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Gene	NASH	HCV
DPPA4	-0.99149595	-1.50988763
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KCNN2	-0.76184643	-1.39228038
CLRN1-AS1	-0.96441909	-1.3557784
RP11-403I13.	-0.85779975	-1.26410861
GYG2	-0.69968025	-1.26305098
RP11-205M3.	-0.66576087	-1.19639311
AC114730.3	-0.95312175	-1.15783489
U91319.1	-0.59765221	-1.15552389
HSD17B3	-0.93519793	-1.15249858
CES5A	-0.58376485	-1.15154589
PZP	-0.69107133	-1.14231349
ASXL3	-0.43301035	-1.13917046
RP3-475N16.	-1.13779469	-0.98193217
AGXT	-1.12923854	-0.75283994
KCNK17	-0.90529918	-1.124968
HORMAD2	-1.09406334	-1.11939868
CAPN3	-0.85622675	-1.11518713
RP11-164J13	-0.85622679	-1.11518708
GNMT	-1.1093108	-1.01696047
NEU4	-0.9270435	-1.10879394
SLC6A13	-0.90009565	-1.09119231
RP11-626H12	-0.84179363	-1.07827663
GCK	-1.06523593	-0.86809113
KANK4	-0.74251028	-1.0564263
PPP1R1A	-0.7017774	-1.03625106
LPA	-0.49306007	-1.0169621
CNDP1	-0.63792646	-0.9987607
ATAD3C	-0.99811532	-0.83210312
CYP1A2	-0.98668091	-0.81786809
AOC1	-0.53624729	-0.98432856
MAD1L1	-0.97826581	-0.87221391
CHRNA4	-0.81746823	-0.96924072
RP11-261N11	-0.81746808	-0.96924071
ESPNL	-0.94309271	-0.70166788
TMTC1	-0.4180584	-0.94205862
CTNNA3	-0.42221582	-0.94007736
GSTA2	-0.93792451	-0.88896097
RP11-168L7.	-0.48701285	-0.93286311
ACSM2B	-0.91701906	-0.89974648
MROH7	-0.89045029	-0.91423505
SLC2A4RG	-0.9095737	-0.59876869
LIME1	-0.90957369	-0.59876869
NAT2	-0.48889312	-0.90882634
MME	-0.78982822	-0.90698252
APOC3	-0.89246412	-0.45008406
APOA1	-0.89246411	-0.45008404

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GCGR	-0.89023552	-0.62501281
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IGFALS	-0.88450169	-0.6259388
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CYP2E1	-0.73994513	-0.87852408
RP4-601P9.2	-0.77082548	-0.87729331
THOP1	-0.86939272	-0.74055984
GCDH	-0.86451674	-0.61958447
FAM151A	-0.83402025	-0.85612392
LINC00844	-0.64764145	-0.84587488
AOX1	-0.43160766	-0.84293406
TBX3	-0.63799608	-0.84108221
TRIM55	-0.41269109	-0.84011324
SLC22A25	-0.61387539	-0.83916424
RBP4	-0.83168116	-0.72002451
RP11-6B4.1	-0.48612421	-0.82930402
PRODH2	-0.82671595	-0.78277324
PCOLCE2	-0.67769587	-0.8229104
CXXC4	-0.49948404	-0.82209373
ORM2	-0.48125488	-0.82026193
TRPC5	-0.43558564	-0.81958049
GPR88	-0.81941466	-0.61700657
CNPY3	-0.81711475	-0.71387346
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FITM1	-0.6639242	-0.81316963
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PDLIM1P4	-0.44372511	-0.81068592
RGN	-0.8093521	-0.64054053
C3P1	-0.67831697	-0.80805497
ETNK2	-0.80482527	-0.67150957
CES1P1	-0.79369268	-0.80408941
NAGS	-0.80097203	-0.71944772
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HAO2-IT1	-0.59955733	-0.79336794
KBTBD11	-0.40521894	-0.79100922
MAGI2-AS3	-0.35584842	-0.78285799
SLC7A9	-0.78097086	-0.76962553
GFRA1	-0.55440634	-0.78061658
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SNTG1	-0.55097541	-0.77969493
RP11-113I22.	-0.7130455	-0.77938329
MEX3A	-0.522985	-0.77832605
TYK2	-0.65803804	-0.7777852
MOGAT2	-0.71494902	-0.77733915
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SMO	-0.69834739	-0.77436359
RP11-475O6.	-0.49405245	-0.77418792
RP11-115J16	-0.55973102	-0.77241533

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RP11-417L19	-0.77042498	-0.62416275
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AR	-0.59966299	-0.76993595
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FAM35BP	-0.72495655	-0.76611146
RP11-38L15.8	-0.72495294	-0.76610895
CYP2D6	-0.76392889	-0.54764712
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SERPINC1	-0.64231174	-0.75788513
GPER1	-0.73874659	-0.7562845
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TSC2	-0.75369796	-0.6199147
RP11-122K13	-0.75356381	-0.54125037
PRAP1	-0.75356381	-0.54125041
FUOM	-0.75356381	-0.54125046
CHAD	-0.74741586	-0.49513365
APOC2	-0.7450738	-0.54355247
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ALDH1L1	-0.59999491	-0.74407132
FMO3	-0.49424232	-0.74299001
TM6SF2	-0.73970533	-0.62457193
CAMSAP3	-0.7391082	-0.64069753
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RP11-7F17.3	-0.73628466	-0.7269955
RP11-830F9.5	-0.7359723	-0.57756223
RP11-119D9.	-0.66797538	-0.73584138
ECHDC3	-0.73574499	-0.64695488
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RP11-706C16	-0.72151361	-0.67126525
JAKMIP2	-0.59190911	-0.71988615
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HPX	-0.53134133	-0.71341157
ALB	-0.61593953	-0.71214067
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HGFAC	-0.51325387	-0.71165281
ASB13	-0.70086639	-0.71154238
GSTA1	-0.71032899	-0.64856362
DGAT2	-0.70679534	-0.70974109
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CECR2	-0.54792984	-0.69282446
ADRA1A	-0.4610272	-0.68963291
APOA5	-0.68897857	-0.46835311
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SLC9A3R2	-0.66600375	-0.49863254
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APOE	-0.66305233	-0.48365476
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RP3-339A18.	-0.65077365	-0.54606314
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FBLN7	-0.65001246	-0.38974033
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SYAP1	-0.4535541	-0.64927048
RP13-650J16	-0.6478358	-0.3982245
DCXR	-0.64783579	-0.39822448
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PON1	-0.59295438	-0.64760568
FAHD1	-0.64633858	-0.48634266
FOXP2	-0.33860001	-0.64592897
AZGP1P2	-0.64485418	-0.53287999
TRABD2B	-0.47722253	-0.64321508
PROX1-AS1	-0.33832987	-0.64270413
C2orf72	-0.5594156	-0.6418142
GNA11	-0.57685342	-0.64092872
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APOH	-0.43648694	-0.63846139
THAP3	-0.50147004	-0.63719817
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SEMA4G	-0.63420912	-0.46527582
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COL18A1	-0.633764	-0.48613968
TTR	-0.60446147	-0.63364811
GC	-0.29478957	-0.6335266
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SULT1E1	-0.40411073	-0.62873206
GOT2	-0.62852963	-0.53663294
PROX1	-0.35402263	-0.62818618
LCAT	-0.62813838	-0.51929613
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KLF15	-0.62635639	-0.45928035
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SEPP1	-0.39355054	-0.62306905
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REXO1	-0.56277739	-0.62150134
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WNK3	-0.62106763	-0.34570911
GYS2	-0.41303876	-0.62103511
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TOMM40	-0.61989376	-0.43165585
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ALDH7A1	-0.46238695	-0.61876846
SEC14L4	-0.61755403	-0.41089817
MLXIPL	-0.6175478	-0.54816044
RAC3	-0.61724767	-0.35175161
NUGGC	-0.44890558	-0.61652604
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GAMT	-0.61187939	-0.36664478
IYD	-0.50358548	-0.61132638
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PSMB7	-0.40820418	-0.61021229
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NOS1AP	-0.40807855	-0.59979899
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TDGF1	-0.41829492	-0.59947195
ACSM5	-0.4846508	-0.59940731
DHTKD1	-0.59913906	-0.4510699
ANPEP	-0.39222731	-0.59797437
AP000695.6	-0.59793891	-0.58609996
TMEM110-MU	-0.48091903	-0.59739318
MIR3646	-0.5959499	-0.52518315
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RAVER1	-0.58965445	-0.56794636
PLIN5	-0.43688193	-0.58939783
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KHK	-0.58850678	-0.47178375
NBPF13P	-0.52308524	-0.58820299
CEACAM22P	-0.58759132	-0.5714708
SLC43A1	-0.58716714	-0.48673092
HNF1A	-0.58703441	-0.43191851
CMYA5	-0.46678244	-0.586006
PQLC1	-0.51128552	-0.58518879
LRRC3	-0.58506819	-0.33908631
LRRC3-AS1	-0.58506818	-0.33908633
CHID1	-0.52113529	-0.58487534
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GLYAT	-0.41431923	-0.57973952
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SCG5	-0.50820222	-0.57715739
NIT2	-0.52382134	-0.57681417
TST	-0.57610113	-0.47748132
GGACT	-0.29750282	-0.57565388
GSTZ1	-0.57416671	-0.49594461
MRPL43	-0.57393552	-0.38562571
SLC27A5	-0.57384955	-0.36274605
BCAT2	-0.57362287	-0.4821496
POLE	-0.5734815	-0.36457824
SERPINA4	-0.45149394	-0.57326362
ABCG8	-0.57311013	-0.43992538
TEF	-0.57245391	-0.41824675
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CLDN14	-0.51014848	-0.5653727
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NDUFA6-AS1	-0.56092034	-0.38097628
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RP5-966M1.6	-0.48430678	-0.5589609
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VIL1	-0.55804691	-0.50261453
FTCDNL1	-0.55759976	-0.42851501
TMEM25	-0.53650468	-0.55661602
ALAD	-0.55652649	-0.4414033
POMT2	-0.55575725	-0.47829184

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Gene	Value 1	Value 2
SLC19A1	-0.55514766	-0.39980198
AK4	-0.37776613	-0.55510821
MOGAT1	-0.46931272	-0.55422142
PCYT2	-0.55361709	-0.37385382
RP4-758J18.2	-0.55342691	-0.33293506
CCNL2	-0.5534269	-0.33293503
QDPR	-0.41312051	-0.55337415
GNAO1	-0.40709817	-0.55335288
SAT2	-0.55328098	-0.32899268
NUDT16	-0.49638324	-0.55146716
ABHD15	-0.55087095	-0.2706481
RP3-402G11.	-0.55049535	-0.42967261
SELO	-0.55049531	-0.42967262
TMEM110	-0.4523131	-0.54941938
AMBP	-0.5332563	-0.54935059
PHGDH	-0.39295342	-0.54867972
ALKBH2	-0.53423372	-0.54812573
XYLB	-0.54782416	-0.46845163
TTC31	-0.54772171	-0.40042391
C1R	-0.36476152	-0.54761051
STEAP3	-0.37738984	-0.54733639
PMM1	-0.54627888	-0.28253201
C16orf13	-0.54570672	-0.32688719
ITIH1	-0.44793049	-0.54564737
SHMT2	-0.54552397	-0.52298954
SH3PXD2A	-0.44187639	-0.54539559
ASL	-0.54456235	-0.52231389
NDUFS7	-0.54417121	-0.29338413
NAPEPLD	-0.42271619	-0.54372659
TCEA3	-0.45619391	-0.54341951
SUGP1	-0.54098686	-0.44638745
VTN	-0.54075469	-0.443821
SHANK3	-0.54064551	-0.39602555
ECHS1	-0.54056713	-0.41448155
MFAP3L	-0.30652926	-0.53937362
MRPL23	-0.53932617	-0.50045197
MIR126	-0.53192407	-0.53928628
AGXT2	-0.32841234	-0.53910873
SLC25A42	-0.53807907	-0.36450899
MARC1	-0.38312721	-0.53739454
ELP3	-0.36883554	-0.53613072
DAB1	-0.32375416	-0.53608108
TMEM37	-0.3196043	-0.53540935
GULOP	-0.53516416	-0.40178378
ASPSCR1	-0.53480527	-0.32653753
GNE	-0.45806797	-0.53442947
SLC25A18	-0.50350814	-0.53424868
SLC46A1	-0.53407199	-0.42455711
SFXN5	-0.496014	-0.53339116

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C3	-0.32496828	-0.53334588
ICAM3	-0.5330691	-0.47745957
TTPAL	-0.53285799	-0.4357361
CTNS	-0.53240924	-0.37648291
PRKAG2-AS1	-0.5310375	-0.31160358
ABCG5	-0.5300833	-0.41424045
PROZ	-0.52983523	-0.46086358
SUOX	-0.47224945	-0.52936307
FAM53A	-0.52900374	-0.37347314
SPTBN2	-0.41482506	-0.52846757
CASC10	-0.46069097	-0.52801376
LCN12	-0.52755957	-0.2416872
C8G	-0.52755957	-0.2416872
SIGMAR1	-0.52753124	-0.29635608
MLYCD	-0.52746589	-0.40467836
CPPED1	-0.45585123	-0.52692497
APOF	-0.39252114	-0.52685065
ABCC2	-0.33069775	-0.526547
HPN	-0.52571552	-0.45549562
PKLR	-0.52544006	-0.47379075
RAD54L2	-0.52459046	-0.48270611
RP5-875H18.	-0.52423609	-0.39216451
CMBL	-0.50367322	-0.52370941
RP11-390F4.2	-0.33177001	-0.52181134
SLC30A10	-0.38143031	-0.52019655
ACADSB	-0.35733082	-0.51715283
ITCH	-0.36434796	-0.51632268
RP11-1151B1	-0.39617577	-0.51550649
RP11-661A12	-0.51475978	-0.36138695
SLC13A5	-0.44023114	-0.51468042
TMEM220	-0.44426325	-0.51422255
PRKAG2	-0.51333418	-0.37661849
TADA1	-0.51288083	-0.42028579
ASGR1	-0.5127561	-0.48431379
DOLPP1	-0.51267896	-0.41169338
FXYD1	-0.51259674	-0.34985605
PCK2	-0.51153711	-0.38174507
DHRS4	-0.51151351	-0.35312145
PGLYRP2	-0.51129907	-0.43756266
LPAL2	-0.47613199	-0.51093138
AC142528.1	-0.50993273	-0.47855001
AGPAT2	-0.50987929	-0.50145303
PEBP1	-0.50957342	-0.36946543
HIBADH	-0.40473344	-0.50932067
CYP4F3	-0.50927874	-0.48591038
RGS12	-0.41474877	-0.50878816
TNFAIP8L1	-0.50681237	-0.31462028
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DCTD	-0.38206799	-0.5062648

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MRPS22	-0.42399493	-0.50613564
DBT	-0.35164339	-0.50496922
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PAIP2B	-0.50458813	-0.43717477
MPC1	-0.32317742	-0.50313087
NDRG2	-0.38817639	-0.5029702
PEMT	-0.47849196	-0.50282158
ALDH8A1	-0.30685945	-0.50167267
TSSC1	-0.41604199	-0.50166131
AP001065.15	-0.50121439	-0.43630473
TSPAN9	-0.39052741	-0.5010383
FGFR4	-0.50079069	-0.40955859
ZNF444	-0.49924193	-0.47143732
LINC00094	-0.49907735	-0.34613862
FAM73B	-0.49864561	-0.41579389
TTPA	-0.29893692	-0.49838552
CTD-2545H1.	-0.49794342	-0.4922324
TFR2	-0.49737757	-0.40044049
FLCN	-0.49727171	-0.39699181
ACAA1	-0.49691562	-0.40187225
FURIN	-0.38736648	-0.49665955
SALL1	-0.32368911	-0.49658827
ZNF696	-0.49657629	-0.3440484
RNF126	-0.49601691	-0.33194009
AC004156.3	-0.49601688	-0.33194018
POLR3H	-0.49517761	-0.31785751
GHR	-0.32229072	-0.49490278
ACP2	-0.49474027	-0.46615352
ZNF497	-0.49442209	-0.39183096
ZBTB48	-0.49401346	-0.2997022
FAM20C	-0.49390927	-0.46207081
NAT8	-0.4935748	-0.42309711
HPD	-0.49355526	-0.42777177
ADI1	-0.49351634	-0.42814468
CTA-292E10.	-0.2790415	-0.49296135
SNHG8	-0.30963332	-0.49265941
BNIP3	-0.49251914	-0.36536377
ZNF517	-0.4917722	-0.46460047
EHHADH	-0.41997315	-0.49164704
RP11-449P15	-0.49137643	-0.43785462
GET4	-0.4913764	-0.43785455
TBC1D2	-0.44369124	-0.49087881
SFXN1	-0.45312962	-0.49081025
FBXW11P1	-0.42475793	-0.49075521
TTC6	-0.2733433	-0.49007905
GALT	-0.48939574	-0.32661027
MRPL20	-0.48889795	-0.29298016
RP11-513G11	-0.32566644	-0.48866387
ZBTB45	-0.48783977	-0.30485582

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EDC3	-0.44603223	-0.48753583
AC009166.5	-0.32444132	-0.48751622
PCBD1	-0.48719245	-0.39835197
RP11-44M6.3	-0.48716407	-0.36623863
LRRC37A5P	-0.4311686	-0.48715786
OSGIN1	-0.48661609	-0.33313549
DEPDC7	-0.3491709	-0.48657689
TMEM82	-0.48639705	-0.40000723
SLC26A1	-0.48606527	-0.39855654
HSBP1L1	-0.35304183	-0.48601142
THRB	-0.29114288	-0.48535447
ENTPD5	-0.35027874	-0.48523689
PKD1L2	-0.46030085	-0.48456053
BDH1	-0.48419263	-0.33955255
SLC25A20	-0.48393904	-0.34051564
RDH16	-0.48359387	-0.4489049
MYD88	-0.48334123	-0.39550524
MPLKIP	-0.48304731	-0.40127274
FBP1	-0.48272264	-0.35558511
SOWAHB	-0.46464072	-0.48157392
FUBP3	-0.48155248	-0.40610461
CYP27A1	-0.41327242	-0.48118186
IL11RA	-0.4798205	-0.3337762
SLC27A2	-0.44706769	-0.47901059
ZNF385B	-0.33023531	-0.47848627
DEAF1	-0.47796184	-0.36825415
POLR2F	-0.47774132	-0.33296713
MMACHC	-0.47712778	-0.41091257
RP11-344P13	-0.39852927	-0.47679292
IDUA	-0.47671009	-0.39321773
HDHD3	-0.44181024	-0.47659129
FABP1	-0.30753758	-0.47627108
SCCPDH	-0.45745009	-0.47546018
EPHX2	-0.47481538	-0.43637706
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PCDH1	-0.27460496	-0.47387188
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MTHFD1	-0.46427643	-0.47210587
CYP8B1	-0.32041968	-0.47112259
TRIM24	-0.40642724	-0.46963243
FKBP8	-0.46922264	-0.43147395
PEX6	-0.46908041	-0.33063488
BTD	-0.38310231	-0.46782556
SLC6A1	-0.46749302	-0.33398139
RANBP1	-0.46739615	-0.34553256
RP11-38G5.4	-0.44114597	-0.4670968
TOLLIP	-0.4670631	-0.37155505
LGI4	-0.46690066	-0.30048316

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RP11-209K10	-0.35233705	-0.46683615
OPLAH	-0.44651345	-0.46490928
SGK2	-0.39416895	-0.46457315
EI24	-0.46454905	-0.3812715
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WDR18	-0.40553702	-0.46347861
TOLLIP-AS1	-0.463264	-0.37064645
USP30	-0.45958095	-0.46283748
ABCG2	-0.45366629	-0.46181431
ACACB	-0.35797062	-0.46176925
AHCY	-0.4064863	-0.46103644
ABCC6	-0.43846415	-0.45989323
GLS2	-0.45963971	-0.27880136
AC019181.2	-0.39783467	-0.45961561
ACVR1C	-0.38045717	-0.45891588
F10	-0.45882069	-0.36950754
ZKSCAN1	-0.39867916	-0.45840621
ADCY1	-0.45809579	-0.37976781
CHMP6	-0.42696208	-0.4575594
RPL7AP6	-0.35534184	-0.4563226
SEC14L2	-0.43225002	-0.45577579
C7orf50	-0.45567089	-0.36783366
FAH	-0.36603446	-0.45532692
CLUH	-0.45525342	-0.26882068
PPP6R2	-0.45511075	-0.25961048
C1S	-0.27588469	-0.45447322
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SLC25A13	-0.45387704	-0.43150595
RAPH1	-0.31973935	-0.45347927
RNF215	-0.45336741	-0.45261625
PAH	-0.36803375	-0.45335418
GCSH	-0.45281308	-0.34995596
LHPP	-0.45207122	-0.33877499
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ACSF2	-0.45161505	-0.28630564
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SMOC1	-0.40655165	-0.45031917
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RP4-584D14.	-0.3750442	-0.44912805
RARRES2	-0.3750443	-0.44912805
POLM	-0.44893481	-0.29853335
RP11-713M15	-0.38277897	-0.44866948
GPR146	-0.44865796	-0.38895443
MOCS1	-0.41773577	-0.44792101
SERPIND1	-0.36698026	-0.44786657

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TACO1	-0.44688164	-0.37216997
EPHX1	-0.4466512	-0.2775992
SDC2	-0.3101171	-0.44600249
RP11-45M22.	-0.44589988	-0.30248336
TOP1MT	-0.39726686	-0.44579036
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SLC22A1	-0.35592978	-0.44505431
CTD-2619J13	-0.44504645	-0.33025985
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GLYCTK	-0.44377755	-0.35026885
ARFGAP2	-0.44372545	-0.35288168
PXMP2	-0.4433802	-0.24999398
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PPL	-0.4315543	-0.44327275
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IQGAP2	-0.32689737	-0.44264569
DECR2	-0.3407892	-0.44198449
ARMC6	-0.44171579	-0.38459195
POLE2	-0.43139487	-0.44093522
CDO1	-0.44002295	-0.33446279
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SP5	-0.43825549	-0.42995769
MAL2	-0.32726125	-0.43704003
SMARCA1	-0.29755465	-0.43694811
AP1M1	-0.42285109	-0.43687256
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MTSS1	-0.33017069	-0.42971923
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AGL	-0.30940841	-0.42726395
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CRLS1	-0.38554414	-0.42500853
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RTTN	-0.27426122	-0.42003928
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METTL7B	-0.40440387	-0.36579102
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SMARCD2	-0.40191315	-0.26016194
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ACSL1	-0.38375538	-0.39712276
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ZER1	-0.39454397	-0.33872364
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LRP1	-0.29833253	-0.39301776
PKP2	-0.34439876	-0.3926357
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CYP39A1	-0.33965247	-0.39108607
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RP5-1033H22	-0.30503081	-0.39050236
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CHST13	-0.38814415	-0.32402455
NFIC	-0.38801358	-0.31715258
PC	-0.2713548	-0.38793794
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SLC12A7	-0.38663084	-0.27527243
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RASSF7	-0.3811343	-0.293724
RP11-655M14	-0.38109626	-0.26735602

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TBX10	-0.38109598	-0.26735594
NUDT8	-0.38109581	-0.2673559
PSMA7	-0.38098092	-0.29845841
TRMT2A	-0.38057839	-0.22895339
EEFSEC	-0.34037015	-0.38025914
HLF	-0.32957238	-0.38009922
PEX16	-0.37993452	-0.33492077
PARP10	-0.37981547	-0.21387565
RP11-134G8.	-0.27602285	-0.37863625
GRTP1	-0.37814196	-0.36530467
HDLBP	-0.37797755	-0.3024235
MAVS	-0.37731114	-0.36557947
EPN1	-0.37682644	-0.27167571
IRF2BP1	-0.37674375	-0.32099143
ASB3	-0.31361875	-0.37647766
TMEM80	-0.37570265	-0.24624656
C16orf70	-0.37492915	-0.31083243
SLC35D1	-0.37436408	-0.27595108
SCAP	-0.37369073	-0.28496227
MDN1	-0.3562244	-0.3736243
ADCK3	-0.29812925	-0.37307645
HSD11B2	-0.3726025	-0.31254558
PHYH	-0.3720753	-0.33485628
MMP15	-0.35668513	-0.37172165
HOGA1	-0.31742346	-0.37107901
RHCE	-0.37080779	-0.30171794
ARL6IP4	-0.37076139	-0.28891513
AQP3	-0.32343107	-0.36985801
LRR1	-0.3287904	-0.36848651
SETD1A	-0.36744264	-0.23242592
TMEM57	-0.3357718	-0.36739329
EPS8L2	-0.36492322	-0.22369652
AP000355.2	-0.36480429	-0.31196501
GPAM	-0.36443184	-0.34811237
FOXA3	-0.36375897	-0.29284569
PIPOX	-0.36276665	-0.28074058
EPHB4	-0.33746387	-0.36213718
TMEM192	-0.27675938	-0.36162899
ANG	-0.25749011	-0.36109385
SMPDL3A	-0.25931705	-0.36022303
NT5DC3	-0.26949837	-0.35751769
WDR81	-0.35673733	-0.25774597
RAP2C	-0.35660216	-0.24521162
RP11-350G8.	-0.3543378	-0.35485534
EPB41L5	-0.35472404	-0.2812191
CERS2	-0.26745357	-0.35404273
GTF2IRD1	-0.35349659	-0.33576831
PEX19	-0.35337264	-0.34915125
AKAP1	-0.35263918	-0.29265316

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SH2D4A	-0.25490705	-0.35212954
NR1H3	-0.35210006	-0.27146195
PDIK1L	-0.35204896	-0.2829924
ANXA9	-0.26745198	-0.35124338
PFKFB1	-0.33473836	-0.35099402
KANK2	-0.35036754	-0.3319646
SHH	-0.32551636	-0.35032606
TMEM101	-0.33732052	-0.34983763
RXRA	-0.34948675	-0.28767448
HPCAL1	-0.28039765	-0.34899215
C1RL-AS1	-0.34870299	-0.3393696
KIF1C	-0.34811672	-0.23372311
IDNK	-0.2652978	-0.34799289
SIVA1	-0.34716386	-0.27226572
ELK1	-0.34650465	-0.30471213
IL6R	-0.34129699	-0.3463338
NEIL1	-0.34551526	-0.32270888
SERPINF1	-0.34534084	-0.33522948
FCGRT	-0.34444097	-0.27204935
AGFG2	-0.34421296	-0.29824866
MUM1	-0.34369254	-0.32853246
ABHD14A	-0.34363545	-0.23778997
CLASRP	-0.34316616	-0.25338292
MLX	-0.34239925	-0.32670861
ACY1	-0.34232231	-0.247427
STARD5	-0.3419298	-0.31524065
FZD5	-0.25822211	-0.3409676
DCAF8	-0.27681872	-0.339734
ZNF408	-0.26236338	-0.33957453
ALG3	-0.3389394	-0.32429392
WIZ	-0.3386708	-0.23583346
BAIAP2L1	-0.26230457	-0.33833424
CTIF	-0.32081451	-0.33504599
MACROD1	-0.33385226	-0.31944701
WWC2-AS2	-0.22097621	-0.3336651
COASY	-0.33200618	-0.31079482
GLTPD2	-0.33175708	-0.27314765
SEPHS2	-0.27031363	-0.3309181
CES2	-0.32990787	-0.24570301
FAM96B	-0.32990787	-0.24570233
SDC1	-0.26936324	-0.32918957
ZBTB39	-0.32865224	-0.32095137
HDAC4	-0.32840301	-0.31694505
SLC23A3	-0.32771937	-0.31415409
XBP1	-0.23846671	-0.32709786
C1orf220	-0.32669137	-0.27036106
AP000253.1	-0.32451248	-0.29401886
SLC35A3	-0.29282936	-0.32197216
PPP1R26	-0.3197786	-0.29937873

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PCTP	-0.28365657	-0.3197411
RPS29	-0.27154984	-0.319368
LTB4R2	-0.27227953	-0.31874686
LTB4R	-0.27227964	-0.31874682
KIAA2013	-0.31837726	-0.27583915
SOD1	-0.31814476	-0.30820525
NFYC	-0.31229081	-0.31672619
DDI2	-0.31641086	-0.26843984
PLA2G12B	-0.31627894	-0.27972574
GSDMD	-0.31549845	-0.28092864
C2	-0.31260761	-0.31434771
ENKD1	-0.31330502	-0.30424951
SUN2	-0.31313228	-0.23607547
NUDT7	-0.29642592	-0.31281805
CDON	-0.31268371	-0.26055483
PEX11G	-0.28673975	-0.31256604
UPB1	-0.31139815	-0.27512159
COBL	-0.31078456	-0.27482485
CTNNBIP1	-0.31070486	-0.26971012
FAHD2A	-0.2759954	-0.31009587
RAB40B	-0.27038904	-0.30958601
NAPA	-0.30932566	-0.24080098
ATP11C	-0.30919624	-0.29446512
RBL2	-0.30816824	-0.25066095
TPCN1	-0.2009117	-0.30642959
KLHDC2	-0.25686425	-0.30247648
MCEE	-0.30024145	-0.29215766
SLC37A4	-0.27316758	-0.30000485
VAMP8	-0.29952151	-0.27377672
SLC25A44	-0.29879377	-0.29111812
AKAP8	-0.29806694	-0.27827847
ERMARD	-0.29347634	-0.29781332
NELFB	-0.29745893	-0.24232981
GRINA	-0.29608637	-0.22354455
FAM35A	-0.29523254	-0.26738233
RPL41	-0.29310028	-0.23916321
ZNF490	-0.24853924	-0.29208614
RP4-605O3.4	-0.2906624	-0.23350988
COX14	-0.2906624	-0.2335097
PMF1	-0.22145396	-0.28935479
DNAJC25	-0.2511999	-0.28893162
MTMR4	-0.28516127	-0.28642688
CRTC2	-0.25459398	-0.28468128
MCCC2	-0.28210687	-0.26364444
ZNF787	-0.27950087	-0.21988141
NPRL3	-0.25928478	-0.27888637
RAB11FIP3	-0.25547192	-0.27748997
PLXNB2	-0.2757926	-0.20709931
RP11-1055B8	-0.24897767	-0.27466938

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TPRN	-0.25973517	-0.27431518
DBI	-0.23974492	-0.26067366
ABCB6	-0.25566735	-0.25991797
COG8	-0.25807848	-0.23033772
SLC27A3	-0.22292407	-0.25561704
RP11-1275H2	-0.22375083	-0.25122346
RP11-1275H2	-0.22375074	-0.25122324
ZNF689	-0.24985306	-0.24292946
ATXN2	-0.23871843	-0.24756363
OGG1	-0.23787695	-0.24669267
ILK	0.210752398	0.215670346
HIPK1	0.223081365	0.226794208
AFTPH	0.229032561	0.231996349
EZR	0.260488531	0.253964073
ATM	0.254946522	0.262550247
PLEKHA2	0.272810699	0.255425965
DCHS1	0.274281788	0.241210805
C15orf39	0.27940961	0.259068112
GAL3ST4	0.244427108	0.281077987
CASP8	0.288316856	0.288847658
GGPS1	0.273509615	0.291437197
PPARD	0.294225848	0.262095152
PRPF38B	0.286121834	0.294350856
HIVEP2	0.299790442	0.267480267
DENND3	0.261596651	0.300499743
ADD3	0.304301847	0.287508974
RP11-356I2.4	0.275183333	0.304513623
CTC1	0.271790024	0.305725514
CREB1	0.303374547	0.306719613
SSH2	0.307182373	0.285220039
MAP3K1	0.267234767	0.3077578
CACUL1	0.308578201	0.294135498
FGD6	0.308960505	0.236207583
OSTM1	0.29658056	0.311399251
NABP1	0.310719368	0.312596991
SLC43A2	0.280641011	0.312937726
TUBA1C	0.291269259	0.313798513
GNA13	0.315310025	0.261456232
SPAG4	0.316600746	0.312743412
PARP8	0.284753406	0.317782005
SYT11	0.320922325	0.32197549
GON4L	0.320922596	0.321975568
RAB34	0.283690332	0.322605087
ARL4A	0.323018	0.312977801
LEPROTL1	0.325857506	0.279288314
YWHAH	0.326257762	0.31678903
HIVEP3	0.293661045	0.328636235
CHMP4A	0.257146526	0.329633863
ARPC5	0.32536411	0.33003866

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ANXA11	0.330605932	0.201074502
OGFRL1	0.334888571	0.30733855
KLHL5	0.335375097	0.285531484
IGF1R	0.340467509	0.328250579
COL4A2	0.342154233	0.259035993
PAK1	0.342711696	0.326455729
JUN	0.346821453	0.294065815
MTMR11	0.347161352	0.285825824
LINC00857	0.347869495	0.229366543
PDCD4	0.266200027	0.352438561
ANKRD53	0.313974487	0.3549392
FHL3	0.343154803	0.355441214
CD63	0.316787405	0.35658012
F2R	0.356939871	0.352328927
MAP3K8	0.357692867	0.273579837
SERPINB9	0.319539442	0.359817902
PRDM2	0.280549516	0.359942734
PRKCH	0.361029683	0.277438536
IFFO2	0.361269267	0.345816233
ZNF160	0.359936416	0.36378827
ZNF397	0.314890278	0.36584279
TCP11L2	0.28389699	0.366840954
ACER2	0.367829349	0.305360022
U73166.2	0.368162641	0.329797112
GPRIN3	0.350765868	0.36842184
SERAC1	0.368499562	0.295069717
RNF145	0.365827554	0.369032385
SH3RF3	0.287075499	0.369541857
CTD-2201E18	0.369954646	0.335611943
SMURF2	0.309739652	0.372569024
CD47	0.373919004	0.363151165
MKL1	0.375310467	0.291027877
MAPRE1	0.350819218	0.375570159
BCL2	0.362056703	0.377629521
ARHGEF2	0.280298502	0.378478042
TSPYL1	0.37911655	0.275706593
RALGDS	0.315885323	0.380451608
USP37	0.381606158	0.340598244
GNA12	0.383406533	0.290219814
RUNX2	0.292060239	0.384022378
IQGAP1	0.384183601	0.376788815
CDC42EP3	0.384923345	0.37741779
CCNG2	0.346783007	0.385429552
PAFAH1B2	0.385863482	0.355677091
DUSP5	0.37846408	0.386244743
RNF24	0.387484918	0.297827827
PLA2G4C	0.388682405	0.372187926
ITGA6	0.284133756	0.389748497
SLC12A2	0.391208096	0.363408594

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GYPC	0.305133073	0.391662919
IL2RA	0.395355832	0.328750423
SLC25A12	0.395805336	0.237863791
ZNF304	0.32302879	0.396134187
RAP2B	0.374009129	0.397251669
FAM129B	0.365404021	0.397450652
CAPN2	0.384268563	0.39788697
AAGAB	0.394117875	0.402878196
KIAA1462	0.403469816	0.390227568
SNN	0.292662109	0.403837746
CTB-55O6.12	0.24814694	0.404945376
MDFIC	0.404998532	0.311795078
IGFBP7	0.378551077	0.405538443
PLCD3	0.307300814	0.405696106
NOD2	0.406365596	0.31642647
STK17A	0.392601896	0.406428221
POU6F1	0.382764162	0.407952433
CEP135	0.408054151	0.341360251
ZNF829	0.355170153	0.408118353
AEN	0.384324073	0.408432424
ZNF568	0.33969794	0.408521724
TTC16	0.409480236	0.39201105
IDS	0.375522944	0.409573421
HSPG2	0.3918783	0.41001784
ATP2B4	0.265743188	0.410072852
HELB	0.410351914	0.404359624
FAM49B	0.29091936	0.411063187
AGO2	0.283941632	0.411168589
SYNGAP1	0.286545128	0.411985442
CDC42SE2	0.412402579	0.379245204
LY6G5C	0.387559452	0.412565647
SP110	0.351812513	0.412938598
REL	0.413520475	0.272690619
FAM228B	0.413555441	0.395111656
LUZP1	0.413661188	0.324162097
CD58	0.374650165	0.414597379
TULP3	0.415365485	0.391756036
JAG1	0.41536706	0.274330693
ZNF292	0.416049087	0.302302737
CTTNBP2NL	0.41729261	0.307937381
CCNJ	0.367356823	0.417658253
CCDC28B	0.340358001	0.419728287
ZNF512	0.344947578	0.419986574
BBS7	0.381288072	0.420247506
HSPA12A	0.421194905	0.354604288
PRICKLE2	0.422388397	0.269549905
RAVER2	0.424645489	0.396429822
GRIN2D	0.377262404	0.424833663
EGLN3	0.35420715	0.427324125

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ZNF614	0.427340743	0.326688866
TIMP2	0.427906953	0.397655497
MXD1	0.429069833	0.330334463
PKDCC	0.361797758	0.429725187
SFMBT2	0.344571478	0.430611159
PLP2	0.431162838	0.371546349
DYRK2	0.349399676	0.431402838
LOXL3	0.337308185	0.432114718
DOK1	0.337308268	0.432115407
TMSB10	0.346487281	0.43295041
EVA1C	0.434009637	0.416985201
SYNJ2	0.434044595	0.377296784
DNAJC10	0.41325387	0.434496382
FZD3	0.434630771	0.367603665
KIRREL	0.435168201	0.41940162
RPS6KA3	0.435884155	0.292247852
ZNF347	0.436104478	0.433054579
HSPBAP1	0.440346368	0.264763076
TP53I3	0.431680359	0.440633861
ANKRD44	0.354216724	0.44114336
STK4	0.305577418	0.441628945
PHACTR2	0.441863107	0.30109068
RP1-111C20.	0.298700267	0.442328546
HMGN4	0.39458524	0.443126008
ZNF548	0.292036365	0.443258443
ETS1	0.385071751	0.443436847
PDE7A	0.444196662	0.421571495
C1QTNF1	0.44015928	0.444534134
NF1	0.444607921	0.343258878
PMP22	0.445985181	0.402815098
TAGLN2	0.410631525	0.446667451
ANTXR1	0.371010854	0.44800178
NXPE3	0.448138565	0.27467834
UBASH3B	0.359455849	0.449668577
SLC41A1	0.449690934	0.420957543
TMEM217	0.449698291	0.314139174
PPP1R12B	0.451087346	0.260029154
PAG1	0.311640182	0.451441437
LINC00092	0.33776175	0.452488826
ANKRD36C	0.421146928	0.453125283
SLC6A9	0.388165111	0.453161691
QSOX1	0.429716669	0.454438777
HMGCR	0.454635837	0.338687245
PAPOLG	0.454943589	0.427355618
MPP3	0.455015369	0.427755128
AMIGO2	0.375510933	0.455745048
PDE4B	0.456352712	0.335356282
TMEM185B	0.400942851	0.456635366
ALOX5	0.314869941	0.456796535

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PRKX	0.456867885	0.455140328
C10orf128	0.38293117	0.457544844
DDHD1	0.457947775	0.378342924
RFX5	0.352845674	0.458281015
PAM	0.458964423	0.412575192
ARMC2	0.459694287	0.255232991
EMP3	0.30966654	0.46017564
PRTFDC1	0.430369821	0.460880726
NFKBIE	0.259102829	0.461440415
KIAA0556	0.340739907	0.462440782
WIPF1	0.34676681	0.463047473
UBE2Q2	0.463428871	0.440399557
DNM3	0.467082408	0.422656904
PACS1	0.374660341	0.467571481
STARD3NL	0.468386762	0.421478563
ABR	0.311538208	0.469761066
MAFK	0.471025329	0.401034756
EML2	0.455654106	0.472472699
HECA	0.329154364	0.477860286
FHOD1	0.409563151	0.478254394
ZNF611	0.394147266	0.479161963
FAM188B	0.479380553	0.359578773
FKBP10	0.458698707	0.479916874
CEP85L	0.48009881	0.3076561
CAV2	0.480104376	0.282719802
PRDM1	0.46971767	0.48160546
TMEM184B	0.481630466	0.478697692
IER5	0.373800487	0.482383647
GPRASP1	0.388498378	0.482426021
ANK1	0.333210293	0.482820413
GAS8	0.434694814	0.48323083
HIST1H4H	0.416846494	0.484887456
PIP4K2A	0.40369193	0.484900626
FAM57A	0.42520587	0.484943301
ARF3	0.40778092	0.4854765
STXBP1	0.487709912	0.460779663
SYTL3	0.239362443	0.488129786
SCLT1	0.489331285	0.426597413
TPM2	0.490370619	0.488065297
ARRDC4	0.349732724	0.490549623
RUNX1	0.491034796	0.396241437
LHFPL2	0.49123161	0.346824537
CUEDC1	0.491619923	0.333361438
SEL1L3	0.413177057	0.491640707
ZC3HAV1L	0.386688012	0.492259925
DACT1	0.493396734	0.452295073
ANK3	0.378458505	0.495036288
BIRC3	0.483974999	0.495183938
APH1B	0.49565719	0.467480552

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PDE4D	0.496521199	0.36657125
CMTM7	0.338289337	0.496557216
TYROBP	0.303109642	0.496969001
GLIPR2	0.303163715	0.497178503
IKZF2	0.497523031	0.271862667
CACNB3	0.444635237	0.498693092
ARHGAP27	0.302433991	0.499743407
MMP25	0.363762336	0.500073192
ABCC4	0.500754987	0.374485403
PPP1R2	0.30381138	0.501012439
PHLDB1	0.397872735	0.501248605
MEF2C	0.502942455	0.358971574
CEP97	0.503328626	0.4070238
ITPKB	0.333122048	0.504518486
METRNL	0.321827262	0.506598937
COL4A1	0.506930346	0.452896292
DBN1	0.463452059	0.50779986
TNFAIP8	0.416893454	0.509512265
CHST15	0.509877616	0.433531977
HID1	0.446486353	0.510274668
FBLIM1	0.510973153	0.448519174
PCSK5	0.512893662	0.401550072
ARRDC2	0.438137992	0.514273212
MFSD7	0.323025763	0.514448714
SMARCD3	0.377906081	0.514566689
MMP14	0.514579971	0.357666286
STK32C	0.298177767	0.514822836
BARD1	0.515778395	0.49116312
ARHGEF19	0.347176259	0.515974944
RP11-344B5.	0.476886812	0.516007704
GATA2	0.407348652	0.516425777
FAM102B	0.510185364	0.51646631
PHF20	0.359671859	0.517148783
FOS	0.517234824	0.498433236
PLAGL1	0.36332848	0.51831473
ADAMTS10	0.518913035	0.459491976
VCL	0.519639895	0.309331897
NFKB2	0.376319496	0.520614223
ZNF267	0.522100613	0.403892853
ZNF737	0.522322047	0.509692248
ARHGDIB	0.42518457	0.522457564
ZNF85	0.497666166	0.522663364
GEM	0.493699669	0.522751691
SH3YL1	0.524620877	0.396174751
TP53BP1	0.417989943	0.525821354
CHST3	0.525971357	0.398703752
MEF2C-AS1	0.52831047	0.435842477
BTN2A3P	0.456185576	0.528912072
RP11-10K16.	0.47912049	0.529424477

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GALNT7	0.479120496	0.529427407
PPP1R15A	0.514389737	0.529603346
CASP1	0.530043107	0.38226252
FAM131A	0.530523529	0.470298667
CDKN2A	0.53121383	0.498922577
CHST11	0.350138133	0.531216338
NEURL3	0.532005762	0.405252886
SPINT2	0.408651085	0.532163047
RIN1	0.501040364	0.532660833
ANKDD1B	0.533389258	0.362108813
CDKN1A	0.535850244	0.370355654
PAQR8	0.42941828	0.535908149
RASGRP3	0.53609675	0.426859625
PDE3A	0.53625641	0.412633357
PDE5A	0.537329583	0.459864608
DNAJB6	0.431645686	0.537396201
GIPR	0.535012512	0.539011536
NKRF	0.539077522	0.488154126
TNFRSF12A	0.540172975	0.475554852
B3GNT7	0.404921375	0.543105597
SLC1A5	0.417498642	0.543489452
NOTCH3	0.543693344	0.387966504
HCG11	0.357110286	0.545716937
AC092835.2	0.362936754	0.545870322
HDAC7	0.464499603	0.546081129
ARL4C	0.385958776	0.547515878
RPS6KA1	0.244894897	0.547838208
SLC26A2	0.477197812	0.547998395
E2F3	0.549127291	0.409319498
C10orf54	0.270966738	0.552166164
NFKBID	0.35908523	0.552198181
HCST	0.359085353	0.552198201
ENDOD1	0.552480245	0.552217026
IMPDH1	0.409027171	0.55270406
ANXA2R	0.553410786	0.523316385
AC025171.1	0.553410789	0.523316435
PEA15	0.555507539	0.546543456
TRABD2A	0.340771033	0.556057905
FLVCR1	0.5560836	0.337673047
TUBB6	0.556252434	0.491547156
CHORDC1	0.556449598	0.541511635
CAV1	0.557498756	0.30249684
SLC35F2	0.558606474	0.51792416
TNFSF8	0.512930163	0.55941066
PDP1	0.392131742	0.559931073
NRSN2	0.560690894	0.560408616
FAM167A	0.456280796	0.562433878
FMNL3	0.36738023	0.56260499
PHF19	0.307881952	0.562636115

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Supplemental material

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AP3M2	0.312142642	0.562985459
MTHFD1L	0.563113995	0.388935503
ITPR3	0.347230059	0.563192021
SYK	0.563372447	0.54784322
ISG20	0.450280119	0.566118365
TRIM31	0.515903581	0.567107576
RARG	0.381317291	0.56736657
TMEM51	0.567479855	0.423530116
RP11-712B9.	0.512347276	0.567727404
PCBP3	0.458314433	0.568121124
ARHGAP31	0.562569988	0.568878284
INPP4B	0.501956565	0.569897846
PRICKLE1	0.570264607	0.568914698
SWAP70	0.571210056	0.547021419
TMEM173	0.313752238	0.571944503
ALOX5AP	0.476686609	0.574000251
WNT4	0.446798283	0.57537098
C5orf30	0.575917812	0.507481097
MARCH3	0.576055231	0.450017656
PWWP2B	0.302477509	0.576423161
PTPRH	0.576704696	0.532198117
TMEM51-AS1	0.576892658	0.421529415
HNRNPA1L2	0.566836198	0.579293926
DBNDD1	0.551593248	0.579503918
ADAM9	0.580951303	0.276442036
AP1S3	0.581252425	0.489957904
GSTM5	0.535085686	0.58281795
GSN	0.583038296	0.349205276
PLAU	0.369327975	0.584164174
RAB8B	0.584385099	0.435094975
ZNF486	0.513653742	0.584671173
CHD3	0.349743855	0.584893401
RP11-848P1.	0.579554881	0.585260645
ZNF853	0.407358804	0.586522537
DLG3	0.528967315	0.586854813
FGFR1	0.587809055	0.510332868
STX11	0.589569559	0.557751235
ZSWIM4	0.589734431	0.562869664
CD83	0.434278257	0.59034087
P2RX1	0.39595553	0.592074792
SYCP2	0.507744487	0.593534714
PHLDA3	0.593619128	0.481793213
SLC25A24	0.595278352	0.450309161
FAR1	0.379336753	0.595745636
ITGA3	0.596532834	0.575199784
IL34	0.526819781	0.596731065
PPDPF	0.373178284	0.596880138
COL16A1	0.539115511	0.598463585
FUT4	0.525829321	0.598517053

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ZDHHC1	0.599395955	0.491279916
TPM4	0.420217884	0.599852113
MCAM	0.600988239	0.507317604
STAT4	0.601068057	0.568990497
FBLN5	0.412151937	0.601102592
HMGA1	0.446509098	0.601223769
ZSCAN9	0.60170843	0.450160344
LOXL1	0.392251889	0.60176019
ENAH	0.602824516	0.370603715
IFI27L2	0.58017434	0.602933474
KIF3C	0.544753065	0.604347027
EIF5A2	0.583215851	0.604884516
F3	0.6056885	0.491853766
CD96	0.566130891	0.606237104
TRNP1	0.60679965	0.396134101
ITM2C	0.474441429	0.608117542
CLSTN1	0.526125776	0.609830867
MTHFD2	0.491592573	0.610179805
LINC00271	0.611760602	0.365382416
AHI1	0.61176064	0.365382539
PTGER4	0.378194404	0.612572855
SRGN	0.612651009	0.565882212
PARP6	0.409681335	0.612664171
C1orf116	0.612768101	0.482580222
CYS1	0.614048741	0.587103886
ZNF816	0.490121369	0.615091517
ATP9A	0.615486653	0.311866672
CYTIP	0.530097039	0.615903841
C1orf145	0.425811014	0.616010027
COL12A1	0.617872719	0.554285849
SESN3	0.411890139	0.619608405
ALDH1A3	0.620365164	0.548935512
PDLIM4	0.620418181	0.520717767
ABCC1	0.602252697	0.621409834
ARSJ	0.621802897	0.38518403
RELB	0.401047262	0.62198863
MYOF	0.62355697	0.479672522
GSTP1	0.565258276	0.624030881
RHOQ	0.62453525	0.506191347
LRP8	0.442363469	0.624793464
DAGLA	0.598291345	0.624924429
LTBP4	0.355422168	0.624952145
BATF3	0.625352233	0.609677722
TEAD4	0.62582399	0.435645967
TP53I11	0.592368952	0.626140933
COL1A2	0.478290766	0.626283835
RIMKLB	0.627178251	0.459354882
RIPK3	0.490965292	0.627724498
MYO5A	0.409209879	0.62779222

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PYGO1	0.452025227	0.628402572
ROBO1	0.628490964	0.55898068
ZNF529	0.557124579	0.628588981
RAB11FIP5	0.629195582	0.366165132
RECK	0.629476899	0.43788935
BEX4	0.591085104	0.630052112
SFXN3	0.587975754	0.630408542
PIWIL4	0.631344199	0.538626102
SPECC1	0.479480724	0.634446756
PAQR5	0.634673137	0.531130076
PLEKHG4	0.383659055	0.634953015
PRR7	0.479013296	0.634968605
NMNAT2	0.635881775	0.635615522
ISYNA1	0.439517876	0.6369664
VIM-AS1	0.511396095	0.637303626
LINC00982	0.607172943	0.63741163
GBGT1	0.41594828	0.638345649
ZNF667-AS1	0.528779455	0.638381935
ZNF667	0.528779164	0.638382088
RAB11FIP1	0.385998578	0.638469335
ODF2L	0.638581945	0.608583863
NCK2	0.518033314	0.638670339
DZIP1L	0.639337214	0.600650837
SLC38A1	0.588848903	0.63944904
AKR1B1	0.569292965	0.640323958
SCRN1	0.641715083	0.569662547
HENMT1	0.413490647	0.642825889
SLC45A4	0.48788347	0.64300174
VIM	0.505487077	0.644339332
ZNF506	0.644617345	0.610131543
SLC4A8	0.420422182	0.6446396
OSBPL7	0.455450531	0.644856718
MLLT3	0.599369123	0.645692864
AC144831.1	0.589795389	0.647426211
RP11-353N14	0.53817712	0.648323935
TMEM243	0.494265279	0.649205916
PLD4	0.502701344	0.649919532
SLC7A6	0.415123721	0.651101267
FRAS1	0.651770989	0.538172221
XYLT1	0.427888943	0.651792969
CHIT1	0.390419541	0.651995798
DNAJC6	0.653386652	0.566178783
BICD1	0.653645784	0.566036138
CYR61	0.65428371	0.475106685
ZNF426	0.654417115	0.436738757
OBSCN	0.403118771	0.655132817
CLCF1	0.655495699	0.62940671
S100A11	0.657029663	0.602158539
SLC6A6	0.440546891	0.657709451

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CARD16	0.659081736	0.583869113
C7orf31	0.406849569	0.660036834
LCA5	0.660079501	0.43118261
ZFP82	0.625990458	0.660677336
LXN	0.661118683	0.483500037
KIAA0226L	0.508741315	0.661907654
LBH	0.344988323	0.661916514
CD59	0.662925519	0.372558905
RP11-44N21.	0.503208663	0.663164549
BCL11A	0.569817577	0.663195155
ATP6V1E2	0.663221309	0.524883363
SOD3	0.584113812	0.663305316
ABCA7	0.273735575	0.664557175
VANGL2	0.664977753	0.631817024
MAP2	0.665740249	0.441906702
TUBA1A	0.537600306	0.666033171
FLRT2	0.666327567	0.550876944
IFT57	0.666688379	0.535326684
AC006129.2	0.405755167	0.667070756
RP11-1149O2	0.53127556	0.669059338
NFATC4	0.563652334	0.669185203
ADRA2A	0.668960964	0.670133927
KIAA1549	0.670777877	0.384693703
RAP1GAP2	0.670590107	0.672009108
PKM	0.645631999	0.674460735
HLA-L	0.532802191	0.676069925
CD44	0.414713869	0.677186835
ORAI2	0.406714184	0.678430999
STK39	0.555015527	0.679326707
PTP4A3	0.336537952	0.679821803
RASSF3	0.674825272	0.681187081
IGF2BP2	0.615170482	0.685164517
TRIM59	0.494951122	0.687183853
ARMCX1	0.67367224	0.692607097
PDGFA	0.692748857	0.64020435
MAML2	0.692868133	0.614441612
HOMER1	0.645885319	0.694713666
SLC25A36	0.618226778	0.695150081
MEX3B	0.488256445	0.695256891
KCNAB2	0.280171352	0.695712015
RP11-4O1.2	0.696998822	0.64007133
ZNF14	0.509113578	0.697003092
CSGALNACT	0.697211201	0.53962567
ZNF43	0.697660428	0.660418506
FAM60A	0.69798662	0.576873459
ZDHHC13	0.592845673	0.701343126
ROR2	0.479533781	0.701468525
LRRC8B	0.702189748	0.435268295
SNPH	0.658618236	0.703076302

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LAPTM5	0.355692684	0.703162712
PIK3IP1	0.458725852	0.703678931
SIK1	0.575175777	0.704032935
PDE4A	0.502387205	0.707425463
SLC6A8	0.492512832	0.709858623
LETM2	0.70993884	0.518588338
NLRP1	0.33686951	0.712029867
SLFN11	0.571798012	0.71204882
CDC7	0.713855959	0.465142137
AFAP1	0.636247917	0.71489051
ZC2HC1A	0.629179178	0.716519229
FMNL1	0.324273897	0.717821922
OSBPL3	0.546605845	0.718724882
SLC7A7	0.719253637	0.656425014
NFE2L3	0.574755836	0.719681886
TNFRSF21	0.719694702	0.546953084
CHST10	0.719728816	0.612378244
SELM	0.56812723	0.719758395
RP11-325F22	0.504605968	0.720904511
MST1R	0.471818744	0.720963103
STX3	0.721029849	0.48367941
MFSD6	0.522895394	0.72111097
MIR24-2	0.539064298	0.721400786
TNFRSF10A	0.504172594	0.721506148
GABBR1	0.650014502	0.721575598
S100A4	0.368205207	0.72160432
TMED3	0.672216204	0.722522567
LMTK3	0.535816763	0.724229814
CNN2	0.352231279	0.724444832
NFATC1	0.530487375	0.724553046
SGCA	0.72589799	0.719817199
HTR7	0.475920305	0.727896868
ZNF462	0.730060555	0.448876496
EPB41L4A	0.730407794	0.578174473
TC2N	0.566990497	0.730476923
STK17B	0.457297522	0.731689385
FAM43A	0.38031763	0.7321046
ZNF682	0.732581884	0.552419208
CDR2L	0.732599979	0.521053825
ANXA1	0.732640229	0.578697593
DBNDD2	0.733101326	0.733446323
MCTP2	0.734541442	0.717216957
CACNB1	0.471286319	0.739314503
TRPC1	0.741884183	0.596541628
NCR3LG1	0.742760607	0.604957529
GDPD1	0.746106966	0.520454335
ZNF551	0.551751402	0.747659986
EFEMP1	0.683044106	0.748331595
WDR54	0.457499479	0.748564522

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BTG2	0.6140358	0.748932299
GPR160	0.699344485	0.755159106
PCYOX1L	0.493903559	0.755826569
ENO2	0.560165372	0.757274638
PTPN13	0.731357558	0.757326872
MAPK10	0.73135737	0.757328391
SRGAP1	0.758608897	0.604731801
RP11-196G18	0.655489782	0.758919177
METTL24	0.760346167	0.717229338
LOXL1-AS1	0.47086974	0.76116581
ZNF135	0.612341726	0.76129642
AC006273.5	0.761592411	0.735830544
SLC7A1	0.763431281	0.686349262
KCNN4	0.395429344	0.763767929
NRARP	0.614133349	0.764442552
LRRC7	0.764575923	0.654624368
S100A6	0.714107626	0.765573208
DUSP4	0.767199069	0.565289109
TES	0.646417788	0.76721734
RASSF2	0.425200189	0.767442211
PFKP	0.768633429	0.394878914
IL32	0.420361459	0.770590699
C11orf63	0.766416415	0.770703934
PLEKHN1	0.770906645	0.752773168
SERTAD4	0.613864741	0.77235122
SPHK1	0.773529454	0.596747352
ZNF93	0.741363503	0.77732631
DOCK8	0.71316828	0.779981583
DNAJA4	0.416739648	0.78066734
GUCY1A3	0.781015227	0.439094629
FAT1	0.781612057	0.413205722
SEZ6L2	0.783008462	0.520468142
ENPP2	0.669858036	0.783270475
HAGHL	0.328326461	0.783645084
ZNF430	0.62275886	0.786366379
KIF5C	0.569014994	0.786950832
PMAIP1	0.788059081	0.769719603
MIR155HG	0.638337376	0.789006148
SLC44A3	0.789968912	0.355792823
OSM	0.457170621	0.790183323
GLIS2	0.585536632	0.790811995
HS3ST1	0.791348044	0.56934978
MB21D2	0.791620807	0.612794891
PAPLN	0.609780895	0.791866577
ZNF83	0.749871293	0.795918019
ZNF525	0.650878704	0.797975343
JAK3	0.427699277	0.799078128
CD24P4	0.799895556	0.793790186
GLS	0.768838958	0.801281969

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CDS1	0.804153551	0.63792143
PDZK1IP1	0.804195646	0.590929172
SGPP2	0.806420656	0.748435724
EMILIN2	0.565521219	0.809275777
ZNF738	0.714205807	0.810129303
ZNF827	0.61687125	0.81182985
KIAA1324L	0.640722181	0.81313444
CRIM1	0.813517637	0.572747295
ARHGAP22	0.81355971	0.532179415
LGALS3	0.815548829	0.804608385
SLFN12	0.585871572	0.817637252
AC009495.4	0.820258391	0.627158372
GALNT3	0.820258899	0.627159731
LAYN	0.825700128	0.56557893
CDH11	0.789476967	0.827060526
NBEA	0.828162605	0.557642957
SUSD1	0.828645713	0.638203084
IFI16	0.829001214	0.570937517
MICAL1	0.408091123	0.832290004
PRDM8	0.414706901	0.833179856
EPHA4	0.840700397	0.515347282
IL20RA	0.84074687	0.630800091
MCOLN3	0.847995989	0.823109831
MOXD1	0.618190369	0.855717574
ZNF610	0.855800767	0.76624814
C2CD4A	0.858076993	0.613315645
PTPN14	0.85928039	0.542402552
CLDN4	0.863854077	0.707327231
ZNF320	0.699400505	0.864345226
SULT1C4	0.866619701	0.558533594
C1orf198	0.86838867	0.757718806
RP11-255H23	0.783483461	0.871348213
RP11-54O7.1	0.660607031	0.874922543
HES4	0.660606977	0.874922567
ZNF439	0.775400301	0.877639273
OXCT1	0.690523756	0.880938235
HLA-V	0.659680379	0.881358994
HCG4	0.659681135	0.881359099
NACAD	0.885404059	0.789489556
KLHL29	0.886880975	0.78426889
GRAMD1B	0.88789388	0.878245233
BHLHE41	0.893801594	0.820460439
CXCL1	0.893977743	0.496767088
ETV4	0.895057992	0.771479384
LOXL4	0.83770117	0.896403241
SPINT1	0.901905301	0.813207289
TUBB3	0.779011781	0.90258575
SLFN13	0.716471682	0.904740565
TESC	0.911545657	0.715589596

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Supplemental material

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Gut

Table S3

SSPN	0.913338286	0.80776856
HKDC1	0.802670981	0.91553292
GPRC5B	0.915824356	0.719255441
B3GALT5	0.822985522	0.922413417
LEF1	0.645811568	0.927960289
CCND2	0.51570471	0.932971738
BACE2	0.938732448	0.934214528
LAMA2	0.945124921	0.704265369
ZNF781	0.895821399	0.947398013
WFDC2	0.951171421	0.842557026
LPAR2	0.749840228	0.952564523
ITGA2	0.954180973	0.728965144
COL4A4	0.716633371	0.960954747
COL4A3	0.716633311	0.960955383
TAF4B	0.601467961	0.961993568
ITGAM	0.968179497	0.818790204
ASNS	0.808192233	0.9686812
SOX4	0.970143129	0.643366548
ZNF607	0.968012074	0.971053252
HSPA4L	0.97111408	0.703913228
PRSS22	0.973147344	0.785889909
KRT80	0.975656829	0.776899478
ANXA3	0.982886526	0.654180672
DCDC2	0.983448991	0.845566771
ZNF665	0.988269337	0.988497735
C1orf106	0.989172252	0.922847025
ZNF888	0.902022049	0.992049305
BDKRB2	1.002198914	0.754592751
ZNF66	0.786372916	1.006124139
AC098614.2	0.73989189	1.0094951
ANKRD18A	1.010704235	0.791441548
FAM201A	1.010704236	0.791441029
KLF5	1.019392782	0.618661708
ITGB8	1.020499958	0.950670586
ST8SIA1	0.528063147	1.022562452
ADAMTS9-AS	1.038019788	0.676904114
ADAMTS9	1.038019805	0.676904237
ZNF793	1.036346123	1.04053639
C3orf52	1.056461919	0.74854065
CXCR4	0.69277409	1.056946558
TGFB2	1.072455418	0.668162167
YBX3	1.07488767	0.602134294
CXCL6	1.076024925	0.821228508
F2RL1	1.078222981	0.628091109
GULP1	1.083348983	0.871062949
ZNF382	0.915147688	1.089436784
EVC	0.70441736	1.090294651
TNFRSF11B	1.092919974	0.804327087
PDX1	1.038066861	1.102100707

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Table S3

Gene	Value 1	Value 2
MDFI	0.99970847	1.10729961
NPNT	1.110846966	0.906999492
PMEPA1	1.118648747	0.985973345
FAM150B	1.129388839	0.933550042
WNT10A	0.540257361	1.132005477
TTC9	0.913266615	1.132654105
TMEM55A	1.137570012	1.020245422
EVC2	0.799160515	1.139165169
HSPB8	1.025749728	1.15133921
ZNF431	1.052420036	1.161452699
B3GNT3	1.165471157	1.134595624
GABRE	1.165947655	0.831243871
CTD-2008P7.	1.167133326	0.994370144
TBC1D30	1.188216141	0.751231151
GABRB3	1.082992753	1.197477394
RASEF	1.227243277	1.072807054
VCAN	1.229051871	0.768855041
LRRC1	1.161178434	1.239454453
KRT7	1.292728533	1.012872642
ZNF714	0.995374963	1.303713055
CLIC6	1.327757594	1.073494196
DUSP8	1.116378379	1.335635054
CDH6	1.381288476	1.127881105
EPCAM	1.393948787	1.362415936
SNAP25	1.47530976	1.063873301
ID4	1.246928763	1.520771853
SOX9	1.556321384	1.610091505
DTNA	1.746428474	1.814806457