

Supplementary Table 3.

Complete set of differentially expressed genes in response to SF in the HG compared to DMSO control in HepG2 cells.

Gene Symbol	Ensembl ID	High Glucose	
		Fold ¹ Change	qvalue ²
AAAS	ENSG00000094914	-1.47	0.02
AATF	ENSG00000275700	1.33	0.02
ABCB1	ENSG00000085563	1.72	0.00
ABCB4	ENSG00000005471	-1.42	0.04
ABCC1	ENSG00000103222	1.6	0.01
ABCC2	ENSG00000023839	2.1	0.00
ABCC3	ENSG00000108846	3.3	0.00
ABCC6	ENSG00000091262	-1.36	0.03
ABCC6P1	ENSG00000256340	-1.54	0.01
ABCF2	ENSG00000033050	1.39	0.03
ABCG2	ENSG00000118777	1.55	0.00
ABCG8	ENSG00000143921	-1.72	0.01
ABHD4	ENSG00000100439	2.39	0.00
AC002546.1	ENSG00000267194	-4.38	0.02
AC004148.2	ENSG00000263272	1.36	0.02
AC005329.1	ENSG00000248015	-2.11	0.01
AC005562.1	ENSG00000214719	-1.77	0.00
AC006486.2	ENSG00000279539	2.17	0.04
AC007318.1	ENSG00000172974	1.37	0.02
AC011043.2	ENSG00000278198	-1.60	0.02
AC011297.1	ENSG00000273906	-2.39	0.03
AC022149.1	ENSG00000269378	1.51	0.01
AC023157.3	ENSG00000276900	2.3	0.02
AC025180.1	ENSG00000249899	11.24	0.02
AC079594.2	ENSG00000248710	-1.66	0.05
AC080128.1	ENSG00000244062	-2.17	0.00
AC083809.1	ENSG00000277247	2.03	0.02
AC083841.1	ENSG00000253196	-2.04	0.01
AC090907.1	ENSG00000259376	1.82	0.04
AC091173.1	ENSG00000251127	7.3	0.03
AC098934.2	ENSG00000234996	-2.19	0.05
AC099548.2	ENSG00000253882	1.71	0.03
AC099850.3	ENSG00000265415	-1.99	0.05
AC110285.7	ENSG00000279692	-2.83	0.00
AC120057.4	ENSG00000279641	2.51	0.03
AC126755.3	ENSG00000257527	1.24	0.05
AC240274.1	ENSG00000271254	-1.71	0.02
AC243964.2	ENSG00000266903	-1.64	0.03
AC243965.2	ENSG00000275552	4.85	0.01

ACACA	ENSG00000278540	-1.42	0.04
ACBD7	ENSG00000176244	-2.38	0.02
ACSL1	ENSG00000151726	-1.47	0.00
ACSL5	ENSG00000197142	1.87	0.00
ACSM2A	ENSG00000183747	-1.75	0.03
ACSM3	ENSG00000005187	-2.99	0.03
ACSS1	ENSG00000154930	-1.73	0.01
ACTB	ENSG00000075624	1.66	0.01
ACTR3	ENSG00000115091	1.4	0.01
ACVR1	ENSG00000115170	1.68	0.00
ACY3	ENSG00000132744	-2.53	0.00
ADAMTS13	ENSG00000160323	-2.38	0.01
ADAMTSL4-			
AS1	ENSG00000203804	1.69	0.01
ADCY6	ENSG00000174233	-1.48	0.02
ADD1	ENSG00000087274	-1.43	0.02
ADGRD1	ENSG00000111452	-2.19	0.04
ADGRG1	ENSG00000205336	-1.73	0.01
ADGRL1	ENSG00000072071	-2.20	0.01
ADH6	ENSG00000172955	-1.61	0.00
ADM	ENSG00000148926	2.05	0.03
ADRM1	ENSG00000130706	1.54	0.04
AFMID	ENSG00000183077	-1.42	0.04
AFP	ENSG00000081051	-1.85	0.00
AGBL5	ENSG00000084693	-1.40	0.00
AGXT	ENSG00000172482	-1.84	0.00
AIFM2	ENSG00000042286	2	0.01
AIMP2	ENSG00000106305	1.38	0.03
AKAP12	ENSG00000131016	2.68	0.00
AKNA	ENSG00000106948	-1.68	0.05
AKR1B10	ENSG00000198074	11.93	0.00
AKR1B10P1	ENSG00000213606	6.4	0.00
AKR1C1	ENSG00000187134	5.04	0.00
AKR1C2	ENSG00000151632	8.51	0.00
AKR1D1	ENSG00000122787	-2.14	0.01
AKTIP	ENSG00000166971	-1.39	0.04
AL031058.1	ENSG00000261189	2.34	0.00
AL034549.2	ENSG00000276073	-2.33	0.02
AL109615.3	ENSG00000237686	-3.03	0.01
AL121832.3	ENSG00000275437	-2.27	0.02
AL161669.1	ENSG00000259444	-1.74	0.01
AL355338.1	ENSG00000274605	1.93	0.02
AL357060.3	ENSG00000237499	-2.58	0.02
AL365181.3	ENSG00000272405	1.28	0.02
AL365203.1	ENSG00000229656	4.82	0.02
AL390195.1	ENSG00000243960	1.39	0.02

AL391832.2	ENSG00000238005	2.2	0.04
AL445524.1	ENSG00000233461	2.13	0.02
AL590004.4	ENSG00000260604	2.42	0.00
AL731684.1	ENSG00000225532	11.13	0.03
AL845321.1	ENSG00000228522	2.08	0.00
ALAD	ENSG00000148218	-1.35	0.02
ALB	ENSG00000163631	-1.39	0.02
ALDH18A1	ENSG00000059573	-1.24	0.05
ALDH1A1	ENSG00000165092	1.73	0.00
ALDH1L1	ENSG00000144908	2.28	0.00
ALDH3B1	ENSG00000006534	-2.31	0.00
ALDH6A1	ENSG00000119711	-1.80	0.00
ALDH7A1	ENSG00000164904	-1.33	0.03
ALDH9A1	ENSG00000143149	-1.38	0.01
ALDOA	ENSG00000149925	1.59	0.01
AMBRA1	ENSG00000110497	-1.34	0.04
AMDHD1	ENSG00000139344	-2.38	0.00
AMER1	ENSG00000184675	-1.49	0.05
AMN1	ENSG00000151743	1.79	0.02
AMZ2P1	ENSG00000214174	-1.68	0.05
ANGPTL1	ENSG00000116194	-2.23	0.00
ANGPTL2	ENSG00000136859	1.62	0.04
ANGPTL8	ENSG00000130173	2.12	0.00
ANKRD13A	ENSG00000076513	-1.33	0.04
ANKRD13B	ENSG00000198720	1.83	0.01
ANKRD65	ENSG00000235098	-1.73	0.02
ANO8	ENSG00000074855	-1.87	0.02
ANPEP	ENSG00000166825	-1.45	0.02
ANTXR1	ENSG00000169604	-1.55	0.01
ANTXR2	ENSG00000163297	1.56	0.02
ANXA2	ENSG00000182718	1.76	0.00
ANXA9	ENSG00000143412	-1.51	0.02
AOC3	ENSG00000131471	-1.40	0.01
AOC4P	ENSG00000260105	-2.38	0.01
AP000777.3	ENSG00000256813	-3.66	0.04
AP001065.1	ENSG00000228709	-1.55	0.05
AP002478.1	ENSG00000266401	4.31	0.04
AP006285.1	ENSG00000227306	-1.67	0.05
AP3S2	ENSG00000157823	-1.29	0.03
APAF1	ENSG00000120868	-1.53	0.03
APOBEC3A	ENSG00000128383	-1.78	0.00
APOBEC3C	ENSG00000244509	-1.62	0.00
APOBEC3G	ENSG00000239713	-2.19	0.01
APOC3	ENSG00000110245	-1.46	0.04
APOH	ENSG00000091583	-1.58	0.00
AQP11	ENSG00000178301	-1.51	0.01

AQP3	ENSG00000165272	2.63	0.01
AQP7P1	ENSG00000186466	1.96	0.04
ARAP2	ENSG00000047365	4.9	0.02
AREG	ENSG00000109321	2.32	0.00
ARHGAP33	ENSG00000004777	-2.01	0.01
ARHGAP5-AS1	ENSG00000258655	1.79	0.01
ARHGEF17	ENSG00000110237	-1.43	0.05
ARHGEF39	ENSG00000137135	-1.46	0.03
ARHGEF40	ENSG00000165801	-1.60	0.00
ARNTL	ENSG00000133794	-1.58	0.03
ARSB	ENSG00000113273	1.8	0.00
ARSI	ENSG00000183876	-3.48	0.00
ART4	ENSG00000111339	-1.67	0.00
ASAH2	ENSG00000188611	-1.82	0.03
ASAP2	ENSG00000151693	1.7	0.03
ASAP3	ENSG00000088280	-1.68	0.01
ASB4	ENSG00000005981	1.75	0.00
ASF1A	ENSG00000111875	1.64	0.02
ASF1B	ENSG00000105011	-1.84	0.00
ASPDH	ENSG00000204653	1.59	0.04
ASPH	ENSG00000198363	1.91	0.00
ASPSCR1	ENSG00000169696	-1.41	0.02
ATG16L1	ENSG00000085978	1.33	0.02
ATIC	ENSG00000138363	1.39	0.01
ATP10D	ENSG00000145246	-1.57	0.04
ATP1A3	ENSG00000105409	-9.78	0.03
ATP6V1E1	ENSG00000131100	1.59	0.00
ATPAF1	ENSG00000123472	-1.48	0.03
AURKA	ENSG00000087586	-1.31	0.03
AXL	ENSG00000167601	1.58	0.05
B4GALNT1	ENSG00000135454	2.75	0.00
B4GALNT3	ENSG00000139044	1.9	0.01
B4GALNT4	ENSG00000182272	-1.55	0.02
BACE1	ENSG00000186318	-1.43	0.05
BAG2	ENSG00000112208	1.85	0.00
BAG3	ENSG00000151929	1.44	0.01
BAHCC1	ENSG00000266074	-1.89	0.03
BAK1	ENSG00000030110	1.34	0.04
BBS2	ENSG00000125124	-1.29	0.04
BCAM	ENSG00000187244	-1.72	0.00
BCAS3	ENSG00000141376	-1.35	0.03
BCORL1	ENSG00000085185	-1.91	0.00
BEAN1-AS1	ENSG00000261656	-1.88	0.03
BHMT2	ENSG00000132840	3.21	0.00
BICDL1	ENSG00000135127	1.74	0.01
BIRC7	ENSG00000101197	2.89	0.00

BMF	ENSG00000104081	-3.84	0.01
BMP8B	ENSG00000116985	-2.60	0.03
BOK-AS1	ENSG00000234235	-2.14	0.01
BOP1	ENSG00000261236	1.77	0.02
BORA	ENSG00000136122	-1.52	0.04
BRD3	ENSG00000169925	-1.33	0.05
BRD8	ENSG00000112983	-1.32	0.03
BTBD11	ENSG00000151136	1.5	0.02
BTG2	ENSG00000159388	-1.41	0.03
BUB1	ENSG00000169679	-1.41	0.02
BUB1B	ENSG00000156970	-1.45	0.02
BUD23	ENSG00000071462	1.39	0.02
BZW2	ENSG00000136261	1.39	0.01
C11orf95	ENSG00000188070	-2.19	0.00
C12orf29	ENSG00000133641	1.49	0.02
C12orf49	ENSG00000111412	-1.34	0.02
C16orf89	ENSG00000153446	-2.35	0.02
C1orf115	ENSG00000162817	-1.42	0.03
C1orf186	ENSG00000263961	-1.55	0.03
C1orf210	ENSG00000253313	-2.83	0.00
C1QTNF6	ENSG00000133466	-1.49	0.03
C1RL-AS1	ENSG00000205885	-2.11	0.03
C21orf58	ENSG00000160298	-2.07	0.00
C2CD5	ENSG00000111731	-1.66	0.03
C2orf54	ENSG00000172478	-6.73	0.00
C3orf70	ENSG00000187068	-1.64	0.05
C4BPA	ENSG00000123838	-1.27	0.03
C8orf31	ENSG00000177335	1.74	0.03
C9	ENSG00000113600	-1.36	0.05
C9orf40	ENSG00000135045	-1.37	0.05
CA12	ENSG00000074410	4.32	0.01
CA14	ENSG00000118298	-2.53	0.00
CABIN1	ENSG00000099991	-1.37	0.01
CABLES2	ENSG00000149679	-1.85	0.00
CACNA2D4	ENSG00000151062	1.59	0.01
CADM1	ENSG00000182985	-1.67	0.01
CADPS2	ENSG00000081803	-1.45	0.02
CAP1	ENSG00000131236	1.33	0.01
CAPN2	ENSG00000162909	1.66	0.00
CARD19	ENSG00000165233	1.91	0.02
CASC19	ENSG00000254166	1.99	0.03
CBLC	ENSG00000142273	-2.51	0.03
CBR1	ENSG00000159228	1.79	0.01
CBX2	ENSG00000173894	-1.39	0.02
CBX5	ENSG00000094916	-1.57	0.02
CCDC15	ENSG00000149548	-1.93	0.03

CCDC163	ENSG00000280670	-2.30	0.00
CCDC170	ENSG00000120262	-2.25	0.02
CCDC34	ENSG00000109881	-1.39	0.02
CCDC84	ENSG00000186166	1.79	0.00
CCL14	ENSG00000276409	1.46	0.01
CCNA2	ENSG00000145386	-1.51	0.01
CCNB1	ENSG00000134057	-1.39	0.03
CCNB2	ENSG00000157456	-1.68	0.00
CCNG2	ENSG00000138764	-1.79	0.05
CCNH	ENSG00000134480	1.42	0.01
CCT2	ENSG00000166226	1.34	0.01
CCT5	ENSG00000150753	1.38	0.02
CCT6A	ENSG00000146731	1.28	0.03
CCT8	ENSG00000156261	1.3	0.05
CD4	ENSG00000010610	-1.88	0.00
CD58	ENSG00000116815	1.44	0.02
CD83	ENSG00000112149	-1.82	0.00
CDC123	ENSG00000151465	1.39	0.02
CDC25C	ENSG00000158402	-1.79	0.00
CDC42BPG	ENSG00000171219	-1.58	0.01
CDC42EP2	ENSG00000149798	1.86	0.01
CDC42EP4	ENSG00000179604	-2.38	0.00
CDCA2	ENSG00000184661	-1.57	0.01
CDCA3	ENSG00000111665	-1.39	0.02
CDCA7	ENSG00000144354	-1.66	0.05
CDCA8	ENSG00000134690	-1.53	0.01
CDH1	ENSG00000039068	-1.57	0.02
CDKN1A	ENSG00000124762	1.53	0.03
CDKN2AIPNL	ENSG00000237190	-1.40	0.05
CDKN2B	ENSG00000147883	4.36	0.00
CDKN2C	ENSG00000123080	-1.80	0.00
CDKN3	ENSG00000100526	-1.65	0.00
CDO1	ENSG00000129596	-1.88	0.02
CDR2	ENSG00000140743	1.29	0.03
CEBPA	ENSG00000245848	-2.28	0.00
CEBPA-AS1	ENSG00000267296	-1.58	0.03
CELSR2	ENSG00000143126	-1.73	0.02
CENPF	ENSG00000117724	-2.00	0.02
CENPI	ENSG00000102384	-2.20	0.02
CENPL	ENSG00000120334	-1.68	0.05
CENPN	ENSG00000166451	-1.88	0.01
CENPU	ENSG00000151725	-1.41	0.03
CEP152	ENSG00000103995	-1.92	0.03
CEP192	ENSG00000101639	-1.68	0.03
CEP295	ENSG00000166004	-2.03	0.02
CEP78	ENSG00000148019	-1.42	0.03

CES1	ENSG00000198848	1.66	0.00
CFAP100	ENSG00000163885	5.87	0.04
CGNL1	ENSG00000128849	-2.06	0.00
CHMP1B	ENSG00000255112	1.26	0.03
CHMP5	ENSG00000086065	1.34	0.03
CHORDC1	ENSG00000110172	1.63	0.03
CHPF2	ENSG00000033100	1.51	0.00
CHRD	ENSG00000090539	1.37	0.04
CHST3	ENSG00000122863	-1.71	0.00
CIC	ENSG00000079432	-1.32	0.04
CIT	ENSG00000122966	-1.85	0.00
CKAP2L	ENSG00000169607	-1.61	0.03
CLDN14	ENSG00000159261	-1.79	0.03
CLDN19	ENSG00000164007	-2.89	0.01
CLIC3	ENSG00000169583	-3.48	0.03
CLIP4	ENSG00000115295	46.19	0.00
CLMN	ENSG00000165959	-1.39	0.04
CNKS3	ENSG00000153721	-1.38	0.01
CNTNAP3P2	ENSG00000276386	2.47	0.02
COG2	ENSG00000135775	-1.32	0.04
COL16A1	ENSG00000084636	-1.31	0.03
COL2A1	ENSG00000139219	-3.03	0.00
COL4A6	ENSG00000197565	-1.49	0.01
COMMD7	ENSG00000149600	-1.55	0.02
COQ5	ENSG00000110871	-1.73	0.01
COQ7	ENSG00000167186	-2.08	0.01
CORO2A	ENSG00000106789	-1.39	0.01
CORO2B	ENSG00000103647	3.46	0.00
CPB2	ENSG00000080618	-1.37	0.03
CPLX1	ENSG00000168993	2.86	0.00
CPLX2	ENSG00000145920	6.54	0.00
CPS1	ENSG00000021826	-1.73	0.01
CPT1A	ENSG00000110090	1.97	0.00
CREB3L4	ENSG00000143578	-1.96	0.00
CRIP3	ENSG00000146215	-1.57	0.05
CRTC3	ENSG00000140577	-1.91	0.04
CRYBG1	ENSG00000112297	-1.42	0.03
CSGALNACT2	ENSG00000169826	1.79	0.04
CTDP1	ENSG00000060069	1.35	0.04
CTDSP2	ENSG00000175215	-1.36	0.01
CTPS1	ENSG00000171793	1.32	0.03
CTSL	ENSG00000135047	1.61	0.01
CTSV	ENSG00000136943	-1.93	0.00
CTTN	ENSG00000085733	1.38	0.03
CXCL8	ENSG00000169429	2.54	0.01
CXorf40B	ENSG00000197021	1.58	0.02

CXXC5	ENSG00000171604	-2.19	0.05
CYB561	ENSG00000008283	-2.10	0.01
CYCSP6	ENSG00000214429	1.48	0.04
CYLD	ENSG00000083799	-1.65	0.05
CYP20A1	ENSG00000119004	-1.60	0.02
CYP21A1P	ENSG00000204338	2.07	0.02
CYP24A1	ENSG00000019186	2.65	0.00
CYP2S1	ENSG00000167600	2.12	0.03
CYP2U1	ENSG00000155016	-1.65	0.01
CYP2W1	ENSG00000073067	-1.53	0.02
CYP4F11	ENSG00000171903	2.61	0.00
CYP8B1	ENSG00000180432	-1.69	0.02
CYR61	ENSG00000142871	2.55	0.00
CYTOR	ENSG00000222041	1.69	0.01
DAPK1	ENSG00000196730	-1.49	0.01
DBP	ENSG00000105516	-2.53	0.01
DCAF13	ENSG00000164934	1.46	0.01
DCAF8	ENSG00000132716	1.31	0.03
DCBLD1	ENSG00000164465	1.37	0.00
DCBLD2	ENSG00000057019	1.46	0.05
DCLRE1A	ENSG00000198924	-1.62	0.02
DCLRE1B	ENSG00000118655	-1.39	0.03
DCP1B	ENSG00000151065	-1.60	0.00
DDX27	ENSG00000124228	1.32	0.02
DDX49	ENSG00000105671	1.44	0.04
DESI1	ENSG00000100418	1.34	0.02
DFFA	ENSG00000160049	1.34	0.02
DGKK	ENSG00000274588	-2.62	0.00
DHRS2	ENSG00000100867	-1.71	0.04
DHTKD1	ENSG00000181192	-1.45	0.05
DHX34	ENSG00000134815	1.38	0.02
DHX37	ENSG00000150990	1.39	0.03
DLGAP5	ENSG00000126787	-1.58	0.01
DLX4	ENSG00000108813	-2.33	0.03
DLX6-AS1	ENSG00000231764	-1.80	0.02
DNAJB1	ENSG00000132002	1.47	0.03
DNAJC11	ENSG00000007923	1.24	0.02
DND1	ENSG00000256453	1.69	0.00
DNLZ	ENSG00000213221	1.52	0.04
DNMT3B	ENSG00000088305	-1.80	0.01
DNMT3L	ENSG00000142182	27.36	0.01
DOCK6	ENSG00000130158	1.44	0.02
DPEP1	ENSG00000015413	-1.97	0.01
DSTYK	ENSG00000133059	-1.83	0.02
DUSP1	ENSG00000120129	1.75	0.01
DUSP10	ENSG00000143507	-1.74	0.03

DUSP13	ENSG00000079393	5.36	0.00
DUSP5	ENSG00000138166	4.92	0.00
DUSP6	ENSG00000139318	1.39	0.05
DUSP9	ENSG00000130829	-1.42	0.04
DYSF	ENSG00000135636	-4.50	0.01
E2F2	ENSG00000007968	-1.77	0.01
E2F7	ENSG00000165891	-1.60	0.02
E2F8	ENSG00000129173	-1.65	0.03
EBNA1BP2	ENSG00000117395	1.54	0.01
EGFR-AS1	ENSG00000224057	1.65	0.03
EGR1	ENSG00000120738	3.35	0.00
EHD4	ENSG00000103966	1.38	0.03
EID3	ENSG00000255150	11.47	0.00
EIF1AD	ENSG00000175376	1.36	0.02
EIF2S1	ENSG00000134001	1.32	0.03
EIF3B	ENSG00000106263	1.3	0.03
EIF4EBP2	ENSG00000148730	-1.59	0.00
EIF5A	ENSG00000132507	1.53	0.04
ELF3	ENSG00000163435	-1.51	0.02
ELMO3	ENSG00000102890	1.83	0.01
EMC7	ENSG00000134153	1.39	0.03
ENO3	ENSG00000108515	-1.73	0.01
ENPP2	ENSG00000136960	-5.86	0.00
ENTPD2	ENSG00000054179	1.32	0.03
EPHB4	ENSG00000196411	-1.54	0.00
EPHX1	ENSG00000143819	2.61	0.00
EPHX2	ENSG00000120915	-1.99	0.00
EPPK1	ENSG00000261150	-1.85	0.01
EPS8L3	ENSG00000198758	1.62	0.00
ERAP2	ENSG00000164308	-1.45	0.04
ERBB2	ENSG00000141736	-2.14	0.00
ERCC1	ENSG00000012061	1.57	0.01
ERN1	ENSG00000178607	1.64	0.03
ERP27	ENSG00000139055	-3.23	0.00
ERRFI1	ENSG00000116285	1.65	0.01
ESPL1	ENSG00000135476	-1.73	0.01
ESPN	ENSG00000187017	-1.73	0.04
ETNK2	ENSG00000143845	-2.43	0.00
ETS2	ENSG00000157557	1.32	0.01
ETV4	ENSG00000175832	-1.39	0.02
EVC	ENSG00000072840	-1.85	0.00
EXO5	ENSG00000164002	-2.27	0.03
EZH2	ENSG00000106462	-1.39	0.05
F2RL1	ENSG00000164251	2.24	0.00
F3	ENSG00000117525	1.69	0.03
FABP5	ENSG00000164687	1.57	0.00

FADS1	ENSG00000149485	-1.45	0.00
FAH	ENSG00000103876	1.61	0.02
FAM102A	ENSG00000167106	-1.73	0.01
FAM102B	ENSG00000162636	-3.20	0.01
FAM111A	ENSG00000166801	-1.84	0.00
FAM111B	ENSG00000189057	-1.42	0.02
FAM117A	ENSG00000121104	-1.53	0.01
FAM155B	ENSG00000130054	1.38	0.02
FAM168A	ENSG00000054965	-1.42	0.03
FAM171A2	ENSG00000161682	-2.00	0.01
FAM174A	ENSG00000174132	1.6	0.01
FAM189B	ENSG00000160767	-1.36	0.03
FAM20C	ENSG00000177706	-1.48	0.04
FAM222A	ENSG00000139438	-2.25	0.00
FAM83D	ENSG00000101447	-1.36	0.03
FAM83H	ENSG00000180921	1.78	0.05
FANCC	ENSG00000158169	-1.31	0.05
FANCG	ENSG00000221829	-1.40	0.04
FAXDC2	ENSG00000170271	-2.13	0.00
FBXL16	ENSG00000127585	-1.58	0.03
FBXO43	ENSG00000156509	-1.85	0.04
FECH	ENSG00000066926	1.45	0.04
FEN1	ENSG00000168496	-1.58	0.02
FGD4	ENSG00000139132	-2.66	0.02
FGFR2	ENSG00000066468	-6.54	0.00
FGFR3	ENSG00000068078	-1.45	0.02
FHL2	ENSG00000115641	1.51	0.05
FHL3	ENSG00000183386	1.55	0.05
FKBP4	ENSG00000004478	1.54	0.00
FLNA	ENSG00000196924	1.49	0.03
FLOT1	ENSG00000137312	-1.46	0.03
FLVCR1	ENSG00000162769	-2.17	0.03
FLVCR2	ENSG00000119686	-1.29	0.03
FMO5	ENSG00000131781	-1.83	0.01
FOSL1	ENSG00000175592	2.23	0.01
FOXO4	ENSG00000184481	-1.82	0.01
FOXP4	ENSG00000137166	-1.75	0.00
FOXQ1	ENSG00000164379	1.41	0.02
FP236383.1	ENSG00000280441	-2.43	0.02
FREM1	ENSG00000164946	-1.54	0.01
FST	ENSG00000134363	1.7	0.00
FTH1P11	ENSG00000237264	2.19	0.02
FTH1P2	ENSG00000234975	1.78	0.02
FTL	ENSG00000087086	2.32	0.00
FTLP3	ENSG00000226608	2.13	0.00
FUT7	ENSG00000180549	1.55	0.02

FXR2	ENSG00000129245	1.42	0.03
FYN	ENSG0000010810	1.93	0.00
FZD1	ENSG00000157240	-2.55	0.00
G6PD	ENSG00000160211	1.62	0.02
GABRE	ENSG00000102287	2.81	0.00
GAL3ST1	ENSG00000128242	-1.87	0.02
GALNT1	ENSG00000141429	1.62	0.02
GALNT11	ENSG00000178234	-1.44	0.01
GALNT6	ENSG00000139629	-2.23	0.02
GANC	ENSG00000214013	-1.40	0.01
GAREM2	ENSG00000157833	-1.67	0.05
GART	ENSG00000159131	1.29	0.03
GAS2L3	ENSG00000139354	-1.77	0.04
GAS7	ENSG00000007237	-2.51	0.00
GATA4	ENSG00000136574	-2.04	0.02
GATA6	ENSG00000141448	-2.36	0.00
GBE1	ENSG00000114480	1.73	0.01
GCKR	ENSG00000084734	2.37	0.00
GCLC	ENSG00000001084	4.44	0.00
GCLM	ENSG00000023909	4.95	0.00
GDF15	ENSG00000130513	2.23	0.00
GDF7	ENSG00000143869	-2.20	0.00
GDPD5	ENSG00000158555	-2.60	0.00
GGACT	ENSG00000134864	-2.85	0.02
GGH	ENSG00000137563	-1.51	0.01
GGT5	ENSG00000099998	2.51	0.00
GHITM	ENSG00000165678	1.43	0.00
GIGYF2	ENSG00000204120	-1.29	0.04
GLA	ENSG00000102393	1.76	0.00
GLDC	ENSG00000178445	-1.30	0.03
GLIPR1	ENSG00000139278	1.89	0.00
GLIS2	ENSG00000126603	-6.45	0.01
GLRX	ENSG00000173221	1.84	0.00
GLT8D1	ENSG00000016864	-1.30	0.05
GLUD1	ENSG00000148672	-1.31	0.01
GLUL	ENSG00000135821	-1.42	0.01
GM2A	ENSG00000196743	-1.39	0.04
GMNN	ENSG00000112312	-1.33	0.03
GNA11	ENSG00000088256	-1.65	0.02
GNG7	ENSG00000176533	-2.00	0.00
GNMT	ENSG00000124713	-2.99	0.04
GNPDA1	ENSG00000113552	1.58	0.01
GOLT1A	ENSG00000174567	1.92	0.01
GOT1	ENSG00000120053	1.28	0.04
GOT2	ENSG00000125166	1.33	0.01
GPAT3	ENSG00000138678	4.49	0.00

GPATCH1	ENSG00000076650	-1.45	0.03
GPD1	ENSG00000167588	1.99	0.00
GPI	ENSG00000105220	1.49	0.01
GPNMB	ENSG00000136235	2.23	0.03
GPX2	ENSG00000176153	2.79	0.01
GRB10	ENSG00000106070	1.37	0.03
GRB7	ENSG00000141738	-1.59	0.02
GREB1	ENSG00000196208	-1.60	0.01
GRTP1	ENSG00000139835	-1.36	0.03
GSR	ENSG00000104687	2.33	0.00
GSTM4	ENSG00000168765	-1.46	0.04
GSTO1	ENSG00000148834	1.42	0.03
GTPBP4	ENSG00000107937	1.42	0.00
H1F0	ENSG00000189060	-1.52	0.01
H1FX	ENSG00000184897	-1.91	0.00
H2AFV	ENSG00000105968	-1.53	0.01
H2AFX	ENSG00000188486	-1.48	0.03
H2AFY2	ENSG00000099284	-1.45	0.01
H6PD	ENSG00000049239	-1.77	0.05
HACL1	ENSG00000131373	1.35	0.02
HADH	ENSG00000138796	-1.36	0.04
HAGLR	ENSG00000224189	-1.41	0.01
HAL	ENSG00000084110	-1.67	0.01
HBEGF	ENSG00000113070	1.95	0.01
HCST	ENSG00000126264	27.63	0.01
HDAC5	ENSG00000108840	-1.99	0.00
HDDC2	ENSG00000111906	1.48	0.04
HELZ2	ENSG00000130589	-1.60	0.02
HEPACAM	ENSG00000165478	-2.35	0.01
HFE	ENSG00000010704	-2.06	0.03
HGD	ENSG00000113924	1.47	0.00
HGFAC	ENSG00000109758	1.44	0.02
HGS	ENSG00000185359	1.38	0.04
HHAT	ENSG00000054392	-1.39	0.05
HHIPL2	ENSG00000143512	1.98	0.01
HIC1	ENSG00000177374	-9.65	0.02
HKDC1	ENSG00000156510	2.28	0.00
HLF	ENSG00000108924	-1.48	0.03
HMGA1	ENSG00000137309	1.58	0.00
HMGB3	ENSG00000029993	-1.59	0.00
HMGCS2	ENSG00000134240	-4.03	0.02
HMMR	ENSG00000072571	-1.93	0.03
HMSD	ENSG00000221887	2.31	0.03
HNRNPA1P10	ENSG00000214223	-1.23	0.05
HOXA3	ENSG00000105997	-1.60	0.02
HOXA-AS2	ENSG00000253552	-2.07	0.03

HOXD1	ENSG00000128645	-3.41	0.00
HPCAL1	ENSG00000115756	1.6	0.01
HPX	ENSG00000110169	-2.27	0.01
HSP90AA1	ENSG00000080824	1.57	0.03
HSP90AB1	ENSG00000096384	1.19	0.04
HSPA4	ENSG00000170606	1.29	0.02
HSPA5	ENSG00000044574	1.21	0.05
HSPA8	ENSG00000109971	1.55	0.01
HSPD1P1	ENSG00000213430	2.09	0.05
HSPH1	ENSG00000120694	1.64	0.01
HUNK	ENSG00000142149	-1.97	0.00
IBA57	ENSG00000181873	-1.47	0.01
ICAM1	ENSG00000090339	1.6	0.02
ICAM4	ENSG00000105371	-1.92	0.04
IDNK	ENSG00000148057	-1.87	0.05
IER3	ENSG00000137331	2.41	0.00
IFIT1	ENSG00000185745	-2.66	0.03
IFRD1	ENSG00000006652	1.56	0.01
IFT46	ENSG00000118096	-2.30	0.01
IGDCC3	ENSG00000174498	-1.74	0.00
IGFBP3	ENSG00000146674	1.97	0.04
IGFBP4	ENSG00000141753	1.63	0.01
IGHMBP2	ENSG00000132740	1.53	0.00
IGSF1	ENSG00000147255	-1.36	0.03
IGSF23	ENSG00000216588	-2.28	0.01
IKBK	ENSG00000269335	3.44	0.00
IL11	ENSG00000095752	3.37	0.00
IL17RC	ENSG00000163702	-1.52	0.03
IL22RA1	ENSG00000142677	-1.57	0.01
IL27RA	ENSG00000104998	1.29	0.05
IL6R	ENSG00000160712	2.71	0.01
IMP4	ENSG00000136718	1.62	0.02
IMPDH1	ENSG00000106348	1.65	0.01
INHA	ENSG00000123999	-1.79	0.01
INHBC	ENSG00000175189	-1.66	0.04
INPP5J	ENSG00000185133	-3.66	0.01
IPPK	ENSG00000127080	1.53	0.04
IQGAP3	ENSG00000183856	-2.00	0.00
IRF2	ENSG00000168310	-1.33	0.03
IRX3	ENSG00000177508	-1.73	0.01
ISG20	ENSG00000172183	2	0.01
ISG20L2	ENSG00000143319	1.53	0.01
ISL2	ENSG00000159556	1.61	0.02
ITGA1	ENSG00000213949	2.04	0.03
ITGB5	ENSG00000082781	1.43	0.03
ITIH1	ENSG00000055957	-1.71	0.02

ITIH5	ENSG00000123243	-1.48	0.02
JAG1	ENSG00000101384	3.51	0.00
JHDM1D-AS1	ENSG00000260231	1.37	0.04
JMJD6	ENSG00000070495	1.45	0.04
JUN	ENSG00000177606	1.54	0.01
JUNB	ENSG00000171223	1.59	0.03
KALRN	ENSG00000160145	1.4	0.04
KANK4	ENSG00000132854	-2.81	0.00
KAT2B	ENSG00000114166	-1.84	0.03
KAZALD1	ENSG00000107821	-1.77	0.00
KCMF1	ENSG00000176407	1.48	0.03
KCNJ11	ENSG00000187486	-2.08	0.03
KCNK13	ENSG00000152315	3.34	0.02
KCTD1	ENSG00000134504	-1.91	0.01
KDM4D	ENSG00000186280	-1.77	0.03
KIAA0922	ENSG00000121210	1.4	0.02
KIAA1161	ENSG00000164976	-1.46	0.01
KIAA1462	ENSG00000165757	5.27	0.03
KIAA1522	ENSG00000162522	-1.31	0.02
KIF11	ENSG00000138160	-1.69	0.02
KIF12	ENSG00000136883	-2.46	0.01
KIF15	ENSG00000163808	-1.75	0.01
KIF18A	ENSG00000121621	-1.66	0.01
KIF20A	ENSG00000112984	-1.85	0.01
KIF22	ENSG00000079616	-1.49	0.01
KIF23	ENSG00000137807	-1.34	0.02
KIF2C	ENSG00000142945	-1.53	0.00
KIF4A	ENSG00000090889	-1.45	0.01
KIFC1	ENSG00000237649	-1.42	0.01
KIFC3	ENSG00000140859	1.5	0.04
KLB	ENSG00000134962	-1.95	0.00
KLC4	ENSG00000137171	-1.38	0.04
KLF10	ENSG00000155090	1.46	0.05
KLF11	ENSG00000172059	-2.27	0.00
KLF5	ENSG00000102554	1.85	0.05
KLHDC2	ENSG00000165516	-1.42	0.01
KLHDC9	ENSG00000162755	-4.44	0.02
KLHL14	ENSG00000197705	-1.99	0.00
KLHL18	ENSG00000114648	1.61	0.01
KLHL21	ENSG00000162413	1.47	0.01
KLHL5	ENSG00000109790	1.42	0.02
KNG1	ENSG00000113889	-1.82	0.02
KYNU	ENSG00000115919	1.58	0.00
LAMP1	ENSG00000185896	1.42	0.03
LAPTM4B	ENSG00000104341	1.28	0.05
LCN15	ENSG00000177984	-2.55	0.01

LDHD	ENSG00000166816	-2.03	0.00
LGALS3	ENSG00000131981	1.85	0.00
LGALS8	ENSG00000116977	1.31	0.05
LGALS8-AS1	ENSG00000223776	1.72	0.05
LIF	ENSG00000128342	2.72	0.04
LIG3	ENSG00000005156	1.27	0.04
LIMD2	ENSG00000136490	1.47	0.04
LINC00261	ENSG00000259974	-1.47	0.04
LINC00346	ENSG00000255874	3.36	0.01
LINC00638	ENSG00000258701	-2.39	0.04
LINC00654	ENSG00000205181	-1.91	0.02
LINC00694	ENSG00000225873	-7.26	0.00
LINC00870	ENSG00000243083	-2.36	0.01
LINC00941	ENSG00000235884	5.33	0.00
LINC00973	ENSG00000240476	4.04	0.05
LINC01124	ENSG00000222033	-1.78	0.00
LINC01564	ENSG00000235899	13.07	0.00
LINC01770	ENSG00000225285	-1.85	0.00
LINC02413	ENSG00000257345	-2.71	0.01
LINGO4	ENSG00000213171	-2.14	0.02
LIVAR	ENSG00000266304	2.67	0.00
LMTK3	ENSG00000142235	-1.96	0.01
LRCH1	ENSG00000136141	1.47	0.01
LRFN4	ENSG00000173621	1.85	0.00
LRP8	ENSG00000157193	2.22	0.00
LRRC1	ENSG00000137269	1.29	0.03
LRRC3	ENSG00000160233	-1.56	0.01
LRRC37A4P	ENSG00000214425	-1.65	0.01
LSM14B	ENSG00000149657	-1.35	0.03
LUCAT1	ENSG00000248323	32.09	0.00
LURAP1L	ENSG00000153714	1.69	0.01
LYZ	ENSG00000090382	-1.33	0.04
M6PR	ENSG00000003056	1.86	0.03
MAFA	ENSG00000182759	-6.54	0.04
MAFF	ENSG00000185022	1.38	0.02
MAFK	ENSG00000198517	1.44	0.01
MAGED2	ENSG00000102316	-1.40	0.02
MAMSTR	ENSG00000176909	-1.75	0.02
MAP2K1	ENSG00000169032	1.37	0.01
MAP2K3	ENSG00000034152	1.49	0.00
MAP2K6	ENSG00000108984	-1.95	0.00
MAP3K14	ENSG00000006062	1.71	0.01
MAP3K3	ENSG00000198909	-1.39	0.03
MAP3K4	ENSG00000085511	-1.47	0.02
MAP4K4	ENSG00000071054	-1.54	0.00
MAP7D2	ENSG00000184368	-1.36	0.04

MAPK13	ENSG00000156711	1.54	0.00
MARS2	ENSG00000247626	1.41	0.04
MAST4	ENSG00000069020	-2.01	0.00
MASTL	ENSG00000120539	-1.42	0.04
MATN3	ENSG00000132031	-1.66	0.00
MBL2	ENSG00000165471	-2.19	0.00
MCAM	ENSG00000076706	-1.39	0.02
ME2	ENSG00000082212	1.44	0.03
MED10	ENSG00000133398	1.44	0.05
MEIKIN	ENSG00000239642	-1.79	0.04
METTL7A	ENSG00000185432	-2.17	0.01
METTL7B	ENSG00000170439	2.01	0.00
MEX3A	ENSG00000254726	-1.45	0.05
MEX3B	ENSG00000183496	-1.99	0.04
MFAP2	ENSG00000117122	-2.83	0.02
MGAT4B	ENSG00000161013	1.36	0.04
MGST1	ENSG00000008394	2.23	0.00
MICALL2	ENSG00000164877	1.61	0.01
MINDY1	ENSG00000143409	-1.49	0.03
MIR22HG	ENSG00000186594	2.54	0.05
MIR29A	ENSG00000284032	2.83	0.01
MIR4435-2HG	ENSG00000172965	2.03	0.01
MIS18A	ENSG00000159055	-1.80	0.00
MIS18BP1	ENSG00000129534	-1.83	0.05
MKS1	ENSG00000011143	-1.40	0.02
MLYCD	ENSG00000103150	4.13	0.00
MMP10	ENSG00000166670	7.74	0.01
MOB3A	ENSG00000172081	-1.39	0.02
MORN4	ENSG00000171160	-1.54	0.02
MOV10	ENSG00000155363	-1.35	0.03
MPHOSPH9	ENSG00000051825	-1.51	0.04
MPP7	ENSG00000150054	-1.93	0.01
MPZL3	ENSG00000160588	1.48	0.03
MROH8	ENSG00000101353	-2.22	0.01
MRPS11	ENSG00000181991	1.51	0.05
MRPS30	ENSG00000112996	1.3	0.02
MTCL1	ENSG00000168502	1.81	0.01
MTHFD1L	ENSG00000120254	1.26	0.05
MT-TT	ENSG00000210195	1.48	0.02
MUTYH	ENSG00000132781	-1.53	0.04
MVB12B	ENSG00000196814	-1.55	0.00
MX1	ENSG00000157601	-2.06	0.01
MYBBP1A	ENSG00000132382	1.57	0.00
MYH10	ENSG00000133026	-1.45	0.04
MYO10	ENSG00000145555	-1.73	0.00
MYO15B	ENSG00000266714	1.5	0.01

MYO1G	ENSG00000136286	-3.84	0.00
NAALAD2	ENSG00000077616	-1.82	0.02
NAALADL1	ENSG00000168060	-1.56	0.04
NAGA	ENSG00000198951	-1.48	0.03
NATD1	ENSG00000274180	-1.69	0.01
NCAPD2	ENSG00000010292	-1.54	0.00
NCAPG	ENSG00000109805	-1.38	0.03
NCAPH	ENSG00000121152	-1.37	0.01
NCF2	ENSG00000116701	13.38	0.00
NECAB3	ENSG00000125967	1.46	0.03
NEDD4L	ENSG00000049759	-1.34	0.00
NEK2	ENSG00000117650	-2.06	0.00
NEURL1B	ENSG00000214357	-3.20	0.02
NFATC2	ENSG00000101096	-1.71	0.01
NFE2	ENSG00000123405	-4.38	0.03
NFE2L3	ENSG00000050344	1.33	0.04
NIPA2	ENSG00000140157	1.44	0.02
NKD1	ENSG00000140807	-1.54	0.00
NLGN2	ENSG00000169992	-1.61	0.04
NLGN4Y	ENSG00000165246	-1.55	0.01
NLN	ENSG00000123213	1.66	0.01
NOL6	ENSG00000165271	1.55	0.01
NOLC1	ENSG00000166197	1.4	0.00
NOMO1	ENSG00000103512	1.22	0.05
NOP14	ENSG00000087269	1.36	0.05
NOP16	ENSG00000048162	1.66	0.01
NOP2	ENSG00000111641	1.58	0.00
NOTCH1	ENSG00000148400	-2.85	0.04
NPAS1	ENSG00000130751	3.86	0.00
NPLOC4	ENSG00000182446	1.33	0.02
NPNT	ENSG00000168743	-4.38	0.00
NPTN	ENSG00000156642	1.34	0.01
NPTXR	ENSG00000221890	-1.73	0.02
NQO1	ENSG00000181019	3.12	0.00
NR1D1	ENSG00000126368	1.57	0.03
NR1H4	ENSG00000012504	-1.62	0.02
NR2C1	ENSG00000120798	-1.52	0.03
NRP2	ENSG00000118257	-1.84	0.03
NSMCE4A	ENSG00000107672	-1.33	0.03
NTN4	ENSG00000074527	-1.60	0.05
NUCKS1	ENSG00000069275	-1.55	0.03
NUDC	ENSG00000090273	1.45	0.03
NUDT4P1	ENSG00000177144	-1.88	0.00
NUDT4P2	ENSG00000271121	-1.77	0.01
NUSAP1	ENSG00000137804	-1.68	0.01
NYNRIN	ENSG00000205978	-4.38	0.00

ODC1	ENSG00000115758	1.73	0.00
OIT3	ENSG00000138315	-1.61	0.01
OLAH	ENSG00000152463	5.83	0.03
OLFML1	ENSG00000183801	-4.29	0.00
OPHN1	ENSG00000079482	-2.30	0.02
ORC3	ENSG00000135336	-1.45	0.01
OSBP2	ENSG00000184792	-1.87	0.02
OSMR	ENSG00000145623	1.75	0.00
OTX1	ENSG00000115507	-1.77	0.01
P2RY6	ENSG00000171631	7.23	0.00
P2RY8	ENSG00000182162	-1.53	0.03
PAK1IP1	ENSG00000111845	1.39	0.00
PALLD	ENSG00000129116	2.65	0.00
PALMD	ENSG00000099260	-1.60	0.01
PANK1	ENSG00000152782	-1.62	0.00
PANX2	ENSG00000073150	2.66	0.00
PAPSS1	ENSG00000138801	-1.36	0.03
PAQR5	ENSG00000137819	4.91	0.00
PAQR8	ENSG00000170915	-1.78	0.00
PART1	ENSG00000152931	1.4	0.04
PBK	ENSG00000168078	-2.06	0.00
PBLD	ENSG00000108187	-2.13	0.01
PBX3	ENSG00000167081	-2.55	0.02
PBXIP1	ENSG00000163346	-1.88	0.00
PCOLCE	ENSG00000106333	-1.85	0.00
PCSK4	ENSG00000115257	-1.75	0.03
PCTP	ENSG00000141179	-1.27	0.03
PCYT1A	ENSG00000161217	1.54	0.03
PCYT1B	ENSG00000102230	-1.78	0.01
PDCD11	ENSG00000148843	1.35	0.02
PDCD4-AS1	ENSG00000203497	-2.07	0.01
PDLIM5	ENSG00000163110	-1.93	0.00
PDLIM7	ENSG00000196923	1.59	0.04
PDPK2P	ENSG00000205918	-1.59	0.04
PDZK1	ENSG00000174827	-1.56	0.02
PEG10	ENSG00000242265	-1.96	0.01
PEG13	ENSG00000282164	-1.41	0.03
PES1	ENSG00000100029	1.48	0.02
PEX13	ENSG00000162928	-1.73	0.01
PFDN2	ENSG00000143256	1.73	0.03
PFKP	ENSG00000067057	2.75	0.00
PGC	ENSG00000096088	-1.62	0.04
PGLYRP2	ENSG00000161031	-2.03	0.04
PGM1	ENSG00000079739	-1.40	0.02
PHF8	ENSG00000172943	-1.38	0.05
PHGDH	ENSG00000092621	-1.58	0.02

PHLDA1	ENSG00000139289	1.23	0.03
PHLDA2	ENSG00000181649	5.06	0.00
PHLPP1	ENSG00000081913	-1.46	0.01
PHYH	ENSG00000107537	-1.49	0.01
PIGZ	ENSG00000119227	-1.64	0.01
PIK3AP1	ENSG00000155629	-1.71	0.02
PIK3C2B	ENSG00000133056	-2.28	0.01
PIK3CD	ENSG00000171608	1.39	0.01
PIK3IP1	ENSG00000100100	-2.10	0.00
PIK3R3	ENSG00000117461	-2.10	0.01
PIM1	ENSG00000137193	1.89	0.00
PIMREG	ENSG00000129195	-1.71	0.01
PIP5K1B	ENSG00000107242	-1.64	0.00
PIPOX	ENSG00000179761	-1.53	0.01
PIR	ENSG00000087842	2.8	0.00
PITHD1	ENSG00000057757	1.49	0.01
PKD1L2	ENSG00000166473	2.31	0.01
PLA2G12B	ENSG00000138308	-1.49	0.00
PLA2G2A	ENSG00000188257	-2.79	0.01
PLA2G3	ENSG00000100078	-2.97	0.03
PLAA	ENSG00000137055	1.31	0.03
PLAC8	ENSG00000145287	1.78	0.00
PLCXD1	ENSG00000182378	-1.30	0.02
PLD6	ENSG00000179598	1.24	0.05
PLEKHA7	ENSG00000166689	-1.58	0.02
PLEKHB1	ENSG00000021300	-1.60	0.00
PLEKHG3	ENSG00000126822	-1.58	0.01
PLEKHG6	ENSG00000008323	-1.55	0.01
PLEKHO2	ENSG00000241839	1.4	0.03
PLIN2	ENSG00000147872	1.46	0.01
PLK3	ENSG00000173846	1.71	0.00
PLPPR1	ENSG00000148123	-1.84	0.00
PLXNC1	ENSG00000136040	-2.00	0.01
PMM1	ENSG00000100417	-1.61	0.02
PNKD	ENSG00000127838	1.35	0.02
PNMA1	ENSG00000176903	1.35	0.01
PNO1	ENSG00000115946	1.54	0.00
PNP	ENSG00000198805	1.49	0.02
PNPLA3	ENSG00000100344	-1.49	0.03
POC1A	ENSG00000164087	-1.72	0.01
POLH	ENSG00000170734	-1.41	0.02
POLQ	ENSG00000051341	-1.85	0.04
POLR3G	ENSG00000113356	2.21	0.04
PPID	ENSG00000171497	1.39	0.04
PPIP5K1	ENSG00000168781	-1.78	0.01
PPM1H	ENSG00000111110	-1.39	0.04

PPP1R15A	ENSG00000087074	1.58	0.02
PPP1R3C	ENSG00000119938	-1.58	0.03
PPP2CB	ENSG00000104695	1.35	0.00
PPP3CC	ENSG00000120910	1.42	0.02
PQLC2	ENSG00000040487	1.63	0.02
PQLC3	ENSG00000162976	-1.97	0.04
PRC1	ENSG00000198901	-1.43	0.02
PRDX1	ENSG00000117450	1.54	0.00
PRIMA1	ENSG00000175785	-2.04	0.02
PRIMPOL	ENSG00000164306	-1.77	0.01
PRKCH	ENSG00000027075	3.4	0.00
PRMT3	ENSG00000185238	1.51	0.01
PRNP	ENSG00000171867	1.43	0.01
PRPSAP1	ENSG00000161542	-1.64	0.00
PRR12	ENSG00000126464	-1.48	0.01
PRR15	ENSG00000176532	-1.54	0.02
PRR15L	ENSG00000167183	-3.07	0.01
PRR36	ENSG00000183248	-1.93	0.01
PRR5	ENSG00000186654	1.51	0.04
PRSS36	ENSG00000178226	-2.73	0.04
PRSS8	ENSG00000052344	-1.68	0.02
PRUNE1	ENSG00000143363	-1.93	0.00
PSMB8-AS1	ENSG00000204261	-2.06	0.01
PSMC2	ENSG00000161057	1.3	0.03
PSMD1	ENSG00000173692	1.33	0.00
PSMD11	ENSG00000108671	1.48	0.00
PSMD12	ENSG00000197170	1.47	0.02
PSMD14	ENSG00000115233	1.36	0.01
PSMD6	ENSG00000163636	1.36	0.04
PSMD7	ENSG00000103035	1.46	0.03
PSMF1	ENSG00000125818	1.34	0.04
PSPC1P1	ENSG00000227879	-1.27	0.04
PSRC1	ENSG00000134222	-1.75	0.02
PTGES3	ENSG00000110958	1.55	0.03
PTGR1	ENSG00000106853	5.23	0.00
PTK2B	ENSG00000120899	-1.91	0.03
PTRH2	ENSG00000141378	1.5	0.01
PTS	ENSG00000150787	1.47	0.01
PUM3	ENSG00000080608	1.55	0.00
PWP1	ENSG00000136045	1.3	0.03
PWP2	ENSG00000241945	1.55	0.01
PXDC1	ENSG00000168994	2.34	0.01
PXYLP1	ENSG00000155893	-1.95	0.01
PYGL	ENSG00000100504	-1.24	0.04
PYGO2	ENSG00000163348	1.35	0.01
RAB10	ENSG00000084733	1.54	0.00

RAB11FIP1	ENSG00000156675	-1.40	0.04
RAB3B	ENSG00000169213	1.92	0.00
RAB40B	ENSG00000141542	-1.40	0.04
RAB7A	ENSG00000075785	1.2	0.03
RABGGTA	ENSG00000100949	1.37	0.04
RALGPS1	ENSG00000136828	-2.38	0.00
RARS2	ENSG00000146282	-1.29	0.05
RASD1	ENSG00000108551	3.29	0.00
RASGRF2	ENSG00000113319	1.55	0.03
RBL1	ENSG00000080839	-1.66	0.05
RBM19	ENSG00000122965	1.42	0.00
RBM24	ENSG00000112183	3.26	0.00
RBM7	ENSG00000076053	1.48	0.00
RELL2	ENSG00000164620	1.88	0.01
RELN	ENSG00000189056	-1.78	0.04
RELT	ENSG00000054967	1.6	0.01
RER1	ENSG00000157916	1.54	0.01
REXO5	ENSG00000005189	-2.10	0.00
RFC1	ENSG00000035928	-1.47	0.02
RFFL	ENSG00000092871	1.31	0.05
RGN	ENSG00000130988	-1.77	0.00
RGS20	ENSG00000147509	2.63	0.03
RGS3	ENSG00000138835	1.87	0.01
RHBDF2	ENSG00000129667	1.46	0.02
RHBDL2	ENSG00000158315	-2.68	0.00
RHBG	ENSG00000132677	-1.51	0.05
RHOBTB1	ENSG00000072422	-1.59	0.00
RHOBTB2	ENSG00000008853	-1.61	0.02
RHOU	ENSG00000116574	-1.88	0.00
RIMS3	ENSG00000117016	-1.52	0.02
RIN2	ENSG00000132669	1.66	0.01
RIPK1	ENSG00000137275	-1.34	0.02
RIT1	ENSG00000143622	1.46	0.03
RMI2	ENSG00000175643	-1.79	0.00
RNA5SP111	ENSG00000223318	-1.58	0.04
RNF144A	ENSG00000151692	-2.07	0.00
RNF183	ENSG00000165188	2.11	0.00
RNF207	ENSG00000158286	-1.67	0.04
RPL23AP7	ENSG00000240356	1.51	0.04
RPSAP69	ENSG00000233487	-1.51	0.01
RRP1	ENSG00000160214	1.52	0.01
RRP12	ENSG00000052749	1.76	0.00
RRP9	ENSG00000114767	1.7	0.01
RRS1	ENSG00000179041	1.37	0.02
RTN4	ENSG00000115310	1.2	0.04
S100A11	ENSG00000163191	1.8	0.04

SALL2	ENSG00000165821	-2.00	0.00
SALL4	ENSG00000101115	-2.46	0.01
SAT1	ENSG00000130066	1.67	0.00
SBK1	ENSG00000188322	-3.05	0.00
SBK3	ENSG00000231274	2.53	0.00
SCAMP5	ENSG00000198794	1.73	0.01
SCARA3	ENSG00000168077	-2.01	0.03
SCFD2	ENSG00000184178	1.38	0.02
SCN1A	ENSG00000144285	-3.18	0.00
SCN1B	ENSG00000105711	-2.17	0.03
SCN9A	ENSG00000169432	-2.30	0.04
SDCBP2-AS1	ENSG00000234684	-2.38	0.03
SDCCAG3	ENSG00000165689	1.72	0.02
SEBOX	ENSG00000274529	-1.57	0.01
SEH1L	ENSG00000085415	1.48	0.02
SEL1L3	ENSG00000091490	2.43	0.00
SEMA4G	ENSG00000095539	-1.78	0.02
SEMA6A	ENSG00000092421	-1.67	0.04
SEMA6B	ENSG00000167680	-1.67	0.02
SEMA6C	ENSG00000143434	-2.22	0.00
SEPHS2	ENSG00000179918	-1.21	0.03
SEPTIN6	ENSG00000125354	-1.67	0.00
SEPTIN8	ENSG00000164402	-1.36	0.04
SERPINA12	ENSG00000165953	-1.97	0.03
SERPINA6	ENSG00000170099	-1.64	0.02
SERPINA7	ENSG00000123561	-1.55	0.00
SERPINB1	ENSG00000021355	-1.29	0.03
SERPINC1	ENSG00000117601	-1.33	0.03
SERPINE1	ENSG00000106366	1.66	0.01
SERPINE2	ENSG00000135919	1.6	0.01
SERTAD1	ENSG00000197019	2.21	0.01
SFN	ENSG00000175793	2.31	0.00
SFXN2	ENSG00000156398	-1.45	0.01
SFXN3	ENSG00000107819	-1.56	0.01
SGK1	ENSG00000118515	-1.93	0.01
SGO1	ENSG00000129810	-1.60	0.02
SH2B1	ENSG00000178188	-1.40	0.03
SH2D4A	ENSG00000104611	-1.71	0.00
SH2D5	ENSG00000189410	2.74	0.00
SH3RF1	ENSG00000154447	1.72	0.02
SIK2	ENSG00000170145	-1.41	0.02
SIN3A	ENSG00000169375	-1.38	0.04
SIRPA	ENSG00000198053	-1.37	0.01
SIRT3	ENSG00000142082	-1.62	0.01
SIRT5	ENSG00000124523	-1.57	0.00
SIRT6	ENSG00000077463	1.51	0.05

SIRT7	ENSG00000187531	1.51	0.00
SKA1	ENSG00000154839	-2.46	0.03
SLC11A2	ENSG00000110911	-1.45	0.01
SLC13A3	ENSG00000158296	-1.44	0.01
SLC13A5	ENSG00000141485	-1.39	0.03
SLC16A10	ENSG00000112394	-1.88	0.03
SLC16A13	ENSG00000174327	-1.44	0.00
SLC16A6	ENSG00000108932	4.3	0.00
SLC1A4	ENSG00000115902	-1.51	0.01
SLC20A1	ENSG00000144136	1.86	0.00
SLC22A18	ENSG00000110628	3.36	0.00
SLC22A18AS	ENSG00000254827	3.81	0.00
SLC22A7	ENSG00000137204	-2.16	0.02
SLC25A23	ENSG00000125648	-1.48	0.03
SLC26A1	ENSG00000145217	1.67	0.01
SLC29A2	ENSG00000174669	-1.78	0.03
SLC29A4	ENSG00000164638	-1.72	0.03
SLC30A10	ENSG00000196660	-1.66	0.03
SLC35F2	ENSG00000110660	1.47	0.01
SLC35G2	ENSG00000168917	1.96	0.00
SLC38A4	ENSG00000139209	-1.92	0.04
SLC39A5	ENSG00000139540	-1.48	0.02
SLC44A2	ENSG00000129353	-1.89	0.00
SLC46A1	ENSG00000076351	-1.49	0.03
SLC5A11	ENSG00000158865	4.85	0.00
SLC6A11	ENSG00000132164	-1.22	0.05
SLC6A12	ENSG00000111181	-5.28	0.02
SLC6A4	ENSG00000108576	-1.88	0.00
SLC6A9	ENSG00000196517	-1.91	0.00
SLC7A5	ENSG00000103257	1.33	0.03
SLC8B1	ENSG00000089060	-1.54	0.04
SLCO2B1	ENSG00000137491	-1.83	0.00
SLCO4A1-AS1	ENSG00000232803	-2.20	0.04
SLCO4C1	ENSG00000173930	-1.85	0.04
SMARCE1	ENSG00000073584	-1.42	0.03
SMG1P6	ENSG00000254634	1.66	0.04
SMIM24	ENSG00000095932	-1.75	0.02
SMO	ENSG00000128602	-1.64	0.01
SMTNL2	ENSG00000188176	-6.06	0.01
SNAI1	ENSG00000124216	1.71	0.04
SNCG	ENSG00000173267	10.05	0.03
SNN	ENSG00000184602	-1.62	0.01
SNTA1	ENSG00000101400	-1.59	0.01
SOBP	ENSG00000112320	-1.80	0.00
SOCS1	ENSG00000185338	-2.30	0.00
SOGA1	ENSG00000149639	-1.49	0.04

SORBS2	ENSG00000154556	-1.61	0.01
SOWAHA	ENSG00000198944	-5.82	0.01
SP1	ENSG00000185591	2.99	0.02
SP5	ENSG00000204335	-1.80	0.00
SPARC	ENSG00000113140	-1.58	0.01
SPIRE2	ENSG00000204991	-1.53	0.01
SPP1	ENSG00000118785	5.85	0.00
SPRY4	ENSG00000187678	1.84	0.00
SPTLC3	ENSG00000172296	-3.92	0.00
SQSTM1	ENSG00000161011	3.32	0.00
SRD5A3	ENSG00000128039	-1.42	0.03
SREBF1	ENSG00000072310	-1.44	0.01
SRM	ENSG00000116649	1.65	0.04
SRPRB	ENSG00000144867	1.44	0.01
SRXN1	ENSG00000271303	5.4	0.00
SSBP1	ENSG00000106028	1.44	0.02
SSBP3	ENSG00000157216	-1.40	0.01
SSC4D	ENSG00000146700	-1.71	0.03
ST3GAL4	ENSG00000110080	1.68	0.01
ST3GAL5	ENSG00000115525	-1.95	0.01
ST6GALNAC4	ENSG00000136840	1.79	0.02
STAR	ENSG00000147465	-2.43	0.00
STC2	ENSG00000113739	1.42	0.03
STIP1	ENSG00000168439	1.26	0.04
STK33	ENSG00000130413	-2.68	0.02
STMN1	ENSG00000117632	-1.97	0.03
STOML2	ENSG00000165283	1.37	0.02
STRA6	ENSG00000137868	-2.20	0.02
STRAP	ENSG00000023734	1.38	0.02
STX3	ENSG00000166900	2.23	0.01
SULT1A2	ENSG00000197165	2.13	0.00
SUPV3L1	ENSG00000156502	1.33	0.03
SUSD3	ENSG00000157303	-2.01	0.03
SV2A	ENSG00000159164	-1.59	0.01
SYNE1	ENSG00000131018	-1.60	0.02
SYT7	ENSG00000011347	-1.88	0.01
TAB1	ENSG00000100324	-1.40	0.02
TACC3	ENSG00000013810	-1.30	0.04
TADA1	ENSG00000152382	-1.32	0.03
TAGLN3	ENSG00000144834	65.61	0.00
TALDO1	ENSG00000177156	2.19	0.00
TAT	ENSG00000198650	2.23	0.00
TBC1D13	ENSG00000107021	-1.33	0.02
TBL1X	ENSG00000101849	-1.39	0.02
TBL1Y	ENSG00000092377	-2.35	0.02
TBX2	ENSG00000121068	-2.81	0.00

TBX2-AS1	ENSG00000267280	-3.16	0.00
TCEA3	ENSG00000204219	-1.96	0.00
TCF19	ENSG00000137310	-1.44	0.01
TCN2	ENSG00000185339	-2.23	0.02
TCTN2	ENSG00000168778	-1.72	0.02
TEAD2	ENSG00000074219	-1.60	0.02
TECPR2	ENSG00000196663	-1.51	0.04
TEF	ENSG00000167074	-2.14	0.00
TESK2	ENSG00000070759	-2.19	0.00
TFDP2	ENSG00000114126	-1.41	0.03
TFE3	ENSG00000068323	1.67	0.00
TFP1	ENSG00000242337	-1.39	0.01
TGFB1	ENSG00000105329	1.55	0.02
TGM2	ENSG00000198959	1.53	0.03
THBS1	ENSG00000137801	1.52	0.05
TICAM1	ENSG00000127666	1.51	0.02
TICRR	ENSG00000140534	-1.52	0.02
TIGD3	ENSG00000173825	-2.38	0.01
TIMELESS	ENSG00000111602	-1.33	0.04
TIMP1	ENSG00000102265	2.52	0.00
TIMP3	ENSG00000100234	-1.37	0.00
TINAG	ENSG00000137251	6.46	0.01
TJP3	ENSG00000105289	-2.16	0.00
TKT	ENSG00000163931	1.68	0.01
TLN2	ENSG00000171914	-1.96	0.00
TLR6	ENSG00000174130	3.27	0.03
TM4SF1	ENSG00000169908	2.25	0.00
TMC8	ENSG00000167895	2.41	0.01
TMCC1	ENSG00000172765	1.52	0.00
TMEM200B	ENSG00000253304	-3.53	0.01
TMEM206	ENSG00000065600	1.51	0.01
TMEM43	ENSG00000170876	1.35	0.01
TMEM52	ENSG00000178821	-1.77	0.02
TMEM87A	ENSG00000103978	1.32	0.03
TMPO-AS1	ENSG00000257167	-2.25	0.02
TMPRSS2	ENSG00000184012	-2.81	0.00
TMPRSS6	ENSG00000187045	-1.61	0.02
TNFRSF10A	ENSG00000104689	1.51	0.01
TNFRSF10D	ENSG00000173530	1.9	0.00
TNFRSF12A	ENSG00000006327	1.85	0.01
TNFRSF19	ENSG00000127863	-1.59	0.01
TNFRSF1A	ENSG00000067182	1.65	0.01
TNFRSF21	ENSG00000146072	1.37	0.04
TNFSF9	ENSG00000125657	2.14	0.01
TNNI2	ENSG00000130598	-2.10	0.03
TNNT1	ENSG00000105048	-3.34	0.01

TNRC18	ENSG00000182095	-1.61	0.00
TNRC6C-AS1	ENSG00000204282	1.49	0.03
TNS4	ENSG00000131746	3.03	0.00
TOB2	ENSG00000183864	-1.27	0.04
TOMM34	ENSG00000025772	1.59	0.01
TOP2A	ENSG00000131747	-1.67	0.03
TOR1A	ENSG00000136827	1.89	0.03
TPX2	ENSG00000088325	-1.38	0.01
TRAF3IP2	ENSG00000056972	-1.52	0.01
TRAF4	ENSG00000076604	-1.92	0.02
TRAPPC12	ENSG00000171853	1.4	0.05
TRIB1	ENSG00000173334	1.91	0.00
TRIM14	ENSG00000106785	-1.42	0.04
TRIM24	ENSG00000122779	-1.39	0.04
TRIM45	ENSG00000134253	-1.79	0.05
TRIM54	ENSG00000138100	6.76	0.03
TRIM74	ENSG00000155428	-3.36	0.00
TRMT1	ENSG00000104907	1.56	0.02
TRMT11	ENSG00000066651	1.42	0.03
TSC22D1	ENSG00000102804	-1.35	0.01
TSKU	ENSG00000182704	1.74	0.00
TSR1	ENSG00000167721	1.38	0.00
TTC21B	ENSG00000123607	-1.49	0.04
TTC30B	ENSG00000196659	-1.71	0.03
TTC39C	ENSG00000168234	1.57	0.03
TTC5	ENSG00000136319	-1.48	0.04
TTC9	ENSG00000133985	2.26	0.00
TTK	ENSG00000112742	-1.71	0.02
TTYH1	ENSG00000167614	-1.69	0.01
TUBB1	ENSG00000101162	-1.91	0.00
TUSC3	ENSG00000104723	8.11	0.04
TXN	ENSG00000136810	1.91	0.00
TXNDC16	ENSG00000087301	-1.71	0.04
TXNRD1	ENSG00000198431	4.58	0.00
TYMSOS	ENSG00000176912	-1.82	0.02
UBA7	ENSG00000182179	-1.56	0.02
UBASH3B	ENSG00000154127	1.98	0.00
UBE2C	ENSG00000175063	-1.52	0.01
UBE2H	ENSG00000186591	-1.52	0.01
UBE2K	ENSG00000078140	1.35	0.03
UBXN8	ENSG00000104691	1.42	0.04
UCKL1-AS1	ENSG00000280213	-2.23	0.03
UGDH	ENSG00000109814	2.82	0.00
ULBP1	ENSG00000111981	-9.25	0.02
UPK3A	ENSG00000100373	-1.68	0.05
UPP1	ENSG00000183696	2.21	0.01

UROC1	ENSG00000159650	-6.19	0.01
USP3	ENSG00000140455	1.32	0.04
USP30	ENSG00000135093	-1.47	0.05
USP35	ENSG00000118369	1.89	0.00
USP40	ENSG00000085982	-1.27	0.04
UTP14A	ENSG00000156697	1.39	0.04
UTP4	ENSG00000141076	1.44	0.01
UTP6	ENSG00000108651	1.38	0.01
VARS	ENSG00000204394	1.44	0.02
VAV3	ENSG00000134215	-2.20	0.00
VCP	ENSG00000165280	1.36	0.05
VGLL4	ENSG00000144560	-1.24	0.04
VMP1	ENSG00000062716	1.43	0.02
VNN1	ENSG00000112299	2.01	0.01
VPS37D	ENSG00000176428	-2.38	0.00
VSIG10	ENSG00000176834	-1.46	0.03
VSNL1	ENSG00000163032	-1.38	0.01
WDFY2	ENSG00000139668	-1.43	0.01
WDR3	ENSG00000065183	1.48	0.04
WDR31	ENSG00000148225	-2.13	0.04
WDR45B	ENSG00000141580	1.22	0.05
WDR46	ENSG00000227057	1.46	0.03
WDTC1	ENSG00000142784	-1.34	0.01
WSB2	ENSG00000176871	1.48	0.01
XPNPEP1	ENSG00000108039	1.31	0.03
XPNPEP2	ENSG00000122121	-1.61	0.04
XPO5	ENSG00000124571	1.28	0.02
YBX3	ENSG00000060138	1.52	0.01
YRDC	ENSG00000196449	1.67	0.00
ZBED5-AS1	ENSG00000247271	-3.16	0.04
ZBTB2	ENSG00000181472	1.33	0.03
ZBTB39	ENSG00000166860	-1.77	0.02
ZER1	ENSG00000160445	-1.38	0.01
ZFAND2B	ENSG00000158552	-1.55	0.04
ZFAND5	ENSG00000107372	1.6	0.01
ZFP14	ENSG00000142065	-1.89	0.04
ZFP36L2	ENSG00000152518	-1.37	0.02
ZKSCAN3	ENSG00000189298	-1.77	0.04
ZMYM3	ENSG00000147130	-1.47	0.03
ZNF114	ENSG00000178150	4.7	0.02
ZNF14	ENSG00000105708	-1.57	0.03
ZNF143	ENSG00000166478	1.54	0.04
ZNF219	ENSG00000165804	-1.48	0.03
ZNF3	ENSG00000166526	-1.83	0.03
ZNF33B	ENSG00000196693	-1.49	0.03
ZNF362	ENSG00000160094	-1.99	0.00

ZNF385A	ENSG00000161642	-2.03	0.02
ZNF385B	ENSG00000144331	-2.03	0.02
ZNF395	ENSG00000186918	-1.66	0.00
ZNF496	ENSG00000162714	-1.79	0.00
ZNF562	ENSG00000171466	2.82	0.03
ZNF629	ENSG00000102870	-1.57	0.01
ZNF692	ENSG00000171163	1.41	0.04
ZNF724	ENSG00000196081	-1.39	0.02
ZNF746	ENSG00000181220	1.58	0.01
ZNF846	ENSG00000196605	-2.55	0.01
ZNF853	ENSG00000236609	1.53	0.03
ZNRF3	ENSG00000183579	-1.34	0.03
ZPR1	ENSG00000109917	1.38	0.04
ZSCAN12	ENSG00000158691	-1.95	0.05
ZSCAN16	ENSG00000196812	-1.71	0.02
ZSCAN26	ENSG00000197062	-2.19	0.02

¹Fold change of SF treated cells compared to DMSO control

²adjusted p-values (q-values) were determined through Benjamini-Hochberg