

## Supplementary Methods

### *Lamina Propria Lymphocyte Isolation*

Colonic lamina propria (LPL) cells were isolated from resections using a slightly modified protocol as described <sup>1</sup>. In brief, tissue was digested overnight using collagenase A (Roche, West Sussex, UK). Digested cells were layered on a 40/80% Percoll gradient (GE Healthcare, Buckinghamshire, UK), centrifuged and LPLs collected. For cell isolation from biopsies, biopsies were digested with collagenase A followed by mechanical disruption (GentleMACS, Miltenyi Biotec, Surrey, UK) and used directly.

### *Quantitative PCR*

CD8+ T cells were enriched from PBMCs using CD8 Microbeads (Miltenyi Biotec). Cells were stimulated with cell stimulation cocktail (eBioscience, Hatfield, UK) for various lengths of time. Total RNA was subsequently extracted using RNeasy Micro or Mini RNA extraction kits (Qiagen, Manchester, UK). cDNA was synthesised using Superscript III Reverse Transcriptase (Invitrogen, Life Technologies, Paisley, UK) and resulting cDNA mixed with Faststart universal probe master (Roche), primers and the corresponding universal probe (Roche). Primers were: HPRT 3'-tgaccttgattattttgcatacc-5' and 5'-cgagcaagacgttcagtct-3', with probe number 73; IFN $\gamma$  3'-tgaaagaggagagtgcagaaa-5' and 5'-ttggatgctctggcatcttt-3' with probe number 21. Samples were run on the Lightcycler 480 (Roche) on the following cycle: 95°C for 10 min, 45 cycles of 95°C for 5min, 60°C for 30 seconds, 72°C for 10 seconds, and one cycle of 40°C for 10 seconds. Fold change was normalised to expression of the housekeeping

gene HPRT using the  $2^{-\Delta\Delta CT}$  method <sup>2</sup> and calculated relative to unstimulated samples.

### Supplementary References

1. Geremia A, Arancibia-Cárcamo C V, Fleming MPP, et al. IL-23-responsive innate lymphoid cells are increased in inflammatory bowel disease. *J Exp Med*. 2011;208(6):1127-33. doi:10.1084/jem.20101712.
2. Livak KJ, Schmittgen TD. Analysis of relative gene expression data using real-time quantitative PCR and the  $2^{-(\Delta\Delta C(T))}$  Method. *Methods*. 2001;25(4):402-8. doi:10.1006/meth.2001.1262.

### Supplementary Figure Legends

Figure S1: Expression of NK cell markers by CD161-defined CD8<sup>+</sup> T cell subsets. Representative flow cytometry plots and cumulative data for percentage of CD8<sup>+</sup>CD3<sup>+</sup> lymphocytes, excluding CCR7<sup>+</sup>CD45RA<sup>+</sup> naïve cells, expressing CD56 (A), CD16 (B), CD160 (C), CD244 (D), NKp80 (E) and KLRG1 (F). A representative plot of CD3<sup>-</sup> lymphocytes, including CD161<sup>+</sup> NK cells, is shown for comparison. \*\*p<0.01, \*p<0.05, ns = not significant by one-way ANOVA with Tukey's multiple comparisons test. Data are represented as mean ± SEM.

Figure S2: CD161 expressing CD8<sup>+</sup> T cell subsets in tissue. A) Percentage of memory CD8<sup>+</sup> T cells expressing CD161 in control colon biopsies (adjacent normal tissue from surgery for colorectal cancer; n=10), compared to biopsies from patients with Inflammatory Bowel Disease (IBD) from either inflamed or non-inflamed tissue (matched) (n=7), as judged by the physician performing the procedure. Also, in comparison to biopsies from IBD patients with quiescent disease and no signs of colonic inflammation (non-inflamed; n=8). Box and whiskers show min to max values. \*\*p<0.01, ns = not significant by one-way ANOVA with Tukey's multiple comparisons test, or \*\*\*p<0.001 by paired t-test between matched inflamed and non-inflamed tissue biopsies. B) Percentage of

CD161<sup>+</sup> memory T cells in control colon biopsies (adjacent normal tissue from surgery for colorectal cancer; n=10), compared to biopsies with patients IBD divided into either Ulcerative Colitis (UC) (n=6) or Crohn's Disease (CD) (n=6). Box and whiskers show min to max values. \*p<0.05, ns = not significant by one-way ANOVA with Tukey's multiple comparisons test. C) Percentage of CD161<sup>+</sup>V $\alpha$ 7.2<sup>+</sup> CD3<sup>+</sup> cells from adult peripheral blood (n=10), liver (n=3) and colon (n=12) which were CD8<sup>-</sup>CD4<sup>-</sup> (DN), CD8<sup>+</sup>CD4<sup>-</sup>, CD8<sup>-</sup>CD4<sup>+</sup> or CD8<sup>+</sup>CD4<sup>+</sup> (DP). Data are represented as mean  $\pm$  SEM.

Figure S3: Analysis of anti-viral cells, and of stimulated CD161<sup>int</sup>CD8<sup>+</sup> T cells by microarray. A) Percentage of the CD161<sup>neg</sup> or CD161<sup>int</sup> CD8<sup>+</sup> T cell populations specific for each virus (n=5). ns = not significant by paired t-test. B) Relative expression of IFN $\gamma$  by CD8<sup>+</sup> T cells stimulated with PMA + ionomycin for 2,4 or 6hrs compared to unstimulated controls. Expression was normalised to that of HPRT in all samples. Each donor is represented by a separate line, with each data point displaying the average of triplicate wells. This identified 4hrs as the optimal duration for stimulation for subsequent detection of cytokines by microarray. C) Scatter plots of signal intensities of all mRNA probes in stimulated (y axis) vs. unstimulated (x axis) CD161<sup>neg</sup>CD8<sup>+</sup> T cells (left), and stimulated CD161<sup>int</sup> (y axis) vs. stimulated CD161<sup>neg</sup> (x axis) CD8<sup>+</sup> T cells (right). The signal intensities of each probe represented by a cross are shown in double logarithmic scale. Red diagonal lines define the areas of 2-fold differential signal intensities. Blue cross: unchanged genes, red cross: significantly upregulated genes (p<0.01), green cross: significantly downregulated genes (p<0.01).

Table S1: Gene expression of resting CD161<sup>int</sup>CD8<sup>+</sup> T cells. CD161<sup>int</sup>CD8<sup>+</sup> T cells sorted from adult peripheral blood were analysed by mRNA microarray, and gene expression compared to CD161<sup>neg</sup>CD8<sup>+</sup> T cells from the same donors. Genes with a fold change >2 and p-value <0.01 are listed. CD161 is encoded by KLRB1.

Table S2: Significantly differentially expressed cytokines and chemokines by CD161<sup>int</sup>CD8<sup>+</sup> T cells upon stimulation. Gene expression of PMA + ionomycin stimulated CD161<sup>int</sup>CD8<sup>+</sup> T cells compared to unstimulated cells. Those genes encoding cytokines and chemokines with a fold change >2 and p-value <0.01 are summarised.

Table S3: Genes significantly differentially expressed by stimulated CD161<sup>int</sup>CD8<sup>+</sup> T cells compared to stimulated CD161<sup>neg</sup>CD8<sup>+</sup> T cells. Genes expressed by PMA + ionomycin stimulated CD161<sup>int</sup>CD8<sup>+</sup> T cells, with a fold change >2 and p-value <0.01 when compared to stimulated CD161<sup>neg</sup>CD8<sup>+</sup> T cells, are listed.

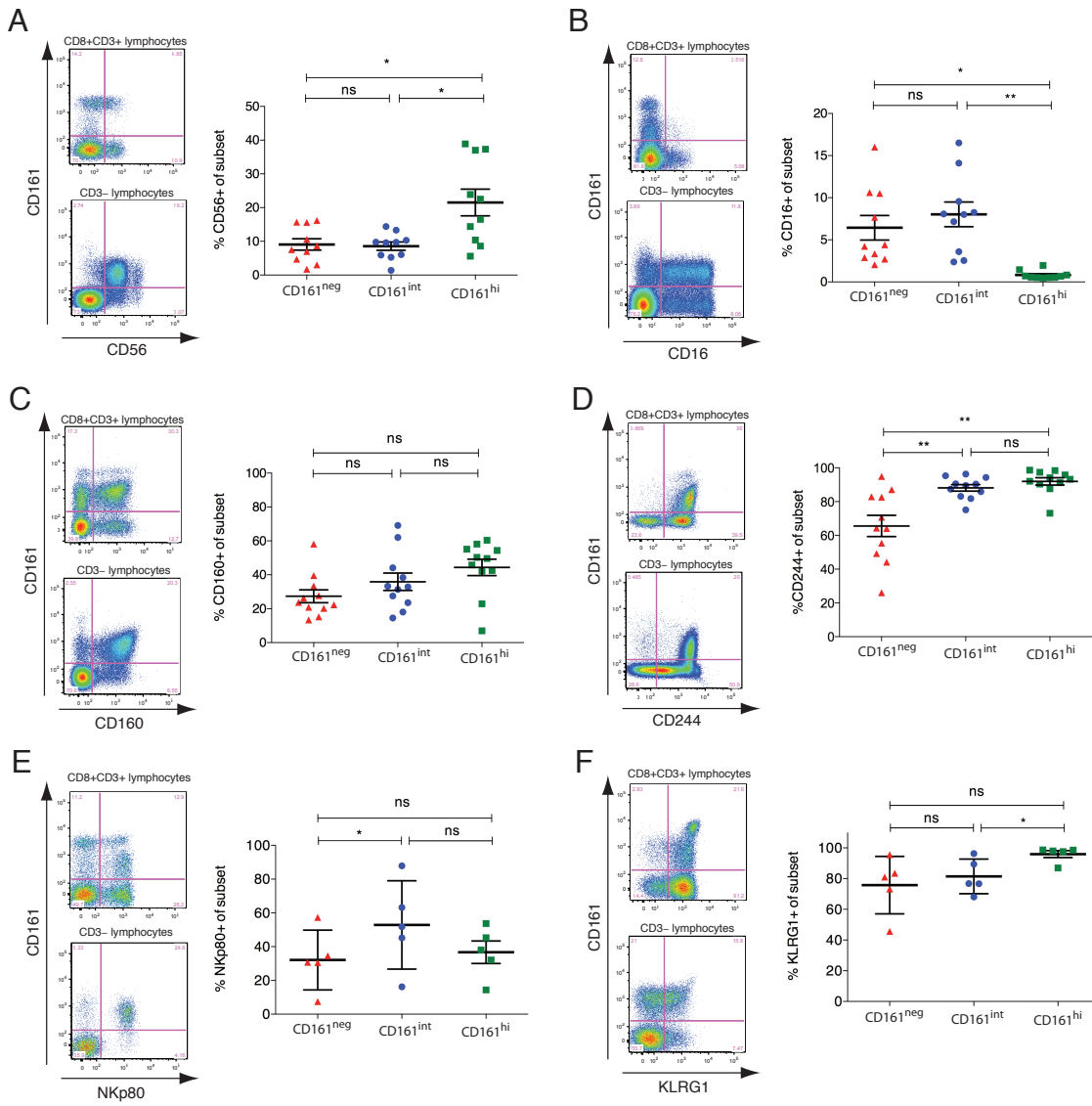


Figure S1

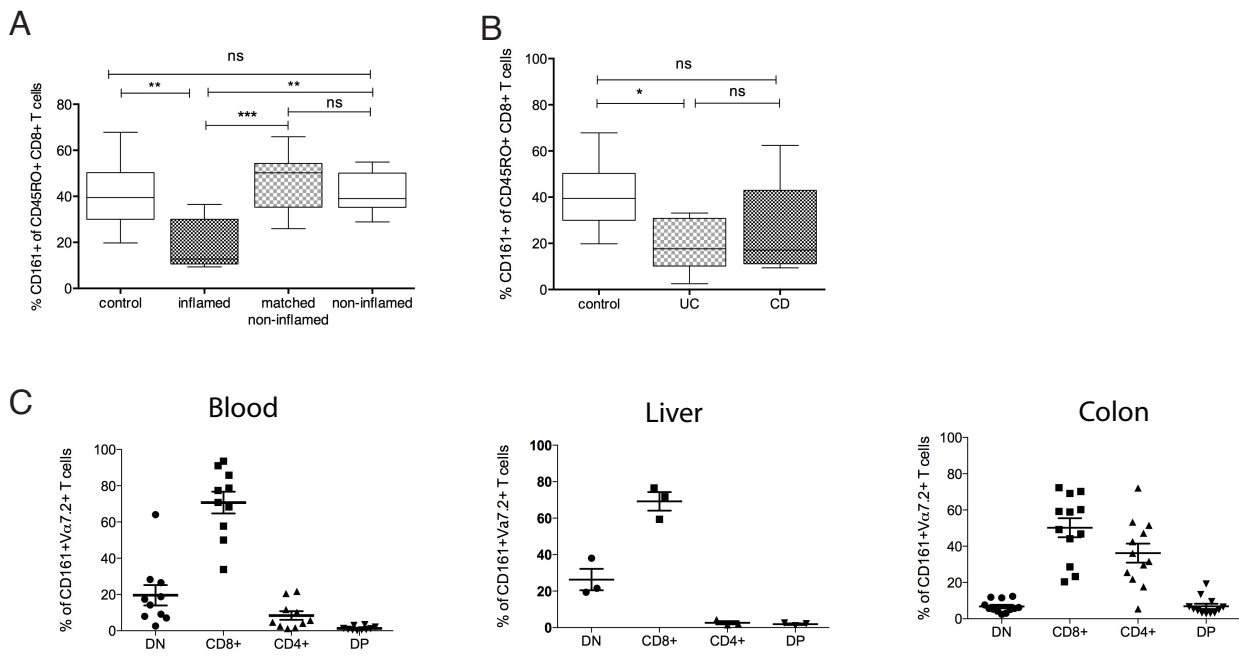


Figure S2

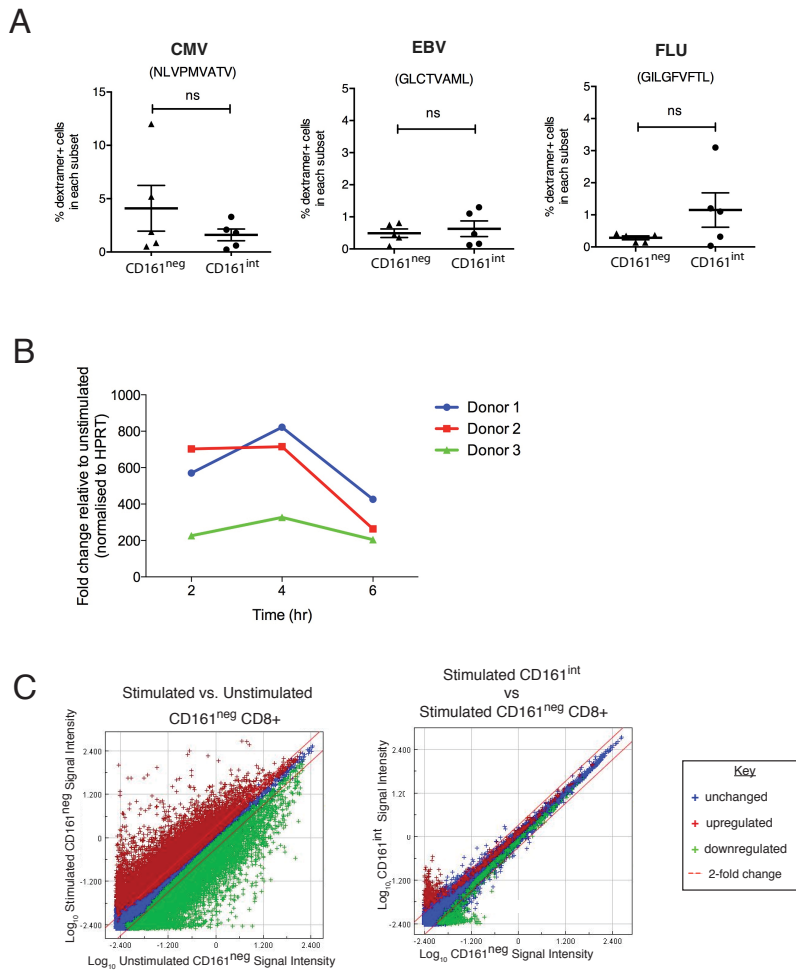


Figure S3

<b>Name</b>	<b>Log(Ratio)</b>	<b>Fold Change</b>	<b>P-value</b>
LOC154449	1.5674	36.93178	7.90E-04
LOC10012939	1.5189	33.02915	0.0016
KIF12	1.40917	25.65476	0.00102
C4orf38	1.39545	24.85694	8.30E-04
KLRB1	1.38407	24.21392	1.27E-35
PRSS41	1.31658	20.72901	1.90E-04
ZNF334	1.25254	17.88716	7.40E-04
CKAP2L	1.15318	14.22915	0.00195
SPTB	1.1363	13.68688	1.30E-04
PANX2	1.1359	13.67427	0.0011
CYLC1	1.10491	12.73236	0.00227
LOC440173	1.09857	12.54791	0.00275
SCGB1D1	1.07624	11.919	0.00433
C8orf48	1.07569	11.90405	0.00263
C14orf162	1.07023	11.75519	2.29E-08
PROKR1	1.00939	10.21865	9.30E-04
KIF6	1.00835	10.19418	0.00357
C1orf185	1.00729	10.16932	0.00775
BIRC8	1.00033	10.00753	0.00193
CTTNBP2NL	0.98936	9.75799	0.00886
PATE2	0.9871	9.70726	0.00586
TMEM178	0.9804	9.55866	0.00283
IL16	0.96773	9.28391	0.00169
CKMT1A	0.96613	9.24976	0.00354
GPR158	0.95515	9.01891	4.60E-04
PTCHD3	0.93862	8.68205	6.69E-06
LOC10012890	0.93801	8.66986	0.00943
ATP13A4	0.93052	8.52158	0.00155
ADAM32	0.92413	8.39702	0.00441
LETM1	0.91559	8.23355	4.86E-09
LOC653203	0.91285	8.18174	5.40E-04
ZSCAN2	0.90342	8.00616	2.27E-10
IGFBP5	0.89929	7.93028	0.00495
C19orf30	0.89232	7.80409	3.04E-11
TTC28	0.88297	7.63782	1.65E-07
ZDHHC20	0.87152	7.43914	2.83E-07
POM121L2	0.86811	7.38095	0.00233
C21orf82	0.8656	7.33838	0.00491
POLR2J2	0.86447	7.3193	2.97E-08
FAM118A	0.84937	7.06926	9.53E-08
PRSS35	0.84807	7.04801	2.60E-04
LOC283335	0.84792	7.04567	1.09E-07
LOC10012985	0.8463	7.01936	0.00299
RAB3B	0.82609	6.70029	0.00348
VNN3	0.822	6.63745	0.00388
LOC284454	0.81642	6.55273	6.85E-08
PARD3B	0.8155	6.53877	0.00724
TBXA2R	0.80864	6.4364	2.99E-07



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GBP6	0.79739	6.27174	2.88E-08
ACBD7	0.79553	6.24495	5.12E-09
KIAA1875	0.78617	6.11187	1.87E-07
KRT23	0.78313	6.06918	3.10E-04
CUX2	0.77457	5.95079	0.0073
DPY19L2P1	0.77174	5.9121	0.00937
ZNF2	0.76997	5.88806	4.62E-08
ZNF713	0.765	5.82107	2.54E-08
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COX6B2	0.74906	5.61126	2.46E-07
HYAL4	0.74218	5.52305	9.81E-08
GS85	0.74076	5.50508	0.00715
LOC401233	0.72701	5.33343	5.58E-06
IL4I1	0.72043	5.25323	8.00E-05
SLC4A10	0.71384	5.17412	0.00453
PABPC1L2A	0.71114	5.14204	0.00572
VPREB3	0.70418	5.06035	1.40E-04
FAM177B	0.69892	4.99943	3.50E-11
ADCY5	0.69791	4.98776	0.00812
CYP2B6	0.68384	4.82881	2.05E-07
IL18RAP	0.66782	4.65393	3.16E-12
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LTK	0.66758	4.65134	4.81E-16
PAK3	0.66149	4.58658	0.00656
B3GALT2	0.6379	4.3441	6.10E-04
PTPN13	0.62393	4.2066	6.00E-05
RN28S1	0.61082	4.08151	6.91E-12
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NCRNA00165	0.60658	4.04187	0.00813
C8orf83	0.6056	4.03277	0.00741
APOL5	0.60506	4.02772	8.00E-05
BLK	0.60473	4.02465	0.00553
LOC10028731	0.59732	3.9566	2.12E-09
APBA1	0.59603	3.94485	4.80E-04
C7orf51	0.59514	3.93677	0.00109
psiTPTE22	0.58892	3.88082	2.00E-05
FAT3	0.58852	3.87726	8.17E-07
TAT	0.58125	3.81287	6.39E-08
LOC10013311	0.57468	3.75565	2.10E-04
ZNF157	0.56904	3.70715	5.65E-07
LOC143286	0.56603	3.68152	2.00E-05
LOC10013071	0.56477	3.67087	9.52E-07
LOC284379	0.56342	3.65948	1.10E-08
LOC340515	0.5591	3.62324	1.42E-13
ARHGAP40	0.55826	3.61628	1.64E-08
PQLC2	0.54889	3.53907	1.18E-09
LOC619207	0.54852	3.53604	1.00E-05
FAM110B	0.53694	3.44305	3.75E-06

CCR1	0.53694	3.44304	2.50E-04
AMN	0.53507	3.4282	1.41E-06
LRP3	0.52924	3.38251	0.00944
AIF1L	0.51954	3.30779	1.80E-04
DYSF	0.51915	3.30481	5.00E-05
SCRN1	0.51147	3.24693	7.59E-06
TYROBP	0.50911	3.22934	1.18E-13
RASL10B	0.50907	3.22902	1.00E-04
LOC10013421	0.50775	3.21919	6.15E-06
SLC8A1	0.50185	3.17577	0.00151
PIH1D2	0.50023	3.16394	1.00E-05
RBP4	0.4995	3.15865	1.00E-04
C14orf167	0.49855	3.15172	2.67E-08
LCE1D	0.49797	3.14756	1.19E-09
LOC10028938	0.49785	3.14663	6.51E-07
LOC10028938	0.49785	3.14663	6.51E-07
FOXA3	0.49743	3.14364	5.98E-06
IL18R1	0.49637	3.13596	5.06E-22
IL18R1	0.49637	3.13596	5.06E-22
IL18R1	0.49637	3.13596	5.06E-22
LOC145757	0.49494	3.12565	8.59E-08
LCN9	0.49364	3.1163	3.00E-05
COLQ	0.49237	3.10718	4.43E-09
GFRA3	0.48685	3.06793	3.31E-07
KIAA0087	0.4862	3.06339	1.90E-04
LGALS3	0.48534	3.05729	2.00E-05
FAM115C	0.48489	3.05413	1.63E-09
LOC645553	0.48175	3.03212	2.04E-07
LOC10013466	0.4814	3.02973	7.48E-06
ISLR2	0.48137	3.02949	7.90E-04
LOC284263	0.481	3.02694	4.18E-07
LOC728449	0.48067	3.02459	2.49E-06
LOC10013221	0.47889	3.01225	1.36E-06
LOC10013221	0.47889	3.01225	1.36E-06
LOC10013221	0.47889	3.01225	1.36E-06
C17orf54	0.4782	3.00743	1.70E-04
LOC10012866	0.47476	2.98372	0.00324
HRH3	0.47467	2.9831	7.48E-07
NRG4	0.47231	2.96697	2.00E-05
ADAMTS7	0.47212	2.96566	6.59E-09
ZNF865	0.4705	2.95463	8.79E-15
CAMK2A	0.46857	2.94152	0.00422
SOX15	0.46658	2.92805	0.0011
PVRL4	0.46594	2.92375	2.80E-04
LOC146795	0.46292	2.90349	2.91E-10
CXCR6	0.46258	2.90122	1.80E-18
SNAR-G1	0.46179	2.89595	0.00303
MAF	0.46054	2.88763	6.94E-09
CELF3	0.45917	2.87854	1.00E-05

LOC10012834	0.45754	2.86772	4.99E-07
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TLE1	0.45746	2.86719	1.08E-09
NR4A3	0.45595	2.85729	0.00156
NYX	0.45559	2.8549	2.75E-10
LOC10013155	0.45437	2.84689	1.51E-06
GPR162	0.45246	2.83437	4.50E-04
LOC10013169	0.45227	2.83316	3.78E-08
RREP3	0.45142	2.82762	2.10E-04
LOC145216	0.4488	2.81062	1.63E-07
HHATL	0.44685	2.79801	0.00266
PSD4	0.44674	2.79728	2.48E-06
PCDHGA7	0.44581	2.79133	8.64E-06
ADAM11	0.44522	2.78751	0.00177
C3orf39	0.44474	2.78447	2.28E-07
LDHAL6A	0.44116	2.7616	4.30E-09
AS3MT	0.43977	2.75274	7.26E-15
IQSEC3	0.43958	2.75157	2.33E-07
PPP1R14A	0.43953	2.75122	2.87E-07
SMR3A	0.43851	2.74478	4.20E-04
OR2H1	0.43639	2.73145	3.33E-08
HRH1	0.43616	2.73	1.16E-06
PAPL	0.43461	2.72027	3.72E-16
TMIGD2	0.43457	2.71999	1.90E-04
LOC10012984	0.43435	2.71861	1.00E-05
LOC10013316	0.43154	2.7011	2.02E-10
KLHL35	0.43095	2.69742	6.00E-05
SLC18A3	0.4297	2.68967	5.99E-10
LMX1B	0.4294	2.68781	8.00E-05
CEACAM18	0.42878	2.68396	4.00E-04
SPRNP1	0.426	2.66686	4.53E-08
C17orf91	0.42568	2.66488	6.96E-08
DTNA	0.42496	2.66046	5.27E-06
MMP15	0.42341	2.65101	8.60E-12
ZDHHC8	0.42332	2.65047	2.40E-04
HCRT	0.42327	2.65014	0.00407
GPR155	0.42311	2.64916	6.22E-13
NUDT8	0.4226	2.64605	3.65E-07
PTAFR	0.42253	2.64564	1.92E-06
FBRSL1	0.42226	2.644	1.46E-06
ADAM12	0.4221	2.64304	4.00E-05
SLC9A4	0.42077	2.63494	1.80E-11
SLC9A4	0.42077	2.63494	1.80E-11
LOC654779	0.41996	2.63001	1.40E-04
IQSEC2	0.41729	2.61392	7.70E-07
FAM21C	0.41487	2.5994	4.81E-06
LOC389033	0.41406	2.59456	1.64E-09
KCNH3	0.41401	2.59426	1.10E-06
ABCC6	0.41285	2.58731	1.00E-04

TFEB	0.41277	2.58686	2.32E-13
LOC400558	0.41255	2.58554	1.00E-05
WFDC3	0.41221	2.58349	1.74E-06
LY6G6D	0.41218	2.58331	4.00E-05
SSX3	0.41167	2.58032	2.70E-09
ADAM33	0.41112	2.57752	1.63E-12
ALDH1L2	0.41086	2.57548	0.00908
COL5A1	0.41072	2.57466	4.00E-04
ZBTB16	0.41006	2.57076	8.73E-08
CHST13	0.40964	2.56826	3.96E-12
HOXA10	0.40959	2.56799	7.18E-07
DOCK3	0.40937	2.56665	0.00253
KIT	0.40921	2.56575	0.00272
HRASLS5	0.40686	2.5519	5.99E-17
ATP6V0A4	0.40609	2.54735	0.00106
MOCS3	0.40552	2.54402	4.00E-05
HMX2	0.40545	2.54363	3.00E-05
LOC10012914	0.40517	2.54197	6.67E-09
PHOSPHO1	0.4041	2.53571	1.50E-06
HMG20B	0.40404	2.53539	5.70E-07
TPSG1	0.40329	2.531	3.39E-12
HSCB	0.40311	2.52992	5.01E-13
DNAH10	0.40306	2.52966	0.00142
FAM74A4	0.40252	2.52653	9.26E-15
PALM	0.40198	2.52339	7.00E-05
GPSM1	0.40159	2.52111	8.78E-09
CLCA1	0.40152	2.52067	2.90E-04
BCORP1	0.40074	2.51614	3.20E-04
RRP7B	0.4004	2.51421	4.00E-13
MPDZ	0.39949	2.50894	0.00907
LOC10013236	0.39842	2.50276	7.99E-09
PRB1	0.39814	2.50115	3.41E-07
LOC399744	0.39782	2.49933	9.13E-06
LIN28A	0.39728	2.4962	2.35E-07
SALL3	0.39717	2.49557	9.20E-07
LOC10012831	0.39713	2.49534	3.00E-05
CNTN4	0.39706	2.49496	8.40E-04
TFE3	0.39666	2.49263	3.93E-10
MEG3	0.39614	2.48968	2.00E-05
LRRC26	0.39488	2.48245	1.30E-07
CDCP2	0.39479	2.48194	3.20E-04
NMU	0.39466	2.48121	0.00943
C8orf58	0.39401	2.47745	1.13E-06
RNU105B	0.39387	2.47668	0.0032
DDX58	0.39375	2.47602	4.00E-05
FEZ1	0.39289	2.47109	0.00237
LOC10050774	0.39147	2.46306	1.54E-09
LOC10012959	0.39088	2.4597	7.26E-07
PRLHR	0.39058	2.45799	2.20E-07

LOC440518	0.3899	2.45414	1.30E-04
KRT7	0.38948	2.4518	2.67E-08
LOC10012833	0.38944	2.45154	1.11E-06
NEUROG3	0.38851	2.4463	3.20E-08
F7	0.38803	2.44361	2.00E-05
CDX1	0.38759	2.44112	1.92E-10
LOC10013028	0.38736	2.43981	4.30E-06
LOC10051001	0.38704	2.43802	1.16E-11
TPP1	0.38656	2.43535	3.46E-06
PLCB1	0.38542	2.42893	0.00232
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GPR25	0.38404	2.42127	7.34E-07
LOC10012810	0.38367	2.41919	1.13E-09
WNK4	0.38343	2.41784	3.27E-07
LOC10051065	0.38322	2.41668	0.00153
FAM99A	0.38223	2.41119	2.00E-06
MAP4	0.38215	2.41072	7.64E-13
LONRF3	0.38193	2.40953	1.69E-07
TERC	0.38174	2.40847	9.67E-09
LOC10027068	0.38072	2.40284	5.00E-05
KCNK15	0.38056	2.40192	7.67E-09
COL27A1	0.38029	2.40042	2.31E-07
HOXA9	0.37983	2.39788	5.58E-06
CTRB2	0.37814	2.3886	9.58E-06
ACTRT2	0.37774	2.38641	0.00404
ANKRD33	0.37724	2.38363	8.62E-09
LOC10012972	0.37706	2.38264	3.39E-08
BCL2L11	0.37651	2.37961	2.67E-06
CD4	0.37503	2.37155	3.92E-10
PRKAG3	0.37424	2.36723	4.43E-11
LOC10012897	0.37356	2.3635	8.10E-04
CTXN1	0.37338	2.36252	6.94E-08
FLJ23867	0.3731	2.36101	4.70E-04
APBB2	0.37235	2.35697	2.70E-08
C8orf56	0.37233	2.35685	2.23E-07
LOC10012911	0.37072	2.3481	6.90E-07
LFNG	0.37051	2.34698	2.76E-09
HBZ	0.37037	2.34624	1.80E-12
TNP2	0.37035	2.34613	6.71E-10
KRTAP10-10	0.37012	2.34486	6.74E-07
ACAD10	0.36986	2.34348	1.93E-09
C14orf181	0.36976	2.34295	2.00E-05
PRRC2B	0.3687	2.33725	2.00E-05
LOC10013091	0.36809	2.33396	0.00629
IER5L	0.36752	2.3309	3.00E-05
UTF1	0.36706	2.32839	1.57E-09
ALPPL2	0.36662	2.32608	6.83E-09
B3GNT7	0.36641	2.32494	1.52E-08
ACCN4	0.36624	2.32402	1.13E-06

EMILIN3	0.36603	2.32291	4.00E-05
CCR2	0.3655	2.32005	2.00E-05
CCR2	0.3655	2.32005	2.00E-05
ZC3HAV1L	0.36485	2.31662	7.97E-07
LOC10013296	0.36458	2.31515	1.11E-06
LOC10013296	0.36458	2.31515	1.11E-06
ARAF2P	0.36413	2.31278	7.03E-09
RPH3A	0.36401	2.31211	4.00E-05
LOC388152	0.36341	2.30891	1.14E-09
KRTAP1-3	0.36319	2.30778	0.00102
HSP90AA5P	0.36132	2.29787	4.00E-05
SLC6A10P	0.36131	2.2978	3.89E-07
LOC10012911	0.36041	2.29304	0.00669
CLDN19	0.35876	2.28432	6.39E-06
ACAP3	0.35817	2.28126	5.48E-07
EXOC3L	0.35783	2.27948	9.10E-04
CHRD	0.35757	2.2781	4.50E-04
LOC10013021	0.35718	2.27605	1.74E-06
DIABLO	0.35713	2.2758	4.10E-07
OR5H1	0.35709	2.27555	7.66E-06
VPS53	0.35684	2.27426	7.50E-04
NRG1	0.35673	2.2737	0.00234
LOC10013015	0.35669	2.27347	1.69E-08
USP17	0.35622	2.271	0.00143
GALE	0.35577	2.26869	5.00E-05
KRT78	0.35552	2.26737	0.00228
OR5L2	0.35551	2.26733	9.52E-06
C20orf141	0.35537	2.26656	7.77E-06
MGC4859	0.35527	2.26605	3.00E-11
PCDHB13	0.35513	2.26532	3.60E-04
LOC644277	0.35448	2.26193	1.46E-08
DEGS2	0.35331	2.25585	4.34E-08
OR10H2	0.35326	2.25557	1.30E-04
SPOCK2	0.35199	2.24899	1.29E-12
PDE9A	0.35174	2.24771	8.36E-09
ABCB1	0.3516	2.247	0.00741
DPT	0.35137	2.2458	5.19E-07
LOC10012791	0.35122	2.245	3.96E-08
PRB3	0.35084	2.24306	2.00E-05
HR	0.35063	2.24196	5.00E-05
SPSB4	0.35046	2.24111	1.29E-08
CDH22	0.35015	2.23949	1.65E-10
C9orf173	0.34976	2.23746	7.49E-06
C9orf173	0.34976	2.23746	7.49E-06
NCRNA00106	0.34912	2.23417	1.60E-07
WDR90	0.34834	2.23017	6.00E-05
LOC10051006	0.34778	2.22731	7.82E-08
LAMA4	0.34745	2.2256	9.40E-04
MEFV	0.34656	2.22104	4.00E-05

DPYSL4	0.34638	2.22015	4.95E-13
PRRT4	0.3463	2.21974	0.0078
ZSCAN12P1	0.3462	2.21923	3.00E-05
NCRNA00092	0.34617	2.21905	6.50E-04
LOC283868	0.34596	2.21799	3.85E-07
SPRR2D	0.34575	2.21691	2.58E-09
RARA	0.34558	2.21606	1.42E-11
CDRT3	0.34545	2.21541	4.00E-05
C18orf12	0.34537	2.21497	6.71E-08
SLCO2B1	0.34529	2.21455	0.00587
C3orf43	0.34524	2.21433	0.00188
CDK13	0.34522	2.21423	1.18E-09
MAVS	0.345	2.21309	6.40E-04
LOC283547	0.34498	2.21299	3.17E-10
TBKBP1	0.34496	2.2129	1.30E-10
TYMP	0.34493	2.21274	1.25E-11
MYH14	0.34488	2.21247	1.74E-07
FAM178B	0.34476	2.21188	7.00E-05
PANX3	0.34456	2.21084	0.00907
IL28A	0.34423	2.20919	5.71E-07
KRTAP9-1	0.34403	2.20816	3.06E-08
PRAP1	0.34382	2.20707	7.79E-08
FDX1L	0.34365	2.20623	4.03E-07
LOC402036	0.34338	2.20484	1.00E-05
TSPAN11	0.34336	2.20476	2.74E-06
LOC10013147	0.34306	2.20321	3.71E-06
LOC284749	0.34189	2.19733	4.00E-05
ACER2	0.34189	2.19731	0.00178
OR1J4	0.34188	2.19725	0.00921
GHSR	0.34178	2.19676	5.68E-16
KRTAP10-8	0.34158	2.19573	1.00E-05
C1orf158	0.34154	2.19554	1.22E-06
KRTAP9L1	0.3415	2.19533	0.00338
LOC728675	0.34145	2.1951	0.00433
NCRNA00253	0.34099	2.19274	8.82E-06
NEDD4	0.3408	2.1918	0.00231
POLR2F	0.33948	2.18515	5.91E-10
KIRREL2	0.33858	2.18063	2.00E-05
SPINK7	0.33849	2.18018	4.71E-09
SAMD11	0.33849	2.18015	1.00E-04
HES6	0.33833	2.17936	2.65E-11
EPS8L3	0.33801	2.17774	1.40E-04
PRO0471	0.33797	2.17757	0.00658
LOC10013045	0.3376	2.17571	2.70E-09
C15orf62	0.3375	2.17521	2.12E-07
RTN3	0.33725	2.17394	3.26E-08
CHST6	0.33598	2.16758	8.70E-07
LOC400968	0.33588	2.16711	1.00E-05
SLC11A1	0.33581	2.16676	3.25E-09

LOC389273	0.33546	2.165	4.90E-04
LOC285095	0.33544	2.16493	0.00406
PHF21B	0.33463	2.16088	1.00E-04
FLJ44385	0.33405	2.15798	5.30E-04
CCDC78	0.33402	2.15784	1.05E-06
UPK3B	0.33352	2.15536	0.00698
ZSCAN30	0.33349	2.15519	2.70E-04
LOC10050659	0.33334	2.15479	7.00E-05
RPL23AP32	0.33297	2.15263	5.00E-05
NOTCH1	0.33286	2.15207	0.00105
NOTCH1	0.33286	2.15207	0.00105
LOC10051000	0.33284	2.15199	2.21E-10
LOC10013041	0.33251	2.15037	9.10E-04
TOR2A	0.3315	2.14537	6.02E-07
STARD8	0.33107	2.14323	0.00316
DSE	0.33106	2.14317	0.00772
LACTBL1	0.33101	2.14293	4.00E-05
NOBOX	0.32913	2.13368	2.89E-08
CORT	0.329	2.13304	5.10E-04
FAM120C	0.32883	2.13219	3.28E-08
LOC10028958	0.32867	2.13144	2.90E-04
CDC14C	0.32856	2.1309	4.18E-06
LOC10050726	0.32851	2.13064	1.36E-06
SPHK1	0.32825	2.12934	1.00E-05
EMX1	0.3277	2.12669	1.30E-07
CBX7	0.32758	2.1261	1.48E-06
C21orf58	0.32638	2.12022	1.40E-04
IL17RE	0.3263	2.11983	8.37E-08
FLJ40606	0.32611	2.11891	2.78E-09
ARHGAP33	0.32608	2.11877	1.00E-04
SOX13	0.32501	2.11352	1.75E-10
TREM1	0.32445	2.11084	5.50E-04
COL11A2	0.3242	2.10959	6.27E-06
ASB10	0.32382	2.10776	1.00E-05
KRT73	0.3231	2.10426	2.94E-07
ATXN2L	0.32257	2.10167	1.40E-07
TNXB	0.32253	2.10152	1.46E-06
OR11A1	0.32226	2.1002	4.00E-05
KCP	0.32116	2.09489	3.26E-07
RAPH1	0.32046	2.0915	3.30E-04
HAR1A	0.32014	2.08998	4.00E-05
KCND3	0.31992	2.08893	2.24E-10
RTBDN	0.31988	2.08872	7.30E-04
EPHB2	0.31891	2.08408	0.00331
ADM2	0.31871	2.08311	6.30E-04
LOC151009	0.31871	2.08309	3.93E-06
CCL24	0.31831	2.08118	4.75E-07
MOS	0.31823	2.08081	3.00E-05
TH	0.31818	2.08055	1.00E-05



C19orf69	0.31801	2.07974	2.62E-08
LHCGR	0.31789	2.07917	0.00592
GPR152	0.31669	2.07343	8.29E-07
DLK1	0.31648	2.07245	2.10E-04
C14orf70	0.31644	2.07224	2.28E-08
SHISA4	0.31641	2.07209	3.30E-06
LOC146429	0.31553	2.06788	0.00696
SEMA3B	0.31546	2.06757	6.00E-05
LOC10021654	0.31538	2.0672	7.00E-05
KRTAP9L2	0.31517	2.06617	1.06E-08
KLHL33	0.31516	2.06614	1.90E-06
LOC149950	0.3151	2.06586	3.55E-09
BTNL8	0.31461	2.0635	3.90E-04
WWOX	0.31428	2.06197	0.00359
EFCAB10	0.31383	2.05982	1.30E-04
SLC17A7	0.31375	2.05944	4.26E-08
SLC16A12	0.31352	2.05835	6.57E-13
KIF17	0.31348	2.05818	0.00418
LOC648044	0.31299	2.05586	0.00604
FIGNL2	0.31282	2.05503	2.20E-04
DERL3	0.31279	2.0549	3.24E-08
LOC10013398	0.31217	2.05199	4.60E-09
TLL4	0.3121	2.05165	1.30E-06
AXL	0.31183	2.05038	3.00E-04
PLEKHG5	0.31168	2.04964	3.35E-09
FMO6P	0.31164	2.04945	0.00123
SLC6A6	0.31146	2.04862	7.00E-05
FGF5	0.31123	2.04753	0.00206
LOC10012997	0.31101	2.04648	0.00175
CABP5	0.31059	2.04452	1.33E-08
FLJ39632	0.3102	2.04269	4.62E-08
CCL16	0.31007	2.04207	4.08E-07
CD79A	0.30971	2.04039	2.00E-04
LOC10013279	0.30949	2.03935	3.09E-12
C8orf67	0.30894	2.03674	4.90E-04
LOC10012919	0.30886	2.03638	3.40E-04
ESRRG	0.30884	2.03627	7.70E-04
C16orf5	0.30871	2.03568	2.00E-05
PALM3	0.3087	2.03563	9.00E-05
TMEM146	0.30843	2.03439	3.61E-08
FAM71E2	0.30828	2.03368	3.55E-06
ATF3	0.30828	2.03366	1.90E-04
ATF3	0.30828	2.03366	1.90E-04
LOC652119	0.30798	2.03228	2.41E-09
MEF2D	0.3078	2.03144	3.43E-06
WNT3A	0.30746	2.02984	2.89E-06
C9orf71	0.30697	2.02756	0.00111
GNAO1	0.306	2.02303	8.00E-05
LOC731932	0.30527	2.01962	7.46E-09

HGFAC	0.30521	2.01935	1.34E-07
LOC10050718	0.30507	2.0187	5.75E-06
KRT85	0.30487	2.01777	2.00E-05
SCUBE1	0.30485	2.01768	0.001
LRRN2	0.30462	2.0166	7.65E-07
LST1	0.30461	2.01653	0.00206
MEX3D	0.30443	2.01573	1.51E-15
IL17REL	0.30434	2.01529	2.16E-07
KRT81	0.30402	2.01382	5.37E-11
TMEM201	0.30343	2.01109	4.77E-08
PHF16	0.30326	2.0103	5.40E-04
LOC440313	0.30318	2.00991	0.00171
LOC10012838	0.30312	2.00964	0.00838
MT3	0.30288	2.00852	1.03E-06
TAS1R3	0.30268	2.00761	6.00E-05
SLC5A6	0.30238	2.00623	3.72E-11
PITX3	0.30208	2.00484	5.22E-07
NCRNA00260	0.30153	2.0023	5.70E-04
CLN5	-0.30305	-2.00934	0.00508
MPPE1	-0.30364	-2.01204	5.30E-04
TSEN2	-0.3037	-2.01231	7.70E-04
SUPT3H	-0.30372	-2.01243	0.00512
IKBKE	-0.30445	-2.01582	0.00368
PPARGC1B	-0.30538	-2.02013	0.00897
LOC649294	-0.30602	-2.0231	0.00252
FAM117B	-0.30721	-2.02868	1.03E-07
CTSZ	-0.30747	-2.02986	0.00952
CTSZ	-0.30747	-2.02986	0.00952
PRIM2	-0.30802	-2.03245	0.00564
CTPS2	-0.30808	-2.03273	8.70E-04
LOC338620	-0.31101	-2.04647	0.0027
TP53	-0.31139	-2.04827	1.20E-04
TMEM185A	-0.31216	-2.05192	6.20E-04
RDX	-0.3122	-2.0521	0.00759
IFNAR2	-0.31456	-2.0633	0.00346
CRIP2	-0.31687	-2.07427	0.00604
EPHX2	-0.31714	-2.07558	0.00145
EGLN3	-0.31722	-2.07598	0.00159
FANCI	-0.31725	-2.07609	0.00362
LOC727916	-0.31754	-2.07751	0.00884
EGFEM1P	-0.31792	-2.07934	0.00622
LOC257396	-0.31843	-2.08173	0.0017
MCM7	-0.31944	-2.0866	1.00E-05
INF2	-0.31947	-2.08675	7.00E-05
ST8SIA1	-0.31948	-2.08681	0.00147
RTN2	-0.31975	-2.08808	0.00414
MAP3K1	-0.31999	-2.08924	4.94E-07
TMPO	-0.32007	-2.08965	0.00106
IL4	-0.32036	-2.09102	0.00727

SLC7A1	-0.32115	-2.09485	5.30E-04
FCGBP	-0.32211	-2.09947	8.00E-05
TGFB3	-0.32347	-2.10605	6.50E-04
PRKCA	-0.32378	-2.10755	7.60E-04
HSD17B3	-0.32381	-2.1077	0.00461
CCDC134	-0.3244	-2.11059	0.00549
RABIF	-0.32456	-2.11137	0.00385
TTLL13	-0.3249	-2.113	0.00266
LEKR1	-0.32551	-2.11598	0.00358
SC4MOL	-0.32703	-2.1234	3.10E-04
GIN54	-0.32737	-2.12504	2.90E-04
MRC2	-0.32949	-2.13544	0.00264
LYL1	-0.32949	-2.13548	0.00158
SUN3	-0.33059	-2.14088	0.0031
CRTC3	-0.33122	-2.14397	7.00E-05
WDHD1	-0.33147	-2.14523	0.00194
SLC23A3	-0.33171	-2.14637	9.40E-04
SLC1A5	-0.33171	-2.14641	0.00583
CLEC3B	-0.33273	-2.15144	0.00689
INCENP	-0.3329	-2.15228	0.00331
LOC10050938	-0.33431	-2.15927	0.00963
ELL3	-0.33492	-2.1623	0.00367
CCNG2	-0.33599	-2.16765	0.00109
FOXK1	-0.33751	-2.17524	0.00737
IL6ST	-0.33752	-2.1753	1.02E-14
IL6ST	-0.33752	-2.1753	1.02E-14
IL6ST	-0.33752	-2.1753	1.02E-14
WNT10A	-0.33773	-2.17635	0.00202
PLTP	-0.34062	-2.1909	0.00492
ZNF823	-0.3413	-2.19431	0.00909
AMT	-0.34147	-2.19516	0.00281
HNRPLL	-0.34187	-2.19722	0.00947
LHFPL5	-0.34277	-2.20175	4.60E-04
CES4A	-0.34292	-2.20252	0.0015
LOC401037	-0.34569	-2.21662	0.0066
ADCK1	-0.34714	-2.22401	0.00297
GAB2	-0.34774	-2.22712	0.00412
MAL	-0.34832	-2.23009	2.80E-04
HS1BP3	-0.34871	-2.23206	0.00813
HERC2	-0.34879	-2.23247	0.00195
PKIA	-0.34973	-2.23731	7.00E-05
C1S	-0.34992	-2.23829	9.10E-04
FLJ36848	-0.35018	-2.23964	0.00148
MCM4	-0.35118	-2.2448	0.0098
MAGED2	-0.3528	-2.25319	0.00542
GREB1L	-0.35396	-2.25924	0.00118
CASS4	-0.35429	-2.26095	0.00171
TMEM194A	-0.35436	-2.26133	0.00107
LOC10013399	-0.35439	-2.26148	0.00671

GHITM	-0.35539	-2.26669	0.00936
C1R	-0.35757	-2.27807	0.00361
FGD4	-0.35849	-2.28291	0.00631
E2F2	-0.36014	-2.29158	5.00E-05
ZNF433	-0.36098	-2.29604	0.00856
OR2A1	-0.36179	-2.30031	0.00268
C2orf89	-0.3618	-2.30036	0.00461
SFXN1	-0.36184	-2.30058	0.00888
TRIB1	-0.36249	-2.30405	5.70E-04
NCRNA00162	-0.36416	-2.31294	0.00284
ADORA2A	-0.36488	-2.31677	0.00979
CCDC19	-0.36507	-2.31779	0.00996
APP	-0.36509	-2.31788	0.00102
KIF20B	-0.36698	-2.328	4.40E-04
C1orf228	-0.36796	-2.33324	3.40E-04
MURC	-0.36813	-2.33417	0.00881
FBXO15	-0.37009	-2.34472	0.00224
LOC643783	-0.37226	-2.35646	1.00E-04
ZNF488	-0.37358	-2.36363	0.00577
RGS16	-0.37591	-2.37636	6.60E-04
ADAMTS6	-0.37618	-2.37784	0.00799
SESN3	-0.37687	-2.38159	0.00476
BCL7A	-0.3772	-2.38341	0.00921
FCHSD1	-0.37897	-2.39317	0.00858
BICD1	-0.38202	-2.40999	0.00551
MLF1IP	-0.38207	-2.41029	0.00863
USP21	-0.3828	-2.41435	0.00808
MYEF2	-0.38692	-2.43734	9.20E-04
RPL32P3	-0.38759	-2.44111	8.00E-05
BTBD8	-0.38831	-2.44519	0.00368
HCRP1	-0.38925	-2.45046	0.00307
LASS6	-0.39082	-2.45933	7.00E-05
LASS6	-0.39082	-2.45933	7.00E-05
ZNF35	-0.39175	-2.46462	0.00194
MEOX1	-0.39301	-2.47176	0.00195
GYPE	-0.39332	-2.47354	0.00745
KCNRG	-0.39351	-2.47461	0.00384
RWDD4	-0.39431	-2.47918	6.20E-04
L3MBTL1	-0.39502	-2.48323	6.10E-04
L3MBTL1	-0.39502	-2.48323	6.10E-04
OSMR	-0.39556	-2.48635	0.00735
SGOL2	-0.39563	-2.48675	0.00371
SLC25A26	-0.3967	-2.49286	0.00325
AKTIP	-0.39681	-2.49348	1.00E-05
CSGALNACT1	-0.39955	-2.5093	6.70E-04
CSGALNACT1	-0.39955	-2.5093	6.70E-04
SEMA5A	-0.39981	-2.51082	0.00763
PPIEL	-0.4003	-2.51362	0.00894
CPLX3	-0.4012	-2.51884	0.00594

NELL2	-0.40157	-2.52096	1.80E-04
TOR3A	-0.40213	-2.52423	1.90E-04
TNNC1	-0.40224	-2.52488	0.00182
CENPE	-0.40255	-2.5267	0.0015
ZFP14	-0.40288	-2.52857	9.70E-04
SLC26A1	-0.40327	-2.53089	0.00313
ZDHHC23	-0.40469	-2.53914	0.002
HSF5	-0.40549	-2.54384	0.0081
IQCA1	-0.40583	-2.54583	0.00704
NUDT7	-0.406	-2.54683	0.00528
LOC643837	-0.40639	-2.54913	0.00888
SPATA24	-0.40667	-2.55077	0.00965
UBTD2	-0.40947	-2.56726	0.00782
LOC729680	-0.4098	-2.5692	0.00311
SORD	-0.41016	-2.57136	0.00884
C1orf162	-0.41107	-2.57674	1.27E-07
ProSAPiP1	-0.41109	-2.57687	4.00E-05
C6orf163	-0.41144	-2.57892	0.00243
RG9MTD2	-0.41227	-2.58387	1.40E-04
FPR2	-0.41232	-2.58413	0.0074
CDCA7L	-0.41363	-2.59196	0.00354
ARHGEF4	-0.41373	-2.59257	2.50E-04
MTHFD1L	-0.41642	-2.60869	2.80E-04
LOC10012911	-0.41643	-2.60872	0.00401
ZNF177	-0.41745	-2.61484	0.00231
CENPW	-0.41937	-2.62645	0.00202
PTPRK	-0.41988	-2.62953	0.00175
SERAC1	-0.42094	-2.63596	0.00531
PRKAR1B	-0.42094	-2.63599	7.10E-04
ZNF273	-0.42145	-2.63908	0.0013
KCTD1	-0.42268	-2.64654	0.00701
CYP2J2	-0.42315	-2.64943	9.72E-08
ARHGEF5	-0.42339	-2.6509	0.00933
KCTD13	-0.4236	-2.65214	0.0027
TCEA3	-0.42378	-2.65327	3.74E-08
PRELID2	-0.42586	-2.666	0.00831
STIL	-0.42595	-2.66657	0.00302
TMEM106A	-0.42632	-2.66884	7.72E-06
IER3	-0.42672	-2.67131	0.00589
FAM106C	-0.43106	-2.69812	0.00733
HMGB3P1	-0.43132	-2.69975	0.0051
ATG9B	-0.43319	-2.71137	0.00204
ZNF850	-0.43387	-2.71563	0.00361
SLC4A8	-0.43405	-2.71674	4.70E-04
MEIG1	-0.43554	-2.72606	0.00161
SNN	-0.43576	-2.7275	1.35E-07
MBP	-0.43581	-2.7278	0.0065
ZNF239	-0.4361	-2.72959	0.00653
RHEB	-0.43722	-2.73667	0.0046

TRIM34	-0.43724	-2.73679	0.00146
KIAA0556	-0.43738	-2.73766	0.00161
DENND5A	-0.43799	-2.74153	3.91E-13
C15orf29	-0.43838	-2.744	0.00278
GGTA1	-0.44186	-2.76607	0.00695
AHI1	-0.44294	-2.77296	4.00E-05
KRTCAP3	-0.44562	-2.79008	5.80E-04
NCRNA00282	-0.44703	-2.79914	0.00341
LOC10013106	-0.44866	-2.80972	0.0014
OR10G9	-0.44954	-2.81539	0.00504
KCNH2	-0.44979	-2.817	9.80E-04
TBC1D3B	-0.4504	-2.82099	8.90E-04
GRB10	-0.45059	-2.82221	5.30E-04
CH25H	-0.45195	-2.83106	0.00892
GALNT2	-0.4525	-2.83465	5.00E-05
RYR1	-0.45259	-2.83525	0.00262
HTR7P1	-0.45262	-2.83546	0.00415
SECISBP2	-0.45278	-2.83649	6.50E-04
LIMS2	-0.45289	-2.83723	0.00722
HLA-DOA	-0.45374	-2.84276	0.00426
DPCR1	-0.45415	-2.84547	2.90E-04
SGPP2	-0.45625	-2.85925	0.00582
C2orf40	-0.45707	-2.86465	0.00323
PTCD3	-0.45741	-2.86686	1.16E-06
RWDD2B	-0.45776	-2.86919	0.00665
GCET2	-0.45848	-2.87396	0.0079
SHMT1	-0.46014	-2.88496	0.00198
FAM126A	-0.46076	-2.88911	6.80E-04
SLC39A9	-0.46201	-2.89743	0.00398
RFPL1	-0.46269	-2.90195	4.80E-04
SEMA4B	-0.46522	-2.91889	0.00239
ZNF202	-0.46613	-2.92505	3.40E-04
FAM169A	-0.46831	-2.93972	5.86E-10
AGBL5	-0.46984	-2.95015	0.00664
HMMR	-0.47211	-2.96558	8.20E-04
ADAMTS4	-0.47215	-2.96586	0.00576
FADS3	-0.47232	-2.96702	2.00E-05
CEP55	-0.473	-2.97165	0.00184
MGP	-0.47662	-2.99656	2.10E-04
KIF11	-0.47705	-2.99951	0.00146
ACTN3	-0.47889	-3.01223	3.40E-04
AXIN2	-0.47947	-3.01628	4.00E-05
B3GNT9	-0.48146	-3.03009	5.70E-06
TMEM184C	-0.4824	-3.03666	0.00176
CCNB1	-0.48325	-3.04261	3.00E-05
POU5F2	-0.48384	-3.0468	0.00415
CEBPE	-0.48595	-3.06163	0.00687
ZSCAN22	-0.48617	-3.06318	0.00181
ZNF284	-0.48688	-3.06819	0.00468

RDH10	-0.48801	-3.07618	0.00402
ZRANB3	-0.48845	-3.0793	2.00E-05
HOXB2	-0.4887	-3.08104	0.00769
SPIN3	-0.48933	-3.08552	0.00135
TIAM1	-0.49117	-3.09862	1.86E-06
RRM2	-0.49143	-3.10048	0.0055
MGC15705	-0.49145	-3.10064	0.00635
ZBTB32	-0.4919	-3.10385	0.00153
GNB4	-0.49316	-3.11288	0.00159
USP46	-0.49332	-3.11398	4.00E-04
IGF1	-0.49402	-3.11907	0.00683
PTGIR	-0.49504	-3.12637	0.00399
GIT1	-0.49555	-3.13006	9.00E-05
COX4I2	-0.49598	-3.13316	0.00845
CDH1	-0.49605	-3.13367	3.00E-05
CDK1	-0.49736	-3.1431	2.70E-04
FLJ22447	-0.49835	-3.15026	6.70E-04
CCDC114	-0.49973	-3.16032	0.00155
ZNF257	-0.4998	-3.16085	7.00E-05
KALRN	-0.50067	-3.16716	6.40E-04
SPHK2	-0.501	-3.16958	0.00691
CCR7	-0.50144	-3.1728	2.95E-10
SLC40A1	-0.50169	-3.17463	5.73E-09
NGFRAP1	-0.50355	-3.18824	6.49E-10
SPDYE8P	-0.50366	-3.18905	0.00928
LOC401431	-0.50396	-3.19127	8.14E-09
BCAT1	-0.50401	-3.19162	0.00638
ZNF827	-0.50592	-3.20566	0.00146
SLC7A14	-0.50798	-3.22093	0.0068
DIO3	-0.50814	-3.22214	0.0032
MYO1E	-0.51009	-3.23663	0.00579
OTUD4	-0.5107	-3.24117	4.34E-06
C20orf177	-0.5108	-3.24192	6.70E-04
MDS2	-0.51752	-3.29245	0.00907
PDE4DIP	-0.51941	-3.30678	0.00359
GAL3ST3	-0.5203	-3.31357	0.00605
EPHA1	-0.52365	-3.33927	6.00E-05
ZNF483	-0.52417	-3.34325	8.40E-04
POU2AF1	-0.52431	-3.34433	0.00291
SELP	-0.52598	-3.35725	0.00551
SELP	-0.52598	-3.35725	0.00551
LEPRE1	-0.52683	-3.3638	1.80E-04
PIGW	-0.52692	-3.36446	0.00708
SNAR-B1	-0.5276	-3.3698	0.00671
S100A14	-0.52895	-3.38024	0.00947
KCNMB4	-0.5307	-3.39394	0.00298
ST6GALNAC3	-0.53075	-3.39431	0.00466
C1orf94	-0.53266	-3.40923	0.00749
LOC148189	-0.53317	-3.41329	0.00142

GRAP	-0.53348	-3.41574	1.00E-05
NKX2-8	-0.53506	-3.42812	0.00884
LEF1	-0.53644	-3.43907	2.60E-22
LAT2	-0.53877	-3.45755	2.00E-05
TJP2	-0.54282	-3.48998	3.00E-05
ZNF836	-0.54323	-3.49324	9.90E-04
VAT1L	-0.54397	-3.4992	0.00874
FOXD1	-0.54416	-3.50075	8.20E-04
CALCR	-0.54705	-3.52412	0.00374
C1QL2	-0.54775	-3.52981	0.00775
ENTPD1	-0.54789	-3.53095	0.0096
BEND7	-0.54842	-3.53524	0.0051
KANK1	-0.54899	-3.53988	0.00216
KANK1	-0.54899	-3.53988	0.00216
LOC10019237	-0.55188	-3.56352	3.60E-04
MAGEB4	-0.55336	-3.57567	0.00644
ZNF404	-0.55396	-3.58062	4.10E-04
LOC284023	-0.5545	-3.58508	0.00489
CAMSAP1L1	-0.55547	-3.59312	3.00E-05
RNASE6	-0.5555	-3.59336	0.00434
SETD5	-0.55727	-3.608	5.00E-05
CXCR5	-0.56119	-3.64072	4.00E-05
IL5	-0.56317	-3.6574	0.0038
HOMER1	-0.5655	-3.67706	0.0049
PLEKHA4	-0.56654	-3.6859	0.00126
LOC729991	-0.56692	-3.68911	1.00E-05
DEFB121	-0.568	-3.69827	0.00947
FHIT	-0.56804	-3.6986	0.00175
LY96	-0.56927	-3.70914	3.00E-05
NEFL	-0.56979	-3.71356	0.00682
FLJ45079	-0.57221	-3.73433	0.00517
PSMC3IP	-0.57355	-3.74582	3.50E-04
CASC5	-0.57383	-3.74822	7.00E-05
ZNF135	-0.57499	-3.75831	0.00679
PXDN	-0.57526	-3.76061	0.00992
PXDN	-0.57526	-3.76061	0.00992
ASB14	-0.57543	-3.76206	0.0033
SLC16A10	-0.57698	-3.77554	8.30E-04
UBD	-0.5771	-3.77659	8.00E-05
MPPED1	-0.57802	-3.78464	0.00143
PLXDC1	-0.57958	-3.7982	2.00E-05
CELF4	-0.58096	-3.81032	0.00525
CYP3A5	-0.58277	-3.82618	0.00126
FREM1	-0.58289	-3.82726	0.00803
SLC24A2	-0.58475	-3.8437	0.00486
ASPM	-0.58776	-3.87041	0.00177
EN1	-0.5881	-3.87344	8.90E-04
CHRNA4	-0.58811	-3.87358	0.00428
SLC22A10	-0.58846	-3.8767	0.00243



FAM74A3	-0.58875	-3.87923	0.00334
LOC440934	-0.59057	-3.89552	0.00357
PARP11	-0.59094	-3.89885	4.45E-06
NCRNA00272	-0.59141	-3.90307	0.00265
ARHGAP21	-0.59197	-3.90815	7.00E-05
LOC10050754	-0.59257	-3.91357	1.90E-04
SPSB1	-0.59569	-3.94178	0.0062
RETN	-0.59648	-3.94895	2.50E-04
LOC90586	-0.59772	-3.96025	0.00247
SELL	-0.59863	-3.96849	1.33E-12
CCR10	-0.60044	-3.98511	6.00E-05
NCKAP5	-0.60124	-3.99247	0.00357
LOC283404	-0.60154	-3.99521	0.00325
LIPH	-0.60343	-4.01262	0.00204
OR4C45	-0.60399	-4.01779	0.00365
TMEM45B	-0.6108	-4.08131	0.00135
CDCA5	-0.61446	-4.11584	8.64E-06
OIP5	-0.61629	-4.13327	0.00473
FLJ45983	-0.61699	-4.13991	0.00422
COL1A1	-0.62206	-4.18854	0.00194
LOC646268	-0.623	-4.19763	0.00255
ACTN1	-0.62376	-4.20495	5.92E-10
SLC22A23	-0.62584	-4.22516	0.00953
NRN1	-0.62797	-4.24592	0.00149
PPFIA4	-0.62885	-4.25448	0.00245
TPST1	-0.63173	-4.28283	0.00136
LOC388630	-0.6339	-4.30426	0.00357
HDGFRP3	-0.63788	-4.3439	5.00E-05
LONRF2	-0.63839	-4.34903	0.00224
GPR44	-0.63957	-4.36086	3.10E-04
ASPN	-0.6407	-4.37215	0.0033
FBLN2	-0.64645	-4.43046	6.50E-04
USP11	-0.65106	-4.47779	2.00E-05
MCTP1	-0.65422	-4.51042	7.90E-04
KRT24	-0.65666	-4.53584	0.00458
MAGED4B	-0.65813	-4.55122	0.00121
E2F1	-0.65834	-4.55345	1.94E-10
DTL	-0.65868	-4.55699	9.00E-05
FLJ22763	-0.66326	-4.60531	0.00199
SH3PXD2A	-0.66618	-4.63634	0.00141
BEND5	-0.66977	-4.67489	3.12E-06
OR51A7	-0.67399	-4.72053	0.00653
MYB	-0.67532	-4.73501	3.00E-05
C3orf14	-0.67682	-4.75135	4.35E-07
LOC729159	-0.67724	-4.75597	0.00149
SLC35F4	-0.68672	-4.8609	0.008
ANO7	-0.69173	-4.91737	6.00E-05
FAM75D3	-0.69333	-4.93548	1.00E-04
NUSAP1	-0.69504	-4.95494	3.20E-04

PDZK1IP1	-0.69531	-4.95804	4.60E-04
WSCD2	-0.6961	-4.96711	9.00E-04
ZWINT	-0.70013	-5.01339	3.40E-04
BIRC5	-0.7006	-5.01879	0.0024
ADAMTSL3	-0.703	-5.04661	0.00104
FLJ46552	-0.70425	-5.0612	0.00514
ADORA1	-0.70575	-5.07865	5.80E-04
SPRY2	-0.70607	-5.0824	1.45E-07
SLC6A13	-0.7085	-5.11088	0.00901
C10orf90	-0.71004	-5.12909	1.80E-04
STS	-0.71265	-5.15999	0.0033
SIRPA	-0.71343	-5.16931	0.00984
C3orf45	-0.71383	-5.17401	0.00364
CCR8	-0.7176	-5.21919	1.24E-08
LOC644662	-0.71968	-5.24417	6.20E-04
FGD5	-0.72133	-5.26417	0.00637
UHRF1	-0.72254	-5.27891	5.00E-04
CDKN3	-0.72867	-5.3539	2.62E-12
C22orf24	-0.72978	-5.36762	0.00756
LOC10013117	-0.73132	-5.38666	0.00273
C19orf77	-0.73206	-5.39587	0.00785
TNNT2	-0.73394	-5.41926	0.00552
CDT1	-0.74155	-5.51511	1.60E-04
PLXNB2	-0.74221	-5.5235	0.00695
FAM71F1	-0.7424	-5.52592	0.00607
FAM55A	-0.74542	-5.56444	0.00422
OR10W1	-0.74843	-5.60307	0.00131
RFPL2	-0.75067	-5.63206	8.52E-06
KIAA0101	-0.75157	-5.64375	0.00109
PCDHA4	-0.75339	-5.66753	5.80E-04
CFB	-0.75582	-5.69929	6.10E-04
LOC440047	-0.75676	-5.71167	0.00134
EEPDI	-0.76266	-5.78973	6.37E-09
IFNA10	-0.76383	-5.80541	0.00164
ALX1	-0.7645	-5.81429	0.00138
KCTD12	-0.77602	-5.97062	4.90E-08
KCTD12	-0.77602	-5.97062	4.90E-08
FCRL2	-0.79202	-6.19475	0.00591
TULP1	-0.7953	-6.24165	2.20E-04
KCNQ1DN	-0.79815	-6.28282	0.00787
INHBE	-0.80284	-6.3509	0.00587
SIGLEC11	-0.8031	-6.35481	0.00827
GAS2L2	-0.80884	-6.43932	0.00354
GINS2	-0.81318	-6.50402	3.94E-09
MXRA8	-0.83209	-6.79346	0.0042
TSPYL5	-0.83883	-6.89974	2.62E-08
PTCRA	-0.83894	-6.90144	0.00321
GCM2	-0.84001	-6.91844	5.70E-04
BDNF-AS1	-0.84808	-7.04825	0.00305

KIAA0125	-0.85683	-7.19167	6.01E-06
FLJ30679	-0.86083	-7.25817	0.00273
BTBD17	-0.86477	-7.32436	0.00427
LOC10013166	-0.8668	-7.3586	1.03E-08
LOC389247	-0.86713	-7.36428	0.00401
AEBP1	-0.87437	-7.48813	3.33E-15
ZNF501	-0.87812	-7.55303	0.00264
TBX3	-0.87856	-7.56074	3.59E-13
LOC10013112	-0.88041	-7.59297	0.00279
RTKN2	-0.88732	-7.71474	9.24E-13
CCNB2	-0.8877	-7.72149	7.28E-06
OR5B17	-0.89367	-7.82831	0.00176
PHGDH	-0.90209	-7.98159	2.13E-11
C5orf13	-0.91129	-8.15249	3.00E-08
KLF7	-0.92632	-8.43959	1.71E-11
AQP4	-0.93397	-8.58958	2.00E-04
CENPF	-0.94603	-8.83147	3.90E-08
CDKN2B	-0.95346	-8.98382	2.00E-04
TRIM71	-1.01828	-10.42979	0.00105
NCRNA00244	-1.07988	-12.01931	3.30E-04
VSIG4	-1.0987	-12.55148	6.49E-13
NOG	-1.12596	-13.36458	1.58E-09

CD161+			
Symbol	Log(Ratio)	Fold Change	P-value
CCL20	2	100	0
CCL3L3	2	100	0
IFNG	2	100	0
IL13	2	100	0
IL2	2	100	0
IL21	2	100	0
IL3	2	100	0
IL4	2	100	0
CCL4	1.98057	95.62418	0
IL10	1.89003	77.63063	0
IL31	1.81784	65.74178	0
CCL3	1.73401	54.20181	5.01E-35
IL23A	1.68192	48.07494	0
IL5	1.66374	46.10404	3.41E-14
IL11	1.63913	43.56461	0
IL22	1.63083	42.73958	2.31E-10
IL17F	1.54097	34.75123	1.01E-13
CXCL2	1.5196	33.08287	1.62E-08
IL1B	1.50201	31.76928	1.34E-16
CCL1	1.26355	18.34628	5.60E-07
IFNA6	1.10063	12.60752	0.00003
CXCL3	1.06275	11.55444	1.62E-18
IFNE	0.87249	7.45581	3.64E-15
CCL18	0.86631	7.35035	4.02E-13
IL24	0.86238	7.28423	8.93E-18
IFNAR2	0.75811	5.72938	3.71E-21
IL6	0.68732	4.86764	3.99E-08
IL17D	0.62571	4.22384	7.09E-09
IL28A	0.32429	2.11002	3.95E-08
IL26	0.30181	2.00358	6.83E-06
CXCL16	-0.31988	-2.0887	1.05E-08
IFNA4	-0.40987	-2.56963	2.35E-13
CXCL12	-0.51247	-3.25441	1.97E-11
CCL28	-0.60662	-4.04223	7.09E-10
IL17C	-0.61893	-4.15842	0.00662
IL29	-0.69618	-4.96795	8.88E-06
IL15	-0.84463	-6.99245	1.89E-09
IL32	-0.86591	-7.34361	1.67E-38
CCL23	-1.02478	-10.58709	0.00125
CXCL5	-1.11002	-12.88307	1.86E-43
CCL24	-1.25558	-18.01277	0
IL16	-1.3737	-23.64262	0

<b>Symbol</b>	<b>Log(Ratio)</b>	<b>Fold Change</b>	<b>P-value</b>
CCL20	2	100	0
CCL3L3	2	100	0
IFNG	2	100	0
IL2	2	100	0
IL3	2	100	0
IL13	1.99905	99.78169	0
IL31	1.99628	99.14742	0
IL21	1.97438	94.27056	0
IL10	1.93585	86.26813	0
CXCL2	1.92853	84.82661	0
IL4	1.92547	84.23036	0
IL11	1.89813	79.09109	0
CXCL3	1.89811	79.08788	0
CCL4	1.86385	73.08866	0
IL22	1.82616	67.01241	2.31E-36
IL5	1.80205	63.39455	4.83E-28
CCL1	1.71716	52.13913	2.18E-10
IL1B	1.65547	45.23426	2.90E-06
CCL3	1.57954	37.97852	2.73E-19
IL23A	1.52115	33.20068	2.38E-44
IL17F	1.47492	29.84858	0
CCL18	1.32723	21.24357	3.37E-10
IL9	1.30126	20.01053	2.79E-18
IL8	1.28335	19.20236	8.48E-15
IL24	1.24926	17.75255	2.86E-11
IL6	1.24587	17.61463	4.38E-08
IL26	1.22463	16.77378	1.96E-10
IFNE	1.21164	16.2795	1.76E-24
CXCL1	0.83586	6.85261	4.04E-11
IL17D	0.76164	5.77623	9.94E-11
IL12A	0.70531	5.07356	1.53E-15
CXCL16	0.58975	3.88825	0.00195
IL28A	0.52041	3.31447	0.00002
CXCL13	0.48054	3.02368	0.00222
CXCL12	-0.41425	-2.59567	0.00005
IL16	-0.44071	-2.75873	0.00054
IFNA4	-0.5126	-3.25534	9.10E-35
IL17C	-0.55126	-3.55842	0.00089
IL15	-0.64435	-4.40907	9.93E-12
IL29	-0.72757	-5.34041	9.14E-08
IL32	-0.7311	-5.38396	0
CCL28	-0.82803	-6.73028	4.52E-17
CCL24	-0.88455	-7.66567	2.92E-32
IL16	-1.20232	-15.93365	4.29E-42
IL16	-1.43147	-27.00685	1.51E-11
CXCL5	-1.54045	-34.70966	0

<b>Symbol</b>	<b>Log(Ratio)</b>	<b>Fold Change</b>	<b>P-value</b>
NLRP13	1.47134	29.60327	0.0006
CAMKMT	1.44882	28.10717	0.00011
PLCH1	1.42324	26.49952	0.00014
TCF21	1.41343	25.90762	0.00011
MYO16	1.41276	25.8677	0.00224
LOC339666	1.39821	25.01582	0.00011
ESYT3	1.39433	24.79314	0.00016
GRM5	1.31368	20.59122	0.00005
FLJ35424	1.29998	19.95174	0.00006
NME5	1.29333	19.64845	0.00008
PRO2214	1.27519	18.84458	0.00011
SOHLH2	1.26099	18.23844	0.00011
FOXP2	1.21821	16.52746	0.00003
CYP4A22	1.21616	16.44996	0.00007
PROL1	1.21392	16.36524	0.00012
UCP1	1.2129	16.32678	0.00152
UGGT2	1.16977	14.78313	0.00007
GALNTL6	1.16783	14.71726	0.00076
HERC3	1.16023	14.46217	0.00009
ZNF311	1.15516	14.29424	0.00015
AGXT2L1	1.15196	14.18938	0.00025
CACNA1A	1.15138	14.17031	0.00033
AP4S1	1.13613	13.68151	0.00066
TP73	1.12146	13.22687	0.00018
WFDC13	1.10678	12.78738	0.0004
FAM188B	1.10117	12.62315	0.00044
FRRS1	1.08323	12.11243	0.00044
KRTAP5-3	1.08086	12.04654	0.00058
IFNA6	1.07652	11.92665	0.00003
LOC10028770	1.05996	11.48055	0.0006
SORCS1	1.05721	11.40793	0.00087
LRIG2	1.05001	11.2204	0.00057
OR2T8	1.04465	11.08271	0.00132
XLOC_011510	1.04365	11.0573	0.00126
OOSP1	1.04162	11.00579	0.0009
ZMYND12	1.04151	11.00296	0.00062
C9orf150	1.03747	10.90103	0.00067
GDNF	1.0248	10.58759	0.00337
FOXL1	1.02117	10.49964	0.00101
C8B	1.01237	10.28902	0.00343
ZBTB49	1.00513	10.11892	0.00103
LOC10028771	0.99305	9.84125	0.00068
EXOC6B	0.99021	9.77706	0.00163
DEFB135	0.98027	9.55592	0.0014
CACNA2D3	0.97144	9.3636	0.00127
XLOC_001851	0.97139	9.36255	0.00015
LRFN2	0.95519	9.01975	0.00002
ARHGAP33	0.95295	8.97317	0.00203

TBX22	0.94914	8.89496	0.00094
ZC3H12B	0.94018	8.71324	0.00146
AQP4	0.937	8.64966	0.00192
KIAA0889	0.93544	8.61863	0.00025
LOC10012901	0.93342	8.57873	0.00178
TIFAB	0.9323	8.55658	0.00402
TPRG1	0.91907	8.29983	0.00246
NYNRIN	0.91525	8.22718	0.00263
LOC643037	0.90484	8.03224	0.00311
ADAM20	0.89902	7.92537	0.00018
BACE1	0.89283	7.81319	0.0033
XLOC_000670	0.88978	7.75847	0.00201
LHX9	0.88581	7.68801	0.0031
RALGPS1	0.88545	7.68151	0.00505
IGSF11	0.8835	7.6471	0.00362
BACE1	0.88019	7.58904	0.00996
DPP6	0.87956	7.57806	0.00502
CCDC36	0.87931	7.57374	0.00372
ASCL3	0.87736	7.53983	0.00317
NXN	0.87382	7.47852	0.00406
LOC10019242	0.87306	7.46554	0.00557
LOC285419	0.86811	7.3809	0.00429
C8orf34	0.86789	7.37725	0.00638
ALDH1A2	0.86545	7.3359	0.00468
KC6	0.86544	7.33562	0.00054
SLC17A2	0.86537	7.33448	0.00455
COL5A2	0.864	7.31137	6.55E-07
LOC10029361	0.86251	7.28631	0.00486
IGSF1	0.85511	7.16329	0.00685
LOC10013088	0.85349	7.13651	0.00694
C11orf88	0.85259	7.12182	0.007
MS4A6A	0.85222	7.11568	0.00095
OR5AN1	0.85119	7.09884	0.00516
PPIP5K1	0.84852	7.05535	0.00737
SIX4	0.84805	7.04775	0.00729
MPDZ	0.84603	7.01512	0.00661
SLC6A15	0.84305	6.96704	0.00602
SULT1C2	0.84289	6.96448	3.73E-06
PRAMEF15	0.83704	6.87129	0.00591
Q7VLF4	0.83622	6.85829	0.00276
IPCEF1	0.8358	6.85176	0.00471
ABCG4	0.82733	6.71935	0.00868
OR10J1	0.82725	6.7181	0.00162
ADAM21	0.82593	6.69782	0.00641
LOC286189	0.82299	6.65256	0.00898
LOC643650	0.81766	6.5714	0.00234
KCNG4	0.81624	6.54991	0.00468
ZBTB47	0.81586	6.54419	0.00146
GPR22	0.81124	6.47495	0.00785

CRLF1	0.79679	6.26304	0.00514
KRTAP13-2	0.79117	6.18264	0.00634
PAX3	0.79029	6.17005	0.00032
LOC10012832	0.78475	6.09187	0.00986
PLA2G4F	0.78394	6.08051	0.00018
KPNA7	0.78311	6.06887	0.00595
LOC729178	0.77905	6.01243	0.00119
CYP4A11	0.76897	5.87453	0.00219
LOC729159	0.75832	5.73222	0.00295
STK31	0.75116	5.63845	0.00027
C9orf84	0.74919	5.61294	0.00717
KIF5A	0.74669	5.58067	0.00892
OR10AD1	0.74009	5.49652	0.00702
ARHGEF11	0.73405	5.42059	0.0004
LOC10029268	0.7293	5.36162	0.00828
CCR9	0.7257	5.31743	0.00238
C9orf172	0.72273	5.2812	0.00288
GPR123	0.71626	5.20305	0.00101
LOC729178	0.71541	5.19286	0.00775
GUSBP1	0.71483	5.18598	0.0012
MMP10	0.71411	5.17739	0.00044
TRMT1L	0.67982	4.78431	0.00145
DOC2A	0.6741	4.72177	0.0026
LOC285191	0.6591	4.56143	0.0065
IGJ	0.65767	4.5464	0.00406
CCDC40	0.65515	4.52013	0.00077
ADAMTSL2	0.65285	4.49621	0.00112
TMEM198	0.61506	4.12156	0.00712
LRRC16A	0.6121	4.09358	0.00366
TRIM46	0.60152	3.99504	0.00841
SLC30A4	0.59975	3.97878	0.00812
TPBG	0.59541	3.93926	0.00092
DIS3L2	0.59302	3.91763	0.00664
LINC00478	0.5823	3.82211	0.0053
MGC11082	0.57822	3.78635	0.00978
HCAR1	0.57134	3.72687	0.00004
PLP1	0.56905	3.70724	0.00561
ITPR2	0.5612	3.64079	0.00273
AMOTL2	0.56002	3.63093	0.00733
SERPIN2	0.54916	3.54126	0.00134
LOC257358	0.53888	3.45845	0.00495
INSR	0.51609	3.28164	0.00963
F3	0.51157	3.24769	0.00152
IDO1	0.49075	3.09564	0.00574
F7	0.48086	3.02597	0.00232
NLRP4	0.47819	3.00738	0.00723
TACR1	0.47326	2.97342	0.00304
FLJ44511	0.46691	2.9303	0.00865
OR8G2	0.46269	2.90195	0.00103



CAV1	0.44125	2.76219	0.00499
IL1RL1	0.44015	2.75519	0.00111
FLJ41423	0.42999	2.69147	0.00021
IGFBP3	0.42449	2.6576	0.00002
KREMEN2	0.39415	2.47829	0.00727
RAPGEFL1	0.39367	2.47555	0.00284
QPCT	0.37517	2.37233	0.00383
CPS1-IT1	0.37377	2.36466	0.00771
LOC338758	0.35514	2.26535	0.00276
SLC2A13	0.34181	2.19689	0.00583
KRTAP5-11	0.32925	2.13426	0.0009
PGF	0.32637	2.12017	0.00884
VSX1	0.31903	2.08463	0.00016
ATP6V0E2	-0.30235	-2.00607	0.00593
DHRS13	-0.30548	-2.0206	0.00596
MMP9	-0.30624	-2.02414	0.00323
ZNF250	-0.30921	-2.03802	0.00017
CNN2	-0.31	-2.04176	0.00022
LOC730961	-0.31638	-2.07194	0.00157
FAM57A	-0.33935	-2.18449	0.00006
NIPSNAP1	-0.3412	-2.1938	0.0013
AIF1	-0.34463	-2.21122	0.00188
AKAP12	-0.34868	-2.23195	2.38E-06
CBFA2T3	-0.35031	-2.24031	0.00921
PLEKHG3	-0.35426	-2.26078	0.0017
SPINT2	-0.3547	-2.2631	0.00071
RPS6KA5	-0.35643	-2.27212	0.00531
HSD17B1	-0.35712	-2.27571	0.00867
BTK	-0.36612	-2.3234	0.00408
JAG2	-0.36638	-2.32479	0.00149
SHMT1	-0.36833	-2.33521	0.00381
LOC10013205	-0.36932	-2.34055	0.00623
SETD1B	-0.37622	-2.37804	0.00033
FAM123B	-0.37779	-2.38667	0.00412
CORO2A	-0.38168	-2.40813	0.00569
TMEM133	-0.38343	-2.41783	0.00844
FLJ42022	-0.38658	-2.43544	0.00048
VPS37A	-0.39745	-2.4972	0.00112
LSS	-0.39931	-2.5079	0.00389
HEATR4	-0.40088	-2.51699	0.00105
FGD4	-0.40564	-2.54472	0.00942
GRIN3A	-0.40677	-2.55138	0.00275
LOC10012827	-0.41196	-2.582	0.00067
BEND5	-0.41521	-2.60139	0.00297
MCAM	-0.41546	-2.60292	0.00029
EDA	-0.41792	-2.6177	0.00381
FMOD	-0.42089	-2.63565	0.00355
SLC2A11	-0.42579	-2.66555	0.00059
RASA2	-0.43422	-2.71781	0.00186

BIRC5	-0.43537	-2.72503	0.00567
LOC10012961	-0.43542	-2.72535	0.0034
NTRK1	-0.43698	-2.73511	0.00009
MYEF2	-0.44698	-2.79885	0.00707
MTUS1	-0.46213	-2.89819	1.27E-12
DACT3	-0.4668	-2.92952	0.0075
XLOC_I2_007	-0.46946	-2.94753	0.00804
WHSC1	-0.47482	-2.98416	0.00008
ZNF815	-0.48391	-3.04723	0.00722
KAT6B	-0.4894	-3.08606	0.00063
CAPN12	-0.49812	-3.1486	0.00113
IL5RA	-0.50812	-3.22195	0.00337
TYSND1	-0.51191	-3.25019	0.00872
MTCP1	-0.51314	-3.2594	0.00732
CD200R1	-0.51455	-3.27003	0.00026
RNFT2	-0.51544	-3.2767	0.00391
C19orf55	-0.51861	-3.30072	0.00018
KPRP	-0.52118	-3.32033	0.0098
KRT34	-0.52608	-3.35797	0.00535
ZNF710	-0.52919	-3.38216	0.00427
STAC3	-0.53608	-3.43622	0.0093
INSM1	-0.54333	-3.49402	0.00041
TNS1	-0.54768	-3.52922	0.00029
MLL	-0.56668	-3.68707	0.00033
SLC35F3	-0.57023	-3.71729	0.00343
UNC45B	-0.57542	-3.76201	0.00881
LOC10012978	-0.57671	-3.77322	0.00419
CDH2	-0.57719	-3.77739	0.00934
TBXA2R	-0.59227	-3.91085	0.00587
HEATR7A	-0.59545	-3.93954	0.00771
SEPT10	-0.59962	-3.97763	0.00155
MPO	-0.60391	-4.01704	0.00562
LOC10050712	-0.61403	-4.1118	0.00311
LOC388948	-0.61453	-4.11651	0.00506
C17orf104	-0.61529	-4.12373	0.00291
CD79B	-0.63056	-4.27131	0.00367
LOC10050619	-0.63291	-4.29442	0.00019
PIK3R3	-0.63499	-4.3151	0.00091
LRRIQ1	-0.65306	-4.49843	0.00924
GUCY1A3	-0.65624	-4.53148	0.00878
VSIG4	-0.66438	-4.61724	0.00702
KIAA0101	-0.66706	-4.64575	0.00116
CTSZ	-0.67359	-4.71616	0.00293
PARP10	-0.68039	-4.7906	0.00466
TP53I3	-0.682	-4.80837	0.00811
BEGAIN	-0.68525	-4.84449	0.00785
SLC35F1	-0.68668	-4.86047	0.00921
WFDC8	-0.68674	-4.86114	0.00124
XLOC_014101	-0.68936	-4.89056	0.00343

P2RX6	-0.69354	-4.93784	0.00811
FAM83C	-0.69442	-4.94791	0.00244
LHX9	-0.71593	-5.19911	0.00305
ARPP21	-0.71717	-5.21404	0.0005
SLC1A2	-0.72108	-5.2611	0.00565
KLRG2	-0.72493	-5.30801	0.00316
DNAJB7	-0.72565	-5.31679	0.00746
XLOC_006486	-0.72685	-5.33148	0.00433
WDR49	-0.73795	-5.4695	0.00935
GADL1	-0.74081	-5.50571	0.00554
GLT8D2	-0.74133	-5.51221	0.00147
SUFU	-0.74453	-5.553	0.00952
CLRN2	-0.74697	-5.58436	0.00334
ENHO	-0.75109	-5.63749	0.00623
LOC10013108	-0.76091	-5.76642	0.0052
PIRT	-0.7659	-5.83309	0.00518
LOC10050637	-0.7662	-5.8371	0.00307
NEXN	-0.76667	-5.84351	0.001
HCRT1	-0.76682	-5.84549	0.00788
GABRA5	-0.76961	-5.88308	0.00005
NINJ2	-0.77051	-5.89535	0.00325
LGALS1	-0.77356	-5.93693	0.00111
LRRC3	-0.7779	-5.99656	0.00215
FLJ46257	-0.78087	-6.03772	0.00929
LOC10065284	-0.78337	-6.0725	0.00345
ARHGAP10L	-0.78671	-6.11948	0.00165
CST2	-0.78803	-6.13811	0.00718
LOC10012932	-0.7884	-6.14328	0.00388
LINC00189	-0.78877	-6.14853	0.00325
DPYD	-0.7921	-6.19581	0.00669
ACSS3	-0.79464	-6.23217	0.00497
FAHD1	-0.80036	-6.31482	0.00058
CYCSP52	-0.80651	-6.40482	0.00093
OTOG	-0.81012	-6.45833	0.00493
SAG	-0.81212	-6.48817	0.0067
C21orf58	-0.81278	-6.49803	0.00196
COX15	-0.81506	-6.53222	0.00074
SLC6A20	-0.8162	-6.54943	0.00558
C1orf88	-0.81778	-6.57326	0.00415
LOC10013065	-0.82238	-6.6433	0.00658
DCAF12L1	-0.82495	-6.68268	0.00217
C4orf26	-0.82696	-6.71368	0.00066
ENO4	-0.8274	-6.72044	0.00399
LOC10028732	-0.8327	-6.80303	0.00016
AADAT	-0.83403	-6.82381	0.00455
DIRC3	-0.84104	-6.93492	0.00535
TRIM17	-0.84257	-6.95932	0.00038
CYP26C1	-0.84314	-6.96859	0.00245
LOC10050547	-0.84495	-6.99758	0.00325

TMEM231	-0.84625	-7.01859	0.00417
SLC22A3	-0.85293	-7.12744	0.00725
LINC00482	-0.85465	-7.15575	0.00253
HELT	-0.85516	-7.16403	0.0018
ABCG2	-0.85842	-7.21812	0.00655
LOC653712	-0.86439	-7.31802	0.00144
OR2F1	-0.86668	-7.3566	0.00259
HSFX1	-0.86679	-7.35848	0.00142
VWF	-0.87067	-7.42447	0.00264
NUDT12	-0.87085	-7.42757	0.00372
MARCH1	-0.87315	-7.46711	0.00177
SKOR1	-0.87323	-7.46848	0.00255
CACNA1E	-0.87435	-7.48771	0.00471
FLJ46365	-0.87552	-7.508	0.00392
LOC10050765	-0.88228	-7.62566	0.00064
LRRC4B	-0.88353	-7.64773	0.00326
ADAMTS4	-0.89295	-7.81539	0.00305
APOF	-0.89812	-7.90901	0.00406
ACY3	-0.90525	-8.03991	0.00636
PRAMEF5	-0.90805	-8.09181	0.0027
WNK2	-0.91165	-8.15918	0.00143
CCR2	-0.9126	-8.17715	0.00328
TMEFF2	-0.9144	-8.21105	0.00527
LOC286087	-0.91561	-8.234	0.00011
TPD52	-0.91564	-8.23448	0.00166
KCND3	-0.91647	-8.25032	0.00418
FBXL7	-0.9172	-8.26419	0.00054
CSN1S2AP	-0.92033	-8.32402	0.00333
NETO1	-0.92458	-8.40581	0.0053
AMZ1	-0.92506	-8.41512	0.00147
OR2T10	-0.93206	-8.55181	0.00133
NAALADL2	-0.93997	-8.70908	0.00475
SPINK5	-0.94669	-8.84474	0.00349
CD1E	-0.94998	-8.91206	0.00427
LOC728431	-0.95019	-8.91631	0.00086
C4orf37	-0.9512	-8.93725	0.00054
RPS6KL1	-0.9513	-8.93931	0.00326
PABPC1L2B	-0.96187	-9.15943	0.00103
ARHGEF33	-0.96344	-9.19264	0.00095
SEMG2	-0.96402	-9.20492	0.00469
C6orf38	-0.96639	-9.25536	0.00106
HSPB9	-0.97069	-9.34748	0.00307
LOC10050719	-0.97358	-9.40984	0.00344
OR4C13	-0.98202	-9.59446	0.00301
PAR4	-0.98981	-9.7681	0.00135
PSMB11	-0.99468	-9.8783	0.00003
VWDE	-0.99874	-9.97092	0.00003
ADCY8	-1.00113	-10.02605	0.00363
RGL3	-1.00535	-10.12396	0.00094

SYT8	-1.01212	-10.28291	8.80E-08
OSM	-1.0181	-10.42559	0.00162
GPR128	-1.02619	-10.62158	0.00049
FLJ41455	-1.03142	-10.75025	0.00062
LOC10012988	-1.03232	-10.7727	0.00067
XLOC_011548	-1.04679	-11.1376	0.00047
LHX2	-1.05239	-11.2821	0.00036
DAZ1	-1.05618	-11.38104	0.00038
RNU105B	-1.05697	-11.40167	0.00056
SCG5	-1.06548	-11.6274	0.00604
RIMS1	-1.09534	-12.45492	0.00015
HOXA6	-1.09871	-12.55187	0.00101
LOC10013186	-1.10293	-12.6746	0.00109
C14orf48	-1.10423	-12.71255	0.00039
BOD1P	-1.10791	-12.82075	0.00035
SNX31	-1.12327	-13.28235	0.00086
P39189	-1.13119	-13.52649	0.00044
ZYG11A	-1.13568	-13.66731	0.00244
TRPM8	-1.14264	-13.88786	0.00029
TTLL7	-1.16483	-14.616	0.00029
NTM	-1.16495	-14.61994	0.00073
C16orf47	-1.16995	-14.78949	0.00027
UGT1A6	-1.19742	-15.75496	0.00018
EDDM3B	-1.2504	-17.79919	0.00015
ADAMTSL2	-1.26173	-18.26951	0.00022
OR10H1	-1.26816	-18.54226	0.00025
LOC728093	-1.2702	-18.62947	0.00028
FCAMR	-1.27518	-18.84422	0.00504
ARHGEF4	-1.29497	-19.72275	0.00026
LOC10050617	-1.31325	-20.57087	0.0001
PRAMEF15	-1.32258	-21.01755	0.00016
LOC10012855	-1.32649	-21.20749	0.00048
LOC10050716	-1.32683	-21.22396	0.00158
TTY18	-1.42431	-26.56514	0.00096
ZNF804B	-1.43288	-27.09422	0.00095