

Supplementary Tables

Supplementary Table S1. A complete list of differential expressed genes identified in meta-analysis.

Ensembl_ID	Gene_Symbol	DE_1 <sup>1</sup>	DE_2 <sup>1</sup>	DE_3 <sup>1</sup>	DE_4 <sup>1</sup>	Adj_P <sup>2</sup>	Average_Log2FC <sup>3</sup>	Effect <sup>4</sup>
ENSG0000008311	AASS	1	1	1	0	0.00E+00	-1.03	Down
ENSG00000075413	MARK3	1	1	1	0	0.00E+00	-0.88	Down
ENSG00000076351	SLC46A1	1	0	1	0	0.00E+00	0.48	Up
ENSG00000100196	KDELR3	1	0	1	0	0.00E+00	0.72	Up
ENSG00000103415	HMOX2	1	1	1	0	0.00E+00	-0.81	Down
ENSG00000105894	PTN	0	1	1	0	0.00E+00	1.47	Up
ENSG00000106809	OGN	1	1	1	0	0.00E+00	2.26	Up
ENSG00000106819	ASPN	1	1	1	0	0.00E+00	1.99	Up
ENSG00000106823	ECM2	0	1	1	0	0.00E+00	1.17	Up
ENSG00000118194	TNNT2	1	0	1	0	0.00E+00	-0.55	Down
ENSG00000122034	GTF3A	1	0	1	0	0.00E+00	-0.54	Down
ENSG00000123689	GOS2	1	0	0	0	0.00E+00	-1.57	Down
ENSG00000126106	TMEM53	1	1	0	0	0.00E+00	-0.58	Down
ENSG00000129250	KIF1C	1	0	0	0	0.00E+00	-0.56	Down
ENSG00000130528	HRC	1	0	0	0	0.00E+00	-0.58	Down
ENSG00000139329	LUM	1	1	1	0	0.00E+00	1.81	Up
ENSG00000140416	TPM1	1	0	0	0	0.00E+00	-0.53	Down
ENSG00000141905	NFIC	1	1	0	0	0.00E+00	-0.57	Down
ENSG00000145934	TENM2	1	0	0	0	0.00E+00	-0.67	Down
ENSG00000156219	ART3	1	0	1	0	0.00E+00	-1.31	Down
ENSG00000161970	RPL26	1	0	0	0	0.00E+00	-0.76	Down
ENSG00000175084	DES	1	1	0	0	0.00E+00	-0.80	Down
ENSG00000176293	ZNF135	1	0	0	0	0.00E+00	0.51	Up
ENSG00000179526	SHARPIN	1	0	0	0	0.00E+00	-0.34	Down
ENSG00000197256	KANK2	1	0	0	0	0.00E+00	-0.57	Down
ENSG00000197616	MYH6	1	0	1	1	0.00E+00	-2.59	Down
ENSG00000198542	ITGBL1	1	1	1	0	0.00E+00	1.69	Up
ENSG00000198624	CCDC69	1	0	1	0	0.00E+00	-0.87	Down
ENSG00000210127	MT-TA	1	0	1	0	0.00E+00	-1.66	Down
ENSG00000233098	CCDC144NL-AS1	1	1	1	0	0.00E+00	1.17	Up
ENSG00000140319	SRP14	1	0	0	0	6.91E-14	-0.53	Down
ENSG00000197586	ENTPD6	1	0	1	0	6.91E-14	-0.77	Down
ENSG00000267280	TBX2-AS1	1	0	0	0	6.91E-14	0.83	Up
ENSG00000152086	TUBA3E	1	1	1	0	1.33E-13	-1.99	Down
ENSG00000170448	NFXL1	1	0	1	0	1.33E-13	-1.84	Down
ENSG00000165124	SVEP1	1	1	1	0	1.89E-13	1.24	Up
ENSG00000152580	IGSF10	1	1	0	0	2.46E-13	1.54	Up
ENSG00000143603	KCNN3	0	1	1	0	3.04E-13	1.43	Up
ENSG00000187837	HIST1H1C	1	0	0	0	3.60E-13	-0.89	Down
ENSG00000075886	TUBA3D	0	1	1	0	4.15E-13	-1.60	Down
ENSG00000189060	H1FO	1	1	0	0	8.87E-13	-0.80	Down
ENSG00000134247	PTGFRN	1	0	1	0	2.21E-12	0.93	Up
ENSG00000116690	PRG4	1	0	1	0	3.94E-12	0.84	Up
ENSG00000160392	C19orf47	1	1	1	0	4.61E-12	-0.95	Down
ENSG00000129009	ISLR	0	1	1	0	7.14E-12	1.49	Up
ENSG00000129116	PALLD	0	1	1	0	8.77E-12	-0.72	Down
ENSG00000173991	TCAP	1	0	0	0	1.11E-11	-0.55	Down

ENSG00000104879	<i>CKM</i>	1	0	1	0	1.27E-11	-0.79	Down
ENSG00000108298	<i>RPL19</i>	1	0	0	0	1.66E-11	-0.54	Down
ENSG00000142748	<i>FCN3</i>	0	1	1	0	1.75E-11	-1.59	Down
ENSG00000211455	<i>STK38L</i>	1	1	1	0	2.14E-11	1.16	Up
ENSG00000197860	<i>SGTB</i>	1	0	0	0	2.50E-11	0.77	Up
ENSG00000167646	<i>DNAAF3</i>	1	0	0	0	4.36E-11	1.34	Up
ENSG00000187955	<i>COL14A1</i>	0	1	1	0	4.92E-11	1.99	Up
ENSG00000131174	<i>COX7B</i>	1	0	1	0	6.04E-11	-1.09	Down
ENSG00000143196	<i>DPT</i>	0	1	1	0	6.23E-11	1.36	Up
ENSG00000210107	<i>MT-TQ</i>	1	0	0	0	7.87E-11	-1.08	Down
ENSG00000149294	<i>NCAM1</i>	1	1	0	0	1.00E-10	-0.71	Down
ENSG00000136942	<i>RPL35</i>	1	0	0	0	1.08E-10	-0.68	Down
ENSG00000138326	<i>RPS24</i>	1	0	0	0	1.75E-10	-0.75	Down
ENSG00000115593	<i>SMYD1</i>	0	0	1	0	1.82E-10	-0.64	Down
ENSG00000177463	<i>NR2C2</i>	1	0	1	0	3.54E-10	-0.41	Down
ENSG00000113296	<i>THBS4</i>	1	0	1	0	3.85E-10	1.42	Up
ENSG00000114867	<i>EIF4G1</i>	1	0	0	0	3.85E-10	-0.66	Down
ENSG00000138074	<i>SLC5A6</i>	1	0	0	0	4.23E-10	-0.40	Down
ENSG00000175416	<i>CLTB</i>	1	0	0	0	4.49E-10	-0.69	Down
ENSG00000106624	<i>AEBP1</i>	1	0	1	0	4.52E-10	1.69	Up
ENSG00000136436	<i>CALCOCO2</i>	1	1	1	0	5.08E-10	-0.76	Down
ENSG00000110400	<i>NECTIN1</i>	1	1	1	0	5.36E-10	-1.60	Down
ENSG00000213694	<i>S1PR3</i>	1	0	1	0	5.40E-10	-1.12	Down
ENSG00000096696	<i>DSP</i>	1	0	0	0	5.87E-10	-0.84	Down
ENSG00000114923	<i>SLC4A3</i>	1	0	0	0	6.17E-10	-0.80	Down
ENSG00000174437	<i>ATP2A2</i>	1	0	1	0	6.19E-10	-0.74	Down
ENSG00000188229	<i>TUBB4B</i>	1	0	1	0	8.15E-10	-0.82	Down
ENSG00000065054	<i>SLC9A3R2</i>	1	0	1	0	8.20E-10	-0.65	Down
ENSG00000118564	<i>FBXL5</i>	0	0	1	0	9.08E-10	-0.52	Down
ENSG00000182979	<i>MTA1</i>	1	0	0	0	9.82E-10	-0.79	Down
ENSG00000171533	<i>MAP6</i>	1	0	1	0	1.17E-09	0.65	Up
ENSG00000147872	<i>PLIN2</i>	1	1	1	0	1.18E-09	-1.38	Down
ENSG00000179954	<i>SSC5D</i>	0	1	1	0	1.18E-09	1.54	Up
ENSG00000184441	<i>AP001062.1</i>	1	0	0	0	1.24E-09	0.33	Up
ENSG00000147687	<i>TATDN1</i>	1	0	0	0	1.39E-09	-0.49	Down
ENSG00000148187	<i>MRRF</i>	1	0	1	0	1.61E-09	-0.54	Down
ENSG00000178685	<i>PARP10</i>	1	1	1	0	1.65E-09	0.70	Up
ENSG00000196535	<i>MYO18A</i>	1	0	0	0	1.72E-09	-0.47	Down
ENSG00000142910	<i>TINAGL1</i>	1	0	1	0	1.80E-09	-0.64	Down
ENSG00000134571	<i>MYBPC3</i>	1	0	0	0	1.93E-09	-0.55	Down
ENSG00000159166	<i>LAD1</i>	1	1	0	0	1.93E-09	-1.95	Down
ENSG00000144857	<i>BOC</i>	0	1	1	0	1.97E-09	0.98	Up
ENSG00000109099	<i>PMP22</i>	1	0	0	0	2.60E-09	-0.54	Down
ENSG00000173402	<i>DAG1</i>	1	1	0	0	2.86E-09	-0.65	Down
ENSG00000135720	<i>DYNC1LI2</i>	1	0	1	0	3.77E-09	0.60	Up
ENSG00000087074	<i>PPP1R15A</i>	1	0	0	0	3.83E-09	0.72	Up
ENSG00000135919	<i>SERPINE2</i>	0	0	1	0	4.36E-09	0.90	Up
ENSG00000054654	<i>SYNE2</i>	1	0	1	0	5.27E-09	-0.80	Down
ENSG00000157613	<i>CREB3L1</i>	1	0	1	0	5.41E-09	-0.79	Down
ENSG00000106483	<i>SFRP4</i>	0	0	1	0	6.21E-09	2.62	Up
ENSG00000254473	<i>AL354920.1</i>	1	0	0	0	6.29E-09	0.43	Up
ENSG00000248527	<i>MTATP6P1</i>	1	1	0	0	7.06E-09	-0.75	Down
ENSG00000198763	<i>MT-ND2</i>	1	0	0	0	8.19E-09	-0.72	Down

ENSG00000239474	<i>KLHL41</i>	0	1	1	0	8.19E-09	-0.89	Down
ENSG00000120833	<i>SOCS2</i>	1	0	1	0	1.01E-08	0.90	Up
ENSG00000078098	<i>FAP</i>	0	0	1	0	1.03E-08	1.57	Up
ENSG00000164530	<i>PI16</i>	0	1	1	0	1.33E-08	1.65	Up
ENSG00000185033	<i>SEMA4B</i>	0	1	0	0	1.37E-08	-0.82	Down
ENSG00000090006	<i>LTBP4</i>	0	1	0	0	1.42E-08	0.80	Up
ENSG00000182107	<i>TMEM30B</i>	0	1	1	0	1.51E-08	1.88	Up
ENSG00000065978	<i>YBX1</i>	1	0	1	0	1.59E-08	-0.57	Down
ENSG00000011028	<i>AC080038.1</i>	1	0	1	0	1.61E-08	1.26	Up
ENSG00000162576	<i>MXRA8</i>	1	1	1	0	1.84E-08	0.91	Up
ENSG00000149575	<i>SCN2B</i>	0	1	1	0	2.07E-08	1.04	Up
ENSG00000174348	<i>PODN</i>	0	1	0	0	2.11E-08	1.13	Up
ENSG00000171385	<i>KCND3</i>	1	0	1	0	2.40E-08	-0.91	Down
ENSG00000107404	<i>DVL1</i>	1	0	1	0	2.69E-08	-0.68	Down
ENSG00000198888	<i>MT-ND1</i>	1	0	1	0	2.72E-08	-0.71	Down
ENSG00000186187	<i>ZNRF1</i>	1	0	0	0	2.85E-08	-0.33	Down
ENSG00000026950	<i>BTN3A1</i>	0	1	0	0	2.88E-08	0.91	Up
ENSG00000113369	<i>ARRDC3</i>	1	1	0	0	2.99E-08	0.96	Up
ENSG00000101825	<i>MXRA5</i>	0	0	1	0	3.58E-08	1.59	Up
ENSG00000101187	<i>SLCO4A1</i>	0	0	1	0	4.18E-08	-1.21	Down
ENSG00000120729	<i>MYOT</i>	1	1	0	0	4.41E-08	-1.30	Down
ENSG00000166482	<i>MFAP4</i>	1	1	1	0	4.90E-08	1.29	Up
ENSG00000150776	<i>NKAPD1</i>	1	0	0	0	5.47E-08	-0.47	Down
ENSG00000119707	<i>RBM25</i>	1	0	0	0	5.63E-08	-0.38	Down
ENSG00000167522	<i>ANKRD11</i>	1	1	0	0	5.99E-08	-0.45	Down
ENSG00000063245	<i>EPN1</i>	1	1	1	0	6.23E-08	-0.79	Down
ENSG00000158747	<i>NBL1</i>	1	1	1	0	6.32E-08	1.06	Up
ENSG00000204569	<i>PPP1R10</i>	0	0	1	0	6.88E-08	0.60	Up
ENSG00000155657	<i>TTN</i>	1	1	1	0	7.45E-08	-0.66	Down
ENSG00000198517	<i>MAFK</i>	1	0	1	0	7.78E-08	0.72	Up
ENSG00000210117	<i>MT-TW</i>	1	0	1	0	9.17E-08	-1.62	Down
ENSG00000255690	<i>TRIL</i>	0	1	1	0	9.35E-08	1.35	Up
ENSG00000160469	<i>BRSK1</i>	0	0	1	0	1.06E-07	0.95	Up
ENSG00000182197	<i>EXT1</i>	1	0	1	0	1.14E-07	1.11	Up
ENSG00000279088	<i>AC022400.8</i>	1	0	0	0	1.14E-07	-0.58	Down
ENSG00000166848	<i>TERF2IP</i>	1	0	1	0	1.18E-07	0.47	Up
ENSG00000131730	<i>CKMT2</i>	1	0	0	0	1.19E-07	-0.62	Down
ENSG00000161940	<i>BCL6B</i>	1	1	1	0	1.20E-07	1.30	Up
ENSG00000105401	<i>CDC37</i>	1	0	0	0	1.37E-07	-0.43	Down
ENSG00000020181	<i>ADGRA2</i>	1	1	1	0	1.43E-07	0.68	Up
ENSG00000135318	<i>NT5E</i>	0	1	1	0	1.46E-07	1.05	Up
ENSG00000110042	<i>DTX4</i>	1	1	0	0	1.48E-07	1.25	Up
ENSG00000205363	<i>INSYN1</i>	1	0	1	0	1.48E-07	-1.08	Down
ENSG00000163050	<i>COQ8A</i>	1	0	1	0	1.64E-07	-0.88	Down
ENSG00000169604	<i>ANTXR1</i>	0	1	1	0	1.75E-07	0.97	Up
ENSG00000185010	<i>F8</i>	1	0	1	0	1.98E-07	-0.71	Down
ENSG00000270504	<i>AL391422.4</i>	1	0	1	0	1.98E-07	0.70	Up
ENSG00000119681	<i>LTBP2</i>	0	0	1	0	2.01E-07	1.23	Up
ENSG00000165629	<i>ATP5F1C</i>	1	0	0	0	2.20E-07	-0.79	Down
ENSG00000065882	<i>TBC1D1</i>	0	1	0	0	2.40E-07	-0.39	Down
ENSG00000138303	<i>ASCC1</i>	1	0	0	0	2.55E-07	-0.38	Down
ENSG00000164694	<i>FNDC1</i>	1	1	1	0	2.56E-07	2.06	Up
ENSG00000227199	<i>ST7-AS1</i>	1	0	0	0	2.56E-07	-0.52	Down

ENSG00000183801	<i>OLFML1</i>	0	1	0	0	2.69E-07	0.85	Up
ENSG00000116898	<i>MRPS15</i>	1	0	0	0	2.72E-07	-0.77	Down
ENSG00000225614	<i>ZNF469</i>	1	1	1	0	2.87E-07	1.38	Up
ENSG00000134716	<i>CYP2J2</i>	1	0	0	0	3.06E-07	0.96	Up
ENSG00000122378	<i>PRXL2A</i>	0	0	1	0	3.10E-07	-0.56	Down
ENSG00000142733	<i>MAP3K6</i>	0	1	1	0	3.41E-07	-0.75	Down
ENSG00000214456	<i>PLIN5</i>	1	0	1	0	3.55E-07	-1.11	Down
ENSG00000120738	<i>EGR1</i>	1	1	1	0	4.00E-07	2.10	Up
ENSG00000101444	<i>AHCY</i>	1	0	1	0	4.12E-07	-0.86	Down
ENSG00000091986	<i>CCDC80</i>	0	0	1	0	4.46E-07	1.24	Up
ENSG00000055118	<i>KCNH2</i>	1	1	1	0	4.53E-07	-0.84	Down
ENSG00000144560	<i>VGLL4</i>	0	1	1	0	4.85E-07	0.38	Up
ENSG00000198892	<i>SHISA4</i>	1	1	1	0	5.82E-07	-0.83	Down
ENSG00000099139	<i>PCSK5</i>	0	1	0	0	6.00E-07	0.73	Up
ENSG00000181104	<i>F2R</i>	0	0	1	0	6.00E-07	0.92	Up
ENSG00000113456	<i>RAD1</i>	1	1	0	0	6.66E-07	-0.56	Down
ENSG00000196821	<i>C6orf106</i>	1	0	1	0	7.17E-07	-0.50	Down
ENSG00000185739	<i>SRL</i>	1	1	0	0	7.23E-07	-0.57	Down
ENSG00000211445	<i>GPX3</i>	1	1	1	0	7.23E-07	-0.81	Down
ENSG00000172795	<i>DCP2</i>	1	0	0	0	7.30E-07	0.69	Up
ENSG00000076555	<i>ACACB</i>	1	0	1	0	7.50E-07	-0.87	Down
ENSG00000161647	<i>MPP3</i>	1	1	1	0	7.78E-07	-1.23	Down
ENSG00000187486	<i>KCNJ11</i>	0	1	1	0	9.00E-07	-1.03	Down
ENSG00000261801	<i>LOXL1-AS1</i>	1	0	1	0	9.55E-07	1.00	Up
ENSG00000173706	<i>HEG1</i>	1	0	0	0	9.61E-07	0.64	Up
ENSG00000076344	<i>RGS11</i>	1	0	1	0	1.05E-06	0.66	Up
ENSG00000044115	<i>CTNNA1</i>	1	1	0	0	1.23E-06	-0.57	Down
ENSG00000147573	<i>TRIM55</i>	1	0	0	0	1.27E-06	-0.84	Down
ENSG00000131386	<i>GALNT15</i>	1	1	0	0	1.30E-06	-1.57	Down
ENSG00000166831	<i>RBPM52</i>	1	1	1	0	1.36E-06	-0.69	Down
ENSG00000177731	<i>FLII</i>	1	0	0	0	1.38E-06	-0.60	Down
ENSG00000232973	<i>CYP1B1-AS1</i>	1	0	1	0	1.40E-06	1.18	Up
ENSG00000214530	<i>STARD10</i>	1	0	1	0	1.44E-06	-0.86	Down
ENSG00000137573	<i>SULF1</i>	0	1	1	0	1.61E-06	1.06	Up
ENSG00000084636	<i>COL16A1</i>	0	0	1	0	1.65E-06	0.86	Up
ENSG00000169231	<i>THBS3</i>	1	0	1	0	1.65E-06	0.96	Up
ENSG00000105664	<i>COMP</i>	0	0	1	0	1.68E-06	2.39	Up
ENSG00000162434	<i>JAK1</i>	1	1	1	0	1.75E-06	-0.55	Down
ENSG00000133392	<i>MYH11</i>	1	0	0	0	1.77E-06	0.56	Up
ENSG00000133477	<i>FAM83F</i>	0	1	1	0	1.78E-06	-1.15	Down
ENSG00000071626	<i>DAZAP1</i>	1	0	0	0	2.07E-06	-0.71	Down
ENSG00000188846	<i>RPL14</i>	1	0	1	0	2.10E-06	-0.56	Down
ENSG00000210112	<i>MT-TM</i>	1	0	1	0	2.25E-06	-1.19	Down
ENSG00000137818	<i>RPLP1</i>	1	0	0	0	2.27E-06	-0.61	Down
ENSG00000111674	<i>ENO2</i>	0	0	1	0	2.29E-06	0.74	Up
ENSG00000123505	<i>AMD1</i>	0	0	1	0	2.40E-06	-0.57	Down
ENSG00000123240	<i>OPTN</i>	1	0	0	0	2.45E-06	-0.71	Down
ENSG00000132938	<i>MTUS2</i>	0	0	1	0	2.63E-06	-0.62	Down
ENSG00000161016	<i>RPL8</i>	1	0	0	0	2.64E-06	-0.60	Down
ENSG00000137312	<i>FLOT1</i>	1	0	0	0	2.84E-06	-0.60	Down
ENSG00000163710	<i>PCOLCE2</i>	0	0	1	0	3.25E-06	0.77	Up
ENSG00000198959	<i>TGM2</i>	1	1	0	0	3.38E-06	-0.76	Down
ENSG00000186298	<i>PPP1CC</i>	1	0	1	0	3.40E-06	-0.84	Down

ENSG00000168610	STAT3	1	1	0	0	3.51E-06	-0.91	Down
ENSG00000111452	ADGRD1	1	0	1	0	3.54E-06	-0.77	Down
ENSG00000092439	TRPM7	0	1	1	0	3.57E-06	-0.65	Down
ENSG00000078804	TP53INP2	1	0	0	0	3.64E-06	0.58	Up
ENSG00000196642	RABL6	1	0	0	0	3.65E-06	-0.26	Down
ENSG00000188677	PARVB	1	0	1	0	3.90E-06	-0.81	Down
ENSG00000143401	ANP32E	1	1	0	0	3.94E-06	0.59	Up
ENSG00000167552	TUBA1A	1	0	0	0	3.94E-06	0.56	Up
ENSG00000133065	SLC41A1	1	0	1	0	4.12E-06	-0.61	Down
ENSG00000089225	TBX5	1	0	0	0	4.33E-06	-0.58	Down
ENSG00000175166	PSMD2	1	0	0	0	4.44E-06	-0.45	Down
ENSG00000171853	TRAPPC12	1	0	0	0	4.51E-06	-0.59	Down
ENSG00000140691	ARMC5	1	0	1	0	4.59E-06	0.48	Up
ENSG00000125827	TMX4	0	1	0	0	5.10E-06	-0.46	Down
ENSG00000262655	SPON1	1	0	0	0	5.10E-06	0.76	Up
ENSG00000104980	TIMM44	1	0	1	0	5.12E-06	-0.64	Down
ENSG00000124766	SOX4	0	1	0	0	5.44E-06	1.06	Up
ENSG00000117592	PRDX6	1	1	0	0	5.47E-06	-0.74	Down
ENSG00000184489	PTP4A3	1	0	1	0	5.76E-06	-0.69	Down
ENSG00000173801	JUP	1	0	0	0	5.85E-06	-0.63	Down
ENSG00000068976	PYGM	1	0	1	0	5.89E-06	-0.74	Down
ENSG00000128791	TWSG1	1	0	1	0	6.04E-06	1.12	Up
ENSG00000099998	GGT5	1	1	0	0	6.40E-06	-0.95	Down
ENSG00000206560	ANKRD28	0	1	0	0	6.51E-06	-0.39	Down
ENSG00000100170	SLC5A1	1	0	1	0	6.57E-06	-0.86	Down
ENSG00000163220	S100A9	1	0	1	0	6.58E-06	-1.55	Down
ENSG00000131477	RAMP2	0	1	0	0	6.59E-06	0.45	Up
ENSG00000125733	TRIP10	1	0	0	0	7.05E-06	-0.59	Down
ENSG00000114631	PODXL2	0	0	1	0	7.15E-06	1.10	Up
ENSG00000128309	MPST	1	1	0	0	7.21E-06	-0.96	Down
ENSG00000267577	AC010327.3	1	0	0	0	7.66E-06	1.09	Up
ENSG00000144810	COL8A1	0	0	1	0	7.83E-06	0.77	Up
ENSG00000105953	OGDH	1	0	1	0	7.85E-06	-0.57	Down
ENSG00000108592	FTSJ3	1	0	0	0	7.99E-06	-0.29	Down
ENSG00000053254	FOXN3	1	0	1	0	8.09E-06	-0.65	Down
ENSG00000183098	GPC6	0	0	1	0	8.09E-06	1.46	Up
ENSG00000171552	BCL2L1	0	1	1	0	8.20E-06	-0.74	Down
ENSG00000183072	NKX2-5	1	0	0	0	8.22E-06	-0.85	Down
ENSG00000000971	CFH	0	0	1	0	8.42E-06	1.14	Up
ENSG00000187840	EIF4EBP1	0	0	1	0	8.55E-06	-0.99	Down
ENSG00000113657	DPYSL3	0	1	1	0	8.70E-06	0.84	Up
ENSG00000075618	FSCN1	0	1	1	0	8.97E-06	0.90	Up
ENSG00000051382	PIK3CB	0	1	1	0	8.98E-06	-0.36	Down
ENSG00000135821	GLUL	0	1	1	0	8.98E-06	-0.55	Down
ENSG00000107262	BAG1	1	0	0	0	1.04E-05	-0.53	Down
ENSG00000235106	BRD3OS	1	0	0	0	1.05E-05	0.34	Up
ENSG00000183722	LHFPL6	1	1	0	0	1.10E-05	0.54	Up
ENSG00000118523	CCN2	0	0	1	0	1.12E-05	1.19	Up
ENSG00000135185	TMEM243	1	0	0	0	1.13E-05	0.46	Up
ENSG00000178814	OPLAH	0	0	1	0	1.14E-05	-0.48	Down
ENSG00000164338	UTP15	1	0	0	0	1.16E-05	-0.51	Down
ENSG00000270885	RASL10B	0	0	1	0	1.17E-05	-1.01	Down
ENSG00000117394	SLC2A1	1	0	0	0	1.30E-05	-1.06	Down

ENSG00000139289	<i>PHLDA1</i>	1	0	0	0	1.31E-05	1.14	Up
ENSG00000160294	<i>MCM3AP</i>	1	0	0	0	1.33E-05	-0.44	Down
ENSG00000166313	<i>APBB1</i>	1	0	1	0	1.33E-05	-0.57	Down
ENSG00000100605	<i>ITPK1</i>	0	1	1	0	1.35E-05	-0.53	Down
ENSG00000262049	<i>AC139530.2</i>	1	0	1	0	1.36E-05	0.35	Up
ENSG00000172458	<i>IL17D</i>	0	0	1	0	1.42E-05	0.79	Up
ENSG00000153207	<i>AHCTF1</i>	0	0	1	0	1.46E-05	-0.58	Down
ENSG00000142973	<i>CYP4B1</i>	0	1	1	0	1.49E-05	-1.56	Down
ENSG00000187778	<i>MCRS1</i>	1	0	1	0	1.61E-05	-0.77	Down
ENSG00000120820	<i>GLT8D2</i>	0	1	0	0	1.63E-05	0.83	Up
ENSG00000156535	<i>CD109</i>	0	1	0	0	1.63E-05	-0.56	Down
ENSG00000160801	<i>PTH1R</i>	0	0	1	0	1.71E-05	-0.75	Down
ENSG00000178209	<i>PLEC</i>	1	0	0	0	1.71E-05	-0.39	Down
ENSG00000073008	<i>PVR</i>	1	0	1	0	1.78E-05	-0.93	Down
ENSG00000120699	<i>EXOSC8</i>	1	0	0	0	1.88E-05	0.35	Up
ENSG00000175206	<i>NPPA</i>	1	0	1	0	1.91E-05	1.86	Up
ENSG00000140350	<i>ANP32A</i>	1	0	1	0	1.93E-05	0.42	Up
ENSG00000161011	<i>SQSTM1</i>	1	0	1	0	1.95E-05	0.30	Up
ENSG00000211448	<i>DIO2</i>	1	1	0	0	1.95E-05	1.30	Up
ENSG00000142541	<i>RPL13A</i>	1	0	0	0	1.97E-05	-0.51	Down
ENSG00000236753	<i>MKLN1-AS</i>	1	0	0	0	2.00E-05	-0.72	Down
ENSG00000178741	<i>COX5A</i>	1	0	1	0	2.07E-05	-0.72	Down
ENSG00000130779	<i>CLIP1</i>	1	0	1	0	2.14E-05	-0.78	Down
ENSG00000272288	<i>AL451165.2</i>	1	0	1	0	2.30E-05	-0.35	Down
ENSG00000017427	<i>IGF1</i>	0	1	0	0	2.44E-05	0.82	Up
ENSG00000173715	<i>C11orf80</i>	0	0	1	0	2.61E-05	1.01	Up
ENSG00000116717	<i>GADD45A</i>	1	0	0	0	2.67E-05	0.82	Up
ENSG00000134030	<i>CTIF</i>	1	0	0	0	2.67E-05	-0.66	Down
ENSG00000132329	<i>RAMP1</i>	0	1	0	0	2.74E-05	-0.83	Down
ENSG00000088899	<i>LZTS3</i>	0	0	1	0	2.75E-05	-0.51	Down
ENSG00000250479	<i>CHCHD10</i>	1	0	0	0	2.81E-05	-0.51	Down
ENSG00000118292	<i>C1orf54</i>	1	0	0	0	2.82E-05	0.52	Up
ENSG00000135766	<i>EGLN1</i>	0	1	1	0	2.92E-05	-0.46	Down
ENSG00000175287	<i>PHYHD1</i>	0	1	1	0	3.03E-05	-0.84	Down
ENSG00000092820	<i>EZR</i>	1	1	0	0	3.09E-05	-0.32	Down
ENSG00000122435	<i>TRMT13</i>	1	0	0	0	3.09E-05	-0.39	Down
ENSG00000144959	<i>NCEH1</i>	1	0	1	0	3.25E-05	-0.69	Down
ENSG00000125378	<i>BMP4</i>	0	1	1	0	3.63E-05	0.63	Up
ENSG00000126777	<i>KTN1</i>	1	0	0	0	3.76E-05	-0.58	Down
ENSG00000166086	<i>JAM3</i>	0	0	1	0	3.89E-05	0.47	Up
ENSG00000133026	<i>MYH10</i>	0	0	1	0	3.94E-05	0.66	Up
ENSG00000100823	<i>APEX1</i>	1	0	0	0	4.09E-05	-0.64	Down
ENSG00000237172	<i>B3GNT9</i>	1	0	1	0	4.09E-05	0.38	Up
ENSG00000106484	<i>MEST</i>	1	0	0	0	4.16E-05	0.55	Up
ENSG00000160888	<i>IER2</i>	0	1	1	0	4.24E-05	0.83	Up
ENSG00000187642	<i>PERM1</i>	1	0	0	0	4.30E-05	-0.65	Down
ENSG00000089157	<i>RPLP0</i>	1	0	0	0	4.32E-05	-0.92	Down
ENSG00000104881	<i>PPP1R13L</i>	1	0	1	0	4.38E-05	-0.54	Down
ENSG00000011295	<i>TTC19</i>	1	0	0	0	4.41E-05	-0.35	Down
ENSG00000214253	<i>FIS1</i>	1	0	0	0	4.50E-05	-0.70	Down
ENSG00000166685	<i>COG1</i>	1	0	0	0	4.56E-05	-0.19	Down
ENSG00000110492	<i>MDK</i>	0	1	1	0	4.82E-05	0.96	Up
ENSG00000131620	<i>ANO1</i>	0	1	0	0	4.82E-05	0.79	Up

ENSG00000047457	<i>CP</i>	0	0	1	0	4.85E-05	0.77	Up
ENSG00000068878	<i>PSME4</i>	0	1	0	0	4.87E-05	-0.54	Down
ENSG00000100628	<i>ASB2</i>	1	0	0	0	4.87E-05	-0.79	Down
ENSG00000174444	<i>RPL4</i>	1	0	0	0	4.91E-05	-0.53	Down
ENSG00000167671	<i>UBXN6</i>	1	0	0	0	4.97E-05	-0.31	Down
ENSG00000114735	<i>HEMK1</i>	0	0	1	0	5.02E-05	0.47	Up
ENSG00000055208	<i>TAB2</i>	1	0	1	0	5.24E-05	-0.85	Down
ENSG00000134851	<i>TMEM165</i>	1	0	0	0	5.27E-05	-0.56	Down
ENSG00000172292	<i>CERS6</i>	0	1	0	0	5.27E-05	-0.32	Down
ENSG00000121413	<i>ZSCAN18</i>	1	0	1	0	5.28E-05	0.45	Up
ENSG00000056736	<i>IL17RB</i>	1	0	1	0	5.29E-05	-1.33	Down
ENSG00000100416	<i>TRMU</i>	0	1	1	0	5.89E-05	-0.41	Down
ENSG00000163884	<i>KLF15</i>	0	1	1	0	5.89E-05	-0.96	Down
ENSG00000198467	<i>TPM2</i>	1	0	0	0	6.33E-05	-0.44	Down
ENSG00000011105	<i>TSPAN9</i>	0	0	1	0	6.38E-05	0.55	Up
ENSG00000158246	<i>TENT5B</i>	1	0	1	0	6.52E-05	-1.22	Down
ENSG00000134508	<i>CABLES1</i>	0	1	0	0	7.06E-05	1.00	Up
ENSG00000072274	<i>TFRC</i>	1	1	0	0	7.18E-05	-1.17	Down
ENSG00000113649	<i>TCERG1</i>	1	0	1	0	7.38E-05	-0.57	Down
ENSG00000104177	<i>MYEF2</i>	0	0	1	0	7.46E-05	0.73	Up
ENSG00000153132	<i>CLGN</i>	1	0	0	0	7.56E-05	-0.69	Down
ENSG00000235387	<i>SPAAR</i>	0	0	1	0	7.82E-05	-0.71	Down
ENSG00000189058	<i>APOD</i>	1	0	0	0	8.18E-05	-1.01	Down
ENSG00000176463	<i>SLCO3A1</i>	1	0	0	0	8.36E-05	-0.60	Down
ENSG00000168653	<i>NDUFS5</i>	1	0	1	0	8.40E-05	-0.59	Down
ENSG00000118495	<i>PLAGL1</i>	0	1	1	0	8.46E-05	0.64	Up
ENSG00000124172	<i>ATP5F1E</i>	1	0	0	0	8.49E-05	-0.66	Down
ENSG00000188257	<i>PLA2G2A</i>	1	0	0	0	8.91E-05	-1.83	Down
ENSG00000156050	<i>FAM161B</i>	1	0	1	0	9.04E-05	0.35	Up
ENSG00000166913	<i>YWHAB</i>	1	0	0	0	9.04E-05	0.48	Up
ENSG00000248923	<i>MTND5P11</i>	1	0	0	0	9.21E-05	-1.12	Down
ENSG00000231711	<i>LINC00899</i>	0	0	1	0	9.25E-05	0.62	Up
ENSG00000134046	<i>MBD2</i>	1	1	0	0	9.28E-05	-0.71	Down
ENSG00000132507	<i>EIF5A</i>	1	0	0	0	9.36E-05	-0.44	Down
ENSG00000154642	<i>C21orf91</i>	1	0	1	0	9.60E-05	1.04	Up
ENSG00000060138	<i>YBX3</i>	0	1	0	0	9.70E-05	-0.49	Down
ENSG00000140564	<i>FURIN</i>	1	1	0	0	9.81E-05	-0.66	Down
ENSG00000235505	<i>CASP17P</i>	1	0	1	0	9.87E-05	1.33	Up
ENSG00000167315	<i>ACAA2</i>	1	0	1	0	1.09E-04	-0.80	Down
ENSG00000008513	<i>ST3GAL1</i>	1	1	0	0	1.14E-04	-0.58	Down
ENSG00000176971	<i>FIBIN</i>	0	0	1	0	1.14E-04	0.86	Up
ENSG00000205726	<i>ITSN1</i>	1	0	0	0	1.16E-04	-0.44	Down
ENSG00000160685	<i>ZBTB7B</i>	1	0	0	0	1.19E-04	-0.85	Down
ENSG00000071242	<i>RPS6KA2</i>	0	1	0	0	1.22E-04	-0.54	Down
ENSG00000163638	<i>ADAMTS9</i>	0	1	1	0	1.25E-04	-0.78	Down
ENSG00000152642	<i>GPD1L</i>	1	0	1	0	1.26E-04	-0.75	Down
ENSG00000120910	<i>PPP3CC</i>	0	1	0	0	1.28E-04	-0.63	Down
ENSG00000205336	<i>ADGRG1</i>	0	0	1	0	1.28E-04	-0.27	Down
ENSG00000092054	<i>MYH7</i>	1	0	0	0	1.28E-04	-0.45	Down
ENSG00000109339	<i>MAPK10</i>	0	1	1	0	1.28E-04	0.76	Up
ENSG00000083845	<i>RPS5</i>	1	0	0	0	1.31E-04	-0.71	Down
ENSG00000102466	<i>FGF14</i>	1	0	1	0	1.34E-04	0.79	Up
ENSG00000109610	<i>SOD3</i>	0	0	1	0	1.36E-04	0.77	Up

ENSG00000118898	<i>PPL</i>	0	0	1	0	1.41E-04	-0.48	Down
ENSG00000173641	<i>HSPB7</i>	1	0	0	0	1.41E-04	-0.45	Down
ENSG00000173545	<i>ZNF622</i>	1	1	0	0	1.45E-04	-0.63	Down
ENSG00000165887	<i>ANKRD2</i>	1	0	1	0	1.46E-04	-1.39	Down
ENSG00000136925	<i>TSTD2</i>	1	0	0	0	1.47E-04	-0.24	Down
ENSG00000173272	<i>MZT2A</i>	1	0	1	0	1.47E-04	-0.69	Down
ENSG00000155096	<i>AZIN1</i>	1	0	1	0	1.48E-04	0.55	Up
ENSG00000119650	<i>IFT43</i>	0	0	1	0	1.50E-04	0.64	Up
ENSG00000186340	<i>THBS2</i>	0	0	1	0	1.57E-04	0.80	Up
ENSG00000128591	<i>FLNC</i>	1	0	0	0	1.67E-04	-0.85	Down
ENSG00000142409	<i>ZNF787</i>	0	0	1	0	1.74E-04	-0.64	Down
ENSG00000184205	<i>TSPYL2</i>	0	1	0	0	1.75E-04	-0.66	Down
ENSG00000187147	<i>RNF220</i>	1	0	0	0	1.81E-04	-0.36	Down
ENSG00000137076	<i>TLN1</i>	1	0	0	0	1.87E-04	-0.47	Down
ENSG00000161649	<i>CD300LG</i>	0	0	1	0	1.87E-04	-0.71	Down
ENSG00000178585	<i>CTNNBIP1</i>	0	0	1	0	1.91E-04	-0.82	Down
ENSG00000260807	<i>AC009041.2</i>	1	0	1	0	1.98E-04	1.32	Up
ENSG00000137547	<i>MRPL15</i>	1	0	0	0	1.99E-04	-0.70	Down
ENSG00000115380	<i>EFEMP1</i>	0	1	1	0	2.04E-04	0.90	Up
ENSG00000140829	<i>DHX38</i>	0	1	0	0	2.12E-04	-0.41	Down
ENSG00000128918	<i>ALDH1A2</i>	0	1	0	0	2.13E-04	0.80	Up
ENSG00000005844	<i>ITGAL</i>	0	1	0	0	2.17E-04	0.97	Up
ENSG00000164932	<i>CTHRC1</i>	0	1	1	0	2.18E-04	1.44	Up
ENSG00000125743	<i>SNRPD2</i>	1	0	0	0	2.19E-04	-0.59	Down
ENSG00000130159	<i>ECSIT</i>	1	0	1	0	2.25E-04	-0.59	Down
ENSG00000160959	<i>LRRC14</i>	1	0	0	0	2.37E-04	0.36	Up
ENSG00000123096	<i>SSPN</i>	0	0	1	0	2.40E-04	0.33	Up
ENSG00000162882	<i>HAAO</i>	0	0	1	0	2.49E-04	1.32	Up
ENSG00000124701	<i>APOBEC2</i>	1	0	1	0	2.58E-04	-0.69	Down
ENSG00000141965	<i>FEM1A</i>	1	0	0	0	2.58E-04	-0.73	Down
ENSG00000173457	<i>PPP1R14B</i>	1	0	0	0	2.62E-04	-0.88	Down
ENSG00000186350	<i>RXRA</i>	1	0	1	0	2.63E-04	-0.55	Down
ENSG00000138592	<i>USP8</i>	1	0	1	0	2.67E-04	-0.37	Down
ENSG00000164050	<i>PLXNB1</i>	0	0	1	0	2.67E-04	-0.55	Down
ENSG00000188783	<i>PRELP</i>	0	0	1	0	2.72E-04	0.80	Up
ENSG00000170142	<i>UBE2E1</i>	1	0	0	0	2.75E-04	-0.29	Down
ENSG00000176597	<i>B3GNT5</i>	0	1	1	0	2.76E-04	0.90	Up
ENSG00000144218	<i>AFF3</i>	0	1	0	0	2.78E-04	0.71	Up
ENSG00000160113	<i>NR2F6</i>	1	0	1	0	2.87E-04	-0.61	Down
ENSG00000141736	<i>ERBB2</i>	1	0	0	0	2.91E-04	-0.39	Down
ENSG00000237945	<i>LINC00649</i>	1	0	1	0	2.92E-04	-0.64	Down
ENSG00000170962	<i>PDGFD</i>	1	0	0	0	3.01E-04	0.97	Up
ENSG00000077942	<i>FBLN1</i>	0	1	1	0	3.01E-04	1.03	Up
ENSG00000176485	<i>PLA2G16</i>	1	0	0	0	3.25E-04	-0.73	Down
ENSG00000224699	<i>LAMTOR5-AS1</i>	1	0	0	0	3.30E-04	-0.77	Down
ENSG00000146147	<i>MLIP</i>	1	0	1	0	3.48E-04	-0.77	Down
ENSG00000143515	<i>ATP8B2</i>	1	0	1	0	3.63E-04	0.87	Up
ENSG00000143995	<i>MEIS1</i>	0	1	0	0	3.64E-04	-0.50	Down
ENSG00000066855	<i>MTFR1</i>	1	0	1	0	3.66E-04	-0.49	Down
ENSG00000187079	<i>TEAD1</i>	1	0	1	0	3.81E-04	-0.73	Down
ENSG00000107036	<i>RIC1</i>	1	0	0	0	3.81E-04	-0.46	Down
ENSG00000171608	<i>PIK3CD</i>	1	0	0	0	3.84E-04	0.36	Up
ENSG00000130300	<i>PLVAP</i>	0	0	1	0	3.94E-04	0.69	Up



ENSG0000014216	<i>CAPN1</i>	1	0	0	0	4.08E-04	-0.41	Down
ENSG00000159167	<i>STC1</i>	0	0	1	0	4.09E-04	1.41	Up
ENSG00000168309	<i>FAM107A</i>	0	0	1	0	4.09E-04	-0.62	Down
ENSG00000158417	<i>EIF5B</i>	1	0	0	0	4.10E-04	-0.51	Down
ENSG00000161381	<i>PLXDC1</i>	0	1	1	0	4.12E-04	0.65	Up
ENSG00000172164	<i>SNTB1</i>	0	1	0	0	4.25E-04	0.55	Up
ENSG00000119242	<i>CCDC92</i>	1	0	0	0	4.63E-04	-0.48	Down
ENSG00000215375	<i>MYL5</i>	1	0	0	0	4.63E-04	-0.27	Down
ENSG00000170734	<i>POLH</i>	1	0	0	0	4.71E-04	0.45	Up
ENSG00000079215	<i>SLC1A3</i>	0	1	1	0	4.75E-04	-0.47	Down
ENSG00000100106	<i>TRIOBP</i>	1	0	0	0	4.80E-04	-0.48	Down
ENSG00000182162	<i>P2RY8</i>	1	1	0	0	4.80E-04	1.21	Up
ENSG00000176658	<i>MYO1D</i>	0	0	1	0	4.82E-04	0.82	Up
ENSG00000166484	<i>MAPK7</i>	1	0	0	0	4.83E-04	0.62	Up
ENSG00000127418	<i>FGFRL1</i>	1	1	0	0	4.83E-04	-0.77	Down
ENSG00000131899	<i>LLGL1</i>	1	0	0	0	4.99E-04	0.44	Up
ENSG00000225526	<i>MKRN2OS</i>	0	0	1	0	5.00E-04	1.28	Up
ENSG00000110811	<i>P3H3</i>	0	1	0	0	5.05E-04	0.59	Up
ENSG00000095203	<i>EPB41L4B</i>	0	0	1	0	5.11E-04	-0.73	Down
ENSG00000160949	<i>TONSL</i>	1	0	0	0	5.15E-04	0.52	Up
ENSG00000113083	<i>LOX</i>	1	0	1	0	5.16E-04	0.85	Up
ENSG00000137309	<i>HMGA1</i>	1	0	0	0	5.28E-04	-0.57	Down
ENSG00000101210	<i>EEF1A2</i>	1	0	0	0	5.33E-04	-0.35	Down
ENSG00000151503	<i>NCAPD3</i>	1	0	0	0	5.43E-04	0.22	Up
ENSG00000167106	<i>FAM102A</i>	0	0	1	0	5.47E-04	0.69	Up
ENSG00000111341	<i>MGP</i>	0	0	1	0	5.63E-04	0.62	Up
ENSG00000147679	<i>UTP23</i>	1	0	0	0	5.63E-04	-0.25	Down
ENSG00000072864	<i>NDE1</i>	1	0	0	0	5.63E-04	0.56	Up
ENSG00000177098	<i>SCN4B</i>	0	1	0	0	5.72E-04	0.62	Up
ENSG00000137776	<i>SLTM</i>	1	0	0	0	5.74E-04	-0.49	Down
ENSG00000162191	<i>UBXN1</i>	1	0	0	0	5.93E-04	-0.56	Down
ENSG00000197893	<i>NRAP</i>	1	0	0	0	5.98E-04	-0.65	Down
ENSG00000198771	<i>RCSD1</i>	1	0	1	0	5.98E-04	-0.46	Down
ENSG00000124588	<i>NQO2</i>	1	0	1	0	6.00E-04	-0.73	Down
ENSG00000103335	<i>PIEZO1</i>	1	0	0	0	6.09E-04	0.36	Up
ENSG00000188176	<i>SMTNL2</i>	0	0	1	0	6.17E-04	-0.84	Down
ENSG00000100023	<i>PPIL2</i>	1	0	0	0	6.24E-04	0.31	Up
ENSG00000105357	<i>MYH14</i>	1	0	0	0	6.40E-04	-0.54	Down
ENSG00000104853	<i>CLPTM1</i>	1	0	0	0	6.65E-04	-0.37	Down
ENSG00000112306	<i>RPS12</i>	1	0	0	0	6.68E-04	-0.86	Down
ENSG00000167815	<i>PRDX2</i>	1	0	0	0	6.78E-04	-0.66	Down
ENSG00000144034	<i>TPRKB</i>	0	0	1	0	6.89E-04	-0.38	Down
ENSG00000142188	<i>TMEM50B</i>	1	0	0	0	7.07E-04	0.29	Up
ENSG00000165795	<i>NDRG2</i>	0	0	1	0	7.15E-04	-0.29	Down
ENSG00000120594	<i>PLXDC2</i>	0	0	1	0	7.18E-04	0.60	Up
ENSG00000140199	<i>SLC12A6</i>	1	0	0	0	7.26E-04	-0.25	Down
ENSG00000277494	<i>GPIHBP1</i>	0	0	1	0	7.52E-04	-0.60	Down
ENSG00000235535	<i>TRDN-AS1</i>	1	0	0	0	7.85E-04	-0.45	Down
ENSG00000197912	<i>SPG7</i>	1	0	1	0	8.00E-04	-0.41	Down
ENSG00000171517	<i>LPAR3</i>	0	0	0	0	8.64E-04	-1.16	Down
ENSG00000163513	<i>TGFBR2</i>	0	0	1	0	8.77E-04	-0.41	Down
ENSG00000136111	<i>TBC1D4</i>	1	0	1	0	8.77E-04	-0.64	Down
ENSG00000142279	<i>WTIP</i>	0	1	1	0	8.85E-04	0.80	Up

ENSG00000166002	<i>SMCO4</i>	1	0	0	0	8.86E-04	-0.82	Down
ENSG00000113555	<i>PCDH12</i>	0	1	0	0	8.97E-04	0.48	Up
ENSG00000197448	<i>GSTK1</i>	1	0	1	0	9.05E-04	-0.40	Down
ENSG00000101421	<i>CHMP4B</i>	1	0	0	0	9.14E-04	-0.51	Down
ENSG00000108387	<i>SEPT4</i>	1	1	0	0	9.30E-04	-0.65	Down
ENSG00000106538	<i>RARRES2</i>	0	1	0	0	9.31E-04	1.06	Up
ENSG00000170921	<i>TANC2</i>	0	0	1	0	9.48E-04	0.43	Up
ENSG00000126749	<i>EMG1</i>	0	0	1	0	9.59E-04	-0.30	Down
ENSG00000245293	<i>AC096564.1</i>	1	0	0	0	9.76E-04	-0.68	Down
ENSG00000142856	<i>ITGB3BP</i>	0	0	1	0	1.01E-03	-0.40	Down
ENSG00000116473	<i>RAP1A</i>	0	1	0	0	1.02E-03	-0.33	Down
ENSG00000172057	<i>ORMDL3</i>	0	0	1	0	1.02E-03	0.41	Up
ENSG00000005436	<i>GCFC2</i>	0	1	1	0	1.03E-03	-0.38	Down
ENSG00000160539	<i>PLPP7</i>	1	0	1	0	1.05E-03	-0.66	Down
ENSG00000159199	<i>ATP5MC1</i>	1	0	1	0	1.05E-03	-0.90	Down
ENSG00000084754	<i>HADHA</i>	0	0	1	0	1.06E-03	-0.39	Down
ENSG00000169184	<i>MN1</i>	0	0	1	0	1.07E-03	0.70	Up
ENSG00000100211	<i>CBY1</i>	1	0	0	0	1.07E-03	0.29	Up
ENSG00000163328	<i>GPR155</i>	0	0	1	0	1.08E-03	-0.40	Down
ENSG00000102225	<i>CDK16</i>	1	0	0	0	1.09E-03	-0.54	Down
ENSG00000119285	<i>HEATR1</i>	1	0	0	0	1.09E-03	-0.31	Down
ENSG00000087245	<i>MMP2</i>	0	1	0	0	1.10E-03	0.71	Up
ENSG00000119487	<i>MAPKAP1</i>	0	0	1	0	1.10E-03	-0.42	Down
ENSG00000186174	<i>BCL9L</i>	1	0	0	0	1.11E-03	-0.74	Down
ENSG00000100296	<i>THOC5</i>	1	1	0	0	1.14E-03	-0.68	Down
ENSG00000175110	<i>MRPS22</i>	1	0	0	0	1.14E-03	-0.21	Down
ENSG00000140941	<i>MAP1LC3B</i>	1	0	0	0	1.18E-03	-0.53	Down
ENSG00000126581	<i>BECN1</i>	1	0	0	0	1.18E-03	-0.57	Down
ENSG00000130725	<i>UBE2M</i>	1	0	0	0	1.18E-03	-0.51	Down
ENSG00000072840	<i>EVC</i>	0	1	0	0	1.25E-03	0.66	Up
ENSG00000077684	<i>JADE1</i>	0	1	0	0	1.28E-03	-0.27	Down
ENSG00000120053	<i>GOT1</i>	1	0	0	0	1.28E-03	-0.54	Down
ENSG00000197077	<i>KIAA1671</i>	1	1	0	0	1.28E-03	0.65	Up
ENSG00000178605	<i>GTPBP6</i>	0	0	1	0	1.28E-03	-0.47	Down
ENSG00000124562	<i>SNRPC</i>	1	0	1	0	1.29E-03	-0.63	Down
ENSG00000176407	<i>KCMF1</i>	0	1	0	0	1.29E-03	-0.42	Down
ENSG00000228794	<i>LINC01128</i>	0	0	1	0	1.30E-03	-0.37	Down
ENSG00000110092	<i>CCND1</i>	0	0	1	0	1.30E-03	0.35	Up
ENSG00000164142	<i>FAM160A1</i>	0	1	0	0	1.32E-03	-0.49	Down
ENSG00000141447	<i>OSBPL1A</i>	1	0	1	0	1.32E-03	-0.40	Down
ENSG00000172349	<i>IL16</i>	0	1	0	0	1.32E-03	0.61	Up
ENSG00000123144	<i>TRIR</i>	1	0	0	0	1.33E-03	-0.53	Down
ENSG00000136870	<i>ZNF189</i>	1	0	0	0	1.33E-03	-1.05	Down
ENSG00000072163	<i>LIMS2</i>	0	0	1	0	1.36E-03	-0.25	Down
ENSG00000142937	<i>RPS8</i>	1	0	0	0	1.47E-03	-0.50	Down
ENSG00000111728	<i>ST8SIA1</i>	0	1	0	0	1.53E-03	0.89	Up
ENSG00000175220	<i>ARHGAP1</i>	0	0	1	0	1.59E-03	0.43	Up
ENSG00000221983	<i>UBA52</i>	1	0	0	0	1.61E-03	-0.69	Down
ENSG00000174502	<i>SLC26A9</i>	0	0	1	0	1.63E-03	-0.55	Down
ENSG00000134755	<i>DSC2</i>	0	0	1	0	1.66E-03	-0.58	Down
ENSG00000005448	<i>WDR54</i>	1	0	0	0	1.70E-03	0.72	Up
ENSG00000099875	<i>MKNK2</i>	1	0	0	0	1.74E-03	-0.75	Down
ENSG00000146242	<i>TPBG</i>	0	1	0	0	1.75E-03	0.73	Up

ENSG00000127663	<i>KDM4B</i>	1	0	1	0	1.76E-03	-0.55	Down
ENSG00000186591	<i>UBE2H</i>	1	0	1	0	1.76E-03	0.42	Up
ENSG00000148498	<i>PARD3</i>	0	1	0	0	1.78E-03	-0.50	Down
ENSG00000256043	<i>CTSO</i>	0	1	0	0	1.81E-03	0.61	Up
ENSG00000070778	<i>AL162171.1</i>	0	1	0	0	1.82E-03	0.35	Up
ENSG00000089199	<i>CHGB</i>	1	0	0	0	1.83E-03	-1.55	Down
ENSG00000116260	<i>QSOX1</i>	1	1	0	0	1.85E-03	-0.77	Down
ENSG00000196531	<i>NACA</i>	1	0	0	0	1.86E-03	-0.53	Down
ENSG00000178982	<i>EIF3K</i>	1	0	0	0	1.87E-03	-0.60	Down
ENSG00000100393	<i>EP300</i>	1	0	0	0	1.90E-03	-0.43	Down
ENSG00000007080	<i>CCDC124</i>	1	0	0	0	1.90E-03	-0.43	Down
ENSG00000203734	<i>ECT2L</i>	1	0	1	0	1.91E-03	1.07	Up
ENSG00000074219	<i>TEAD2</i>	0	0	1	0	1.92E-03	-0.51	Down
ENSG00000188735	<i>TMEM120B</i>	1	0	0	0	1.92E-03	-0.49	Down
ENSG00000198932	<i>GPRASP1</i>	0	0	1	0	1.93E-03	0.66	Up
ENSG00000121281	<i>ADCY7</i>	1	0	0	0	2.00E-03	0.56	Up
ENSG00000104635	<i>SLC39A14</i>	0	1	0	0	2.04E-03	-0.57	Down
ENSG00000079805	<i>DNM2</i>	0	0	1	0	2.08E-03	-0.24	Down
ENSG00000182154	<i>MRPL41</i>	1	0	1	0	2.11E-03	-0.58	Down
ENSG00000149970	<i>CNKSR2</i>	1	0	1	0	2.12E-03	0.92	Up
ENSG00000184076	<i>UQCR10</i>	1	0	0	0	2.19E-03	-0.55	Down
ENSG00000178607	<i>ERN1</i>	0	0	0	0	2.24E-03	0.88	Up
ENSG00000245105	<i>A2M-AS1</i>	1	0	0	0	2.25E-03	0.33	Up
ENSG00000143149	<i>ALDH9A1</i>	1	0	0	0	2.29E-03	0.53	Up
ENSG00000197622	<i>CDC42SE1</i>	1	0	1	0	2.36E-03	0.38	Up
ENSG00000031081	<i>ARHGAP31</i>	0	0	1	0	2.40E-03	-0.43	Down
ENSG00000110697	<i>PITPNM1</i>	1	0	0	0	2.42E-03	-0.72	Down
ENSG00000204463	<i>BAG6</i>	1	0	0	0	2.48E-03	-0.40	Down
ENSG00000172831	<i>CES2</i>	1	0	0	0	2.53E-03	-0.62	Down
ENSG00000128731	<i>HERC2</i>	1	0	0	0	2.65E-03	-0.54	Down
ENSG00000174231	<i>PRPF8</i>	1	0	0	0	2.76E-03	-0.41	Down
ENSG00000018280	<i>SLC11A1</i>	0	1	0	0	2.84E-03	-1.31	Down
ENSG00000130560	<i>UBAC1</i>	1	0	0	0	2.85E-03	-0.60	Down
ENSG00000171863	<i>RPS7</i>	1	0	0	0	2.94E-03	-0.93	Down
ENSG00000176946	<i>THAP4</i>	1	0	1	0	2.94E-03	-0.51	Down
ENSG00000145725	<i>PIIP5K2</i>	0	0	1	0	2.98E-03	-0.78	Down
ENSG00000197852	<i>INKA2</i>	0	1	1	0	2.98E-03	-0.43	Down
ENSG00000121022	<i>COPSS5</i>	1	0	0	0	3.04E-03	-0.49	Down
ENSG00000137752	<i>CASP1</i>	0	1	1	0	3.05E-03	0.80	Up
ENSG00000235750	<i>KIAA0040</i>	0	0	1	0	3.06E-03	-0.62	Down
ENSG00000103363	<i>ELOB</i>	1	0	0	0	3.08E-03	-0.59	Down
ENSG00000184207	<i>PGP</i>	0	0	1	0	3.12E-03	-0.50	Down
ENSG00000241644	<i>INMT</i>	0	1	0	0	3.16E-03	0.72	Up
ENSG00000048707	<i>VPS13D</i>	0	0	0	0	3.17E-03	-0.60	Down
ENSG00000127616	<i>SMARCA4</i>	1	0	0	0	3.17E-03	-0.38	Down
ENSG00000175550	<i>DRAP1</i>	1	0	0	0	3.18E-03	-0.38	Down
ENSG00000179604	<i>CDC42EP4</i>	0	0	0	0	3.18E-03	-0.66	Down
ENSG00000114166	<i>KAT2B</i>	1	0	1	0	3.30E-03	-0.58	Down
ENSG00000138709	<i>LARP1B</i>	0	0	1	0	3.41E-03	-0.52	Down
ENSG00000072832	<i>CRMP1</i>	0	0	0	0	3.42E-03	0.75	Up
ENSG00000223768	<i>LINC00205</i>	0	0	1	0	3.49E-03	0.65	Up
ENSG00000151092	<i>NGLY1</i>	0	0	1	0	3.52E-03	-0.43	Down
ENSG00000000457	<i>SCYL3</i>	1	0	0	0	3.55E-03	-0.30	Down

ENSG00000099968	<i>BCL2L13</i>	0	1	0	0	3.62E-03	-0.41	Down
ENSG00000204851	<i>PNMA8B</i>	1	0	0	0	3.65E-03	0.89	Up
ENSG00000135597	<i>REPS1</i>	1	0	0	0	3.69E-03	0.49	Up
ENSG00000081803	<i>CADPS2</i>	0	0	1	0	3.74E-03	-0.73	Down
ENSG00000164949	<i>GEM</i>	0	0	1	0	3.78E-03	0.90	Up
ENSG00000138758	<i>SEPT11</i>	0	1	0	0	3.83E-03	0.45	Up
ENSG00000096968	<i>JAK2</i>	1	0	0	0	3.87E-03	0.82	Up
ENSG00000169855	<i>ROBO1</i>	0	1	0	0	3.94E-03	0.59	Up
ENSG00000188290	<i>HES4</i>	1	1	0	0	4.00E-03	0.57	Up
ENSG00000159251	<i>ACTC1</i>	0	0	1	0	4.01E-03	-0.45	Down
ENSG00000160075	<i>SSU72</i>	0	0	1	0	4.06E-03	-0.45	Down
ENSG00000173281	<i>PPP1R3B</i>	1	0	1	0	4.07E-03	-0.47	Down
ENSG00000079739	<i>PGM1</i>	0	0	1	0	4.09E-03	-0.33	Down
ENSG00000260186	<i>LINC02137</i>	0	0	1	0	4.18E-03	-1.08	Down
ENSG00000226900	<i>AL451069.1</i>	1	0	1	0	4.23E-03	-1.12	Down
ENSG00000115241	<i>PPM1G</i>	1	0	0	0	4.27E-03	-0.45	Down
ENSG00000155659	<i>VSIG4</i>	0	1	0	0	4.27E-03	-1.15	Down
ENSG00000104765	<i>BNIP3L</i>	1	0	0	0	4.60E-03	0.49	Up
ENSG00000103404	<i>USP31</i>	0	1	0	0	4.62E-03	-0.53	Down
ENSG00000148356	<i>LRSAM1</i>	0	0	1	0	4.77E-03	-0.58	Down
ENSG00000100105	<i>PATZ1</i>	0	0	1	0	4.78E-03	0.38	Up
ENSG00000196504	<i>PRPF40A</i>	1	0	0	0	4.85E-03	-0.34	Down
ENSG00000147155	<i>EBP</i>	0	1	0	0	4.90E-03	-0.70	Down
ENSG00000218283	<i>MORF4L1P1</i>	1	0	0	0	4.94E-03	-0.74	Down
ENSG00000105516	<i>DBP</i>	0	1	0	0	4.95E-03	0.67	Up
ENSG00000115317	<i>HTRA2</i>	1	0	0	0	4.97E-03	0.24	Up
ENSG00000165916	<i>PSMC3</i>	1	0	0	0	5.01E-03	-0.50	Down
ENSG00000184209	<i>SNRNP35</i>	1	0	0	0	5.01E-03	-0.29	Down
ENSG00000061676	<i>NCKAP1</i>	0	1	0	0	5.05E-03	-0.24	Down
ENSG00000007402	<i>CACNA2D2</i>	1	0	0	0	5.10E-03	0.59	Up
ENSG00000198796	<i>ALPK2</i>	1	0	0	0	5.10E-03	-0.44	Down
ENSG00000178573	<i>MAF</i>	0	1	0	0	5.24E-03	0.54	Up
ENSG00000164733	<i>CTSB</i>	1	1	0	0	5.29E-03	-0.36	Down
ENSG00000144824	<i>PHLDB2</i>	0	1	0	0	5.32E-03	0.36	Up
ENSG00000022840	<i>RNF10</i>	0	1	0	0	5.36E-03	-0.37	Down
ENSG00000006007	<i>GDE1</i>	1	0	0	0	5.40E-03	-0.59	Down
ENSG00000170522	<i>ELOVL6</i>	1	0	1	0	5.40E-03	0.81	Up
ENSG00000085760	<i>MTIF2</i>	1	0	0	0	5.42E-03	-0.62	Down
ENSG00000141449	<i>GREB1L</i>	0	1	0	0	5.54E-03	-0.57	Down
ENSG00000126858	<i>RHOT1</i>	0	0	1	0	5.62E-03	-0.39	Down
ENSG00000161981	<i>SNRNP25</i>	1	0	1	0	5.76E-03	-0.35	Down
ENSG00000120907	<i>ADRA1A</i>	1	0	0	0	5.83E-03	-0.67	Down
ENSG00000182541	<i>LIMK2</i>	0	0	1	0	5.89E-03	0.40	Up
ENSG00000138495	<i>COX17</i>	1	0	1	0	5.91E-03	-0.43	Down
ENSG00000116132	<i>PRRX1</i>	1	0	1	0	5.94E-03	0.56	Up
ENSG00000183873	<i>SCN5A</i>	1	0	0	0	5.97E-03	-0.54	Down
ENSG00000134531	<i>EMP1</i>	1	0	0	0	6.10E-03	0.79	Up
ENSG00000243156	<i>MICAL3</i>	1	0	0	0	6.12E-03	-0.50	Down
ENSG00000137941	<i>TTLL7</i>	0	0	1	0	6.14E-03	0.76	Up
ENSG00000130382	<i>MLLT1</i>	1	0	0	0	6.26E-03	-0.63	Down
ENSG00000163788	<i>SNRK</i>	1	0	0	0	6.26E-03	0.37	Up
ENSG00000196954	<i>CASP4</i>	1	0	0	0	6.41E-03	0.84	Up
ENSG00000140986	<i>RPL3L</i>	1	0	0	0	6.47E-03	-0.44	Down

ENSG00000162458	<i>FBLIM1</i>	0	0	0	0	6.49E-03	-0.79	Down
ENSG00000156650	<i>KAT6B</i>	1	0	0	0	6.72E-03	-0.38	Down
ENSG00000175463	<i>TBC1D10C</i>	1	1	0	0	6.73E-03	1.03	Up
ENSG00000171310	<i>CHST11</i>	0	0	1	0	6.80E-03	0.69	Up
ENSG00000117114	<i>ADGRL2</i>	1	0	1	0	6.80E-03	-0.74	Down
ENSG00000122033	<i>MTIF3</i>	0	0	1	0	6.85E-03	-0.33	Down
ENSG00000175581	<i>MRPL48</i>	0	0	1	0	6.86E-03	-0.44	Down
ENSG00000178307	<i>TMEM11</i>	0	0	0	0	6.86E-03	-0.49	Down
ENSG00000115641	<i>FHL2</i>	1	0	0	0	6.88E-03	-0.63	Down
ENSG00000050405	<i>LIMA1</i>	0	1	0	0	6.92E-03	0.63	Up
ENSG00000213190	<i>MLLT11</i>	0	0	1	0	6.94E-03	0.49	Up
ENSG00000110422	<i>HIPK3</i>	0	0	1	0	7.20E-03	-0.38	Down
ENSG00000129351	<i>ILF3</i>	1	0	0	0	7.30E-03	-0.41	Down
ENSG00000166441	<i>RPL27A</i>	1	0	0	0	7.31E-03	-0.30	Down
ENSG00000132589	<i>FLOT2</i>	1	0	0	0	7.47E-03	-0.72	Down
ENSG00000131943	<i>C19orf12</i>	0	0	1	0	7.48E-03	-0.33	Down
ENSG00000166278	<i>C2</i>	0	0	0	0	7.49E-03	1.02	Up
ENSG00000149212	<i>SESN3</i>	0	0	1	0	7.60E-03	0.71	Up
ENSG00000107738	<i>VSIR</i>	0	0	1	0	7.74E-03	-0.41	Down
ENSG00000131462	<i>TUBG1</i>	1	0	1	0	7.76E-03	-0.77	Down
ENSG00000165458	<i>INPPL1</i>	1	0	0	0	7.80E-03	-0.52	Down
ENSG00000186184	<i>POLR1D</i>	1	0	0	0	7.83E-03	-0.57	Down
ENSG00000148303	<i>RPL7A</i>	1	0	0	0	7.88E-03	-0.48	Down
ENSG00000100401	<i>RANGAP1</i>	1	0	0	0	7.88E-03	-0.48	Down
ENSG00000163382	<i>NAXE</i>	0	0	1	0	7.95E-03	-0.40	Down
ENSG00000130640	<i>TUBGCP2</i>	1	0	0	0	8.14E-03	-0.20	Down
ENSG00000121057	<i>AKAP1</i>	0	0	1	0	8.15E-03	-0.52	Down
ENSG00000125753	<i>VASP</i>	1	0	0	0	8.16E-03	-0.59	Down
ENSG00000228526	<i>MIR34AHG</i>	0	0	0	0	8.17E-03	0.97	Up
ENSG00000140009	<i>ESR2</i>	1	0	0	0	8.22E-03	-0.78	Down
ENSG00000152284	<i>TCF7L1</i>	0	1	0	0	8.24E-03	0.45	Up
ENSG00000178878	<i>APOLD1</i>	1	0	0	0	8.24E-03	0.95	Up
ENSG00000165775	<i>FUNDC2</i>	0	0	1	0	8.26E-03	-0.35	Down
ENSG00000184007	<i>PTP4A2</i>	0	0	0	0	8.29E-03	-0.40	Down
ENSG00000176222	<i>ZNF404</i>	1	0	0	0	8.32E-03	0.53	Up
ENSG00000151883	<i>PARP8</i>	1	0	0	0	8.38E-03	0.49	Up
ENSG00000132361	<i>CLUH</i>	1	0	0	0	8.42E-03	-0.26	Down
ENSG00000160818	<i>GPATCH4</i>	0	0	0	0	8.45E-03	-0.48	Down
ENSG00000204397	<i>CARD16</i>	1	0	0	0	8.48E-03	1.40	Up
ENSG00000244486	<i>SCARF2</i>	0	0	1	0	8.49E-03	0.84	Up
ENSG00000158321	<i>AUTS2</i>	0	1	0	0	8.50E-03	0.36	Up
ENSG00000100949	<i>RABGGTA</i>	0	0	0	0	8.63E-03	-0.38	Down
ENSG00000132718	<i>SYT11</i>	1	0	0	0	8.67E-03	0.68	Up
ENSG00000198663	<i>C6orf89</i>	1	0	0	0	8.79E-03	-0.38	Down
ENSG00000120549	<i>KIAA1217</i>	0	0	1	0	8.81E-03	-0.45	Down
ENSG00000176472	<i>ZNF575</i>	1	0	0	0	8.99E-03	0.36	Up
ENSG00000059145	<i>UNKL</i>	1	0	0	0	9.00E-03	0.32	Up
ENSG00000173113	<i>TRMT112</i>	1	0	0	0	9.04E-03	-0.22	Down
ENSG00000205339	<i>IPO7</i>	0	0	1	0	9.09E-03	-0.50	Down
ENSG00000100564	<i>PIGH</i>	1	0	0	0	9.14E-03	-0.44	Down
ENSG00000125656	<i>CLPP</i>	0	0	1	0	9.19E-03	-0.61	Down
ENSG00000105186	<i>ANKRD27</i>	1	0	0	0	9.24E-03	-0.38	Down
ENSG00000255248	<i>MIR100HG</i>	0	0	0	0	9.29E-03	0.35	Up

ENSG00000163110	<i>PDLIM5</i>	1	0	0	0	9.31E-03	-0.40	Down
ENSG00000153563	<i>CD8A</i>	0	1	0	0	9.38E-03	1.43	Up
ENSG00000003402	<i>CFLAR</i>	0	0	1	0	9.48E-03	-0.32	Down
ENSG00000165028	<i>NIPSNAP3B</i>	0	0	0	0	9.48E-03	-0.52	Down
ENSG00000226950	<i>DANCR</i>	0	0	1	0	9.72E-03	-0.47	Down
ENSG00000166289	<i>PLEKHF1</i>	0	0	1	0	9.75E-03	-0.73	Down
ENSG00000138622	<i>HCN4</i>	1	0	0	0	9.89E-03	-1.20	Down
ENSG00000094975	<i>SUCO</i>	0	0	1	0	9.95E-03	-0.52	Down
ENSG00000257261	<i>AC008014.1</i>	0	0	1	0	9.96E-03	-0.71	Down
ENSG00000133678	<i>TMEM254</i>	0	0	0	0	9.98E-03	0.63	Up
ENSG00000172201	<i>ID4</i>	0	0	1	0	1.00E-02	1.11	Up
ENSG00000172348	<i>RCAN2</i>	0	1	0	0	1.01E-02	-0.31	Down
ENSG00000128272	<i>ATF4</i>	0	0	0	0	1.02E-02	-0.55	Down
ENSG00000164442	<i>CITED2</i>	1	0	0	0	1.04E-02	-0.56	Down
ENSG00000115084	<i>SLC35F5</i>	1	0	0	0	1.04E-02	-0.62	Down
ENSG00000095321	<i>CRAT</i>	1	0	0	0	1.04E-02	-0.63	Down
ENSG00000184983	<i>NDUFA6</i>	1	0	0	0	1.05E-02	-0.40	Down
ENSG00000060339	<i>CCAR1</i>	1	0	0	0	1.06E-02	-0.64	Down
ENSG00000147677	<i>EIF3H</i>	1	0	0	0	1.06E-02	-0.24	Down
ENSG00000261115	<i>TMEM178B</i>	0	0	1	0	1.06E-02	-0.55	Down
ENSG00000006576	<i>PHTF2</i>	0	1	0	0	1.07E-02	-0.61	Down
ENSG00000164023	<i>SGMS2</i>	1	0	0	0	1.09E-02	-0.30	Down
ENSG00000198874	<i>TYW1</i>	1	0	0	0	1.10E-02	0.21	Up
ENSG00000180644	<i>PRF1</i>	0	1	0	0	1.12E-02	1.21	Up
ENSG00000173638	<i>SLC19A1</i>	1	0	0	0	1.12E-02	0.39	Up
ENSG00000118971	<i>CCND2</i>	1	0	0	0	1.12E-02	0.48	Up
ENSG00000103342	<i>GSPT1</i>	0	0	0	0	1.13E-02	-0.33	Down
ENSG00000123124	<i>WWP1</i>	0	0	1	0	1.14E-02	-0.34	Down
ENSG00000240694	<i>PNMA2</i>	0	1	0	0	1.15E-02	0.78	Up
ENSG00000176720	<i>BOK</i>	0	0	1	0	1.16E-02	0.72	Up
ENSG00000198793	<i>MTOR</i>	1	1	0	0	1.17E-02	-0.45	Down
ENSG00000070010	<i>UFD1</i>	1	0	0	0	1.18E-02	-0.36	Down
ENSG00000069702	<i>TGFBR3</i>	0	0	1	0	1.19E-02	-0.69	Down
ENSG00000122359	<i>ANXA11</i>	1	0	0	0	1.21E-02	-0.41	Down
ENSG00000172725	<i>CORO1B</i>	1	0	0	0	1.22E-02	0.53	Up
ENSG00000130312	<i>MRPL34</i>	0	0	1	0	1.26E-02	-0.28	Down
ENSG00000163866	<i>SMIM12</i>	0	0	0	0	1.27E-02	-0.46	Down
ENSG00000253304	<i>TMEM200B</i>	0	0	1	0	1.27E-02	0.50	Up
ENSG00000099785	<i>MARCH2</i>	1	0	0	0	1.27E-02	-0.78	Down
ENSG00000124702	<i>KLHDC3</i>	0	0	1	0	1.28E-02	-0.31	Down
ENSG00000198355	<i>PIM3</i>	0	0	0	0	1.29E-02	-0.61	Down
ENSG00000170270	<i>GON7</i>	0	0	1	0	1.30E-02	-0.49	Down
ENSG00000177374	<i>HIC1</i>	1	1	0	0	1.31E-02	0.38	Up
ENSG00000163399	<i>ATP1A1</i>	0	0	0	0	1.32E-02	-0.47	Down
ENSG00000160862	<i>AZGP1</i>	0	0	0	0	1.33E-02	-0.85	Down
ENSG00000135617	<i>PRADC1</i>	1	0	0	0	1.37E-02	-0.63	Down
ENSG00000114686	<i>MRPL3</i>	0	0	1	0	1.38E-02	-0.61	Down
ENSG00000213722	<i>DDAH2</i>	0	0	1	0	1.38E-02	0.39	Up
ENSG00000108797	<i>CNTNAP1</i>	1	0	0	0	1.41E-02	0.52	Up
ENSG00000146592	<i>CREB5</i>	0	1	0	0	1.42E-02	0.76	Up
ENSG00000117616	<i>RSRP1</i>	0	0	1	0	1.42E-02	0.43	Up
ENSG00000180758	<i>GPR157</i>	0	0	0	0	1.42E-02	-0.73	Down
ENSG00000188549	<i>CCDC9B</i>	1	0	0	0	1.42E-02	-0.38	Down

ENSG00000185104	<i>FAF1</i>	1	0	0	0	1.43E-02	-0.70	Down
ENSG00000150457	<i>LATS2</i>	1	0	0	0	1.43E-02	0.57	Up
ENSG00000087274	<i>ADD1</i>	1	0	0	0	1.44E-02	-0.39	Down
ENSG00000107263	<i>RAPGEF1</i>	1	0	0	0	1.46E-02	-0.45	Down
ENSG00000132613	<i>MTSS1L</i>	1	0	0	0	1.46E-02	-0.43	Down
ENSG00000151729	<i>SLC25A4</i>	1	0	1	0	1.48E-02	-0.37	Down
ENSG00000131697	<i>NPHP4</i>	1	0	0	0	1.48E-02	0.89	Up
ENSG00000135074	<i>ADAM19</i>	1	0	0	0	1.51E-02	0.65	Up
ENSG00000161791	<i>FMNL3</i>	0	0	1	0	1.51E-02	0.36	Up
ENSG00000115840	<i>SLC25A12</i>	0	0	1	0	1.53E-02	-0.44	Down
ENSG00000115461	<i>IGFBP5</i>	0	0	0	0	1.53E-02	0.48	Up
ENSG00000113916	<i>BCL6</i>	0	0	1	0	1.55E-02	-0.54	Down
ENSG00000165269	<i>AQP7</i>	1	0	1	0	1.59E-02	-0.38	Down
ENSG00000181896	<i>ZNF101</i>	1	0	0	0	1.59E-02	0.64	Up
ENSG00000176903	<i>PNMA1</i>	0	0	1	0	1.60E-02	0.50	Up
ENSG00000170871	<i>KIAA0232</i>	1	0	0	0	1.67E-02	-0.52	Down
ENSG00000160216	<i>AGPAT3</i>	1	0	0	0	1.70E-02	-0.53	Down
ENSG00000164736	<i>SOX17</i>	1	0	0	0	1.72E-02	0.86	Up
ENSG00000277791	<i>PSMB3</i>	1	0	0	0	1.73E-02	-0.66	Down
ENSG00000152700	<i>SAR1B</i>	1	0	0	0	1.73E-02	-0.38	Down
ENSG00000167549	<i>CORO6</i>	0	0	1	0	1.75E-02	-0.43	Down
ENSG00000237807	<i>AC022034.1</i>	0	0	1	0	1.75E-02	-0.81	Down
ENSG00000147100	<i>SLC16A2</i>	0	1	0	0	1.76E-02	0.55	Up
ENSG00000037280	<i>FLT4</i>	0	0	0	0	1.76E-02	0.48	Up
ENSG00000148229	<i>POLE3</i>	1	0	0	0	1.77E-02	-0.49	Down
ENSG00000248449	<i>PCDHGB8P</i>	0	0	1	0	1.78E-02	-0.77	Down
ENSG00000135272	<i>MDFIC</i>	0	0	0	0	1.78E-02	0.69	Up
ENSG00000122965	<i>RBM19</i>	1	0	0	0	1.78E-02	-0.56	Down
ENSG00000155115	<i>GTF3C6</i>	1	0	0	0	1.78E-02	-0.48	Down
ENSG00000182179	<i>UBA7</i>	0	0	1	0	1.80E-02	0.53	Up
ENSG00000165886	<i>UBTD1</i>	0	0	1	0	1.81E-02	-0.59	Down
ENSG00000259972	<i>AC009120.2</i>	1	0	0	0	1.82E-02	-0.35	Down
ENSG00000131781	<i>FMO5</i>	0	0	0	0	1.83E-02	-0.73	Down
ENSG00000073792	<i>IGF2BP2</i>	0	1	0	0	1.84E-02	-0.73	Down
ENSG00000104904	<i>OAZ1</i>	1	0	0	0	1.84E-02	-0.50	Down
ENSG00000139567	<i>ACVRL1</i>	0	0	1	0	1.84E-02	-0.46	Down
ENSG00000100711	<i>ZFYVE21</i>	0	0	1	0	1.85E-02	0.34	Up
ENSG00000131844	<i>MCCC2</i>	1	0	1	0	1.86E-02	-0.47	Down
ENSG00000101400	<i>SNTA1</i>	1	0	0	0	1.87E-02	-0.45	Down
ENSG00000134684	<i>YARS</i>	0	1	0	0	1.87E-02	-0.33	Down
ENSG00000243147	<i>MRPL33</i>	0	0	1	0	1.88E-02	-0.55	Down
ENSG00000168461	<i>RAB31</i>	0	0	1	0	1.88E-02	0.58	Up
ENSG00000099889	<i>ARVCF</i>	0	1	0	0	1.92E-02	0.50	Up
ENSG00000184887	<i>BTBD6</i>	0	0	0	0	1.93E-02	-0.53	Down
ENSG00000107338	<i>SHB</i>	0	0	1	0	1.93E-02	0.58	Up
ENSG00000135749	<i>PCNX2</i>	0	0	1	0	1.96E-02	0.77	Up
ENSG00000197653	<i>DNAH10</i>	1	0	0	0	1.96E-02	-0.91	Down
ENSG00000048162	<i>NOP16</i>	1	0	0	0	1.98E-02	-0.34	Down
ENSG00000177600	<i>RPLP2</i>	1	0	0	0	1.99E-02	-0.61	Down
ENSG00000178980	<i>SELENOW</i>	0	0	1	0	2.01E-02	-0.37	Down
ENSG00000156411	<i>ATP5MPL</i>	1	0	0	0	2.10E-02	-0.69	Down
ENSG00000133740	<i>E2F5</i>	1	0	0	0	2.11E-02	-0.28	Down
ENSG00000184110	<i>EIF3C</i>	1	0	0	0	2.18E-02	-1.00	Down

ENSG00000165996	<i>HACD1</i>	0	0	1	0	2.22E-02	-0.37	Down
ENSG00000132003	<i>ZSWIM4</i>	1	0	0	0	2.22E-02	0.70	Up
ENSG00000111832	<i>RWDD1</i>	0	0	1	0	2.26E-02	-0.46	Down
ENSG00000187678	<i>SPRY4</i>	0	0	1	0	2.28E-02	0.44	Up
ENSG00000134463	<i>ECHDC3</i>	0	0	1	0	2.29E-02	-0.33	Down
ENSG00000111052	<i>LIN7A</i>	0	1	0	0	2.31E-02	-0.46	Down
ENSG00000154305	<i>MIA3</i>	1	0	0	0	2.31E-02	-0.30	Down
ENSG00000132326	<i>PER2</i>	0	0	1	0	2.31E-02	0.75	Up
ENSG00000116750	<i>UCHL5</i>	1	0	0	0	2.35E-02	-0.35	Down
ENSG00000036257	<i>CUL3</i>	1	0	0	0	2.37E-02	-0.44	Down
ENSG00000006118	<i>TMEM132A</i>	1	0	0	0	2.38E-02	0.55	Up
ENSG00000137857	<i>DUOX1</i>	0	0	1	0	2.39E-02	0.65	Up
ENSG00000142494	<i>SLC47A1</i>	0	0	0	0	2.39E-02	0.58	Up
ENSG00000066697	<i>MSANTD3</i>	1	0	0	0	2.50E-02	-0.88	Down
ENSG00000172932	<i>ANKRD13D</i>	0	0	1	0	2.50E-02	0.53	Up
ENSG00000164620	<i>RELL2</i>	1	0	0	0	2.58E-02	0.60	Up
ENSG00000186575	<i>NF2</i>	1	0	0	0	2.59E-02	-0.74	Down
ENSG00000031823	<i>RANBP3</i>	1	0	0	0	2.60E-02	-0.48	Down
ENSG00000122483	<i>CCDC18</i>	1	0	0	0	2.61E-02	-0.35	Down
ENSG00000156414	<i>TDRD9</i>	0	0	1	0	2.61E-02	-0.78	Down
ENSG00000066777	<i>ARFGEF1</i>	1	0	0	0	2.61E-02	-0.31	Down
ENSG00000117395	<i>EBNA1BP2</i>	1	0	0	0	2.62E-02	-0.66	Down
ENSG00000104368	<i>PLAT</i>	0	0	1	0	2.63E-02	0.64	Up
ENSG00000113811	<i>SELENOK</i>	0	0	0	0	2.63E-02	-0.34	Down
ENSG00000124507	<i>PACIN1</i>	0	0	1	0	2.63E-02	-0.71	Down
ENSG00000186567	<i>CEACAM19</i>	0	0	0	0	2.63E-02	-0.60	Down
ENSG00000131469	<i>RPL27</i>	1	0	0	0	2.65E-02	-0.56	Down
ENSG00000100767	<i>PAPLN</i>	0	0	0	0	2.66E-02	0.97	Up
ENSG00000078304	<i>PPP2R5C</i>	1	0	0	0	2.67E-02	-0.41	Down
ENSG00000107242	<i>PIP5K1B</i>	0	0	1	0	2.67E-02	-0.47	Down
ENSG00000167393	<i>PPP2R3B</i>	1	0	0	0	2.67E-02	-0.33	Down
ENSG00000140937	<i>CDH11</i>	0	0	1	0	2.70E-02	0.56	Up
ENSG00000155099	<i>PIP4P2</i>	0	0	1	0	2.81E-02	-0.63	Down
ENSG00000196482	<i>ESRRG</i>	0	0	1	0	2.82E-02	-0.47	Down
ENSG00000159176	<i>CSRP1</i>	1	0	0	0	2.83E-02	0.52	Up
ENSG00000196396	<i>PTPN1</i>	1	0	0	0	2.84E-02	-0.52	Down
ENSG00000091527	<i>CDV3</i>	1	0	0	0	2.85E-02	-0.40	Down
ENSG00000159674	<i>SPON2</i>	0	0	0	0	2.85E-02	0.62	Up
ENSG00000134240	<i>HMGCS2</i>	0	0	1	0	2.89E-02	-2.05	Down
ENSG00000169155	<i>ZBTB43</i>	0	0	0	0	2.95E-02	-0.40	Down
ENSG00000164134	<i>NAA15</i>	1	0	0	0	2.98E-02	-0.41	Down
ENSG00000198356	<i>ASNA1</i>	1	0	0	0	3.01E-02	-0.78	Down
ENSG00000143158	<i>MPC2</i>	1	0	0	0	3.02E-02	-0.24	Down
ENSG00000160219	<i>GAB3</i>	1	0	0	0	3.08E-02	0.59	Up
ENSG00000250159	<i>AC106791.1</i>	1	0	0	0	3.09E-02	-0.62	Down
ENSG00000103034	<i>NDRG4</i>	0	0	0	0	3.09E-02	-0.34	Down
ENSG00000147601	<i>TERF1</i>	0	0	1	0	3.11E-02	0.42	Up
ENSG00000106034	<i>CPED1</i>	0	0	0	0	3.11E-02	0.37	Up
ENSG00000130724	<i>CHMP2A</i>	1	0	0	0	3.12E-02	-0.40	Down
ENSG00000136848	<i>DAB2IP</i>	1	0	0	0	3.13E-02	-0.50	Down
ENSG00000145592	<i>RPL37</i>	1	0	0	0	3.18E-02	-0.53	Down
ENSG00000148411	<i>NACC2</i>	0	0	1	0	3.26E-02	-0.47	Down
ENSG00000179262	<i>RAD23A</i>	0	0	0	0	3.28E-02	-0.32	Down



ENSG00000164088	<i>PPM1M</i>	0	0	1	0	3.31E-02	0.44	Up
ENSG00000169718	<i>DUS1L</i>	0	0	0	0	3.31E-02	-0.37	Down
ENSG00000196428	<i>TSC22D2</i>	0	0	1	0	3.32E-02	0.44	Up
ENSG00000204261	<i>PSMB8-AS1</i>	1	0	0	0	3.32E-02	0.39	Up
ENSG00000132688	<i>NES</i>	0	0	1	0	3.32E-02	0.28	Up
ENSG00000107736	<i>CDH23</i>	0	0	0	0	3.35E-02	0.71	Up
ENSG00000115325	<i>DOK1</i>	1	0	0	0	3.35E-02	0.48	Up
ENSG00000182636	<i>NDN</i>	0	1	0	0	3.36E-02	0.44	Up
ENSG00000125170	<i>DOK4</i>	0	0	1	0	3.38E-02	0.38	Up
ENSG00000168275	<i>COA6</i>	0	0	1	0	3.40E-02	-0.41	Down
ENSG00000108883	<i>EFTUD2</i>	0	0	0	0	3.43E-02	-0.26	Down
ENSG00000121579	<i>NAA50</i>	1	0	0	0	3.43E-02	-0.74	Down
ENSG00000093010	<i>COMT</i>	0	0	1	0	3.44E-02	0.25	Up
ENSG00000139990	<i>DCAF5</i>	0	0	0	0	3.45E-02	-0.34	Down
ENSG00000011485	<i>PPP5C</i>	1	0	0	0	3.47E-02	-0.32	Down
ENSG00000120688	<i>WBP4</i>	1	0	0	0	3.47E-02	-0.45	Down
ENSG00000019995	<i>ZRANB1</i>	0	0	0	0	3.49E-02	-0.24	Down
ENSG00000160877	<i>NACC1</i>	0	0	0	0	3.49E-02	-0.50	Down
ENSG00000138100	<i>TRIM54</i>	1	0	0	0	3.50E-02	-0.35	Down
ENSG00000175602	<i>CCDC85B</i>	0	0	0	0	3.51E-02	0.56	Up
ENSG00000005889	<i>ZFX</i>	0	0	1	0	3.52E-02	-0.34	Down
ENSG00000136279	<i>DBNL</i>	0	0	1	0	3.56E-02	-0.24	Down
ENSG00000157240	<i>FZD1</i>	1	0	0	0	3.56E-02	0.51	Up
ENSG00000137171	<i>KLC4</i>	1	0	0	0	3.58E-02	0.29	Up
ENSG00000162601	<i>MYSM1</i>	0	0	1	0	3.61E-02	-0.54	Down
ENSG00000230630	<i>DNM3OS</i>	0	0	1	0	3.63E-02	0.65	Up
ENSG00000143869	<i>GDF7</i>	0	0	0	0	3.65E-02	0.76	Up
ENSG00000141568	<i>FOXK2</i>	1	0	0	0	3.68E-02	-0.28	Down
ENSG00000090061	<i>CCNK</i>	1	0	0	0	3.69E-02	-0.25	Down
ENSG00000151725	<i>CENPU</i>	1	0	0	0	3.72E-02	0.62	Up
ENSG00000182253	<i>SYNM</i>	1	0	0	0	3.72E-02	-0.29	Down
ENSG00000263335	<i>AF001548.2</i>	1	0	0	0	3.79E-02	0.52	Up
ENSG00000103316	<i>CRYM</i>	0	0	1	0	3.80E-02	0.52	Up
ENSG00000167705	<i>RILP</i>	0	0	1	0	3.80E-02	-0.42	Down
ENSG00000071127	<i>WDR1</i>	1	0	0	0	3.88E-02	-0.46	Down
ENSG00000182287	<i>AP1S2</i>	0	0	0	0	3.90E-02	-0.34	Down
ENSG00000114670	<i>NEK11</i>	0	0	0	0	3.94E-02	0.77	Up
ENSG00000178764	<i>ZHX2</i>	1	0	0	0	3.94E-02	-0.39	Down
ENSG00000197977	<i>ELOVL2</i>	0	0	0	0	3.96E-02	-0.71	Down
ENSG00000179041	<i>RRS1</i>	1	0	0	0	4.03E-02	-0.55	Down
ENSG00000179958	<i>DCTPP1</i>	1	0	0	0	4.07E-02	-0.47	Down
ENSG00000100418	<i>DESI1</i>	0	0	1	0	4.09E-02	-0.29	Down
ENSG00000196843	<i>ARID5A</i>	0	0	1	0	4.11E-02	0.51	Up
ENSG00000168763	<i>CNNM3</i>	1	0	0	0	4.13E-02	0.37	Up
ENSG00000165487	<i>MICU2</i>	1	0	0	0	4.16E-02	-0.58	Down
ENSG00000170004	<i>CHD3</i>	0	0	0	0	4.20E-02	0.48	Up
ENSG00000127191	<i>TRAF2</i>	0	0	1	0	4.26E-02	0.46	Up
ENSG00000198873	<i>GRK5</i>	1	0	0	0	4.33E-02	-0.70	Down
ENSG00000019582	<i>CD74</i>	0	1	0	0	4.34E-02	0.47	Up
ENSG00000110925	<i>CSRNP2</i>	0	0	1	0	4.36E-02	0.19	Up
ENSG00000168615	<i>ADAM9</i>	0	0	0	0	4.38E-02	-0.39	Down
ENSG00000118762	<i>PKD2</i>	0	0	0	0	4.42E-02	0.32	Up
ENSG00000141582	<i>CBX4</i>	1	0	0	0	4.42E-02	-0.51	Down

ENSG00000171476	<i>HOPX</i>	0	0	1	0	4.45E-02	-1.37	Down
ENSG00000103260	<i>METRN</i>	0	0	1	0	4.48E-02	0.38	Up
ENSG00000078061	<i>ARAF</i>	0	0	0	0	4.54E-02	-0.27	Down
ENSG00000090776	<i>EFNB1</i>	0	0	1	0	4.54E-02	-0.33	Down
ENSG00000186716	<i>BCR</i>	1	0	0	0	4.57E-02	-0.71	Down
ENSG00000113140	<i>SPARC</i>	0	0	0	0	4.57E-02	0.49	Up
ENSG00000144645	<i>OSBPL10</i>	0	0	0	0	4.62E-02	0.85	Up
ENSG00000164683	<i>HEY1</i>	1	0	0	0	4.62E-02	0.75	Up
ENSG00000008869	<i>HEATR5B</i>	1	0	0	0	4.75E-02	-0.72	Down
ENSG00000112335	<i>SNX3</i>	1	0	0	0	4.81E-02	-0.42	Down
ENSG00000164897	<i>TMUB1</i>	1	0	0	0	4.81E-02	-0.52	Down
ENSG00000126218	<i>F10</i>	0	1	0	0	4.82E-02	0.54	Up
ENSG00000168994	<i>PXDC1</i>	1	0	0	0	4.90E-02	0.59	Up
ENSG00000136888	<i>ATP6V1G1</i>	1	0	0	0	4.91E-02	-0.49	Down
ENSG00000277196	<i>AC007325.2</i>	0	0	1	0	4.94E-02	-1.03	Down
ENSG00000003096	<i>KLHL13</i>	0	0	0	0	4.99E-02	0.83	Up

1: '1' or '0' indicates if the gene was identified as differentially expressed gene or not; 2: FDR-adjusted p-value from meta-analysis; 3: Average of log<sub>2</sub>FC from individual studies; 4: 'Up' or 'Down' indicates if the gene was upregulated or downregulated. The genes were sorted based on the adjusted p-values.

Supplementary Table S2. Significant canonical pathways with absolute z-score > 2.0 and their involved genes.

<b>Ingenuity Canonical Pathways</b>	<b>-Log(p)<sup>1</sup></b>	<b>z-score<sup>2</sup></b>	<b>Genes</b>
EIF2 Signaling	11.9	-3.27	<i>ACTC1, ATF4, CCND1, EIF3C, EIF3H, EIF3K, EIF4G1, EIF5B, MT-TM, PIK3CB, PIK3CD, PPP1CC, PPP1R15A, RAP1A, RPL13A, RPL14, RPL19, RPL26, RPL27, RPL27A, RPL35, RPL37, RPL3L, RPL4, RPL7A, RPL8, RPLP0, RPLP1, RPLP2, RPS12, RPS24, RPS5, RPS7, RPS8, UBA52</i>
Oxidative Phosphorylation	2.52	-3.32	<i>ATP5F1C, ATP5F1E, ATP5MC1, COX17, COX5A, COX7B, MT-ND1, MT-ND2, NDUFA6, NDUFS5, UQCR10</i>
Senescence Pathway	2.02	-2.07	<i>ARAF, CAPN1, CCND1, E2F5, EIF4EBP1, EP300, GADD45A, KAT2B, MAPK7, MTOR, PIK3CB, PIK3CD, PPP2R3B, PPP2R5C, PPP3CC, RAP1A, SQSTM1, TGFBR2, TGFBR3</i>
Superpathway of Inositol Phosphate Compounds	1.4	-3.05	<i>ATP1A1, INPPL1, ITPK1, PIK3CB, PIK3CD, PIP4P2, PIP5K1B, PLPP7, PPIP5K2, PPP1CC, PPP1R14B, PPP5C, PTPN1</i>

1:  $-\log(p) > 1.3$  reflects a significant association between a canonical pathway and its involved genes; 2: Positive and negative z-scores are considered as activated and inhibited, respectively. The pathways were sorted based on the  $-\log(p)$ .

Supplementary Table S3. Differentially expressed upstream regulators and their targeted genes.

Upstream Regulator	Log <sub>2</sub> FC	Molecule Type	Activation z-score <sup>1</sup>	p-value of overlap <sup>2</sup>	Target Molecules in Dataset
SMARCA4	-0.38	transcription regulator	0.47	4.61E-10	<i>ADGRG1, ANO1, AP1S2, ASCC1, AZGP1, BMP4, BNIP3L, C19orf12, C1orf54, CARD16, CASP1, CCDC85B, CCDC9B, CCN2, CCND1, CD74, CDH11, CKM, CORO6, CP, CTSB, CYP4B1, DES, ECM2, EFN1, EGR1, ELOVL6, FBLIM1, FHL2, GADD45A, HEY1, IGF1, IGFBP5, LOX, LUM, MEIS1, MGP, MMP2, MN1, MT-ND2, MYH11, MYL5, NECTIN1, PLAT, PLIN2, PTP4A2, RAD1, RAMP1, SERPINE2, SLC11A1, SMARCA4, SOCS2, SOD3, SOX17, ST3GAL1, STARD10, TNNT2, TPM1, TUBA3C/TUBA3D, UBE2H</i>
ERBB2	-0.39	kinase	0.70	5.77E-07	<i>ACAA2, ADAM19, ATF4, BCL2L1, CCDC80, CCN2, CCND1, CCND2, CDC37, CDC42SE1, CDH11, CHCHD10, CTSB, CUL3, CYP2J2, CYP4B1, DAG1, DOK1, DPT, E2F5, EBP, EGR1, EIF4EBP1, EMP1, ERBB2, ESR2, F2R, FLOT2, FSCN1, GPX3, GTF3A, HEY1, IGFBP5, JAK1, JUP, KLHDC3, LTBP2, LUM, MAF, MKNK2, NDRG4, PDGFD, PGM1, PIK3CD, PLAT, PLIN2, POLR1D, PRDX2, PSMC3, PTPN1, RAB31, SLC2A1, SOCS2, SOX4, SPARC, STAT3, THBS4, TPM1, TUBA1A, UQCR10</i>
TBX5	-0.59	transcription regulator	-2.89	7.79E-07	<i>ACTC1, ATP2A2, BCL2L1, DES, ECM2, FAP, HSPB7, MYH6, NKX2-5, NPPA, PLA2G2A, SCN5A, TNNT2, TPM1, TTN</i>
ESR2	-0.78	ligand-dependent nuclear receptor	-0.47	9.16E-06	<i>ACTC1, AKAP1, APEX1, ASB2, BAG1, BCL2L1, BMP4, CCN2, CCND1, COL16A1, COMP, EGR1, EP300, ERBB2, ERN1, ESR2, FBLN1, FSCN1, IGF1, JAK1, LOX, MICOS10-NBL1/NBL1, MMP2, MYH6, MYH7, NDRG2, PLAT, PLEC, PLIN2, PLXDC1, PTH1R, S100A9, SFRP4, SLC25A4, SOCS2, SOX4, ST8SIA1, TGFBR2, TGM2, THBS4, TPM1, USP8</i>
CCN2	1.19	growth factor	0.88	2.08E-05	<i>BCL2L1, CCN2, CCND1, CFLAR, COL8A1, EGR1, IGF1, LOX, MIA3, MMP2, PTH1R, RAMP2, SFRP4, SOX4, SPARC</i>
AZGP1	-0.85	transporter	-1.13	3.05E-05	<i>AZGP1, BCL2L1, BMP4, CCND1, DSP, EGR1, MTOR</i>
TEAD1	-0.73	transcription regulator	0.43	7.52E-05	<i>CCND1, DES, FIBIN, IGFBP5, LATS2, MYH6, MYH7, NPPA, SULF1, TNNT2, TPM1</i>
MTA1	-0.79	transcription regulator	-0.60	8.74E-05	<i>ACTC1, APEX1, BCL2L1, CCND1, CCND2, EMP1, MMP2, MYH6, STAT3</i>
HMGA1	-0.57	transcription regulator	-0.22	1.00E-04	<i>CCND1, CCND2, EGR1, IER2, IGF1, ITGAL, KCNJ11, NECTIN1, NF2, NKX2-5, PTH1R, RPL7A, SOD3, SOX17, SOX4, SPARC, STAT3</i>
IGF2BP2	-0.73	translation regulator		2.48E-04	<i>ELOVL6, LIMS2, TRIM54</i>
SFRP4	2.62	transmembrane receptor	2.00	3.06E-04	<i>CCND1, MYH6, MYH7, NKX2-5, TNNT2</i>

<i>STAT3</i>	-0.91	transcription regulator	-0.04	1.11E-03	<i>APEX1, BCL2L1, BCL6, BCL9L, BECN1, BNIP3L, BOC, CASP1, CCN2, CCND1, CCND2, CD74, CFLAR, COPS5, CTSB, EGR1, ESR2, FSCN1, GADD45A, HEY1, IGFBP5, JAK2, KAT2B, LOX, MAF, MMP2, MT-ND1, MT-ND2, MYH7, NES, NPPA, PHLDA1, PLA2G2A, PRF1, PTN, S100A9, SERPINE2, SLC1A3, SLC2A1, STAT3</i>
<i>CUL3</i>	-0.44	enzyme	-0.82	1.14E-03	<i>CKMT2, DBP, GSTK1, MFAP4, MYH7, PDLIM5, S100A9, SPON1</i>
<i>NKX2-5</i>	-0.85	transcription regulator	0.02	1.27E-03	<i>CBY1, DIO2, HOPX, NKX2-5, NPPA, SCN5A, TBX5</i>
<i>TRIM54</i>	-0.35	other		1.60E-03	<i>FHL2, FLNC</i>
<i>TNNT2</i>	-0.55	other		1.60E-03	<i>MYH7, NPPA</i>
<i>SOCS2</i>	0.90	other		1.85E-03	<i>IGF1, MYH7, PIM3, STAT3</i>
<i>PER2</i>	0.76	transcription regulator		1.85E-03	<i>ATP1A1, CCND1, DBP, PER2</i>
<i>TTN</i>	-0.67	kinase		3.07E-03	<i>ANKRD2, ATP2A2, FHL2</i>
<i>ERN1</i>	0.88	kinase	-0.29	3.88E-03	<i>ATF4, ATP2A2, BECN1, GOT1, LAD1, MAP1LC3B, MYH7, NPPA, PLIN2, PVR, SPARC, SYT11, TINAGL1</i>
<i>MTOR</i>	-0.45	kinase	-0.08	4.06E-03	<i>ACACB, ATP2A2, BCL2L1, CASP1, CCND1, CFLAR, CITED2, DAG1, DDAH2, ELOB, FAF1, HADHA, HMGC2, IGF1, JAK2, MAP1LC3B, MTOR, NCAM1, NDUFA6, PGP, PTH1R, SLC2A1, SOX4, SQSTM1, STAT3</i>
<i>DAG1</i>	-0.65	transmembrane receptor	-1.00	6.10E-03	<i>DAG1, SLC2A1, SNTA1, SSPN</i>
<i>JAK2</i>	0.82	kinase	0.64	6.56E-03	<i>BCL2L1, CASP1, CCND1, CCND2, CFLAR, EGR1, F10, JAK2, NDN, SLC11A1, SLC1A3, STAT3, TGM2</i>
<i>TFRC</i>	-1.17	transporter	0.56	6.86E-03	<i>ADGRG1, ATF4, GADD45A, GPX3, PIP5K1B, PPP1R15A, PTN, SLC2A1, UBE2E1</i>
<i>PPP1R15A</i>	0.72	other		7.39E-03	<i>ATF4, CCND1, GADD45A, MAP1LC3B</i>
<i>PPP1R13L</i>	-0.54	transcription regulator	1.07	7.39E-03	<i>CCND2, DSP, JUP, SLC2A1</i>
<i>F2R</i>	0.92	G-protein coupled receptor	2.56	8.24E-03	<i>CASP4, CCN2, CCND1, CDH11, DSP, EGR1, F2R, MMP2, PLAT, TGM2</i>
<i>IGFBP5</i>	0.48	other	1.98	1.05E-02	<i>BCL2L1, CCND1, IGF1, MYH7</i>
<i>TEAD2</i>	-0.51	transcription regulator	1.00	1.30E-02	<i>CCND1, FIBIN, IGFBP5, SULF1, TNNT2, TPM1</i>
<i>HEY1</i>	0.75	transcription regulator	-0.22	1.43E-02	<i>MMP2, MYH11, MYH6, NPPA</i>
<i>F10</i>	0.54	peptidase		1.67E-02	<i>CCN2, EGR1, MMP2</i>
<i>SOX4</i>	1.06	transcription regulator	1.01	1.77E-02	<i>APBB1, B3GNT5, CASP1, CD74, CTNNA1, DDAH2, EMP1, IGF1, LHFPL6, NCAM1, PRXL2A, SERPINE2, TEAD1, TUBA1A</i>

<i>S100A9</i>	-1.55	other	1.50	1.85E-02	<i>BECN1, CASP1, CCND1, CP, EPB41L4B, FBLIM1, FURIN, IGF1, KLF15, LOC102724788/PRODH, MMP2, PHLDA1, S100A9</i>
<i>APBB1</i>	-0.57	transcription regulator		2.03E-02	<i>CASP4, CCND1, TPM1</i>
<i>MT-TM</i>	-1.19	other		2.03E-02	<i>MT-ND1, MT-TM, MT-TQ</i>
<i>BMP4</i>	0.63	growth factor	1.14	2.05E-02	<i>ADGRG1, ALDH1A2, BMP4, CCND1, DIO2, HEY1, HOPX, MAFK, NCAM1, NES, SOX17, SPARC, SULF1, TBX5, TGM2</i>
<i>THBS2</i>	0.80	other		2.15E-02	<i>HEY1, MMP2</i>
<i>EFNB1</i>	-0.33	other		2.15E-02	<i>BCL2L1, CFLAR</i>
<i>BNIP3L</i>	0.49	other	0.82	2.21E-02	<i>BCL2L1, GADD45A, IL16, PIK3CD, STAT3, TFRC</i>
<i>RAPGEF1</i>	-0.45	other		2.42E-02	<i>DHX38, EFTUD2, RAP1A</i>
<i>CDH11</i>	0.56	other	-1.00	2.43E-02	<i>IGF1, JUP, MBD2, S1PR3</i>
<i>NPPA</i>	1.86	other	-0.66	2.73E-02	<i>CCND1, EGR1, FLT4, NPPA</i>
<i>NF2</i>	-0.74	other	-1.98	2.73E-02	<i>CCND1, GLUL, MMP2, NF2</i>
<i>DIO2</i>	1.30	enzyme		3.64E-02	<i>ATP2A2, B3GNT5, EGR1, KCND3, MYH7, NPPA, SLC1A3</i>
<i>ALDH1A2</i>	0.80	enzyme	0.00	3.76E-02	<i>CCN2, NKX2-5, NPPA, SPARC</i>
<i>STC1</i>	1.41	kinase		3.81E-02	<i>MTOR, STC1</i>
<i>KAT2B</i>	-0.58	transcription regulator	-0.13	3.89E-02	<i>CCN2, CKM, KAT2B, NPPA, TGFB2</i>
<i>RBM25</i>	-0.38	other		4.00E-02	<i>BCL2L1</i>
<i>RPLP0</i>	-0.92	other		4.00E-02	<i>CCND1</i>
<i>MPP3</i>	-1.23	kinase		4.00E-02	<i>NECTIN1</i>
<i>EZR</i>	-0.32	other	0.04	4.15E-02	<i>ATF4, BCL2L1, EIF4EBP1, MMP2</i>
<i>EIF4EBP1</i>	-0.99	translation regulator		4.15E-02	<i>CCND1, CFLAR, EGR1, SLC2A1</i>
<i>KLF15</i>	-0.96	transcription regulator	-0.70	4.21E-02	<i>BECN1, CCN2, ESRRG, HADHA, NPPA</i>
<i>BCL6</i>	-0.54	transcription regulator	0.21	4.63E-02	<i>BCL2L1, BCL6, CCND1, CCND2, GADD45A, HACD1, MAF, MCM3AP, MGP, PLA2G2A, SOCS2, TRMT13, TUBA3C/TUBA3D, UBA7</i>
<i>CCND2</i>	0.48	other		4.78E-02	<i>CCND1, CCND2</i>
<i>CAPN1</i>	-0.41	peptidase		4.78E-02	<i>MMP2, PTPN1</i>
<i>YBX3</i>	-0.49	transcription regulator		4.78E-02	<i>CCND1, ERBB2</i>
<i>EP300</i>	-0.43	transcription regulator	-0.59	4.85E-02	<i>ACACB, ARID5A, BCL2L1, BCL6, CCND1, CFLAR, CKM, COMT, EGR1, EP300, EPN1, ERBB2, HMGS2, IGF1, JUP, MAF, MYH11, NPPA, PIP5K1B, PITPNM1, PLEKHF1, RCDSD1, SCN4B, TANC2, TGFB2</i>
<i>ADRA1A</i>	-0.67	G-protein coupled receptor		4.88E-02	<i>EGR1, LOX, NPPA, PRRX1, STAT3</i>

<i>IGF1</i>	0.82	growth factor	0.02	4.93E-02	<i>BCL2L1, BMP4, CCN2, CCND1, CCND2, CFLAR, CITED2, EGR1, ESR2, GADD45A, HMGA1, IER2, IGF1, IGFBP5, IL16, MMP2, MYH11, MYH6, NCAM1, NPPA, PHLDA1, PLA2G2A, PPP3CC, PTH1R, SLC12A6, SLC2A1, YBX3</i>
<i>CYP2J2</i>	0.97	enzyme		4.96E-02	<i>BCL2L1, CYP2J2, NPPA</i>

1: Positive and negative z-scores are considered as activated and inhibited, respectively; 2: A p-value of overlap indicates whether there is a statistically significant interaction between an upstream regulator and its regulated genes. A p-value of overlap < 0.05 is considered as statistically significant. The genes were sorted based on the p-value of overlap.