

Table SI. Paired gene relationships with combined scores.

Gene 1	Gene 2	Score
UHRF1	DNMT1	0.996
EPHB6	EFNA5	0.992
CENPN	CENPI	0.992
KIF4A	KIF2C	0.991
OAS2	MX2	0.991
FN1	ITGA5	0.990
HJURP	CENPN	0.989
MX2	OAS3	0.988
XAF1	OAS2	0.987
CACNA2D2	CACNB2	0.986
STAT1	SOCS3	0.986
SDC4	FN1	0.986
XAF1	OAS3	0.984
CENPN	KIF2C	0.983
FN1	THBS1	0.982
PARP14	DTX3L	0.981
HJURP	CENPI	0.980
FN1	SERPINE1	0.979
UBE2S	UBE3A	0.977
STAT1	MX2	0.975
TEX101	LY6K	0.974
GBP1	OAS2	0.973
XAF1	MX2	0.972
DHX9	HNRNPA0	0.970
IL20RA	IL26	0.969
THBS1	SERPINE1	0.969
GBP1	OAS3	0.968

LPP	ACTN1	0.966
ACSL1	ACOX2	0.962
SERPINH1	COL4A1	0.962
F2	F2RL1	0.959
GPIHBP1	LY6K	0.958
PKLR	MLXIPL	0.958
OAS2	OAS3	0.957
LY6E	LY6K	0.956
CENPI	KIF2C	0.953
GPIHBP1	TEX101	0.952
RET	GFRA3	0.952
UBE2S	LNX1	0.951
RELA	CARD11	0.950
ADAR	OAS2	0.949
CPSF1	HNRNPA0	0.948
STAT1	IL20RA	0.948
ADAR	OAS3	0.947
CDSN	LCE3B	0.947
FN1	FSTL3	0.947
FN1	APP	0.946
ADAR	MX2	0.946
ENPP3	ENTPD6	0.945
APP	THBS1	0.944
F2	APP	0.944
P4HA2	COL4A1	0.944
CLIC4	CLIC5	0.943
TEC	VAV2	0.942
CDSN	LCE3C	0.942
EXT1	SDC4	0.942

ACTN1	FN1	0.942
STAT1	IL26	0.941
SDC4	THBS1	0.940
RELA	DHX9	0.940
GPIHBP1	LY6E	0.940
RELA	APP	0.938
CPSF1	DHX9	0.937
LCE3B	SPRR3	0.934
LCE3B	LCE3C	0.933
SERPINH1	COL2A1	0.932
COL2A1	COL10A1	0.932
CDSN	SPRR3	0.931
HDAC9	TBL1X	0.931
HJURP	RUVBL1	0.929
CYP4F8	CYP2C9	0.929
STAT1	THPO	0.929
COL4A1	P4HA1	0.928
GBP1	STAT1	0.928
KRT4	KRT20	0.928
KRT76	KRT32	0.928
COL4A6	COL2A1	0.928
LCE3C	SPRR3	0.927
ST3GAL1	ST6GALNAC1	0.927
SCN4A	ANK2	0.925
COL2A1	COL4A1	0.925
KRT4	KRT32	0.925
COL2A1	P4HA1	0.924
C5AR1	CXCR2	0.924
KRT76	KRT20	0.924

C5AR1	APP	0.923
LAMA1	LAMA3	0.923
APP	SERPINE1	0.921
ACTN1	THBS1	0.920
P4HA2	COL2A1	0.919
COL4A6	COL10A1	0.918
COL4A6	COL4A1	0.918
HJURP	KIF2C	0.917
CXCR2	APP	0.917
COL4A1	COL10A1	0.917
APP	GNRH1	0.916
FECH	ALAS2	0.916
KRT4	KRT23	0.916
KIF4A	KIF9	0.916
LNX1	UBE3A	0.916
OCLN	CGN	0.916
GAN	UBE2S	0.915
ACTN1	SERPINE1	0.915
CYP2C9	ALOX12	0.915
FZD3	GNAO1	0.915
COL4A6	P4HA1	0.914
GBP1	PML	0.913
KCTD6	UBE2S	0.913
LCE2A	LCE3B	0.913
OAS2	PML	0.913
GAN	UBE3A	0.913
PML	OAS3	0.913
KIF2C	KIF9	0.912
F2	GNRH1	0.912

SDC4	LAMA3	0.911
KDEL3	KIF4A	0.911
ADH1C	BCO1	0.911
ADAMTSL4	THBS1	0.911
SERPINH1	COL4A6	0.911
ADAR	XAF1	0.910
TEX101	LY6E	0.910
CENPN	RUVBL1	0.910
REEP1	OR2H2	0.910
ALOX12B	ALOX12	0.910
PRSS2	CTSG	0.910
SERPINH1	COL10A1	0.910
PADI2	CTSG	0.910
COL4A6	COL6A5	0.909
CYP4F8	ALOX12B	0.908
ACTN1	APP	0.908
KRT76	KRT23	0.908
KCTD6	LNK1	0.908
ENPP3	PKLR	0.908
SORBS1	LMOD1	0.908
KRT32	KRT23	0.908
P4HA2	COL4A6	0.907
APLN	HCAR1	0.906
KRT4	KRT76	0.906
KRT23	KRT20	0.906
RELA	IL1RAP	0.905
PCM1	TUBB4A	0.905
APLN	APP	0.905
SDC4	F2	0.905

LCE2A	LCE3C	0.905
CXCR2	HTR1E	0.905
CENPI	RUVBL1	0.904
CTSB	CTSL	0.904
ZNF1	UBE3A	0.904
COL4A1	COL6A5	0.903
DTX3L	UBE3A	0.903
KDEL3	KIF2C	0.903
ACTN1	SDC4	0.903
APP	FSTL3	0.903
ACSL1	TBL1X	0.903
P4HA2	COL6A5	0.902
CDSN	LCE2A	0.902
ENTPD6	PKLR	0.902
F2RL1	GNRH1	0.902
GAN	LN1	0.902
COL2A1	COL6A5	0.902
DTX3L	LN1	0.902
SOCS3	UBE3A	0.902
TEX101	GPLD1	0.902
HCAR1	C5AR1	0.902
TAS2R43	C5AR1	0.902
SERP1H1	COL6A5	0.902
COL6A5	P4HA1	0.902
KCTD6	UBE3A	0.902
SOCS3	UBE2S	0.902
ALOX12B	CYP2C9	0.901
SOCS3	LN1	0.901
LY6K	GPLD1	0.901

ENTPD6	ACR	0.901
DTX3L	UBE2S	0.901
HCAR1	HTR1E	0.901
F2RL1	APP	0.901
HTR1E	APP	0.901
ST3GAL1	MUC15	0.901
LAMA1	SDC4	0.900
MUC15	GALNT2	0.900
TAS2R43	CXCR2	0.900
APLN	HTR1E	0.900
KDEL3	KIF9	0.900
CYP4F8	ALOX12	0.900
KRT32	KRT20	0.900
APLN	CXCR2	0.900
OR2H2	RTP3	0.900
OR52B2	RTP3	0.900
FN1	ZC3HAV1	0.900
GAN	DTX3L	0.900
GPLD1	CEACAM7	0.900
KCTD6	DTX3L	0.900
TAS2R43	APP	0.900
ENPP3	PYGM	0.900
ST3GAL1	ACAN	0.900
TAS2R43	APLN	0.900
TAS2R43	HTR1E	0.900
TEX101	CEACAM7	0.900
LCE2A	SPRR3	0.900
OR2H2	REEP2	0.900
PRSS2	PADI2	0.900

C5AR1	HTR1E	0.900
HCAR1	APP	0.900
KDEL3	GPLD1	0.900
P4HA2	COL10A1	0.900
TAS2R43	HCAR1	0.900
GPIHBP1	CEACAM7	0.900
MUC15	GALNT12	0.900
SOCS3	DTX3L	0.900
COL10A1	P4HA1	0.900
GAN	SOCS3	0.900
OR10J3	RTP3	0.900
LY6E	GPLD1	0.900
REEP2	OR51D1	0.900
ITSN2	IL7R	0.900
GAN	KCTD6	0.900
REEP2	OR10J3	0.900
OR51D1	RTP3	0.900
GPIHBP1	GPLD1	0.900
REEP1	OR51D1	0.900
KDEL3	ANK2	0.900
APLN	C5AR1	0.900
KCTD6	SOCS3	0.900
LY6K	CEACAM7	0.900
REEP1	OR10J3	0.900
HCAR1	CXCR2	0.900
LY6E	CEACAM7	0.900
COL10A1	COL6A5	0.900
REEP1	OR52B2	0.900
OR52B2	REEP2	0.900

SNAI2	FN1	0.898
STAT1	OAS2	0.885
ELN	FN1	0.875
GALNT2	ST6GALNAC1	0.874
XAF1	STAT1	0.874
COX6B2	CYCS	0.872
GART	MTHFR	0.870
GPD1	GPD1L	0.870
HJURP	KIF4A	0.869
MTHFR	FPGS	0.868
MTHFR	F2	0.860
GART	FPGS	0.859
ABHD5	PLIN5	0.857
LPP	LASP1	0.856
DDX31	SURF6	0.854
STAT1	OAS3	0.851
PGK1	PKLR	0.850
F2	SERPINE1	0.849
ATP1B2	ATP12A	0.848
CTSB	APP	0.847
RELA	KLF2	0.844
REEP1	REEP2	0.842
ACAN	COL10A1	0.838
MTHFR	CYCS	0.835
LPA	SERPINE1	0.834
LAMA1	ITGA5	0.831
SOX10	SNAI2	0.827
P4HA2	P4HA1	0.826
SSH2	SSH1	0.825

MLXIPL	MLXIP	0.818
ABCA12	CYP4F22	0.816
GLTP	PLEKHA3	0.816
F2RL1	CTSG	0.814
HTR3A	GRIN2C	0.814
ALOX12B	CYP4F22	0.812
ENPP3	LAMA3	0.807
TRPS1	EXT1	0.804
EXT1	EXTL3	0.800
EEF1A2	ST6GALNAC1	0.800
CENPN	KIF4A	0.800
ITGA5	THBS1	0.798
LAMA3	ITGA5	0.795
EFNA5	SEMA4G	0.793
ACTN1	ITGA5	0.792
EFNA5	SEMA6A	0.791
GALNT12	ST6GALNAC1	0.790
SERPINH1	FN1	0.790
RHNO1	TRPS1	0.789
SURF6	GNL3L	0.789
UHRF1	KIF2C	0.787
HSPB6	BAG3	0.786
COL4A1	FN1	0.785
HFE	DNMT1	0.785
LPA	APP	0.783
RELA	STAT1	0.783
DDX31	GNL3L	0.781
RYR1	CACNB2	0.781
DIAPH3	KIF2C	0.776

ACTN1	MYOZ3	0.770
ALOX12B	ABCA12	0.768
CDK9	CDK6	0.765
PARP14	STAT1	0.763
GBP1	XAF1	0.761
COL4A1	ITGA5	0.758
ABHD5	ALOX12B	0.757
SOX10	COL2A1	0.756
GALNT2	B4GALNT1	0.756
RGS4	GNAO1	0.753
MSANTD3	KCTD9	0.752
ASGR2	ATP1B2	0.751
HTR3A	HTR1E	0.751
KIF2C	CKAP2L	0.75
SIRPA	MPZL1	0.749
FBLL1	RUVBL1	0.748
MON2	ATP9A	0.748
FN1	F2	0.743
ALDH5A1	GPLD1	0.742
FAIM2	SEC16B	0.741
OCLN	MARVELD3	0.740
PRSS2	F2RL1	0.739
PLSCR1	OAS3	0.738
UHRF1	HFE	0.738
UHRF1	CENPN	0.736
HFE	RUVBL1	0.736
HFE	HJURP	0.732
PLIN5	CIDEA	0.728
SLC12A1	SCNN1A	0.727

CYP2C18	GSTA3	0.726
KIF4A	CENPI	0.724
SAMD5	SASH1	0.723
CACNB2	GPD1L	0.720
ESRRB	KLF2	0.719
ST3GAL1	ASGR2	0.719
RHNO1	EXT1	0.712
FN1	KLK3	0.710
PGK1	EEF1A2	0.710
CYP2C9	GSTA3	0.708
IL1RAP	IL36B	0.706
OCLN	CLDN17	0.701
MTHFR	SERPINE1	0.701
ADH1C	GSTA3	0.701
SELE	FUT7	0.700
CYP4B1	PKLR	0.699
FBLL1	GNL3L	0.699
THBS1	CTSG	0.697
CENPN	CKAP2L	0.696
ZDHHC19	RMDN2	0.695
ACAN	FN1	0.694
HTR1E	GNAO1	0.693
PLA2G5	ALOX12	0.688
HJURP	CKAP2L	0.687
COL2A1	ITGA5	0.686
ESX1	SOX3	0.685
ADGRL2	LRRK2	0.685
GPIHBP1	LPA	0.685
ADAMTSL4	CTSB	0.685

LRRC37A2	ADGRL2	0.685
ENPP3	PDE7A	0.684
CXCR2	GNA12	0.683
CDSN	SPINK5	0.681
RSPH9	ARMC4	0.679
SELE	SERPINE1	0.676
LGI3	ADAM11	0.676
CNGB1	TULP1	0.675
GPRIN2	GPLD1	0.674
KLK3	GNRH1	0.674
COL4A6	ITGA5	0.673
SOX10	MLANA	0.669
CDSN	SCEL	0.668
KIF4A	CKAP2L	0.665
GPRIN2	ALDH5A1	0.664
CENPI	CKAP2L	0.664
TPPP	EEF1A2	0.663
ACAN	SOX10	0.662
OCLN	FN1	0.662
ACAN	ELN	0.662
ZNFX1	MX2	0.661
SLC12A1	AQP1	0.66
CYP4F8	PLA2G5	0.659
GPD1	LPIN2	0.658
SOX10	COL10A1	0.658
ST3GAL1	FUT7	0.657
RHNO1	DTX3L	0.656
RECQL4	GAS7	0.655
COL2A1	FN1	0.655

ESYT3	SYT15	0.654
GPD1L	LPIN2	0.654
LCE3C	CRNN	0.652
PLAGL1	DLK1	0.651
PLA2G5	ALOX12B	0.65
GDPD3	PLA2G5	0.65
PLA2G5	CYP2C9	0.65
PIANP	TGM3	0.649
FN1	LPA	0.649
RELA	CDK9	0.649
NEU2	GAL3ST2	0.646
CDKN2AIP	MPHOSPH6	0.646
SPRR3	CRNN	0.646
COL4A1	SDC4	0.645
IL7R	THPO	0.645
FN1	SELE	0.643
GBP1	MX2	0.642
PGK1	RAPH1	0.642
TTC39B	GALNT2	0.641
RELA	PYGM	0.641
CYCS	TNFSF10	0.641
XAF1	TNFSF10	0.638
POTEE	ACTN1	0.636
GALNT12	B4GALNT1	0.634
LCE3C	SPATA18	0.633
ELN	CTSG	0.633
STAT1	DTX3L	0.631
MTHFR	CHDH	0.631
SCN4A	RYR1	0.630

TONSL	FPGS	0.630
LY6E	OAS3	0.629
PRSS2	APP	0.627
PKLR	GPD1	0.627
COL4A6	SDC4	0.627
CHDH	CYCS	0.624
CPSF1	CYHR1	0.624
ABHD5	CYP4F22	0.623
SLC26A9	SLC4A3	0.622
CYCS	ATP12A	0.621
SNAI2	OCLN	0.618
DIAPH3	KIF4A	0.618
COL2A1	SDC4	0.616
MTHFR	LPA	0.615
CMTM4	SYNGR1	0.615
COL4A1	THBS1	0.614
LAMA1	SOX7	0.614
SYT15	GPRIN2	0.612
GART	PDXK	0.612
UHRF1	KIF4A	0.609
FN1	LGALS3BP	0.608
KRT4	GRHL3	0.608
ITGA5	COL6A5	0.607
KRT4	SPRR3	0.606
APP	GNAO1	0.606
DNMT1	SOCS3	0.605
PLSCR1	OAS2	0.604
ADAR	STAT1	0.602
PGK1	GPD1	0.602

LRRK2	APP	0.602
PGK1	CYCS	0.601
PLA2G5	CHDH	0.600
GBP1	PLSCR1	0.600
OSMR	THPO	0.600
IL20RA	THPO	0.600
SDC4	COL6A5	0.600

Table SII. Topology parameter information for DEGs in cluster 1 and cluster 7.

Gene	Average shortest path length	Betweenness centrality	Closeness centrality	Cluster	Degree
FN1	3.749	0.230	0.267	7	20
APP	3.617	0.330	0.276	7	20
STAT1	4.093	0.233	0.244	7	13
SDC4	4.115	0.080	0.243	7	11
COL4A1	4.492	0.015	0.223	7	11
COL2A1	4.503	0.020	0.222	7	11
COL6A5	4.962	0.002	0.202	1	9
THBS1	4.016	0.028	0.249	7	9
COL10A1	5.268	0.004	0.190	7	9
COL4A6	4.962	0.002	0.202	7	9
ITGA5	4.437	0.024	0.225	7	9
OAS3	4.612	0.035	0.217	7	9
DTX3L	4.787	0.045	0.209	7	9
KIF4A	6.022	0.035	0.166	7	9
KIF2C	6.022	0.035	0.166	7	9
ACTN1	4.033	0.050	0.248	7	9
HTR1E	4.541	0.022	0.220	1	8
GPLD1	4.727	0.141	0.212	1	8
RELA	3.874	0.265	0.258	7	8
OAS2	4.727	0.006	0.212	7	8
SOCS3	4.776	0.097	0.209	7	8
SERPINE1	3.803	0.059	0.263	7	8
MX2	4.727	0.010	0.212	7	7
CXCR2	4.563	0.011	0.219	1	7
CENPN	6.667	0.008	0.150	7	7
ALOX12B	6.301	0.054	0.159	1	7

MTHFR	4.027	0.196	0.248	1	7
HJURP	6.667	0.009	0.150	7	7
UBE3A	5.628	0.002	0.178	1	7
GBP1	4.732	0.006	0.211	7	7
XAF1	4.492	0.060	0.223	7	7
F2	3.885	0.062	0.257	7	7
UBE2S	5.639	0.000	0.177	7	6
CYCS	4.290	0.145	0.233	1	6
LNX1	5.639	0.000	0.177	1	6
APLN	4.568	0.000	0.219	7	6
CDSN	1.929	0.275	0.519	1	6
GPIHBP1	4.186	0.147	0.239	1	6
LCE3C	1.929	0.170	0.519	1	6
SERPINH1	4.678	0.003	0.214	7	6
TAS2R43	4.568	0.000	0.219	1	6
CENPI	6.934	0.007	0.144	7	6
PKLR	5.071	0.067	0.197	1	6
LY6E	4.628	0.029	0.216	7	6
KRT4	1.786	0.538	0.560	1	6
SPRR3	1.571	0.555	0.636	1	6
P4HA1	5.383	0.000	0.186	7	6
HCAR1	4.568	0.000	0.219	1	6
C5AR1	4.568	0.000	0.219	7	6
KCTD6	5.639	0.000	0.177	1	6
P4HA2	5.383	0.000	0.186	7	6
PLA2G5	5.399	0.143	0.185	1	6
GAN	5.639	0.000	0.177	1	6
ENPP3	4.705	0.078	0.213	1	5
KDEL3	5.432	0.106	0.184	7	5

ADAR	4.743	0.000	0.211	7	5
RUVBL1	7.066	0.044	0.142	7	5
REEP2	1.167	0.133	0.857	1	5
LY6K	4.874	0.000	0.205	7	5
CTSG	4.880	0.005	0.205	1	5
LPA	3.694	0.183	0.271	1	5
OCLN	4.694	0.033	0.213	1	5
F2RL1	4.322	0.004	0.231	7	5
CYP2C9	6.306	0.043	0.159	1	5
SOX10	5.279	0.012	0.189	1	5
PGK1	4.874	0.093	0.205	7	5
CEACAM7	4.874	0.000	0.205	1	5
ACAN	4.503	0.071	0.222	7	5
UHRF1	6.175	0.020	0.162	7	5
ST3GAL1	5.202	0.062	0.192	7	5
CKAP2L	6.962	0.000	0.144	7	5
TEX101	4.874	0.000	0.205	1	5
REEP1	1.167	0.133	0.857	1	5
ST6GALN AC1	5.650	0.039	0.177	1	4
THPO	5.049	0.033	0.198	1	4
KRT23	2.500	0.000	0.400	1	4
LCE3B	2.071	0.000	0.483	1	4
CYP4F8	6.328	0.000	0.158	1	4
LAMA1	4.978	0.011	0.201	7	4
KRT20	2.500	0.000	0.400	1	4
KRT76	2.500	0.000	0.400	1	4
GALNT2	6.612	0.017	0.151	7	4
GNRH1	4.339	0.002	0.230	1	4

GNAO1	4.574	0.022	0.219	1	4
EXT1	4.678	0.039	0.214	7	4
HFE	6.301	0.037	0.159	7	4
KRT32	2.500	0.000	0.400	1	4
GPD1	5.546	0.045	0.180	1	4
RTP3	1.333	0.133	0.750	7	4
LAMA3	4.727	0.033	0.212	7	4
ALOX12	6.328	0.000	0.158	1	4
LCE2A	2.071	0.000	0.483	1	4
GPD1L	6.284	0.028	0.159	1	3
GNL3L	9.000	0.022	0.111	7	3
GALNT12	6.623	0.006	0.151	1	3
CPSF1	5.814	0.011	0.172	7	3
IL20RA	5.060	0.000	0.198	1	3
EFNA5	1.000	1.000	1.000	1	3
CACNB2	6.945	0.023	0.144	1	3
FPGS	5.000	0.011	0.200	7	3
MUC15	6.153	0.014	0.163	1	3
OR2H2	1.500	0.033	0.667	1	3
CHDH	4.557	0.151	0.219	1	3
ABHD5	7.268	0.022	0.138	1	3
CYP4F22	7.273	0.000	0.137	1	3
EEF1A2	5.585	0.034	0.179	1	3
OR10J3	1.500	0.033	0.667	1	3
GSTA3	7.268	0.033	0.138	1	3
CTSB	4.590	0.013	0.218	7	3
ENTPD6	5.415	0.011	0.185	7	3
DNMT1	5.514	0.071	0.181	7	3
KIF9	6.295	0.000	0.159	1	3

OR52B2	1.500	0.033	0.667	1	3
PLSCR1	5.596	0.000	0.179	7	3
OR51D1	1.500	0.033	0.667	1	3
ELN	4.628	0.003	0.216	1	3
RHNO1	5.011	0.023	0.200	7	3
SNAI2	4.694	0.005	0.213	7	3
DHX9	4.836	0.032	0.207	7	3
SELE	4.492	0.010	0.223	1	3
PML	5.596	0.000	0.179	7	3
GPRIN2	5.694	0.022	0.176	1	3
GART	5.000	0.011	0.200	7	3
LPIN2	6.426	0.000	0.156	1	2
TRPS1	5.372	0.000	0.186	1	2
PYGM	4.552	0.047	0.220	1	2
LRRK2	4.590	0.022	0.218	1	2
PARP14	5.005	0.000	0.200	7	2
ABCA12	7.290	0.000	0.137	1	2
FBLL1	8.027	0.032	0.125	1	2
KLF2	4.858	0.011	0.206	1	2
TBLIX	1.333	0.667	0.750	1	2
ATP12A	5.213	0.011	0.192	1	2
FSTL3	4.377	0.000	0.228	7	2
ADHIC	8.251	0.011	0.121	1	2
ADAMTSL 4	4.989	0.000	0.200	1	2
ALDH5A1	5.705	0.000	0.175	1	2
HTR3A	5.525	0.011	0.181	1	2
MLXIPL	6.055	0.011	0.165	1	2
CDK9	4.858	0.011	0.206	7	2

IL26	5.082	0.000	0.197	1	2
PLIN5	8.251	0.011	0.121	1	2
KLK3	4.727	0.001	0.212	7	2
ANK2	6.251	0.022	0.160	1	2
ASGR2	5.885	0.004	0.170	1	2
PADI2	5.393	0.000	0.185	1	2
DIAPH3	7.011	0.000	0.143	7	2
CRNN	2.357	0.000	0.424	1	2
LPP	5.016	0.011	0.199	7	2
SCN4A	6.962	0.014	0.144	1	2
SLC12A1	1.000	1.000	1.000	1	2
ACSL1	1.333	0.667	0.750	1	2
B4GALNT1	7.596	0.000	0.132	7	2
DDX31	9.989	0.000	0.100	7	2
IL1RAP	4.858	0.011	0.206	7	2
SURF6	9.989	0.000	0.100	7	2
IL7R	6.033	0.011	0.166	7	2
TNFSF10	4.661	0.059	0.215	7	2
FUT7	5.273	0.001	0.190	1	2
RYR1	7.268	0.011	0.138	1	2
HNRNPA0	5.820	0.000	0.172	7	2
ZNFX1	5.525	0.001	0.181	7	2
ATP1B2	5.929	0.004	0.169	1	2
LGI3	1.000	0.000	1.000	1	1
GAL3ST2	1.000	0.000	1.000	1	1
CARD11	4.869	0.000	0.205	7	1
LRRC37A2	6.568	0.000	0.152	1	1
ITSN2	7.027	0.000	0.142	1	1
NEU2	1.000	0.000	1.000	1	1

TGM3	1.000	0.000	1.000	1	1
PLEKHA3	1.000	0.000	1.000	1	1
CTSL	5.585	0.000	0.179	7	1
CIDEA	9.246	0.000	0.108	1	1
SPATA18	2.857	0.000	0.350	1	1
MARVELD 3	5.689	0.000	0.176	7	1
LMOD1	1.000	0.000	1.000	1	1
GNA12	5.557	0.000	0.180	7	1
ACOX2	2.000	0.000	0.500	1	1
SPINK5	2.857	0.000	0.350	1	1
MPZL1	1.000	0.000	1.000	7	1
OSMR	6.044	0.000	0.165	7	1
ALAS2	1.000	0.000	1.000	1	1
CACNA2D 2	7.940	0.000	0.126	1	1
POTEE	5.027	0.000	0.199	7	1
ADAM11	1.000	0.000	1.000	1	1
MLXIP	7.049	0.000	0.142	7	1
CYP2C18	8.262	0.000	0.121	1	1
RSPH9	1.000	0.000	1.000	7	1
CYP4B1	6.066	0.000	0.165	1	1
CYHR1	6.809	0.000	0.147	7	1
SSH1	1.000	0.000	1.000	7	1
SEC16B	1.000	0.000	1.000	7	1
GRIN2C	6.519	0.000	0.153	1	1
HDAC9	2.000	0.000	0.500	7	1
PLAGL1	1.000	0.000	1.000	1	1
SYNGR1	1.000	0.000	1.000	1	1

SEMA4G	1.667	0.000	0.600	1	1
KCTD9	1.000	0.000	1.000	1	1
SSH2	1.000	0.000	1.000	7	1
ZDHHC19	1.000	0.000	1.000	1	1
SLC4A3	1.000	0.000	1.000	7	1
MLANA	6.273	0.000	0.159	1	1
GFRA3	1.000	0.000	1.000	1	1
TEC	1.000	0.000	1.000	1	1
RECQL4	1.000	0.000	1.000	7	1
VAV2	1.000	0.000	1.000	7	1
AQP1	1.500	0.000	0.667	1	1
SEMA6A	1.667	0.000	0.600	1	1
IL36B	5.852	0.000	0.171	1	1
SAMD5	1.000	0.000	1.000	1	1
FECH	1.000	0.000	1.000	1	1
PDXK	5.995	0.000	0.167	7	1
CNGB1	1.000	0.000	1.000	7	1
CMTM4	1.000	0.000	1.000	7	1
LGALS3BP	4.743	0.000	0.211	7	1
RGS4	5.568	0.000	0.180	7	1
FZD3	5.568	0.000	0.180	1	1
ESRRB	5.852	0.000	0.171	1	1
SOX3	1.000	0.000	1.000	7	1
BCO1	9.246	0.000	0.108	1	1
EPHB6	1.667	0.000	0.600	1	1
SASH1	1.000	0.000	1.000	1	1
CLIC4	1.000	0.000	1.000	7	1
EXTL3	5.672	0.000	0.176	1	1
SIRPA	1.000	0.000	1.000	7	1

FAIM2	1.000	0.000	1.000	1	1
TULP1	1.000	0.000	1.000	1	1
MYOZ3	5.027	0.000	0.199	1	1
MSANTD3	1.000	0.000	1.000	7	1
CLIC5	1.000	0.000	1.000	1	1
GLTP	1.000	0.000	1.000	1	1
MON2	1.000	0.000	1.000	1	1
SORBS1	1.000	0.000	1.000	1	1
PCM1	1.000	0.000	1.000	1	1
RAPH1	5.869	0.000	0.170	1	1
TUBB4A	1.000	0.000	1.000	7	1
ATP9A	1.000	0.000	1.000	1	1
GDPD3	6.393	0.000	0.156	1	1
PDE7A	5.699	0.000	0.175	7	1
BAG3	1.000	0.000	1.000	7	1
CLDN17	5.689	0.000	0.176	1	1
COX6B2	5.284	0.000	0.189	7	1
RET	1.000	0.000	1.000	7	1
TPPP	6.579	0.000	0.152	1	1
SCEL	2.857	0.000	0.350	1	1
MPHOSPH 6	1.000	0.000	1.000	1	1
RMDN2	1.000	0.000	1.000	1	1
ESYT3	7.672	0.000	0.130	1	1
CDK6	5.852	0.000	0.171	7	1
LASP1	6.011	0.000	0.166	7	1
TONSL	5.995	0.000	0.167	7	1
ESX1	1.000	0.000	1.000	1	1
CGN	5.689	0.000	0.176	1	1

SLC26A9	1.000	0.000	1.000	1	1
DLK1	1.000	0.000	1.000	1	1
GRHL3	2.714	0.000	0.368	1	1
SCNN1A	1.500	0.000	0.667	1	1
TTC39B	7.607	0.000	0.131	1	1
PIANP	1.000	0.000	1.000	1	1
CDKN2AIP	1.000	0.000	1.000	1	1
GAS7	1.000	0.000	1.000	1	1
ZC3HAV1	4.743	0.000	0.211	7	1
SOX7	5.973	0.000	0.167	1	1
ACR	6.410	0.000	0.156	1	1
HSPB6	1.000	0.000	1.000	1	1
ARMC4	1.000	0.000	1.000	1	1