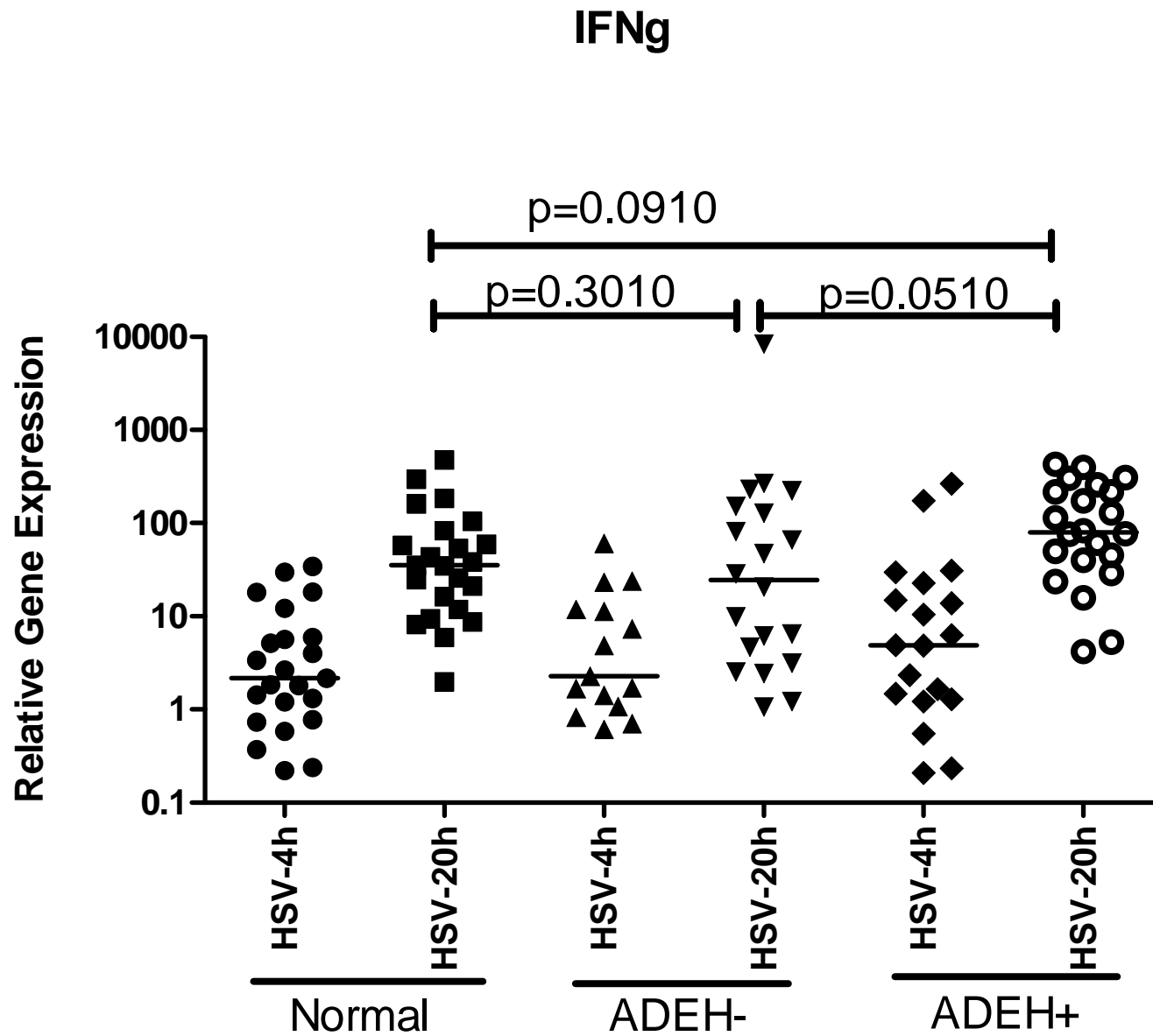
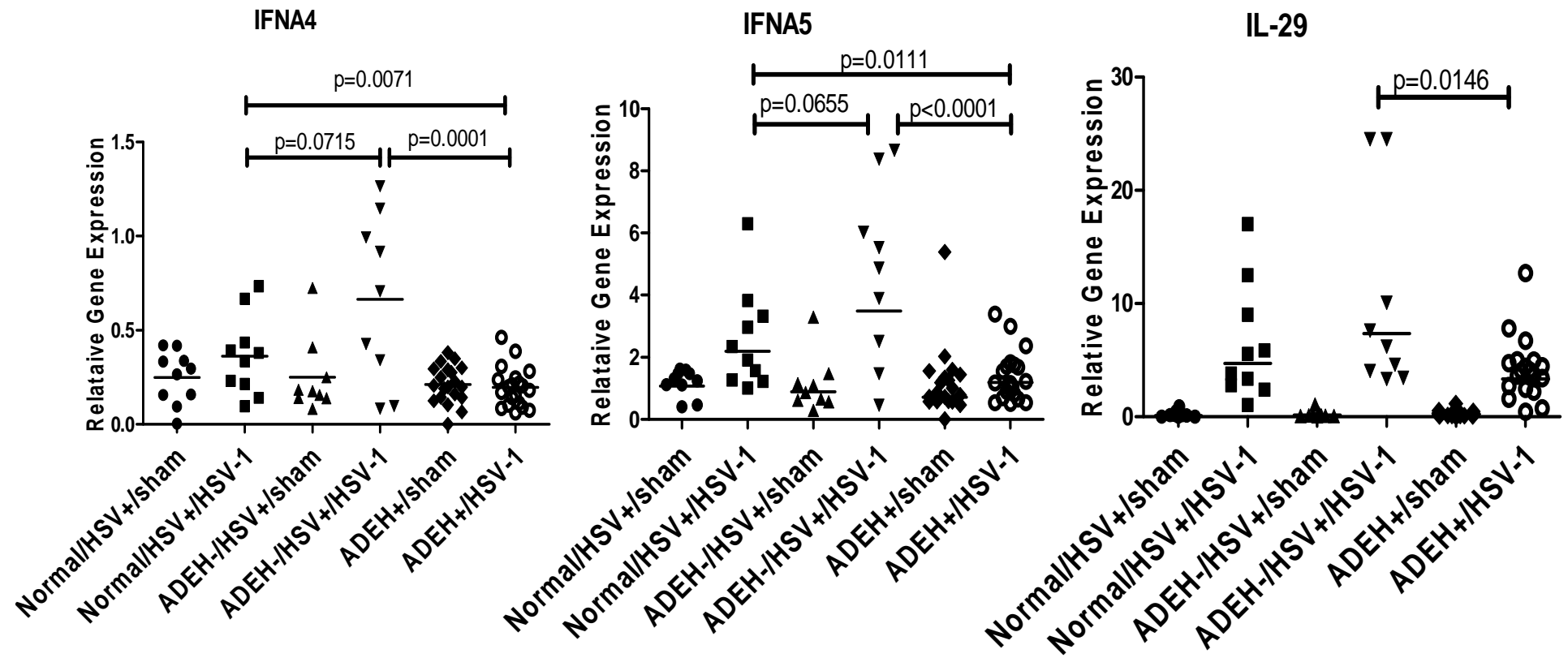


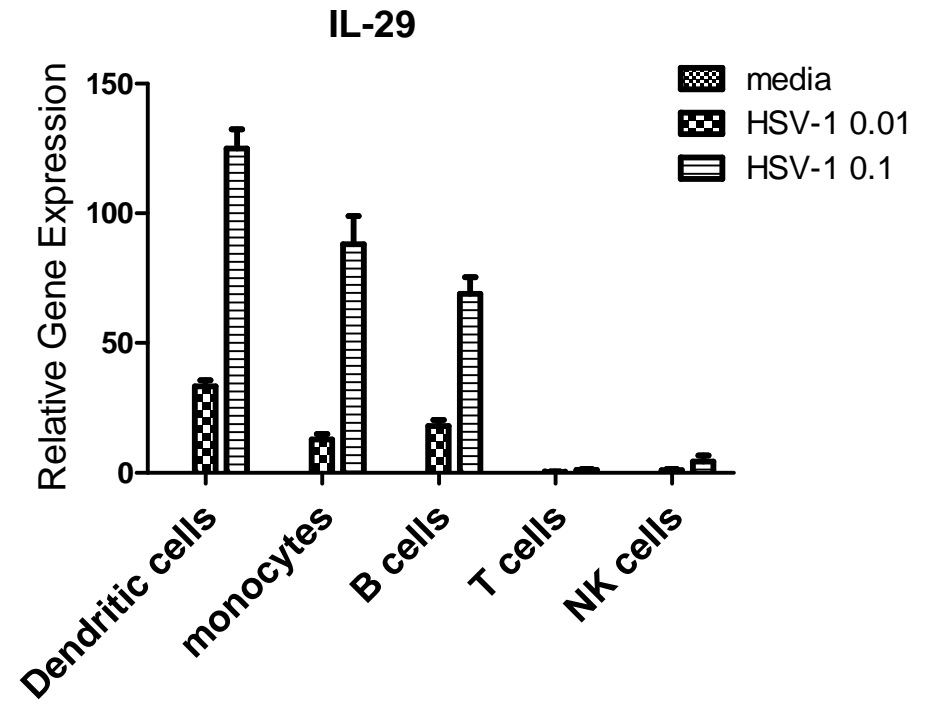
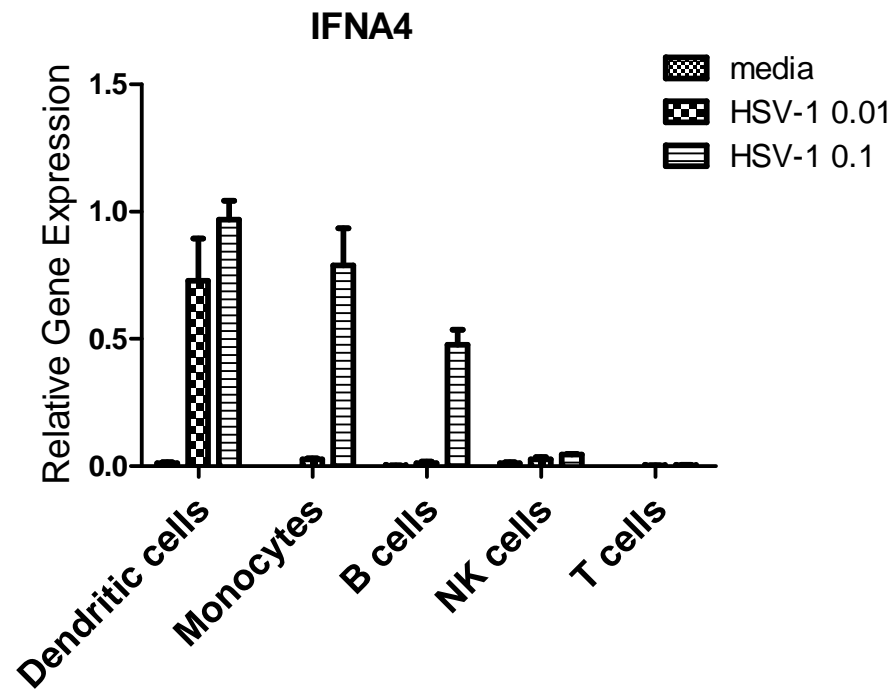
Supplemental Figure 1



Supplemental Figure 2



Supplemental Figure 3



Supplemental Table I: Demographic characteristics of human subjects

	Diagnostic Group		
	Normal (N= 20)	ADEH- (N= 20)	ADEH+ (N= 20)
Age (years) Mean (SD)	29.7 (13.1)	30.0 (14.6)	28.2(13.7)
Female N(%)	11(55%)	11 (55%)	11 (55%)
African American N(%)	1(5%)	5(25%)	5 (25%)
Caucasian N(%)	17(85%)	11 (55%)	14(70%)
Other N(%)	2(10%)	4(20%)	1(5%)
Rajka-Langeland Mean (SD)	-	6.6(1.5)	6.9 (1.6)
EASI Median (Q1, Q3)	-	5.60 (1.80,17.18)	12.85(5.55,24.88)
Serum anti-HSV-1 IgG titers (mean±SEM)	2.26±0.48	1.79±0.50	4.92±0.14
Serum anti-HSV-1 IgM titers (mean±SEM)	negative	negative	negative

Supplemental Table 2. RNA-seq Read Summary

Subject #	treatment	Atopic dermatitis type	Total number of reads	Reads that overlap exon (%)	Reads which partially overlap exon (%)	Reads within an intron (%)	Reads between genes (%)	Number of transcripts in the model	Transcript with reads (%)	Total reads with junctions	Reads with junctions compatible with a transcript
1	Sham	ADEH+	3.4E+07	73.2	2.5	10.9	9.6	38868	73.3	1.3E+07	1.2E+07
2	Sham	ADEH+	5.1E+07	79.3	1.9	7.9	7.6	38868	74.5	2.0E+07	1.8E+07
3	Sham	ADEH+	3.8E+07	74.8	2.3	9.9	9.2	38868	74.7	1.5E+07	1.4E+07
4	Sham	ADEH+	4.2E+07	77.1	2.1	9.1	8.2	38868	73.9	1.7E+07	1.6E+07
5	Sham	ADEH+	5.9E+07	78.9	2.0	7.5	8.1	38868	75.2	2.3E+07	2.1E+07
6	Sham	ADEH-	4.8E+07	77.3	2.0	8.5	8.9	38868	74.7	2.0E+07	1.8E+07
7	Sham	ADEH-	2.5E+07	72.2	2.4	11.3	10.6	38868	72.9	9.4E+06	8.5E+06
8	Sham	ADEH-	6.6E+07	76.1	2.1	9.7	9.1	38868	75.9	2.5E+07	2.3E+07
9	Sham	ADEH-	3.8E+07	73.5	2.4	11.5	8.9	38868	73.8	1.5E+07	1.3E+07
10	Sham	ADEH-	4.2E+07	79.3	1.9	7.8	7.5	38868	74.0	1.7E+07	1.6E+07
11	Sham	ADEH-	4.3E+07	76.2	2.3	9.6	8.5	38868	74.0	1.7E+07	1.6E+07
1	HSV-1	ADEH+	4.7E+07	81.1	1.8	7.4	6.0	38868	72.6	1.9E+07	1.8E+07
2	HSV-1	ADEH+	6.2E+07	82.3	1.6	7.0	5.9	38868	74.1	2.5E+07	2.3E+07
3	HSV-1	ADEH+	4.1E+07	84.1	1.7	6.3	4.4	38868	72.2	1.6E+07	1.5E+07
4	HSV-1	ADEH+	4.1E+07	84.0	1.5	6.0	5.0	38868	71.7	1.7E+07	1.6E+07
5	HSV-1	ADEH+	6.8E+07	83.2	1.5	6.4	5.5	38868	73.9	2.8E+07	2.6E+07
6	HSV-1	ADEH-	6.0E+07	80.7	1.7	7.6	6.9	38868	74.7	2.4E+07	2.2E+07
7	HSV-1	ADEH-	3.8E+07	76.0	1.9	10.1	8.3	38868	72.8	1.4E+07	1.3E+07
8	HSV-1	ADEH-	6.4E+07	82.4	1.5	6.9	6.1	38868	74.4	2.6E+07	2.4E+07
9	HSV-1	ADEH-	4.3E+07	79.2	1.8	8.4	7.1	38868	73.2	1.7E+07	1.6E+07
10	HSV-1	ADEH-	4.5E+07	82.9	1.5	6.5	5.7	38868	72.9	1.9E+07	1.7E+07
11	HSV-1	ADEH-	4.1E+07	81.4	1.8	7.3	6.2	38868	72.5	1.7E+07	1.5E+07
		Average:	4.7E+07	78.9	1.9	8.3	7.4	38868	73.7	1.9E+07	1.7E+07
		STDev:	1.1E+07	3.7	0.3	1.7	1.7	0	1.0	4.6E+07	4.3E+06

Supplemental Table III: 792 genes are differentially expressed in HSV-1 stimulated PBMCs from ADEH+ as compared to ADEH- subjects.

	Mean rpkm (HSV1- ADEH+)	Mean rpkm (HSV1- ADEH-)	Mean rpkm (sham- ADEH+)	Mean rpkm (sham- ADEH-)	FoldChange (HSV1- ADEH+ vs. HSV1- ADEH-)	p-value (HSV1- ADEH+ vs. HSV1- ADEH-)	FDR (HSV1- ADEH+ vs. HSV1- ADEH-)
SLFN12L	6.3435	10.8011	3.05204	4.68972	-1.7027	4.30E-10	3.75E-06
SAMD9	170.074	210.189	19.8498	21.8669	-1.23587	9.48E-08	0.00035
IPCEF1	18.2221	28.7226	10.4609	13.465	-1.57625	1.52E-07	0.00035
SCML4	9.91514	16.2148	7.09387	8.07865	-1.63536	1.60E-07	0.00035
ZDHC13	9.24728	7.42793	6.04251	5.98083	1.24493	3.24E-07	0.000565
TRIM22	456.527	593.987	78.7892	91.8588	-1.3011	4.48E-07	0.000651
SLFN13	4.80427	9.07833	3.40649	4.15917	-1.88964	7.04E-07	0.000877
VAMP5	250.328	135.919	33.145	35.0209	1.84174	1.81E-06	0.001497
FAM26F	707.011	308.529	14.4712	31.5423	2.29156	2.06E-06	0.001497
TUBB2C	94.433	60.7899	42.4769	35.3106	1.55343	1.62E-06	0.001497
KIAA0664L3	5.45805	12.9217	4.50221	7.37107	-2.36745	1.50E-06	0.001497
SERTAD3	20.1176	13.1077	16.374	14.1825	1.53479	2.06E-06	0.001497
KPNB1	127.261	151.962	55.2999	57.6487	-1.19409	2.72E-06	0.001826
LILRA6	62.3432	24.1426	10.4827	4.70758	2.58229	2.98E-06	0.001856
TMEM123	257.576	372.823	216.495	207.838	-1.44743	4.27E-06	0.00248
TLR1	48.4879	24.658	14.2662	13.4788	1.96642	5.32E-06	0.002899
CLUAP1	9.99896	17.4641	7.43203	8.76826	-1.74659	5.67E-06	0.002905
SH2B2	7.43964	4.26616	2.41764	2.23115	1.74387	6.59E-06	0.00319
DDX60	96.7067	120.584	7.73048	9.66842	-1.2469	8.05E-06	0.003562
AMBRA1	13.2486	16.2268	7.49959	7.77564	-1.22479	9.28E-06	0.003562
PSMD12	22.2313	18.0207	13.3456	12.0934	1.23365	8.80E-06	0.003562
BATF3	32.665	17.4472	1.24029	1.88458	1.87222	9.98E-06	0.003562
KIAA1539	16.08	9.17302	9.39153	7.38056	1.75296	9.20E-06	0.003562
STX3	8.92296	5.3295	5.3555	4.92603	1.67426	1.02E-05	0.003562
ANXA2P2	16.6083	5.393	7.76235	3.86594	3.0796	1.01E-05	0.003562
SEPX1	33.9322	15.6747	18.1699	16.1066	2.16478	1.16E-05	0.003885
C14orf159	24.955	33.7106	14.1273	15.6742	-1.35086	1.39E-05	0.004171
SERTAD1	42.7862	25.279	14.3106	11.647	1.69256	1.38E-05	0.004171
DSE	100.392	37.4688	16.9028	11.8611	2.67934	1.36E-05	0.004171
KPNA2	25.6862	18.8664	12.7617	11.3766	1.36148	1.48E-05	0.004302
ANKRD22	103.226	52.0377	0.684342	3.34835	1.98367	1.87E-05	0.005266
STX12	25.9591	16.4746	12.5073	10.7275	1.57571	2.17E-05	0.005737
ZNF800	11.8162	14.9526	10.8425	12.3181	-1.26543	2.11E-05	0.005737

IFI44L	168.505	209.758	3.94219	3.21667	-1.24482	2.83E-05	0.007064
CSF2RB	274.907	122.359	60.5075	52.8512	2.24673	2.84E-05	0.007064
FMR1	21.0765	25.4575	13.2233	14.426	-1.20787	2.96E-05	0.007158
PCGF5	30.1069	37.1759	13.8565	14.8036	-1.2348	3.14E-05	0.007266
PDCD4	51.5276	83.2566	71.0773	74.7136	-1.61577	3.17E-05	0.007266
XAF1	272.457	327.472	22.3381	21.4722	-1.20192	3.43E-05	0.007474
PRKD2	47.0025	67.0081	23.0261	24.7386	-1.42563	3.37E-05	0.007474
DSCR3	28.745	23.5588	20.4608	19.5197	1.22014	3.61E-05	0.007495
TBC1D15	9.46835	13.8231	14.9879	14.7823	-1.45993	3.53E-05	0.007495
TRIM14	55.29	69.2965	19.4696	22.4376	-1.25333	3.96E-05	0.007567
PARP11	15.2066	19.5294	4.2548	5.02014	-1.28427	4.00E-05	0.007567
PIM3	102.271	72.8913	35.2757	30.0954	1.40306	4.14E-05	0.007567
CBFA2T2	4.61685	6.53184	7.62927	8.47762	-1.41478	4.17E-05	0.007567
TMBIM1	143.58	88.5551	75.8034	60.2405	1.62136	3.84E-05	0.007567
ISOC1	9.89178	7.36481	6.97677	7.41953	1.34311	3.74E-05	0.007567
G3BP1	45.1002	53.5489	35.9459	36.8423	-1.18733	4.32E-05	0.007678
TUBB6	48.126	21.9564	8.73516	5.62042	2.1919	4.99E-05	0.008166
DYNC1LI1	25.4363	18.6315	16.5985	14.9068	1.36523	4.74E-05	0.008166
ANKRD1	1.29557	7.65277	0.029087	0.013701	-5.90688	4.93E-05	0.008166
STARD8	7.89747	2.78774	1.70121	1.19942	2.83293	5.06E-05	0.008166
RNFT1	14.0041	9.91076	13.2013	12.6835	1.41302	4.85E-05	0.008166
WDR55	17.0026	13.6333	13.1671	12.8723	1.24713	5.16E-05	0.008178
TARBP1	11.608	18.1352	6.92527	9.03666	-1.56231	5.31E-05	0.008266
JAK2	67.0695	49.3438	12.5578	14.2716	1.35923	5.98E-05	0.008339
MOBK12C	49.2747	36.6604	13.3707	14.1054	1.34408	5.49E-05	0.008339
ADPRH	16.1164	11.3328	5.17739	4.51177	1.4221	5.81E-05	0.008339
C20orf24	103.125	68.2134	51.7809	47.5778	1.51181	6.03E-05	0.008339
ITPRIPL2	17.1756	8.22523	5.12343	4.1866	2.08816	5.82E-05	0.008339
PCYT1A	27.4579	17.1315	14.3544	13.5603	1.60278	5.95E-05	0.008339
APEX2	17.0887	11.5553	10.6839	10.6761	1.47887	5.82E-05	0.008339
CAPZA1	143.929	111.049	87.7846	78.1115	1.29609	6.43E-05	0.00866
PITPNA	29.4415	20.297	23.3443	20.084	1.45054	6.46E-05	0.00866
PPP2R5C	57.1392	73.7339	77.5787	75.0073	-1.29043	6.60E-05	0.00872
TMUB2	29.974	24.5508	22.3236	21.4621	1.2209	6.74E-05	0.008774
FAM115C	7.33737	10.4147	3.3244	4.16779	-1.4194	7.11E-05	0.009056
KCTD5	24.9283	17.2611	16.631	15.4377	1.44418	7.17E-05	0.009056
TRANK1	61.0386	81.3681	14.5492	17.2671	-1.33306	7.40E-05	0.009088
RB1CC1	8.22175	11.2501	14.8721	15.7104	-1.36833	7.40E-05	0.009088
SFI1	11.8287	19.5179	20.4988	25.6009	-1.65005	7.68E-05	0.009303
ATG3	107.625	74.2667	47.4281	44.828	1.44917	8.31E-05	0.009526
MYO1E	25.6076	13.718	5.85552	5.37094	1.86672	8.11E-05	0.009526

ZDHC5	34.1156	26.9561	25.0081	24.3361	1.2656	8.25E-05	0.009526
SATB1	37.0527	57.5191	50.9986	63.8416	-1.55236	8.26E-05	0.009526
SP100	95.1179	109.601	31.8168	30.9725	-1.15226	8.74E-05	0.009648
CARD6	9.80947	6.51433	4.36872	3.89602	1.50583	8.59E-05	0.009648
TUBA1B	311.268	188.022	133.591	121.518	1.65549	8.69E-05	0.009648
JMJD6	17.9529	13.5753	14.075	12.772	1.32247	9.18E-05	0.009997
STX17	13.0386	14.8817	7.00894	7.69842	-1.14136	9.90E-05	0.010258
RAB39	15.0193	10.036	1.81021	2.05358	1.49655	9.70E-05	0.010258
TMEM165	40.6006	27.8242	27.506	23.9892	1.45918	0.0001	0.010258
C14orf129	12.8045	9.07852	13.3274	10.6218	1.41042	9.96E-05	0.010258
PDK1	6.43357	10.7106	7.99365	8.84281	-1.6648	9.81E-05	0.010258
PRIC285	115.81	135.359	6.55762	7.17604	-1.16881	0.000105	0.010293
PATL1	37.9862	31.7325	16.2454	16.3888	1.19707	0.000104	0.010293
ADPGK	138.172	103.005	48.2041	46.2075	1.34141	0.000109	0.010293
WARS	745.783	434.41	46.4452	74.7086	1.71677	0.000108	0.010293
VPS37C	24.9596	15.6025	7.45661	5.51545	1.59972	0.000108	0.010293
MPI	9.81122	14.4907	16.2962	17.9325	-1.47695	0.000104	0.010293
C9orf46	20.3329	13.9773	12.328	13.1115	1.45471	0.000107	0.010293
ELP2	13.5506	16.6024	20.5505	22.1922	-1.22522	0.000112	0.010298
TNK2	58.6	80.6427	29.9886	30.7568	-1.37616	0.000113	0.010298
RAB18	37.0182	24.1367	21.3344	20.2683	1.53368	0.000113	0.010298
RAPGEF6	22.7182	34.674	23.2265	25.4616	-1.52627	0.000111	0.010298
PVRL2	86.6844	53.0644	13.7028	6.81299	1.63357	0.000123	0.010795
SLC31A2	173.293	100.729	23.9001	22.4383	1.7204	0.000123	0.010795
RB1	35.4767	25.8382	16.5919	15.7181	1.37303	0.00012	0.010795
SPHK1	45.2275	28.9707	8.04253	3.21381	1.56115	0.000128	0.010865
PIGK	3.90718	5.90705	7.20455	7.46557	-1.51185	0.000128	0.010865
S100A11	804.93	471.152	299.544	224.96	1.70843	0.000128	0.010865
FAM135A	8.67386	5.20987	3.37915	3.42486	1.66489	0.000125	0.010865
CSRNP1	51.9781	41.3165	9.37826	8.40955	1.25805	0.000133	0.011045
CD81	170.387	104.014	102.902	98.5605	1.63811	0.000133	0.011045
PRKACB	23.1724	36.4489	43.3998	48.9745	-1.57295	0.000137	0.011286
CCDC66	5.88348	11.4868	10.2945	13.0439	-1.95239	0.00014	0.011403
NAT1	6.48933	4.60795	4.21871	3.68435	1.40829	0.000147	0.011791
LOC374443	12.8845	18.5918	15.6263	19.3492	-1.44295	0.000146	0.011791
CNIH4	22.5449	16.7954	16.911	15.3883	1.34233	0.00015	0.011883
ODF2L	15.1629	19.3939	6.25684	6.70386	-1.27903	0.000154	0.011888
SMARCA2	15.9163	20.6365	26.8871	28.9137	-1.29656	0.000159	0.011888
ST3GAL5	60.7545	41.0839	11.7871	12.3417	1.47879	0.00016	0.011888
TRPV2	48.1291	33.4185	19.7465	20.187	1.44019	0.000162	0.011888
C6orf145	12.0643	7.05904	4.08173	2.18265	1.70906	0.000154	0.011888

SEC61G	91.8841	61.1518	51.5597	45.2911	1.50256	0.00016	0.011888
CD63	397.216	224.05	215.346	152.217	1.77289	0.000159	0.011888
JAK1	87.2708	111.357	109.013	120.271	-1.276	0.000162	0.011888
CYTH4	84.0505	43.7224	59.7937	55.5317	1.92237	0.00016	0.011888
TOP2B	19.2983	28.0136	52.2181	55.7135	-1.4516	0.000171	0.012077
AKIRIN2	45.3003	33.7406	20.5153	20.3107	1.3426	0.000168	0.012077
ZNF302	9.20497	12.2042	13.6669	15.2121	-1.32582	0.000173	0.012077
DECR1	38.1698	28.7912	23.234	22.3315	1.32575	0.000169	0.012077
CASP5	19.8141	6.16025	1.22268	1.70401	3.21645	0.000171	0.012077
RSU1	28.9056	16.1202	19.0542	20.0268	1.79313	0.000172	0.012077
ACBD5	13.7606	11.0142	9.01088	8.9896	1.24936	0.000175	0.012087
C16orf7	16.3311	6.38056	10.1749	9.67175	2.55951	0.000177	0.012126
LOC144438	8.62175	10.6207	10.8269	11.5891	-1.23184	0.000178	0.012154
HDAC4	5.94531	8.08323	5.80668	5.51269	-1.3596	0.000183	0.012161
WDR41	12.2111	7.23527	7.04953	5.8957	1.68772	0.000183	0.012161
RELT	20.5657	12.8391	13.6019	11.5182	1.60181	0.000182	0.012161
PREPL	3.15081	4.58229	8.85206	9.62218	-1.45432	0.000194	0.012296
PNPT1	35.4507	45.9104	4.37566	5.08221	-1.29505	0.000198	0.012296
ZBTB4	15.5612	21.7561	28.6527	30.1837	-1.3981	0.000196	0.012296
BTN3A3	57.8638	74.111	39.6453	47.6237	-1.28078	0.000195	0.012296
MYOF	25.3827	14.8025	4.66298	5.46428	1.71476	0.000195	0.012296
TBC1D10B	21.9798	17.6473	18.1235	16.4846	1.24551	0.000189	0.012296
RNF185	14.2386	12.121	11.9655	11.7331	1.17471	0.000189	0.012296
TMEM138	16.5412	36.5009	17.224	15.3913	-2.20667	0.000187	0.012296
CAP1	209.785	146.493	177.471	166.264	1.43205	0.000197	0.012296
KCNMB1	15.2423	7.126	2.34333	2.6418	2.13897	0.000201	0.01243
GIMAP2	112.462	159.369	103.383	116.412	-1.41709	0.000204	0.012496
ASPHD2	14.1073	7.47648	3.47971	3.65996	1.88689	0.000207	0.012518
FERMT3	129.604	91.3608	78.3353	69.8518	1.4186	0.000206	0.012518
SLC35A1	13.0069	9.95491	20.0755	17.1177	1.30658	0.000212	0.012719
MOV10	84.961	95.7449	14.0188	16.7448	-1.12693	0.000223	0.012772
FAM122C	5.40105	6.5342	1.95702	2.29994	-1.2098	0.000224	0.012772
NUDCD1	12.425	10.177	4.48909	4.31758	1.22089	0.000223	0.012772
LOC647979	33.053	42.4683	57.8592	60.0725	-1.28485	0.000221	0.012772
GART	46.6015	32.5795	18.1698	18.6928	1.43039	0.000218	0.012772
GLUL	396.912	201.346	92.5947	62.3056	1.97129	0.000227	0.012772
RBM47	33.9694	18.9646	10.7598	8.63229	1.7912	0.000227	0.012772
FMNL2	18.4368	7.84775	1.39627	1.33888	2.3493	0.00023	0.012772
LUZP6	38.4045	32.272	30.9881	28.5143	1.19002	0.000229	0.012772
MTPN	38.4045	32.272	30.9881	28.5143	1.19002	0.000229	0.012772
HCCS	10.4876	7.63393	7.52071	7.56891	1.37381	0.000229	0.012772

NANS	28.4846	17.4798	19.2243	17.6359	1.62957	0.00022	0.012772
ELF4	54.9811	46.9401	20.066	18.5413	1.1713	0.000238	0.012843
PPPDE2	16.6625	13.2515	8.03961	8.18579	1.25741	0.000234	0.012843
USP6NL	23.3164	15.1146	4.19336	4.54576	1.54264	0.000239	0.012843
MPP7	2.00124	3.56161	4.83189	5.9589	-1.7797	0.000238	0.012843
STX16	46.8213	62.5894	42.3045	44.1916	-1.33677	0.000236	0.012843
RRBP1	25.8296	19.8716	13.9999	11.3445	1.29982	0.000243	0.012927
TGM2	28.8284	5.55969	1.93315	1.06339	5.18524	0.000243	0.012927
CD86	77.1445	35.317	40.9256	23.9852	2.18435	0.000255	0.01347
SQRDL	191.399	145.435	40.4593	39.3722	1.31604	0.000257	0.013489
CCR1	312.435	161.458	34.8892	24.9785	1.93508	0.000265	0.013833
GTF2B	49.3876	37.7916	23.6007	22.7348	1.30684	0.000269	0.013871
CLIP4	5.67946	8.69353	11.1877	11.9347	-1.5307	0.00027	0.013871
TWF2	59.8096	39.9119	56.4561	49.9795	1.49854	0.000271	0.013871
PLEK	300.816	166.265	64.4638	69.2024	1.80926	0.000272	0.013887
POMP	61.8708	42.3667	24.3696	23.9403	1.46036	0.000276	0.013894
TMED9	133.776	84.1507	84.9616	68.4958	1.58972	0.000276	0.013894
EGLN1	2.90217	3.8523	7.97153	7.64704	-1.32739	0.000283	0.013914
BLOC1S2	40.7184	28.9585	22.7318	20.0515	1.40609	0.00028	0.013914
FAM175A	8.73424	13.0888	9.8365	10.1453	-1.49856	0.000282	0.013914
KLF9	6.83745	8.88148	7.7866	8.18813	-1.29895	0.000281	0.013914
ADAR	215.11	243.331	66.6443	70.6895	-1.13119	0.000293	0.013935
GPBP1	59.6301	72.3812	29.9751	30.434	-1.21384	0.000292	0.013935
KIAA0586	2.40486	3.48496	4.77934	5.28776	-1.44913	0.000293	0.013935
UTRN	27.7602	36.0264	17.9208	20.5286	-1.29777	0.000294	0.013935
CD274	235.39	109.491	4.64701	7.02574	2.14986	0.000285	0.013935
SPATA13	39.8858	49.9808	32.8691	35.1492	-1.2531	0.000291	0.013935
HLX	17.8258	10.3585	6.12371	4.83425	1.7209	0.000292	0.013935
C15orf48	418.781	207.223	30.4137	12.5451	2.02092	0.000298	0.014036
ELL2	8.64038	5.35512	3.75653	3.21636	1.61348	0.0003	0.014036
DOK1	20.8712	13.2386	21.2891	16.8907	1.57654	0.000301	0.014041
ATG14	3.48569	4.95079	6.41114	7.5554	-1.42032	0.000307	0.014229
BTBD11	6.57746	10.3398	7.7653	8.75166	-1.57201	0.000311	0.014346
CDKN1A	547.332	240.252	32.2724	25.9222	2.27816	0.000315	0.014443
GIMAP6	113.878	145.548	64.3015	71.7488	-1.2781	0.00032	0.014596
TMPO	29.5794	40.6552	39.7767	41.9291	-1.37444	0.000323	0.014685
TRIM44	29.1203	37.7649	22.4466	26.6019	-1.29686	0.000329	0.014802
LONRF1	9.14924	5.6548	3.72361	3.76503	1.61796	0.000328	0.014802
DENND1A	13.0861	9.53398	7.75227	7.75702	1.37258	0.000335	0.014963
VCP	92.3171	80.5063	58.6975	55.7186	1.14671	0.000342	0.015029
GGNBP2	20.5296	24.1	27.5734	29.5935	-1.17391	0.000342	0.015029

TAF8	9.38083	12.2207	7.95648	8.73735	-1.30274	0.000343	0.015029
ARL6IP1	78.6474	61.1348	67.9236	61.4461	1.28646	0.000342	0.015029
BTK	47.3086	30.928	28.8807	25.4588	1.52964	0.000355	0.015469
ZNF395	5.76421	10.1682	17.6908	18.8732	-1.76402	0.000359	0.015569
GTF2E2	26.292	21.3012	16.0165	14.7725	1.2343	0.000365	0.015731
SELS	55.7608	37.6533	21.8926	19.4119	1.4809	0.00037	0.015731
ZBTB7B	25.8259	16.6481	33.9358	26.3089	1.55128	0.00037	0.015731
PTTG1IP	77.822	48.2452	58.4332	47.8242	1.61305	0.000367	0.015731
TBC1D1	23.3386	28.3099	12.4008	12.1312	-1.21301	0.000378	0.015893
ORC5	4.82582	6.04247	7.53518	8.28585	-1.25211	0.000379	0.015893
LAT2	50.4886	20.8746	47.3175	38.2267	2.41866	0.000379	0.015893
UBE2W	13.5304	8.1796	7.71591	7.45888	1.65417	0.000382	0.015923
DYNLRB1	74.3223	62.8428	60.1356	54.7971	1.18267	0.000389	0.016102
RGS19	37.2462	22.5513	37.2381	33.3114	1.65163	0.00039	0.016102
SERPING1	350.52	212.266	8.1986	13.7312	1.65133	0.000404	0.016605
NFKBIE	59.1621	40.5145	20.3117	17.6304	1.46027	0.000407	0.016654
MATR3	59.6366	70.1549	66.2121	68.9161	-1.17637	0.000409	0.016673
KIAA1143	5.33141	7.49168	8.89684	9.59018	-1.4052	0.00042	0.017019
GPR155	18.0586	26.1446	7.3656	7.74588	-1.44776	0.000425	0.017065
VIM	662.912	364.361	322.043	232.127	1.81938	0.000423	0.017065
PLEKHO1	284.537	195.794	122.839	115.575	1.45325	0.000429	0.017142
RBBP6	22.5944	25.8983	15.8272	17.5901	-1.14623	0.000434	0.017254
TMEM55A	4.66801	3.30475	6.36274	5.6132	1.41251	0.000436	0.017258
MTHFD2	103.019	75.0089	24.4535	20.0398	1.37342	0.000439	0.017313
STK40	30.186	23.5816	23.7484	21.6695	1.28007	0.000442	0.017346
HERC5	195.836	233.799	7.11018	6.79944	-1.19386	0.000449	0.017486
SMCHD1	90.9351	122.94	39.3795	42.9157	-1.35196	0.000449	0.017486
DDX58	140.316	165.606	10.2117	12.0699	-1.18024	0.000457	0.017599
ZNF839	2.70169	3.58102	5.09205	5.83236	-1.32548	0.000458	0.017599
SEC61B	123.341	88.7698	87.9217	73.4714	1.38944	0.000456	0.017599
JMY	1.67064	3.09496	5.08703	5.80364	-1.85255	0.000463	0.017686
WDR89	6.7898	9.13115	9.88661	11.3	-1.34483	0.000466	0.017739
APOL2	146.871	106.917	19.1925	23.215	1.37369	0.000475	0.017818
ACVR1B	8.98595	5.20221	6.19151	5.3317	1.72734	0.000476	0.017818
KCTD12	66.0681	25.0205	38.2097	31.5792	2.64056	0.000472	0.017818
CUL4B	14.58	20.1599	16.5437	18.1908	-1.38271	0.000476	0.017818
DDX60L	89.8475	108.497	9.49434	10.3208	-1.20757	0.000486	0.01787
DENND1B	22.6276	15.7843	3.74993	3.73185	1.43355	0.000486	0.01787
CDK17	19.1682	22.9557	13.0845	13.5897	-1.19759	0.000485	0.01787
CDS2	33.9602	21.2746	17.2782	14.9907	1.59628	0.000482	0.01787
THUMPD1	15.5136	19.6216	17.3792	19.609	-1.2648	0.000492	0.018021

FAM177A1	15.1684	8.81005	4.05029	4.00286	1.72172	0.000498	0.018097
CXCL9	661.151	218.694	7.11937	21.6056	3.02318	0.000497	0.018097
SDC4	21.5006	8.78102	4.06889	3.39659	2.44853	0.000503	0.018191
IFNA2	14.6714	46.9757	0.044937	0.017489	-3.20186	0.000535	0.019174
PDIA3P	25.5483	13.3659	9.81016	8.49256	1.91145	0.000534	0.019174
TUBA1A	99.8304	47.6763	58.8484	50.2478	2.09392	0.000539	0.019174
TSFM	9.98765	6.73211	7.43205	7.5522	1.48358	0.000537	0.019174
KCNN4	39.6325	9.50921	15.2851	7.60888	4.1678	0.000542	0.019188
TRAPPC2	4.74542	6.21	7.54721	8.04522	-1.30863	0.000556	0.019624
ALAS1	52.0851	30.5631	16.7895	15.0948	1.70418	0.000567	0.019874
ANXA11	87.2816	58.4884	77.0578	76.1522	1.49229	0.000568	0.019874
MLX	28.841	23.003	25.7958	24.0985	1.25379	0.000578	0.020139
IFNB1	30.9528	87.3793	0.097761	0.109296	-2.82298	0.000587	0.020348
PLIN3	35.8842	21.416	27.9612	19.0514	1.67558	0.000588	0.020348
C9orf167	20.2903	12.5608	8.91064	7.37883	1.61537	0.000591	0.020354
RG9MTD3	4.21891	5.34923	6.23476	7.07489	-1.26792	0.000597	0.020475
EMP1	141.277	41.9003	15.6196	4.56519	3.37174	0.000606	0.020701
DNAJC7	50.4999	41.1321	33.6725	31.8093	1.22775	0.000609	0.020744
TTC9C	16.6678	13.0325	15.2932	13.9592	1.27894	0.000617	0.02088
SHKBP1	59.0268	46.2636	52.5841	48.7858	1.27588	0.000618	0.02088
FKBP1A	84.1322	53.4928	83.5179	75.7137	1.57278	0.000626	0.021062
PGAP1	9.8598	12.7391	1.02696	1.05595	-1.29202	0.000634	0.021263
PCMTD2	15.8786	24.599	29.4827	33.644	-1.54919	0.000639	0.021273
EDEM2	26.4375	16.9105	20.784	19.5278	1.56337	0.000637	0.021273
STX18	11.6969	9.26935	9.38776	9.4279	1.26189	0.000645	0.021385
NR1D2	11.1768	15.472	16.2902	17.5058	-1.3843	0.000649	0.021435
C11orf57	7.89539	10.3171	10.6191	11.0653	-1.30673	0.000658	0.021654
LSM14A	31.6222	36.7033	46.1314	46.6593	-1.16068	0.000675	0.021685
SFT2D2	31.507	22.1577	6.80862	7.11803	1.42194	0.000671	0.021685
CRTC3	14.7119	19.6261	22.5806	23.0269	-1.33403	0.000672	0.021685
CHMP2B	18.0284	15.6034	14.831	13.8105	1.15541	0.000672	0.021685
IFNW1	9.85974	29.9337	0.016511	0.02452	-3.03595	0.000674	0.021685
IFNA14	16.7727	53.4637	0.037198	0.05301	-3.18754	0.00067	0.021685
GOS2	11.9587	3.14526	1.04973	1.28432	3.80214	0.000677	0.021685
C18orf10	13.4027	8.90847	11.375	8.96539	1.50449	0.000686	0.021837
INSIG1	51.0115	24.0127	33.9724	32.3633	2.12436	0.000686	0.021837
MDM1	3.67929	5.54645	8.18663	8.56977	-1.50748	0.000695	0.022025
IL29	10.3912	30.648	0.155022	0.219202	-2.94942	0.000703	0.022039
ARF1	203.373	167.247	158.552	144.256	1.21601	0.000701	0.022039
ZNF766	11.8879	14.5108	11.3033	12.0457	-1.22064	0.000699	0.022039
EHD4	84.3523	70.616	18.5312	15.9305	1.19452	0.000707	0.02208

AGPAT2	23.6176	13.3437	15.5042	11.9943	1.76994	0.000712	0.022156
DNASE1L1	9.92229	6.92887	9.05382	7.35586	1.43202	0.000716	0.022224
LRRCS9	36.1603	27.0224	20.0933	19.8463	1.33816	0.000727	0.022474
ZC3H13	8.80028	11.3511	11.1235	13.3557	-1.28986	0.000735	0.022643
NEXN	16.8071	21.9485	0.35709	0.585229	-1.30591	0.000743	0.022644
C6orf192	14.3385	19.7553	8.7122	8.22934	-1.37778	0.000751	0.022644
PCNX	25.2248	18.0117	12.2061	11.4221	1.40047	0.000745	0.022644
CD53	455.897	329.747	240.503	227.152	1.38256	0.000749	0.022644
IFNA21	14.493	49.527	0.039536	0.051316	-3.41731	0.000749	0.022644
TSPAN14	39.6169	27.3934	37.3942	35.3436	1.44622	0.000747	0.022644
COQ10B	28.2169	23.901	13.8744	14.1071	1.18057	0.000774	0.022831
PSMB5	30.5571	23.9448	19.4351	17.3315	1.27615	0.000768	0.022831
SIDT1	12.2147	17.2874	7.75119	8.91004	-1.41529	0.000777	0.022831
SLC39A1	48.7267	34.2844	29.3531	22.3417	1.42125	0.00077	0.022831
IFNA22P	4.67347	14.7613	0.01433	0.041314	-3.15853	0.000765	0.022831
IFNA17	9.7174	36.8992	0.014141	0.028099	-3.79723	0.000778	0.022831
ACTR10	19.8069	15.7588	15.7925	14.9876	1.25688	0.00076	0.022831
EHBP1L1	51.0443	36.9219	42.039	36.0704	1.38249	0.000775	0.022831
ACSS2	9.65904	5.22383	11.0774	10.2321	1.84903	0.000782	0.022861
ZNF136	6.96058	8.25441	6.78522	7.55558	-1.18588	0.000789	0.023
SBNO2	66.8601	49.5289	30.538	24.6171	1.34992	0.000798	0.023089
LOC728743	15.6952	22.0499	13.1461	13.9577	-1.40488	0.000803	0.023089
ATXN1L	9.13143	10.2822	10.1308	10.8821	-1.12602	0.000806	0.023089
GNB2	102.847	79.9623	75.7914	70.2746	1.2862	0.000797	0.023089
LTBR	30.7238	16.9762	15.6304	11.311	1.80982	0.000803	0.023089
SEC23A	16.6849	13.8545	14.1067	13.8616	1.20429	0.000808	0.023089
NDUFC2-KCTD14	10.0607	6.04696	0.181998	0.289356	1.66377	0.000812	0.023122
HINT3	9.72952	7.77644	7.85913	7.54208	1.25115	0.000816	0.023162
CHMP5	73.3778	61.7146	19.7664	18.8842	1.18899	0.000834	0.023222
HPS4	5.90092	7.29036	8.96496	9.74102	-1.23546	0.000831	0.023222
NIPSNAP1	10.3282	14.7347	18.3615	19.4245	-1.42665	0.000832	0.023222
KEAP1	28.253	21.8554	17.7419	15.0439	1.29273	0.00083	0.023222
TTC7B	7.15651	3.85908	1.15558	1.11393	1.85446	0.000828	0.023222
PLEKHA7	8.80985	3.02889	1.16575	1.24486	2.90861	0.00083	0.023222
PIK3R1	12.4052	19.6231	30.1066	34.0921	-1.58185	0.000842	0.02331
SYNE1	27.7302	40.4961	31.251	38.1508	-1.46036	0.000842	0.02331
IFNA4	6.3714	27.6071	0	0.010616	-4.33298	0.000846	0.023344
STK3	8.07519	5.90264	2.53757	2.31923	1.36807	0.00086	0.023581
FAM117A	18.2877	27.3873	32.4271	35.812	-1.49758	0.000859	0.023581
SPPL2A	132.915	97.8567	28.1547	25.2853	1.35826	0.000871	0.023608
GNAI3	33.282	25.4302	17.4305	16.4198	1.30876	0.000872	0.023608

SRRM1	18.0761	22.7067	22.5181	25.9545	-1.25618	0.000882	0.023608
WHAMM	10.8049	13.5437	9.81355	10.3888	-1.25348	0.000879	0.023608
BCL2L1	36.1102	17.5753	12.3027	12.7009	2.0546	0.000883	0.023608
TIFA	17.5925	10.062	8.23094	9.16335	1.74841	0.000878	0.023608
CAPN1	41.8741	34.3185	35.0688	32.6926	1.22016	0.000883	0.023608
BTN3A1	68.2316	85.1305	75.8995	86.0019	-1.24767	0.00087	0.023608
C5orf15	43.9976	32.7318	19.8166	19.8959	1.34418	0.000903	0.023932
TYMP	609.891	387.61	166.285	156.082	1.57347	0.000903	0.023932
TNFRSF10A	12.4663	8.38018	8.42356	8.7676	1.4876	0.000902	0.023932
SUMF2	26.2094	33.8424	49.1988	51.6903	-1.29123	0.000907	0.023945
NCOA2	12.9053	16.752	9.70026	10.7062	-1.29807	0.000916	0.02413
KDM1B	13.6567	9.30667	5.48823	5.86285	1.46741	0.000923	0.024181
SLC44A2	40.8799	55.7704	63.7711	64.873	-1.36425	0.000927	0.024181
ZNF91	3.45942	4.84056	4.85768	5.19823	-1.39924	0.000924	0.024181
UNKL	5.06109	7.21248	9.77111	11.4826	-1.42509	0.000936	0.024209
ANXA5	471.402	299.733	169.121	123.556	1.57274	0.000944	0.024209
TFE3	36.8335	28.34	23.9897	20.3116	1.2997	0.000943	0.024209
NKIRAS2	23.6432	17.5266	15.0631	13.14	1.34899	0.000942	0.024209
IFNA1	13.9931	43.5312	0.021877	0.014197	-3.1109	0.000931	0.024209
C11orf75	50.0373	24.2108	12.8912	14.9097	2.06674	0.00094	0.024209
E2F3	12.8282	16.3321	12.8713	14.3898	-1.27315	0.000951	0.024308
PHF10	11.3205	17.9032	32.9599	34.9355	-1.58149	0.000974	0.024559
RP2	25.4225	19.9214	13.3282	11.1477	1.27613	0.000972	0.024559
TPM4	160.765	117.413	72.6228	63.7814	1.36922	0.000966	0.024559
RAB5A	38.8066	27.7127	22.2446	20.6339	1.40032	0.000972	0.024559
EZH2	7.74862	4.92551	5.22527	4.55586	1.57316	0.000975	0.024559
ERCC5	16.1385	20.6754	27.8832	29.054	-1.28112	0.000978	0.024568
PLK1S1	3.29786	5.38149	10.367	11.3163	-1.63181	0.000989	0.024771
SRPK2	8.37008	11.4089	18.0698	17.6709	-1.36306	0.000993	0.024792
GSTM4	1.52766	4.40912	4.36872	10.0119	-2.8862	0.001005	0.025023
FTSJD2	73.9652	86.4518	20.2334	21.0356	-1.16882	0.001012	0.025045
RECQL5	6.10318	7.888	7.88499	8.70481	-1.29244	0.001013	0.025045
GK	15.7863	7.96328	6.34552	5.32345	1.98239	0.001014	0.025045
HM13	143.872	93.4752	63.9164	49.8822	1.53915	0.001029	0.025254
UTP14C	6.34664	7.1265	6.71117	7.00408	-1.12288	0.001029	0.025254
BCL10	11.4536	9.4622	7.40724	7.75301	1.21046	0.001036	0.025268
RILP	13.2226	7.78145	4.30296	3.47747	1.69924	0.001034	0.025268
ZNF160	6.41582	8.11795	8.60118	9.31956	-1.2653	0.001038	0.025268
DHDDS	8.5449	7.01437	6.44157	6.16492	1.2182	0.001044	0.025268
OMA1	7.71464	10.5488	10.8611	11.6893	-1.36737	0.001042	0.025268
DDIT3	39.1452	28.5017	16.4606	16.4426	1.37343	0.001072	0.025829

DEDD	21.0588	17.9846	18.7658	17.1407	1.17094	0.001073	0.025829
IL4I1	480.185	360.754	17.1431	9.34134	1.33106	0.001091	0.025867
ZRANB1	7.58954	9.14227	12.2676	12.3387	-1.20459	0.001087	0.025867
ARL8A	37.7215	27.5909	15.8872	14.3346	1.36717	0.001088	0.025867
IFNA8	14.0487	48.9222	0.012082	0.048173	-3.48232	0.001083	0.025867
FGL2	338.609	185.523	120.473	121.409	1.82516	0.001095	0.025867
GLRX	144.858	80.2705	64.9789	61.0126	1.80462	0.001095	0.025867
CYB561	5.62883	8.71106	7.3268	9.14097	-1.54758	0.001084	0.025867
TTC35	30.8165	23.3489	14.9503	13.8101	1.31983	0.00112	0.026232
UBE2A	51.5436	38.4993	25.2223	22.4914	1.33882	0.00112	0.026232
IFNA5	14.8629	60.0775	0.044403	0.055211	-4.0421	0.001118	0.026232
SLC25A45	5.13427	7.68456	8.33117	11.6899	-1.49672	0.00113	0.026235
URGCP	4.14851	5.43909	6.34518	6.60849	-1.31109	0.001134	0.026235
HIATL1	32.7801	26.9874	22.7082	22.2049	1.21464	0.001138	0.026235
LRRFIP1	63.2833	49.7838	45.7271	38.8768	1.27116	0.001134	0.026235
CD96	22.0477	34.7623	29.5932	38.0307	-1.57669	0.001132	0.026235
CMAH	14.022	8.34481	7.35894	8.07014	1.68033	0.001136	0.026235
PTPRE	83.304	40.5247	25.8586	24.0712	2.05564	0.001143	0.026284
DPH3	9.17348	7.68744	7.01204	6.47286	1.19331	0.00115	0.026311
IFNA16	9.87903	36.0726	0.020307	0.023435	-3.65143	0.001153	0.026311
ZNF675	5.20482	6.86785	6.57397	7.00878	-1.31952	0.001152	0.026311
CASP7	50.6479	34.1684	9.71494	10.0662	1.4823	0.001162	0.026377
SLC4A2	27.1018	21.8228	22.2947	18.8229	1.2419	0.001162	0.026377
ABCG1	18.6682	6.79342	9.38619	5.25591	2.74798	0.00117	0.026482
C12orf44	18.446	15.0765	17.01	15.5651	1.22349	0.001181	0.026671
BATF2	38.8343	26.1574	0.877302	2.87528	1.48464	0.00119	0.026742
MTMR6	17.0499	11.6002	12.3681	12.206	1.46979	0.00119	0.026742
SLC25A25	15.4434	10.2324	9.14973	8.85888	1.50927	0.001203	0.026955
PHF3	16.6276	21.5317	24.0194	25.6271	-1.29493	0.001209	0.027013
NPIP	9.051	15.2419	21.7061	24.708	-1.684	0.001235	0.027482
CTNS	9.43206	6.43944	7.4966	6.67138	1.46473	0.001236	0.027482
FBXO6	96.8883	79.9643	7.48983	9.57759	1.21164	0.00127	0.027676
C17orf62	100.008	82.4767	72.6129	64.0019	1.21256	0.00127	0.027676
C4orf32	17.6119	10.2262	4.55495	5.73766	1.72224	0.001258	0.027676
GVINP1	21.6054	28.28	16.2471	21.5968	-1.30893	0.001258	0.027676
AKT2	30.2769	35.3866	29.0875	28.9475	-1.16877	0.00127	0.027676
CISH	64.6099	25.6955	16.8938	20.6383	2.51444	0.001267	0.027676
CHD6	6.50744	9.21502	8.98462	9.93421	-1.41608	0.001264	0.027676
IFNG	59.7028	7.82318	0.551001	0.764432	7.63152	0.001273	0.027676
SIN3A	17.1985	21.9113	20.4166	21.2869	-1.27402	0.001266	0.027676
TOR1A	34.0676	24.4733	22.3602	19.2912	1.39203	0.001287	0.027828

STAG2	33.9862	40.2108	35.4304	37.2335	-1.18315	0.001284	0.027828
TIA1	30.0987	39.669	26.1943	28.0044	-1.31796	0.001294	0.027911
BLVRA	131.851	78.7344	25.0261	18.0109	1.67463	0.001305	0.028092
CNOT6L	12.5108	17.4847	21.0784	22.0349	-1.39757	0.001311	0.028141
C5orf39	35.1392	46.8589	24.5739	29.0532	-1.33352	0.001317	0.028205
IFNA7	10.0325	33.9418	0.013504	0.052801	-3.38317	0.001321	0.028212
YME1L1	55.6068	50.7752	40.8338	40.36	1.09516	0.001324	0.02822
LAMTOR3	10.9881	8.58655	8.53066	8.73524	1.27968	0.001332	0.028309
PATZ1	11.4349	15.5478	15.195	17.9691	-1.35969	0.001335	0.028311
SERPINB8	16.5901	10.8736	10.223	9.71307	1.52572	0.001341	0.028362
GRINL1A	11.8326	14.9366	13.3968	15.1733	-1.26232	0.001348	0.028445
ARF3	51.8513	39.0465	48.053	41.8166	1.32794	0.001353	0.028494
SLC9A8	7.94049	8.95931	6.28815	6.81724	-1.12831	0.001358	0.028526
IFNA13	3.91625	12.2702	0	0.01185	-3.13316	0.001372	0.028738
ZFP62	4.75479	6.44141	8.74436	9.39725	-1.35472	0.001389	0.028885
MGAT2	41.3282	32.0992	23.2788	21.7429	1.28752	0.001386	0.028885
CPEB4	8.11911	5.91321	4.89934	4.38515	1.37305	0.001383	0.028885
TUT1	6.66245	8.8912	10.8464	12.2328	-1.33452	0.001418	0.029069
ATXN7L3B	27.5056	36.0853	39.3228	45.0756	-1.31193	0.001407	0.029069
C15orf24	44.0519	34.1499	29.1802	25.5498	1.28996	0.001422	0.029069
ANXA2	441.73	285.649	216.605	169.438	1.54641	0.001424	0.029069
PHF23	24.761	20.451	27.6802	24.14	1.21075	0.001421	0.029069
TAX1BP1	54.6667	46.8622	47.0362	45.4992	1.16654	0.001406	0.029069
LEPROT	19.8645	14.7101	15.7304	14.7675	1.3504	0.001409	0.029069
PQLC1	21.0361	15.3322	19.8995	17.8076	1.37202	0.001421	0.029069
CTNNA1	57.2324	40.5264	30.1886	23.5559	1.41223	0.001432	0.029094
LRRN3	10.7267	31.5223	14.4484	34.4598	-2.93868	0.00143	0.029094
ARHGAP10	21.1038	10.2384	6.52949	5.87352	2.06125	0.001437	0.029134
PSME2	462.077	345.163	104.64	130.788	1.33872	0.001459	0.029371
TRIB1	13.4087	8.41602	5.29874	3.85114	1.59324	0.001458	0.029371
MYC	29.1745	51.1693	31.9802	36.8652	-1.7539	0.001455	0.029371
GIGYF2	7.79743	9.4193	11.9017	12.3582	-1.208	0.001471	0.029548
JUNB	195.23	143.116	80.32	73.5777	1.36414	0.001488	0.029751
COPB2	40.449	33.0437	37.6523	34.6255	1.2241	0.001488	0.029751
ZNF7	5.18577	6.34626	8.93701	9.59356	-1.22378	0.001494	0.02978
DHX40	5.75436	7.45799	11.9724	11.517	-1.29606	0.001497	0.02978
CSRP2BP	3.52163	4.63647	6.46741	6.93193	-1.31657	0.001525	0.030157
STAM2	7.38467	6.01448	4.7432	4.91618	1.22782	0.001533	0.030157
RAB1A	64.5631	45.4146	32.9907	29.7152	1.42164	0.001533	0.030157
OSGIN2	11.6037	8.61087	6.79662	6.61477	1.34756	0.001531	0.030157
HARS	31.3095	24.2603	21.9303	22.0933	1.29057	0.00152	0.030157

TMED5	32.3482	23.5093	21.4489	19.4862	1.37597	0.00155	0.030283
SLAMF8	62.6949	17.6481	22.6	31.1474	3.55249	0.001548	0.030283
ARPC1B	228.08	152.303	192.501	174.543	1.49754	0.001546	0.030283
MKNK1	25.2864	15.0196	19.9733	18.0161	1.68356	0.001553	0.030283
TXNDC11	25.8007	21.6255	19.4771	18.178	1.19307	0.001564	0.030425
MANF	82.0404	47.7499	43.9797	40.6743	1.71813	0.001568	0.030435
KIAA1370	6.65157	9.95632	14.7939	15.8181	-1.49684	0.001579	0.030582
CARM1	14.0019	10.636	12.1373	11.7014	1.31646	0.001592	0.030759
SESN1	8.03748	12.7371	14.3875	16.9712	-1.58471	0.001602	0.030841
SOCS3	95.3435	45.0765	20.2271	12.5304	2.11515	0.00161	0.030841
SNX12	13.7408	10.3781	10.9424	9.85426	1.32402	0.001614	0.030841
JKAMP	16.1917	11.2283	15.2978	13.5737	1.44204	0.001612	0.030841
ARHGAP18	16.904	5.31275	12.1931	8.98589	3.18178	0.001604	0.030841
MSL3	58.6067	73.5172	49.8704	48.6305	-1.25442	0.001638	0.031247
LILRA2	21.5057	3.92957	15.6524	6.1944	5.47277	0.001643	0.031265
CCDC85B	24.085	31.7505	19.4064	20.3417	-1.31827	0.001651	0.031351
FAM120B	10.1261	11.2531	12.1298	12.8681	-1.1113	0.001662	0.031421
HSD3B7	12.3274	4.95825	3.55415	2.62862	2.48623	0.001662	0.031421
C1GALT1	16.0737	19.5105	8.81927	9.54238	-1.21382	0.001686	0.031659
VAMP3	30.4614	22.964	23.6481	20.9136	1.32648	0.001687	0.031659
C17orf87	32.406	12.2092	7.91675	10.5985	2.65424	0.001687	0.031659
APP	29.6554	21.4725	29.0939	27.6692	1.38109	0.001689	0.031659
DENND4C	5.57093	7.71633	11.2017	12.339	-1.38511	0.001699	0.03171
HSPA6	6.98876	1.98081	5.85321	3.45542	3.52824	0.001697	0.03171
B3GNT5	15.5806	5.77385	4.40219	4.38847	2.69848	0.001709	0.031769
PNP	37.659	20.281	25.0088	24.4527	1.85686	0.001706	0.031769
ARHGAP31	32.6568	12.107	7.2092	6.36938	2.69735	0.001717	0.031837
MESDC2	19.6379	15.1676	9.99669	9.52164	1.29473	0.001745	0.032216
CLEC7A	92.8537	21.758	46.4764	38.5038	4.26756	0.001742	0.032216
HERPUD1	58.7984	46.3956	70.0823	65.079	1.26733	0.00176	0.032229
LOC254128	2.66573	4.16299	4.71318	5.21681	-1.56167	0.001758	0.032229
ZBTB44	7.19221	10.8908	12.3021	13.2298	-1.51425	0.001756	0.032229
SELL	284.585	422.996	310.766	320.638	-1.48636	0.001759	0.032229
CDC14A	6.32023	9.16237	10.7953	12.7891	-1.44969	0.001772	0.032301
TMEM188	11.7175	9.73838	11.008	9.91293	1.20323	0.001769	0.032301
SSR1	20.4173	16.2022	17.0114	16.7013	1.26016	0.001775	0.032301
PDIA3	166.606	108.942	64.0028	64.6897	1.52931	0.001803	0.032653
ARPC5	199.28	148.667	149.946	127.695	1.34044	0.001806	0.032653
8-Mar	12.5137	15.9759	14.2403	14.8637	-1.27667	0.001801	0.032653
LMNB1	98.2718	70.5649	17.6835	18.4167	1.39264	0.001836	0.032743
RALB	70.5381	50.9708	21.4171	21.7723	1.38389	0.001837	0.032743

DEK	105.536	88.2434	66.5885	62.1887	1.19596	0.001816	0.032743
PHF15	33.9395	43.2423	24.1738	27.8857	-1.2741	0.001821	0.032743
LOC282997	3.42613	6.94782	7.47218	9.9172	-2.02789	0.001834	0.032743
JOSD2	21.4453	15.1641	12.9366	11.1023	1.41421	0.001835	0.032743
GCA	25.4716	15.4348	15.6895	14.0892	1.65027	0.001833	0.032743
FAM168B	10.9761	14.0777	25.319	24.922	-1.28258	0.001849	0.032883
OFD1	14.1537	18.9347	15.7469	19.6735	-1.3378	0.001867	0.03314
PAPD5	5.16612	6.43671	4.35647	4.60913	-1.24595	0.001892	0.033526
XPO4	3.66435	4.69206	5.13308	5.85907	-1.28046	0.001904	0.03366
C5orf56	10.3849	12.0321	2.29999	3.05393	-1.15861	0.001924	0.033886
IFNA6	4.58602	17.6366	0.006851	0.026239	-3.84573	0.001923	0.033886
LOC440944	3.65044	5.0322	4.10757	5.23047	-1.37852	0.001931	0.033935
ERICH1	16.4128	12.5979	10.6337	10.8098	1.30281	0.001945	0.034109
PTPRC	264.764	305.292	335.535	345.177	-1.15307	0.00195	0.034129
ZBP1	72.3368	94.2489	7.14562	7.78291	-1.30292	0.001985	0.034597
TMEM229B	15.3719	22.4042	5.19833	7.06491	-1.45747	0.001984	0.034597
TLR2	72.306	36.0451	23.5343	21.1604	2.00598	0.00199	0.034626
KIAA0495	3.18719	4.79032	6.22987	7.31395	-1.50299	0.001998	0.034686
CD40	270.741	113.885	19.9798	21.0842	2.37731	0.00202	0.035
DYRK2	12.21	19.165	25.9533	29.1804	-1.56961	0.002048	0.035387
CD97	114.788	86.5274	57.3484	54.3633	1.32661	0.002058	0.035387
TMSB10	3201.71	2391.2	1502.85	1533.35	1.33895	0.002071	0.035387
METTL16	4.13273	5.70377	6.32331	7.20826	-1.38014	0.002068	0.035387
VEZF1	14.8018	17.8595	18.4255	19.726	-1.20658	0.002051	0.035387
TCEB1	15.615	11.4783	10.8036	10.0063	1.36039	0.002067	0.035387
CTSH	228.432	120.451	124.617	114.763	1.89647	0.002064	0.035387
NDUFV2	67.3749	50.1138	41.3217	41.9513	1.34444	0.002078	0.035435
CNOT1	36.8341	42.4316	36.7099	38.3934	-1.15197	0.002085	0.035488
RNF19B	161.146	119.405	21.1503	16.7472	1.34957	0.002133	0.035605
TRIM23	3.42044	4.46717	6.34283	6.94361	-1.30602	0.002141	0.035605
RHEB	32.9778	26.0737	15.0689	13.1311	1.26479	0.002152	0.035605
AASDH	2.3994	3.45394	4.34288	5.47588	-1.4395	0.002099	0.035605
PIM2	115.713	153.314	62.7434	58.4004	-1.32496	0.002125	0.035605
TNKS	2.98986	3.96968	5.11671	5.66195	-1.32771	0.002104	0.035605
MAP3K4	5.33673	7.25335	9.7344	10.1193	-1.35914	0.002113	0.035605
NUDCD3	11.1033	13.1627	14.0886	14.9653	-1.18547	0.002148	0.035605
LEMD3	10.9578	12.242	11.8765	13.0223	-1.11719	0.002147	0.035605
FXR2	14.8771	12.4738	15.76	14.5455	1.19267	0.002127	0.035605
PAPOLG	4.97419	5.9197	5.60016	6.28224	-1.19008	0.00215	0.035605
SMAD3	7.71292	13.8131	12.7306	15.7784	-1.7909	0.002126	0.035605
MYO1C	11.0363	5.59077	9.35346	5.58155	1.97403	0.002153	0.035605

LASS5	18.49	15.0732	15.7686	15.2286	1.22668	0.002104	0.035605
PACSIN2	30.4151	21.6921	26.3169	22.4387	1.40213	0.002149	0.035605
PPP6C	15.5777	18.0193	21.2523	22.4771	-1.15674	0.002166	0.035713
TUBA1C	135.104	91.772	27.0275	16.9599	1.47217	0.002169	0.035713
TMEM106B	7.65498	9.84504	8.81869	9.78914	-1.2861	0.002172	0.035713
ZNF480	3.54644	4.55492	4.90914	5.01264	-1.28437	0.002182	0.035748
CCDC91	11.1213	13.61	11.8689	12.4319	-1.22378	0.002182	0.035748
FRG1	35.346	23.2624	23.5358	22.4475	1.51945	0.002189	0.0358
COPB1	47.5108	41.6277	40.8763	40.624	1.14132	0.002195	0.035801
C14orf119	18.7416	14.94	18.5776	17.42	1.25446	0.002198	0.035801
MYCBP2	25.8713	32.3474	17.6171	19.6581	-1.25032	0.002219	0.036044
PTMS	50.6531	32.9319	16.1345	13.8085	1.53812	0.002225	0.036044
GPATCH8	12.0151	14.2449	14.9089	16.728	-1.18558	0.002223	0.036044
CREB3	22.0703	18.2102	16.6035	13.8167	1.21197	0.00223	0.036053
PPP4R1	10.6409	7.95816	11.4098	9.44548	1.3371	0.002238	0.036127
PHLDA2	9.46111	3.67732	0.43885	0.339487	2.57283	0.002254	0.036321
WDR1	119.455	102.88	101.643	94.3967	1.16112	0.00226	0.036349
SLC16A3	87.6733	39.7716	54.7516	33.4152	2.20442	0.002267	0.036383
LASP1	75.1748	61.3242	75.608	70.4021	1.22586	0.002274	0.036438
CMAS	16.6316	13.3417	14.7161	13.5438	1.24658	0.002283	0.036456
SEC23B	25.3097	18.7366	21.0909	19.5991	1.35082	0.002284	0.036456
FBXO3	6.56738	8.48677	12.4871	13.5237	-1.29226	0.00229	0.036483
KBTBD2	24.1225	27.1289	20.0085	20.9987	-1.12463	0.002297	0.036538
PPAPDC1B	11.8197	8.26166	12.9862	11.5873	1.43067	0.002315	0.036755
PPWD1	13.6077	19.668	25.2131	30.1224	-1.44536	0.002348	0.037214
ZNF623	3.63424	4.76589	6.68371	7.35482	-1.31139	0.002354	0.03722
RPL23A	153.809	222.128	303.794	341.178	-1.44418	0.002357	0.03722
SLFN11	23.0565	12.4244	15.8121	13.146	1.85575	0.002372	0.03739
NSUN6	5.36652	6.90874	5.98977	6.31031	-1.28738	0.002397	0.037717
NEDD8	100.201	80.0254	107.779	97.7305	1.25211	0.002404	0.03775
PEX1	3.45772	4.75111	8.27207	8.65309	-1.37406	0.002422	0.037903
ORMDL2	31.5382	24.0603	16.4626	14.9387	1.3108	0.00242	0.037903
POLK	11.7803	9.6681	6.88504	6.01748	1.21848	0.002455	0.037937
EPB41	35.476	55.4264	75.417	88.1956	-1.56236	0.002432	0.037937
ACSL4	32.938	23.5448	19.3856	15.6199	1.39895	0.002451	0.037937
TRAM1	132.525	103.627	90.866	82.3338	1.27886	0.002452	0.037937
STX4	49.9699	41.413	37.9246	35.6781	1.20662	0.002448	0.037937
UGP2	71.0473	51.7248	44.9246	44.4354	1.37356	0.002433	0.037937
TNIK	8.62834	11.7915	11.1904	12.956	-1.3666	0.002449	0.037937
ATP1B3	87.874	51.4315	37.7509	29.2653	1.70856	0.002471	0.038072
TP53	20.4628	27.29	19.8576	22.8741	-1.33364	0.00248	0.038072

CCNL1	46.6084	54.3599	45.9562	49.1446	-1.16631	0.00248	0.038072
FBXO18	20.5747	25.8504	22.5964	22.7686	-1.25642	0.002481	0.038072
BTG3	30.5426	24.1259	8.90707	7.04875	1.26597	0.002517	0.038562
NPRL3	4.58878	6.67329	7.20056	8.37587	-1.45426	0.002528	0.038653
SLC25A12	5.00157	6.06921	4.65087	4.51522	-1.21346	0.00255	0.038924
C1GALT1C1	26.3963	19.3572	10.8077	10.2889	1.36364	0.002573	0.039163
ERP44	29.3229	22.4313	14.4644	13.6815	1.30723	0.002575	0.039163
NAP1L1	50.406	74.8932	108.524	116.424	-1.4858	0.002586	0.039197
RNMT	7.24971	9.15776	10.6115	11.378	-1.26319	0.002583	0.039197
SERTAD2	7.01592	9.12283	12.5102	12.8432	-1.3003	0.002599	0.039234
PARP8	24.8164	33.5959	17.2869	21.0393	-1.35378	0.002606	0.039234
TMEM194A	19.2689	12.9867	8.7009	8.31918	1.48374	0.002604	0.039234
BLMH	16.8294	21.2993	17.6925	17.9645	-1.2656	0.002596	0.039234
FAM82A2	14.3162	11.2527	9.06886	8.59532	1.27224	0.002637	0.039626
CTCF	16.6542	19.4542	23.9427	25.1465	-1.16813	0.002648	0.039728
LUC7L2	25.9832	30.306	38.41	39.6219	-1.16637	0.002667	0.039938
CDK13	8.47332	9.98696	13.0404	13.781	-1.17864	0.002682	0.039964
ATP2A2	38.9324	26.3267	21.2309	21.8969	1.47882	0.002679	0.039964
RUNX2	3.52856	6.71988	5.34627	4.39217	-1.90442	0.002679	0.039964
BTBD10	11.6405	9.58633	8.28456	8.44758	1.21428	0.002693	0.040058
ADNP	12.7368	16.3906	22.4573	24.3254	-1.28687	0.002714	0.040157
CTNBL1	53.5241	40.8321	23.5417	23.5031	1.31083	0.002706	0.040157
S100A10	115.305	65.4925	116.715	91.2635	1.76058	0.002709	0.040157
UBA7	70.6209	90.1933	37.3405	42.9904	-1.27715	0.002735	0.040321
IFNA10	12.1327	37.1916	0.011081	0.034729	-3.06541	0.002739	0.040321
CBX6	23.3379	16.2219	17.5843	17.7091	1.43867	0.002738	0.040321
GNB4	33.1983	25.0129	10.9369	10.1874	1.32724	0.002761	0.040523
VPS29	60.5276	46.4804	40.6623	36.1166	1.30222	0.002762	0.040523
ZNF192	5.26675	7.51648	8.77246	10.1799	-1.42716	0.002778	0.040555
DCAF16	4.99706	7.33845	7.64787	9.03064	-1.46855	0.002776	0.040555
KIAA0174	67.7598	62.0887	66.6316	64.4989	1.09134	0.002777	0.040555
REPS1	7.16533	8.4725	11.3461	11.9551	-1.18243	0.002786	0.040593
ACN9	2.15745	3.28393	5.04368	5.56903	-1.52213	0.002804	0.040593
PARN	8.71616	10.7858	12.3842	13.4607	-1.23745	0.002797	0.040593
LETMD1	11.2627	14.9782	16.5811	16.9804	-1.32989	0.002803	0.040593
MLLT3	8.67615	13.5831	13.8199	16.6898	-1.56557	0.002799	0.040593
ZNF506	6.25158	8.34038	8.12626	8.81761	-1.33412	0.002809	0.040609
DAPK3	13.0726	10.7044	11.6477	10.4121	1.22124	0.002831	0.040851
C3orf38	31.6583	24.7153	10.9929	11.1655	1.28092	0.00284	0.040916
ICAM1	160.123	91.9974	16.6418	19.1199	1.74052	0.002865	0.04103
EIF6	66.4508	54.3387	44.0345	42.3638	1.2229	0.002862	0.04103

DGCR2	17.3692	21.8313	22.5257	23.0158	-1.2569	0.002867	0.04103
SLC50A1	29.067	21.7361	26.2744	23.0429	1.33727	0.002857	0.04103
VMAC	3.99879	5.98548	7.24344	9.24135	-1.49682	0.002892	0.041202
PION	21.8516	16.4268	14.2208	13.1187	1.33025	0.002898	0.041202
KIAA0947	11.1438	13.1766	11.1238	12.7078	-1.18242	0.002895	0.041202
FANCF	7.00114	9.00043	8.22914	9.20705	-1.28557	0.002895	0.041202
ELF1	102.889	120.171	71.1638	69.0569	-1.16797	0.002911	0.041206
MYST2	11.3314	13.3601	15.0565	16.1144	-1.17903	0.002907	0.041206
GBA	25.9226	17.7184	17.8212	14.2335	1.46303	0.002917	0.041206
CEP170	9.40915	4.95486	7.05785	6.32131	1.89897	0.002914	0.041206
DCAF8	19.9674	25.9975	39.114	40.7476	-1.302	0.00294	0.041459
TMEM194B	4.05215	5.3113	3.87913	4.25105	-1.31074	0.002945	0.041466
NONO	74.8952	85.6522	92.9334	94.2105	-1.14363	0.002962	0.041601
HIF1AN	10.5513	12.2919	12.9138	13.4429	-1.16497	0.002964	0.041601
TBC1D22B	8.02384	6.48153	5.30215	5.07648	1.23795	0.002976	0.041703
DDX17	114.562	159.568	212.995	239.849	-1.39286	0.003	0.041717
BRWD1	7.80643	10.507	12.9905	14.8226	-1.34594	0.002996	0.041717
ACTG1	764.132	575.947	571.083	518.121	1.32674	0.003001	0.041717
ADAMTSL4	25.3482	9.22254	11.4108	10.4797	2.74851	0.003001	0.041717
FCGR2A	52.0222	13.9951	40.7206	27.8814	3.71718	0.002982	0.041717
NPM1	226.76	296.415	314.571	359.828	-1.30718	0.003011	0.041785
MOBK1B	169.637	134.415	68.3471	65.8777	1.26205	0.003017	0.041807
SNRK	20.5542	27.1955	32.1683	38.1623	-1.32311	0.003031	0.041938
SLC25A36	5.5778	7.56642	11.306	12.7495	-1.35652	0.00305	0.042052
PDCD11	6.65826	8.55057	8.03473	9.44215	-1.28421	0.003054	0.042052
DERL2	29.5389	23.2934	22.3573	21.3601	1.26812	0.003053	0.042052
TANK	115.832	92.6097	28.3036	26.202	1.25075	0.003074	0.042064
TMEM106A	42.9949	29.5785	6.1436	4.82481	1.45359	0.003072	0.042064
PIP4K2C	13.8596	11.6842	10.8645	11.2458	1.18618	0.003061	0.042064
ARHGEF2	43.1665	37.3166	44.0609	40.81	1.15677	0.003069	0.042064
MOAP1	10.863	15.0523	23.5253	25.3536	-1.38565	0.003089	0.042199
C1QB	30.2442	13.0812	2.52173	7.33363	2.31203	0.003102	0.042251
ARF4	61.2621	42.7536	41.6684	37.7028	1.43291	0.003101	0.042251
LPCAT2	13.0665	7.50657	9.0653	7.27359	1.74068	0.003109	0.042269
LCP2	150.976	101.018	55.6164	68.3395	1.49455	0.003131	0.042501
MBNL1	83.6734	96.2464	95.1141	101.499	-1.15026	0.003135	0.042501
TRPC4AP	73.3013	63.4412	43.6881	46.012	1.15542	0.003166	0.042804
MYO1G	108.583	76.1763	42.0037	29.1359	1.42542	0.003168	0.042804
ARNTL2	16.6872	9.50116	1.86345	1.41631	1.75634	0.003173	0.042806
PLD2	8.37407	4.8009	9.30828	6.65926	1.74427	0.003189	0.042893
GBGT1	11.7038	6.2563	7.9455	7.13947	1.87073	0.003185	0.042893

OBFC2A	31.467	23.5123	12.9921	10.9537	1.33832	0.003195	0.042902
C19orf66	113.67	129.324	31.2191	31.9176	-1.13772	0.003206	0.042956
GON4L	7.55365	8.99439	8.25484	9.66854	-1.19073	0.003213	0.042956
SGMS1	13.7054	9.34898	11.1562	10.2962	1.46598	0.003213	0.042956
PLEKHG4	2.79122	4.5464	5.34356	6.4786	-1.62882	0.003225	0.043053
KIAA0247	47.4286	35.7452	25.6174	23.829	1.32685	0.003239	0.043095
PDCD10	40.953	33.2711	30.3685	27.4532	1.23089	0.003238	0.043095
ARRB2	75.6791	46.077	136.382	115.355	1.64245	0.003253	0.043216
FYCO1	5.16912	6.81643	7.14353	7.12183	-1.31868	0.003258	0.043216
ZNF75A	6.57432	8.15087	7.41937	8.58434	-1.2398	0.003267	0.04328
CD74	3487.6	2110.38	2194.25	2183.72	1.65259	0.003282	0.043344
ZDHHC6	22.0168	19.1938	20.9527	20.2449	1.14708	0.003279	0.043344
PPM1K	49.6411	58.1598	11.2315	11.7654	-1.17161	0.00329	0.043376
SMEK2	26.6362	30.4735	28.2958	28.4209	-1.14406	0.003301	0.043463
SLC6A12	18.1609	8.56799	2.19684	2.03527	2.11962	0.00331	0.043518
VRK2	61.0844	41.362	13.1027	13.8468	1.47682	0.003332	0.043586
HNRNPA3	24.81	30.682	36.5914	37.5327	-1.23668	0.003335	0.043586
CTDSPL2	9.47363	10.898	10.5166	11.0439	-1.15035	0.003326	0.043586
C10orf2	4.8181	6.40769	5.27335	5.63401	-1.32992	0.00333	0.043586
ATM	23.6775	40.607	43.6323	57.2054	-1.715	0.003346	0.043656
RHOC	42.1939	23.524	22.7797	15.4167	1.79366	0.003352	0.043668
BANP	8.80908	11.1904	11.8351	11.5962	-1.27033	0.003371	0.04385
FLCN	16.6729	13.1666	13.2891	12.8659	1.2663	0.00338	0.043906
CASP4	228.774	187.865	58.4149	63.0327	1.21776	0.00341	0.044053
XIAP	11.833	13.8365	8.29726	8.98125	-1.16932	0.003397	0.044053
KIAA1147	13.9313	19.7276	22.1731	23.9918	-1.41606	0.003412	0.044053
OSM	19.5533	5.07931	3.16341	3.06402	3.8496	0.003406	0.044053
KIAA1712	2.07654	2.91739	4.8791	5.46838	-1.40493	0.003442	0.044364
LILRB4	331.198	234.791	27.9735	16.1381	1.41061	0.003447	0.044364
PPIB	266.78	195.6	199.942	189.713	1.36391	0.003456	0.044364
CSDE1	130.805	151.428	148.691	153.577	-1.15767	0.003453	0.044364
ADPRHL2	51.1174	41.1134	17.1878	16.5593	1.24332	0.003493	0.044437
PSMA4	228.701	176.865	61.0296	64.0197	1.29308	0.003467	0.044437
PSMB2	18.4911	14.703	9.85954	10.2898	1.25764	0.003507	0.044437
IFI27	499.148	264.131	13.8807	0.893476	1.88977	0.003504	0.044437
APOBEC3B	37.5161	16.4781	0.482755	0.213755	2.27672	0.003508	0.044437
C19orf2	20.3525	26.6099	26.6765	30.2974	-1.30745	0.003481	0.044437
BHLHE40	51.7941	22.254	25.462	22.9711	2.32741	0.003497	0.044437
TREML2	5.57846	2.83019	3.40628	3.03772	1.97105	0.00348	0.044437
ARHGAP15	38.9201	47.1257	43.3215	46.2241	-1.21083	0.003498	0.044437
ITGA5	52.9863	28.0225	38.2459	31.4546	1.89085	0.003513	0.044441

PSIP1	22.8234	35.7597	50.3352	57.734	-1.5668	0.003527	0.044551
USP8	14.0531	12.7048	14.289	13.3909	1.10613	0.003532	0.044555
ZFP161	7.6731	9.6495	14.2876	15.6217	-1.25757	0.003549	0.044702
ARID3A	8.03898	5.62061	7.14138	5.88246	1.43027	0.003558	0.044754
KDM3A	13.4391	18.1064	28.9316	31.1165	-1.34729	0.00357	0.044765
SYNRG	17.4986	21.9095	20.9544	23.8621	-1.25208	0.003567	0.044765
ADRM1	69.6789	58.4928	39.5076	40.1144	1.19124	0.003587	0.044892
DCUN1D3	11.2242	4.55064	1.88908	1.9082	2.46651	0.003593	0.044892
CIRBP	124.268	150.609	126.447	144.847	-1.21197	0.003598	0.044892
FAM129B	69.0263	16.5205	24.7988	15.2925	4.17822	0.0036	0.044892
IFI27L2	29.6491	22.5209	34.7064	32.577	1.31651	0.00361	0.04495
MED23	8.04292	10.3479	13.2094	15.074	-1.28659	0.003621	0.04502
LBH	61.8178	105.869	138.914	176.164	-1.7126	0.003668	0.045358
SECTM1	166.172	105.545	22.3196	30.044	1.57443	0.00366	0.045358
XPNPEP1	26.0087	20.7744	14.1275	14.2519	1.25196	0.003664	0.045358
VDR	12.4537	3.90322	6.71966	3.97848	3.19062	0.003669	0.045358
SSTR3	12.1559	18.3799	2.00838	2.70222	-1.51202	0.003699	0.045666
GRIPAP1	38.4451	34.9222	25.8558	24.5054	1.10088	0.003706	0.045686
PSMA6	195.435	164.022	73.9858	67.1087	1.19152	0.003718	0.045711
ZNF740	11.2721	14.8812	18.7199	20.603	-1.32018	0.003718	0.045711
EXOSC4	9.99634	6.813	8.58599	7.79542	1.46725	0.003731	0.045801
TRAPPC3	30.197	25.8663	31.0693	28.0982	1.16743	0.003742	0.045868
TPM3	209.304	176.786	118.207	109.553	1.18394	0.003784	0.045994
PMS1	3.22239	4.21273	5.79605	6.36265	-1.30733	0.003774	0.045994
PSMA1	91.3934	76.6361	60.1363	58.1226	1.19256	0.003767	0.045994
NUP214	7.93046	9.34227	10.1619	10.8864	-1.17802	0.003771	0.045994
SUCLG2	14.4613	22.5654	16.6605	22.6814	-1.5604	0.003773	0.045994
HK3	14.1774	6.04821	11.1491	9.80034	2.34406	0.003783	0.045994
TMEM187	8.2302	10.9692	4.87765	4.49799	-1.3328	0.003801	0.046092
PTAFR	111.006	59.8756	43.3012	39.6365	1.85394	0.003802	0.046092
6-Mar	18.3968	22.8172	27.5203	29.1602	-1.24028	0.003819	0.046163
TWISTNB	4.64106	5.66939	4.92625	5.39863	-1.22157	0.003818	0.046163
DNAJC1	15.8343	11.7139	12.7791	11.4337	1.35175	0.003836	0.046307
UBE2S	37.645	30.2571	8.33814	8.14742	1.24417	0.003853	0.046346
SPG7	12.4966	15.4116	22.0438	23.3862	-1.23327	0.003847	0.046346
ALCAM	20.1177	11.9791	9.49731	8.02639	1.6794	0.003855	0.046346
SUB1	77.207	57.6099	34.4483	32.3919	1.34017	0.003891	0.04658
SMARCC1	13.539	17.3882	20.1361	21.4724	-1.28431	0.003881	0.04658
LOC100233209	11.7674	16.2274	15.1817	15.8257	-1.37902	0.003887	0.04658
GLIPR2	128.375	79.3936	38.4074	31.9699	1.61694	0.003906	0.046695
ZNF14	4.60076	6.50413	8.87101	9.24354	-1.41371	0.003917	0.046718

TUBB2A	14.1088	7.90893	1.4345	0.692794	1.7839	0.003918	0.046718
PUM2	28.1651	33.7896	38.6862	40.7835	-1.1997	0.003936	0.046805
NIPA2	23.9781	21.0115	20.7232	17.6608	1.14119	0.003931	0.046805
RAB12	29.5395	22.0581	10.8327	10.4679	1.33917	0.003948	0.046877
APOL6	94.4838	112.163	13.4126	17.5838	-1.18712	0.003969	0.047005
MAPKAPK3	40.1448	22.16	32.9766	28.8753	1.81159	0.003969	0.047005
GPD2	19.3681	15.5002	4.78325	4.31227	1.24954	0.003988	0.04716
ATG4A	6.85141	5.82142	6.05679	5.41868	1.17693	0.003999	0.047225
CSRNP2	8.45638	7.03451	5.51885	5.84208	1.20213	0.004008	0.047275
C10orf125	16.1636	9.45791	8.16782	8.99992	1.709	0.004023	0.047383
DPH1	6.24298	9.23176	13.393	14.8725	-1.47874	0.00403	0.047405
NACC1	15.0249	12.2277	12.6032	10.8682	1.22875	0.004058	0.047672
PPP2CA	55.5562	50.2562	49.915	45.1734	1.10546	0.004079	0.047737
KCNE1L	4.48506	35.0429	0.395558	0.263189	-7.81324	0.004079	0.047737
GMPPB	19.6169	11.3625	10.0489	9.65433	1.72647	0.00408	0.047737
C6orf211	19.2876	11.5944	12.3837	11.9318	1.66352	0.004091	0.047798
CMTM6	142.648	90.6825	71.2781	61.1207	1.57305	0.004125	0.048066
ZNF101	25.4395	35.803	25.2422	31.4146	-1.40738	0.004125	0.048066
NMT2	3.80467	7.73379	8.6699	11.7423	-2.03271	0.004131	0.048073
MYNN	4.32945	5.03708	5.34341	5.71256	-1.16345	0.004156	0.048298
PIK3IP1	57.7285	99.0375	155.785	181.664	-1.71557	0.004169	0.048325
C20orf43	57.5208	45.2676	49.8954	48.2396	1.27068	0.004169	0.048325
C8orf76	14.3697	12.2048	11.8602	10.4003	1.17738	0.004181	0.048332
APOL4	30.7828	5.16884	1.48582	6.09462	5.95545	0.004181	0.048332
TRIOBP	10.82	8.51289	11.859	10.4363	1.27101	0.004189	0.048355
DOCK2	31.2543	25.6139	41.5249	41.4762	1.22021	0.0042	0.048425
YKT6	32.1335	27.0311	24.7802	23.2684	1.18876	0.004224	0.048532
EVL	146.647	194.667	163.321	178.974	-1.32746	0.004226	0.048532
FAM20B	7.27521	8.75785	8.23686	8.17248	-1.20379	0.004226	0.048532
YLPM1	6.12628	8.25368	9.04559	10.7663	-1.34726	0.004241	0.048629
ZNF507	2.80009	4.28149	4.25713	5.08529	-1.52905	0.004246	0.048629
RBM43	9.90799	13.9548	3.4024	4.87954	-1.40844	0.004254	0.048662
IFIT5	64.8996	74.2941	8.66263	8.64087	-1.14475	0.004274	0.04882
SOCS1	160.865	98.2316	10.1384	10.2625	1.63761	0.004311	0.04912
PRMT7	6.87328	9.35939	11.124	12.8989	-1.36171	0.00431	0.04912
ATG5	11.7247	10.1684	10.309	10.0306	1.15305	0.004318	0.049131
PARP10	194.091	235.303	34.8016	41.501	-1.21234	0.004324	0.049139
SCAP	10.9052	13.9659	18.9796	19.4459	-1.28066	0.004335	0.049201
FAM172A	2.4508	3.09867	5.14257	5.52125	-1.26435	0.004365	0.049478
EPRS	15.3252	18.1728	23.9759	26.3621	-1.18581	0.004372	0.049494
AKNA	36.4516	50.2224	69.786	77.2419	-1.37778	0.004394	0.049583

FAM122B	9.95827	13.476	15.8718	17.6004	-1.35325	0.004397	0.049583
NPTN	48.7973	35.9539	38.7025	32.8244	1.35722	0.004395	0.049583
ZNF333	3.00082	3.64181	4.53921	5.47146	-1.2136	0.00444	0.049601
FOXJ3	12.7163	16.1683	18.3801	20.706	-1.27146	0.00445	0.049601
SLC41A2	21.814	11.888	1.38762	0.962644	1.83496	0.004421	0.049601
LOC731424	14.4005	7.57158	0.196541	0.185448	1.90192	0.004449	0.049601
CERKL	2.48003	4.36843	4.9456	6.94233	-1.76144	0.004416	0.049601
LANCL1	6.25527	8.06431	8.96385	10.1739	-1.2892	0.00445	0.049601
TAF1D	19.6889	25.1042	26.1245	27.8005	-1.27504	0.004432	0.049601
WDR3	5.82081	8.22552	8.15748	9.04858	-1.41312	0.004449	0.049601
RHO	15.7701	6.67602	8.83975	5.00274	2.36221	0.004427	0.049601
SCYL2	22.2485	18.128	15.1887	14.9551	1.2273	0.004466	0.049604
PHF14	5.73923	7.52172	8.12626	9.04647	-1.31058	0.004464	0.049604
GTF3C3	7.74001	9.22174	9.13125	10.5051	-1.19144	0.00447	0.049604
SPCS2	13.8721	10.5522	12.7147	10.8917	1.31462	0.004473	0.049604
GOLM1	17.8991	5.92123	3.52499	3.36382	3.02288	0.004492	0.049751
NR1D1	1.72418	3.25053	4.9127	5.92373	-1.88526	0.004523	0.049898
PIP5K1A	17.3784	15.7687	13.276	13.4233	1.10208	0.004512	0.049898
DGKQ	7.43517	12.1941	11.7927	15.3473	-1.64006	0.004522	0.049898
1-Mar	15.0491	7.89315	19.9725	15.1278	1.9066	0.004534	0.049959
SPI1	195.107	121.283	128.762	99.9977	1.60869	0.00454	0.049963

Supplemental Table IV: Mixed-model ANOVA with multiple testing correction (Partek Genomics Suite)

Sig. Level (FDR): 0.05; total number of p-values: 8716		
Method: Step Up		
Comparison (ANOVA)	Cutoff p-value	# Genes
All Groups	0.04	6427
sham ADEH+ vs sham ADEH-	6×10^{-6}	1
HSV-1 ADEH+ vs HSV-1 ADEH-	0.005	792
HSV-1 ADEH+ vs sham ADEH+	0.03	5837
HSV-1 ADEH- vs sham ADEH-	0.03	5520

Supplemental Table V. The top 20 most up-regulated genes in ADEH+ as compared to ADEH- in response to HSV-1 stimulation

Refseq Symbol	Entrez Gene Name	Gene symbol	p-value	ADEH+ vs ADEH- (Fold Change)
IFNG	interferon, gamma	IFNG	1.27E-03	7.632
APOL3	apolipoprotein L, 4	APOL4	4.18E-03	5.955
LILRA2	leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 2	LILRA2	1.64E-03	5.473
TGM2	transglutaminase 2 (C polypeptide, protein-glutamine-gamma-glutamyltransferase)	TGM2	2.43E-04	5.185
CLEC7A	C-type lectin domain family 7, member A	CLEC7A	1.74E-03	4.268
FAM129B	family with sequence similarity 129, member B	FAM129B	3.60E-03	4.178
KCNN4	potassium intermediate/small conductance calcium-activated channel, subfamily N, member 4	KCNN4	5.42E-04	4.168
OSM	oncostatin M	OSM	3.41E-03	3.85
G0S2	G0/G1switch 2	G0S2	6.77E-04	3.802
FCGR2A	Fc fragment of IgG, low affinity IIa, receptor (CD32)	FCGR2A	2.98E-03	3.717
SLAMF8	SLAM family member 8	SLAMF8	1.55E-03	3.552
HSPA6	heat shock 70kDa protein 6 (HSP70B')	HSPA6	1.70E-03	3.528
EMP1	epithelial membrane protein 1	EMP1	6.06E-04	3.372
CASP5	caspase 5, apoptosis-related cysteine peptidase	CASP5	1.71E-04	3.216
VDR	vitamin D (1,25- dihydroxyvitamin D3) receptor	VDR	3.67E-03	3.191
ARHGAP18	Rho GTPase activating protein 18	ARHGAP18	1.60E-03	3.182
ANXA2P2	annexin A2 pseudogene 2	ANXA2P2	1.01E-05	3.08
CXCL9	chemokine (C-X-C motif) ligand 9	CXCL9	4.97E-04	3.023
GOLM1	golgi membrane protein 1	GOLM1	4.49E-03	3.023
STARD8	StAR-related lipid transfer (START) domain containing 8	STARD8	5.06E-05	2.833