

Appendix 1. Genes that were differentially expressed in CD4+ T cells.

Gene_Symbol	P value	FC (log2)	Transcript_Cluster_ID
Up-regulated			
Mcm10	0.0000	0.66	17381306
Ncapd2	0.0003	0.61	17471023
Mcm5	0.0004	0.62	17502583
Mir466n	0.0005	0.66	17366926
5730590G19Rik	0.0006	0.84	17479425
Gm19281	0.0006	0.63	17547777
Kif23	0.0007	0.69	17527934
Cxcr6	0.0008	0.89	17523642
Plk1	0.0009	0.83	17482739
Cenpn	0.0010	0.63	17505913
Bard1	0.0012	0.66	17223999
Bub1	0.0013	0.97	17391376
Hist1h2bk	0.0013	0.86	17285742
Kif20a	0.0013	0.72	17349433
Nusap1	0.0014	0.69	17374833
Pbk	0.0015	0.71	17301428
Prr11	0.0016	0.85	17267454
Nuf2	0.0016	0.68	17229433
Igsf9b	0.0016	0.66	17515617
Klrb1f	0.0017	0.72	17463482
Adam19	0.0019	0.70	17248754
Il12rb1	0.0020	0.77	17502051
Casc5	0.0024	0.75	17374692
Spag5	0.0026	0.90	17253570
Kif15	0.0028	0.67	17523494
Stil	0.0029	0.76	17417117
Ube2c	0.0031	0.69	17379523
E2f8	0.0032	0.87	17491378
Dtl	0.0032	0.64	17231066
F630043A04Rik	0.0033	0.72	17307203
Slamf1	0.0035	0.69	17219407
Kif4	0.0035	0.63	17536566
Il2ra	0.0037	0.63	17366992
Prc1	0.0038	0.72	17479575
Gpr68	0.0040	0.78	17283293
Crmp1	0.0042	0.80	17436999
Kif18b	0.0043	0.93	17270369
Klk1b9	0.0046	0.72	17477306
Ttk	0.0047	0.65	17519910
A630038E17Rik	0.0048	0.60	17300127
Ttc39c	0.0048	0.67	17348570
Pole	0.0050	0.71	17440465
Ccna2	0.0050	0.78	17404821

B4galnt4	0.0055	1.10	17484710
AA467197	0.0057	0.63	17375503
Cenpk	0.0057	1.00	17289584
2810417H13Rik	0.0058	0.61	17518636
Mir5104	0.0063	0.71	17231600
Gm19703	0.0064	0.69	17547821
Ncapg	0.0065	0.65	17437278
Hmmr	0.0065	0.63	17261840
Ctsw	0.0065	0.76	17361605
Tk1	0.0068	0.65	17272594
Esco2	0.0072	0.86	17307774
Mki67	0.0072	0.90	17497334
Osbpl3	0.0073	0.70	17466687
Cenpe	0.0073	0.74	17402797
Dlgap5	0.0074	0.62	17305789
Sh2d2a	0.0075	0.63	17398853
Depdc1a	0.0076	0.79	17403919
Mybl2	0.0078	0.72	17379206
2610318N02Rik	0.0086	0.68	17328610
Atp2b4	0.0091	0.76	17227037
Mis18bp1	0.0093	0.77	17281428
Kif22	0.0094	0.66	17496568
Ncapg2	0.0103	0.68	17279608
Cxcr3	0.0105	0.67	17543625
Sv2c	0.0106	0.65	17295177
Kif11	0.0106	0.80	17359020
Pdcd1lg2	0.0113	0.62	17358552
Neb	0.0115	0.70	17385099
Adam8	0.0116	0.96	17497525
Top2a	0.0117	0.67	17268909
Tarm1	0.0118	0.93	17485510
Ccr3	0.0120	0.70	17523646
Sytl3	0.0122	0.70	17332932
Pdcd1	0.0126	0.83	17225801
Sytl3	0.0127	0.75	17340532
Oas3	0.0136	0.61	17452070
Gzmb	0.0140	1.61	17307033
Gm6637	0.0140	0.82	17462644
Shcbp1	0.0143	0.78	17507288
Fam64a	0.0144	0.61	17252310
Nkg7	0.0147	0.73	17477101
Mir1948	0.0151	1.18	17348589
4930547N16Rik	0.0156	0.65	17243850
Ifng	0.0160	0.82	17237589
Hells	0.0167	0.79	17359212
Itgae	0.0180	0.67	17252574
Sfn8	0.0181	0.64	17266861
Gpr25	0.0189	1.18	17227480
Klrg1	0.0194	0.89	17470533

Gm20262	0.0197	0.77	17547493
Gm11435	0.0213	0.75	17266928
Rgs1	0.0216	0.68	17227780
Rad54l	0.0228	0.67	17428553
LOC100505156	0.0232	0.67	17419058
Mir1933	0.0232	0.67	17260931
Mybl1	0.0247	0.68	17221158
Ccr8	0.0264	0.94	17523158
Ccr4	0.0266	0.71	17531887
Apol7c	0.0278	0.97	17318794
Gm13238	0.0281	0.80	17421390
Tnfrsf8	0.0283	0.63	17432687
Gpr52	0.0284	0.97	17228790
Tbx21	0.0292	0.69	17268445
Il18rap	0.0306	0.80	17212252
Chst2	0.0312	0.65	17529708
Atad5	0.0329	0.63	17253858
Ccr2	0.0330	0.60	17523650
Gm20235	0.0338	0.79	17547660
Mir709	0.0348	0.67	17503092
1500009L16Rik	0.0383	0.75	17235990
LOC100503226	0.0387	0.75	17548738
LOC100503226	0.0387	0.75	17548740
LOC100503226	0.0387	0.75	17548742
Ly6g5b	0.0409	0.87	17344216
Gm19279	0.0414	0.94	17548763
Sp100	0.0432	0.83	17214979
A330049M08Rik	0.0463	0.62	17431429
Plekhf1	0.0497	0.61	17489905

Down-regulated

Lama2	0.0000	-1.01	17239919
Hey1	0.0000	-1.01	17404011
Car14	0.0000	-1.06	17407956
Acer2	0.0000	-1.25	17415219
Nsg1	0.0000	-1.08	17447615
Mapt	0.0000	-1.06	17257197
Edn1	0.0000	-1.59	17286830
Cnn3	0.0000	-0.85	17402155
Ecsr	0.0000	-1.09	17353650
Ppap2a	0.0000	-1.51	17289928
Hpgd	0.0000	-1.20	17501250
Syne1	0.0001	-1.04	17238936
Ccbp2	0.0001	-0.96	17523371
Syne1	0.0001	-0.63	17238908
Map4k5	0.0001	-0.60	17281637
Foxf1	0.0001	-1.23	17506291
Sema3c	0.0001	-1.49	17434973
Ly6c1	0.0001	-1.13	17318089

Fam55d	0.0001	-1.34	17516978
Gsta3	0.0001	-1.30	17211405
Kit	0.0001	-1.30	17438272
Ocln	0.0001	-1.02	17295670
Tek	0.0001	-1.54	17415469
Col4a1	0.0001	-0.76	17507377
Dach1	0.0001	-1.02	17309041
Fzd6	0.0001	-1.17	17311179
Igfbp3	0.0001	-1.18	17260474
Plat	0.0001	-1.07	17499962
Casc4	0.0001	-1.11	17375327
Plvap	0.0001	-1.59	17510338
Pecam1	0.0001	-0.67	17270937
Hspa12b	0.0001	-0.94	17376423
Col4a2	0.0001	-0.83	17498962
Arhgap29	0.0001	-1.29	17402193
Lama4	0.0002	-1.28	17232593
Ptk2	0.0002	-1.06	17317858
Nos3	0.0002	-0.64	17435282
Adcy2	0.0002	-0.66	17294086
Pde3a	0.0002	-1.16	17464040
Rasip1	0.0002	-1.26	17477930
Wfdc1	0.0002	-1.38	17506137
Pllp	0.0002	-1.18	17511878
Adh1	0.0002	-1.08	17403070
Gjc1	0.0002	-0.72	17270315
Asap2	0.0002	-0.80	17274415
Aldh1a1	0.0002	-1.52	17358103
Jup	0.0002	-1.03	17269464
E030019B13Rik	0.0002	-0.67	17281291
Ctsl	0.0002	-0.78	17293706
Cd34	0.0002	-1.30	17221014
Hoxa5	0.0002	-1.30	17466833
Rasgef1a	0.0002	-1.34	17462202
Scn7a	0.0002	-1.40	17386090
Ptpm	0.0002	-1.37	17346856
Dennd5b	0.0002	-1.03	17473061
Rhoj	0.0002	-1.43	17276386
Gucy1b3	0.0002	-1.45	17406205
Notch4	0.0002	-0.97	17336559
Pard6g	0.0002	-0.71	17352120
Eml1	0.0002	-1.23	17278561
Smad6	0.0002	-1.31	17528125
Ripply3	0.0003	-1.45	17327364
Cdc42ep1	0.0003	-1.26	17312774
Tmem100	0.0003	-1.50	17255058
Pde8b	0.0003	-0.96	17295059
6430548M08Rik	0.0003	-1.00	17506230
Gkap1	0.0003	-0.78	17293103

Id3	0.0003	-0.85	17420016
Ism1	0.0003	-1.02	17376908
Synm	0.0003	-0.66	17492018
Thbd	0.0003	-1.36	17392568
Gpihbp1	0.0003	-1.38	17312236
Adamts8	0.0003	-0.95	17515703
Stmn2	0.0003	-1.36	17396024
Ephb4	0.0004	-1.49	17443539
Postn	0.0004	-1.46	17397575
Eltld1	0.0004	-1.58	17403605
Ldb2	0.0004	-1.44	17447884
Lrp6	0.0004	-0.84	17548528
Ccdc85a	0.0004	-0.95	17261233
Nipal2	0.0004	-1.36	17316402
Gpr125	0.0004	-1.10	17447979
Rgmb	0.0004	-0.67	17341231
Pxdn	0.0004	-1.38	17274703
Inpp5a	0.0004	-0.75	17484382
Sox18	0.0004	-1.43	17395928
Tuba1a	0.0004	-0.78	17321474
Adcy4	0.0004	-1.41	17306877
Ntn4	0.0004	-1.39	17236604
Galnt14	0.0005	-1.32	17495172
Akap12	0.0005	-0.78	17231423
Gpc3	0.0005	-1.37	17541681
Rapgef5	0.0005	-1.02	17279670
Cd36	0.0005	-1.03	17445715
Fkbp9	0.0005	-1.13	17458911
Fmo1	0.0005	-1.18	17229020
Egfl7	0.0005	-1.32	17368330
Calcr1	0.0005	-0.92	17387385
Tcf21	0.0005	-1.58	17239714
Fam38b	0.0005	-1.19	17354906
Pcdh1	0.0005	-0.86	17353923
Meox2	0.0005	-0.94	17275062
Crim1	0.0005	-0.63	17339801
9430020K01Rik	0.0005	-1.28	17348138
Rbp1	0.0005	-1.24	17520624
Aplnr	0.0005	-1.40	17372725
Syne1	0.0005	-0.95	17238912
B4galt4	0.0005	-1.06	17325637
Cpne8	0.0005	-0.87	17320583
Clic5	0.0005	-1.36	17337852
Myo10	0.0005	-0.94	17310589
Unc13b	0.0005	-0.83	17413221
Pde9a	0.0005	-1.23	17335842
Hmcn1	0.0006	-1.13	17227910
Afap1l1	0.0006	-1.36	17354810
Sdpr	0.0006	-1.44	17212719

Sparc	0.0006	-1.25	17262990
Adamts9	0.0006	-1.20	17469136
Jag2	0.0006	-0.76	17284253
Disp2	0.0006	-0.83	17374618
Rgs6	0.0006	-0.71	17277017
Cxcl14	0.0006	-1.00	17293006
Myo1d	0.0006	-0.99	17266698
Pdgfd	0.0006	-1.16	17514460
Tspan6	0.0006	-0.87	17544385
Tm4sf1	0.0006	-1.37	17405355
Tmtc2	0.0006	-1.12	17244661
Sema3g	0.0006	-1.18	17298387
Sgce	0.0006	-1.19	17464588
Kank3	0.0006	-0.73	17336175
Layn	0.0006	-1.18	17526956
Prkcdbp	0.0006	-0.82	17494503
Cd200	0.0006	-0.75	17330625
Car2	0.0006	-1.06	17396162
Clec12b	0.0006	-0.73	17471518
Nedd4	0.0006	-1.11	17519184
Igfbp7	0.0006	-1.09	17449084
Igfbp5	0.0006	-0.84	17224180
1110021L09Rik	0.0007	-0.79	17232135
Tmem2	0.0007	-0.91	17358138
Grb10	0.0007	-1.09	17260668
Arhgef15	0.0007	-1.11	17264448
Gpx8	0.0007	-1.07	17296281
Lphn2	0.0007	-1.10	17411103
Sh3tc2	0.0007	-0.77	17351143
Mtus1	0.0007	-0.90	17508907
Lipg	0.0007	-1.58	17355443
Clstn2	0.0007	-1.33	17529930
Myo6	0.0007	-1.06	17519821
LOC545261	0.0007	-0.62	17351133
Srgap1	0.0007	-0.62	17245539
Tmem178	0.0008	-1.36	17339967
Maoa	0.0008	-1.14	17533474
Pde5a	0.0008	-1.38	17402321
Prkg1	0.0008	-1.37	17363903
Efnb2	0.0008	-1.36	17507321
Zfp532	0.0008	-0.89	17351351
Pik3r3	0.0008	-1.02	17417407
Npr1	0.0008	-1.03	17407306
Ankrd33b	0.0008	-1.06	17316280
Atp6v0e2	0.0008	-0.89	17458308
Vegfc	0.0008	-0.75	17501160
Dll4	0.0008	-1.35	17374792
Fam174b	0.0008	-0.76	17479183
Kdr	0.0008	-1.38	17448924

Acvrl1	0.0009	-0.87	17315133
Adcy8	0.0009	-1.33	17317533
Vegfa	0.0009	-1.20	17345293
She	0.0009	-1.08	17399533
Lims2	0.0009	-1.34	17349209
Wwtr1	0.0009	-1.09	17405365
Plk2	0.0009	-0.95	17289794
Prex2	0.0009	-1.41	17211131
Emcn	0.0009	-1.34	17402981
Cmtm8	0.0009	-1.14	17531932
Bmp5	0.0009	-1.34	17519538
Fam162b	0.0009	-1.17	17240729
Dok4	0.0009	-0.81	17511900
Adrb1	0.0009	-0.61	17360599
Syne1	0.0009	-1.01	17238938
Rbfox2	0.0009	-0.75	17318750
Shank3	0.0009	-0.98	17314190
Emp2	0.0009	-1.35	17328062
Bmp4	0.0009	-1.18	17305709
Palmd	0.0010	-1.11	17409792
Aqp1	0.0010	-1.44	17458813
Fzd4	0.0010	-1.28	17480036
Nostrin	0.0010	-1.03	17371390
Sparcl1	0.0010	-1.34	17450387
Cyp39a1	0.0010	-0.77	17337816
Agtr1a	0.0010	-1.10	17286271
Map4k3	0.0010	-0.68	17347571
Scn3b	0.0010	-1.25	17516332
D4Bwg0951e	0.0010	-1.22	17414984
Wwc2	0.0010	-0.97	17509288
Syne1	0.0010	-0.71	17238910
Mpdz	0.0010	-0.63	17426700
Pam	0.0011	-1.05	17225929
Gstk1	0.0011	-0.63	17457876
Tfpi	0.0011	-0.79	17387407
Slc6a2	0.0011	-1.58	17503866
Ednrb	0.0011	-1.28	17309268
Myct1	0.0011	-1.54	17231477
Myzap	0.0011	-1.31	17528673
Grk5	0.0011	-0.98	17360890
Enpep	0.0011	-1.45	17410251
Cldn5	0.0011	-1.63	17323755
D0H4S114	0.0011	-1.05	17353370
Syne1	0.0011	-1.05	17238922
Foxf2	0.0011	-1.03	17286332
Rilpl1	0.0011	-0.70	17452861
Tjp1	0.0012	-1.47	17491853
Crip2	0.0012	-1.12	17279499
Cdh5	0.0012	-0.95	17504399

Colec12	0.0012	-0.88	17348282
Prdm8	0.0012	-0.62	17439511
Id1	0.0012	-0.95	17377778
Rbpms	0.0012	-1.16	17508691
Uaca	0.0012	-0.91	17518109
Tmeff1	0.0012	-1.01	17414017
Fermt2	0.0012	-1.19	17305662
Spns2	0.0012	-1.07	17265672
Clec1a	0.0013	-1.43	17471528
Ager	0.0013	-1.27	17336618
Ctnna1	0.0013	-0.72	17349520
Npr3	0.0013	-1.48	17316043
Mapk12	0.0013	-0.80	17320307
Prss23	0.0013	-0.89	17493212
Rasal2	0.0013	-0.97	17228624
Scel	0.0013	-0.86	17302490
Mettl7a1	0.0014	-1.16	17315002
Ptprg	0.0014	-1.38	17297125
Syne1	0.0014	-0.78	17238932
Mal2	0.0014	-1.62	17311512
C920021L13Rik	0.0014	-1.11	17407947
Gpr116	0.0014	-1.18	17337770
Cyth3	0.0014	-0.66	17444372
Rgs12	0.0014	-0.82	17436761
Gucy1a3	0.0014	-1.49	17406221
Tmtc1	0.0014	-1.31	17472955
Cav2	0.0014	-1.06	17456152
Rhbdf1	0.0014	-0.60	17261470
Syne1	0.0014	-0.94	17238916
Ptgis	0.0014	-0.87	17394679
4930578C19Rik	0.0014	-1.07	17540436
Hyal2	0.0014	-1.09	17521422
Thsd1	0.0014	-0.85	17499874
Notch3	0.0014	-0.89	17343299
Cald1	0.0015	-0.75	17457184
Bcam	0.0015	-1.29	17487422
Pknox2	0.0015	-0.73	17525561
Erg	0.0015	-1.47	17332358
Tbx3	0.0015	-1.34	17441595
1810011O10Rik	0.0015	-0.88	17508170
Ddah2	0.0015	-1.08	17336906
Nkd2	0.0015	-1.02	17294289
Amigo2	0.0015	-0.65	17320967
Prickle1	0.0015	-0.83	17320720
Cdo1	0.0015	-1.25	17354282
Mcam	0.0015	-1.20	17516518
Ltbp1	0.0016	-0.98	17339729
Mmrn2	0.0016	-0.97	17298825
Cav1	0.0016	-0.99	17456161

Myo1b	0.0016	-1.10	17222837
Limch1	0.0016	-1.27	17437887
Sec14l3	0.0016	-1.39	17246727
Atp8b1	0.0016	-1.32	17355026
Mmp28	0.0016	-0.97	17266911
Spats2	0.0016	-0.71	17314738
Tmem204	0.0017	-1.20	17342133
Cdc42ep2	0.0017	-0.97	17361850
Ptprk	0.0017	-1.34	17232358
Lrrc61	0.0017	-0.87	17466599
Anxa3	0.0017	-1.03	17439464
Slc9a3r2	0.0017	-1.18	17341963
Itga3	0.0017	-1.07	17268137
Fnbp1l	0.0018	-1.14	17409963
Rps6ka2	0.0018	-0.79	17332974
Clec14a	0.0018	-1.53	17281350
Il17rd	0.0018	-0.74	17298021
Arhgap42	0.0018	-1.51	17523921
Syne1	0.0018	-1.01	17238934
Lifr	0.0018	-0.89	17310044
Esam	0.0018	-1.38	17516074
Kank4	0.0018	-1.02	17427476
Cd93	0.0018	-0.99	17392572
Inmt	0.0018	-1.20	17467062
Ehd2	0.0018	-1.37	17486807
9230104L09Rik	0.0018	-0.71	17392600
Plcb1	0.0018	-1.03	17376685
Tbc1d19	0.0018	-0.61	17437505
Arhgef25	0.0019	-0.63	17245751
Ephx3	0.0019	-0.64	17343334
Ppp1r14a	0.0019	-1.19	17476119
5430417L22Rik	0.0019	-0.65	17374610
Angpt1	0.0019	-1.52	17316780
Ace	0.0019	-1.15	17257444
Ica1	0.0019	-0.76	17464803
Pcolce2	0.0019	-1.46	17520425
Pcdh18	0.0019	-1.49	17405075
Parva	0.0019	-1.10	17481916
Adamts1	0.0019	-1.55	17331705
Tspan18	0.0019	-1.01	17388435
Grtp1	0.0020	-1.08	17507559
Syne1	0.0020	-0.89	17238898
Podxl	0.0020	-1.39	17465620
Cyp4b1	0.0020	-1.29	17428477
Smagp	0.0020	-0.77	17321761
Dlc1	0.0020	-0.88	17508804
Gm14322	0.0020	-0.79	17380567
Eng	0.0021	-1.12	17369925
Gpr126	0.0021	-1.03	17239435

Nckap1	0.0021	-0.85	17387316
Dll1	0.0021	-0.74	17341179
Hecw2	0.0021	-0.86	17223080
Fam198b	0.0021	-1.46	17398406
Tie1	0.0021	-1.22	17429206
Bmp1	0.0021	-0.76	17308361
Cyrr1	0.0022	-1.28	17331692
Pcdh17	0.0022	-1.26	17302289
Rasgrp3	0.0022	-0.94	17339772
Chrm2	0.0022	-0.82	17457310
Edil3	0.0022	-1.22	17288992
Schip1	0.0022	-0.69	17398198
Trpc6	0.0022	-1.33	17514623
Caskin2	0.0022	-0.85	17272019
Ctnn	0.0022	-0.89	17498398
Robo1	0.0022	-0.79	17326604
Enpp2	0.0022	-1.25	17317056
Bmp6	0.0023	-1.28	17286682
Pvrl3	0.0023	-0.97	17330773
Stxbp1	0.0023	-0.72	17384021
Tspan9	0.0023	-1.21	17471252
Fbln5	0.0023	-0.92	17283380
Raver2	0.0023	-0.61	17415897
Wscd1	0.0023	-0.77	17252292
Lbp	0.0024	-1.07	17378827
Ppic	0.0024	-1.01	17354378
Cyp2d22	0.0024	-0.86	17319625
Mtap1b	0.0024	-0.65	17295482
Arhgap20	0.0024	-1.01	17517222
Gstm2	0.0025	-1.24	17409142
Pcp4l1	0.0025	-1.16	17229639
Egflam	0.0025	-1.24	17315763
2810025M15Rik	0.0025	-0.94	17548987
Rassf9	0.0025	-1.24	17237028
Vwf	0.0025	-1.06	17463205
Dkk3	0.0025	-0.70	17495191
1810010H24Rik	0.0026	-1.27	17257642
Klf4	0.0026	-0.75	17425401
Figf	0.0026	-1.27	17539536
Lama5	0.0026	-0.76	17395512
Upk1b	0.0026	-1.26	17330427
Hbegf	0.0026	-0.79	17353699
Mid2	0.0026	-1.32	17538171
Mxra8	0.0026	-1.34	17422732
Ppap2b	0.0026	-1.42	17416234
Fmo2	0.0026	-1.30	17229036
Syne1	0.0026	-1.06	17238930
Cadps2	0.0026	-0.69	17465115
Mxra8	0.0027	-1.29	17433898

Pls3	0.0027	-0.93	17542853
Glt25d2	0.0027	-0.91	17218233
Tenc1	0.0027	-1.07	17315272
Slc5a12	0.0027	-1.46	17374137
Nr2f2	0.0027	-0.97	17492066
St5	0.0028	-1.08	17494894
Cdh11	0.0028	-1.34	17512153
Klhl5	0.0028	-0.78	17437704
Lix1l	0.0028	-1.01	17400622
Stap2	0.0028	-0.80	17346078
Tbx2	0.0028	-1.22	17254591
Lmcd1	0.0028	-0.95	17461477
Syne1	0.0029	-0.88	17238838
Cyp2b10	0.0029	-1.68	17475360
Abca8a	0.0029	-1.05	17271350
Syne1	0.0029	-0.79	17238850
Serpinh1	0.0029	-1.08	17493658
Kitl	0.0030	-1.20	17236900
Zfp641	0.0030	-0.87	17321202
Plscr2	0.0030	-1.00	17520326
Pbx1	0.0030	-0.94	17229417
Chst15	0.0030	-0.82	17497076
Nicn1	0.0030	-0.64	17521652
Efemp1	0.0030	-1.31	17247948
Gm9917	0.0031	-0.93	17530915
Ddr2	0.0031	-1.37	17229481
Mpzl1	0.0031	-1.02	17229259
Tmod2	0.0031	-0.92	17528863
Ttll7	0.0031	-0.96	17403571
Dennd3	0.0032	-0.67	17312097
Slc16a9	0.0033	-1.39	17234136
Syne1	0.0033	-0.61	17238896
Mustn1	0.0033	-0.88	17298262
Laptm4b	0.0033	-0.79	17310912
Syne1	0.0033	-1.12	17238926
Bcl6b	0.0033	-0.89	17265164
Scn3a	0.0033	-0.71	17385924
Efna1	0.0033	-1.25	17406990
Cdc42bpa	0.0033	-1.11	17220059
Aldh2	0.0034	-0.95	17452231
Sema3f	0.0034	-1.11	17531001
Ddah1	0.0034	-1.40	17403439
Cryab	0.0036	-1.08	17517132
Ctnnd1	0.0036	-0.85	17387432
Serping1	0.0037	-1.43	17387517
Bcar1	0.0038	-0.99	17513158
Stard8	0.0038	-0.84	17536463
Syde1	0.0038	-1.22	17242535
Syne1	0.0038	-1.39	17238920

Nbea	0.0038	-1.15	17405285
Lhfp	0.0038	-1.27	17397511
Antxr1	0.0039	-1.29	17468573
LOC100861984	0.0040	-0.74	17528772
Meis1	0.0040	-1.23	17260815
Slc16a2	0.0040	-0.74	17543817
Fgd5	0.0040	-0.98	17460994
Hc	0.0040	-0.96	17384374
Maob	0.0040	-0.95	17540378
Glp1r	0.0040	-1.16	17335726
Ptprb	0.0041	-1.18	17237451
Arhgef12	0.0041	-0.92	17526038
Gsn	0.0041	-0.94	17370209
Rgs5	0.0041	-1.04	17219139
Scube1	0.0041	-0.85	17319887
Itga8	0.0041	-1.36	17381717
Nynrin	0.0042	-0.66	17300686
Gdpd1	0.0042	-1.00	17267430
Stom	0.0042	-0.71	17384457
Rtkn2	0.0042	-0.61	17234008
Tspan7	0.0042	-1.11	17533269
Npr2	0.0043	-0.68	17413403
9530026P05Rik	0.0043	-0.63	17461060
Nipa1	0.0043	-0.70	17491454
Cdh2	0.0043	-0.74	17352884
Fat1	0.0043	-0.69	17500832
Enpp5	0.0043	-0.89	17337844
S1pr3	0.0043	-1.19	17287325
Abi3bp	0.0044	-1.28	17326318
Pdia5	0.0044	-0.77	17330058
Ntn1	0.0044	-0.81	17264405
Nid1	0.0045	-1.04	17285244
Vcl	0.0046	-0.85	17297551
Lamb2	0.0046	-1.08	17521727
Dock9	0.0046	-0.74	17309580
Fgfr2	0.0046	-1.09	17496947
Tinagl1	0.0047	-1.16	17430576
A4galt	0.0047	-0.89	17319801
Maged1	0.0047	-0.92	17543264
Fads3	0.0047	-0.75	17357444
Efnb1	0.0047	-1.02	17536483
Itpripl2	0.0048	-0.65	17495549
Bmpr2	0.0048	-1.04	17213336
Acy3	0.0048	-0.72	17356041
Fam171a1	0.0048	-1.18	17366359
Slco2a1	0.0048	-1.13	17520905
Vsig2	0.0048	-0.74	17516087
Syne1	0.0048	-0.82	17238844
Rtp3	0.0048	-0.93	17531693

Syne1	0.0049	-0.76	17238928
Ces2g	0.0049	-1.40	17504572
Slc35f5	0.0049	-0.91	17216727
Npnt	0.0049	-1.28	17410435
Lamb1	0.0050	-1.12	17274775
Tspan12	0.0050	-1.09	17465044
Jub	0.0050	-0.83	17306396
Ednra	0.0051	-1.42	17510685
Gab1	0.0051	-0.87	17510823
Fam164a	0.0052	-0.63	17396009
Cdk14	0.0053	-0.90	17445329
Snai2	0.0053	-0.80	17323192
1300014I06Rik	0.0053	-0.78	17291803
Krt80	0.0053	-1.02	17321823
Mill2	0.0053	-0.66	17474363
Nfib	0.0053	-1.09	17426765
Stard13	0.0054	-0.91	17455578
Oaz2	0.0054	-0.61	17548287
Sox7	0.0054	-1.10	17301256
Abcg2	0.0054	-0.73	17459014
Fbn1	0.0055	-1.20	17390879
Cyr61	0.0055	-1.40	17410974
Ctla2a	0.0055	-0.96	17293362
Lrp5	0.0056	-0.78	17360977
Xpnpep2	0.0056	-0.98	17534528
Tspan15	0.0056	-0.76	17241308
Neo1	0.0057	-0.78	17527735
Syne1	0.0057	-0.98	17238918
Ptpn14	0.0057	-0.88	17220724
Tns1	0.0057	-0.92	17224211
Myh10	0.0057	-0.80	17251370
Ltbp4	0.0057	-1.24	17488179
Rnf141	0.0058	-0.70	17495088
Pdgfrb	0.0058	-1.41	17351027
Mgp	0.0058	-0.81	17472192
Arhgap32	0.0059	-0.69	17515786
Zbtb46	0.0059	-0.62	17395863
Zcchc24	0.0059	-0.74	17304147
Gpr182	0.0059	-1.16	17246038
Mxra7	0.0059	-1.04	17272509
Jam2	0.0060	-1.15	17326801
Syne1	0.0061	-0.79	17238904
Ogn	0.0061	-1.41	17287175
Des	0.0061	-0.93	17214476
Cyb561	0.0061	-0.71	17270703
Sox17	0.0062	-0.78	17221071
Cd300lg	0.0062	-0.88	17256870
Apln	0.0062	-1.47	17541378
Crispld2	0.0063	-0.97	17506206

Slc43a3	0.0063	-0.84	17372644
F3	0.0063	-0.80	17402181
Lyve1	0.0063	-0.96	17495097
Zdhhc1	0.0063	-0.63	17512440
Trim16	0.0064	-0.78	17250775
Kifc3	0.0064	-0.69	17511927
Mecom	0.0064	-0.62	17404478
Robo4	0.0064	-1.07	17516047
Ghr	0.0065	-0.68	17315635
Aqp11	0.0065	-0.79	17493461
Rnf144a	0.0065	-0.68	17280315
Reck	0.0065	-0.94	17413474
Adamts15	0.0065	-0.62	17242879
Mgst3	0.0065	-0.63	17229403
1810029B16Rik	0.0065	-0.61	17509697
Shroom4	0.0065	-0.74	17532739
Ushbp1	0.0065	-0.94	17510295
Lrp4	0.0065	-1.21	17373283
Mme	0.0066	-1.40	17397990
Csrp2	0.0066	-0.73	17237208
Cxcl12	0.0066	-1.03	17462149
Ptpru	0.0066	-0.91	17430680
Tmem47	0.0066	-1.28	17536067
Fam135a	0.0066	-0.96	17221792
Syne1	0.0067	-0.82	17238834
Dock6	0.0067	-0.80	17524775
Mcc	0.0067	-0.94	17354189
Slit2	0.0067	-0.90	17437302
Epas1	0.0068	-0.89	17340197
Tspan8	0.0069	-1.14	17237412
Gata2	0.0069	-1.40	17460634
A430105I19Rik	0.0070	-0.76	17389775
Ece1	0.0070	-0.85	17420347
Sgip1	0.0071	-0.83	17416061
Sept10	0.0071	-0.73	17240989
Mllt4	0.0071	-0.67	17333418
1110050K14Rik	0.0071	-0.93	17513550
Flt1	0.0071	-1.01	17455346
App	0.0072	-0.76	17331669
Hes1	0.0072	-0.98	17324623
Fibin	0.0073	-1.21	17389157
Lrig3	0.0073	-0.64	17237811
Agap1	0.0073	-0.76	17215576
1110017D15Rik	0.0074	-0.64	17424249
Tspan2	0.0074	-0.82	17401072
Dock1	0.0074	-0.77	17484167
Bgn	0.0074	-0.86	17542364
Cd209d	0.0076	-0.66	17507184
Dpysl3	0.0076	-0.61	17354101

Glb1l3	0.0077	-0.67	17525118
Lox	0.0077	-0.89	17354367
Btbd3	0.0078	-0.60	17376867
Ptgfrn	0.0078	-1.05	17408483
Prkaa2	0.0078	-0.91	17427746
Ifitm3	0.0078	-0.75	17497718
Dtna	0.0079	-0.64	17348902
Nox4	0.0079	-1.08	17479974
Scnn1a	0.0079	-0.89	17463169
Fgfr3	0.0079	-1.12	17436481
Sdc2	0.0080	-1.06	17310872
Myh11	0.0080	-0.67	17328368
Ctgf	0.0080	-1.05	17232235
Vangl1	0.0081	-0.84	17408563
Rassf8	0.0081	-0.76	17464271
Slitrk6	0.0081	-0.90	17309368
Zfp366	0.0081	-0.90	17289432
Apbb2	0.0082	-0.72	17448415
C7	0.0082	-1.36	17315686
Pkd2	0.0082	-0.87	17439842
Pdgfra	0.0082	-1.39	17438246
Syne1	0.0082	-0.85	17238876
Rapgef3	0.0082	-0.72	17321007
Stx3	0.0082	-0.77	17363025
Cd151	0.0083	-0.84	17484940
Abca8b	0.0084	-0.93	17271307
Itga1	0.0084	-0.94	17296388
Nrxn2	0.0085	-0.78	17362028
Amph	0.0085	-0.87	17285488
Cebpd	0.0085	-0.83	17323297
Arl4d	0.0085	-0.89	17256823
Sema7a	0.0086	-0.92	17517812
Arhgap6	0.0086	-0.67	17539658
Gja4	0.0086	-0.72	17430211
Zbtb10	0.0087	-0.61	17396035
Cxcl15	0.0087	-1.44	17438980
Hunk	0.0087	-0.70	17326964
Vtn	0.0087	-1.06	17253656
Pla2r1	0.0088	-0.76	17385614
Syne1	0.0090	-0.75	17238888
Fam13a	0.0091	-0.68	17467209
Hspb8	0.0091	-0.87	17451816
Arap3	0.0091	-0.91	17353881
Ntrk2	0.0091	-0.65	17287901
Gnao1	0.0092	-0.95	17503884
Plac9	0.0094	-0.85	17304186
Aff2	0.0094	-0.81	17535245
Gng11	0.0094	-1.02	17455793
Pdzd2	0.0094	-1.21	17316068

Epha4	0.0095	-0.88	17224661
Syne1	0.0095	-0.70	17238890
Zfp503	0.0096	-0.68	17303989
Tmem200b	0.0096	-0.74	17419369
D030029J20Rik	0.0097	-0.88	17387430
Pgm5	0.0097	-0.97	17363626
Samd5	0.0098	-1.12	17239142
Olfml2a	0.0099	-0.93	17370487
Bmpr2	0.0099	-0.75	17213321
Shroom3	0.0099	-0.76	17439138
Syne1	0.0099	-0.63	17238842
Tbx5	0.0101	-1.20	17441610
Pcdhb22	0.0101	-0.61	17349949
Tox3	0.0102	-0.82	17511550
Syne1	0.0102	-0.84	17238880
Lmo7	0.0102	-1.09	17302429
Scamp1	0.0102	-0.70	17295038
Fhl1	0.0103	-0.92	17534960
Fmnl2	0.0103	-0.65	17370807
Gpr124	0.0103	-0.71	17500301
Fads2	0.0104	-0.68	17362595
Parvb	0.0106	-0.89	17313705
Nova1	0.0106	-0.78	17280913
Fat4	0.0107	-0.96	17397185
B3gnt3	0.0107	-0.67	17510422
Lrat	0.0107	-1.31	17406247
Plac9	0.0108	-0.86	17304155
Plac9	0.0108	-0.86	17304170
Nkd1	0.0109	-1.12	17503650
Syne1	0.0109	-1.04	17238830
Bgn	0.0109	-0.91	17535558
Epb4.1l4a	0.0109	-0.81	17353378
Gm4956	0.0110	-0.89	17221676
Dysf	0.0110	-0.60	17460185
Pdgfb	0.0110	-0.75	17319380
Timp3	0.0111	-1.08	17236182
Mylk	0.0111	-0.98	17325159
Akap5	0.0111	-0.61	17276552
Dpep1	0.0111	-1.23	17506532
Rcn3	0.0112	-0.70	17490578
Prickle2	0.0112	-1.09	17469121
Flt4	0.0113	-0.84	17248992
Kcnq1	0.0113	-0.87	17485320
F11r	0.0114	-0.90	17219362
Me1	0.0114	-0.62	17529398
Car4	0.0114	-0.90	17254508
Psd3	0.0115	-0.66	17509723
Clstn1	0.0115	-0.67	17421828
Nid1	0.0115	-1.05	17285225

Akap2	0.0116	-0.82	17414364
Pkia	0.0117	-0.68	17396003
Syne1	0.0117	-0.82	17238854
Cyp1a1	0.0119	-0.67	17517770
Zfyve9	0.0119	-0.65	17428094
Ltbp2	0.0119	-0.94	17282570
Meis2	0.0120	-1.02	17389608
Vgll3	0.0120	-0.85	17326541
Mamdc2	0.0120	-1.17	17363533
Ecm2	0.0120	-1.26	17287148
Ier3	0.0120	-0.92	17337228
Mfge8	0.0121	-0.86	17492314
Gprc5a	0.0122	-0.87	17463747
Tmem44	0.0123	-1.11	17329675
Rab34	0.0123	-0.70	17253478
Tle1	0.0124	-0.63	17426517
C1qtnf2	0.0124	-0.72	17248613
Plekhg1	0.0125	-0.79	17231366
Cgrrf1	0.0125	-0.63	17299279
Sema6a	0.0127	-1.14	17354299
Pawr	0.0128	-0.61	17237170
Tril	0.0128	-0.64	17466932
Vsnl1	0.0129	-1.32	17279980
Plscr4	0.0129	-0.93	17520353
Tnfrsf19	0.0129	-0.79	17307433
Hyal1	0.0130	-1.22	17521428
Dusp3	0.0131	-0.65	17269985
Ptk7	0.0131	-0.64	17345475
Gnai1	0.0131	-0.90	17445735
Dock4	0.0132	-0.65	17275168
Samd12	0.0133	-0.85	17317031
Slit3	0.0135	-0.89	17248426
Scube2	0.0136	-1.17	17494950
Hgf	0.0136	-0.88	17434933
BC020535	0.0137	-0.92	17377857
Tcn2	0.0137	-0.63	17259907
Syne1	0.0139	-0.67	17238900
Syne1	0.0139	-0.67	17238848
Pir	0.0142	-0.62	17539519
Ror1	0.0143	-0.72	17415835
Fzd8	0.0145	-0.68	17348276
Sema3b	0.0147	-0.68	17530930
A430107O13Rik	0.0147	-0.84	17456339
3110070M22Rik	0.0150	-0.61	17290155
Syne1	0.0151	-0.82	17238868
Spon1	0.0152	-1.19	17482000
Pmp22	0.0152	-0.66	17250839
Pygm	0.0156	-0.63	17356874
Chn1	0.0157	-0.62	17386569

Slc22a23	0.0157	-0.94	17291787
Fkbp7	0.0158	-0.81	17386770
Pard3	0.0158	-0.71	17506949
Ttc12	0.0159	-0.65	17526753
Pltp	0.0160	-0.69	17394297
Plscr3	0.0160	-0.62	17251756
Ehd4	0.0162	-0.73	17390066
Syne1	0.0163	-0.89	17238870
Fxyd1	0.0163	-0.74	17489420
Tlr3	0.0163	-0.89	17509101
Rras	0.0164	-0.66	17477670
Heyl	0.0164	-0.60	17418177
Cdc42bpb	0.0166	-0.67	17284065
Nes	0.0167	-0.89	17398903
Dpt	0.0167	-1.32	17218927
Slc34a2	0.0168	-1.48	17437459
Osmr	0.0170	-1.17	17315743
Lphn3	0.0172	-1.07	17438530
Mtss1l	0.0172	-0.73	17505623
Gata6	0.0174	-0.66	17348400
Slc10a6	0.0174	-0.66	17450319
Lepr	0.0176	-1.02	17415979
Glb1l2	0.0176	-1.14	17525090
E130203B14Rik	0.0178	-0.73	17298631
Angpt2	0.0180	-0.97	17507799
Zbtb16	0.0181	-0.62	17526707
Sema4c	0.0181	-0.66	17222211
Fgfr4	0.0181	-0.77	17287590
Ces2c	0.0181	-0.72	17504512
Boc	0.0182	-0.75	17330577
Fam189a2	0.0187	-0.84	17363559
Gfra2	0.0190	-0.81	17301823
Ceacam1	0.0191	-0.92	17487952
Sult1a1	0.0192	-0.65	17496354
Gulp1	0.0192	-0.74	17212442
Casp12	0.0193	-0.74	17514447
Slc1a1	0.0193	-0.72	17358466
Scnn1g	0.0194	-0.84	17482681
Klf9	0.0195	-0.72	17358214
Sorbs3	0.0197	-0.64	17308257
Vldlr	0.0198	-0.67	17358422
Robo2	0.0198	-0.73	17331481
Glis2	0.0201	-0.64	17322525
Clec4g	0.0202	-0.83	17507148
Slc40a1	0.0202	-0.81	17222777
Sftpb	0.0203	-1.03	17459601
Plekhh2	0.0203	-0.81	17340050
Plxdc2	0.0204	-0.77	17367216
Plod2	0.0204	-0.60	17520364

Kcnk3	0.0204	-0.60	17435811
Pde7b	0.0205	-0.67	17239638
Gm13889	0.0205	-0.96	17388548
Cdr2l	0.0205	-0.65	17258178
Arhgef17	0.0207	-0.86	17493842
Pros1	0.0208	-0.63	17326510
Plxna2	0.0209	-0.89	17220974
Jag1	0.0210	-0.65	17392151
Syne1	0.0210	-0.79	17238858
Cbfa2t3	0.0213	-0.62	17513806
B230120H23Rik	0.0213	-0.81	17371912
Arhgef26	0.0216	-0.96	17397968
Atp1a2	0.0220	-1.15	17229891
Ramp2	0.0220	-0.81	17256607
Lrrc16a	0.0222	-0.71	17291275
Fstl1	0.0223	-0.83	17325514
Cyp2f2	0.0223	-1.22	17475498
Cttnbp2nl	0.0227	-0.62	17408813
Mansc1	0.0228	-0.64	17472023
Syne1	0.0228	-0.92	17238840
Cacna1c	0.0231	-0.85	17470235
Lysmd2	0.0232	-0.61	17519533
Kank2	0.0233	-0.63	17524760
Syne1	0.0239	-0.75	17238878
Prelp	0.0239	-1.09	17227077
Hist1h2bc	0.0240	-0.66	17285851
C1qtnf7	0.0241	-0.80	17437148
Cd24a	0.0241	-0.77	17233022
Svep1	0.0246	-0.92	17425631
Ablim3	0.0246	-0.78	17354831
Rin2	0.0247	-0.70	17377177
Scnn1b	0.0249	-0.66	17482699
Syne1	0.0251	-0.70	17238862
Hbb-b1	0.0251	-1.44	17494221
Sftpc	0.0252	-1.35	17308388
Fkbp10	0.0255	-0.78	17256365
Cadm1	0.0256	-0.66	17516960
Syne1	0.0257	-0.83	17238846
Gabra3	0.0258	-0.63	17542220
Chst1	0.0259	-0.98	17373521
Yes1	0.0261	-0.90	17436328
Tekt5	0.0272	-0.72	17328070
Syne1	0.0273	-0.62	17238860
Mmp2	0.0283	-0.99	17503825
Syne1	0.0283	-0.62	17238874
Etv1	0.0292	-0.81	17289547
Ctdspl	0.0293	-0.72	17522958
Syne1	0.0295	-0.63	17238872
Nt5dc2	0.0298	-0.70	17298364

Syne1	0.0298	-0.83	17238924
Pcdhb17	0.0304	-0.88	17349926
Syne1	0.0304	-0.92	17238866
Faim2	0.0311	-0.67	17321582
Rnf144b	0.0315	-0.72	17287066
Syne1	0.0317	-0.84	17238852
Clu	0.0317	-0.86	17301452
2610034B18Rik	0.0324	-0.72	17492466
Rtn2	0.0324	-0.65	17474547
Tcf7l1	0.0324	-0.73	17467806
Tgfb1i1	0.0326	-0.80	17483696
Chrdl1	0.0328	-0.70	17545087
Tbx4	0.0328	-0.67	17254602
Arhgap23	0.0334	-0.63	17255788
Sash1	0.0341	-0.71	17239113
Serpina3n	0.0343	-1.01	17278328
Tmem98	0.0347	-0.65	17253996
Cox4i2	0.0347	-0.76	17377785
Gprc6a	0.0347	-0.97	17240737
Cd209a	0.0348	-0.68	17507161
Fut10	0.0348	-0.74	17500412
Sftpa1	0.0349	-1.05	17298968
Trpc1	0.0350	-0.61	17529748
Sox11	0.0351	-0.63	17280350
Gnaq	0.0353	-0.61	17357959
Pgm5	0.0353	-0.88	17358266
Tshz3	0.0364	-0.63	17476866
Nbl1	0.0365	-0.72	17431861
Gucy1a2	0.0368	-0.80	17514399
Col1a1	0.0381	-0.70	17255260
Mrc2	0.0386	-0.67	17257361
Syne1	0.0389	-0.65	17238828
Epha2	0.0396	-0.67	17421033
Gpx3	0.0402	-0.92	17249787
Gabarapl1	0.0403	-0.62	17463550
Spry4	0.0404	-0.78	17353957
Cd24a	0.0406	-0.71	17240606
Frmd4a	0.0409	-0.62	17366451
Ms4a4d	0.0415	-0.72	17357700
Chi3l1	0.0420	-0.72	17217399
Sema5a	0.0421	-0.79	17310837
Bmp3	0.0426	-0.75	17439535
D530008I23	0.0427	-0.67	17382378
D14Ertd668e	0.0428	-0.60	17307290
Adm	0.0435	-0.65	17481770
Gstm1	0.0439	-0.68	17409154
Gp9	0.0447	-0.68	17460569
Syne1	0.0448	-0.93	17238832
Mmrn1	0.0451	-0.61	17459097

Scarf1	0.0452	-0.66	17252980
Cyp26b1	0.0453	-0.66	17468286
Prx	0.0461	-0.63	17475603
Loxl1	0.0462	-0.84	17527694
Fam149a	0.0465	-0.67	17509083
Hspb1	0.0466	-0.67	17443342
Tecrl	0.0467	-0.61	17449108
8430408G22Rik	0.0469	-0.61	17462145
Syne1	0.0476	-0.87	17238856
Col1a2	0.0479	-0.62	17455801
Mras	0.0480	-0.60	17530059
Rcan1	0.0480	-0.64	17332228
Tmem22	0.0486	-0.83	17530137
Sntn	0.0491	-0.60	17297181
Sod3	0.0493	-0.73	17437385

Appendix 2. Genes that were differentially expressed in macrophages.

Gene_Symbol	P value	FC (log2)	Transcript_Cluster_ID
Up-regulated			
Fhdc1	0.0000	0.77	17406363
Aldh8a1	0.0000	0.62	17232025
Tgfb3	0.0001	0.60	17282743
Il2rb	0.0003	1.04	17319009
Scgb1a1	0.0004	2.36	17362539
Xirp2	0.0008	0.60	17371296
Ccl8	0.0008	1.98	17254065
Dusp5	0.0009	0.74	17360348
Tas2r109	0.0010	0.82	17471966
Slc38a2	0.0011	0.82	17320928
Prg2	0.0017	0.99	17372662
Tuba1a	0.0018	1.24	17321474
C1qc	0.0021	0.80	17431612
Gm11978	0.0024	0.62	17260453
2010010A	0.0030	1.04	17355455
Gm13286	0.0039	1.01	17415345
Pygm	0.0040	0.97	17356874
1810035I	0.0040	0.71	17421138
5430421F	0.0043	0.83	17508369
Rnf125	0.0043	0.93	17348840
Cd38	0.0046	0.89	17437213
3110070M	0.0047	-0.60	17290155
Khdc1a	0.0048	0.96	17211416
Zfp651	0.0049	0.64	17523352
Ms4a4c	0.0051	1.38	17357648
A530021J	0.0051	0.68	17479841
Fgl2	0.0052	0.84	17435089
Arhgap27	0.0052	0.62	17270481
Folr1	0.0053	0.61	17493956
Gpr183	0.0055	1.55	17309649
Gm19877	0.0056	0.63	17222524
Cd97	0.0057	2.81	17510948
Lrig1	0.0067	1.26	17469217
Prl8a6	0.0067	0.68	17291420
Adam19	0.0067	0.75	17248754
Trim25	0.0077	0.68	17255026
Cpm	0.0078	0.84	17237547
1700056N	0.0083	0.68	17323387
Gpr97	0.0085	0.65	17504207
BE949265	0.0091	0.72	17337963
Gm20264	0.0091	0.81	17545477
Zfp36l1	0.0095	1.84	17282216
Cd86	0.0095	0.74	17330203

Amica1	0.0095	0.67	17516718
Sema4c	0.0096	0.65	17222211
Gatm	0.0097	0.68	17390810
Whsc111	0.0103	0.61	17500135
LOC10050	0.0105	1.16	17547911
Il10	0.0105	1.69	17216990
Fam102a	0.0108	0.75	17369841
Wfikkn1	0.0111	1.01	17342491
Auts2	0.0112	0.67	17453242
Snora30	0.0112	0.98	17483383
Emp1	0.0114	1.10	17548559
Olfr48	0.0114	0.62	17388006
Csrnp1	0.0119	0.84	17532257
Olfr1230	0.0121	0.90	17387926
Hivep1	0.0122	0.74	17286818
Olfr177	0.0127	0.88	17547980
Ngp	0.0129	0.60	17522369
Rbm38	0.0131	0.85	17395057
Mir694	0.0133	0.65	17355131
LOC66550	0.0134	1.65	17457804
Slamf8	0.0134	0.67	17229931
Inpp5k	0.0134	0.63	17253037
Grap2	0.0134	1.41	17313147
Bpifb9a	0.0137	0.89	17378184
Sfn	0.0138	0.77	17431049
Stx3	0.0139	0.61	17363025
A330094K	0.0140	0.60	17355535
Alas2	0.0144	1.34	17538575
Irs2	0.0147	0.67	17507374
Ccr7	0.0147	1.29	17268972
LOC10086	0.0148	1.47	17548315
Ccr5	0.0152	1.39	17523659
LOC67005	0.0159	0.79	17422940
Eif2s2	0.0160	1.60	17393192
LOC10086	0.0160	1.32	17547986
Gm7168	0.0164	0.61	17333461
Gm19261	0.0164	0.64	17362970
Vmn1r58	0.0165	0.77	17486039
C1qb	0.0166	0.89	17431607
Fam83g	0.0173	0.62	17250624
Defb2	0.0175	0.86	17499818
Ms4a6b	0.0176	1.39	17357688
Gm8989	0.0177	0.64	17494651
1110059G	0.0181	0.64	17532455
Ippk	0.0183	0.78	17287126
Asb1	0.0186	0.83	17215788
Riiad1	0.0188	0.84	17407550
Gm17749	0.0189	1.41	17528271
4932416K	0.0194	0.64	17504493

Mtmr1	0.0196	0.60	17535319
Glcci1	0.0196	0.63	17456001
Olfr494	0.0201	0.63	17481614
Arid4a	0.0201	0.67	17276070
Serpib8	0.0201	0.86	17216478
Edn1	0.0203	0.68	17286830
C1qa	0.0204	0.86	17431619
Gm5547	0.0207	1.03	17401414
Rassf2	0.0207	0.71	17391920
2610005L	0.0207	1.06	17507872
Coil	0.0210	0.76	17267626
Snord13	0.0211	1.14	17508591
Rab3il1	0.0212	0.72	17357425
Mfsd6l	0.0219	0.82	17251354
Dennd4a	0.0221	0.67	17518378
Olfr582	0.0221	1.19	17481167
Tmem39a	0.0222	0.61	17325619
Klrd1	0.0226	1.58	17463567
Snora5c	0.0230	1.14	17260440
Arl15	0.0233	0.72	17290033
Agr2	0.0234	0.67	17275015
Ttc28	0.0238	0.81	17440592
Apold1	0.0250	0.92	17463727
Mir532	0.0250	1.89	17539826
Fn3k	0.0259	0.68	17259623
Olfr310	0.0261	0.71	17493116
1700030N	0.0262	1.06	17360916
1700012A	0.0264	0.64	17218290
Zscan30	0.0267	0.63	17353108
LOC10086	0.0267	1.51	17548166
2810422O	0.0269	0.62	17218813
Apoe	0.0270	0.83	17487381
Pif1	0.0271	0.64	17518596
LOC10004	0.0274	0.73	17532655
Cxcr4	0.0275	0.73	17226593
Ttc18	0.0279	0.66	17303769
Sik3	0.0279	0.67	17516871
H2-Q6	0.0282	0.78	17337122
Casp8ap2	0.0283	0.76	17412404
Tnfrsf17	0.0285	0.98	17322944
LOC43441	0.0285	0.70	17528537
Mir1957	0.0293	0.99	17417858
Gtf2h2	0.0295	1.03	17295646
Fbln7	0.0295	0.72	17376051
Plbd1	0.0297	1.61	17472114
Nt5c3	0.0297	0.82	17467128
Olfr1506	0.0298	0.74	17372974
Olfr1506	0.0298	0.74	17388030
Olfr1444	0.0298	0.76	17357887

AW121686	0.0300	0.72	17313616
Snora20	0.0301	1.78	17333344
Gm15472	0.0304	0.62	17401293
Il7r	0.0304	2.51	17315891
Atf2	0.0304	0.68	17386591
6720401G	0.0309	0.63	17541567
Nckap5	0.0315	0.63	17226447
Apoc2	0.0316	0.76	17487361
Hba-a2	0.0320	0.69	17248263
Mx2	0.0329	0.64	17327557
Gm9840	0.0334	0.72	17344508
Il21r	0.0336	0.82	17482958
Gm13710	0.0337	0.66	17387426
LOC10086	0.0338	2.11	17547656
Mir7-1	0.0340	1.23	17293163
Crisp1	0.0345	0.83	17344953
Snord116	0.0348	0.71	17491537
Snord116	0.0348	0.71	17491539
Snord116	0.0348	0.71	17491566
Snord116	0.0348	0.71	17491570
Snord116	0.0348	0.71	17491572
Snord116	0.0348	0.71	17491574
Snord116	0.0348	0.71	17491576
Snord116	0.0348	0.71	17491578
Snord116	0.0348	0.71	17491580
Snord116	0.0348	0.71	17491582
Snord116	0.0348	0.71	17491584
Snord116	0.0348	0.71	17491586
Snord116	0.0348	0.71	17491588
Snord116	0.0348	0.71	17491590
Snord116	0.0348	0.71	17491592
Snord116	0.0348	0.71	17491594
F2r	0.0356	0.86	17295130
Extl2	0.0356	0.80	17402001
Scara5	0.0358	0.75	17301414
Cpne2	0.0359	0.95	17504074
Ms4a1	0.0359	1.01	17362922
Dpp4	0.0359	0.63	17385719
4921523A	0.0366	0.62	17345971
Olfr668	0.0370	0.80	17494447
Fam102b	0.0370	0.89	17409463
Slc7a5	0.0378	1.83	17513641
Gdf3	0.0380	0.73	17470592
Ankrd12	0.0384	0.83	17346781
Siah1b	0.0385	0.66	17545947
Adig	0.0392	0.64	17378898
Nr1d1	0.0399	0.89	17268884
Spred3	0.0410	0.75	17488735
Cyp2b10	0.0411	0.75	17475360

Mir18	0.0415	1.59	17302634
Slc29a3	0.0415	0.63	17548262
Ly86	0.0416	1.47	17286587
Olfr116	0.0419	0.61	17344905
Gpr171	0.0421	1.31	17405458
Sh2d4b	0.0422	0.86	17305198
Ciita	0.0427	0.77	17322842
Gif	0.0428	0.65	17357729
Zfp389	0.0428	0.66	17290967
Nr4a3	0.0429	1.50	17413945
C3ar1	0.0430	1.00	17470616
Hspb1	0.0431	0.70	17286958
H2-Q5	0.0432	0.87	17337110
A330050F	0.0436	0.64	17339353
Mllt3	0.0446	0.79	17427033
Olfr470	0.0446	0.98	17494772
Spink2	0.0455	0.62	17449064
1700012D	0.0465	0.72	17495168
Emp1	0.0471	1.20	17463781
Fam154b	0.0487	0.77	17492877

Down-regulated

Gm6579	0.0007	-0.65	17488883
Rab6b	0.0007	-0.70	17530231
BC029127	0.0008	-0.77	17360909
Vmn1r148	0.0008	-0.62	17474785
Entpd6	0.0008	-0.63	17377478
Apoa2	0.0010	-1.02	17219242
Kank3	0.0010	-0.75	17336175
Ppap2a	0.0013	-0.89	17289928
Fbxw5	0.0013	-0.92	17368079
Trem14	0.0014	-1.15	17338378
Mettl22	0.0015	-0.88	17322735
Trappc5	0.0015	-0.70	17498738
Kctd11	0.0016	-0.71	17265026
Pmvk	0.0017	-1.53	17399474
G730013B	0.0021	-0.93	17326188
Fam57a	0.0022	-1.19	17253133
1700010M	0.0022	-0.60	17548381
Tpm4	0.0023	-0.93	17502378
Sgk3	0.0023	-0.92	17211043
Gm9897	0.0026	-1.89	17434467
Gm4199	0.0029	-1.58	17516613
Lilra5	0.0030	-0.75	17473292
Prkar2b	0.0033	-1.11	17280590
Dhcr24	0.0035	-1.50	17416325
Lce1h	0.0035	-0.98	17407461
LOC67165	0.0036	-1.16	17532584
Apobr	0.0037	-0.74	17483048

Gng12	0.0038	-1.02	17459250
Gsn	0.0040	-0.65	17370209
Sc5d	0.0041	-0.69	17525955
Zbtb4	0.0044	-0.73	17251728
Lypd6b	0.0050	-0.75	17370691
Oxct1	0.0050	-0.71	17309802
Golim4	0.0051	-0.70	17406002
Cyp51	0.0051	-0.86	17445308
Btbd1	0.0052	-0.75	17492847
Kif22	0.0052	-0.64	17496568
Fdft1	0.0053	-0.78	17307588
2310030N	0.0054	-0.87	17423215
Zbtb42	0.0056	-0.63	17279372
Fam175b	0.0059	-1.16	17497143
Gpsm2	0.0060	-0.79	17409386
Ebna1bp2	0.0067	-0.86	17417791
LOC10086	0.0068	-0.88	17547610
Tada3	0.0068	-0.75	17469719
Cat	0.0070	-0.64	17388803
Mmaa	0.0072	-0.79	17510726
Ccdc163	0.0073	-0.61	17417492
Nol8	0.0075	-0.60	17287185
Fpr1	0.0076	-0.61	17341276
Serpini1	0.0077	-0.61	17398323
Mir1907	0.0079	-1.07	17316977
Prex1	0.0083	-0.66	17394582
Cdkn2b	0.0086	-1.13	17427155
Nosip	0.0088	-0.62	17477679
Gtpbp10	0.0088	-0.96	17445381
Dcakd	0.0088	-0.82	17547587
Zkscan3	0.0088	-0.89	17290921
Lmo4	0.0089	-0.71	17410809
Ccdc130	0.0091	-0.83	17511112
Spsb2	0.0091	-0.81	17462944
Ccdc125	0.0093	-0.71	17289497
Pex5	0.0093	-0.72	17470689
Megf9	0.0096	-1.14	17426497
Csprs	0.0098	-0.66	17366355
Sgol2	0.0099	-0.69	17212970
Nsdhl	0.0099	-1.06	17535434
Ankmy2	0.0099	-1.15	17275029
Hist1h2a	0.0099	-1.06	17291001
Gpr155	0.0100	-0.96	17386514
B230120H	0.0101	-0.83	17371912
Rg9mtd2	0.0106	-0.66	17403043
Capza3	0.0107	-0.69	17463967
Acot2	0.0109	-0.61	17277134
Mdc1	0.0109	-0.85	17337250
Acat2	0.0110	-0.78	17340967

Frmd8	0.0111	-0.89	17361814
Mrpl41	0.0112	-0.69	17382350
Idi1	0.0114	-1.06	17285056
Mtg1	0.0115	-0.96	17484494
Pdgfrb	0.0115	-0.71	17351027
Gtpbp5	0.0116	-0.63	17380694
Tnfrsf21	0.0119	-0.82	17337741
Mir672	0.0119	-0.67	17543850
Grwd1	0.0120	-0.68	17490984
Bcl3	0.0121	-0.78	17487457
2810008M	0.0121	-0.74	17289695
Pstpip2	0.0122	-0.64	17352036
Tmem55a	0.0124	-0.87	17411939
D4Ertd22	0.0126	-0.79	17432135
Hyou1	0.0127	-0.69	17516564
Tmem202	0.0128	-0.91	17527810
Pgm2l1	0.0128	-0.96	17480652
Aacs	0.0128	-1.10	17442719
Fkbp9	0.0131	-0.95	17458911
Asf1b	0.0131	-0.79	17503023
Zfp623	0.0135	-0.67	17312295
Zfp266	0.0137	-0.69	17524411
Cdc37l1	0.0137	-0.63	17358486
Atg4d	0.0142	-0.67	17515132
Ndufc1	0.0143	-0.70	17405133
D9Ertd40	0.0144	-0.74	17523457
Dnajb5	0.0145	-0.63	17413191
Rab31	0.0150	-0.81	17346749
Gm19918	0.0154	-0.82	17218446
Mvd	0.0157	-1.00	17513681
Camta2	0.0158	-0.72	17265340
Zfp426	0.0160	-1.36	17524393
Mapk14	0.0160	-0.97	17335364
Zfp808	0.0168	-0.76	17288051
1110057K	0.0168	-0.77	17273899
Lrig3	0.0168	-0.60	17237811
Kdelc1	0.0169	-0.64	17222694
Ppt2	0.0169	-1.05	17343897
Blvrb	0.0169	-1.05	17475580
Fads2	0.0170	-0.98	17362595
3110052M	0.0171	-0.74	17333955
Amac1	0.0173	-0.61	17264940
Ppp1ca	0.0173	-0.73	17356182
Krtap5-5	0.0174	-0.68	17498072
Dcpp3	0.0175	-1.12	17334178
Slc39a9	0.0175	-0.63	17276854
Vmn2r16	0.0181	-0.82	17440328
Slc48a1	0.0182	-0.60	17314556
Spint2	0.0182	-0.74	17488806

Chpf2	0.0185	-0.61	17435403
Fam129a	0.0187	-0.65	17218186
Pter	0.0194	-0.71	17367036
Ehd2	0.0197	-0.64	17486807
Dnajc24	0.0200	-0.73	17389066
Olfr1269	0.0205	-1.10	17388016
Eef1e1	0.0208	-1.23	17291964
Olfr52	0.0208	-0.61	17387646
LOC10086	0.0212	-0.60	17547684
Ppm1n	0.0214	-0.76	17487201
Cul2	0.0216	-0.97	17348079
Myo1f	0.0216	-0.72	17336114
Klk1b8	0.0216	-0.82	17477292
Zfp958	0.0219	-1.07	17498860
Polr3gl	0.0220	-1.09	17408074
Sqle	0.0224	-1.28	17311807
Tada2b	0.0226	-0.65	17447446
Rps6ka1	0.0226	-0.96	17431101
Alas1	0.0228	-0.66	17530653
AF366264	0.0232	-0.63	17507665
Snx11	0.0232	-1.29	17268338
Haus8	0.0237	-0.67	17510264
D3Erttd25	0.0241	-0.70	17396966
Isca2	0.0242	-0.70	17277294
Gm10033	0.0245	-0.67	17509809
D330045A	0.0246	-1.01	17538079
4930483K	0.0247	-1.01	17242140
Rdx	0.0248	-0.61	17517248
Supt3h	0.0250	-0.64	17337872
Mrps31	0.0252	-1.41	17499922
Bin3	0.0252	-0.62	17301722
Dusp12	0.0255	-1.03	17219196
Ap3s2	0.0255	-1.44	17492457
Kazald1	0.0256	-0.67	17359816
Klf7	0.0259	-0.68	17223766
2210408F	0.0260	-0.94	17456974
Ehhadh	0.0263	-1.14	17329220
Akr1b8	0.0264	-1.23	17457128
Ccdc90b	0.0267	-0.74	17480192
Agtrap	0.0267	-0.63	17432895
St3gal3	0.0270	-0.87	17429008
Exosc3	0.0271	-0.62	17424937
9030418K	0.0273	-0.94	17380604
Chmp6	0.0273	-0.97	17272939
Gm2012	0.0275	-0.62	17540739
Fam194a	0.0276	-0.61	17405420
Tmsb10	0.0276	-0.63	17467831
F630028O	0.0279	-1.67	17536383
Ubtf	0.0280	-0.67	17270134

Fam125a	0.0281	-0.62	17502221
Cyb5b	0.0285	-0.66	17505252
Phox2a	0.0285	-0.62	17480955
Mrpl20	0.0286	-1.06	17422697
Aph1a	0.0286	-0.75	17400437
Car5b	0.0290	-0.80	17545936
Matn2	0.0292	-0.67	17310922
Lix1l	0.0293	-0.98	17400622
Oaz2	0.0293	-0.97	17548287
Alg3	0.0295	-0.94	17329151
Snord15b	0.0298	-1.20	17493681
Snupn	0.0300	-1.26	17517608
Ephb1	0.0300	-0.66	17520830
Pkp4	0.0301	-0.74	17370977
Ehbp1	0.0303	-0.74	17260968
Naa38	0.0303	-0.81	17456285
Tspan6	0.0308	-0.63	17544385
Dhcr24	0.0309	-0.87	17427799
2900006K	0.0310	-0.69	17277251
4930455G	0.0310	-1.23	17421150
Hsd17b7	0.0310	-1.15	17229466
Usp4	0.0314	-0.68	17521686
LOC10086	0.0314	-1.00	17548153
Yif1a	0.0317	-0.68	17356372
Aagab	0.0317	-0.70	17518256
Hmgcs1	0.0317	-1.14	17290173
2010321M	0.0319	-0.68	17518417
Nedd1	0.0319	-0.72	17244244
Dock8	0.0319	-0.61	17358274
Rdbp	0.0320	-0.74	17336738
Pmm1	0.0323	-0.66	17319554
Frg1	0.0325	-0.70	17508968
Clec1b	0.0327	-0.84	17463520
Gm16023	0.0329	-0.75	17433810
Vmn1r207	0.0329	-0.69	17291089
Rai12	0.0332	-0.79	17265111
Ubl4	0.0334	-0.86	17542662
Cd22	0.0335	-0.63	17489320
G6pc3	0.0336	-0.90	17256896
Ndor1	0.0336	-1.06	17382459
Pacrgl	0.0339	-1.35	17437355
Cd300lb	0.0342	-0.70	17271710
Creld2	0.0343	-0.65	17313998
Chst15	0.0344	-0.90	17497076
Dgkz	0.0344	-0.76	17373448
Cyp4f13	0.0346	-0.87	17343505
Ggps1	0.0349	-0.65	17290729
Tmem222	0.0350	-1.19	17430989
Afg3l1	0.0351	-0.88	17506661

Ybey	0.0355	-0.69	17242133
Sowahd	0.0356	-0.69	17534135
Ndufs8	0.0358	-0.66	17361032
Hmgcr	0.0360	-0.82	17295233
Hist1h4i	0.0365	-1.11	17291053
Fads1	0.0366	-1.08	17357460
Rnf219	0.0366	-0.73	17309293
Hyal1	0.0369	-0.68	17521428
Slc11a1	0.0370	-0.89	17214197
Mrpl21	0.0377	-0.82	17355903
Napepld	0.0384	-1.30	17445860
Cdh11	0.0385	-0.82	17512153
Fdps	0.0385	-0.88	17406908
Abcc4	0.0389	-1.12	17309420
Creb1	0.0390	-0.67	17213676
Fam3c	0.0390	-0.96	17465062
Aldh1l1	0.0391	-0.95	17460831
Tm7sf3	0.0394	-0.72	17472868
Sfxn3	0.0394	-0.66	17359803
Cntln	0.0395	-0.82	17415076
Pid1	0.0398	-0.91	17224971
Gm11426	0.0399	-0.74	17254085
Slc39a14	0.0402	-0.91	17308299
2210009G	0.0402	-0.68	17376834
Cpeb1	0.0403	-0.98	17492754
Ndufs6	0.0406	-0.65	17548616
Pla2g4a	0.0409	-0.91	17227828
Mrpl36	0.0411	-0.63	17294244
Tbc1d22a	0.0413	-0.62	17313958
4833417C	0.0414	-0.96	17255476
Pbx3	0.0416	-0.84	17384234
Napsa	0.0416	-0.69	17477508
Tnfrsf10	0.0421	-0.62	17301697
D19Bwg13	0.0421	-1.00	17363683
Zfp775	0.0421	-0.92	17458333
Tanc2	0.0422	-0.97	17257405
Il15	0.0425	-0.66	17510856
Rnf113a2	0.0428	-0.76	17277265
Ppfibp2	0.0428	-1.01	17481556
Pnpla1	0.0429	-0.70	17342940
Josd2	0.0429	-0.92	17477486
Sowaha	0.0430	-0.70	17262669
Chek2	0.0434	-0.80	17440575
Kctd12b	0.0436	-0.88	17545488
BC003331	0.0438	-0.82	17227872
1110006O	0.0438	-1.22	17451746
Dtymk	0.0444	-0.86	17225785
Oxct2a	0.0444	-1.13	17429685
D430020J	0.0445	-1.45	17284696

Gpr89	0.0448	-1.03	17408135
Ppp1r14b	0.0454	-0.71	17356987
Zfp574	0.0455	-0.62	17475170
Rragd	0.0458	-0.61	17412539
Bnip3	0.0460	-0.68	17497421
D10Jhu81	0.0460	-0.71	17242416
Dusp6	0.0460	-1.06	17236882
Maoa	0.0461	-0.74	17533474
Fgr	0.0463	-0.73	17419483
Pex19	0.0463	-0.82	17219489
Adhfe1	0.0465	-0.75	17211004
Serinc5	0.0466	-0.72	17289103
Eri3	0.0467	-0.83	17417679
Znhit6	0.0469	-1.13	17403423
Ldlr	0.0469	-0.63	17515315
Erich1	0.0471	-0.68	17507682
Mxi1	0.0477	-0.70	17360331
Lpin1	0.0481	-0.76	17280062
Vmn1r183	0.0481	-0.73	17474878
Cnm4	0.0484	-0.94	17211822
Tbrg1	0.0484	-1.00	17525661
Rabl3	0.0485	-1.53	17325489
Rras	0.0488	-0.70	17477670
Mast3	0.0489	-0.63	17510166
Zfp433	0.0489	-0.96	17235831
Slc52a3	0.0489	-0.64	17377651
Rpl37	0.0495	-1.36	17309899
Mrpl14	0.0495	-0.66	17337955
Endog	0.0496	-0.81	17369120
Xpnpep3	0.0500	-0.79	17313260