

SUPPLEMENTARY INFORMATION

A synthetic small molecule for rapid induction of multiple pluripotency genes in mouse embryonic fibroblasts

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Cytotoxicity assay

Colorimetric assays using WST-8 (Dojindo, Kumamoto, Japan) were carried out in 96-well plates with various concentrations of SAHA-PIP δ as mentioned before².

Microarray Analysis

Microarray analysis was done by Medical & Biological Laboratories Co., Ltd with microarray chip that is manufactured by agilent technologies with UniGene number of genes. GeneSymbol, GeneName and sequences that were used as probes were given in supplementary table S1 and S2. For comparative method, 2-color method was chosen. In 2-color method, one sample is labeled with Cy3 and another is labeled with Cy5. By comparing fluorescence intensity of Cy3 and Cy5, expression levels were analyzed. Ratio of gene expression of DMSO over either SAHA or δ treated MEFs were calculated using fold change to derive the regulation. The obtained raw data was the normalized to attain induction values of either SAHA or δ treated MEF over DMSO.

Cell culture

C57BL/6 mouse embryonic fibroblasts (MEFs) purchased from the American Type Culture Collection (ATCC) were used in all experiments. MEF cells were periodically cultured and maintained in Dulbecco's modified Eagle's medium (DMEM) that contains 15% heat-inactivated fetal bovine serum (FBS), 100 IU/ml penicillin, and 100 μ g/ml

streptomycin at 37 °C in a humidified atmosphere of 5% CO₂ in 95% air. MEFs were passaged by trypsin (Invitrogen). mES cell line R1 (a gift from Professor N. Nakatsuji, Kyoto University) were maintained on Mitomycin C-treated MEFs in complete mESC culture medium (Millipore) consisting of DMEM/F12 (80%), knockout serum replacement (10%), fetal bovine serum (10%), L-glutamine (1 mM), nonessential amino acids (1%), β-mercaptoethanol (0.1 mM) and Leukemia inhibitory factor (1000 U/mL).

The medium was changed every day.

Treatment of SAHA-PIPs against MEF

MEF cells with in the passage P6 were trypsinized for 5 min at 37 °C, and were resuspended in the fresh DMEM medium to a concentration of 2×10^5 cells/ml in a 35 mm plate and were grown for 24 h as mentioned before^{1, 3}. The medium was then removed and replaced with 2 ml of fresh DMEM medium followed by the addition of 2 μl of the 100 μM of each individual SAHA-PIP **Q-Φ** shown in Figure 1 to achieve a final polyamide concentration of 100 nM in 0.1% DMSO and then were incubated in a 5% CO₂ atmosphere at 37 °C for 24 h. 0.1% DMSO treated cells were used as the control. Incubation time and the concentration of the PI polyamide SAHA conjugates were standardized based on the initial optimization experiments with varied incubation time and the treatment of MEF with various concentration of SAHA-PIPs as mentioned

before^{1,3} to optimize 100 nM as the optimal concentration and 24 h as the optimal time for incubation.

Quantification of expression of marker genes in mouse embryonic fibroblasts treated with SAHA-PIP

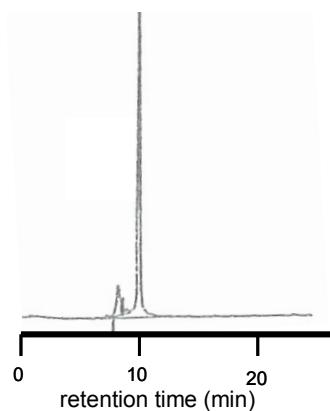
As mentioned in the previous report¹, total RNA was extracted from PI polyamide SAHA conjugates treated MEF using an RNeasy Mini Kit, in accordance with the manufacturer's instructions. The amount of nucleic acid in the total RNA was determined by measuring the absorbance at 260 nm using a NanoDrop spectrophotometer, ND-1000 (Thermo Scientific, USA) as mentioned before¹. cDNA was synthesized from 500 ng of total RNA using a ReverTra Ace qPCR RT kit (Toyobo, Japan) and used as a template for polymerase chain reaction (PCR). SYBR green real-time RT-PCR amplifications were carried out in triplicate with THUNDERBIRD SYBR qPCR Mix (TOYOBO, Japan) and the program as mentioned before¹. Melting curve analysis of amplification products and the comparative cycle threshold (CT) method used to analyze the expression level of each gene was as carried out as mentioned before¹. The average CT of the three determinations was used in calculations of relative expression level using DMSO treated cells as the internal control. The relative expression of genes was normalized against GAPDH. Primer pairs

of iPSC factors and actin that were used for RT-PCR analysis is as shown⁴. Other primer pairs used to analyze endogenous gene expression were listed in Table S4.

Chromatin immunoprecipitation (ChIP) analysis of promoter region of pluripotency genes

Antibodies for acetylated histone H3 and normal rabbit IgG were purchased from Upstate Biotechnology Inc., USA and H3K14 was purchased from Abcam (ab10812, UK). ES cells were used as the positive control. After 24 h treatment of each of the cells individually with 100 nM of **δ**, **δ-OMe**, **B**, SAHA and 0.1 % DMSO, ChIP assay was performed according to the protocol described in⁵ and that in the kit manual (SimpleChIP™ Enzymatic Chromatin IP Kit, Cell Signaling Technology, USA). DNA fraction was then purified QIAquick PCR Purification Kit (Qiagen, USA) and analyzed with qRT-PCR as mentioned before. Input sample was used as the internal control and the GAPDH was used as the internal control primer pair. Details of the purchased primer pairs used for *Oct-3/4*, *Nanog*, *Rex1*, *Dppa4*, *Gapdh* and *Cdh1* were shown in Table S5.

Figure S1



Retention time: 10.4 min

Figure S1 HPLC chromatogram of δ . The purities of the δ were checked by HPLC (elution with trifluoroacetic acid and a 0-100% acetonitrile linear gradient (0-40 min) at a flow rate of 1.0 mL min^{-1} under 254 nm).

Figure S2

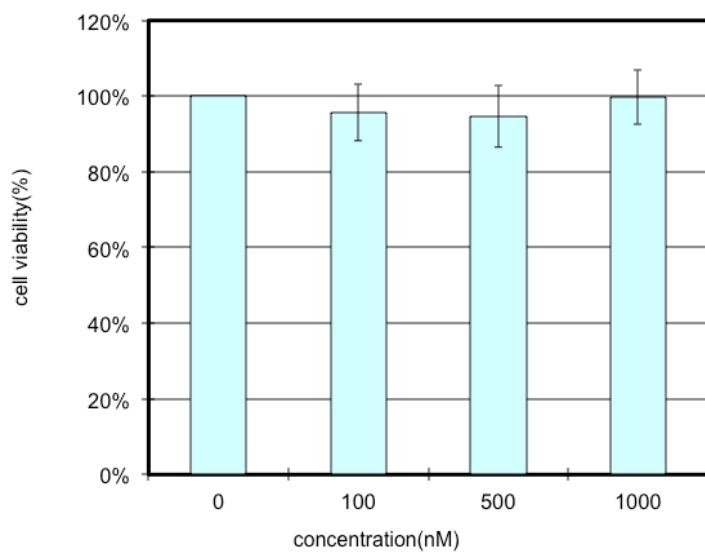


Figure S2. Cytotoxicity assay of SAHA-PIP δ . Cell viability of MEF was measured after 24 h treatment of the above effectors with various concentrations. Each bar represents mean \pm SD from 12 wells.

Table S1**a) Up regulated genes in SAHAtreated MEF**

No	ProbeName	Gene Symbol	Sequence	Fold change [SAHA] vs [DMSO3]
1	A_55_P2152009	Tesc	GTGGTGTGGGACTCCGATATTTATCTAATGGTGACAATAAGGTTCTTAATGA	23.539
2	A_52_P596595	Pnma2	TGACTCCACGTGGCATTATGTCCTGGGAATAGCTTGCCTGTACTTACCAACAGAAAT	21.604
3	A_51_P368313	Vip	GGATAAAAGAGATATGTGGAAAAGGATTTCAGAATTGTATTCAGTGATAGGTAC	15.784
4	A_55_P2004213	Gprasp2	TAACATGTGGTCTGCTTGAGTCTGGGTTTCAATAAAGTCGATGTTAAAGTTGCC	14.776
5	A_55_P2017600	Crmp1	GAGCAGGGCAGTCAGATTTAAAGTTGTACAGTTTCCTTGATTCACCTCCATT	11.216
6	A_51_P363187	Cxcl1	AGAAGTGCAGAGAGATAGAGTTAGTATTATGTTTGTATGATTAGGGTGAGGACATGT	10.696
7	A_55_P2114110	Cadm4	AAACACATTTGTACGGGGGGGGAGGGGATAGGGAGGGGTTTGGCAATCCACTAAC	8.946
8	A_55_P2146560	H2-Ab1	AATGATGCTTATCCCCACCTAGATTACAATAAACGAACCCAGACTCTGGTTATTGA	8.630
9	A_55_P1997756	Il6	CTGTTACCTAGCCAGATGGTTCTGGAATGTATAAGTTACCTCAATGAATTGCTAATT	8.301
10	A_55_P1965283	Wdr17	GTCTAAGATAATAGGTTGGAGGTGGTTGATACTTGGAGACAGAGGAAATAATTAA	8.200
11	A_55_P2007500	Tmem151b	TCCAAGCGAAAGATTGACAAATCACACTGATGGATAATAAAAGTGTGGATGACTCACT	8.194
12	A_52_P562676	Sult4a1	AGTACTGTACGGATGTTCTGGAACCACACATGGTAATCTCTGCTGCATCTTAAT	7.730
13	A_51_P504354	Nrarp	TTTTGAATCTGGTTATGAACCCAATTAAAGGGCGTTGATCCAGGAG	7.370
14	A_55_P1962747	H2-Ab1	TAGTAAACCAATGTATGCTTATCCCCACCTAGATTACAATAAACGAGACTCAGACTCTG	7.308
15	A_51_P483159	Gchfr	CCGAGGACGAGGACAGTCCTGGATCCTACACAGCTAATCCAAGCCAATAAGGGCTCT	6.717
16	A_55_P1990032	Cxcl5	GCTGAGATATTAGATGTCTGAGTGTGTCTTTAAAGAGTGCTTTGTATAAGGAGA	6.677
17	A_51_P428372	Ppbp	CTGGTCATGACCATGTTTCCAATTCTTATCCCTAGAATGCTTGTGTTCAAGCAACC	6.467
18	A_51_P202050	Dtx1	TGAGGATTGGCTGGGATGGAAGTCAGCCAAGCTTAAAGGGGACGCCAGCAATTGCTC	6.418
19	A_55_P2119633	Gnal	GATTCAGCCATTAAGTAGTTGATTACTGTGTTGATTTCAACTCAAGAAAAGCTTCAG	6.392
20	A_51_P308048	Cmtm8	CCAGTGTCTTACAATTGAGCTGGATATTACTGGGGAGTCTGCTCTTAATGA	6.352
21	A_55_P2085311	Nxph4	TCTAACCTTGCTAAAGCAAAGCTCTGATCAGGGGGCTCTGCTCTG	6.085
22	A_55_P2044684	Rspn1	CTCTTAGCTGTTAAGTTGTTTTCGGTTAACAAAATAAATCTCAGGTGTTCACTG	6.034
23	A_51_P204740	Cd34	CCAGAGATGAGAGGATTGGGTGATTCTCTCTGAATAAACGTGATGAGTAAAAATGATG	5.987
24	A_55_P2032094		ATGTGTGATAATTTGAAACCAACAATTGGCTCATATTTTAAAAGCTTTGTGTGA	5.888
25	A_55_P1980204	LOC100044518	TTATAAAACTAAACTCACGGTTGACTTTGCTGACTCACTGGAGGCTGCTGAG	5.883
26	A_55_P2047305	Adcy5	GCAAGAGGACACCAAGGCAAGGAGCAGTGGCTGAGCAAAAGAAAATTTATAAATAA	5.861

27	A_55_P2362877	LOC100044518	ACAGGGCTAGGAATGGAGAAAGAAGCGCCTTGTTTT CAATAAATGGTCAGGGCACTCAT	5.852
28	A_55_P2081785	Slc45a1	AGCCAGCCAGGCTTCTAGTGGGATGTAAATACGGGCT AAATAAACAAACAGCAGCAATCTT	5.723
29	A_55_P2137049	AA467197	CTGCATTAGCAAGGTAGCACATAGTCTAAAAT AGTTTCTGTGTTATTGGTGT	5.654
30	A_51_P176352	Ndrg2	TCAGGAGAAGGTTGCTGGTGGGTCAGCGATCCTAA TGTGATAGAAATATCCAGCATGT	5.609
31	A_55_P1984243	Naip2	TTC TAGTACATTC ACTCTAGACAGGCATGGTCAATC CTAGTACTTAGGAGCCTGAGCA	5.560
32	A_52_P220573	Serpini1	TGGTGTAAATTCA GTGTTCACATTCTGCTAAGAAC GTCTTATCTGTATCCTTCT	5.555
33	A_55_P1997831	Dbndd1	TTTCATGTGCACAAAGACAAACACACTGGCTGCTGA CCACAAATCAAAGACTGTTTG	5.548
34	A_55_P2072233	Zcchc12	GTGTTGTTATGCTGTATTTTCAACAAACGTAT GTTGGCCCTTCTGTCAAT	5.539
35	A_51_P397468	Rundc3a	GGACAGCGCTCCATTCTGGTGGCTCTGAAGGCTGCCT GGTCCCTCTGATTCTCCACA	5.531
36	A_55_P2051313	Gstk1	ACAAGTGCCTTTGAAAAGCCTAAATTCTGCATTCCC ATAAAAATAAAGTTGATGCCACC	5.495
37	A_55_P1966102	Nme5	AAGTTACCTTA CTGTAAGAAGCGCTCCCATGTTCTT ACAT AAAAGCATATATGTGT	5.472
38	A_55_P1976200	Lmtk3	AGCCTGGCCCCTGGAGGGGGCTCTGATTCAAACCTTC GCGTGACATTTCACATTATT	5.409
39	A_51_P458778	Hpgd	AAGCTCTTACAATGGAATATTAGTAATAAAAGCT TGTCCGGGACCTGCAAGCGAAC	5.392
40	A_66_P135185	Etv1	TCACAGGCCAGTAGCATTATGTATCTGGGCCATCC TGCTGTTTGGTACTACAAAATA	5.364
41	A_52_P533724	Ino80	ACTCGGCTCAAGTCTCAAGGACATAGGGCTTATCTA CTCTCAGATGACCGAAATGATA	5.100
42	A_66_P125828	Gm6684	GCTGCCACCACGGTTGCCATGTGGATGGTAAACCT ACATGCGCATGTGGATCTGA	5.033
43	A_66_P116998	Tro	CTATTACCCATCAGCTGAGTGAACACTGAAAAATCTG CTGTTCTGCTTGTGTTGCT	5.021
44	A_55_P2006093		TGCAAGTGAACATGGATATCCCAGATATGCTCGAGCC AAGAGGGCATCTGAAATCTACA	4.852
45	A_52_P49378	Kif1a	TGTCATAACCA CCTGACGTAATGACTAGTATCCTGC TGTTACACCCGAGTGTAGCT	4.829
46	A_66_P121288	Tceal6	ACCCA ACTCCAGTGCTCTGTCTTACTGAGGATT TCACCCATGTGATGAAAAAT	4.777
47	A_55_P2169829	3632451006Rik	GGCTGCAATTAGAAACTCATAGGATACATGTTAGTG GGAGATAGGTAGAATAAATATT	4.707
48	A_55_P2427377	3110068a07rik	CTTCATCTTACAAAGCTGTAGCTGCCATTGCTCT GCTTATTTAATAAAGATACC	4.635
49	A_55_P2008987	Ch25h	TGCGTAACCTCAGAGAGCGATGCGCTGTACACTGA TCCAGAAGAAGAAA CAGACTTGA	4.630
50	A_55_P2004867	Serpinb2	CATCATAAGTAAGCATGCTTACTTACACACTGCTATCT GTTGTATAAAACTTAGCAATCC	4.617
51	A_55_P1982902	Tceal3	GCTCTGTCTTTAGTACAGGATTTACCCATGTGCA TGTACATTGAAAATAACAAT	4.577
52	A_51_P270733	Syngr1	ATGTGACTTCCCGCAGATCAGCAGTGTCAAGGACCG CAAGAAGGCCGTGCTCTGACA	4.564
53	A_51_P256246	Tspan13	AGTCAGGGCAAAGGAAGATACCATTGGGAAATGCT TTGGTGTGAACATCTTCAGCTC	4.510
54	A_55_P1953846	Abca8b	CACATCCCTTAGGACACTTATGCCATAGTTCTGTAG AATGTTGAATAAACAGTTACTT	4.498
55	A_55_P2048759	4930583H14Rik	CTTCTCTTACTTTGTTCTATGTAAGACCAGATTACTGG GTTTGCTGTGAACCTTAA	4.468
56	A_55_P2017710	Igsf9	CGCGCGCGAAGCGCGCGTCGAAAGTGGTGTATTAG GTGTTGGTGCAGGTTCTT	4.444
57	A_51_P510418	Aldh1b1	AAATCTGATTTAGCCTGAGTCCCAGTGAAGTGTAC AAGAAGTGTCAACCAATAAAGT	4.415

58	A_55_P2045642	Stmn4	GAGACCTGCCCTGCAGCGGGTGGGATAAGGTCTGTGTCGCTGTTCATCTTT	4.376
59	A_55_P2048119	Slc29a4	CCTGCTACCTGTTCTGACTACCGCACTGGCCATTAAATATGGCAGAGACTGCC	4.360
60	A_55_P2024463	Tbkbp1	CTCGGCCAGCCGATGGCAGTGAAACGCCACTGTCCATCGAATGTGCCATTCTGATCCAAAT	4.331
61	A_55_P1962771	Cyfip2	GTACCTGTTGAGTCGATAAAACATTTCATCTCCATTAAAATGCTTCAAACAGTT	4.327
62	A_55_P2042016	LOC100048058	ACCTGTGTTCTGACTACCGCACTGGCCATTAAATATGGCAGAGACTGCCACCGCT	4.284
63	A_52_P482897	Areg	CTCAGAGGAGTATGATAATGAACCACAAATATCCGGCTATATTAGATGATTCACTGAG	4.263
64	A_55_P2123502	Jam2	TTCGTGATTCTGTATGTGGCCCTGGCACATGCTATGCTCAGAGGAAAGGCTACTTTCA	4.232
65	A_51_P182257	1700019N12Rik	CGGCCCTCGAACCCAAGCTAACCTCATCTGCATGGATTGAATCCTAGAGAAATTAA	4.210
66	A_51_P459108	Insl6	CAAACATCACTGGTGTAGAGATGTACAAACTGTCGTAGGAACATGCTCGTAA	4.058
67	A_55_P2092296	Fbxo2	GGATCCCGCGCTCTAGCATTGTCCTGCCTGCTCAAAGTGGCAACTCAATAATTGTC	4.035
68	A_66_P119034	Pla2g7	TTACCAAATAAGCATTTTAATATACACTGTACTGTAGGATGTGAAACGCTAG	3.963
69	A_55_P2208579	Onecut2	TCCAGCACTTGACCAAAGCATGTGCAAGGACTCTACCTGGGACAAGTCATCTCCA	3.956
70	A_52_P63855	S100a7a	GTTAGTAAAAGAAGTTAGTTTATTATCAGGAACATCGTTGGGACAGAATGG	3.947
71	A_51_P399175	Ppm1j	GCAGTATGAGCACTGTCAGATGATGTGCTGGTCTGGAACAGATGGCTTGTAAAG	3.929
72	A_51_P389988	Slc40a1	TTCTAGAGCAACAATAGTCACAAAGTTCCCTTCAAATATCCCTGAGAAGAAATAAGAA	3.917
73	A_51_P469968	H2-M3	CCTTCGATAAAAGCTGACTTCATGCTGTTAAAGTGTAAAGATTGTACATTGGAAAG	3.907
74	A_51_P201785	Morn5	TGCTGGCTGGAAAAGCTGGCTGTAGTCCTAGCTCGACCTAAGTTCAAGAATAAGGTT	3.893
75	A_52_P60353	Greb1l	GACTCTAACGCTGCTTAACCTATGTCTACAGTATGTTCTGTTTCAATTGGTAATG	3.853
76	A_52_P476029	8430427H17Rik	GTCATAAGTATGGAATCCTTCCCTTGGACTGAGACTGTATCATATACCACTGAATC	3.843
77	A_55_P2106901	Nkain4	CGGGGGACACTGCAGGACAGGGTGGCTACAACGTGAGTTGAATCTTTCTTCTT	3.841
78	A_55_P1953301	Sord	ATCATGGCCCAGACCTGAGCTTCACACTGCTTCGCTAAACTGCTTCGCTAAACGTTGTC	3.840
79	A_55_P2109257	Nipal3	CATGTGTTATTTGCAAGAAGTGTGTACTGTGTGCAGATAACATTGAAAGCGGTATT	3.800
80	A_55_P2008889	Tmsb15b2	AGATCCATTACTACCCTGGCTGCAAAGGTCACTGATTTGCTTGTGATTTGCTTGT	3.733
81	A_55_P1977533	Eno3	CTTCACAGGAAAGACACAGGCCCTCAAGGCCCTCTCCAGAAAATAAACACTGCCAAAC	3.729
82	A_55_P2169669	Csf1	CAGCTGCATCATATATTGTATGTTGAGCTTGTAGTCTATGATTGATTCAGCTAT	3.712
83	A_55_P2070199	Speer2	TGTGAATAGGAGGAAGGCCAGTGAGCTATGTTGGTGAATGGTGTCTTCCCTTCAAT	3.706
84	A_52_P282838	Spin2	CATTGTCTGTGTAAGAGATGAGTATGTTGGTGAATGGATATGAGAAACAGCTGCA	3.697
85	A_52_P590396	Sort1	GTGTTAACCTTGACTGGTAATTTCTGTATATTGCAATATTGGTTAGAAATAAAC	3.650
86	A_55_P2263877	8430436N08Rik	CTTTCATTTCAAGCTGACTGTATTACTAGAATGAAATAAGTGTACTGGCTGGAAAAT	3.635
87	A_55_P2143219	Rasgrp2	TCTGTTAGACCAAGAAGGGAACCGCAGGCACAGCAGCTCATCGACATCGAGAGTGTGT	3.609
88	A_51_P230347	Sfrs13b	ATCTCATTACTAAACACACTGTCAGTCAGTCCCTACAGCTAATATTGCTGAATAC	3.608

89	A_55_P2149500	Kifc2	CTATCTAGCAGAGACAACCCTTCTGGAGTAACCTAATTAAAGCTGTGGGTTTCAGCAA	3.582
90	A_55_P2044582	Iglon5	GCCGTGTGTTCCAATTCATGGGGAGTGTTGAGACACACACCAATAAACGCCTTTCC	3.545
91	A_55_P2148688		CTGTGTGCAGATAACATTGTAAGCGGTATTAAATTAAAAATCCAAGCAGTCTTGAGA	3.538
92	A_55_P2146214	Zcchc18	CTGTGTGCCTCGGTATATGATGATAAAAGTGATCACATATAAGTGCTGTCTATAG	3.532
93	A_66_P119017	Smarca1	TTTACTTGTCCCCATCTCAAATGCTAATTACTACTTCCAGTGATTATGGTACTCTAA	3.517
94	A_51_P234881	Elov14	TTTTACACAGATTAATTGTTATGGCGTCACAGAGAGATCATATGGAAGAGGAAATG	3.505
95	A_55_P2090070	Myh14	TCTGTGTGCTCATAGGTAAATGCTCATGGCCCCTCATGCTCCAGACACTAAAGAAATAAA	3.466
96	A_52_P645862	Agtr1a	TCCTCCACATATATGTACATATGTATCTCTAAGCTGTCA	3.465
97	A_55_P2047275	Tspan7	CTCTGTCTAGCATGCCAACAGAATGCATTGATATTGTTAACAGCTGCATGAACATTGTGATACATGTATT	3.405
98	A_55_P2017914	Csf1	CGTCAGATTAAGATCACATTAGTTAACAGCTGCATCATATTGTATGTTGAGC	3.399
99	A_52_P243391	Sema4f	ATGGCTTCATCAGATTCTCAAGGCCTTAATGAGGTTAACGGACCATGTCAC	3.391
100	A_55_P2082215	Ttbk1	CTGACACCAACACCTTCAAGTCGCTGTCAAACTAGATCGGCTCTCAGAAGGAAAGTAG	3.391
101	A_51_P435339	Epor	GAACGGGATTGGTGAAGCCATACTTAAAGTCAGAGCTGACCTTGGCCCTGAGCAGGAA	3.378
102	A_51_P131164	Enkur	GCAGTGTGAAAGAATAGTTGAATTATTGCTGCTCTAGAGAAAATTTCTCCTCCACT	3.361
103	A_55_P2147101	Syt14	CCAGGCTCAGACTTGTCTTGATATTCTACTTTAAATATGCATGTGTTCAATAAGC	3.339
104	A_51_P509643	Snca	GTCTTGTGCTGGATATTGTTGTCACACTTAAATTGTTAGAAGAAACTTAA	3.338
105	A_55_P2068673	Stmn2	TCTCTTGTATGTCATTGAGCAAGCTGTGATGAATAAAGAATTGGAGTTCTGTGAACT	3.316
106	A_55_P2024461	Tbkbp1	GAGAGGGCCAAGTGTCTCTGAACAAAGTTGAAAGTCCAAATAAACTTACCTGTTCCATC	3.309
107	A_55_P2024841	Gstt1	ACTATAATCACTACTTCCCCTTGAGTCTGGTAATAAACCTGGGCTT	3.266
108	A_51_P112223	Gsta4	GCTGGAGTGGAGTTGAGGAAGAATTCTTGAGACAAAGGAAACAGTATGAGAAGATGCA	3.259
109	A_66_P122086	9030619P08Rik	GCCCTACTGCGTGCAGAAAGAGTTCAAGGGCTGGAATGCTACAGTGTGCTT	3.258
110	A_66_P129029	Taf10	GCATAATTGGCTCATCTCACTAGCTGCCAGAAATTCACTCAGATATTGCCATGAT	3.245
111	A_51_P460048	Cnrip1	AACATAAAGGTGGCACTAAATACATACCCCTTAACCTGAACCTTAACTTGTACACCGTGTATGGA	3.234
112	A_55_P1959425	Slc16a3	CTGGGCAGTGGCTGTTCACCTGAGTCCCACCCCTTGTAAATAACAAACTGCTGATTC	3.227
113	A_55_P2123496		CTAAAGTCTGAAGTCTTAAATTGTTCAAGGCAATCGCTAACTGTCAACCCCTTATGTAAT	3.221
114	A_55_P2147083	Tnfaip6	AATTATATTAGGATTAAGGTTTTCTGATAAAATATTGCTGTAATAATACCTGGAT	3.217
115	A_55_P2021704		ATTCTGCACCGTTCTTGCTAACCTGGAGGCTGTGGATAATACAGCAGTTACTACTGA	3.211
116	A_55_P2126790	1500009L16Rik	CAGCATTGAAAATGAACCTGTTAAATGTGCATGCTATACACATATGGATAAGTCCTC	3.202
117	A_52_P365660	Lrrc4c	GCATGAACCGTTATTGATCCGAATGAACCTAAAGACAATGACAAGAGACTCAGATATA	3.201
118	A_51_P344376	Gpr162	CCATCCAAGTGACCAAGATACCCAAACGCACCCGTCTCAACCTAGCAAAATGTATTAAAA	3.200
119	A_55_P2043200	LOC635905	AGTACAATTACGCAGTGTGAATAGGAGGAAGACAGTGAGCCAGTGTGATTAGGTGTTGT	3.198

120	A_52_P549827	Mgst1	AGAATTCCATATTTCACTGGATTCAAACCTTTCTGA GGTTTAATGCGTAAAGGAG	3.195
121	A_55_P2129261	Arhgap36	TGATTGTCAAACTCTCTGGCATTTCATCATTAATAAA CATCTGTGTTGACAGCAGC	3.189
122	A_52_P151116	Kcnab3	GAAGACTTAAATCTAGAACTAGAGTCACACTTGTT TACAGAGGGGATAAAGITGG	3.187
123	A_55_P2015495	Abat	GGTGACCACGTGAACAGTCCATGAATTAAATGTTCC TGTGTTAACAGTATTCTAA	3.186
124	A_55_P2141943		GTCTAGGCATGTCAGATTAAGTGTAAACATCTTA TTTCCACTGATGAATCTAAG	3.179
125	A_55_P2157033	Bace2	GACTGTATCTGATTACTCTGATTCCAAGCTTCAGA TCTTTCTACTCAGAGAGAA	3.171
126	A_55_P2183587	Gli1	GGGGCTGTATTAGTCTATGTATGTTCCAGGAAAGAAC AAACTTAACATGACACAGTT	3.155
127	A_55_P2013043	Serpinb6b	CCTTCATCCTCTGCAGCAACTGGGATCTCAATT TTGGTTACTTAGTAATTATT	3.142
128	A_55_P2104988	Accn2	TTAGAGATCAGAACTCCCCAGAAAGAACAGGGCAA AGCTGAGAAATGTACACTGGCTG	3.127
129	A_51_P275454	Trim30	CATATTGCTCTAGCAGATAGAAGGTATCAGACTGT ATCTGTTAACGTTTCTACCC	3.105
130	A_52_P262219	Fos	GGACTTATTTCCAGTAGATAGAAATCAATAGCTATA TCCATGTAAGTCTCAG	3.105
131	A_55_P2067505	Slc16a3	GTGGTCTGTCACCCCTGAGTCCCACCTTGTAAATA ACAAACTGCTGATTCTAAAAA	3.100
132	A_55_P1974645	Entpd2	AGAAAAGCAAGCACCAGAGACTACAGGCTAGGAGTC AGCTCCATGCCACTTGTAAAAAA	3.095
133	A_51_P116601	A330021E22Rik	CGGGTAAAGTGAAGCCACCACTGAATGATCCTAAAAA AGAGCATCCCTACATGATGTGTT	3.086
134	A_55_P2162988	Tmem179	TGGTAGTGTGCCTCCGTGTGTCGATCCTCAAGTC AATAAAATAAAGACGAAACATC	3.084
135	A_51_P429335	Prss16	AAATGAGGAAATGATTACTGTCTTTGAGGTAGTGA TATTCTGTATGGTAAATGTCA	3.083
136	A_55_P2058671	Zfyve28	GGAGGTGGGAGAGGTATAACAGAGGGAAATTATT GTATTGAGATGATTTTATTCT	3.080
137	A_55_P1955656	Ctla2a	AACACTGTGGTGTAAACTCTGAGGCACATTGCAAT AAAACTACTAGTTGGCAGTC	3.076
138	A_52_P387009	Egln3	ATCCCAGCATTATTATGCACTATGTTACTTCTTACTT GGGAAACCTAATTATCCAGAG	3.070
139	A_55_P2095899	2310057B04Rik	GTGGCTAAGTGGCTTCTGTACTTGACGTGCTTGA ATTATTGTTAACGAAATTG	3.069
140	A_52_P138806	Dlgap3	CCACACCTGTGGCTTCCCACATCCCTTGAGTATCCC AGGAAAAAATAAACCGCAGAA	3.068
141	A_51_P271425	Lhfpl4	ATGTGTCTTAGATGTTCACTGTCACATTGGTAACATT CTTTGGTCCGCCCTCT	3.063
142	A_51_P401987	Tmem37	GTGCCCTGTACGACGGCACAGTGGAGCTGGATAGGTT AGTCATGCTATTAAATCTCA	3.050
143	A_55_P1982404	Gpm6b	CTATCAGTGCCAAGGGCTCTGTAGTTACTTCAAGT GTTACAATAAATTTGTAGAT	3.041
144	A_52_P432919	Rab3d	CTATTCAGCAGACTCCCTAAACACTATCTGACAT TTCATGGTCCAGGTGACAGAT	3.037
145	A_55_P2237432	Smarca1	TAAGGCAGTGTACGGAATGCTCCCTGAGTTAGATT GACTGGTCATCAAGTCGAGAA	3.033
146	A_55_P2065364	Tdrkh	GGAGAAGTATCTAGGAATGTTGAAACGTGTTACAA ATATGTGTCTGTACACACAAAC	3.032
147	A_55_P2021187	Malat1	CGTCTTATTACCTGTAGTCGACACACCTCTACTATT ATTGAAACTTGATTGATTTATG	3.029
148	A_55_P1991079	Phf21b	GGCTAGAGAAAGTGTGTTCTAAATATTCCAGTGTAG TTTCCTCTGTATGATGCA	3.024
149	A_55_P2049752	Pamr1	TGATCCTTCCCTTCAATCTCTGTACACATTCAATA AAACAAGGTCTGCTCCTGA	3.020
150	A_51_P265495	Ly6a	TATGAGTTATAGAAGCTCAAGGTGGAGTAGTGTG GAAATACCATGTTGCCTTAT	3.007

b) Down regulated genes in SAHA treated MEF

No	ProbeName	Gene Symbol	Sequence	Fold change [SAHA] vs [DMSO3]
1	A_51_P495780	Plin4	CAGCCTGTGGGTATGAGACCTGCCCTGAATCAGGTCT GGCTCCCTATACTGCTCATGGTA	10.405
2	A_51_P378051	Aoc3	GAAAAGCTAAAATGAGTAGGCGATAAGTGTACATT GTTTATTTCTGCTGCATTCTTG	6.298
3	A_51_P397437	Prss46	TTGAGCCATCTGAAGTTACCATGTTCTGACTTTGACC AAAACCCTTAGACACCTCCC	5.949
4	A_55_P1981681	Syt8	AGAAAAATGGAAGAAGAGGCAAAACATCCTCCAAGAAA GGCACGACTACCCCCACTTCAAC	5.535
5	A_55_P2093705	Meig1	GGCAATGCTCCTTAAGAATTGGTTGTTACATTCTCC ATCGTGTAAATGTCATTTC	5.039
6	A_55_P2052016	Crispld2	TGAACAGGGGCCACACTGGTTGTTGCTATGGTTCAATA AAACGGATTGATTCTAACAC	4.843
7	A_52_P619248	Prl2c5	CAGTCAGAACGGGGTTAATGCCCTCATGAGCACCAT GAATGGAGATGAAGAAAATAAGA	4.693
8	A_55_P2057380	Gm6745	AAATGTCAAACAGAACAGACTGAGAAAAAGCCAGATA CCTTCACAATAGCCTGAAAAAA	4.679
9	A_66_P119376	Kctd12	AAAGCTCTTCTATATCAAAGGGAACAAAAACACAT GGATGAAATTTTCAGAGGTGC	4.649
10	A_55_P2004016	Crispld2	CGGTGAGTGTAGCCAAACACAAACAGGGTTGCGTGC TCCAGCCAAATATTCTTAGACC	4.607
11	A_55_P2004752	Prl2c5	GGTTCTGCAATGACAATGAAGATGCTCGCATTG TCTTCATATGGCATGATCAGCT	4.505
12	A_55_P2076866	Megf6	CAGCAAGTGGGATCAAGGGTTTGTAAAACCCAGTGA GTTAAAGGCACAGTGGTGTCCCC	4.405
13	A_51_P235088	Dusp27	TGGGAAGATGTAGAACAGACTCATCTAAATCAGACTCG CTGAGTTGGGCCAACAGGAAA	4.186
14	A_55_P1994128	Tmem184a	AGAGTTGCCAGTGCGCCAGCCTACCAAGCAACTATCTGC TTATTATAGATAAACACCTTG	3.928
15	A_51_P352385	Ism1	GGGGTGGGTAGTAAGTGAATGTGCAGAGTCAAATCTA AGACATCGTTCAATGGCTTA	3.858
16	A_55_P2040893	Tnni2	AAGCACCAACATCCAGTCTGGGAGTACTTGGCCTCGC TCCAATAAGGATTACATCTC	3.832
17	A_55_P2172196	Thns1	GCCTGGGATACATGAGGTCTGTAAAACAAACAAA CAAACAAACAAACAAACAAACAA	3.737
18	A_55_P2385792	4933431K23Rik	CTACAAATCCTTTGACAGATGGGAAACTCACAAATG TGGAAATCCTTGAAACATAAAAAA	3.720
19	A_52_P382886	Gjb2	CAAGTTGAACCATTACCACTATGCCTATGTGTATCCTA CAAGATGACAGTCACAAATC	3.710
20	A_55_P2045571	Adam12	GACCTAAGATGAGATGTTACTTCTATTCAAGGCCTT ATCGGAAATAGCTCCCCACCT	3.604
21	A_51_P205215	Klhl30	CCCTGGGGTGTGTCAGAACAGCTGCTCCGGGGATATG CTGAGATGGGGTGGAGCTAACAT	3.577
22	A_55_P1960631	Col8a2	ATGGTCTCTACTCCACCGAGTACATCCATTGTCCTTCT CAGGATTCTGCTGTCCCC	3.575
23	A_55_P2130032	Zfp599	ATGAATGTAAGGGAGTGTGGGAAATCATTCTACCAAGAA ATCAAAACTCACTCTACATCAA	3.549
24	A_55_P2083879	Vsig2	ACTCTGATCGCTGAGGGTGGTGAGCGTCCATGTTAAT AATTAAAGCCTAACCATGCCA	3.517
25	A_51_P372393	Angpt4	TCTCCAACCTCAATGGCATCTACTATTCAAGTTCATCAGC ACTTGACAAGATCAATGGCA	3.493

26	A_55_P1987430	Fam196a	GGATGACCCTCTCCTGGAAAGATTGAGCTAAAAGTT TCATACAAAACATAAGTAAAAAA	3.467
27	A_55_P2130501	LOC100044727	AATGATGGGATGTATCCCAGTCGACACACCATACCA TATGGGGATGTCCCTAATTTC	3.444
28	A_66_P116372	Soat2	ACACGTTGGTCTTCGCTTCTCCAATGCAACAATA AAAATCTTAGTCTCGGACTGG	3.431
29	A_55_P2115851	9930013L23Rik	ATCTGAGAGTGGTGGCTCAGACCAGGATCTTCAGC TTATGTTCACTGAGCAAATA	3.409
30	A_66_P123449	Gm847	CTTGCAACTTGAAGGACTTCACAGAACGACATTGCTA CTAAAAATAAAACATCTGTATC	3.330
31	A_55_P2069659	9930013L23Rik	AGGGGAACCTCACCACACCCAGAAACATGGGAAGG CTTCTCTGGAAGGTGATGGTCT	3.320
32	A_55_P2092551	LOC100044328	CCATTATATCTGTAGCATTGTGACTCTGATGTTCTTA ATAAGCTTATATTCCCTGGC	3.269
33	A_55_P2348126	1500032F14Rik	CATCGAGTCCAGGCCAGCCTCAAAAAACAAAAACAAAA CAAAATAAAATGGCATTCAAATC	3.251
34	A_66_P103185	Olfr1418	AGAGAACTCAAGGATGCTTGAGGAGAGTGATAATGA AATTGGTTCTGATCCAAACACAA	3.248
35	A_55_P1968799	Krtap1-5	CTGCTAAGAAATAGGCCAGACCCATTCTACACTTTCCA CTGGATCCTTCCTTATTTTT	3.245
36	A_55_P1995473	Ptger1	CCTGCTCCAAGCACACTCCAGTCAGATGCACACAGAG GCTGAAAATGCATGTATGGAGT	3.228
37	A_55_P1995055	Prr7	AACTCCTAGCCTGACTGCGAGGCTTTAAATGCTTCC CTTGGACTGCAGGGAGGGGTGG	3.216
38	A_55_P2138718	Gm14483	CTACTAGCTGGGGGAGCAAATCAAATATGCTATTAAA GCATCTAGATCAAACCCAAAAAA	3.215
39	A_51_P220150	Angptl7	TAACCCCTGAGGTCACTTAACCCATTTCCTAACTGAG GCTTAGATGACACGAGGGAAAA	3.205
40	A_55_P2315747	4930571B16Rik	TGCTAGAAAGAGAGGTTGGAGTGTAAAGGAACCTAA TAAAAGTAGGTTCCAAAGATCT	3.187
41	A_52_P381484	Spon2	CCACAGGAGGAACAAACGAAGAGGGGCAGTTTCG AAACTGGCCCTGTGTGCGTTG	3.182
42	A_55_P2128929	Cc2d2a	AACAAAGATGGAAGAGTACAGAACATCTCATCAGCAA TGGAAAGCCTGGAGGAAAGCCCA	3.181
43	A_52_P89335	Tmie	ACCTGGCAGATAAAAGCTTGAAACAAAGGTAACAG TGTGACAGACCTGAGGCACTGA	3.152
44	A_55_P2121956	Gck	ACATCAGTGTCCCCAAGAGAACGCCACCA GCATCTCTCAGGAAACCACCCA	3.151
45	A_51_P462271	Acan	ACAGGCTGGCTGAAGAGAACAGCAGAGCCCTCTCTAGG GACCTTCATCTGGTCAACCAA	3.143
46	A_52_P484956	Nnat	TGGATATATTCAACCAGTAATTGAATCCCACCTTACCA AAACACGTTCTCTAACCCCG	3.105
47	A_55_P2344598	E330037I15Rik	GAGGAGTGTACAAGTCTGAGGTACCATGATCTACTT AGCAACACCTTCTTGTAAAAAA	3.092
48	A_51_P315890	Kcnk6	TGGGAAGTGTGACTATTCTGGTCTGAAAGCAGAA CTCTGTGAGTTGAACCTTGTCT	3.054
49	A_55_P2452914	N4bp2	AATTGTCTCTGGAGTAGATACAGGCACTGTACCCAGA CTGAACCCCAAGATTTGCTCT	3.053
50	A_55_P2002903	Smoc2	GCTCATGTCAATGCTGTACAAACGAGTATGATCCTA ACTGTTTGATAATCTTTAT	3.044
51	A_51_P282616	4932425I24Rik	GGCTCTATTGAAACTTAACCTTGCAATCTAAATA AGACTATTGGTTATTGGGGGG	3.019
52	A_51_P218653	Jph2	TCGGACCTAAACCTGCTCACATCCACTCCATGGACA TTAAGGAGGCCAGAGAGC	2.991
53	A_51_P507051	Bhlhe22	TTCCAAAAGGGGACCTATTGCAATTCCAAAACAGAAAA ACATCACAGCAATAGATTTAC	2.983
54	A_55_P2197777	3110001N23Rik	AAGAGTCAGAGCACTCTGCCCGAATTATTTAGCAA ACAGAATTGGCTGACTC	2.976

55	A_52_P409769	Mrv1	CAGCCTTGTTCAGACGTAACTGTGAAATGGAATA AAAGTTTCCCCTCAAGATGCC	2.975
56	A_52_P84027	Cyp7a1	TTGTTTTAAAACAAGTTTATGACTCCCTGAACGTGAAT GTATCCACATACCTTCCCATG	2.972
57	A_55_P2079732	Myo1h	TTCAAGGTGGCGCTGTATCTAGTCGCTCCTGAGAGCC AACCTAGAGTCTCCCCGTCTGC	2.962
58	A_55_P1995104	Btbd19	ACTGGTGGTACGTGGGCAGGCTGCACCCTTCCACA GCACTTCAAGCCTCATCAACAA	2.962
59	A_52_P283055	Slc5a3	GGCTTCAGTTCAAAGAAAATAGAATTGATATAAGCC AGGTTACTTCCATCTTGAAAGG	2.956
60	A_55_P1968618	LOC100045418	CTTATGCTTAGATTAGTTGCCTCTGTATTTGTTACA GTAAACACGAAGCTAACCGTT	2.947
61	A_52_P87763	Olfr860	CTCCATTGTTAGAGTTCCTCATCTGGGGGGAAATGTA AAGCGTTCTACTTGTGGATC	2.946
62	A_52_P657360	Tnni1	AGGTGTCCATGGATCTGCGGGCCAACCTCAAGTCTGT GAAGAAAAGAACAGACAGAAAAGG	2.930
63	A_55_P1997115		CTCTTACTGTCAAGCAATTACAAAGTAGCTCTGCCGA ATATTGTTGCAAAAGCCTGTAA	2.914
64	A_51_P208922	Stc2	AAGCAGTGAAGTGGAAAGATGAACAGTCTGAGTATTCC GACATCCGGAGGTGAAATGAAAA	2.911
65	A_51_P302520	Myom1	AAGTCATCAGATCTTATCCATAGATGAGGAGGCA CCATTGAAGAACACATTAAGGG	2.888
66	A_55_P2049368	Olfr1097	CAAAGAAGTGAAGGTGCTGTTAGAGTTATGAAG AAGAGAGAGTGCACCCAGAAACT	2.882
67	A_52_P28960	Gdf6	CTAAAGTTACTGGAGGTGATTGATATAACAAACATT TTACAGTATACTTCTGGACG	2.882
68	A_55_P2080880	Clcnkb	TGACTTCTGGGGTTGCCTGCTGCTAACCAAGGAGCTCT GAGAAAAATAAAACTGATGTCT	2.866
69	A_51_P372550	Cgref1	CTTCAGTGGAAAGTAGGACTTCTGTGCAGCTCAGGG AGACCATAAGCTGAGAACAGCAGCT	2.865
70	A_55_P2028971	Odz3	AGGAGTTAATTATGTAAGTGTAAAAAGTTATAC TTAAAAATAAAATGATAAAAAC	2.854
71	A_55_P2126363	Wnt10b	GGGTGGGAATGGATAATTATTTACTGAGATGTGTT TTGGTTCTGTTGAAACTAAA	2.850
72	A_52_P1011	Fgf14	GCTGGAGATGCACCTAAAGATTTATGCAAAGTGTTC TATAACAGATATAAAAGCTTC	2.840
73	A_66_P118600	Lama1	ATGTTGAACTAAGCCACACGGACAAACAGATACCTCTA TTAAATGGTTAAACGTCAGT	2.840
74	A_52_P173442	Wscd2	TGGCCTCTGGTCACGAACCTCTGTTGAAGATT CTCAGGTCAACACTATCATTAA	2.838
75	A_52_P294514	4930542N07Rik	TTCTGGTTTCAGTGTGATAGCTTCAGGATTAGCTGC ATGAAAGATCCATTCTAATGA	2.838
76	A_52_P249856	Cc2d2a	TGGTTAATATTCAACACCATGATTCTCCACTAAGGAT AAATTGTGATGTCAAAGGCC	2.826
77	A_51_P501844	Cyp26b1	GTTCTGTGTCTCGTTGTGGTAGCATTAATGGGTGATG TAGTCTCACATTCTAACTATT	2.807
78	A_55_P2143376	Gm6651	CCAAGGCACAATGCCCTGTGTTCTGGAAAACCATAA ATTCACTTTATATCCTCTCCC	2.804
79	A_55_P2037121	Tmem106a	TTCAACAGCAACTCTATCCCATCACAGTGACACAGCT GACGGCCGAGGTGCTCCACAG	2.803
80	A_55_P1980401	Cbx7	TTAGATGATTTATCTGATAGATGAGGCAAAATTATTA AAAAATACATTTAAATGTCTTT	2.801
81	A_52_P505192	Ntn3	TGACCCACAGATTTCTTGACAGACCTGACTCAGTTCA GAAATAGTGTCTGGCTTCTT	2.794
82	A_55_P2032853	Entpd1	CTAGGCTTGTGTATGCACATGGATGTGTAGAGAGA GAAAAGTTCAATTCTAAAT	2.792
83	A_55_P2027392	Gpr146	CAAAATTCTGTGAATGTGAAAAAGAAAACACTGATGG GATCCACACTCTGAAGACTATT	2.791

84	A_55_P2132323	Mthfr	AGTAAACTACTGCGGCTGGAAACCATCCTGCATATGA CCTGCTGCCAGCAGCACCCGGA	2.776
85	A_55_P2428514	Retn	ACTCACGTGCGCGAATCCACACACAAGCACACATACTT AAAAATAAAACAAAACAGGCTG	2.768
86	A_51_P304397	Cpm	AACAGGAATAATGGATGGGAAAGTGTCTCAGCTAC CGCTACAGACCTTCCAGAACGC	2.764
87	A_55_P2099650	Slc24a3	ACTTATCATCATTGGTATGGTTTCCCAGTCCTTGT ACACATCCTGGTTGAATTGT	2.761
88	A_55_P2062627	2210411K11Rik	AATGTGGGCAGACTGAATCTGAGTGTAGACCACACAC TTCAAGAAAAGGTTGGCAGTG	2.759
89	A_55_P2143832	Col4a4	GTACCCATGCAAACGCCACCCACAGACATACTCATAC ACATAGAAAACAAAGTAATAA	2.755
90	A_55_P2141088		AAACCGAAGTGATCCGTAGCCTCGTTGACAAAT AAAAGACTATTTGTGTTAAA	2.750
91	A_55_P2086820	Zfp651	ACATGTGGCAAAGCCTCAAGAAACTGTGGTCTCTCA TGAGCACACAAGATAGTCAC	2.749
92	A_55_P2068233	Phactr1	AACTCAATGAGTTAAAAGTACCGAGATGGAAGTCCA CGAGTTAAGTAGACACTTAACCA	2.743
93	A_55_P2141084	Odz4	TCGCCTTATGTTGCCACTGGGATAAGAGGGATGTGTT TCGTTAAGTGCTCCCTGATT	2.732
94	A_55_P1967643	Plb1	CCTGGGAGTTCATGATCTCTTTGGAAAGATAAAAAAA GAAAGAGAGGCCATACTCAGTG	2.699
95	A_55_P2107045	Myl4	GTTACTGTTACGGAGTATTGGACTCACATGGCTCTCT GACCCACAACCTCCCTGGAAA	2.694
96	A_55_P2019294		AGGACTAGTCATCAGCAGAACACCCACCCAATGAA GCATGCATATATTCTGTTGAAC	2.693
97	A_55_P2333580	BC020402	TTTATTTGAGAAGTGTAAAGTAAATGAAGGCATGT ATTAACACAGCACTGGGACCCCC	2.693
98	A_51_P520849	Sfrp2	TCGGCATCTAAGTCTCAAACATTTCTGTTGCTCGTTTA TGCCCTCATGAGCTCTGACCA	2.687
99	A_55_P2160825		GATAATCAGATCTCAGACAGTTGTGAACCACTTCAG AGTCATAAACCTCTAGTCTGA	2.680
100	A_55_P1978047	Aven	ACTGGGATCGCTATCAAGATACTGAAAAGGAGGTCAA TGGTAAAAGTGGAGAATCTCAGC	2.673
101	A_55_P1961180	4930429B21Rik	CTTGTTCATAGAAATGTAAGTCTCATGACAGAGAAAAA TGGCCCCACAAATTAGAGCTTT	2.666
102	A_55_P2052690	Synm	GTTACTACGGCTGGCTCGTCATCTTATACTGTCA GAGATGTGCGGACTTATTTTT	2.664
103	A_55_P2277475	9330179D12Rik	GACTACCTGTAACACCTCACCCATTGCTATGTAATAAG CTTAATAAAAGTCGTTGGTTCC	2.664
104	A_52_P446457	Ly6gf	CCAGGGGTCTCGGGACAGAGAACCTCAGTCCTCATT TCAAGCCTGAAGTCAGGTCTA	2.664
105	A_52_P498193	Aldh1l2	TAAATTGCCCTCTTAAGTTTGCTTTTGTTCTGATT TCAGGATTATATGGGGCGG	2.663
106	A_52_P362981		CAGGTTCCCTCATTTGAGATGGAGTGTGCTGCTGTAGTA CACCAAGTTGACCAAAACTAA	2.658
107	A_66_P105711	Ap4s1	CCAGTGCATAACTTTAAAGGATATTGCAAAGAAACT GGGAAAGGGTAAAAATGATC	2.650
108	A_55_P2145237	Gm7210	ATTTCAAATTCCCTCATGAGTCCTGCAGGAGCCAG GACTAGATCTCAAGCTTCTTA	2.639
109	A_55_P2133948	Olfr1465	AGCATGAGGAACAAAGAAGTCAAAGCGTCATTCAA ACGTTTCCACAAAGCAAATAG	2.632
110	A_55_P2240823	Epb4.1	AACATCATGACAACAGAGAAGAGTTAGCGGCTGAAG CTGAGAATTCTCAGCACCGCAA	2.622
111	A_55_P2052416	Iqsec1	GCAGAGCAAATCTGAGTGTGACTACTCAGATGGGAC AATGACAGCATCAACAGCACCTC	2.614
112	A_52_P16356		CTGCCGTTAACCGTGACACATAACTAATGTTCACTGTTGT GGGAATCCAATGAAAGAAAAAA	2.600

113	A_51_P220135	Nfatc1	ATGCCCTTAAAAATGAGGACAATAGCTTGTGCATT CTAAACAAAGGACATCACTGAA	2.600
114	A_55_P2167236	Olfr1184	ATTAAGGAATTACTCTGCAGAAGGAAGCACAAAGCC CTTTCTACCTGTGCATCTCATAT	2.581
115	A_51_P487555	Cd7	GGAGGTACCTGCCCTGGAGCCGCTGGCCAGGAAAAA TTAAATAAACACACAAATACATT	2.580
116	A_55_P2073694	Gm266	TTCTGGAAATCACGACCAAGAGCAAACGATGGTGG ACCGCGTGTTCACGCAGGTGGTG	2.577
117	A_55_P2086785	Olfr362	TTGTTTAGTCTCGTAATAAGGATGTGAAAGGTGCC CTCCACAGACTACTGAGACAGG	2.573
118	A_55_P2302240	AU017834	TTCTGGGTGCATTTCTCAACACATTGGGTTGCACTC TTCTTAAAGCTCTCTCCC	2.569
119	A_51_P409010	Comp	CTGCGCTACCGTTGCAATGATAACAATCCCTGAGGACTA CGAGAGTCACCGGCTGCAGAGA	2.567
120	A_51_P203182	Apob48r	GAGTTGGGAAACGTTGCCAGGAACCTCCAAGCACATA GGAGTAGAGAGGGGTTCTGTG	2.560
121	A_55_P2081318	Gnas	ATGGGGGACATTGAAGGGATTGCTGGAGGCCATCCCC AACAAACAGCAAACATAAACATT	2.549
122	A_51_P456721	Azgp1	AGACTGAGTTCACTCTAACATGTAGATCAATCACCTG CCTTGTAACCTCTCCTTGAT	2.546
123	A_66_P101724	Fam124a	CCATGTCATGACCCCAAAGCCACACAGGGTGTCAAG GCATGCTATTGCCCTCAAACAACA	2.538
124	A_55_P2114626	Hiomt	GACATCGGCGGGGGGGAAAGCGACATCACAGACAGGA AGTGAAGTCGGCACCCAGGACTGA	2.534
125	A_52_P103998	Htr1b	CATCATCTACACCATGTCCAATGAGGACTTCAAACAAG CGTCCACAAACTGTATACGCTT	2.527
126	A_55_P2165199	Cxcr6	AATGTATAAAACAGAGCTTAAGACTTTAACAAATACAA GAGGACTCTGGGGCTTGCTC	2.524
127	A_55_P2034968		AGAACAAAGACTCTAACTGCCATGTGCCAGAATGAGA TGGTAAAAACAAACAGATCTGC	2.523
128	A_55_P2089520	Col10a1	GCCCCGAGTATTAATCTACTTGGTATTACGAAGCAAT AAAATGACATGAATAGACCTT	2.523
129	A_51_P444822	Olfr574	TACATTATGAGGAGCCTTAGAGGAAGGTGGCTAGAA GGAGACAGTTTCCAGTACATGA	2.522
130	A_51_P204442	Phf19	GTCAAATTGTGGCTTCTGTTGGCTTCAGTGAACATG GCAACCTCCAACACGTGTTTT	2.518
131	A_52_P386682		CCTAGGTGATGCTGTCTTACATACAGCCTAACAGAGTC CTCTGAAAATGGCTTACTCTGT	2.513
132	A_55_P2401624	C630004L07Rik	GGATGCCTTATTCACTAAGAAGCACACACAGAATTG AAAACACTTAAATAATGAGCA	2.510
133	A_55_P2009988	Trib3	GGTTAAGTGTGATTTCATCATGTGCCAATAAAAGA GAGCTGTGGTTGATATGTG	2.505
134	A_51_P148684	Pou6f2	AAAGACTTCCCCAGTCATCATCTCCCTGTATGAAA AGACTAAAAACAAAAAAACTAC	2.504
135	A_55_P2112142		CAGAAAAACAAACATATGTTCTCATAAAGAGTGCC TTCCACTTCCAACCTCACAAACC	2.501
136	A_51_P218953	Zfp536	CAGACTTGTGGTAAGTTAGAACCTCTCCCTCA GTTCATTTCCCACAAAAACGTC	2.494
137	A_51_P510882	Adam12	GAAAATCAAGTTAGCACTAATTACAAAATGCTTTGAT GCAACCTGAATTCCCAATGGC	2.494
138	A_51_P204247	C8a	GAACCTGGATGGAACCTTTAACAGATCAACATGGAGG AGACTTTGAAATAGAAATCCAG	2.494
139	A_52_P495869	Mafb	GCCGCAACGCAACAGAAATTGTTTAAATTCATGTAA AATAAGGGATCAATTCAACCC	2.491
140	A_55_P1961127	H19	TAGTCTGGAAGCAGTCCATCATAAAGTGTCAACATG CCCTACTCATCCTTGCCCCCT	2.485
141	A_55_P1963439	LOC100048608	ACAGTCACCACCTCGAAGGAACTCTCTTAAGGCAA CAATGGTAAAGTGGACTCAT	2.478

142	A_65_P11603	Ldb3	GCATAGTGTAAAGATTAAGGCTGAATGTCGATAGTT ACCATCACATTTACTAGTGCA	2.476
143	A_51_P519648	Mical3	AGAAACAAAAGATATCCACCTGGAAATGGAGAACATG GTGAATCCCCAACACTCCCAA	2.475
144	A_51_P207706	Fam180a	CCTGTAATGAGCAGACTCTGAGATATACTTACACAC ATACCCAAGAGTAGGGACTGAG	2.472
145	A_51_P207591	Anxa8	ATCCTCTGATCGTGGTCTCCGAGCCTGAAGAACATGAC AGAACTCTTCAATATTGCGTT	2.468
146	A_55_P2052696	Synm	GTAAGCTAACACTGGAAAGGAAATAGGTGCGTTTT CTCTTCTACATCTAAAAACA	2.464
147	A_55_P2107901	Dlk2	AAGACTTGTGAACTTGTCTACCTGCTCCAGAGCCTGC CTCACTGGGCACCCCACAAATG	2.463
148	A_55_P2054688		CCACAGATTGCCACTACATATTCTATGAGTGTAGGT CATGATGGAAATTAAAGAATAT	2.462
149	A_55_P2396370	A730056I06Rik	GTTCATGATGCCCTGGGCTACAGCATGATAACCTGTC TGGAAAAAATAAAAAATAAC	2.461
150	A_55_P2122096	Gm2327	ATTCCTGAACTAACAGTCTAATCTGCTGAAAGGC AGCTGGCTAACTGCTGGTGTCT	2.446
151	A_52_P525183	Acot2	GGGGAAACCTCATATATATTACAAATGTCAGTCAG GTTAGTTCATTTGAACATATT	2.437
152	A_55_P2119927	LOC100047419	AGCGCTTCAGACACGAGAGACTTCAGAAGATAATAC TAAACAGAACTAAACGAAAAAA	2.435
153	A_55_P2172935		CTAACTCAGTTACTATGGATGGACAAGGTTGCAGGTA ATGGATTCAAAGTTCAAATTAT	2.434
154	A_55_P2013630	LOC100046931	ACAGTCACTTGAAAGCGGCAGACTGGCCAAAGCGC AAGGCTCATGGAGGTGTCCCC	2.433
155	A_55_P1958597	Slc27a3	AGGGTTTCGGGTATCTTTGTATATGGAGTCATTATTT TGTAATAAACAGCTGGAGCCT	2.432
156	A_55_P2131989		AGTCGTAGGGCTCAGTGGTGGAAAGCAGCTTATTCA GCACCGAAAACAAAACCTACAAA	2.427
157	A_51_P302942	Rasl10a	GGACAGGTAGTTTACCTGAGACCTTATTGGGTCTATA AGCACAGATGGAAAGGACTTGA	2.422
158	A_55_P2063312	Mgll	TATGATGAGCTGGCTATATGTTGAAGGGGCTGGACA TGCTGGTATTTGCCCATGACCAT	2.421
159	A_52_P622694	Adal	GAAGTTGGCATTGCACTTGCAGAGATTCCAAACAGG AAAAAAGAAAATCAGATGCTGCT	2.421
160	A_65_P19089	Esrrg	GGCAGTCTTATGTGCAAAGATCGTGAATGGACAAAAC AAAAAATTAAACTGCTTACAATG	2.419
161	A_55_P2232325		GTCATCTAGGTATCTCAGCCACACGAAAAGGATTTAA ATAAATTATACTGCTATTGCC	2.417
162	A_55_P2144532	LOC100045235	AAACGAAACAACAATGATAAGAGCTACCCACACTGGG TCCACGGGCGAGAAAACATATC	2.416
163	A_55_P2094434	Gm3906	AATTACATCCCATCGAGCAGGCCAGATGTATCAGCAC ATGTTTTAAACCAGCACTTG	2.416
164	A_55_P2431897	Thap6	AAAAAGAGAAAAACTTCACTGTAGAAAAAAACTCCTTC TCAAAACCCCTCCCATCACCA	2.414
165	A_55_P1990067		ATAATTITGAAAGACTCCTGGCTCCAGAAGAGAT ATCCTGGTCTGACCTAGGTGG	2.414
166	A_55_P1962209	Cxcr6	ACAGAGCTTAAGACTTAAACAAATACAAGAGGACTCT GGTGGCTTGCTCATCTAAAAAA	2.414
167	A_55_P2297806	Mapkbp1	GTAAGACACCTCGGCAGAGCAAAGTCACATCACCG TCTCCTGAGAGACACCTTCTCTC	2.413
168	A_51_P442964	Casc5	AGATGGACACTATCCTCAAGAAGATCAAACTGTCTC GCTGAAGTGGAAACAGAAACTA	2.412
169	A_55_P2206491	1810062O18Rik	CCACGAATAGTGACGGTGTACAGCATGTATTTTC AATATCTCATGAATACTAACAG	2.408
170	A_55_P2302290	E230012P03	GAGACCCATTAGGGGTGCCATGGGAGAAGGTATTTTC AGAATAAAAGTTCTGTACTCC	2.407

171	A_52_P513123	Dna2	AACTACCAACTCGGGTCTGATTCCCAAATCATACAAG TTACATTAAACAGTCAGACAG	2.405
172	A_55_P2029962	Gm1998	CAGGTGAAAAGCCTATCAATGTACAGAACATGCAAGAA AGCATTCTCCAAGAACATC	2.402
173	A_51_P264495	Pgam2	ATGGGAACAGCCTCGGGGATTGTGAAACATCTGGA AGGGATGTCGACCAGGCCATCA	2.398
174	A_55_P2014154	Cacna1c	TGACGCCTGCGACATGACAATAGAGGAGATGGAGAA CGCCGAGACAACATCCTCAGTGG	2.397
175	A_51_P185593	Synm	AGTTCCCTGAGATCAGAACTTCCCTATAAGTTCAA ACTAGGAAGCATGCACTAACT	2.396
176	A_55_P2014144	Olfr830	AACAGGGATATGAAGGAGGCCCTGAAGAAAGTTATTG GTAGGACAGCTCTTCTGTGA	2.395
177	A_51_P106799	Pparg	GCAGGAAAGTCCCACCCGCTGACAACGTGTTCTCTA TTGATTGCACTATTATTTGAG	2.391
178	A_55_P2079669	Bcat1	ACGATGGAGAATGGCCCAAGCTTGCAAGTCGAATCC TGGAAAGCTGACTGATATCCAG	2.389
179	A_55_P2167733	U2af2	TTAAAAGAGCTGCTGACATCCTTGGGCCTCTCAAGGC CTTCAACTGGTTAAGGATAGT	2.389
180	A_55_P2004179	Col2a1	GTCTCACACAATGGTCTATTCTGTGTCACACCTCT GTATTTTAAACATCAATTG	2.378
181	A_55_P1995060	EG667885	GACATGGAAGTCATCCTGATCTACGTCAAATTGTTCA TGCTCAGAAAATTAAATTACG	2.375
182	A_52_P620448	Mab21l1	GAGACAGTGCACAAATCTCTCTTAAAGGAGTAA CAACACAACATTAAACCATCAT	2.374
183	A_66_P119350	2310040G24Rik	TGCCATACAGGGAGAAGACAGTCACAGATCATAATA AAACTAAAGGAAACCTATCTA	2.371
184	A_52_P19532	Fgd3	CAAGATATTGTGAAACCAAACGCAGCCTGCACGTTCAT CATAACAGGAAGAAAAGGTCC	2.371
185	A_55_P2083197	Maml2	AGGAAGGCTAGCAAACATGCTAAGGCTACAGTCGA CTGCCACTACCACAGCTCCTCCA	2.370
186	A_55_P2049717	Agpr	CTAGCCAATGGATGTTGGGAAAGGCAGGGAT GAGAATAAAGGATGGGACGGTT	2.368
187	A_55_P2011772	Oscp1	CAGGCCATTCTGGCTGCATAACAAGATAGATCTTTAA AAAACCAAAACCAAAACAAAC	2.364
188	A_51_P384693	Kirrel3	GACATGGTACATTCTCGTCTCCAAGGATTGGGCTAC TTTGCAGAGGACCCCTAGAACTG	2.362
189	A_51_P163261	Gm6985	AAGGGGAAAGCCAATGCCAGTGAGGATGCAAATAAT CCTGCAGAAAATGGAGATGCCAA	2.354
190	A_51_P213691	Scnn1a	TGGGTAGACTGAAGTGTGTCAGGGATGAGCTTGCT CATTGTTGATCCTCCGTTCTA	2.351
191	A_55_P2324425	5830403F22Rik	GTTGCCATGCCATTATGAATGCCCCCTGGAACCACA AGCCAAAATAAGCCTTCTACA	2.350
192	A_55_P2074353	Synm	TGGCAAAATCACAGTTGAAAGTGGCAATGGCGTGAT TTTATGGTTGGGGTCAGCACAA	2.350
193	A_55_P2120089	Zmynd11	GCTTGTAAACAAATCAGCAGCAAAACAAAAATCAAAG CCAAAACTACCTGTACTCAG	2.344
194	A_55_P1969977	Myo15	ACCAAGGTACACATGTGATGCAGACATATGTCAGGCA AAATACCCATATCCATAAATAAA	2.340
195	A_55_P1965584		GCCGCCTCTTCAGAAACCAAGAGAAAATGGTGGGAG GCGAAAAGAAAAACTAAATAAAA	2.336
196	A_51_P145511	Prl2a1	CTTTCATCATATCTCGTCTGAGCCACTGCTTGATGAT ATATTGCTGTGAAACTTCCTT	2.330
197	A_55_P1990066	LOC100045975	CAACAATGACTTGGTCTGGAAAATACATACATTCTAT TTTATATCCTCTCCCCCTGT	2.324
198	A_55_P1976849	D130009I18Rik	ACTTCTCATCTGTAACACAGACACGAGCTAAGTAAGA GGCTGACTGAAGTAGTCCTTGG	2.323
199	A_55_P2257765	Gm7111	TCAGTAGATCATTGTGTTCTAGCTTGTGTTCTA CTGAGAAGCAAGTAGCAATCC	2.321

200	A_55_P2005549	Tnn	GTTTCTGTAACCAAGTCAGTGACCTTGAAGTAACCTAAATTCCACTCAAGAAAACAC	2.317
201	A_55_P2180944	Tmco4	AAGGACTGGGCCTTGGTAAGCATGGATTACATGAGGGGGGACCAATAAACACTGATTATC	2.313
202	A_65_P04284	Erap1	ATGCAGAGTCATTAGATCTGTATCAGAAATATCTGTTTAAGATATACTGTGAGTC	2.312
203	A_52_P47126	Maml3	TTGCAGCATTCCAATCAGAGTGGATGGCATCCCACACAACCAATCCCAGGGACCAGG	2.311
204	A_55_P2094963	Gm10105	CAAAGCCAGGGCCAAACCTAAAGGTCCCTACAAAAGGGAGAGAAGGTACCAAGG	2.307
205	A_55_P1956752	Ska2l-ps	TGCAACAGAGCCATTAAAGTCTCACATGCCGACTGATAAAAAGAATGTTAACGAGGAA	2.305
206	A_52_P167278	Mthfd1l	CTTGCAAGAGTGTGAACTAAAGCTAATGCTTCGTCCTGGAGTTCTTCTCATCT	2.305
207	A_55_P2011560	1810009J06Rik	CCATTCTCTTCTCTTATGCTGAAATGAGGTTGAAATAAACATTTCTGCTGCTCT	2.303
208	A_55_P2234164	LOC100038760	CACAAAGTTCTCCACACCTGAGAAAACCTGGCTCCAAATAAAAGAACAGAGTTGTTAA	2.299
209	A_55_P2112355		AGAAGAGCACTGTTCTCTATAAAAGATTGTGGATCTTCATGGATAATTCTGCCAT	2.298
210	A_51_P143805	Tmem42	ATAGTCCTGATTCTTGACCCAGGGAAATTGGAAAGACTCTGTGATCATGGTTACA	2.297
211	A_51_P389864	B3gnt9-ps	CTCATATTCTCAACTCCAGCTTCAGAAATCAACAGCTCACATTTAGTACAAACAGC	2.293
212	A_55_P2184189	Ncf2-rs	GGAAATGTGGACTAACTTACCATTTCCCTATTAAATTGAACCTGTACACGACAAAAAA	2.293
213	A_55_P2012146	Veph1	CTCTGCCATGATGGAAATATATTATCCTCTGAAACTGTAAACCTCAATAACTCTTC	2.291
214	A_55_P2176025	Gm4532	TGCTGGGGACAGGACCTAGAGACTGGGTACCAAGACAAAGAGATGTAGAACAGATAA	2.290
215	A_55_P2174541	Dtx3l	GAAAGGGTTGGCAAGGAGAGAGCTCGCTTACACAA TACCAAGTTGCCACAACCTTAA	2.290
216	A_55_P2002497	Srcap	GCCAAATCAAACCCGAGGCAAGAGCCGAAACTCACAGTTCCAAAGCCTATGCCAGGT	2.289
217	A_55_P2156022	Fam132b	GGGGCTGGAGAACAGCAGCGAGCTTCACCATCTCA GTAAATGGTGTCCCTATCTACA	2.288
218	A_55_P2162782	Ahnak	TCACCAAGGGATTAAATGTGGAAGCTCTGATATTCAATAAGGCTCCAAGTTCAAGGTG	2.287
219	A_55_P1992789		TTGTTAGGGGGCTATTAGAGGCCACTAATTCTGAGGA GTGTGTTGTATCTGTCAGGTG	2.286
220	A_55_P1960053	Hvcn1	AAAGGAACCTGAAATCTAGAGAGAAATAACCTTCATTC CAAGTAATAACCTTCCACC	2.285
221	A_55_P2022870		TGATCTCCTGACAGATGTACCTCTTGATACCTATGTAAGCCAAACACAAACAGGTTGAC	2.281
222	A_51_P117581	Cables1	GTAAGACGCATGATTGGTGTCTTGCGCTTGCAGCTGGACAAACTACATTCAAGCT	2.281
223	A_55_P2114863	Mgll	CTTATGAAGGGAGGTATTTCTACACAGAGACTGTGGAATATCCTTGAATT	2.278
224	A_55_P2412859	5830468K08Rik	CAAACCCAACCTAGAAAGGCTACACACAATGGCTAC AATATTCTAAATGATACCTTA	2.277
225	A_55_P2205858	Gm7455	ATTACTTCCGAGACTTTAATAAGCTAAAGAATGTGGA TGTAAGAAGAGAAATGGTTCGT	2.274
226	A_51_P201982	Angpt2	ACCTATCTGATGGCTTAGTTTAATGGCTGGCTACTA TTTACTATATGGCAAAATG	2.273
227	A_55_P2113391		TCAGAGCCAAACCATCTCCAAACCTGTAAGTCATA TTGCTTATAAACAGTAAATAG	2.269
228	A_55_P2201020	AI790442	AAAGAAAAAGAAAAGGAGAAAGAAAGAAGAAACAA AACCTAGCTACCTAGCAAAAAAA	2.269

229	A_55_P2020461	Hmgn2	ACAAAACCAAGGTGAAGGACAAGCCACAAAGAAGAT CTGCAAGGGTGTGCTAACCTG	2.267
230	A_55_P2007356	Iqcg	ATGTCATCATCTGGATTAAAGACGTAAGAAACCAA CCAAACCAACCAACCAAC	2.266
231	A_55_P2104422	Inadl	AATCTACTGAAGAATGCCCTGGGCCATTATCCTGCA GGTATTCGATCAATGGAGAAC	2.265
232	A_52_P87843	Aldh1a3	GGGGATTTGATCTTAAGTTAGATTGTGTTCAGCA ATGAAAAAATAAAGTTGGACAC	2.265
233	A_51_P501656	Kdelc2	AAACAAGAAGAACCAAGTTAAATTATCGGGAAATGAA AGCTTCCATGACCAAAAGGCACA	2.262
234	A_55_P2023285	A630075F10Rik	AAGCTCATCCGTACTTCGTATGCTTACACATGTGTAT CCTTTCCGGAATGGACGGAA	2.261
235	A_55_P2062340	LOC100044039	CCTGGCTTGAGGCATAAATGCAGGCAATACCGTGTAA CTTAATAAATAAAATCTTA	2.259
236	A_65_P05872		TCTGGGAGGATTCTGTATTGACTGTTACATTCCTCAA CTGAAGGTACCCAGGTTCTCCT	2.258
237	A_52_P411430	Gm5914	AGACTCGCTTGAAATTCTATGAGAAAAGAGAGTGTGAA ACAAGAACAGATCGGGTTGG	2.257
238	A_55_P2141866	9630025I21Rik	ACACTGTCTACTCTTACAGAACACAAGTTGTTCTTCT CTAGAGAAACTGTTGAAGTAG	2.257
239	A_55_P2094964	Gm10105	AAATCAAGGTGAAGGACAAGGCCACAGAGAACAGATCTC AAGGTTGCTGCTAAACCTGCTC	2.256
240	A_55_P1981291	Spink8	GGAGTGTAAAAGAGAACAGCACCTTGAGAAAAACAT CTTGATATTAGAAGATACTTGGAA	2.251
241	A_55_P1978050	Aven	TGCTTACAGCAGCCAACACCTACCTCTGTGTTGATGG CATCTGAATATATGTATGAGGC	2.248
242	A_52_P274496	Tspan18	TTGGAATTGTAAATGTCCTTGAGTAGGAAACAGA GCTAATTATCATTGTATCTCCC	2.247
243	A_55_P2160421	Gm8619	CTCTTTAAACAGTCTTGTAACCATACTGAAA ATCTGAAGCCTGAATACTCC	2.245
244	A_55_P2168497	Slc9a1	GGACAAGGAGGAAGAGATCCGAAATCTGAGGAG CAATCTGCAGAAAACCCGGCAACG	2.244
245	A_55_P2018697	Ldhd	AACTGAAGCACCTCTTCAAGCTTTATGGTGACAAT AGAAATACAGATGAACAACT	2.243
246	A_52_P81693	LOC100044247	TCAGAGACCTCTCAGCCAGGAACCATCAACCACCC AGCATGGAAACAATGAACAGCC	2.240
247	A_52_P680751	Cux1	ATATCAGCAGAACCCATACCCATCACCAAAACCATCG AGGAACCTGCCACACAACCAA	2.237
248	A_55_P1993789	Hmgn2	GAGCACTGGTCTTTATAAGGATTGTGGATCTCA GATTGATAATTCTGCCAAAAG	2.237
249	A_51_P164393	Txndc2	AAGACATCATCCAATCCAAGAAAGAGGACAGGCCAA GTCCTCAGAACATCATCCAAT	2.236
250	A_51_P358906	U2af2	CCTCTGAAGAAGATGGCAGAGGAGTGACAGCCGA ATGACAGCCGGCAGCACTGGAAAT	2.230
251	A_55_P2196037	A630031M23Rik	ATAAGAGACGCAAGTCACACAGACACACAGTATACTC TCACATAGACACGTCACATACG	2.230
252	A_55_P1975315	Crygs	TCTGCTGTCTGGCTTGTGGTCAAATAGACAACGTAAA TAAAAGCATTGGAATGCATCCC	2.229
253	A_55_P2109877	Gm4718	TGAGCTGGGGCTTAAATCATTAGGGTACAGATGATT TTAAGTTGTTTCAGCATAACGC	2.228
254	A_65_P15245	Nrp2	GGTTCTGTTGGCTGTCAATTGTCATCTCCAGGTACCTA GACAAATAGAGACCATTGGGAA	2.228
255	A_66_P100586		ATGATAAAAATGGGATTAGAGTAGACCAATTGGCAA ACCTGGAACCCAGTGAGAGATT	2.226
256	A_55_P1989738	4930426L09Rik	CTCTCCTGTGTGGAAATAAGCATTGATATTGTTGTTA ACCAGTTGGAGGAGTCATTAT	2.226
257	A_51_P210143	Syne2	GCAAGTGCAGGGAGCCGCTCGTCATGAAATT CTTGTATCTCAACAACTAAAA	2.219

258	A_55_P2214408	A130049A11Rik	TGGGAGGTGGGAAATCGGATCTTGAAGACAAGAA AAACAAAATAAAACTTTTCGTC	2.214
259	A_55_P2114188	Gm5105	GTGCACACTCACATACCCCTGACCCAGGCACATGTAAT ATACAATTAAAATAAAATGTA	2.214
260	A_55_P1960157	Bcat1	GAGCAGGACACTTGTTCTTGTGGTGGTTCTT TTGTTTTGTGTTGGTTGTT	2.213
261	A_55_P2065958	Gm3119	AAGAAGTCAAGAAGTCTCTGGCTACTTACCCCTAAC TCCATGTGTTACTAGTGATGGC	2.210
262	A_51_P314107	Gsdma	CTAAGCCCCTCCTGATGCTTAAATCCTGAAGATACA GAATCATTCAAACCCCTACTAC	2.209
263	A_55_P2114143	LOC100044698	CAGATGTGTTAAAGGGCTCTGCCTTTGTGACACA ATAAATTATAAACCTGGAAAGA	2.209
264	A_51_P233797	Adh7	CAGATGTGGCATGTAGAGATGTAGAAAATGAATT CAAGAAATGACCATAAAACCAC	2.206
265	A_55_P2148961		CAGGTGGTCACAGACATACAAGCCTGCAAAGCACCC ATACACGTAAATATATATAATT	2.205
266	A_66_P117254		GTGACAGCCAAGCTTGGAGGCATTGATGTCCTG GAATATCCCTGCAGGCAAGGCTT	2.204
267	A_55_P1959525	Wbscr25	AGAATGCCAGGCTTGCCACACAAGGCACAGGACACCA AACACAACACACCAGGCACAAACA	2.196
268	A_55_P1998912	Txnrd2	GCCCCAGGTTGAACCCCTGGCATTCTAGAGCACTAAT AAAGAGGATGTTTACTAAAGC	2.196
269	A_55_P2102998	Gm3893	AGTAAAGAAAATGTTGAAGGGGCTGCCTCAAGCCA AGAGCCCCACCAAGAAAATCAAG	2.193
270	A_52_P507498	Plxnc1	GGATCCATTAGCCAATGACAGAACATGTCAAATTAG ATGTGTGCTGAAGACAATCAGT	2.193
271	A_55_P2094792	Pcdhga10	AATGATAACAGTCTGAGGTGACCATCACATCTCTT CAGTCCAGTGACAGAACATTG	2.193
272	A_66_P105526	Mamld1	AAGTCACATGGGTATCAACTCTGAAGAACAGCAAA TCAACACCGGCCTTCATTCCC	2.192
273	A_51_P168613	Nuak1	CCAGCTGATTGTCTGTTAGTATTCCCCACCATGCA GTTGACTCCATTAGGAAAACCA	2.192
274	A_55_P2157507	Gm3709	ACCAAGCCTCACAGGATCTACAAACACCAGTCTCAAATA TCTTAGATTTTCAGCAAAAAAA	2.191
275	A_55_P2140449	B3galt4	AATGCGGAAGCTTGGAAAGCTGGTGAGCGGCATGAA TGGGGAGAGGACTGCACCCCTT	2.188
276	A_55_P2046328	Gm6225	CAACATTCTTAGCCATCAGGGAAATGCAAATCAGAAC AACTTGAGATTCTATAGCCAAG	2.186
277	A_55_P2010364	Gm5116	ATGAAGAAACTCGATGACATTGATGTGACCAAAGTCC GTACCCCTAACAGGCTGACAGA	2.185
278	A_55_P2102540	Olfml3	TTAGACGGCACCCAGAACGACACGGCTTGTCTCCC AAGGCTGCGTGAACCTCACCCCTT	2.185
279	A_55_P2034033	Il12rb1	AGTTCCCTATTAGAGTATTGGGACTTAATAATGGG CCTTCCCAGAGACTGAGAAACT	2.180
280	A_55_P2144461	Suv420h1	GAGGTGGACGACTACAGTCATAATGAGGAGGACAGC ACAGATGAATCCTCATCTTGAG	2.178
281	A_55_P1995354	Btnl2	CACACATGTGGTACACAGACATAGATGTAGGCACAAAC ACCCATACATCTAAATAAAAAT	2.175
282	A_55_P2084617	Fam78a	ATTTGAGTTTGAGATTAGATTGAGCGCTCTGCACTG GGTCCTGCAACCTCATCCTT	2.175
283	A_55_P2013928	Dhrs13	TAGGTAGTGAATTACCCCCATTTTATGGAGGCAGGAA TTGGGAAAGGACTAAGTCAGGG	2.174
284	A_55_P2104909	Pisd-ps2	CCAGAAAGCTTATTGAGTGCACAGAGGAAAGAA ATCAGAAAGCAGTCACTCACAAGC	2.169
285	A_66_P139618	Stfa2	ATCCCCCTAACCCCCATTGAAAGAGATGCAGGCCATCAA TAAAGAAGCATTGAAATAA	2.168
286	A_55_P2072631	Prr5l	CTCTGCAGAAACTCACAAACTAACTCCTCTGGTTGT CTGTTCAAAATAGATAACAA	2.166

287	A_55_P2233462	2700022O18Rik	AATTAGACTCCATTCCACAACAAAAGGAGACAACCT AACTACAACCAGGCCATTAAGC	2.166
288	A_55_P2107502	Fat1	CAATGGTCTTGTAAAGGTTTACTGAAAATATCATT AGCCAGCCTTCTACTGACAA	2.166
289	A_51_P279247	4930403N07Rik	TGAAGTAAAATTCTAACCAACAAAATAAGTGAGCTG AAGAGCATGAATGAAGTCTGGG	2.161
290	A_52_P399095	9030224M15Rik	TTCTGAAGAAGGACCTTCAACGCTAGCAGCTGTTA TACCTTGAGTTGGGTGAATACA	2.160
291	A_66_P105244	Tor1aip1	CCATTAAGAAGCCAAGACTTGACTCAACATACCAAAC AAATGGAAATACTAAACGAAT	2.160
292	A_55_P1998995	Speg	TCCTGGCTGCTGAACGGGGCGATGCTGGTTCTACAC ATGCAAGGCGGTCAACGAATATG	2.159
293	A_51_P160824	Cspg4	CTGACCCAGAACTATTGCAGTTGCCGGACACCCAAT CCTGCCCTCAGGAATGGCCAGT	2.158
294	A_55_P2085165	Gm5951	ATGTGGCTCCACTCGAGGATTATAGAAACAGCTGTT GTATTCAAGAAAATGGGTGC	2.157
295	A_55_P2369191	Ggt1	GTCAAGGTAGCTGGCAGACAAAAGAGTATAATTGG TTAGAAATAATGTCTGACTTCAA	2.156
296	A_52_P298548	Nbn	GCTTCTCCAATGAAATTCTGTGCAAATAAAAATA AGGATTGGACTTCAGCAGCA	2.153
297	A_52_P304128	Mmp14	GGACAGCGAGTACCCCTAAAAACATCAAAGTCTGGAA GGAATCCCTGAATCTCCCAGGGG	2.152
298	A_55_P2063316	Mgll	AATTACTAAAGAAGCCAATGTGCACTACAGCTCACCGT AATAAAAACCACGTGCTTTGG	2.151
299	A_55_P2262560	5730471H19Rik	ACTTGCATAAAAGATAAGAGGCATGCAAGAACATCT CTGGACAGGCCAGTTGAGATTG	2.151
300	A_52_P339791	Hdgf	GGATTGATGAGATGCCCTGAGGCTGCAGTGAAGTCAC AGCCAACAAATACCAAGTCTTT	2.150
301	A_55_P2162136	Hmgn2	GCTGACGCCGGAAAGGATGCGAATAATCCTGCAGAAA ATGGAGATGCCAACACAGACCAAG	2.149
302	A_55_P2011490	Gm16510	AGTAAGGTGCGAATGTCCTGCAGAAAATGGAGATG CCAAAACAGACCAGGCACAGAAA	2.148
303	A_55_P2389818	A830035O19Rik	ATCCCACTCCAGGGACTGTGCTCTACGAATAAGAAATA CAAATAAAATGGGGACAGCG	2.147
304	A_55_P2392972	K230015D01Rik	CTTCCTCCAATGATGGATTATGATCTGGAAGGGTAAGA TGAAATAAACTCTTCCTCCCC	2.146
305	A_51_P386829	Gm5577	GTGAGCTAGTGCATATTTCACTAAACTTTAATCTT GCTTGCACTTAACGACGTGG	2.144
306	A_55_P2152069		TGCTCTGGATGAGGGAGAAGCAGGAAAGCAAAGAGC TCTTAATAAAAGAACATGCCCTCA	2.142
307	A_52_P117393	Tlr6	TTATGAAGTTAGCCTTAGTCATGAGGATGATGTGAA AACTGAAACTTGGTTCTAAC	2.142
308	A_55_P2163428	Foxm1	TTGTCTGGACACAATGAATGATAGCCTCAGCAAGATC CTTCTAGACATCAGTTCCCTG	2.140
309	A_55_P2039289	Hspb6	ACATTCCCACATCTCCGCAGGCCCTCTACCATCAGTCCC CAATAATGCACTTGAGATT	2.139
310	A_51_P482611	Dusp21	TCCTACATCAAGATAAAACAATGACCTGGACCTATG GTTGGTTAAAACAGAAAGAG	2.139
311	A_55_P2005175		CCTGGCCTAGCAAGTAGACAACATACTTAATATTAAC AGATATTAATACAGAGACCTG	2.139
312	A_55_P1954331	Murc	TTGGAGAACCTTGAGATCTGAGGTGGTGTACAGAGTT TGTGAGAACAGACACAGACAA	2.137
313	A_55_P2006210	Fgf22	GCTCTGCTTTTGAGTAGGTGTTAAATAGCTTCC CAGATAACACACATTTCCCT	2.132
314	A_55_P2045903	LOC100044822	GTTATGGTCAACATTATGGTCAACAGTCTGGCTATGGT GGACAGCAACAAAGCTATGGAC	2.130
315	A_55_P2081432	LOC635676	GTCTCGCAGCCATCTGGTTGTGTTGTTGTT ACAGCTTCTAACAAAATTG	2.130

316	A_55_P2019068	Flii	TATATGGAAAAAGAACATCAAATTGGAGCCTGTGCC CCTCAAAGGGTCCACTAGATC	2.129
317	A_51_P352381	Dhrs4	TTTCTTGAAATCTAATGGATGTACAGAGGAGGTGT GGGACAAGGTTTGAGCATTA	2.129
318	A_66_P111714	Utp20	TTGAAGAACATAAAAATAAGAGTGAAGCAAAGAAC AGGAAGATAGAGTTCCTGCCCC	2.126
319	A_55_P1958876	4833422C13Rik	GACCACCAATAGATTCTACCAGAAAAGAAAATCCTCC CACACATAATAATTAAACAC	2.125
320	A_55_P2167070	Kif5a	TCAAAACCAAACAGAACATTTGCTAAAAGCCCAAAT CTCATTATAGCCAACCCCTGAC	2.122
321	A_55_P2169188	Ccdc23	GCCTTCTCATCTGCTGCTCACCCGGGTTGGTAGGGAA ATGCCAGGAAATGACTACTGT	2.117
322	A_51_P112762	Slc5a3	GAAGAGACTCCACAAGTAAAGTGTACCTAAACATTG GACTTTGCTGTGTTCACTT	2.115
323	A_55_P1965876	Opn1mw	CATCAAAGCTTGGCCATGTTTACCTCCCTCATCT ATCCTGTAAAATAAACATAA	2.113
324	A_52_P657123	Gm10270	TGGTAAGGATGCAAATAATCTGCAGAAAATAGAGAT GCCAAACAGACCAGACACAGAA	2.112
325	A_55_P2140162	Gm14725	ATGTTACCTTAGATATGGCCGACGTTGTCTCATACG ACCCATGCGAGATACTCCTGAA	2.111
326	A_55_P1996742	Rbm14	TATGGGGCTCAAGCATCTATTGGCTGTCAGGCTATA TGGAGCTAGCTGCTGCG	2.110
327	A_55_P1958906	Col17a1	GGCACAGTTGGTTTTATTAAGCACTTCCACTGTCTA AAAACATTGTATGTAACCTG	2.108
328	A_51_P207330	Tgm6	TTCTGAAGCCATAAGACAAAGCAGAAACAAGGTTGA GAACCAAGTGGCCCCAACTCA	2.107
329	A_55_P2246235	Tpm3	AAGAAAGCTGAAAGGGACAGAGGGATGAGCTGGACAAG TATTCGGAAGCTTAAAGGATGCT	2.107
330	A_52_P257502	Igfbp4	GAGAAGAGAAACCTCATTCTGGAGTGAGAGAGAAA GAAAGTGGTAACATTGAACGCC	2.105
331	A_55_P1954985	Foxn3	CCAGTACCTGGCCTCAAAGGTGACATTTCAGCTAA GGTAAAAAACAAAAACAAAAA	2.103
332	A_52_P502267	Epc2	TAATGGGATCATGAGCATGAAATGGGATCTGCATCA CTTGTAACTATTATTTGC	2.103
333	A_55_P2013143	Esrp2	ATGGGTGACAGCCAGAAAACCTCCATCTGTTGG CCCTCAAATACTGAGTTGAAG	2.102
334	A_55_P2176894	Gm2181	AAAGAAAGAAAGAAAGAGAGAGAAAATGGAAATATCA ATCAACCAACCAACAAATCAATCA	2.102
335	A_55_P1965338	Anxa8	GTATACCGCCCACCTAGCATTACCTTGAGCAAACGG AAACATCAACATGAAGAAAGAA	2.101
336	A_55_P2157423	Gm8784	ATTGAGAGGACGTATGAGACGAGTGAGCAAGTATG GGCTGGTCAAATCCATTGACATT	2.097
337	A_55_P2056493		TTGGGTGTGGCGCTATTGGCATCGATGAGGGGCAGT TTGTAAGTCAGCCTGCAGCATAA	2.096
338	A_51_P207622	Fmod	GGCAAGCGTGGTTTCAAACATGAGAAAGAGCCTCT GCTCATCCTTGGTCTAGTATGA	2.096
339	A_52_P681557		AGGGAGTCTATGTAGACATGGGAGACCTGATAAGTT TTAGATAATTGCAAGTATCTG	2.092
340	A_51_P430259	1700009P17Rik	TTTAGAGACTGACCGAAATAGGTGAGACCCGTGCTGT ATTCAAGAAATGTGGAACAGAGA	2.089
341	A_51_P451458	Mamdc2	ATGCAGTGTGTTATGGTAAACAATTATTCTGAAATAAG GTCGCCCATGGAGCCCCAGGA	2.089
342	A_51_P342926	Omd	TAAAGATCAGAACTCGCTTAAGATGTTGGTAAAAT GGCTTACTTCATAAGCTTAGAG	2.088
343	A_55_P2026214	Gm5899	GATGCGAATAATCCTGCAGAAAATGGAGATGGCAAA CAGACCAGGCACAGAAAGCATAA	2.087
344	A_55_P2000280	Mthfd1l	ACAGAAACGGAGCAAGTAAAGGCTGTTCAATGGA ATGAAACCCACAGGACTGGCAA	2.086

345	A_55_P2168014	Prmt7	CACAGGCCTTGTCAATGATGGCAGTTACTGCAGGG GCTGACTTCTGCTATGCTATCGA	2.086
346	A_51_P203653	4930417M19Rik	CATCTGGGAGAACAGCAGAGGCTACTATTCAGGCC TTTCTCCCATGGAACATTATAT	2.082
347	A_55_P2133360	Gm4608	AAACGCAGACACGCTAAGGTTAACAGCATCCACCAA GCATTACTAAAATCCACCCGGAA	2.082
348	A_51_P121179	Fam132b	TGTGTCATATTGCTAGGCAGAACATATTTATGTAATGG ATCACACAAAGCCCTAACAAATG	2.081
349	A_55_P2096762	Arhdig	TTGTGACTTCAGTGGAGGAAGGCACCAAGAGGGAGCATT GGCACGTGGCCTCTACGTGGTCA	2.080
350	A_55_P2044982	Zfp74	TGGAAAAGCTTCAGCCAAAGTCACACCTGTCAGAC ACCAAGAGAACATCCACACTCACTA	2.080
351	A_52_P286002	Obsl1	ATGAACGTGCCTACTTCACAGTTACCATCACAGATGTC TTCTCGTGGATCGTCTACCCCA	2.080
352	A_55_P2031636	Igf1	AGAAATGTAATGGAATAAGAGGTCAGCTGACCATCC ACCTGCTCCCCAGAAGGATACA	2.080
353	A_55_P2028496	Hmgn2l6	TCAGGGTCGGCTGTGAAAAGCTGTTAAAACAACATC CTTAATGTGAAATGTCAACTCTC	2.080
354	A_52_P410685	Krt7	CAGCATCGCAGAGGCTGAGGAACAAGGGGAGCTGGC AATCAAGGATGCTCATGCTAAAGCA	2.069
355	A_51_P281593	Ppapdc1b	GAAAATAATGCAACACTTCTGCCTTGTCATAAAG AAATAATGGCGCAACTAGAGG	2.068
356	A_55_P1983558	Tmed1	TCAAGGAACAGAGGGCATTGCTGGCACTGGAGT CAATAAATTATGGTCAGAAAGTT	2.067
357	A_55_P1962224	Afap1l2	GGCATTATTCCTGTATCATAAACACTTGGTGACCTT ATCAAGTGGTAGTTAGAATT	2.066
358	A_52_P132761	Stat6	CTAATTCCAAGATGTCCCCAGAAAAACTGCAACGGCT CTATGTTGACTTCCACAACGC	2.065
359	A_51_P449995	C6	TTGCTGGACCATCAAGGTATACATGCAAGGAAGACTC CTGGACACCTCCATTCAAATT	2.064
360	A_51_P245275	H2afx	CTGCTGGACTGAGCCTCTGGCTCTGAACCTGGAACTT TTGCAGCTATTACAAGTTACA	2.063
361	A_55_P2037702	Gm10638	AGAGTTCTGGACTTCCCAGGGAGACCTTTATCCA AAATAATGAAGACCTCATCTC	2.062
362	A_51_P167292	Chi3l3	TGAACATCTTGTCTCTGAAACACCATGCTTGT TCTTGCTCTCACATAAAATC	2.060
363	A_55_P1989524	Fndc1	ACTCAGACCTCGTCAGTGACCCATCTGCCATTGAGAA CTTGAAGCCAAACACAAGGTAT	2.059
364	A_55_P1997696	Plbd1	GATGACAGAAAGCTGCGAATAGGACACCAAAGGCACT CTTAGCTGTATTTCCCATCTGT	2.055
365	A_51_P475342	Chrnb1	CTCCAAGTGATTTCTTCCCTAAACTAACAGGTTTC AGCCTGAATCATCTGCCCGG	2.053
366	A_55_P1974441	Pdgfb	ACTCCAGGCTGCAGGCTCTCTGACTCCAAGAACCTG GAACAAGTGTGCAGGAGCCTG	2.052
367	A_55_P2347073	AI662501	TCCTATGATCTGCCAGAACGGATGCTTCAAGGTTACT CTGACCTCGTTAACCTCGAG	2.051
368	A_55_P2344608	D7Wsu130e	GGCCTTCACTCTGAGCCATCTGTCAGCTGCCAACGCT GAATTTTAATAAAAGCCCATT	2.048
369	A_55_P1978241	Artn	ATATATACATATACATTGTAGTCGCGTTGCTGGACC AGCCTGTGCTGAAACCAAGTCCC	2.048
370	A_55_P1988058	Tyw3	AGATCAAATGCCAAGCCCTTGTATAACGATGTTAG GAATTGAAGATAGCTACCACC	2.046
371	A_65_P06446	Tfrc	TCCTGCTAGATGGAACATAGATTCTCATGTAAGCTGG AACTTCACAGAACAAATGT	2.043
372	A_66_P128199	Fzd5	AATTTCAGTGGCTTCCACAAGACCTGTACACCTAGAT GCAGGACTCTGTGAAGGCTTA	2.043
373	A_55_P2007708	Nanog	CCATGATGAACCGATGCCAGCTGGACTAGTTAACACA AAATAAAACACTAATTACCTT	2.042

374	A_55_P2148323	2810021J22Rik	AAAGAATGTAGCAAAGCATTAGTGTCAAGTCCTATCT CACTATCCATCAGAAAACCTCAC	2.041
375	A_51_P225793	Prr5l	TAAATGGTGCCTTACCGTCACTCCAGTTGAGAACCA GCCACATTCTGGTGTATAT	2.039
376	A_55_P1979863	Syne2	CAGGGGTTGGTAAAGAAAATTGGAACATTGTGATA TGTCAACTCAGATGTTCTCATT	2.039
377	A_55_P2029046	Fgd3	TGTGAGGTTTCAGACGAGTCTCTGTGGGCAGGTGC CATGCTTATCTGCATAAATAAT	2.038
378	A_55_P2124331	LOC640017	AGAAGAAAAGAAAAGCTCTCACCGATACATCTCGAC CCTCCCAAGTACCTCAATTCAA	2.035
379	A_55_P2384593	Gpc6	GCATTCCTTAACATAACAACCTCACACAAAACAAGTC AAGACAAAAAGAGAGAGAGGAT	2.031
380	A_55_P2200029	Dleu2	TTTCAGGTTTGTAACAGTTCAGTAGTAAAAGCACTT GTGGGCTGGAGAGACACCTCGG	2.030
381	A_66_P132997	Ccdc15	CGCAACTCTCGAAATGCCATTGTAATTGCTCTGC ACATAGACGGACTCCAAAACA	2.029
382	A_52_P630632	Rcbtb2	GTATCCTGTGTCGAGCTTCTGGAGTATCTATACA CAGATAACATCAGCCTATCTCC	2.029
383	A_51_P227345	Dpep1	AGCTCAGGGAAAGACTGGACAAGCCCAGAGTCTGTT GTCCGTGCAGAACACACCCCTT	2.029
384	A_52_P152631	Tmem17	ATGATGGCACTTCAGACGAAATTGCTTGTCAGTGG AATCTCACCAAGTGTGACAACA	2.029
385	A_52_P233305	Adamts12	GCTCTCAGAAAAGAACCATTCATTGCATCCCTCAGAA AACAGTACAACGTGAAGATCAAG	2.028
386	A_51_P389636	Kcnn4	GCCACATAGCTCCACATGAACACTCACAGAAGAACAGG CTAAGTACCCAAGGACCGAGCTC	2.028
387	A_51_P332003	Aste1	TGAAGTGGAAAGAATTGATACAAATATCAAACATCAC CTGTTTATGCAAAGCAACTGCTC	2.026
388	A_55_P1966332	Plac9	GAACCTGGCTTAAACCTCCACAGGGCCCTCAGCCC CAAACCTGACTTGCTGGAGAT	2.026
389	A_52_P586141	Adcy7	ACACTCCTGACAAAGTGTGTTACTGTGTACTTCATA GATGACAGGTCAATGCTCCGA	2.026
390	A_52_P499299		TAACTCAGCAATTACGAATGTTGCTTCAAACATCCTT AAGAACAGGATGTCCTAACGA	2.025
391	A_55_P2120308	Cacna1a	GTCTGCTTGAATAACAAAAGAAAAAGAAAAATT ACCACCATCACTGATTCCCTG	2.023
392	A_51_P191782	Olfml3	TAAAGGACAACCAAATTCTCAAGCCCTCTGTTTATG CAGAACTCCAGATCCTGGGTAG	2.022
393	A_55_P1973941	Slc7a5	GTGGTTATAATGTTTACTATTGTATTAATGGCTAGC CTGTTACATTAGACTGGGGGG	2.021
394	A_66_P140856	Gm4588	CGACTTTGCAATGAAAAAGCTGAAGAGGGCAAAGAAA GACAAATCCAGATCGGAGAGTGTGAG	2.019
395	A_51_P198137	Ubxn8	GTCTTACTTGAUTGGATGATGAAAGTTGGTACCAAA ATCCCTATATAGACTTTCACT	2.018
396	A_55_P2030771	Fnbp1	TACTCCTTAATCTGCAGAGATTCAACCAGGAGCAATG GGAATACTACCACATCCCACATC	2.018
397	A_55_P1962429	Maf	GAACAAGCCTGGTTACATTAGAATAACGTTATGATT ACAGTATTGAGCTCCACCCCCC	2.015
398	A_55_P2378486	Kcnma1	TGGGTGGGCAGTCAATGTATAATGTAAATTCAAAG TCCTGTGAGTGGAAAGTATTTTTT	2.013
399	A_55_P1960298	Tmem80	GCAGCCTTGTAGATGCCAAATGAATCTCATCTCCTGT TTTCTTTCTAGCCCCATT	2.008
400	A_55_P1966104	Il17d	GCGAACTCCAGCATGGACAAGCTGCTGCTGGGGCCCG CCGACAGGCCTGCGGGCGCTGA	2.007
401	A_55_P2383877	2810040C05Rik	CATATACAAGACGGGGCAATCCAAAACAGCATAATAT AATTTCCTCAAACACTTGAGAA	2.007
402	A_55_P2133220	E130306D19Rik	CTACCTCCTATGTTCTATAATTATTCACCTGGATCT TAATAAAGGGTTGTTTGC	2.007

403	A_55_P2144456	Suv420h1	CCCTTTGCTCTGAGGGTTGTGTTATGTGATA CATGTAATTAAAAAGAAAATA	2.006
404	A_51_P162116	Mblac1	ACACAGTCAAGACAAGCAATATTTGTACGTGCAGCTT TCTAGGAGGCAGCTCAAACA	2.006
405	A_51_P256945	Opa3	GAGCCTTATTACATCTGAAGACCCTTTCTAAATG GAGACACAGGCCAGGAT	2.006
406	A_55_P2071970	Nav2	ACACTGAAAATACCTCATGGGAAAGGATCCTCACTGTT GAAATATAAGGTTAAATGG	2.003
407	A_55_P2110703		ATGGTTAACATTGACATAGGAATACAGACCACTG ACCACCTGTGACCACCTAGCAC	2.002
408	A_55_P2111825	1700001C02Rik	CCCAGGGAACCTTGGCTGACCAGGCTGGCTTGCTTG TAATAAAATCTCAGCCACAACC	2.002
409	A_52_P560146	Gm22	CCCCCAGGTTGACTGTAAAAGCTACAGCTAATTGT CTTTCAAATATATCCCACCA	2.001
410	A_52_P593037	AcsI5	GCAGCCAAGATCGGGTAAAGGGATCATTGAAGAAC TGTGCAAAACCAATGTGAAAG	2.001

Table S2**a) Up regulated genes in δ-treated MEF**

No	ProbeName	Gene Symbol	Sequence	Fold change [σ] vs [DMSO]
1	A_51_P413376	Zfp42	TGTGCTATTGAAGGGGATGGGGACTTTGCATA CGGCAGAAAATCAGTTTTAACTA	488.161
2	A_55_P2042297	Gm5250	GGATCCTGCTGTGCATTCTGATGTGAATACCAAG GTTACTACTCAAATAAAACATAAAA	155.015
3	A_55_P2067947	Dppa5b	TTCATTACGGCTATCAAAGCATCAAGGTCGGG CTAAATGGTTGCTTCAGTCCATGGCT	123.400
4	A_55_P2003483	Gldc	CACTAATGTGCCGTACTGTGACAGCATAAGTGT CCTCCTTCACTGTGCCGGACTTTTT	122.181
5	A_55_P2028171	Dppa5a	CTGCGCATTCTGATGTGAATCCAAGGTTACAC TCTAAATAAAAAATAAAATTGAAGTG	94.802
6	A_51_P143712	Tdh	CACAAAGGCCAGAGAAATGAAGTCTGAGTGGT GGTGGCTATCTCTCGGGATCTGCAGCA	78.498
7	A_66_P114804	Gm7325	TGAGTACTTCAAAGCTGGTACCGCAGCAGGTA GTCAATAAACGAGGACAGTGTGTTGTT	78.169
8	A_52_P537571	Trap1a	TGTAGGATGATTATTCTTCCACGACCTAATT CCTGGTGTCTATACCAGTGAACCCCT	69.488
9	A_55_P1978571	Otx2	TTTCAGGGCTGTGGATTGTGCGACTGATTGTC CTAGATGCACTACTTTATTAAAAAAA	58.380
10	A_55_P1971006	1190003J15Rik	GAAGATATTCTAGCTGCCCTGGAGTTCTAATG GGAAGCTGTGACTTGGGTGTCAATAA	55.346
11	A_51_P491635	Ly6g6e	TACCCGAGGGTCTCAAGAACAGAGGGCTACCTT GGGGAACCATAAAGAGTGTATTAAATA	54.093
12	A_55_P2137701	Gm13138	CTGTCAACATCTCCTCCATTGCCCTGTAAATA AAGCTGAATATTAAACAAGGTTAA	53.197
13	A_55_P1960342	Tcl1	GTGTGGGATTTTATGTGGTTCTATTAGAGATA CGGCTGGATTTAATAAACGTTGTAG	52.202
14	A_55_P2027127	Triml2	CCCAAGATCAAAGAGACACAAAAATAAGATCC AGACTTGTGAACACCACTTATGTAAT	51.429
15	A_55_P2101526	L1td1	GAAGAGACTGCAGGCTGACTGACTCAACAAGAT TACATTGCTTATTATTACTATTACA	46.675
16	A_51_P508580	Tcf15	CCATCCAGGCCTAGCTGGCCAGGGACAAGGCAG AAATTAGAAAACCAAAGACTATT	45.908
17	A_55_P2071349	Trh	GGGGTCACATCTGTATATAACCTGCTTGTAA ATCTCAATGACAATAAAATATCCT	44.791
18	A_55_P2084332	Pigp	TATCGAGGTCTTCATTGCGGCTCTCAAACAC AAGGTTGGCTAAATGGATGCTTC	43.066
19	A_51_P137336	Cdh1	ACATTCTAACGGAAAAAGGAGACAAGACCTTT GAGAGTTTCATTCAAATGCAAATCT	43.030
20	A_52_P633300	Morc1	AACGAAAAGCTAAAACGTGTTCAACCAGATCC AGAATATCTACATGGCTCAGTATGAG	42.882
21	A_55_P2007708	Nanog	CCATGATGAACCGATGCCAGCTGGACTAGTTAA ACAAAAATAAACACTAATTACCTT	42.247
22	A_55_P1984655	Smtnl2	TGCCCATCTATCCCTTAGATATTGGCAAATATT ATGATAAAAAGTGGCCCAAAGTTGA	40.894

23	A_51_P269084	Chchd10	GCCTAACCCCTCACCGACAGCTTGATGGAAAGGAGAGGTTCATGTGACTGGGAGTAAGG	36.728
24	A_51_P514449	Nr5a2	ATGCAAAGACAGTGATTCTGCATATGGCCTGGAAGACAGGAAAGCCAGTCTCCTACAAA	32.774
25	A_51_P245533	Tex19.1	TGACCTCACTGTCATAGGGTCATATGCTTACTGTCTTAGGTCAAGATACTGATTTA	31.948
26	A_51_P202340	Pou5f1	AAGTATTGAGTATTCCAACGAGAAGAGTATGAGGCTACAGGACACCTTCCCAGGGGG	31.537
27	A_66_P136102	Lefty2	AAGGGTGTACCTGAGTCTTCTGCCATTGCCTGCAGCTTGCCATGTCATTATTGT	31.310
28	A_52_P175376	Tcfcp2l1	GTACCTGAAATAAACATATTGCACTTGAAATGAGCTTGAAATCTGTATGGGCTCTGT	31.184
29	A_65_P16753	Bex1	AAGGATAGGCCAGGAGTAATGGAGTCAAAGATCAAGCGTAAAAATCTAACATGG	29.812
30	A_55_P2065549	Dppa4	CCAATGCTAAGAAGTACGAGGGCAGTGCAGCCGATGCTCGTCATCAGAAGTCAAAG	28.775
31	A_55_P2150029		AAGCCAGGCCGTTTGAGCTGAAGAATCTGGATCTCCAAACATACCGAGGTCTTAAT	27.322
32	A_52_P488501	Gtsf1l	GCGCCAACGTGTCACCCAATGTTGTCCTTAAGAGTTTGTCCCCAAAAACTGTTGT	26.557
33	A_51_P496720	Dnmt3l	ATGAAAGTCTTCTAGAACCCAGGGCAGATTCTCCTAACAGTTCAAGGTCTCTCCACAGTT	26.057
34	A_51_P494125	Alpl	CCTTTTTGGTGGTTAAAAGGGAACACAAGACATTTAAATAAAACATCCCAAATAT	25.370
35	A_51_P376445	Rhox5	TGGAGTGAGATGGGAGAAAGATGCCCTTGCACACCAGATTTGATTGATCACAT	25.214
36	A_66_P137775	A830035A12Rik	TCACATCAGGCAGGTGAGCCAAGCCATATTGAGCTGAAGAATCTGGATCTTCTAAGA	23.447
37	A_51_P324814	Krt18	GGATGGCAGAGTGGTGTCCGAGACTAATGACACAGAGTTCTGAGGCAGTGGAGAGA	23.403
38	A_51_P368823	Grb7	CTGTACAGACTGAGAGGCCAGTTGATCTGCTCTGTTTATACAGTAACAATAAGATTA	23.275
39	A_51_P354706	Lefty1	CTTTCATGCAAATCTGAAGTGCTCATTATACTGGAGAGCTGGGATTCTAACTCCCAA	22.788
40	A_55_P2146254	Ifitm1	TGTGACACTCACAAATCTGTCATGGTGGACTCAATAAAGTGACGTGCTGTGACTTTCT	21.932
41	A_55_P2011877	Eif2s3y	CTGTGACCAACTGAACCTACAGTAAAGAAAGTTTCTTATGTTGAAGGATTGTTACTC	21.524
42	A_55_P2031021	Bex1	TTTTTACTCGGCCATAATTCTTGTAGCAGAATTATCAATTGATGGGAAGATCCG	20.487
43	A_55_P2129498	Gm5712	AGATCAAGTATTGAGTATTCCAACGAGAAAAGTATGAGGCTTCCGGGGATGCCCTTCG	20.487
44	A_55_P1983488	Lsr	GTCGGGAAAGTTAGTCGTCGTGACTCCACGTTTGTATGCTTAA	20.401
45	A_55_P2183147	Tdgf1	TGATGCTCACAGTGAATCCCTAATGTTACCCCTC AAAACACTAACTAGGCCCTAGCTG	19.822
46	A_55_P2087265	Gm7676	ATGTGACACTCACAAATCTGTCATGGTGGACTCAATAAAGTGACGTGCTGTGAAAAAA	19.678
47	A_52_P307739	Sox2	TGGCAATCAAATGTCATTGTTATAAGCTGAGAATTGCAATTTTCAGGAAAGG	19.630

48	A_55_P1988368	Upp1	TTTCCGCCCGGAGAACCTCTGCAACTCCTGGG CAATAATCTATTTTCTACAAACACA	19.213
49	A_52_P270429	2200001I15Rik	TGGAGAGAAGGCCATTAATGACGCCCTAAAGAA AGCCCAAGAACATCAGGAGACAGGGTGT	18.750
50	A_55_P1966749	Cyp2s1	TAGCTGACCTTGTGACTGAAGGTTCCGTT TGCAATAAAAGTTGTTCTGGCCC	18.626
51	A_52_P648715	Triml1	AGAACCCGTGCATAAAAGTTGGTGTGTTGGAC TATGACTCTGGACACATAGCCTCTA	18.592
52	A_55_P2015375	Tuba3a	TCTGGCTGGCGGCCGTCCATTATGTCCTCCCCAC CATTGAAATAAAGGATATATTATT	18.349
53	A_66_P118600	Lama1	ATGTTGAACTAAAGGCCACACGGACAACAGATAC CTCTATTAAATGGTTAAAAGCTCAGT	17.736
54	A_66_P101192	Dppa4	ATAAGAACAGATCTTGACTAAGAGCCTCGAAG GATAAAGGACAGATCTTGTTGAGC	17.493
55	A_52_P472302	Fxyd6	TTGGAAACTAACCAAGGCCACACTGTGACTGGGA CTGCTGATCTGTCTGTGATCTAT	17.170
56	A_51_P109144	Grtp1	AAGCAGATCACCAAGGGGACTTTGTGACAGAG TGTCAAGCATTATGCAGAAAATCTT	16.755
57	A_55_P1998601	Slc17a9	CCTATTAGATTTCTTATAGATGTTGAGTCTT GCCAGAGCCTTATTAAGTGAAAAC	16.526
58	A_51_P237668	Bex2	GTTTGTGATGTTACTGTTGAAATATTCTGGTGTCA CTTGTTCATGGGCTCCAAC	16.267
59	A_51_P171999	Apoe	AAGATACAGGCCTCTGGCTACCAACCCATCA TCACCCCAGTGGCCAGGAGAACCAA	16.066
60	A_55_P2071691	Kank3	CTGGGTAATGCCATATCCTCAACTCACTTCATG AAACATCTAATAAAAGTATTCTAC	16.053
61	A_55_P1960291	Tjp3	GCAGTCACCAGCGTGCCACAAGCCCTCAAGCTTC TGACCACTTAATAATCTTAAAAAA	15.674
62	A_55_P2078960	Tdh	TTACACACTGCCTTGTCTGTGCCTAAATTGGTC CAAGCACAAAGGCCAGAGAAATGAA	15.644
63	A_51_P417074	Arhgap8	AGACTGGAGATGCCCTCCAATCTAGGCATCT GTGTACCTGTTGTCTTATGAACCTA	15.404
64	A_51_P346132	Rhx9	CACCAGGTTCACCACTCTCAGCTGCGTGTGATCTG GAGCGCTTTCCAAGAGAACGCTT	15.227
65	A_51_P202050	Dtx1	TGAGGATTGGCTGGGATGAAAGTCAGCCAA GCTTTAAAGGGACGCCAGCAATTGCTC	15.136
66	A_55_P2001628	Rps4y2	GGGGAAGGGCGTTTACGTTGTTACTTAA AGTTTTTAAGCAGCATGTTGAATTA	14.705
67	A_55_P2169415	Cgn	CATGATTAAAGAACAGATATTCTGCAGATCAGAT ATTTCTCCAATCCAGCCTGGTT	14.469
68	A_66_P128079	Gm5604	CCATCCAAACCAATTCAAGTTGTTCTAAAT AAAGCCTCAGCTGGCTGTCAACT	14.005
69	A_55_P2174601	LOC100047292	CTGTCTATTTAACTAACCTCCATATGCTGCCAGT ATCAACTTCTGACATTGCAAA	13.962
70	A_55_P2129920	Chd7	GTCCTACTGTTACACTCACAGTTAATGTTCATAC CTAGTTTATAAGCTGTTCTGTAAC	13.903
71	A_55_P1953341	Wfdc2	CGATGAAAGCATCTCTTCTAACCAATAAGT GATCGCTTCAGCAATGGAGAACG	13.226
72	A_51_P244950	Dpys	CAACCCCTGGAGAACACCTGCTATTCAACTCC CCAAGATCCTTAGGAAAAATCATTG	13.213

73	A_51_P359603	Itgb7	ATTTTCAGAGTGACCTTCAGAGGGCAGCAGCCA TTCCACCACAGAAGGGCTGGTCT	13.198
74	A_55_P1983733	Aldh1l1	AATCAGAAGTGGCTCCAAGTGGAGTGAGCAGTC ATGTCCCCCATGAATAAAATTGTGAG	13.171
75	A_51_P255657	2210011C24Rik	AACCACCTTCTCCATAAAATTCTAGTCTTCCTT GGAAACCTGCAAACCTATGAGT	13.162
76	A_51_P183894	Fbxo15	CGATGAATACTTCATTGTCAGACTGGACATTAC CTCAGTAGCAAACATTACAACAATG	12.973
77	A_55_P1979126	Tuba3a	CGGCCGTCATTTATGTCCTCCCCACATTGGAA ATAAAGGATATATTATAAAATTCT	12.669
78	A_55_P2032543	Cblc	AAGGGAGCCTGGGGCTGGAAGGAGTGACAAA GCAGAAATAAATTGAATCCTGATCTTC	12.273
79	A_66_P112024	Gm6816	CTTGCTACCCGCCTCTAACATCTCATGATCT GGAAGGGCAAAAGCCGTGGATCTC	12.077
80	A_55_P2174582	1190003J15Rik	GGAGTAAAGTGTGTTACCTGAAGAAAGCC ATCTATCTGCCTGTTCTTCCCAGAC	11.630
81	A_55_P2092661	Nup210	CCGAGAGCTGTAATGGAGTCTCCCTGCATTG TTAATAAAGTCTGTGAGTTCTT	11.325
82	A_55_P2090070	Myh14	TCTGTGCTCATAGGTAATGCTCATGGCCCT CATGCTCAGACACTAAAGAAATAA	11.160
83	A_55_P2096917	Mreg	CATGCTTTAAATTAGCCTGCAAATATTTCA GTCACCTCTGTGGCTATTAGAAGAT	11.056
84	A_55_P2151609	Sorl1	GTTATGGTTATTTAAAAGATGCACTTGAGT TGCAATATGTTATTTATATGGGCC	10.934
85	A_55_P2007703	Nanogpd	ACCCACAAGCCTTGGATTATTCTCTGAACACTC TGTGACTCCACCAGGTGAAATATGA	10.775
86	A_52_P138806	Dlgap3	CCACACCTGTGGCTGTTCCACATCCCTTGAGTA TCCCAGGAAAAATAAAACCGCAGAA	10.726
87	A_51_P282144	Adam23	TAATGACTACAGAGCCTCAGATCTGAGAATTGG GATGGGTACAAGACAAAGGTCCCTT	10.532
88	A_55_P2086835	Gm5514	GGCTTGTGATGTTGCACTAGGAGCTCTGAT CAAATAAAGTTAGCAATTGCAAAAAAA	10.384
89	A_55_P1954302	Esrrb	CATGCCCTGGGATTATCTCCCATCCAGTCCATGT ATCTGAAATCTAATAAAATAAGGAAA	10.299
90	A_51_P103222	Slc39a4	CTCTGCTTACCTTCTAAGCCACCTAATTGTTGG CCCCACTACGGGTAGCCAGAGGCTT	10.274
91	A_55_P2404484	1700001L05Rik	TTCTTGCCAAGTGTGTTCTGTGGTGTTCA TTGCCTCAGGCCTACAGCCATAAG	10.226
92	A_55_P1962334	Trim71	AAAGGATTACAAACCAACCACCAACAGGAA GTGTAGGACACAGTATATGTC	10.157
93	A_55_P1985351	Slc35f2	CAGCCACCAAGTGGCCTTCAGAAAACTTAT GTAAATTGTTGTATAAGAATAAT	10.111
94	A_55_P1954006	Ldhb	AGGCTTGTGATGTTGCACTAGGAGCTCTGA TCAAATAAAGTTAGCAATTGCA	10.103
95	A_55_P1975370	Apoc1	TCCACGTAATGTGCCAGGTCCCTTCATCACAG ACCAATAAAAACGTGTAGAAGGCAA	9.961
96	A_51_P486810	Gpx2	GGGCTCTAAGTCTGGGGTAGGTTCTGGCCTTC ACAGAAATGATGGCATCTCCTAAACCC	9.928
97	A_66_P124011	Spint2	AACCGGGAGTACAACCTGTGCTGTTAAAAGA GAGCAACTGCTTGCCTGAGATCATT	9.862

98	A_55_P2036086	Gm3761	GCAGGGCTCTGTCTATGGGAGAAAGGTATATTAA TAATAAAGCGTGATTCATAGAAAAAA	9.781
99	A_55_P2076085		TCTAGCAGGAGGAAGAGGGCTCTGAATGCATG GATGGATTGTGCATCTCATCTGAATAA	9.755
100	A_52_P817257	Gm5480	GCAATGGTGTGGATAACTTGGCCCTGGAACCTTA ATGCTAACCTGCCCTGGCATGGTC	9.752
101	A_55_P1989921	Eml2	GGGACGAATGGGCCACCATGCCTGTGGGAGCC ATTGGTGTGTTGGTGGGTATTTTT	9.695
102	A_51_P103397	Vwf	CAAGTGAGGCTGTGCAGCTACAGCGGATTCC ACTGATAACCATGCTATGACCTGGCTA	9.694
103	A_55_P2027995	Rpl10l	ACCAAGCTGCAGAACAGGAGCACGTGATCGAG GCCCTACGCCAGGCCAAATTCAAGTT	9.689
104	A_55_P2143219	Rasgrp2	TCTGTTAGACCAAGAAGGGAACCGCAGGCACAG CAGCCTCATCGACATCGAGAGTGTGTG	9.435
105	A_55_P1965233	Sh3tc1	ATTTTGTGAGGGTTGGGGGAACTGAAGGACC AAACAGTAGTAAATATTTTCAGCAAC	9.399
106	A_55_P2180744	Clstn3	TGAGGGTAGGGGTTGGGTGTGGTAAAGGAGGG CCGCACCCCTAGGGTTTCAAATAAAACA	9.352
107	A_52_P23225	Gpc3	AAATGGTATCTTATGAGGATGGTAAATTAGT GGTAGGATAGATTGTCTTTGCAAA	9.133
108	A_55_P2037081	2610305D13Rik	CCCCCTTTGTTCTAGTCACAACTCCTTCACTAA TGTATTGTAATAAAAGCTGAATGAT	9.128
109	A_55_P1999511	Aurkc	AGGAAGCTCTCCAGGCTCTGGTTAGTGCATG TGGATTGCTTGTCTCTTTATGA	9.059
110	A_55_P2173188	Kank3	GCTCTGCATTACAGCGTGTCTCATGGGAATCTG CCATTTCCAGCCTGCTACTGGATACA	9.043
111	A_51_P341108	Spint1	ATAGAAGGACCTGCTTATCCAAGAGCTGGAGAA AGTTGGTGTGTTGTGCTTGTCAAAG	8.863
112	A_51_P231946	1700029P11Rik	CGTATTCTCTGGAAATCGGCCCTGGATTTTCAGAT TGCCTGCCCGCTATGTTCTTTA	8.705
113	A_51_P112223	Gsta4	GCTGGAGTGGAGTTGAGGAAGAATTCTTGAG ACAAGGGAACAGTATGAGAAGATGCAA	8.637
114	A_55_P2140903	Vax2os2	ACTAAGGGTGGCGAGGCACCCATGTTCCCAGAA GTAATTCAAATAAACTCCTTGTCA	8.563
115	A_55_P1988384	Slc7a3	GGATATGAAATAATGCTCTGTATTCTTGAA TGATGGCTATGCTTGTGTTCTC	8.474
116	A_66_P107379	Mdk	CTGCACCTCCAAGACCAAGTCAAAGACCAAAGCC AAGAAAGGAAAAGGAAAGGACTAAGT	8.464
117	A_55_P2143233	Rasgrp2	GTTTCTCATGATGCACCCCTGGTACATACCTCCT CTCAGCTGGCTTCAAACTGCTCCA	8.276
118	A_55_P2199118	Bend4	CTAGAAGGCCACATGTTGTTGGGGTAAATT GCACAATAATGTCAGTTACCTGTT	8.254
119	A_52_P338956	Aspg	CTGCTTCCCAGCCTTCCGACGACAATCTGAAG GTCTTGTGAGAAGAATGTCATAA	8.175
120	A_55_P2024366	Raver2	GCTGTTAGTTCTGTGTCAGCTAATGGTTGAA ATGCTTTCAAGATGCAAGCTTAATA	8.158
121	A_55_P2123496		CTAAAGTCTGAAGTCTAAATTGTCAGGCAAT CGCTTAACGTCAACCTTATGTAAT	8.154
122	A_52_P236448	Ngfr	TCCAGCTGGCGACTATGAGATCCAGACCTCTCA TGTTCCCTGACACTTCCCCTTGCAT	8.066

123	A_51_P125842	Tmem51	CCCCAAGTGCTGCTGGTTCTTGAAGGTCAAGG CCTGATGACCTTCAGCGTGCACACA	8.015
124	A_55_P2143251		CTTCACATGGCTCTGCATGTACAGTATTGGGC AAAAAACAAAAATAAAGTCCATTG	7.852
125	A_55_P1968340	Plekh1	ATGCTTGACACCCATGGCTGAAATGCTATGTATG TTTGTCATAAAAAGTCACTGACATGCT	7.702
126	A_55_P2123502	Jam2	TTCGTGATTCTGTATGTGGCCTGGCACATGCT ATGCTCAGAGGAAAGGCTACTTTCA	7.606
127	A_55_P2070992	Aldoc	TCCAGGCCCTGACTCGTGCCTTATGCTCTGAGTA CATAGCAAATAATGAGAGCAAAC	7.473
128	A_55_P2019054	Acacb	CCTGACCACCTGGGTGCGCTGAAGAGGCTGCTG AAAGAGCTGCAAATAAAACTATTTTT	7.466
129	A_55_P2071811	Eml2	TGGTTCTGCTGACGACTTGGCAAAGTGCACCT GTTCAGCTACCCCTGCTGTCAGCCGA	7.459
130	A_51_P472249	Slc7a7	CTCTTCCCTTACAAGGGCCAACAATGCTCCAAAC TTGTCTCCTTCAGAGGAACACAAAA	7.384
131	A_52_P354744	Slc2a3	GTGCTTACACATTCAAGCCCTTAGGCAAACCC TTGCATAGAGTGGTAGAGCCATATCT	7.355
132	A_55_P2002572	Ephx2	TTTTGAAGCAGCTGATTGGAGAGTAAGATT CATTCAATAAGCTAACCTCAGGGC	7.276
133	A_55_P2026982	2610019F03Rik	CTCCTCTCAGGAGGTGAAGATGCACGTAAACCA GAAAGATTAATTACAAATGATTTTT	7.266
134	A_55_P2097340	Camkv	GGGCTAACTGTGCTGCTACTGAACCTGGCAAATA AACGTCAACCTGCAAAGCCTCTGGCC	7.168
135	A_55_P2155504	Lck	AATCTATGTCTGTGTGTTCTGCTGGTGCCT AGCACACACCAGGAGCTCAATAAAA	7.105
136	A_55_P1954718	Cyb561	CTCCTGTGACGTACAGTGTGTTGGTGCACAA GAGGAATCAATAATGTCACAGCTG	7.092
137	A_51_P273538	Syce2	AGGCATGCTGATATTGTTTTATAGTTCTGTAAC CCAACACAAAGGCCACCAATGCTCTT	7.088
138	A_55_P1955998	Nlrp1a	AACCTGCGGAGGCCACACAGTCACCTTCTACT GGACCAGAGATTTCGGCGGGAAATC	7.070
139	A_55_P2067722	2310057J16Rik	AGCTCAGTCCCCTGTCTGTCCTCCACTTCTGA ATAAAAAAACTGAAAAGAGAAGCTG	7.049
140	A_51_P510418	Aldh1b1	AAATCTGATTCAGCCTGAGTCCCAGTGAAGTG TTACAAGAAGTGTCAACCAATAAGT	7.045
141	A_55_P1963002	Ppfia4	TGTGTGGCGTGAGCGGGTGTACGTACCA ATAAACATCCTGGTTAAGACAATGT	7.034
142	A_55_P1968231	Rbpms	AACCTTATATTAAAGGGGAGGGACCTTAGTTGG AGGTAACCATTGCCTCAAGAGGGAGCA	6.999
143	A_55_P1969392	Rpl39l	CTGTGCTTACTGAGTTCAATTCAAGCAGTTCA ATAAAATATGTGAAACCTTGTTC	6.974
144	A_66_P107818	Gdf3	CTATCAGGATAGTGTAGAAGAACGTCATTCTCCGA CATTATGAAGACATGGTAGTCGATGA	6.948
145	A_51_P282837	St14	CTCAGAGTTCTCCAAAGTGGGACCCCTCAAGA GTTGGAGAGAGAACCTGCGTGCAG	6.925
146	A_55_P2037608	Acp5	CTTCTGGGAACGGGTTCTTCAGTCAGTC TTACTGTCAGTCTTCAATAAAA	6.773
147	A_55_P1957049	Bai1	GAAAGAACGGGGTGGGGATCTATTTCT CCTTTCTTCAATAAAAAGAA	6.761

148	A_55_P1971244	Ndufa4l2	TGTCCCTGGGATCAAACAGAAGCAGCCGTGGG CAAAATACAATTTCATTTAACAAATTG	6.674
149	A_55_P2102060	Gstm3	TCATGTACAATAAGCCTGAAACACACTTGAAAC ACAATAAACACTGAACACTTGCTGTG	6.642
150	A_55_P1998943	Oas1a	TGTCCACCTGTGGAAGGTTCTGTCGACAAAGT CTGATCAACAATAAACACCACAGCAGGT	6.595
151	A_52_P379277	Enpp3	CCCACGTTGAAACCATTATTGAATGAATGGAT GTATAAAGCATTGACAAAATGGGG	6.537
152	A_55_P2127934	Palm3	CCCTCTGCAATGAAGCCTTATACTGAAAATTA AATGTTAAGGCACTCTGGCTTAAG	6.463
153	A_51_P148612	Cox7a1	ACAACGCTGTACAGACTGACCATGACGCTGAC TCTGGGGGCACTGCCACTGCTTAT	6.428
154	A_55_P2259125	LOC100303645	TATGGGAGCAACCAGTGCCTCAGCCTCCAAACA TGAATAATAAAAGTCTTGTCTTGA	6.415
155	A_55_P2097828	Gmfg	CCTTGAGCCAGGGATTGGAATCCTTACCTCTG AAGGCTCAGATTGATAGGATATGAAC	6.414
156	A_55_P2130535	Dnmt3b	GTGCAAAGATGACAGATGCCAGAGTTACCTT CTGGTTGATTAAGTGTATTCTCT	6.291
157	A_55_P2052281	Rnf208	CTACCTCGTGGCATTGTCGCTGCAGCCAACCT TGCCATTAAACTCTTGCCAAAGTT	6.261
158	A_55_P2428968	Lrrc2	CTTACTGCCCGTGTCTAAATCTTGAATATGTG TTACCTTATTGGAATTGCGGCTT	6.241
159	A_66_P131110	Zfp473	GCACACAGGAAATGTTGCTATTGATGAAGTGT GGATGAGTGTCAACTATCTAGTACAA	6.219
160	A_51_P486681	Ap3b2	CTTCTACCTGTTCCATGGGTTCTTAGTGACTT CCTAGGGGAAGACAGAACAGCTGCTCC	6.138
161	A_51_P273609	Itpk1	CCCGATCCATAATTGACTTCACAGGTATATAGA CTTCTGGTCTAACCTCTGCACTACA	6.125
162	A_52_P648601	Dusp9	CACTGAGACTCTTGACTGAGGGTGGCAAAC TGCCACCGGAGGAGATAGGTCTAG	6.022
163	A_51_P438821	Pycard	ACCTGCAAGGACTCCCTCCAGGCCCTGAAGG AAATACATCCCTACTGGTATGGAC	6.011
164	A_55_P2170847	Fbxo27	GCCTAGAGTCCAGGCCCGATCATCAAAGATGTC TATATTGTATAATTTAAAGTTATT	6.001
165	A_55_P2044439	Mfng	ATAGAAGGGTTCTGGAATACATCCCAGGCCAA GACCCCATCTCTACTATGAATGTG	5.842
166	A_55_P1968178	Smagp	CCACTGTTCCCAATCAGCCTCAAACCTACTGT TTTATCTTAATTAAACTTATGAAA	5.765
167	A_55_P1974019	Dapk1	CTGTCCGTGAGAACATGTCATGTTACCATATCAT CTGTACATATATATGCACTATGTA	5.737
168	A_55_P2075966	Spnb4	GGGCGGTGTGGCAGGCGCACACTGTATGTACCT ATAATAACCCCTTGCTTGTACAGTC	5.701
169	A_55_P2088385	Tnnt1	CAGGAGCCACTGGAGCGTGTCCATCTGAACTC AAAATAAAAGTCCCCCAGGCATCTGC	5.696
170	A_55_P1973578	Foxh1	AACAAGAGTATCTATGATGTGTGGGTAGCCATC CTAGGGACCTGGCAGCTCTGCCCA	5.647
171	A_51_P338443	Angptl4	ATGGTGTGTTGAGGTGCTGTGGATGCACAGG TGCTAACTGTGGTCCCAGGCACAGCT	5.594
172	A_55_P2052485	Ushbp1	CTGGCCTCTGCAGGGCTGTACTAATGTTCCCTCA CACATGTAATTAGACAAAGTAACCTT	5.562

173	A_51_P312949	Tdrd12	AGAGTGTTCCTGGTCGATTTGCCAAGTATATT CCAGTAAAATCTAAAACATCCGAGT	5.555
174	A_52_P350786	Phlda2	ACCATTCCGTGTTAATATTTTATACCATATTTC ATTCCAAATAAACATGTCACTTT	5.518
175	A_55_P1973447	Ybx2	TTTATGAACTGTATGTGCCACCTGAGCCTCCA GTAAAAACAAAAGCAGGCTTCTGT	5.494
176	A_52_P633560	Nodal	TTATTAGATTATAAACGAGCCATTGGTTCCCT GCCTCAAGCTGTGGTAGGGAAAGACC	5.478
177	A_55_P2055324	Spint1	GGAGAAGGCCAAGAGTCTGGAAGGAGCAGAG CAGCCTTGAGCCAGGAGTACTGTATATA	5.461
178	A_55_P2008722	Gm13157	TATCAAGGTGATTCTGAATCCCCCAATGTACA CCTTACAAAACATCACAGCTCT	5.419
179	A_51_P487918	Rinl	AACGAACGGATGGGAACAAGAGAGACGGGAGA TGCTGGCTACTCCAGGAAAGCTCTCC	5.409
180	A_51_P270733	Syngr1	ATGTGTACTTCCCGCAGATCAGCAGTGTCAAGGA CCGCAAGAAGGCCGTGCTCTGACA	5.404
181	A_51_P241769	Rhd	TTGGTTTACATGACAGAGACTATTAAATACTTGGG ATGAATACACCTCATTAAGTTCTGG	5.392
182	A_55_P2144341	Gm7029	AGGAGGAGGCAGCTCTGGTGCCTGAGCATCTT CATAGACCACCTGTCTTGACTGAG	5.388
183	A_55_P2047461	Fcho1	TGGACAGGAACACCCATTTCAGCCTGGCTCAGCC AACTCCTCCGTCCACAAGCAGGCCCT	5.355
184	A_52_P562676	Sult4a1	AGTACTGTACGGATTTCTGGAACACACATGGT AATCTGCTTGCCTGCATCTTAA	5.353
185	A_51_P451588	Plekhb1	AACCCCTCATGTGCCGTCTATAGGTAGCAAGCA ATCTCTCCATTGATCCTGTTCCAAA	5.335
186	A_55_P2015687	D14Ert668e	CCATGGTTTATGCTCACTATCATATCACATTGCC AATATTAGCACACTTAATAATGC	5.329
187	A_51_P280893	Pla2g1b	CGTACACAAAGGAATACAAAAACCTTGACACCG GGAAATTCTGTTAGCCTGTCACCTCAC	5.316
188	A_55_P1995243	Cobl	TTAGTCACAGCTGTGCTCTTCTCTTAGTGCCA CAAATAATGCAAATCCAATGCTGT	5.281
189	A_55_P2035812	Rnf208	TGCGTGGCATTGTCGCTGCAGCCAACTTGCCATT TAAAACCTTTGCCAAAGTTAAAAAA	5.276
190	A_55_P2047335	Capn5	GCCTCAGTGTGGAGGGCCCCAAAGAATTCCC GTCTGTGGGGAGTTCTTGCTCAA	5.246
191	A_51_P246317	Mt2	AGAAGCCTAGCCTTTGTACAACCTGACTCG TTCTCCACAACTTTCTATAAAGCA	5.208
192	A_55_P2074371	Lin28a	TTCCTTCCCTCTTCCCTGGGAAAAATAAGACT TATTGGTACTCCAGAGTTGGTACTG	5.206
193	A_51_P412914	Efs	GCTGAAGATGACAATGTAATAGTCTGAGAAACA CCAGAGAGCTCTCCCTCACAGTC	5.201
194	A_55_P2080880	Clcnkb	TGACTTCTGGGTTGCCTGCTGCTAACCGAGGC TTCTGAGAAAAATAAAACTGATGTCT	5.199
195	A_55_P1971897	Mdk	CCCTCTTGTCTCCCACCCGTACACTGTTATT AAGAAATGAATAAAATAAACTCAC	5.146
196	A_55_P2128501	Krt8	AGATCTCGAGATGAACCGCAACATCAACCGCCT GCAGGGGGAGATTGAAGCCCTCAAAG	5.131
197	A_51_P208145	Si	ATCTCTGATACTAGGCATAGACTTAAGAAGCAGG GCTCAGTTCCCAAATGCCACATGGT	5.127

198	A_55_P2019694	1700061G19Rik	AAGAGGAAATCCAGAAAATCTATGAGACTTCGA CCTCCTAGGAACCCCATTCAACCCTAAT	5.096
199	A_55_P2048119	Slc29a4	CCTGTCTACCTGTGTTCTGACTACCGCACTG GCCATTAAATATGGCAGAGACTGCC	5.050
200	A_51_P155755	Pld6	GGGGGAGCATGTGGAGTAACAAGTCTGATAT CCCCTCTGGGCCACCCCTAGCCTCT	5.050
201	A_55_P2125963		GAATTACATACAGGAAAGAAAACCTTACAAATGCA GTGAATGTGGAAATGCTTACTGACA	5.026
202	A_51_P154842	Oas1f	CCTGTCCACCTGTGGGAGGTTCTGTCCAATGTC TGATGCACAATAATAATCACAGAGA	5.020
203	A_55_P2064538	Gm13154	GTGTGCTTCGAGTATCTACTAATCAGAATTCTCT CAAATGCTTGTCTTGTCAATTAGGA	5.016
204	A_55_P2076462	Lnx1	ACGCTTGCTGGCCAGGATGCTCAAGGAACCTAA AGGGAGAATTACTCTGACCATTGCTT	4.966
205	A_51_P498772	1700019D03Rik	CAAAGATGCTTGAAGTAGTCCTCATTAACACA GCTTCCTCACCTGCCAAAGCTCTT	4.951
206	A_55_P1976734	Cacna2d2	TGTAGCTGTCTGGGGCGTGTGTAA CTGTAGTGTAGTCAGGTGCTCAACCGGA	4.927
207	A_55_P2015541	Hif3a	CAGAAACCCACAAATGTCCTAAAAACCCATAA AGACCTCTCTGTAGGCAACAGAG	4.907
208	A_55_P2091551	Arhgap9	GGTGATGCTTGTCTCAGTATTCTTATTGTCAG GAAACTGTGTCAATTAAAGTTT	4.906
209	A_55_P2097448	Rbpms	TTTGTACATATCAACCTACTGCAGACCGCAGA GGGAGCTCCGTGTTGAATTATTAG	4.902
210	A_51_P107020	Kif5a	AAATGTTGCATGCCGGCTGGAAGACAAAACCA AACCGCACAAATCCAGTGTGTATTAA	4.833
211	A_55_P2088018	Fhod3	GTACACACATACAAGCACAGCTTGTCTTACAGTT GTGGATTTAGATGTACTAAATGTTT	4.809
212	A_51_P350332	Rbpms	CTCTCTGCTCCTAAAAAGGAGCTATGTATTATT ATGTTGACCTCAGAATTCCCAGCTG	4.808
213	A_51_P145520	SigIRR	TTGCCTCTATCCCTGGGCCCTCAGGAAAGGAGT GTGGCCCCAGGGTGTCAACAAATAAA	4.727
214	A_55_P2148688		CTGTGTGCAGATAACATTGTAAGCGGTATTAA TTAAAAATCCAAGCAGTCTTGCAGA	4.720
215	A_52_P97889	B4galnt4	TTTGGCCTTTGGGATCTACAAATCAGACTTG ACAGAGTAGGAGGCATGAACACTGAG	4.642
216	A_55_P1995996	Gm13157	CGAAAATCCCATCTGGTATTCATCAGAAAATC ATACAGGAGAGAAACCTTACAAATAG	4.628
217	A_55_P2109257	Nipal3	CATGTGTTATTTGCAGAAGTGTGTATACTGTGT GCAGATAACATTGAAAGCGGTATT	4.598
218	A_66_P110161	LOC626152	TTACAACCTTCGTGTCTCATGTCTTTGATAAT AAATGAATTTCGCTCTGTGGGG	4.576
219	A_55_P2103011	Sema4d	TTTCCTACTTGGAACTGTACACATTGAAAAGTACC CAAATAAACAGAAGCTTATCGTT	4.549
220	A_55_P2002849	Aifm3	GGACGATTTCCCAGCAAGCCCCCTCAACATTAC CTTAAATTAACAGCATGTCTCAGC	4.547
221	A_51_P181341	Necab2	TGTTCCCTACTTCCGTCTCTGTGATGGCCCGCT ACCTAGTAGGAGCTGTGACCTGT	4.529
222	A_55_P2056774	Hsd17b14	TTAGTCTGGACTCTACCCGATGCCCTGGCTATA CTCTCCCTATAGCTACAATAAAAGC	4.528

223	A_55_P2154914	Acap1	ATCTCGACATATCCGAGACTTCTCCCTCATGGC GTCGGACGCCAGAGAACTGAGCC	4.501
224	A_55_P2035400	Ripk4	CTTGTGAAAACACGGGGACCATAAGGAGATCTG TTTATGTCAATAAAGGACTCCGCCTA	4.491
225	A_51_P414396	Mmrn2	ACTTTCCTCAGAAGGAATGTCTACAGTGATGGG TTGCCATGCAGAAAGGCCCAGATT	4.452
226	A_51_P262515	Phf11	ACACTGATACCCGGGTTATGCTCACTATCATA CAGATTCCAATATTAGCACACTT	4.444
227	A_55_P2137828	Gprc5b	CTGACCTCGTCTAACGCCAGTACATCTGAGCTGA GTGTTTAATAATCTGATATTCTC	4.443
228	A_51_P403814	Slc4a5	ATACCGAAAACATACAGCTAAATGCCACCCAC CATAGATATAACCTTCTCGTGAAAAA	4.388
229	A_55_P2045367	G630025P09Rik	AAATGACTATTGCCTTCGGTTTTCTAACAGCAGGT TGCCCCACGGTAAATCGGTTACCT	4.379
230	A_52_P147803	AI428936	TCAGTTATGTCAATGGTCTCCCTCCAATCTGAGCC CACCATCCAAGACACGTGCATTA	4.365
231	A_55_P2056719	AF067061	GTGTCTTGAGCCATCTGGGTTGGTTGTGTT GTTTATTTTCGTTGTTACAGC	4.364
232	A_55_P2048759	4930583H14Rik	CTTCTTACTTGTCTATGTAAGACCAGATTA CTGGGTTGCTGTAACTCATTAA	4.348
233	A_55_P2175955	Ano9	GGATCCGTACAGCGGCCAAACTTTTACAAGCAA AATAAACCTGTGTATTGATTCTG	4.347
234	A_55_P1974367	Fabp3	TTTATTTTAAACTGTATCAAAGGGTCTCAAGGTCAAT AGGTCAATAAACGAGCAGAACCAAGGCC	4.316
235	A_55_P2037717	Slc22a18	GACCACAAAGCCCAGTGAECTGGCCAGTCGG CAATAAACTTAAGAACCTCTCCTCTT	4.298
236	A_55_P2033780	Fabp3	TAAAACGTATCAAAGGGTCTCAAGGTCAAT AAAGCAGAACCAAGGCCACCCAAAAA	4.292
237	A_55_P2042016	LOC100048058	ACCTGTGTTCTGACTACCGCACTGGCCATT AAATATGGCAGAGACTGCCACCGCT	4.279
238	A_51_P391291	Gng3	CAAGCACCTTCACTCTATCTATAAAGGGACCC GCTAAACTGCCAAAATCCTGCCTGTT	4.270
239	A_55_P2022895	Slc12a8	CCAAATGTGGAGAACAAACGAGATTCTTATT CTAAGGGCCAAAATAAACACTTCTT	4.239
240	A_55_P2158653	Cldn7	AAAGGCCCTCTGCCACTCCACCTCAAACATCA TGTATAGTTGCTGGGGGGAGGGCA	4.183
241	A_51_P176352	Ndrg2	TCAGGAGAACGGTTGCTGGGGTCAGCGATCC TTAATGTGATAGAAATATCCAGCATGT	4.081
242	A_52_P683441	Capn5	AAGCCTGAAGACTGGACAAGGGAGGACAGGG TGGAGCAGGGATAGCCGTGGCTTCATT	4.067
243	A_55_P2008889	Tmsb15b2	AGATCCATTACTACCCCTGGCTGCAAAGGTCA ATTGCTATGAATCATTAAATT	4.016
244	A_52_P108850	St8sia1	CAGTTCTCTACCTCCCTCCTGGAGAACATTG GAAACGTACCTGTGAATAAAATGG	3.982
245	A_52_P380369	D14Ertd668e	AAGAAAGGCAAAGGCAGATGAAGAACAGCTT GAGGCAGTGAGACTACAACAAACCT	3.973
246	A_55_P2173952	Myh6	GCACGACGAGGAATAACCTCTCCAGCAGACCC GCTGTGGCCAATACACAATAACATA	3.945
247	A_55_P2005060		GTGTTGAAACATACGTCACTATGGAGAGACTTG GCTGATTCTAAAATAATAGTGTGTTA	3.937

248	A_51_P518051	Dusp4	AATAACGGCGGTTCCGCTGCCAGAGAAGACTT GGTTCTGTGTCAGTTTACTTGCA	3.889
249	A_55_P1954277	Emid1	AAGTGTCTGCTGCAGATGCCACGAGTCATATGT ACAGGACAATAAACATCCCTGCTTGA	3.876
250	A_55_P2110351	Eppk1	GTCGGTGTATTACAACACTAGGGTATTACAACTT TCGTGCTTCATGTCTTGATAATA	3.868
251	A_52_P325116		CCTAGAAAACACACAAGGCTATCAGCCAATCTT AATGTAAAGTAGCTAGAGCCATGGAA	3.862
252	A_55_P1961014	Selenbp1	TGTTTGTGCTTTCTTAAGTGAGCTCTGGAAAGC ACCAAGAAATAAAATGCTGAAACTTC	3.842
253	A_52_P167382	Tmem8	TAGCAGGCTGCTCAGCTGTATGAGGTCTGGCTCC AGAAGGCACACAATGCTCGCTAGTGT	3.828
254	A_55_P2173457	1700097N02Rik	CACTTCAATCTGTTGGCTGGCTTGCTTGTGTTG CTAAATAAACTGCTTCATGCTGTC	3.819
255	A_52_P244702	Tcf7	TTTTTCACTTCGCTGTAGATAGCCTGAATCCAA AGAAAACAAAAGGGGTTATCCAAG	3.790
256	A_51_P139320	Pcbd1	GCCATGTTACACTAATTGATAAGCTCTCCCTT TTCTGTAGAGTCCCAGCCTCAGTA	3.782
257	A_55_P2007986	Zscan4f	ATGTTGCAAGTAAATTGACTGTCCAATAATGA TATAACATGCTGTGGATTGCCACTT	3.774
258	A_55_P2104769	Utf1	TGTCCCCATCCCCATCTAAACCTAGGTTCTTACC AAAATAAGATTGTGTTTCTACTT	3.772
259	A_55_P1975903	Dnmt3b	TGTTGCCCCCTGAAGGACCACTTGCCTGTGA ATAGTTCTACCCAGGACTGGGAGCT	3.750
260	A_55_P2072661	Prex1	GGCCAGGGCAGCATACTGGTTATTTAAATGT ACAGATTCTTTCATAAATTATCATGA	3.746
261	A_55_P2136289		AACACGGGGACCATAGGAGATCTTTTATGTCA ATAAAGGACTCCGCCTACTTTGGAA	3.736
262	A_55_P1987761	Prkcz	TGATGAGGACGTATAAGAGGATGACCAGTC CGAGTTGAAGGCTTGAGTACATCAA	3.733
263	A_51_P440743	Celsr1	GTGTATTATTACTGTTAGCACTGGATGGCAAC ACAGGTGAGATGATGCATCTATAATA	3.689
264	A_51_P300506	Cox6b2	GGAACTTCCCGGGAAATATGACCTTGCACTT GAGCGCTGCTCCCTGGCGTCATCAA	3.685
265	A_55_P2194064	BC023969	TTGGATGATTGACCCCTACATGCCAGCTGTATT GAAGAATAAAAGTTCTGTGCTTTAC	3.652
266	A_55_P2182273	Bin2	TAATCCAGAACCAGCAGAACCAAGAGAAAAGGA AGGCCTGGAAGTTCAGGCCAGAAGA	3.604
267	A_55_P2093665	Gm3950	TCCGAAGCCATCACGTGCTCACTCTGCTACTGGA CTCAGAGATTATGGTGGGAATCATG	3.602
268	A_55_P2154252	Gfpt2	CCCTGCTCTATTAAAAGCGTGACAATCAATGT ACTATGCAATTTCACAAATAAGACAG	3.600
269	A_55_P2102857	Krtcap3	GCACGGGGCCCTGACCCCTAGGGTGGTATAAAT AATTGTAATAAAAGAACATTGTATTG	3.568
270	A_52_P377576	Ap1s3	CTAAATGTACTACTTACATTCTGGATAATTCCATA GTTGATCTGTCTAGGTTGCACAAG	3.552
271	A_55_P1956448	Ttyh1	CTCTAAATATGCTGCCAGAGACTGTGAATCACC AGCTATGTGAAAATAATAAAACAA	3.543
272	A_51_P201338	Mtss1	GGAGATGCTGCCAGCGCGAACGAACCTTTAATT AATAAGCCTAATTGTCTTGATCCA	3.522

273	A_55_P1961423	Gsta3	ATTCAGGCAACTATAAGTACATAGCCCCCACAA GCCAACCTCTAAAATTGATCAC	3.514
274	A_55_P2151986	Gngt2	GTGTACTGGGATACCTAAGGACCAATGTTTCTT CCTCTAGACACAATAAGATGCTG	3.501
275	A_55_P1965416	Atp9a	GGCCCGTCTGAGGTTGTGGGTCAGTGCAA GCTTCCTATGGTTGAACCTTGTG	3.468
276	A_51_P399175	Ppm1j	GCAGTATGAGCACTGTCCAGATGATGTGCTGGT CCTGGAAAGATGGCTTGTGGATGT	3.405
277	A_55_P1954486	Mapt	ATGGTGGACTCACACAGCTGCCACACTAGCCG ATGAAGTGTCTGCTCCTGGCCAAG	3.402
278	A_51_P345792	Tmem180	AAAGCCCTGCAGGCCCTAAACCTAAAGAGGTT CATCTCATCTCAAGTAAGCCAGTCA	3.392
279	A_51_P297105	Ucp2	CTCAAAAGAGCCCTAAATGGCTGCCACATCTC GGGAGGCACCTTCTGAGCCTCTCA	3.389
280	A_55_P1977792	Folr1	GTGGTGGGGCTCTGACAGCCTTTAAACCA GACATTCACATGTGCCATTGAATT	3.354
281	A_55_P2008874	Dnmt3b	TCAGGTCCCAGAACCCCTAGTCCATGAGA AGCTAGGACCAGAACATCGTTC	3.353
282	A_55_P2002103	Hmha1	GTAAAGGAGCTTCCACATGAACATCACAA TTGAAATAAACTCTAACCAACTGC	3.323
283	A_55_P1995924	Gm13157	TGTGAAAATGTAGAAAGCCTTCTGACACCTT TACTTGTTCACCCCTCAAATGTTACAA	3.315
284	A_55_P2019533	Zscan4c	ATCCAAGTCTTAGGTTGCAAGTTAAATGCATT GCCTCTCAGACATCTCATGCCATGT	3.306
285	A_55_P2029420	2610318N02Rik	CCAGTAATCTTCCCAACAGACCATGCCAGG ACTGAATAAGTTCATCCTGGTGTG	3.305
286	A_52_P73475	Fam78a	ACTCACTGTTCTAGCAATAAGCACCAACTGCT TGGTCACGGACAGTACTGTGAACAC	3.283
287	A_55_P1959305	Rbm47	CGTTCATACATTCTAAAAGACTTGCAGCCTC ACGCCTTAATGCCATCTCTAAAGTT	3.282
288	A_55_P1969477	Abcb1a	ACTCAGACATGGGCACCTGAGTCAGATCCCTAC CACCTAAGTAAGCAGCAAGGTGGT	3.266
289	A_51_P214269	Epha1	TCAATCAGAACTGCCTTGAACCAAGGAGCCT TTGTTATAAGGGGTGGATGGTA	3.265
290	A_51_P230439	Ppfibp2	AAGAATTCAAGTGCCTTAGGTTTGAGCCACAA AGTCTGGCTGAGATCAAAGTCCAA	3.233
291	A_55_P2139256	Rps6ka1	CTCAGCTGGTAACTCAGGGTTCATGTCCAAGG CCTTCTAATAAACTTACAATCCAGT	3.226
292	A_55_P2008427	Dnd1	CCCACCACTTGTCCCTGGTTGGGCTACATGGTT TTGTTTTCTATACTGGTTTATT	3.187
293	A_66_P117578	Mtmr7	TGCAGGTTGCATTAGGAACCTTGACATTCCTC TGCCTTACCAATATTTAAAAGAAA	3.186
294	A_55_P2128499	Mgl2	CGGGCCCCCTCCCTCCCTCATAACTAGTGTGCG CAACAATAAAATTGAGCTTAATC	3.164
295	A_55_P2003713	Zscan4e	AATTACCAAGATGTACTGAAGTATCTAACATC CTCAGCAGAGACTGGTAGGGCTTCAG	3.143
296	A_52_P144297	Tspyl3	TGAGCCCTATTCCAACACTGATCTGTTCCACATGG AGAAATGTTCTGTGAGTCAGAAG	3.140
297	A_51_P257743	Dnajc22	AGTCTTGAGTCAGCCAAGAAGCCTAGAGCATCC TAGAGGTGAAAAGCAACCACATTGAGG	3.130

298	A_52_P370203	Jarid2	TGTTCCCTCACACTTAGAGCCACTAAGTCTGCA GTTTTTGAATGTGAAACACATCT	3.077
299	A_55_P1970274	Zscan10	CCCACAGTTACCTCTCCCTGACTCCAAGAATT TGTTTTAAGTAAAGCTGCCTTCTC	3.068
300	A_55_P2091153	BC051142	TGTGAACAACCAGCTCTTCTTCATCAGCA TCAGCATCAGCAGCAGCAGCAG	3.065
301	A_55_P2178127	Sept1	CGCTCTCCCGCTTCAATTGGGTTTCTATTCT CTCCAAGTTCTCCATCTAATAAAAAA	3.060
302	A_55_P1996963	1110012J17Rik	GTACCGTGTGACTGTTGCTGTTGGTCTTGTAC CAGTAAGACAATGGCTCCATTTTT	3.051
303	A_55_P2071191	Prss8	CGAAATTGTTAAGGCCGTACTTTCTGCCACTT GGTCTGACCCCTGGGCTTGTCTT	3.042
304	A_51_P388847	Stap2	CAGGCTCCCAGGGATCAGTGGCTATCTGGG TACAATAGTCTCTCCAGCTCTATCC	3.029
305	A_55_P2111713	Spint2	TTGGTAGCTTCGCTGCTCTCCGGGCCAGG TGGCCAGCCGAGAACTAGACGTCCAC	3.029

b) Down regulated genes in δ-treated MEF

No	ProbeName	Gene Symbol	Sequence	Fold change [σ] vs [DMSO]
1	A_51_P406780	Serpinb9b	GTAATTTAAATTACAAACAAGTAAATTAAA AATATAAGGAAATTAAAGAGTGCT	24.702
2	A_55_P1964553	Gm13140	GGCTAATTATCAGACTAACGCCTAGCATAAA CTGAATTCAAATATGCTGTCAGTCT	14.603
3	A_55_P2063283		AGCAATGGGCATACAGAGGAGAACTACAAGGAC ACCGCACCACTCCTGGACTCTGACGGT	7.311
4	A_66_P102202	Gm648	CTACACTCAAGAGTGTGATCCTGTTACAGTG GTCAGCAAGATTAGCAGCAAATAGTTCA	7.263
5	A_55_P2011163	BC061237	AACAAATAATTGTGGTCTGGAGTAAGCGG AGGCTGCTATGCAAATCCATGTGCT	6.644
6	A_55_P2001458		AGTAAACCCGAGAGACTCATACTCGAGAAAAG CTGCTGTCATAGTCAGTCTGCTTAAGCCA	6.471
7	A_52_P319093	Serpina3k	CAAGTTCTCATGATTCTGTCAGGGCTCTGGGAC AGAGTCTGCATATGGATCTCTATATA	6.060
8	A_66_P109757	A430033K04Rik	GGCATAGGGATCCATGCGCCTGAGAAACCT ACGAATGTAACGAATGTAAGAAATCTT	4.859
9	A_55_P2014352	Gm2494	GGAGGAGGAAAAACAAACAAACAAACAA ACAACATAAAAACCCAAACCATGCTGG	4.786
10	A_55_P2425442	D030036P13Rik	CACACACAATAGCATGCACATGCATGTATACACA CACCCACAATAAACAAACATAATTA	4.712
11	A_55_P2111114		GGGAAGACGCTGCTGCCCACTTGTCTCTTTA TCTCAGGTGCGACGCAACACTAGCTAG	4.670
12	A_55_P2030186	Ifna7	CTGAACATCTCACATCAAAGGACTCATCTGCTG CTTGGGATGGATCCCTCTAGACTCA	4.637
13	A_55_P2058602	LOC674794	ACTCATGAACAACGAACAACCATGAAACAGAAC AGAACAGAACAGTCCCACCTCTCGAGG	4.461
14	A_55_P2125997	Grin2d	TCTTGGAGCCCACCGACTCTTTAAACCCGAA AAGGGCTTTAACGTACCTGATTG	4.140
15	A_52_P307749	Slc35a5	AAGGACAATGTGAAGGTAAGAGGTCCAGAACCA TTCCCAGGACTAATGGAGTGGAAAT	4.116

16	A_55_P1958876	4833422C13Rik	GACCACCAAATAGATTCTACCAGAAAAGAAAATC CTCCACCACATAATAATTAAAACAC	4.083
17	A_52_P614207	LOC100047222	GCACTGGTACCAACAGAAACCAGGACAGGCCACC CAAACCTCTCATCAAGTATGCATCCAA	3.988
18	A_55_P2100197		GCAAACTATGGAGATCAGAACAGGAAACACACA CACACAATTAAACGAATTAAACTGTT	3.749
19	A_55_P2169227	AI836003	ATCCTTCTTAGTGCCTTGCTTGATGTCAACCTTA ATAAAAAGGCACCATGTCCTCTT	3.723
20	A_52_P101487	Ddn	TGAGCGCCTTCTGCCTCCCATTCTTGCCCTAG GATTTGTGAATAAGCGAGTAGAGA	3.417
21	A_51_P493117	Slc16a9	CAATGCAATAATGGGGCTCCAAGCACATGAGAC TTGTGTTCTACACTCAGACTCTGAA	3.354
22	A_55_P1959525	Wbscr25	AGAATGCCAGGCTTGCCACACAAGGCACAGGAC ACCAACACAAACACACCAGGCACAACA	3.329
23	A_55_P2213968	4933416M07Rik	TGGGAGGAAAGGAGGGAGGGGGACCATGATC AAATACATTACATGAAAAAACATTATTC	3.321
24	A_55_P2050169	Vmn1r197	GAGAACATTCTACAGTACTATATGTTCCGGAGT TCCTAACCTTGGTTATGCGATTCTC	3.275
25	A_55_P2420591	2010001M06Rik	CCCAAGGAAAATCCCGGGCCAAGGAAATAAGGG GGCTGGGAATTCTCCCACCCAAAAAA	3.237
26	A_55_P2162970	Gm3734	GCACAAAAGTGGTACACAGATACACACAGAAC TAAACACCCATACACATAAAAATAAAAA	3.233
27	A_55_P2061036		GAGAACATTGAGGCCATTCTGGCATACAGGGAAC CCTGCCTCAAAAATCATTCTGCTCAC	3.232
28	A_55_P1995104	Btbd19	ACTGGTGGTACGTGGGCAGGCTGCACCTTTCC ACAGCACTCGAAGCCTCATCAACAA	3.204
29	A_55_P2093053		AGTTGAAATTGGCCTGGTGGAAACCCATAGATCT GATGCCAGGATGAAGAGAAACACTT	3.202
30	A_51_P202920	Wbscr17	ATACAACAACACTATGCCCTATGGGAGCTCGT AATAATAAGGCCAACGGACGTCTGTCT	3.191
31	A_55_P2058195		TTGGATATGATAAGTAAAGAATTGGAACAACTTG AGCGCACAGCAGAGAACACGCTTA	3.144
32	A_55_P2044050		ACCCACGCCGAACCGAACAAACAGCACACCT ACAGAGGGCAATGAACCAGCCATTAA	3.131
33	A_55_P2195077	1700066D14Rik	GGTTAATCGCCCCCTGGGAAAAAATAATTACCC ACCTTTAAAAAATCTCAAAGGAA	3.092
34	A_52_P104658	Krt6a	AGCAAGAAGAGCTACAGGCAGTGAATTCTGTCA CCAAGAGCTTGTCTGGTCCCAGATG	3.087
35	A_55_P2172196	Thnsl1	GCCTGGGATACATGAGGTCTGTTAAAACAAAC AAACAAACAAACAAACAAACAA	3.074
36	A_55_P2372528	4122401K19Rik	GTGAGAAAAGGTGAGGTGATTCAACAAATAAAT TTTGTCTGAAACTGGCACAATAAAAC	3.043
37	A_55_P2014710	Naip7	GACCACACACACTCATGCAAGCATAACACTGACT TAAATTTAACATCAAATCTACTGG	3.038
38	A_55_P1959843	Gm2640	TTCTTGTCGCCCTGAGAAACAAAGTCAAATA ACCATTGTACAGCCCAGCATGCCAA	3.029
39	A_55_P2043033	Pla2g3	AGGAGTAAATGAATTAAACACACACATACCAAC CAGTAAACATTCTCTCTAAACAC	3.014
40	A_55_P2091916	Gm8005	TAACATCTCATGCTCAGACTTGGAGGACGAG TCCATCAGAAAAACCCACACCAAT	3.010
41	A_55_P2431897	Thap6	GAAAAGAGAAAAACTTCACTGTAGAAAAAAACTT CCTTCTCAAAACCCCTCCATCACCCA	2.995
42	A_66_P136215	4921517L17Rik	GGTCGCCGGCGCTCATCGTAAGAAGGGCAG ATGGGCAATAGCTTTTATTCTAC	2.972
43	A_55_P2136970	Gm7269	TCAACATTCCAAAATATGAGGAAGGAGGTGACA TGATTAGCCCAAGCCCTCTTAAGCA	2.955
44	A_55_P2034968		AGAACAAAGACTCCTAACTGCCATGTGCCAGAATG AGATGGTAAAAACAAACAGATCTGC	2.949

45	A_55_P2032553	9430024F10Rik	CCGTGGGCACTTGCACTCATATGTACAATCCAC ATACAGAAACAAACACATTAAAAAA	2.935
46	A_55_P2363040	1700007J24Rik	CATCCTTCTGCTACATCCCCTAAAAGTTGGCC AAGTGTACTTCACTATTATATTA	2.841
47	A_55_P1994942	Rorc	TTGAGGTTGCAGCTCTGAGAACGCTGAGGTTCTA ATTCAACAGGACACCAGAATTCACT	2.840
48	A_55_P2420694	AV074028	GCAGAGTGTATGGACAGCCATGACCTGAGAAA GTTCTTCTAAAATAATAAAACTCAAT	2.831
49	A_55_P2078143	Otop1	CACCAGCACTCACATGCAAGAGTGCTACCCCC ATGAATAATAAAAATAATAATAATA	2.826
50	A_55_P2107632	BC030307	GTTTAGAACAGCTTTCTCTAGTTGGGTA AAACAAACAAACAAACAAACAAACAA	2.811
51	A_55_P2151414	Gml	AGGAACAGCAGCAACAGCAAGAAGAACAGGC CTCAAACCTTCAGCCAGAGGTCCCCAGC	2.807
52	A_55_P2063618	Gm10818	ACAGGGAAAGTGTGGGGGGCAGACAGAACAG GCAAAGATGTCCAGACAGTCCCCTCTAC	2.804
53	A_55_P2179074	Ciita	GCCCCATCTAATGCAAAACAAACAAACGAAA CAAAACAAACAAACAAACAAACAAACAA	2.779
54	A_55_P2200890	4933407G14Rik	TGCAACCACCAAGTTCTAATGAGCGGACCTCTCAC CCACCAATAAAAGTAAAATTAAAAC	2.778
55	A_51_P347169	4921517D21Rik	AAGGCATACTAACCTAACACTAACAGAACCTCA TGAGCCCTGGCAATCTGCCCTTCCA	2.776
56	A_55_P1985825	Gm2980	TAGACCTAAAATTGATGTGGCCATGCCCTTGG CTTCAGTAAACCAGCTTCTGCCA	2.738
57	A_55_P2146122		AGGGAAAGCTACTCGTCCAGGCCCTATCTCA TGGGGTTAGTCCTCACCTGGAACCTG	2.737
58	A_55_P2396370	A730056I06Rik	GTTTCATGATAGCCTGGGCTACAGCATGATAACCC TGTCTGGAAAAAATAAAAATATAAC	2.734
59	A_55_P1985236	EG666692	ACAAACAGCTGCTAAGGGAGCAGATTGATTGG AAGAATGCAACATAGAAACAAACAC	2.728
60	A_55_P1961809	Adra1d	AGCAGTGTCCCTAACATGTTCCCAAGACGGGGC AGAGGCTGTCTACGCTCCAGGCTTATGA	2.720
61	A_66_P105526	Mamld1	AAGTCACATGGGTCATCAACTCTGAAGAACAG CAAATCACACCGGCCTCCATTCCC	2.695
62	A_51_P331288	Akr1b7	GAGATCCGTGCATGATAGATTCTCGTCTCT AAAATCACCTGGATGTAGGCTACCA	2.677
63	A_55_P2066240	Zufsp	CTCTCCAGTGAGAGAAATCAGCTGTAGAACATT CCATAGATAATATGGACACAACAAATC	2.661
64	A_55_P1973813	Gm7660	TAATATGACAGAAGAAAAGACCAATGCAATTGC ATGAGCCCTGCCAGATTACAAAAA	2.659
65	A_55_P2314657	4931403G20Rik	GACTGACCAACCTACTCCTGACACTTCTGATC CTTAGTAAACTGATAAAAGAGCATC	2.618
66	A_55_P2365902	LOC402769	TTCTGTTCAAGAAGAGGGAGGGAGGGCACAA AAATACCATTCATCCAAACACTGAAA	2.615
67	A_55_P2011772	Oscp1	CAGGCCATTCTGGCTGCATAACAAGATAGATCTT TTAAAAAACCAAAACCAAAACAAAC	2.605
68	A_51_P164393	Txndc2	AAGACATCATCCAATCCAAGAACAGGACAGGC CCAAGTCCTCAGAACAGCATCATCCAAT	2.555
69	A_55_P2146590	1810011O10Rik	ACAAAAGACAAGCTTCTCAGTTCTCAAAC GGAAATATCCATCAAGGTACACTGA	2.554
70	A_55_P2138718	Gm14483	CTACTAGCTGGGGAGCAAATCAAATATGCTATT AAAGCATCTAGATCAAACCCCCAAAAAA	2.544
71	A_51_P257892	Adam25	TAGAACTACCTATGAGTGAAGAACCCAAAGTTCC CACCCCCAGAAAACAAAGAACATCCA	2.540
72	A_55_P2037873	Gm10322	GGGAGGCTGAGGCAAATTACAAGTTCTGGAG TACATAGTAAAAATTATCTAAAAAA	2.502
73	A_55_P2201020	AI790442	AAAGAAAAAGAAAAGGAGAAAGAACAGAAC ACAAAAACCTAGCTACCCCTAGCAAAAAAA	2.498

74	A_55_P2115181		CTACCAAGTCTGTGCCCTAGGTGAACCTGTAAAAAATGGAATAAAACAACATCTTCATAA	2.483
75	A_52_P28582	Zmym2	CATCTTCAAAAATGAAGAACACTACAAGGAAACGATCCAAAATTCTCCTCATCGAAAG	2.482
76	A_55_P2412859	5830468K08Rik	CAAACCCAACCTTAGAAAGGCTACACACAATGGCTACAATTTCTAAAATGATACTTA	2.475
77	A_66_P128733	BC106175	GTAAAGTCTAGGAAAAGGCTCAGAGTCAAAACCCGGCAACCCAGGGACCAATTCAAATC	2.473
78	A_55_P2054703	Gm2659	AATATAAAGCATCTATAGGACCTAACACCCAATTACATCACCTAATCCCTAAACAGTC	2.472
79	A_66_P122377	Cd84	CTAATAGGCAGCAAAGCATAAGCAGGTCTTACAAAAACATAACAGTAGATTCTTATC	2.470
80	A_55_P1968325	Agbl3	TAAGCAGAGAATTCTTACCTAACCAAAACCAGCAAGAAACCCAGTGAAGGTGATGGCCT	2.445
81	A_55_P2216988	A830021M18Rik	GCTCTCTAAACTAACGCCGCACAGACATATGAAATTATATGCCACATCTCCGC	2.444
82	A_52_P81693	LOC100044247	TCAGAGACCTCTCAGGCCAGGAAACCATCAACCACCCCAGCATGGAAACAATGAACAGCC	2.440
83	A_55_P2004031	Ctrc	TCTCTTCACTACCTCAGGGATGACACTTGGAGGCACACCTGTGGCAGTCTCATCA	2.434
84	A_66_P135403		GCCTGAGCCTCAGAGATCATAATGGGAGGGCTTGGACTTGAGATCATATAAGAAC	2.416
85	A_55_P2367878	Ncrna00085	CCAAAGGAATCCAATAGAAAAGCACATACACTAAGTGTCAAAAACCTATAAGAAC	2.410
86	A_55_P2017086	Ezh1	GCATGGGATCTTGCCAAGAGAGCAATTCTGGCGAAGAGCTCTTGTATTATA	2.406
87	A_55_P2401624	C630004L07Rik	GGATGCCTTATTCACTAAGAACACACACAGATTGAAAACACTTAAATAATGAGCA	2.403
88	A_55_P2054827	Rxfp3	CAGGAAAAGAACCTTAACTAGGACATGCTCCAATATACAAAATAATAAGGGTCAAC	2.398
89	A_55_P2005549	Tnn	GTTTCTGTAACCAAGTCAGTGACCTTGAAGTAACCTAAATTCTACTCAAGAAAACAC	2.394
90	A_55_P2183592	Rpl19-ps5	GAAACAACTCCCTCACAAATGCCACATATAATAAAATATCTCAGGGTAACTCTAAC	2.393
91	A_55_P1954521	5430417L22Rik	AACGACCGCGGGGCTGGACGAGGACGAAGAGGAAGCGCGGAAGCCCCGGAGTCGTT	2.392
92	A_55_P2070510	Gas1	ATGGATGAGGACGCCATGCCAGAACGTGCGCGGAACTCGGACAAACTTTCCAGCGGCC	2.387
93	A_55_P2162573	Art3	CCAACGGGTGCTAACATCCAGACCTGTTGGAGTCGGCGTGGAAAGTTCTTAA	2.385
94	A_55_P2175296	Gm9480	AATGAAAACCTGAGTCCTTCAAAGGAGACACCAGAGAAGTCAAGGACCCAAATGCA	2.377
95	A_55_P2073825	Ocm	AGCCCCATCTGGCAGACAAGGCCTTAAACCAACCCAAATAATTCTCATCATT	2.371
96	A_55_P2081452		GGAAAATGTAGAGCATTGCTTAGCATACTGAACTTCAAGGACCCAAATGCA	2.370
97	A_51_P209818	Prtn3	TTCCAGAACAAATTACAACCCCGAGGAGAACCTCATGACGCTTCTCCAGCTAAC	2.359
98	A_55_P1979950	LOC100046257	GTCCTGCTAAGATAATAGTCCCTCAAACCTGTAAGGCGAATAACCCCTTCC	2.357
99	A_55_P2303868	5033421B08Rik	TAAGTCTGACGCCCTGACTTAACCCAGGATGAAACATACCTAACAGCCATAAC	2.349
100	A_55_P2022024	Olfr212	TTTCCCTGTCCTTCTTAATGAAGTAACTGAAAGCCAAATAACCCCTTCTCCC	2.346
101	A_55_P1976744	Gm4324	GAAAAATACGTCTGCCACATCACAGAGATGAACGAAACACGGCCAATCAGATCCATC	2.343
102	A_55_P2069550	Gm6750	GCTGAGAAAGAAATTAGGGAAATGACACCTCAAAATAGTCACAAACAGTATAAAGTATC	2.338

103	A_55_P2123854	Zfhx2	CCAGAGGAATGAAGTAAAGAAAAACATAAACTT TGAATATACATAGAGAGAGAGAAAAAA	2.328
104	A_55_P1971264	6530403M18Rik	ACACGATGGGATGGTGTAGTATAGAATAGAATT TATTCAAGGCATGGGGAGGGGAGTTAA	2.308
105	A_52_P459259	4930528A17Rik	CTTAACCTAAATATTGAAAATGACTTCTTGA ATGTCAGTGTAACTAAAAGAGTTAT	2.302
106	A_52_P125253	Olfr123	CCATGGGAAGTTCATCTCTCTTTACACTGTTA TGACCCGACCCTTAATCCCTCAT	2.299
107	A_52_P119060	Acpp	AGTCAAGTAAAACAAACACAACAGGTACCTTA TCCTGTGCTTCACTGTGTTTAATC	2.299
108	A_52_P628411	Far2	TCTGAAACGACAGCAAATTATTCACATAAATT TTCCAATTCCATGTAAACATGCCCTGC	2.292
109	A_52_P578790	Dok3	AGCGGCCAGCCACTGCAGGACAGAGGTGATCAC CCAAGACCAGAACAACTTCGAACATA	2.292
110	A_55_P2236622	Gm2763	AGAAGTTCATCTTTAGGAACGCTCCTGCTTAA ATCTCCAGAATTCATCTGTTCAA	2.290
111	A_51_P372702	Il16	AACAGTTCTGTGAGATGACCCCTGCCATGAAGAA CACATTCAAACACATAGAAGACTTT	2.287
112	A_52_P186751	BC061237	AACGATTGAATGACAGGATCAACTTGAGACAT TCATGCTTGAGATGCAACATAACCAAG	2.282
113	A_66_P102853	Ccbe1	TCTGAAAACAAGATCACCACGACCAAAATACCCAT GTCTGAAGTCTCGGGCAGCCTCAC	2.282
114	A_55_P2143832	Col4a4	GTACCCATGCAAACGCCACCCACAGACATACTC ATACACATAGAAACAAAAAGTAAATAA	2.272
115	A_51_P224064	Klh38	AAATGCCAGTGAATGCTTTCAAAAATTCCATCCT TACCCCCCTGAATCAATGTCAGAAAC	2.272
116	A_55_P1973417	LOC100041903	TGGAGTCCCTACAAACAATGACCAATAAACATG GTAAGGCGTACCAATAAACACCAGCA	2.271
117	A_55_P2171354	Gm7111	GAAACCGTACGACAACAGTACGAAACCAACCC AGAGGACTGTTCTGGACCAACCC	2.270
118	A_55_P1986691	Card6	AGACATCTTAATTACACTCAGTGGGTTACCCAA ACCAAACCAAACCAACCAAACCAA	2.270
119	A_55_P2139546	B3gnt3	CTCCCCAACACCAAGACAGGAGAGAAAAAGTAT AGAGGAAAGAAAAGAGATTACCCAAATA	2.268
120	A_55_P2018215	Gm3859	CAAGAAACCCCTATAATCTCTTGAGTACCTGTG TACATGTGAATATACATACATACAC	2.267
121	A_55_P2098573	BC003267	GTAAATGAGAGAAACCCCTATAATGGAGTCAT ATTAGGAAGCCTTCTCAGAACAGTT	2.265
122	A_55_P2222437	D430040D24Rik	AAGCAAGAAGATCACAAGTTAAGGCCAGCCAA GGCTGCTGCATAGAAAGAAAGCATCTC	2.260
123	A_55_P2078133	Gm7289	ACCCCAGCCAAAATTGCAAAAAATCAAACAA AATGGAAAAGCAAGCAGCACCTTAA	2.260
124	A_66_P128963	Cyp2d9	GCCATACTGGATAACCTGTTGACTGAGAATAGG ACCACCTGGGACCCGTCCAAGCACCC	2.258
125	A_51_P308597	Gcm2	ACAGCATTGAAACCTGCCACACACAGGC TATTCAACCAGATGACACAAATTAAAA	2.242
126	A_55_P2397854	4921518K17Rik	CTAGACCTTGGCTGCCAGATGCCATATCTCCT GCACTACCTTATAAGACATTTTT	2.238
127	A_55_P2173408	Gm2419	TAACCGGGCTGAGAACACCTTCTAAGATAAGGA TATTCAAATAAAACTCACAACATCA	2.237
128	A_55_P2051199	Gm13710	GCAAAAGGAAGACCCCTCAGACTGAGGTTGAGAG TACTAATTATGTGAATAAAATACAATT	2.233
129	A_55_P2167776	Gm2169	AAGTGGGAATGAAGAATAAAAATACTGAAC TCTTCTCACCCAGAGGCCAACCCCT	2.232
130	A_55_P2220092	D230035N22Rik	AAGGATACACAGAGAAATCCTGCTTGAAGAAACT AATAGAAGGGAAAAATAGCACTCCC	2.226
131	A_66_P111163	Gm10896	ATGTAACACAGGAGGCCTCACAGGATGCAGA TGTGCTACAACACAAATGACATCGTC	2.224

132	A_55_P2339760	C230006B20	GAGTTCTGCCTCAACTCCCTGAATGAACCTGTA ATTAGAAAATAATCCTTACCTTCCCC	2.218
133	A_52_P496956	Acsbg1	TGACATCTCCAATGCCTCACGTGCAAGTAGTTT CAATTCTAACCACTGCTCTGTTCAAG	2.218
134	A_55_P2021330	Dynlt1d	AATAAGGAACAGGAAACCTTGCCTACAGAGGA GTCCAGACACAAACAGATAGAAGGGGC	2.213
135	A_55_P2019294		AGGACTAGTCATCAGCAGAACACCCACCCAAAT GAAGCATGCATATATTCTGAAAC	2.207
136	A_55_P2076545	F5	TGGGCAAAAGTGCTGCTGCCAAAACAAAACAA CAACAGCAACACAACACAAAACAAACC	2.202
137	A_55_P2138744	LOC100045653	AAATCAGAGCGAAGCCACTGAAGTGCAGTGTG ACCGCCGCTTGAAGACCTACTACACCC	2.200
138	A_51_P449995	C6	TTGCTGGACCATCAAGGTATACATGCAAGGAAG ACTCCTGGACACCTCCATTCAAATT	2.194
139	A_55_P2119613	Prss55	TTGCACTGCTTAGAGCCTTGTCCAACGGAAATA AAACATGCAAGTCTGATCCACCC	2.193
140	A_55_P2020242	LOC640683	TACAGTCCCTCTCCAACCTAACGGTCACAGAAC TGTCTTGGGGACCATGCCATGGCAC	2.192
141	A_55_P2061879	Opn4	ACAGTCTTCTGCAAGTCAAGAACCTAGAAGATGGA GAACACTAACGGCTCTCCAGCCCCCA	2.191
142	A_55_P2122300	Cir1	ACAGAAGAGAAAAATAAACACAAAAACGTAA AAACAAATCCCCTCTCCCTCCCTCCTC	2.189
143	A_52_P564413	Pik3c2g	TCTCCCCATCATCATTCTACTCAATAGACT CCATACCGAATAGAGAGAAAAAGAAG	2.187
144	A_55_P2042452	Vgll1	AGATGTGGGCCCTCAACATTAGTCCAGCAAG ATAGATACCAAAACATCCTCTGGAA	2.186
145	A_55_P1974377	Defb26	CCTATCTATTCTGGCCACTAACACTAAACCATT CACTATGATGCCATAACTACTTAA	2.182
146	A_55_P2122075	Pcdl1lg2	ATCCTGGCAGCCTCTGAAGTTCAATTAACTGGA AGCATTAAAGCAACAGTCAGTGC	2.174
147	A_55_P2278845	3830408C21Rik	GACCCCCATAAAAAGTCAAAGGACCAAAATGGA TGCATTGAGTATCTAAACTTGATCA	2.174
148	A_55_P1954985	Foxn3	CCAGTACCTGGCCTCAAAGGTGACATTCAAG CTAAGGTTAAAAACAAAAACAAAA	2.170
149	A_55_P2049323	Gm4755	GACTCTACACTGTGGAACCAGCCTCTGGGAATT CAACAGCCTCTTACACACACCACA	2.163
150	A_55_P2121716	Gm9513	GGGACTGTTATGATTGGAGATAAGACAGTAAAA ATGAACTGTTGCAACAAACAAATCTTC	2.162
151	A_55_P2051879	4930473A06Rik	GTGCAGGGATATGCTACTAAATAATGAAACAA CCCACCTTTCTCCCTAAAGTTTAT	2.150
152	A_55_P1983523	Cd300ld	GTTCTAGGTCACTGCTTACAGAGTGAGTTAT AGGACTACACAGAGAAATCCAAAAAA	2.149
153	A_55_P2285669	Gm4250	AACTGTTGAAATAACAGAAAGAGCAGCAGACA GATCGGACCCCTGGATCAAGTTGGT	2.148
154	A_55_P2172001	Mrgpra2a	CAACATCTCTCAACTAACCTAGTTCTACCCCTC CTGAATAAAAGCATTAAATCAGAAA	2.143
155	A_55_P2289707	Cacnb4	CGACATAGGCTTGAGGCTGCCGAAACAAACAA ACAAACAAACAAACACATCATCTGT	2.141
156	A_55_P2138591		ATAAGCTGCACATAGAAAAGGACAAGTCAGG GCTAGCAAGATCCCTTGCAAGTAA	2.140
157	A_55_P2111825	1700001C02Rik	CCCAGGGAACCTGCCCTGACCAGGCTGGCTTG CTTGTAATAAAATCTCAGCCACAACC	2.136
158	A_51_P229363	Rg9mtd3	AACACTCTCTTATCCAAAACCTGAGCTCGTAG GTTTTAAGATTGTGGGAATTCTGTT	2.132
159	A_66_P110425	Kif6	GGGGGGCAGTGGAGGTGCAAGAAATAGGTGCC AGAAATAATTACAGCTGAATAAAATAC	2.131
160	A_55_P2122945	Olf541	CTGAGGAACAAGGATGTCAAGCTGCCCTGGC AGAATCTTACCCCTCTCACATTAA	2.124

161	A_55_P2102683	LOC100047543	GAGAGTCAAAGGTTCTCGAGCACTAGGGAA ACAGCAGTAAAGGTAGAGAAGGAAAAA	2.123
162	A_55_P1996414	LOC100045477	ACAGCTGAAATTGCTCCACAAACTGAGCTGGTG GAAGTAAAAGTTCTGGATTCACCCCCA	2.117
163	A_52_P327610		GTCACACTCGCGGGGCCGGAGAACCCAGAAC GCGGCTGGTCTGCCACCCAGCAGCGC	2.113
164	A_55_P2348126	1500032F14Rik	CATCGAGTCCAGGCCAGCCTAAAAAACAAAAC AAAACAAAATAAAATGGCATTCAAATC	2.112
165	A_55_P1976204	Cdkn1a	TGGGGTAGTTCCATAGTGACCCGGTCCTCTT GTGTTTCAGGCCACAGGCACCATGTCC	2.103
166	A_55_P2088178	Cbln2	GGGGGCTCGGAGAGAAAAACAAAACAAAACAA AACAAACAAAACCTATGTTCAGTCCTGT	2.099
167	A_55_P2428514	Retn	ACTCACGTGCGGAATCCACACACAAGCACACAT ACTTAAAAATAAAACAAAACAGGCTG	2.095
168	A_55_P2061243	LOC100048863	AATGTCGTTGAAAGAAATTGCCCTGCCATTAAAC ACATTCCATGGGACCTAAACACTAC	2.095
169	A_55_P2117272		TGAGGTCTAATGTGCCAACCTCCCCCTTAACATT TTACTCTTACCTAACACCATTTC	2.089
170	A_55_P2158324	Gm4958	AGGCACCCACAGTGAGCCACACAGATCGCATAGA AGGCACAGCCATCATCGGCACAGCTAA	2.087
171	A_55_P1983828	Zbtb11	TATGCGGCAAAGAATTATGAAAAAGCTTATT CAGAAGACATGTAAGAAGGCCACCC	2.085
172	A_55_P2211937	E130101M22	AGGTACTCATGTGGTCATAGATACAATGCAAG CAAATCATCCATACACATAAAATCCCT	2.081
173	A_55_P1952684	LOC100048289	TGGAACATGAAAATCAAGAACATTGTAATGCA ACAATAAGGGGAAATGCAATTAAAAA	2.078
174	A_55_P2036460	D930020E02Rik	AATTCCAATATAAAACTGCCCAAGACTCCC CAGATGAGGACACCATTCTACATAA	2.071
175	A_55_P2022789	Zfp646	AAGGGTTCTCAAACCTCATGTCACTCAAGAAC ACCGCGCATCCATGCGACACCCTCGA	2.070
176	A_51_P519648	Mical3	AGAAAACAAAGATATCCACCTGAAATGGAGAA CATGGTGAATCCCGAACCACTCCCAA	2.065
177	A_55_P2159573	Reep6	AATGTCAGGCCTCTGACAGTTCTCAGACTCCC AGACAAAGACACCAGCTCAACCACAG	2.063
178	A_55_P2269289	Dgkg	TTTCTCTGAGGAGGAAAGCCGTTCAAAAGACTA AACAAATGCCAACACCAGCTCTAC	2.058
179	A_52_P319726	LOC100047731	TTGCCCTAGGAGAACCTCACGTGAAGTAGGAA GTACTAATGGAAGGGTGGAGACATGTC	2.056
180	A_55_P2004457	Prrg1	CTCATTGCTACTGTAGACTCCCATAACTCAAGA ATTTAGCCAAATCAAATTCAAATC	2.056
181	A_55_P2121956	Gck	ACATCAGTGATCCGGAAGAGAACGCCACC CACAGCATCTCCAGGAAACCACCCA	2.053
182	A_55_P2032886	Pip5k1c	ATTCCAGCAGTGAATGGCGCGGGGAGCGACTG CTCCTCACATGGGATCATTGATATT	2.049
183	A_55_P1999012	LOC100046875	GGCTCACAACTGTCCACATACATAACTTACATAT ATCTGGATAAAACACTTAGACAGATA	2.047
184	A_55_P2394495	1700023A20Rik	CATACCAAGGCATGTCATCTCTCAGTGCAGGAA GTGCTCCCAAATAAGCCAAATCTT	2.046
185	A_55_P2174945	Gm4615	TTAAAAGAAGCAGTGCAGAGCTCCAAAAACTT CTTCTCACTCAGGCAGGCACCCCT	2.046
186	A_55_P2164890	5830415F09Rik	TGAAGCTAAGACTGCTTCACATCGTCAGGGGA AGAATATAATTGAAAACACTACCCAAAC	2.045
187	A_55_P2410325	2610028D06Rik	GTACTTATAACACAGGTACACACAGACAGGCA CACATGAATAAAACCAATTAAAAAA	2.044
188	A_55_P2082376	Crybb2	TCATCATCTCGAACAGGAGAACTCCAGGGCCA TTCCACGAGCTAGCGGGCCCTGCC	2.041
189	A_55_P2026734	Rgs4	GCTTCGACGAAACACACAAATCTTAAATGATGAC AGTAATAAAATGCTTCTACAAACAA	2.041

190	A_55_P1965584		GCCGCCTTTAGAAACCAAGAGAAAATGGTG GGAGGGGAAAGAAAAACTAAATAAAA	2.039
191	A_55_P2090909	Ptx4	GTCCCATATGCCACACCGTGAECTGTGTACACACA GTCAAGGCCATCAAGAACAAAGCCTCA	2.032
192	A_55_P2008644	Gm6268	CCTACTAGCAAATTCCTCTCTAAATTAAACAT GGTTCAAGTCCAATGAAAC	2.028
193	A_55_P2323503	AA960618	GGTTAGGAAACTAGCACCCAAGCAGCAGAGAGG ACACAAGCTCATTCCCCATTACCCATT	2.027
194	A_55_P2144296	LOC100046658	CAGGAGAGAAACCTTACAAATGTAATGAGTGTG AGAAATCTTTACAAAGTCACACAAAC	2.026
195	A_55_P2096370	Gm3865	AGCCACAAGTCGAGAATGTGATCCCGAACCAA ATCCTCTAAAATTAGCTCGGGCAA	2.020
196	A_55_P2176894	Gm2181	AAAGAAAGAAAGAAAGAGAGAAAATGGAAAT ATCAATCAACCAACCAAACAATCAATCA	2.016
197	A_52_P574759	Rbpjl	GAGCAGGAAGGAGAGAGATAGCTCACCTGACCT CAGGCCACTCACTGTCTCAGACATAC	2.007
198	A_55_P2138966	Nab2	AGCTGAATAAGAAGCTGGCGCGAGCGTGGGG CACATCTTGAGATGGACGATCATGACG	2.005
199	A_51_P148684	Pou6f2	AAAGACTTGCCCCAGTCATCATCTCCCTGTATGT AAAAGACTAAAAACAAAAAAACTAC	2.001
200	A_65_P07627	Dach1	AGGATCGAAGACAAAAGCTATCCACTATATGTT AAGAGACTCTTATTAACCTGTTGAC	2.000

Table S3. Induction of genes belonging to cellular reprogramming

Phases in cellular reprogramming	Fold induction in MEF treated with	
	δ	SAHA
Initiation		
<i>Cdh1</i>	43.3	1.13
<i>Esrp1</i>	2.8	1.07
<i>Cldn7</i>	4.31	0.9
<i>Alpl</i>	25.3	-
<i>Gdf3</i>	6.9	0.9
<i>Nanog</i>	42	1.2
Maturation		
<i>Utf1</i>	3.7	0.9
<i>Zfp42</i>	488	-
<i>Esrrb</i>	10.2	-
<i>Lin28</i>	5.2	1.13
<i>Prdm1</i>	2.3	1.5
<i>Dppa4</i>	20.2	-
Stabilization		
<i>Tcf7</i>	3.7	0.91
<i>Nodal</i>	5.478	1.232

Fold induction values in MEFs treated with either δ or SAHA over DMSO treated MEFs

Table S4. Primers for q-RT PCR analysis

Gene	Endogenous primers
<i>Rex1</i>	F: CAGCTCCTGCACACAGAAGA R: ACTGATCCGAAACACCTG
<i>Cdh1</i>	F: CAGGTCTCCTCATGGCTTGC R: CTTCCGAAAAGAAGGCTGTCC
<i>Snai1</i>	F: AAGATGCACATCCGAAGC R: ATCTCTTCACATCCGAGTGG
<i>Snai2</i>	F: TGATGCCAGTCTAGGAAAT R: AGTGAGGGCAAGAGAAAGG
<i>Zeb2</i>	F: TAGCCGGTCCAGAAGAAATG R: GGCCATCTTTCTCCAGT
<i>Rex1</i>	F: AGGAAGTCAGCACCAACCGTAGT R: AAGCAGGAAGAGGGCAATGGCT
FGF5	F: ACAAGAGAGGGAAAGCCAAGAG R: GAACAGTGACGGTGAAGGAAAG

Table S5. Promoter primers for ChIP analysis

Gene	Primers for ChIP analysis
<i>Oct-3/4</i>	F: ATCCGAGCAACTGGTTGTG R: CAATCCCACCCCTCTAGCCTT
<i>Nanog</i>	F: GGATGTCTTAGATCAGAGGATGCC R: CCACAGAAAGAGCAAGACACCAACC
<i>Dppa4</i>	F: GACCAGAAGGGGAGGGGACGG R: ACCTTCTGTCTCCAGCAGTCTCC
<i>Cdh1</i>	F: CATGCTGGGCTACATAGCAA R: TGGGCCTGGAATTGTCTTAG
<i>Rex1</i>	F: GCATCCTCTGCTTGTGTAAATTG R: CTCAGTTATGCAAATGCCTCTTC
<i>Gapdh</i>	F: ACCAGGGAGGGCTGCAGTCC R: TCAGTTCGGAGCCCACACGC

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