38	4.75	14.28	1.58E-04	1.37E-03
TLR4	0.37	4.53	13.16	2.86E-04	2.23E-03
CSTF2	0.37	5.05	13.35	2.59E-04	2.07E-03
GPBP1	0.37	5.93	17.87	2.36E-05	2.85E-04
TAF12	0.37	4.25	12.06	5.14E-04	3.62E-03
STON2	0.37	5.65	14.48	1.42E-04	1.25E-03
MYO9A	0.37	3.72	6.03	1.41E-02	4.97E-02
ERO1L	0.37	5.40	15.73	7.32E-05	7.26E-04
MAP1A	0.37	3.86	6.12	1.34E-02	4.78E-02
MANF	0.37	6.52	13.16	2.86E-04	2.24E-03
CDC5L	0.37	5.38	17.31	3.18E-05	3.63E-04
CMIP	0.37	6.99	16.21	5.68E-05	5.88E-04
PDS5B	0.37	4.36	8.08	4.49E-03	2.02E-02
PDE8A	0.37	3.07	6.77	9.27E-03	3.58E-02
AQP4	0.37	9.07	11.40	7.34E-04	4.86E-03
POLR2A	0.37	7.24	11.43	7.21E-04	4.81E-03
XRCC4	0.37	3.27	8.52	3.52E-03	1.67E-02
EPC2	0.37	4.66	15.24	9.46E-05	8.95E-04
ADAM28	0.37	7.24	16.56	4.70E-05	5.00E-04
CDK17	0.37	3.89	9.30	2.29E-03	1.18E-02
DVL3	0.37	4.53	9.61	1.94E-03	1.04E-02
MYADM	0.37	6.68	17.19	3.37E-05	3.82E-04
SMARCC2	0.37	6.22	9.88	1.67E-03	9.24E-03
ERLIN1	0.37	4.50	11.03	8.96E-04	5.69E-03
PTP4A1	0.37	5.13	15.50	8.27E-05	8.02E-04
KLF6	0.37	7.14	17.33	3.15E-05	3.60E-04

SEC23IP	0.37	5.59	18.91	1.37E-05	1.79E-04
KIAA2012	0.37	6.31	14.85	1.17E-04	1.07E-03
NUP153	0.37	6.08	15.99	6.37E-05	6.50E-04
C6orf132	0.37	8.07	9.30	2.30E-03	1.18E-02
ZNFX1	0.37	5.76	14.25	1.60E-04	1.38E-03
SLC16A7	0.37	4.82	6.96	8.32E-03	3.28E-02
SLC5A8	0.37	7.21	15.53	8.13E-05	7.92E-04
ZC3H11A	0.37	6.18	15.09	1.03E-04	9.58E-04
TCOF1	0.37	3.98	6.45	1.11E-02	4.13E-02
RYBP	0.37	5.30	17.23	3.31E-05	3.76E-04
DR1	0.37	4.81	13.65	2.20E-04	1.81E-03
RNF144B	0.37	3.86	9.21	2.40E-03	1.22E-02
SUPT6H	0.37	6.63	20.87	4.92E-06	7.45E-05
LYST	0.37	4.88	6.49	1.08E-02	4.06E-02
SEC14L1	0.37	8.59	15.14	1.00E-04	9.38E-04
TMEM33	0.37	6.28	16.62	4.56E-05	4.88E-04
CSTF3	0.37	4.51	10.82	1.01E-03	6.21E-03
LATS1	0.37	5.69	15.09	1.03E-04	9.58E-04
ARL8A	0.37	6.07	16.77	4.22E-05	4.59E-04
INTS6	0.37	3.77	6.32	1.19E-02	4.36E-02
ABL2	0.37	4.43	9.51	2.05E-03	1.08E-02
USP10	0.37	5.84	16.84	4.06E-05	4.43E-04
CEP170B	0.36	7.71	15.27	9.33E-05	8.87E-04
TOPORS	0.36	4.49	11.01	9.06E-04	5.73E-03
ANKRD17	0.36	6.34	14.80	1.19E-04	1.09E-03
CRAMP1L	0.36	4.27	11.74	6.12E-04	4.21E-03
TRAF3IP1	0.36	7.49	16.06	6.14E-05	6.30E-04
SUCO	0.36	5.50	18.22	1.97E-05	2.44E-04
PTBP3	0.36	6.74	16.37	5.21E-05	5.46E-04
SLC4A8	0.36	4.78	14.82	1.18E-04	1.08E-03
DIDO1	0.36	5.22	12.53	4.00E-04	2.98E-03
USP45	0.36	2.87	6.49	1.08E-02	4.06E-02
VCPIP1	0.36	4.81	12.50	4.07E-04	3.02E-03
ACTR6	0.36	3.11	6.25	1.24E-02	4.51E-02
CCNT2	0.36	4.16	9.14	2.50E-03	1.27E-02
KRI1	0.36	4.07	8.73	3.14E-03	1.53E-02
TMC7	0.36	3.29	7.07	7.82E-03	3.13E-02
SKIL	0.36	4.98	14.91	1.13E-04	1.04E-03
ACSL4	0.36	5.42	11.22	8.08E-04	5.27E-03
PRKX	0.36	5.55	15.44	8.53E-05	8.24E-04
7-Sep	0.36	6.22	18.57	1.63E-05	2.07E-04
STYX	0.36	3.30	6.77	9.25E-03	3.57E-02
DENND4C	0.36	5.94	13.89	1.94E-04	1.63E-03

NFATC1	0.36	3.93	8.14	4.33E-03	1.97E-02
LRRFIP1	0.36	6.49	19.93	8.03E-06	1.14E-04
MAGI3	0.36	5.30	10.55	1.16E-03	6.97E-03
PCNT	0.36	5.59	10.48	1.21E-03	7.18E-03
NFYA	0.36	4.39	12.16	4.87E-04	3.48E-03
MATR3	0.36	6.49	16.95	3.84E-05	4.25E-04
ASPH	0.36	8.04	14.66	1.29E-04	1.16E-03
KMT2B	0.36	5.35	11.10	8.61E-04	5.52E-03
SMAD1	0.36	4.78	13.98	1.85E-04	1.56E-03
MBNL3	0.36	4.10	6.96	8.35E-03	3.29E-02
ARMC9	0.36	4.19	11.99	5.35E-04	3.75E-03
C11orf16	0.36	7.22	18.17	2.02E-05	2.49E-04
IFT74	0.36	5.66	17.22	3.33E-05	3.78E-04
AIMP2	0.36	4.06	9.97	1.59E-03	8.92E-03
ESCO1	0.36	4.47	12.12	4.98E-04	3.54E-03
TIRAP	0.36	5.65	15.15	9.95E-05	9.34E-04
RNF19A	0.36	5.07	14.31	1.55E-04	1.35E-03
RNF186	0.36	5.58	13.04	3.04E-04	2.35E-03
EXOC5	0.36	4.86	14.26	1.59E-04	1.37E-03
NANP	0.36	3.05	6.81	9.06E-03	3.51E-02
MPHOSPH8	0.36	4.84	15.43	8.58E-05	8.27E-04
CIPC	0.36	5.36	16.72	4.34E-05	4.69E-04
ZNF317	0.36	3.77	7.57	5.93E-03	2.51E-02
RPGR	0.36	5.18	16.47	4.95E-05	5.23E-04
RABGAP1L	0.36	7.18	8.42	3.71E-03	1.75E-02
PHF8	0.36	4.82	10.25	1.37E-03	7.93E-03
PMEPA1	0.36	6.09	17.27	3.24E-05	3.69E-04
RSRC2	0.36	5.13	14.21	1.64E-04	1.40E-03
C20orf194	0.36	5.74	11.34	7.58E-04	4.99E-03
DNAL1	0.36	6.03	11.67	6.36E-04	4.34E-03
HMCES	0.36	3.75	9.20	2.42E-03	1.23E-02
FAM120B	0.36	5.29	13.30	2.66E-04	2.11E-03
TDRD3	0.36	4.11	9.87	1.68E-03	9.29E-03
SMC3	0.36	5.41	15.76	7.17E-05	7.17E-04
DSG2	0.36	6.61	14.07	1.76E-04	1.49E-03
SGCB	0.36	4.50	11.58	6.68E-04	4.53E-03
ZNF7	0.36	5.89	15.02	1.06E-04	9.89E-04
SPECC1	0.36	3.35	6.02	1.41E-02	4.99E-02
PLEKHF2	0.36	5.59	16.70	4.37E-05	4.72E-04
SLC23A1	0.36	5.82	10.44	1.24E-03	7.31E-03
C16orf46	0.36	4.46	7.87	5.04E-03	2.22E-02
CTSC	0.36	5.58	8.83	2.97E-03	1.46E-02
ITGA3	0.36	7.75	16.84	4.07E-05	4.44E-04

ATXN7	0.36	4.61	12.13	4.95E-04	3.53E-03
PLK5	0.36	5.14	15.19	9.71E-05	9.16E-04
RBM10	0.35	4.88	12.43	4.22E-04	3.11E-03
SLC6A6	0.35	9.09	9.52	2.03E-03	1.07E-02
UTP14A	0.35	3.75	6.86	8.83E-03	3.44E-02
SPA17	0.35	5.73	15.75	7.24E-05	7.20E-04
NFKBIA	0.35	6.59	14.98	1.09E-04	1.01E-03
HSPA4	0.35	7.15	16.49	4.90E-05	5.19E-04
CTS2	0.35	6.25	6.97	8.29E-03	3.27E-02
RASA2	0.35	4.01	8.25	4.09E-03	1.88E-02
MED1	0.35	5.15	10.74	1.05E-03	6.42E-03
TNPO1	0.35	5.58	14.71	1.26E-04	1.14E-03
SOWAHB	0.35	4.23	10.52	1.18E-03	7.04E-03
CUL5	0.35	4.58	13.89	1.94E-04	1.63E-03
BRD2	0.35	7.24	12.09	5.07E-04	3.58E-03
DENND6A	0.35	5.30	11.91	5.59E-04	3.89E-03
FSD1L	0.35	5.92	11.00	9.13E-04	5.76E-03
PTPRZ1	0.35	7.16	8.49	3.56E-03	1.69E-02
VIM	0.35	6.11	9.51	2.04E-03	1.08E-02
YAE1D1	0.35	3.90	9.64	1.90E-03	1.02E-02
P2RY2	0.35	5.01	7.87	5.04E-03	2.22E-02
FAM81A	0.35	4.96	14.20	1.64E-04	1.41E-03
C15orf39	0.35	5.41	12.87	3.34E-04	2.55E-03
PTPN1	0.35	6.54	15.80	7.03E-05	7.05E-04
B3GNT7	0.35	5.64	9.76	1.78E-03	9.72E-03
LARP4B	0.35	6.69	13.50	2.39E-04	1.93E-03
NOP14	0.35	4.13	9.67	1.87E-03	1.01E-02
HNRNPU	0.35	7.93	15.99	6.36E-05	6.49E-04
RIIAD1	0.35	5.36	15.89	6.70E-05	6.78E-04
ZNF335	0.35	4.04	6.92	8.53E-03	3.34E-02
ZHX2	0.35	4.65	10.21	1.40E-03	8.05E-03
RPS19BP1	0.35	3.42	7.02	8.07E-03	3.21E-02
MTF1	0.35	4.78	14.22	1.62E-04	1.40E-03
WSB1	0.35	3.65	7.83	5.14E-03	2.25E-02
PRKAA1	0.35	5.53	14.90	1.13E-04	1.04E-03
CLDN12	0.35	5.01	12.20	4.78E-04	3.43E-03
NAA25	0.35	4.06	9.67	1.87E-03	1.01E-02
MBNL2	0.35	6.95	14.07	1.77E-04	1.50E-03
LRRC36	0.35	5.24	10.67	1.09E-03	6.60E-03
LAMB1	0.35	4.16	7.33	6.77E-03	2.79E-02
GIT2	0.35	4.55	9.27	2.33E-03	1.20E-02
MICALL1	0.35	4.84	13.46	2.43E-04	1.97E-03
EIF1B	0.35	4.94	11.75	6.08E-04	4.19E-03

RB1CC1	0.35	6.06	15.12	1.01E-04	9.44E-04
C12orf66	0.35	2.84	6.15	1.32E-02	4.73E-02
TBP	0.35	3.53	7.03	8.01E-03	3.19E-02
ZNF263	0.35	3.98	9.83	1.72E-03	9.44E-03
SRM	0.35	4.31	8.53	3.48E-03	1.66E-02
HCAR3	0.35	6.23	15.02	1.06E-04	9.89E-04
IK	0.35	6.36	16.04	6.21E-05	6.37E-04
SET	0.35	6.82	17.72	2.56E-05	3.04E-04
LSG1	0.35	4.57	10.19	1.41E-03	8.11E-03
SLC27A2	0.35	6.05	14.77	1.21E-04	1.10E-03
GLS	0.35	5.62	14.36	1.51E-04	1.32E-03
ZNF646	0.35	4.92	9.84	1.70E-03	9.39E-03
ZNF592	0.34	4.91	10.15	1.44E-03	8.28E-03
METTL16	0.34	4.05	9.93	1.63E-03	9.09E-03
TSC22D1	0.34	8.91	12.49	4.08E-04	3.02E-03
HELZ2	0.34	4.04	7.01	8.09E-03	3.21E-02
ZBTB40	0.34	3.28	7.10	7.69E-03	3.09E-02
CEBPZ	0.34	4.58	12.00	5.32E-04	3.73E-03
BMP2K	0.34	4.95	11.86	5.73E-04	3.97E-03
MORF4L2	0.34	7.63	16.05	6.17E-05	6.33E-04
SCAF11	0.34	6.25	16.82	4.11E-05	4.48E-04
UMPS	0.34	4.15	9.38	2.19E-03	1.14E-02
TFAP2A	0.34	4.31	9.75	1.80E-03	9.79E-03
NR6A1	0.34	3.64	6.39	1.15E-02	4.23E-02
EVA1C	0.34	4.50	10.68	1.08E-03	6.58E-03
FAM126B	0.34	3.98	8.16	4.27E-03	1.95E-02
IL1RL2	0.34	4.54	11.62	6.52E-04	4.43E-03
TOM1L1	0.34	5.75	15.34	8.96E-05	8.58E-04
KIAA1841	0.34	4.56	12.91	3.27E-04	2.50E-03
PLSCR1	0.34	7.74	15.39	8.74E-05	8.39E-04
CHKA	0.34	4.77	7.46	6.31E-03	2.64E-02
RFX2	0.34	5.80	7.72	5.45E-03	2.36E-02
BICD2	0.34	5.08	15.24	9.45E-05	8.95E-04
MED12	0.34	4.79	7.96	4.79E-03	2.13E-02
GLIPR1	0.34	5.09	8.45	3.64E-03	1.72E-02
TPM4	0.34	7.81	15.33	9.02E-05	8.62E-04
ACTB	0.34	10.22	8.86	2.92E-03	1.44E-02
EPS8	0.34	6.04	14.30	1.56E-04	1.36E-03
COL4A3BP	0.34	5.71	14.43	1.46E-04	1.28E-03
ST7L	0.34	3.70	7.00	8.14E-03	3.22E-02
ZNF609	0.34	5.74	8.32	3.92E-03	1.82E-02
OPTN	0.34	3.51	7.96	4.79E-03	2.13E-02
PRPF40A	0.34	5.22	13.85	1.98E-04	1.67E-03

CCDC65	0.34	5.82	12.74	3.58E-04	2.70E-03
SRRM1	0.34	6.32	10.57	1.15E-03	6.88E-03
DDX10	0.34	3.62	7.85	5.09E-03	2.23E-02
NAA15	0.34	5.47	15.50	8.26E-05	8.02E-04
NSD1	0.34	6.14	11.42	7.28E-04	4.84E-03
POFUT2	0.34	6.31	14.71	1.26E-04	1.14E-03
DUSP16	0.34	5.76	14.27	1.59E-04	1.37E-03
DCP2	0.34	4.71	10.74	1.05E-03	6.42E-03
SP3	0.34	5.84	14.56	1.36E-04	1.21E-03
OPA3	0.34	4.71	10.89	9.68E-04	6.03E-03
GOLGA3	0.34	4.53	7.86	5.06E-03	2.22E-02
BIRC6	0.34	6.09	8.56	3.43E-03	1.64E-02
SHPRH	0.34	4.03	7.39	6.57E-03	2.73E-02
FNDC7	0.34	4.85	11.97	5.41E-04	3.78E-03
MT1G	0.34	6.28	10.93	9.46E-04	5.91E-03
PTPRJ	0.34	6.56	11.58	6.68E-04	4.53E-03
MYO1E	0.34	5.75	15.43	8.57E-05	8.27E-04
PRPF40B	0.34	4.49	10.91	9.58E-04	5.98E-03
HMGB1	0.34	7.05	13.60	2.26E-04	1.85E-03
CPSF2	0.34	4.94	15.51	8.19E-05	7.97E-04
RASSF6	0.34	4.36	8.95	2.78E-03	1.38E-02
CRELD2	0.34	6.16	13.39	2.53E-04	2.03E-03
ZFP62	0.34	3.93	6.44	1.11E-02	4.14E-02
LIMA1	0.34	6.69	12.06	5.15E-04	3.63E-03
STAT2	0.33	4.74	9.61	1.94E-03	1.04E-02
AK7	0.33	7.67	12.77	3.51E-04	2.67E-03
DNAH5	0.33	8.89	6.59	1.03E-02	3.88E-02
MAP3K2	0.33	5.29	9.22	2.39E-03	1.22E-02
FOXK1	0.33	5.48	8.15	4.31E-03	1.96E-02
PLXNB1	0.33	7.73	11.14	8.45E-04	5.45E-03
TAF15	0.33	4.78	11.73	6.16E-04	4.23E-03
DYNC1LI1	0.33	4.83	14.42	1.46E-04	1.29E-03
PPP1R15B	0.33	7.03	14.50	1.40E-04	1.24E-03
TRAF3	0.33	5.03	10.13	1.46E-03	8.35E-03
ASRGL1	0.33	5.55	13.06	3.02E-04	2.34E-03
RIN1	0.33	3.49	6.97	8.28E-03	3.27E-02
RFX1	0.33	4.55	8.20	4.18E-03	1.92E-02
BRPF1	0.33	4.54	9.02	2.67E-03	1.34E-02
PIBF1	0.33	3.52	7.03	7.99E-03	3.18E-02
LPCAT4	0.33	7.05	14.18	1.66E-04	1.42E-03
HIPK3	0.33	7.70	10.43	1.24E-03	7.32E-03
RUFY3	0.33	4.19	8.03	4.61E-03	2.07E-02
CDK11B	0.33	5.02	14.51	1.39E-04	1.23E-03

KPNA1	0.33	6.21	15.83	6.92E-05	6.96E-04
ARHGAP17	0.33	4.34	8.52	3.51E-03	1.67E-02
ERICH2	0.33	6.34	14.02	1.81E-04	1.53E-03
CCDC130	0.33	3.13	6.11	1.35E-02	4.81E-02
PDCD11	0.33	4.46	8.43	3.70E-03	1.74E-02
RILPL1	0.33	4.67	11.02	8.99E-04	5.70E-03
SGMS1	0.33	6.27	13.56	2.31E-04	1.88E-03
DIAPH1	0.33	6.60	15.53	8.10E-05	7.89E-04
RINT1	0.33	3.95	8.19	4.21E-03	1.93E-02
GCH1	0.33	4.46	9.21	2.40E-03	1.22E-02
DOCK5	0.33	4.43	6.87	8.79E-03	3.43E-02
STRN3	0.33	5.45	14.31	1.55E-04	1.35E-03
CLASP1	0.33	4.98	12.92	3.25E-04	2.49E-03
S100A10	0.33	6.34	6.92	8.51E-03	3.34E-02
LMTK2	0.33	7.04	11.56	6.72E-04	4.55E-03
AHSA1	0.33	7.03	14.99	1.08E-04	1.00E-03
PPP1CB	0.33	7.91	10.70	1.07E-03	6.53E-03
FAM133B	0.33	3.35	6.46	1.10E-02	4.11E-02
HNF1B	0.33	4.71	9.99	1.58E-03	8.86E-03
NCOR1	0.33	6.54	10.07	1.51E-03	8.56E-03
TAOK1	0.33	6.01	7.94	4.83E-03	2.15E-02
FNDC3A	0.33	6.59	10.21	1.40E-03	8.05E-03
AGBL2	0.33	5.29	10.27	1.35E-03	7.86E-03
LIN54	0.33	3.60	6.65	9.91E-03	3.77E-02
CTR9	0.33	4.91	13.26	2.71E-04	2.15E-03
KIAA1033	0.33	4.04	7.45	6.33E-03	2.65E-02
PPCDC	0.33	3.67	7.06	7.87E-03	3.15E-02
P4HA2	0.32	5.30	8.09	4.44E-03	2.01E-02
ST14	0.32	8.06	11.17	8.33E-04	5.39E-03
CCDC24	0.32	5.08	11.55	6.78E-04	4.57E-03
EIF4G2	0.32	9.65	10.47	1.21E-03	7.21E-03
RPS6KB1	0.32	4.51	10.61	1.13E-03	6.80E-03
NCOR2	0.32	6.04	6.35	1.17E-02	4.30E-02
YWHAZ	0.32	9.13	10.62	1.12E-03	6.77E-03
CUX1	0.32	6.55	13.60	2.26E-04	1.85E-03
ETNK1	0.32	8.04	10.89	9.68E-04	6.03E-03
ZC3H13	0.32	4.08	6.84	8.90E-03	3.46E-02
ATG3	0.32	5.29	11.48	7.02E-04	4.71E-03
MRPL21	0.32	3.54	7.34	6.73E-03	2.78E-02
PBRM1	0.32	5.87	10.82	1.00E-03	6.20E-03
RAB23	0.32	5.59	13.48	2.41E-04	1.95E-03
C19orf26	0.32	5.42	12.95	3.19E-04	2.45E-03
SYVN1	0.32	5.77	9.79	1.76E-03	9.62E-03

DIP2B	0.32	4.98	9.90	1.65E-03	9.17E-03
KRT8	0.32	9.89	9.30	2.29E-03	1.18E-02
SH3GLB1	0.32	7.01	15.33	9.04E-05	8.62E-04
RALGPS2	0.32	4.32	9.02	2.68E-03	1.34E-02
LIN7C	0.32	7.03	13.69	2.16E-04	1.78E-03
MECP2	0.32	5.52	8.35	3.86E-03	1.80E-02
MAK	0.32	5.99	12.99	3.13E-04	2.41E-03
OSBPL11	0.32	4.10	8.64	3.29E-03	1.58E-02
LRRC8A	0.32	5.02	13.35	2.58E-04	2.06E-03
DNAJC13	0.32	5.53	10.74	1.05E-03	6.43E-03
NCOA6	0.32	5.41	9.57	1.97E-03	1.05E-02
ELL2	0.32	5.25	11.01	9.04E-04	5.72E-03
FCHO2	0.32	5.85	8.54	3.48E-03	1.66E-02
IRF2BP2	0.32	5.97	13.21	2.78E-04	2.19E-03
PLCG2	0.32	4.27	7.68	5.58E-03	2.40E-02
MRPS2	0.32	4.47	10.50	1.19E-03	7.11E-03
MAST2	0.32	5.62	8.47	3.62E-03	1.71E-02
YTHDF2	0.32	5.68	14.33	1.53E-04	1.34E-03
MIB1	0.32	4.32	6.93	8.48E-03	3.33E-02
KIAA1211L	0.32	6.93	13.34	2.59E-04	2.07E-03
VPS26A	0.32	5.61	11.33	7.62E-04	5.01E-03
KLF13	0.32	6.29	12.42	4.24E-04	3.12E-03
CAST	0.32	6.19	10.49	1.20E-03	7.14E-03
USP43	0.32	5.02	12.34	4.44E-04	3.23E-03
MYL12B	0.32	7.94	12.82	3.43E-04	2.61E-03
CCDC39	0.32	5.47	6.24	1.25E-02	4.53E-02
THRAP3	0.32	6.78	11.63	6.51E-04	4.43E-03
ACER3	0.32	5.39	13.76	2.08E-04	1.73E-03
SF1	0.32	7.01	11.02	9.00E-04	5.70E-03
DNAH8	0.32	3.57	7.56	5.96E-03	2.52E-02
SFSWAP	0.32	3.96	7.55	6.00E-03	2.54E-02
MARVELD2	0.32	4.69	7.76	5.34E-03	2.32E-02
RASEF	0.32	5.97	12.27	4.59E-04	3.32E-03
IWS1	0.32	4.52	8.34	3.88E-03	1.80E-02
WAPAL	0.32	5.90	9.69	1.85E-03	1.00E-02
NCOA4	0.32	6.69	13.24	2.74E-04	2.17E-03
MED4	0.32	3.68	6.09	1.36E-02	4.85E-02
RPRD2	0.32	5.21	9.76	1.79E-03	9.75E-03
ARHGAP32	0.31	6.81	9.49	2.07E-03	1.09E-02
HSP90B1	0.31	9.15	9.97	1.59E-03	8.94E-03
TMX1	0.31	5.80	10.98	9.23E-04	5.81E-03
FOXK2	0.31	5.48	12.22	4.73E-04	3.39E-03
CPEB4	0.31	6.24	9.32	2.27E-03	1.17E-02

ABCF2	0.31	5.42	13.20	2.79E-04	2.20E-03
UBE2O	0.31	4.48	8.20	4.19E-03	1.92E-02
FBF1	0.31	5.75	10.10	1.48E-03	8.44E-03
DYNC1H1	0.31	7.84	9.62	1.92E-03	1.03E-02
CD3EAP	0.31	3.26	6.49	1.08E-02	4.06E-02
CASK	0.31	5.18	12.75	3.57E-04	2.70E-03
RBM12	0.31	4.41	9.45	2.12E-03	1.11E-02
HSPA13	0.31	5.10	8.35	3.85E-03	1.80E-02
SLMAP	0.31	6.32	10.96	9.29E-04	5.84E-03
TFDP1	0.31	5.00	10.27	1.35E-03	7.88E-03
FAM120A	0.31	7.60	10.78	1.03E-03	6.32E-03
DGCR8	0.31	4.39	8.21	4.16E-03	1.91E-02
SRSF4	0.31	5.32	10.77	1.03E-03	6.34E-03
ECT2L	0.31	4.17	7.61	5.81E-03	2.48E-02
PPP1R14C	0.31	5.47	10.14	1.45E-03	8.31E-03
SOCS2	0.31	6.97	11.26	7.92E-04	5.18E-03
TRPM5	0.31	4.83	6.80	9.12E-03	3.53E-02
GPATCH2	0.31	3.61	6.53	1.06E-02	3.99E-02
PDZD8	0.31	5.44	10.47	1.22E-03	7.21E-03
ZSCAN29	0.31	4.01	7.54	6.05E-03	2.55E-02
CDC14A	0.31	7.71	11.47	7.05E-04	4.73E-03
IQCC	0.31	3.93	7.85	5.07E-03	2.23E-02
RLIM	0.31	5.89	11.60	6.60E-04	4.48E-03
PAQR8	0.31	5.07	8.50	3.55E-03	1.68E-02
SEMA3E	0.31	5.62	10.06	1.51E-03	8.58E-03
DRC1	0.31	6.78	14.00	1.83E-04	1.55E-03
ABLIM3	0.31	4.59	7.08	7.79E-03	3.12E-02
RUVBL1	0.31	6.22	13.82	2.01E-04	1.68E-03
CANX	0.31	8.24	11.56	6.75E-04	4.56E-03
MMAA	0.31	3.94	6.14	1.32E-02	4.73E-02
WHSC1L1	0.31	5.67	11.99	5.34E-04	3.74E-03
TMED8	0.31	4.52	7.96	4.79E-03	2.13E-02
HIVEP1	0.31	5.77	8.27	4.04E-03	1.86E-02
MLLT4	0.31	6.66	12.67	3.71E-04	2.79E-03
FAM107B	0.31	7.75	10.71	1.07E-03	6.52E-03
MALL	0.31	7.60	7.64	5.70E-03	2.45E-02
DHX8	0.31	5.06	11.65	6.41E-04	4.37E-03
CNOT3	0.31	5.21	7.84	5.12E-03	2.24E-02
FARP2	0.31	3.60	6.14	1.32E-02	4.73E-02
UPF1	0.31	6.19	13.10	2.95E-04	2.30E-03
F2R	0.31	6.73	11.26	7.94E-04	5.19E-03
SRSF11	0.31	4.99	8.70	3.18E-03	1.54E-02
USP16	0.31	4.52	9.93	1.62E-03	9.09E-03

YBX1	0.31	8.61	11.16	8.37E-04	5.42E-03
SLC31A1	0.31	7.55	12.42	4.25E-04	3.12E-03
TRNT1	0.31	3.92	6.84	8.91E-03	3.46E-02
RND3	0.31	4.56	6.89	8.66E-03	3.38E-02
SEC24B	0.30	6.27	11.69	6.28E-04	4.30E-03
NBEA	0.30	5.04	6.02	1.42E-02	5.00E-02
APPBP2	0.30	4.41	8.55	3.46E-03	1.65E-02
TMPRSS4	0.30	7.00	9.33	2.25E-03	1.16E-02
AFF4	0.30	6.60	12.01	5.28E-04	3.71E-03
KDSR	0.30	5.56	9.85	1.70E-03	9.37E-03
DAGLB	0.30	5.60	7.91	4.93E-03	2.18E-02
ARHGAP35	0.30	6.54	10.54	1.17E-03	6.97E-03
KRCC1	0.30	6.06	12.65	3.76E-04	2.81E-03
VBP1	0.30	4.99	9.67	1.87E-03	1.01E-02
CPNE3	0.30	6.00	9.70	1.84E-03	9.98E-03
WASL	0.30	6.03	10.96	9.30E-04	5.84E-03
KIAA1407	0.30	4.52	8.03	4.61E-03	2.06E-02
GNS	0.30	8.61	10.03	1.54E-03	8.72E-03
DHX29	0.30	4.36	7.24	7.14E-03	2.91E-02
CDK13	0.30	5.34	10.81	1.01E-03	6.22E-03
RSF1	0.30	4.95	6.93	8.49E-03	3.33E-02
PKN2	0.30	6.33	11.83	5.84E-04	4.03E-03
BCOR	0.30	4.60	8.47	3.61E-03	1.71E-02
GNA13	0.30	6.12	12.70	3.65E-04	2.74E-03
UBE3A	0.30	5.01	9.56	1.98E-03	1.06E-02
HIPK1	0.30	8.43	7.59	5.87E-03	2.50E-02
BBS5	0.30	4.25	7.33	6.77E-03	2.79E-02
RAI14	0.30	4.44	8.35	3.86E-03	1.80E-02
OSBPL10	0.30	5.82	10.00	1.57E-03	8.82E-03
MTSS1	0.30	4.63	6.48	1.09E-02	4.08E-02
FBXO46	0.30	3.55	6.42	1.13E-02	4.17E-02
SLC20A1	0.30	5.35	10.26	1.36E-03	7.88E-03
RSPH3	0.30	3.96	7.94	4.84E-03	2.15E-02
PPIP5K2	0.30	4.76	8.92	2.82E-03	1.40E-02
CDC27	0.30	5.60	10.79	1.02E-03	6.28E-03
EMC1	0.30	4.96	7.83	5.14E-03	2.25E-02
GEMIN4	0.30	4.74	8.95	2.77E-03	1.38E-02
ARHGEF28	0.30	6.81	8.52	3.50E-03	1.67E-02
TMX3	0.30	6.12	10.94	9.41E-04	5.89E-03
RLF	0.30	4.49	6.24	1.25E-02	4.53E-02
FAR1	0.30	6.27	9.10	2.56E-03	1.29E-02
DHX15	0.30	6.56	13.63	2.22E-04	1.82E-03
ITPR3	0.30	6.82	10.97	9.25E-04	5.82E-03

KLHL9	0.30	6.43	11.57	6.71E-04	4.55E-03
ALCAM	0.30	8.57	9.00	2.70E-03	1.35E-02
EIF2S1	0.30	5.58	10.86	9.82E-04	6.09E-03
SLC6A14	0.30	7.61	6.37	1.16E-02	4.27E-02
LMNB1	0.30	4.80	10.83	9.96E-04	6.17E-03
EBNA1BP2	0.30	4.92	10.33	1.31E-03	7.66E-03
AIM1L	0.30	6.34	9.38	2.19E-03	1.14E-02
RASGEF1B	0.30	4.46	7.17	7.42E-03	3.00E-02
FAM49B	0.30	4.57	9.22	2.39E-03	1.22E-02
GRPEL2	0.30	5.46	12.13	4.95E-04	3.53E-03
SRSF7	0.30	5.36	9.58	1.97E-03	1.05E-02
MEAF6	0.30	3.89	6.67	9.78E-03	3.73E-02
RFX3	0.30	5.73	6.46	1.10E-02	4.10E-02
DCBLD2	0.30	5.14	8.30	3.96E-03	1.83E-02
AGFG1	0.30	5.14	9.84	1.71E-03	9.42E-03
CTBP2	0.30	5.65	11.94	5.50E-04	3.84E-03
AP3S1	0.30	4.70	7.81	5.21E-03	2.27E-02
LRRK1	0.30	5.49	10.50	1.19E-03	7.11E-03
MFAP1	0.30	4.52	6.74	9.43E-03	3.63E-02
NAB1	0.30	6.03	12.01	5.28E-04	3.71E-03
SUMO1	0.30	6.17	7.98	4.72E-03	2.10E-02
TRIM37	0.30	6.26	11.07	8.79E-04	5.61E-03
USP34	0.30	6.25	8.81	2.99E-03	1.46E-02
CCNC	0.30	5.08	7.62	5.76E-03	2.46E-02
MYO5B	0.30	7.08	10.90	9.62E-04	6.00E-03
RNF19B	0.30	4.78	6.68	9.74E-03	3.72E-02
CWC15	0.29	5.51	10.48	1.20E-03	7.16E-03
DDX27	0.29	4.10	7.01	8.11E-03	3.21E-02
ZDHHC21	0.29	4.05	7.59	5.87E-03	2.50E-02
MAATS1	0.29	6.15	10.67	1.09E-03	6.62E-03
PIK3CA	0.29	5.51	9.86	1.69E-03	9.33E-03
IPMK	0.29	5.70	11.07	8.79E-04	5.61E-03
LAMC2	0.29	6.41	11.55	6.77E-04	4.57E-03
AGAP1	0.29	5.87	8.14	4.33E-03	1.97E-02
PAIP1	0.29	5.96	11.93	5.52E-04	3.85E-03
HOOK2	0.29	5.55	11.40	7.34E-04	4.86E-03
APPL2	0.29	7.32	11.69	6.28E-04	4.30E-03
PLA2G4A	0.29	6.51	12.66	3.74E-04	2.80E-03
BCAS1	0.29	5.39	10.31	1.33E-03	7.74E-03
DDX31	0.29	3.74	6.33	1.19E-02	4.35E-02
PPFIA1	0.29	5.48	12.36	4.38E-04	3.20E-03
GNL2	0.29	5.51	10.87	9.77E-04	6.07E-03
RABL6	0.29	5.55	10.27	1.35E-03	7.86E-03

SAP130	0.29	4.77	7.56	5.96E-03	2.52E-02
KIAA0232	0.29	6.49	12.12	4.98E-04	3.54E-03
SLC5A9	0.29	7.15	6.70	9.65E-03	3.69E-02
RASSF10	0.29	5.21	10.60	1.13E-03	6.80E-03
TMEM185A	0.29	4.65	8.88	2.88E-03	1.43E-02
MARK4	0.29	4.07	6.28	1.22E-02	4.44E-02
TTC26	0.29	5.90	10.17	1.43E-03	8.22E-03
WSB2	0.29	6.31	9.57	1.98E-03	1.06E-02
SMNDC1	0.29	4.82	9.43	2.13E-03	1.12E-02
MAFK	0.29	4.89	8.57	3.42E-03	1.64E-02
FPGT	0.29	4.19	6.85	8.89E-03	3.46E-02
NAA50	0.29	6.03	12.12	4.99E-04	3.54E-03
SMARCC1	0.29	6.06	7.18	7.39E-03	2.99E-02
MYBBP1A	0.29	5.88	8.54	3.48E-03	1.66E-02
CAMK2D	0.29	4.25	6.37	1.16E-02	4.26E-02
MOB1A	0.29	5.28	9.52	2.03E-03	1.07E-02
CCDC17	0.29	4.73	6.29	1.22E-02	4.44E-02
C3orf58	0.29	5.31	7.42	6.46E-03	2.69E-02
DEDD2	0.29	5.64	7.84	5.10E-03	2.23E-02
GABPB2	0.29	5.28	7.04	7.96E-03	3.17E-02
ZNF474	0.29	5.05	7.81	5.19E-03	2.27E-02
ST8SIA2	0.29	4.75	6.24	1.25E-02	4.53E-02
DNAH9	0.29	8.25	7.29	6.92E-03	2.84E-02
LRRFIP2	0.29	5.25	9.92	1.64E-03	9.13E-03
MEX3C	0.29	5.03	8.71	3.17E-03	1.54E-02
EPB41L4A	0.29	5.22	9.86	1.69E-03	9.33E-03
WDR82	0.29	5.76	10.61	1.12E-03	6.78E-03
GIGYF2	0.29	5.03	8.50	3.55E-03	1.68E-02
HN1L	0.29	5.10	7.61	5.81E-03	2.48E-02
CNNM4	0.29	4.72	8.09	4.44E-03	2.01E-02
SHOC2	0.29	5.91	9.61	1.94E-03	1.04E-02
BCL10	0.29	5.33	8.72	3.15E-03	1.53E-02
UBP1	0.29	4.99	8.65	3.27E-03	1.57E-02
RNF6	0.29	5.34	10.06	1.52E-03	8.60E-03
SMIM15	0.29	5.59	6.95	8.41E-03	3.30E-02
CD55	0.29	7.52	10.00	1.56E-03	8.82E-03
UBR4	0.29	7.25	6.88	8.71E-03	3.40E-02
PSD3	0.29	4.72	6.10	1.35E-02	4.81E-02
MIER3	0.29	4.12	6.43	1.13E-02	4.17E-02
TP53BP1	0.29	4.98	7.39	6.55E-03	2.72E-02
PJA1	0.29	5.44	10.25	1.37E-03	7.93E-03
KIF6	0.29	4.47	7.92	4.90E-03	2.17E-02
CARD10	0.28	5.21	9.65	1.90E-03	1.02E-02

AVEN	0.28	3.70	6.27	1.22E-02	4.46E-02
GPC4	0.28	5.58	8.67	3.23E-03	1.56E-02
AGBL5	0.28	5.17	6.09	1.36E-02	4.85E-02
CTSV	0.28	8.27	7.90	4.94E-03	2.18E-02
RBM24	0.28	5.14	8.77	3.07E-03	1.50E-02
SLC46A3	0.28	5.67	7.85	5.08E-03	2.23E-02
IFT80	0.28	5.89	9.25	2.36E-03	1.21E-02
CEBPG	0.28	5.92	10.32	1.32E-03	7.71E-03
CIRH1A	0.28	4.38	7.79	5.24E-03	2.28E-02
TAGLN2	0.28	8.65	9.79	1.76E-03	9.62E-03
DOCK1	0.28	5.71	9.41	2.16E-03	1.13E-02
RBM14	0.28	4.82	7.50	6.17E-03	2.60E-02
IGF1R	0.28	6.30	8.04	4.57E-03	2.05E-02
ZNF24	0.28	5.00	9.03	2.66E-03	1.34E-02
WDR78	0.28	6.58	9.73	1.82E-03	9.87E-03
BRWD1	0.28	4.73	6.39	1.15E-02	4.23E-02
PCNA	0.28	5.75	9.60	1.95E-03	1.04E-02
FTSJ3	0.28	4.61	8.54	3.48E-03	1.66E-02
RDX	0.28	6.65	10.07	1.50E-03	8.54E-03
CLDN7	0.28	7.56	10.62	1.12E-03	6.75E-03
USP8	0.28	5.85	9.89	1.66E-03	9.23E-03
SEMA3C	0.28	5.52	7.54	6.05E-03	2.55E-02
IGSF8	0.28	5.89	8.70	3.19E-03	1.54E-02
NAMPT	0.28	6.80	7.86	5.07E-03	2.23E-02
TTC13	0.28	3.88	6.16	1.31E-02	4.70E-02
CABIN1	0.28	5.78	7.62	5.78E-03	2.47E-02
RNF169	0.28	4.36	6.71	9.58E-03	3.68E-02
OSBPL6	0.28	6.30	7.95	4.81E-03	2.14E-02
RNF168	0.28	4.47	8.57	3.41E-03	1.63E-02
SH3D19	0.28	6.23	11.75	6.08E-04	4.19E-03
SCAF8	0.28	5.86	9.17	2.45E-03	1.25E-02
UPF3A	0.28	4.00	6.54	1.05E-02	3.97E-02
WASF2	0.28	6.20	7.72	5.47E-03	2.36E-02
PAF1	0.28	5.46	11.29	7.78E-04	5.11E-03
CDHR3	0.28	8.88	8.62	3.32E-03	1.60E-02
TADA3	0.28	4.58	8.13	4.36E-03	1.98E-02
KLC2	0.28	5.20	7.78	5.27E-03	2.29E-02
TET3	0.28	6.03	6.99	8.19E-03	3.24E-02
ARID1B	0.28	5.60	6.36	1.17E-02	4.29E-02
RSPH1	0.28	7.77	10.51	1.19E-03	7.08E-03
BCR	0.28	5.26	9.27	2.33E-03	1.20E-02
UBC	0.28	5.90	9.92	1.64E-03	9.13E-03
TOB2	0.28	5.93	8.41	3.74E-03	1.75E-02

RANBP1	0.28	5.08	7.85	5.08E-03	2.23E-02
TTC21A	0.28	7.25	7.78	5.28E-03	2.30E-02
RERE	0.28	6.40	9.09	2.57E-03	1.30E-02
ANKRD13C	0.28	5.34	9.46	2.10E-03	1.11E-02
WDR47	0.28	5.27	8.29	3.99E-03	1.84E-02
CCDC180	0.28	5.76	7.22	7.22E-03	2.94E-02
CSNK1G3	0.28	4.83	10.38	1.27E-03	7.49E-03
C18orf8	0.28	4.32	7.14	7.52E-03	3.03E-02
MAVS	0.28	5.43	10.35	1.29E-03	7.59E-03
MISP	0.28	6.21	9.68	1.86E-03	1.01E-02
KNDC1	0.28	6.77	8.34	3.88E-03	1.81E-02
CCP110	0.28	5.32	6.44	1.12E-02	4.14E-02
ZCCHC8	0.28	5.19	8.18	4.23E-03	1.93E-02
ARHGAP18	0.28	6.66	9.64	1.91E-03	1.03E-02
AGPS	0.27	6.65	9.21	2.41E-03	1.23E-02
UCP2	0.27	9.52	7.14	7.54E-03	3.04E-02
ETV6	0.27	5.30	6.85	8.88E-03	3.46E-02
KPNA3	0.27	5.80	9.38	2.19E-03	1.14E-02
DNM1L	0.27	5.24	8.86	2.92E-03	1.44E-02
SPTAN1	0.27	7.93	7.66	5.65E-03	2.43E-02
POC5	0.27	4.59	7.41	6.50E-03	2.70E-02
ANXA2	0.27	10.52	6.30	1.21E-02	4.40E-02
PTGFRN	0.27	7.32	9.22	2.40E-03	1.22E-02
GTF3C4	0.27	5.05	7.51	6.13E-03	2.58E-02
STAU1	0.27	5.69	9.49	2.07E-03	1.09E-02
PAXIP1	0.27	5.22	8.52	3.51E-03	1.67E-02
C2CD2L	0.27	6.28	9.38	2.19E-03	1.14E-02
RSPH4A	0.27	7.27	7.25	7.08E-03	2.89E-02
CDC42SE1	0.27	7.32	10.49	1.20E-03	7.13E-03
SYNJ1	0.27	5.46	6.71	9.59E-03	3.68E-02
CAPN2	0.27	7.12	10.76	1.04E-03	6.37E-03
ABCF1	0.27	6.11	9.07	2.59E-03	1.31E-02
CALR	0.27	9.46	6.80	9.09E-03	3.52E-02
PAPOLA	0.27	6.83	10.01	1.56E-03	8.78E-03
RALA	0.27	5.56	10.29	1.34E-03	7.80E-03
RIPK1	0.27	4.88	8.84	2.94E-03	1.45E-02
CYBA	0.27	6.39	6.80	9.12E-03	3.53E-02
RAB6A	0.27	6.69	11.10	8.62E-04	5.52E-03
DUSP18	0.27	6.74	8.02	4.62E-03	2.07E-02
USP15	0.27	5.24	8.88	2.88E-03	1.43E-02
RRP12	0.27	4.06	6.70	9.62E-03	3.69E-02
MMP15	0.27	8.10	8.02	4.62E-03	2.07E-02
WAC	0.27	6.15	9.69	1.85E-03	1.00E-02

4-Mar	0.27	5.51	7.29	6.93E-03	2.85E-02
DDX3X	0.27	8.11	8.87	2.90E-03	1.43E-02
HEATR5A	0.27	5.46	8.01	4.65E-03	2.08E-02
ADAM8	0.27	8.85	7.34	6.75E-03	2.79E-02
SMC6	0.27	4.53	7.24	7.14E-03	2.91E-02
MAPRE2	0.27	5.40	8.09	4.46E-03	2.01E-02
BRIX1	0.27	4.69	7.88	4.99E-03	2.20E-02
WRB	0.27	4.96	8.30	3.96E-03	1.83E-02
CDV3	0.27	6.56	12.00	5.31E-04	3.72E-03
STK38L	0.27	4.92	7.15	7.51E-03	3.03E-02
CCDC33	0.27	6.29	10.14	1.45E-03	8.31E-03
PPHLN1	0.27	4.33	6.19	1.28E-02	4.63E-02
RAP1B	0.27	6.80	10.09	1.49E-03	8.50E-03
CCDC146	0.27	5.80	7.34	6.73E-03	2.78E-02
USO1	0.27	6.47	10.69	1.08E-03	6.56E-03
STAG2	0.27	6.49	8.59	3.39E-03	1.62E-02
KIAA0319L	0.27	6.30	7.51	6.14E-03	2.58E-02
CHD8	0.27	5.61	6.91	8.57E-03	3.36E-02
PAPD5	0.27	5.24	8.13	4.35E-03	1.98E-02
EGFR	0.27	5.28	9.55	2.00E-03	1.06E-02
STRBP	0.27	6.09	8.04	4.59E-03	2.06E-02
SRRT	0.27	5.48	10.00	1.56E-03	8.82E-03
SMARCE1	0.27	5.41	9.57	1.98E-03	1.05E-02
MTMR4	0.27	5.08	6.26	1.24E-02	4.50E-02
ZC2HC1C	0.27	4.95	7.83	5.14E-03	2.25E-02
FBR5	0.27	5.64	9.12	2.52E-03	1.28E-02
CGGBP1	0.27	6.83	10.10	1.48E-03	8.44E-03
WDR60	0.27	5.16	7.62	5.76E-03	2.46E-02
CCDC113	0.27	5.92	9.64	1.91E-03	1.03E-02
DPP9	0.27	5.22	7.86	5.05E-03	2.22E-02
MED14	0.27	5.56	7.20	7.30E-03	2.97E-02
TAF4	0.27	4.56	6.29	1.21E-02	4.42E-02
FXR2	0.27	5.43	10.25	1.37E-03	7.93E-03
SPAG9	0.27	6.05	8.92	2.81E-03	1.40E-02
MBOAT1	0.27	6.19	7.15	7.51E-03	3.03E-02
C22orf23	0.26	6.29	10.04	1.53E-03	8.67E-03
SMARCA4	0.26	6.84	8.75	3.09E-03	1.51E-02
ETF1	0.26	7.22	9.58	1.97E-03	1.05E-02
UBQLN1	0.26	7.07	8.84	2.95E-03	1.45E-02
SARNP	0.26	4.76	6.51	1.07E-02	4.03E-02
ZFYVE16	0.26	4.57	6.72	9.53E-03	3.66E-02
SMOX	0.26	5.95	8.80	3.02E-03	1.48E-02
ZNF207	0.26	6.61	10.05	1.52E-03	8.63E-03

PHF2	0.26	5.59	6.86	8.81E-03	3.44E-02
TTC39A	0.26	6.57	10.64	1.11E-03	6.70E-03
RAP2A	0.26	4.80	9.17	2.47E-03	1.25E-02
ATN1	0.26	6.30	6.04	1.40E-02	4.94E-02
IGF2R	0.26	6.94	6.84	8.91E-03	3.46E-02
TBC1D32	0.26	5.34	7.22	7.21E-03	2.94E-02
ZPR1	0.26	4.61	6.70	9.63E-03	3.69E-02
SENP6	0.26	5.83	8.72	3.15E-03	1.53E-02
IRF6	0.26	6.64	10.44	1.23E-03	7.29E-03
BPNT1	0.26	5.69	8.96	2.76E-03	1.38E-02
KCTD3	0.26	4.76	6.59	1.03E-02	3.89E-02
USP9X	0.26	7.30	6.24	1.25E-02	4.52E-02
CPEB2	0.26	4.80	6.64	9.99E-03	3.79E-02
NAF1	0.26	4.81	7.53	6.08E-03	2.56E-02
MYO1D	0.26	7.99	7.59	5.86E-03	2.49E-02
SLC25A24	0.26	4.67	7.13	7.59E-03	3.05E-02
ZDHHC5	0.26	7.09	9.43	2.14E-03	1.12E-02
HNRNPUL2- BSCL2	0.26	6.90	9.97	1.59E-03	8.92E-03
ATP1B1	0.26	9.91	6.20	1.28E-02	4.62E-02
NUAK2	0.26	5.23	8.09	4.44E-03	2.01E-02
DDX6	0.26	7.86	6.69	9.72E-03	3.71E-02
CHD4	0.26	7.49	7.77	5.30E-03	2.30E-02
SC5D	0.26	4.95	6.67	9.81E-03	3.74E-02
ZXDC	0.26	4.17	6.25	1.24E-02	4.51E-02
BBS4	0.26	4.67	6.20	1.27E-02	4.60E-02
XPO1	0.26	6.00	7.72	5.45E-03	2.36E-02
KDM4C	0.26	4.57	6.49	1.09E-02	4.06E-02
PRR14L	0.26	5.76	6.53	1.06E-02	4.00E-02
UBTF	0.26	6.20	8.96	2.76E-03	1.37E-02
ZC3HAV1	0.26	5.09	7.95	4.82E-03	2.14E-02
CELF1	0.26	6.26	7.72	5.47E-03	2.36E-02
LPGAT1	0.26	7.43	7.45	6.34E-03	2.65E-02
TMEM55A	0.26	4.65	6.66	9.85E-03	3.75E-02
MAP4K4	0.26	5.30	7.61	5.81E-03	2.48E-02
FAM210A	0.26	4.60	6.11	1.35E-02	4.80E-02
SETD8	0.26	6.08	8.08	4.47E-03	2.01E-02
EIF4A1	0.26	8.36	7.31	6.87E-03	2.83E-02
CCDC151	0.26	5.32	7.41	6.50E-03	2.70E-02
NEK5	0.25	6.33	9.08	2.59E-03	1.30E-02
ETV3	0.25	5.12	7.58	5.89E-03	2.50E-02
RRN3	0.25	4.96	8.43	3.68E-03	1.73E-02
FAM149A	0.25	6.86	7.38	6.60E-03	2.74E-02

MYO18A	0.25	6.77	9.54	2.02E-03	1.07E-02
DOCK9	0.25	6.64	7.83	5.12E-03	2.24E-02
TES	0.25	6.59	10.13	1.46E-03	8.32E-03
TMEM67	0.25	5.71	7.36	6.67E-03	2.76E-02
GPBP1L1	0.25	5.75	6.40	1.14E-02	4.22E-02
ARF6	0.25	7.71	7.46	6.33E-03	2.64E-02
ODF2	0.25	6.37	7.78	5.28E-03	2.30E-02
ARMC4	0.25	5.68	8.72	3.14E-03	1.53E-02
MAN1A2	0.25	7.34	6.75	9.40E-03	3.62E-02
DEK	0.25	5.64	7.84	5.10E-03	2.23E-02
AMMECR1L	0.25	5.60	8.99	2.71E-03	1.36E-02
GPRC5C	0.25	6.79	6.86	8.81E-03	3.43E-02
GCC2	0.25	5.53	6.51	1.07E-02	4.03E-02
TTC25	0.25	5.53	8.90	2.85E-03	1.41E-02
ENPP4	0.25	5.78	7.56	5.98E-03	2.53E-02
SIPA1L1	0.25	5.77	8.24	4.09E-03	1.88E-02
PREP	0.25	6.28	9.47	2.09E-03	1.10E-02
TNKS2	0.25	7.60	8.21	4.16E-03	1.91E-02
MON1B	0.25	4.93	7.26	7.04E-03	2.88E-02
DNAJA2	0.25	7.38	9.00	2.69E-03	1.35E-02
SIK3	0.25	5.34	7.31	6.87E-03	2.83E-02
NPTN	0.25	7.31	8.13	4.35E-03	1.98E-02
CAPRIN1	0.25	7.69	7.57	5.94E-03	2.52E-02
MEF2D	0.25	4.89	6.23	1.26E-02	4.54E-02
NFE2L1	0.25	7.76	7.32	6.81E-03	2.81E-02
SBDS	0.25	5.79	8.80	3.02E-03	1.48E-02
IL18R1	0.25	7.26	7.34	6.74E-03	2.78E-02
USP32	0.25	5.28	6.43	1.12E-02	4.16E-02
MIDN	0.25	6.89	6.86	8.81E-03	3.43E-02
RILPL2	0.25	5.27	7.84	5.10E-03	2.23E-02
TXNDC12	0.25	5.72	7.04	7.98E-03	3.18E-02
NUS1	0.25	6.00	8.76	3.07E-03	1.50E-02
SNW1	0.25	6.18	8.28	4.00E-03	1.85E-02
IRX2	0.25	5.55	6.50	1.08E-02	4.05E-02
C8orf37	0.25	5.14	6.59	1.02E-02	3.87E-02
N4BP1	0.25	5.99	7.59	5.87E-03	2.49E-02
ZFX	0.25	4.67	6.99	8.21E-03	3.25E-02
ACSL1	0.25	8.44	7.27	7.01E-03	2.87E-02
LCP1	0.25	7.41	6.44	1.12E-02	4.14E-02
CXXC1	0.25	4.91	7.42	6.45E-03	2.69E-02
WDFY1	0.25	5.69	8.03	4.59E-03	2.06E-02
SNRPD3	0.24	4.83	6.95	8.38E-03	3.30E-02
IBTK	0.24	6.15	6.48	1.09E-02	4.07E-02

NUP188	0.24	4.95	6.52	1.07E-02	4.02E-02
NBEAL2	0.24	5.11	8.15	4.30E-03	1.96E-02
RALGAPA1	0.24	5.52	7.49	6.19E-03	2.60E-02
PNPLA6	0.24	5.40	7.14	7.56E-03	3.04E-02
PRRC2A	0.24	8.08	6.14	1.32E-02	4.74E-02
NUP50	0.24	5.88	7.55	6.00E-03	2.54E-02
IFNGR1	0.24	5.82	7.88	5.00E-03	2.21E-02
CALML4	0.24	6.41	7.79	5.26E-03	2.29E-02
HNRNPH1	0.24	6.17	7.16	7.47E-03	3.02E-02
NCOA5	0.24	5.03	7.47	6.29E-03	2.63E-02
RMDN3	0.24	4.88	7.21	7.25E-03	2.95E-02
CCDC181	0.24	7.43	7.88	4.99E-03	2.20E-02
REPS1	0.24	5.48	8.29	3.98E-03	1.84E-02
KDM5C	0.24	6.81	8.11	4.41E-03	2.00E-02
ABCE1	0.24	6.25	8.68	3.21E-03	1.55E-02
TRIM26	0.24	5.74	7.74	5.41E-03	2.34E-02
CSNK2A2	0.24	4.65	6.47	1.10E-02	4.09E-02
AMOTL2	0.24	5.70	6.39	1.14E-02	4.22E-02
RTF1	0.24	4.62	6.36	1.17E-02	4.29E-02
VPS37A	0.24	5.25	6.14	1.32E-02	4.73E-02
CDKL4	0.24	5.90	7.02	8.06E-03	3.20E-02
SMAD4	0.24	6.36	7.98	4.72E-03	2.10E-02
G3BP1	0.24	7.04	7.92	4.90E-03	2.17E-02
SNAP23	0.24	4.97	7.05	7.94E-03	3.17E-02
PLXNA1	0.24	6.39	7.62	5.77E-03	2.46E-02
USP1	0.24	4.55	6.05	1.39E-02	4.92E-02
GHR	0.24	4.78	6.50	1.08E-02	4.04E-02
CUL3	0.24	6.51	8.55	3.45E-03	1.65E-02
ODF3B	0.24	5.97	6.66	9.83E-03	3.74E-02
GATAD2A	0.24	6.47	7.68	5.57E-03	2.40E-02
TNKS1BP1	0.24	7.31	7.58	5.90E-03	2.50E-02
QRICH1	0.24	5.79	6.25	1.24E-02	4.51E-02
FBXO42	0.24	5.13	6.56	1.04E-02	3.93E-02
C11orf88	0.24	5.12	6.40	1.14E-02	4.21E-02
NFKB1	0.24	6.73	8.31	3.94E-03	1.83E-02
OTUD7B	0.24	6.38	7.39	6.54E-03	2.72E-02
ZNF664	0.23	6.50	8.11	4.40E-03	1.99E-02
KBTBD2	0.23	4.66	6.50	1.08E-02	4.05E-02
ADAM10	0.23	6.48	7.91	4.90E-03	2.17E-02
ZFP91-CNTF	0.23	6.04	7.19	7.33E-03	2.97E-02
LZTFL1	0.23	5.88	6.35	1.17E-02	4.30E-02
DNALI1	0.23	7.71	6.52	1.07E-02	4.02E-02
FGFR1OP2	0.23	5.93	7.08	7.79E-03	3.12E-02

SOD2	0.23	6.96	7.04	7.96E-03	3.17E-02
CLIC5	0.23	6.56	7.26	7.06E-03	2.89E-02
KTN1	0.23	6.48	7.01	8.11E-03	3.21E-02
CAMSAP2	0.23	5.77	6.06	1.38E-02	4.91E-02
SF3A2	0.23	5.31	6.49	1.09E-02	4.06E-02
NAA60	0.23	6.08	6.76	9.31E-03	3.59E-02
FAM76A	0.23	5.31	6.73	9.50E-03	3.65E-02
FAM117A	0.23	5.94	7.14	7.53E-03	3.03E-02
SLC35A5	0.23	5.39	6.28	1.22E-02	4.45E-02
KCTD10	0.23	7.04	7.59	5.87E-03	2.50E-02
PICALM	0.23	6.77	7.06	7.90E-03	3.16E-02
CDC42BPB	0.23	6.92	6.14	1.32E-02	4.74E-02
MAPK6	0.23	6.15	6.17	1.30E-02	4.68E-02
C9orf78	0.23	6.24	7.73	5.43E-03	2.35E-02
PPP3R1	0.23	6.38	7.48	6.22E-03	2.61E-02
CRIM1	0.22	6.72	6.40	1.14E-02	4.21E-02
SBK1	0.22	5.14	6.39	1.15E-02	4.23E-02
HNRNPH2	0.22	5.68	7.05	7.94E-03	3.17E-02
AQR	0.22	5.40	6.05	1.39E-02	4.93E-02
KDM2A	0.22	6.36	6.58	1.03E-02	3.90E-02
BRD7	0.22	5.03	7.07	7.82E-03	3.13E-02
RBFOX2	0.22	5.39	6.62	1.01E-02	3.82E-02
OXSRI	0.22	5.61	7.14	7.56E-03	3.04E-02
IFT140	0.22	6.49	7.10	7.72E-03	3.10E-02
NUMB	0.22	5.58	7.18	7.36E-03	2.98E-02
STAT3	0.22	7.44	6.47	1.10E-02	4.08E-02
SKIV2L2	0.22	5.25	6.26	1.23E-02	4.48E-02
WBP11	0.22	6.50	7.46	6.31E-03	2.64E-02
UHRF1BP1L	0.22	6.60	6.19	1.28E-02	4.63E-02
TMEM260	0.22	5.40	6.09	1.36E-02	4.84E-02
GRAMD3	0.22	7.29	6.34	1.18E-02	4.33E-02
RAB35	0.22	5.75	6.14	1.32E-02	4.73E-02
DNAI1	0.22	6.54	6.32	1.19E-02	4.37E-02
NOMO1	0.22	6.11	6.19	1.28E-02	4.62E-02
ANXA7	0.22	7.65	6.34	1.18E-02	4.33E-02
C5orf24	0.22	6.22	6.06	1.38E-02	4.91E-02
DGKA	0.21	5.51	6.20	1.28E-02	4.60E-02
TSPAN8	0.21	7.20	6.17	1.30E-02	4.68E-02
SCARB2	0.21	6.55	6.09	1.36E-02	4.83E-02
TOR1AIP1	0.21	5.80	6.30	1.21E-02	4.41E-02
FCHSD2	0.21	5.76	6.31	1.20E-02	4.40E-02
ST3GAL4	0.21	6.58	6.29	1.21E-02	4.43E-02
PDPK1	0.21	6.21	6.15	1.31E-02	4.72E-02

TPRN	0.21	5.68	6.15	1.31E-02	4.72E-02
SMAD2	0.21	5.58	6.13	1.33E-02	4.75E-02
CYTH2	0.21	5.89	6.15	1.31E-02	4.71E-02
NME5	0.21	6.70	6.55	1.05E-02	3.96E-02
ATPIF1	0.20	6.65	6.33	1.19E-02	4.35E-02
TJP2	0.20	6.78	6.09	1.36E-02	4.83E-02
SUN1	0.20	6.47	6.42	1.13E-02	4.17E-02

Table S2. Pioglitazone treatment led to 1,993 significantly down-regulated genes (FDR < 0.05) in the bronchial airway epithelial cells of B(a)P induced mouse lung ADC model.

Gene	logFC	logCPM	LR	PValue	FDR
PLN	-4.55	0.85	146.32	1.11E-33	1.13E-30
ERBB4	-4.27	-1.88	23.68	1.14E-06	2.09E-05
AVPR1A	-4.01	0.08	43.61	4.01E-11	2.31E-09
NKX6-1	-3.92	-0.73	34.71	3.82E-09	1.44E-07
CPLX1	-3.86	0.05	50.31	1.31E-12	1.01E-10
CHODL	-3.56	-1.00	31.64	1.86E-08	5.72E-07
PVALB	-3.48	2.77	8.22	4.15E-03	1.90E-02
SPHKAP	-3.44	-0.82	31.65	1.84E-08	5.70E-07
PGK2	-3.41	-1.63	14.55	1.37E-04	1.22E-03
SNTG2	-3.37	0.36	59.64	1.14E-14	1.27E-12
MRGPRX2	-3.30	-1.21	28.33	1.02E-07	2.58E-06
TMEM182	-3.20	-0.14	19.24	1.15E-05	1.54E-04
TSHR	-3.19	-1.62	16.41	5.11E-05	5.38E-04
ACTA2	-3.13	6.89	113.94	1.35E-26	7.62E-24
SLC12A8	-3.09	2.54	163.27	2.19E-37	3.34E-34
SBSPON	-3.07	1.35	56.19	6.58E-14	6.49E-12
PRSS3	-3.06	-1.56	19.45	1.03E-05	1.41E-04
MYLK	-3.03	5.31	92.59	6.44E-22	2.01E-19
MYADML2	-3.02	-0.96	12.31	4.51E-04	3.27E-03
C11orf96	-2.98	1.23	27.23	1.81E-07	4.30E-06
ACTG2	-2.94	4.11	62.56	2.58E-15	3.23E-13
KCNA1	-2.93	-1.07	17.19	3.39E-05	3.83E-04
CKMT2	-2.92	3.44	7.30	6.91E-03	2.84E-02
KIAA1644	-2.90	1.40	30.97	2.62E-08	7.73E-07
ARPP21	-2.86	-1.35	10.24	1.37E-03	7.93E-03
CHRM2	-2.84	0.03	25.23	5.09E-07	1.04E-05
EPHA3	-2.79	-0.98	23.69	1.13E-06	2.08E-05
MRV11	-2.78	2.08	63.57	1.54E-15	2.02E-13
MESP2	-2.78	-0.95	28.22	1.08E-07	2.72E-06
TRIM54	-2.77	0.45	10.86	9.82E-04	6.09E-03
HAPLN4	-2.75	-0.12	45.54	1.50E-11	9.13E-10
KCNJ8	-2.74	0.22	37.87	7.55E-10	3.36E-08
TPSD1	-2.71	2.19	115.30	6.78E-27	4.15E-24
NDP	-2.71	-1.79	15.17	9.84E-05	9.25E-04
SCUBE1	-2.70	1.31	58.76	1.78E-14	1.93E-12
DUSP27	-2.69	-0.93	8.31	3.95E-03	1.83E-02
CILP	-2.68	-0.82	21.03	4.52E-06	6.91E-05
MYOT	-2.67	1.65	8.37	3.81E-03	1.78E-02

ASB10	-2.66	-0.18	12.31	4.49E-04	3.27E-03
TAGLN	-2.64	6.14	74.30	6.71E-18	1.22E-15
PYGM	-2.62	3.69	9.07	2.60E-03	1.31E-02
NRAP	-2.61	2.30	8.20	4.20E-03	1.92E-02
HFE2	-2.57	1.23	8.39	3.78E-03	1.77E-02
MYRIP	-2.56	-0.72	23.16	1.49E-06	2.65E-05
PERM1	-2.55	0.62	8.38	3.80E-03	1.78E-02
JPH2	-2.54	2.79	40.96	1.55E-10	7.87E-09
KCNF1	-2.54	-1.49	11.82	5.85E-04	4.04E-03
CNN1	-2.53	5.05	63.53	1.58E-15	2.05E-13
CPA3	-2.52	1.72	60.57	7.09E-15	8.44E-13
KCNC4	-2.51	1.01	27.51	1.56E-07	3.78E-06
TFF2	-2.49	10.85	225.41	5.98E-51	1.52E-47
SGCG	-2.47	0.51	14.30	1.56E-04	1.36E-03
NPTX2	-2.47	-0.02	35.03	3.25E-09	1.25E-07
SMPX	-2.46	2.07	8.95	2.77E-03	1.38E-02
NACAD	-2.44	-0.92	25.35	4.78E-07	9.82E-06
LRRC4B	-2.44	-0.63	32.44	1.23E-08	4.03E-07
IRX4	-2.43	-0.76	27.18	1.85E-07	4.37E-06
KRT76	-2.43	4.12	36.21	1.77E-09	7.15E-08
TCAP	-2.43	4.25	7.30	6.90E-03	2.84E-02
PITX2	-2.42	-0.96	11.13	8.49E-04	5.48E-03
AOC3	-2.41	2.34	74.46	6.19E-18	1.14E-15
MYLPF	-2.41	4.47	9.68	1.86E-03	1.01E-02
BCHE	-2.40	3.02	98.69	2.95E-23	1.05E-20
GUCY1A3	-2.40	-0.14	32.70	1.08E-08	3.57E-07
PLIN1	-2.38	0.75	20.51	5.94E-06	8.78E-05
GABRA4	-2.38	-1.62	11.42	7.26E-04	4.83E-03
NKX3-1	-2.38	4.36	122.30	1.99E-28	1.32E-25
RASL10B	-2.37	-0.57	18.57	1.64E-05	2.08E-04
DMRTA1	-2.36	-0.93	19.21	1.17E-05	1.57E-04
LMOD1	-2.36	2.56	62.82	2.27E-15	2.87E-13
RGS4	-2.36	1.42	41.17	1.39E-10	7.13E-09
SPARCL1	-2.34	5.71	94.08	3.03E-22	9.85E-20
MYH11	-2.34	5.71	50.02	1.52E-12	1.14E-10
KBTBD13	-2.34	-1.04	9.83	1.72E-03	9.44E-03
MYOZ3	-2.33	1.45	11.84	5.80E-04	4.01E-03
FITM1	-2.32	0.22	6.09	1.36E-02	4.83E-02
GUCY1B3	-2.32	-0.34	26.66	2.42E-07	5.54E-06
SUSD5	-2.31	0.46	26.49	2.64E-07	5.97E-06
MYL9	-2.30	5.56	79.72	4.31E-19	9.68E-17
EDNRB	-2.29	1.08	36.72	1.37E-09	5.76E-08
ART1	-2.29	0.60	8.24	4.11E-03	1.89E-02

LMAN1L	-2.27	4.40	105.26	1.07E-24	4.42E-22
C14orf180	-2.27	-0.79	19.42	1.05E-05	1.43E-04
SP5	-2.26	-1.62	12.10	5.04E-04	3.56E-03
FABP3	-2.25	2.03	14.73	1.24E-04	1.12E-03
COL6A6	-2.25	-1.45	7.68	5.58E-03	2.40E-02
RASL12	-2.24	1.67	33.09	8.81E-09	2.98E-07
SLC38A5	-2.21	0.75	61.49	4.45E-15	5.44E-13
VSTM4	-2.21	-0.86	19.91	8.11E-06	1.15E-04
CA14	-2.20	-1.15	6.39	1.14E-02	4.22E-02
SYPL2	-2.19	0.76	6.34	1.18E-02	4.33E-02
CMA1	-2.19	1.44	51.80	6.15E-13	4.95E-11
GREM2	-2.19	1.13	51.22	8.24E-13	6.49E-11
FBXL22	-2.18	0.84	55.64	8.72E-14	8.32E-12
WNT2B	-2.17	-0.58	17.70	2.58E-05	3.07E-04
ACTC1	-2.16	3.73	18.79	1.46E-05	1.89E-04
TESC	-2.16	2.14	97.99	4.21E-23	1.46E-20
SLC46A2	-2.16	2.42	42.77	6.14E-11	3.37E-09
MCAM	-2.15	2.75	72.80	1.43E-17	2.58E-15
LIPF	-2.15	12.12	36.06	1.92E-09	7.68E-08
MYBPC1	-2.13	2.12	6.13	1.33E-02	4.75E-02
SGCA	-2.13	0.69	17.61	2.71E-05	3.20E-04
C1orf95	-2.12	-0.86	16.32	5.35E-05	5.59E-04
KCNA2	-2.10	-0.62	17.77	2.49E-05	2.97E-04
KCNK3	-2.09	1.84	41.87	9.74E-11	5.10E-09
LRRN1	-2.09	-1.33	11.11	8.60E-04	5.52E-03
RETN	-2.08	0.54	22.76	1.84E-06	3.18E-05
AADAT	-2.08	-1.44	11.13	8.49E-04	5.48E-03
THRSP	-2.07	3.48	72.16	1.98E-17	3.44E-15
PTH1R	-2.06	-0.53	14.68	1.28E-04	1.15E-03
LRRN2	-2.06	-0.66	28.55	9.15E-08	2.33E-06
FAM26E	-2.05	-0.21	24.31	8.22E-07	1.58E-05
WSCD2	-2.05	-0.28	13.99	1.84E-04	1.56E-03
CFD	-2.04	3.81	31.81	1.70E-08	5.34E-07
STARD6	-2.04	-1.71	7.78	5.29E-03	2.30E-02
MB	-2.03	4.40	7.25	7.08E-03	2.90E-02
NMRK2	-2.03	-0.44	11.14	8.44E-04	5.45E-03
SNAP91	-2.03	-1.18	10.91	9.57E-04	5.98E-03
LRRN4CL	-2.03	0.41	21.50	3.54E-06	5.58E-05
OPTC	-2.02	-0.72	13.08	2.98E-04	2.32E-03
EFHD1	-2.02	-0.10	30.44	3.45E-08	9.87E-07
C1QTNF2	-2.01	-0.38	29.86	4.63E-08	1.29E-06
GREM1	-2.01	-0.77	15.77	7.16E-05	7.16E-04
ARMCX6	-2.00	-0.22	20.93	4.78E-06	7.26E-05

EGF	-2.00	2.26	53.47	2.62E-13	2.33E-11
B4GALNT2	-2.00	0.63	20.32	6.57E-06	9.51E-05
TNNI2	-2.00	4.05	9.55	2.00E-03	1.06E-02
SLITRK5	-2.00	-1.53	10.10	1.48E-03	8.44E-03
SRL	-2.00	3.05	10.16	1.43E-03	8.23E-03
S1PR3	-1.99	1.55	28.16	1.12E-07	2.79E-06
SHISA9	-1.99	-1.23	7.11	7.65E-03	3.07E-02
KLHL30	-1.99	-0.84	9.41	2.15E-03	1.13E-02
TACR3	-1.99	-1.39	6.81	9.07E-03	3.51E-02
PGM5	-1.99	2.73	48.27	3.71E-12	2.53E-10
CA3	-1.98	4.92	29.36	6.01E-08	1.62E-06
TWIST2	-1.98	0.46	33.06	8.96E-09	3.02E-07
MUSTN1	-1.98	2.16	47.13	6.63E-12	4.35E-10
GPR153	-1.96	2.08	76.10	2.70E-18	5.35E-16
TFAP2E	-1.95	-1.06	10.89	9.65E-04	6.01E-03
DES	-1.95	6.13	26.44	2.72E-07	6.10E-06
HRC	-1.93	2.04	9.38	2.19E-03	1.14E-02
PYCR1	-1.93	1.73	43.33	4.63E-11	2.61E-09
LAMA2	-1.91	1.55	40.90	1.60E-10	8.07E-09
EMID1	-1.91	-1.33	10.22	1.39E-03	8.02E-03
SLC7A10	-1.90	-1.70	7.24	7.13E-03	2.91E-02
SLC43A1	-1.90	-0.43	15.30	9.15E-05	8.72E-04
LRRC75B	-1.89	0.57	46.22	1.05E-11	6.71E-10
P2RX1	-1.88	-1.64	8.09	4.45E-03	2.01E-02
SYNPO2	-1.88	4.01	57.89	2.77E-14	2.96E-12
SAPCD2	-1.88	-1.33	11.11	8.60E-04	5.52E-03
NRN1	-1.88	-0.96	18.93	1.36E-05	1.78E-04
LOXL1	-1.86	2.36	66.18	4.12E-16	5.83E-14
DACT3	-1.86	0.83	45.83	1.29E-11	8.03E-10
ITGA8	-1.85	1.96	31.57	1.92E-08	5.92E-07
SNCAIP	-1.85	-0.68	13.06	3.02E-04	2.34E-03
DAAM2	-1.85	-0.28	26.65	2.44E-07	5.57E-06
NDRG4	-1.84	1.53	45.94	1.22E-11	7.62E-10
ADIPOQ	-1.84	2.34	24.28	8.34E-07	1.59E-05
LGI4	-1.83	0.55	29.87	4.62E-08	1.29E-06
TMEM100	-1.83	0.13	21.62	3.33E-06	5.31E-05
RBP7	-1.83	-1.13	11.89	5.66E-04	3.93E-03
ROR2	-1.83	-0.01	21.92	2.84E-06	4.65E-05
ADCY5	-1.83	1.51	33.55	6.93E-09	2.42E-07
LYG1	-1.82	4.22	23.21	1.45E-06	2.59E-05
GJC1	-1.82	-1.01	13.39	2.54E-04	2.04E-03
ACSL6	-1.82	-1.36	11.85	5.78E-04	4.00E-03
SULT1C2	-1.82	2.85	90.05	2.32E-21	7.09E-19

CASQ2	-1.82	0.64	34.45	4.38E-09	1.61E-07
MYOC	-1.82	0.62	32.20	1.39E-08	4.47E-07
CGREF1	-1.82	3.67	118.87	1.12E-27	7.13E-25
BPIFB2	-1.81	3.06	10.68	1.08E-03	6.58E-03
KCNG4	-1.81	-0.87	7.17	7.42E-03	3.00E-02
FAM13C	-1.81	0.01	24.76	6.49E-07	1.29E-05
FOXF2	-1.80	-0.37	14.24	1.61E-04	1.39E-03
MRGPRF	-1.80	1.15	35.97	2.01E-09	8.01E-08
SEC16B	-1.80	0.03	17.50	2.88E-05	3.35E-04
SRPX	-1.79	-0.37	14.57	1.35E-04	1.20E-03
MPPED2	-1.79	0.07	33.36	7.66E-09	2.63E-07
DLK1	-1.78	-1.20	8.25	4.08E-03	1.88E-02
LY6H	-1.78	-1.50	6.05	1.39E-02	4.92E-02
SMOC2	-1.78	3.02	102.27	4.84E-24	1.80E-21
CLMP	-1.77	0.26	16.27	5.48E-05	5.71E-04
ADORA1	-1.77	2.23	65.91	4.73E-16	6.63E-14
SOD3	-1.76	4.28	124.67	6.01E-29	4.18E-26
LHFP	-1.76	2.06	68.92	1.02E-16	1.60E-14
FFAR2	-1.76	0.62	29.24	6.41E-08	1.70E-06
CRISPLD1	-1.75	-0.88	13.82	2.01E-04	1.68E-03
DACT1	-1.75	-0.52	11.54	6.79E-04	4.58E-03
PAX1	-1.75	2.92	28.86	7.80E-08	2.02E-06
FGF7	-1.75	-0.01	14.60	1.33E-04	1.19E-03
WNT6	-1.74	-0.87	11.64	6.45E-04	4.40E-03
SULT1C3	-1.73	6.96	175.91	3.78E-40	7.22E-37
SMYD1	-1.73	1.34	10.14	1.45E-03	8.31E-03
RIPPLY1	-1.72	-1.24	11.23	8.03E-04	5.24E-03
HOXB5	-1.71	0.37	31.40	2.10E-08	6.37E-07
SLC2A4	-1.71	3.11	32.93	9.57E-09	3.21E-07
TBXA2R	-1.71	-1.07	8.03	4.59E-03	2.06E-02
INMT-	-1.70	3.15	21.79	3.04E-06	4.93E-05
FAM188B					
FAM64A	-1.69	-0.27	11.30	7.76E-04	5.10E-03
PGBD5	-1.69	-0.41	18.77	1.48E-05	1.90E-04
POSTN	-1.69	2.85	29.83	4.72E-08	1.31E-06
B3GNT6	-1.68	-0.24	15.78	7.11E-05	7.11E-04
SLC26A7	-1.68	-0.43	10.91	9.59E-04	5.98E-03
MRAP	-1.67	-0.26	15.08	1.03E-04	9.63E-04
TNNT1	-1.67	0.84	8.08	4.47E-03	2.02E-02
CCL11	-1.67	0.08	26.73	2.34E-07	5.36E-06
MEGF10	-1.67	-1.68	7.54	6.05E-03	2.55E-02
AMHR2	-1.67	-1.15	11.44	7.19E-04	4.80E-03
PLA1A	-1.67	-0.33	16.23	5.60E-05	5.81E-04

SFRP4	-1.67	0.08	17.38	3.06E-05	3.52E-04
HRASLS	-1.67	-0.85	10.76	1.04E-03	6.36E-03
OGN	-1.66	3.60	57.59	3.22E-14	3.37E-12
UNC45B	-1.66	0.19	6.51	1.07E-02	4.03E-02
SOX10	-1.66	0.95	22.33	2.30E-06	3.85E-05
TMEM211	-1.66	1.48	53.07	3.22E-13	2.77E-11
FBXO27	-1.66	1.03	50.19	1.39E-12	1.06E-10
ART3	-1.65	1.53	30.49	3.36E-08	9.67E-07
MYCT1	-1.65	-0.64	14.57	1.35E-04	1.20E-03
NXPE2	-1.65	-0.83	11.51	6.91E-04	4.65E-03
EBF2	-1.64	-1.21	11.42	7.28E-04	4.84E-03
CACNB2	-1.64	0.62	31.34	2.17E-08	6.56E-07
SCARA3	-1.63	4.44	94.94	1.96E-22	6.51E-20
RECK	-1.63	1.48	37.07	1.14E-09	4.87E-08
IGF1	-1.63	1.66	36.47	1.55E-09	6.42E-08
SLIT3	-1.63	0.66	29.89	4.57E-08	1.28E-06
DOCK3	-1.62	-1.03	12.43	4.22E-04	3.11E-03
ARNTL	-1.62	3.42	88.44	5.24E-21	1.51E-18
AASS	-1.62	2.43	63.62	1.51E-15	1.99E-13
TWIST1	-1.62	-0.12	17.06	3.63E-05	4.06E-04
KCNB1	-1.62	0.53	34.49	4.28E-09	1.58E-07
MFAP2	-1.61	0.33	26.47	2.68E-07	6.05E-06
ALDH1A2	-1.61	0.75	23.84	1.04E-06	1.94E-05
CADM3	-1.61	0.32	23.84	1.05E-06	1.95E-05
RARRES2	-1.61	2.29	42.08	8.75E-11	4.65E-09
CNGA2	-1.61	-0.86	12.47	4.13E-04	3.05E-03
HSPB2	-1.61	-0.32	10.82	1.00E-03	6.21E-03
CD248	-1.61	1.74	49.77	1.72E-12	1.27E-10
FBLN7	-1.60	0.85	44.80	2.18E-11	1.30E-09
ISLR	-1.60	2.33	83.65	5.90E-20	1.48E-17
CELF5	-1.59	-1.31	8.01	4.64E-03	2.08E-02
BVES	-1.59	-0.37	8.24	4.09E-03	1.88E-02
APOL6	-1.59	-0.75	9.83	1.72E-03	9.44E-03
IGFBP6	-1.59	1.67	22.52	2.08E-06	3.53E-05
MYOM1	-1.59	2.89	10.58	1.15E-03	6.88E-03
SLC16A9	-1.58	1.12	21.24	4.06E-06	6.28E-05
TMEM255A	-1.58	-1.03	10.21	1.40E-03	8.05E-03
LIMS2	-1.58	1.46	40.90	1.60E-10	8.07E-09
DMBT1	-1.58	11.72	45.83	1.29E-11	8.03E-10
MMP17	-1.57	-1.19	6.93	8.47E-03	3.33E-02
PPP1R14A	-1.57	0.81	24.09	9.21E-07	1.74E-05
PRDM6	-1.57	-0.83	11.05	8.87E-04	5.65E-03
HSPB7	-1.57	2.49	16.66	4.48E-05	4.81E-04

VCAN	-1.57	1.29	39.50	3.28E-10	1.57E-08
THEMIS	-1.57	-0.73	13.43	2.48E-04	2.00E-03
COL5A3	-1.57	-0.47	13.33	2.61E-04	2.08E-03
ENO3	-1.57	4.24	9.52	2.03E-03	1.07E-02
GFRA4	-1.56	-0.93	9.78	1.77E-03	9.66E-03
CSPG4	-1.56	1.50	44.46	2.60E-11	1.53E-09
NDN	-1.55	1.10	28.56	9.09E-08	2.32E-06
TSPAN18	-1.55	0.27	19.71	9.03E-06	1.26E-04
CNRIP1	-1.54	-0.44	10.99	9.16E-04	5.78E-03
NMU	-1.54	3.15	19.47	1.02E-05	1.40E-04
THBS4	-1.54	0.63	18.15	2.04E-05	2.51E-04
LOX	-1.54	2.18	65.55	5.67E-16	7.88E-14
RHOJ	-1.54	1.86	53.03	3.28E-13	2.80E-11
GFAP	-1.53	-1.21	8.92	2.82E-03	1.40E-02
GAS1	-1.53	1.72	56.48	5.69E-14	5.65E-12
HOXC5	-1.53	0.02	16.73	4.31E-05	4.67E-04
ZNF521	-1.52	2.11	31.69	1.81E-08	5.61E-07
SCX	-1.52	-0.41	16.21	5.66E-05	5.86E-04
C1orf115	-1.52	1.50	37.54	8.93E-10	3.93E-08
WASF1	-1.52	-1.28	9.80	1.74E-03	9.56E-03
ABCC9	-1.51	1.15	15.32	9.05E-05	8.63E-04
AZGP1	-1.51	-0.40	14.20	1.65E-04	1.41E-03
PRDM8	-1.51	0.87	25.43	4.60E-07	9.54E-06
FUT10	-1.50	0.87	37.14	1.10E-09	4.70E-08
MAB21L2	-1.50	0.08	16.10	6.01E-05	6.19E-04
TMEM204	-1.50	0.66	25.36	4.77E-07	9.82E-06
LRRC4C	-1.49	-0.85	7.52	6.09E-03	2.56E-02
RGS5	-1.49	0.95	31.15	2.39E-08	7.15E-07
SLC6A2	-1.49	-0.86	8.13	4.37E-03	1.98E-02
DGKG	-1.49	-0.41	17.86	2.38E-05	2.87E-04
EDN3	-1.49	-1.00	9.11	2.54E-03	1.28E-02
TMEM132C	-1.49	0.06	15.18	9.77E-05	9.20E-04
SLC2A13	-1.48	0.41	13.52	2.36E-04	1.92E-03
AMT	-1.48	1.43	43.92	3.42E-11	1.98E-09
GCGR	-1.48	0.34	12.20	4.79E-04	3.43E-03
SCN7A	-1.48	0.29	21.97	2.77E-06	4.55E-05
PPM1E	-1.47	-1.08	6.50	1.08E-02	4.04E-02
ESM1	-1.47	-0.71	10.30	1.33E-03	7.75E-03
PTGIS	-1.47	1.88	26.52	2.61E-07	5.93E-06
DPT	-1.46	4.28	74.62	5.69E-18	1.07E-15
PDGFRA	-1.46	2.61	49.84	1.67E-12	1.24E-10
GP2	-1.46	9.49	88.12	6.16E-21	1.74E-18
DLGAP1	-1.46	-0.82	12.89	3.31E-04	2.53E-03

CXCL12	-1.45	3.26	56.67	5.14E-14	5.17E-12
MPZ	-1.45	1.79	41.92	9.49E-11	4.98E-09
GALNT16	-1.44	0.81	24.86	6.15E-07	1.23E-05
CXCL6	-1.44	3.82	28.70	8.47E-08	2.18E-06
ANGPT1	-1.44	1.85	28.29	1.04E-07	2.63E-06
WBSCR17	-1.44	-1.14	7.99	4.69E-03	2.10E-02
ACACB	-1.44	3.01	40.01	2.53E-10	1.24E-08
CD34	-1.43	3.62	58.09	2.50E-14	2.69E-12
NID1	-1.43	2.54	36.47	1.55E-09	6.42E-08
KCNK13	-1.43	-1.17	7.32	6.83E-03	2.81E-02
EPHA5	-1.43	-0.12	7.03	8.03E-03	3.19E-02
PHEX	-1.42	1.11	31.95	1.58E-08	5.00E-07
CPED1	-1.42	1.45	34.69	3.87E-09	1.45E-07
DCHS1	-1.42	0.35	17.34	3.12E-05	3.58E-04
SMTN	-1.41	3.85	66.71	3.15E-16	4.54E-14
SPON1	-1.41	2.42	33.27	8.01E-09	2.74E-07
FSTL1	-1.41	3.83	68.16	1.51E-16	2.26E-14
TUSC5	-1.41	0.39	15.85	6.85E-05	6.91E-04
RGS7	-1.41	-0.58	8.60	3.37E-03	1.61E-02
SFRP5	-1.41	-0.46	11.21	8.13E-04	5.29E-03
CERCAM	-1.41	1.74	49.02	2.54E-12	1.84E-10
CD300LG	-1.41	0.75	25.48	4.46E-07	9.28E-06
PDE7B	-1.41	-0.12	11.92	5.56E-04	3.87E-03
FIBIN	-1.40	-0.81	11.20	8.17E-04	5.31E-03
SYTL3	-1.40	2.75	53.89	2.12E-13	1.91E-11
OLFML1	-1.40	-0.05	13.79	2.05E-04	1.71E-03
ABAT	-1.40	0.89	32.08	1.48E-08	4.72E-07
TROAP	-1.40	-0.78	9.92	1.63E-03	9.11E-03
SLC2A5	-1.39	1.92	38.48	5.54E-10	2.53E-08
CCKAR	-1.39	5.87	39.11	4.01E-10	1.90E-08
CRABP1	-1.39	0.80	19.64	9.36E-06	1.30E-04
DDR2	-1.39	2.61	36.68	1.39E-09	5.84E-08
ZNF449	-1.38	-0.22	12.29	4.55E-04	3.30E-03
FAM109B	-1.38	-0.27	15.06	1.04E-04	9.72E-04
CTHRC1	-1.38	0.45	16.84	4.07E-05	4.44E-04
FKBP11	-1.38	2.26	26.02	3.39E-07	7.35E-06
COL4A2	-1.38	3.42	44.09	3.14E-11	1.83E-09
C3orf18	-1.38	0.30	11.19	8.21E-04	5.33E-03
FXYD1	-1.38	2.35	28.19	1.10E-07	2.76E-06
KRT32	-1.38	3.53	12.09	5.08E-04	3.58E-03
TSPAN11	-1.38	0.90	20.57	5.75E-06	8.55E-05
TCF21	-1.38	-0.80	6.81	9.08E-03	3.52E-02
ARMCX2	-1.37	1.57	32.20	1.39E-08	4.47E-07

AQP2	-1.37	1.14	26.05	3.33E-07	7.25E-06
METTL24	-1.37	-0.11	11.08	8.75E-04	5.59E-03
LIX1L	-1.37	1.18	27.49	1.58E-07	3.81E-06
CD163	-1.36	-0.04	10.15	1.44E-03	8.26E-03
ALOX15B	-1.36	-0.11	12.55	3.96E-04	2.94E-03
ABCG4	-1.36	-0.71	10.57	1.15E-03	6.88E-03
NPHS2	-1.36	-0.11	17.80	2.46E-05	2.94E-04
HOXC4	-1.35	0.50	14.61	1.32E-04	1.18E-03
KCNN4	-1.35	3.83	102.71	3.88E-24	1.48E-21
SCARA5	-1.35	3.06	50.05	1.50E-12	1.13E-10
CHRD1	-1.35	-0.23	11.02	8.99E-04	5.70E-03
FAM110B	-1.35	-0.37	13.04	3.04E-04	2.35E-03
PCNXL2	-1.34	-0.96	6.71	9.56E-03	3.67E-02
TRPV6	-1.34	1.38	34.28	4.76E-09	1.73E-07
PPP1R3C	-1.34	3.57	107.93	2.78E-25	1.36E-22
ECM2	-1.34	1.09	27.87	1.30E-07	3.20E-06
ELN	-1.34	2.87	25.69	4.01E-07	8.51E-06
ENPP2	-1.34	1.43	25.95	3.50E-07	7.58E-06
GYPC	-1.33	0.99	28.97	7.37E-08	1.92E-06
SH3BGR	-1.33	1.07	18.39	1.80E-05	2.25E-04
APOD	-1.33	3.51	57.37	3.61E-14	3.73E-12
BHLHA15	-1.33	3.21	28.17	1.11E-07	2.77E-06
DMPK	-1.33	4.03	48.52	3.27E-12	2.29E-10
PTGFR	-1.33	2.67	56.77	4.89E-14	4.95E-12
LRRC39	-1.33	-0.31	8.57	3.41E-03	1.63E-02
ADAMTSL1	-1.32	2.35	55.04	1.18E-13	1.10E-11
TPM2	-1.32	6.03	49.88	1.63E-12	1.22E-10
FAM198A	-1.31	1.85	32.39	1.26E-08	4.11E-07
KLK3	-1.31	-0.48	8.88	2.88E-03	1.42E-02
CLDN24	-1.31	3.28	50.72	1.07E-12	8.31E-11
WFIKKN2	-1.31	-0.88	6.68	9.73E-03	3.71E-02
FZD2	-1.31	2.11	41.82	9.99E-11	5.19E-09
TGFB111	-1.31	3.00	62.19	3.11E-15	3.87E-13
FBLN5	-1.30	1.92	27.76	1.37E-07	3.36E-06
HES2	-1.30	-0.12	17.70	2.58E-05	3.07E-04
NTRK2	-1.30	2.39	38.77	4.76E-10	2.23E-08
FSTL4	-1.30	1.65	35.58	2.45E-09	9.64E-08
PADI2	-1.30	4.23	85.83	1.96E-20	5.34E-18
ZCCHC5	-1.30	-0.55	10.69	1.07E-03	6.55E-03
C14orf37	-1.30	-0.10	12.04	5.22E-04	3.67E-03
LOXL2	-1.30	1.53	24.64	6.89E-07	1.35E-05
LGI3	-1.29	1.69	18.04	2.16E-05	2.63E-04
TUBB4A	-1.29	-0.20	11.06	8.81E-04	5.62E-03

PLP1	-1.29	0.23	8.96	2.76E-03	1.37E-02
FRAT1	-1.28	-0.86	6.10	1.35E-02	4.82E-02
COL4A1	-1.28	3.73	47.14	6.60E-12	4.35E-10
PRELP	-1.28	3.77	61.91	3.60E-15	4.44E-13
FGL2	-1.28	4.64	142.65	7.00E-33	6.69E-30
KLK5	-1.28	0.82	6.83	8.95E-03	3.48E-02
MFAP5	-1.27	2.04	47.64	5.13E-12	3.45E-10
LUM	-1.27	3.25	52.51	4.29E-13	3.62E-11
SEMA4G	-1.27	0.73	20.35	6.46E-06	9.41E-05
RARRES1	-1.27	1.32	12.36	4.38E-04	3.20E-03
IGLON5	-1.26	-1.31	8.14	4.33E-03	1.97E-02
PLIN4	-1.26	1.88	16.03	6.22E-05	6.37E-04
CX3CR1	-1.26	2.85	42.22	8.17E-11	4.40E-09
MUC5B	-1.26	11.07	72.24	1.90E-17	3.34E-15
ZCCHC24	-1.26	2.30	29.27	6.31E-08	1.68E-06
SHE	-1.26	-0.53	9.54	2.01E-03	1.07E-02
SGCE	-1.26	3.30	21.67	3.23E-06	5.18E-05
CLDN5	-1.26	0.19	13.22	2.77E-04	2.18E-03
GRIN3A	-1.26	-0.81	9.58	1.96E-03	1.05E-02
C10orf10	-1.25	6.45	81.92	1.42E-19	3.43E-17
RRAD	-1.25	0.15	13.56	2.30E-04	1.88E-03
COL5A1	-1.25	2.18	31.02	2.56E-08	7.61E-07
SLC36A2	-1.25	0.95	10.98	9.21E-04	5.80E-03
B3GNT9	-1.24	0.29	14.97	1.09E-04	1.01E-03
C1QTNF1	-1.24	2.61	40.05	2.48E-10	1.21E-08
CACNA1C	-1.24	0.50	10.82	1.00E-03	6.20E-03
UPB1	-1.24	2.56	27.05	1.98E-07	4.64E-06
SLC35G2	-1.23	1.17	25.89	3.62E-07	7.80E-06
SEL1L3	-1.23	4.53	75.72	3.27E-18	6.33E-16
PI15	-1.23	-0.66	9.71	1.84E-03	9.96E-03
PDGFB	-1.23	2.94	40.70	1.78E-10	8.90E-09
GPM6A	-1.23	0.76	21.74	3.13E-06	5.04E-05
CHRM1	-1.23	3.14	85.66	2.14E-20	5.72E-18
PCDHB4	-1.23	-0.65	9.54	2.01E-03	1.07E-02
HSPA12B	-1.23	-0.34	10.35	1.29E-03	7.59E-03
LMCD1	-1.22	0.88	9.42	2.15E-03	1.12E-02
HSPB6	-1.22	4.03	20.62	5.60E-06	8.35E-05
RAVER2	-1.22	0.85	24.02	9.55E-07	1.79E-05
SPON2	-1.22	2.49	41.06	1.47E-10	7.51E-09
ALDH1B1	-1.21	1.08	20.86	4.95E-06	7.50E-05
IFITM10	-1.21	1.06	18.95	1.34E-05	1.76E-04
GFRA2	-1.21	-0.31	11.69	6.28E-04	4.30E-03
SLC6A17	-1.21	0.03	10.21	1.39E-03	8.04E-03

CNTFR	-1.21	0.31	7.25	7.11E-03	2.90E-02
MATN4	-1.21	-0.24	10.99	9.14E-04	5.77E-03
EGFLAM	-1.21	-0.46	7.99	4.69E-03	2.09E-02
C1orf216	-1.21	0.24	15.95	6.50E-05	6.61E-04
CPXM2	-1.20	3.16	47.47	5.57E-12	3.69E-10
STEAP3	-1.20	2.40	39.25	3.72E-10	1.77E-08
STC1	-1.20	0.18	8.00	4.69E-03	2.09E-02
PDLIM3	-1.20	3.41	45.40	1.61E-11	9.72E-10
SIX3	-1.20	2.49	29.42	5.83E-08	1.58E-06
ARMCX1	-1.20	0.26	18.12	2.08E-05	2.55E-04
TNXB	-1.20	3.07	27.59	1.50E-07	3.64E-06
C2orf72	-1.20	2.01	38.40	5.77E-10	2.62E-08
DCN	-1.19	6.24	68.25	1.44E-16	2.18E-14
CSDC2	-1.19	2.32	28.03	1.19E-07	2.96E-06
PRRX1	-1.18	1.22	21.51	3.52E-06	5.56E-05
RGS7BP	-1.18	-0.73	8.30	3.96E-03	1.83E-02
ACER1	-1.18	3.33	15.96	6.46E-05	6.58E-04
GATA2	-1.17	-0.53	7.31	6.85E-03	2.82E-02
PRRX2	-1.17	2.35	43.42	4.42E-11	2.51E-09
CLDN2	-1.17	4.64	47.87	4.56E-12	3.10E-10
CHST1	-1.17	-0.18	7.91	4.91E-03	2.18E-02
ZNF423	-1.17	0.64	15.98	6.42E-05	6.54E-04
GAL3ST4	-1.16	0.68	9.82	1.73E-03	9.49E-03
EDNRA	-1.16	1.57	36.12	1.85E-09	7.48E-08
IGFBP4	-1.16	5.70	63.30	1.77E-15	2.26E-13
ATP1B2	-1.16	1.18	12.16	4.89E-04	3.49E-03
PLA2G2F	-1.16	3.21	12.85	3.38E-04	2.57E-03
RASGRP3	-1.16	0.58	12.24	4.69E-04	3.38E-03
PTGER3	-1.16	0.63	8.38	3.79E-03	1.77E-02
MFSD4	-1.16	4.94	42.03	8.98E-11	4.73E-09
SSC5D	-1.16	0.23	11.46	7.09E-04	4.75E-03
PCSK2	-1.16	-0.31	8.84	2.94E-03	1.45E-02
RASL11A	-1.16	0.80	12.40	4.29E-04	3.14E-03
OGDHL	-1.15	-0.60	9.64	1.90E-03	1.02E-02
SERPINB13	-1.15	0.18	8.40	3.75E-03	1.76E-02
ABCA8	-1.15	-0.30	6.80	9.13E-03	3.53E-02
FCRL2	-1.15	0.48	18.32	1.87E-05	2.33E-04
CLIP3	-1.15	0.81	15.26	9.36E-05	8.89E-04
KLK1	-1.15	1.07	16.26	5.52E-05	5.74E-04
PLEKHA4	-1.14	1.07	20.76	5.20E-06	7.81E-05
WNT5A	-1.14	3.57	39.94	2.62E-10	1.27E-08
GPC3	-1.14	3.08	53.28	2.89E-13	2.54E-11
SPEG	-1.14	1.33	13.08	2.99E-04	2.32E-03

RNF144A	-1.13	0.21	9.40	2.17E-03	1.13E-02
PFKM	-1.13	4.48	14.36	1.51E-04	1.32E-03
SVOPL	-1.13	1.23	9.67	1.87E-03	1.01E-02
HSPG2	-1.13	3.57	60.56	7.12E-15	8.44E-13
BPIFB1	-1.13	13.47	48.88	2.71E-12	1.96E-10
P2RX2	-1.12	1.05	17.83	2.42E-05	2.90E-04
MEF2C	-1.12	2.28	14.35	1.52E-04	1.33E-03
ACSBG1	-1.10	4.53	15.62	7.75E-05	7.61E-04
SEMA3A	-1.10	-0.28	9.25	2.35E-03	1.21E-02
C15orf59	-1.10	0.31	11.55	6.79E-04	4.58E-03
ZNF454	-1.10	-0.79	6.52	1.07E-02	4.02E-02
CACNA1G	-1.10	0.18	9.21	2.41E-03	1.23E-02
RCAN2	-1.09	1.39	10.39	1.27E-03	7.47E-03
PF4	-1.09	1.10	23.89	1.02E-06	1.89E-05
EBF1	-1.09	-0.24	8.46	3.63E-03	1.71E-02
C16orf74	-1.09	-0.28	6.90	8.62E-03	3.37E-02
SERPINF1	-1.09	5.56	50.37	1.27E-12	9.84E-11
COL15A1	-1.09	4.02	76.61	2.08E-18	4.19E-16
ETV1	-1.09	4.02	34.39	4.52E-09	1.66E-07
TMEM47	-1.09	1.08	18.27	1.92E-05	2.38E-04
EXOC3L4	-1.08	2.03	18.04	2.16E-05	2.63E-04
SLC19A3	-1.08	0.13	10.90	9.61E-04	6.00E-03
CERS4	-1.08	3.29	45.41	1.60E-11	9.71E-10
NTN1	-1.08	3.54	79.52	4.79E-19	1.04E-16
MUC15	-1.08	2.67	12.26	4.63E-04	3.35E-03
HHIP	-1.08	1.22	13.92	1.91E-04	1.61E-03
NGB	-1.08	0.12	8.37	3.82E-03	1.78E-02
PAQR6	-1.08	1.89	29.87	4.62E-08	1.29E-06
SLC6A15	-1.07	4.62	70.01	5.89E-17	9.68E-15
ARHGEF25	-1.07	1.24	16.62	4.57E-05	4.89E-04
KIF26A	-1.07	-0.70	6.87	8.79E-03	3.43E-02
GPB1	-1.07	-0.53	6.91	8.56E-03	3.36E-02
MFAP4	-1.06	3.60	51.80	6.16E-13	4.95E-11
FLNC	-1.06	2.59	9.15	2.49E-03	1.26E-02
ADRA2A	-1.06	2.28	23.29	1.39E-06	2.50E-05
ATP8A2	-1.06	0.47	8.66	3.25E-03	1.57E-02
PENK	-1.05	1.14	17.10	3.54E-05	3.98E-04
TMEM35	-1.05	1.88	24.72	6.64E-07	1.31E-05
RAB37	-1.05	0.35	13.64	2.22E-04	1.82E-03
GJB1	-1.05	2.79	37.42	9.54E-10	4.15E-08
ENHO	-1.05	1.49	17.02	3.70E-05	4.13E-04
MYOM3	-1.04	1.45	11.08	8.71E-04	5.58E-03
HTRA4	-1.04	0.37	10.97	9.24E-04	5.82E-03

HGF	-1.04	-0.22	9.78	1.76E-03	9.66E-03
PIK3C2G	-1.04	0.10	8.76	3.08E-03	1.50E-02
MAOB	-1.03	1.83	17.39	3.05E-05	3.51E-04
MCOLN2	-1.03	1.33	13.02	3.09E-04	2.38E-03
FAM124A	-1.03	0.22	8.01	4.66E-03	2.08E-02
RAMP2	-1.03	2.04	26.90	2.15E-07	4.97E-06
FGFR1	-1.03	4.13	51.52	7.08E-13	5.66E-11
POPDC2	-1.03	1.13	22.21	2.45E-06	4.09E-05
KLHL41	-1.02	2.15	6.37	1.16E-02	4.27E-02
AKNAD1	-1.02	-0.11	7.16	7.45E-03	3.01E-02
IGF2	-1.02	2.77	26.34	2.86E-07	6.35E-06
ZNF286B	-1.02	-0.31	6.15	1.32E-02	4.73E-02
SHC2	-1.02	-0.87	7.20	7.30E-03	2.97E-02
DPEP1	-1.02	1.16	19.90	8.15E-06	1.15E-04
FAM171A2	-1.01	2.00	15.87	6.79E-05	6.87E-04
COL3A1	-1.01	5.15	30.91	2.70E-08	7.91E-07
IL1RL1	-1.01	-0.36	7.64	5.70E-03	2.44E-02
PRKG1	-1.01	0.29	10.81	1.01E-03	6.23E-03
NYNRIN	-1.01	3.07	42.91	5.75E-11	3.17E-09
KCNIP3	-1.01	0.87	18.70	1.53E-05	1.96E-04
GRID2	-1.01	0.78	16.91	3.92E-05	4.31E-04
PDZRN3	-1.00	1.15	17.50	2.87E-05	3.35E-04
BPIFA3	-1.00	0.13	7.09	7.75E-03	3.11E-02
CCR2	-1.00	4.07	60.47	7.47E-15	8.78E-13
HSD11B1	-1.00	1.24	14.68	1.27E-04	1.15E-03
FBXL7	-1.00	0.39	9.22	2.39E-03	1.22E-02
SYNM	-0.99	3.26	18.07	2.13E-05	2.60E-04
CLEC14A	-0.99	0.95	12.11	5.00E-04	3.54E-03
CALML5	-0.99	9.32	9.34	2.24E-03	1.16E-02
ASGR1	-0.99	3.49	23.75	1.10E-06	2.02E-05
SCG2	-0.99	2.02	22.73	1.87E-06	3.22E-05
COPZ2	-0.99	3.79	56.51	5.59E-14	5.59E-12
ADCYAP1R1	-0.99	2.81	12.42	4.25E-04	3.12E-03
ITM2A	-0.99	0.87	10.07	1.51E-03	8.56E-03
SALL2	-0.99	1.07	15.45	8.47E-05	8.20E-04
RAPGEF3	-0.99	1.16	14.34	1.53E-04	1.34E-03
ASTN2	-0.98	2.58	18.11	2.08E-05	2.55E-04
ACCS	-0.98	2.23	26.76	2.30E-07	5.29E-06
TMEM59L	-0.98	0.24	11.09	8.68E-04	5.56E-03
RAB17	-0.98	4.41	77.83	1.13E-18	2.36E-16
TMCC2	-0.98	1.79	16.92	3.89E-05	4.30E-04
CPZ	-0.98	0.45	10.99	9.16E-04	5.78E-03
TRIM72	-0.98	1.34	6.98	8.25E-03	3.26E-02

KLHL38	-0.97	1.97	23.09	1.55E-06	2.73E-05
SSPN	-0.97	2.50	20.33	6.52E-06	9.46E-05
PTPRN2	-0.97	3.60	34.55	4.16E-09	1.54E-07
FAM89A	-0.97	1.57	11.24	8.01E-04	5.23E-03
DSG1	-0.97	5.19	10.81	1.01E-03	6.22E-03
ISM1	-0.97	1.67	24.86	6.16E-07	1.24E-05
ZEB1	-0.97	2.10	32.04	1.51E-08	4.82E-07
ZNF580	-0.96	1.03	19.51	1.00E-05	1.38E-04
CKB	-0.96	5.86	81.72	1.56E-19	3.74E-17
DMRTA2	-0.96	1.63	22.13	2.55E-06	4.23E-05
ARHGEF39	-0.96	-0.03	8.79	3.04E-03	1.48E-02
CREB3L4	-0.96	3.68	45.25	1.73E-11	1.04E-09
FBLN2	-0.96	2.71	21.94	2.82E-06	4.62E-05
EPHX2	-0.96	1.33	12.23	4.71E-04	3.39E-03
BFSP1	-0.95	1.12	18.52	1.68E-05	2.12E-04
MMRN1	-0.95	1.27	15.66	7.56E-05	7.49E-04
SLC41A3	-0.95	1.23	16.91	3.91E-05	4.31E-04
SLC47A1	-0.95	1.83	15.67	7.52E-05	7.45E-04
TMEM144	-0.95	0.18	10.18	1.42E-03	8.16E-03
ALDH1L2	-0.94	2.72	29.09	6.92E-08	1.83E-06
PHACTR1	-0.94	0.37	11.38	7.42E-04	4.91E-03
TMTC1	-0.94	2.08	14.49	1.41E-04	1.24E-03
EDAR	-0.94	0.66	9.46	2.10E-03	1.11E-02
KLHL23	-0.94	2.57	31.36	2.14E-08	6.49E-07
TRIM46	-0.94	2.23	22.33	2.30E-06	3.86E-05
BEX1	-0.94	2.21	14.69	1.26E-04	1.14E-03
EFS	-0.94	3.22	46.77	8.00E-12	5.18E-10
TMEM52	-0.94	0.50	7.42	6.45E-03	2.69E-02
AOC1	-0.94	5.89	80.12	3.53E-19	8.04E-17
DNASE1L2	-0.94	5.24	9.12	2.53E-03	1.28E-02
PKDCC	-0.93	1.89	16.09	6.05E-05	6.23E-04
CACNA1D	-0.93	0.70	10.66	1.09E-03	6.63E-03
CRISPLD2	-0.93	3.51	30.78	2.88E-08	8.38E-07
GNB4	-0.93	0.36	10.65	1.10E-03	6.66E-03
ITIH2	-0.93	3.22	15.83	6.94E-05	6.97E-04
PIK3IP1	-0.93	3.28	48.39	3.49E-12	2.39E-10
SCAND1	-0.93	5.24	34.91	3.45E-09	1.32E-07
COL6A3	-0.93	2.83	17.32	3.16E-05	3.62E-04
KCNJ18	-0.92	3.17	6.25	1.24E-02	4.51E-02
MRC2	-0.92	1.57	14.60	1.33E-04	1.19E-03
DIO2	-0.92	0.78	10.37	1.28E-03	7.55E-03
REC8	-0.92	-0.04	6.45	1.11E-02	4.12E-02
ANGPT2	-0.92	0.04	9.47	2.09E-03	1.10E-02

PI16	-0.92	2.49	27.23	1.81E-07	4.30E-06
MAN1C1	-0.92	3.97	48.43	3.43E-12	2.36E-10
INHA	-0.92	0.58	9.48	2.08E-03	1.10E-02
CAPNS2	-0.92	3.80	9.30	2.29E-03	1.18E-02
TMIGD1	-0.92	1.90	9.59	1.96E-03	1.05E-02
RCN3	-0.91	2.62	29.00	7.24E-08	1.90E-06
LRRC17	-0.91	1.56	17.51	2.85E-05	3.33E-04
HS3ST6	-0.91	3.19	30.08	4.14E-08	1.16E-06
GUCA1A	-0.91	0.11	8.86	2.91E-03	1.44E-02
KRTDAP	-0.91	8.97	12.10	5.05E-04	3.57E-03
TSTD1	-0.91	1.73	16.02	6.26E-05	6.40E-04
IGSF10	-0.91	0.32	7.06	7.89E-03	3.15E-02
ST6GAL1	-0.91	4.16	10.08	1.50E-03	8.52E-03
SNX31	-0.90	0.55	10.00	1.56E-03	8.82E-03
EPDR1	-0.90	3.18	8.03	4.59E-03	2.06E-02
NDUFA4L2	-0.90	4.65	8.50	3.55E-03	1.68E-02
GFPT2	-0.90	3.88	52.16	5.12E-13	4.25E-11
NICN1	-0.90	3.73	66.74	3.10E-16	4.51E-14
TGFB3	-0.90	3.05	30.52	3.30E-08	9.55E-07
BTN2A2	-0.90	0.88	10.25	1.37E-03	7.93E-03
FAM127B	-0.90	1.55	18.15	2.04E-05	2.51E-04
MFNG	-0.90	0.77	9.88	1.67E-03	9.27E-03
CLDN10	-0.90	5.25	44.20	2.96E-11	1.73E-09
GJB5	-0.90	2.01	12.66	3.74E-04	2.80E-03
ST8SIA1	-0.90	1.71	10.38	1.28E-03	7.51E-03
CXCL13	-0.90	2.30	16.51	4.84E-05	5.13E-04
SLC40A1	-0.89	3.98	54.64	1.45E-13	1.34E-11
XRCC2	-0.89	0.80	11.29	7.81E-04	5.12E-03
C1QTNF7	-0.89	0.10	6.49	1.09E-02	4.06E-02
NTRK3	-0.89	-0.01	7.08	7.80E-03	3.13E-02
LGALS7B	-0.89	6.98	10.94	9.40E-04	5.89E-03
PRICKLE1	-0.89	-0.13	7.27	6.99E-03	2.87E-02
ATP13A5	-0.89	5.74	104.54	1.54E-24	6.19E-22
HSD17B14	-0.88	3.02	19.32	1.10E-05	1.49E-04
BTBD16	-0.88	0.65	7.13	7.57E-03	3.05E-02
VEGFC	-0.88	1.36	8.43	3.70E-03	1.74E-02
PDGFRB	-0.88	1.93	17.59	2.74E-05	3.23E-04
PSTPIP1	-0.88	2.68	11.45	7.14E-04	4.77E-03
PLA2G2C	-0.88	1.11	12.50	4.08E-04	3.02E-03
SYNGR1	-0.88	4.53	47.56	5.32E-12	3.54E-10
EA2F	-0.88	2.02	15.91	6.63E-05	6.72E-04
CD164L2	-0.88	1.05	14.83	1.18E-04	1.07E-03
PXMP2	-0.88	4.36	39.75	2.88E-10	1.39E-08

ASPG	-0.88	2.68	18.04	2.17E-05	2.63E-04
RAI2	-0.88	1.01	13.69	2.16E-04	1.78E-03
CCDC69	-0.88	1.64	16.13	5.92E-05	6.11E-04
NRTN	-0.87	2.81	18.81	1.44E-05	1.87E-04
DNM1	-0.87	0.90	7.72	5.46E-03	2.36E-02
COL6A2	-0.87	3.83	45.61	1.44E-11	8.83E-10
ZFPM1	-0.87	2.04	18.86	1.40E-05	1.83E-04
GP1BB	-0.86	1.41	7.87	5.02E-03	2.21E-02
C10orf99	-0.86	4.96	10.54	1.17E-03	6.97E-03
FBXO2	-0.86	3.14	22.72	1.87E-06	3.23E-05
MAMDC2	-0.86	2.85	23.41	1.31E-06	2.36E-05
HRNR	-0.86	5.67	8.24	4.09E-03	1.88E-02
NUDT22	-0.86	2.92	32.56	1.16E-08	3.81E-07
H1FO	-0.85	5.91	79.27	5.43E-19	1.17E-16
PLVAP	-0.85	2.90	26.57	2.54E-07	5.78E-06
C5orf46	-0.84	6.20	11.22	8.11E-04	5.28E-03
NEXN	-0.84	1.71	16.70	4.37E-05	4.72E-04
TSPAN7	-0.84	4.43	45.76	1.34E-11	8.29E-10
SARDH	-0.84	2.85	27.87	1.30E-07	3.20E-06
LYVE1	-0.84	1.03	12.64	3.78E-04	2.83E-03
PEAR1	-0.84	0.34	7.77	5.30E-03	2.30E-02
RELN	-0.84	0.92	7.80	5.23E-03	2.28E-02
SHISA2	-0.83	1.93	15.02	1.07E-04	9.90E-04
GGT2	-0.83	4.53	33.62	6.69E-09	2.34E-07
VSIG8	-0.83	4.51	8.37	3.81E-03	1.78E-02
LIPK	-0.83	4.43	9.02	2.68E-03	1.34E-02
KCNS1	-0.83	2.33	22.30	2.33E-06	3.90E-05
COX7A1	-0.83	2.11	8.83	2.96E-03	1.46E-02
BPIFA1	-0.83	16.39	23.60	1.19E-06	2.17E-05
SLC6A19	-0.83	3.19	8.05	4.56E-03	2.05E-02
TBATA	-0.83	3.56	9.20	2.42E-03	1.23E-02
MT4	-0.83	6.42	10.14	1.45E-03	8.30E-03
GDPD3	-0.82	3.43	7.72	5.48E-03	2.36E-02
F13A1	-0.82	1.41	6.74	9.45E-03	3.63E-02
GRIN2D	-0.82	1.81	18.25	1.94E-05	2.41E-04
TESK2	-0.82	1.40	7.65	5.68E-03	2.44E-02
MMRN2	-0.82	0.77	9.28	2.32E-03	1.19E-02
LAMA4	-0.82	2.90	8.06	4.53E-03	2.04E-02
WDR5B	-0.82	1.44	17.78	2.47E-05	2.96E-04
C4B	-0.82	3.69	21.24	4.06E-06	6.28E-05
TGM3	-0.82	9.14	6.61	1.01E-02	3.84E-02
CXCL14	-0.82	1.83	13.61	2.25E-04	1.84E-03
ARMCX3	-0.82	3.37	30.12	4.06E-08	1.15E-06

STMN2	-0.81	0.29	6.06	1.38E-02	4.90E-02
HILPDA	-0.81	2.17	18.42	1.77E-05	2.22E-04
SLPI	-0.81	9.65	7.09	7.73E-03	3.10E-02
ZG16B	-0.81	4.81	6.90	8.61E-03	3.37E-02
EHD3	-0.81	1.89	15.49	8.31E-05	8.06E-04
ITIH5	-0.81	1.90	9.07	2.59E-03	1.31E-02
LCE3B	-0.81	7.55	7.21	7.26E-03	2.95E-02
PDE8B	-0.81	0.90	7.44	6.39E-03	2.66E-02
DMTN	-0.81	2.88	28.11	1.15E-07	2.85E-06
NOTUM	-0.81	0.08	6.30	1.21E-02	4.42E-02
WIPF3	-0.81	0.40	6.36	1.17E-02	4.29E-02
ILDR2	-0.81	0.06	6.70	9.66E-03	3.70E-02
GPM6B	-0.80	2.93	26.44	2.71E-07	6.10E-06
DTX4	-0.80	4.67	42.08	8.75E-11	4.65E-09
ME3	-0.80	2.93	24.82	6.30E-07	1.26E-05
LAMC3	-0.80	0.44	6.75	9.36E-03	3.61E-02
TULP2	-0.79	0.27	8.19	4.21E-03	1.93E-02
SERPINB12	-0.79	8.85	7.18	7.36E-03	2.98E-02
NPR2	-0.79	1.78	11.37	7.45E-04	4.92E-03
ATP2A3	-0.79	7.41	55.31	1.03E-13	9.72E-12
CHST14	-0.79	2.59	26.90	2.14E-07	4.97E-06
OLFML3	-0.79	1.91	14.22	1.63E-04	1.40E-03
UNC5CL	-0.79	0.76	7.73	5.44E-03	2.36E-02
SH3TC2	-0.79	-0.18	6.05	1.39E-02	4.92E-02
ATP1A2	-0.78	4.42	8.73	3.13E-03	1.52E-02
GNG7	-0.78	1.88	17.54	2.82E-05	3.30E-04
CREB3L1	-0.78	5.86	57.00	4.36E-14	4.45E-12
IL1R1	-0.78	3.99	36.30	1.69E-09	6.87E-08
MSRB3	-0.78	3.00	21.74	3.12E-06	5.04E-05
ASB2	-0.78	2.90	11.17	8.29E-04	5.38E-03
CYGB	-0.78	2.68	16.95	3.84E-05	4.25E-04
HIST1H2BM	-0.78	2.84	23.26	1.42E-06	2.53E-05
CYP2D6	-0.78	1.65	10.00	1.57E-03	8.83E-03
TNS1	-0.78	5.46	36.54	1.50E-09	6.25E-08
SLC22A17	-0.78	2.68	22.18	2.48E-06	4.12E-05
SLC46A1	-0.78	4.16	44.96	2.01E-11	1.20E-09
TCF19	-0.77	2.33	24.69	6.75E-07	1.32E-05
FN3K	-0.77	2.51	17.16	3.43E-05	3.87E-04
AIF1L	-0.77	5.28	7.36	6.68E-03	2.76E-02
ARHGAP29	-0.77	4.84	70.19	5.38E-17	8.93E-15
TMEM150C	-0.77	2.79	26.73	2.34E-07	5.36E-06
TCTA	-0.77	4.95	64.41	1.01E-15	1.38E-13
POLG2	-0.77	1.31	10.93	9.44E-04	5.91E-03

DCAF12L1	-0.77	1.98	12.79	3.49E-04	2.65E-03
GALNT6	-0.76	5.67	26.89	2.15E-07	4.98E-06
PECAM1	-0.76	2.34	11.56	6.73E-04	4.55E-03
COL14A1	-0.76	3.05	18.77	1.48E-05	1.90E-04
CCBE1	-0.76	1.12	6.74	9.42E-03	3.62E-02
MED12L	-0.76	2.04	9.52	2.03E-03	1.07E-02
SCGB3A1	-0.76	12.77	25.71	3.97E-07	8.47E-06
KIAA1456	-0.76	1.83	13.03	3.06E-04	2.37E-03
PLK1	-0.76	1.08	7.34	6.76E-03	2.79E-02
EID2B	-0.76	2.15	15.89	6.71E-05	6.78E-04
TMEM54	-0.76	5.14	12.03	5.24E-04	3.68E-03
PRRG3	-0.76	3.47	24.91	6.00E-07	1.21E-05
SMIM20	-0.76	4.20	34.26	4.83E-09	1.75E-07
PID1	-0.76	1.98	14.23	1.62E-04	1.39E-03
THEM5	-0.76	6.52	6.90	8.61E-03	3.37E-02
ADAT2	-0.76	1.20	8.35	3.86E-03	1.80E-02
SHROOM1	-0.76	0.94	9.69	1.85E-03	1.00E-02
LRFN1	-0.76	1.22	13.03	3.07E-04	2.37E-03
PPP2R2B	-0.75	3.34	16.74	4.30E-05	4.66E-04
C1QTNF6	-0.75	1.89	14.74	1.23E-04	1.12E-03
TACR1	-0.75	5.41	60.22	8.49E-15	9.68E-13
CASS4	-0.75	2.83	24.80	6.37E-07	1.27E-05
TMPRSS6	-0.75	0.32	6.23	1.25E-02	4.54E-02
GSTM2	-0.75	4.00	31.86	1.66E-08	5.22E-07
C1S	-0.75	3.38	24.05	9.40E-07	1.77E-05
TRIB3	-0.75	2.00	6.79	9.16E-03	3.54E-02
TMEM200B	-0.75	1.04	9.40	2.17E-03	1.13E-02
LTBP1	-0.75	2.58	19.98	7.82E-06	1.11E-04
TMEM203	-0.75	3.18	31.02	2.56E-08	7.61E-07
ZNF462	-0.75	0.79	6.87	8.74E-03	3.42E-02
TEK	-0.75	0.98	6.08	1.37E-02	4.86E-02
FYN	-0.75	3.08	10.60	1.13E-03	6.82E-03
STC2	-0.75	1.94	11.35	7.56E-04	4.98E-03
SYT3	-0.74	0.98	9.75	1.79E-03	9.76E-03
SNTA1	-0.74	1.38	7.26	7.07E-03	2.89E-02
SYT7	-0.74	3.19	21.51	3.52E-06	5.56E-05
SPOCK2	-0.74	1.42	12.20	4.78E-04	3.43E-03
MMP2	-0.74	4.52	43.65	3.92E-11	2.26E-09
CASP14	-0.74	3.79	6.78	9.23E-03	3.56E-02
KLHL13	-0.74	1.42	12.13	4.96E-04	3.53E-03
ANLN	-0.74	2.28	15.44	8.53E-05	8.24E-04
TBX2	-0.74	2.84	9.72	1.82E-03	9.88E-03
FBLIM1	-0.74	3.65	33.66	6.58E-09	2.31E-07

PLA2G3	-0.74	3.46	7.86	5.04E-03	2.22E-02
ZSCAN2	-0.74	0.96	9.72	1.82E-03	9.90E-03
NQO1	-0.74	5.58	24.48	7.50E-07	1.45E-05
LRRC29	-0.73	0.95	10.57	1.15E-03	6.91E-03
THY1	-0.73	2.82	23.24	1.43E-06	2.55E-05
CITED4	-0.73	3.97	10.74	1.05E-03	6.43E-03
CKAP2	-0.73	0.86	8.17	4.26E-03	1.95E-02
ELOVL7	-0.73	5.32	8.95	2.77E-03	1.38E-02
UGT8	-0.73	1.55	9.64	1.90E-03	1.02E-02
LRP3	-0.73	0.33	7.23	7.17E-03	2.92E-02
CIRBP	-0.73	5.92	38.19	6.40E-10	2.88E-08
METRNL	-0.73	4.17	34.90	3.47E-09	1.32E-07
SERPINE2	-0.73	3.03	15.75	7.24E-05	7.20E-04
SMTNL2	-0.73	3.89	17.41	3.02E-05	3.49E-04
EMC9	-0.73	2.49	13.72	2.12E-04	1.76E-03
ARRB1	-0.73	5.57	57.55	3.29E-14	3.42E-12
COL5A2	-0.72	1.80	8.61	3.34E-03	1.60E-02
MATN2	-0.72	3.83	27.22	1.81E-07	4.30E-06
NUPR1	-0.72	8.03	47.58	5.29E-12	3.53E-10
FAHD1	-0.72	3.11	26.82	2.24E-07	5.16E-06
HTRA3	-0.72	4.34	44.25	2.90E-11	1.70E-09
INSIG1	-0.72	6.70	57.68	3.08E-14	3.25E-12
TMEM238	-0.72	3.98	18.55	1.66E-05	2.09E-04
PAX7	-0.72	2.12	18.24	1.95E-05	2.41E-04
C5orf45	-0.72	1.17	11.90	5.62E-04	3.91E-03
PDLIM4	-0.71	1.31	9.57	1.98E-03	1.05E-02
CD38	-0.71	2.51	16.32	5.34E-05	5.58E-04
BIK	-0.71	3.36	24.62	6.97E-07	1.36E-05
C1QTNF4	-0.71	1.76	12.00	5.31E-04	3.72E-03
FBP1	-0.71	1.98	12.73	3.61E-04	2.72E-03
SIRT5	-0.71	2.78	20.23	6.88E-06	9.93E-05
S1PR5	-0.71	1.09	6.42	1.13E-02	4.17E-02
BDKRB1	-0.71	1.15	9.61	1.94E-03	1.04E-02
KCNMA1	-0.71	1.60	7.57	5.92E-03	2.51E-02
C1orf21	-0.71	3.04	19.38	1.07E-05	1.46E-04
DOK1	-0.71	3.35	28.49	9.41E-08	2.39E-06
GMNN	-0.71	4.13	35.77	2.22E-09	8.78E-08
CD180	-0.70	1.19	8.76	3.08E-03	1.50E-02
ZNF771	-0.70	2.82	11.37	7.47E-04	4.93E-03
ENTPD2	-0.70	3.40	30.33	3.65E-08	1.04E-06
SLC29A1	-0.70	3.82	23.69	1.13E-06	2.08E-05
GPX2	-0.70	8.22	33.45	7.31E-09	2.53E-07
TMEM45A	-0.70	4.15	9.71	1.83E-03	9.94E-03

NUDT16	-0.70	3.76	23.29	1.40E-06	2.50E-05
CIDEC	-0.70	2.34	8.22	4.15E-03	1.91E-02
MFSD3	-0.70	1.62	10.30	1.33E-03	7.75E-03
ENG	-0.69	2.57	16.48	4.91E-05	5.20E-04
CLSTN3	-0.69	2.41	15.65	7.61E-05	7.52E-04
TREX2	-0.69	6.43	6.74	9.41E-03	3.62E-02
KCNN1	-0.69	0.32	6.31	1.20E-02	4.39E-02
IL7	-0.69	1.84	8.95	2.77E-03	1.38E-02
TRIM3	-0.69	5.72	34.21	4.95E-09	1.79E-07
PROM2	-0.69	5.08	15.65	7.61E-05	7.52E-04
CXXC5	-0.69	4.64	53.18	3.04E-13	2.64E-11
GAS7	-0.69	5.29	9.46	2.10E-03	1.10E-02
RNF208	-0.69	4.30	10.63	1.11E-03	6.71E-03
FCHO1	-0.69	3.41	15.84	6.91E-05	6.96E-04
LYZ	-0.69	12.89	19.52	9.93E-06	1.37E-04
AQP11	-0.69	2.52	18.89	1.39E-05	1.81E-04
PTGES	-0.69	6.22	42.41	7.40E-11	4.01E-09
PALM	-0.68	3.75	16.86	4.03E-05	4.41E-04
ALDH3A1	-0.68	9.76	13.96	1.87E-04	1.58E-03
MGST2	-0.68	5.26	41.65	1.09E-10	5.66E-09
GMPR	-0.68	4.26	33.44	7.34E-09	2.53E-07
SYT9	-0.68	2.53	15.22	9.55E-05	9.02E-04
RAB34	-0.68	2.93	19.50	1.00E-05	1.38E-04
TMEM246	-0.68	4.83	28.64	8.70E-08	2.22E-06
GRASP	-0.68	4.23	40.48	1.99E-10	9.90E-09
FAM198B	-0.68	1.88	11.75	6.09E-04	4.19E-03
SHISA7	-0.68	0.77	6.39	1.15E-02	4.23E-02
PINLYP	-0.68	4.55	6.94	8.41E-03	3.31E-02
COL1A2	-0.68	4.96	23.28	1.40E-06	2.51E-05
GJA1	-0.68	5.67	12.48	4.11E-04	3.04E-03
TLR5	-0.68	2.19	15.75	7.21E-05	7.18E-04
PM20D1	-0.68	2.11	13.57	2.30E-04	1.88E-03
NAT8L	-0.68	0.78	6.91	8.57E-03	3.36E-02
ATP6V0A4	-0.67	3.92	11.04	8.93E-04	5.68E-03
GSTM4	-0.67	4.22	35.46	2.60E-09	1.01E-07
MAP6	-0.67	3.12	8.16	4.28E-03	1.95E-02
TST	-0.67	8.71	36.61	1.44E-09	6.04E-08
AKR1C4	-0.67	4.43	18.72	1.52E-05	1.95E-04
MMD	-0.67	3.93	24.57	7.18E-07	1.40E-05
GNG4	-0.67	3.08	12.57	3.93E-04	2.92E-03
FAM65C	-0.67	2.95	6.27	1.22E-02	4.46E-02
CUX2	-0.66	1.63	8.38	3.80E-03	1.78E-02
LMO2	-0.66	3.19	20.95	4.71E-06	7.18E-05

EGFL7	-0.66	1.06	9.69	1.85E-03	1.00E-02
MRGPRE	-0.66	3.00	21.50	3.53E-06	5.58E-05
VPS37D	-0.66	1.53	7.55	6.00E-03	2.53E-02
MYH10	-0.66	3.13	14.89	1.14E-04	1.05E-03
SLC16A13	-0.66	4.05	37.31	1.01E-09	4.34E-08
FAM213B	-0.66	4.15	11.07	8.77E-04	5.61E-03
ITGA11	-0.66	1.34	6.45	1.11E-02	4.12E-02
AKAP12	-0.66	2.11	8.74	3.12E-03	1.52E-02
HNMT	-0.66	2.51	16.20	5.70E-05	5.89E-04
NFATC4	-0.66	2.10	14.30	1.56E-04	1.36E-03
TPD52L1	-0.66	2.37	11.04	8.91E-04	5.67E-03
KAZALD1	-0.65	0.96	6.66	9.88E-03	3.76E-02
FAM189A2	-0.65	2.75	15.63	7.71E-05	7.58E-04
RHBDD3	-0.65	3.34	24.30	8.26E-07	1.58E-05
PARS2	-0.65	2.54	13.95	1.88E-04	1.59E-03
SLC2A10	-0.65	4.47	42.17	8.38E-11	4.49E-09
CAND2	-0.65	3.42	24.10	9.17E-07	1.73E-05
RAB24	-0.65	4.30	19.25	1.15E-05	1.54E-04
GJB6	-0.65	4.03	8.22	4.14E-03	1.90E-02
CHRM3	-0.65	3.60	24.29	8.27E-07	1.58E-05
CADM2	-0.65	4.23	18.38	1.81E-05	2.27E-04
HUNK	-0.65	1.80	10.26	1.36E-03	7.90E-03
C9orf152	-0.64	4.19	31.75	1.75E-08	5.47E-07
TYRO3	-0.64	6.20	37.67	8.37E-10	3.71E-08
PTTG2	-0.64	1.55	8.98	2.73E-03	1.36E-02
KNSTRN	-0.64	1.59	9.22	2.39E-03	1.22E-02
CTNNBIP1	-0.64	4.51	11.04	8.94E-04	5.68E-03
CYP4A22	-0.64	8.32	31.00	2.57E-08	7.66E-07
LRRC26	-0.64	7.45	42.05	8.91E-11	4.71E-09
SNX21	-0.64	3.80	25.69	4.00E-07	8.51E-06
BEND5	-0.64	1.07	6.89	8.65E-03	3.38E-02
ECHDC2	-0.64	1.74	10.99	9.18E-04	5.79E-03
RAP1GAP	-0.64	5.36	36.53	1.51E-09	6.27E-08
FBN1	-0.64	4.07	20.13	7.24E-06	1.04E-04
UMOD	-0.64	4.06	15.18	9.78E-05	9.20E-04
FKBP14	-0.64	1.29	6.99	8.22E-03	3.25E-02
PRR5	-0.64	0.88	8.06	4.53E-03	2.03E-02
FOXA3	-0.64	2.26	11.76	6.05E-04	4.17E-03
NUDT1	-0.63	3.80	22.93	1.68E-06	2.93E-05
EDARADD	-0.63	2.26	13.31	2.64E-04	2.10E-03
ANXA9	-0.63	5.47	6.25	1.24E-02	4.51E-02
ACKR3	-0.63	3.68	23.33	1.36E-06	2.45E-05
SEMA5A	-0.63	1.78	9.87	1.68E-03	9.28E-03

HCN2	-0.63	1.74	9.82	1.73E-03	9.49E-03
CD59	-0.63	2.95	18.33	1.85E-05	2.31E-04
NUDT7	-0.63	2.26	13.02	3.08E-04	2.37E-03
METTL22	-0.63	2.10	11.00	9.11E-04	5.75E-03
NUPR1L	-0.63	2.05	9.19	2.43E-03	1.23E-02
ANKH	-0.63	5.89	9.02	2.66E-03	1.34E-02
HIGD1A	-0.63	5.12	26.34	2.86E-07	6.34E-06
CHPF2	-0.63	4.55	36.43	1.58E-09	6.54E-08
TMEM44	-0.63	3.91	28.19	1.10E-07	2.76E-06
TMEM160	-0.63	3.77	18.56	1.65E-05	2.09E-04
ZNF775	-0.63	1.97	9.34	2.24E-03	1.16E-02
HOXA2	-0.62	2.24	10.68	1.08E-03	6.58E-03
AKR1C2	-0.62	3.40	19.20	1.18E-05	1.57E-04
PAPSS2	-0.62	5.27	37.61	8.63E-10	3.81E-08
IFI27	-0.62	6.86	21.57	3.41E-06	5.42E-05
SUSD4	-0.62	2.22	7.63	5.74E-03	2.46E-02
EFNA3	-0.62	2.60	6.64	9.95E-03	3.78E-02
FAM173A	-0.62	4.65	18.95	1.34E-05	1.76E-04
EPHB6	-0.62	4.47	22.69	1.90E-06	3.26E-05
TMEM140	-0.62	3.66	22.69	1.90E-06	3.26E-05
ZNF25	-0.62	1.15	7.05	7.94E-03	3.17E-02
CHL1	-0.62	4.23	6.93	8.46E-03	3.32E-02
ATP2B4	-0.62	4.03	25.52	4.38E-07	9.15E-06
GRB10	-0.62	2.02	6.71	9.60E-03	3.68E-02
NIPSNAP1	-0.62	3.67	27.31	1.73E-07	4.14E-06
PECR	-0.61	2.81	17.34	3.12E-05	3.58E-04
LRFN3	-0.61	1.43	7.64	5.72E-03	2.45E-02
DERL3	-0.61	1.01	6.73	9.48E-03	3.64E-02
SMIM22	-0.61	4.81	34.36	4.57E-09	1.67E-07
SLC35G5	-0.61	5.11	30.28	3.73E-08	1.06E-06
PDCD4	-0.61	5.90	45.28	1.71E-11	1.03E-09
CDO1	-0.61	4.39	24.55	7.25E-07	1.41E-05
CD276	-0.61	1.64	8.84	2.94E-03	1.45E-02
RBPMS2	-0.61	1.87	9.74	1.80E-03	9.82E-03
THTPA	-0.61	4.53	38.50	5.48E-10	2.52E-08
IER5L	-0.61	2.43	10.23	1.38E-03	7.98E-03
HEMK1	-0.61	3.77	25.64	4.12E-07	8.72E-06
HTRA1	-0.61	3.52	15.23	9.52E-05	9.00E-04
FCGRT	-0.61	6.13	46.18	1.08E-11	6.84E-10
FAH	-0.61	3.80	22.96	1.65E-06	2.89E-05
KDELR3	-0.61	4.18	18.64	1.58E-05	2.01E-04
TMEM221	-0.61	2.51	8.66	3.25E-03	1.57E-02
HNRNPA1	-0.60	1.01	6.55	1.05E-02	3.95E-02

PKNOX2	-0.60	1.51	8.36	3.83E-03	1.79E-02
BCKDK	-0.60	5.65	42.99	5.50E-11	3.05E-09
PTP4A3	-0.60	4.77	26.81	2.25E-07	5.17E-06
CPE	-0.60	6.05	18.85	1.41E-05	1.83E-04
ABTB1	-0.60	4.21	31.76	1.74E-08	5.45E-07
PYGB	-0.60	7.41	43.16	5.04E-11	2.81E-09
FBXL16	-0.60	1.04	6.24	1.25E-02	4.53E-02
C6orf226	-0.60	4.03	26.31	2.90E-07	6.41E-06
RAB11FIP5	-0.60	4.38	18.21	1.98E-05	2.45E-04
FCGBP	-0.60	8.20	42.50	7.08E-11	3.85E-09
EGFL6	-0.60	2.76	9.78	1.77E-03	9.66E-03
SLC15A2	-0.60	8.50	35.47	2.59E-09	1.01E-07
INPP5J	-0.59	1.67	9.68	1.87E-03	1.01E-02
SEPN1	-0.59	4.52	33.12	8.65E-09	2.93E-07
HMGCL	-0.59	4.18	24.12	9.07E-07	1.72E-05
EVC	-0.59	2.32	10.14	1.45E-03	8.30E-03
SHISA4	-0.59	1.69	7.80	5.24E-03	2.28E-02
ARSG	-0.59	2.35	13.65	2.21E-04	1.82E-03
HOXB2	-0.59	4.13	20.59	5.68E-06	8.46E-05
ADCK3	-0.59	5.82	22.34	2.28E-06	3.84E-05
E2F2	-0.59	2.26	11.02	9.00E-04	5.70E-03
SOX15	-0.59	2.57	8.51	3.54E-03	1.68E-02
PRKCDBP	-0.59	2.91	10.69	1.08E-03	6.57E-03
PDK2	-0.59	5.80	35.37	2.73E-09	1.05E-07
VWA1	-0.59	2.59	9.92	1.63E-03	9.12E-03
ZNF205	-0.58	1.56	7.54	6.04E-03	2.55E-02
TBC1D7	-0.58	2.89	17.91	2.31E-05	2.79E-04
PTGR1	-0.58	7.30	8.41	3.74E-03	1.75E-02
COLCA2	-0.58	5.03	38.54	5.37E-10	2.48E-08
PDE2A	-0.58	3.87	17.77	2.49E-05	2.97E-04
FBXO32	-0.58	6.66	35.54	2.50E-09	9.82E-08
ENO2	-0.58	2.02	7.94	4.83E-03	2.14E-02
IL18	-0.58	4.84	6.14	1.32E-02	4.74E-02
NOL3	-0.58	1.94	7.68	5.58E-03	2.40E-02
FAM114A1	-0.58	4.42	23.76	1.09E-06	2.01E-05
SVEP1	-0.58	1.35	7.20	7.31E-03	2.97E-02
TK1	-0.58	1.48	7.06	7.90E-03	3.16E-02
KANK2	-0.58	4.06	20.59	5.70E-06	8.49E-05
HAUS1	-0.58	1.94	7.71	5.49E-03	2.37E-02
ROM1	-0.57	2.25	9.53	2.03E-03	1.07E-02
DENND2A	-0.57	2.74	8.53	3.49E-03	1.66E-02
HPN	-0.57	5.31	33.89	5.82E-09	2.07E-07
MOB2	-0.57	5.43	38.60	5.20E-10	2.41E-08

NUDT8	-0.57	3.53	15.63	7.72E-05	7.59E-04
LPAR1	-0.57	3.73	21.31	3.90E-06	6.08E-05
AQP1	-0.57	5.28	14.36	1.51E-04	1.32E-03
RALYL	-0.57	1.31	6.93	8.49E-03	3.33E-02
SH3BP5	-0.57	3.05	15.60	7.83E-05	7.67E-04
AFAP1L1	-0.57	1.87	6.95	8.39E-03	3.30E-02
ATP6V1B1	-0.57	5.68	24.11	9.08E-07	1.72E-05
BGN	-0.57	5.57	13.53	2.35E-04	1.91E-03
SCD	-0.56	7.59	34.56	4.14E-09	1.54E-07
ANO8	-0.56	3.30	18.52	1.68E-05	2.12E-04
SLC39A11	-0.56	5.46	32.20	1.39E-08	4.47E-07
ANTXR1	-0.56	3.83	23.83	1.05E-06	1.95E-05
C8orf58	-0.56	3.82	7.25	7.09E-03	2.90E-02
AHCYL2	-0.56	6.67	45.61	1.44E-11	8.83E-10
SLC25A45	-0.56	2.50	10.54	1.17E-03	6.99E-03
ADCY2	-0.56	4.78	29.99	4.33E-08	1.22E-06
FAIM2	-0.56	2.94	13.08	2.99E-04	2.32E-03
MME	-0.56	3.32	6.86	8.83E-03	3.44E-02
THNSL2	-0.56	4.70	19.34	1.09E-05	1.47E-04
SLC4A5	-0.55	4.84	10.12	1.47E-03	8.38E-03
ELOVL6	-0.55	4.48	14.88	1.15E-04	1.05E-03
SLC25A21	-0.55	1.70	8.12	4.37E-03	1.98E-02
WBSCR27	-0.55	4.59	23.41	1.31E-06	2.36E-05
NPAS2	-0.55	3.99	17.86	2.38E-05	2.87E-04
ZNF346	-0.55	2.89	14.45	1.44E-04	1.27E-03
CDKN1C	-0.55	4.43	26.44	2.71E-07	6.10E-06
CHGA	-0.55	3.16	9.57	1.98E-03	1.05E-02
DNAJC10	-0.55	5.47	35.45	2.62E-09	1.02E-07
FAM109A	-0.55	4.02	24.76	6.51E-07	1.29E-05
ALOXE3	-0.55	4.91	6.14	1.32E-02	4.73E-02
DUSP22	-0.55	4.24	9.85	1.70E-03	9.37E-03
FBXL15	-0.55	2.38	9.40	2.18E-03	1.13E-02
PPFIA4	-0.55	3.22	19.98	7.82E-06	1.11E-04
YPEL3	-0.55	5.89	25.34	4.81E-07	9.89E-06
NCALD	-0.55	4.05	19.26	1.14E-05	1.53E-04
KLHL22	-0.55	4.16	26.12	3.20E-07	6.99E-06
CYBRD1	-0.55	2.87	9.38	2.19E-03	1.14E-02
TPST1	-0.55	2.77	11.54	6.82E-04	4.59E-03
GPRC5B	-0.55	3.38	16.58	4.67E-05	4.98E-04
PGP	-0.55	4.17	19.65	9.30E-06	1.30E-04
MPV17L2	-0.55	4.54	22.20	2.45E-06	4.09E-05
GLMN	-0.55	1.51	7.88	4.99E-03	2.20E-02
SNN	-0.54	3.73	21.64	3.29E-06	5.25E-05

QSOX1	-0.54	9.27	24.40	7.81E-07	1.51E-05
MOCS1	-0.54	5.35	25.41	4.64E-07	9.60E-06
TATDN3	-0.54	2.09	10.03	1.54E-03	8.69E-03
FUT2	-0.54	3.14	10.85	9.90E-04	6.14E-03
THBD	-0.54	2.85	7.67	5.61E-03	2.41E-02
DHRS7B	-0.54	4.54	23.01	1.61E-06	2.83E-05
GPLD1	-0.54	6.27	6.55	1.05E-02	3.95E-02
PAQR5	-0.54	4.62	16.45	4.98E-05	5.26E-04
CP	-0.54	9.37	22.21	2.45E-06	4.09E-05
PHGDH	-0.54	3.94	8.10	4.42E-03	2.00E-02
IGFBP7	-0.54	5.01	32.32	1.31E-08	4.23E-07
ASAP3	-0.54	4.18	20.12	7.28E-06	1.04E-04
SLC38A1	-0.54	5.40	13.26	2.71E-04	2.14E-03
CDCA7L	-0.54	2.04	10.29	1.34E-03	7.79E-03
NCMAP	-0.54	2.09	10.71	1.07E-03	6.52E-03
SNX11	-0.54	5.02	27.72	1.41E-07	3.43E-06
SHPK	-0.54	3.17	13.81	2.03E-04	1.69E-03
HDHD3	-0.54	3.60	12.47	4.14E-04	3.06E-03
SLC35B2	-0.53	5.55	32.90	9.71E-09	3.25E-07
FBLN1	-0.53	3.82	15.93	6.56E-05	6.66E-04
NHS	-0.53	1.44	6.27	1.23E-02	4.47E-02
ADK	-0.53	3.36	15.85	6.87E-05	6.93E-04
OBSL1	-0.53	3.00	14.51	1.39E-04	1.23E-03
GSTM3	-0.53	4.34	15.72	7.35E-05	7.29E-04
ZBTB7C	-0.53	4.17	21.05	4.48E-06	6.85E-05
RABAC1	-0.53	7.51	25.52	4.39E-07	9.15E-06
WDR62	-0.53	3.21	6.74	9.41E-03	3.62E-02
TECPR1	-0.53	4.70	30.92	2.68E-08	7.89E-07
TTC23	-0.53	3.06	12.85	3.37E-04	2.57E-03
TP53I13	-0.53	3.36	13.31	2.64E-04	2.10E-03
AKAP7	-0.53	2.98	14.84	1.17E-04	1.07E-03
BLMH	-0.53	6.78	7.49	6.19E-03	2.60E-02
FZD7	-0.53	3.94	18.85	1.41E-05	1.84E-04
DPP6	-0.52	3.47	8.74	3.11E-03	1.51E-02
CTTNBP2	-0.52	2.11	8.73	3.13E-03	1.52E-02
LGI1	-0.52	3.70	16.61	4.58E-05	4.90E-04
CACNA2D1	-0.52	2.91	9.10	2.55E-03	1.29E-02
ALDH5A1	-0.52	4.77	24.43	7.70E-07	1.49E-05
NFE2L3	-0.52	4.57	24.37	7.94E-07	1.53E-05
COL8A2	-0.52	4.33	15.66	7.59E-05	7.51E-04
CLEC11A	-0.52	2.43	9.49	2.07E-03	1.09E-02
TLE6	-0.52	1.82	6.48	1.09E-02	4.07E-02
PRR15	-0.52	3.20	15.58	7.92E-05	7.74E-04

MMP14	-0.52	6.11	29.77	4.85E-08	1.33E-06
SLC41A2	-0.52	3.14	8.87	2.89E-03	1.43E-02
OTUB2	-0.52	4.53	6.31	1.20E-02	4.40E-02
CCDC167	-0.52	2.48	8.89	2.87E-03	1.42E-02
TUBA8	-0.52	4.16	6.83	8.95E-03	3.48E-02
TF	-0.51	9.13	16.66	4.48E-05	4.81E-04
CTF1	-0.51	3.98	21.96	2.78E-06	4.57E-05
CADM1	-0.51	3.56	15.01	1.07E-04	9.93E-04
HEXB	-0.51	7.05	26.88	2.17E-07	5.00E-06
CCDC163P	-0.51	1.97	7.44	6.36E-03	2.66E-02
C10orf35	-0.51	3.13	14.74	1.24E-04	1.12E-03
ANGEL1	-0.51	3.28	16.30	5.41E-05	5.65E-04
SLC25A29	-0.51	3.73	16.60	4.62E-05	4.93E-04
LRR61	-0.51	4.16	23.53	1.23E-06	2.23E-05
NUDT13	-0.51	2.11	8.69	3.19E-03	1.55E-02
KLHDC8B	-0.51	2.90	10.33	1.31E-03	7.68E-03
SMARCD3	-0.51	2.40	10.48	1.21E-03	7.16E-03
UQCRRF51	-0.51	6.49	20.72	5.31E-06	7.98E-05
ACY3	-0.51	3.24	15.00	1.08E-04	9.99E-04
FLT4	-0.51	1.69	7.83	5.15E-03	2.25E-02
CLDN8	-0.51	5.81	28.26	1.06E-07	2.68E-06
GYLTL1B	-0.51	3.20	13.28	2.69E-04	2.13E-03
ADAMTS1	-0.51	2.42	7.82	5.17E-03	2.26E-02
NTPCR	-0.50	3.35	15.93	6.57E-05	6.66E-04
RNASEH2C	-0.50	3.29	12.32	4.49E-04	3.26E-03
EYA1	-0.50	4.53	26.46	2.69E-07	6.06E-06
GTPBP3	-0.50	3.33	16.42	5.08E-05	5.36E-04
SERGEF	-0.50	2.53	9.22	2.40E-03	1.22E-02
CDK1	-0.50	2.74	8.34	3.87E-03	1.80E-02
PHOSPHO1	-0.50	3.07	8.62	3.32E-03	1.60E-02
HPGD	-0.50	5.64	8.83	2.97E-03	1.46E-02
SEC14L4	-0.50	5.36	25.07	5.53E-07	1.12E-05
EML3	-0.50	5.35	31.55	1.95E-08	5.98E-07
CHCHD2	-0.50	6.40	23.56	1.21E-06	2.21E-05
FKBP9	-0.50	6.08	34.02	5.46E-09	1.94E-07
SLX1A	-0.50	3.16	15.64	7.65E-05	7.54E-04
SEMA4A	-0.50	5.59	18.08	2.12E-05	2.59E-04
TMEM86A	-0.50	3.38	15.58	7.91E-05	7.74E-04
SLC34A2	-0.50	3.89	9.17	2.46E-03	1.25E-02
LYPD6	-0.50	2.82	9.79	1.76E-03	9.62E-03
TMEM218	-0.50	4.01	19.17	1.19E-05	1.59E-04
TMEM97	-0.49	3.65	17.57	2.77E-05	3.26E-04
TLCD1	-0.49	3.70	13.61	2.25E-04	1.84E-03

ALDH1L1	-0.49	4.27	12.71	3.64E-04	2.74E-03
BMF	-0.49	5.03	25.76	3.87E-07	8.27E-06
DCXR	-0.49	7.59	25.60	4.20E-07	8.88E-06
PAMR1	-0.49	2.10	7.60	5.85E-03	2.49E-02
S100A14	-0.49	7.82	6.66	9.86E-03	3.75E-02
TBC1D17	-0.49	5.14	27.01	2.02E-07	4.73E-06
DHRS3	-0.49	7.14	29.47	5.68E-08	1.55E-06
VAMP5	-0.49	4.11	11.40	7.33E-04	4.86E-03
UAP1L1	-0.49	4.81	25.65	4.10E-07	8.69E-06
SMAD6	-0.49	3.25	13.79	2.05E-04	1.71E-03
ACAD8	-0.49	4.67	20.18	7.05E-06	1.02E-04
FN1	-0.49	4.57	7.55	5.99E-03	2.53E-02
NSMF	-0.49	3.90	17.62	2.69E-05	3.18E-04
RASA3	-0.49	4.77	19.37	1.08E-05	1.46E-04
MSRB1	-0.49	5.46	28.12	1.14E-07	2.83E-06
DCAF4L1	-0.49	2.99	8.81	3.00E-03	1.47E-02
CARHSP1	-0.49	6.11	24.35	8.03E-07	1.54E-05
SLC25A4	-0.49	6.81	14.38	1.49E-04	1.31E-03
SESN1	-0.49	3.87	20.52	5.89E-06	8.73E-05
MYCL	-0.48	6.18	29.83	4.72E-08	1.31E-06
SCARF2	-0.48	2.93	11.91	5.59E-04	3.89E-03
PPIC	-0.48	5.07	28.68	8.52E-08	2.18E-06
BOC	-0.48	4.02	16.75	4.27E-05	4.63E-04
SLC16A11	-0.48	9.03	19.58	9.63E-06	1.33E-04
LYSMD4	-0.48	2.72	10.31	1.32E-03	7.74E-03
ZC3H6	-0.48	3.04	9.42	2.15E-03	1.13E-02
SLC2A8	-0.48	4.19	22.13	2.55E-06	4.23E-05
GALM	-0.48	5.61	25.39	4.69E-07	9.70E-06
SCRN2	-0.48	3.97	12.15	4.92E-04	3.51E-03
ROMO1	-0.48	5.04	18.50	1.69E-05	2.13E-04
PRSS23	-0.48	4.43	15.84	6.90E-05	6.95E-04
3-Mar	-0.48	3.28	6.05	1.39E-02	4.92E-02
SCAMP5	-0.48	1.51	6.30	1.20E-02	4.40E-02
KCNH2	-0.48	2.37	8.39	3.77E-03	1.77E-02
CPQ	-0.48	4.51	11.59	6.62E-04	4.49E-03
DPM3	-0.48	4.28	15.99	6.38E-05	6.51E-04
ACADS	-0.48	4.72	18.23	1.96E-05	2.43E-04
C11orf71	-0.48	3.70	15.60	7.83E-05	7.67E-04
CSRP1	-0.48	7.05	19.65	9.32E-06	1.30E-04
LGALS1	-0.48	4.60	17.19	3.38E-05	3.83E-04
HAGHL	-0.48	4.78	19.33	1.10E-05	1.48E-04
RNASEH2A	-0.48	3.99	14.68	1.28E-04	1.15E-03
SH2D3C	-0.48	2.74	9.32	2.27E-03	1.17E-02

HCAR1	-0.47	2.63	8.36	3.83E-03	1.79E-02
HTRA2	-0.47	3.68	14.17	1.67E-04	1.43E-03
STARD7	-0.47	6.23	24.99	5.75E-07	1.16E-05
CYB561D1	-0.47	4.30	17.15	3.45E-05	3.89E-04
KLC3	-0.47	4.61	8.45	3.65E-03	1.72E-02
ITGA9	-0.47	3.28	11.25	7.97E-04	5.21E-03
PPP1R3B	-0.47	4.72	24.69	6.75E-07	1.32E-05
SYTL2	-0.47	4.80	19.32	1.11E-05	1.49E-04
LPIN3	-0.47	5.25	6.27	1.23E-02	4.46E-02
TNFRSF19	-0.47	5.40	28.43	9.69E-08	2.46E-06
GATSL3	-0.47	2.11	8.14	4.34E-03	1.97E-02
RAD51B	-0.47	3.82	13.73	2.11E-04	1.75E-03
SH3RF2	-0.47	4.15	9.45	2.11E-03	1.11E-02
CCDC85B	-0.47	3.59	10.17	1.43E-03	8.21E-03
RPS29	-0.47	8.17	13.31	2.65E-04	2.10E-03
RTKN	-0.47	3.93	17.80	2.46E-05	2.94E-04
ACBD4	-0.47	4.49	22.04	2.67E-06	4.41E-05
LHFPL1	-0.47	3.17	10.69	1.08E-03	6.56E-03
NSUN6	-0.46	2.45	7.06	7.86E-03	3.15E-02
SLC17A9	-0.46	3.72	11.82	5.84E-04	4.04E-03
FADS2	-0.46	3.57	11.47	7.08E-04	4.74E-03
TMEM192	-0.46	4.04	15.01	1.07E-04	9.94E-04
LCMT1	-0.46	3.96	18.10	2.10E-05	2.57E-04
NDRG2	-0.46	4.98	8.73	3.13E-03	1.52E-02
PPAPDC1B	-0.46	4.15	16.51	4.83E-05	5.13E-04
VMAC	-0.46	5.34	30.17	3.96E-08	1.12E-06
ZBTB22	-0.46	4.86	22.96	1.65E-06	2.89E-05
KIF21B	-0.46	2.98	6.42	1.13E-02	4.17E-02
HOXB4	-0.46	2.78	7.04	7.99E-03	3.18E-02
SLC9A3R2	-0.46	5.06	18.11	2.08E-05	2.55E-04
ZFAND1	-0.46	4.66	20.46	6.08E-06	8.94E-05
NRDE2	-0.46	3.41	14.97	1.09E-04	1.01E-03
WTIP	-0.46	2.41	6.75	9.38E-03	3.61E-02
TMED3	-0.46	7.26	21.35	3.82E-06	5.98E-05
SLC25A35	-0.46	5.81	27.02	2.02E-07	4.72E-06
SLC37A4	-0.46	3.40	12.72	3.61E-04	2.72E-03
OSGEPL1	-0.46	2.11	6.17	1.30E-02	4.68E-02
FBXO8	-0.46	4.50	19.42	1.05E-05	1.43E-04
EID1	-0.46	5.49	24.79	6.39E-07	1.27E-05
HARBI1	-0.46	3.13	11.25	7.95E-04	5.19E-03
COL6A1	-0.46	4.18	11.05	8.87E-04	5.65E-03
MPG	-0.46	3.83	12.75	3.56E-04	2.69E-03
C1orf122	-0.45	3.61	12.12	5.00E-04	3.54E-03

TMCO6	-0.45	4.50	19.20	1.18E-05	1.57E-04
HDAC5	-0.45	5.49	28.99	7.26E-08	1.90E-06
CYFIP2	-0.45	7.58	21.14	4.27E-06	6.57E-05
POT1	-0.45	3.09	11.28	7.83E-04	5.13E-03
FKBP10	-0.45	2.35	7.90	4.94E-03	2.18E-02
HES1	-0.45	6.95	24.90	6.04E-07	1.22E-05
CCDC129	-0.45	6.14	14.30	1.56E-04	1.36E-03
S100A16	-0.45	7.79	7.64	5.71E-03	2.45E-02
NTHL1	-0.45	2.63	7.13	7.57E-03	3.05E-02
TMEM53	-0.45	4.38	18.54	1.67E-05	2.10E-04
N6AMT2	-0.45	3.39	10.82	1.00E-03	6.21E-03
METTL23	-0.45	2.81	8.81	3.00E-03	1.47E-02
GLIS2	-0.45	2.50	7.25	7.10E-03	2.90E-02
IKBIP	-0.45	3.02	9.95	1.61E-03	9.01E-03
CALML3	-0.45	9.30	7.55	6.00E-03	2.53E-02
POU6F1	-0.45	3.02	9.92	1.63E-03	9.11E-03
LZTS2	-0.45	5.10	27.98	1.22E-07	3.03E-06
COMMD4	-0.45	4.25	12.12	4.99E-04	3.54E-03
CCBL1	-0.44	6.25	6.33	1.19E-02	4.35E-02
NUPL2	-0.44	2.20	7.01	8.11E-03	3.21E-02
ALKBH7	-0.44	2.87	7.36	6.67E-03	2.76E-02
ACE2	-0.44	5.92	12.25	4.66E-04	3.36E-03
P2RX4	-0.44	7.83	21.83	2.98E-06	4.84E-05
POLL	-0.44	3.54	13.36	2.57E-04	2.06E-03
KCNJ13	-0.44	4.40	13.32	2.63E-04	2.09E-03
GSTK1	-0.44	4.57	11.69	6.28E-04	4.30E-03
PPM1M	-0.44	3.46	12.97	3.16E-04	2.43E-03
FAHD2B	-0.44	3.51	10.52	1.18E-03	7.05E-03
HOXA1	-0.44	2.83	7.04	7.96E-03	3.17E-02
DNAJC28	-0.44	2.28	6.28	1.22E-02	4.44E-02
FAM63A	-0.44	6.54	23.77	1.09E-06	2.01E-05
BLOC1S4	-0.44	2.87	7.07	7.82E-03	3.13E-02
ACBD6	-0.44	4.63	13.30	2.65E-04	2.10E-03
TMEM117	-0.44	3.09	9.21	2.40E-03	1.23E-02
NUDT18	-0.44	4.87	18.78	1.47E-05	1.90E-04
GGH	-0.44	6.92	13.83	2.00E-04	1.68E-03
SPDEF	-0.44	4.46	10.49	1.20E-03	7.16E-03
C1orf198	-0.44	4.67	12.25	4.65E-04	3.36E-03
DNAJB5	-0.44	2.88	8.40	3.76E-03	1.76E-02
HERC3	-0.44	3.63	10.70	1.07E-03	6.54E-03
CBR3	-0.44	5.91	10.24	1.37E-03	7.95E-03
ACAA1	-0.44	5.75	12.24	4.68E-04	3.37E-03
BCAT2	-0.44	5.40	20.59	5.68E-06	8.46E-05

DHX35	-0.44	3.23	10.64	1.11E-03	6.71E-03
CARS2	-0.44	3.15	10.02	1.55E-03	8.76E-03
HDC	-0.44	7.64	22.47	2.13E-06	3.61E-05
RFESD	-0.43	2.85	9.77	1.77E-03	9.69E-03
CLYBL	-0.43	3.47	12.05	5.17E-04	3.63E-03
ACY1	-0.43	2.16	6.51	1.07E-02	4.03E-02
KRTCAP2	-0.43	5.85	26.28	2.95E-07	6.52E-06
RFT1	-0.43	4.21	16.82	4.12E-05	4.48E-04
RAB4A	-0.43	3.64	11.51	6.91E-04	4.65E-03
GDPD2	-0.43	4.43	11.86	5.72E-04	3.96E-03
LYPLAL1	-0.43	3.31	7.75	5.38E-03	2.33E-02
PLA2G12A	-0.43	3.56	7.77	5.30E-03	2.30E-02
ABCC3	-0.43	6.00	23.79	1.08E-06	1.99E-05
CRYL1	-0.43	5.34	20.15	7.15E-06	1.03E-04
SVIP	-0.43	3.17	8.72	3.14E-03	1.53E-02
ORMDL3	-0.43	5.77	22.92	1.69E-06	2.93E-05
C16orf89	-0.43	6.81	13.69	2.15E-04	1.78E-03
COX10	-0.43	4.28	18.59	1.62E-05	2.06E-04
ABHD17A	-0.43	5.52	14.96	1.10E-04	1.01E-03
SMO	-0.43	5.56	22.51	2.09E-06	3.54E-05
CDKN2C	-0.43	2.80	7.58	5.90E-03	2.50E-02
IL17RE	-0.43	4.63	20.09	7.37E-06	1.05E-04
SYTL1	-0.43	5.73	7.46	6.30E-03	2.64E-02
SPHK2	-0.43	5.62	24.49	7.47E-07	1.45E-05
SLC29A3	-0.43	4.16	13.10	2.96E-04	2.30E-03
VLDLR	-0.43	3.01	7.47	6.28E-03	2.63E-02
GTF2H5	-0.43	4.90	14.26	1.59E-04	1.37E-03
PANK1	-0.43	3.67	14.31	1.55E-04	1.35E-03
MMAB	-0.43	3.65	10.67	1.09E-03	6.60E-03
MVK	-0.43	4.56	12.14	4.94E-04	3.53E-03
FARS2	-0.42	4.88	17.54	2.82E-05	3.30E-04
PGLS	-0.42	6.06	16.87	4.01E-05	4.40E-04
POMT1	-0.42	3.34	11.35	7.56E-04	4.98E-03
NUMBL	-0.42	2.76	7.64	5.72E-03	2.45E-02
PCBP4	-0.42	3.59	12.12	4.98E-04	3.54E-03
CRTAP	-0.42	4.72	14.15	1.69E-04	1.44E-03
CACNB3	-0.42	4.87	21.46	3.62E-06	5.67E-05
IZUMO4	-0.42	2.44	6.69	9.69E-03	3.70E-02
FLNA	-0.42	7.51	11.76	6.05E-04	4.17E-03
DEF8	-0.42	4.73	9.87	1.68E-03	9.30E-03
SLC25A39	-0.42	6.80	23.99	9.67E-07	1.81E-05
WBSCR16	-0.42	3.69	9.60	1.95E-03	1.04E-02
BRK1	-0.42	6.50	15.25	9.44E-05	8.95E-04

SLC25A1	-0.42	6.21	22.80	1.80E-06	3.11E-05
IL11RA	-0.42	3.56	11.13	8.51E-04	5.48E-03
COX7C	-0.42	4.43	10.79	1.02E-03	6.29E-03
KCNK12	-0.42	4.65	15.62	7.76E-05	7.61E-04
FOCAD	-0.42	2.95	7.28	6.99E-03	2.86E-02
SPNS2	-0.42	7.21	6.67	9.82E-03	3.74E-02
GCAT	-0.42	4.40	6.40	1.14E-02	4.21E-02
FAM195B	-0.42	5.70	21.10	4.37E-06	6.71E-05
ACVRL1	-0.42	3.45	10.06	1.52E-03	8.61E-03
HADH	-0.42	6.82	18.59	1.62E-05	2.06E-04
GHDC	-0.42	3.49	11.41	7.32E-04	4.86E-03
SMIM19	-0.42	4.46	18.27	1.91E-05	2.38E-04
TM7SF3	-0.42	5.04	24.80	6.36E-07	1.27E-05
FXYP6-FXYP2	-0.42	4.18	6.09	1.36E-02	4.85E-02
BCL11A	-0.42	2.76	7.17	7.41E-03	3.00E-02
ALOX12	-0.42	4.40	12.48	4.12E-04	3.05E-03
RANBP17	-0.41	2.64	7.59	5.86E-03	2.49E-02
HNRNPDL	-0.41	5.43	21.47	3.60E-06	5.66E-05
TRAPPC1	-0.41	5.19	15.13	1.01E-04	9.41E-04
OGFOD2	-0.41	4.73	17.93	2.29E-05	2.77E-04
ELK3	-0.41	3.93	11.46	7.12E-04	4.76E-03
HPR	-0.41	8.84	7.48	6.25E-03	2.62E-02
HDDC3	-0.41	4.02	13.66	2.19E-04	1.81E-03
KCNMB1	-0.41	3.93	6.07	1.37E-02	4.88E-02
GALNT12	-0.41	5.45	19.50	1.01E-05	1.38E-04
IMP3	-0.41	5.32	12.59	3.88E-04	2.89E-03
LIMD2	-0.41	5.45	21.30	3.93E-06	6.12E-05
RPA2	-0.41	3.02	7.29	6.94E-03	2.85E-02
HBP1	-0.41	6.24	24.75	6.53E-07	1.29E-05
IL17RC	-0.41	5.11	11.21	8.15E-04	5.30E-03
RAD51D	-0.41	3.95	10.94	9.41E-04	5.89E-03
KIAA1161	-0.41	4.04	10.21	1.40E-03	8.05E-03
NDUFB6	-0.41	4.67	14.27	1.59E-04	1.37E-03
TBKBP1	-0.41	2.65	6.08	1.37E-02	4.86E-02
ANO10	-0.41	5.31	18.52	1.68E-05	2.12E-04
COX8A	-0.41	7.75	18.13	2.06E-05	2.54E-04
HAUS4	-0.41	2.45	6.14	1.32E-02	4.73E-02
KLHL36	-0.41	2.51	6.11	1.34E-02	4.79E-02
AGL	-0.41	4.06	9.22	2.39E-03	1.22E-02
IMPDH1	-0.41	3.78	10.81	1.01E-03	6.22E-03
2-Mar	-0.41	5.28	20.73	5.29E-06	7.95E-05
TSPYL4	-0.41	3.93	11.12	8.53E-04	5.48E-03
PLEKHG5	-0.41	3.97	11.42	7.25E-04	4.83E-03

SCN1B	-0.41	4.41	13.11	2.93E-04	2.29E-03
NEMP2	-0.41	2.93	7.07	7.86E-03	3.14E-02
OXA1L	-0.40	5.68	20.50	5.96E-06	8.79E-05
TK2	-0.40	4.24	14.84	1.17E-04	1.07E-03
LRRC8D	-0.40	5.36	18.18	2.01E-05	2.47E-04
ATP5G3	-0.40	7.59	12.40	4.29E-04	3.14E-03
NDOR1	-0.40	5.28	19.59	9.61E-06	1.33E-04
H2AFJ	-0.40	5.80	10.68	1.08E-03	6.57E-03
ESYT3	-0.40	4.31	8.69	3.20E-03	1.55E-02
PCK2	-0.40	4.63	15.94	6.55E-05	6.65E-04
FANCE	-0.40	3.54	10.52	1.18E-03	7.05E-03
ALPL	-0.40	4.64	14.64	1.30E-04	1.17E-03
RARB	-0.40	3.75	6.96	8.33E-03	3.28E-02
BCKDHA	-0.40	5.65	20.13	7.25E-06	1.04E-04
ALDH18A1	-0.40	4.93	15.76	7.20E-05	7.18E-04
ATG13	-0.40	5.47	20.77	5.17E-06	7.79E-05
ICA1	-0.40	4.44	15.03	1.06E-04	9.83E-04
NDUFA5	-0.40	4.32	14.20	1.64E-04	1.41E-03
SFT2D3	-0.40	2.86	6.97	8.31E-03	3.28E-02
SLC8B1	-0.40	3.87	10.83	9.99E-04	6.18E-03
GMDS	-0.40	4.94	17.43	2.99E-05	3.46E-04
RPUSD1	-0.40	3.21	9.77	1.77E-03	9.70E-03
H6PD	-0.40	5.36	18.00	2.21E-05	2.69E-04
NDUFV1	-0.40	6.46	17.36	3.09E-05	3.55E-04
HINT3	-0.40	3.36	6.85	8.85E-03	3.44E-02
DNASE2	-0.40	4.22	13.67	2.18E-04	1.80E-03
SLC7A7	-0.40	4.39	14.52	1.38E-04	1.23E-03
KPTN	-0.40	3.39	9.33	2.25E-03	1.17E-02
CLEC3B	-0.40	4.13	7.37	6.64E-03	2.75E-02
PEX11G	-0.39	3.42	9.47	2.09E-03	1.10E-02
SGSM1	-0.39	4.34	11.16	8.38E-04	5.42E-03
KHK	-0.39	3.56	10.18	1.42E-03	8.17E-03
TMIE	-0.39	3.20	6.50	1.08E-02	4.04E-02
CCDC61	-0.39	3.30	9.35	2.22E-03	1.16E-02
SERTAD3	-0.39	3.45	7.05	7.92E-03	3.16E-02
THOP1	-0.39	6.60	6.04	1.40E-02	4.95E-02
FEZ2	-0.39	3.27	8.34	3.88E-03	1.80E-02
HINT2	-0.39	5.21	11.45	7.14E-04	4.77E-03
SLC8A1	-0.39	3.72	11.05	8.85E-04	5.64E-03
SEMA4C	-0.39	3.75	11.46	7.12E-04	4.76E-03
SRSF5	-0.39	6.36	13.39	2.53E-04	2.03E-03
MOCOS	-0.39	4.88	6.54	1.05E-02	3.98E-02
CBX6	-0.39	6.20	18.54	1.66E-05	2.10E-04

NUDT16L1	-0.39	4.72	13.81	2.03E-04	1.69E-03
SNRPE	-0.39	4.93	13.27	2.70E-04	2.14E-03
MRPS28	-0.39	4.15	11.07	8.77E-04	5.60E-03
LETMD1	-0.39	3.70	10.14	1.45E-03	8.31E-03
SDHC	-0.39	6.27	18.97	1.33E-05	1.75E-04
IVD	-0.39	5.03	8.70	3.19E-03	1.54E-02
TMEM147	-0.39	5.34	17.25	3.28E-05	3.73E-04
OXLD1	-0.39	3.09	7.59	5.89E-03	2.50E-02
GJB3	-0.39	4.97	8.43	3.69E-03	1.74E-02
CLIC3	-0.39	6.37	7.57	5.93E-03	2.51E-02
PHPT1	-0.39	4.80	13.93	1.90E-04	1.60E-03
FBXL4	-0.39	4.27	14.54	1.37E-04	1.22E-03
POMGNT2	-0.39	3.29	7.85	5.08E-03	2.23E-02
TGM2	-0.39	8.30	17.65	2.66E-05	3.14E-04
NIT2	-0.38	3.18	8.30	3.96E-03	1.83E-02
PCCA	-0.38	4.85	11.99	5.34E-04	3.74E-03
EIF2A	-0.38	5.32	14.60	1.33E-04	1.19E-03
DECR2	-0.38	4.64	13.87	1.96E-04	1.64E-03
ZFPL1	-0.38	4.42	14.68	1.27E-04	1.15E-03
STAT5A	-0.38	3.23	8.17	4.27E-03	1.95E-02
NDUFC1	-0.38	4.75	13.47	2.42E-04	1.96E-03
TMED1	-0.38	4.08	13.17	2.85E-04	2.23E-03
DDIT4L	-0.38	3.64	8.32	3.92E-03	1.82E-02
LYPD2	-0.38	9.85	13.44	2.46E-04	1.99E-03
TOMM40L	-0.38	4.24	11.42	7.28E-04	4.84E-03
PCED1A	-0.38	2.82	7.26	7.06E-03	2.89E-02
ARFGAP1	-0.38	4.51	12.68	3.69E-04	2.77E-03
DENND3	-0.38	3.38	8.31	3.94E-03	1.83E-02
C6orf89	-0.38	6.27	20.49	6.01E-06	8.85E-05
P2RX7	-0.38	4.51	12.23	4.72E-04	3.39E-03
HIBCH	-0.38	4.48	13.53	2.35E-04	1.91E-03
LPIN1	-0.38	4.24	9.91	1.64E-03	9.16E-03
DEGS2	-0.38	2.73	6.82	9.00E-03	3.50E-02
CMTM7	-0.38	5.39	18.46	1.73E-05	2.18E-04
SLC35F5	-0.38	5.45	17.10	3.54E-05	3.98E-04
TMEM205	-0.38	6.17	13.54	2.34E-04	1.90E-03
IGSF9	-0.38	3.46	9.41	2.16E-03	1.13E-02
QDPR	-0.38	5.12	18.71	1.52E-05	1.95E-04
PBX3	-0.38	3.23	6.66	9.85E-03	3.75E-02
ERN2	-0.38	4.62	10.56	1.15E-03	6.91E-03
RENBP	-0.38	3.72	11.11	8.59E-04	5.52E-03
RIC3	-0.38	4.44	11.56	6.75E-04	4.56E-03
SLC50A1	-0.38	5.44	19.59	9.62E-06	1.33E-04

RAPGEFL1	-0.38	5.45	15.75	7.23E-05	7.20E-04
GNB5	-0.38	3.93	11.37	7.45E-04	4.92E-03
CMAS	-0.38	6.18	15.66	7.59E-05	7.51E-04
SHMT1	-0.38	4.35	11.41	7.31E-04	4.85E-03
PEX16	-0.38	3.96	10.53	1.17E-03	7.02E-03
ASNS	-0.37	4.81	11.02	8.99E-04	5.70E-03
ATRAID	-0.37	5.94	17.86	2.38E-05	2.87E-04
NR2F6	-0.37	6.00	13.54	2.33E-04	1.90E-03
NADK2	-0.37	4.61	11.38	7.42E-04	4.91E-03
PLXND1	-0.37	4.72	12.16	4.88E-04	3.49E-03
PPP1R1B	-0.37	6.22	13.63	2.23E-04	1.83E-03
DOHH	-0.37	4.96	9.30	2.29E-03	1.18E-02
ZNHIT2	-0.37	5.26	10.76	1.04E-03	6.36E-03
HEY1	-0.37	5.25	13.46	2.43E-04	1.97E-03
WDR83OS	-0.37	5.31	13.19	2.81E-04	2.21E-03
SLC7A4	-0.37	5.01	16.97	3.80E-05	4.21E-04
PRKRA	-0.37	3.66	8.12	4.38E-03	1.99E-02
NXN	-0.37	6.00	17.84	2.40E-05	2.88E-04
C3orf67	-0.37	4.26	10.63	1.11E-03	6.73E-03
YIF1A	-0.37	5.67	15.50	8.27E-05	8.02E-04
LRRN3	-0.37	4.19	7.46	6.31E-03	2.64E-02
LMF1	-0.37	4.72	13.59	2.28E-04	1.86E-03
ACSM1	-0.37	5.34	14.27	1.59E-04	1.37E-03
C17orf89	-0.37	3.73	6.28	1.22E-02	4.46E-02
BNIP1	-0.37	5.24	8.53	3.50E-03	1.67E-02
SUFU	-0.37	3.88	11.16	8.35E-04	5.41E-03
KLHDC8A	-0.37	5.73	16.55	4.73E-05	5.03E-04
PRPS2	-0.37	4.43	8.37	3.82E-03	1.78E-02
TC2N	-0.37	4.32	9.29	2.31E-03	1.19E-02
NARF	-0.37	3.72	8.70	3.19E-03	1.54E-02
TMEM80	-0.37	3.52	7.30	6.88E-03	2.83E-02
LRRC40	-0.37	3.57	8.41	3.73E-03	1.75E-02
ISL1	-0.37	3.65	6.37	1.16E-02	4.27E-02
SLC22A18	-0.37	5.56	16.29	5.44E-05	5.67E-04
TPRA1	-0.37	4.79	13.17	2.85E-04	2.23E-03
DDAH2	-0.37	3.44	9.59	1.95E-03	1.04E-02
LGR6	-0.37	5.99	7.20	7.30E-03	2.97E-02
GUK1	-0.37	5.30	9.42	2.14E-03	1.12E-02
STOML1	-0.37	3.80	9.05	2.63E-03	1.32E-02
ZER1	-0.37	4.79	14.11	1.72E-04	1.47E-03
GLRX2	-0.36	3.95	10.02	1.55E-03	8.73E-03
TMEM219	-0.36	4.56	12.93	3.24E-04	2.48E-03
GGACT	-0.36	3.43	8.36	3.84E-03	1.79E-02

HMBS	-0.36	4.49	9.48	2.08E-03	1.10E-02
FAM98C	-0.36	3.82	9.35	2.23E-03	1.16E-02
FAM214A	-0.36	5.75	13.77	2.07E-04	1.72E-03
C11orf74	-0.36	4.48	10.39	1.27E-03	7.48E-03
ECHDC3	-0.36	3.77	6.73	9.46E-03	3.64E-02
MOCS2	-0.36	4.87	9.40	2.17E-03	1.13E-02
NDUFB3	-0.36	5.22	11.65	6.43E-04	4.38E-03
PACS1	-0.36	4.82	13.17	2.84E-04	2.23E-03
GUSB	-0.36	6.25	15.23	9.51E-05	9.00E-04
C11orf31	-0.36	3.53	8.54	3.48E-03	1.66E-02
GPX4	-0.36	8.75	13.76	2.07E-04	1.72E-03
PRDX2	-0.36	7.62	10.07	1.50E-03	8.54E-03
CAMKK1	-0.36	3.58	8.10	4.43E-03	2.00E-02
FOXRED1	-0.36	3.40	8.26	4.05E-03	1.87E-02
GALT	-0.36	3.43	8.49	3.57E-03	1.69E-02
RGMA	-0.36	4.25	10.38	1.28E-03	7.51E-03
MRI1	-0.36	3.46	8.13	4.35E-03	1.98E-02
ANGPTL2	-0.36	3.99	6.07	1.38E-02	4.88E-02
SDC2	-0.36	4.78	8.15	4.31E-03	1.96E-02
YIPF2	-0.36	5.23	13.83	2.01E-04	1.68E-03
SFRP1	-0.36	4.55	10.52	1.18E-03	7.05E-03
COX5A	-0.35	6.64	10.22	1.39E-03	8.02E-03
SLC4A4	-0.35	4.94	9.61	1.94E-03	1.04E-02
HDAC11	-0.35	5.06	10.61	1.13E-03	6.80E-03
PEX12	-0.35	3.22	7.63	5.75E-03	2.46E-02
TBC1D30	-0.35	5.56	13.32	2.62E-04	2.09E-03
RRAGD	-0.35	4.95	7.22	7.21E-03	2.94E-02
RPS5	-0.35	9.06	9.24	2.37E-03	1.22E-02
JAM3	-0.35	5.34	11.86	5.73E-04	3.97E-03
GSTP1	-0.35	5.93	7.68	5.57E-03	2.40E-02
COX7A2	-0.35	6.24	8.94	2.80E-03	1.39E-02
AFF3	-0.35	4.01	6.42	1.13E-02	4.18E-02
DHCR7	-0.35	4.92	10.83	1.00E-03	6.19E-03
MPZL1	-0.35	4.12	8.15	4.30E-03	1.96E-02
FNDC5	-0.35	4.25	8.88	2.88E-03	1.43E-02
SRR	-0.35	4.16	12.14	4.95E-04	3.53E-03
RECQL5	-0.35	3.73	8.61	3.34E-03	1.60E-02
SMAGP	-0.35	5.00	7.59	5.86E-03	2.49E-02
DKK3	-0.35	4.30	8.80	3.01E-03	1.47E-02
AGR2	-0.35	8.28	8.92	2.82E-03	1.40E-02
GABARAPL1	-0.35	7.15	14.89	1.14E-04	1.05E-03
NDUFS3	-0.35	6.31	12.54	3.99E-04	2.97E-03
SIDT1	-0.35	4.55	9.22	2.40E-03	1.22E-02

CD36	-0.35	9.34	6.69	9.71E-03	3.71E-02
ATP6V1C2	-0.35	5.32	6.48	1.09E-02	4.08E-02
ZRANB1	-0.35	4.36	8.55	3.46E-03	1.65E-02
DDT	-0.35	4.61	9.63	1.91E-03	1.03E-02
RPS27A	-0.35	8.45	8.62	3.33E-03	1.60E-02
SAMD10	-0.35	4.96	14.88	1.14E-04	1.05E-03
EXTL2	-0.35	3.94	8.79	3.03E-03	1.48E-02
EFNA1	-0.35	3.95	6.34	1.18E-02	4.33E-02
COPS6	-0.34	6.05	10.96	9.31E-04	5.85E-03
ALAD	-0.34	7.24	12.35	4.41E-04	3.21E-03
PDDC1	-0.34	5.52	12.45	4.17E-04	3.07E-03
HPCAL1	-0.34	5.14	13.64	2.22E-04	1.82E-03
CHMP1A	-0.34	6.59	12.17	4.87E-04	3.48E-03
MSRB2	-0.34	3.73	6.93	8.50E-03	3.33E-02
TCEB2	-0.34	6.97	10.70	1.07E-03	6.54E-03
DAPL1	-0.34	4.42	9.42	2.15E-03	1.13E-02
TSPAN17	-0.34	4.28	9.23	2.39E-03	1.22E-02
RDM1	-0.34	4.22	9.04	2.65E-03	1.33E-02
BCKDHB	-0.34	3.91	9.31	2.28E-03	1.18E-02
CENPB	-0.34	7.68	13.78	2.05E-04	1.71E-03
HPS1	-0.34	4.18	9.56	1.99E-03	1.06E-02
FASTK	-0.34	4.92	12.68	3.70E-04	2.78E-03
STX8	-0.34	4.45	8.67	3.23E-03	1.56E-02
EMC10	-0.34	6.61	15.34	8.97E-05	8.58E-04
POLD2	-0.34	3.48	6.96	8.34E-03	3.29E-02
ADPRM	-0.34	4.87	13.14	2.89E-04	2.25E-03
RPS21	-0.34	7.86	6.81	9.06E-03	3.51E-02
DGCR6	-0.34	5.56	11.30	7.73E-04	5.09E-03
NDUFA9	-0.34	6.04	13.16	2.85E-04	2.23E-03
SMIM1	-0.34	4.51	10.36	1.28E-03	7.55E-03
AOX1	-0.34	4.70	7.34	6.73E-03	2.78E-02
PSMB5	-0.34	6.12	9.34	2.24E-03	1.16E-02
NT5C3B	-0.34	3.88	8.80	3.02E-03	1.48E-02
MRPL2	-0.34	4.56	11.03	8.97E-04	5.70E-03
PSMB4	-0.34	7.07	9.14	2.51E-03	1.27E-02
PAQR4	-0.34	4.53	8.98	2.72E-03	1.36E-02
MOSPD1	-0.34	3.74	8.19	4.20E-03	1.92E-02
SFT2D1	-0.34	4.53	11.66	6.37E-04	4.35E-03
ASNSD1	-0.34	4.81	12.08	5.11E-04	3.60E-03
DEXI	-0.34	5.08	9.65	1.90E-03	1.02E-02
FERMT2	-0.34	3.92	6.22	1.26E-02	4.56E-02
THRA	-0.33	5.14	14.30	1.56E-04	1.36E-03
XYLT2	-0.33	3.75	8.86	2.91E-03	1.44E-02

AP1S3	-0.33	4.32	6.76	9.33E-03	3.60E-02
PMM1	-0.33	5.96	9.44	2.12E-03	1.11E-02
HN1	-0.33	6.02	7.75	5.37E-03	2.33E-02
KCTD2	-0.33	4.68	11.74	6.11E-04	4.21E-03
KLHDC2	-0.33	4.62	9.41	2.16E-03	1.13E-02
TMEM222	-0.33	5.10	13.42	2.49E-04	2.00E-03
TCN2	-0.33	8.05	8.38	3.80E-03	1.78E-02
NDRG3	-0.33	5.17	15.06	1.04E-04	9.69E-04
KIAA1324	-0.33	8.17	12.14	4.93E-04	3.52E-03
BDH1	-0.33	5.03	10.04	1.53E-03	8.67E-03
GORASP1	-0.33	5.20	12.98	3.15E-04	2.42E-03
C19orf70	-0.33	5.61	11.34	7.61E-04	5.01E-03
EPHB2	-0.33	5.57	12.39	4.32E-04	3.16E-03
AP5S1	-0.33	3.58	7.02	8.06E-03	3.20E-02
TIMP2	-0.33	7.61	15.08	1.03E-04	9.63E-04
ATF5	-0.33	5.17	8.06	4.54E-03	2.04E-02
ARSA	-0.33	3.59	6.45	1.11E-02	4.12E-02
GABRP	-0.33	9.82	9.25	2.36E-03	1.21E-02
DPP7	-0.33	5.68	15.10	1.02E-04	9.52E-04
CRELD1	-0.33	4.20	9.90	1.65E-03	9.17E-03
HNRNPD	-0.33	5.86	14.54	1.37E-04	1.22E-03
SIRT3	-0.33	4.46	9.07	2.60E-03	1.31E-02
ATHL1	-0.33	5.15	14.76	1.22E-04	1.11E-03
FBXW5	-0.33	5.17	14.52	1.38E-04	1.23E-03
THAP3	-0.33	3.70	8.06	4.53E-03	2.03E-02
ARHGEF19	-0.33	5.52	12.93	3.23E-04	2.47E-03
MAGED1	-0.33	7.39	12.41	4.28E-04	3.13E-03
PHLDB1	-0.33	3.88	6.87	8.77E-03	3.43E-02
COA5	-0.33	6.33	12.42	4.25E-04	3.12E-03
ZFYVE21	-0.33	4.45	10.73	1.06E-03	6.46E-03
COX19	-0.33	3.74	6.97	8.28E-03	3.27E-02
ATP5J2	-0.33	6.34	9.59	1.96E-03	1.05E-02
MDP1	-0.33	4.78	10.58	1.14E-03	6.86E-03
SEMA3D	-0.33	4.78	7.06	7.87E-03	3.15E-02
CTDSP2	-0.32	7.78	13.85	1.98E-04	1.66E-03
RNF26	-0.32	3.82	7.48	6.23E-03	2.62E-02
TSPAN13	-0.32	6.97	15.28	9.25E-05	8.80E-04
HMGB3	-0.32	4.03	7.36	6.67E-03	2.76E-02
MAPK8IP1	-0.32	5.41	13.37	2.56E-04	2.05E-03
LIAS	-0.32	4.24	7.64	5.71E-03	2.45E-02
ILVBL	-0.32	5.29	9.94	1.62E-03	9.05E-03
C9orf64	-0.32	5.30	8.85	2.93E-03	1.44E-02
COA3	-0.32	5.84	13.16	2.85E-04	2.23E-03

TIMM22	-0.32	4.29	8.12	4.38E-03	1.98E-02
KIAA0391	-0.32	4.16	8.06	4.53E-03	2.04E-02
ANKRD46	-0.32	5.23	11.26	7.94E-04	5.19E-03
FOPNL	-0.32	5.25	10.81	1.01E-03	6.22E-03
PSMB7	-0.32	6.20	10.32	1.31E-03	7.70E-03
AP2S1	-0.32	6.07	10.11	1.48E-03	8.43E-03
EFEMP2	-0.32	4.10	9.25	2.36E-03	1.21E-02
PPAP2B	-0.32	5.28	8.20	4.20E-03	1.92E-02
ADCK5	-0.32	3.92	8.23	4.11E-03	1.89E-02
LOH12CR1	-0.32	3.66	6.47	1.10E-02	4.09E-02
SAMM50	-0.32	5.82	11.02	9.00E-04	5.70E-03
COQ7	-0.32	4.40	7.03	8.02E-03	3.19E-02
C16orf70	-0.32	5.83	14.22	1.62E-04	1.40E-03
C16orf58	-0.32	4.68	10.35	1.29E-03	7.59E-03
PAFAH2	-0.32	5.44	11.71	6.20E-04	4.26E-03
DECR1	-0.32	5.17	8.71	3.16E-03	1.53E-02
PFN2	-0.32	5.82	10.94	9.39E-04	5.89E-03
SURF1	-0.32	4.81	9.76	1.78E-03	9.72E-03
SERHL2	-0.32	3.91	7.92	4.88E-03	2.17E-02
UQCRH	-0.32	7.50	8.34	3.88E-03	1.81E-02
KXD1	-0.32	5.50	14.27	1.58E-04	1.37E-03
ACACA	-0.32	4.95	11.22	8.10E-04	5.27E-03
PNKP	-0.32	4.39	8.67	3.23E-03	1.56E-02
NPDC1	-0.32	6.16	14.28	1.57E-04	1.36E-03
ACSS1	-0.32	7.21	14.30	1.56E-04	1.36E-03
ZMAT5	-0.32	4.31	8.36	3.84E-03	1.79E-02
TPRG1L	-0.32	6.19	12.36	4.39E-04	3.20E-03
MED16	-0.32	5.44	12.23	4.70E-04	3.39E-03
HNRNPA0	-0.31	6.81	11.56	6.72E-04	4.55E-03
ELMO3	-0.31	5.51	13.31	2.65E-04	2.10E-03
ARSB	-0.31	4.68	11.87	5.71E-04	3.96E-03
NDUF3F3	-0.31	5.04	10.88	9.72E-04	6.04E-03
NEK8	-0.31	3.57	6.44	1.11E-02	4.14E-02
CTSF	-0.31	4.33	7.91	4.92E-03	2.18E-02
CMTM6	-0.31	6.68	12.16	4.90E-04	3.50E-03
NSUN4	-0.31	4.20	9.36	2.21E-03	1.15E-02
TMEM60	-0.31	3.28	6.26	1.24E-02	4.49E-02
NDUFS7	-0.31	6.05	11.13	8.51E-04	5.48E-03
TBC1D22A	-0.31	4.78	11.10	8.66E-04	5.55E-03
TRIM2	-0.31	5.75	12.63	3.79E-04	2.84E-03
ADAM15	-0.31	5.29	8.85	2.93E-03	1.44E-02
CNNM3	-0.31	4.48	8.45	3.64E-03	1.72E-02
URM1	-0.31	4.23	8.67	3.23E-03	1.56E-02

CACFD1	-0.31	5.40	13.02	3.08E-04	2.37E-03
SRP9	-0.31	5.30	9.83	1.72E-03	9.44E-03
AKR1E2	-0.31	5.13	9.87	1.68E-03	9.29E-03
MED30	-0.31	3.82	7.00	8.13E-03	3.22E-02
CHID1	-0.31	5.04	12.99	3.14E-04	2.42E-03
C1orf123	-0.31	4.23	7.42	6.45E-03	2.69E-02
CYC1	-0.31	6.38	10.31	1.32E-03	7.74E-03
TGIF2- C20orf24	-0.31	6.24	6.72	9.54E-03	3.66E-02
MAP1LC3A	-0.31	7.44	10.88	9.75E-04	6.06E-03
MPND	-0.31	5.69	10.69	1.08E-03	6.55E-03
RIT1	-0.31	5.57	9.80	1.75E-03	9.59E-03
NDUFC2	-0.31	5.64	11.02	9.03E-04	5.72E-03
SDHAF1	-0.31	3.70	7.12	7.61E-03	3.06E-02
GCDH	-0.31	4.06	6.33	1.19E-02	4.36E-02
SLC22A23	-0.31	6.79	8.81	3.00E-03	1.47E-02
PGM1	-0.31	4.80	11.02	9.02E-04	5.71E-03
C9orf50	-0.31	3.70	6.28	1.22E-02	4.44E-02
TMBIM1	-0.31	7.42	11.88	5.66E-04	3.93E-03
ARFIP2	-0.31	5.73	11.69	6.29E-04	4.30E-03
TVP23B	-0.31	5.99	12.74	3.57E-04	2.70E-03
FBXL6	-0.31	4.39	9.45	2.11E-03	1.11E-02
PPIF	-0.31	5.77	7.62	5.78E-03	2.47E-02
TMEM242	-0.31	4.91	7.86	5.04E-03	2.22E-02
LMBR1L	-0.31	3.92	7.15	7.51E-03	3.03E-02
LDOC1L	-0.31	3.90	6.69	9.69E-03	3.70E-02
SLC39A8	-0.31	5.78	13.07	3.00E-04	2.33E-03
ALDH7A1	-0.31	5.40	11.30	7.76E-04	5.10E-03
ACSF3	-0.31	3.68	6.45	1.11E-02	4.12E-02
METTL20	-0.31	4.82	7.61	5.79E-03	2.47E-02
LAGE3	-0.31	4.31	8.69	3.19E-03	1.55E-02
ANPEP	-0.30	6.79	11.69	6.29E-04	4.30E-03
ATP5G2	-0.30	7.44	11.25	7.96E-04	5.20E-03
TSTA3	-0.30	4.82	9.87	1.68E-03	9.30E-03
PITHD1	-0.30	4.80	9.67	1.87E-03	1.01E-02
MVB12A	-0.30	5.74	11.56	6.75E-04	4.56E-03
EIF3F	-0.30	8.11	9.35	2.23E-03	1.16E-02
ANO1	-0.30	6.85	11.19	8.23E-04	5.34E-03
RBBP7	-0.30	8.00	10.79	1.02E-03	6.29E-03
CD99L2	-0.30	6.05	12.24	4.69E-04	3.38E-03
C12orf57	-0.30	6.16	12.36	4.39E-04	3.20E-03
MAGED2	-0.30	4.54	8.52	3.52E-03	1.67E-02
TIMM13	-0.30	5.58	7.76	5.35E-03	2.32E-02

SMIM14	-0.30	7.12	13.25	2.73E-04	2.16E-03
MTFR1L	-0.30	5.64	10.86	9.84E-04	6.10E-03
CREBRF	-0.30	5.54	9.97	1.59E-03	8.92E-03
GLTSCR2	-0.30	6.88	9.98	1.58E-03	8.91E-03
C2orf15	-0.30	5.05	9.93	1.63E-03	9.09E-03
VAV2	-0.30	4.37	7.89	4.97E-03	2.19E-02
PRUNE	-0.30	5.11	11.12	8.55E-04	5.50E-03
INPP5K	-0.30	5.26	12.21	4.75E-04	3.41E-03
TYW1B	-0.30	3.90	7.35	6.70E-03	2.77E-02
DTNB	-0.30	4.51	8.43	3.69E-03	1.74E-02
CCS	-0.30	5.09	8.52	3.51E-03	1.67E-02
SSR4	-0.30	6.36	12.71	3.65E-04	2.74E-03
HLCS	-0.30	4.56	9.04	2.65E-03	1.33E-02
AGFG2	-0.30	5.20	9.88	1.67E-03	9.27E-03
MPST	-0.30	6.04	11.61	6.58E-04	4.47E-03
TMEM143	-0.30	3.68	6.51	1.07E-02	4.03E-02
ABHD4	-0.30	6.34	13.37	2.56E-04	2.05E-03
LGALS9	-0.30	6.08	7.02	8.06E-03	3.20E-02
ALDH16A1	-0.30	5.10	9.90	1.65E-03	9.17E-03
PYCR2	-0.30	4.77	8.07	4.51E-03	2.03E-02
FNTB	-0.30	4.87	7.84	5.11E-03	2.24E-02
SLC12A9	-0.30	4.08	7.50	6.17E-03	2.59E-02
TBC1D19	-0.30	5.35	9.93	1.62E-03	9.08E-03
PEF1	-0.30	6.05	11.62	6.54E-04	4.44E-03
ELP3	-0.30	5.18	10.71	1.07E-03	6.52E-03
TASP1	-0.30	3.62	6.26	1.23E-02	4.49E-02
COPG2	-0.30	6.02	13.17	2.85E-04	2.23E-03
NME3	-0.30	4.43	7.18	7.38E-03	2.99E-02
GALK1	-0.30	5.80	11.03	8.98E-04	5.70E-03
UNC119	-0.30	3.95	6.14	1.32E-02	4.73E-02
HACL1	-0.30	3.95	7.46	6.31E-03	2.64E-02
TAF10	-0.30	6.26	10.77	1.03E-03	6.34E-03
PRDX3	-0.30	5.64	10.27	1.35E-03	7.85E-03
SERPING1	-0.30	8.06	7.23	7.18E-03	2.93E-02
TRAPPC6A	-0.29	5.34	7.99	4.71E-03	2.10E-02
SUV420H2	-0.29	4.11	6.95	8.37E-03	3.29E-02
POLR3H	-0.29	3.96	6.77	9.25E-03	3.57E-02
SERF2	-0.29	7.87	10.22	1.39E-03	8.02E-03
SYNE4	-0.29	4.08	6.47	1.10E-02	4.09E-02
C9orf16	-0.29	4.54	8.05	4.55E-03	2.05E-02
SLC44A2	-0.29	6.89	11.94	5.50E-04	3.84E-03
SNX17	-0.29	6.12	11.36	7.51E-04	4.96E-03
KLHDC9	-0.29	3.98	6.49	1.08E-02	4.05E-02

TMEM258	-0.29	5.30	10.98	9.21E-04	5.80E-03
WBP1	-0.29	6.23	12.51	4.04E-04	3.00E-03
SEC61G	-0.29	5.74	8.99	2.72E-03	1.36E-02
ATP6V0E2	-0.29	6.55	12.47	4.13E-04	3.05E-03
ATP5G1	-0.29	6.35	10.16	1.43E-03	8.23E-03
ABCC4	-0.29	6.30	12.27	4.59E-04	3.32E-03
MAPK9	-0.29	5.69	11.40	7.33E-04	4.86E-03
PMP22	-0.29	5.40	7.62	5.76E-03	2.46E-02
FBXW2	-0.29	5.26	10.14	1.45E-03	8.31E-03
SPPL3	-0.29	6.25	8.67	3.23E-03	1.56E-02
HSD17B8	-0.29	5.33	7.57	5.93E-03	2.51E-02
C14orf2	-0.29	5.62	9.18	2.45E-03	1.24E-02
LYPLA2	-0.29	6.23	10.44	1.23E-03	7.29E-03
DTNA	-0.29	4.98	7.34	6.74E-03	2.78E-02
MRPL15	-0.29	4.59	6.97	8.29E-03	3.27E-02
SMPD2	-0.29	4.44	7.86	5.04E-03	2.22E-02
ITGB5	-0.29	6.29	12.45	4.18E-04	3.08E-03
DNAJC30	-0.29	4.37	8.01	4.65E-03	2.08E-02
SOBP	-0.29	4.12	6.49	1.08E-02	4.06E-02
LDLRAP1	-0.29	4.99	9.57	1.97E-03	1.05E-02
LTBP4	-0.29	6.91	11.16	8.36E-04	5.41E-03
PPP1R12C	-0.29	4.35	7.49	6.21E-03	2.61E-02
GNE	-0.29	6.01	8.49	3.57E-03	1.69E-02
C16orf13	-0.29	5.11	10.26	1.36E-03	7.91E-03
PPP2R4	-0.29	7.12	10.89	9.65E-04	6.01E-03
CPM	-0.29	5.73	6.96	8.32E-03	3.28E-02
AGTRAP	-0.29	6.02	12.31	4.50E-04	3.27E-03
IDH1	-0.29	8.02	9.34	2.24E-03	1.16E-02
ABCB8	-0.29	4.88	9.35	2.23E-03	1.16E-02
TRIM24	-0.29	4.91	8.66	3.26E-03	1.57E-02
WIPI2	-0.29	5.75	7.08	7.79E-03	3.12E-02
CYHR1	-0.29	6.65	12.30	4.54E-04	3.29E-03
EXT2	-0.29	6.18	11.22	8.09E-04	5.27E-03
ASB7	-0.29	4.16	6.49	1.08E-02	4.05E-02
PPA2	-0.29	5.33	9.46	2.11E-03	1.11E-02
PON1	-0.29	8.88	7.43	6.43E-03	2.68E-02
TMEM159	-0.29	4.76	7.45	6.35E-03	2.65E-02
STX5	-0.29	5.75	10.40	1.26E-03	7.45E-03
CISD3	-0.29	4.14	7.51	6.15E-03	2.59E-02
CNN3	-0.29	5.27	8.87	2.89E-03	1.43E-02
TTC7A	-0.29	6.84	10.53	1.18E-03	7.03E-03
YIF1B	-0.29	5.43	10.75	1.04E-03	6.40E-03
CDK10	-0.28	4.26	8.18	4.24E-03	1.94E-02

GNG10	-0.28	4.31	7.40	6.54E-03	2.72E-02
MMS19	-0.28	4.95	9.96	1.60E-03	8.95E-03
ANAPC16	-0.28	4.91	8.96	2.76E-03	1.38E-02
SDR39U1	-0.28	5.23	8.83	2.96E-03	1.46E-02
PCIF1	-0.28	5.25	9.96	1.60E-03	8.98E-03
TBCD	-0.28	6.25	9.83	1.71E-03	9.44E-03
EMP2	-0.28	8.16	9.66	1.89E-03	1.02E-02
TUBA1B	-0.28	7.12	8.53	3.49E-03	1.66E-02
NDUFB5	-0.28	6.02	8.20	4.19E-03	1.92E-02
NR1D1	-0.28	7.50	7.84	5.10E-03	2.23E-02
FADS1	-0.28	6.48	9.64	1.90E-03	1.02E-02
ITM2C	-0.28	7.86	10.27	1.35E-03	7.85E-03
7-Mar	-0.28	5.22	7.34	6.75E-03	2.78E-02
NAGK	-0.28	5.92	10.03	1.54E-03	8.70E-03
TIMM10B	-0.28	4.36	6.66	9.87E-03	3.75E-02
MCRS1	-0.28	5.06	8.98	2.73E-03	1.36E-02
SLC20A2	-0.28	5.05	10.35	1.29E-03	7.60E-03
LYRM2	-0.28	4.34	6.22	1.27E-02	4.58E-02
ST7	-0.28	4.19	6.78	9.23E-03	3.56E-02
ATP5A1	-0.28	9.48	7.29	6.94E-03	2.85E-02
BTG2	-0.28	5.67	8.76	3.08E-03	1.50E-02
CHURC1	-0.28	4.57	6.14	1.32E-02	4.74E-02
TSPAN9	-0.28	6.22	11.19	8.22E-04	5.34E-03
SCMH1	-0.28	4.71	8.73	3.13E-03	1.52E-02
MICALCL	-0.28	4.35	7.57	5.93E-03	2.52E-02
EI24	-0.28	6.32	11.13	8.51E-04	5.48E-03
TKT	-0.28	9.09	8.13	4.36E-03	1.98E-02
MYEOV2	-0.28	4.95	6.90	8.64E-03	3.38E-02
DYNLRB1	-0.28	6.40	11.88	5.68E-04	3.94E-03
KDELR1	-0.28	7.53	10.38	1.28E-03	7.51E-03
BSCL2	-0.28	6.20	9.01	2.68E-03	1.34E-02
RCHY1	-0.28	5.13	7.73	5.44E-03	2.35E-02
SUPT4H1	-0.28	4.61	7.49	6.20E-03	2.60E-02
NUDT14	-0.28	4.99	7.18	7.37E-03	2.99E-02
ESRRA	-0.28	5.04	7.40	6.51E-03	2.71E-02
ATP5D	-0.28	7.46	7.86	5.05E-03	2.22E-02
NKIRAS2	-0.28	5.45	7.63	5.75E-03	2.46E-02
TMEM158	-0.28	6.79	7.71	5.49E-03	2.37E-02
AURKAIP1	-0.28	5.92	8.13	4.36E-03	1.98E-02
SRGAP3	-0.28	4.52	6.98	8.24E-03	3.26E-02
SLC35D2	-0.28	3.89	6.70	9.62E-03	3.69E-02
TEX264	-0.28	6.96	8.25	4.07E-03	1.87E-02
GLRX5	-0.28	5.56	7.91	4.93E-03	2.18E-02

UQCR11	-0.28	6.53	8.00	4.67E-03	2.09E-02
ACADVL	-0.27	6.68	9.07	2.59E-03	1.31E-02
SLC25A11	-0.27	6.73	9.36	2.22E-03	1.15E-02
NDUFS2	-0.27	6.65	10.65	1.10E-03	6.68E-03
TPD52	-0.27	7.05	9.13	2.51E-03	1.27E-02
GRHPR	-0.27	4.16	6.21	1.27E-02	4.58E-02
ANKMY2	-0.27	4.54	6.98	8.26E-03	3.26E-02
WDR6	-0.27	7.03	9.81	1.73E-03	9.51E-03
PC	-0.27	6.62	9.61	1.94E-03	1.04E-02
ZFYVE1	-0.27	4.96	8.26	4.06E-03	1.87E-02
YIPF1	-0.27	6.14	9.43	2.13E-03	1.12E-02
SLC39A3	-0.27	4.46	7.45	6.35E-03	2.65E-02
ANKRA2	-0.27	4.75	7.92	4.88E-03	2.16E-02
PGAP2	-0.27	6.23	11.51	6.92E-04	4.65E-03
MVB12B	-0.27	4.88	9.24	2.37E-03	1.21E-02
AP3S2	-0.27	5.55	10.56	1.16E-03	6.94E-03
TPGS1	-0.27	4.68	6.22	1.26E-02	4.56E-02
RCAN3	-0.27	4.58	7.65	5.67E-03	2.44E-02
UROD	-0.27	5.73	8.27	4.03E-03	1.86E-02
UNC50	-0.27	5.06	8.85	2.93E-03	1.44E-02
NDUFA3	-0.27	5.60	6.83	8.95E-03	3.48E-02
CREBL2	-0.27	4.29	6.84	8.90E-03	3.46E-02
SCLY	-0.27	4.21	6.98	8.25E-03	3.26E-02
QARS	-0.27	6.96	10.09	1.49E-03	8.48E-03
TSEN34	-0.27	5.81	9.54	2.01E-03	1.07E-02
APH1A	-0.27	6.86	8.96	2.76E-03	1.38E-02
LEPROT	-0.27	5.51	10.68	1.08E-03	6.58E-03
SLC1A5	-0.27	7.97	8.98	2.72E-03	1.36E-02
RNF167	-0.27	6.16	9.94	1.62E-03	9.05E-03
RAB3D	-0.27	7.49	8.33	3.89E-03	1.81E-02
FBXW9	-0.27	5.48	9.87	1.68E-03	9.28E-03
PAFAH1B3	-0.27	5.15	9.22	2.40E-03	1.22E-02
IGSF5	-0.27	4.38	6.91	8.57E-03	3.36E-02
GSTZ1	-0.27	5.58	7.11	7.67E-03	3.08E-02
MPPE1	-0.27	5.03	8.42	3.72E-03	1.75E-02
EPG5	-0.27	4.91	8.66	3.25E-03	1.56E-02
PPP4C	-0.27	6.18	8.62	3.33E-03	1.60E-02
UQCRC1	-0.27	7.39	7.48	6.25E-03	2.62E-02
MAPKAPK3	-0.27	6.16	8.65	3.26E-03	1.57E-02
PRAF2	-0.27	4.16	6.02	1.41E-02	4.99E-02
FUS	-0.27	6.67	8.24	4.11E-03	1.89E-02
PARL	-0.27	4.81	7.30	6.88E-03	2.83E-02
POFUT1	-0.27	4.97	7.75	5.39E-03	2.33E-02

ABHD14B	-0.27	6.24	8.56	3.43E-03	1.64E-02
RAB40C	-0.27	4.78	7.66	5.63E-03	2.42E-02
IFI35	-0.27	6.23	6.61	1.01E-02	3.84E-02
ZNF395	-0.26	5.07	7.54	6.02E-03	2.54E-02
HMG20A	-0.26	4.61	7.40	6.51E-03	2.71E-02
IRX3	-0.26	5.84	8.74	3.11E-03	1.51E-02
TBCEL	-0.26	7.41	8.96	2.76E-03	1.37E-02
C11orf68	-0.26	4.80	8.90	2.85E-03	1.41E-02
DCAF11	-0.26	6.94	8.99	2.72E-03	1.36E-02
MAF1	-0.26	5.90	8.47	3.61E-03	1.71E-02
FAM3D	-0.26	7.30	7.98	4.74E-03	2.11E-02
TSC22D4	-0.26	6.34	9.72	1.82E-03	9.88E-03
MYLIP	-0.26	4.94	8.82	2.99E-03	1.46E-02
MXI1	-0.26	6.38	9.50	2.05E-03	1.08E-02
MPDU1	-0.26	5.61	8.66	3.26E-03	1.57E-02
HGSNAT	-0.26	4.73	8.37	3.81E-03	1.78E-02
MTCH1	-0.26	7.40	8.70	3.18E-03	1.54E-02
PMM2	-0.26	5.29	7.36	6.67E-03	2.76E-02
KIAA0141	-0.26	5.04	9.44	2.13E-03	1.12E-02
TSPO	-0.26	6.45	7.81	5.19E-03	2.27E-02
VAMP8	-0.26	7.56	8.11	4.40E-03	1.99E-02
PAIP2B	-0.26	5.81	7.03	8.00E-03	3.19E-02
GLB1L2	-0.26	5.36	6.78	9.21E-03	3.56E-02
AMIGO1	-0.26	5.03	8.85	2.93E-03	1.44E-02
RNF181	-0.26	6.89	9.53	2.02E-03	1.07E-02
TM9SF1	-0.26	6.90	9.31	2.28E-03	1.18E-02
ATP13A2	-0.26	5.89	8.26	4.06E-03	1.87E-02
NUDT19	-0.26	4.98	6.16	1.31E-02	4.71E-02
COX14	-0.26	5.77	8.46	3.63E-03	1.71E-02
TMEM19	-0.26	5.21	8.01	4.66E-03	2.08E-02
MACROD1	-0.26	5.14	6.98	8.24E-03	3.26E-02
ABHD3	-0.26	5.08	7.01	8.11E-03	3.21E-02
DCAF12	-0.26	6.10	6.78	9.22E-03	3.56E-02
TMEM55B	-0.26	4.86	7.85	5.08E-03	2.23E-02
HADHB	-0.26	6.88	8.16	4.28E-03	1.95E-02
MED28	-0.26	5.93	6.97	8.31E-03	3.28E-02
ATP5L	-0.26	7.05	7.77	5.32E-03	2.31E-02
HAUS2	-0.25	4.87	6.70	9.64E-03	3.69E-02
SDHB	-0.25	6.30	7.87	5.02E-03	2.21E-02
TFDP2	-0.25	4.76	7.05	7.94E-03	3.17E-02
COQ9	-0.25	5.08	6.49	1.09E-02	4.06E-02
EPS8L2	-0.25	7.51	6.61	1.02E-02	3.85E-02
C21orf33	-0.25	5.17	6.23	1.26E-02	4.54E-02

SURF4	-0.25	8.10	7.62	5.78E-03	2.47E-02
APMAP	-0.25	5.62	8.41	3.72E-03	1.75E-02
GRB7	-0.25	6.46	10.25	1.37E-03	7.93E-03
VPS41	-0.25	5.83	8.68	3.22E-03	1.55E-02
SEC61B	-0.25	6.10	7.88	4.98E-03	2.20E-02
MGAT3	-0.25	8.62	6.46	1.11E-02	4.11E-02
PBXIP1	-0.25	6.89	8.46	3.63E-03	1.71E-02
FBXO7	-0.25	4.20	6.12	1.33E-02	4.77E-02
NDUFB8	-0.25	6.43	7.48	6.24E-03	2.62E-02
PSMB3	-0.25	6.54	7.39	6.55E-03	2.72E-02
GYG1	-0.25	5.00	7.18	7.35E-03	2.98E-02
STUB1	-0.25	6.50	7.96	4.77E-03	2.13E-02
SREBF1	-0.25	7.09	8.49	3.57E-03	1.69E-02
UBXN1	-0.25	6.40	7.82	5.17E-03	2.26E-02
POLDIP2	-0.25	5.49	7.93	4.87E-03	2.16E-02
SPRYD3	-0.25	5.52	6.65	9.94E-03	3.78E-02
SLC35A1	-0.25	6.38	8.27	4.04E-03	1.86E-02
LSM4	-0.25	5.24	7.68	5.59E-03	2.41E-02
SLC37A1	-0.25	5.36	6.65	9.89E-03	3.76E-02
TMEM259	-0.25	6.28	9.13	2.52E-03	1.27E-02
NSDHL	-0.25	5.53	6.25	1.24E-02	4.51E-02
ANAPC11	-0.24	5.21	7.26	7.07E-03	2.89E-02
TBX1	-0.24	5.26	7.21	7.25E-03	2.95E-02
FLOT2	-0.24	6.20	7.69	5.57E-03	2.40E-02
APEH	-0.24	5.57	8.49	3.57E-03	1.69E-02
ALDH4A1	-0.24	5.99	7.14	7.55E-03	3.04E-02
AMZ2	-0.24	5.21	7.56	5.98E-03	2.53E-02
PQLC3	-0.24	5.53	7.92	4.90E-03	2.17E-02
CSAD	-0.24	5.41	6.88	8.72E-03	3.41E-02
GDPD5	-0.24	5.28	6.74	9.45E-03	3.63E-02
NTAN1	-0.24	5.11	6.81	9.08E-03	3.52E-02
EIF3I	-0.24	6.74	7.26	7.07E-03	2.89E-02
PINK1	-0.24	7.46	7.13	7.57E-03	3.05E-02
RNF103- CHMP3	-0.24	6.96	7.47	6.28E-03	2.63E-02
MRPS24	-0.24	5.03	6.80	9.14E-03	3.53E-02
EMG1	-0.24	5.06	6.05	1.39E-02	4.92E-02
CAPN5	-0.24	5.68	7.01	8.09E-03	3.21E-02
PEX2	-0.24	4.99	6.68	9.75E-03	3.72E-02
UFC1	-0.24	5.93	6.10	1.35E-02	4.81E-02
CYB5R3	-0.24	8.01	6.80	9.14E-03	3.53E-02
FECH	-0.24	5.59	8.25	4.08E-03	1.88E-02
POGLUT1	-0.24	4.82	7.43	6.40E-03	2.67E-02

LAMTOR1	-0.23	5.80	6.68	9.74E-03	3.72E-02
IMPDH2	-0.23	6.42	7.37	6.64E-03	2.75E-02
NDUFA11	-0.23	5.90	7.15	7.48E-03	3.02E-02
POLR1C	-0.23	5.19	6.37	1.16E-02	4.28E-02
MLPH	-0.23	6.55	7.17	7.40E-03	3.00E-02
LONP2	-0.23	6.18	7.73	5.43E-03	2.35E-02
CPD	-0.23	8.23	7.11	7.65E-03	3.08E-02
2-Mar	-0.23	6.11	6.29	1.21E-02	4.43E-02
RCBTB2	-0.23	6.27	8.30	3.96E-03	1.83E-02
GNB2	-0.23	8.22	6.23	1.26E-02	4.55E-02
AKR7A2	-0.23	5.51	6.23	1.25E-02	4.54E-02
PKN1	-0.23	5.50	7.63	5.74E-03	2.46E-02
MANBA	-0.23	4.92	6.57	1.04E-02	3.91E-02
RMND5A	-0.23	6.78	6.12	1.34E-02	4.77E-02
FAM83E	-0.23	5.83	7.00	8.15E-03	3.23E-02
RAB2A	-0.23	7.07	6.57	1.04E-02	3.91E-02
CNPY2	-0.23	5.99	6.11	1.35E-02	4.80E-02
GEMIN7	-0.23	4.94	6.05	1.39E-02	4.92E-02
ERGIC1	-0.23	6.27	7.21	7.25E-03	2.95E-02
FTO	-0.23	6.69	7.26	7.06E-03	2.89E-02
KDM4A	-0.23	5.62	7.21	7.25E-03	2.95E-02
DYRK1B	-0.23	4.95	6.35	1.17E-02	4.30E-02
RBMS2	-0.23	5.09	6.44	1.12E-02	4.14E-02
PGRMC2	-0.23	6.36	6.60	1.02E-02	3.86E-02
CLN6	-0.23	6.04	6.06	1.38E-02	4.90E-02
ATP6V1F	-0.23	6.34	6.94	8.43E-03	3.31E-02
RBCK1	-0.23	5.83	6.53	1.06E-02	4.00E-02
ARF5	-0.23	6.80	6.60	1.02E-02	3.86E-02
DGCR2	-0.23	6.91	7.52	6.11E-03	2.57E-02
RHOT2	-0.23	4.98	6.91	8.58E-03	3.36E-02
YIPF4	-0.23	5.84	6.61	1.01E-02	3.85E-02
RXRB	-0.23	5.35	7.30	6.90E-03	2.84E-02
HID1	-0.23	6.62	6.57	1.03E-02	3.91E-02
FIS1	-0.22	6.69	6.08	1.37E-02	4.86E-02
CLPTM1L	-0.22	7.07	7.23	7.16E-03	2.92E-02
TCP11L2	-0.22	6.44	6.43	1.12E-02	4.16E-02
FAM134A	-0.22	6.49	7.17	7.41E-03	3.00E-02
APOA1BP	-0.22	6.91	6.70	9.66E-03	3.70E-02
REXO2	-0.22	5.63	6.81	9.06E-03	3.51E-02
TXN2	-0.22	6.34	6.19	1.29E-02	4.64E-02
ADH5	-0.22	6.48	6.71	9.58E-03	3.68E-02
TEX261	-0.22	5.01	6.59	1.02E-02	3.87E-02
UBL5	-0.22	6.84	6.40	1.14E-02	4.21E-02

ISCU	-0.22	5.99	6.60	1.02E-02	3.86E-02
LZTR1	-0.22	5.19	6.16	1.31E-02	4.71E-02
AKT2	-0.22	6.72	7.05	7.94E-03	3.17E-02
HK1	-0.22	7.47	6.37	1.16E-02	4.27E-02
PGPEP1	-0.22	5.36	6.71	9.60E-03	3.68E-02
ATG7	-0.22	4.94	6.67	9.81E-03	3.74E-02
NAGLU	-0.22	5.66	6.68	9.73E-03	3.72E-02
RHOQ	-0.22	6.49	7.16	7.44E-03	3.01E-02
ATP8A1	-0.22	6.44	6.63	1.00E-02	3.80E-02
TMEM30B	-0.22	6.96	6.54	1.05E-02	3.97E-02
CNPPD1	-0.22	5.72	6.64	9.98E-03	3.79E-02
SPCS1	-0.22	6.64	6.21	1.27E-02	4.60E-02
EIF2D	-0.22	5.32	6.12	1.33E-02	4.77E-02
ULK1	-0.21	5.82	6.61	1.01E-02	3.84E-02
DAP3	-0.21	5.73	6.45	1.11E-02	4.12E-02
SH3GLB2	-0.21	5.92	6.47	1.09E-02	4.08E-02
PRRC1	-0.21	6.03	6.52	1.07E-02	4.02E-02
ANAPC5	-0.21	6.87	6.08	1.37E-02	4.86E-02
IDH3G	-0.21	5.94	6.42	1.13E-02	4.18E-02
SPG21	-0.21	6.28	6.19	1.29E-02	4.64E-02
SFT2D2	-0.21	6.70	6.44	1.12E-02	4.14E-02
RHBDD2	-0.20	6.17	6.08	1.37E-02	4.86E-02
IPO13	-0.20	6.31	6.27	1.22E-02	4.46E-02
