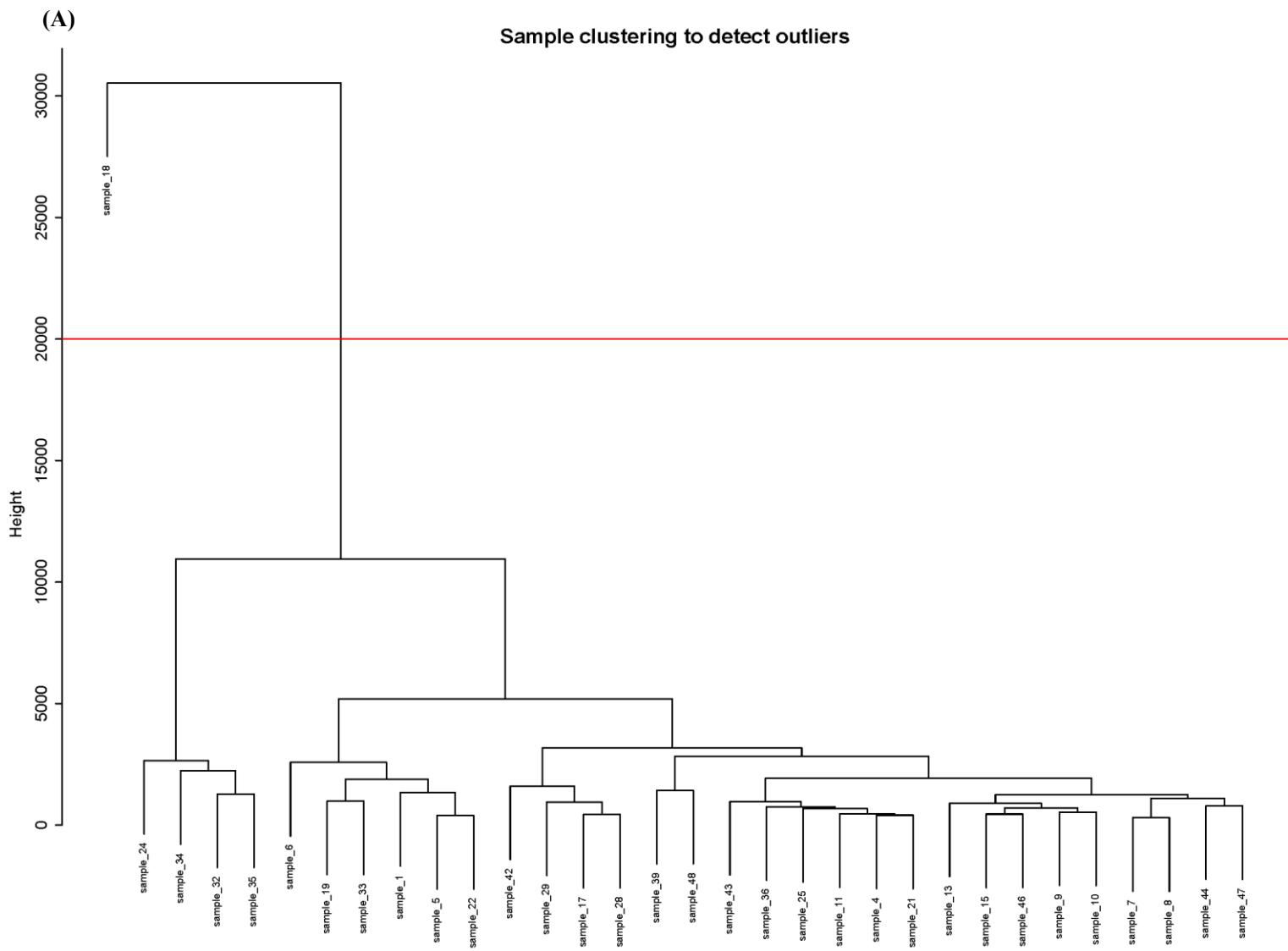


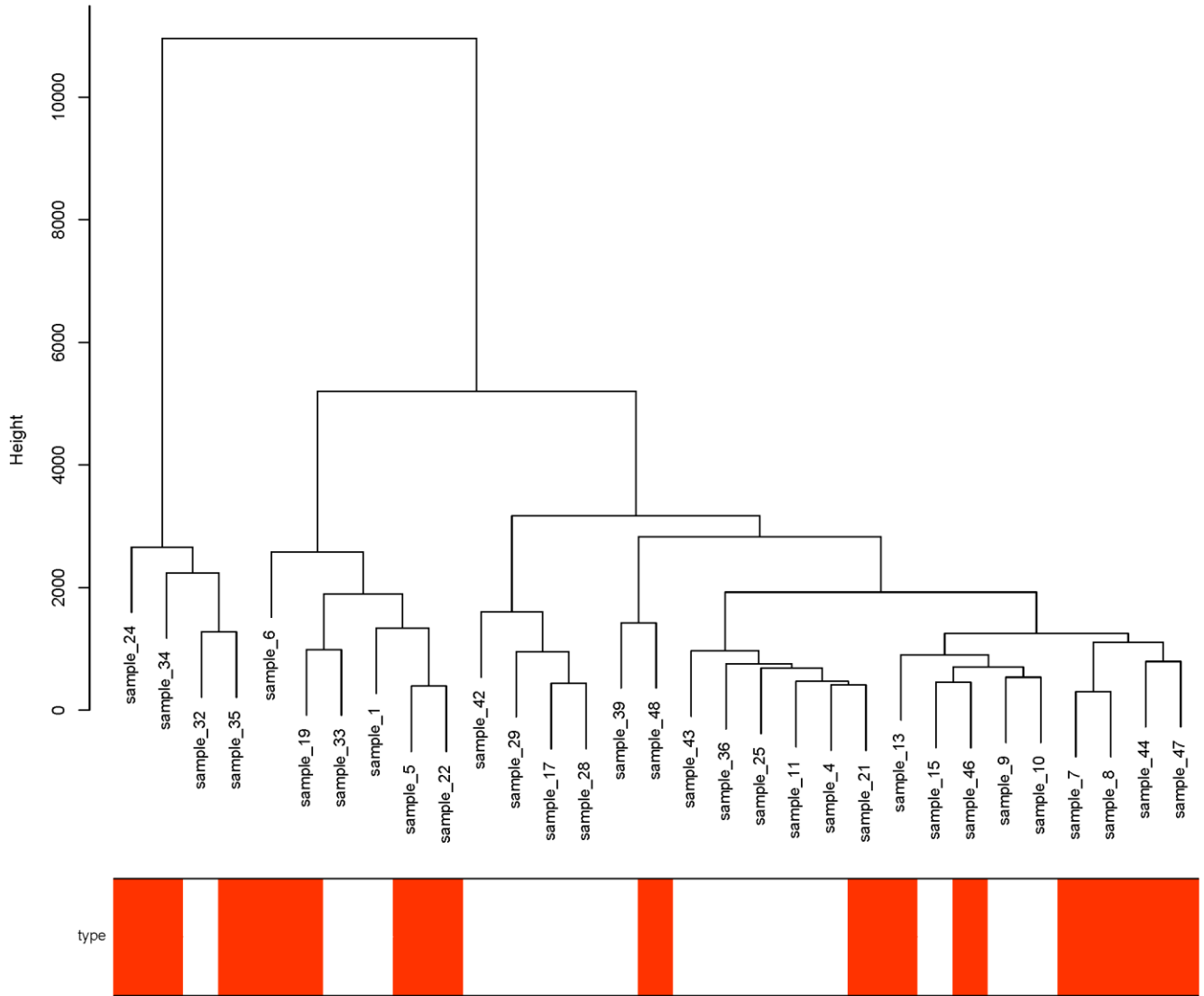
Supplementary Figure (SF) 1. WGCNA analysis.



SF 1(A). Sample clustering to detect outliers. Sample 18 was detected as an outlier and removed with the cut-off value at 20000.

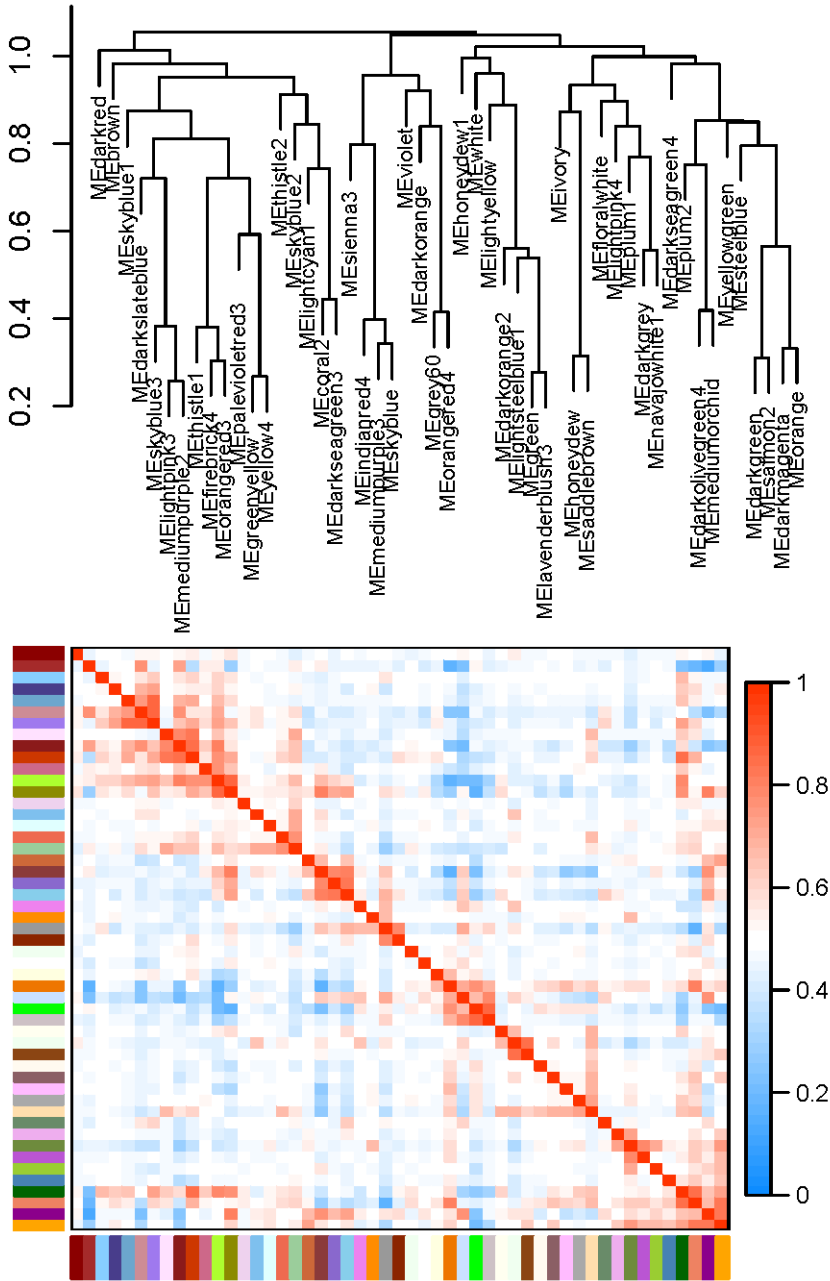
(B)

Sample dendrogram and trait heatmap



SF 1(B). Sample dendrogram and trait heatmap. The leaves of the tree correspond to MS samples and control samples. The red areas represent to MS samples while the white to control samples.

C)



SF 1(C). Relationships among identified modules. The plot above indicates correlated hierarchical clustering of the identified modules. The plot below is correlated heatmap of eigengene adjacency. Light-blue represents low adjacency, while red represents high correlation.

Supplementary Tables (ST)

ST 1. DEGs in MS dataset (GSE145412)

Genesymbol	logFC	<i>P</i> value
HMGN3-AS1	-0.008804551	2.33E-05
CACNA1C-AS1	-0.03332137	0.000146
CDKN2D	0.325984042	0.000251
TGFB1I1	0.024986706	0.000253
FANCD2	-0.038334181	0.00034
ARPC1A	0.121592517	0.000345
ALOX12	0.183792184	0.000396
ZNF880	-0.030685217	0.000424
RAC1	0.263612995	0.000468
ERRFI1	-0.007823338	0.000492
GPR17	0.005362952	0.000523
TREML1	0.665601855	0.000645
SELP	0.121651426	0.000653
CTDSPL	0.117132181	0.000656
FAM120C	-0.013093103	0.000682
MYL9	0.800942955	0.000695
5-Sep	0.235427724	0.000696
CLEC2L	0.029722234	0.000708
ZIK1	-0.031037259	0.000736
ANKDD1A	0.04863542	0.000757
PF4	0.965148532	0.000776
GP9	0.618232276	0.000802
FKBP1A	0.25711928	0.000815
NKX2-3	-0.002590439	0.000854
MBTPS1	-0.083057619	0.000903
DHRS13	0.240511299	0.000911
ESAM	0.128796644	0.000914
AHI1	-0.021677048	0.000951
LINC01503	0.115382464	0.000988
ANO10	0.065283274	0.000999
BCKDHB	-0.031410476	0.001045
TRIB2	-0.196862494	0.001052
TTC27	-0.065129646	0.001086
CDH15	-0.00043614	0.001117
CMTM5	0.25967567	0.001121
ITGB5	0.127060853	0.001162
ITGA2B	0.380128516	0.001165
PLIN4	0.125338644	0.001193

GALNT12	-0.059283365	0.001211
PLIN5	0.103547214	0.001221
LAMTOR1	0.253737113	0.001289
F2RL3	0.024720712	0.001292
ITGA9-AS1	0.005707636	0.001358
CFL2	-0.035474361	0.001376
CXorf57	-0.029488191	0.001442
GFOD2	0.049993172	0.001492
ANKAR	-0.019395951	0.001516
RNF139-AS1	-0.010354925	0.001557
SPARC	0.56062482	0.001578
FAM214B	0.182067212	0.001635
TSPAN9	0.055994385	0.00166
SYTL4	0.010933478	0.001743
ATPAF1	-0.029260697	0.001747
NAF1	-0.0226077	0.001782
RSPH4A	-0.006378438	0.001808
TPM1	0.066168488	0.001817
WDR12	-0.022324211	0.001831
R3HDM4	0.486280927	0.001849
TNNC2	0.072373525	0.001864
NRGN	0.898293085	0.001864
PHF10	-0.091364941	0.001887
FLOT2	0.382674103	0.001906
PDE5A	0.029200624	0.001993
PLEKHO2	0.324897099	0.002016
SCGB3A2	0.050527249	0.002017
RP11-363N22.2	-0.005593842	0.002043
ZNF717	-0.01686815	0.002056
FBXO36	-0.007276382	0.002064
SLPI	0.53380988	0.002076
S100A11	0.535373772	0.00208
FGR	0.205395717	0.002115
SLC41A2	-0.00672919	0.00212
MFSD4B	-0.019008506	0.002121
SH3D19	-0.00270057	0.002134
ZBTB10	-0.019753337	0.002135
SLC12A9	0.233954399	0.002157
CLU	0.398283375	0.002164
ST3GAL4	0.154861656	0.002215
HRASLS	0.029324637	0.002216
USB1	0.17407536	0.002283
MTURN	0.157616397	0.002312

ZADH2	-0.074806032	0.00232
FLOT1	0.178934598	0.002379
DUS4L	-0.015654205	0.00238
ADGRF3	-0.003216728	0.002407
CYTH4	0.27329586	0.002409
EFHD2	0.288327716	0.002421
PTGS1	0.331642173	0.002473
SETDB2	-0.059554687	0.002495
SNORD53	-0.037580626	0.002565
PNPT1	-0.085096195	0.002565
RP11-1007O24.3	-0.008997673	0.002603
CERS3	-0.004782093	0.002622
AC005076.5	0.01766387	0.002643
HERC2P9	-0.020297944	0.002653
OAZ1	0.401399081	0.002763
SNORD59A	-0.087406641	0.002806
TMEM8A	0.233184758	0.00283
CSTF3	-0.029953574	0.002871
ACAD11	-0.010880627	0.002896
HSPA4L	0.000744942	0.00293
ARPC1B	0.28546381	0.002954
ERCC5	-0.054160047	0.002975
AC129492.6	-0.029397805	0.003015
GLT1D1	0.286719962	0.003057
MGLL	0.090983784	0.003079
MPHOSPH9	-0.047930718	0.003113
TFEB	0.198333419	0.003134
ZNF385D	0.004553528	0.003153
LINC01151	0.0280293	0.003162
GNAZ	0.147049202	0.003218
PROS1	0.045124679	0.003226
OFD1	-0.103289698	0.003236
MYBPC3	0.088963853	0.003291
THUMPD2	-0.039870215	0.003312
RINT1	-0.066504131	0.003316
CHMP4B	0.231395446	0.003344
RP11-7F17.5	0.007894234	0.003349
POU2F3	-0.000433896	0.003473
FRAT1	0.296495441	0.003477
MYO1B	-0.003924011	0.003525
TDRP	0.020377424	0.003543
P2RY10	-0.213808693	0.003606
ANK3	-0.018146208	0.003675

MSRB1	0.44240316	0.003678
PI3	0.847972279	0.003741
CDA	0.537007291	0.003758
DOK4	0.047935614	0.003774
DOCK6	0.005043103	0.003828
CTTN	0.118190973	0.003846
PCBP2	0.128060543	0.003848
GAS2L1	0.144354324	0.00385
FPR3	-0.054009671	0.003879
ICOS	-0.134035962	0.003944
CLDN5	0.073504837	0.003968
PPBP	0.930632123	0.003982
GNB2	0.29048488	0.004027
YIPF7	-0.001283313	0.004057
IMPDH1	0.305411617	0.00407
GP6	0.068219569	0.004092
CASC15	0.001564589	0.004098
AIMP1	-0.108699788	0.004099
TPD52L2	0.194105511	0.004139
CCND2	-0.080869938	0.004163
VMAC	-0.079585599	0.004165
SLC2A10	-0.002140081	0.004205
SLFN13	-0.076358445	0.004229
TUBA1A	0.383838902	0.004245
NEPRO	-0.044020078	0.004255
SCN1B	0.075732684	0.004331
B9D2	0.179293572	0.004331
PIK3CD-AS1	0.036762875	0.004364
SERPINA1	0.408417376	0.004378
CABP5	0.081303868	0.004432
ZBTB5	-0.061031001	0.004446
SAMD14	0.039877453	0.004457
ZNF720	-0.020617998	0.004469
PTCRA	0.301708003	0.004501
CDH4	0.002980995	0.004562
PLIN3	0.238801286	0.004593
FAM134A	0.159793156	0.004642
ZBTB25	-0.059292368	0.004644
RABIF	0.056668818	0.004665
IFITM2	0.556245547	0.004696
MICU3	-0.013124602	0.004706
TBCK	-0.020652112	0.004728
OGFR-AS1	-0.009315242	0.004871

CCDC168	-0.000779266	0.004886
PTPRN	0.006754485	0.004911
TANGO2	0.175700169	0.004942
ZNF467	0.33572776	0.004953
CAMKV	0.000671939	0.004982
PRR13	0.210192161	0.005015
FRK	-0.000447328	0.005028
PCSK6	0.062440904	0.005041
ZNF585B	-0.026225762	0.005086
CBY3	-0.006237301	0.005095
TOMM5	-0.012545167	0.005149
FAM160A2	0.088386643	0.005183
PRDX6	0.29891882	0.005193
SUPT7L	-0.082306454	0.005198
YIPF1	0.183571646	0.005206
TRMT12	-0.066964992	0.00528
ABLIM3	0.117081987	0.005324
LRG1	0.353187477	0.005328
QSOX2	-0.073128906	0.00542
C6orf25	0.083221987	0.005428
PHC2	0.349700697	0.005436
SUCLG2	-0.118575384	0.005455
RHOG	0.392489214	0.005478
NDUFAF6	-0.01659808	0.005534
ZNHIT6	-0.045306408	0.005569
CYSTM1	0.318800544	0.005587
CFAP161	0.050884805	0.005616
AC025171.1	-0.039396134	0.005617
PCBP3	0.02032378	0.005646
SIGLEC5	0.222647294	0.005725
HIST1H2BK	0.438819851	0.005739
TYW1	-0.04973174	0.005791
MIR181B2	-0.017866411	0.005827
DHX34	0.214326851	0.005861
PHEX	-0.008408021	0.005881
ACSBG1	0.00818074	0.005946
EEF2K	-0.047745743	0.005958
ILK	0.204346762	0.005966
HNRNPDL	-0.165905978	0.005974
AQP10	0.072835443	0.005986
NEU1	0.015790052	0.006018
2-Mar	0.430661155	0.00603
ELOVL7	0.047813126	0.006033

CDHR2	-0.006353503	0.006339
TMEM240	0.016069742	0.006343
C5orf64	-0.00296508	0.006389
RASA4B	0.002013711	0.006397
TARSL2	-0.058029504	0.006398
CTD-2201E18.3	-0.021809182	0.006419
AL133493.2	-0.006666503	0.006471
FERMT3	0.242488679	0.006474
PDGFA	0.008033929	0.006474
DEDD	0.0972635	0.006528
LTBR	0.156456031	0.006537
EHBP1L1	0.217006962	0.006541
ZYX	0.429488943	0.006547
FAM227B	-0.006407747	0.006555
MCEMP1	0.225451405	0.006557
RAD9B	-0.010006152	0.006582
TUBA4A	0.307639666	0.006624
ORC6	-0.009730223	0.006671
SCHIP1	-0.00057559	0.006684
DYNC2LI1	-0.013534246	0.006689
GLTP	0.103650384	0.006708
KLF8	-0.02233887	0.006708
ENOSF1	-0.054851745	0.006742
C5orf34	-0.013511118	0.006766
DPPA4	-0.008301542	0.006774
FAM212B-AS1	0.027178589	0.006835
TST	0.182238869	0.006846
PTCD3	-0.055842156	0.006853
PDZK1IP1	0.652581139	0.006864
RP11-588G21.2	0.001138467	0.006881
SLC4A8	-0.009443178	0.007036
TP53I11	0.248835934	0.00704
DOPEY1	-0.056143902	0.007044
RP11-715J22.4	-0.01087143	0.007095
RNF208	0.090535539	0.00711
SMOC1	-0.006587092	0.007115
CCNJL	0.248574478	0.007189
POTEF	0.001454722	0.007204
AGPAT1	0.068333911	0.007213
CENPJ	-0.022512285	0.007228
HN1	0.259587286	0.007253
RGS6	0.032011479	0.007269
NQO2	0.362959966	0.007297

RFC2	0.088614711	0.007337
RTFDC1	0.165710449	0.007373
TRIM14	-0.132704771	0.007447
BID	0.199630097	0.007453
HCK	0.283043427	0.007498
RPAIN	-0.059351593	0.007502
AMMECR1	-0.029513108	0.007512
TUBA8	0.007645118	0.007521
HELQ	-0.06258204	0.007522
ORC2	-0.053880597	0.007525
FUT7	0.274379153	0.007538
ZNF70	-0.02264525	0.007556
ZSCAN12	-0.036698488	0.007566
MBNL1-AS1	0.007923023	0.007571
CERS2	0.154211929	0.007579
OSTF1	0.187003015	0.007584
RGS19	0.234103206	0.007595
CD209	-0.009677614	0.007598
YIPF3	0.209680301	0.007708
METTL8	-0.021912504	0.007734
THOC1	-0.034034733	0.007767
ASF1B	0.143389764	0.007793
ZBTB47	0.064774356	0.0078
TRMT6	-0.066229281	0.007874
FAM84B	-0.060519677	0.007914
DNAAF2	-0.037507212	0.007952
SPI1	0.377306692	0.007984
CFAP36	-0.072862383	0.008006
HMG20A	-0.052936889	0.008009
SLC25A44	0.167547189	0.008071
SEMA6B	0.010491853	0.008095
RNASEH1	-0.045703863	0.008128
TSTD2	-0.038488881	0.008142
OAZ2	0.185641699	0.008163
DIDO1	-0.066059472	0.008183
ZNF84	-0.052634766	0.008204
ARRB2	0.278147784	0.008204
POR	0.108261038	0.008243
AKAP7	-0.045525501	0.008269
CRLF2	-0.005850132	0.00842
TMEM30B	-0.01236534	0.008427
DYRK2	-0.128876861	0.008429
SHPRH	-0.026873431	0.008442

CHEK2	-0.018660221	0.008466
KIAA1524	-0.018421879	0.00852
FCGRT	0.312339978	0.008554
XPO4	-0.04828162	0.008589
UACA	-0.005893066	0.008633
HTATIP2	0.114689395	0.008633
COX11	-0.040099578	0.00864
HYAL2	0.031102543	0.008652
ZNF224	-0.092220683	0.008661
MLX	0.103246194	0.008671
CEACAM3	0.296189942	0.008677
ORAOV1	-0.028477559	0.008741
RTN2	0.093114614	0.008749
ATOH7	-0.001383518	0.008771
COL24A1	-0.003945276	0.008781
ZKSCAN3	-0.024388118	0.008789
NT5DC1	-0.036717578	0.008794
CUL1	-0.098262028	0.008797
USP40	-0.021562076	0.008804
PDCD7	-0.045206392	0.008815
NINJ2	0.189900187	0.00884
GNG5	0.302251838	0.00884
SH3BGRL2	0.14851427	0.008861
CAP1	0.20276471	0.008874
FAM122C	-0.011326937	0.008948
ZNF331	-0.028834457	0.008969
EGFL7	0.07197876	0.008974
ZDHHC23	-0.020022267	0.008978
RP1-167G20.1	0.001442807	0.009085
ZNF555	-0.012941399	0.009107
SLC39A1	0.128498461	0.009118
PPM1M	0.206660572	0.009142
FMNL3	-0.045477214	0.009181
CCDC138	-0.009242919	0.009193
ARMCX2	-0.021472535	0.009236
MCM3AP-AS1	-0.008510789	0.009288
BRIP1	-0.005281078	0.009293
MSL3P1	-0.025423646	0.009304
SH3TC2	0.006045383	0.009304
TNIP1	0.26496553	0.009318
ACRBP	0.277241797	0.009346
TRAF5	-0.084994696	0.009357
ZFYVE21	0.020799347	0.009372

CANT1	0.192368298	0.009379
TSNARE1	-0.054293521	0.009404
ZNF596	-0.01636648	0.009414
UTP3	-0.085439391	0.009427
VIL1	0.028049111	0.009428
RBM19	-0.047986969	0.009431
MIR646	-0.096748893	0.009452
MRVI1	0.202418724	0.009528
TUBA1C	0.104202604	0.009546
LINC01619	-0.018838183	0.009555
LINS1	-0.054007543	0.009563
TBC1D31	-0.022973508	0.009626
AJAP1	-0.005108388	0.009636
RBL1	-0.036559028	0.00964
OXCT1	-0.076085727	0.00965
LY6G6F	0.006510521	0.009665
C3orf52	0.002396789	0.009676
TFE3	0.203830247	0.009682
ST3GAL6-AS1	0.011797057	0.009685
ZNF662	-0.009856503	0.009692
GUSBP1	-0.01499049	0.009776
GPR137C	-0.000987295	0.009784
ZFP3	-0.049409197	0.009797
PP7080	-0.046579376	0.009829
INTS6L	-0.092171603	0.009841
ZNF17	-0.033396931	0.00988
ITGB3	0.133346759	0.009892
ARHGAP11B	-0.006880307	0.009907
OSBPL3	-0.060990576	0.00993
NARF	0.157492679	0.009938
LTV1	-0.102416608	0.009945
HACD3	-0.041594024	0.00995
KDM2B	-0.04314069	0.009994

Note: *P*-value < 0.01 was set as the threshold.

Abbreviation: DEGs = differentially expressed genes.

ST 2. GO output of hub genes in MS

ID	Description	GeneRatio	Count	P value
GO:0002576	platelet degranulation	11/50	11	3.03E-14
GO:0030168	platelet activation	11/50	11	2.21E-13
GO:0007596	blood coagulation	12/50	12	6.24E-11
GO:0007599	hemostasis	12/50	12	7.40E-11
GO:0050817	coagulation	12/50	12	7.66E-11
GO:0061041	regulation of wound healing	6/50	6	2.67E-06
GO:1903034	regulation of response to wounding	6/50	6	8.00E-06
GO:0070527	platelet aggregation	4/50	4	1.86E-05
GO:0006936	muscle contraction	7/50	7	4.82E-05
GO:0050900	leukocyte migration	8/50	8	4.93E-05
GO:0030193	regulation of blood coagulation	4/50	4	5.90E-05
GO:1900046	regulation of hemostasis	4/50	4	6.20E-05
GO:0034109	homotypic cell-cell adhesion	4/50	4	6.51E-05
GO:0050818	regulation of coagulation	4/50	4	7.50E-05
GO:0010543	regulation of platelet activation	3/50	3	7.71E-05
GO:1901568	fatty acid derivative metabolic process	5/50	5	8.25E-05
GO:0006937	regulation of muscle contraction	5/50	5	9.23E-05
GO:1901570	fatty acid derivative biosynthetic process	4/50	4	0.000142
GO:0001676	long-chain fatty acid metabolic process	4/50	4	0.000206
GO:0033559	unsaturated fatty acid metabolic process	4/50	4	0.000213
GO:0003012	muscle system process	7/50	7	0.000246
GO:0070252	actin-mediated cell contraction	4/50	4	0.000307
GO:0019369	arachidonic acid metabolic process	3/50	3	0.000344
GO:0030195	negative regulation of blood coagulation	3/50	3	0.000385
GO:0006636	unsaturated fatty acid biosynthetic process	3/50	3	0.000407
GO:1900047	negative regulation of hemostasis	3/50	3	0.000407
GO:0050819	negative regulation of coagulation	3/50	3	0.000478
GO:0030048	actin filament-based movement	4/50	4	0.000578
GO:0090257	regulation of muscle system process	5/50	5	0.000629
GO:0043217	myelin maintenance	2/50	2	0.000823
GO:0006633	fatty acid biosynthetic process	4/50	4	0.000965

GO:0061045	negative regulation of wound healing	3/50	3	0.001107
GO:0010634	positive regulation of epithelial cell migration	4/50	4	0.001127
GO:0010544	negative regulation of platelet activation	2/50	2	0.001167
GO:0035338	long-chain fatty-acyl-CoA biosynthetic process	2/50	2	0.001167
GO:0045652	regulation of megakaryocyte differentiation	3/50	3	0.001239
GO:0006941	striated muscle contraction	4/50	4	0.00128
GO:0097581	lamellipodium organization	3/50	3	0.001379
GO:1903035	negative regulation of response to wounding	3/50	3	0.001802
GO:0014909	smooth muscle cell migration	3/50	3	0.00186
GO:0035336	long-chain fatty-acyl-CoA metabolic process	2/50	2	0.002027
GO:1902905	positive regulation of supramolecular fiber organization	4/50	4	0.002152
GO:0030219	megakaryocyte differentiation	3/50	3	0.002168
GO:0007229	integrin-mediated signaling pathway	3/50	3	0.002648
GO:0014812	muscle cell migration	3/50	3	0.002722
GO:0007009	plasma membrane organization	3/50	3	0.002796
GO:0000038	very long-chain fatty acid metabolic process	2/50	2	0.002915
GO:0010743	regulation of macrophage derived foam cell differentiation	2/50	2	0.002915
GO:0030198	extracellular matrix organization	5/50	5	0.002964
GO:0043062	extracellular structure organization	5/50	5	0.002998
GO:0007160	cell-matrix adhesion	4/50	4	0.003065
GO:0046949	fatty-acyl-CoA biosynthetic process	2/50	2	0.003312
GO:0006631	fatty acid metabolic process	5/50	5	0.003516
GO:0006690	icosanoid metabolic process	3/50	3	0.003527
GO:0072330	monocarboxylic acid biosynthetic process	4/50	4	0.00369
GO:0033363	secretory granule organization	2/50	2	0.003953
GO:0010742	macrophage derived foam cell differentiation	2/50	2	0.004178
GO:0090077	foam cell differentiation	2/50	2	0.004178
GO:0007015	actin filament organization	5/50	5	0.004228

GO:0019730	antimicrobial humoral response	3/50	3	0.004266
GO:0010595	positive regulation of endothelial cell migration	3/50	3	0.004878
GO:0030049	muscle filament sliding	2/50	2	0.004889
GO:0033275	actin-myosin filament sliding	2/50	2	0.004889
GO:0042552	myelination	3/50	3	0.005313
GO:0035337	fatty-acyl-CoA metabolic process	2/50	2	0.005392
GO:0007272	ensheathment of neurons	3/50	3	0.00554
GO:0008366	axon ensheathment	3/50	3	0.00554
GO:0060048	cardiac muscle contraction	3/50	3	0.006253
GO:0010256	endomembrane system organization	5/50	5	0.006602
GO:0050919	negative chemotaxis	2/50	2	0.006748
GO:0008643	carbohydrate transport	3/50	3	0.007287
GO:0010632	regulation of epithelial cell migration	4/50	4	0.007585
GO:0003254	regulation of membrane depolarization	2/50	2	0.007628
GO:0051017	actin filament bundle assembly	3/50	3	0.007981
GO:0061572	actin filament bundle organization	3/50	3	0.008564
GO:0035384	thioester biosynthetic process	2/50	2	0.009204
GO:0071616	acyl-CoA biosynthetic process	2/50	2	0.009204
GO:0046456	icosanoid biosynthetic process	2/50	2	0.009535
GO:0006898	receptor-mediated endocytosis	4/50	4	0.009847
GO:0032233	positive regulation of actin filament bundle assembly	2/50	2	0.011631
GO:0032496	response to lipopolysaccharide	4/50	4	0.011656
GO:0001936	regulation of endothelial cell proliferation	3/50	3	0.01167
GO:0010821	regulation of mitochondrion organization	3/50	3	0.012212
GO:0002237	response to molecule of bacterial origin	4/50	4	0.013274
GO:0032956	regulation of actin cytoskeleton organization	4/50	4	0.013274
GO:0033627	cell adhesion mediated by integrin	2/50	2	0.014307
GO:0033866	nucleoside bisphosphate biosynthetic process	2/50	2	0.014307
GO:0034030	ribonucleoside bisphosphate biosynthetic process	2/50	2	0.014307
GO:0034033	purine nucleoside bisphosphate biosynthetic process	2/50	2	0.014307
GO:0010631	epithelial cell migration	4/50	4	0.014475

GO:0001935	endothelial cell proliferation	3/50	3	0.014524
GO:1902903	regulation of supramolecular fiber organization	4/50	4	0.014612
GO:0031589	cell-substrate adhesion	4/50	4	0.01475
GO:0046394	carboxylic acid biosynthetic process	4/50	4	0.01489
GO:0090132	epithelium migration	4/50	4	0.01489
GO:0006959	humoral immune response	4/50	4	0.01503
GO:0016053	organic acid biosynthetic process	4/50	4	0.01503
GO:0090130	tissue migration	4/50	4	0.015742
GO:0050866	negative regulation of cell activation	3/50	3	0.016195
GO:0061844	antimicrobial humoral immune response mediated by antimicrobial peptide	2/50	2	0.016366
GO:0032970	regulation of actin filament-based process	4/50	4	0.019959
ID	Description	GeneRatio	Count	pvalue
GO:0051015	actin filament binding	6/48	6	1.51E-05
GO:0050840	extracellular matrix binding	3/48	3	0.000494
GO:0005161	platelet-derived growth factor receptor binding	2/48	2	0.00074
GO:0005518	collagen binding	3/48	3	0.000794
GO:0003779	actin binding	6/48	6	0.001041
GO:0015144	carbohydrate transmembrane transporter activity	2/48	2	0.004516
GO:0019838	growth factor binding	3/48	3	0.006088
GO:0008307	structural constituent of muscle	2/48	2	0.006911
GO:0008009	chemokine activity	2/48	2	0.007812
GO:0008201	heparin binding	3/48	3	0.010805
GO:0048306	calcium-dependent protein binding	2/48	2	0.011908
GO:0042379	chemokine receptor binding	2/48	2	0.013839
GO:0001618	virus receptor activity	2/48	2	0.017189
GO:0140272	exogenous protein binding	2/48	2	0.017189
GO:0005125	cytokine activity	3/48	3	0.021751
GO:0005539	glycosaminoglycan binding	3/48	3	0.024135
GO:0051213	dioxygenase activity	2/48	2	0.025313
GO:0016803	ether hydrolase activity	1/48	1	0.026803
GO:0004312	fatty acid synthase activity	1/48	1	0.029444
GO:0005522	profilin binding	1/48	1	0.029444
GO:0015250	water channel activity	1/48	1	0.029444

GO:0016801	hydrolase activity, acting on ether bonds	1/48	1	0.029444
GO:0045236	CXCR chemokine receptor binding	1/48	1	0.029444
GO:0048407	platelet-derived growth factor binding	1/48	1	0.029444
GO:0070411	I-SMAD binding	1/48	1	0.029444
GO:1901681	sulfur compound binding	3/48	3	0.030228
GO:0005200	structural constituent of cytoskeleton	2/48	2	0.031249
GO:0005372	water transmembrane transporter activity	1/48	1	0.032078
GO:0031994	insulin-like growth factor I binding	1/48	1	0.032078
GO:0032036	myosin heavy chain binding	1/48	1	0.032078
GO:0033691	sialic acid binding	1/48	1	0.032078
GO:0004467	long-chain fatty acid-CoA ligase activity	1/48	1	0.034706
GO:0005172	vascular endothelial growth factor receptor binding	1/48	1	0.034706
GO:0042043	neurexin family protein binding	1/48	1	0.034706
GO:0030553	cGMP binding	1/48	1	0.039939
GO:0070492	oligosaccharide binding	1/48	1	0.039939
GO:0001664	G protein-coupled receptor binding	3/48	3	0.040211
GO:0048018	receptor ligand activity	4/48	4	0.041255
GO:0005126	cytokine receptor binding	3/48	3	0.042386
GO:0003756	protein disulfide isomerase activity	1/48	1	0.042545
GO:0003996	acyl-CoA ligase activity	1/48	1	0.042545
GO:0008093	cytoskeletal anchor activity	1/48	1	0.042545
GO:0016864	intramolecular oxidoreductase activity, transposing S-S bonds	1/48	1	0.042545
GO:0030546	signaling receptor activator activity	4/48	4	0.042583
GO:0047555	3',5'-cyclic-GMP phosphodiesterase activity	1/48	1	0.047737
GO:0005178	integrin binding	2/48	2	0.049846
GO:0004622	lysophospholipase activity	1/48	1	0.050323
GO:0070300	phosphatidic acid binding	1/48	1	0.050323
GO:0070851	growth factor receptor binding	2/48	2	0.0512
GO:0005248	voltage-gated sodium channel activity	1/48	1	0.052902

GO:0005355	glucose transmembrane transporter activity	1/48	1	0.052902
GO:0015149	hexose transmembrane transporter activity	1/48	1	0.052902
GO:0031683	G-protein beta/gamma-subunit complex binding	1/48	1	0.052902
GO:0015645	fatty acid ligase activity	1/48	1	0.055474
GO:0050750	low-density lipoprotein particle receptor binding	1/48	1	0.055474
GO:0051861	glycolipid binding	1/48	1	0.055474
GO:0003924	GTPase activity	3/48	3	0.057503
GO:0015145	monosaccharide transmembrane transporter activity	1/48	1	0.058039
GO:0017134	fibroblast growth factor binding	1/48	1	0.060597
GO:0046625	sphingolipid binding	1/48	1	0.060597
GO:0051119	sugar transmembrane transporter activity	1/48	1	0.063148
GO:0035257	nuclear hormone receptor binding	2/48	2	0.063962
GO:0043027	cysteine-type endopeptidase inhibitor activity involved in apoptotic process	1/48	1	0.065693
GO:0016405	CoA-ligase activity	1/48	1	0.068231
GO:0051787	misfolded protein binding	1/48	1	0.068231
GO:0070325	lipoprotein particle receptor binding	1/48	1	0.068231
GO:1901981	phosphatidylinositol phosphate binding	2/48	2	0.070706
GO:0001968	fibronectin binding	1/48	1	0.070762
GO:0016702	oxidoreductase activity, acting on single donors with incorporation of molecular oxygen, incorporation of two atoms of oxygen	1/48	1	0.070762
GO:0008083	growth factor activity	2/48	2	0.072235
GO:0004114	3',5'-cyclic-nucleotide phosphodiesterase activity	1/48	1	0.073286
GO:0005520	insulin-like growth factor binding	1/48	1	0.073286
GO:0016701	oxidoreductase activity, acting on single donors with incorporation of molecular oxygen	1/48	1	0.073286
GO:0004112	cyclic-nucleotide phosphodiesterase activity	1/48	1	0.075804
GO:0046966	thyroid hormone receptor binding	1/48	1	0.075804

GO:0016878	acid-thiol ligase activity	1/48	1	0.078315
GO:0004866	endopeptidase inhibitor activity	2/48	2	0.081634
GO:0019956	chemokine binding	1/48	1	0.083317
GO:0030414	peptidase inhibitor activity	2/48	2	0.087284
GO:0061135	endopeptidase regulator activity	2/48	2	0.087284
GO:0051427	hormone receptor binding	2/48	2	0.08974
GO:0001530	lipopolysaccharide binding	1/48	1	0.09077
GO:0019001	guanyl nucleotide binding	3/48	3	0.091036
GO:0032561	guanyl ribonucleotide binding	3/48	3	0.091036
GO:0017080	sodium channel regulator activity	1/48	1	0.093241
GO:0030551	cyclic nucleotide binding	1/48	1	0.093241
GO:0008200	ion channel inhibitor activity	1/48	1	0.095706
GO:0016248	channel inhibitor activity	1/48	1	0.098164
GO:0005547	phosphatidylinositol-3,4,5-trisphosphate binding	1/48	1	0.100615
GO:0016877	ligase activity, forming carbon-sulfur bonds	1/48	1	0.10306
GO:0005272	sodium channel activity	1/48	1	0.105499
GO:0043028	cysteine-type endopeptidase regulator activity involved in apoptotic process	1/48	1	0.107931
GO:0005543	phospholipid binding	3/48	3	0.109144
GO:0015026	coreceptor activity	1/48	1	0.112775
GO:0050681	androgen receptor binding	1/48	1	0.112775
GO:1901618	organic hydroxy compound transmembrane transporter activity	1/48	1	0.112775
GO:0048156	tau protein binding	1/48	1	0.115188
GO:0061134	peptidase regulator activity	2/48	2	0.118915
GO:0016860	intramolecular oxidoreductase activity	1/48	1	0.119994
GO:0042887	amide transmembrane transporter activity	1/48	1	0.119994
GO:0004601	peroxidase activity	1/48	1	0.131897
ID	Description	GeneRatio	Count	pvalue
GO:0031091	platelet alpha granule	12/52	12	7.82E-18
GO:0031092	platelet alpha granule membrane	6/52	6	3.02E-12
GO:0031093	platelet alpha granule lumen	6/52	6	2.21E-08
GO:0030667	secretory granule membrane	7/52	7	1.25E-05
GO:0032432	actin filament bundle	4/52	4	4.55E-05
GO:0008305	integrin complex	3/52	3	7.38E-05
GO:0098636	protein complex involved in cell adhesion	3/52	3	9.77E-05

GO:0034774	secretory granule lumen	6/52	6	0.000193
GO:0060205	cytoplasmic vesicle lumen	6/52	6	0.000206
GO:0031983	vesicle lumen	6/52	6	0.000213
GO:0097197	tetraspanin-enriched microdomain	2/52	2	0.000303
GO:0005925	focal adhesion	6/52	6	0.000663
GO:0062023	collagen-containing extracellular matrix	6/52	6	0.000672
GO:0030055	cell-substrate junction	6/52	6	0.000725
GO:0001725	stress fiber	3/52	3	0.000736
GO:0097517	contractile actin filament bundle	3/52	3	0.000736
GO:0001726	ruffle	4/52	4	0.001092
GO:0042641	actomyosin	3/52	3	0.001188
GO:0005902	microvillus	3/52	3	0.00137
GO:0030027	lamellipodium	4/52	4	0.001669
GO:0005796	Golgi lumen	3/52	3	0.002472
GO:0005865	striated muscle thin filament	2/52	2	0.003021
GO:0036379	myofilament	2/52	2	0.003217
GO:0031252	cell leading edge	5/52	5	0.004111
GO:0072562	blood microparticle	3/52	3	0.006871
GO:0019898	extrinsic component of membrane	4/52	4	0.007566
GO:0098978	glutamatergic synapse	4/52	4	0.013403
GO:0030017	sarcomere	3/52	3	0.016633
GO:0098858	actin-based cell projection	3/52	3	0.017508
GO:0030016	myofibril	3/52	3	0.021258
GO:0043292	contractile fiber	3/52	3	0.023809
GO:0032587	ruffle membrane	2/52	2	0.025552
GO:0033655	host cell cytoplasm part	1/52	1	0.026068
GO:0030430	host cell cytoplasm	1/52	1	0.028638
GO:0030175	filopodium	2/52	2	0.030794
GO:0016363	nuclear matrix	2/52	2	0.033561
GO:1990023	mitotic spindle midzone	1/52	1	0.033758
GO:0005884	actin filament	2/52	2	0.034695
GO:0001518	voltage-gated sodium channel complex	1/52	1	0.036308
GO:0005859	muscle myosin complex	1/52	1	0.038851
GO:0012510	trans-Golgi network transport vesicle membrane	1/52	1	0.038851
GO:0033268	node of Ranvier	1/52	1	0.038851
GO:0033646	host intracellular part	1/52	1	0.041388
GO:0043656	host intracellular region	1/52	1	0.041388
GO:0098802	plasma membrane signaling receptor complex	3/52	3	0.042805
GO:0097440	apical dendrite	1/52	1	0.043918

GO:0031527	filopodium membrane	1/52	1	0.046442
GO:0032433	filopodium tip	1/52	1	0.046442
GO:0033643	host cell part	1/52	1	0.046442
GO:0034399	nuclear periphery	2/52	2	0.046814
GO:0016460	myosin II complex	1/52	1	0.048959
GO:0042383	sarcolemma	2/52	2	0.050055
GO:0071682	endocytic vesicle lumen	1/52	1	0.05147
GO:0042827	platelet dense granule	1/52	1	0.053974
GO:0031258	lamellipodium membrane	1/52	1	0.056471
GO:0097038	perinuclear endoplasmic reticulum	1/52	1	0.056471
GO:0002080	acrosomal membrane	1/52	1	0.058963
GO:0031528	microvillus membrane	1/52	1	0.058963
GO:0034706	sodium channel complex	1/52	1	0.058963
GO:0043197	dendritic spine	2/52	2	0.065943
GO:0034364	high-density lipoprotein particle	1/52	1	0.066397
GO:0044309	neuron spine	2/52	2	0.067396
GO:0031256	leading edge membrane	2/52	2	0.074064
GO:0002102	podosome	1/52	1	0.076221
GO:0005834	heterotrimeric G-protein complex	1/52	1	0.076221
GO:1905360	GTPase complex	1/52	1	0.076221
GO:0030140	trans-Golgi network transport vesicle	1/52	1	0.078661
GO:0051233	spindle midzone	1/52	1	0.085943
GO:0034358	plasma lipoprotein particle	1/52	1	0.093169
GO:1990777	lipoprotein particle	1/52	1	0.093169
GO:0032994	protein-lipid complex	1/52	1	0.097955
GO:0030658	transport vesicle membrane	2/52	2	0.104312
GO:0034703	cation channel complex	2/52	2	0.114471
GO:0014704	intercalated disc	1/52	1	0.123838
GO:0030315	T-tubule	1/52	1	0.128466
GO:0016459	myosin complex	1/52	1	0.135361
GO:1904724	tertiary granule lumen	1/52	1	0.135361

Note: *P*-value < 0.05 was set as the cut-off criteria.

ST 3. KEGG output of hub genes in MS

ID	Description	GeneRatio	Count	<i>P</i> value
hsa04611	Platelet activation	6/28	6	3.26E-06
hsa04512	ECM-receptor interaction	5/28	5	1.09E-05
hsa05410	Hypertrophic cardiomyopathy	4/28	4	0.000238
hsa05414	Dilated cardiomyopathy	4/28	4	0.000305
hsa04510	Focal adhesion	5/28	5	0.000552
hsa04810	Regulation of actin cytoskeleton	5/28	5	0.000798
hsa05412	Arrhythmogenic right ventricular cardiomyopathy	3/28	3	0.002279
hsa04610	Complement and coagulation cascades	3/28	3	0.003021
hsa04640	Hematopoietic cell lineage	3/28	3	0.004645
hsa04015	Rap1 signaling pathway	4/28	4	0.005511
hsa05418	Fluid shear stress and atherosclerosis	3/28	3	0.011831
hsa04145	Phagosome	3/28	3	0.015044
hsa01212	Fatty acid metabolism	2/28	2	0.016349
hsa04923	Regulation of lipolysis in adipocytes	2/28	2	0.016349
hsa00590	Arachidonic acid metabolism	2/28	2	0.018588
hsa04530	Tight junction	3/28	3	0.019926
hsa04613	Neutrophil extracellular trap formation	3/28	3	0.02704
hsa04151	PI3K-Akt signaling pathway	4/28	4	0.032018
hsa05205	Proteoglycans in cancer	3/28	3	0.032856
hsa04540	Gap junction	2/28	2	0.036726
hsa04061	Viral protein interaction with cytokine and cytokine receptor	2/28	2	0.046305
hsa04670	Leukocyte transendothelial migration	2/28	2	0.058507
hsa04726	Serotonergic synapse	2/28	2	0.059418
hsa00061	Fatty acid biosynthesis	1/28	1	0.060474

ST 4. DEGs in OA dataset (GSE51588)

Genesymbol	logFC	<i>P</i> value
IL1R2	-4.18068	2.94E-22
FPR1	-3.62994	1.15E-19
SRGN	-3.54628	1.79E-19
ANP32E	-1.18253	1.02E-18
FOXS1	3.36943	1.06E-17
SLA	-1.97451	2.63E-17
SIAH2	-1.1094	2.65E-17
TKT	-1.81787	3.56E-17
LPCAT3	-1.3876	4.57E-17
IRAK3	-1.68631	5.61E-17
RPIA	-1.23314	1.12E-16
ANP32B	-1.00173	1.34E-16
IQCD	1.368318	3.28E-16
FBXL2	1.495373	4.68E-16
DHRS13	-2.1119	6.66E-16
TBC1D8B	1.471606	1.57E-15
CC2D2A	1.338195	2.17E-15
AFAP1L2	1.09636	4.57E-15
RUNX1T1	1.373971	4.71E-15
ARG1	-4.85178	6.07E-15
SLC7A5	-2.61634	6.94E-15
ZNF287	1.279899	8.69E-15
SLC22A4	-2.91612	9.01E-15
GLRX	-1.41816	9.58E-15
PGD	-2.16115	1.07E-14
FAM100B	-1.02632	1.08E-14
CRIP1	1.132813	1.14E-14
ZNF793	1.16259	1.17E-14
C3orf18	1.006169	1.62E-14
NME5	1.044871	1.65E-14
BAZ1A	-1.32296	1.84E-14
P2RY8	-2.17399	1.90E-14
PPIF	-1.69946	2.35E-14
HMGB2	-2.15903	2.59E-14
H2AFY	-1.04231	3.15E-14
KLF12	1.217864	3.92E-14
C5AR1	-2.48314	4.12E-14
ACCN2	1.565905	6.13E-14
PRRT2	2.239944	7.43E-14
LOC648149	1.7175	8.42E-14

ZNF135	1.202678	8.45E-14
GPR124	1.219307	8.74E-14
HECW2	1.855753	1.14E-13
MAP1B	1.397833	1.48E-13
LOC286063	1.351816	1.52E-13
UGCG	-1.21238	1.54E-13
S100A9	-5.54812	1.59E-13
PTPLA	-1.02592	1.61E-13
ISG20	-1.42794	1.63E-13
TMC7	1.469766	1.73E-13
KIAA1671	1.192984	2.27E-13
CCL23	-2.66916	2.66E-13
GYPC	-1.34084	2.79E-13
CSRNP3	1.520388	2.88E-13
PLXDC1	1.810014	3.01E-13
ABHD5	-1.54585	3.13E-13
ADAMTS10	1.543616	3.25E-13
SRPK1	-1.00302	3.59E-13
ZNF30	1.002145	4.40E-13
CCDC113	1.424848	4.48E-13
C4orf39	1.102368	5.08E-13
TM4SF18	1.490852	5.23E-13
CCDC74B	1.216053	5.43E-13
C1orf162	-1.92318	6.42E-13
SPIN3	1.159853	7.84E-13
ECM2	1.431416	9.00E-13
SIGLEC12	-2.78965	9.17E-13
CLEC1B	-3.926	9.94E-13
LINC00478	1.280639	9.96E-13
CD34	1.129712	1.03E-12
THSD1	1.083482	1.03E-12
ALOX5AP	-2.09424	1.13E-12
SNRPB	-1.16219	1.33E-12
HNRNPAB	-1.48398	1.33E-12
SERPINB1	-1.57924	1.34E-12
CMYA5	1.246217	1.40E-12
S100P	-4.9934	1.41E-12
RCAN2	1.121837	1.46E-12
LILRB3	-1.27926	1.47E-12
GUCY1A3	1.514386	1.52E-12
ANO1	1.41348	1.56E-12
PRR5L	1.141006	1.68E-12
GADD45A	-2.21968	1.76E-12

CCDC30	1.435425	1.80E-12
LIN7A	-2.69964	2.01E-12
PRRT4	-2.91154	2.07E-12
FGR	-1.8626	2.07E-12
CCDC65	1.669237	2.09E-12
KLK1	1.911876	2.11E-12
SVEP1	1.103175	2.19E-12
B4GALNT1	1.605651	2.23E-12
GCA	-2.14643	2.39E-12
GPR125	1.102925	2.99E-12
ISLR	1.298457	3.15E-12
RARG	1.231872	3.31E-12
FCAR	-2.52195	3.35E-12
PNP	-1.73765	3.37E-12
SSPN	1.12512	3.58E-12
SLIT2	1.590719	3.58E-12
SIGLEC10	-1.35866	4.10E-12
CXCR4	-1.89497	4.28E-12
METTL20	1.106677	4.34E-12
KIAA1199	1.610511	4.35E-12
DHCR7	-1.12143	4.71E-12
MRAP2	2.021146	4.93E-12
MBL1P	1.545603	4.97E-12
ZNF781	1.181941	5.00E-12
MYLK	1.294899	5.11E-12
C19orf59	-2.69121	5.13E-12
WDR27	1.139599	5.56E-12
LRG1	-2.0196	5.72E-12
DDX39A	-1.02041	5.87E-12
C6orf225	1.122503	6.07E-12
HCLS1	-1.21179	6.45E-12
FPR2	-1.65701	6.75E-12
DPYSL3	1.380276	7.59E-12
GLI1	2.382374	8.56E-12
CX3CR1	2.585863	9.13E-12
ZNF436	1.329391	9.16E-12
EPHA4	1.075516	9.18E-12
TET1	1.002472	9.64E-12
HRH4	-2.55866	1.04E-11
IL17RA	-1.11375	1.07E-11
SAMSN1	-1.9588	1.08E-11
RNF144B	-1.08921	1.15E-11
PRDX6	-1.0444	1.16E-11

RNF207	1.319248	1.24E-11
ZNF503-AS2	1.09779	1.29E-11
MTMR9LP	1.279054	1.66E-11
PLEKHG4	1.180569	1.66E-11
LRRC7	2.05702	1.81E-11
ARHGEF10	1.118805	1.97E-11
DCLK1	1.189538	2.20E-11
PTPRD	1.829728	2.25E-11
TLR3	1.201807	2.26E-11
RAB20	-1.49413	2.36E-11
BMP3	1.652361	2.52E-11
GRK6	-1.0933	2.56E-11
LBR	-1.22589	2.57E-11
UNC5B	1.663589	2.65E-11
LOC100288428	1.532485	2.78E-11
DNALI1	1.302188	2.79E-11
PPFIBP2	1.371156	2.81E-11
PMEPA1	1.165858	2.83E-11
FGD6	1.165608	2.94E-11
NT5E	1.086919	2.97E-11
ZNF575	1.120058	3.13E-11
ORM1	-2.33382	3.29E-11
TRIM47	1.154339	3.30E-11
BCL2A1	-1.66205	3.30E-11
ETV1	1.266714	3.59E-11
APLNR	1.667911	3.75E-11
REEP2	1.334889	3.77E-11
RAB40B	1.007828	3.85E-11
RNASE2	-4.82059	3.94E-11
LRIG3	1.101146	4.03E-11
NBPF3	1.204691	4.12E-11
TCN1	-4.16111	4.36E-11
FLJ13197	1.567123	4.46E-11
CYS1	2.898596	4.61E-11
PRTFDC1	1.223154	4.62E-11
PTCH1	1.258175	4.97E-11
LOC400684	1.41657	5.05E-11
EPHB3	1.626332	5.13E-11
SEPX1	-1.43085	5.34E-11
C18orf1	1.021508	5.53E-11
SBK1	1.489986	5.54E-11
C5orf54	1.262725	5.73E-11
MGC24103	1.46322	6.29E-11

ID1	1.504042	6.35E-11
FAM201A	-3.73999	6.57E-11
TEX2	-1.06083	6.83E-11
BDNF-AS1	1.250869	7.10E-11
OLFML2A	1.230741	7.28E-11
NRARP	1.244353	7.41E-11
TPTE2P1	1.228471	7.44E-11
BMX	-1.26955	7.46E-11
KIAA1377	1.869747	7.60E-11
LINGO1	1.43111	7.71E-11
TUBA4A	-1.43275	7.91E-11
TLR7	2.206081	8.01E-11
MED12L	-1.77321	8.04E-11
C11orf63	1.125784	8.19E-11
LMO7	1.428832	8.46E-11
ZNF608	1.01871	8.62E-11
ODC1	-1.12157	9.00E-11
LRRN3	1.2102	9.07E-11
S100A8	-5.43886	9.10E-11
CCDC89	1.28068	9.34E-11
RAB7B	2.269401	9.34E-11
FZD8	2.041011	9.38E-11
FAM164A	1.466297	9.52E-11
MAMDC2	2.099357	9.59E-11
CUBN	1.411874	9.79E-11
FBN1	1.123577	9.86E-11
LOC100505933	1.011922	1.01E-10
CYTIP	-1.45192	1.04E-10
RGS11	1.665295	1.11E-10
C10orf140	1.28687	1.11E-10
BID	-1.04978	1.15E-10
EML1	1.04548	1.18E-10
RHOU	-1.46372	1.24E-10
HMOX1	-1.56933	1.26E-10
TLR2	-1.52113	1.27E-10
GLUL	-2.26557	1.34E-10
SAP30	-1.52814	1.35E-10
SLC25A37	-2.35604	1.38E-10
RNASE3	-4.83254	1.41E-10
ZFHX4	1.108392	1.43E-10
LINC00256B	1.555897	1.43E-10
CXorf28	1.359885	1.46E-10
MATN2	1.154748	1.48E-10

SOD2	-1.66471	1.49E-10
PRICKLE1	1.219119	1.52E-10
XBP1	-1.26365	1.54E-10
CAPN5	1.33357	1.61E-10
C9orf3	1.268389	1.61E-10
FLRT3	2.530199	1.75E-10
AQP9	-2.58314	1.80E-10
HEY2	1.662523	1.83E-10
SPAG17	1.406724	1.99E-10
GLI3	1.043709	2.09E-10
HIST1H2AD	-1.59125	2.10E-10
LOC641518	1.222418	2.13E-10
MAPKAPK3	-1.07862	2.23E-10
PLA2R1	1.318691	2.27E-10
CSDA	-1.42626	2.28E-10
C1orf133	1.135352	2.28E-10
ANKAR	1.18124	2.30E-10
C9orf93	1.253478	2.32E-10
FLJ32063	1.805409	2.38E-10
CCDC36	1.357481	2.38E-10
MXRA8	1.438159	2.80E-10
TAS2R10	1.061246	2.86E-10
IL18RAP	-1.6828	2.86E-10
ZNF711	1.170759	2.87E-10
ZFP2	1.109041	2.91E-10
CBLN3	1.394426	2.95E-10
SMO	1.000501	3.33E-10
S100A12	-5.81584	3.42E-10
TFDP2	-1.13102	3.47E-10
KIF25	1.770265	3.52E-10
EREG	-2.35118	3.62E-10
CTSO	1.026889	3.70E-10
TRPM4	1.056625	3.79E-10
DLX6	1.261959	4.04E-10
CRISP3	-2.37149	4.51E-10
DUSP19	1.456073	4.87E-10
KBTBD3	1.223762	4.88E-10
LOC100129940	2.328653	5.05E-10
RCOR2	2.023735	5.15E-10
HTR2B	2.109784	5.20E-10
PROK2	-3.57141	5.26E-10
TAS1R1	1.342524	5.65E-10
HOXA11-AS1	1.08454	5.69E-10

PLAC9	1.021625	5.70E-10
PRTN3	-5.48445	6.09E-10
NBPF11	1.092574	6.45E-10
NEIL3	-2.60586	6.53E-10
NFIL3	-2.27167	6.59E-10
HOXC6	1.007717	6.62E-10
PRPS1L1	-1.0302	6.69E-10
MPO	-6.33389	6.89E-10
HIST1H2BI	-1.4011	6.89E-10
HIST1H2BB	-1.44366	7.52E-10
NFE2	-4.58926	7.66E-10
CCNH	-1.1769	7.78E-10
HCG4	1.388566	7.92E-10
HIST1H3G	-1.13887	8.28E-10
CPEB1	1.414422	8.56E-10
TMEM232	1.213679	8.62E-10
GABRB1	1.067366	8.75E-10
MMP8	-1.86334	9.18E-10
PPBP	-3.93039	9.46E-10
AZU1	-5.70556	1.03E-09
NOTCH3	1.060857	1.05E-09
PLAC8	-2.77137	1.05E-09
LAMB3	1.280259	1.08E-09
RAB27A	-1.11546	1.10E-09
KANK4	1.553466	1.11E-09
SCN4B	1.683727	1.16E-09
FASLG	1.680784	1.20E-09
RGS9	1.620285	1.24E-09
DEFA8P	-3.82011	1.25E-09
ELANE	-5.38711	1.26E-09
CXCL14	2.15314	1.33E-09
SP7	1.200553	1.37E-09
MXRA5	1.480191	1.44E-09
FGFR3	2.019387	1.46E-09
MYOM3	1.740843	1.50E-09
CCDC80	1.010888	1.51E-09
SLC9A3R2	1.161048	1.53E-09
SLC36A4	-1.09315	1.55E-09
MPP1	-1.09278	1.55E-09
MYOM2	1.344907	1.65E-09
MAPK14	-1.01572	1.65E-09
PCDHB2	1.097313	1.67E-09
IFIT1	2.065058	1.67E-09

INSC	2.017011	1.68E-09
GPR160	-1.63935	1.68E-09
LOC400456	1.111159	1.69E-09
PF4V1	-4.08452	1.71E-09
COL13A1	1.871792	1.71E-09
SLCO1C1	1.925286	1.75E-09
HOXC8	1.142293	1.76E-09
HSF2BP	1.300117	1.78E-09
FAM167A	1.255874	1.79E-09
LOC100506731	1.092427	1.81E-09
LOC100507055	1.437581	1.81E-09
CROCCP3	1.65841	1.82E-09
RASSF9	2.3733	1.89E-09
FAM81A	1.259083	1.92E-09
TRIL	1.429067	1.92E-09
RGS7BP	1.799758	1.98E-09
CLEC4D	-2.21676	2.08E-09
AADAT	1.127333	2.09E-09
DEFA4	-6.19574	2.10E-09
PLIN2	-2.60276	2.16E-09
BTBD8	1.466291	2.19E-09
FLJ46875	1.10407	2.26E-09
TRIM45	1.352557	2.29E-09
SERTAD4	1.14715	2.31E-09
RUNX2	1.022018	2.32E-09
PF4	-4.20017	2.35E-09
ANXA8L2	1.464022	2.39E-09
LOC641467	1.733405	2.39E-09
HIST1H2BG	-1.55644	2.52E-09
MDGA1	1.041512	2.57E-09
LOC84989	1.139897	2.70E-09
COL8A1	1.715188	2.77E-09
HMGA1	-1.48595	2.78E-09
LOC728061	1.451347	2.79E-09
PDK1	-1.26427	2.81E-09
SLC11A1	-1.78394	2.82E-09
TCEA3	1.082604	2.83E-09
MIR100HG	1.200257	2.89E-09
IHH	2.111628	2.98E-09
AJUBA	1.10619	3.03E-09
GLRX5	-1.21126	3.04E-09
C10orf107	1.825791	3.06E-09
TTC21A	1.024308	3.08E-09

LOC100147773	1.099975	3.08E-09
C2orf88	-1.61919	3.10E-09
IDH2	-1.29202	3.10E-09
MYO1G	-1.44941	3.11E-09
ZNF846	1.629035	3.19E-09
ANTXR1	1.093883	3.25E-09
HIST1H2BM	-1.3522	3.29E-09
C14orf37	1.173439	3.62E-09
COL8A2	1.40202	3.62E-09
ACOX2	1.086378	3.65E-09
KCNQ1OT1	1.24456	3.71E-09
COL15A1	1.633609	3.74E-09
PCDHB17	1.514406	3.84E-09
LOC100127909	1.335282	4.04E-09
DKFZp547J222	1.379578	4.08E-09
NAP1L3	1.592983	4.09E-09
HIST2H2AA4	-1.2279	4.10E-09
C14orf82	2.059569	4.17E-09
PER3	1.200249	4.19E-09
BOC	1.102846	4.21E-09
IRGM	-1.85479	4.26E-09
PIM1	-1.30645	4.27E-09
LOC644192	1.087772	4.33E-09
THSD4	1.645915	4.39E-09
CABP1	1.127955	4.39E-09
GLT1D1	-2.68126	4.53E-09
HIST1H2BO	-1.39948	4.54E-09
NPNT	1.194386	4.62E-09
OSTalpha	-2.05284	4.77E-09
MLIP	1.177549	4.78E-09
CLEC3B	1.043689	4.88E-09
C5orf62	-1.93503	4.89E-09
NTN5	1.131427	4.99E-09
KIAA1407	1.175654	5.24E-09
GPRC5C	1.117058	5.26E-09
HSPG2	1.08883	5.40E-09
ZNF334	1.03991	5.53E-09
ZNF618	1.125737	5.54E-09
PCDHA3	1.244861	5.54E-09
ABCB4	1.813019	5.59E-09
HIST1H2BL	-1.29583	5.62E-09
ABCG4	1.472674	5.65E-09
CEACAM8	-4.98339	5.83E-09

CST7	-3.44426	6.08E-09
MMP16	1.836117	6.20E-09
IL17RD	1.47792	6.21E-09
PRG2	-4.15113	6.24E-09
HEG1	1.049262	6.27E-09
LPIN3	1.019473	6.39E-09
LOC338817	1.316419	6.61E-09
NKX3-2	1.530092	6.70E-09
SEMA3D	2.18977	6.70E-09
KCNS3	1.480258	6.74E-09
SPON2	1.012001	6.75E-09
CNIH3	1.104269	6.87E-09
DPPA4	-2.55118	6.89E-09
SLC4A3	1.287269	6.97E-09
MXD1	-1.37459	7.01E-09
CYP39A1	1.114729	7.32E-09
P2RY2	-1.8016	7.41E-09
REM1	1.111923	7.55E-09
MGC23284	1.017896	7.65E-09
SERPINB10	-2.89719	8.01E-09
TAS2R14	1.085054	8.39E-09
COL14A1	1.270139	9.09E-09
LILRA6	-1.57387	9.31E-09
SDK2	1.127978	9.34E-09
HIST1H2BH	-1.42723	9.46E-09
FLRT2	1.094567	9.52E-09
LOC100132057	1.096607	9.71E-09
CXCR1	-1.50581	9.93E-09
HMGB3P1	-1.69883	1.00E-08
PTX3	-2.97267	1.02E-08
BFSP1	1.575572	1.11E-08
ZFP14	1.011628	1.12E-08
LOC643650	1.598623	1.12E-08
LGR6	1.066284	1.14E-08
SLC36A2	2.542038	1.14E-08
HIST1H2BJ	-1.60273	1.15E-08
EFHC1	1.140736	1.15E-08
RGL4	-3.9308	1.16E-08
C14orf28	1.058809	1.17E-08
TP73-AS1	1.212722	1.18E-08
MURC	1.13662	1.18E-08
LOC728978	1.283781	1.20E-08
SCARA3	1.165987	1.21E-08

IL2RB	1.332041	1.28E-08
RGN	1.239807	1.30E-08
DEFA3	-6.36093	1.35E-08
UACA	1.285115	1.35E-08
FGFR2	1.168246	1.36E-08
BLID	1.253517	1.49E-08
RETN	-3.94046	1.51E-08
SLC25A5	-1.06839	1.53E-08
CDA	-1.5455	1.54E-08
SLC2A1	-1.12093	1.54E-08
FAM65B	-1.23594	1.60E-08
CA1	-4.48294	1.61E-08
GPR84	-1.24377	1.63E-08
HTR2A	1.426941	1.72E-08
SNPH	1.026943	1.74E-08
LRRC17	2.265884	1.79E-08
RPL23AP32	1.64534	1.79E-08
BEX1	-2.06536	1.83E-08
PRKCDBP	1.180327	1.83E-08
RASL12	1.359352	1.85E-08
SIGLEC5	-1.10926	1.88E-08
CLIC3	1.416007	1.90E-08
LSP1	1.352427	2.06E-08
HERC6	1.821304	2.10E-08
CAPS	1.078179	2.11E-08
CCDC42	1.465805	2.14E-08
ZCWPW2	1.00481	2.15E-08
IL22RA1	1.14169	2.18E-08
ULK2	1.015825	2.26E-08
PRTG	1.564431	2.27E-08
ZNF469	1.426752	2.29E-08
PNMAL1	2.540596	2.33E-08
SPATA18	1.058205	2.35E-08
LOC100130876	1.216463	2.43E-08
CR1	-1.38138	2.44E-08
CEP164	1.021585	2.47E-08
HIST1H2BK	-1.0151	2.48E-08
KLK3	1.433036	2.51E-08
IL7	1.17119	2.54E-08
PRSS57	-4.75674	2.58E-08
ADM	-2.57866	2.58E-08
LTBP3	1.449436	2.60E-08
GYPA	-2.44631	2.73E-08

ANKRD50	1.1625	2.81E-08
MTFP1	-1.56924	2.88E-08
MAP2	1.143592	2.91E-08
LOC728743	1.049931	2.99E-08
CAPS2	1.326243	2.99E-08
PADI4	-4.03941	2.99E-08
LOC100130463	1.166969	3.00E-08
IFIT2	1.572236	3.23E-08
PROM1	-1.49444	3.24E-08
SMURF2	1.042015	3.27E-08
STXBP2	-1.19738	3.33E-08
KLKP1	1.611543	3.34E-08
RFTN2	1.287543	3.36E-08
PANK1	1.174632	3.47E-08
PGAM2	1.095288	3.52E-08
TGM2	-1.4755	3.56E-08
HIST1H2BD	-1.51103	3.56E-08
UCK2	-1.25471	3.60E-08
HMBS	-2.07974	3.62E-08
PURG	1.170259	3.63E-08
CSF3R	-1.88627	3.68E-08
TMEM169	1.157964	3.68E-08
EMID1	1.417911	3.75E-08
PCDHB6	1.512184	3.77E-08
BTN3A1	1.425876	3.85E-08
CD177	-1.69521	3.85E-08
RPL22L1	-1.2577	3.91E-08
CA2	-2.52749	3.92E-08
SLC7A1	-1.25273	4.02E-08
PGLYRP1	-3.94104	4.07E-08
STAR	-2.05642	4.12E-08
OR51E1	1.522746	4.20E-08
ZYX	-1.02864	4.24E-08
NOP16	-1.36882	4.41E-08
ITGBL1	1.291785	4.42E-08
LOC441204	1.722878	4.42E-08
VSTM1	-3.53639	4.43E-08
SEMA3B	1.122995	4.45E-08
CLGN	-1.42906	4.64E-08
SNCA	-2.1174	4.72E-08
MGAM	-1.88059	4.80E-08
LCN2	-5.45957	4.82E-08
CNTN1	1.38683	4.87E-08

DPT	1.519645	4.90E-08
HIST1H2AK	-1.47788	4.92E-08
MXI1	-1.02446	5.02E-08
CXCL11	1.957934	5.09E-08
CROCC	1.069133	5.25E-08
GLIS2	1.245115	5.32E-08
PDCD1LG2	1.083995	5.34E-08
LOC728431	1.236642	5.50E-08
SGCD	1.670804	5.51E-08
CEACAM3	-3.11612	5.53E-08
MIRLET7BHG	1.262935	5.57E-08
RYR1	1.355105	5.64E-08
MS4A3	-3.52275	5.71E-08
STGC3	1.218807	5.83E-08
FAM66C	1.123984	5.91E-08
KIAA0408	1.038565	5.95E-08
PLEKHH2	1.101542	6.10E-08
C1orf220	1.74811	6.12E-08
ZNF114	1.386571	6.14E-08
C14orf132	1.250258	6.19E-08
ZFP37	1.104234	6.27E-08
HIST1H1C	-1.34875	6.36E-08
ZNF528	1.210894	6.54E-08
TRAF1	1.240684	6.65E-08
BLM	-1.18147	6.75E-08
C6orf97	1.091273	6.91E-08
LOC100506247	1.318899	7.06E-08
LOC646976	-1.65542	7.20E-08
RIPPLY2	1.493228	7.37E-08
BMP8A	1.224408	7.57E-08
ITGA3	1.043527	7.57E-08
FLJ22447	1.052419	7.61E-08
SHOX2	1.281467	7.68E-08
BPI	-3.7833	7.78E-08
FEN1	-1.48177	7.89E-08
GPR137C	1.275615	8.07E-08
TNFRSF10C	-1.18075	8.07E-08
ENAH	1.048667	8.59E-08
AREG	-3.06467	8.75E-08
ORM2	-1.31979	8.82E-08
CACNA1E	1.593198	8.93E-08
MEGF10	1.845824	9.06E-08
CORO2A	-1.42723	9.07E-08

LOC100306975	1.109821	9.39E-08
SLC19A2	-1.21231	9.42E-08
RAN	-1.14447	9.71E-08
RTKN	1.174859	9.81E-08
C19orf38	-1.22349	1.01E-07
KLHL3	1.096805	1.02E-07
MCTP2	-1.45256	1.02E-07
SLC27A2	-1.55495	1.04E-07
LINC00472	1.242808	1.06E-07
PTH2R	-1.95178	1.07E-07
ENO1	-1.22561	1.08E-07
DEPDC7	1.150638	1.10E-07
JMJD6	-1.13856	1.10E-07
CCDC102B	1.587372	1.14E-07
HAL	-2.16875	1.16E-07
ADH4	-2.02409	1.18E-07
CGNL1	1.059852	1.20E-07
STOM	-1.31428	1.20E-07
SYT12	1.095003	1.23E-07
PLK2	1.017199	1.24E-07
EDA2R	1.082902	1.25E-07
VASH1	1.057916	1.28E-07
LOC100216546	1.294495	1.30E-07
LOC100616668	1.484686	1.35E-07
DGKI	1.723959	1.35E-07
AGRN	1.120687	1.35E-07
PRSS45	1.272831	1.37E-07
FAM134B	-1.65498	1.37E-07
WDR52	1.028218	1.41E-07
HPCA	1.113103	1.41E-07
LOC100128420	1.750952	1.45E-07
CLC	-4.4814	1.50E-07
MUSTN1	1.288217	1.52E-07
CBR3	1.11944	1.58E-07
ALOX12	-2.50224	1.59E-07
C1orf204	1.624059	1.62E-07
GLT8D2	1.450476	1.63E-07
COL22A1	2.312434	1.67E-07
C20orf3	-1.35652	1.68E-07
MTMR11	1.143154	1.68E-07
C19orf77	-2.48786	1.69E-07
ZNF540	1.161492	1.69E-07
GEMIN8P4	-1.37001	1.71E-07

SYT7	1.021237	1.76E-07
MDFI	1.068621	1.79E-07
SLC4A1	-2.26415	1.82E-07
HIST1H2AJ	-1.39987	1.84E-07
C18orf54	1.308168	1.96E-07
LOC646324	1.69606	1.97E-07
ZNF541	1.054409	2.01E-07
PDE11A	2.080436	2.01E-07
FERMT3	-1.0443	2.09E-07
SLC44A3	1.624072	2.12E-07
HEMK1	1.396213	2.14E-07
XAF1	1.410511	2.15E-07
ADORA3	-1.44719	2.15E-07
ARSE	1.193947	2.16E-07
SFRP4	1.332512	2.17E-07
SLC26A8	-2.70672	2.17E-07
TRH	-1.63347	2.21E-07
COL21A1	1.075621	2.22E-07
ISM1	1.475852	2.23E-07
CD163	-1.73777	2.25E-07
AHNAK2	1.462445	2.25E-07
SLC16A8	1.212001	2.27E-07
LAPTM5	-1.09603	2.27E-07
DDX21	-1.64642	2.31E-07
LOC645195	-1.07033	2.33E-07
AGPAT9	-1.14657	2.38E-07
EMX2OS	2.561183	2.39E-07
PYROXD2	1.017238	2.42E-07
TSPY26P	1.231644	2.49E-07
CALCR	1.364298	2.50E-07
TRO	1.070709	2.53E-07
TNFRSF25	1.150057	2.54E-07
TMEM98	1.062474	2.58E-07
CYP4F3	-3.71184	2.64E-07
WNT5A	1.703504	2.64E-07
CFI	1.100332	2.65E-07
UPP1	-1.0989	2.66E-07
TUBB1	-2.69781	2.68E-07
CORO1A	-1.36621	2.80E-07
MYO1H	1.486442	2.85E-07
COL2A1	4.188583	2.88E-07
EDARADD	-1.15243	2.91E-07
SALL1	1.317797	2.98E-07

THAP2	1.076953	2.99E-07
DBP	1.305812	3.03E-07
RFESD	-1.56158	3.04E-07
C9orf129	1.432382	3.05E-07
B3GALT2	1.939847	3.12E-07
LIMS2	1.127522	3.13E-07
TRANK1	1.025265	3.45E-07
NRXN3	1.172247	3.49E-07
AHRR	1.323505	3.49E-07
SLCO4A1	-2.01952	3.52E-07
SLC22A16	-2.68564	3.55E-07
CD38	-1.89573	3.58E-07
LOC100509860	1.76407	3.62E-07
ITGB4	1.003937	3.64E-07
SMCR5	1.049308	3.64E-07
TMEM154	-1.61995	3.69E-07
ATP6V1B1	1.051467	3.70E-07
LNX1	1.084512	3.79E-07
SEMA6D	1.088929	3.83E-07
EIF4EBP1	-1.13109	3.84E-07
CEACAM6	-2.58875	3.87E-07
BTN3A2	1.002388	3.87E-07
CEBPE	-3.61392	3.88E-07
LOC145694	1.304658	3.91E-07
DEPDC1	-1.23815	3.97E-07
GLIPR2	-1.13557	3.98E-07
ALAS2	-3.53013	3.99E-07
PAEP	1.04066	4.05E-07
C1QTNF8	2.126725	4.08E-07
RAB26	1.110977	4.09E-07
MAB21L1	1.069655	4.12E-07
LOC100192378	1.114384	4.15E-07
C1orf135	-1.51296	4.17E-07
DAGLA	1.125425	4.19E-07
PLA2G10	1.070329	4.25E-07
ALOX15B	-1.59516	4.31E-07
PODNL1	1.191218	4.48E-07
HIST1H2AE	-1.47901	4.55E-07
GFI1	-1.30447	4.58E-07
LIPC	1.50364	4.71E-07
KCNJ12	1.177148	4.79E-07
HPRT1	-1.10986	4.91E-07
FAR2	-1.28808	4.92E-07

C14orf64	1.54746	5.05E-07
C3orf67	1.325401	5.09E-07
PHC2	-1.1604	5.11E-07
ERO1L	-1.12429	5.14E-07
ZFAND5	-1.38083	5.22E-07
RTP4	1.442481	5.23E-07
EBF3	1.124504	5.23E-07
HS3ST1	1.07314	5.26E-07
TESC	-1.82881	5.29E-07
TSPAN11	1.031389	5.32E-07
CLEC18B	1.59688	5.40E-07
ZG16B	-1.23067	5.44E-07
UBE2S	-1.13591	5.68E-07
CNTNAP2	2.540872	5.70E-07
HHIPL1	1.23256	5.80E-07
BGN	1.326934	5.88E-07
PTN	1.591176	5.91E-07
HSPA4L	-1.24972	6.03E-07
HIST1H2AH	-1.41549	6.09E-07
GCLC	-1.14554	6.30E-07
CADM1	1.159633	6.30E-07
CRYGS	1.019208	6.38E-07
SNORA33	-1.1088	6.39E-07
ZNF683	1.417621	6.40E-07
CFP	-1.65745	6.77E-07
OXTR	1.613425	6.80E-07
RHAG	-3.93341	6.95E-07
NR2E3	1.09906	7.06E-07
PEX2	1.218166	7.13E-07
DMGDH	1.069467	7.13E-07
SLC2A14	-1.7574	7.19E-07
SLIT3	1.592459	7.22E-07
CCDC148	1.203296	7.39E-07
PCDHGC3	1.108651	7.47E-07
ENPP1	1.036421	7.51E-07
THY1	2.381846	7.57E-07
HES5	1.4213	7.68E-07
HIST1H2BC	-1.29822	8.06E-07
LILRA2	-1.09321	8.16E-07
LRRC66	1.087876	8.16E-07
RGS2	-1.32931	8.22E-07
SLC26A10	1.289045	8.32E-07
FCN2	-1.77996	8.33E-07

RAB44	-2.64795	8.45E-07
MGAT3	-1.2321	8.68E-07
PZP	1.065391	9.05E-07
CSF2RA	-1.04423	9.25E-07
PIWIL4	-1.01623	9.40E-07
UBQLNL	1.205378	9.42E-07
DKFZp686M1136	1.111038	9.43E-07
AMT	1.042597	9.50E-07
ANGPTL5	1.44861	9.76E-07
SHISA2	1.39565	9.76E-07
ABCB1	1.098457	9.81E-07
HPR	-2.91392	1.01E-06
ABCB10	-1.37189	1.02E-06
ANKRD65	1.004638	1.03E-06
CDC7	-1.10751	1.07E-06
C20orf108	-1.07847	1.09E-06
SATB2	1.159886	1.11E-06
GPR20	1.241296	1.11E-06
FLJ46906	1.118283	1.12E-06
LOC100132495	1.263237	1.12E-06
ADIPOR2	-1.03186	1.14E-06
SLC22A15	-1.17204	1.15E-06
MYH6	1.115125	1.15E-06
SLC8A3	2.407021	1.16E-06
NCKAP5	1.32629	1.18E-06
GATA1	-2.71052	1.18E-06
C6orf195	1.137533	1.18E-06
TMEM200B	1.132934	1.22E-06
SCARA5	1.344078	1.29E-06
NBPF1	1.088912	1.29E-06
DLX3	1.225449	1.30E-06
SIX4	1.037366	1.31E-06
CD5L	-2.48187	1.32E-06
SDF2L1	-1.02563	1.32E-06
C16orf47	1.069768	1.35E-06
PEG3	1.041535	1.36E-06
LINC00256A	1.192097	1.37E-06
P2RX7	1.14286	1.38E-06
CTSG	-4.35163	1.39E-06
MYO1B	1.092359	1.43E-06
PGF	1.172189	1.44E-06
HILS1	1.155513	1.45E-06
NOV	1.134032	1.47E-06

PRAM1	-2.35825	1.47E-06
AHCY	-1.15582	1.49E-06
LRRC3B	1.472797	1.50E-06
EPX	-3.43293	1.51E-06
GDF10	1.581995	1.53E-06
SLC25A21	-1.55812	1.54E-06
SHC4	1.329047	1.55E-06
COLEC12	1.229145	1.56E-06
TEX21P	1.018588	1.58E-06
VNN2	-1.75416	1.63E-06
GSTA7P	-1.88685	1.63E-06
LOC440905	1.224412	1.64E-06
CA8	-1.07977	1.65E-06
BST1	-1.45055	1.68E-06
LOC283867	1.913022	1.69E-06
MAGED4B	1.601557	1.70E-06
XK	-2.7435	1.70E-06
C13orf33	-1.58183	1.72E-06
NAMPT	-1.80877	1.73E-06
SLC28A3	-1.86139	1.73E-06
KIAA1107	1.314515	1.73E-06
LY6G6F	-1.76733	1.74E-06
C1orf98	1.237322	1.77E-06
DLX1	1.049397	1.77E-06
LOC100130373	1.130557	1.81E-06
LRRC15	2.047202	1.83E-06
NCAM1	1.229177	1.85E-06
KLHDC9	1.110067	1.86E-06
C10orf10	-1.99188	1.88E-06
LOC643623	1.465435	1.92E-06
LOC100131929	1.300245	1.92E-06
AHSP	-3.89449	1.96E-06
SAMD9L	1.341081	1.97E-06
MNDA	-1.82913	1.97E-06
SLC25A39	-1.27453	1.97E-06
AOX2P	-1.62148	1.98E-06
OAS3	1.213272	1.98E-06
C6orf165	1.189659	1.99E-06
MRC2	1.255866	2.00E-06
ZNF827	1.138033	2.01E-06
NNMT	-1.59159	2.06E-06
LCP1	-1.06788	2.07E-06
SALL4	1.274854	2.09E-06

MGC4294	2.224554	2.10E-06
LDHA	-1.46329	2.18E-06
KAZALD1	2.178558	2.19E-06
PTPN20A	1.534512	2.20E-06
RPS6KA6	1.034114	2.26E-06
GPX8	1.315506	2.26E-06
TP63	1.7356	2.29E-06
GMPR	-1.59942	2.34E-06
PDE4B	-1.32281	2.40E-06
HEMGN	-3.15769	2.41E-06
SMPD3	3.036259	2.44E-06
GABRB2	1.868533	2.52E-06
NOX5	2.436175	2.52E-06
SEMA5A	1.114413	2.59E-06
HOXA3	1.104657	2.62E-06
OR2G6	-1.64974	2.62E-06
E2F8	-2.95846	2.64E-06
CDKN2D	-1.02186	2.65E-06
TPPP3	1.682572	2.66E-06
ITPRIP	-1.02996	2.67E-06
COL6A1	1.295362	2.67E-06
LOC375295	1.321754	2.69E-06
GPAT2	-1.11581	2.69E-06
MT1A	-1.39149	2.70E-06
LOC100652763	1.629615	2.90E-06
E2F4	-1.22355	2.92E-06
DOK7	1.20601	2.93E-06
SHROOM3	1.101573	2.94E-06
SLC16A10	-2.00625	3.01E-06
BCL11A	-1.18955	3.03E-06
ZNF214	1.010703	3.09E-06
LOC728147	1.010606	3.11E-06
HLA-DPB2	1.242711	3.12E-06
CASC1	1.158908	3.12E-06
C7orf40	-1.09046	3.18E-06
ZCCHC5	1.334732	3.24E-06
CCNA1	-1.16579	3.26E-06
LINC00310	1.486916	3.29E-06
HIST1H1D	-1.49839	3.32E-06
PRDX2	-1.1758	3.35E-06
EGR3	1.27807	3.47E-06
C3orf32	1.022315	3.50E-06
LTF	-3.51646	3.54E-06

TFRC	-1.40227	3.66E-06
LRRC10B	-1.34928	3.68E-06
APCDD1L	3.297178	3.68E-06
SIX1	1.026267	3.73E-06
HK3	-1.78574	3.74E-06
ANKH	1.041097	3.76E-06
ZNF674	1.165634	3.85E-06
BHLHE22	1.800806	3.85E-06
EMB	-1.35131	3.86E-06
FAP	2.255993	3.90E-06
SLC1A3	-1.29815	3.93E-06
HIST1H4F	-1.40494	3.94E-06
IFIT1B	-3.55236	3.97E-06
FLJ38109	1.113161	3.99E-06
FLJ34503	1.691847	4.09E-06
RBM38	-1.80503	4.10E-06
CHMP4C	1.194335	4.11E-06
LOC284080	1.065808	4.13E-06
FAM13C	1.454985	4.15E-06
MYB	-1.90916	4.19E-06
LOC401164	1.539654	4.36E-06
COL6A2	1.024405	4.38E-06
IFIT3	1.376867	4.45E-06
LMO1	1.059755	4.47E-06
PCMTD1	1.114822	4.49E-06
CDKN3	-1.95843	4.51E-06
TMTC2	1.05362	4.68E-06
ATP1B3	-1.12933	4.94E-06
GPX3	-2.26589	5.25E-06
PKD1L1	1.873261	5.26E-06
DKFZp761E198	-1.32926	5.30E-06
ENPP6	1.396161	5.34E-06
NCOA7	-1.02877	5.39E-06
HIST1H3H	-1.7444	5.39E-06
DCXR	-1.03903	5.43E-06
TREML1	-1.61285	5.44E-06
ENTPD3	1.977623	5.51E-06
NMNAT2	1.342105	5.54E-06
RSPO2	2.499893	5.57E-06
NRK	1.537098	5.62E-06
ENHO	1.336493	5.80E-06
C3orf45	1.024066	5.82E-06
AVPR2	1.151702	5.87E-06

C1orf150	-1.14062	6.00E-06
LOC100130428	1.152564	6.13E-06
IL21R	1.137622	6.16E-06
RUNDC3B	1.019437	6.32E-06
BGLAP	2.25246	6.34E-06
ADAMTS6	1.179979	6.44E-06
SPOCK1	1.382136	6.55E-06
LOC100130009	-1.37377	6.58E-06
FAT1	1.238633	6.69E-06
GAPDH	-1.03097	6.77E-06
DDIT4	-1.59296	6.79E-06
HP	-2.83647	6.86E-06
PYGL	-1.05979	6.93E-06
FAM135B	1.103481	7.00E-06
FLJ21408	1.10072	7.07E-06
PDE3A	1.321525	7.19E-06
OPCML	2.451953	7.22E-06
LOC219347	1.046694	7.32E-06
ANXA3	-2.61775	7.37E-06
RGS17	1.123309	7.39E-06
HIST1H3D	-1.53092	7.42E-06
PFKFB3	-1.14302	7.43E-06
PPP2R3B-AS1	1.15051	7.45E-06
TNFRSF11A	1.081022	7.45E-06
PTPN7	-1.36017	7.51E-06
LGALS12	-1.84369	7.52E-06
PRSS21	-1.03773	7.59E-06
COL10A1	2.048449	7.65E-06
SLPI	-1.40036	7.69E-06
TRIM66	1.091536	7.75E-06
ADRA2C	1.111132	7.76E-06
LILRA5	-1.25515	7.80E-06
TMEM130	1.344228	7.82E-06
ANO5	2.09102	7.87E-06
ALS2CR11	1.419838	7.88E-06
CD79B	-1.03186	8.00E-06
TBX3	1.119477	8.31E-06
COL3A1	2.772374	8.33E-06
OLAH	-1.01956	8.46E-06
OLFM4	-3.53689	8.59E-06
RASL10B	-1.14553	8.87E-06
YOD1	-1.16811	8.87E-06
COL16A1	1.233677	8.89E-06

GXYLT2	1.750043	8.90E-06
ITGA2B	-1.01483	9.01E-06
LOC283174	1.46036	9.03E-06
LOC100506898	1.05888	9.07E-06
CRTAM	1.344996	9.14E-06
LOC100509091	1.760173	9.15E-06
SLC6A1	1.589223	9.35E-06
ZNF474	1.11267	9.36E-06
DNTT	-2.90471	9.38E-06
LOC100506123	1.09706	9.67E-06
FZD1	1.123588	9.78E-06
MATN4	2.714391	9.87E-06
DUSP21	-1.3374	9.93E-06
ZFP28	1.095605	1.02E-05
LOC284219	1.189569	1.04E-05
HIST1H1E	-1.40803	1.04E-05
STXBP6	1.151367	1.07E-05
HBQ1	-2.51078	1.10E-05
LCAT	1.064129	1.10E-05
C10orf105	2.232658	1.10E-05
EPB42	-2.87878	1.12E-05
NS3BP	1.043443	1.13E-05
C15orf52	1.090119	1.15E-05
ARL4C	-1.15833	1.18E-05
TRGV7	1.014202	1.19E-05
RHBDL3	1.019626	1.22E-05
HBG1	-3.23017	1.22E-05
CBLN4	1.178078	1.23E-05
PDE6H	-1.56157	1.27E-05
IFI44L	1.557962	1.31E-05
ABCC13	-1.12096	1.33E-05
LOC100128501	1.072563	1.33E-05
RHBDL2	1.97117	1.34E-05
F2RL3	-1.80083	1.36E-05
S1PR4	-1.86537	1.37E-05
TCTEX1D1	-1.28454	1.37E-05
C1QTNF3	1.396217	1.38E-05
PRKG2	1.075078	1.39E-05
NAALAD2	1.231917	1.40E-05
PMF1-BGLAP	2.199087	1.40E-05
ATP2C2	-1.63794	1.41E-05
SSC5D	1.615725	1.42E-05
PPA1	-1.19031	1.43E-05

CENPV	-1.04543	1.44E-05
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LOC338799	1.008923	1.45E-05
MFSD2A	-1.27253	1.45E-05
ITPK1-AS1	1.11196	1.47E-05
MTHFD2	-1.29483	1.47E-05
DPY19L2	1.388362	1.60E-05
C12orf75	1.152016	1.63E-05
RELN	1.315742	1.66E-05
PLAT	1.186003	1.68E-05
PLN	1.22784	1.70E-05
CHST6	1.023188	1.70E-05
ZSCAN23	1.234274	1.73E-05
FASN	-1.72138	1.73E-05
MT1B	-1.3495	1.75E-05
GATA2	1.069268	1.75E-05
COL5A1	1.35414	1.78E-05
GATA6	1.302403	1.79E-05
MAP3K8	-1.0621	1.80E-05
NTNG1	1.093166	1.80E-05
PSD3	1.082819	1.80E-05
MT1L	-1.35836	1.81E-05
CSTA	-1.66808	1.82E-05
LAMP3	1.151463	1.83E-05
SLC26A4	1.432177	1.90E-05
HN1	-1.09916	1.94E-05
COL12A1	1.311841	1.96E-05
SUSD2	1.026364	1.97E-05
CR1L	-2.2147	1.98E-05
FKBP5	-1.74098	2.00E-05
IFI44	1.079251	2.01E-05
C5orf13	1.075455	2.05E-05
LOC340335	1.164465	2.11E-05
COL24A1	1.661824	2.18E-05
TMOD1	-1.67243	2.19E-05
LOC285300	1.134576	2.21E-05
CBLN2	1.893605	2.23E-05
MEOX1	1.261546	2.24E-05
LUM	1.655392	2.24E-05
LOC100131032	1.080986	2.27E-05
DHRS3	-1.23857	2.27E-05
LOC100506191	1.135396	2.29E-05
PDGFD	1.186519	2.30E-05

FNDC1	2.248689	2.30E-05
HAPLN1	2.069107	2.33E-05
ALDH1A2	1.356448	2.45E-05
MKRN9P	1.605564	2.51E-05
LOC100127885	1.153713	2.53E-05
MT1X	-1.61224	2.54E-05
ANO3	1.257544	2.57E-05
GPR68	1.209497	2.59E-05
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XCL1	1.104191	2.63E-05
KBTBD10	1.408524	2.65E-05
MT1M	-1.39787	2.66E-05
RERGL	1.600315	2.67E-05
TNNT3	2.084794	2.69E-05
C9	-1.31727	2.69E-05
CPXM2	1.022602	2.72E-05
FOLH1B	1.534779	2.74E-05
FN1	1.711188	2.75E-05
ARVCF	1.002311	2.78E-05
HIST1H2AL	-2.41587	2.85E-05
OLIG1	-1.11571	2.86E-05
BATF	-1.00494	2.92E-05
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DAZ1	1.473964	2.99E-05
ATF7	1.028792	2.99E-05
ORC1	-1.35434	3.02E-05
GYS2	-1.50641	3.06E-05
NBPF15	1.061919	3.06E-05
APCDD1	1.118696	3.15E-05
LOC730091	1.088955	3.18E-05
PAMR1	1.635041	3.19E-05
PTPRZ1	1.51065	3.21E-05
LOC728073	1.199936	3.32E-05
SLC1A5	-1.16535	3.33E-05
CPE	1.103855	3.34E-05
LYPD1	1.073807	3.34E-05
SYTL2	1.197777	3.35E-05
CYP4Z2P	1.096873	3.40E-05
PCDHGB6	1.253835	3.42E-05
GP9	-1.32584	3.45E-05
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LOC730101	1.186824	3.56E-05
ARHGEF25	1.027236	3.59E-05

COL5A2	1.728676	3.67E-05
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CDON	1.038441	3.78E-05
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C1QTNF6	1.154984	3.86E-05
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COL1A1	2.212412	3.97E-05
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CDH13	1.277398	4.00E-05
GBP1P1	1.1611	4.08E-05
IRS2	-1.60393	4.15E-05
PAR6G	1.104921	4.16E-05
SPDYE8P	1.117768	4.17E-05
RIMBP3	1.378706	4.22E-05
SRGAP3	1.470877	4.29E-05
L1TD1	1.258672	4.34E-05
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MT2A	-1.27172	4.40E-05
BASP1	-1.60834	4.44E-05
HCST	-1.16404	4.50E-05
LOC100129322	-1.5967	4.57E-05
PAR5	1.303357	4.64E-05
BSN	1.058482	4.75E-05
NCF4	-1.04275	4.85E-05
LOC100130778	1.199679	4.94E-05
WISP2	1.384335	4.95E-05
E2F2	-2.56408	4.95E-05
MT1E	-1.2476	5.13E-05
MEIS2	1.175692	5.13E-05
CCNE2	-1.15178	5.16E-05
IL5RA	-1.30957	5.29E-05
LOC100133286	-1.10937	5.39E-05
APOBEC3B	-1.00066	5.44E-05
ADAMTS4	-1.80853	5.48E-05
TRIM58	-2.24322	5.53E-05
PKMYT1	-1.12265	5.55E-05
CD1C	1.117343	5.56E-05

ODZ2	1.099666	5.58E-05
SULF1	1.179452	5.63E-05
AURKA	-1.49763	5.65E-05
PDK4	-1.23806	5.72E-05
GZMH	1.403803	5.72E-05
ANGPTL4	-1.69568	5.73E-05
PRUNE2	1.078652	5.73E-05
HIST2H3A	-2.79292	5.89E-05
OSBP2	-1.70439	5.90E-05
ARSI	1.480875	5.97E-05
PDGFRL	1.498861	6.07E-05
CLEC5A	-1.93454	6.15E-05
COPZ2	1.199257	6.19E-05
CLDN1	1.606532	6.21E-05
HBB	-1.40743	6.38E-05
LOC100505806	1.169658	6.41E-05
PRG3	-2.50349	6.43E-05
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LOC441052	-1.4073	6.57E-05
GVINP1	1.164706	6.61E-05
AGPAT2	-1.22783	6.76E-05
SMOC2	1.486565	6.78E-05
IER2	1.391604	6.85E-05
SFRP2	1.35152	7.00E-05
KIT	1.148868	7.09E-05
P4HA3	1.052129	7.14E-05
LOC283728	1.031559	7.24E-05
TOX3	1.645439	7.36E-05
FGG	-1.79193	7.44E-05
EMX2	1.139713	7.51E-05
PCOLCE	1.325855	7.57E-05
LOC100506514	1.008838	7.60E-05
TECRL	1.012566	7.79E-05
IL4	-1.07543	7.84E-05
MMP23B	1.746693	7.84E-05
LPAR4	1.81304	7.90E-05
IMPA2	-1.10717	7.91E-05
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DKK3	1.451392	8.08E-05
SHROOM2	1.153071	8.09E-05
PSORS1C1	1.135027	8.10E-05
C1orf228	-1.61455	8.13E-05
BSPRY	-1.99974	8.20E-05

KAL1	1.326057	8.27E-05
GPR158	1.420573	8.40E-05
OTOR	-1.10858	8.49E-05
SDC4	-1.02653	8.60E-05
CXCL9	1.346581	8.97E-05
LOC100128001	1.065581	9.26E-05
C2orf48	-1.99963	9.32E-05
ADAMTSL2	1.250124	9.41E-05
FCRL6	1.137799	9.43E-05
OGN	2.777599	9.61E-05
HIST1H2AM	-1.46407	9.63E-05
VWC2	2.078611	9.71E-05
HIST1H2BF	-1.81841	9.77E-05
HIST1H2BE	-1.12281	0.000101
PTCRA	-1.59955	0.000102
HIST1H3F	-1.58981	0.000102
COL1A2	1.830481	0.000102
HBD	-2.63391	0.000102
CEACAM4	-1.08361	0.000103
C1orf195	1.020988	0.000103
GYPB	-2.39917	0.000103
EFHB	1.107554	0.000106
KCNS1	1.379769	0.000106
ASPN	2.601888	0.00011
GP6	-1.69514	0.000111
SPINK8	-1.05061	0.000114
FLT3	-1.05571	0.000116
TAS2R20	1.62877	0.000118
LOC100128727	1.185951	0.00012
FNDC5	1.232901	0.000123
HIST1H4K	-1.06309	0.000124
HIST2H4B	-1.21845	0.000124
ACPP	-1.1326	0.000124
CDH2	1.469392	0.000124
COL7A1	1.182687	0.000127
C17orf99	-2.8473	0.000128
HBM	-3.39584	0.000129
ADAM20	1.14459	0.000131
REEP1	1.004467	0.000132
CAMP	-4.22563	0.000134
SHC3	1.336421	0.000134
MYH7B	1.000593	0.000134
CYB5A	-1.12969	0.000134

GHR	-1.22751	0.000134
TMEM119	1.961674	0.000134
NMUR1	1.147619	0.000136
PPP1R14C	1.452123	0.000138
THBS1	-1.0842	0.000138
GALNTL2	-1.52763	0.000139
CLEC11A	1.268596	0.00014
STMN2	4.305145	0.000142
CYP27C1	1.375095	0.000144
ITGA2	1.427968	0.000146
P2RY6	1.013472	0.000147
NKG7	-1.71964	0.000148
SOX11	2.194028	0.00015
PENK	1.692715	0.000151
SOX18	1.020309	0.000151
ALPK2	1.684403	0.000153
CLEC3A	2.830551	0.000155
PCDHAC2	1.208831	0.000157
ALB	-1.83275	0.000158
SGMS2	1.653906	0.000162
LOC100130232	1.107217	0.000163
ISG15	1.351457	0.000165
SGCG	1.075493	0.000168
ZDHHC8P1	1.178476	0.000168
DPP4	1.414627	0.000168
IGLL1	-1.57747	0.000172
EGFL6	2.217743	0.000174
FAM55B	1.085153	0.000174
ABCA13	-2.486	0.000175
COL11A1	2.154686	0.000175
CRTAC1	1.895598	0.000178
WNT1	1.164785	0.000179
FCER1A	1.5897	0.000181
NRBP2	1.060376	0.000182
SAA1	-2.97801	0.000183
HILPDA	-1.36053	0.000183
HIST1H4I	-1.19885	0.000187
B4GALNT4	1.15953	0.000192
ACSL1	-1.40473	0.000193
HOMER2	1.508088	0.000197
EGFLAM	-1.11432	0.000198
DIRC3	1.488148	0.000203
LINC00313	-1.84514	0.000203

PRSS35	2.293558	0.000208
CYP8B1	-1.31218	0.000213
ADD2	-1.99916	0.000213
ANKRD18A	-1.23876	0.000215
SPARC	1.274464	0.000217
MMP11	1.447743	0.000218
C6orf174	1.066529	0.000222
ANK1	-1.86543	0.000224
PRC1	-1.11907	0.000225
HIST1H4H	-1.3111	0.000229
AVPR1A	1.097609	0.000231
LOC100130992	1.09102	0.000232
KRT19P2	1.229159	0.000234
LOC100129408	1.067833	0.000242
CDH1	-1.79903	0.000245
MAL	-1.05012	0.000249
OMD	1.390004	0.000252
HLA-DMB	1.024531	0.000254
IRX6	1.177973	0.000263
RHD	-1.8992	0.000265
MMP2	1.104861	0.000268
ACAP1	-1.20511	0.000269
SERPINE2	1.098454	0.000269
ARHGAP8	-1.19918	0.000269
TIMP4	-1.92523	0.00027
GFI1B	-1.66121	0.00027
LOC100505648	1.130709	0.000281
CRIM1	1.011114	0.000285
C1orf61	1.183646	0.00029
HMCN1	1.252502	0.000295
NLRP12	-1.36565	0.000301
AURKB	-1.27526	0.000307
LALBA	-1.93312	0.000307
SLITRK5	-1.15635	0.000308
TM7SF4	1.477086	0.000308
IGFBP3	-1.31934	0.000315
TTR	-1.39682	0.000319
MN1	1.086889	0.000325
CCL20	-1.21775	0.000326
FCGR3A	-1.01215	0.00033
A2ML1	-1.15289	0.000342
FAM155A	1.204034	0.000345
TRIM10	-1.2846	0.000351

BTC	1.616855	0.000361
KEL	-2.432	0.000367
GPR183	-1.0961	0.000369
AMTN	1.838722	0.000371
TPBG	1.088	0.000378
UAP1	-1.07885	0.000382
LOC642781	1.041695	0.000386
NUF2	-1.42344	0.000404
F3	-1.03728	0.000408
INS-IGF2	1.452943	0.000412
CYP4F12	1.233838	0.000422
PPP1R27	-1.50624	0.000422
CERCAM	1.043331	0.000431
CRISPLD2	-1.20205	0.000433
MGP	1.064121	0.000437
GNG4	1.483861	0.000438
HIST1H2AI	-2.35915	0.00044
GRIA2	1.032681	0.000442
HIST1H4D	-1.33285	0.000445
TGFB3	1.237008	0.000453
REP15	2.039652	0.000462
TMEM156	-1.31603	0.000477
LOC283484	1.33663	0.000477
EAF2	-1.00824	0.000478
SP6	1.057639	0.000482
COL17A1	-2.42226	0.000486
ICAM4	-1.19777	0.000492
HTR1F	1.08916	0.000495
SPAG5	-1.202	0.000515
EDIL3	1.147964	0.000523
CXCL10	1.736846	0.000528
AZGP1	-1.21009	0.00053
ACSL6	-2.32584	0.000537
PII5	-1.40949	0.000538
LOC283710	-1.39973	0.000542
CDCA8	-1.17023	0.000543
CFB	1.026678	0.000559
DKFZp451A211	-1.4118	0.000561
POU2AF1	-1.66189	0.000561
PRG4	2.287916	0.000566
ZIC2	-1.09376	0.000567
CMTM2	-1.7297	0.000587
PRPH2	1.006053	0.000604

PTTG2	-1.12221	0.000616
DAPL1	1.389665	0.000617
SERPINB2	-1.15879	0.000626
UGT3A2	-1.07838	0.000636
VSIG4	-1.0153	0.000649
TTY16	-1.40673	0.000668
CKAP2L	-1.31913	0.000669
RNU2-2	-1.89121	0.00067
HBA2	-2.331	0.000675
LOC401497	-1.03675	0.000676
NTN1	1.161534	0.000679
APOD	-1.85857	0.000691
UCN2	1.130159	0.000704
RGS1	-1.64115	0.000713
C2orf27B	1.051078	0.000729
PCDHGB8P	1.138956	0.00073
SLC2A3	-1.37566	0.000738
VPREB1	-2.56985	0.000774
LRRC4	1.293969	0.000781
C2orf80	-1.1569	0.000781
LBP	-1.48079	0.000784
LOC284630	1.114927	0.000792
FAM47C	1.077844	0.000794
LOC100129617	-1.05761	0.000825
LINC00261	1.430394	0.000827
LOC152225	1.106242	0.000834
LRRC19	1.148538	0.000836
THBS4	1.906792	0.000851
SEMA3E	1.080739	0.000853
FUT4	-1.06466	0.00086
KIF2C	-1.26436	0.000861
HIST1H3B	-1.90768	0.000866
BMP5	1.010646	0.000866
LPAR3	1.177157	0.000872
KCNV1	-1.32208	0.000888
RPGRIP1	1.192557	0.000892
SLAMF9	1.157673	0.000897
KLHL30	1.254454	0.000953
LRRC8E	1.345775	0.001008
FAM9C	-1.07188	0.001013
HIST1H4E	-1.34454	0.001033
TMEM229A	1.021364	0.001038
RSAD2	1.060161	0.001042

COMP	1.859916	0.00107
AEBP1	1.035684	0.001096
PNMT	-1.20123	0.001097
RGS18	-1.06603	0.001104
PIM2	-1.01125	0.001168
SYT13	1.430903	0.001188
FAM159B	1.9399	0.001188
GLDC	1.049642	0.001208
BIN2	-1.02013	0.001226
MAFF	-1.13081	0.001229
EPB49	-1.36399	0.001229
GAP43	1.403325	0.001247
RFPL2	-1.12256	0.001266
LGALS2	1.323101	0.001302
FAM46C	-1.44504	0.001317
ZNF702P	1.221009	0.001321
LINC00242	1.123271	0.001323
LOC402160	1.006845	0.001324
C3orf80	1.010547	0.001348
TEF	1.402235	0.001351
NDST4	1.302058	0.001373
CTHRC1	1.614832	0.001391
GUCY1A2	1.043813	0.001399
AKAP6	1.140488	0.001509
NEURL3	1.213253	0.001519
MMP9	1.388285	0.001533
NOXO1	1.018793	0.001539
FOXG1	1.09167	0.001547
BLNK	1.145233	0.001562
LOC100134256	-1.23878	0.001575
GLDN	-1.09377	0.001582
OR4X1	-1.05012	0.001594
KCNK2	1.545475	0.001609
CLEC4GP1	1.510629	0.00168
LHX2	1.326842	0.001704
DNASE2B	1.476859	0.001723
ASXL3	1.257892	0.001732
RNU1-5	-1.25764	0.001777
MYOM1	1.33986	0.00178
PRKAR2B	-1.45359	0.001807
GADD45B	-1.35699	0.001834
LOC339505	-1.28721	0.001837
LYVE1	-1.45701	0.001865

NMU	-1.02229	0.001868
LOC100130627	1.159003	0.001873
OR52E2	-1.26173	0.001915
KCNH2	-1.40814	0.001918
SPRY1	-1.00472	0.001935
MYH1	1.712392	0.001936
PNPLA1	-1.0724	0.002038
PRRX1	1.048897	0.002077
LDLRAD2	1.256715	0.002094
SUSD5	1.103446	0.002143
IFITM5	1.80698	0.002143
TNF	1.255264	0.002169
MMP26	1.013678	0.002199
EIF1AY	-1.65164	0.0022
DEFA6	-1.01364	0.002201
NUP210	-1.04575	0.002217
PLAC1L	-1.1693	0.002231
PDPN	1.00474	0.002239
CLEC4G	-1.05146	0.002259
CRLF1	1.91943	0.00226
LINC00116	1.215238	0.00236
ELOVL7	-1.02689	0.002399
GAL3ST3	-1.01937	0.002409
MKI67	-1.0985	0.002474
CPZ	1.859539	0.002478
ZNF806	1.05869	0.002491
DIRAS1	1.167167	0.002502
SEC1	1.329333	0.002564
PKP2	-1.89703	0.002606
ERAP2	1.576942	0.002613
CCR3	-1.09224	0.002653
KDELR3	1.258637	0.00266
QRFPR	1.644335	0.002731
FMOD	1.045878	0.002783
IL11	2.266248	0.002814
HIST1H1A	1.312379	0.002829
MMP7	1.455265	0.002855
SLED1	-1.52712	0.002915
RHCE	-2.22527	0.002959
SHCBP1L	1.048058	0.003033
SPTA1	-2.42191	0.003033
COL4A5	1.023837	0.003106
LOC100131347	1.035883	0.003108

BAMBI	1.021656	0.003193
GPR141	-1.08436	0.003203
CXCR2	-1.02767	0.003212
ECM1	1.330945	0.003289
PPMIH	1.240844	0.003342
MEST	-1.36733	0.003453
CCL8	2.237854	0.00346
SEC14L4	-1.10022	0.003478
LOC340017	-1.11722	0.003487
SLC2A4	-1.58373	0.003494
DACH2	1.02696	0.003541
KRT1	-1.12565	0.003605
C21orf37	1.686569	0.003606
AMBP	-1.40788	0.003629
MMP1	1.953398	0.003682
C18orf56	-1.4404	0.003741
JAKMIP2	1.036228	0.003795
HMMR	-1.25201	0.003795
SAA2	-1.40818	0.003834
LPPR3	-1.20375	0.003852
HIST1H1B	-1.92017	0.003858
PRR23A	-1.24172	0.003888
SLCO4C1	-1.29962	0.003934
MGC16025	-1.0167	0.003954
EGR2	1.458558	0.003989
TNNC2	1.060777	0.00404
DIO2	1.373935	0.004076
PTTG1	-1.2134	0.004102
CD83	1.012027	0.004104
SKA1	-1.51148	0.004141
PCDHAC1	1.092241	0.004193
C9orf84	-1.12125	0.0042
CCDC164	-1.22691	0.004252
LOC284108	1.225876	0.004315
LOC285629	1.390519	0.004317
FAM70A	1.588252	0.004385
IL1RL1	-1.13541	0.004392
SOX3	1.422932	0.004408
APOBEC3A	-1.78859	0.004483
HHIPL2	1.337819	0.004495
LOC283731	1.819581	0.004495
ACP5	1.181457	0.004514
TMEM132E	1.251754	0.004542

ADAMTS1	-1.19597	0.004632
SELL	-1.09868	0.004639
UBE2C	-1.22236	0.004656
BRIP1	-1.24004	0.004821
LOC399708	-1.01202	0.004885
CISH	-1.25589	0.005026
STC2	1.178513	0.005062
C4orf6	1.49829	0.005084
AKR1B15	1.107212	0.005176
C9orf53	1.416495	0.005404
SYN2	-1.16286	0.005463
LINC00304	-1.09127	0.005605
NHLH1	-1.0332	0.005753
TSPAN16	-1.14968	0.005862
CRABP1	1.326333	0.00591
SELE	1.683346	0.006151
SPC24	-1.11884	0.006178
FGF10	1.307478	0.006358
GAS1	-1.05652	0.006394
GSTT1	-2.3966	0.006436
PITX2	1.201337	0.006449
ADH1C	-1.69745	0.006475
GTSE1	-1.06019	0.006497
IL8	-1.28839	0.006544
DBX1	1.022988	0.006704
HIST1H4L	-1.0858	0.006719
KCTD4	1.221306	0.006816
KIF15	-1.08878	0.006914
UNC13A	1.022417	0.006962
PKIB	1.171644	0.00717
STAP1	-1.00134	0.007536
PPEF1	1.377311	0.007618
IGLL5	-1.61707	0.0077
VSNL1	1.351095	0.00771
DLGAP5	-1.57275	0.007769
SLC38A11	1.031166	0.007825
ITLN1	-1.33779	0.007825
C6orf138	1.627383	0.007969
GABRP	-1.17681	0.008246
WNT2B	1.274764	0.008734
LOC100271722	1.124672	0.008757
SULT1B1	-1.27986	0.008798
CCNB2	-1.37773	0.008811

ADH1B	-2.31927	0.008949
OR52I2	1.109283	0.009625
RGPD1	-1.17027	0.009749
MLC1	-1.54065	0.009924
ADH1A	-1.86209	0.009927
LOC100653210	-1.39265	0.009972
NT5DC4	1.51413	0.010026
APOLD1	-1.04112	0.010052
TSPAN2	1.049898	0.010156
MFAP4	1.124441	0.010592
PGBD5	1.154285	0.010663
FKBP10	1.039736	0.010746
CIDEA	-1.49551	0.011072
PROM2	1.105754	0.011388
MTL5	-1.0274	0.011489
CHI3L1	-1.02606	0.011526
GRP	1.15236	0.011607
PDE8B	-1.12416	0.011797
PLIN5	-1.07183	0.011919
SCRG1	1.193085	0.011962
TNFRSF13B	-1.21599	0.012034
P2RY14	1.257952	0.012106
CDT1	-1.32372	0.012132
KIF18A	-1.22429	0.012271
FABP4	-1.56417	0.012709
PSORS1C3	1.376566	0.012744
OIP5	-1.03848	0.012856
LOC400965	1.15813	0.012998
HLA-DQA1	1.059287	0.013002
C20orf123	1.053001	0.013354
CD24	-1.23838	0.0134
PDE3B	-1.10452	0.014298
MGST1	-1.51063	0.014777
XIST	3.590785	0.015284
TUBB3	1.320648	0.015385
CADM2	1.113439	0.015685
LINC00320	1.032351	0.016361
LOC100287221	1.311328	0.017298
COL6A3	1.382002	0.017375
TNP1	1.027597	0.017392
1-Mar	-1.01774	0.017757
MYOC	-1.15019	0.018023
TMCC2	-1.0832	0.018503

NDP	1.128384	0.018623
SKA3	-1.03709	0.018635
MSMP	1.599243	0.01922
LOC285965	1.085339	0.020068
HOXB7	1.457772	0.020334
CA4	-1.30968	0.021511
CENPA	-1.54585	0.022363
C13orf30	1.52705	0.02242
TMEM196	1.247336	0.023211
GDF6	1.372988	0.023427
C19orf80	-1.59745	0.023795
LMO3	1.167814	0.024184
HJURP	-1.38236	0.024539
ST6GAL2	1.167676	0.024697
GPR182	1.495101	0.024734
LEP	-2.14239	0.024944
KIAA0101	-1.38889	0.025228
FAM55D	1.096099	0.025485
CILP	1.54319	0.026574
BUB1	-1.09883	0.026918
DGAT2	-1.54539	0.027075
SBSN	1.228475	0.027442
ADIPOQ	-1.42757	0.028363
NUSAP1	-1.17275	0.029408
UTY	-1.68553	0.029908
SLC13A5	1.236848	0.030132
DDX3Y	-2.15425	0.030233
LOC401847	-1.16785	0.030648
CA12	1.229848	0.030938
PTCHD3	-1.07831	0.036963
CDCA2	-1.20486	0.038228
EGR1	1.083105	0.039611
ZCCHC13	1.238966	0.040804
PLA2G2A	1.007313	0.04264
RPS4Y1	-3.02437	0.044681
TK1	-1.05811	0.044916
NPY1R	1.131654	0.046292
MAGEB6	1.676443	0.046954
BIRC5	-1.16756	0.047714
GPR179	1.87466	0.048007
TNN	1.112928	0.048666
NCRNA00185	-1.59174	0.049414