

Supplementary Table. Gene set enrichment analysis (GSEA) results for A-196 and TMP-269 treatment o

Pathway	Pval	Padj	NES
HALLMARK_OXIDATIVE_PHOSPHORYLATION	1.77E-08	8.84E-07	-2.051835843
HALLMARK_MTORC1_SIGNALING	5.27E-05	0.001236765	-1.721043426
HALLMARK_XENOBIOTIC_METABOLISM	7.87E-05	0.001236765	-1.758804877
HALLMARK_TNFA_SIGNALING_VIA_NFKB	9.89E-05	0.001236765	-1.698156688
HALLMARK_MYC_TARGETS_V1	0.000135032	0.001350319	-1.660524808
HALLMARK_HYPOXIA	0.000240542	0.002004519	-1.630054933
HALLMARK_CHOLESTEROL_HOMEOSTASIS	0.001976622	0.014118727	-1.706602966
HALLMARK_UNFOLDED_PROTEIN_RESPONSE	0.008753507	0.051859071	-1.475798533
HALLMARK_EPITHELIAL_MESENCHYMAL_TRANSITION	0.009334633	0.051859071	-1.424085859
HALLMARK_ADIPOGENESIS	0.020390031	0.101950154	-1.358534683
HALLMARK_REACTIVE_OXYGEN_SPECIES_PATHWAY	0.022720115	0.103273249	-1.539731242
HALLMARK_E2F_TARGETS	0.027271166	0.113629859	-1.320694277
HALLMARK_MITOTIC_SPINDLE	0.034167078	0.13141184	1.279251948
HALLMARK_COAGULATION	0.044091711	0.150723473	-1.37011892
HALLMARK_ALLOGRAFT_REJECTION	0.046551724	0.150723473	-1.373481886
HALLMARK_DNA_REPAIR	0.048231511	0.150723473	-1.271275402
HALLMARK_GLYCOLYSIS	0.0592	0.174117647	-1.257683803
HALLMARK_IL2_STAT5_SIGNALING	0.113402062	0.315005727	1.185581662
HALLMARK_WNT_BETA_CATENIN_SIGNALING	0.13099631	0.344727131	-1.282532974
HALLMARK_APOPTOSIS	0.146529563	0.366323907	1.150521491
HALLMARK_FATTY_ACID_METABOLISM	0.165048544	0.392972723	-1.154882393
HALLMARK_IL6_JAK_STAT3_SIGNALING	0.182432432	0.407166124	1.182665976
HALLMARK_MYOGENESIS	0.187296417	0.407166124	-1.122416833
HALLMARK_PI3K_AKT_MTOR_SIGNALING	0.220689655	0.459770115	-1.142343585
HALLMARK_PANCREAS_BETA_CELLS	0.244444444	0.488888889	-1.193943773
HALLMARK_UV_RESPONSE_UP	0.298701299	0.572737686	-1.074754838
HALLMARK_APICAL_JUNCTION	0.309278351	0.572737686	1.061151703
HALLMARK_HEDGEHOG_SIGNALING	0.382687927	0.683371298	1.053624081
HALLMARK_UV_RESPONSE_DN	0.41038961	0.707568294	1.020546359
HALLMARK_KRAS_SIGNALING_UP	0.433497537	0.722495895	-1.011868959
HALLMARK_NOTCH_SIGNALING	0.483065954	0.723515951	-0.976391777
HALLMARK_PEROXISOME	0.491916859	0.723515951	0.973650906
HALLMARK_BILE_ACID_METABOLISM	0.495260664	0.723515951	0.982488809
HALLMARK_MYC_TARGETS_V2	0.513574661	0.723515951	0.962390292
HALLMARK_HEME_METABOLISM	0.515650741	0.723515951	-0.975993891
HALLMARK_G2M_CHECKPOINT	0.526315789	0.723515951	0.968241476
HALLMARK_APICAL_SURFACE	0.538188277	0.723515951	-0.941909346
HALLMARK_INFLAMMATORY_RESPONSE	0.549872123	0.723515951	0.966229161
HALLMARK_TGF_BETA_SIGNALING	0.58781362	0.747826087	-0.917268984
HALLMARK_INTERFERON_ALPHA_RESPONSE	0.59826087	0.747826087	-0.925629467
HALLMARK_PROTEIN_SECRETION	0.671256454	0.789720601	-0.893389506
HALLMARK_ANGIOGENESIS	0.676895307	0.789720601	-0.855150389
HALLMARK_P53_PATHWAY	0.686900958	0.789720601	-0.914121077
HALLMARK_SPERMATOGENESIS	0.694954128	0.789720601	0.881784572
HALLMARK_ESTROGEN_RESPONSE_EARLY	0.760526316	0.841127899	0.889908305
HALLMARK_ANDROGEN_RESPONSE	0.784482759	0.841127899	-0.846354841
HALLMARK_INTERFERON_GAMMA_RESPONSE	0.790660225	0.841127899	-0.868843992

HALLMARK_ESTROGEN_RESPONSE_LATE	0.835236542	0.870038064	-0.847873775
HALLMARK_KRAS_SIGNALING_DN	0.884433962	0.902483635	0.777993237
HALLMARK_COMPLEMENT	0.936378467	0.936378467	-0.798139448
HALLMARK_EPITHELIAL_MESENCHYMAL_TRANSITION	5.85E-05	0.001749023	-1.716449652
HALLMARK_PROTEIN_SECRETION	7.00E-05	0.001749023	1.857055222
HALLMARK_XENOBIOTIC_METABOLISM	0.000169261	0.002821012	-1.762508299
HALLMARK_APICAL_JUNCTION	0.009740092	0.121751145	-1.501733187
HALLMARK_MYOGENESIS	0.026094309	0.243105212	-1.411513644
HALLMARK_ALLOGRAFT_REJECTION	0.03086226	0.243105212	1.445733821
HALLMARK_P53_PATHWAY	0.03403473	0.243105212	-1.328714742
HALLMARK_ADIPOGENESIS	0.047941257	0.261377614	-1.274559517
HALLMARK_COMPLEMENT	0.054924242	0.261377614	1.290124035
HALLMARK_REACTIVE_OXYGEN_SPECIES_PATHWAY	0.061672482	0.261377614	-1.453240586
HALLMARK_GLYCOLYSIS	0.062360802	0.261377614	-1.224252909
HALLMARK_E2F_TARGETS	0.062730627	0.261377614	1.255569153
HALLMARK_SPERMATOGENESIS	0.076125674	0.281481481	1.380367923
HALLMARK_UV_RESPONSE_DN	0.080827068	0.281481481	1.235622692
HALLMARK_TNFA_SIGNALING_VIA_NFKB	0.084444444	0.281481481	-1.206318848
HALLMARK_BILE_ACID_METABOLISM	0.095419847	0.28480666	1.300168779
HALLMARK_ANDROGEN_RESPONSE	0.096834264	0.28480666	1.273466782
HALLMARK_HYPOXIA	0.10940919	0.294870368	-1.16304585
HALLMARK_UNFOLDED_PROTEIN_RESPONSE	0.11205074	0.294870368	-1.2266123
HALLMARK_NOTCH_SIGNALING	0.131736527	0.329341317	-1.301828706
HALLMARK_MITOTIC_SPINDLE	0.139194139	0.331414617	1.160174516
HALLMARK_UV_RESPONSE_UP	0.219616205	0.499127738	-1.107220899
HALLMARK_G2M_CHECKPOINT	0.244080146	0.530609012	1.097315769
HALLMARK_KRAS_SIGNALING_UP	0.279850746	0.554038863	1.089055174
HALLMARK_IL6_JAK_STAT3_SIGNALING	0.283834586	0.554038863	1.108245501
HALLMARK_INFLAMMATORY_RESPONSE	0.288100209	0.554038863	-1.074083193
HALLMARK_PEROXISOME	0.319109462	0.579338098	1.078544181
HALLMARK_MYC_TARGETS_V2	0.33460076	0.579338098	1.069712116
HALLMARK_ANGIOGENESIS	0.336016097	0.579338098	-1.072570931
HALLMARK_WNT_BETA_CATENIN_SIGNALING	0.389937107	0.645773398	-1.038550708
HALLMARK_ESTROGEN_RESPONSE_EARLY	0.400379507	0.645773398	1.019206823
HALLMARK_APOPTOSIS	0.429924242	0.653198653	1.012923776
HALLMARK_MTORC1_SIGNALING	0.431111111	0.653198653	-1.01298986
HALLMARK_KRAS_SIGNALING_DN	0.464583333	0.679112554	-1.002371404
HALLMARK_ESTROGEN_RESPONSE_LATE	0.475378788	0.679112554	0.994739874
HALLMARK_APICAL_SURFACE	0.502970297	0.686498856	0.969690443
HALLMARK_PI3K_AKT_MTOR_SIGNALING	0.514124294	0.686498856	0.962957524
HALLMARK_INTERFERON_ALPHA_RESPONSE	0.52173913	0.686498856	0.95895344
HALLMARK_CHOLESTEROL_HOMEOSTASIS	0.595103578	0.757783883	0.917461296
HALLMARK_OXIDATIVE_PHOSPHORYLATION	0.606227106	0.757783883	0.937148983
HALLMARK_COAGULATION	0.638418079	0.778558633	0.905391998
HALLMARK_DNA_REPAIR	0.696842105	0.829573935	-0.914131228
HALLMARK_HEME_METABOLISM	0.75142315	0.873747849	0.881135259
HALLMARK_HEDGEHOG_SIGNALING	0.770623742	0.875708798	-0.792880307
HALLMARK_IL2_STAT5_SIGNALING	0.812030075	0.902255639	0.854888808
HALLMARK_INTERFERON_GAMMA_RESPONSE	0.87012987	0.945793337	0.827186364
HALLMARK_PANCREAS_BETA_CELLS	0.897637795	0.954933825	0.673074558

HALLMARK_TGF_BETA_SIGNALING	0.938297872	0.961720495	-0.721066458
HALLMARK_FATTY_ACID_METABOLISM	0.942486085	0.961720495	0.776592931
HALLMARK_MYC_TARGETS_V1	0.996296296	0.996296296	0.722474252
HALLMARK_MYC_TARGETS_V1	4.96E-05	0.002479172	1.711080258
HALLMARK_MTORC1_SIGNALING	0.0004629	0.011572508	1.583031055
HALLMARK_HYPOXIA	0.000814167	0.013569449	1.612390113
HALLMARK_ESTROGEN_RESPONSE_LATE	0.001214665	0.015183316	1.597342161
HALLMARK_UNFOLDED_PROTEIN_RESPONSE	0.003428645	0.028748508	1.601230997
HALLMARK_XENOBIOTIC_METABOLISM	0.003449821	0.028748508	1.533821546
HALLMARK_HEME_METABOLISM	0.004326796	0.030905687	1.494190827
HALLMARK_INTERFERON_ALPHA_RESPONSE	0.006715603	0.041972518	1.529717386
HALLMARK_WNT_BETA_CATENIN_SIGNALING	0.007599911	0.04222173	1.73513585
HALLMARK_INTERFERON_GAMMA_RESPONSE	0.013493763	0.067468815	1.419485312
HALLMARK_ANDROGEN_RESPONSE	0.019381785	0.088099021	1.419149087
HALLMARK_BILE_ACID_METABOLISM	0.023630481	0.098460336	1.442842582
HALLMARK_ADIPOGENESIS	0.034402578	0.122480269	1.288370842
HALLMARK_CHOLESTEROL_HOMEOSTASIS	0.036095865	0.122480269	1.455212998
HALLMARK_UV_RESPONSE_UP	0.036744081	0.122480269	1.327810063
HALLMARK_EPITHELIAL_MESENCHYMAL_TRANSITION	0.047202797	0.147508741	-1.316283188
HALLMARK_TNFA_SIGNALING_VIA_NFKB	0.063679245	0.184215629	1.280541946
HALLMARK_DNA_REPAIR	0.066317627	0.184215629	-1.26323655
HALLMARK_G2M_CHECKPOINT	0.076923077	0.20242915	1.268059003
HALLMARK_MYC_TARGETS_V2	0.094412331	0.236030829	-1.316112801
HALLMARK_OXIDATIVE_PHOSPHORYLATION	0.106235566	0.252941823	1.206794095
HALLMARK_FATTY_ACID_METABOLISM	0.136160714	0.296296296	1.177142441
HALLMARK_UV_RESPONSE_DN	0.144469526	0.296296296	1.182052958
HALLMARK_ALLOGRAFT_REJECTION	0.146025878	0.296296296	-1.215012586
HALLMARK_COMPLEMENT	0.148148148	0.296296296	1.178468994
HALLMARK_ESTROGEN_RESPONSE_EARLY	0.160183066	0.308044358	1.147165697
HALLMARK_TGF_BETA_SIGNALING	0.18647541	0.333778371	1.161792403
HALLMARK_PROTEIN_SECRETION	0.186915888	0.333778371	-1.158413032
HALLMARK_E2F_TARGETS	0.218527316	0.376771234	1.111634805
HALLMARK_PEROXISOME	0.233905579	0.382882883	1.128179572
HALLMARK_INFLAMMATORY_RESPONSE	0.239543726	0.382882883	-1.120805547
HALLMARK_APOPTOSIS	0.245045045	0.382882883	-1.114848361
HALLMARK_ANGIOGENESIS	0.264150943	0.396989782	1.158351183
HALLMARK_P53_PATHWAY	0.269953052	0.396989782	1.092151014
HALLMARK_APICAL_SURFACE	0.28721174	0.404503281	1.139049243
HALLMARK_NOTCH_SIGNALING	0.291242363	0.404503281	1.137237419
HALLMARK_P13K_AKT_MTOR_SIGNALING	0.303538175	0.410186723	-1.080094063
HALLMARK_REACTIVE_OXYGEN_SPECIES_PATHWAY	0.346666667	0.456140351	-1.054508103
HALLMARK_APICAL_JUNCTION	0.363793103	0.466401415	-1.032640916
HALLMARK_PANCREAS_BETA_CELLS	0.382716049	0.478395062	1.078462674
HALLMARK_COAGULATION	0.417943107	0.503336727	1.037466853
HALLMARK_IL2_STAT5_SIGNALING	0.42280285	0.503336727	1.000749509
HALLMARK_MYOGENESIS	0.564981949	0.656955755	-0.952590189
HALLMARK_KRAS_SIGNALING_UP	0.598214286	0.668369519	0.934029008
HALLMARK_KRAS_SIGNALING_DN	0.601532567	0.668369519	-0.924773964
HALLMARK_IL6_JAK_STAT3_SIGNALING	0.638297872	0.693802035	-0.904704659
HALLMARK_GLYCOLYSIS	0.754355401	0.799464398	-0.886767616

HALLMARK_SPERMATOGENESIS	0.767485822	0.799464398	-0.843450421
HALLMARK_HEDGEHOG_SIGNALING	0.800838574	0.817182219	0.771343422
HALLMARK_MITOTIC_SPINDLE	0.881849315	0.881849315	-0.828159202
HALLMARK_TNFA_SIGNALING_VIA_NFKB	3.17E-07	1.59E-05	1.986547309
HALLMARK_HYPOXIA	0.000306981	0.005132989	1.682140779
HALLMARK_OXIDATIVE_PHOSPHORYLATION	0.000307979	0.005132989	1.653419069
HALLMARK_INTERFERON_GAMMA_RESPONSE	0.000426878	0.005335973	1.671684605
HALLMARK_CHOLESTEROL_HOMEOSTASIS	0.0009522	0.009522001	1.791953565
HALLMARK_INTERFERON_ALPHA_RESPONSE	0.002749978	0.022916482	1.608672256
HALLMARK_ESTROGEN_RESPONSE_LATE	0.007485649	0.053468923	1.456466378
HALLMARK_COAGULATION	0.01166119	0.067491822	1.49100921
HALLMARK_WNT_BETA_CATENIN_SIGNALING	0.012148528	0.067491822	1.648328586
HALLMARK_MYC_TARGETS_V2	0.014204745	0.071023727	-1.475444205
HALLMARK_HEME_METABOLISM	0.031037614	0.132917585	1.33824078
HALLMARK_INFLAMMATORY_RESPONSE	0.03190022	0.132917585	1.368089708
HALLMARK_ANDROGEN_RESPONSE	0.03716748	0.142951845	1.336840331
HALLMARK_KRAS_SIGNALING_UP	0.047619048	0.170068027	1.333318611
HALLMARK_TGF_BETA_SIGNALING	0.055865922	0.176886792	1.390802473
HALLMARK_IL2_STAT5_SIGNALING	0.056603774	0.176886792	1.328101279
HALLMARK_EPITHELIAL_MESENCHYMAL_TRANSITION	0.068522484	0.200989487	-1.254588559
HALLMARK_ADIPOGENESIS	0.072356215	0.200989487	1.268295972
HALLMARK_XENOBIOTIC_METABOLISM	0.081132075	0.213505462	1.27178897
HALLMARK_E2F_TARGETS	0.097605893	0.244014733	1.214582032
HALLMARK_APICAL_SURFACE	0.111324376	0.246269738	1.328723737
HALLMARK_ESTROGEN_RESPONSE_EARLY	0.123076923	0.246269738	1.195831114
HALLMARK_UV_RESPONSE_UP	0.125475285	0.246269738	1.206045837
HALLMARK_COMPLEMENT	0.125714286	0.246269738	1.204472468
HALLMARK_MTORC1_SIGNALING	0.125925926	0.246269738	1.187763571
HALLMARK_P53_PATHWAY	0.128060264	0.246269738	1.198248933
HALLMARK_MYOGENESIS	0.143925234	0.26652821	1.182461882
HALLMARK_APOPTOSIS	0.170777989	0.304960694	1.159648783
HALLMARK_G2M_CHECKPOINT	0.194444444	0.335249042	1.119801134
HALLMARK_APICAL_JUNCTION	0.255198488	0.421164285	1.082457145
HALLMARK_REACTIVE_OXYGEN_SPECIES_PATHWAY	0.261121857	0.421164285	1.131231251
HALLMARK_BILE_ACID_METABOLISM	0.352293578	0.550458716	1.058006577
HALLMARK_UNFOLDED_PROTEIN_RESPONSE	0.366013072	0.55456526	-1.037936931
HALLMARK_UV_RESPONSE_DN	0.388888889	0.564910375	1.022462239
HALLMARK_NOTCH_SIGNALING	0.395437262	0.564910375	1.036779755
HALLMARK_MYC_TARGETS_V1	0.436329588	0.606013317	0.992932809
HALLMARK_ANGIOGENESIS	0.487551867	0.658853875	-0.987991943
HALLMARK_MITOTIC_SPINDLE	0.508506616	0.666463166	0.967271133
HALLMARK_PEROXISOME	0.524714829	0.666463166	0.972620353
HALLMARK_FATTY_ACID_METABOLISM	0.553672316	0.666463166	0.955347744
HALLMARK_ALLOGRAFT_REJECTION	0.556277056	0.666463166	-0.949877455
HALLMARK_GLYCOLYSIS	0.55982906	0.666463166	-0.957983372
HALLMARK_PANCREAS_BETA_CELLS	0.591876209	0.677157845	0.897381032
HALLMARK_DNA_REPAIR	0.601904762	0.677157845	0.936813334
HALLMARK_IL6_JAK_STAT3_SIGNALING	0.60944206	0.677157845	-0.916980532
HALLMARK_PROTEIN_SECRETION	0.670353982	0.728645633	-0.906318074
HALLMARK_HEDGEHOG_SIGNALING	0.821576763	0.874017833	-0.745738866

HALLMARK_SPERMATOGENESIS	0.841121495	0.876168224	0.798314072
HALLMARK_PI3K_AKT_MTOR_SIGNALING	0.953874539	0.966480447	0.739702963
HALLMARK_KRAS_SIGNALING_DN	0.966480447	0.966480447	0.693008548

f HUVEC and HPF cells using the Hallmark gene sets from MSigDB. Padj, FDR-adjusted p-value; NES, GSEA en

GeneCount	Comparison	LeadingEdge
182	HPF_A196_VS_HPFDMSO	NDUFA4 HCCS COX7A2L FH ETF A NDUFA8 CYB5A NDUFE
185	HPF_A196_VS_HPFDMSO	DDIT4 SEC11A SERPINH1 G6PD SLC1A5 GLA FADS2 HSPE
134	HPF_A196_VS_HPFDMSO	COMT CYB5A SLC1A5 CNDP2 SLC35B1 BCAR1 NQO1 TGF
164	HPF_A196_VS_HPFDMSO	PLAUR SOD2 CEBPD SERPINB2 PLAU IFNGR2 EDN1 TUBB
193	HPF_A196_VS_HPFDMSO	HDHC2 PSMB3 IMPDH2 SRSF1 HSPE1 MCM2 RRM1 EIF4
160	HPF_A196_VS_HPFDMSO	PLAUR STC2 IGFBP3 TGFBI DDIT4 CDKN1B LOX GBE1 GLF
64	HPF_A196_VS_HPFDMSO	PLAUR FADS2 TNFRSF12A CD9 CTNNB1 SCD ERRF1 TM7
105	HPF_A196_VS_HPFDMSO	STC2 DDIT4 SEC11A ALDH18A1 TUBB2A SLC30A5 EXOSC
182	HPF_A196_VS_HPFDMSO	PLAUR IGFBP3 TGFBI SGCB SERPINH1 ACTA2 TAGLN SPA
176	HPF_A196_VS_HPFDMSO	NDUF7 DECR1 SLC1A5 MGST3 COX8A COX7B VEGFB GI
43	HPF_A196_VS_HPFDMSO	SOD2 G6PD MSRA NQO1 GLRX PRNP JUNB CDKN2D CAT
195	HPF_A196_VS_HPFDMSO	CDKN2A ASF1B RPA2 SRSF1 MCM2 CDKN1B UBE2T RAC
197	HPF_A196_VS_HPFDMSO	KIF11 OPHN1 PCNT NIN ARHGEF11 EPB41 FBX05 DST FL
82	HPF_A196_VS_HPFDMSO	GNB2 PEF1 SERPINB2 PLAU SPARC ARF4 CD9 MAFF PRSE
88	HPF_A196_VS_HPFDMSO	CDKN2A MRPL3 EIF5A IFNGR2 IKBKB TAP2 TGFB2 IL11 T
145	HPF_A196_VS_HPFDMSO	MPG FEN1 COX17 IMPDH2 RPA2 TAF9 POLH NUDT21 TP
163	HPF_A196_VS_HPFDMSO	STC2 IGFBP3 TGFBI DDIT4 CYB5A G6PD PLOD2 B4GALT1
149	HPF_A196_VS_HPFDMSO	CTSZ SYNGR2 SPRY4 TNFRSF1B CDCP1 PLEC AHR BMPR2
36	HPF_A196_VS_HPFDMSO	NCSTN KAT2A TP53 CTNNB1 GNAI1 PPARD SKP2 AXIN1 C
138	HPF_A196_VS_HPFDMSO	HMOX1 PTK2 SAT1 ENO2 HMGB2 PPP2R5B DNMT1L SQS
128	HPF_A196_VS_HPFDMSO	HCCS FH OSTC DECR1 DHCR24 CRYZ PDHB ACO2 HMGCS
53	HPF_A196_VS_HPFDMSO	HMOX1 TNFRSF1B TGFB1 LEPR GRB2 PTPN11 STAT2 STA
136	HPF_A196_VS_HPFDMSO	STC2 IGFBP3 KIFC3 TAGLN GABARAPL2 SPARC NQO1 PRI
88	HPF_A196_VS_HPFDMSO	MKNK1 ARPC3 RAF1 CDKN1B MAP2K3 SLC2A1 MAPK8 U
15	HPF_A196_VS_HPFDMSO	SEC11A ELP4 SRP9 SPCS1 SRPRB
130	HPF_A196_VS_HPFDMSO	HYAL2 SOD2 FEN1 NFKBIA PRKCD TAP1 MGAT1 JUNB KL
149	HPF_A196_VS_HPFDMSO	ADAM23 PTK2 ADAM15 ITGA3 TJP1 CDH1 GTF2F1 CLDN
26	HPF_A196_VS_HPFDMSO	OPHN1 NRP1 NF1 ETS2 THY1 VLDLR RASA1 LDB1 TLE3 CI
137	HPF_A196_VS_HPFDMSO	HAS2 RND3 TJP1 PRKAR2B NIPBL SCN8A MGMT LAMC1
132	HPF_A196_VS_HPFDMSO	PLAUR DNMBP IGFBP3 PLAU PSMB8 GFPT2 GLRX GOS2 E
28	HPF_A196_VS_HPFDMSO	KAT2A WNT5A FZD7 APH1A DTX4 PPARD CUL1 NOTCH2
84	HPF_A196_VS_HPFDMSO	HSD17B11 HMGCL PABPC1 CADM1 CLN6 IDH2 YWHAH F
71	HPF_A196_VS_HPFDMSO	HSD17B11 NEDD4 ABCA3 ABCA2 PECR IDH2 MLYCD HSC
56	HPF_A196_VS_HPFDMSO	RRP12 PES1 SUPV3L1 GNL3 PLK4 NOP56 WDR43 SLC19A
152	HPF_A196_VS_HPFDMSO	RBM38 MGST3 MAP2K3 MPP1 SDCBP MOSPD1 SLC2A1
186	HPF_A196_VS_HPFDMSO	RBL1 SAP30 KIF11 TGFB1 FBX05 POLQ BRCA2 KATNA1 C
26	HPF_A196_VS_HPFDMSO	PLAUR B4GALT1 EPHB4 SHROOM2
112	HPF_A196_VS_HPFDMSO	HAS2 TNFRSF1B SLC4A4 AHR P2RX7 CD82 KIF1B KCNJ2 C
53	HPF_A196_VS_HPFDMSO	IFNGR2 JUNB CTNNB1 NOG RHOA WWTR1 BCAR3 ID3 KI
80	HPF_A196_VS_HPFDMSO	PSMB8 TRAFD1 GMPR HLA-C SLC25A28 TAP1 ADAR UBA
89	HPF_A196_VS_HPFDMSO	GLA OCRL CD63 MON2 ABCA1 RAB9A LMAN1 AP2B1 VA
25	HPF_A196_VS_HPFDMSO	VAV2 COL3A1 LRPAP1 KCNJ8 LUM PDGFA FSTL1 TNFRSF
166	HPF_A196_VS_HPFDMSO	STEAP3 CDKN2A DDIT4 TRAFD1 PLK3 POLH TP53 TAP1 F
70	HPF_A196_VS_HPFDMSO	HSPA4L IL13RA2 CHFR STRBP NCAPH DBF4 SPATA6 CLG
145	HPF_A196_VS_HPFDMSO	ABLIM1 ALDH3B1 RRP12 ZNF185 ABCA3 ADCY9 KRT19 N
86	HPF_A196_VS_HPFDMSO	SRP19 DHCR24 B4GALT1 VAPA SCD HMGCS1 AKT1 NCO
148	HPF_A196_VS_HPFDMSO	SOD2 NUP93 PSMB8 TRAFD1 NFKBIA SOCS3 SLC25A28 T

138 HPF_A196_VS_HPF_DMSO
73 HPF_A196_VS_HPF_DMSO
138 HPF_A196_VS_HPF_DMSO
182 HPF_TMP269_VS_HPF_DMSO
89 HPF_TMP269_VS_HPF_DMSO
134 HPF_TMP269_VS_HPF_DMSO
149 HPF_TMP269_VS_HPF_DMSO
136 HPF_TMP269_VS_HPF_DMSO
88 HPF_TMP269_VS_HPF_DMSO
166 HPF_TMP269_VS_HPF_DMSO
176 HPF_TMP269_VS_HPF_DMSO
138 HPF_TMP269_VS_HPF_DMSO
43 HPF_TMP269_VS_HPF_DMSO
163 HPF_TMP269_VS_HPF_DMSO
195 HPF_TMP269_VS_HPF_DMSO
70 HPF_TMP269_VS_HPF_DMSO
137 HPF_TMP269_VS_HPF_DMSO
164 HPF_TMP269_VS_HPF_DMSO
71 HPF_TMP269_VS_HPF_DMSO
86 HPF_TMP269_VS_HPF_DMSO
160 HPF_TMP269_VS_HPF_DMSO
105 HPF_TMP269_VS_HPF_DMSO
28 HPF_TMP269_VS_HPF_DMSO
197 HPF_TMP269_VS_HPF_DMSO
130 HPF_TMP269_VS_HPF_DMSO
186 HPF_TMP269_VS_HPF_DMSO
132 HPF_TMP269_VS_HPF_DMSO
53 HPF_TMP269_VS_HPF_DMSO
112 HPF_TMP269_VS_HPF_DMSO
84 HPF_TMP269_VS_HPF_DMSO
56 HPF_TMP269_VS_HPF_DMSO
25 HPF_TMP269_VS_HPF_DMSO
36 HPF_TMP269_VS_HPF_DMSO
145 HPF_TMP269_VS_HPF_DMSO
138 HPF_TMP269_VS_HPF_DMSO
185 HPF_TMP269_VS_HPF_DMSO
73 HPF_TMP269_VS_HPF_DMSO
138 HPF_TMP269_VS_HPF_DMSO
26 HPF_TMP269_VS_HPF_DMSO
88 HPF_TMP269_VS_HPF_DMSO
80 HPF_TMP269_VS_HPF_DMSO
64 HPF_TMP269_VS_HPF_DMSO
182 HPF_TMP269_VS_HPF_DMSO
82 HPF_TMP269_VS_HPF_DMSO
145 HPF_TMP269_VS_HPF_DMSO
152 HPF_TMP269_VS_HPF_DMSO
26 HPF_TMP269_VS_HPF_DMSO
149 HPF_TMP269_VS_HPF_DMSO
148 HPF_TMP269_VS_HPF_DMSO
15 HPF_TMP269_VS_HPF_DMSO

CHPT1 GLA NXT1 CD9 MEST PRSS23 GALE IGFBP4 UGDH
MAST3 THNSL2 DTNB SYNPO PLAG1 SHOXT2 LYPD3 MFSE
GNB2 PLAUR SERPINB2 RAF1 PRKCD HSPA1A MAFF PREI
ACTA2 TIMP3 COL5A1 COL1A1 TGFBI CRLF1 SERPINH1 LI
STX7 GNAS ATP6V1H TMED2 GOLGA4 SNX2 DST M6PR F
AKR1C3 GABARAPL1 SLC1A5 SERTAD1 NQO1 IGFBP4 NF
PIK3R3 WNK4 AKT2 ACTG2 TGFBI ACTB PCDH1 SHROOM
AKT2 COL1A1 NQO1 COL3A1 IGFBP3 ATP6AP1 SPARC TS
RPL39 HDAC9 B2M ABCE1 DYRK3 CSF1 BRCA1 GLMN RP
SLC7A11 TP53 PLK3 DDIT4 STEAP3 SP1 TRIB3 MXD4 IERE
SLC1A5 PHLDB1 ANGPTL4 TALDO1 ESYT1 SNCG CDKN2C
CASP1 GNB4 USP15 MMP15 LIPA DOCK9 BRPF3 GNB2 EI
G6PD SBNO2 NQO1 PDLIM1 GCLM NDUFS2 PRDX1 PFKP
G6PD COL5A1 TGFBI DDIT4 ANGPTL4 SLC16A3 TALDO1 I
ASF1A HMGB2 UBE2S BRCA2 TRIP13 BUB1B PLK4 DCK P
CLGN HSPA4L STRBP BRAF IL13RA2 DBF4 RFC4 TSN CHFI
SCAF8 RND3 HAS2 ANXA4 ATRN INPP4B SCN8A ATP2B1
EDN1 PER1 CEBPD SMAD3 IER2 IRF1 BCL3 RELA IER5 SPS
NPC1 SLC35B2 HSD17B11 PEX1 SLC22A18 NEDD4 PHYH
NGLY1 B2M AKAP12 MAF INPP4B INSIG1 TNFAIP8 SAT1
PKP1 COL5A1 TGFBI DDIT4 ANGPTL4 NDST1 IGFBP3 DPY
CHAC1 DDIT4 PSAT1 SHC1 EXOSC4 FUS TUBB2A SRPRB F
DTX4 NOTCH1 LFNG CUL1 TCF7L2 PSEN2 DTX2 KAT2A HI
KIF11 BRCA2 CEP250 CENPF FBXO5 DST CEP192 NET1 AF
FURIN DLG4 STARD3 IRF1 NFKBIA WIZ MGAT1 CDKN2B F
KIF11 UBE2S BRCA2 HSPA8 RBL1 CENPF FBXO5 PLK4 OD
GPNMB HDAC9 AKAP12 GOS2 CPE LY96 PTPRR MMD YRI
HMOX1 MYD88 CD9 CSF1 LEPR TNFRSF12A STAT2 GRB2
EDN1 LPAR1 IRF1 RELA ADRM1 NFKBIA PCDH7 IFNGR2 E
SLC35B2 HSD17B11 CADM1 PABPC1 HMGCL ACOT8 ABC
SUPV3L1 PLK4 UTP20 NOP16 MYC GNL3 MPHOSPH10 N
COL3A1 FSTL1 VAV2 COL5A2 TIMP1 LUM POSTN
TP53 NOTCH1 AXIN1 FZD8 MAML1 CUL1 PSEN2 PTCH1 K
UGCG ENDOD1 AFF1 TIPARP LRIG1 PODXL MYC DYNLT3
HMOX1 DDIT3 HMGB2 PTK2 CASP1 ENO2 IGF2R CASP8 \\\
G6PD SLC7A11 PIK3R3 SLC1A5 DHCR24 DDIT4 SERPINH1
EDN1 PKP1 SLC29A3 GTF3C5 THRB TGFBI LFNG NR4A2 S
AFF1 PLK4 CDH1 CPE HSPA4L CD9 DYNLT3 MOCS2 SLC2E
ATP8B1 BRCA1 PLAUR ADAM10 LYPD3 SRPX LYN FLOT2
DDIT3 MYD88 RIPK1 SQSTM1 PAK4 MAPK9 STAT2 ACTR
B2M USP18 CASP1 CASP8 CSF1 PNPT1 STAT2 GBP2 PSM
CD9 TNFRSF12A GNAI1 ALCAM GSTM2 PLAUR NFIL3 CPE
ATP6V1C1 NDUFC1 SUPV3L1 ATP6V1H ISCU MTRR UQCI
CTSK ISCU MMP3 CD9 MMP15 GNB2 PLAU DUSP6 LAMF
TP53 SAC3D1 GTF3C5 CANT1 BCAP31 ADRM1 POLR2C T
MXI1 KAT2B UCP2 ENDOD1 SLC11A2 USP15 ATP6V0A1 C
GLI1 PML CDK5R1 THY1 PTCH1 TLE3 DPYSL2
PLAGL1 CDCP1 P2RX4 SWAP70 ANXA4 CTSZ IGF2R CSF1
B2M MYD88 USP18 CASP1 CASP8 RIPK1 PNPT1 STAT2 FC
FOXO1 DPP4 ELP4 PAK3 AKT3 STXBP1

53	HPF_TMP269_VS_HPF_DMSO	FURIN SMAD3 IFNGR2 PPP1CA ID2 SKI HDAC1 JUNB RHC
128	HPF_TMP269_VS_HPF_DMSO	HSD17B11 GOS2 ENO2 ODC1 HMGCL ACOT8 AADAT TP5
193	HPF_TMP269_VS_HPF_DMSO	C1QBP ABCE1 ODC1 PABPC1 NOP16 MYC RPL22 GNL3 E
193	HUVEC_A196_VS_HUVEC_DMSO	COX5A GLO1 HDDC2 CBX3 RPL6 U2AF1 MCM2 RAN EIF1
186	HUVEC_A196_VS_HUVEC_DMSO	PSAT1 DDIT4 ASNS GBE1 SLC1A5 CD9 FADS2 TM7SF2 HM
163	HUVEC_A196_VS_HUVEC_DMSO	DDIT4 CITED2 GBE1 ANXA2 HMOX1 SRPX CDKN1C MT1E
137	HUVEC_A196_VS_HUVEC_DMSO	CD9 FOXC1 MAPK13 TSPAN13 GAL SCARB1 KIF20A GPEF
105	HUVEC_A196_VS_HUVEC_DMSO	PSAT1 DDIT4 ASNS CHAC1 EIF2AK3 EIF4A3 STC2 WIP1 N
131	HUVEC_A196_VS_HUVEC_DMSO	AKR1C3 ARG2 BCAR1 HMOX1 CYP2S1 SLC1A5 GCNT2 PT
154	HUVEC_A196_VS_HUVEC_DMSO	ASNS FBXO34 RANBP10 BNIP3L HAGH SLC6A8 HTATIP2 I
84	HUVEC_A196_VS_HUVEC_DMSO	UBE2L6 IFI27 PSMB8 SAMD9 SAMD9L CCRL2 TRIM25 NM
36	HUVEC_A196_VS_HUVEC_DMSO	FZD8 AXIN1 CTNNB1 SKP2 NOTCH1 KAT2A CUL1 FZD1 PF
147	HUVEC_A196_VS_HUVEC_DMSO	APOL6 UBE2L6 IFI27 PSMB8 SAMD9L SRI MT2A MTHFD2
88	HUVEC_A196_VS_HUVEC_DMSO	HMGCS1 INSIG1 LIFR SAT1 BMPR1B IQGAP2 B4GALT1 C
73	HUVEC_A196_VS_HUVEC_DMSO	LIPE FADS2 SCP2 NPC1 CYP27A1 PEX1 CAT SLC29A1 RET
173	HUVEC_A196_VS_HUVEC_DMSO	MYLK GBE1 DECR1 SLC1A5 LIPE COX8A LIFR SCARB1 SCP
63	HUVEC_A196_VS_HUVEC_DMSO	CD9 FADS2 TM7SF2 HMGCS1 PLAUR ANXA5 ACTG1 CTN
129	HUVEC_A196_VS_HUVEC_DMSO	ASNS HMOX1 CDKN1C PPP1R2 GAL SLC25A4 ALAS1 MG
171	HUVEC_A196_VS_HUVEC_DMSO	IL32 CAPG BGN TPM4 FOXC2 TGFB1 BASP1 TAGLN PTX3
160	HUVEC_A196_VS_HUVEC_DMSO	IRS2 PLAUR CCRL2 IER5 CCNL1 BCL6 SAT1 SNN IFNGR2 B
145	HUVEC_A196_VS_HUVEC_DMSO	BCAM TAF13 ALYREF POLL TAF10 GTF2F1 RFC2 VPS28 A
186	HUVEC_A196_VS_HUVEC_DMSO	E2F3 MCM2 HMGA1 SLC7A1 MT2A RPA2 RBM14 CCND1
56	HUVEC_A196_VS_HUVEC_DMSO	PES1 SRM MCM5 RRP12 PPAN FARSA PLK1 MYBBP1A SL
181	HUVEC_A196_VS_HUVEC_DMSO	COX5A FDX1 DECR1 SLC25A5 NDUFA8 PDHB COX8A SLC
127	HUVEC_A196_VS_HUVEC_DMSO	UBE2L6 DECR1 OSTC HMGCS1 PDHB GRHR ACADVL ME
135	HUVEC_A196_VS_HUVEC_DMSO	CITED2 MTA1 ANXA2 MT1E SRI INSIG1 SLC7A1 ANXA4 D
90	HUVEC_A196_VS_HUVEC_DMSO	CAPG CSK TGFB2 TAPBP RPS9 TGFB1 RPL9 STAB1 FLNA /
136	HUVEC_A196_VS_HUVEC_DMSO	FDX1 LIPA CPQ PLAUR DYRK2 ANXA5 IRF2 ME1 PLA2G4A
143	HUVEC_A196_VS_HUVEC_DMSO	TUBB2B PMAIP1 FOXC1 STC2 SCARB1 B4GALT1 CCND1 /
52	HUVEC_A196_VS_HUVEC_DMSO	CDKN1C ID3 IFNGR2 SERPINE1 CTNNB1 BCAR3 SMAD6 F
92	HUVEC_A196_VS_HUVEC_DMSO	ERGIC3 AP2S1 ARFIP1 ARFGEF1 COG2 RPS6KA3 AP2M1 (
195	HUVEC_A196_VS_HUVEC_DMSO	MCM2 RAN ASF1B UBE2T HMGA1 MTHFD2 RPA2 EED PE
84	HUVEC_A196_VS_HUVEC_DMSO	SCP2 CTBP1 SLC25A4 ACOX1 ABCC5 CAT RETSAT IDI1 PE
110	HUVEC_A196_VS_HUVEC_DMSO	SLC7A2 TAPBP HBEGF STAB1 HRH1 GABBR1 MMP14 TNI
133	HUVEC_A196_VS_HUVEC_DMSO	BCL2L1 PEA15 BGN BAX TGFB2 IER3 MGMT IGFBP6 GSR
24	HUVEC_A196_VS_HUVEC_DMSO	VEGFA STC1 MSX1 VAV2 POSTN TIMP1 JAG1 VCAN FSTL
167	HUVEC_A196_VS_HUVEC_DMSO	DDIT4 HMOX1 ZFP36L1 SLC3A2 HINT1 IER5 RAP2B SAT1
23	HUVEC_A196_VS_HUVEC_DMSO	SRPX CROCC PLAUR B4GALT1
28	HUVEC_A196_VS_HUVEC_DMSO	CCND1 FBXW11 NOTCH1 KAT2A CUL1 FZD1 SKP1 PPARC
89	HUVEC_A196_VS_HUVEC_DMSO	PAK4 DUSP3 E2F1 RPS6KA3 AP2M1 GRB2 PPP1CA TNFR
43	HUVEC_A196_VS_HUVEC_DMSO	PFKP PRDX2 TXNRD2 GSR FES SCAF4 ATOX1 GPX3 LAMT
147	HUVEC_A196_VS_HUVEC_DMSO	VWF CD34 ADAM15 PBX2 GTF2F1 CNN2 CRAT EVL MYL
15	HUVEC_A196_VS_HUVEC_DMSO	PCSK1 SRP9 ISL1 LMO2 SEC11A
80	HUVEC_A196_VS_HUVEC_DMSO	CD9 CPQ MMP10 CFI ARF4 SERPINE1 C1R PREP PEF1 MA
149	HUVEC_A196_VS_HUVEC_DMSO	IRF6 SLC1A5 CDKN1C NFKBIZ AHCY ANXA4 SCN9A SNX9
128	HUVEC_A196_VS_HUVEC_DMSO	PLXNB2 SMTN TGFB1 PDLIM7 HBEGF TAGLN SYNGR2 CR
130	HUVEC_A196_VS_HUVEC_DMSO	PSMB8 IGF2 MMP10 PLAUR TSPAN13 ZNF639 JUP FBXO
68	HUVEC_A196_VS_HUVEC_DMSO	CDKAL1 TGFB2 SYNPO LFNG BTG2 SLC29A3 SPTBN2 TCF
55	HUVEC_A196_VS_HUVEC_DMSO	TGFB1 STAT3 ACVRL1 GRB2 TNFRSF1A TNFRSF1B STAM
165	HUVEC_A196_VS_HUVEC_DMSO	CHST1 NSDHL ANGPTL4 IER3 PKM PFKP COG2 SLC25A10

69 HUVEC_A196_VS_HUVEC_DMSO	CHFR PHKG2 ACE TLE4 STAM2 MAST2 IDE GMCL1 SPATA
24 HUVEC_A196_VS_HUVEC_DMSO	VEGFA CDK5R1 PTCH1 AMOT RASA1
197 HUVEC_A196_VS_HUVEC_DMSO	SYNPO PLEKHG2 ARFGF1 DYNLL2 TBCD FLNA ATG4B CC
160 HUVEC_TMP269_VS_HUVEC_DMSO	PTGS2 CCL2 CCND1 MAFF CCRL2 IRS2 SERPINE1 INHBA M
163 HUVEC_TMP269_VS_HUVEC_DMSO	MAFF IRS2 SERPINE1 HEXA GBE1 GAA PLAUR NEDD4L AI
181 HUVEC_TMP269_VS_HUVEC_DMSO	SLC25A5 COX17 COX7A2L FDX1 COX7B NDUFA8 NDUFB!
147 HUVEC_TMP269_VS_HUVEC_DMSO	PTGS2 PLA2G4A CCL2 HLA-B IFI27 PSMB8 HLA-A UBE2L6
63 HUVEC_TMP269_VS_HUVEC_DMSO	FADS2 HMGCS1 CXCL16 PLAUR ACTG1 TM7SF2 CD9 IDI1
84 HUVEC_TMP269_VS_HUVEC_DMSO	GMPR CCRL2 IFI27 PSMB8 UBA7 UBE2L6 IL4R B2M TRIM
137 HUVEC_TMP269_VS_HUVEC_DMSO	CCND1 MAPK13 BLVRB CD9 GALE SCARB1 TOB1 DHCR7
80 HUVEC_TMP269_VS_HUVEC_DMSO	MMP1 MAFF CPQ SERPINE1 CFI ARF4 CD9 SIRT2 ANG PE
36 HUVEC_TMP269_VS_HUVEC_DMSO	HDAC5 CTNNB1 JAG2 TP53 NOTCH4 SKP2 FZD8 AXIN1 C
56 HUVEC_TMP269_VS_HUVEC_DMSO	RRP12 SRM MCM5 PES1 MCM4 FARSA BYSL PPAN UNG
154 HUVEC_TMP269_VS_HUVEC_DMSO	FBXO34 MAP2K3 TMEM9B PICALM BLVRB RAD23A HAG
110 HUVEC_TMP269_VS_HUVEC_DMSO	CCL2 CCRL2 SERPINE1 INHBA PLAUR IL4R LPAR1 NFKBIA
88 HUVEC_TMP269_VS_HUVEC_DMSO	CCND1 HMGCS1 AKAP12 IDI1 B2M INSIG1 MERTK NDRG
130 HUVEC_TMP269_VS_HUVEC_DMSO	PTGS2 MPZL2 HDAC9 JUP PSMB8 INHBA PLAUR AKAP12
52 HUVEC_TMP269_VS_HUVEC_DMSO	SERPINE1 ID3 JUNB FNTA PPP1R15A HDAC1 BMP2 CTNN
149 HUVEC_TMP269_VS_HUVEC_DMSO	NFKBIZ MAFF ANXA4 DHRS3 APLP1 IL3RA IL4R COL6A1 I
171 HUVEC_TMP269_VS_HUVEC_DMSO	RGS4 TGFB1 FN1 CAPG SPOCK1 POSTN BGN COL3A1 TA
173 HUVEC_TMP269_VS_HUVEC_DMSO	MYLK COX7B GBE1 COX8A PRDX3 NDUFB7 FABP4 MGST
131 HUVEC_TMP269_VS_HUVEC_DMSO	HSD17B2 NPC1 SERPINE1 JUP NQO1 DHRS1 BLVRB SERT
195 HUVEC_TMP269_VS_HUVEC_DMSO	CDKN3 UBE2T WDR90 MCM2 ASF1B TACC3 SHMT1 BIRC
23 HUVEC_TMP269_VS_HUVEC_DMSO	PLAUR CROCC B4GALT1 SRPX HSPB1 LYN
143 HUVEC_TMP269_VS_HUVEC_DMSO	CCND1 THSD4 TUBB2B DHRS3 NAV2 PODXL BLVRB HES1
129 HUVEC_TMP269_VS_HUVEC_DMSO	HYAL2 JUNB GGH ARRB2 BMP2 NFKBIA PRKACA MGAT1
136 HUVEC_TMP269_VS_HUVEC_DMSO	PLA2G4A MAFF CPQ SERPINE1 FDX1 PPP4C PLAUR LIPA
186 HUVEC_TMP269_VS_HUVEC_DMSO	FADS2 HMGCS1 GBE1 MAP2K3 MCM2 TM7SF2 DDIT4 CI
167 HUVEC_TMP269_VS_HUVEC_DMSO	RALGDS HINT1 DDIT4 PPP1R15A BMP2 ATF3 STEAP3 ND
128 HUVEC_TMP269_VS_HUVEC_DMSO	MYLK PTP4A3 HDAC5 COX7A1 NAV2 GAA NQO1 MEF2D
133 HUVEC_TMP269_VS_HUVEC_DMSO	CCND1 BMP2 CTNNB1 BCAP31 ATF3 TNFRSF12A EBP DD
186 HUVEC_TMP269_VS_HUVEC_DMSO	CCND1 E2F3 CDKN3 MCM2 TACC3 BIRC5 DTYMK KPNA2
147 HUVEC_TMP269_VS_HUVEC_DMSO	MPZL2 MAPK13 SIRPA JUP RAC2 ACTG1 ITGA10 INSIG1 F
43 HUVEC_TMP269_VS_HUVEC_DMSO	NQO1 JUNB MSRA FTL PRNP G6PD CAT ABCC1 MGST1 T
73 HUVEC_TMP269_VS_HUVEC_DMSO	FADS2 NPC1 IDI1 CYP27A1 DHCR24 SCP2 CAT OPTN SLC
105 HUVEC_TMP269_VS_HUVEC_DMSO	HSPA5 EIF4EBP1 HSP90B1 ATF4 PAIP1 DKC1 BANF1 EIF4
135 HUVEC_TMP269_VS_HUVEC_DMSO	SERPINE1 ANXA4 PTPRM LPAR1 INSIG1 LDLR VAV2 CITEI
28 HUVEC_TMP269_VS_HUVEC_DMSO	CCND1 ST3GAL6 HES1 APH1A CUL1 KAT2A
193 HUVEC_TMP269_VS_HUVEC_DMSO	U2AF1 PRDX3 RRM1 MCM2 RPL6 RNPS1 GLO1 SNRPB2 (
24 HUVEC_TMP269_VS_HUVEC_DMSO	POSTN COL3A1 S100A4 THBD COL5A2 ITGAV
197 HUVEC_TMP269_VS_HUVEC_DMSO	SORBS2 SUN2 LLGL1 CTTN CAPZB ARL8A BIRC5 CNTROB
84 HUVEC_TMP269_VS_HUVEC_DMSO	DHRS3 CTBP1 IDI1 SLC25A4 DHCR24 ECH1 SCP2 CAT AB
127 HUVEC_TMP269_VS_HUVEC_DMSO	HMGCS1 OSTC UBE2L6 IL4I1 ACADVL IDI1 HCCS PDHB F
90 HUVEC_TMP269_VS_HUVEC_DMSO	TGFB1 CSK STAB1 CAPG STAT1 RPS9 FLNA GCNT1 TGFB2
165 HUVEC_TMP269_VS_HUVEC_DMSO	FUT8 TPI1 PYGB IER3 PKM ME2 ANGPTL4 HSPA5 PFKP A
15 HUVEC_TMP269_VS_HUVEC_DMSO	SPCS1 SRP9 SEC11A PCSK1 LMO2 ELP4 ISL1
145 HUVEC_TMP269_VS_HUVEC_DMSO	COX17 STX3 MPG BCAP31 TP53 RRM2B DDB2 FEN1 NEL
55 HUVEC_TMP269_VS_HUVEC_DMSO	TGFB1 TNFRSF1B STAT3 TNFRSF1A STAT1 CXCL1 GRB2 I
92 HUVEC_TMP269_VS_HUVEC_DMSO	CTSC AP2S1 ARFGF1 ARFIP1 AP2M1 DNM1L RPS6KA3 S
24 HUVEC_TMP269_VS_HUVEC_DMSO	HEY1 NRCAM NF1 TLE3 PML HEY2 NRP1

69	HUVEC_TMP269_VS_HUVEC_DMSO	CDKN3	RAD17	SLC12A2	CLGN	COIL	TALDO1	VDAC3	CSN1
89	HUVEC_TMP269_VS_HUVEC_DMSO	MAP2K3	PLCG1	ARPC3	DDIT3	PIN1	CDK4	PLA2G12A	CDK
68	HUVEC_TMP269_VS_HUVEC_DMSO	SLC25A23	CCDC106	CPEB3	SNN	PLAG1	CELSR2	IDUA	ZBT

enrichment score normalized using random samples; LeadingEdge, the genes driving the GSEA signal.

37 NDUFA1 DECR1 MGST3 SLC25A20 COX17 NDUFB1 COX8A COX7B NDUFB6 UQCRC5 UQCRC2 SDHE
:1 SRD5A1 MCM2 DHCR24 PLOD2 GBE1 MAP2K3 CD9 GLRX SCD COPS5 RPA1 ATP2A2 SLC2A1 PSAT1 T
:B2 HACL1 ATP2A2 NFS1 ACO2 AP4B1 GART IGFBP4 UGDH DDT SLC12A4 HPRT1 SERTAD1 PTGR1 AKR1
:2A NFKBIA SOCS3 B4GALT1 MAP2K3 GFPT2 SPSB1 MAFF SDC4 PER1 DENND5A TAP1 IRS2 JUNB TIPAR
G2 RPL34 FAM120A RAN COPS5 PCBP1 PSMA1 PRDX3 YWHAQ MRPL9 SLC25A3 SNRPD1 U2AF1 PHB2
:RX MAFF SDC4 JMJD6 IRS2 SLC2A1 FAM162A ERFF1 TIPARP PFKFB3 PGM2 DUSP1 F3 HK2 GRHPR SCAI
'SF2 HMGCS1 SREBF2 GNAI1 LSS TP53INP1 DHCR7 ACTG1 ACS2 TRIB3 ACAT2 ANXA5 EBP FDFT1 ATF3
:10 PSAT1 GEMIN4 MTHFD2 LSM1 DCP1A SHC1 CEBPB FUS SPCS1 DNAJB9 PDIA6 HYOU1 EIF4A3 TATDI
RC PLOD2 LOX TNFRSF12A WNT5A COL16A1 MEST FBLN5 LOXL2 SDC4 CRLF1 ADAM12 ITGB5 IGFBP4
BE1 PIM3 RMDN3 SDHB PRDX3 ACO2 SCP2 PFKFB3 DDT LPCAT3 ABCA1 SCARB1 DLAT CAT ACOX1 TALI

GAP1 CENPM NUDT21 PAICS DCTPP1 TP53 RAN RPA1 CCNB2 MLH1 TUBG1 KPNA2 MTHFD2 NUP107 V
NA BRCA2 KIF1B AKAP13 DYNC1H1 SYNPO ARHGEF3 SOS1 HDAC6 KATNA1 CENPF CKAP5 SPTBN1 FGC

AP1 UBE2N AKT1 ELF4 HLA-A BCL3 INHBA EIF3J RPS3A FAS CD47 EGFR MAP3K7 IL27RA BCAT1
'53 SDCBP POLR2C ZWINT POLR1C HPRT1 POLR2F RPA3 PNP DDB1 POLR2A SAC3D1 NUDT9 RFC4 POLF
GLRX IRS2 RPE FAM162A GALE B4GALT4 GOT1 PGM2 MDH1 HK2 DPYSL4 EXT2 PRPS1 ANG TALDO1 A
:PLAGL1 ALCAM ITGA6 CAPG HUWE1 FGL2 BCL2L1 NRP1 IGF2R ENPP1 HOPX ST3GAL4 NCS1 SWAP70

TM1 MGMT BCL2L1 WEE1 GADD45A PEA15 DPYD IGF2R GPX3 PDCD4 CASP4 CASP8 SPTAN1 ROCK1 BC
:1 G0S2 MDH1 UGDH GRHPR BCKDHB ACSL1 ACOX1 LDHA SMS UROD ACADVL HADHB PCBD1 ACAT2

NP ADAM12 SCD ITGB5 COL4A2 ACSL1 CRYAB PFKM PPP1R3C WWTR1 COL3A1 COL1A1 SLC6A8 GAA E
JBE2N CSNK2B AKT1 CDK4 PDK1 TRIB3 EGFR MAP3K7 NGF TSC2 IRAK4 NFKBIB PFN1 RAC1 PIN1

.HDC3 PPIF RHOB DLG4 POLE3 PPP1R2 RFC4 CYB5B CDKN2B TST SLC6A8 UROD POLR2H CASP3 NAT1 H
4 SRC YWHAH NF1 TRO LAMB3 FBN1 CERCAM ARPC2 AMIGO1 MVD GAMT RHOF LIMA1 SPEG BMP1

CACNA1A PLCB4 RUNX1 NRP1 MRPS31 SPOP MYC ZMIZ1 SLC22A18 ATRN PRDM2 SCAF8 NEK7 GRK5 F

VVP MLYCD HSD17B4 HSD3B7 ABCB1 ABCD1 ERCC3 BCL10 SOD1 TOP2A PEX11B ACOT8 CRAT

TMEM9B BPGM PICALM MKRN1 FECH NCOA4 ISCA1 RCL1 SLC6A9 CAT ATG4A SLC6A8 UROD DCAF11
:ENPF UBE2S PLK4 CHAF1A MKI67 GSPT1 HSPA8 CUL4A DBF4 TPX2 NUP50 LIG3 CCNT1 NCL MYC SFPQ

3ABBR1 NDP ITGB8 MMP14 SCN1B MYC AXL NFKB1 SLC11A2 HIF1A ATP2B1 TNFSF10 P2RX4 DCBLD2

.MP4 CAV2 VAMP7 VPS45 EGFR CLN5 YIPF6 ATP6V1H ADAM10 TOM1L1 GALC AP1G1 TMX1 ZW10 SN

AM162A ABHD4 HINT1 TRAF4 IER5 SLC3A2 PRKAB1 WRAP73 HDAC3 BLCAP CDKN2B RPL36 FOXO3 PP

/MAST4 AFF1 MYBL1 NRIP1 HR CXCL12 MYC ITPK1 ASB13 MED13L KDM4B PODXL ENDOD1 SLC26A2 SLC

HPRT1 COX6C PPIF SCARB1 METTL3 TST PLXNB1 DHCR7 NAB2 RPS6KA2 SLC22A5 TPBG OPN3 SIAH2 X

OXL1 PDGFRB PCOLCE IGFBP4 COL3A1 COLGALT1 IGFBP3 SPARC LGALS1 DPYSL3 QSOX1 FSTL1 BGN CC
AB22A IGF2R AP2S1 ARFGEF2 VPS45 LAMP2 OCRL RPS6KA3 ARFGEF1 BNIP3 ATP7A ABCA1 PPT1 TOM
S1 UGDH PGD PYCR1 AOX1 AP4B1 ACP2 DHRS1 F10 TGFB2 TNFRSF1A AKR1C2 SMOX DDT SLC12A4 M
12 CNN2 BAIAP2 SHC1 SORBS3 COL16A1 LDLRAP1 TUBG1 VAV2 FSCN1 AMIGO2 TRAF1 CLDN11 SLIT2 F
C2 NOTCH1 SORBS3 MAPK12 MAPRE3 TEAD4 CLU EFS SSPN TPM2 MYLK STC2 TAGLN MYO1C BDKRB2
L9 EREG NCK1 GBP2 AKT1 EIF4G3 MTIF2 RPS9 FLNA GALNT1 APBB1 EGFR BCL10 ETS1 LYN CD4 INHBA
; BAIAP2 TRIAP1 HDAC3 ANKRA2 CSRNP2 NOTCH1 CDKN2B IP6K2 CD81 RXRA TRAF4 OSGIN1 DDB2 JU
SLC25A1 ACLY RAB34 LPCAT3 COQ5 BAZ2A SSPN MYLK NDUFB7 APLP2 DDT PEX14 COX8A ANGPT1 RI
RAP2 DUSP6 DUSP5 LAMP2 DYRK2 LTA4H DGKG SRC SERPINB2 PLAUR SERPINE1 PDP1 VCIPI1 CFH GR

GFBP3 DPYSL4 ANKZF1 B3GALT6 QSOX1 PHKA2 MPI PFKP B4GALT2 ENO1 STC2 PYGB ALG1 STMN1 NE
RKDC WEE1 NUP205 BRCA1 MKI67 SMC6 PPP1R8 UBE2T MYC PMS2 HMMR TFRC PNN RBBP7 TIPIN U

RGS4 INSIG1 PLCB4 SLC22A18 MYC CITED2 MAGI2 APBB2 MAP1B NIPBL CELF2 ATP2C1 SERPINE1 TJP1
;B1 GFPT2 NFKBIA EGR1 PHLDA2 BIRC2 IFNGR2 RHOB TUBB2A NR4A2 JUN LDLR TRAF1 SDC4 ZC3H12A

SLC26A2 PIAS1 ELK4 RPS6KA3 AKT1 ACSL3 SRP19 SGK1 HMGCR ELOVL5 FKBP5 XRCC6 CDK6 ADAMTS1
SL4 ANKZF1 B3GALT6 SLC25A1 ANXA2 BGN PFKP ILVBL ENO1 STC2 NEDD4L JUN SDC4 TGM2 SIAH2 SL
OP4 STC2 EEF2 TATDN2 IMP3 ASNS ERN1 EXOSC1 KDEL3 CEBPG PREB KHSRP EXOSC10 SEC11A CXXC

RHGEF3 OPHN1 KIF20B RASAL2 PCNT ANLN RICTOR NIN NCK1 HOOK3 ARFGEF1 PCGF5 FLNA NOTCH2
RHOB POLG2 PRKACA MAOA ASNS CCND3 TST DNAJB1 CEBPG STK25 EPHX1 PDAP1 NXF1 UROD JUNB
C1 CCNT1 POLQ DBF4 MKI67 MYC KIF20B RASAL2 SMC2 CHAF1A HMMR NOTCH2 E2F4 SRSF10 SMC4
DC SPRY2 PLAUR EREG DUSP6 NIN PLAUR SNAP25 MAP3K1 KLF4 GYPC CFH PTBP2 PRKG2 PPP1R15A TN

BDKRB1 SLC7A1 RHOG PTGIR TIMP1 LDLR RNF144B OSMR HBEGF TAPBP IL7R ADM SCN1B ITGA5 IRAK
C5 MLYCD ISOC1 HSD17B4 ACSL4 ERCC3 NUDT19 PEX6 STS CLN8 BCL10 ABCD1 PEX2 IDH1 ELOVL5

SVIL SLC26A2 TOB1 NAV2 ITPK1 MYBL1 CA12 ASB13 KLF4 BCL2 ABCA3 IGF1R MYB SYBU CELSR2 ALDH
WEE1 SQSTM1 GADD45A BRCA1 TNFRSF12A GPX3 SAT1 EREG BAX BCL2L1 BTG3 PPT1 XIAP DNAJA1 D
TRIB3 PSAT1 ACLY PSMB5 PHGDH TUBG1 PRDX1 ENO1 EIF2S2 RPA1 HMBS RRM2 GSR FDXR LDLR ASI

5A2 TOB1 JAK1 ALDH3A2 ITPK1 CA12 BTG3 KLF4 BCL2 ABCA3 SCUBE2 SGK1 MYB CELSR2 ACOX2 FABP

2 NCK1 RPS6KA3 AKT1 CAMK4 MAP2K3 DUSP3 EGFR GRB2 AKT1S1 EIF4E PLA2G12A PRKAA2 ACACA C

RB GRPEL1 CYCS TIMM9 RHOT1 OAT ACAT1 MGST3 BAX SDHB NDUFB4 NDUFS7 COX11 MRPL34 MRP

AF1C USP11 ITPA NME3 POLR2G NELFB SRSF6 EDF1 DDB2 LIG1 POLB MPG POLH TK2 TAF6 POLD4 NM
TNS TNRC6B SDCBP TCEA1 LAMP2 MGST3 FBXO34 TFRC RBM5 MAP2K3 PGLS BMP2K GYPC CROCCP2

ODC1 SYNGR2 LRIG1 MYC FGL2 PTRH2 ALCAM GSTO1 BCL2L1 HUWE1 NFIL3 BCL2 SOCS2 IGF1R SNX9
3L2 CD274 PSMA3 VAMP8 IFIT1 ISOC1 CFH LYSMD2 IRF2 NAMPT CASP4 TRIM21 LAP3 NLRC5 PTGS2 IS

3INP2 PCBD1 HSPH1 ALDH3A2 MLYCD HSD17B4 ACSL4 CPOX SUCLG2 PTS SERINC1 DLST ACAA2 IDH1
IF1AX HNRNPC RFC4 HNRNPA3 RPS10 EEF1B2 RPL34 HNRNPA1 NOP56 USP1 SRPK1 HNRNPR SRSF1 EII
AX HSPE1 IMPDH2 RRM1 PGK1 SNRPB2 STARD7 POLD2 GNL3 YWHAE NDUFAB1 PHB2 SLC25A3 PRDX3
MGCS1 MCM2 PHGDH INSIG1 HSPE1 MTHFD2 PSMC2 ME1 PGK1 TXNRD1 PSMG1 ENO1 STC1 LDLR SEF
GCNT2 IRS2 PLAUR GRHPR STC2 SCARB1 MT2A CSRP2 GAA BNIP3L PGK1 MXI1 SERPINE1 VEGFA ENO
1 CCND1 IMPA2 ARL3 CA12 SLC29A1 CELSR2 LLGL2 KRT19 SLC7A5 NXT1 RAB31 JAK2 ID2 DHCR7 DNA
MTHFD2 FUS VEGFA KHSRP GEMIN4 LSM4 CEBPB HERPUD1 SLC7A5 CNOT4 DNAJB9 ZBTB17 EDEM1 EII
GR1 NPC1 NFS1 MT2A AHCY CYP27A1 JUP ALAS1 ACOX1 NQO1 SERPINE1 FAH CAT RETSAT SERTAD1 E
MXI1 FBXO7 PPOX ERMAP BMP2K CAT SDCBP ALAD VEZF1 FOXO3 SLC7A11 KLF3 DCAF11 SEC14L1 CPC
MI IRF2 GMPR SLC25A28 TRIM14 IRF9 HLA-C LAMP3 SELL PARP12 TRAFD1 IFI44L CASP1 ADAR CNP

2 TRIM25 NMI IRF2 ARL4A PLA2G4A PTGS2 C1R SLC25A28 NCOA3 TRIM14 HLA-A IRF9 TOR1B PNP CD4
CND1 ZBTB10 CENPN SLC38A2 NDRG1 IDI1 PA2G4 PIAS1 KRT19 VAPA SMS TPD52 DNAJB9 DHCR24 AC
SAT IDI1 PEX11A SLC35B2 ACSL1 ABCA5 BCAR3 RBP1 SULT1B1 PECR ABCD1 DHCR24 AR ALDH9A1
2 MCCC1 BCL6 COX7B TALDO1 ME1 ACOX1 SLC27A1 ARL4A FAH FABP4 NDUFAB1 SDHB PRDX3 CAT R
NB1 LDLR FASN IDI1 CXCL16 STARD4 ERFF1 ECH1 TRIB3 PNRC1 DHCR7 NFIL3 FDFT1 PDK3 JAG1 GUSB
AT1 SLC6A8 STARD3 HYAL2 FEN1 DLG4 MSX1 RHOB AGO2 NFKBIA TYRO3 ABCB1 RFC4 GGH BID GCH1
MGP FLNA CAP2 MYL9 CDH2 RGS4 QSOX1 LRP1 BMP1 MMP14 COL6A2 ITGA5 TNFAIP3 COL5A2 TPM2
4GALT1 SERPINE1 CCND1 VEGFA ZBTB10 PTGS2 LDLR IER2 KDM6B MAFF LITAF JUN RHOB CEBPB NFK
AAS USP11 NCBP2 ERCC5 TYMS POLB POM121 ERCC1 CSTF3 POLR2E ERCC3 NELFE TMED2 REV3L NMI
HMGN2 ORC5 HMMR PURA POLA2 KIF20B PDS5B CBX1 MCM6 RACGAP1 SLC38A1 CUL1 SLC7A5 SNR

25A4 ACADVL COX17 COX7B NDUFB8 ALAS1 NDUFA1 NDUFAB1 FH ATP6V1E1 SDHB COX7A2L PHB2 S
1 Bmpr1b ACOX1 FH HADHB ALAD FASN RETSAT IDI1 ACSL1 CPOX SDHA ECH1 CBR1 SMS HCCS GPD2
AB2 SERPINE1 FBLN5 EFEMP1 LDLR FZD2 PMP22 VAV2 KIT PTPRM PRDM2 CDKN1B TFPI ABCC1 ICA1 F

1 SERPINE1 PPP4C C1R PREP MAFF GMFB CEBPB PCLO USP16 PHEX CDK5R1 PLAT JAK2 CASP1 GPD2 KI
ARL3 CA12 FASN CELSR2 PEX11A KRT19 SLC7A5 NXT1 RAB31 JAK2 INPP5F RHOBTB3 THSD4 DHCR7 AR

COPE ADAM10 TMED2 YIPF6 ANP32E NAPG TSG101 BET1 RER1 CLTA NAPA DNM1L VAMP7
OLD2 RAD50 HMMR POLA2 PA2G4 SHMT1 IPO7 PDS5B MMS22L NUP153 MCM6 RACGAP1 WDR90 RA
X11A DLG4 SLC35B2 ACSL1 SIAH1 ABCB1 ECH1 PABPC1 ABCD1 TSPO DHCR24 ACSL4 ALDH9A1 ELOVL5
FRSF1B RAF1 ITGA5 RHOG BTG2 ACVR2A ICOSLG PVR PTPRE DCBLD2 AXL IL18R1 AHR P2RY2 PCDH7 RI
IFITM3 ANKH PPP2R5B SATB1 RHOT2 BTG2 GPX3 DFFA GADD45B GPX4 GPX1 RARA RELA DNM1L CCM

STEAP3 ABCC5 RPL36 NDRG1 RETSAT FOXO3 JUN RAD9A SLC7A11 NOTCH1 RPL18 ACVR1B RAD51C N

1 MVD BMP1 CDH4 RHOF CERCAM PKD1 CLDN5 NLGN3 ITGA3 BAIAP2 HADH CLDN14 NF1 AKT2 CADM

ARL4A FAH NDRG1 NCS1 MAFF NCOA3 RHOB PNP ENPP1 SELL RORA SH3BGR2 ABCB1 ITGAE LCLAT1
AT RIT1 ABLIM1 TCAP COL6A2 GPX3 TPM2 CNN3 GADD45B AKT2 AK1 CDH13 MYO1C MEF2A PDE4DIF
4 MPZL2 PTGS2 ATG10 DNMBP MMP11 ABCB1 HDAC9 ST6GAL1 PLAT ID2 TFPI ETV1 ALDH1A3 FUCA1

1 ALG1 AKR1A1 LHPP QSOX1 TPI1 PYGB PGLS MED24 PHKA2 XYLT2 SLC16A3 ALDOA IDH1 GMPPA DPYS

DC42EP1 RHOF KPTN PLK1 RHOT2 BCR MAP1S FGD6 CLASP1 MYO9B TLK1 NF1 TPX2 CEP250 CLIP2 TRIC
MAP2K3 PLAUR CCNL1 JUNB PPP1R15A BMP2 NFKBIA HES1 SDC4 LDLR ATF3 SNN B4GALT1 IFNGR2 SP
KAP12 DDIT4 PPP1R15A SDC4 ATF3 NDRG1 SCARB1 CITED2 ANXA2 DDIT3 MXI1 HK2 MT1E GRHPR SRP
5 COX8A PRDX3 ATP6V1E1 NDUFB7 ACADVL TCIRG1 HCCS PDHB MGST3 COX5A ETFA SLC25A4 NDUFB
; IL4R NUP93 B2M NFKBIA TRIM25 APOL6 LATS2 SRI IFIT3 ICAM1 SLC25A28 IRF1 SAMD9L TAP1 CDKN1
. CTNNB1 GUSB LDLR ATF3 TNFRSF12A EBP ANXA5 DHCR7 LGMN ECH1 STARD4 PMVK SREBF2 SC5D G
I25 IFIT3 SLC25A28 IRF1 SAMD9L TAP1 ISG20 CASP1 RIPK2 TRAFD1 HLA-C IL15 NMI IRF2 IFI44L SAMD9
NXT1 PRSS23 GLA LGL2 SLC29A1 ISG20 WFS1 TSPAN13 DLG5 CELSR2 SORD CHPT1 ARL3 MICB PRKAR

H MGST3 SEC14L1 MXI1 ATG4A HTATIP2 ALDH6A1 ALAD CAT SDCBP BNIP3L MOSPD1 OPTN VEZF1 KA
SEMA4D LDLR IFNGR2 SRI ABI1 EMP3 ICAM1 IRF1 P2RX4 SCARF1 CDKN1A CD55 RIPK2 LYN IL15 IRAK2
;1 LIFR CENPN B4GALT1 DHCR24 ACTN1 DBI SORD ALDH1A3 ZBTB10 IQGAP2 UBE2J1 PGM3 VAPA GPC
PPP1R15A BMP2 DNMBP FLT4 FBXO4 ZNF639 MMP10 PLAT USP12 ABCB1 MTMR10 EMP1 CBL TSPAN

RF6 BMP2 SNX9 NDRG1 LCLAT1 HK2 PHLDA1 PRNP P2RX4 ABCB1 MYO1E EMP1 SCN9A SOCS2 PNP RR
GLN MMP14 MCM7 LRP1 ABI3BP MGP BASP1 PCOLCE FLNA QSOX1 CTHRC1 COL6A2 CXCL1 ITGA2 TPN
3 RTN3 SCARB1 LIFR TOB1 DHCR7 PHLDB1 UBQLN1 CHCHD10 ECH1 DECR1 TALDO1 SCP2 CAT SDHC C
AD1 CYP27A1 NFS1 BCAR1 ARG2 PTGR1 ECH1 CAT COMT RETSAT SLC35B1 CYP2S1 DDAH2 CYB5A HES
;5 MMS22L TP53 KPNA2 HMGA1 CENPM RACGAP1 ESPL1 RAN CDK4 HMMR POLA2 EXOSC8 CDKN1A F

. SCARB1 TOB1 DHCR7 B4GALT1 NADSYN1 NXT1 TIPARP PRSS23 GLA WFS1 SLC37A1 RHOBTB3 CELSR2
ATF3 SLC25A4 MSX1 FEN1 ICAM1 IRF1 TAP1 ABCB1 STARD3 PPP1R2 RAB27A CCNE1 LYN DLG4 CYB5B
COL4A2 ANG PRCP ANXA5 NOTCH4 PLAT LGMN CALM3 IRF1 CD59 CD55 CASP1 CTSL LYN IRF2 GMFB F
D9 IDI1 PPP1R15A INSIG1 LDLR EBP DHCR7 DDIT3 HK2 DHCR24 LGMN G6PD AK4 GLA CDKN1A PNP ST
RG1 JAG2 TP53 TOB1 DDIT3 GM2A DDB2 ZFP36L1 TM7SF3 RAD9A TM4SF1 PLK2 RCHY1 TAP1 SLC3A2

IT3 PLAT GSN IRF1 BCL2L2 BNIP3L TAP1 TSPO PPP3R1 TIMP3 CDKN1A HSPB1 EMP1 RETSAT ISG20 CAS
HMGA1 SLC12A2 UBE2C RACGAP1 ESPL1 CDK4 HMMR POLA2 HMGN2 SRSF10 RBM14 PBK SLC38A1 C
PLCG1 CDH4 ZYX VAV2 ITGB1 CD99 PARD6G NLGN2 B4GALT1 ICAM2 ICAM1 ACTN1 FSCN1 DLG1 LDLR

A1 CNOT2 DNAJC3 NOP56 IGFBP1 POP4 SLC7A5 SSR1 TATDN2 EXOSC2 ERN1 TSPYL2 EIF4G1 ATP6V0D
;2 ANXA2 DAB2 PMP22 SRI FZD2 MT1E PRDM2 MTA1 EFEMP1 RBPMS TGFBR2 ABCC1 DLG1 CDKN1B I

COX5A CBX3 KPNA2 LSM7 HDDC2 RAN CDK4 GNL3 POLD2 RPL18 VDAC3 ERH NDUFAB1 RPL34 SNRPD2

CDC42EP4 CDC42 MID1IP1 ABI1 BCAR1 GSN RACGAP1 ESPL1 KATNB1 RANBP9 RFC1 MYO1E FSCN1 BI

4 DHCR24 GRHPR ECH1 DECR1 ALAD SDHC RETSAT CPOX ACOX1 PTS HADHB SDHA HMGCL PCBD1 HAI
; ACVR2A TAPBP CCND3 APBB1 RPL9 GALNT1 ST8SIA4 F2R GLMN EIF4G3 MTIF2 NME1 EIF3A
LG1 QSOX1 CHST1 SLC25A10 ALDOA COG2 POLR3K NSDHL MED24 DPYSL4 ANKZF1 LHPP DLD TFF3 SLC

FCD POLA2 SDCBP PRIM1 POLR1D POLR2K PNP IMPDH2 SAC3D1 POLR3GL POLR2F GTF2A2 ITPA TAF9

MAPK8 CDKN1B MAPK9 RAC1 PDK1 CDK2 MYD88 TBK1 NOD1 CAB39 CDK1 ACACA SLC2A1 CLTC

PDHB MRPL34 PRDX3 ACO2 FDX1 TOMM22 MDH1 SLC25A3 ISCA1 PHB2 MTX2 COX6C POLR2F ATP6
OMM40 TM7SF2 HMGCS1 GOT1 TUBG1 HK2 HPRT1 PSMC2 MTHFD2 NUFIP1 PNP PPA1 PSMG1 CYB5E
LC3 JUP CAT ACOX1 ABHD6 AOX1 ADH5 MTHFD1 PPARD DDAH2 FAS DHRS1 AHCY SSR3 BCAT1 RETSAT
IP GOS2 PFKFB3 DUSP1 F3 MSC IER5 ABCA1 BIRC2 RHOB BCL3 INHBA CEBPB PTGER4 KLF10 SMAD3 DR
HPRT1 KPNA2 RPL14 VBP1 GLO1 CCT4 PRPS2 HNRNPA2B1 SNRPB2 CDK4 RNPS1 MCM6 CDC45 ILF2 PC
RB1 HEXA PPP1R3C DPYSL4 ANKZF1 LDHA GAA PDK1 FOXO3 SLC25A1 SRPX SLC37A4 MT1E XPNPEP1 E

COL1A2 COL4A2 CTHRC1 GLIPR1 LOXL1 TNFRSF11B RHOB PFN2 FERMT2 SNAI2 MATN2 COL3A1 INHBA
DO1 TST ACLY SNCG DHCR7 NDUFAB1 DNAJB9 SLC25A1 UBQLN1 ENPP2 NKIRAS1 COQ3 MYLK RETSAT

VDR90 RPA3 EXOSC8 CDK4 ING3 MCM6 GINS4 TACC3 PRPS1 DUT POLA2 MMS22L EED NAA38 PPM1D
EZR CEP192 SSH2 PIF1 ARFGEF1 BCR NF1 DYNLL2 TPX2 PCM1 APC ARHGAP29 SMC3 WASF2 CLIP2 R

DUT POLR2K POLA2 POLR2H POLB AAAS NELFCD DAD1 PCNA BCAP31 GTF2H5 NPR2 GTF2A2 UMP

MYC PLIN2 SOCS2 ABCB1 PTRH2 ENO3 ETV4 CYFIP1 PLSCR1 IFITM3 TNFSF10 PRAF2 P2RX4 LRIG1 CD8

AKT3 CDH4 NFASC CD274 MSN MAP4K2 THY1 TSPAN4 MYL9 CRAT PIK3CB ADAMTS5 SKAP2 NLGN

PHF3 YTHDC1 NFKB1 IRS1 AKT3 NR3C1 MAGI2 INPP4B ATP2B1 PIAS3 SIPA1L1 LTBP1 MET AGGF1

SLC10A3 FOXO3 KDM7A HTATIP2 FBXO7 TMCC2 HAGH CDR2 EIF2AK1 ASNS CIR1 RANBP10 ALDH6A1
AURKB TNPO2 DKC1 YTHDC1 DR1 KIF15 HIF1A SMC1A EWSR1 TOP2A SRSF10 CCNF MCM3 CHEK1 ST

TRIB3 DRAM1 FAS RCHY1 PCNA CGRRF1 CSRNP2 RETSAT SLC35D1 PITPNC1 PPP1R15A ZFP36L1

DL16A1 PDLIM4 FSTL3 COL5A2 RHOB TPM2 MYLK APLP1 FZD8 TAGLN TIMP1 JUN SDC4 LUM ID2 TGM2
11L1 EGFR ADAM10 USO1 SCRNI KIF1B SCAMP1 DNM1L BET1 SNAP23 ARFGAP3 SGMS1 PAM COPB2 (C
THFD1 ATOH8 ACOX3 ASL GSR MAOA ID2 RETSAT PDLIM5 HSD11B1 EPHX1 BCAR1 SLC35B1 SHMT2 AC

N BLCAP AEN FDXR CDK5R1 PTPN14 HEXIM1 IRAK1 RETSAT HBEGF CCND3 RPL36 HRAS POLH EPHX1 S
ETSAT ECHS1 ENPP2 TST PREB PPP1R15B SLC5A6 PFKL CD151 SLC19A1 COQ3 REEP6 ACO2 PFKFB3 UB
B2 RNF4 PPP4C IRF2 USP8 COL4A2 CASP10 FN1 CASP4 LGALS3 LYN CTSL CDH13 LAP3 DPP4 CD46 CBL

UJFV3 SLC37A4 CAPN5 PLOD1 KDEL3 RBCK1 B4GALT1 CHPF2 MED24 P4HA1 SDC1 ANG SLC35A3
BR7 NOP56 DIAPH3 SMC4 NCAPD2 CENPE NAA38 USP1 DNMT1 SMC3 SRSF1 SLBP PCNA MCM2 SPAG

L RUNX1 PTPRM NOTCH2 IGF1R ADORA2B AGGF1 MTA1 CACNA1A PHF3 NFIB DLG1 CDC42BPA ATP2B
ID2 RCAN1 HBEGF IFIH1 IL7R TRIB1 PDLIM5 B4GALT1 TRIP10 CXCL3 F3 TNIP2 JUNB PFKFB3 TAP1 GEN

C37A4 KDEL3 ADM CAV1 PFKL XPNPEP1 P4HA1 F3 PPP1R3C LXN GAA PFKFB3 CDKN1A ERFF1

CCDC88A CD2AP PCM1 SMC4 KIF15 CKAP5 NCK2 CENPE SMC3 NEK2 SOS1 KIF1B DLGAP5 TUBGCP6 BL

KIF15 CENPE SAP30 SRSF1 NEK2 DR1 EWSR1 MCM2 CDC45 BUB1 MNAT1 NOLC1 LBR WRN
FRSF1B ETS1 FUCA1 ZNF639 F2RL1 PTGS2 INHBA GALNT3 CCND2 SDCCAG8 ATG10 BIRC3 EVI5 EMP1 k

NS CTSC SLC37A4 PSME3 PSMD13 PFKL PDAP1 P4HA1 CCNF SEC11A SHMT2 FKBP2 YKT6 CDKN1A PSPF

IG15 TRIM25 TXNIP PSMB9 IFIT3 PLSCR1 LGALS3BP PTPN2 AUTS2 NCOA3 UBE2L6 PLA2G4A HLA-B PDE

ELOVL5 IL4I1 MCEE BCKDHB MGLL APEX1 CD36 ETFDH PTPRG UBE2L6 RDH11 PPARA CRYZ MDH1 BMI
F4E PCNA SSB MCM2 CDC45 NOLC1 SRSF7 DDX18 EIF4H DEK TFDP1 MRPL23 XRCC6 PSMA6 RPLP0 XPC
3 EIF4G2 PABPC4 VBP1 RSL1D1 EIF2S2 PA2G4 FAM120A TCP1 CCT4 ILF2 MCM6 CUL1 RPL18 RPS2 RFC
PINH1 AK4 IDI1 EIF2S2 SLC7A11 STARD4 PLOD2 PNP SLC7A5 NUPR1 G6PD DDIT3 BCAT1 TRIB3 NUFIP
1 STC1 NDRG1 CA12 MAFF AK4 FOXO3 JUN NEDD4L RORA ERFF1 DDIT3 HS3ST1 TPD52 PNRC1 CDKN
JC12 SNX10 TOB1 DLG5 FDFT1 ELOVL5 TFF3 MICB CD44 IL6ST CKB COX6C MOCS2 RBBP8 FABP5 AMFR

DX ALDH6A1 HBQ1 SLC6A9 E2F2 MGST3 IGSF3 TCEA1 TMEM9B SLC30A1 TFRC HEBP1 ATG4A MKRN1

IO NFKBIA NLRC5 HLA-B NUP93 PARP12 TRAFD1 JAK2 IFI44L CASP1 GCH1 ADAR SOCS3 LATS2 STAT2

ETSAT GPHN RTN3 ECH1 CHCHD10 DNAJB9 JAGN1 MGST3 GPD2 BCL2L13 DHCR7 NDUFB7 TOB1 SORE
HNRNPU TFRC CNP HSPA13 SPR CYB5B PRKACA BSG EIF5 CDC5L IL6ST NPTXR JUNB AMD1 CASP3 CDC
BIA PNRC1 ID2 GCH1 SPSB1 NFIL3 SOCS3 MAP2K3 HES1 MYC ACKR3 CD44 JAG1 EIF1 IL6ST TRAF1 PHL
PD1 MNAT1 E2F2 SYNCRIP CDKN1B HNRNPU KIF22 BARD1 FOXN3 TACC3 KPNA2 MYC G3BP1 ESPL1 P
LC25A3 PRDX3 HADHB RETSAT ACADSB NDUFS4 TCIRG1 COX10 ALDH6A1 SDHA ECH1 NDUFB4 ABCB7

LD51C BRMS1L SYNCRIP MLH1 CDKN1B CENPM DUT TFRC KIF22 BARD1 DCTPP1 DNMT1 PRDX4 TACC3

IUPR1 DDIT3 ITGB4 RALGDS CDK5R1 TRIB3 PRKAB1 TRAFD1 TPRKB CASP1 TOB1 BLCAP NUDT15 HDAC

I3 INPPL1 SYMPK CDH1 THBS3 AKT3 CD274 SKAP2 SDC3 ADAM23 CDK8 ARPC2 PCDH1 MSN LIMA1 CLI

NOP2 PRNP IL3RA IGF2R NFIL3 MYO1E PTCH1 MYC CD44 RNH1 BATF3 SOCS2 TRAF1 PHLDA1 PUS1 GL

ARHGAP4 PIF1 CD2AP SPTBN1 UXT PRC1 KNTC1 KIF3C APC ARFIP2 DOCK2 TUBGCP6 KIF3B MARCKS
SB1 PHLDA1 ICAM1 TIPARP IRF1 KDM6B PLK2 TAP1 CDKN1A IER5 IER2 RIPK2 ZBTB10 PHLDA2 ACKR3
TIPARP AK4 BNIP3L CCNG2 CDKN1A CSRP2 PGM2 ISG20 RRAGD TPST2 KDELR3 PAM CDKN1B PLAC8
FH NDUFA1 ATP1B1 MRPL34 MTX2 ECH1 ALDH6A1 ATP6V1H DECR1 ATP6V0E1 SDHC SDHB RETSAT
LA ISG20 CASP1 RIPK2 PNP NCOA3 TRAFD1 SECTM1 IL15 NMI NLRC5 MT2A IRF2 IFI44L SOCS3

IGFBP4 FOXC1 KIF20A SLC2A8 COX6C FABP5 PERP ADD3 SNX10 ABCA3 FDFT1 SIAH2 DYNLT3 EMP2

RCL1 FBXO7 SLC25A38 TRAK2 DCAF11 PPOX FN3K CPOX CDR2 TCEA1 FBXO9 E2F2 TMCC2 KLF3 SI

AGD NCOA3 CCNE1 IGF2R LRRC8C TNFRSF21 SYT11 CDKN1C NFIL3 WLS P4HA1 KLF6 RORA NCS1 BATF
COL12A1 COL5A2 TGM2 PPIB ITGB3 FOXC2 NNMT ITGAV EDIL3 CDH11 DST CAP2 PDLIM4 PVR BMP
CNG2 SDHB RETSAT NDUFAB1 SLC27A1 LIPE ACOX1 MCCC1 LPCAT3 ESRRR UQCRQ COQ5 CYC1 PGM1
ACOX1 PTS GSTM4 IGFBP4 MT2A TMBIM6 SSR3 CBR1 DDT GCH1 ATOH8 SAR1B AP4B1 ACO2 HPRT1
FC1 POLD2 RAD51C DEPDC1 CCNE1 CDKN1B PPM1D DUT RPA2 PTTG1 DCLRE1B KIF22 ORC2 RRM2 OI

CHPT1 PEX11A ARL3 MICB IGFBP4 UGCG FOXC1 ADD3 TGIF2 ABCA3 FDFT1 SIAH2 DYNLT3 OPN3 SNX
CDKN1C POLR2H IGFBP2 BID BCL2L11 CDK2 TMBIM6 SLC6A8 GCH1 TUBA4A EIF2S3 UROD RHOB POL
REP STX4 GNAI2 CDH13 DYRK2 XPNPEP1 CTSO TIMP1 HSPA1A CASP9 PSMB9 GPD2 DUSP5
ARD4 SORD SC5D CYB5B TXNRD1 RAB1A PSMC2 NFIL3 TCEA1 NUFIP1 P4HA1 PDK1 SEC11A PSMC6 STC
RHDF2 CDKN1A CGRRF1 RETSAT RPL18 IER5 CASP1 RPL36 NUDT15 RAD51C TRAFD1 BLCAP PDGFA F

SP1 CDKN1B IGF2R SC5D JUN CFLAR DAP3 LMNA BID BCL2L11 CDK2 GCH1 FDXR TIMP1 NEDD9 CASP9
CDKN1B RAD54L CUL1 ORC5 KIF20B RPA2 MT2A PURA PTTG1 E2F2 KIF22 ORC6 CDC25A TFDP1 SMC2 I
AP1 JAM3 ACTB ACTN4 ARHGEF6 RRAS STX4 GNAI2 TUBG1 MYL12B HADH VASP CLDN15 FLNC NF2 TS

PCBP1 PHB2 IMPDH2 EIF4G2 CUL1 EIF1AX DUT RPS6 YWHAE CYC1 RPL14 SNRPG PSMC6 VBP1 ORC2

N1 SAC3D1 DLG1 ARHGEF3 ARF6 ARHGAP10 ACTN4 ARHGAP27 KLC1 KIF20B YWHAE KIF22 BCL2L11 S

16A3 UGP2 FKBP4 XYLT2 PHKA2 PPIA PGLS GPC1 IGFBP3 SOD1 PYGL CLN6 GOT2 B4GALT2 AGL GLRX

TAF6 DUT RPA2 POLR2H ZWINT GTF3C5 NFX1 PCNA DDB1 RBX1 RFC5 DAD1 RALA POLR1C RPA3 NPR2

/1E1 DLAT TCIRG1 OAT BDH2 LDHA VDAC3 ACADVL NDUFS2 HADHB NDUFAB1 MRPS15 COX5A ATP6V
3 LDHA ACLY DHCR7 PDK1 TRIB3 SLC37A4 ARPC5L CDC25A PHGDH PSME3 BCAT1 XBP1 NUP205 RRM2

OLE3 RFC4 DUT SNRPD3 LDHA VDAC3 EIF3J CCT2 NDUFAB1 CNBP COX5A SNRPG SRSF7 PCNA AIMP2 T

A THBS2 GREM1 COL1A1 SLC6A8 PCOLCE FAS GADD45B TNC PLOD3 LUM MYLK SLIT2 VEGFC
CS ATP1B3 CPT2 ELMOD3 SLC5A6 MDH2 ESYT1 ESRRR MTCH2 BCL6 PHYH PHLDB1 PPARG GPAM TAN

HOF CEP250 TUBGCP6 DLGAP5 SPTAN1 ROCK1 ANLN KIF15 SMC1A MYO9B TOP2A ITSN1 TBCD CLIP1

2 SLIT2 VCAM1 POSTN PLOD1 NTM MYL9 ITGA5 ITGB5 EFEMP2 CALD1 TPM1 MEST THY1 SDC1 MCM7

C RTN3 SOWAHC GBE1 UQCRQ TKT POR SLC25A10 RMDN3 NMT1 AK2 SUCLG1 CRAT STOM MAP4K3 V

JB1 ROCK1 DLG1 CLASP1 NF1 CDC42BPA APC ARHGEF11 SPTBN1 RABGAP1 UXT KIF2C CDC27 CENPJ A

:4B HIF1A RNF213 SPPL2A ISG20 EIF2AK2 SAMHD1 PSMB2 PSME2 MX1 RAPGEF6 PSMB8 IFNAR2 MET

4 SNRPD1 HNRNPC EIF3J PABPC1 RNPS1 NOP16 PCBP1 ACP1 SYNCRIP PSMC6 YWHAQ DUT HNRNPU U

IS1 ELMOD3 SDHC PPM1B CCNG2 UBQLN1 COQ9 LPCAT3 RNF11 PHLDB1 PIM3 PREB RIOK3 UQCRQ PE

DA1 PLK2 MXD1 FOSL1 GFPT2 JUNB PFKFB3 KLF2 IL15RA PHLDA2 TNFAIP2 RIPK2 NFE2L2 TAP1 NR4A2

AFAH1B1 NUP98 DTYMK CKS2 SRSF2 FBXO5 PTTG1 SRSF10 SMC2 TRAIP CDKN3 ABL1 AMD1 PRPF4B R.

KPNA2 TP53 MYC HELLS CTPS1 ESPL1 E2F8 USP1 LUC7L3 CKS2 SRSF2 PTTG1 CHEK2 CDKN3 RFC1 RAD

EIF1 NFIL3 LITAF EDN1 JUN CFLAR SOCS3 KLF6 NAMPT PER1 SPHK1 FOSL1 GCH1 TUBB2A SLC2A6
ACKR3 JMJD6 SDC2 CDKN1C NFIL3 JUN P4HA1 PDK1 MT2A NAGK ADM KLF6 STC1 PGM1 PGF RORA L
VDAC3 NDUFA3 NDUFAB1 COX11 CYB5A NDUFS4 NDUFB1 PHB2 UQCRC2 COX10 POLR2F COX6B1 UC

2 OPN3 CYP26B1 MDK HPRT1 CXCL12 NAB2 GPER1 UNC13B SLC16A1 CDC6 BCL2 RAPGEFL1 JAK1 IMPA

.C30A1 ERMAP LMO2 SLC6A8 SLC25A37 FOXJ2 IGSF3 RNF19A UROD BMP2K FECH FOXO3 RNF123 HEE

LAMA4 SORBS1 HADH JAGN1 RMDN3 DDT RNF11 MTCH2 ELMOD3 MAP4K3 GPD2 PIM3 ACO2 GPHN
RC6 CDC25A TUBG1 PCNA SPC25 MLH1 CHEK2 NUP153 RAD51AP1 IPO7 RPA3 CCNB2 KIF2C TCF19 MY

21 PSMC4 PGM1 RRM2 CDC25A SERPINH1 TUBG1 NAMPT PPA1 ADD3 TBK1 FDXR CCNG1 TUBA4A UFI

MNAT1 CUL3 G3BP1 SLC7A1 NDC80 CCNB2 SNRPD1 KIF2C MYBL2 CDK1 PDS5B CKS1B BUB3 TTK

PSMC4 CDK2 PCNA UBE2L3 TFDP1 FAM120A NOP16 YWHAQ ILF2 CCT4 UBA2 G3BP1 PSMA1 SNRPD1
SH2 WASF1 PCGF5 NEDD9 TUBA4A GEMIN4 NDC80 CEP192 RASA1 CCNB2 KIF2C PKD2 SASS6 ALS2 CD

/OE1 NDUFB5 MTRR SLC25A12 TIMM10 SUCLA2 ABCB7 SLC25A5 COX15 RETSAT CS ATP6V1H MAOB N
ASNS EBP NFKBIB PPP1R15A GSR SLC7A11 PSMC6 INSIG1 PSMC4 P4HA1 PSMB5 PSMA3 ATP6V1D SC!

KAP13 DYNC1H1 TLK1 CLIP2 LRPPRC LLGL1 ECT2 KNTC1 CLIP1 EPB41 ITSN1 SHROOM1 TRIO TTK

IBA2 VDAC3 UBE2L3 PRDX4 KPNA2 MYC RPL14 MRPL9 HNRNPA2B1 G3BP1 CTPS1 ERH COPS5 CNBP U'

AD21 RAD23B CENPE GINS2 ATRX CENPA CENPF CDK4 SRSF1 BUB3 TTK KIF23 UBE2C XPO1 TFDP1 RBL

3P1 HBQ1 SLC2A1 AGPAT4 GDE1 MINPP1 HDGF P4HA2 SLC10A3 CLCN3 NCOA4 LAMP2 GYPC CTNS YPE

DUFC1 ACADSB MDH2 COX6B1 ATP6AP1 SDHA ALDH6A1 ATP1B1

