



Figure S1. Reverse correlation of the differentially expressed transcript variants with corresponding genes. We observed that the transcript variants encoded by upregulated, downregulated, and insignificant genes show discordance with their respective gene group (**Figure 4**). We have performed a reverse correlation of the differentially expressed transcript variants compressed to their respective genes. The results are shown according to original gene expression groups. Either the upregulated (**A**) or the downregulated (**B**) group showed ~44% of the transcript variants to be overlapping, ~22% to be insignificant, and ~34% correlating to the respective gene group. The transcript variants of the insignificant (**C**) group showed ~40% to be overlapping, ~60% to be insignificant, but almost none to be upregulated or downregulated. These findings indicate that at least 40% of the genes encode transcript variants that can be either upregulated, downregulated, or insignificant despite their original gene group. upreg. var, upregulated variants; down. var., downregulated variants; insig. var., insignificant variants.

Supplemental Tables: Expression Value & Metadata Tables

S.1. Transcript Variants (TE) of Upregulated Genes (GE)

Table S1-1. Expression values & metadata of upregulated transcript variants of upregulated genes						
Name	Chromosome	Max group mean	Fold change	FDR p-value	ENSEMBL	Biotype
Ahdc1-203	4	17.32	2.74	1.47E-05	ENSMUST00000105915	protein coding
Arid3a-202	10	30.36	7.31	5.50E-07	ENSMUST00000105376	protein coding
Atoh8-201	6	0.89	13.19	3.00E-02	ENSMUST00000042646	protein coding
Barx1-201	13	25.93	35.43	5.08E-22	ENSMUST00000021813	protein coding
Bcl11b-203	12	1.29	5.13	9.54E-03	ENSMUST00000109891	protein coding
Cdc5lrt1-201	10	0.98	4.97	3.00E-02	ENSMUST00000219147	protein coding
Cdc5lrt4-201	10	0.8	4.96	4.00E-02	ENSMUST00000219565	protein coding
Cdx2-201	5	106.83	42.79	3.85E-93	ENSMUST00000031650	protein coding
Cebpa-201	7	8.7	1,698.94	9.08E-03	ENSMUST00000042985	protein coding
Cebpb-201	2	30.27	2.24	5.07E-04	ENSMUST00000070642	protein coding
Cux1-205	5	3.34	535.65	3.00E-02	ENSMUST00000175998	protein coding
Dlx1-201	2	0.9	6.08	4.28E-04	ENSMUST00000037119	protein coding
Dlx3-201	11	25.62	3.82	2.21E-10	ENSMUST00000092768	protein coding
Dmbx1-202	4	1.22	29.64	6.12E-05	ENSMUST00000084338	protein coding
Dmrt2-201	19	1.71	2.7	2.00E-02	ENSMUST00000053068	protein coding
Dmrta2-201	4	2.29	6.07	9.42E-03	ENSMUST00000061187	protein coding
Ebf2-203	14	0.87	11.43	1.11E-05	ENSMUST00000176161	protein coding
Ebf3-201	7	0.51	4.42	4.00E-02	ENSMUST00000033378	protein coding
Egr2-201	10	1.47	33.11	5.44E-04	ENSMUST00000048289	protein coding
Elf2-201	3	28.82	4.92	2.16E-03	ENSMUST00000062009	protein coding
Elf2-204	3	10.48	2,020.82	7.08E-03	ENSMUST00000108053	protein coding

Elf4-202	X	8.3	3,837.86	2.00E-02	ENSMUST00000114958	protein coding
Elf5-201	2	336.4	4,445.84	5.08E-33	ENSMUST00000028609	protein coding
Elf5-203	2	20.64	149.06	2.83E-06	ENSMUST00000126290	protein coding
Eomes-201	9	181.17	6.98	5.03E-89	ENSMUST00000035020	protein coding
Eomes-202	9	41.29	21.89	1.45E-29	ENSMUST00000111763	protein coding
Eomes-203	9	10.28	6.77	1.58E-10	ENSMUST00000150633	protein coding
Esrra-206	19	5.41	9.23	1.00E-02	ENSMUST00000239322	protein coding
Fbxl19-201	7	65.02	41.27	5.05E-63	ENSMUST00000033081	protein coding
Fosb-201	7	2.46	81.73	3.47E-04	ENSMUST00000003640	protein coding
Fosl1-201	19	26.34	13.57	3.11E-19	ENSMUST00000025850	protein coding
Foxc2-201	8	2.31	8.48	3.43E-04	ENSMUST00000054691	protein coding
Foxd2-201	4	0.74	5.84	2.00E-02	ENSMUST00000068654	protein coding
Foxe1-201	4	13.65	89.67	9.28E-18	ENSMUST00000095097	protein coding
Foxf1-201	8	2.28	61.32	2.61E-04	ENSMUST00000181504	protein coding
Foxg1-201	12	0.99	17.46	1.00E-02	ENSMUST00000021333	protein coding
Foxl2-201	9	1.6	385.88	4.00E-02	ENSMUST00000051312	protein coding
Gata2-201	6	34.96	363.6	4.06E-18	ENSMUST00000015197	protein coding
Gata2-202	6	31.59	6.59	1.75E-14	ENSMUST00000170089	protein coding
Gata3-201	2	51.76	207.1	1.79E-43	ENSMUST00000102976	protein coding
Glis1-201	4	3.87	108.45	2.72E-04	ENSMUST00000046005	protein coding
Gsc-201	12	2.55	19.72	2.49E-03	ENSMUST00000021513	protein coding
Hand1-201	11	344.31	1,946.71	3.38E-34	ENSMUST00000036917	protein coding
Hand1-203	11	9.2	18.87	4.21E-09	ENSMUST00000160392	protein coding
Heyl-201	4	0.41	20.74	1.00E-02	ENSMUST00000040821	protein coding
Hic1-201	11	3.45	897.55	2.00E-02	ENSMUST00000055619	protein coding
Hlx-201	1	1.5	8.45	2.49E-03	ENSMUST00000048572	protein coding

Hmg20b-201	10	29.16	9.48	1.03E-08	ENSMUST00000020454	protein coding
Hmg20b-203	10	3.85	442.08	4.00E-02	ENSMUST00000105324	protein coding
Hmga1-203	17	46.56	5,488.18	1.61E-03	ENSMUST00000117600	protein coding
Hmga1-206	17	69.97	5,330.37	1.68E-03	ENSMUST00000119486	protein coding
Hmga1-211	17	11.21	8.81	9.66E-03	ENSMUST00000231825	protein coding
Hmga1-216	17	507.71	63,162.20	2.68E-05	ENSMUST00000232265	protein coding
Hmga1-217	17	30.17	2,042.16	6.93E-03	ENSMUST00000232552	protein coding
Hmx1-201	5	3.03	37.11	6.10E-04	ENSMUST00000087674	protein coding
Hoxa3-201	6	3.01	4.03	1.00E-02	ENSMUST00000114434	protein coding
Hoxa5-201	6	1.01	3.95	3.00E-02	ENSMUST00000048794	protein coding
Hoxa7-201	6	5.4	2.94	2.00E-02	ENSMUST00000048715	protein coding
Hoxc10-201	15	3.03	3.99	2.40E-03	ENSMUST00000001699	protein coding
Hoxc6-201	15	1.21	11.21	2.00E-02	ENSMUST00000001711	protein coding
Hoxd9-201	2	2.22	15	2.50E-05	ENSMUST00000059272	protein coding
Hsf4-201	8	5.76	84.12	3.49E-04	ENSMUST00000036127	protein coding
Insm1-201	2	23.55	47.26	2.70E-34	ENSMUST00000089257	protein coding
Irf2-201	8	23.65	4,365.98	2.33E-03	ENSMUST00000034041	protein coding
Irf2-210	8	1.2	8.94	2.00E-02	ENSMUST00000210284	nonsense mediated decay
Irx1-201	13	6.6	19.92	4.60E-09	ENSMUST00000077337	protein coding
Irx1-203	13	3.84	18.66	2.60E-03	ENSMUST00000223460	protein coding
Irx2-201	13	21.96	13.81	3.10E-15	ENSMUST00000074372	protein coding
Irx3-201	8	3.21	21.12	2.51E-06	ENSMUST00000093312	protein coding
Irx3-202	8	64.39	13,115.95	4.14E-04	ENSMUST00000175795	protein coding
Irx4-202	13	8.65	20.64	6.99E-09	ENSMUST00000176684	protein coding
Irx5-201	8	2.83	9.77	2.24E-04	ENSMUST00000034184	protein coding
Isl2-201	9	1.2	14.39	2.00E-02	ENSMUST00000034869	protein coding

Jun-201	4	13.2	4.24	2.11E-10	ENSMUST00000107094	protein coding
Jun-202	4	12.88	3.89	3.42E-09	ENSMUST00000249436	protein coding
Junb-201	8	112.5	2.45	3.15E-06	ENSMUST00000064922	protein coding
Klf14-201	6	4.9	10.54	5.09E-07	ENSMUST00000101589	protein coding
Lhx2-201	2	6.21	61.41	1.18E-09	ENSMUST00000000253	protein coding
Lhx6-202	2	1.91	468.21	4.00E-02	ENSMUST00000112961	protein coding
Lmx1b-201	2	3.88	21.7	1.69E-10	ENSMUST000000041730	protein coding
Maff-201	15	26.63	11.5	1.36E-09	ENSMUST000000096350	protein coding
Mafk-201	5	30.35	2.01	5.66E-04	ENSMUST000000018287	protein coding
Mbnl2-202	14	1.19	399.09	4.00E-02	ENSMUST00000167459	protein coding
Mef2d-203	3	1.31	3.71	5.00E-02	ENSMUST00000107559	protein coding
Meis1-201	11	37.22	15.06	1.01E-18	ENSMUST000000068264	protein coding
Meis1-206	11	1.05	50.68	4.32E-04	ENSMUST00000144988	protein coding
Meis1-207	11	1.22	14.26	2.00E-02	ENSMUST00000177357	nonsense mediated decay
Meis1-208	11	1.24	22.92	6.42E-05	ENSMUST00000177417	protein coding
Meis3-205	7	4.39	5.05	2.00E-02	ENSMUST00000176506	protein coding
Msx1-201	5	14.46	13.84	5.66E-10	ENSMUST000000063116	protein coding
Mycl-201	4	14.98	4.2	2.42E-04	ENSMUST000000030407	protein coding
Nfatc1-201	18	2.93	4.13	1.77E-03	ENSMUST000000035800	protein coding
Nfatc1-203	18	1.39	477.54	3.00E-02	ENSMUST00000167977	protein coding
Nfatc1-204	18	1.72	586.05	3.00E-02	ENSMUST00000170905	protein coding
Nfatc1-205	18	3.95	17.45	5.08E-07	ENSMUST00000236310	protein coding
Nfatc1-206	18	1.41	505.83	3.00E-02	ENSMUST00000236711	protein coding
Nfatc2-202	2	2.76	2.67	2.00E-02	ENSMUST000000074618	protein coding
Nfix-204	8	2.81	3.75	1.87E-06	ENSMUST00000109764	protein coding
Nkx6-1-201	5	3.09	108.57	4.63E-05	ENSMUST000000044125	protein coding

Nr2f2-201	7	1.49	25.36	1.71E-05	ENSMUST00000003 2768	protein coding
Olig2-201	16	1.01	7.98	4.70E-03	ENSMUST00000003 5608	protein coding
Onecut1- 201	9	0.78	6.47	0.01	ENSMUST00000005 6006	protein coding
Onecut2- 201	18	0.54	3.23	3.00E-02	ENSMUST00000017 5965	protein coding
Otx1-201	11	6.09	6.87	3.61E-08	ENSMUST00000000 6071	protein coding
Pax3-201	1	0.89	15.99	2.64E-03	ENSMUST00000000 4994	protein coding
Pax9-201	12	1.43	10.82	1.02E-04	ENSMUST00000000 1538	protein coding
Pbx3-201	2	32.78	8.6	3.66E-10	ENSMUST00000004 0638	protein coding
Pbx3-202	2	33.22	2.44	5.15E-06	ENSMUST00000011 3132	protein coding
Pbx3-207	2	2.46	15.97	2.00E-02	ENSMUST00000015 3278	Nonsense mediated decay
Peg3-201	7	71.66	2.45	4.47E-20	ENSMUST00000005 1209	protein coding
Peg3-205	7	5.11	4.98	3.33E-04	ENSMUST00000023 9104	protein coding
Phf19-201	2	85.71	3.18	1.19E-18	ENSMUST00000002 8232	protein coding
Phf19-205	2	18.26	4.90	2.00E-02	ENSMUST00000020 2907	protein coding
Pitx1-201	13	3.82	29.15	1.45E-06	ENSMUST00000002 1968	protein coding
Pou3f1-201	4	112.71	13.03	3.32E-113	ENSMUST00000005 3491	protein coding
Pou3f3-201	1	0.31	15.85	3.00E-02	ENSMUST00000005 4883	protein coding
Prdm6-201	18	1.29	3.65	5.47E-03	ENSMUST00000009 1900	protein coding
Prox1-202	1	2.86	4.83	1.59E-03	ENSMUST00000017 5916	protein coding
Runx1-203	16	5.38	10.15	2.20E-05	ENSMUST00000016 8195	protein coding
Satb1-208	17	3.71	280.2	5.21E-05	ENSMUST00000014 4331	protein coding
Satb2-201	1	6.21	124.27	1.68E-12	ENSMUST00000004 2857	protein coding
Satb2-202	1	26.88	10.45	2.32E-19	ENSMUST00000011 4415	protein coding
Scnh1-201	4	62.86	2.39	1.18E-09	ENSMUST00000000 0087	protein coding
Sim2-201	16	1.03	310.71	5.00E-02	ENSMUST00000007 2182	protein coding
Six2-201	17	4	63.29	1.83E-04	ENSMUST00000016 3568	protein coding

Six3-202	17	1.02	14.69	6.64E-03	ENSMUST00000175898	protein coding
Six3-203	17	0.95	7.43	4.82E-03	ENSMUST00000176081	protein coding
Snai1-201	2	32.33	4.63	5.39E-07	ENSMUST00000052631	protein coding
Snai3-201	8	36.73	2.45	1.59E-06	ENSMUST00000006762	protein coding
Sox10-201	15	3.48	3.21	1.00E-02	ENSMUST00000040019	protein coding
Sox21-201	14	40.86	11.47	4.83E-46	ENSMUST00000170662	protein coding
Sox3-201	X	106.7	10.68	6.16E-57	ENSMUST00000135107	protein coding
Sox9-201	11	4.02	30.27	7.63E-10	ENSMUST00000000579	protein coding
Sp6-202	11	19.34	8.39	2.60E-05	ENSMUST00000107622	protein coding
Srebf2-203	15	2.34	62	1.46E-04	ENSMUST00000229336	protein coding
Stat5a-202	11	11.71	2.54	1.00E-02	ENSMUST00000107356	protein coding
T-201	17	8.11	4.91	1.00E-07	ENSMUST00000074667	protein coding
T-202	17	3.07	12.87	0.01	ENSMUST00000136922	protein coding
T-203	17	2.45	21.39	1.00E-02	ENSMUST00000177118	protein coding
Tbx15-201	3	12.63	8.94	4.76E-23	ENSMUST00000029462	protein coding
Tbx18-201	9	7.35	73.44	1.53E-15	ENSMUST00000034991	protein coding
Tbx2-201	11	0.9	10.2	1.72E-03	ENSMUST00000000095	protein coding
Tcf7-202	11	44.08	2.7	3.21E-04	ENSMUST00000109071	protein coding
Tead3-206	17	59.8	428.53	4.32E-23	ENSMUST00000156862	protein coding
Tfap2c-201	2	243.46	3.48	7.52E-42	ENSMUST00000030391	protein coding
Tfap2c-202	2	20.36	14.15	6.59E-11	ENSMUST00000099058	protein coding
Tlx3-201	11	13.7	10.02	1.18E-05	ENSMUST00000037746	protein coding
Tshz1-201	18	1.74	66.16	7.57E-05	ENSMUST00000060303	protein coding
Tshz1-202	18	2.98	3.38	3.77E-03	ENSMUST00000175783	protein coding
Vdr-201	15	9.43	20.52	4.30E-33	ENSMUST00000023119	protein coding
Wt1-204	2	10.59	3.55	1.60E-04	ENSMUST00000139585	protein coding

Wt1-205	2	9.28	19.26	3.61E-08	ENSMUST00000143043	protein coding
Zbtb10-201	3	38.4	2.83	9.82E-14	ENSMUST00000155203	protein coding
Zbtb4-203	11	1.82	4.46	3.00E-02	ENSMUST00000108640	protein coding
Zbtb42-201	12	4.15	2.88	2.00E-02	ENSMUST00000169593	protein coding
Zbtb7b-201	3	60.09	2,185.64	1.59E-14	ENSMUST00000029677	protein coding
Zbtb7b-203	3	4.17	4.44	1.31E-05	ENSMUST00000107433	protein coding
Zfhx3-204	8	0.36	463.25	3.00E-02	ENSMUST00000220518	protein coding
Zfp202-201	9	2.73	700.5	2.00E-02	ENSMUST00000026693	protein coding
Zfp28-206	7	2.41	15.09	2.00E-02	ENSMUST00000208949	Nonsense mediated decay
Zfp316-201	5	1.49	340.2	4.00E-02	ENSMUST00000051665	protein coding
Zfp362-202	4	18.77	5.68	1.36E-06	ENSMUST00000106072	protein coding
Zfp429-201	13	2.95	3.48	3.00E-02	ENSMUST00000109732	protein coding
Zfp467-206	6	1.73	41.65	5.50E-04	ENSMUST00000114561	protein coding
Zfp469-202	8	2.78	25.42	7.33E-18	ENSMUST00000187142	protein coding
Zfp503-201	14	2.13	10.56	2.10E-04	ENSMUST00000043409	protein coding
Zfp579-201	7	3.26	41.94	1.27E-03	ENSMUST00000108572	protein coding
Zfp641-202	15	1.14	366.59	4.00E-02	ENSMUST00000169721	protein coding
Zfp651-201	9	4.71	2.06	4.60E-04	ENSMUST00000093772	protein coding
Zfp703-202	8	28.69	25.42	1.00E-28	ENSMUST00000154256	protein coding
Zfpm1-201	8	107.37	15.82	2.29E-49	ENSMUST00000054052	protein coding
Zic1-201	9	1.15	44.72	3.47E-04	ENSMUST00000034927	protein coding
Zic1-202	9	4.58	7.92	8.66E-06	ENSMUST00000065360	protein coding
Zkscan17-201	11	113.53	2	3.12E-13	ENSMUST00000013262	protein coding

Table S1-2. Expression values & metadata of downregulated transcript variants of upregulated genes						
Name	Chromosome	Max group mean	Fold change	FDR p-value	ENSEMBL	Biotype
Ahdc1-201	4	15.14	-3.64	4.38E-18	ENSMUST00000044521	protein coding
Bmal2-201	6	0.22	-142.93	2.00E-02	ENSMUST00000080530	protein coding
Creb3l4-201	3	2.03	-3.27	0.05	ENSMUST00000029547	protein coding
Cux1-204	5	0.56	-2.78	0.02	ENSMUST00000175975	protein coding
Cux1-206	5	3.34	-2.71	1.00E-02	ENSMUST00000176172	protein coding
Cux1-208	5	1.68	-16.81	2.72E-08	ENSMUST00000176423	protein coding
Cux1-209	5	0.56	-77.15	6.13E-04	ENSMUST00000176486	protein coding
Dpf3-204	12	0.06	-69.14	2.00E-02	ENSMUST00000147469	protein coding
Ebf3-204	7	0.15	-100.25	1.00E-02	ENSMUST00000209578	protein coding
Egr1-201	18	32.72	-2.15	2.15E-09	ENSMUST00000064795	protein coding
Ehf-203	2	0.05	-63.89	2.00E-02	ENSMUST00000111176	protein coding
Elf2-203	3	14.95	-7.28	8.69E-58	ENSMUST00000108051	protein coding
Elf2-208	3	7.81	-8.98	2.69E-28	ENSMUST00000183463	nonsense mediated decay
Elf2-212	3	0.82	-3.55	8.62E-06	ENSMUST00000194641	protein coding
Elf4-201	X	11.51	-2.09	4.24E-08	ENSMUST00000033429	protein coding
Elf4-203	X	0.28	-145.01	8.06E-03	ENSMUST00000140486	protein coding
Esrra-203	19	0.83	-179.55	1.61E-05	ENSMUST00000172975	protein coding
Ets1-202	9	0.13	-93.65	2.00E-02	ENSMUST00000050797	protein coding
Ets1-207	9	0.09	-63.87	4.00E-02	ENSMUST00000238819	protein coding
Fbxl19-203	7	27.64	-2.66	1.89E-04	ENSMUST00000186207	protein coding
Fbxl19-206	7	1.16	-5.48	2.00E-02	ENSMUST00000205689	protein coding
Fbxl19-207	7	63.55	-2.4	2.09E-26	ENSMUST00000206893	protein coding
Fosb-205	7	0.32	-417.87	1.13E-04	ENSMUST00000208326	protein coding
Glis3-209	19	2.6	-2.19	0.02	ENSMUST00000162022	protein coding

Hic2-202	16	0.39	-261.49	1.57E-03	ENSMUST0000023 2082	protein coding
Hivep1- 201	13	7.21	-2.04	3.86E-07	ENSMUST0000006 0148	protein coding
Hivep1- 205	13	0.37	-21.59	0.05	ENSMUST0000022 2854	protein coding
Hmg20b- 202	10	6.81	-4.79	2.27E-07	ENSMUST0000010 5323	protein coding
Hmg20b- 210	10	11.05	-12.86	8.24E-44	ENSMUST0000014 1171	protein coding
Hmg20b- 212	10	2.26	-6.59	3.81E-03	ENSMUST0000015 4609	protein coding
Hmga1- 201	17	300.02	-4.65	3.68E-59	ENSMUST0000011 4888	protein coding
Hmga1- 204	17	1.93	-362.79	7.58E-10	ENSMUST0000011 8570	protein coding
Hmga1- 207	17	21.64	-118.67	5.11E-11	ENSMUST0000023 1243	protein coding
Hmga1- 215	17	55.63	-1,148.36	4.26E-34	ENSMUST0000023 2253	protein coding
Klf6-203	13	2.73	-4.25	0.02	ENSMUST0000022 2857	nonsense mediated decay
Kmt2a-202	9	6.53	-2.61	3.06E-05	ENSMUST0000011 4689	protein coding
Lhx2-203	2	0.14	-84.9	2.00E-02	ENSMUST0000014 3783	protein coding
Lhx6-204	2	5.27	-2.05	1.08E-04	ENSMUST0000011 2966	protein coding
Maff-202	15	11.9	-4.13	1.33E-09	ENSMUST0000016 3691	protein coding
Mbnl2-204	14	4.32	-6.84	2.42E-08	ENSMUST0000022 7012	protein coding
Mbnl2-208	14	14.72	-3.36	5.49E-15	ENSMUST0000022 7594	protein coding
Mef2a-201	7	2.22	-4.22	8.52E-03	ENSMUST0000003 2776	protein coding
Mef2d-201	3	35.4	-2.04	1.07E-15	ENSMUST0000000 1455	protein coding
Nfatc2-209	2	0.33	-5.7	0.03	ENSMUST0000017 1689	protein coding
Nfia-204	4	0.02	-79.64	2.00E-02	ENSMUST0000010 7057	protein coding
Nfic-203	10	9.44	-2.31	4.97E-12	ENSMUST0000010 5321	protein coding
Nfkb2-201	19	17.34	-2.17	9.43E-06	ENSMUST0000007 3116	protein coding
Npas1-202	7	0.09	-62.82	0.03	ENSMUST0000021 0748	protein coding
Nr1d1-201	11	16.87	-2.06	5.28E-06	ENSMUST0000006 4941	protein coding
Ovol2-202	2	0.31	-16.46	2.00E-02	ENSMUST0000010 3171	protein coding

Pbx4-205	8	2.21	-3.07	3.00E-02	ENSMUST00000134777	nonsense mediated decay
Purg-201	8	5.52	-2.6	2.91E-05	ENSMUST00000070340	protein coding
Sall2-201	14	0.35	-628.65	3.10E-05	ENSMUST00000058326	protein coding
Satb1-203	17	7.49	-3.37	1.14E-06	ENSMUST00000129667	protein coding
Satb1-213	17	0.18	-399.54	3.40E-04	ENSMUST00000169480	protein coding
Scmh1-203	4	2.44	-4.79	5.00E-02	ENSMUST00000106298	protein coding
Smad3-204	9	0.4	-67.02	4.00E-02	ENSMUST00000137713	protein coding
Smad3-205	9	0.34	-87.82	3.00E-02	ENSMUST00000154323	protein coding
Sp4-203	12	8.15	-2.72	1.65E-08	ENSMUST00000222314	protein coding
Sp6-201	11	1.28	-10.06	1.77E-03	ENSMUST00000047997	protein coding
Srebf2-202	15	3.03	-184.03	2.27E-07	ENSMUST00000229009	protein coding
Tbx4-202	11	0.45	-123.25	2.51E-06	ENSMUST00000108045	protein coding
Tcf24-201	1	1.01	-5.96	2.06E-04	ENSMUST00000097824	protein coding
Tcf7-201	11	100.59	-2	1.05E-16	ENSMUST00000086844	protein coding
Tead3-201	17	0.82	-148.31	4.75E-06	ENSMUST00000114799	protein coding
Tead4-203	6	12.86	-2.35	1.32E-05	ENSMUST00000130454	protein coding
Trafd1-202	5	11.09	-2.69	4.24E-04	ENSMUST00000120784	protein coding
Vezf1-202	11	3.77	-2.01	2.53E-04	ENSMUST00000143052	protein coding
Wt1-202	2	0.41	-95.23	3.06E-06	ENSMUST00000111099	protein coding
Xpa-204	4	2.8	-3.38	3.00E-02	ENSMUST00000132358	nonsense mediated decay
Zbtb20-202	16	0.25	-243.62	1.37E-03	ENSMUST00000114690	protein coding
Zbtb42-203	12	0.42	-4.57	5.00E-02	ENSMUST00000174780	protein coding
Zbtb46-202	2	3.33	-4.53	5.91E-20	ENSMUST00000087409	protein coding
Zbtb7b-202	3	4.15	-1,145.26	4.05E-17	ENSMUST00000107432	protein coding
Zfp174-201	16	2.01	-2.23	4.22E-03	ENSMUST00000041778	protein coding
Zfp202-202	9	1.5	-3.22	4.60E-04	ENSMUST00000168691	nonsense mediated decay

Zfp202-203	9	0.39	-145.62	4.69E-08	ENSMUST00000168832	protein coding
Zfp358-202	8	0.5	-126.52	2.00E-02	ENSMUST00000207318	protein coding
Zfp362-201	4	0.56	-163.68	7.14E-08	ENSMUST00000071108	protein coding
Zfp429-204	13	4.6	-26.74	3.86E-10	ENSMUST00000224825	protein coding
Zfp46-205	4	0.45	-176.74	4.69E-03	ENSMUST00000144217	protein coding
Zfp628-201	7	5.81	-2.09	4.00E-02	ENSMUST00000116354	protein coding
Zfp708-203	13	0.07	-66.32	4.00E-02	ENSMUST00000190566	protein coding
Zfp773-201	7	1.57	-8.18	2.99E-06	ENSMUST00000032622	protein coding
Zfp787-204	7	7.72	-2.52	5.00E-02	ENSMUST00000207628	protein coding
Zfp787-205	7	5.02	-3.97	2.75E-07	ENSMUST00000207957	protein coding
Zfp791-201	8	1.72	-3.81	3.56E-03	ENSMUST00000098550	protein coding
Zfp820-202	17	3.87	-4.76	3.13E-06	ENSMUST00000232918	protein coding
Zkscan17-202	11	13.7	-21.8	1.30E-110	ENSMUST00000101150	protein coding

Table S1-3. Expression values & metadata of insignificant transcript variants of upregulated genes

Name	Chromosome	Max group mean	Fold change	FDR p-value	ENSEMBL	Biotype
Aebp1-201	11	9.8	1.36	0.38	ENSMUST00000102923	protein coding
Aebp1-202	11	1.33	-2.6	0.11	ENSMUST00000109829	protein coding
Ahdc1-202	4	57.91	-1.25	0.2	ENSMUST00000105914	protein coding
Ahdc1-204	4	0.12	-2.08	0.61	ENSMUST00000105916	protein coding
Alx1-201	10	0.16	31.41	0.27	ENSMUST00000040859	protein coding
Alx1-203	10	0.09	17.83	0.38	ENSMUST00000167156	protein coding
Alx1-204	10	0.09	-1.04	0.99	ENSMUST00000217946	protein coding
Alx1-205	10	0.01	2.99	NaN	ENSMUST00000218282	protein coding
Alx1-208	10	0.14	-5.69	0.29	ENSMUST00000219194	protein coding
Alx4-201	2	0.34	1.89	0.36	ENSMUST00000042078	protein coding
Ar-201	X	0.18	-1.25	0.77	ENSMUST00000052837	protein coding
Arid3a-201	10	31.22	1.45	0.03	ENSMUST00000019708	protein coding
Arid3a-203	10	0.14	54.43	0.24	ENSMUST00000105377	protein coding
Arid3a-204	10	0.36	21.52	0.35	ENSMUST00000131118	protein coding
Arid3c-202	4	0.76	-1.2	0.84	ENSMUST00000150809	protein coding
Arid3c-203	4	1.34	-1.52	0.18	ENSMUST00000171251	protein coding
Ascl2-201	7	14.82	1.57	0.06	ENSMUST00000009392	protein coding
Ascl5-201	1	0.36	16.25	0.38	ENSMUST00000180436	protein coding
Atoh8-202	6	0.21	-1.65	0.72	ENSMUST00000206425	nonsense mediated decay
Barhl1-201	2	0.11	2.68	0.49	ENSMUST00000050776	protein coding
Barhl1-203	2	0.01	2.99	NaN	ENSMUST00000113849	protein coding
Barhl2-201	5	0.39	1.35	0.76	ENSMUST00000086795	protein coding
Batf3-201	1	12.44	2.39	0.1	ENSMUST00000027943	protein coding
Bcl11b-201	12	0.77	1.09	0.89	ENSMUST00000066060	protein coding

Bhlha9-201	11	0.39	35.21	0.26	ENSMUST0000005 6184	protein coding
Bhlhe41- 201	6	2.53	1.46	0.48	ENSMUST0000003 2386	protein coding
Bhlhe41- 202	6	0.61	-4.81	0.1	ENSMUST0000011 1703	protein coding
Bmal2-202	6	0.05	8.19	0.52	ENSMUST0000011 1636	protein coding
Bmal2-203	6	0.19	-2.53	0.51	ENSMUST0000011 1638	protein coding
Bmal2-204	6	3.64	1.74	0.23	ENSMUST0000011 1639	protein coding
Bmal2-206	6	0.85	104.43	0.13	ENSMUST0000012 9788	nonsense mediated decay
Bmyc-201	2	49.68	-1.21	0.51	ENSMUST0000006 1483	protein coding
Bnc1-201	7	0.29	8.08	0.09	ENSMUST0000002 6096	protein coding
Cbx2-201	11	79.05	-1.26	0.02	ENSMUST0000002 6662	protein coding
Ccdc17- 201	4	0.71	-1.88	0.3	ENSMUST0000005 1869	protein coding
Cdc5lrt10- 201	10	0.22	40.87	0.25	ENSMUST0000017 8998	protein coding
Cdc5lrt7- 201	10	0.13	1.39	0.81	ENSMUST0000021 9760	protein coding
Cebpa-202	7	2.73	-1.56	0.35	ENSMUST0000020 5391	protein coding
Cebpd-201	16	1.18	-1.3	0.68	ENSMUST0000009 6232	protein coding
Creb3-201	4	35.15	-1.62	4.12E-03	ENSMUST0000010 2944	protein coding
Creb3-203	4	0.22	-3.48	0.37	ENSMUST0000013 2631	protein coding
Creb3l2- 201	6	12.14	-1.44	7.01E-03	ENSMUST0000004 1093	protein coding
Creb3l3- 201	10	1.35	-1.97	0.26	ENSMUST0000011 7422	protein coding
Creb3l4- 202	3	7.09	-1.52	0.47	ENSMUST0000010 7369	protein coding
Crebzf-201	7	49.22	-1.29	0.09	ENSMUST0000006 1767	protein coding
Crebzf-202	7	0.42	2.7	0.51	ENSMUST0000010 7205	nonsense mediated decay
Crebzf-203	7	2.73	183.56	0.08	ENSMUST0000010 7206	nonsense mediated decay
Crebzf-204	7	0.02	-6.17	NaN	ENSMUST0000012 6041	nonsense mediated decay
Crebzf-205	7	15.64	-1.2	0.36	ENSMUST0000014 3408	nonsense mediated decay
Crebzf-207	7	8.43	-1.6	0.23	ENSMUST0000020 7252	nonsense mediated decay

Crebzf-208	7	4.15	-1.67	0.29	ENSMUST00000208379	nonsense mediated decay
Cux1-201	5	3.32	-1.52	0.14	ENSMUST00000004097	protein coding
Cux1-203	5	0.05	-4.22	0.3	ENSMUST00000015918	nonsense mediated decay
Cux1-207	5	6.21	-1.92	0.24	ENSMUST00000016216	protein coding
Cux1-211	5	23.51	-1.71	0.03	ENSMUST00000016745	protein coding
Cux1-212	5	0.44	181.17	0.08	ENSMUST00000016778	protein coding
Dlx2-201	2	0.59	2.41	0.29	ENSMUST000000024159	protein coding
Dlx4-201	11	1.74	-1.78	0.3	ENSMUST000000021241	protein coding
Dlx5-201	6	0.73	7.26	0.14	ENSMUST000000052609	protein coding
Dlx5-202	6	0.01	-6.17	NaN	ENSMUST000000142635	protein coding
Dlx6-201	6	0.81	38.98	0.25	ENSMUST000000031768	protein coding
Dlx6-202	6	0.36	4.66	0.34	ENSMUST000000160937	protein coding
Dlx6-203	6	0.09	7.7	0.53	ENSMUST000000171311	protein coding
Dmbx1-201	4	0.13	55.79	0.22	ENSMUST000000064806	protein coding
Dmbx1-203	4	1.95	1.48	0.41	ENSMUST000000124071	protein coding
Dmrt3-201	19	3.24	-1.88	0.06	ENSMUST000000048935	protein coding
Dmrt3-202	19	0.36	10.57	0.46	ENSMUST000000237821	protein coding
Dnttip1-201	2	43.41	-2	1.81E-07	ENSMUST000000017443	protein coding
Dnttip1-202	2	1.41	-1.11	0.93	ENSMUST000000109326	protein coding
Dnttip1-203	2	17.48	-1.59	0.29	ENSMUST000000109327	protein coding
Dpf3-202	12	1.05	-2.21	0.35	ENSMUST000000140327	protein coding
Dpf3-203	12	1.97	-1.39	0.44	ENSMUST000000144237	protein coding
Dpf3-205	12	2.98	285.48	0.05	ENSMUST000000177959	protein coding
Dpf3-206	12	0.95	224.06	0.07	ENSMUST000000178756	protein coding
Ebf2-201	14	0.09	32.59	0.28	ENSMUST000000022637	protein coding
Ebf2-202	14	0.22	1.33	0.85	ENSMUST000000176029	protein coding

Ebf3-202	7	0.04	11.46	0.46	ENSMUST00000106118	protein coding
Ebf3-203	7	0.17	63.09	0.21	ENSMUST00000169486	protein coding
Ebf3-207	7	0.17	38.99	0.25	ENSMUST00000210774	protein coding
Ebf4-201	2	1.41	279.27	0.06	ENSMUST00000110286	protein coding
Ebf4-203	2	1.28	284.19	0.05	ENSMUST00000110288	protein coding
Ebf4-204	2	0.38	80.66	0.15	ENSMUST00000126740	nonsense mediated decay
Ebf4-206	2	0.89	2.43	0.36	ENSMUST00000140169	nonsense mediated decay
Egr2-202	10	0.2	44.46	0.24	ENSMUST00000105438	protein coding
Egr2-203	10	0.04	-35.18	0.08	ENSMUST00000127820	protein coding
Egr2-204	10	0.04	-6.17	NaN	ENSMUST00000130933	protein coding
Egr2-205	10	0.04	-11.42	NaN	ENSMUST00000145754	protein coding
Egr2-206	10	0.02	-6.17	NaN	ENSMUST00000145936	protein coding
Ehf-201	2	0.31	99.11	0.13	ENSMUST00000090475	protein coding
Ehf-202	2	0.14	-7.28	0.15	ENSMUST00000111174	protein coding
Ehf-204	2	0.31	1.56	7.90E-01	ENSMUST00000125788	protein coding
Ehf-207	2	0.02	-6.17	NaN	ENSMUST00000140503	protein coding
Ehf-208	2	0.06	-11.42	NaN	ENSMUST00000151265	protein coding
Elf1-201	14	2.73	3.66	0.06	ENSMUST00000040131	protein coding
Elf1-202	14	14.05	-1.63	0.03	ENSMUST00000110835	protein coding
Elf1-204	14	2.83	1.04	0.97	ENSMUST00000227192	protein coding
Elf2-202	3	0.32	58.51	0.24	ENSMUST00000091144	protein coding
Elf2-206	3	12.64	-1.81	0.07	ENSMUST00000163748	protein coding
Elf2-207	3	0.99	1.69	5.70E-01	ENSMUST00000183338	nonsense mediated decay
Elf2-209	3	2.24	-2	0.28	ENSMUST00000184677	nonsense mediated decay
Elf2-213	3	0.52	-1.61	0.37	ENSMUST00000195432	protein coding
Elf5-206	2	0.62	120.42	1.20E-01	ENSMUST00000164172	protein coding

Elf5-207	2	0.55	104.97	0.13	ENSMUST0000023 9273	protein coding
Emx1-201	6	1.06	2.34	0.18	ENSMUST0000004 5942	protein coding
Emx2-201	19	0.07	14.36	0.4	ENSMUST0000006 2216	protein coding
Emx2-202	19	0.12	15.63	0.39	ENSMUST0000017 4353	protein coding
En1-201	1	1.62	-1.01	0.99	ENSMUST0000007 9721	protein coding
Erg-203	16	0.08	-60.84	0.05	ENSMUST0000012 2199	protein coding
Erg-204	16	0.07	-1.77	0.71	ENSMUST0000017 1646	protein coding
Erg-205	16	0.31	-2.19	0.49	ENSMUST0000017 6345	protein coding
Erg-206	16	0.43	10.57	0.12	ENSMUST0000023 3269	protein coding
Erg-207	16	0.09	20.34	0.36	ENSMUST0000023 3664	protein coding
Erg-208	16	0.36	-1.47	0.6	ENSMUST0000023 3881	protein coding
Esrra-201	19	29.52	1.33	0.39	ENSMUST0000002 5906	protein coding
Esrra-205	19	0.85	2.46	0.56	ENSMUST0000017 3635	protein coding
Esrrg-201	1	0.06	25.16	0.33	ENSMUST0000002 7906	protein coding
Esrrg-203	1	0.01	-9.65	0.17	ENSMUST0000011 0939	protein coding
Esx1-201	X	15.71	1.28	0.34	ENSMUST0000007 4698	protein coding
Esx1-202	X	38.98	1.47	0.15	ENSMUST0000011 3066	protein coding
Ets1-201	9	3.57	-1.39	0.05	ENSMUST0000003 4534	protein coding
Ets1-205	9	0.43	-10.48	0.19	ENSMUST0000018 4364	protein coding
Ets2-201	16	101.79	1.7	3.09E-08	ENSMUST0000002 3612	protein coding
Ets2-202	16	0.79	-1.11	0.95	ENSMUST0000023 2792	protein coding
Fbxl19-202	7	1.7	449.86	0.08	ENSMUST0000018 6116	protein coding
Fbxl19-204	7	26.44	1.7	0.16	ENSMUST0000018 8580	protein coding
Fbxl19-205	7	0.89	21.94	0.34	ENSMUST0000018 9562	protein coding
Fezf1-201	6	1.07	194.23	7.00E-02	ENSMUST0000003 1709	protein coding
Fli1-201	9	0.07	-1	1	ENSMUST0000001 6231	protein coding

Fli1-202	9	0.05	4.88	0.6	ENSMUST00000183767	protein coding
Fos-201	12	20.89	1.5	9.00E-02	ENSMUST00000021674	protein coding
Fosb-206	7	0.52	43.72	0.25	ENSMUST00000208446	protein coding
Fosb-207	7	0.15	2.14	0.63	ENSMUST00000208505	protein coding
Fosl1-203	19	0.59	1.32	0.87	ENSMUST00000236774	protein coding
Fosl2-201	5	14.6	1.55	0.02	ENSMUST00000031017	protein coding
Foxa1-201	12	0.6	-1.22	0.77	ENSMUST00000044380	protein coding
Foxa2-202	2	3.65	1.49	0.42	ENSMUST00000109964	protein coding
Foxc1-201	13	0.25	3.66	0.24	ENSMUST00000062292	protein coding
Foxf2-201	13	0.51	-1.47	0.54	ENSMUST00000042054	protein coding
Foxg1-204	12	0.29	1.24	0.81	ENSMUST00000179669	protein coding
Foxj1-201	11	3.43	1.71	0.2	ENSMUST00000036215	protein coding
Foxj2-201	6	17.82	1.33	0.1	ENSMUST00000003238	protein coding
Foxj2-202	6	1.45	3	0.46	ENSMUST00000203075	protein coding
Foxk1-201	5	29.33	-1.35	0.02	ENSMUST00000072837	protein coding
Foxk1-202	5	5.50E-01	1.76	0.71	ENSMUST00000198422	protein coding
Foxl1-201	8	0.14	27.63	0.3	ENSMUST00000181609	protein coding
Gata1-201	X	13.38	1.6	0.02	ENSMUST00000033502	protein coding
Gata1-202	X	0.02	-6.17	NaN	ENSMUST00000125418	protein coding
Gata1-203	X	0.24	-1.44	0.81	ENSMUST00000128449	protein coding
Gata2-203	6	0.11	-17.04	0.17	ENSMUST00000203480	protein coding
Gata3-202	2	0.33	16.77	0.38	ENSMUST00000130615	protein coding
Gcm1-201	9	0.62	-1.89	2.40E-01	ENSMUST00000024104	protein coding
Gfi1b-201	2	0.64	3.3	0.27	ENSMUST00000028156	protein coding
Gfi1b-204	2	0.52	71.33	0.18	ENSMUST00000164290	protein coding
Glis1-202	4	0.17	-5.51	0.2	ENSMUST00000106738	protein coding

Glis1-205	4	0.13	4.88	0.6	ENSMUST00000135835	protein coding
Glis3-201	19	0.41	1.74	0.49	ENSMUST00000065113	nonsense mediated decay
Glis3-202	19	0.03	8.19	0.52	ENSMUST00000112612	protein coding
Glis3-208	19	0.01	-6.17	NaN	ENSMUST00000161328	protein coding
Gm28047-201	15	0.52	3.68	0.36	ENSMUST00000184772	nonsense mediated decay
Grhl2-201	15	35.19	1.21	0.24	ENSMUST00000022895	protein coding
Grhl2-202	15	0.1	6.63	0.55	ENSMUST00000159221	protein coding
Grhl2-203	15	1.28	195.6	0.07	ENSMUST00000161405	protein coding
Grhl2-204	15	1.57	76.87	0.16	ENSMUST00000161532	protein coding
Gsx1-201	5	1.05	1.42	0.61	ENSMUST00000065382	protein coding
Gtf2ird2-201	5	4.08	-1.79	8.41E-04	ENSMUST00000016086	protein coding
Gtf2ird2-202	5	0.05	-1.39	0.83	ENSMUST00000123941	nonsense mediated decay
Gtf2ird2-204	5	0.1	-22.63	0.14	ENSMUST00000135588	protein coding
Hand2-201	8	0.27	1.07	0.97	ENSMUST00000040104	protein coding
Hes5-201	4	0.5	-1.5	0.65	ENSMUST00000049621	protein coding
Hes7-201	11	1.1	1.27	0.75	ENSMUST00000024543	protein coding
Hic1-202	11	2.30E+00	3.18	0.06	ENSMUST00000131720	protein coding
Hic2-201	16	81.06	-1.64	2.20E-08	ENSMUST00000090190	protein coding
Hif3a-201	7	0.09	2.4	0.6	ENSMUST00000037762	protein coding
Hif3a-202	7	24.07	1.36	0.06	ENSMUST00000108492	protein coding
Hif3a-203	7	1.01	-1.28	0.85	ENSMUST00000139224	protein coding
Hif3a-204	7	0.07	-2.25	0.62	ENSMUST00000153833	protein coding
Hivep1-203	13	0.02	-6.17	NaN	ENSMUST00000220801	nonsense mediated decay
Hivep2-201	10	1.04	-1.23	0.64	ENSMUST00000015645	protein coding
Hivep2-203	10	0.17	22.99	0.35	ENSMUST00000186989	protein coding
Hivep2-204	10	0.04	-6.47	2.10E-01	ENSMUST00000187083	protein coding

Hivep2-205	10	0.08	56.78	0.24	ENSMUST00000191138	protein coding
Hivep3-201	4	4.98E-03	-6.17	NaN	ENSMUST00000084306	protein coding
Hivep3-202	4	0.23	1.31	0.47	ENSMUST00000106307	protein coding
Hivep3-209	4	0.04	-1.43	0.8	ENSMUST00000166542	protein coding
Hlx-202	1	0.04	-11.41	0.23	ENSMUST00000174257	protein coding
Hmg20b-204	10	1.86	-1.8	0.52	ENSMUST00000122993	protein coding
Hmga1-202	17	2.41	162.8	0.09	ENSMUST00000117254	protein coding
Hmga1-205	17	0.69	54.06	0.22	ENSMUST00000118599	protein coding
Hmga1-208	17	4.42	-1.25	0.77	ENSMUST00000231358	protein coding
Hmga1-209	17	0.35	-18.35	0.05	ENSMUST00000231780	protein coding
Hmga1-210	17	0.56	-3.38	0.25	ENSMUST00000231796	protein coding
Hmga1-212	17	3.49	-2.7	0.06	ENSMUST00000231866	protein coding
Hmga1-213	17	12.68	1.94	0.01	ENSMUST00000231874	protein coding
Hmga1-214	17	18.22	-1.01	0.99	ENSMUST00000232013	protein coding
Hmgn3-201	9	8.88	-1.92	0.07	ENSMUST00000161796	protein coding
Hmgn3-202	9	6.53	-1.56	0.35	ENSMUST00000162246	protein coding
Hmgn3-203	9	2.45	-1.39	0.54	ENSMUST00000185315	protein coding
Hmgn3-205	9	0.45	-2.25	0.6	ENSMUST00000187193	protein coding
Hmx1-202	5	0.05	2.99	NaN	ENSMUST00000172923	protein coding
Hmx2-201	7	0.07	-2.53	0.4	ENSMUST00000051997	protein coding
Hmx2-202	7	0.49	59.82	2.10E-01	ENSMUST00000183219	protein coding
Hmx3-201	7	0.23	3.83	0.39	ENSMUST00000046093	protein coding
Hoxa1-201	6	9.79	-1.07	0.74	ENSMUST00000000964	protein coding
Hoxa1-202	6	2.48	-1.8	0.2	ENSMUST00000120363	protein coding
Hoxa10-201	6	0.35	1.23	0.88	ENSMUST00000121043	protein coding
Hoxa10-202	6	0.67	1.16	0.85	ENSMUST00000125581	protein coding

Hoxa11-201	6	0.57	-1.36	0.63	ENSMUST00000048026	protein coding
Hoxa13-201	6	1.03	1.55	0.54	ENSMUST00000147595	protein coding
Hoxa2-201	6	0.35	3.64	0.36	ENSMUST000000014848	protein coding
Hoxa4-201	6	0.75	-1	1	ENSMUST00000101395	protein coding
Hoxa6-201	6	0.25	1.46	0.79	ENSMUST000000062829	protein coding
Hoxa7-202	6	0.14	10.07	0.48	ENSMUST00000134367	protein coding
Hoxa7-203	6	0.07	4.88	0.6	ENSMUST00000140316	protein coding
Hoxa7-204	6	0.04	2.99	NaN	ENSMUST00000150041	protein coding
Hoxa7-205	6	0.26	39.63	0.26	ENSMUST00000153280	nonsense mediated decay
Hoxa9-201	6	0.15	2.04	0.59	ENSMUST000000048680	protein coding
Hoxa9-202	6	0.08	-1.84	0.66	ENSMUST00000114425	protein coding
Hoxb13-201	11	5.26	1.76	0.19	ENSMUST000000062709	protein coding
Hoxb2-201	11	0.13	1.46	0.79	ENSMUST00000100523	protein coding
Hoxb3-201	11	0.04	6.56	0.55	ENSMUST000000055334	protein coding
Hoxb3-202	11	0.19	3.59	0.36	ENSMUST000000093944	protein coding
Hoxb4-201	11	2.06	3	0.05	ENSMUST000000049241	protein coding
Hoxb6-201	11	0.18	18.31	0.37	ENSMUST000000000704	protein coding
Hoxb6-202	11	0.04	6.63	0.55	ENSMUST00000173432	protein coding
Hoxb7-201	11	1.07	-1.59	0.42	ENSMUST000000049352	protein coding
Hoxb8-201	11	0.2	-1.84	0.55	ENSMUST000000052650	protein coding
Hoxb8-202	11	0.07	4.88	0.6	ENSMUST00000125410	protein coding
Hoxc11-201	15	0.25	1.05	0.98	ENSMUST000000001701	protein coding
Hoxc8-201	15	0.16	3.55	0.42	ENSMUST000000001703	protein coding
Hoxc9-201	15	1.05	2.68	1.30E-01	ENSMUST000000001706	protein coding
Hoxd10-201	2	0.48	5.48	0.2	ENSMUST000000061745	protein coding
Hoxd11-202	2	0.44	37.1	0.26	ENSMUST00000142312	protein coding

Hoxd13-201	2	2.61	-1.23	0.59	ENSMUST00000001872	protein coding
Hoxd8-201	2	0.39	6.5	0.12	ENSMUST000000019749	protein coding
Hoxd8-202	2	0.06	-4.83	0.24	ENSMUST000000014721	protein coding
Hoxd8-203	2	0.04	2.99	NaN	ENSMUST000000011380	protein coding
Hsf4-204	8	0.25	-2.35	0.6	ENSMUST000000013102	nonsense mediated decay
Hsf4-205	8	0.63	1.59	0.71	ENSMUST000000013640	nonsense mediated decay
Hsf4-206	8	0.1	-2.38	0.58	ENSMUST000000013859	protein coding
Hsf4-207	8	0.2	-7.15	0.26	ENSMUST000000014837	protein coding
Irf2-202	8	0.3	16.74	0.38	ENSMUST000000027105	protein coding
Irf2-203	8	0.06	2.99	NaN	ENSMUST000000027571	protein coding
Irf2-204	8	0.08	4.88	0.6	ENSMUST000000028433	protein coding
Irf2-205	8	0.6	18.2	0.37	ENSMUST000000028507	protein coding
Irf4-201	13	0.05	-8.22	0.08	ENSMUST000000021784	protein coding
Irf4-202	13	0.2	1.14	0.9	ENSMUST000000010307	protein coding
Irf6-201	1	14.83	-1.3	0.16	ENSMUST000000076521	protein coding
Irf7-201	7	0.72	103.78	0.14	ENSMUST000000026571	protein coding
Irf7-202	7	0.36	1.56	0.8	ENSMUST000000097952	protein coding
Irf7-203	7	0.5	-1.13	0.89	ENSMUST0000000106023	protein coding
Irf7-204	7	0.09	-1.01	1	ENSMUST0000000123525	protein coding
Irf7-212	7	0.15	17.83	0.38	ENSMUST0000000209899	nonsense mediated decay
Irx1-202	13	0.07	2.99	NaN	ENSMUST0000000223379	protein coding
Irx2-203	13	0.42	-5.58	0.23	ENSMUST0000000167067	protein coding
Irx2-205	13	1.5	-3.42	0.18	ENSMUST0000000172353	protein coding
Irx4-201	13	1.86	295.31	0.05	ENSMUST000000022095	protein coding
Irx5-202	8	0.32	60.65	0.22	ENSMUST0000000210246	protein coding
Isl1-201	13	0.98	1	0.99	ENSMUST000000036060	protein coding

Isl1-202	13	0.08	-3.82	0.37	ENSMUST00000176044	protein coding
Isl2-202	9	0.61	3.67	0.39	ENSMUST00000114290	nonsense mediated decay
Isl2-203	9	9.06E-03	-6.17	NaN	ENSMUST00000164373	nonsense mediated decay
Jazf1-201	6	1.43	1.44	0.33	ENSMUST00000074541	protein coding
Jund-201	8	98.14	1.26	0.22	ENSMUST00000095267	protein coding
Klf6-201	13	46.91	-1.56	8.98E-04	ENSMUST00000000080	protein coding
Kmt2a-201	9	34.64	-1.89	1.37E-13	ENSMUST00000002095	protein coding
Kmt2a-203	9	0.01	4.88	0.6	ENSMUST00000128768	protein coding
Kmt2a-204	9	4.61	-2.27	0.29	ENSMUST00000138119	nonsense mediated decay
Kmt2a-206	9	0.41	-10.15	0.09	ENSMUST00000215489	protein coding
L3mbtl3-201	10	10.95	1.32	0.16	ENSMUST00000040219	protein coding
L3mbtl3-202	10	0.26	87.5	0.16	ENSMUST00000105519	protein coding
L3mbtl3-203	10	2.3	-2.51	0.06	ENSMUST00000174766	protein coding
Lbx2-201	6	1.09	-1.17	0.86	ENSMUST00000041265	protein coding
Lhx1-201	11	0.73	2.49	0.22	ENSMUST00000018842	protein coding
Lhx1-204	11	0.08	8.67	0.5	ENSMUST00000184646	protein coding
Lhx2-207	2	0.3	13.31	0.42	ENSMUST00000176229	nonsense mediated decay
Lhx4-201	1	0.12	7.21	0.21	ENSMUST00000027740	protein coding
Lhx5-201	5	0.51	1.02	0.98	ENSMUST00000031591	protein coding
Lhx6-201	2	0.78	1.1	0.99	ENSMUST00000112960	protein coding
Lhx6-203	2	0.24	62.85	0.22	ENSMUST00000112963	protein coding
Lhx6-205	2	0.2	49.53	0.24	ENSMUST00000112967	protein coding
Lhx9-202	1	0.23	2.09	0.48	ENSMUST00000046870	protein coding
Lhx9-203	1	0.03	14.11	0.41	ENSMUST00000093486	protein coding
Lhx9-204	1	0.09	1.28	0.88	ENSMUST00000112026	protein coding
Lhx9-207	1	0.01	-6.17	NaN	ENSMUST00000194557	nonsense mediated decay

Lmx1b-203	2	1.17	128.69	0.11	ENSMUST0000017 6067	protein coding
Ltf-201	9	0.5	8.32	0.09	ENSMUST0000003 5077	protein coding
Ltf-211	9	0.18	5.1	NaN	ENSMUST0000019 9815	nonsense mediated decay
Maf-201	8	0.02	5.1	NaN	ENSMUST0000006 9009	protein coding
Maf-202	8	0.35	2.57	0.13	ENSMUST0000010 9104	protein coding
Mafb-201	2	0.48	1.62	0.53	ENSMUST0000009 9126	protein coding
Maff-203	15	0.17	25.61	0.34	ENSMUST0000022 9130	protein coding
Maff-204	15	0.16	-2.09	0.57	ENSMUST0000022 9285	protein coding
Mafk-202	5	1.88	-1.62	0.29	ENSMUST0000011 0836	protein coding
Mbnl2-201	14	60.53	1.05	0.71	ENSMUST0000008 8419	protein coding
Mbnl2-203	14	1.4	1.11	0.91	ENSMUST0000022 6800	protein coding
Mef2a-202	7	0.27	-7.25	0.18	ENSMUST0000007 2460	nonsense mediated decay
Mef2a-203	7	1.14	-3.34	0.25	ENSMUST0000007 6325	protein coding
Mef2a-204	7	4.03	-1.59	0.07	ENSMUST0000010 7476	protein coding
Mef2a-206	7	0.35	-8.77	0.35	ENSMUST0000013 5493	nonsense mediated decay
Mef2a-208	7	5.88	-1.37	0.15	ENSMUST0000015 6690	protein coding
Mef2d-202	3	3.37	-1.4	0.35	ENSMUST0000010 7558	protein coding
Mef2d-204	3	41.04	1.15	0.51	ENSMUST0000011 9251	protein coding
Meis1-209	11	0.47	9.74	0.08	ENSMUST0000018 5131	protein coding
Meis3-201	7	8.19	-1.05	0.91	ENSMUST0000000 2495	protein coding
Meis3-203	7	0.63	31.98	0.29	ENSMUST0000017 6342	protein coding
Meis3-204	7	0.18	-1.18	0.91	ENSMUST0000017 6446	nonsense mediated decay
Meis3-207	7	0.08	-49.51	0.06	ENSMUST0000017 7156	nonsense mediated decay
Mnx1-201	5	0.78	4.52	0.06	ENSMUST0000016 5512	protein coding
Msx2-201	13	21.09	1.84	1.06E-03	ENSMUST0000002 1922	protein coding
Mxd4-201	5	5.48	-1.9	0.08	ENSMUST0000004 2701	protein coding

Mycl-202	4	25.38	-1.71	2.09E-04	ENSMUST00000106252	protein coding
Mycl-204	4	0.06	2.99	NaN	ENSMUST00000144998	protein coding
Mypop-201	7	10.34	1.95	0.24	ENSMUST00000059331	protein coding
Mypop-203	7	2.12	-3.02	0.15	ENSMUST00000131087	protein coding
Nfatc1-202	18	1	3.63	0.68	ENSMUST00000078049	protein coding
Nfatc2-201	2	0.55	-1.7	0.53	ENSMUST00000029057	protein coding
Nfatc2-204	2	4.36	-1.39	0.35	ENSMUST00000109184	protein coding
Nfatc2-205	2	0.16	27.84	0.32	ENSMUST00000137451	protein coding
Nfia-201	4	0.11	10.75	0.17	ENSMUST00000052018	protein coding
Nfia-202	4	0.06	42.92	0.26	ENSMUST00000075448	protein coding
Nfia-205	4	0.03	1.66	0.77	ENSMUST00000107062	protein coding
Nfia-207	4	0.05	-3.72	0.37	ENSMUST00000148930	protein coding
Nfia-208	4	0.16	12.46	0.43	ENSMUST00000152023	protein coding
Nfic-201	10	10.91	1.18	0.72	ENSMUST00000020461	protein coding
Nfic-202	10	0.33	45.69	0.33	ENSMUST00000078185	protein coding
Nfic-204	10	1.2	2.72	0.27	ENSMUST00000117966	protein coding
Nfix-201	8	0.91	1.83	0.57	ENSMUST00000076715	protein coding
Nfix-202	8	1.01	129.03	0.11	ENSMUST00000099070	protein coding
Nfix-203	8	0.07	14.11	0.41	ENSMUST00000109762	protein coding
Nfkb2-202	19	13.48	2.09	0.07	ENSMUST00000111881	protein coding
Nfkb2-204	19	0.35	6.01	0.24	ENSMUST00000236591	protein coding
Nfkb2-206	19	2.23	-1.27	0.54	ENSMUST00000237330	protein coding
Nfkb2-208	19	0.02	-22.46	0.14	ENSMUST00000237791	nonsense mediated decay
Nkx1-1-201	5	1.43	126.04	0.12	ENSMUST00000173348	protein coding
Nkx2-2-201	2	0.11	19.76	0.36	ENSMUST00000067075	protein coding
Nkx2-2-203	2	0.19	16.25	0.38	ENSMUST00000109970	protein coding

Nkx2-3-201	19	0.33	1.16	0.91	ENSMUST00000057178	protein coding
Nkx2-5-201	17	1.59	-1.01	0.99	ENSMUST00000015723	protein coding
Nkx2-9-201	12	4.02	1.91	0.18	ENSMUST00000072631	protein coding
Npas1-201	7	0.52	80.7	0.16	ENSMUST00000002053	protein coding
Npas2-201	1	2.28	1.91	0.18	ENSMUST00000056815	protein coding
Npas2-203	1	0.33	14.11	0.41	ENSMUST00000173050	protein coding
Nr1h3-201	2	0.18	-4.94	0.29	ENSMUST00000002177	protein coding
Nr1h3-202	2	1.56	-2.31	0.3	ENSMUST00000111354	protein coding
Nr1h3-203	2	0.1	12.77	0.42	ENSMUST00000111355	protein coding
Nr1h3-204	2	0.8	115.77	0.12	ENSMUST00000111356	protein coding
Nr2e1-201	10	0.07	2.98	0.48	ENSMUST00000019938	protein coding
Nr2f1-201	13	0.06	1.31	0.84	ENSMUST00000091458	protein coding
Nr2f1-205	13	0.03	6.56	0.55	ENSMUST00000150498	protein coding
Nr2f2-202	7	0.22	4.24	0.41	ENSMUST00000089565	protein coding
Nr2f2-204	7	0.78	37.87	0.28	ENSMUST00000208081	protein coding
Nr2f6-201	8	33.77	1.1	0.65	ENSMUST00000002466	protein coding
Nr2f6-205	8	0.48	30.47	0.3	ENSMUST00000137058	protein coding
Nr4a3-201	4	0.02	11.79	0.45	ENSMUST00000030025	protein coding
Nr4a3-203	4	0.07	-2.7	0.49	ENSMUST00000153369	protein coding
Nr5a1-201	2	0.1	23.52	3.40E-01	ENSMUST00000028084	protein coding
Nr5a1-202	2	0.13	12.32	0.45	ENSMUST00000112883	protein coding
Olig1-201	16	3.23	2.66	0.07	ENSMUST00000056882	protein coding
Onecut3-201	10	0.14	50.37	0.22	ENSMUST00000051773	protein coding
Otx1-202	11	0.04	-11.42	NaN	ENSMUST00000147486	protein coding
Ovol2-201	2	12.08	-1.44	0.04	ENSMUST00000037423	protein coding
Pax3-202	1	0.99	289	0.05	ENSMUST00000087086	protein coding

Pax7-201	4	0.22	-1.11	0.88	ENSMUST00000030508	protein coding
Pax7-202	4	0.04	6.63	0.55	ENSMUST00000174681	protein coding
Pax9-203	12	0.75	236.54	0.07	ENSMUST00000153250	protein coding
Pbx3-203	2	0.75	2.07	0.58	ENSMUST00000127353	protein coding
Pbx3-204	2	0.64	21.94	0.34	ENSMUST00000138021	protein coding
Pbx3-205	2	0.22	8.67	0.5	ENSMUST00000141653	protein coding
Pbx3-209	2	0.73	-2.26	0.56	ENSMUST00000175855	nonsense mediated decay
Pbx4-201	8	4.11	1.67	0.32	ENSMUST00000081503	protein coding
Pbx4-202	8	1.14	1.09	0.96	ENSMUST00000131637	protein coding
Pbx4-204	8	0.98	3.76	0.35	ENSMUST00000132899	nonsense mediated decay
Pbx4-209	8	1	5.52	2.20E-01	ENSMUST00000156319	nonsense mediated decay
Pdx1-201	5	0.68	-1.03	0.97	ENSMUST00000085591	protein coding
Peg3-202	7	0.28	17.07	0.38	ENSMUST00000143703	nonsense mediated decay
Peg3-203	7	0.25	60.24	0.22	ENSMUST00000150182	nonsense mediated decay
Pgr-201	9	0.07	-1.12	0.94	ENSMUST00000070463	protein coding
Pgr-202	9	0.04	-1.18	0.91	ENSMUST00000098986	protein coding
Pgr-204	9	1.30E-01	-1.24	0.83	ENSMUST00000189181	protein coding
Phox2a-201	7	8.04	1.29	0.59	ENSMUST00000008090	protein coding
Pitx3-201	19	0.58	2.02	0.53	ENSMUST00000026259	protein coding
Pitx3-202	19	0.21	-25.65	0.12	ENSMUST00000172971	protein coding
Pogk-201	1	0.04	-11.41	0.23	ENSMUST00000127596	protein coding
Pogk-202	1	1.55	2.16	0.3	ENSMUST00000128861	protein coding
Pogk-203	1	0.8	499.99	0.08	ENSMUST00000131487	protein coding
Pogk-204	1	0.23	1.39	0.82	ENSMUST00000135673	protein coding
Pogk-205	1	0.4	-2.11	0.33	ENSMUST00000148243	nonsense mediated decay
Pogk-206	1	1.7	-1.82	0.08	ENSMUST00000169324	protein coding

Pou3f3-202	1	0.05	-2.26	0.56	ENSMUST0000023 9323	protein coding
Ppard-201	17	40.17	-1.8	7.98E-05	ENSMUST0000000 2320	protein coding
Ppard-205	17	0.24	-7.86	0.17	ENSMUST0000016 6744	protein coding
Ppard-206	17	3.01	217.1	0.07	ENSMUST0000016 9040	protein coding
Pparg-201	6	0.45	60.24	0.23	ENSMUST0000000 0450	protein coding
Pparg-202	6	1.79	285.86	0.05	ENSMUST0000017 1644	protein coding
Pparg-204	6	1.08	146.7	0.1	ENSMUST0000020 3732	protein coding
Pparg-206	6	0.06	-11.41	0.23	ENSMUST0000020 4305	protein coding
Pparg-207	6	0.04	2.99	NaN	ENSMUST0000020 5213	protein coding
Prdm6-205	18	1.2	9.18	0.2	ENSMUST0000023 6096	protein coding
Prdm8-201	5	4.93E-03	2.99	NaN	ENSMUST0000011 2959	protein coding
Prdm8-202	5	0.26	63.64	0.21	ENSMUST0000021 0477	protein coding
Prox1-201	1	0.54	-1.12	0.9	ENSMUST0000001 0319	protein coding
Prox1-203	1	0.02	-27.96	0.11	ENSMUST0000017 7288	protein coding
Prox2-201	12	0.03	-2.91	0.49	ENSMUST0000011 0249	protein coding
Prox2-202	12	0.83	1.1	0.82	ENSMUST0000017 7289	protein coding
Prrx1-201	1	0.16	2.4	0.54	ENSMUST0000002 7878	protein coding
Prrx1-202	1	0.06	23.88	0.35	ENSMUST0000007 5805	protein coding
Prrx1-204	1	0.03	-1.12	0.94	ENSMUST0000017 4397	protein coding
Purb-201	11	60.16	-1.7	2.34E-08	ENSMUST0000017 9343	protein coding
Purg-202	8	5.49	-1.37	0.46	ENSMUST0000007 8058	protein coding
Rbpjl-201	2	0.19	5.4	0.3	ENSMUST0000001 7151	protein coding
Rel-201	11	5.44	-1.17	0.42	ENSMUST0000010 2864	protein coding
Runx1-201	16	1.03	1.11	0.85	ENSMUST0000002 3673	protein coding
Runx1-202	16	4	1.71	0.22	ENSMUST0000011 3956	protein coding
Runx1-205	16	0.06	4.88	0.6	ENSMUST0000018 7242	protein coding

Runx2-201	17	0.03	-16.19	0.17	ENSMUST00000113568	nonsense mediated decay
Runx2-203	17	0.16	76.94	0.16	ENSMUST00000113572	protein coding
Runx2-204	17	6.00E-03	-6.17	NaN	ENSMUST00000159943	protein coding
Runx2-207	17	0.01	2.99	NaN	ENSMUST00000160673	protein coding
Runx2-209	17	0.05	2.99	NaN	ENSMUST00000162130	protein coding
Runx2-210	17	0.15	17.83	0.38	ENSMUST00000162373	protein coding
Runx2-212	17	0.02	-2.36	0.59	ENSMUST00000162816	nonsense mediated decay
Runx2-213	17	0.02	4.88	0.6	ENSMUST00000162878	protein coding
Runx2-214	17	0.1	15.54	0.39	ENSMUST00000238400	protein coding
Runx3-201	4	3.04	-1.69	0.09	ENSMUST00000056977	protein coding
Runx3-202	4	0.44	62.77	0.21	ENSMUST00000119564	protein coding
Rxra-201	2	71.58	1.42	8.98E-04	ENSMUST00000077257	protein coding
Rxra-202	2	2.96	-3.46	0.19	ENSMUST00000100251	protein coding
Rxra-203	2	1.73	257.92	0.07	ENSMUST00000113934	protein coding
Rxra-204	2	0.11	5.1	NaN	ENSMUST00000129514	protein coding
Rxra-206	2	0.2	23.83	0.33	ENSMUST00000238859	protein coding
Sall2-202	14	11.89	-1.14	6.20E-01	ENSMUST00000135523	protein coding
Satb1-201	17	0.18	-11.47	0.14	ENSMUST00000124222	protein coding
Satb1-204	17	20.97	1.35	0.37	ENSMUST00000133574	protein coding
Satb1-207	17	5.04	-1.74	0.04	ENSMUST00000140979	protein coding
Satb1-211	17	1.52	1.7	0.23	ENSMUST00000152830	protein coding
Satb1-214	17	1.26	2.25	0.26	ENSMUST00000176669	protein coding
Satb2-203	1	0.41	12.46	0.43	ENSMUST00000176759	protein coding
Satb2-205	1	0.2	-2.59	0.42	ENSMUST00000177424	protein coding
Scmh1-202	4	0.75	-1.17	0.89	ENSMUST00000064991	protein coding
Scmh1-205	4	0.13	5.1	NaN	ENSMUST00000122860	protein coding

Scmh1-206	4	4.44	1.4	0.49	ENSMUST0000013 2116	protein coding
Scx-201	15	2.78	1.98	0.3	ENSMUST0000004 3089	protein coding
Setbp1-201	18	0.69	-1.98	0.03	ENSMUST0000002 5430	protein coding
Shox2-201	3	0.17	1.31	0.87	ENSMUST0000002 9422	protein coding
Shox2-203	3	0.47	2.66	0.35	ENSMUST0000016 2098	protein coding
Sim1-201	10	0.1	8.69	0.22	ENSMUST0000002 0071	protein coding
Sim1-202	10	0.04	6.78	0.54	ENSMUST0000021 9436	protein coding
Sim2-203	16	0.01	-16.66	0.16	ENSMUST0000023 1688	nonsense mediated decay
Six3-201	17	0.02	4.88	0.6	ENSMUST0000016 2695	protein coding
Smad3-201	9	45.39	1.33	0.05	ENSMUST0000003 4973	protein coding
Smad3-202	9	0.58	18.15	0.36	ENSMUST0000013 3108	protein coding
Sox10-202	15	0.04	2.99	NaN	ENSMUST0000023 0261	protein coding
Sox10-203	15	0.6	125.47	0.12	ENSMUST0000023 0532	protein coding
Sox14-201	9	0.14	24.24	0.34	ENSMUST0000005 4819	protein coding
Sox14-202	9	0.03	2.99	NaN	ENSMUST0000018 3065	protein coding
Sox15-201	11	42.83	-1.83	0.02	ENSMUST0000004 7373	protein coding
Sox18-201	2	2.36	1.28	0.65	ENSMUST0000005 4491	protein coding
Sox30-201	11	0.19	-1.76	0.51	ENSMUST0000004 9038	protein coding
Sox8-201	17	0.9	-2.02	0.09	ENSMUST0000002 5003	protein coding
Sox8-202	17	0.07	5.1	NaN	ENSMUST0000017 3447	protein coding
Sox8-203	17	0.06	-20.91	0.14	ENSMUST0000017 4560	protein coding
Sp100-201	1	0.09	12.77	0.42	ENSMUST0000005 4279	protein coding
Sp100-202	1	0.07	15.1	0.4	ENSMUST0000006 6427	protein coding
Sp100-204	1	0.14	14.36	0.4	ENSMUST0000013 2641	protein coding
Sp100-209	1	0.03	8.67	0.5	ENSMUST0000014 5440	nonsense mediated decay
Sp100-212	1	0.08	11.79	0.45	ENSMUST0000015 3574	protein coding

Sp100-213	1	0.04	5.1	NaN	ENSMUST00000155094	protein coding
Sp4-201	12	11.16	1.24	0.46	ENSMUST00000026367	protein coding
Sp4-202	12	1.74	52.24	0.22	ENSMUST00000221844	protein coding
Srebf2-201	15	195.01	-1.74	4.21E-09	ENSMUST00000023100	protein coding
Srebf2-206	15	1.52	1.82	0.57	ENSMUST00000230955	protein coding
Srf-201	17	63.42	-1.59	6.82E-03	ENSMUST00000015749	protein coding
Srf-202	17	4.68	2.82	0.09	ENSMUST00000233104	protein coding
Stat5a-203	11	3.28	-1.6	0.29	ENSMUST00000107357	protein coding
Stat5a-206	11	2.66	120.52	0.12	ENSMUST00000138083	protein coding
Stat5b-201	11	19.74	-1.15	0.37	ENSMUST00000004143	protein coding
Stat5b-202	11	0.33	130.73	0.12	ENSMUST00000107358	protein coding
Tbr1-201	2	0.19	3.29	0.41	ENSMUST00000048934	protein coding
Tbx1-201	16	0.88	123.82	0.12	ENSMUST00000009241	protein coding
Tbx1-202	16	0.4	1.62	0.78	ENSMUST00000232143	nonsense mediated decay
Tbx1-203	16	0.04	8.35	0.51	ENSMUST00000232335	protein coding
Tbx20-201	9	1.27	-1.9	0.02	ENSMUST00000052946	protein coding
Tbx20-202	9	0.26	-5.65	0.15	ENSMUST00000166018	protein coding
Tbx20-203	9	0.1	-16.96	0.18	ENSMUST00000215802	protein coding
Tbx21-201	11	1.56	-1.54	0.49	ENSMUST00000001484	protein coding
Tbx4-201	11	0.35	79.13	1.90E-01	ENSMUST00000000096	protein coding
Tbx4-203	11	1.06	250.61	0.06	ENSMUST00000108047	protein coding
Tcf24-202	1	2.79	1.43	0.36	ENSMUST00000185184	protein coding
Tcf7-203	11	16.36	-1	1	ENSMUST00000238914	protein coding
Tcf7l1-201	6	91.46	1.07	0.59	ENSMUST00000069536	protein coding
Tcf7l1-202	6	38.24	1.79	0.04	ENSMUST00000114053	protein coding
Tcf7l1-204	6	0.79	1.25	8.70E-01	ENSMUST00000149446	protein coding

Tead3-205	17	0.68	142.61	0.1	ENSMUST00000154873	protein coding
Tead3-207	17	2.84	2.86	0.15	ENSMUST00000219703	protein coding
Tead4-201	6	57.15	1.04	0.84	ENSMUST00000006311	protein coding
Tead4-202	6	0.15	22.99	0.35	ENSMUST00000112157	protein coding
Tead4-204	6	0.61	3.83	0.4	ENSMUST00000133118	protein coding
Tead4-205	6	0.06	2.99	NaN	ENSMUST00000143004	protein coding
Tet3-202	6	12.65	1.52	5.53E-03	ENSMUST00000089622	protein coding
Tet3-203	6	3.48	-1.22	0.35	ENSMUST00000186548	protein coding
Tfap2c-206	2	27.24	2.03	0.34	ENSMUST00000170744	protein coding
Tfap2e-201	4	1.58	1.29	0.5	ENSMUST00000048194	protein coding
Tgif2-201	2	31.51	-1.45	0.05	ENSMUST00000073352	protein coding
Tgif2-202	2	89.19	-1.54	1.03E-04	ENSMUST00000081335	protein coding
Tgif2-203	2	6	-1.38	0.55	ENSMUST00000150078	nonsense mediated decay
Thap3-201	4	29.62	-1.28	0.26	ENSMUST00000036680	protein coding
Thap3-202	4	1.63	-2.33	0.2	ENSMUST00000105665	protein coding
Tlx1-201	19	1.72	-1.01	0.99	ENSMUST00000026236	protein coding
Trafd1-201	5	20.52	1.78	0.02	ENSMUST00000042312	protein coding
Trafd1-206	5	3.86	177.43	0.08	ENSMUST00000152265	protein coding
Trafd1-207	5	0.18	6.78	0.55	ENSMUST00000155379	protein coding
Trafd1-208	5	5.3	1.56	3.80E-01	ENSMUST00000156158	nonsense mediated decay
Trafd1-209	5	0.81	-2.15	0.41	ENSMUST00000202064	protein coding
Tshz3-201	7	1.8	-1.55	0.35	ENSMUST00000021641	protein coding
Twist1-201	12	1.64	-1.99	0.19	ENSMUST00000049089	protein coding
Twist2-201	1	2.71	270.09	0.06	ENSMUST00000007949	protein coding
Twist2-202	1	0.02	4.88	0.6	ENSMUST00000186075	protein coding
Uncx-201	5	0.1	2.98	0.47	ENSMUST00000172997	protein coding

Uncx-202	5	0.02	2.99	NaN	ENSMUST00000174792	protein coding
Vax2-201	6	5.47	1.24	0.67	ENSMUST00000037807	protein coding
Vdr-202	15	0.21	6.78	0.55	ENSMUST00000126568	protein coding
Vezf1-201	11	52.65	-1.25	0.05	ENSMUST00000018521	protein coding
Wt1-201	2	3.97	-1.42	4.90E-01	ENSMUST00000111098	protein coding
Wt1-207	2	0.6	3.21	0.48	ENSMUST00000146842	protein coding
Xpa-201	4	18.28	-1.84	2.80E-03	ENSMUST00000030013	protein coding
Xpa-202	4	0.58	-2.05	0.53	ENSMUST00000058232	protein coding
Xpa-206	4	0.78	2.77	0.48	ENSMUST00000142380	protein coding
Zbtb16-201	9	0.65	-2.37	0.07	ENSMUST00000093852	protein coding
Zbtb16-202	9	0.3	57.68	0.23	ENSMUST00000216150	protein coding
Zbtb20-201	16	0.08	18.7	0.37	ENSMUST00000079441	protein coding
Zbtb20-203	16	0.1	23.85	0.35	ENSMUST00000114691	protein coding
Zbtb20-204	16	0.31	-1.7	2.40E-01	ENSMUST00000114694	protein coding
Zbtb20-205	16	0.07	-1.1	0.96	ENSMUST00000114695	protein coding
Zbtb20-216	16	0.03	-6.17	NaN	ENSMUST00000148775	protein coding
Zbtb20-217	16	0.03	2.99	NaN	ENSMUST00000151244	protein coding
Zbtb20-219	16	0.02	-6.17	NaN	ENSMUST00000156367	protein coding
Zbtb4-201	11	0.52	7.77	0.13	ENSMUST00000108638	protein coding
Zbtb4-202	11	2.31	1.07	0.83	ENSMUST00000108639	protein coding
Zbtb4-204	11	0.02	-6.17	NaN	ENSMUST00000108642	protein coding
Zbtb42-202	12	0.19	-1.44	0.81	ENSMUST00000173942	protein coding
Zbtb46-201	2	4.84	-1.02	0.95	ENSMUST00000029106	protein coding
Zbtb46-205	2	0.17	-8.71	0.1	ENSMUST00000180222	protein coding
Zbtb7b-204	3	0.62	2.16	0.29	ENSMUST00000107435	protein coding
Zbtb7b-205	3	7.44	-2.13	0.1	ENSMUST00000124783	protein coding

Zbtb7b-206	3	0.75	2.37	0.51	ENSMUST00000126027	protein coding
Zbtb7b-209	3	4.07	146.92	0.09	ENSMUST00000148361	protein coding
Zfhx3-201	8	6.71	1.69	3.63E-03	ENSMUST00000043896	protein coding
Zfhx3-202	8	0.34	29.53	0.29	ENSMUST00000188994	protein coding
Zfp276-201	8	10.72	-1.58	0.09	ENSMUST00000001092	protein coding
Zfp276-206	8	0.13	8.35	0.51	ENSMUST00000154450	protein coding
Zfp28-201	7	6.57	-1.23	0.37	ENSMUST00000081022	protein coding
Zfp28-202	7	1.39	4.44	0.2	ENSMUST00000207086	nonsense mediated decay
Zfp28-203	7	0.04	-11.41	0.23	ENSMUST00000207465	protein coding
Zfp28-204	7	2.39	1.02	9.90E-01	ENSMUST00000207809	protein coding
Zfp28-205	7	0.32	-5.87	0.19	ENSMUST00000208338	protein coding
Zfp316-202	5	2.45	-1.43	0.06	ENSMUST00000161448	protein coding
Zfp319-201	8	4.83	-1.6	0.09	ENSMUST00000057717	protein coding
Zfp334-201	2	13.85	-1.97	1.46E-06	ENSMUST00000103084	protein coding
Zfp358-201	8	15.18	-1.14	0.71	ENSMUST00000061508	protein coding
Zfp358-203	8	0.36	3.56	0.36	ENSMUST00000208423	protein coding
Zfp362-204	4	1.05	87.45	0.15	ENSMUST00000170934	protein coding
Zfp382-201	7	19.06	-1.85	0.02	ENSMUST00000098596	protein coding
Zfp382-202	7	2.72	-2.02	0.4	ENSMUST00000153792	protein coding
Zfp385c-201	11	1.36	-1.38	0.6	ENSMUST00000103119	protein coding
Zfp385c-203	11	0.27	16.25	0.38	ENSMUST00000151589	protein coding
Zfp385c-204	11	0.68	21.89	0.34	ENSMUST00000153494	protein coding
Zfp429-203	13	0.34	14.33	0.41	ENSMUST00000224684	protein coding
Zfp46-201	4	5.76	-1.68	0.03	ENSMUST00000069195	protein coding
Zfp46-203	4	1.02	-2.83	0.06	ENSMUST00000130658	protein coding
Zfp467-201	6	0.26	13.1	4.30E-01	ENSMUST00000101443	protein coding

Zfp467-202	6	0.16	-1.44	0.8	ENSMUST0000011 4556	protein coding
Zfp467-203	6	0.01	-16.66	0.15	ENSMUST0000011 4558	protein coding
Zfp467-205	6	0.09	1.79	0.73	ENSMUST0000011 4560	protein coding
Zfp467-207	6	0.2	1.29	0.88	ENSMUST0000011 4563	protein coding
Zfp467-209	6	0.61	-3.82	0.38	ENSMUST0000011 4566	protein coding
Zfp467-211	6	0.1	-16.96	0.18	ENSMUST0000014 1449	nonsense mediated decay
Zfp469-201	8	0.17	2.41	0.59	ENSMUST0000005 5537	protein coding
Zfp524-201	7	9.69	-1.2	0.82	ENSMUST0000008 6349	protein coding
Zfp524-202	7	2.50E-01	-12.32	0.08	ENSMUST0000020 7901	protein coding
Zfp524-203	7	0.78	7.45	0.21	ENSMUST0000020 9030	protein coding
Zfp575-201	7	0.99	1.17	0.63	ENSMUST0000009 4705	protein coding
Zfp579-206	7	7.71	-1.06	0.8	ENSMUST0000016 2731	protein coding
Zfp641-201	15	0.01	-16.66	0.15	ENSMUST0000002 3722	protein coding
Zfp651-203	9	1.89	1.58	5.30E-01	ENSMUST0000021 4732	nonsense mediated decay
Zfp697-201	3	2.37	1.26	0.51	ENSMUST0000005 6096	protein coding
Zfp703-201	8	0.38	16.26	0.38	ENSMUST0000012 7097	protein coding
Zfp703-203	8	1.15	30.98	0.28	ENSMUST0000020 9411	protein coding
Zfp708-201	13	0.95	1.26	0.78	ENSMUST0000010 9742	protein coding
Zfp768-201	7	7.6	-1.73	2.91E-03	ENSMUST0000006 0783	protein coding
Zfp768-202	7	0.29	55.61	0.22	ENSMUST0000020 5266	protein coding
Zfp771-201	7	16.94	1.71	0.03	ENSMUST0000005 2509	protein coding
Zfp771-203	7	0.38	-6.05	0.09	ENSMUST0000020 5583	protein coding
Zfp773-202	7	6.81	-1.18	0.63	ENSMUST0000021 1240	protein coding
Zfp787-201	7	11.76	-1.55	0.2	ENSMUST0000009 4870	protein coding
Zfp787-202	7	0.31	2.42	0.55	ENSMUST0000020 7315	protein coding
Zfp787-206	7	0.55	-1.97	0.6	ENSMUST0000020 8746	protein coding

Zfp791-202	8	6.05	-1.4	0.04	ENSMUST00000211109	protein coding
Zfp820-201	17	14.52	-1.2	0.51	ENSMUST00000084141	protein coding
Zfp865-201	7	3.24	1.01	0.99	ENSMUST00000076251	protein coding
Zfp865-202	7	14.77	-1.07	0.78	ENSMUST00000085427	protein coding
Zfp9-201	6	1.01	-1.19	0.78	ENSMUST00000161170	protein coding
Zfp92-201	X	0.12	2.27	0.55	ENSMUST00000033740	protein coding
Zfp92-202	X	0.02	2.99	NaN	ENSMUST00000086470	protein coding
Zfp947-201	17	4.58	-1.64	0.11	ENSMUST00000080249	protein coding
Zhx2-201	15	1.13	1.16	0.82	ENSMUST00000096430	protein coding
Zhx3-201	2	0.53	2.72	0.19	ENSMUST00000103111	protein coding
Zhx3-202	2	0.72	-1.48	0.48	ENSMUST00000103112	protein coding
Zhx3-203	2	1.54	2.04	0.38	ENSMUST00000109460	protein coding
Zic2-201	14	50.51	1.87	1.90E-04	ENSMUST00000075888	protein coding
Zic4-201	9	0.05	16.25	0.38	ENSMUST00000066384	protein coding
Zic4-204	9	0.06	14.35	0.4	ENSMUST00000172646	protein coding
Zic4-207	9	0.25	14.08	0.41	ENSMUST00000173054	protein coding
Zic4-208	9	0.1	2.99	NaN	ENSMUST00000173342	protein coding
Zic4-209	9	0.03	4.88	0.6	ENSMUST00000173933	protein coding
Zic5-201	14	23.56	-1.09	0.57	ENSMUST00000039118	protein coding
Zscan2-201	7	1.79	-2.49	0.05	ENSMUST00000044115	protein coding
Zscan2-202	7	0.78	1.07	0.97	ENSMUST00000132163	protein coding
Zscan2-203	7	1.03	14.35	0.07	ENSMUST00000147125	protein coding
Zscan2-204	7	0.17	11.67	0.45	ENSMUST00000155128	protein coding
Zscan2-205	7	0.34	1.61	0.77	ENSMUST00000205361	protein coding

S.2. Transcript Variants (TE) of Downregulated Genes (GE)

Table S2-1. Expression values & metadata of upregulated transcript variants of downregulated genes						
Name	Chromosome	Max group mean	Fold change	FDR p-value	ENSEMBL	Biotype
Arid3b-202	9	4.69	10.29	1.57E-08	ENSMUST00000098686	protein coding
Arid5a-201	1	2.4	3.44	0.01	ENSMUST00000097778	protein coding
Dpf1-202	7	3.15	32.27	1.63E-09	ENSMUST00000065181	protein coding
Dpf1-204	7	0.69	6.21	0.04	ENSMUST00000108231	protein coding
Fiz1-208	7	2.94	4.83	0.01	ENSMUST00000208944	protein coding
Gli1-204	10	0.53	28.63	2.37E-03	ENSMUST00000219671	protein coding
Gtf2i-202	5	0.32	441.84	1.26E-04	ENSMUST00000082057	protein coding
Gtf2i-203	5	12.45	16,239.01	7.96E-14	ENSMUST00000111261	protein coding
Jdp2-201	12	5.49	804.8	1.83E-13	ENSMUST00000050687	protein coding
Klf10-201	15	43.9	2.05	8.71E-07	ENSMUST00000074043	protein coding
Klf15-201	6	2.12	591.6	1.42E-09	ENSMUST00000032174	protein coding
Msantd3-203	4	10.83	10.04	4.04E-04	ENSMUST00000107704	protein coding
Msantd4-202	9	18.38	3.75	2.39E-24	ENSMUST00000212075	protein coding
Mtf2-201	5	43.09	2	3.96E-08	ENSMUST00000081567	protein coding
Mtf2-203	5	16.61	3.35	5.89E-13	ENSMUST00000124195	nonsense mediated decay
Mycn-201	12	14.72	2.6	2.69E-06	ENSMUST00000043396	protein coding
Nfkb1-201	3	4.23	3.01	7.61E-05	ENSMUST00000029812	protein coding
Phf21a-204	2	9.25	2.28	4.22E-09	ENSMUST00000111293	protein coding
Phf21a-205	2	2.69	4.64	1.02E-11	ENSMUST00000111294	protein coding
Plscr1-201	9	4.65	3.83	1.54E-11	ENSMUST00000093801	protein coding
Prdm16-203	4	0.14	333.92	4.18E-03	ENSMUST00000097759	protein coding
Prdm4-207	10	2.74	6.5	1.80E-11	ENSMUST00000220032	protein coding
Rarg-201	15	12.49	2.49	4.39E-06	ENSMUST00000043172	protein coding

Rarg-205	15	1.27	55.84	0.04	ENSMUST00000135466	protein coding
Rbak-202	5	2.22	8.4	1.02E-05	ENSMUST00000165318	protein coding
Rbpj-201	5	3.92	3.16	6.36E-06	ENSMUST00000037618	protein coding
Rbpj-203	5	33.78	19.85	7.58E-278	ENSMUST00000113865	protein coding
Rest-201	5	32.32	2.62	1.33E-12	ENSMUST00000080359	protein coding
Stat1-205	1	3.37	2.28	0.03	ENSMUST00000186574	protein coding
Tcf4-205	18	2.6	1,698.51	3.03E-08	ENSMUST00000114980	protein coding
Tcf4-225	18	0.59	165.26	4.01E-03	ENSMUST00000201091	protein coding
Tcf4-246	18	1.1	16.22	2.66E-07	ENSMUST00000202116	protein coding
Tcf4-254	18	1.23	5.6	7.52E-03	ENSMUST00000202674	protein coding
Trerf1-203	17	3.74	3.35	4.56E-04	ENSMUST00000190020	protein coding
Trp53-203	11	68.88	17.67	1.98E-32	ENSMUST00000108658	protein coding
Tsc22d1-202	14	7.73	2.46	5.31E-12	ENSMUST00000048371	protein coding
Tsc22d1-204	14	1.61	671.47	7.96E-14	ENSMUST00000110888	protein coding
Tsc22d1-213	14	5.62	5.24	1.96E-19	ENSMUST00000176886	nonsense mediated decay
Usf1-208	1	23.93	2.17	4.32E-08	ENSMUST00000161241	protein coding
Zbed5-202	5	0.66	12.66	5.18E-03	ENSMUST00000077320	protein coding
Zbtb45-201	7	14.28	2.14	7.88E-10	ENSMUST00000051390	protein coding
Zfp109-202	7	1.5	2.66	1.62E-05	ENSMUST00000206362	protein coding
Zfp317-202	9	12.74	2.28	1.11E-09	ENSMUST00000208694	protein coding
Zfp322a-203	13	2.47	4.5	4.02E-05	ENSMUST00000145451	protein coding
Zfp423-203	8	0.18	250.2	5.80E-03	ENSMUST00000165770	protein coding
Zfp438-201	18	0.84	139.45	1.39E-05	ENSMUST00000063989	protein coding
Zfp451-202	1	6.11	4.67	8.11E-19	ENSMUST00000044455	protein coding
Zfp518b-203	5	9.08	2.3	1.19E-03	ENSMUST00000179555	protein coding
Zfp532-204	18	0.27	47.16	0.05	ENSMUST00000182319	protein coding

Zfp553-202	7	7.27	3.29	1.53E-23	ENSMUST00000106312	protein coding
Zfp62-201	11	3.61	2.91	0.01	ENSMUST00000061757	protein coding
Zfp644-213	5	0.14	54.91	0.04	ENSMUST00000137285	protein coding
Zfp644-216	5	0.81	20.9	0.01	ENSMUST00000155495	protein coding
Zfp74-203	7	0.76	6.86	7.07E-03	ENSMUST00000108211	protein coding
Zfp740-207	15	0.43	81.52	0.02	ENSMUST00000133986	protein coding
Zfp827-203	8	0.07	93.27	0.04	ENSMUST00000119254	protein coding
Zfp93-202	7	1.13	5.99	1.86E-03	ENSMUST00000108438	protein coding
Zkscan2-202	7	0.61	50.77	0.02	ENSMUST00000125356	protein coding
Zscan10-202	17	3.38	2,363.72	1.67E-08	ENSMUST00000115509	protein coding
Zscan10-206	17	0.48	123.26	0.02	ENSMUST00000122285	nonsense mediated decay
Zscan18-205	7	2.44	6.79	3.27E-05	ENSMUST00000211392	protein coding
Zup1-207	10	0.91	3.74	2.62E-04	ENSMUST00000219457	nonsense mediated decay

Table S2-2. Expression values & metadata of downregulated transcript variants of downregulated genes

Name	Chromosome	Max group mean	Fold change	FDR p-value	ENSEMBL	Biotype
Atf1-206	15	35	-278.15	2.09E-06	ENSMUST00000168103	nonsense mediated decay
Atf1-209	15	22.99	-32.13	3.64E-09	ENSMUST00000172154	protein coding
Atf5-202	7	15.83	-40.38	7.79E-17	ENSMUST00000107893	protein coding
Bnc2-202	4	11.56	-406.29	2.75E-08	ENSMUST00000107198	protein coding
Csrnp3-203	2	1.77	-41.16	1.78E-03	ENSMUST00000112397	nonsense mediated decay
Csrnp3-204	2	1.95	-22.97	2.51E-09	ENSMUST00000122912	protein coding
Ctcf1-201	2	0.74	-29.5	0.01	ENSMUST00000094287	protein coding
Dmrt1-201	19	51.21	-69.25	7.36E-81	ENSMUST00000025755	protein coding
Etv1-201	12	1.36	-10.7	1.50E-07	ENSMUST00000095767	protein coding
Etv1-202	12	3.04	-35.86	3.94E-05	ENSMUST00000159334	protein coding
Etv5-203	16	124.32	-56.13	4.64E-51	ENSMUST00000168774	protein coding
Foxd3-201	4	10.81	-16.85	2.57E-14	ENSMUST00000087285	protein coding
Foxn4-201	5	4.94	-11.05	1.53E-11	ENSMUST00000044790	protein coding
Gbx1-201	5	1.01	-9.21	7.46E-04	ENSMUST00000088311	protein coding
Gli2-201	1	24.71	-3.02	6.57E-17	ENSMUST00000062483	protein coding
Gm21411-201	4	108.15	-167.81	7.85E-48	ENSMUST00000238583	protein coding
Gm3854-201	7	4.63	-16.41	8.39E-12	ENSMUST00000207173	protein coding
Gm49496-201	13	6.31	-10.88	3.02E-04	ENSMUST00000231096	protein coding
Gtf2i-216	5	17.68	-7.89	2.28E-09	ENSMUST00000173888	protein coding
Gtf2i-222	5	59.07	-3.46	2.38E-05	ENSMUST00000174354	protein coding
Ikzf3-201	11	0.89	-20.74	1.89E-03	ENSMUST00000103141	protein coding
Jdp2-202	12	19.52	-247.62	1.40E-07	ENSMUST00000171754	protein coding
Klf10-202	15	26.02	-57.54	7.89E-21	ENSMUST00000226363	protein coding
Klf2-201	8	66.63	-2.28	2.54E-07	ENSMUST00000067912	protein coding

Klf3-201	5	30.73	-2.03	1.57E-08	ENSMUST00000165536	protein coding
Klf3-204	5	28.4	-3.21	7.06E-03	ENSMUST00000197879	protein coding
Klf4-201	4	163.42	-5.4	2.01E-48	ENSMUST00000107619	protein coding
Klf8-201	X	16.98	-3.1	3.14E-20	ENSMUST00000039545	protein coding
Klf8-202	X	2.08	-5.72	7.34E-03	ENSMUST00000112574	protein coding
Lef1-204	3	3.85	-13.16	2.97E-10	ENSMUST00000106341	protein coding
Lin28b-201	10	9.4	-2.17	0.03	ENSMUST00000079390	protein coding
Meox1-201	11	0.79	-7.57	0.04	ENSMUST00000057054	protein coding
Msantd3-201	4	39.3	-2.79	5.68E-06	ENSMUST00000061135	protein coding
Msantd4-201	9	17.69	-509.34	6.32E-09	ENSMUST00000047173	protein coding
Msc-201	1	24.65	-32.46	6.20E-28	ENSMUST00000027062	protein coding
Msc-204	1	7.13	-6.99	0.01	ENSMUST00000190719	protein coding
Mtf2-202	5	48.53	-153.05	3.66E-26	ENSMUST00000112626	protein coding
Mtf2-207	5	62.02	-17.99	8.31E-83	ENSMUST00000134026	nonsense mediated decay
Mtf2-210	5	62.15	-4.07	8.44E-20	ENSMUST00000143412	nonsense mediated decay
Myb-201	10	0.57	-21.65	0.05	ENSMUST00000020158	protein coding
Myb-203	10	0.93	-28.05	3.33E-03	ENSMUST00000188495	protein coding
Mycn-202	12	39.55	-87.2	2.04E-33	ENSMUST00000130990	protein coding
Nanog-201	6	395.77	-476.14	2.47E-138	ENSMUST00000012540	protein coding
Nanog-202	6	11.89	-3,574.87	0.05	ENSMUST00000112580	protein coding
Neurod1-201	2	2.08	-36.18	1.53E-03	ENSMUST00000041099	protein coding
Nfib-201	4	2.45	-43.58	3.36E-08	ENSMUST00000050872	protein coding
Nkx6-3-201	8	4.57	-44.2	2.07E-06	ENSMUST00000071588	protein coding
Nr5a2-201	1	29.59	-77.36	2.07E-80	ENSMUST00000027649	protein coding
Nr5a2-202	1	4.39	-167.81	2.65E-06	ENSMUST00000168126	protein coding
Nr5a2-203	1	13	-248.86	6.95E-07	ENSMUST00000192357	protein coding

Nr5a2-205	1	33.27	-474.76	2.83E-09	ENSMUST00000192929	protein coding
Otx2-201	14	14.31	-4,545.63	0.04	ENSMUST00000118578	protein coding
Otx2-202	14	2.43	-50.94	2.71E-03	ENSMUST00000119070	protein coding
Pax8-201	2	2.27	-15.2	1.79E-03	ENSMUST00000028355	protein coding
Pou2f3-202	9	4.94	-2.59	3.19E-03	ENSMUST00000176636	protein coding
Pou4f2-201	8	4.55	-178.57	1.36E-06	ENSMUST00000034115	protein coding
Pou5f1-201	17	1,689.61	-234.2	0	ENSMUST00000025271	protein coding
Pou5f1-205	17	3.05	-13.19	8.10E-03	ENSMUST00000173934	protein coding
Prdm1-201	10	1.35	-51.63	9.56E-04	ENSMUST00000039174	protein coding
Prdm14-201	1	22.37	-700.83	3.92E-10	ENSMUST00000047577	protein coding
Prdm16-205	4	0.54	-20.2	0.03	ENSMUST00000105637	protein coding
Prdm5-201	6	8.47	-4.65	5.80E-06	ENSMUST00000031973	protein coding
Rarg-202	15	92.91	-3.34	2.19E-09	ENSMUST00000063339	protein coding
Rbpj-202	5	140.24	-3.39	2.16E-34	ENSMUST00000087360	protein coding
Rex2-201	4	163.11	-29.3	2.61E-160	ENSMUST00000075775	protein coding
Rhox10-201	X	12.89	-33.51	1.90E-07	ENSMUST00000115150	protein coding
Rhox13-201	X	6.94	-26.27	5.13E-04	ENSMUST00000152730	protein coding
Sohlh2-201	3	21.61	-325.8	5.03E-15	ENSMUST00000029369	protein coding
Sox1-201	8	0.79	-6.3	0.02	ENSMUST00000180353	protein coding
Sox11-201	12	2.15	-2.1	0.04	ENSMUST00000079063	protein coding
Sox17-208	1	0.65	-5.64	0.04	ENSMUST00000195555	protein coding
Sox7-201	14	4.78	-2.29	0.05	ENSMUST00000079652	protein coding
Stat1-203	1	2.41	-6.26	6.25E-04	ENSMUST00000186057	protein coding
Stat4-201	1	5.23	-190.98	6.79E-07	ENSMUST00000027277	protein coding
Stat4-202	1	14.29	-463.94	9.77E-09	ENSMUST00000168302	protein coding
Tal1-201	4	0.49	-14.15	0.05	ENSMUST00000030489	protein coding

Tbx3-201	5	34.49	-2.1	7.60E-06	ENSMUST00000018748	protein coding
Tcf23-201	5	0.55	-7.4	0.02	ENSMUST00000006818	protein coding
Tcf4-203	18	5.6	-15.76	9.86E-08	ENSMUST000000114977	protein coding
Terf1-201	1	201.05	-2.03	6.26E-09	ENSMUST000000027057	protein coding
Tet1-201	10	16.86	-4.06	3.68E-03	ENSMUST000000050826	protein coding
Tet2-204	3	38.02	-4.01	4.30E-27	ENSMUST000000196398	protein coding
Tfcp2l1-201	1	158.23	-2.62	1.05E-35	ENSMUST000000027629	protein coding
Tgif1-202	17	135.93	-2.16	8.71E-05	ENSMUST000000118283	protein coding
Tgif1-211	17	8.23	-70.43	3.31E-05	ENSMUST000000186358	protein coding
Trp53-201	11	397.51	-2.11	1.67E-17	ENSMUST000000005371	protein coding
Trps1-201	15	6.4	-55.68	6.49E-20	ENSMUST000000165201	protein coding
Trps1-204	15	6.26	-277.64	3.14E-07	ENSMUST000000183997	protein coding
Trps1-205	15	2.69	-122.11	4.69E-06	ENSMUST000000184458	protein coding
Tsc22d1-214	14	4.45	-38.24	3.62E-03	ENSMUST000000177207	protein coding
Usf1-202	1	11.73	-3.55	9.11E-03	ENSMUST000000159207	protein coding
Zbtb8a-201	4	26.22	-2.28	3.67E-05	ENSMUST000000030610	protein coding
Zeb1-201	18	5.34	-4.17	8.53E-09	ENSMUST000000025081	protein coding
Zfp105-201	9	28.82	-54.71	6.03E-22	ENSMUST000000051667	protein coding
Zfp108-201	7	1.62	-19.82	6.09E-03	ENSMUST000000072713	protein coding
Zfp169-207	13	2.13	-4.35	8.31E-03	ENSMUST000000177530	protein coding
Zfp239-207	6	10.65	-5.61	2.21E-06	ENSMUST000000172088	protein coding
Zfp260-201	7	8.44	-5.33	3.35E-11	ENSMUST000000050735	protein coding
Zfp260-202	7	14.42	-79.07	1.68E-16	ENSMUST000000108200	protein coding
Zfp42-201	8	614.52	-3.31	2.37E-59	ENSMUST000000082120	protein coding
Zfp42-202	8	120.61	-5.84	4.06E-34	ENSMUST000000209356	protein coding
Zfp42-203	8	21.79	-2.68	1.21E-03	ENSMUST000000211248	protein coding

Zfp423-201	8	17.85	-4.8	6.14E-06	ENSMUST0000005 2250	protein coding
Zfp454-201	11	3.08	-36.64	3.89E-03	ENSMUST0000005 0595	protein coding
Zfp459-201	13	30.97	-28.64	1.14E-58	ENSMUST0000005 6470	protein coding
Zfp459-202	13	24.11	-130.46	2.41E-05	ENSMUST0000022 3644	protein coding
Zfp518b- 201	5	55.43	-3.88	4.74E-24	ENSMUST0000005 7258	protein coding
Zfp532-205	18	10.9	-2.66	5.97E-05	ENSMUST0000018 2478	nonsense mediated decay
Zfp532-210	18	5.22	-6.04	9.35E-06	ENSMUST0000018 2979	protein coding
Zfp532-224	18	10.6	-147.94	1.02E-14	ENSMUST0000023 7714	protein coding
Zfp532-225	18	21.5	-5	4.94E-15	ENSMUST0000023 7756	nonsense mediated decay
Zfp534-201	4	85.33	-217.01	3.25E-78	ENSMUST0000011 7638	protein coding
Zfp551-201	7	1.06	-17.92	0.02	ENSMUST0000008 0348	protein coding
Zfp57-201	17	153.55	-4.33	1.96E-16	ENSMUST0000006 9250	protein coding
Zfp57-202	17	9.46	-3.05	5.11E-03	ENSMUST0000008 9968	protein coding
Zfp57-205	17	32.87	-17.4	7.20E-11	ENSMUST0000017 2540	protein coding
Zfp57-211	17	99.37	-14.07	4.65E-53	ENSMUST0000017 4524	protein coding
Zfp57-212	17	106.7	-4.42	1.19E-15	ENSMUST0000017 4672	protein coding
Zfp59-202	7	36.89	-93.27	8.02E-72	ENSMUST0000020 5701	protein coding
Zfp607a- 201	7	1.35	-33.85	0.02	ENSMUST0000005 3722	protein coding
Zfp607b- 202	7	5.67	-2.28	2.06E-03	ENSMUST0000012 0004	protein coding
Zfp62-206	11	10.17	-2.68	6.56E-06	ENSMUST0000013 6539	protein coding
Zfp623-201	15	20.89	-5.85	6.83E-06	ENSMUST0000003 7260	protein coding
Zfp74-201	7	4	-6.84	2.67E-04	ENSMUST0000003 2797	protein coding
Zfp786-201	6	2.41	-3.1	1.54E-03	ENSMUST0000005 8844	protein coding
Zfp850-202	7	22.48	-4.17	6.22E-04	ENSMUST0000018 0024	protein coding
Zfp945-201	17	8.74	-4.63	1.21E-04	ENSMUST0000008 8696	protein coding
Zfp978-202	4	172.9	-56.35	8.90E-94	ENSMUST0000015 4154	protein coding

Zfp979-201	4	79.88	-299.12	1.21E-55	ENSMUST00000037565	protein coding
Zfp980-201	4	106.47	-52.51	1.77E-147	ENSMUST00000105738	protein coding
Zfp980-202	4	161.29	-112.17	7.36E-81	ENSMUST00000180014	protein coding
Zfp981-201	4	49.88	-19.23	2.46E-75	ENSMUST00000105735	protein coding
Zfp981-202	4	25.2	-5.86	9.04E-09	ENSMUST00000140089	protein coding
Zfp984-201	4	52.52	-11.5	1.25E-62	ENSMUST00000105734	protein coding
Zfp984-202	4	44.58	-106.4	9.66E-42	ENSMUST00000122309	protein coding
Zfp985-201	4	79.26	-39.16	1.10E-94	ENSMUST00000081742	protein coding
Zfp985-202	4	18.75	-144.45	3.24E-05	ENSMUST00000139784	protein coding
Zfp985-203	4	12.55	-43.95	2.96E-04	ENSMUST00000143885	protein coding
Zfp986-201	4	96.35	-226.29	2.02E-49	ENSMUST00000123460	protein coding
Zfp987-201	4	61.16	-249.99	1.14E-51	ENSMUST00000091878	protein coding
Zfp987-202	4	5.75	-29	0.01	ENSMUST00000105730	protein coding
Zfp988-201	4	81.92	-101.25	8.15E-97	ENSMUST00000148762	protein coding
Zfp989-202	4	45.69	-668.52	2.59E-19	ENSMUST00000146688	protein coding
Zfp990-201	4	151.17	-24.25	1.02E-128	ENSMUST00000105741	protein coding
Zfp990-202	4	31.26	-13,603.24	0.02	ENSMUST00000105742	protein coding
Zfp990-204	4	3.71	-26.74	0.01	ENSMUST00000136309	protein coding
Zfp991-201	4	98.01	-32.74	3.95E-50	ENSMUST00000084149	protein coding
Zfp991-202	4	41.51	-11.65	3.94E-05	ENSMUST00000151022	protein coding
Zfp992-201	4	73.89	-6.93	6.86E-41	ENSMUST00000105733	protein coding
Zfp993-202	4	56.62	-6.65	2.11E-23	ENSMUST00000130825	protein coding
Zic3-203	X	59.39	-26,161.31	9.11E-03	ENSMUST00000088631	protein coding
Zmat4-201	8	3.53	-4.18	1.36E-04	ENSMUST00000042352	protein coding
Zscan18-201	7	7.35	-5.14	9.00E-04	ENSMUST00000046245	protein coding

Table S2-3. Expression values & metadata of insignificant transcript variants of downregulated genes						
Name	Chromosome	Max group mean	Fold change	FDR p-value	ENSEMBL	Biotype
Ankzf1-205	1	3.54	2.14	0.09	ENSMUST00000145459	nonsense mediated decay
Ankzf1-207	1	35.86	1.45	0.12	ENSMUST00000152233	protein coding
Arid3b-201	9	25.09	1.52	0.1	ENSMUST00000004780	protein coding
Arid3b-203	9	0.02	16.19	0.16	ENSMUST00000114165	nonsense mediated decay
Arid3b-204	9	0.49	-94.43	0.33	ENSMUST00000164010	protein coding
Arid3b-205	9	1.28	1.19	0.77	ENSMUST00000164035	nonsense mediated decay
Arid3b-208	9	0.16	2.29	0.62	ENSMUST00000170477	protein coding
Arid3b-209	9	15.03	1.86	2.84E-05	ENSMUST00000171444	protein coding
Arid3b-210	9	0.11	16.71	0.16	ENSMUST00000171949	protein coding
Arid5a-203	1	0.21	5.61	0.3	ENSMUST00000115031	protein coding
Arid5a-204	1	1.04	1.42	0.55	ENSMUST00000115032	protein coding
Arid5a-205	1	4.33	1.33	0.62	ENSMUST00000116629	nonsense mediated decay
Arid5a-207	1	0.65	-86.05	0.33	ENSMUST00000126413	protein coding
Arid5a-208	1	0.21	1.27	0.82	ENSMUST00000137906	protein coding
Arid5a-211	1	0.25	4.42	0.44	ENSMUST00000142319	protein coding
Ascl4-202	10	0.21	1.05	0.97	ENSMUST00000170396	protein coding
Atf1-201	15	72.45	1.54	7.21E-04	ENSMUST00000023769	protein coding
Atf1-202	15	0.27	5.06	0.33	ENSMUST00000163855	protein coding
Atf1-203	15	0.54	-2.63	0.62	ENSMUST00000165804	protein coding
Atf1-204	15	1.31	-62.36	0.39	ENSMUST00000166435	protein coding
Atf1-207	15	0.41	-45.77	0.44	ENSMUST00000169408	nonsense mediated decay
Atf1-208	15	0.91	2.41	0.51	ENSMUST00000171869	protein coding
Atf4-201	15	271.94	1.74	7.96E-14	ENSMUST00000109605	protein coding
Atf4-202	15	0.91	8.6	0.07	ENSMUST00000229828	protein coding

Atf5-201	7	9.84	1.39	0.21	ENSMUST0000004 7356	protein coding
Atf6-201	1	24.13	1.71	3.82E-06	ENSMUST0000002 7974	protein coding
Batf-201	12	0.25	-2.97	0.6	ENSMUST0000004 0536	protein coding
Baz2b-201	2	5.69	-2.45	0.06	ENSMUST0000009 0925	protein coding
Baz2b-202	2	4.48	1.01	0.98	ENSMUST0000011 2550	protein coding
Baz2b-204	2	4.27	-2.38	0.21	ENSMUST0000013 0637	protein coding
Baz2b-213	2	1.44	1.15	0.86	ENSMUST0000015 3136	protein coding
Bcl11a-201	11	0.36	-2.08	0.31	ENSMUST0000000 0881	protein coding
Bcl11a-202	11	0.33	-3.77	0.17	ENSMUST0000010 9514	protein coding
Bcl11a-203	11	0.01	-5.79	0.71	ENSMUST0000010 9516	protein coding
Bcl11a-204	11	0.25	-2.41	0.62	ENSMUST0000011 8955	protein coding
Bcl6-201	16	3.04	1.68	0.2	ENSMUST0000002 3151	protein coding
Bend2-202	X	0.06	-47.21	0.42	ENSMUST0000020 7320	protein coding
Bend2-204	X	0.06	-18.56	0.55	ENSMUST0000020 7800	protein coding
Bend2-205	X	0.04	-7.88	0.67	ENSMUST0000020 7853	protein coding
Bhlhe23- 201	2	0.3	-9.43	0.17	ENSMUST0000010 8878	protein coding
Bnc2-201	4	2.97	-1,801.85	0.08	ENSMUST0000010 2820	protein coding
Bnc2-206	4	0.09	2.17	0.7	ENSMUST0000017 5800	protein coding
Bnc2-207	4	0.63	-61.83	0.39	ENSMUST0000017 5969	protein coding
Bnc2-210	4	0.03	-3.61	0.78	ENSMUST0000017 6370	protein coding
Bnc2-211	4	0.1	-18.53	0.55	ENSMUST0000017 6418	protein coding
Bnc2-215	4	0.64	-1.73	0.73	ENSMUST0000017 6691	protein coding
Bnc2-216	4	0.08	-9.98	0.63	ENSMUST0000017 6702	protein coding
Bnc2-218	4	0.53	-2.73	0.51	ENSMUST0000017 6971	protein coding
Bnc2-219	4	0.22	-10.46	0.63	ENSMUST0000017 6998	protein coding
Bnc2-222	4	0.94	-79.77	0.33	ENSMUST0000017 7277	protein coding

Cdc5l-201	17	247.35	1.38	9.66E-05	ENSMUST0000002 4727	protein coding
Cdx1-201	18	3.57	1.7	0.09	ENSMUST0000002 5521	protein coding
Cggbp1- 201	16	54.25	1.62	2.20E-08	ENSMUST0000006 7744	protein coding
Cpeb1-201	7	0.22	3.86	0.44	ENSMUST0000009 8331	protein coding
Cpeb1-203	7	1.25	-1.62	0.67	ENSMUST0000013 0310	protein coding
Cpeb1-209	7	0.34	-1.35	0.8	ENSMUST0000017 8892	protein coding
Crebl2-201	6	4.46	1.91	0.02	ENSMUST0000004 6303	protein coding
Crebl2-202	6	0.57	1.42	0.79	ENSMUST0000011 1937	protein coding
Csrnp3- 201	2	0.36	-240.6	0.24	ENSMUST0000005 3910	protein coding
Csrnp3- 202	2	0.03	-10.46	0.63	ENSMUST0000011 2394	protein coding
Csrnp3- 207	2	0.53	-2.84	0.54	ENSMUST0000014 5598	protein coding
Csrnp3- 208	2	0.82	-358.78	0.19	ENSMUST0000017 6109	protein coding
Dach2-201	X	0.2	-6.34	0.24	ENSMUST0000006 7219	protein coding
Dach2-202	X	0.04	-1.27	0.9	ENSMUST0000011 3378	protein coding
Dach2-203	X	0.07	-26.92	0.5	ENSMUST0000011 3379	protein coding
Dach2-205	X	0.06	6.34	0.24	ENSMUST0000011 3382	protein coding
Dbx2-201	15	0.32	-4.74	0.07	ENSMUST0000005 4244	protein coding
Dmrt1-202	19	0.07	-12.77	0.61	ENSMUST0000008 7525	protein coding
Dmrtd2- 201	7	1.01	-10.44	0.1	ENSMUST0000001 1493	protein coding
Dpf1-201	7	10	-1.24	0.33	ENSMUST0000004 9977	protein coding
Dpf1-207	7	1.41	-1.66	0.69	ENSMUST0000013 7848	protein coding
Dpf1-209	7	6.77	-1.97	0.23	ENSMUST0000014 2958	protein coding
Duxbl1- 201	14	0.69	-10.08	0.12	ENSMUST0000004 9793	protein coding
Duxbl1- 203	14	0.26	-7.12	0.25	ENSMUST0000017 2667	protein coding
Duxbl1- 204	14	0.33	-28.92	0.5	ENSMUST0000017 3155	protein coding
Duxbl1- 205	14	0.1	-15.08	0.59	ENSMUST0000017 3580	protein coding

E2f2-201	4	16.84	-1.18	0.36	ENSMUST0000006 1721	protein coding
Ebf1-201	11	0.13	-114.58	0.3	ENSMUST0000008 1265	protein coding
Ebf1-202	11	0.21	-105.38	0.32	ENSMUST0000010 1326	protein coding
Ebf1-203	11	0.32	-2.39	0.47	ENSMUST0000010 9268	protein coding
Egr4-201	6	0.72	-3.43	0.33	ENSMUST0000009 5759	protein coding
Epas1-201	17	31.1	-1.43	0.1	ENSMUST0000002 4954	protein coding
Esr2-202	12	0.12	-58.95	0.41	ENSMUST0000010 1291	protein coding
Esr2-203	12	0.25	-1.26	0.86	ENSMUST0000011 0421	protein coding
Etv1-203	12	5.93	-1,780.66	0.08	ENSMUST0000016 0244	protein coding
Etv1-204	12	0.1	-24.32	0.52	ENSMUST0000016 0701	protein coding
Etv1-205	12	5.52	-1,217.03	0.1	ENSMUST0000016 0856	protein coding
Etv1-206	12	2.88	-363.75	0.19	ENSMUST0000016 0996	protein coding
Etv1-208	12	0.95	-2.77	0.55	ENSMUST0000016 1513	protein coding
Etv1-210	12	0.1	1.39	0.86	ENSMUST0000016 1980	protein coding
Etv1-211	12	0.21	-5.05	0.46	ENSMUST0000016 2563	protein coding
Etv5-201	16	120.6	1.47	2.54E-07	ENSMUST0000007 9601	protein coding
Etv5-204	16	0.67	-1.07	0.97	ENSMUST0000017 0393	protein coding
Etv5-205	16	0.16	23.33	0.12	ENSMUST0000017 0803	nonsense mediated decay
Etv6-201	6	7.66	-2.59	0.24	ENSMUST0000008 1028	protein coding
Etv6-202	6	5.64	-1	0.99	ENSMUST0000011 1963	protein coding
Etv6-204	6	0.09	-10.14	0.63	ENSMUST0000016 4648	protein coding
Fiz1-201	7	56.58	1.52	9.65E-04	ENSMUST0000007 7385	protein coding
Fiz1-202	7	2.01	2.63	0.28	ENSMUST0000016 5320	protein coding
Fiz1-203	7	4.26	1.11	0.78	ENSMUST0000016 7804	protein coding
Fiz1-204	7	0.38	3.88	0.28	ENSMUST0000020 7030	protein coding
Fiz1-205	7	0.19	6.49	0.27	ENSMUST0000020 7412	protein coding

Fiz1-209	7	4.42	-1.51	0.68	ENSMUST00000209060	protein coding
Foxi3-201	6	0.83	1.34	0.79	ENSMUST00000069634	protein coding
Foxn2-201	17	22.28	1.82	3.06E-05	ENSMUST00000112238	protein coding
Foxn2-203	17	0.96	-267.71	0.23	ENSMUST00000141052	nonsense mediated decay
Foxn2-204	17	0.32	1.61	0.78	ENSMUST00000155640	protein coding
Foxr2-201	X	2.39	-1,140.69	0.1	ENSMUST00000096265	protein coding
Foxr2-202	X	7.57E-03	8.44	0.31	ENSMUST00000163801	protein coding
Gabpa-201	16	37.39	1.84	1.42E-08	ENSMUST00000009120	protein coding
Gabpa-202	16	64.39	-1.3	0.29	ENSMUST00000114184	protein coding
Gata6-201	18	3.31	1.6	0.09	ENSMUST00000047762	protein coding
Gata6-203	18	0.11	16.19	0.16	ENSMUST00000234512	protein coding
Gata6-206	18	0.07	-10.14	0.63	ENSMUST00000235081	protein coding
Gbx2-201	1	35.85	-1.52	2.63E-04	ENSMUST00000036954	protein coding
Gli1-201	10	18.98	-1.89	5.89E-09	ENSMUST00000026474	protein coding
Gli1-202	10	0.3	6.68	0.25	ENSMUST00000218236	protein coding
Gli2-204	1	0.12	2.4	0.62	ENSMUST00000160991	nonsense mediated decay
Gli2-205	1	0.36	-60.8	0.4	ENSMUST00000161056	nonsense mediated decay
Gli2-206	1	1.78	-8.57	0.08	ENSMUST00000161301	protein coding
Gm10037-201	13	1.48	-123.21	0.3	ENSMUST00000221266	protein coding
Gm10037-203	13	2.32	-238.01	0.23	ENSMUST00000222626	protein coding
Gm10037-204	13	0.23	-18.53	0.55	ENSMUST00000231606	protein coding
Gm26920-201	7	4.78	-1.23	0.75	ENSMUST00000182746	nonsense mediated decay
Gm26965-201	13	0.57	-1.97	0.63	ENSMUST00000167914	nonsense mediated decay
Gm28557-203	13	3.57	-1.47	0.46	ENSMUST00000186303	nonsense mediated decay
Gm42715-201	7	2.74	1.16	0.58	ENSMUST00000189629	nonsense mediated decay
Gm42715-202	7	0.76	2.67	0.51	ENSMUST00000206825	nonsense mediated decay

Gtf2i-201	5	1.12	2.41	0.2	ENSMUST0000005 9042	protein coding
Gtf2i-206	5	0.3	-9.65	0.13	ENSMUST0000017 2715	protein coding
Gtf2i-210	5	19.4	1.15	0.45	ENSMUST0000017 3341	protein coding
Gtf2i-211	5	4.47	-1.3	0.78	ENSMUST0000017 3485	protein coding
Gtf2i-212	5	0.13	3.02	0.55	ENSMUST0000017 3504	protein coding
Gtf2i-214	5	0.24	-2.34	0.68	ENSMUST0000017 3651	nonsense mediated decay
Gtf2i-218	5	2.09	-7.21	0.06	ENSMUST0000017 4133	protein coding
Gtf2i-219	5	2.01	2.92	0.18	ENSMUST0000017 4155	protein coding
Gtf2i-221	5	0.64	-2.07	0.58	ENSMUST0000017 4188	protein coding
Gtf2i-223	5	0.02	-12.26	0.62	ENSMUST0000017 4513	protein coding
Gtf2i-224	5	1.19	-1.72	0.69	ENSMUST0000017 4772	protein coding
Hesx1-202	14	1.23	-179.27	0.25	ENSMUST0000022 4331	protein coding
Hey2-201	10	0.87	-1.84	0.54	ENSMUST0000001 9924	protein coding
Hlf-201	11	0.51	-1.29	0.78	ENSMUST0000000 4051	protein coding
Hlf-206	11	0.09	16.19	0.15	ENSMUST0000017 6001	protein coding
Hnf1a-201	5	0.67	-1.27	0.81	ENSMUST0000003 1535	protein coding
Hnf1a-202	5	0.17	-33.42	0.47	ENSMUST0000017 6550	nonsense mediated decay
Hnf1a-203	5	0.3	-1.46	0.82	ENSMUST0000017 6911	nonsense mediated decay
Hnf1b-201	11	0.35	2.47	0.59	ENSMUST0000002 1016	protein coding
Hnf1b-202	11	0.59	1.91	0.63	ENSMUST0000010 8113	protein coding
Hnf1b-203	11	0.86	-1.29	0.8	ENSMUST0000010 8114	protein coding
Hnf1b-204	11	0.02	-3.61	0.78	ENSMUST0000013 5975	protein coding
Hnf1b-205	11	0.05	8.44	0.31	ENSMUST0000014 6786	protein coding
Hnf4a-201	2	0.13	-86.38	0.33	ENSMUST0000001 8094	protein coding
Hnf4a-202	2	0.14	-92.82	0.33	ENSMUST0000010 9411	protein coding
Hnf4a-204	2	0.13	1.6	0.79	ENSMUST0000013 7449	protein coding

Hnf4a-205	2	0.03	-3.61	0.78	ENSMUST00000143911	protein coding
Hoxb1-201	11	0.29	-90.65	0.33	ENSMUST00000019117	protein coding
Hoxb9-201	11	0.35	1.56	0.74	ENSMUST00000000010	protein coding
Hoxb9-202	11	2.45	-5.61	0.06	ENSMUST00000174042	protein coding
Hoxc4-201	15	0.53	-12.86	0.08	ENSMUST00000100164	protein coding
Hoxc4-202	15	0.03	5.94	0.29	ENSMUST00000165375	protein coding
Hsf5-201	11	0.4	-1.58	0.58	ENSMUST00000093956	protein coding
Kdm5b-201	1	61.09	1.03	0.78	ENSMUST00000047714	protein coding
Kdm5b-203	1	196.24	-1.33	7.21E-04	ENSMUST00000112198	protein coding
Klf10-203	15	0.06	1.08	0.97	ENSMUST00000227920	protein coding
Klf10-204	15	0.09	-5.79	0.71	ENSMUST00000228416	protein coding
Klf10-206	15	0.58	4.47	0.26	ENSMUST00000228772	protein coding
Klf12-201	14	2.6	-5.32	0.1	ENSMUST00000097079	protein coding
Klf12-204	14	2.86	-308.22	0.2	ENSMUST00000226774	protein coding
Klf12-205	14	4.33	1.29	0.58	ENSMUST00000228216	protein coding
Klf13-201	7	15.83	1.55	0.04	ENSMUST00000063694	protein coding
Klf13-202	7	0.03	-3.61	0.78	ENSMUST00000183817	protein coding
Klf13-204	7	0.17	1.58	0.81	ENSMUST00000185175	protein coding
Klf15-202	6	0.17	-62.63	0.4	ENSMUST00000113530	protein coding
Klf15-203	6	0.74	-6.09	0.25	ENSMUST00000203039	protein coding
Klf15-204	6	11.94	-1.21	0.59	ENSMUST00000203607	protein coding
Klf15-205	6	0.85	-1.42	0.82	ENSMUST00000205136	protein coding
Klf17-201	4	0.51	-2.72	0.23	ENSMUST00000062747	protein coding
Klf3-205	5	20.71	-2.45	0.09	ENSMUST00000198946	protein coding
Klf3-206	5	6.04	-5.99	0.08	ENSMUST00000200384	nonsense mediated decay
Klf4-203	4	1.01	-3.83	0.4	ENSMUST00000132746	protein coding

Klf5-201	14	162.18	1.1	0.3	ENSMUST00000005279	protein coding
Klf5-202	14	1.24	2.11	0.05	ENSMUST00000226784	protein coding
Klf8-203	X	0.88	-34.07	0.46	ENSMUST00000143880	protein coding
Lef1-202	3	4.88	-2,473.29	0.06	ENSMUST00000066849	protein coding
Lef1-203	3	2.52	-860.71	0.12	ENSMUST00000098611	protein coding
Mef2b-201	8	2.9	-4.33	0.06	ENSMUST00000110140	protein coding
Mef2b-202	8	0.46	1.82	0.74	ENSMUST00000110141	protein coding
Mef2b-203	8	7.08	-4.35	0.19	ENSMUST00000110143	protein coding
Mef2b-204	8	10.5	-1.34	0.6	ENSMUST00000110146	protein coding
Mesp2-201	7	2.12	1.22	0.77	ENSMUST00000107394	protein coding
Mitf-201	6	0.45	-2.55	0.54	ENSMUST00000043628	protein coding
Mitf-202	6	5.12	-1.44	0.09	ENSMUST00000043637	protein coding
Mitf-205	6	8.43E-03	-3.61	0.78	ENSMUST00000139462	nonsense mediated decay
Mitf-208	6	3.25	-516.54	0.15	ENSMUST00000203938	protein coding
Msantd3-202	4	27.93	-2.15	0.12	ENSMUST00000064807	protein coding
Mtf2-204	5	5.14	-1.17	0.86	ENSMUST00000129921	nonsense mediated decay
Mtf2-208	5	18.58	-1,974.23	0.07	ENSMUST00000137996	protein coding
Mtf2-213	5	0.06	1.52	0.82	ENSMUST00000170319	protein coding
Mtf2-214	5	1.63	3.23	0.15	ENSMUST00000172045	protein coding
Myrf-201	19	19.84	1.11	0.67	ENSMUST00000088013	protein coding
Myrf-202	19	0.06	-33.54	0.47	ENSMUST00000186056	protein coding
Myrf-203	19	2.79	-1.12	0.9	ENSMUST00000186854	protein coding
Myrf-205	19	1.84	1.93	0.21	ENSMUST00000189897	protein coding
Nanog-203	6	1.45	-1.67	0.5	ENSMUST00000112581	protein coding
Neurog3-201	10	0.54	-125.47	0.3	ENSMUST00000050103	protein coding
Nfatc4-201	14	3	-1.26	0.64	ENSMUST00000024179	protein coding

Nfatc4-202	14	3.81	-1.15	0.69	ENSMUST00000172271	protein coding
Nfatc4-209	14	0.07	3.36	0.51	ENSMUST00000226979	protein coding
Nfe2-201	15	0.28	-1.82	0.68	ENSMUST00000075192	protein coding
Nfe2-202	15	0.09	-10.46	0.63	ENSMUST00000131364	protein coding
Nfe2-204	15	0.39	-37.74	0.46	ENSMUST00000132836	protein coding
Nfe2-205	15	0.36	-2.59	0.52	ENSMUST00000133600	protein coding
Nfe2-206	15	0.06	3.96	0.44	ENSMUST00000134193	protein coding
Nfe2-209	15	0.04	-5.79	0.71	ENSMUST00000154510	protein coding
Nfe2-210	15	0.04	-12.32	0.62	ENSMUST00000156927	protein coding
Nfib-202	4	0.7	1.06	0.95	ENSMUST00000064770	protein coding
Nfib-203	4	0.76	-1.57	0.48	ENSMUST00000107245	protein coding
Nfib-204	4	0.47	-216.87	0.23	ENSMUST00000107246	protein coding
Nfib-205	4	0.64	-312.54	0.2	ENSMUST00000107247	protein coding
Nfib-212	4	0.22	-24.32	0.52	ENSMUST00000155821	protein coding
Nfkb1-203	3	7.22	-2.18	0.14	ENSMUST00000132668	protein coding
Nfkb1-206	3	19.35	-1.08	0.55	ENSMUST00000164430	protein coding
Nfkb1-207	3	5.87	1.06	0.91	ENSMUST00000184550	nonsense mediated decay
Nfkb1-209	3	1.02	-471.81	0.17	ENSMUST00000196469	nonsense mediated decay
Nhlh1-201	1	0.17	-1.87	0.63	ENSMUST00000059794	protein coding
Nkx1-2-201	7	0.35	-173.13	0.25	ENSMUST00000054562	protein coding
Nkx2-4-201	2	0.44	1.57	0.49	ENSMUST00000067020	protein coding
Npas3-201	12	0.17	-3.33	0.22	ENSMUST00000101432	protein coding
Npas3-203	12	0.02	16.71	0.16	ENSMUST00000223057	protein coding
Nr0b1-201	X	45.5	1.58	7.80E-04	ENSMUST00000026036	protein coding
Nr1d2-201	14	11.23	1.02	0.87	ENSMUST00000090543	protein coding
Nr1d2-204	14	0.09	-1.02	0.99	ENSMUST00000225491	protein coding

Nr2c1-201	10	4.84	-1.17	0.78	ENSMUST00000092213	protein coding
Nr2c1-202	10	0.08	3.57	0.52	ENSMUST00000099343	protein coding
Nr2c1-203	10	3.34	1.57	0.28	ENSMUST00000105290	protein coding
Nr5a2-206	1	0.1	-12.08	0.62	ENSMUST00000195428	protein coding
Otx2-203	14	0.22	-18.84	0.55	ENSMUST00000119739	protein coding
Otx2-204	14	10.66	-2,749.52	0.06	ENSMUST00000122009	protein coding
Otx2-208	14	0.46	-73.32	0.36	ENSMUST00000152018	protein coding
Otx2-209	14	0.38	-146.02	0.29	ENSMUST00000226501	protein coding
Ovol1-201	19	0.79	1.5	0.67	ENSMUST00000025861	protein coding
Ovol1-202	19	0.09	16.71	0.16	ENSMUST00000238060	protein coding
Pax5-201	4	0.06	-2.07	0.56	ENSMUST00000014174	protein coding
Pax5-212	4	0.02	-3.61	0.78	ENSMUST00000173733	protein coding
Pbx1-202	1	0.19	2.26	0.63	ENSMUST00000072863	protein coding
Pbx1-205	1	5.45	-1.76	0.22	ENSMUST00000176540	protein coding
Pbx1-206	1	2.44	-2.79	0.36	ENSMUST00000176790	protein coding
Pbx1-208	1	0.69	-1.51	0.47	ENSMUST00000188912	protein coding
Phf21a-201	2	4.29	1.21	0.67	ENSMUST00000090586	protein coding
Phf21a-202	2	8.29	-1.77	0.16	ENSMUST00000111291	protein coding
Phf21a-203	2	0.1	-37.34	0.46	ENSMUST00000111292	protein coding
Phf21a-206	2	0.17	-18.91	0.55	ENSMUST00000128781	protein coding
Phf21a-207	2	2.26	-3.43	0.35	ENSMUST00000138995	protein coding
Phf21a-209	2	1.63	3.03	0.12	ENSMUST00000159366	protein coding
Phf21a-210	2	6.27	-517.21	0.15	ENSMUST00000159727	protein coding
Phf21a-211	2	8.86	1.05	0.91	ENSMUST00000159961	protein coding
Phf21a-215	2	2.23	-2.3	0.28	ENSMUST00000162146	protein coding
Phf21a-217	2	1.09	-1.23	0.89	ENSMUST00000162497	protein coding

Plag1-201	4	4.46	-1.09	0.72	ENSMUST00000003369	protein coding
Plag1-202	4	1.67	-1.43	0.79	ENSMUST00000137439	nonsense mediated decay
Plag1-204	4	0.15	1.99	0.73	ENSMUST00000151543	nonsense mediated decay
Plscr1-202	9	25.41	1.23	0.38	ENSMUST00000186364	protein coding
Pou4f3-201	18	0.15	1.82	0.64	ENSMUST00000025374	protein coding
Pou4f3-202	18	0.21	-1.75	0.7	ENSMUST00000237247	protein coding
Pou5f1-202	17	0.05	8.44	0.31	ENSMUST00000172651	protein coding
Pou5f1-203	17	4.63	-319.13	0.19	ENSMUST00000173256	protein coding
Pou5f1-204	17	0.38	1.14	0.94	ENSMUST00000173805	protein coding
Pou5f1-206	17	1.91	-194.63	0.24	ENSMUST00000174782	protein coding
Prdm1-202	10	0.76	-1.65	0.55	ENSMUST00000105490	protein coding
Prdm1-204	10	0.84	-6.06	0.09	ENSMUST00000218369	protein coding
Prdm16-201	4	0.4	-1.35	0.78	ENSMUST00000030902	protein coding
Prdm16-202	4	0.32	5.84	0.15	ENSMUST00000070313	protein coding
Prdm16-204	4	0.23	2.32	0.6	ENSMUST00000105636	protein coding
Prdm16-206	4	0.18	-234.95	0.24	ENSMUST00000105638	protein coding
Prdm16-207	4	0.12	30.35	0.1	ENSMUST00000124771	protein coding
Prdm4-201	10	31.32	1.71	1.38E-03	ENSMUST00000037646	protein coding
Prdm4-206	10	5.39	-1.09	0.82	ENSMUST00000219370	nonsense mediated decay
Prdm5-202	6	9.43	-1.29	0.54	ENSMUST00000031976	protein coding
Prdm5-203	6	0.47	-2.13	0.62	ENSMUST00000081219	protein coding
Prdm5-204	6	1	-5.9	0.2	ENSMUST00000172638	protein coding
Pura-201	18	19.28	1.03	0.9	ENSMUST00000051301	protein coding
Rarg-204	15	1.33	-3.7	0.4	ENSMUST00000130204	protein coding
Rbak-201	5	9.21	1.32	0.29	ENSMUST00000049861	protein coding
Rbpj-207	5	4.31	1.76	0.18	ENSMUST00000201883	protein coding

Rbpj-208	5	2.3	-1.65	0.36	ENSMUST00000201912	protein coding
Rbpj-210	5	1.6	-162.84	0.26	ENSMUST00000201991	protein coding
Rbsn-201	6	16.9	1.37	0.02	ENSMUST00000014694	protein coding
Rbsn-202	6	0.11	1.73	0.78	ENSMUST00000124635	protein coding
Rbsn-205	6	0.04	-3.61	0.78	ENSMUST00000203516	protein coding
Rest-202	5	50.66	-1.44	0.01	ENSMUST00000113449	protein coding
Rfx2-201	17	6.04	-2.28	0.11	ENSMUST00000002444	protein coding
Rfx2-202	17	18.01	1.39	0.06	ENSMUST00000086801	protein coding
Rfx2-203	17	0.72	1.86	0.62	ENSMUST00000233000	protein coding
Rfx4-202	10	0.24	-126.37	0.3	ENSMUST00000060397	protein coding
Rfx4-203	10	0.34	-1.42	0.64	ENSMUST00000095388	protein coding
Rorb-201	19	1.97	-2,560.79	0.06	ENSMUST00000040153	protein coding
Rorb-203	19	3.63E-03	8.44	0.31	ENSMUST00000112832	protein coding
Rsl1-201	13	0.44	1.52	0.62	ENSMUST00000021997	protein coding
Rsl1-202	13	1.44	-1.54	0.74	ENSMUST00000225334	nonsense mediated decay
Rsl1-203	13	5.64	1.65	0.14	ENSMUST00000249257	protein coding
Rxrg-201	1	0.96	-11.68	0.06	ENSMUST00000015987	protein coding
Rxrg-202	1	0.12	-29.16	0.5	ENSMUST00000111380	protein coding
Rxrg-203	1	0.31	-93.45	0.34	ENSMUST00000111384	protein coding
Rxrg-204	1	0.45	-5.12	0.33	ENSMUST00000111386	protein coding
Sall1-201	8	72.73	-1.32	3.58E-03	ENSMUST00000034090	protein coding
Scml4-201	10	0.04	5.54	0.35	ENSMUST00000063063	protein coding
Scml4-202	10	0.16	-2.2	0.54	ENSMUST00000105494	protein coding
Scml4-203	10	0.02	8.44	0.31	ENSMUST00000105495	protein coding
Scml4-204	10	0.11	26.67	0.1	ENSMUST00000125576	protein coding
Setdb2-202	14	0.11	1.53	0.8	ENSMUST00000111253	protein coding

Setdb2-205	14	12.49	1.58	1.74E-06	ENSMUST0000016 1459	protein coding
Six1-201	12	1.25	-1.17	0.85	ENSMUST0000005 0029	protein coding
Skor1-202	9	0.1	-1.18	0.91	ENSMUST0000011 6613	protein coding
Snai2-201	16	0.49	-1.87	0.39	ENSMUST0000002 3356	protein coding
Snpc5- 201	9	36.88	1.47	2.84E-05	ENSMUST0000003 4965	protein coding
Sox17-201	1	0.29	-138.52	0.29	ENSMUST0000002 7035	protein coding
Sox17-202	1	0.05	23.93	0.1	ENSMUST0000011 6652	protein coding
Sox17-204	1	0.91	-2.59	0.51	ENSMUST0000019 1939	protein coding
Sox17-206	1	0.02	-10.03	0.63	ENSMUST0000019 2650	protein coding
Sp110-201	1	0.17	-1.43	0.82	ENSMUST0000009 3508	protein coding
Sp8-201	12	0.09	1.13	0.91	ENSMUST0000006 3918	protein coding
Sp8-202	12	0.05	2.1	0.69	ENSMUST0000022 3305	protein coding
Spdef-201	17	0.21	1.96	0.62	ENSMUST0000002 5054	protein coding
Spdef-202	17	0.06	-14.28	0.59	ENSMUST0000011 4870	protein coding
Spi1-201	2	0.08	-25.6	0.51	ENSMUST0000000 2180	protein coding
Spi1-205	2	0.05	5.94	0.28	ENSMUST0000024 9728	protein coding
Spi1-206	2	0.14	-44.01	0.44	ENSMUST0000024 9729	protein coding
Spib-201	7	0.55	-4.03	0.22	ENSMUST0000003 5323	protein coding
Spib-202	7	0.04	-5.79	0.71	ENSMUST0000009 8483	protein coding
Spib-203	7	0.09	2.73	0.59	ENSMUST0000020 5506	protein coding
Spic-201	10	2.81	-733.88	0.13	ENSMUST0000000 4473	protein coding
Spic-202	10	1.36	-273.76	0.21	ENSMUST0000013 3724	nonsense mediated decay
Spic-203	10	2.38	-229.76	0.23	ENSMUST0000013 8734	protein coding
Stat1-201	1	0.04	2.17	0.68	ENSMUST0000007 0968	protein coding
Stat1-206	1	8.35	1.01	0.98	ENSMUST0000018 6857	protein coding
Stat1-207	1	0.45	-1.55	0.82	ENSMUST0000018 8681	protein coding

Stat1-210	1	0.44	-60.52	0.4	ENSMUST0000018 9336	nonsense mediated decay
Stat1-211	1	1.38	-117.52	0.3	ENSMUST0000018 9347	protein coding
Tal1-203	4	0.06	-33.41	0.47	ENSMUST0000016 1601	protein coding
Tal1-204	4	0.56	-3.03	0.3	ENSMUST0000016 2489	protein coding
Tbx3-202	5	1.58	-1.2	0.81	ENSMUST0000007 9719	protein coding
Tbx3-203	5	15.39	-1.25	0.13	ENSMUST0000012 1021	protein coding
Tcf15-201	2	63	1.13	0.45	ENSMUST0000008 9112	protein coding
Tcf4-201	18	0.25	7.34	0.1	ENSMUST0000006 6717	protein coding
Tcf4-202	18	10.53	1.14	0.51	ENSMUST0000007 8486	protein coding
Tcf4-204	18	0.14	4.38	0.41	ENSMUST0000011 4978	protein coding
Tcf4-207	18	0.51	-1.03	0.97	ENSMUST0000011 4985	protein coding
Tcf4-210	18	0.02	8.44	0.31	ENSMUST0000012 8706	protein coding
Tcf4-218	18	0.07	26.67	0.1	ENSMUST0000020 0862	protein coding
Tcf4-231	18	0.2	39.76	0.06	ENSMUST0000020 1235	protein coding
Tcf4-232	18	0.18	-22.78	0.53	ENSMUST0000020 1288	protein coding
Tcf4-234	18	0.92	1.36	0.82	ENSMUST0000020 1410	protein coding
Tcf4-235	18	0.05	16.19	0.14	ENSMUST0000020 1537	protein coding
Tcf4-237	18	0.02	-3.61	0.78	ENSMUST0000020 1627	protein coding
Tcf4-243	18	0.51	-151.16	0.29	ENSMUST0000020 2057	protein coding
Tcf4-248	18	0.95	-2.8	0.46	ENSMUST0000020 2354	protein coding
Tcf4-249	18	2.17	-797.25	0.14	ENSMUST0000020 2435	protein coding
Tcf4-251	18	0.5	-138.7	0.3	ENSMUST0000020 2474	protein coding
Tcf4-257	18	0.28	-90.04	0.33	ENSMUST0000020 2772	protein coding
Tcf15-201	2	26.66	1.61	2.69E-03	ENSMUST0000003 7877	protein coding
Tcf15-203	2	1.04	30.85	0.1	ENSMUST0000016 1425	nonsense mediated decay
Terb1-201	8	0.13	-2.36	0.66	ENSMUST0000006 4576	protein coding

Terb1-202	8	0.02	-7.91	0.67	ENSMUST00000159713	nonsense mediated decay
Terb1-203	8	0.22	1.65	0.67	ENSMUST00000161520	nonsense mediated decay
Terf1-203	1	43.89	1.63	0.02	ENSMUST00000188371	protein coding
Tet1-203	10	0.49	2.61	0.35	ENSMUST00000173087	protein coding
Tet1-204	10	0.07	16.19	0.16	ENSMUST00000173905	nonsense mediated decay
Tet1-205	10	8.12	-1.92	0.07	ENSMUST00000174121	protein coding
Tet1-206	10	34.88	-1.33	6.20E-03	ENSMUST00000174189	protein coding
Tet1-207	10	2.68	3.23	0.23	ENSMUST00000218438	protein coding
Tet1-208	10	0.79	-55.83	0.4	ENSMUST00000218782	protein coding
Tet1-209	10	18.05	-1,480.60	0.08	ENSMUST00000227494	protein coding
Tet1-210	10	1.43	-1.71	0.69	ENSMUST00000228901	protein coding
Tet2-201	3	3.52	1.15	0.72	ENSMUST00000098603	protein coding
Tet2-207	3	0.5	-35.54	0.47	ENSMUST00000198974	protein coding
Tfec-201	6	1.54	-405.74	0.18	ENSMUST00000031533	protein coding
Tgif1-201	17	135.37	-1.17	0.3	ENSMUST00000059775	protein coding
Tgif1-204	17	23.02	-1.84	0.12	ENSMUST00000127719	protein coding
Tgif1-206	17	5.17	1.31	0.76	ENSMUST00000134654	protein coding
Tgif1-207	17	4.08	1.97	0.04	ENSMUST00000135007	protein coding
Tgif1-208	17	1.58	-3.71	0.36	ENSMUST00000156484	protein coding
Tgif1-209	17	6.89	-1.86	0.17	ENSMUST00000166395	protein coding
Tgif1-210	17	1.2	3.46	0.43	ENSMUST00000172229	protein coding
Thyn1-201	9	26.79	-1.97	0.13	ENSMUST00000039161	protein coding
Thyn1-202	9	14.92	1.24	0.45	ENSMUST00000213683	protein coding
Thyn1-203	9	168.27	1.25	0.33	ENSMUST00000213770	protein coding
Topors-201	4	71.82	1.62	1.67E-08	ENSMUST00000042575	protein coding
Trerf1-204	17	7.69	1.42	3.80E-03	ENSMUST00000190080	protein coding

Trp53-202	11	121.65	-1.12	0.48	ENSMUST00000108657	protein coding
Trps1-202	15	0.14	-73.24	0.35	ENSMUST00000183421	protein coding
Trps1-203	15	0.39	-3.88	0.32	ENSMUST00000183757	protein coding
Trps1-206	15	0.59	3.1	0.48	ENSMUST00000184885	protein coding
Trps1-207	15	0.99	-133.67	0.3	ENSMUST00000185183	protein coding
Tsc22d1-201	14	222.89	1.49	1.23E-05	ENSMUST00000022587	protein coding
Tsc22d1-203	14	0.58	-91.59	0.33	ENSMUST00000101618	protein coding
Tsc22d1-205	14	0.85	2.48	0.09	ENSMUST00000133224	protein coding
Tsc22d1-206	14	0.89	3.21	0.08	ENSMUST00000134109	protein coding
Tsc22d1-207	14	0.44	-45.25	0.43	ENSMUST00000140251	protein coding
Tsc22d1-208	14	0.57	-67.72	0.37	ENSMUST00000142683	protein coding
Tsc22d1-211	14	1.21	4.78	0.14	ENSMUST00000175984	nonsense mediated decay
Tsc22d1-212	14	0.81	1.54	0.78	ENSMUST00000176581	protein coding
Tsc22d1-216	14	0.19	-24.32	0.52	ENSMUST00000177471	nonsense mediated decay
Usf1-201	1	28.79	1.11	0.81	ENSMUST00000001284	nonsense mediated decay
Usf1-207	1	9.02	1.16	0.63	ENSMUST00000160486	protein coding
Usf1-210	1	42.1	1.36	0.09	ENSMUST00000167546	protein coding
Vsx2-202	12	0.17	-1.24	0.85	ENSMUST00000169934	protein coding
Xbp1-201	11	87.86	1.8	2.90E-08	ENSMUST00000063084	protein coding
Xbp1-203	11	5.97	-1.3	0.67	ENSMUST00000149159	protein coding
Xbp1-204	11	1.41	-2.42	0.39	ENSMUST00000149623	protein coding
Xbp1-205	11	28.9	1.23	0.44	ENSMUST00000239150	protein coding
Zbed4-201	15	37.2	1.2	0.21	ENSMUST00000041297	protein coding
Zbed5-201	5	14.14	1.47	7.21E-03	ENSMUST00000041466	protein coding
Zbtb12-201	17	21.37	-1.2	0.59	ENSMUST00000052778	protein coding
Zbtb12-202	17	0.54	-31.9	0.47	ENSMUST00000173093	protein coding

Zbtb3-201	19	6.59	1.58	0.24	ENSMUST00000172175	protein coding
Zbtb45-202	7	0.04	-5.79	0.71	ENSMUST00000209997	protein coding
Zbtb45-203	7	4.84	-1.43	0.69	ENSMUST00000210108	protein coding
Zbtb45-204	7	3.29	-1.78	0.28	ENSMUST00000210282	protein coding
Zc3h8-201	2	22.23	1.56	5.06E-06	ENSMUST00000028866	protein coding
Zeb1-202	18	0.58	-7.77	0.68	ENSMUST00000159390	protein coding
Zeb1-205	18	0.09	-12.08	0.62	ENSMUST00000160910	protein coding
Zeb1-206	18	0.29	-52.57	0.42	ENSMUST00000161295	nonsense mediated decay
Zeb2-201	2	0.08	4.34	0.31	ENSMUST00000028229	protein coding
Zeb2-202	2	0.04	-35.41	0.46	ENSMUST00000068415	protein coding
Zeb2-203	2	0.06	65.58	0.06	ENSMUST00000076836	protein coding
Zeb2-211	2	0.02	1.52	0.82	ENSMUST00000153561	protein coding
Zeb2-212	2	0.02	2.22	0.66	ENSMUST00000176438	protein coding
Zeb2-213	2	0.03	2.92	0.55	ENSMUST00000176732	protein coding
Zeb2-214	2	0.02	-15.08	0.59	ENSMUST00000177302	protein coding
Zeb2-215	2	0.15	-88.43	0.33	ENSMUST00000200844	protein coding
Zeb2-221	2	0.01	3.36	0.5	ENSMUST00000201804	protein coding
Zeb2-222	2	0.02	-3.61	0.78	ENSMUST00000201969	protein coding
Zeb2-227	2	0.06	-3.61	0.78	ENSMUST00000202432	protein coding
Zfhx2-201	14	8.4	1	0.99	ENSMUST00000036328	protein coding
Zfhx4-201	3	5.01E-03	-12.08	0.62	ENSMUST00000026284	protein coding
Zfhx4-203	3	0.06	-99.36	0.32	ENSMUST00000175866	protein coding
Zfhx4-205	3	0.02	-48.31	0.43	ENSMUST00000176383	protein coding
Zfp108-202	7	0.07	-28.92	0.5	ENSMUST00000205982	protein coding
Zfp108-203	7	0.42	-3.62	0.26	ENSMUST00000206777	protein coding
Zfp109-201	7	5.01	1.2	0.74	ENSMUST00000037448	protein coding

Zfp11-201	5	3.13	1.56	0.3	ENSMUST0000004 9778	protein coding
Zfp114-201	7	0.56	1.65	0.4	ENSMUST0000008 6010	protein coding
Zfp114-202	7	0.71	-1.77	0.74	ENSMUST0000020 5309	protein coding
Zfp114-203	7	2.41	-1.39	0.64	ENSMUST0000020 6547	protein coding
Zfp13-201	17	0.56	-1.93	0.48	ENSMUST0000005 7029	protein coding
Zfp13-202	17	13.21	-1.52	0.1	ENSMUST0000011 5516	protein coding
Zfp13-203	17	5.57	-571.05	0.14	ENSMUST0000022 7952	protein coding
Zfp14-201	7	1.73	1.03	0.98	ENSMUST0000007 7787	protein coding
Zfp14-202	7	0.48	1.37	0.78	ENSMUST0000020 7072	protein coding
Zfp14-203	7	0.57	2.77	0.25	ENSMUST0000020 7873	protein coding
Zfp169-201	13	0.27	1.23	0.9	ENSMUST0000011 0110	protein coding
Zfp169-204	13	1.27	-80.69	0.34	ENSMUST0000017 6949	protein coding
Zfp235-201	7	5.41	1.32	0.21	ENSMUST0000005 6549	protein coding
Zfp235-202	7	0.76	3.69	0.09	ENSMUST0000020 5680	protein coding
Zfp239-201	6	0.95	-1.02	0.99	ENSMUST0000007 9405	protein coding
Zfp266-201	9	18.5	-1.28	0.31	ENSMUST0000006 8296	protein coding
Zfp266-202	9	26.74	1.24	0.13	ENSMUST0000017 4462	protein coding
Zfp266-204	9	1.07	1.02	0.99	ENSMUST0000021 3418	protein coding
Zfp266-205	9	0.64	2.96	0.1	ENSMUST0000021 5908	protein coding
Zfp273-201	13	0.71	1.08	0.95	ENSMUST0000001 2725	protein coding
Zfp273-203	13	2.05	-1.83	0.4	ENSMUST0000018 1391	protein coding
Zfp281-201	1	52.63	1.4	0.06	ENSMUST0000004 7734	protein coding
Zfp281-202	1	29.75	-1.29	0.52	ENSMUST0000011 2046	protein coding
Zfp286-201	11	3.26	-1,479.22	0.08	ENSMUST0000005 4654	protein coding
Zfp286-202	11	3.44	-1,008.82	0.11	ENSMUST0000010 8705	protein coding
Zfp286-211	11	0.07	-18.84	0.55	ENSMUST0000020 7597	protein coding

Zfp296-201	7	41.55	1.52	0.02	ENSMUST00000108453	protein coding
Zfp317-201	9	8.82	-1.29	0.44	ENSMUST00000079042	protein coding
Zfp317-203	9	9.88	1.12	0.74	ENSMUST00000213725	protein coding
Zfp317-205	9	2.51	1.31	0.41	ENSMUST00000215372	protein coding
Zfp322a-201	13	20.05	1.49	0.06	ENSMUST00000050101	protein coding
Zfp322a-202	13	7.68	1.46	0.3	ENSMUST00000125328	protein coding
Zfp422-201	6	16.68	1.16	0.41	ENSMUST00000057540	protein coding
Zfp422-202	6	0.76	3.34	0.14	ENSMUST00000079749	protein coding
Zfp422-203	6	0.48	-1.51	0.82	ENSMUST00000112880	protein coding
Zfp423-202	8	2.89	1.57	0.18	ENSMUST00000109655	protein coding
Zfp423-207	8	3.81	-7.45	0.06	ENSMUST00000174764	protein coding
Zfp438-202	18	2.5	-1.11	0.78	ENSMUST00000234241	protein coding
Zfp445-201	9	0.31	-139.51	0.3	ENSMUST00000056467	protein coding
Zfp445-202	9	8.58	-1.73	0.17	ENSMUST00000213971	protein coding
Zfp445-204	9	0.42	2.56	0.38	ENSMUST00000214558	protein coding
Zfp445-205	9	0.09	3.26	0.5	ENSMUST00000214626	protein coding
Zfp445-206	9	41.14	1.27	0.02	ENSMUST00000216063	protein coding
Zfp445-208	9	12.09	1.26	0.51	ENSMUST00000216721	protein coding
Zfp451-201	1	53.65	1.11	0.5	ENSMUST00000019861	protein coding
Zfp451-206	1	2.27	1.81	0.64	ENSMUST00000139143	nonsense mediated decay
Zfp451-208	1	1.08	1.22	0.86	ENSMUST00000151055	nonsense mediated decay
Zfp451-209	1	1.34	1.23	0.86	ENSMUST00000194656	protein coding
Zfp454-202	11	0.73	-3.9	0.33	ENSMUST00000109131	protein coding
Zfp454-206	11	3.19	-2.95	0.07	ENSMUST00000163301	protein coding
Zfp456-201	13	2.36	-2.28	0.22	ENSMUST00000057070	protein coding
Zfp456-202	13	0.09	-10.14	0.63	ENSMUST00000172266	protein coding

Zfp456-203	13	0.12	-7.96	0.67	ENSMUST0000022 5787	protein coding
Zfp459-203	13	3.53	-336.73	0.19	ENSMUST0000022 4113	protein coding
Zfp488-201	14	0.14	-1.34	0.8	ENSMUST0000016 6737	protein coding
Zfp493-201	13	7.57	-1.7	0.02	ENSMUST0000016 4936	protein coding
Zfp493-203	13	0.45	-4.07	0.46	ENSMUST0000018 1319	protein coding
Zfp493-204	13	0.06	8.44	0.31	ENSMUST0000022 0570	protein coding
Zfp518a- 201	19	28.92	-1.53	0.05	ENSMUST0000005 0092	protein coding
Zfp518a- 202	19	1.03	-974.23	0.13	ENSMUST0000023 5207	protein coding
Zfp518b- 202	5	1.74	-1.4	0.81	ENSMUST0000017 8760	protein coding
Zfp532-201	18	3.2	-4.63	0.15	ENSMUST0000004 9016	protein coding
Zfp532-202	18	3.81	1.23	0.39	ENSMUST0000016 9679	protein coding
Zfp532-203	18	0.87	-97.17	0.32	ENSMUST0000018 2140	protein coding
Zfp532-206	18	3.17	-168.47	0.26	ENSMUST0000018 2655	protein coding
Zfp532-207	18	0.32	-44.95	0.43	ENSMUST0000018 2684	protein coding
Zfp532-208	18	7.52	-2.43	0.23	ENSMUST0000018 2852	protein coding
Zfp532-209	18	0.38	2.25	0.63	ENSMUST0000018 2973	protein coding
Zfp532-212	18	0.09	-10.14	0.63	ENSMUST0000018 3236	protein coding
Zfp532-214	18	1.85	-8.05	0.21	ENSMUST0000018 3319	protein coding
Zfp532-215	18	0.14	-10.46	0.63	ENSMUST0000018 3326	protein coding
Zfp532-216	18	8.79	-1.54	0.1	ENSMUST0000023 5493	protein coding
Zfp532-218	18	0.68	1.15	0.81	ENSMUST0000023 5822	protein coding
Zfp532-219	18	0.26	-1.94	0.76	ENSMUST0000023 6523	protein coding
Zfp532-220	18	0.43	-36.25	0.46	ENSMUST0000023 6633	protein coding
Zfp532-222	18	2.5	-2.22	0.07	ENSMUST0000023 7553	protein coding
Zfp532-223	18	0.94	-2.01	0.52	ENSMUST0000023 7712	protein coding
Zfp532-226	18	1.54	-136.34	0.3	ENSMUST0000023 7886	protein coding

Zfp532-227	18	0.09	2.87	0.57	ENSMUST00000237931	protein coding
Zfp536-203	7	0.43	-3.52	0.17	ENSMUST00000176114	protein coding
Zfp536-204	7	0.55	-5.99	0.07	ENSMUST00000176129	protein coding
Zfp536-208	7	0.03	8.44	0.31	ENSMUST00000176534	protein coding
Zfp536-211	7	0.01	23.93	0.1	ENSMUST00000206763	protein coding
Zfp551-202	7	1.73	-559.56	0.15	ENSMUST00000120220	protein coding
Zfp551-203	7	0.12	-7.91	0.67	ENSMUST00000123877	nonsense mediated decay
Zfp553-201	7	37.02	1.34	0.2	ENSMUST00000056232	protein coding
Zfp558-202	9	1.91	1.1	0.92	ENSMUST00000034647	protein coding
Zfp558-203	9	0.25	1.21	0.84	ENSMUST00000159596	nonsense mediated decay
Zfp566-201	7	20.83	1.27	0.33	ENSMUST00000088785	protein coding
Zfp57-204	17	0.66	-42.63	0.44	ENSMUST00000172527	protein coding
Zfp57-206	17	2.63	-2.21	0.41	ENSMUST00000172580	protein coding
Zfp57-207	17	1.13	-4.8	0.29	ENSMUST00000173588	protein coding
Zfp57-208	17	0.56	-2.09	0.71	ENSMUST00000173921	protein coding
Zfp57-213	17	1.66	-1.2	0.88	ENSMUST00000174747	protein coding
Zfp583-201	7	5.03	1.01	0.98	ENSMUST00000062765	protein coding
Zfp583-202	7	0.12	2.41	0.63	ENSMUST00000108560	protein coding
Zfp583-204	7	0.16	9.27	0.2	ENSMUST00000127658	protein coding
Zfp583-206	7	1.76	-449.05	0.17	ENSMUST00000165705	protein coding
Zfp59-201	7	0.02	-5.79	0.71	ENSMUST00000108331	protein coding
Zfp60-201	7	3.75	1.3	0.65	ENSMUST00000042641	protein coding
Zfp60-202	7	7.87	1.7	1.42E-05	ENSMUST00000108336	protein coding
Zfp60-205	7	0.08	16.19	0.16	ENSMUST00000130997	protein coding
Zfp60-206	7	0.04	2.09	0.69	ENSMUST00000136373	nonsense mediated decay
Zfp60-208	7	5.25	-1.41	0.46	ENSMUST00000167955	protein coding

Zfp607a-202	7	5.52	-2,869.66	0.06	ENSMUST00000205534	protein coding
Zfp607a-203	7	0.17	-8.53	0.23	ENSMUST00000205715	protein coding
Zfp607b-201	7	1.16	-1.34	0.71	ENSMUST00000076421	protein coding
Zfp61-201	7	7.02	1.75	0.06	ENSMUST00000077780	protein coding
Zfp61-207	7	0.42	-58.52	0.4	ENSMUST00000145131	protein coding
Zfp61-208	7	6.92	1.31	0.5	ENSMUST00000165241	protein coding
Zfp619-201	7	2.3	-1.02	0.95	ENSMUST00000108015	protein coding
Zfp62-202	11	0.8	1.74	0.59	ENSMUST00000109197	protein coding
Zfp62-203	11	6.97	1.39	0.39	ENSMUST00000109198	protein coding
Zfp62-205	11	0.44	3.34	0.3	ENSMUST00000133150	protein coding
Zfp62-207	11	1.28	1.02	0.98	ENSMUST00000136691	protein coding
Zfp62-208	11	0.04	8.44	0.31	ENSMUST00000137061	protein coding
Zfp644-201	5	11.05	1.7	5.47E-03	ENSMUST00000045466	protein coding
Zfp644-203	5	0.53	4.81	0.05	ENSMUST00000112695	protein coding
Zfp644-204	5	11.32	1.1	0.62	ENSMUST00000112696	protein coding
Zfp644-205	5	0.02	37.4	0.08	ENSMUST00000112698	protein coding
Zfp644-206	5	0.1	-12.15	0.62	ENSMUST00000122980	protein coding
Zfp644-207	5	0.69	-1.52	0.77	ENSMUST00000124263	protein coding
Zfp644-209	5	1.41	1.32	0.74	ENSMUST00000127434	protein coding
Zfp644-212	5	1.33	-1.08	0.96	ENSMUST00000135108	protein coding
Zfp65-201	13	8.8	1.23	0.42	ENSMUST00000073157	protein coding
Zfp65-202	13	0.2	1.46	0.82	ENSMUST00000127979	protein coding
Zfp65-203	13	4.89	1.22	0.76	ENSMUST00000130891	protein coding
Zfp654-202	16	12.83	1.45	7.46E-03	ENSMUST00000207826	protein coding
Zfp711-201	X	0.71	-4.44	0.16	ENSMUST00000071814	protein coding
Zfp711-202	X	0.15	-100.36	0.33	ENSMUST00000113409	protein coding

Zfp711-203	X	0.4	-41.9	0.44	ENSMUST0000012 2805	protein coding
Zfp712-201	13	1.5	1.23	0.77	ENSMUST0000016 7565	protein coding
Zfp729a- 201	13	4.18	1.54	2.69E-07	ENSMUST0000001 2314	protein coding
Zfp74-202	7	9.25	1.68	2.09E-07	ENSMUST0000010 8205	protein coding
Zfp74-204	7	1.52	-1.09	0.93	ENSMUST0000010 8212	protein coding
Zfp740-201	15	66.82	1.21	0.06	ENSMUST0000011 8729	protein coding
Zfp740-202	15	7.94	1.7	8.31E-03	ENSMUST0000011 9168	protein coding
Zfp740-203	15	34.88	-1.17	0.58	ENSMUST0000011 9800	protein coding
Zfp740-208	15	9.31	1.3	0.64	ENSMUST0000013 9960	protein coding
Zfp740-209	15	4.4	1.16	0.78	ENSMUST0000014 1465	protein coding
Zfp740-210	15	2.43	1.25	0.78	ENSMUST0000022 9886	protein coding
Zfp740-212	15	0.34	-38.72	0.45	ENSMUST0000023 0867	protein coding
Zfp759-201	13	4.5	-1.1	0.82	ENSMUST0000005 2716	protein coding
Zfp763-201	17	8	1.38	0.39	ENSMUST0000008 7654	protein coding
Zfp784-201	7	0.2	1.24	0.86	ENSMUST0000006 2428	protein coding
Zfp827-201	8	0.12	1.47	0.78	ENSMUST0000008 7927	protein coding
Zfp827-202	8	2.02	-2.13	0.11	ENSMUST0000009 8614	protein coding
Zfp827-204	8	0.12	-14.61	0.59	ENSMUST0000012 9613	protein coding
Zfp827-205	8	0.71	-2.28	0.48	ENSMUST0000014 5827	nonsense mediated decay
Zfp827-206	8	0.08	3.68	0.46	ENSMUST0000014 8713	protein coding
Zfp827-209	8	0.99	-1.99	0.51	ENSMUST0000023 8669	protein coding
Zfp84-201	7	8.97	1.79	1.91E-11	ENSMUST0000003 2802	protein coding
Zfp850-203	7	18.32	-1.34	0.05	ENSMUST0000018 0502	protein coding
Zfp87-201	13	0.73	-7.85	0.27	ENSMUST0000018 0536	nonsense mediated decay
Zfp87-202	13	0.03	-3.61	0.78	ENSMUST0000018 1341	protein coding
Zfp87-203	13	1.73	2.37	0.14	ENSMUST0000018 1573	protein coding

Zfp87-204	13	11.78	1.53	0.06	ENSMUST0000018 1767	protein coding
Zfp874a- 201	13	1.18	-2.91	0.28	ENSMUST0000005 7241	protein coding
Zfp874a- 202	13	3.05	1.53	0.25	ENSMUST0000007 5255	protein coding
Zfp874a- 203	13	0.4	-1.55	0.81	ENSMUST0000018 0580	nonsense mediated decay
Zfp874a- 204	13	2.43	-1.42	0.71	ENSMUST0000022 3682	nonsense mediated decay
Zfp874a- 208	13	3.34	-1.14	0.89	ENSMUST0000022 5479	protein coding
Zfp874a- 209	13	1.09	-1.57	0.72	ENSMUST0000022 5778	protein coding
Zfp874b- 201	13	8.19	1.81	2.84E-05	ENSMUST0000001 9572	protein coding
Zfp874b- 203	13	2.72	-1.09	0.91	ENSMUST0000022 3868	protein coding
Zfp882-201	8	3.81	-1.84	0.15	ENSMUST0000011 0002	protein coding
Zfp882-203	8	0.72	-1.51	0.72	ENSMUST0000012 6607	protein coding
Zfp93-201	7	5.81	1.22	0.69	ENSMUST0000003 2696	protein coding
Zfp945-204	17	1.38	1.6	0.18	ENSMUST0000016 0457	protein coding
Zfp953-201	13	3.27	1.13	0.78	ENSMUST0000008 1582	protein coding
Zfp979-202	4	3.57	-1,361.53	0.09	ENSMUST0000010 5720	protein coding
Zfp979-204	4	1.66	-144.12	0.3	ENSMUST0000013 3006	protein coding
Zfp981-203	4	1.32	-576.96	0.14	ENSMUST0000017 9175	protein coding
Zfp993-201	4	11.27	-656.41	0.15	ENSMUST0000007 0932	protein coding
Zic3-201	X	17.99	1.21	0.54	ENSMUST0000008 8627	protein coding
Zic3-202	X	2.9	-1.02	0.96	ENSMUST0000008 8629	protein coding
Zic3-204	X	1.49	-128.13	0.3	ENSMUST0000013 7687	protein coding
Zkscan16- 201	4	2.37	-1.32	0.65	ENSMUST0000010 7554	protein coding
Zkscan2- 201	7	1.05	1.5	0.44	ENSMUST0000004 2470	protein coding
Zkscan2- 203	7	0.47	3.19	0.16	ENSMUST0000012 8217	protein coding
Zkscan4- 201	13	0.58	1.17	0.84	ENSMUST0000006 2609	protein coding
Zkscan4- 202	13	0.11	6.02	0.29	ENSMUST0000022 5845	protein coding

Zkscan7-201	9	1.2	1.05	0.94	ENSMUST00000063980	protein coding
Zkscan7-202	9	0.28	1.83	0.42	ENSMUST00000215872	protein coding
Zscan10-201	17	49	1.56	5.82E-03	ENSMUST00000095595	protein coding
Zscan10-203	17	0.08	16.71	0.16	ENSMUST00000117606	protein coding
Zscan10-204	17	2.21	-1.06	0.93	ENSMUST00000118369	protein coding
Zscan10-205	17	32.18	-1.45	0.06	ENSMUST00000120967	protein coding
Zscan10-207	17	3.84	1.71	0.28	ENSMUST00000123866	protein coding
Zscan10-209	17	0.24	-67.46	0.38	ENSMUST00000129227	protein coding
Zscan10-211	17	1.01	-5.78	0.32	ENSMUST00000138487	protein coding
Zscan18-204	7	1.23	2.62	0.41	ENSMUST00000210891	nonsense mediated decay
Zscan5b-201	7	0.7	-205.19	0.23	ENSMUST00000072662	protein coding
Zscan5b-203	7	0.09	-1.56	0.82	ENSMUST00000165445	protein coding
Zup1-201	10	0.62	6.54	0.12	ENSMUST00000048222	protein coding
Zup1-202	10	8.26	1.52	0.04	ENSMUST00000218055	protein coding
Zup1-203	10	0.12	23.27	0.12	ENSMUST00000218222	protein coding
Zup1-204	10	1.81	-1.03	0.98	ENSMUST00000218275	nonsense mediated decay
Zup1-205	10	0.24	5.48	0.26	ENSMUST00000218880	protein coding
Zup1-206	10	3.86	-1.07	0.9	ENSMUST00000218892	protein coding
Zup1-208	10	0.08	-1.23	0.9	ENSMUST00000219878	nonsense mediated decay

S.3. Transcript Variants (TE) of Insignificant Genes (GE)

Table S3-1. Expression values & metadata of upregulated transcript variants of insignificant genes						
Name	Chromosome	Max group mean	Fold change	FDR p-value	ENSEMBL	Biotype
Adnp-202	2	7.83	8.6	2.37E-22	ENSMUST000000088001	protein coding
Aebp2-202	6	14.56	17.59	3.77E-10	ENSMUST000000087614	protein coding
Akap8-205	17	12.63	5,709.50	1.08E-07	ENSMUST0000000235764	nonsense mediated decay
Arid2-202	15	2.41	254.72	2.43E-03	ENSMUST0000000134985	protein coding
Arnt-203	3	1.51	12.57	0.03	ENSMUST0000000107160	protein coding
Arnt2-201	7	1.18	933.15	1.60E-03	ENSMUST000000085077	protein coding
Ash1l-202	3	5.39	7.12	1.37E-14	ENSMUST0000000186583	protein coding
Atf2-202	2	1.97	154.75	9.86E-06	ENSMUST0000000090802	protein coding
Atf2-203	2	3.58	1,806.67	3.83E-04	ENSMUST0000000100009	protein coding
Atf2-206	2	14.03	3.79	9.96E-08	ENSMUST0000000112016	protein coding
Bach2-202	4	0.82	194.46	9.12E-05	ENSMUST0000000108180	protein coding
Baz2a-208	10	8.42	2.35	5.40E-03	ENSMUST0000000220049	protein coding
Baz2a-209	10	6.24	8.42	1.44E-12	ENSMUST0000000238829	protein coding
Bbx-201	16	4.42	3.84	4.27E-05	ENSMUST0000000066037	protein coding
Bmal1-203	7	0.84	79.54	1.12E-03	ENSMUST0000000210074	protein coding
Bptf-202	11	0.9	5.36	0.03	ENSMUST0000000106762	protein coding
Bptf-203	11	10.78	2.18	2.84E-11	ENSMUST0000000106763	protein coding
Bptf-208	11	26.2	2.64	1.21E-07	ENSMUST0000000208369	protein coding
Camta1-201	4	2.73	2.07	1.93E-03	ENSMUST0000000049790	protein coding
Camta2-203	11	0.46	280.08	2.56E-03	ENSMUST0000000108544	protein coding
Camta2-205	11	7.49	2.14	0.01	ENSMUST0000000119120	protein coding
Cc2d1a-201	8	24.62	2.15	4.32E-05	ENSMUST0000000040383	protein coding
Cc2d1a-202	8	1.81	24.11	2.94E-05	ENSMUST0000000117424	protein coding

Cenpa-204	5	3.38	64	1.76E-04	ENSMUST00000134846	nonsense mediated decay
Cenpa-209	5	4.2	14.57	0.04	ENSMUST00000199320	protein coding
Cic-212	7	13.85	2.79	3.41E-09	ENSMUST00000169266	protein coding
Cic-213	7	3.13	244.81	3.34E-03	ENSMUST00000169392	protein coding
Creb5-203	6	0.15	147.63	0.02	ENSMUST00000203528	protein coding
Crem-201	18	0.76	287.56	2.67E-03	ENSMUST00000025069	protein coding
Crem-203	18	0.83	306.85	2.46E-03	ENSMUST00000082141	protein coding
Crem-227	18	1.96	46.7	7.03E-05	ENSMUST00000149803	protein coding
Crem-234	18	1.5	381.93	2.14E-03	ENSMUST00000154470	protein coding
Crem-237	18	1.21	227.61	5.34E-03	ENSMUST00000156234	protein coding
Csrnp1-204	9	2.96	1,131.98	6.87E-05	ENSMUST00000215916	protein coding
Csrnp1-205	9	7.44	7.94	6.54E-03	ENSMUST00000216929	protein coding
Cxxc5-206	18	3.88	12.09	4.27E-04	ENSMUST00000237291	protein coding
Dnmt1-203	9	1.68	1,275.46	3.70E-05	ENSMUST00000178110	protein coding
Drap1-201	19	67.33	4.19	2.30E-11	ENSMUST00000025853	protein coding
Drap1-202	19	2.5	235.1	3.88E-03	ENSMUST00000113673	protein coding
Dzip1-201	14	7.2	2.59	1.79E-04	ENSMUST00000004055	protein coding
E2f3-201	13	19	3.21	9.00E-10	ENSMUST00000102948	protein coding
E2f6-201	12	14.85	5.73	1.75E-06	ENSMUST00000020908	protein coding
E2f6-203	12	0.49	21.55	0.01	ENSMUST00000220794	nonsense mediated decay
E4f1-204	17	2.58	849	1.69E-03	ENSMUST00000226754	nonsense mediated decay
E4f1-205	17	4.71	524.32	5.06E-07	ENSMUST00000226941	protein coding
Elf3-201	1	33.55	3.05	1.36E-05	ENSMUST00000003135	protein coding
Elk3-204	10	1.59	8.11	0.04	ENSMUST00000151153	protein coding
Esrrb-206	12	30.36	22.44	5.84E-46	ENSMUST00000167891	protein coding
Flywch1-202	17	3.64	318.02	3.70E-06	ENSMUST00000086325	protein coding

Foxn3-201	12	13.4	2.06	9.61E-08	ENSMUST0000004 6859	protein coding
Foxn3-209	12	2.32	857.97	1.23E-04	ENSMUST0000017 7451	protein coding
Foxo3-202	10	3.59	193.75	3.55E-06	ENSMUST0000010 5501	protein coding
Foxo4-201	X	89.91	2.11	9.54E-27	ENSMUST0000006 2000	protein coding
Foxo4-202	X	0.64	112.99	0.03	ENSMUST0000013 8437	protein coding
Gata4-201	14	5.32	10.05	1.04E-07	ENSMUST0000006 7417	protein coding
Gata4-202	14	6.1	14.15	6.51E-07	ENSMUST0000011 8022	protein coding
Gatad2a- 206	8	2.73	1,279.49	3.91E-05	ENSMUST0000021 2478	protein coding
Glimp-209	3	20.62	2.51	1.53E-07	ENSMUST0000017 7005	protein coding
Gmeb1- 203	4	3.43	4.39	0.04	ENSMUST0000010 5965	protein coding
Gmeb2- 203	2	0.89	89.95	0.03	ENSMUST0000013 0475	protein coding
Gmeb2- 205	2	0.81	38.05	3.53E-03	ENSMUST0000014 1110	nonsense mediated decay
Grhl1-202	12	11.5	2.14	2.41E-04	ENSMUST0000008 5553	protein coding
Gtf2ird1- 201	5	1.56	712.65	5.97E-04	ENSMUST0000007 3161	protein coding
Gtf2ird1- 203	5	2.89	1,306.98	3.76E-05	ENSMUST0000010 0650	protein coding
Gtf2ird1- 204	5	2.3	1,085.61	7.72E-05	ENSMUST0000010 0652	protein coding
Gtf2ird1- 209	5	12.55	1,352.22	5.90E-14	ENSMUST0000017 1794	protein coding
Gtf2ird1- 229	5	3.31	13.46	1.05E-05	ENSMUST0000020 2554	protein coding
Hbp1-205	12	1.37	31.04	1.00E-02	ENSMUST0000017 6084	protein coding
Hdx-201	X	2.26	3.39	1.79E-05	ENSMUST0000003 8472	protein coding
Hmg20a- 205	9	5.07	4.4	0.02	ENSMUST0000021 5269	protein coding
Hsf1-204	15	0.75	38.38	1.58E-03	ENSMUST0000022 6872	protein coding
Hsf1-211	15	1.03	4.6	0.02	ENSMUST0000022 8757	nonsense mediated decay
Hsf1-213	15	4.68	11.42	2.13E-04	ENSMUST0000022 8868	nonsense mediated decay
Ikzf4-209	10	0.64	133.44	1.34E-05	ENSMUST0000023 8610	protein coding
Irf1-201	11	4.19	287.35	1.00E-02	ENSMUST0000001 9043	protein coding

Irf1-207	11	1.12	73.5	0.04	ENSMUST00000138913	protein coding
Irf3-201	7	8.74	2.75	2.67E-03	ENSMUST00000003284	protein coding
Irf3-213	7	10.07	2.53	0.02	ENSMUST00000209066	protein coding
Kat7-204	11	32.98	7.12	6.90E-32	ENSMUST00000107733	protein coding
Kat7-205	11	37.28	4.86	6.10E-36	ENSMUST00000107734	protein coding
Kat7-212	11	36.51	4.9	9.67E-32	ENSMUST00000249615	protein coding
Kcmf1-206	6	2.09	146.01	0.02	ENSMUST00000206378	protein coding
Kcnip3-203	2	0.92	47.32	8.77E-04	ENSMUST00000103215	protein coding
Kmt2b-202	7	0.14	155.7	0.02	ENSMUST00000108154	protein coding
Lcor-201	19	5.68	2.04	2.40E-04	ENSMUST00000067795	protein coding
Lcorl-202	5	1.15	852.69	1.25E-04	ENSMUST00000045586	protein coding
Lin28a-204	4	1.43	16.76	0.01	ENSMUST00000176897	protein coding
Lin54-202	5	1.3	196.37	2.66E-05	ENSMUST00000239513	protein coding
Lin54-203	5	1.44	11.21	4.65E-03	ENSMUST00000239514	nonsense mediated decay
Lmx1a-201	1	0.18	78.64	0.05	ENSMUST00000028003	protein coding
Mafg-203	11	1.76	185.51	9.58E-03	ENSMUST00000106181	protein coding
Mafg-204	11	17.26	3.37	5.07E-04	ENSMUST00000106182	protein coding
Maz-201	7	26.9	9.69	6.19E-11	ENSMUST00000032916	protein coding
Mbd1-202	18	10.94	3.16	1.01E-07	ENSMUST00000224047	protein coding
Mbd6-202	10	12.33	2.07	4.70E-03	ENSMUST00000119078	protein coding
Mlx-201	11	25.84	4.62	9.44E-09	ENSMUST00000017945	protein coding
Mlxipl-208	5	1.51	20.94	0.02	ENSMUST00000154840	protein coding
Myc-206	15	24.51	4.53	2.37E-03	ENSMUST00000167731	protein coding
Mzf1-201	7	0.2	96.54	0.02	ENSMUST00000069289	protein coding
Mzf1-202	7	0.44	121.05	0.03	ENSMUST00000182087	protein coding
Nacc2-202	2	0.28	244.54	3.22E-03	ENSMUST00000114159	protein coding

Ncoa2-203	1	3.5	2.23	3.02E-03	ENSMUST00000081713	protein coding
Nfat5-201	8	0.51	304.88	0.02	ENSMUST00000075922	protein coding
Nfat5-203	8	0.71	539.7	1.33E-03	ENSMUST00000125721	protein coding
Nfat5-206	8	5.56	2.57	0.01	ENSMUST00000133026	nonsense mediated decay
Nfat5-214	8	5.22	2,123.60	3.69E-15	ENSMUST00000169453	protein coding
Nfe2l1-201	11	73.18	3.03	6.50E-74	ENSMUST00000081775	protein coding
Nfe2l1-203	11	7.15	25.81	2.05E-08	ENSMUST00000107658	protein coding
Nfya-212	17	4.8	2,299.23	5.94E-06	ENSMUST00000162460	protein coding
Nfyb-205	10	4.91	65	8.49E-05	ENSMUST00000142523	protein coding
Nfyc-201	4	53.28	3.03	5.50E-09	ENSMUST00000043429	protein coding
Nme2-201	11	834.13	3.15	2.88E-45	ENSMUST00000021217	protein coding
Nr1h2-203	7	14.28	3,663.92	4.69E-05	ENSMUST00000107911	protein coding
Nr1h2-204	7	1.78	416.34	1.97E-03	ENSMUST00000107912	protein coding
Nr3c1-203	18	2.66	2,206.70	2.50E-04	ENSMUST00000115567	protein coding
Nr4a1-202	15	12.97	2.04	4.17E-03	ENSMUST00000228985	protein coding
Nr6a1-201	2	24.36	2.24	2.61E-06	ENSMUST00000076275	protein coding
Nr6a1-202	2	14.99	27.06	6.04E-49	ENSMUST00000112877	protein coding
Nrf1-206	6	1.08	10.54	0.01	ENSMUST00000115204	protein coding
Nrf1-211	6	5.26	2.05	0.05	ENSMUST00000115212	protein coding
Pa2g4-202	10	417.87	6.67	5.63E-146	ENSMUST00000131728	protein coding
Pax6-208	2	0.16	9.91	0.05	ENSMUST00000111088	protein coding
Pbx2-201	17	43.52	2.18	3.30E-11	ENSMUST00000038149	protein coding
Pbx2-205	17	5.2	800.76	1.79E-04	ENSMUST00000183827	protein coding
Phf1-201	17	2.98	10.81	9.19E-04	ENSMUST00000073724	protein coding
Pknox1-209	17	1.25	72.43	0.04	ENSMUST00000235869	protein coding
Pknox1-210	17	1.22	30.75	4.80E-03	ENSMUST00000236493	protein coding

Pou2f1-209	1	0.7	230.03	9.28E-03	ENSMUST00000160908	protein coding
Pou2f2-203	7	0.16	46.63	0.01	ENSMUST00000108415	protein coding
Pou6f1-201	15	1.82	4.57	6.55E-03	ENSMUST00000073837	protein coding
Pou6f1-203	15	1.9	232.46	1.47E-06	ENSMUST00000176271	protein coding
Pou6f1-205	15	0.7	254.69	2.57E-03	ENSMUST00000177202	nonsense mediated decay
Prdm15-201	16	0.71	122.61	9.25E-05	ENSMUST00000095849	protein coding
Prrx2-201	2	1.72	5.63	0.02	ENSMUST00000041659	protein coding
Rara-201	11	0.21	91.68	0.03	ENSMUST00000068133	protein coding
Rara-204	11	23.25	4.58	1.89E-15	ENSMUST00000107475	protein coding
Rbck1-202	2	68.49	2.8	9.63E-11	ENSMUST00000109847	protein coding
Rela-205	19	1.44	70.17	0.04	ENSMUST00000237863	protein coding
Rela-206	19	1.12	298.47	0.02	ENSMUST00000238000	nonsense mediated decay
Relb-201	7	1.31	8.87	0.03	ENSMUST00000049912	protein coding
Rexo4-202	2	42.32	2.99	2.92E-03	ENSMUST00000114020	protein coding
Rfx1-201	8	19.14	2.1	4.48E-04	ENSMUST00000005600	protein coding
Rfx5-202	3	1.84	5.15	2.72E-03	ENSMUST00000107253	protein coding
Rfx5-207	3	5.96	3,310.82	8.13E-05	ENSMUST00000137088	protein coding
Rlf-203	4	0.55	464.69	7.85E-03	ENSMUST00000168615	protein coding
Rora-201	9	2.01	2.4	5.09E-04	ENSMUST00000034766	protein coding
Rreb1-203	13	4.03	2.44	5.25E-05	ENSMUST00000110238	protein coding
Rreb1-211	13	3.47	6.95	0.03	ENSMUST00000162849	protein coding
Rxrb-201	17	16.69	7	6.89E-09	ENSMUST00000044858	protein coding
Setdb1-201	3	5.36	2.06	8.63E-03	ENSMUST00000015841	protein coding
Ski-201	4	57.98	10.09	2.25E-79	ENSMUST00000030917	protein coding
Skil-201	3	5.48	2.35	2.55E-03	ENSMUST00000029194	protein coding
Skil-205	3	1.48	137.88	0.02	ENSMUST00000123532	protein coding

Smad4-201	18	77.96	2.09	4.88E-26	ENSMUST00000025393	protein coding
Smad5-202	13	1.18	60.28	4.59E-04	ENSMUST00000109874	protein coding
Snai3-201	2	15.23	23.48	1.62E-08	ENSMUST00000035427	protein coding
Son-203	16	9.7	4.26	2.59E-15	ENSMUST00000117633	protein coding
Son-205	16	1.74	554.99	6.57E-03	ENSMUST00000122302	protein coding
Sox13-205	1	13.3	4.87	4.90E-11	ENSMUST00000153799	protein coding
Sp3-202	2	47.97	19.89	5.50E-54	ENSMUST00000102689	protein coding
Spen-202	4	8.25	2.01	6.00E-05	ENSMUST00000105786	protein coding
Srebf1-201	11	40.01	2.55	1.89E-09	ENSMUST00000020846	protein coding
Stat3-202	11	1.38	3.29	0.04	ENSMUST00000103114	protein coding
Tcf12-201	9	10.65	5.64	3.24E-11	ENSMUST00000034755	protein coding
Tcf20-203	15	6.88	9.87	3.75E-04	ENSMUST00000229439	protein coding
Tcf20-205	15	6.54	43.63	4.54E-05	ENSMUST00000230403	protein coding
Tcf3-202	10	25.07	2.31	0.01	ENSMUST00000020379	protein coding
Tcf3-207	10	11.17	40.22	1.44E-20	ENSMUST00000105343	protein coding
Tcf3-210	10	13.36	467.61	1.30E-23	ENSMUST00000105346	protein coding
Tcf712-211	19	0.53	33.31	5.30E-03	ENSMUST00000111658	protein coding
Tead1-201	7	3.15	18	2.43E-15	ENSMUST00000059768	protein coding
Tead1-207	7	1.53	241.68	3.42E-03	ENSMUST00000165036	protein coding
Tead1-211	7	1.46	39.29	6.36E-04	ENSMUST00000170352	protein coding
Tead1-212	7	0.62	89.94	0.03	ENSMUST00000171197	protein coding
Tead1-216	7	10.53	441.92	6.04E-49	ENSMUST00000239404	protein coding
Tead1-217	7	3.42	15.46	9.59E-23	ENSMUST00000239442	protein coding
Tead2-203	7	9.58	4.51	1.77E-17	ENSMUST00000107801	protein coding
Tead2-206	7	4.82	28.5	2.54E-04	ENSMUST00000209437	protein coding
Tead2-211	7	3.35	16.35	1.34E-03	ENSMUST00000210447	protein coding

Tead2-216	7	5.84	61.59	2.33E-04	ENSMUST0000021 1744	protein coding
Tef-201	15	20.71	2.54	9.71E-07	ENSMUST0000002 3024	protein coding
Tfap2a- 206	13	0.47	121.15	0.03	ENSMUST0000022 4665	protein coding
Tfcp2-203	15	2.05	5.69	0.03	ENSMUST0000022 9581	protein coding
Tfdp2-204	9	4.79	11.45	2.01E-04	ENSMUST0000017 9065	protein coding
Tfe3-201	X	34.95	6.37	3.91E-14	ENSMUST0000007 7680	protein coding
Tfe3-202	X	1.46	71.38	0.04	ENSMUST0000007 9542	protein coding
Tfe3-207	X	0.59	237.71	0.02	ENSMUST0000011 5680	nonsense mediated decay
Tfe3-211	X	0.98	77.83	6.32E-04	ENSMUST0000013 7467	protein coding
Tfeb-201	17	14.42	4.15	1.08E-04	ENSMUST0000002 4786	protein coding
Thap7-201	16	8.58	5.65	3.50E-04	ENSMUST0000010 0125	protein coding
Thap7-211	16	1.13	170.5	0.01	ENSMUST0000023 2114	nonsense mediated decay
Tigd3-202	19	1.32	92.46	9.17E-04	ENSMUST0000023 6767	protein coding
Trp73-201	4	0.36	20.18	0.04	ENSMUST0000009 7762	protein coding
Ubp1-202	9	26.29	2.72	2.47E-07	ENSMUST0000008 4885	protein coding
Ubp1-203	9	2.97	165.46	9.03E-07	ENSMUST0000021 4095	protein coding
Usf2-202	7	12.24	9.45	1.07E-04	ENSMUST0000010 8119	protein coding
Ybx2-201	11	2.53	5.66	0.02	ENSMUST0000001 8698	protein coding
Zbtb14- 202	17	6.11	3.33	3.32E-03	ENSMUST0000011 2674	protein coding
Zbtb14- 203	17	2.55	4.07	7.33E-03	ENSMUST0000011 2676	protein coding
Zbtb18- 212	1	4.27	2.61	0.04	ENSMUST0000019 5612	protein coding
Zbtb2-202	10	3.21	1,326.51	3.28E-05	ENSMUST0000010 0078	protein coding
Zbtb21- 203	16	3.03	4.15	7.35E-04	ENSMUST0000011 3734	protein coding
Zbtb21- 205	16	0.58	69.9	0.05	ENSMUST0000023 1263	protein coding
Zbtb21- 208	16	2.45	22.45	1.19E-04	ENSMUST0000023 2187	protein coding
Zbtb34- 202	2	4.72	4,458.32	3.43E-07	ENSMUST0000011 3158	protein coding

Zbtb44-201	9	16.57	3.22	2.77E-22	ENSMUST00000115222	protein coding
Zbtb5-204	4	0.31	192.23	0.01	ENSMUST00000180217	protein coding
Zbtb6-202	2	1.97	10.51	2.52E-03	ENSMUST00000112932	protein coding
Zbtb7a-202	10	8.84	2,129.48	6.26E-06	ENSMUST00000117956	protein coding
Zbtb7c-202	18	0.26	73.48	0.04	ENSMUST00000167921	protein coding
Zfand5-205	19	3.03	4.25	3.58E-07	ENSMUST00000237651	protein coding
Zfp12-201	5	2.15	2.81	0.03	ENSMUST00000032591	protein coding
Zfp12-203	5	2.16	1,197.00	6.79E-04	ENSMUST00000077485	protein coding
Zfp131-203	13	8.49	8.28	4.59E-04	ENSMUST00000223722	protein coding
Zfp160-202	17	0.69	189.15	0.01	ENSMUST00000231482	protein coding
Zfp160-205	17	0.59	74.73	0.04	ENSMUST00000232354	protein coding
Zfp207-203	11	2.46	3.69	0.02	ENSMUST00000108216	protein coding
Zfp207-204	11	17.3	2.53	7.40E-06	ENSMUST00000123726	nonsense mediated decay
Zfp207-207	11	11.54	2.26	4.48E-05	ENSMUST00000178665	nonsense mediated decay
Zfp207-208	11	11.92	2.24	1.72E-04	ENSMUST00000188489	protein coding
Zfp217-201	2	20.45	7.12	2.01E-23	ENSMUST00000063710	protein coding
Zfp219-204	14	32.82	3,759.76	2.39E-13	ENSMUST00000226522	protein coding
Zfp236-206	18	4	3.59	2.92E-03	ENSMUST00000183324	nonsense mediated decay
Zfp275-201	X	6.51	2.05	2.64E-03	ENSMUST00000033731	protein coding
Zfp280c-202	X	3.97	2.09	0.04	ENSMUST00000076635	protein coding
Zfp280d-201	9	10.24	1,215.12	1.59E-16	ENSMUST00000098576	protein coding
Zfp280d-205	9	3.09	113.11	7.38E-06	ENSMUST00000183468	protein coding
Zfp324-203	7	0.37	46.59	3.82E-03	ENSMUST00000128293	nonsense mediated decay
Zfp326-206	5	3.05	6.25	0.03	ENSMUST00000138615	nonsense mediated decay
Zfp335-203	2	0.19	112.08	0.04	ENSMUST00000183830	nonsense mediated decay
Zfp346-203	13	0.78	127.68	0.03	ENSMUST00000159278	protein coding

Zfp37-205	4	1.48	65.42	4.47E-04	ENSMUST00000221329	protein coding
Zfp385a-203	15	13.89	2.84	1.19E-03	ENSMUST00000229551	protein coding
Zfp397-204	18	2.75	6.65	0.04	ENSMUST00000225682	protein coding
Zfp410-201	12	19.05	12.23	2.44E-14	ENSMUST00000045931	protein coding
Zfp426-202	9	4.04	11.28	1.51E-05	ENSMUST00000115562	protein coding
Zfp426-212	9	0.96	89.07	0.03	ENSMUST00000169269	protein coding
Zfp446-202	7	9.4	3.08	4.70E-06	ENSMUST00000108535	protein coding
Zfp462-201	4	7.78	3.95	4.60E-04	ENSMUST00000030131	protein coding
Zfp513-202	5	22.21	3.13	9.74E-06	ENSMUST00000114590	protein coding
Zfp523-202	17	3.66	374.4	1.14E-06	ENSMUST00000073534	protein coding
Zfp574-202	7	2.99	4.31	1.09E-03	ENSMUST00000179556	protein coding
Zfp598-202	17	38.26	2.03	2.79E-03	ENSMUST00000234956	protein coding
Zfp637-208	6	0.78	70.17	0.04	ENSMUST00000136889	protein coding
Zfp64-201	2	72.33	2.04	7.43E-09	ENSMUST00000087971	protein coding
Zfp64-203	2	5.78	2.16	0.03	ENSMUST00000109162	protein coding
Zfp646-204	7	3.84	2.5	6.32E-04	ENSMUST00000206340	protein coding
Zfp652-203	11	0.73	92.8	3.91E-05	ENSMUST00000133070	nonsense mediated decay
Zfp655-206	5	4.51	3.43	0.03	ENSMUST00000200039	protein coding
Zfp667-201	7	6.71	4.98	9.25E-08	ENSMUST00000086327	protein coding
Zfp667-205	7	0.58	277.77	2.57E-03	ENSMUST00000170776	protein coding
Zfp668-203	7	2.78	187.35	7.58E-07	ENSMUST00000106262	protein coding
Zfp687-205	3	5.1	5.34	2.33E-04	ENSMUST00000137799	nonsense mediated decay
Zfp688-206	7	12.03	2.86	0.02	ENSMUST00000148483	nonsense mediated decay
Zfp7-205	15	46.58	3.4	1.88E-24	ENSMUST00000230106	protein coding
Zfp777-201	6	4.13	1,686.48	5.86E-04	ENSMUST00000095944	protein coding
Zfp800-202	6	1.44	804.97	1.46E-04	ENSMUST00000115320	protein coding

Zfp853-203	5	0.42	33.87	4.65E-03	ENSMUST00000212715	protein coding
Zfp90-201	8	1.37	463.77	6.90E-04	ENSMUST00000034382	protein coding
Zfp943-202	17	1.62	11.09	2.11E-03	ENSMUST00000153985	protein coding
Zfp995-205	17	5.85	4.91	4.23E-04	ENSMUST00000190066	protein coding
Zfx-201	X	4.93	4,436.61	5.33E-05	ENSMUST00000088102	protein coding
Zgpat-201	2	4.46	5.81	2.72E-03	ENSMUST00000029105	protein coding
Zgpat-202	2	15.59	2.63	7.49E-04	ENSMUST00000108807	protein coding
Zhx1-202	15	0.3	196.8	0.01	ENSMUST00000110168	protein coding
Zkscan1-203	5	1.13	225.04	4.53E-05	ENSMUST00000110962	protein coding
Zkscan5-201	5	0.9	10.38	0.02	ENSMUST00000031601	protein coding
Zkscan6-201	11	0.68	203.98	0.01	ENSMUST00000018491	protein coding
Zkscan8-201	13	7.13	2.59	1.27E-06	ENSMUST00000045228	protein coding
Zscan21-204	5	12.31	3,497.75	5.32E-05	ENSMUST00000110960	protein coding
Zscan22-204	7	0.55	128.14	0.02	ENSMUST00000120809	protein coding
Zscan29-205	2	2.57	226.06	5.20E-07	ENSMUST00000163766	protein coding
Zxdc-202	6	11.53	2.07	1.08E-04	ENSMUST00000075117	protein coding
Zzz3-202	3	8.06	3.68	6.26E-11	ENSMUST00000106100	protein coding
Zzz3-204	3	9.84	2.04	1.18E-04	ENSMUST00000106103	protein coding
Zzz3-210	3	2.06	6.74	0.01	ENSMUST00000200570	protein coding

Table S3-2. Expression values & metadata of downregulated transcript variants of insignificant genes

Name	Chromosome	Max group mean	Fold change	FDR p-value	ENSEMBL	Biotype
Aebp2-205	6	28.48	-76.39	1.76E-23	ENSMUST00000160836	protein coding
Ahctf1-202	1	5.03	-3.86	0.04	ENSMUST00000125816	nonsense mediated decay
Ahctf1-203	1	12.72	-22.58	8.52E-08	ENSMUST00000127250	nonsense mediated decay
Akap8-206	17	13.56	-7.85	5.39E-10	ENSMUST00000236267	nonsense mediated decay
Akap8l-204	17	1.57	-20.11	0.01	ENSMUST00000235614	nonsense mediated decay
Arnt2-207	7	1.2	-1,111.18	0.01	ENSMUST00000208232	protein coding
Atf2-212	2	8.38	-3.32	0.01	ENSMUST00000136958	protein coding
Atf2-219	2	7.56	-1,925.86	7.49E-04	ENSMUST00000173010	nonsense mediated decay
Atf3-203	1	8.64	-2,553.40	2.49E-04	ENSMUST00000195117	protein coding
Bach2-207	4	0.32	-416.83	0.04	ENSMUST00000171600	protein coding
Baz2a-203	10	5.85	-3.28	3.45E-03	ENSMUST00000217851	protein coding
Bbx-205	16	1.28	-8.18	5.56E-03	ENSMUST00000114488	protein coding
Bmal1-206	7	9.71	-7.36	1.01E-13	ENSMUST00000211770	protein coding
Bptf-207	11	6.7	-4.41	0.02	ENSMUST00000149486	protein coding
Camta1-203	4	1.26	-135.56	1.79E-05	ENSMUST00000105668	protein coding
Carf-201	1	2.07	-10.54	4.47E-04	ENSMUST00000027171	protein coding
Cenpa-201	5	60.08	-9,249.44	9.86E-06	ENSMUST00000031073	nonsense mediated decay
Cenpa-210	5	21.92	-2.22	2.80E-03	ENSMUST00000199617	nonsense mediated decay
Cenps-206	4	9.33	-12.02	2.62E-04	ENSMUST00000176124	protein coding
Champ1-202	8	11.16	-4.06	3.37E-09	ENSMUST00000128557	protein coding
Chchd3-202	6	5.28	-3.77	0.02	ENSMUST00000115091	protein coding
Cic-204	7	5.84	-413.51	8.48E-03	ENSMUST00000163901	protein coding
Creb1-209	1	11.34	-5.91	1.29E-03	ENSMUST00000190348	protein coding
Deaf1-202	7	6.15	-565.33	5.18E-03	ENSMUST00000209397	nonsense mediated decay

Dmtf1-207	5	13.93	-5,206.54	3.80E-05	ENSMUST00000183973	protein coding
Dnmt1-207	9	1.01	-876.36	2.13E-03	ENSMUST00000216540	protein coding
Drap1-209	19	83.91	-2.07	3.56E-05	ENSMUST00000136579	protein coding
Dzip1-202	14	2.05	-7.52	3.67E-05	ENSMUST00000047208	protein coding
E2f3-203	13	12.55	-4.64	9.28E-09	ENSMUST00000221536	protein coding
E4f1-202	17	1.53	-10.92	3.88E-03	ENSMUST00000226654	nonsense mediated decay
Erf-202	7	26.32	-4.84	2.05E-06	ENSMUST00000116343	protein coding
Foxn3-202	12	2.58	-28.29	1.76E-04	ENSMUST00000085108	protein coding
Foxn3-207	12	1.76	-45.33	3.90E-03	ENSMUST00000177269	protein coding
Gata4-203	14	6.78	-5.32	1.02E-03	ENSMUST00000121312	protein coding
Gatad2b-201	3	14.59	-2.25	3.78E-04	ENSMUST00000049382	protein coding
Gatad2b-204	3	2.16	-5.22	0.04	ENSMUST00000199607	protein coding
Gmeb1-201	4	2.5	-968.78	0.02	ENSMUST00000030733	protein coding
Gmeb1-207	4	7.16	-7.04	4.22E-24	ENSMUST00000168553	protein coding
Gpbp1-204	13	51.05	-6.56	2.42E-23	ENSMUST00000136471	nonsense mediated decay
Gpbp1l1-202	4	33.4	-3.23	4.55E-10	ENSMUST00000106475	protein coding
Grhl1-201	12	2.15	-1,022.58	1.83E-03	ENSMUST00000020985	protein coding
Gtf2ird1-202	5	6.4	-5.52	8.63E-07	ENSMUST00000074114	protein coding
Gtf2ird1-206	5	12.7	-3.79	3.69E-06	ENSMUST00000111244	protein coding
Gtf2ird1-212	5	1.62	-10.67	3.15E-03	ENSMUST00000200944	protein coding
Gtf2ird1-215	5	4.38	-52.64	6.87E-04	ENSMUST00000201495	nonsense mediated decay
Gtf2ird1-220	5	4.53	-48.43	7.35E-04	ENSMUST00000202104	protein coding
Gtf2ird1-231	5	7.77	-2.77	0.02	ENSMUST00000202829	protein coding
Hbp1-208	12	17.12	-8.35	4.06E-06	ENSMUST00000176520	protein coding
Hbp1-209	12	4.93	-8.18	6.56E-03	ENSMUST00000176643	protein coding
Hif1a-202	12	36.68	-2.86	6.73E-21	ENSMUST00000110461	protein coding

Hmbox1-210	14	1.8	-7.36	0.03	ENSMUST00000177326	protein coding
Homez-204	14	4.55	-6.76	0.01	ENSMUST00000176259	protein coding
Hsf1-214	15	9.36	-6.54	1.85E-06	ENSMUST00000229363	protein coding
Ikzf4-210	10	0.53	-420.03	0.01	ENSMUST00000238712	protein coding
Irf3-203	7	7.9	-654.96	3.86E-03	ENSMUST00000207128	protein coding
Irf9-205	14	4.08	-8.06	3.70E-03	ENSMUST00000138037	protein coding
Kat7-201	11	44.98	-13.79	1.17E-68	ENSMUST00000072621	protein coding
Kat7-202	11	63.81	-17	2.47E-101	ENSMUST00000092766	protein coding
Kat7-206	11	22.22	-2.3	5.76E-06	ENSMUST00000138671	protein coding
Kdm2a-212	19	10.81	-7.54	1.79E-05	ENSMUST00000176653	protein coding
Kdm2a-213	19	15.01	-4.49	2.03E-10	ENSMUST00000235335	nonsense mediated decay
Kdm2b-202	5	7.87	-4.5	1.28E-03	ENSMUST00000046073	protein coding
Kdm2b-203	5	17.84	-3.63	3.50E-09	ENSMUST00000086200	protein coding
Kdm2b-207	5	1.19	-32.93	9.17E-03	ENSMUST00000127403	nonsense mediated decay
Lcor-203	19	1.26	-76.38	1.68E-04	ENSMUST00000172371	protein coding
Lcorl-205	5	1.53	-5.73	0.03	ENSMUST00000121573	protein coding
Max-202	12	38.75	-2.6	5.06E-08	ENSMUST00000110395	protein coding
Max-205	12	8.01	-6.35	3.86E-03	ENSMUST00000218640	protein coding
Maz-204	7	118.39	-3.83	1.76E-87	ENSMUST00000206254	protein coding
Mbd3-202	10	29.56	-22.28	1.47E-29	ENSMUST00000105347	protein coding
Mbd3-206	10	76.24	-3.15	5.31E-10	ENSMUST00000142997	protein coding
Mbd4-204	6	2.95	-2.88	0.02	ENSMUST00000147282	nonsense mediated decay
Meis2-201	2	0.61	-13.04	0.01	ENSMUST00000028639	protein coding
Mga-215	2	12.52	-3.6	3.09E-09	ENSMUST00000156510	protein coding
Mterf3-214	13	1.63	-15.19	0.04	ENSMUST00000224085	nonsense mediated decay
Mterf4-203	1	2.11	-3.16	0.04	ENSMUST00000112944	protein coding

Mxi1-205	19	13.79	-3,061.90	3.50E-03	ENSMUST00000235880	protein coding
Mybl1-202	1	6.25	-2.3	2.46E-03	ENSMUST00000115468	protein coding
Myc-202	15	12.76	-2.54	0.04	ENSMUST00000159327	protein coding
Mynn-206	3	11.6	-2.08	3.78E-04	ENSMUST00000195751	nonsense mediated decay
Ncoa1-202	12	1.66	-20.8	1.58E-05	ENSMUST00000217674	protein coding
Nfat5-211	8	1.91	-1,473.86	7.60E-04	ENSMUST00000151114	protein coding
Nfat5-213	8	0.66	-631.63	0.02	ENSMUST00000154474	nonsense mediated decay
Nfatc3-202	8	6.58	-2	2.11E-03	ENSMUST00000211991	protein coding
Nfatc3-206	8	6.48	-3,216.45	1.32E-04	ENSMUST00000212742	protein coding
Nfe2l1-202	11	16.25	-9,755.29	8.92E-06	ENSMUST00000107657	protein coding
Nfe2l1-204	11	7.2	-3.73	1.08E-04	ENSMUST00000107659	protein coding
Nfe2l1-210	11	42.43	-17.13	2.69E-114	ENSMUST00000167110	protein coding
Nfe2l1-212	11	5.21	-6.33	0.01	ENSMUST00000169828	protein coding
Nfya-203	17	18.64	-2.14	5.88E-05	ENSMUST00000159063	protein coding
Nfyc-202	4	3.53	-226.46	0.03	ENSMUST00000097906	protein coding
Nfyc-203	4	55.25	-16,105.36	2.31E-06	ENSMUST00000118902	protein coding
Nme2-202	11	337.9	-4.24	1.70E-44	ENSMUST00000072566	protein coding
Nr3c1-202	18	0.84	-35.02	2.05E-03	ENSMUST00000097592	protein coding
Nr6a1-210	2	11.7	-9.41	3.55E-04	ENSMUST00000168098	protein coding
Nrf1-203	6	6.72	-6.54	4.77E-03	ENSMUST00000069831	protein coding
Nrf1-214	6	28.34	-2.47	2.86E-05	ENSMUST00000132866	protein coding
Nrf1-216	6	7.98	-4.12	0.03	ENSMUST00000133928	protein coding
Nrf1-219	6	8.21	-24.65	3.28E-06	ENSMUST00000167972	protein coding
Pa2g4-201	10	538.86	-9.73	4.56E-138	ENSMUST00000026425	protein coding
Patz1-207	11	7.93	-5.74	1.21E-04	ENSMUST00000134089	protein coding
Pcgf2-206	11	28.82	-2.07	2.42E-04	ENSMUST00000169807	protein coding

Pcgf2-207	11	3.67	-4.48	1.28E-03	ENSMUST00000179765	protein coding
Phf1-206	17	2.09	-9.57	4.23E-03	ENSMUST00000237412	protein coding
Plagl2-202	2	3.71	-2,475.53	2.54E-04	ENSMUST00000109795	protein coding
Pou2f1-201	1	3.91	-1,365.37	1.72E-03	ENSMUST00000027850	protein coding
Pou2f1-205	1	0.16	-29.78	3.05E-04	ENSMUST00000111427	protein coding
Pou2f1-216	1	0.98	-57.24	2.52E-03	ENSMUST00000184643	protein coding
Pou6f1-202	15	2.73	-15	7.10E-06	ENSMUST00000176140	nonsense mediated decay
Preb-204	5	14.01	-6.31	2.54E-04	ENSMUST00000201002	protein coding
Rara-203	11	15.47	-18.62	3.69E-27	ENSMUST00000107474	protein coding
Rara-207	11	7.55	-3,973.95	7.96E-05	ENSMUST00000164748	protein coding
Rbck1-201	2	26.39	-4.56	5.85E-14	ENSMUST00000028964	protein coding
Rela-204	19	1.74	-229.72	0.03	ENSMUST00000237838	nonsense mediated decay
Relb-209	7	1.55	-366.6	0.01	ENSMUST00000208087	nonsense mediated decay
Repin1-207	6	1.4	-649.81	6.08E-03	ENSMUST00000163452	protein coding
Rfx5-201	3	1.05	-677.22	4.79E-03	ENSMUST00000029772	protein coding
Rfx5-204	3	0.91	-329.33	0.02	ENSMUST00000107255	protein coding
Safb-210	17	6.65	-4.25	0.03	ENSMUST00000182951	nonsense mediated decay
Ski-202	4	27.12	-11.51	7.13E-63	ENSMUST00000084103	protein coding
Skil-202	3	1.1	-21.62	9.76E-03	ENSMUST00000117728	protein coding
Skil-203	3	25.02	-3.22	5.16E-07	ENSMUST00000118204	protein coding
Son-208	16	21.91	-2.05	1.58E-11	ENSMUST00000140312	nonsense mediated decay
Sp1-202	15	5.51	-2.78	1.70E-04	ENSMUST00000163709	protein coding
Sp2-202	11	11.83	-2.48	7.70E-04	ENSMUST00000107623	protein coding
Srcap-205	7	0.73	-522.26	8.28E-03	ENSMUST00000186954	protein coding
Tbp-204	17	13.67	-12.19	1.86E-05	ENSMUST00000119879	protein coding
Tcf12-215	9	1.09	-258.24	0.02	ENSMUST00000184448	protein coding

Tcf3-205	10	25.21	-1,539.19	1.16E-15	ENSMUST00000105341	protein coding
Tcf3-206	10	1.28	-152.92	0.04	ENSMUST00000105342	protein coding
Tcf3-208	10	3.93	-1,796.32	4.60E-04	ENSMUST00000105344	protein coding
Tead2-202	7	11.64	-8.23	2.87E-06	ENSMUST00000097216	protein coding
Terf2-203	8	15.23	-2.34	1.50E-05	ENSMUST00000116425	protein coding
Terf2-207	8	1.69	-5.92	0.01	ENSMUST00000142616	nonsense mediated decay
Tfap4-202	16	1.74	-216.31	0.03	ENSMUST00000229956	protein coding
Tfdp1-201	8	178.3	-2.81	5.41E-54	ENSMUST00000170909	protein coding
Tfdp2-211	9	6.15	-163.18	1.48E-06	ENSMUST00000189606	protein coding
Tfeb-204	17	1.65	-604.73	7.34E-03	ENSMUST00000113288	protein coding
Thap4-205	1	21.69	-6.63	4.11E-05	ENSMUST00000189728	protein coding
Tigd3-201	19	3.19	-3.37	0.04	ENSMUST00000055911	protein coding
Trp73-205	4	0.59	-91.41	8.89E-04	ENSMUST00000133533	protein coding
Ubp1-205	9	23.61	-4.31	9.63E-05	ENSMUST00000216558	protein coding
Usf2-209	7	39.13	-3.92	1.06E-14	ENSMUST00000170699	nonsense mediated decay
Usf3-204	16	2.58	-2.04	0.04	ENSMUST00000169582	protein coding
Wiz-204	17	9.5	-2.53	1.92E-04	ENSMUST00000163107	nonsense mediated decay
Ybx2-202	11	2.83	-96.89	5.05E-04	ENSMUST00000108601	protein coding
Zbed3-202	13	6.59	-1,996.64	4.27E-04	ENSMUST00000221807	protein coding
Zbtb21-202	16	7.23	-2.72	5.45E-06	ENSMUST00000063605	protein coding
Zbtb25-201	12	4.29	-2.85	0.05	ENSMUST00000167011	protein coding
Zbtb25-202	12	2.86	-2.78	0.01	ENSMUST00000176102	protein coding
Zbtb33-202	X	4.11	-2.77	0.03	ENSMUST00000115142	protein coding
Zbtb33-203	X	1.07	-343.02	0.01	ENSMUST00000131124	protein coding
Zbtb43-202	2	16.82	-2.85	1.06E-03	ENSMUST00000095035	protein coding
Zbtb44-202	9	12.03	-2,431.34	2.88E-04	ENSMUST00000167346	protein coding

Zbtb44-205	9	31.84	-7.51	2.03E-33	ENSMUST00000216649	protein coding
Zbtb44-206	9	40.24	-4.66	3.58E-29	ENSMUST00000217092	protein coding
Zfp110-205	7	31.83	-3.25	2.18E-12	ENSMUST00000168247	protein coding
Zfp111-203	7	3.09	-2.23	1.41E-03	ENSMUST00000086006	protein coding
Zfp131-201	13	6.04	-363.9	1.48E-12	ENSMUST00000177916	protein coding
Zfp131-206	13	23.26	-16.99	8.18E-19	ENSMUST00000223813	protein coding
Zfp142-202	1	2.04	-3.02	0.03	ENSMUST00000066986	protein coding
Zfp142-204	1	10.93	-3.02	1.45E-07	ENSMUST00000127921	nonsense mediated decay
Zfp182-201	X	2.71	-3.98	0.02	ENSMUST00000040628	protein coding
Zfp2-202	11	0.59	-260.34	0.02	ENSMUST00000109129	protein coding
Zfp207-202	11	122.68	-2.57	1.73E-25	ENSMUST00000053740	protein coding
Zfp217-202	2	34.11	-10.15	7.36E-36	ENSMUST00000109155	protein coding
Zfp219-201	14	18.53	-2.09	3.11E-03	ENSMUST00000067549	protein coding
Zfp263-206	16	4.43	-3.43	2.62E-05	ENSMUST00000161630	nonsense mediated decay
Zfp263-207	16	6.46	-2.56	0.05	ENSMUST00000162207	protein coding
Zfp280c-203	X	1.71	-1,068.34	0.01	ENSMUST00000088898	protein coding
Zfp280d-211	9	8	-11.94	4.26E-14	ENSMUST00000184036	protein coding
Zfp280d-216	9	3.53	-3.11	0.03	ENSMUST00000184399	nonsense mediated decay
Zfp354a-201	11	1.49	-392.06	0.01	ENSMUST00000020628	protein coding
Zfp354b-203	11	0.61	-14.48	0.04	ENSMUST00000164280	protein coding
Zfp384-205	6	5.93	-4.46	5.78E-03	ENSMUST00000112424	protein coding
Zfp384-206	6	10.17	-2.16	9.43E-03	ENSMUST00000112425	protein coding
Zfp410-206	12	6.26	-4.07	1.47E-03	ENSMUST00000221656	nonsense mediated decay
Zfp410-213	12	19.45	-2.3	3.43E-04	ENSMUST00000222606	nonsense mediated decay
Zfp414-205	17	4.13	-86.25	6.30E-05	ENSMUST00000170225	protein coding
Zfp428-203	7	22.66	-3.21	2.31E-09	ENSMUST00000177205	protein coding

Zfp507-206	7	2.16	-4.17	0.05	ENSMUST00000206615	protein coding
Zfp513-201	5	7.45	-2.06	0.02	ENSMUST00000031562	protein coding
Zfp516-206	18	5.78	-314.89	0.01	ENSMUST00000236858	protein coding
Zfp608-203	18	0.17	-29.68	0.02	ENSMUST00000237844	nonsense mediated decay
Zfp637-204	6	1.13	-21.66	0.01	ENSMUST00000112861	protein coding
Zfp69-202	4	2.45	-670.92	3.82E-03	ENSMUST00000106281	protein coding
Zfp777-205	6	3.21	-5.63	0.02	ENSMUST00000148362	protein coding
Zfp78-202	7	0.8	-190.73	0.03	ENSMUST00000108559	protein coding
Zfp78-205	7	0.89	-35.19	2.42E-03	ENSMUST00000208030	protein coding
Zfp942-201	17	1.07	-239.85	0.02	ENSMUST00000074295	protein coding
Zfp946-201	17	0.37	-20.4	0.02	ENSMUST00000088763	protein coding
Zfp946-204	17	0.71	-16.29	0.04	ENSMUST00000167740	protein coding
Zkscan3-207	13	10.99	-3.01	7.40E-06	ENSMUST00000223831	protein coding
Zkscan8-203	13	2.14	-5.87	0.01	ENSMUST00000156674	protein coding
Zkscan8-204	13	2.92	-4.73	1.13E-08	ENSMUST00000224362	protein coding
Zscan12-202	13	7.76	-2.72	0.04	ENSMUST00000099720	protein coding
Zscan21-201	5	13.15	-7.17	9.33E-21	ENSMUST00000062350	protein coding
Zscan21-205	5	15.93	-16.74	1.61E-23	ENSMUST00000110961	protein coding
Zscan26-201	13	16.25	-5.91	1.11E-17	ENSMUST00000032820	protein coding
Zscan29-201	2	0.66	-255.93	0.02	ENSMUST00000079024	protein coding
Zzz3-203	3	3.44	-3,999.84	7.44E-05	ENSMUST00000106101	protein coding

Table S3-3. Expression values & metadata of insignificant transcript variants of insignificant genes

Name	Chromosome	Max group mean	Fold change	FDR p-value	ENSEMBL	Biotype
1700057G04Rik-204	9	0.06	7.56	NaN	ENSMUST00000135182	nonsense mediated decay
Adnp-201	2	13.16	1	1	ENSMUST00000057793	protein coding
Adnp2-201	18	34.33	-1.38	9.86E-06	ENSMUST00000066743	protein coding
Aebp2-201	6	13.57	-1.83	2.16E-05	ENSMUST00000032359	protein coding
Aebp2-203	6	0.37	3.13	0.09	ENSMUST00000095350	protein coding
Aebp2-206	6	0.27	1.06	0.98	ENSMUST00000161335	protein coding
Aebp2-208	6	1.85	1.74	0.38	ENSMUST00000162903	protein coding
Aebp2-210	6	15.9	-1.37	0.14	ENSMUST00000249348	protein coding
Aebp2-211	6	0.26	2.36	0.61	ENSMUST00000249349	protein coding
Aebp2-212	6	1.2	-2.25	0.15	ENSMUST00000249350	nonsense mediated decay
Ahctf1-201	1	110.03	-1.58	1.29E-09	ENSMUST00000027768	protein coding
Ahctf1-204	1	0.3	1.03	0.99	ENSMUST00000140489	protein coding
Ahctf1-205	1	0.15	-13.01	0.38	ENSMUST00000145968	protein coding
Ahr-201	12	0.3	-53.4	0.13	ENSMUST00000110811	nonsense mediated decay
Ahr-202	12	1.06	-1.44	0.53	ENSMUST00000116436	protein coding
Ahrr-201	13	0.44	1.85	0.41	ENSMUST00000022059	protein coding
Ahrr-202	13	0.03	7.89	NaN	ENSMUST00000109640	protein coding
Aire-202	10	0.12	-1.06	0.98	ENSMUST00000105395	protein coding
Aire-204	10	0.17	42.62	0.11	ENSMUST00000128241	protein coding
Aire-205	10	0.31	6.36	0.2	ENSMUST00000130972	protein coding
Aire-206	10	4.93	-1.81	0.03	ENSMUST00000131028	nonsense mediated decay
Aire-207	10	0.27	1.15	0.95	ENSMUST00000140636	protein coding
Aire-213	10	2.36	-5.86	0.1	ENSMUST00000148469	protein coding
Aire-214	10	0.37	4.35	0.45	ENSMUST00000154374	protein coding

Aire-215	10	0.11	-7.22	0.3	ENSMUST000001 55021	protein coding
Akap8-201	17	43.68	-1.24	4.91E-03	ENSMUST000000 02699	protein coding
Akap8-203	17	0.8	-7.49	0.14	ENSMUST000002 35360	protein coding
Akap8-204	17	1.87	1.56	0.74	ENSMUST000002 35702	protein coding
Akap8-208	17	0.17	10.85	NaN	ENSMUST000002 36580	protein coding
Akap8-211	17	54.96	-1.95	2.33E-08	ENSMUST000002 36954	nonsense mediated decay
Akap8-213	17	10.29	-1.31	0.33	ENSMUST000002 37381	nonsense mediated decay
Akap8-215	17	1.27	-1.77	0.56	ENSMUST000002 37860	protein coding
Akap8l-201	17	44.25	1.47	5.56E-03	ENSMUST000000 50214	protein coding
Akap8l-202	17	0.26	-2.14	0.7	ENSMUST000002 35265	protein coding
Akap8l-209	17	12.55	1.19	0.5	ENSMUST000002 36503	protein coding
Akap8l-211	17	0.53	-2.02	0.7	ENSMUST000002 36765	protein coding
Akap8l-213	17	1.64	-1.94	0.45	ENSMUST000002 37936	nonsense mediated decay
Akna-201	4	7	1.14	0.6	ENSMUST000000 35724	protein coding
Alx3-201	3	0.07	-4.79	0.39	ENSMUST000000 14747	protein coding
Alx3-202	3	0.07	-7.65	NaN	ENSMUST000002 33202	protein coding
Arhgap35-201	7	37.78	-1.25	1.24E-03	ENSMUST000000 75845	protein coding
Arid2-201	15	40.07	1.3	9.89E-05	ENSMUST000000 96250	protein coding
Arid5b-201	10	0.06	36.5	0.13	ENSMUST000000 20106	nonsense mediated decay
Arid5b-203	10	12.71	-1.56	0.07	ENSMUST000002 18532	protein coding
Arid5b-204	10	40.7	1.48	9.15E-08	ENSMUST000002 19238	protein coding
Arnt-201	3	28.16	-1.46	3.90E-03	ENSMUST000000 90804	protein coding
Arnt-202	3	31.16	1.34	0.04	ENSMUST000001 02749	protein coding
Arnt-204	3	5.2	-1.15	0.75	ENSMUST000001 07161	protein coding
Arnt-205	3	0.9	-1.67	0.67	ENSMUST000001 36413	protein coding
Arnt2-204	7	0.06	7.56	NaN	ENSMUST000002 07769	protein coding

Arnt2-206	7	0.09	7.89	NaN	ENSMUST00000208204	nonsense mediated decay
Arx-201	X	0.02	-9.72	0.42	ENSMUST00000046565	protein coding
Arx-202	X	0.02	-2.29	0.67	ENSMUST000000113947	protein coding
Ascl1-201	10	0.02	1.01	1	ENSMUST00000020243	protein coding
Ascl3-201	7	0.15	14.15	0.24	ENSMUST00000035372	protein coding
Ash1l-201	3	8.2	-1.56	3.45E-04	ENSMUST00000090933	protein coding
Atf2-201	2	2.75	1.85	0.33	ENSMUST00000055833	protein coding
Atf2-204	2	5.35	1.2	0.54	ENSMUST000000112007	protein coding
Atf2-205	2	17.06	-1.32	0.15	ENSMUST000000112010	protein coding
Atf2-207	2	22.56	-1.8	0.02	ENSMUST000000112017	protein coding
Atf2-208	2	2.65	-2.43	0.05	ENSMUST000000124737	protein coding
Atf2-210	2	2	-7.41	0.05	ENSMUST000000128531	protein coding
Atf2-216	2	0.07	7.56	NaN	ENSMUST000000154456	protein coding
Atf3-201	1	10.21	1.99	0.02	ENSMUST00000027941	protein coding
Atf6b-201	17	36.21	1.29	0.1	ENSMUST00000015605	protein coding
Atf6b-202	17	0.29	-108.42	0.09	ENSMUST000000173984	protein coding
Atf6b-204	17	0.28	-1.58	0.82	ENSMUST000000174519	nonsense mediated decay
Atf6b-205	17	0.24	-15.47	0.34	ENSMUST000000174614	nonsense mediated decay
Atf7-202	15	0.29	2.19	0.55	ENSMUST000000108828	protein coding
Atf7-203	15	0.04	13.58	0.28	ENSMUST000000169033	protein coding
Atf7-204	15	0.44	37.43	0.1	ENSMUST000000183452	nonsense mediated decay
Atf7-206	15	0.11	-13.01	0.38	ENSMUST000000183765	protein coding
Atf7-208	15	0.29	20.74	0.18	ENSMUST000000184077	protein coding
Atf7-209	15	2.74	2.19	0.16	ENSMUST000000184485	protein coding
Atf7-210	15	16.1	1.85	1.21E-09	ENSMUST000000184616	protein coding
Atf7-211	15	0.61	-3.22	0.44	ENSMUST000000184906	protein coding

Atmin-201	8	46.37	1.18	0.03	ENSMUST00000109099	protein coding
Atoh1-201	6	0.03	2.37	NaN	ENSMUST00000101351	protein coding
Atoh7-201	10	0.1	4.48	0.31	ENSMUST00000044059	protein coding
Bach1-201	16	27.65	1.86	3.50E-09	ENSMUST00000026703	protein coding
Bach2-201	4	0.57	-2.05	0.4	ENSMUST00000037416	protein coding
Barx2-201	9	0.24	1.23	0.9	ENSMUST00000016615	protein coding
Batf2-207	19	0.04	-9.72	0.42	ENSMUST000000237511	protein coding
Baz2a-201	10	83.72	-1.53	1.79E-07	ENSMUST00000045621	protein coding
Baz2a-202	10	35.94	-1	0.99	ENSMUST000000170054	protein coding
Baz2a-205	10	3.78	-79.64	0.08	ENSMUST000000219072	protein coding
Bbx-202	16	0.52	-1.5	0.82	ENSMUST00000089399	protein coding
Bbx-203	16	2.38	1.59	0.4	ENSMUST00000089404	protein coding
Bbx-208	16	25.14	1.86	1.15E-14	ENSMUST000000138166	protein coding
BC025920-201	10	1.65	1.42	0.66	ENSMUST00000099442	protein coding
BC025920-202	10	0.29	1.35	0.85	ENSMUST00000019492	protein coding
BC025920-203	10	0.23	-1.26	0.9	ENSMUST00000019753	protein coding
BC025920-204	10	0.19	42.3	0.11	ENSMUST00000021138	protein coding
Bcl6b-201	11	10.71	-1.23	0.34	ENSMUST00000000326	protein coding
Bhlha15-201	5	2.65	1.8	0.21	ENSMUST00000060747	protein coding
Bhlhe22-201	3	0.06	-1.65	0.75	ENSMUST00000026120	protein coding
Bhlhe40-201	6	57.55	1.37	1.32E-03	ENSMUST00000032194	protein coding
Bhlhe40-202	6	0.2	13.58	0.27	ENSMUST000000163617	protein coding
Bmal1-201	7	10.02	1.19	0.56	ENSMUST00000047321	protein coding
Bmal1-204	7	0.13	-57.77	0.14	ENSMUST000000210238	protein coding
Bptf-201	11	49.01	1.23	4.11E-03	ENSMUST00000057892	protein coding
Bptf-204	11	1.52	1.72	0.46	ENSMUST000000133317	protein coding

Brf2-201	8	20.9	1.01	0.96	ENSMUST000000 33877	protein coding
Brf2-202	8	0.25	14.15	0.25	ENSMUST000002 09770	nonsense mediated decay
Brf2-204	8	1.56	1.94	0.42	ENSMUST000002 10552	nonsense mediated decay
Brf2-206	8	1.52	-2.35	0.38	ENSMUST000002 11151	nonsense mediated decay
Brf2-207	8	0.7	-3.62	0.32	ENSMUST000002 11236	protein coding
Bsx-201	9	0.03	-13.87	0.36	ENSMUST000000 67375	protein coding
Camta1-204	4	6.96	1.12	0.71	ENSMUST000001 05670	protein coding
Camta1-205	4	0.08	-5.59	NaN	ENSMUST000001 31948	protein coding
Camta1-207	4	3.94	-1.55	0.24	ENSMUST000001 40030	protein coding
Camta1-209	4	9.34	-1.44	0.05	ENSMUST000001 53938	nonsense mediated decay
Camta2-201	11	0.06	37.53	0.13	ENSMUST000000 36299	protein coding
Camta2-202	11	0.39	-1.04	1	ENSMUST000001 00933	protein coding
Camta2-204	11	2.48	4.02	0.06	ENSMUST000001 08545	protein coding
Camta2-208	11	0.75	1.43	0.8	ENSMUST000001 45823	nonsense mediated decay
Carf-202	1	1.9	-3.14	0.34	ENSMUST000001 24986	protein coding
Carf-203	1	0.85	1.3	0.78	ENSMUST000001 30075	nonsense mediated decay
Carf-204	1	0.79	-1.51	0.78	ENSMUST000001 32949	nonsense mediated decay
Carf-206	1	0.09	-30.57	0.24	ENSMUST000001 80952	protein coding
Carf-207	1	0.2	-57.77	0.14	ENSMUST000001 86107	nonsense mediated decay
Carf-209	1	1.91	-1.06	0.91	ENSMUST000001 87978	protein coding
Cdc5lrt5-201	10	0.01	-5.57	NaN	ENSMUST000001 77762	protein coding
Cdc5lrt6-201	10	0.05	-19.18	0.29	ENSMUST000001 79851	protein coding
Cdc5lrt9-201	10	0.13	38.32	0.12	ENSMUST000001 77744	protein coding
Cdx4-201	X	0.07	-1.46	0.83	ENSMUST000000 33689	protein coding
Cebpe-201	14	0.11	1.47	0.83	ENSMUST000000 64290	protein coding
Cebpg-201	7	3.66	2.39	0.28	ENSMUST000000 70191	protein coding

Cebpg-202	7	16.62	-1.32	0.03	ENSMUST000001 30491	protein coding
Cebpz-201	17	55.22	1.01	0.94	ENSMUST000000 24885	protein coding
Cebpz-204	17	70.6	-1.95	3.63E-19	ENSMUST000002 33484	nonsense mediated decay
Cenpa-202	5	116.94	1.74	4.99E-06	ENSMUST000001 33316	nonsense mediated decay
Cenpa-205	5	56.12	1.94	1.12E-04	ENSMUST000001 44742	protein coding
Cenpa-206	5	0.99	2.12	0.59	ENSMUST000001 49759	protein coding
Cenpb-201	2	31.93	1.31	0.03	ENSMUST000000 89510	protein coding
Cenps-201	4	23.89	-1.31	0.31	ENSMUST000000 30813	protein coding
Cenps-202	4	1.2	3.06	0.35	ENSMUST000001 05695	protein coding
Cenps-203	4	0.62	-1.51	0.81	ENSMUST000001 05696	nonsense mediated decay
Cenps-207	4	5.72	-1.59	0.55	ENSMUST000001 77408	protein coding
Cenpt-201	8	59.32	1.04	0.84	ENSMUST000000 40776	protein coding
Cenpt-204	8	4.7	-2.11	0.11	ENSMUST000002 12431	nonsense mediated decay
Cenpt-205	8	0.39	-1.06	0.98	ENSMUST000002 12552	nonsense mediated decay
Cenpt-209	8	0.44	-1.1	0.96	ENSMUST000002 12839	nonsense mediated decay
Champ1-201	8	41.13	1.03	0.82	ENSMUST000000 51870	protein coding
Chchd3-201	6	119.58	-1.54	3.16E-09	ENSMUST000000 66379	protein coding
Chchd3-203	6	0.11	24.03	0.16	ENSMUST000001 24436	nonsense mediated decay
Chchd3-205	6	0.89	-102.85	0.07	ENSMUST000001 27666	protein coding
Cic-201	7	7.78	-1.34	0.36	ENSMUST000000 05578	protein coding
Cic-202	7	16.78	-1.09	0.64	ENSMUST000001 63320	protein coding
Cic-207	7	5.17	-1.53	0.2	ENSMUST000001 65239	protein coding
Clock-201	5	6.59	-1.4	0.12	ENSMUST000000 75159	protein coding
Clock-204	5	1.56	-2.51	0.06	ENSMUST000002 02122	protein coding
Clock-205	5	1.56	-1.66	0.11	ENSMUST000002 02651	protein coding
Creb1-201	1	5.59	-1.11	0.73	ENSMUST000000 49932	protein coding

Creb1-202	1	8.4	-1.24	0.18	ENSMUST000000 87366	protein coding
Creb1-203	1	2.14	-1.66	0.51	ENSMUST000001 71164	protein coding
Creb1-207	1	0.59	2.97	0.52	ENSMUST000001 87811	protein coding
Creb1-210	1	1.54	-2.01	0.41	ENSMUST000001 90876	nonsense mediated decay
Creb3l1-201	2	7.17	-1.34	0.15	ENSMUST000000 28663	protein coding
Creb5-201	6	0.22	1.01	1	ENSMUST000000 47450	protein coding
Creb5-212	6	0.49	-2.15	0.27	ENSMUST000002 05120	protein coding
Crem-202	18	0.15	-23.27	0.26	ENSMUST000000 49942	protein coding
Crem-206	18	0.23	10.65	0.15	ENSMUST000001 24747	protein coding
Crem-207	18	0.21	-30.57	0.24	ENSMUST000001 26578	protein coding
Crem-211	18	0.03	7.56	NaN	ENSMUST000001 30455	protein coding
Crem-212	18	1.12	-17.6	0.06	ENSMUST000001 30599	protein coding
Crem-213	18	0.54	-2.33	0.52	ENSMUST000001 31899	protein coding
Crem-215	18	0.45	2.67	0.5	ENSMUST000001 34027	nonsense mediated decay
Crem-216	18	0.08	-10.55	0.41	ENSMUST000001 36961	protein coding
Crem-217	18	1.5	1.04	0.98	ENSMUST000001 37568	protein coding
Crem-218	18	0.34	11.17	0.16	ENSMUST000001 39537	protein coding
Crem-219	18	0.13	19.13	0.21	ENSMUST000001 40332	protein coding
Crem-221	18	3.13	-1.58	0.53	ENSMUST000001 42690	protein coding
Crem-222	18	0.23	1.28	0.9	ENSMUST000001 44496	protein coding
Crem-223	18	0.26	-35.07	0.22	ENSMUST000001 46265	protein coding
Crem-225	18	0.23	20.74	0.18	ENSMUST000001 48305	nonsense mediated decay
Crem-228	18	0.34	3.98	0.38	ENSMUST000001 50235	protein coding
Crem-230	18	0.07	25.54	0.17	ENSMUST000001 51311	protein coding
Crem-232	18	0.1	-2.86	0.56	ENSMUST000001 52900	protein coding
Crem-233	18	1.55	1.11	0.9	ENSMUST000001 54135	protein coding

Crem-236	18	0.38	-1.39	0.84	ENSMUST000001 54715	protein coding
Crem-239	18	0.1	34.03	0.13	ENSMUST000001 65086	protein coding
Csrnp1-201	9	32.79	1.32	0.05	ENSMUST000000 35101	protein coding
Csrnp1-202	9	13.7	-1.22	0.71	ENSMUST000002 13936	protein coding
Csrnp1-203	9	0.69	1.76	0.7	ENSMUST000002 14058	protein coding
Csrnp2-201	15	10.36	-1.53	0.04	ENSMUST000000 61457	protein coding
Ctcf-201	8	96.5	-1.63	1.95E-14	ENSMUST000000 05841	protein coding
Cux2-201	5	0.47	2.03	0.52	ENSMUST000000 86317	protein coding
Cux2-202	5	0.48	2.08	0.29	ENSMUST000001 11752	protein coding
Cux2-205	5	0.18	-12.38	0.37	ENSMUST000001 34326	protein coding
Cux2-207	5	0.03	4.26	NaN	ENSMUST000001 54139	protein coding
Cux2-210	5	2.83	2.34	0.33	ENSMUST000001 68288	protein coding
Cxxc1-201	18	33.74	-1.08	0.64	ENSMUST000000 25444	protein coding
Cxxc4-202	3	0.05	-2.69	0.45	ENSMUST000001 81904	protein coding
Cxxc5-201	18	27.59	1.13	0.58	ENSMUST000000 60722	protein coding
Cxxc5-202	18	0.74	-73.91	0.1	ENSMUST000002 35161	protein coding
Cxxc5-203	18	4.6	3.08	0.14	ENSMUST000002 35169	protein coding
Cxxc5-205	18	0.25	1.5	0.82	ENSMUST000002 35404	protein coding
Dach1-201	14	0.06	-1.25	0.88	ENSMUST000000 69334	protein coding
Dach1-202	14	0.02	16.57	0.23	ENSMUST000000 71533	protein coding
Dbp-201	7	2.53	1.93	0.26	ENSMUST000000 80885	protein coding
Dbp-203	7	0.17	-35.07	0.22	ENSMUST000002 11357	protein coding
Dbp-204	7	2.36	-1.46	0.65	ENSMUST000002 11513	protein coding
Dbx1-201	7	0.03	2.41	NaN	ENSMUST000000 32717	protein coding
Ddit3-201	10	16.14	-1.68	0.08	ENSMUST000000 26475	protein coding
Ddit3-203	10	0.87	-1.52	0.81	ENSMUST000001 39091	protein coding

Deaf1-201	7	18.63	1.69	0.03	ENSMUST000000 80553	protein coding
Deaf1-203	7	5.78	-2.49	0.11	ENSMUST000002 09600	protein coding
Deaf1-204	7	7.54	-1.04	0.95	ENSMUST000002 09608	nonsense mediated decay
Deaf1-205	7	4.32	-1.26	0.68	ENSMUST000002 10062	nonsense mediated decay
Deaf1-206	7	0.38	-5.71	0.38	ENSMUST000002 10816	nonsense mediated decay
Deaf1-207	7	2.33	2.4	0.14	ENSMUST000002 10830	nonsense mediated decay
Deaf1-208	7	1.95	-7.57	0.07	ENSMUST000002 11146	nonsense mediated decay
Deaf1-209	7	2.85	1.9	0.15	ENSMUST000002 11537	protein coding
Dmrta1-201	4	0.08	2.1	0.62	ENSMUST000000 52478	protein coding
Dmrtb1-201	4	1.04	-3.12	0.12	ENSMUST000000 69271	protein coding
Dmrtb1-203	4	2.09	-1.36	0.71	ENSMUST000001 31776	protein coding
Dmtf1-201	5	9.67	-1.04	0.92	ENSMUST000000 71921	protein coding
Dmtf1-202	5	27.05	-1.48	3.87E-03	ENSMUST000000 95017	protein coding
Dmtf1-204	5	1.63	1.32	0.68	ENSMUST000001 83448	nonsense mediated decay
Dmtf1-205	5	0.06	7.56	NaN	ENSMUST000001 83525	protein coding
Dmtf1-209	5	1.16	1.01	1	ENSMUST000001 84159	nonsense mediated decay
Dmtf1-212	5	0.23	-1.17	0.9	ENSMUST000001 84401	nonsense mediated decay
Dmtf1-213	5	2.29	-1.83	0.27	ENSMUST000001 84620	nonsense mediated decay
Dmtf1-214	5	0.31	3.58	0.46	ENSMUST000001 84888	nonsense mediated decay
Dmtf1-217	5	1.1	-9.47	0.18	ENSMUST000001 85100	protein coding
Dnmt1-201	9	102.56	1.83	5.85E-14	ENSMUST000000 04202	protein coding
Dnmt1-202	9	73.38	-1.76	1.01E-17	ENSMUST000001 77754	protein coding
Dot1l-201	10	41.67	1.39	1.82E-05	ENSMUST000001 05336	protein coding
Dot1l-202	10	0.67	1.43	0.65	ENSMUST000001 27740	nonsense mediated decay
Dot1l-203	10	6.28	2.11	0.14	ENSMUST000001 38505	protein coding
Dot1l-205	10	1.19	5.36	0.08	ENSMUST000001 49394	nonsense mediated decay

Dot1l-206	10	3.12	-2.3	0.09	ENSMUST000001 50338	protein coding
Dr1-201	5	50.93	1.24	0.07	ENSMUST000000 31190	protein coding
Drap1-203	19	6.2	-1.73	0.39	ENSMUST000001 13674	protein coding
Drap1-210	19	7.47	-1.07	0.92	ENSMUST000001 48219	protein coding
Drgx-202	14	0.04	-13.87	0.36	ENSMUST000001 86452	protein coding
Drgx-204	14	0.02	-10.55	0.41	ENSMUST000001 89022	protein coding
Drgx-205	14	0.04	-5.57	NaN	ENSMUST000002 28878	protein coding
E2f1-201	2	17.98	-1.87	2.98E-03	ENSMUST000000 00894	protein coding
E2f1-202	2	26.85	-1.05	0.82	ENSMUST000001 03145	protein coding
E2f3-204	13	7.16	-1.44	0.19	ENSMUST000002 22730	protein coding
E2f4-201	8	180.98	-1.52	1.44E-09	ENSMUST000000 15003	protein coding
E2f5-201	3	22.76	-1.49	0.07	ENSMUST000000 29069	protein coding
E2f6-204	12	18.21	-1.88	3.64E-03	ENSMUST000002 21541	nonsense mediated decay
E2f6-206	12	0.33	2.23	0.64	ENSMUST000002 21934	nonsense mediated decay
E2f7-201	10	13.79	1.25	0.28	ENSMUST000000 73781	protein coding
E2f7-204	10	3.2	-1.23	0.84	ENSMUST000001 73471	protein coding
E2f7-205	10	0.56	2.16	0.53	ENSMUST000001 73634	protein coding
E2f7-206	10	0.17	-1.28	0.91	ENSMUST000001 73948	nonsense mediated decay
E2f7-209	10	0.78	1.25	0.82	ENSMUST000001 74857	protein coding
E2f8-201	7	18.78	-1.17	0.42	ENSMUST000000 58745	protein coding
E2f8-202	7	10.65	1.08	0.83	ENSMUST000001 19223	protein coding
E430018J23Rik -201	7	1.71	1.18	0.82	ENSMUST000000 74249	protein coding
E430018J23Rik -202	7	0.08	7.56	NaN	ENSMUST000001 06303	protein coding
E430018J23Rik -203	7	0.74	1.05	0.96	ENSMUST000001 65495	protein coding
E4f1-201	17	4.2	-1	1	ENSMUST000000 56032	protein coding
E4f1-208	17	5.29	1.15	0.82	ENSMUST000002 28882	protein coding

Eea1-201	10	6.96	1.82	3.18E-03	ENSMUST000000 53484	protein coding
Eea1-203	10	0.43	1.28	0.82	ENSMUST000002 18291	nonsense mediated decay
Eea1-204	10	0.02	4.26	NaN	ENSMUST000002 18517	nonsense mediated decay
Egr3-201	14	0.03	-7.84	NaN	ENSMUST000000 35908	protein coding
Egr3-204	14	0.13	2.09	0.56	ENSMUST000002 25200	protein coding
Elf3-202	1	34.26	1.27	0.38	ENSMUST000001 85752	protein coding
Elk1-201	X	15.79	-1.33	0.2	ENSMUST000000 09550	protein coding
Elk3-201	10	5.99	1.79	1.33E-03	ENSMUST000000 08542	protein coding
Elk3-202	10	2.79	1.24	0.79	ENSMUST000001 29827	nonsense mediated decay
Elk4-201	1	1.72	-1.68	0.52	ENSMUST000000 27696	protein coding
Elk4-202	1	7.57	1.1	0.75	ENSMUST000000 86556	protein coding
Elk4-206	1	0.74	-2.06	0.42	ENSMUST000001 46432	protein coding
Elk4-207	1	7.76	-1.07	0.84	ENSMUST000001 47218	nonsense mediated decay
En2-201	5	1.63	1	1	ENSMUST000000 36177	protein coding
Erf-201	7	77.18	-1.45	3.44E-05	ENSMUST000000 45847	protein coding
Esr1-201	10	0.01	-1.84	0.78	ENSMUST000000 67086	protein coding
Esr1-203	10	0.01	-1.26	NaN	ENSMUST000001 05589	protein coding
Esr1-204	10	0.02	20.81	0.18	ENSMUST000001 05590	protein coding
Esrrb-202	12	2.1	-1.36	0.65	ENSMUST000001 10203	protein coding
Esrrb-203	12	281.8	-1.93	1.61E-20	ENSMUST000001 10204	protein coding
Esrrb-204	12	2.97	-3.42	0.11	ENSMUST000001 16402	protein coding
Etv2-201	7	1.56	1.57	0.62	ENSMUST000001 08147	protein coding
Etv3-201	3	0.8	1.11	0.91	ENSMUST000001 17293	protein coding
Etv3-202	3	2.39	2.33	0.14	ENSMUST000001 19109	protein coding
Etv3-205	3	13.37	1.14	0.57	ENSMUST000001 70036	protein coding
Etv3l-201	3	0.03	7.89	NaN	ENSMUST000002 38853	protein coding

Etv3l-202	3	0.02	-1.26	NaN	ENSMUST00000238894	protein coding
Etv4-201	11	94.64	-1.86	2.83E-15	ENSMUST00000017868	protein coding
Etv4-202	11	43.95	-1.41	0.01	ENSMUST000000107176	protein coding
Etv4-212	11	4.89	-1.94	0.25	ENSMUST000000164750	protein coding
Evx1-201	6	0.22	-1.11	0.94	ENSMUST00000031787	protein coding
Evx1-202	6	0.07	7.89	NaN	ENSMUST000000129243	protein coding
Fev-201	1	0.21	1.63	0.75	ENSMUST00000068631	protein coding
Fev-202	1	0.08	10.85	NaN	ENSMUST000000159232	protein coding
Fezf2-201	14	6.35E-03	-3.31	NaN	ENSMUST00000022262	protein coding
Fezf2-202	14	0.01	4.26	NaN	ENSMUST000000224023	protein coding
Figla-201	6	0.35	-42.08	0.17	ENSMUST00000032070	protein coding
Flywch1-201	17	1.62	-1.4	0.64	ENSMUST00000045517	protein coding
Flywch1-203	17	7.34	1.33	0.73	ENSMUST000000226460	protein coding
Flywch1-204	17	17.69	1.01	0.97	ENSMUST000000227120	protein coding
Foxa3-201	7	1.68	-1	1	ENSMUST00000036018	protein coding
Foxb1-201	9	0.01	4.26	NaN	ENSMUST00000071281	protein coding
Foxb2-201	19	0.08	17.44	0.2	ENSMUST00000072915	protein coding
Foxd1-201	13	0.12	1.81	0.68	ENSMUST000000105098	protein coding
Foxe3-201	4	0.05	7.56	NaN	ENSMUST00000050940	protein coding
Foxh1-201	15	38.73	-1.14	0.6	ENSMUST00000037824	protein coding
Foxj3-201	4	12.94	-1.36	0.12	ENSMUST00000044564	protein coding
Foxj3-202	4	13.63	1.24	0.36	ENSMUST000000106310	protein coding
Foxj3-205	4	0.12	-2.29	0.66	ENSMUST000000137560	protein coding
Foxj3-206	4	0.03	7.56	NaN	ENSMUST000000138845	protein coding
Foxj3-207	4	0.09	4.26	NaN	ENSMUST000000160219	protein coding
Foxj3-209	4	0.06	-1.36	0.87	ENSMUST000000162267	protein coding

Foxj3-210	4	0.08	-5.57	NaN	ENSMUST00000176012	protein coding
Foxk2-201	11	35.13	-1.34	3.67E-05	ENSMUST00000106113	protein coding
Foxm1-201	6	37.42	1.22	0.03	ENSMUST00000073316	protein coding
Foxm1-202	6	4.27	-1.05	0.95	ENSMUST00000112148	protein coding
Foxm1-207	6	6.29	-1.94	0.17	ENSMUST00000203040	protein coding
Foxm1-208	6	0.31	-4.1	0.42	ENSMUST00000203258	protein coding
Foxn1-201	11	0.05	2.75	0.53	ENSMUST00000108294	protein coding
Foxn3-205	12	0.47	-1.16	0.93	ENSMUST00000176928	protein coding
Foxn3-212	12	2.46	1.49	0.72	ENSMUST00000222458	nonsense mediated decay
Foxn3-214	12	0.07	-1.26	NaN	ENSMUST00000223484	protein coding
Foxo1-201	3	18.71	1.6	4.67E-06	ENSMUST00000053764	protein coding
Foxo3-201	10	0.17	64.59	0.06	ENSMUST00000056974	protein coding
Foxo3-203	10	31.74	-1.06	0.45	ENSMUST00000105502	protein coding
Foxo3-204	10	0.51	3.21	0.27	ENSMUST00000175881	protein coding
Foxo6-201	4	0.98	1.03	0.98	ENSMUST00000102656	protein coding
Foxp2-201	6	0.01	-10.55	0.41	ENSMUST00000031545	protein coding
Foxp2-205	6	0.01	-5.57	NaN	ENSMUST00000115474	protein coding
Foxp2-207	6	3.44E-03	4.26	NaN	ENSMUST00000115477	protein coding
Foxp2-216	6	0.08	-5.57	NaN	ENSMUST00000154448	protein coding
Foxp3-201	X	0.05	-2.06	0.72	ENSMUST00000045566	protein coding
Foxp3-202	X	0.04	-1.41	0.87	ENSMUST00000115738	protein coding
Foxp3-203	X	5.96E-03	4.26	NaN	ENSMUST00000115739	protein coding
Foxp3-206	X	0.01	-5.57	NaN	ENSMUST00000234363	protein coding
Foxp3-209	X	0.05	1.34	NaN	ENSMUST00000234896	protein coding
Foxp4-201	17	12.56	1.08	0.83	ENSMUST00000097311	protein coding
Foxp4-202	17	21.64	2.07	0.21	ENSMUST00000113262	protein coding

Foxp4-203	17	0.36	-1.89	0.73	ENSMUST000001 13263	protein coding
Foxp4-204	17	18.46	-1.65	3.81E-03	ENSMUST000001 13265	protein coding
Foxp4-208	17	1	15.83	0.08	ENSMUST000001 54108	protein coding
Foxq1-201	13	1.45	1.34	0.53	ENSMUST000000 42118	protein coding
Foxr1-201	9	1.31	-1.97	0.38	ENSMUST000000 98837	protein coding
Foxr1-202	9	0.09	-1.29	0.9	ENSMUST000002 15375	protein coding
Foxr1-203	9	1.3	1.05	0.96	ENSMUST000002 15980	protein coding
Foxs1-201	2	0.03	-1.77	0.78	ENSMUST000000 99200	protein coding
Gata4-204	14	1.16	-118.26	0.06	ENSMUST000001 32122	protein coding
Gata4-206	14	1.03	-95.42	0.09	ENSMUST000001 56782	protein coding
Gata5-201	2	0.04	5.48	0.3	ENSMUST000000 15771	protein coding
Gatad2a-201	8	19.77	1.91	5.77E-03	ENSMUST000000 65169	protein coding
Gatad2a-202	8	94.83	-1.13	0.19	ENSMUST000001 16463	protein coding
Gatad2a-203	8	8.95	-1.43	0.11	ENSMUST000001 77851	protein coding
Gatad2a-204	8	0.26	-1.51	0.83	ENSMUST000002 11960	protein coding
Gatad2a-205	8	1.19	-5.21	0.26	ENSMUST000002 12277	protein coding
Gatad2b-203	3	0.36	-1.74	0.73	ENSMUST000001 97988	protein coding
Gatad2b-205	3	24.94	-1.41	7.53E-06	ENSMUST000001 99754	protein coding
Gatad2b-208	3	1.45	1.09	0.94	ENSMUST000002 06907	protein coding
Gcm2-201	13	0.08	-38.9	0.18	ENSMUST000000 21791	protein coding
Gcm2-202	13	0.04	-5.57	NaN	ENSMUST000002 25271	protein coding
Gfi1-202	5	0.08	1.88	0.68	ENSMUST000000 65478	protein coding
Gfi1-204	5	0.07	7.56	NaN	ENSMUST000001 59263	protein coding
Gli3-201	13	2.6	-1.01	0.98	ENSMUST000001 10510	protein coding
Gli3-202	13	0.17	-7.3	0.25	ENSMUST000001 30065	protein coding
Glis2-201	16	49.82	1.97	7.31E-10	ENSMUST000000 14447	protein coding

GImp-201	3	24.2	-1.12	0.66	ENSMUST000000 01454	protein coding
GImp-202	3	0.58	-1.26	0.89	ENSMUST000001 31666	nonsense mediated decay
GImp-206	3	34.56	1.22	0.57	ENSMUST000001 54381	protein coding
GImp-207	3	66.74	1.93	7.89E-04	ENSMUST000001 76425	protein coding
GImp-208	3	1.98	-139.17	0.06	ENSMUST000001 76519	protein coding
Glyrl-201	16	52.42	-1.41	9.29E-05	ENSMUST000000 23189	protein coding
Glyrl-202	16	74.88	-1.38	1.19E-05	ENSMUST000001 15844	protein coding
Gm20422-201	8	0.55	-3.28	0.38	ENSMUST000001 26915	protein coding
Gm20422-202	8	0.02	4.26	NaN	ENSMUST000001 49782	protein coding
Gm28041-201	13	0.25	2.55	0.56	ENSMUST000001 66080	nonsense mediated decay
Gm28044-201	13	0.62	2.83	0.47	ENSMUST000000 44819	nonsense mediated decay
Gm28230-201	2	0.04	2.79	0.55	ENSMUST000000 53932	nonsense mediated decay
Gm44505-201	19	2.09	1.2	0.81	ENSMUST000001 42247	nonsense mediated decay
Gm44973-201	7	0.3	-3.54	0.45	ENSMUST000002 07050	protein coding
Gm50253-201	17	3.07	-1.52	0.24	ENSMUST000001 33257	nonsense mediated decay
Gm7072-201	17	9.72	1.11	0.73	ENSMUST000002 33465	protein coding
Gmeb1-202	4	14.63	-1.17	0.57	ENSMUST000001 05964	protein coding
Gmeb2-201	2	17.16	1.07	0.78	ENSMUST000000 49032	protein coding
Gpbp1-201	13	42.95	1.22	0.1	ENSMUST000000 47627	protein coding
Gpbp1-202	13	57.69	1.61	1.38E-06	ENSMUST000000 91236	protein coding
Gpbp1l1-201	4	38.2	-1.32	0.01	ENSMUST000000 30460	protein coding
Grhl3-201	4	22.95	-1.03	0.9	ENSMUST000001 05855	protein coding
Gsc2-201	16	0.47	-1.14	0.92	ENSMUST000000 12279	protein coding
Gsx2-201	5	0.04	-10.18	0.42	ENSMUST000000 40477	protein coding
Gsx2-202	5	0.06	-11.79	0.39	ENSMUST000001 60104	protein coding
Gtf2b-201	3	61.47	-1.25	0.08	ENSMUST000000 29938	protein coding

Gtf2ird1-207	5	1.74	-1.58	0.67	ENSMUST0000011245	protein coding
Gtf2ird1-208	5	4.8	1.73	0.44	ENSMUST00000167084	protein coding
Gtf2ird1-210	5	0.69	-3	0.44	ENSMUST00000200798	nonsense mediated decay
Gtf2ird1-213	5	0.88	-10.7	0.16	ENSMUST00000201441	protein coding
Gtf2ird1-214	5	1.02	-92.68	0.1	ENSMUST00000201447	protein coding
Gtf2ird1-216	5	0.28	-27.72	0.25	ENSMUST00000201526	nonsense mediated decay
Gtf2ird1-221	5	0.14	-13.87	0.36	ENSMUST00000202165	protein coding
Gtf2ird1-224	5	0.13	5.49	0.32	ENSMUST00000202280	protein coding
Gtf2ird1-225	5	5.34	1.59	0.33	ENSMUST00000202321	nonsense mediated decay
Gtf3a-201	5	46.11	1.31	0.27	ENSMUST00000132102	protein coding
Gtf3a-204	5	59.7	1.91	5.02E-04	ENSMUST00000146511	protein coding
Gzf1-201	2	33.09	1.67	5.62E-06	ENSMUST00000028928	protein coding
Gzf1-202	2	0.27	1.18	0.93	ENSMUST00000131292	protein coding
Hbp1-201	12	3.69	1.33	0.65	ENSMUST00000167458	protein coding
Hbp1-202	12	38.57	1.26	0.06	ENSMUST00000172314	protein coding
Hbp1-204	12	0.83	-1.62	0.73	ENSMUST00000175686	protein coding
Hbp1-206	12	1.94	1.44	0.69	ENSMUST00000176103	protein coding
Hdx-202	X	1.36	-2.65	0.07	ENSMUST00000113422	protein coding
Helt-201	8	0.03	7.56	NaN	ENSMUST00000058636	protein coding
Hes1-201	16	27.38	-1.09	0.75	ENSMUST00000023171	protein coding
Hes2-201	4	0.6	1.33	0.77	ENSMUST00000030782	protein coding
Hes3-201	4	0.06	5.48	0.31	ENSMUST00000094438	protein coding
Hes6-201	1	14.63	-1.04	0.88	ENSMUST00000086851	protein coding
Hey1-201	3	3.03	1.39	0.46	ENSMUST00000042412	protein coding
Hif1a-201	12	32.05	1.19	0.16	ENSMUST00000021530	protein coding
Hif1a-203	12	0.54	2.28	0.51	ENSMUST00000110464	protein coding

Hinfp-201	9	5.87	-1.33	0.64	ENSMUST000000 34629	protein coding
Hinfp-202	9	0.15	-1.29	0.89	ENSMUST000002 14660	protein coding
Hinfp-205	9	16.72	-1.27	0.04	ENSMUST000002 16508	protein coding
Hmbox1-201	14	14.54	1.26	0.31	ENSMUST000000 22544	protein coding
Hmbox1-202	14	4.95	1.17	0.72	ENSMUST000000 67843	protein coding
Hmbox1-203	14	1.1	-1.26	0.82	ENSMUST000001 75744	protein coding
Hmbox1-204	14	0.08	6.51	0.26	ENSMUST000001 75905	protein coding
Hmbox1-205	14	4.03	2.84	0.17	ENSMUST000001 76128	protein coding
Hmbox1-207	14	0.16	-1.74	0.78	ENSMUST000001 76489	protein coding
Hmg20a-201	9	22.51	1.02	0.89	ENSMUST000000 34879	protein coding
Hmg20a-202	9	0.05	-3.31	NaN	ENSMUST000002 13242	protein coding
Hmg20a-203	9	0.42	1.48	0.71	ENSMUST000002 14771	protein coding
Hmg20a-204	9	0.17	1.2	0.9	ENSMUST000002 14869	protein coding
Hmg20a-206	9	2	2.21	0.17	ENSMUST000002 17518	protein coding
Hnf4g-202	3	5.50E-03	4.26	NaN	ENSMUST000001 08394	protein coding
Homez-201	14	0.06	49.57	0.08	ENSMUST000000 81162	protein coding
Homez-202	14	8.44	1.99	8.29E-04	ENSMUST000001 42283	protein coding
Homez-203	14	0.2	13.58	0.28	ENSMUST000001 46642	protein coding
Hoxb5-201	11	0.02	-1.26	NaN	ENSMUST000000 49272	protein coding
Hoxc12-201	15	0.36	-1.49	0.77	ENSMUST000000 55562	protein coding
Hoxc13-201	15	3.07	1.93	0.22	ENSMUST000000 01700	protein coding
Hoxc5-201	15	0.11	3.22	0.45	ENSMUST000000 01709	protein coding
Hoxd1-201	2	0.38	1.36	0.82	ENSMUST000000 47793	protein coding
Hoxd12-201	2	5.49E-03	-3.31	NaN	ENSMUST000000 01878	protein coding
Hoxd3-203	2	7.83E-03	4.26	NaN	ENSMUST000001 11983	protein coding
Hoxd4-201	2	0.03	10.51	NaN	ENSMUST000000 47904	protein coding

Hoxd4-202	2	0.09	1.74	0.75	ENSMUST000001 11980	protein coding
Hsf1-201	15	1.86	4.74	0.2	ENSMUST000000 72838	protein coding
Hsf1-202	15	0.32	-1.64	0.78	ENSMUST000002 26238	protein coding
Hsf1-203	15	2.15	1.4	0.62	ENSMUST000002 26860	nonsense mediated decay
Hsf1-205	15	25.69	1.28	0.38	ENSMUST000002 27478	protein coding
Hsf1-207	15	2.17	-1.82	0.43	ENSMUST000002 28371	protein coding
Hsf1-209	15	0.7	-1.13	0.95	ENSMUST000002 28688	protein coding
Hsf2-201	10	18.46	-1.41	0.19	ENSMUST000000 79833	protein coding
Hsf2-204	10	3.34	1.17	0.81	ENSMUST000002 20042	protein coding
Hsf2-206	10	1.63	2.15	0.27	ENSMUST000002 20353	nonsense mediated decay
Ikzf1-201	11	0.07	-17.06	0.32	ENSMUST000000 18798	protein coding
Ikzf1-204	11	0.04	25.54	0.17	ENSMUST000000 76700	protein coding
Ikzf1-205	11	0.06	-5.57	NaN	ENSMUST000001 26058	protein coding
Ikzf1-207	11	0.07	-1.57	0.8	ENSMUST000002 40540	protein coding
Ikzf1-208	11	0.08	4.26	NaN	ENSMUST000002 40541	protein coding
Ikzf1-209	11	5.47E-03	4.26	NaN	ENSMUST000002 40542	protein coding
Ikzf1-210	11	0.02	-1.2	0.93	ENSMUST000002 40543	protein coding
Ikzf1-211	11	0.07	7.89	NaN	ENSMUST000002 40544	protein coding
Ikzf2-201	1	0.22	1.4	0.69	ENSMUST000000 27146	protein coding
Ikzf2-202	1	0.22	-2.77	0.44	ENSMUST000001 87184	protein coding
Ikzf2-206	1	0.12	-1.77	0.78	ENSMUST000001 90016	protein coding
Ikzf2-207	1	0.06	2.31	0.6	ENSMUST000001 90771	protein coding
Ikzf2-209	1	0.08	-14.63	0.34	ENSMUST000001 91262	protein coding
Ikzf4-201	10	1.68	2.19	0.32	ENSMUST000001 33342	protein coding
Ikzf4-203	10	0.05	-17.06	0.32	ENSMUST000002 21150	protein coding
Ikzf4-204	10	0.34	1.61	0.75	ENSMUST000002 22067	protein coding

Ikzf4-206	10	0.23	16.25	0.24	ENSMUST000002 22901	nonsense mediated decay
Ikzf4-208	10	0.47	1.33	0.79	ENSMUST000002 23162	nonsense mediated decay
Ikzf5-201	7	11.68	1.05	0.83	ENSMUST000000 46306	protein coding
Ikzf5-202	7	1.3	2.78	0.36	ENSMUST000001 21033	protein coding
Ikzf5-203	7	1.29	-2.94	0.34	ENSMUST000001 28432	protein coding
Ikzf5-204	7	0.38	-1.51	0.82	ENSMUST000001 42349	protein coding
Ikzf5-205	7	0.31	-24.3	0.27	ENSMUST000001 54602	protein coding
Ikzf5-206	7	0.52	-3.96	0.4	ENSMUST000002 07243	protein coding
Irf1-202	11	49.25	1.32	0.04	ENSMUST000001 08920	protein coding
Irf1-203	11	0.13	-1.25	0.86	ENSMUST000001 08922	protein coding
Irf1-204	11	0.22	24.28	0.16	ENSMUST000001 23376	protein coding
Irf1-208	11	0.15	-20.37	0.29	ENSMUST000001 40866	protein coding
Irf1-209	11	0.88	1.06	0.98	ENSMUST000001 42221	nonsense mediated decay
Irf3-202	7	8.61	1.04	0.95	ENSMUST000001 07834	protein coding
Irf3-206	7	4.52	2.38	0.22	ENSMUST000002 07521	protein coding
Irf3-211	7	0.37	17.45	0.19	ENSMUST000002 08958	protein coding
Irf5-201	6	2.84	1.77	0.51	ENSMUST000000 04392	protein coding
Irf5-202	6	0.72	-1.04	1	ENSMUST000001 63511	protein coding
Irf5-204	6	0.23	2.64	0.57	ENSMUST000001 64922	protein coding
Irf5-205	6	0.28	-74.45	0.09	ENSMUST000001 67252	protein coding
Irf8-201	8	1.53	-1.21	0.81	ENSMUST000000 47737	protein coding
Irf8-204	8	0.14	24.91	0.17	ENSMUST000001 60943	protein coding
Irf9-202	14	3.85	1.15	0.85	ENSMUST000001 30697	protein coding
Irf9-203	14	2.37	1.18	0.78	ENSMUST000001 34863	protein coding
Irf9-207	14	0.16	16.25	0.24	ENSMUST000002 26275	protein coding
Irx6-202	8	0.03	1.44	0.83	ENSMUST000001 67261	protein coding

Isx-201	8	0.12	-34.2	0.2	ENSMUST000000 34034	protein coding
Jrk-201	15	5.74	-1.79	6.55E-03	ENSMUST000000 50234	protein coding
Jrkl-201	9	4.64	1.63	0.2	ENSMUST000001 10582	protein coding
Kat7-203	11	1.39	-1.93	0.5	ENSMUST000001 03159	protein coding
Kcmf1-201	6	20.8	1.03	0.91	ENSMUST000000 68697	protein coding
Kcmf1-204	6	110.11	1.4	9.17E-06	ENSMUST000002 04598	protein coding
Kcmf1-205	6	0.19	2.62	0.57	ENSMUST000002 04708	protein coding
Kcnip3-201	2	0.74	-1.74	0.61	ENSMUST000000 28850	protein coding
Kcnip3-202	2	0.84	1.85	0.54	ENSMUST000000 88538	protein coding
Kdm2a-201	19	0.56	2.47	0.13	ENSMUST000000 47898	protein coding
Kdm2a-202	19	35.52	1.01	0.92	ENSMUST000000 75856	protein coding
Kdm2a-203	19	0.06	16.72	0.24	ENSMUST000001 16571	protein coding
Kdm2a-206	19	0.78	-1.11	0.95	ENSMUST000001 75959	protein coding
Kdm2a-208	19	0.54	-8.49	0.12	ENSMUST000001 76483	protein coding
Kdm2a-211	19	1.14	-6.6	0.2	ENSMUST000001 76532	nonsense mediated decay
Kdm2b-201	5	31.9	1.92	2.08E-07	ENSMUST000000 31435	protein coding
Kdm2b-204	5	1.54	-1.92	0.2	ENSMUST000001 18027	protein coding
Kdm2b-205	5	0.12	-78.93	0.11	ENSMUST000001 21739	protein coding
Kdm2b-214	5	0.18	26.28	0.15	ENSMUST000001 45082	protein coding
Kdm2b-217	5	0.08	1.04	0.99	ENSMUST000001 52872	protein coding
Kin-201	2	27.25	1.09	0.71	ENSMUST000000 42512	protein coding
Klf1-201	8	0.51	1.81	0.68	ENSMUST000000 67060	protein coding
Klf1-202	8	0.14	-8.14	0.26	ENSMUST000002 39392	protein coding
Klf11-201	12	17.43	1.52	0.03	ENSMUST000000 20982	protein coding
Klf11-202	12	0.06	4.26	NaN	ENSMUST000001 39940	protein coding
Klf11-204	12	0.03	4.26	NaN	ENSMUST000001 46894	protein coding

Klf16-201	10	57.13	1.6	2.66E-05	ENSMUST000000 38558	protein coding
Klf7-201	1	1.3	1.13	0.9	ENSMUST000000 55001	protein coding
Klf7-202	1	5.4	-1.09	0.75	ENSMUST000001 14086	protein coding
Klf7-203	1	0.74	-5.73	0.13	ENSMUST000001 35075	protein coding
Klf9-201	19	64.18	-1.55	3.94E-13	ENSMUST000000 36884	protein coding
Kmt2b-201	7	24.57	-1.24	0.01	ENSMUST000000 06470	protein coding
Kmt2b-206	7	9.67	-1.13	0.62	ENSMUST000001 31002	protein coding
L3mbtl1-201	2	0.61	1.21	0.83	ENSMUST000000 35751	protein coding
L3mbtl1-202	2	0.24	-2.07	0.69	ENSMUST000001 24264	protein coding
L3mbtl1-207	2	0.02	-3.31	NaN	ENSMUST000001 56954	protein coding
Lbx1-201	19	0.3	3	0.41	ENSMUST000000 99401	protein coding
Lcor-202	19	0.15	1.05	0.98	ENSMUST000001 63929	protein coding
Lcor-204	19	1.13	1.46	0.77	ENSMUST000002 37208	protein coding
Lcor-206	19	8.43	-1.35	0.18	ENSMUST000002 38398	protein coding
Lcor-207	19	6.57	1.25	0.42	ENSMUST000002 38431	protein coding
Lcorl-201	5	1.3	1.27	0.71	ENSMUST000000 16026	protein coding
Lcorl-208	5	0.05	4.26	NaN	ENSMUST000001 87615	nonsense mediated decay
Lcorl-210	5	0.51	2.86	0.34	ENSMUST000001 90036	protein coding
Lcorl-212	5	0.73	-1.07	0.91	ENSMUST000002 38522	protein coding
Lhx3-202	2	0.15	2.52	0.54	ENSMUST000000 54099	protein coding
Lhx8-203	3	0.03	-5.57	NaN	ENSMUST000002 04171	nonsense mediated decay
Lhx8-204	3	0.16	5.48	0.28	ENSMUST000002 04403	protein coding
Lhx8-205	3	0.04	-1.11	0.96	ENSMUST000002 05251	protein coding
Lin28a-201	4	203.04	-1.7	2.83E-15	ENSMUST000000 51674	protein coding
Lin28a-202	4	0.04	-3.31	NaN	ENSMUST000001 76113	protein coding
Lin28a-203	4	0.14	-1.55	0.83	ENSMUST000001 76292	protein coding

Lin54-201	5	23.49	1.52	1.57E-04	ENSMUST000002 39512	protein coding
Lmx1a-202	1	0.17	-5.06	0.29	ENSMUST000001 11377	protein coding
Lyl1-201	8	0.11	-1.42	0.83	ENSMUST000000 37165	protein coding
Mafa-201	15	2.19	1.11	0.88	ENSMUST000000 62002	protein coding
Mafg-201	11	56.74	1.9	3.21E-22	ENSMUST000000 58162	protein coding
Mafg-202	11	2.67	3.05	0.23	ENSMUST000001 06180	protein coding
Max-201	12	69.98	-1.34	6.41E-03	ENSMUST000000 82136	protein coding
Max-206	12	6.36	-3.04	0.21	ENSMUST000002 18653	nonsense mediated decay
Maz-202	7	0.21	1.16	0.94	ENSMUST000002 05461	protein coding
Maz-203	7	25.53	1.34	0.35	ENSMUST000002 05568	protein coding
Maz-205	7	0.18	1.44	0.84	ENSMUST000002 06291	protein coding
Mbd1-201	18	8.96	1.54	0.06	ENSMUST000000 97530	protein coding
Mbd1-204	18	24.68	1.77	1.79E-05	ENSMUST000002 24332	protein coding
Mbd1-207	18	0.23	-108.42	0.09	ENSMUST000002 39157	protein coding
Mbd2-201	18	25.87	1.14	0.65	ENSMUST000000 74058	protein coding
Mbd2-202	18	0.81	-1.16	0.9	ENSMUST000001 14946	protein coding
Mbd2-203	18	3.94	-3.7	0.23	ENSMUST000001 27260	nonsense mediated decay
Mbd3-201	10	19.59	1.71	0.02	ENSMUST000000 92295	protein coding
Mbd3-203	10	9.88	-1.5	0.41	ENSMUST000001 05348	protein coding
Mbd3-204	10	54.6	1.6	0.06	ENSMUST000001 05349	protein coding
Mbd4-201	6	13.65	-1.49	0.11	ENSMUST000000 32469	protein coding
Mbd4-202	6	2.34	-1.17	0.8	ENSMUST000001 22816	protein coding
Mbd4-205	6	0.81	-19.67	0.08	ENSMUST000002 03643	protein coding
Mbd6-201	10	11.58	1.31	0.29	ENSMUST000000 26476	protein coding
Mbd6-203	10	3.09	1.43	0.51	ENSMUST000001 26243	nonsense mediated decay
Mbd6-204	10	0.13	13.38	0.28	ENSMUST000001 36169	nonsense mediated decay

Mbd6-205	10	0.17	13.38	0.28	ENSMUST000001 54851	protein coding
Mbd6-206	10	2.65	1.78	0.43	ENSMUST000001 56208	protein coding
Mbd6-207	10	0.48	41.17	0.11	ENSMUST000001 72567	protein coding
Mecom-201	3	0.16	2.37	NaN	ENSMUST000000 61088	protein coding
Mecom-202	3	0.04	-1.56	0.82	ENSMUST000001 08270	protein coding
Mecom-203	3	0.05	1.89	0.72	ENSMUST000001 08271	protein coding
Mecom-204	3	9.54E-03	-5.57	NaN	ENSMUST000001 66001	protein coding
Mecom-206	3	0.04	-1.35	0.89	ENSMUST000001 72694	protein coding
Mecom-207	3	0.04	16.72	0.24	ENSMUST000001 72697	protein coding
Mecom-208	3	0.01	-7.88	NaN	ENSMUST000001 72754	nonsense mediated decay
Mecom-210	3	0.03	-3.38	0.51	ENSMUST000001 73059	protein coding
Mecom-212	3	0.03	-1.11	0.96	ENSMUST000001 73495	protein coding
Mecom-213	3	0.11	43.82	0.09	ENSMUST000001 73899	protein coding
Mecom-215	3	0.03	-10.18	0.42	ENSMUST000001 74413	protein coding
Mecp2-201	X	10.79	1.05	0.87	ENSMUST000000 33770	protein coding
Mecp2-202	X	2.81	-1.13	0.66	ENSMUST000001 00750	protein coding
Mecp2-203	X	1.39	2.01	0.52	ENSMUST000001 23362	protein coding
Mef2c-201	13	0.03	-33.35	0.21	ENSMUST000000 05722	protein coding
Mef2c-205	13	0.06	-9.72	0.42	ENSMUST000001 95984	protein coding
Mef2c-208	13	0.02	4.26	NaN	ENSMUST000001 96730	protein coding
Mef2c-211	13	0.06	-7.65	NaN	ENSMUST000001 97145	protein coding
Mef2c-212	13	0.05	7.55	0.18	ENSMUST000001 97146	protein coding
Mef2c-216	13	0.06	4.26	NaN	ENSMUST000001 98064	protein coding
Mef2c-219	13	0.02	-5.57	NaN	ENSMUST000001 98217	protein coding
Mef2c-221	13	0.04	-3.31	NaN	ENSMUST000001 98916	protein coding
Mef2c-223	13	0.03	16.25	0.24	ENSMUST000001 99105	protein coding

Mef2c-230	13	0.09	1.14	0.95	ENSMUST00000200138	protein coding
Meis2-202	2	0.15	-2.48	0.53	ENSMUST00000074285	protein coding
Meis2-203	2	0.61	1.25	0.82	ENSMUST000000102538	protein coding
Meis2-205	2	0.41	1.44	0.73	ENSMUST000000110907	protein coding
Meis2-206	2	0.4	1.9	0.54	ENSMUST000000110908	protein coding
Meox2-201	12	0.03	-10.12	0.41	ENSMUST00000041183	protein coding
Mesp1-201	7	0.14	2.47	0.55	ENSMUST00000032760	protein coding
Mga-201	2	44.91	-1.82	2.25E-15	ENSMUST00000046717	protein coding
Mga-203	2	0.12	-1.36	0.83	ENSMUST000000110773	protein coding
Mga-204	2	5.45	1.33	0.14	ENSMUST000000110774	protein coding
Mixl1-201	1	1.68	1.54	0.55	ENSMUST00000027778	protein coding
Mkx-201	18	4	1.63	0.25	ENSMUST00000079788	protein coding
Mkx-202	18	0.53	-5.32	0.2	ENSMUST000000176608	protein coding
Mlx-202	11	38.14	-1.52	0.03	ENSMUST000000107302	protein coding
Mlx-203	11	4.37	2	0.23	ENSMUST000000107303	protein coding
Mlx-207	11	1.82	2.86	0.4	ENSMUST000000149597	protein coding
Mlxip-201	5	27.35	1.46	7.32E-07	ENSMUST00000068237	protein coding
Mlxip-202	5	0.12	4.11	0.4	ENSMUST000000111596	protein coding
Mlxip-203	5	0.73	1.3	0.78	ENSMUST000000135961	nonsense mediated decay
Mlxipl-201	5	0.31	1.53	0.72	ENSMUST00000005507	protein coding
Mlxipl-202	5	0.24	23.67	0.17	ENSMUST000000123370	protein coding
Mlxipl-203	5	0.42	11.76	0.05	ENSMUST000000128691	nonsense mediated decay
Mlxipl-204	5	0.36	-1.88	0.65	ENSMUST000000129008	nonsense mediated decay
Mlxipl-206	5	0.65	2.34	0.22	ENSMUST000000142385	nonsense mediated decay
Mlxipl-207	5	0.81	1.05	0.97	ENSMUST000000153519	nonsense mediated decay
Mnt-201	11	25.71	1.65	3.01E-05	ENSMUST00000000291	protein coding

Mnt-202	11	0.22	-22.22	0.28	ENSMUST000001 32150	protein coding
Msantd1-201	5	0.05	2.31	0.58	ENSMUST000000 50535	protein coding
Msantd1-203	5	0.12	-14.79	0.33	ENSMUST000002 02205	protein coding
Msantd1-204	5	0.13	1.42	0.84	ENSMUST000002 12362	protein coding
Mterf1a-201	5	7.01	-1.75	0.33	ENSMUST000000 44746	protein coding
Mterf1a-202	5	1.02	-1.37	0.73	ENSMUST000001 17463	protein coding
Mterf1b-201	5	3.67	-1.37	0.65	ENSMUST000001 77258	protein coding
Mterf2-201	10	10.99	-1.67	0.05	ENSMUST000000 50813	protein coding
Mterf2-202	10	0.1	1.34	NaN	ENSMUST000002 14193	protein coding
Mterf2-203	10	1.46	-5.56	0.25	ENSMUST000002 14607	protein coding
Mterf2-204	10	0.19	17.44	0.2	ENSMUST000002 17027	protein coding
Mterf3-201	13	35.76	-1.55	0.02	ENSMUST000000 21991	protein coding
Mterf3-202	13	0.55	-70.4	0.1	ENSMUST000001 72597	protein coding
Mterf3-205	13	0.87	1.01	1	ENSMUST000001 73158	nonsense mediated decay
Mterf3-206	13	1.75	-1.4	0.73	ENSMUST000001 73407	nonsense mediated decay
Mterf3-207	13	0.47	2.87	0.52	ENSMUST000001 73773	protein coding
Mterf3-208	13	1.27	1.03	0.99	ENSMUST000001 73891	protein coding
Mterf3-209	13	2.02	-2.39	0.33	ENSMUST000001 73910	nonsense mediated decay
Mterf3-212	13	0.88	1.15	0.93	ENSMUST000001 74339	protein coding
Mterf4-201	1	46.54	-1.13	0.59	ENSMUST000000 27492	protein coding
Mterf4-202	1	3.72	-1.18	0.75	ENSMUST000001 12942	protein coding
Mtf1-201	4	11.11	1.39	0.02	ENSMUST000000 30723	protein coding
Mtf1-202	4	1.29	4.37	0.06	ENSMUST000001 06193	protein coding
Mtf1-203	4	8.19	-1.92	0.31	ENSMUST000001 38807	protein coding
Mtf1-205	4	0.36	1.29	0.88	ENSMUST000001 75875	protein coding
Mxd1-201	6	3.11	1.47	0.34	ENSMUST000000 01184	protein coding

Mxd3-201	13	5.79	-1.21	0.73	ENSMUST000000 21941	protein coding
Mxi1-201	19	12.27	1.57	0.04	ENSMUST000000 03870	protein coding
Mxi1-202	19	0.11	8.48	0.11	ENSMUST000000 25998	protein coding
Mxi1-203	19	18.31	-1.25	0.33	ENSMUST000001 11737	protein coding
Mxi1-204	19	0.26	36.5	0.14	ENSMUST000002 35201	protein coding
Mxi1-208	19	0.57	1.25	0.87	ENSMUST000002 37480	protein coding
Mxi1-209	19	0.67	-1.35	0.83	ENSMUST000002 37837	protein coding
Mybl1-201	1	5.36	1.17	0.59	ENSMUST000000 88658	protein coding
Mybl2-201	2	378.14	-1.19	0.03	ENSMUST000000 18005	protein coding
Mybl2-205	2	9.59	-1.43	0.56	ENSMUST000001 42729	protein coding
Myc-201	15	28.42	1.6	0.01	ENSMUST000000 22971	protein coding
Myc-203	15	0.77	-1	1	ENSMUST000001 59338	protein coding
Myc-204	15	15.02	-1.61	0.08	ENSMUST000001 60009	protein coding
Myc-205	15	28.19	1.56	0.02	ENSMUST000001 61976	protein coding
Mycs-201	X	0.01	-5.59	NaN	ENSMUST000000 58404	protein coding
Myf5-201	10	0.01	4.26	NaN	ENSMUST000000 00445	protein coding
Myf6-201	10	0.02	-5.57	NaN	ENSMUST000000 44210	protein coding
Mynn-201	3	9.59	-1.85	0.01	ENSMUST000000 47502	protein coding
Mynn-202	3	1.66	-1.04	0.95	ENSMUST000001 92715	protein coding
Myod1-201	7	0.05	3.41	0.49	ENSMUST000000 72514	protein coding
Myog-201	1	0.08	1.45	0.83	ENSMUST000000 27730	protein coding
Myrf1-201	10	0.19	-1.14	0.93	ENSMUST000000 48229	protein coding
Mysm1-201	4	13.34	-1.6	1.10E-05	ENSMUST000000 75872	protein coding
Myt1-203	2	0.01	10.6	NaN	ENSMUST000001 08757	protein coding
Myt1-204	2	0.02	-2.89	0.59	ENSMUST000001 29843	protein coding
Myt1-205	2	0.01	1.34	NaN	ENSMUST000001 29856	protein coding

Myt1l-201	12	0.01	-1.16	0.95	ENSMUST000000 21009	protein coding
Myt1l-202	12	9.46E-03	1.04	0.99	ENSMUST000000 49784	protein coding
Myt1l-204	12	0.02	-10.11	0.41	ENSMUST000002 18198	protein coding
Myt1l-205	12	4.96E-03	4.26	NaN	ENSMUST000002 18583	protein coding
Mzf1-204	7	0.95	1.29	0.79	ENSMUST000001 82490	protein coding
Mzf1-205	7	0.17	1.95	0.7	ENSMUST000001 82515	protein coding
Nacc2-201	2	2.35	1.07	0.87	ENSMUST000000 28300	protein coding
Nacc2-206	2	0.11	2.37	NaN	ENSMUST000001 40993	protein coding
Naif1-201	2	4.69	1.08	0.79	ENSMUST000000 48431	protein coding
Ncoa1-201	12	3.21	-1.14	0.65	ENSMUST000000 85814	protein coding
Ncoa1-203	12	0.06	2.44	0.63	ENSMUST000002 17794	nonsense mediated decay
Ncoa1-205	12	0.24	1.48	0.81	ENSMUST000002 18191	protein coding
Ncoa1-206	12	0.36	-8.59	0.26	ENSMUST000002 19275	protein coding
Ncoa1-207	12	0.88	-1.35	0.82	ENSMUST000002 19373	protein coding
Ncoa1-209	12	1	1.69	0.47	ENSMUST000002 20434	protein coding
Ncoa2-201	1	8.09	1.17	0.5	ENSMUST000000 06037	protein coding
Ncoa2-202	1	13.98	1.98	3.80E-09	ENSMUST000000 68304	protein coding
Ncoa2-208	1	0.11	7.56	NaN	ENSMUST000001 45280	protein coding
Ncoa3-201	2	37.34	-1.3	6.01E-05	ENSMUST000000 88095	protein coding
Ncoa3-202	2	59.45	1.05	0.63	ENSMUST000001 09252	protein coding
Neurod2-201	11	0.01	7.56	NaN	ENSMUST000000 41685	protein coding
Neurog1-201	13	0.05	1.11	0.95	ENSMUST000000 58475	protein coding
Neurog2-201	3	0.06	20.74	0.18	ENSMUST000000 29587	protein coding
Nfat5-202	8	8.85	-1.91	1.06E-06	ENSMUST000000 77440	protein coding
Nfat5-207	8	0.34	-1.14	0.95	ENSMUST000001 44100	protein coding
Nfat5-208	8	2.83	-1.02	0.97	ENSMUST000001 47588	protein coding

Nfatc3-201	8	31.82	-1.01	0.94	ENSMUST00000109308	protein coding
Nfe2l1-211	11	33.13	1.17	0.34	ENSMUST00000167149	protein coding
Nfe2l2-201	2	89.77	1.19	0.02	ENSMUST00000102672	protein coding
Nfe2l3-201	6	1.29	1.55	0.58	ENSMUST00000005103	protein coding
Nfe2l3-203	6	0.06	3.41	0.48	ENSMUST00000160133	protein coding
Nfil3-201	13	9.34	-1.15	0.57	ENSMUST000000071065	protein coding
Nfx1-201	4	21.86	-1.35	0.03	ENSMUST000000030133	protein coding
Nfx1-202	4	51.93	-1.6	2.53E-07	ENSMUST000000091614	protein coding
Nfx1-203	4	35.14	-1.35	4.59E-04	ENSMUST000000098143	protein coding
Nfxl1-201	5	0.76	7.8	0.13	ENSMUST000000074948	protein coding
Nfxl1-202	5	31.32	1.74	5.24E-08	ENSMUST000000087216	protein coding
Nfxl1-204	5	1.03	2.15	0.44	ENSMUST00000135318	nonsense mediated decay
Nfya-201	17	19.08	-1.71	6.83E-03	ENSMUST000000046719	protein coding
Nfya-202	17	11.33	-1.7	0.06	ENSMUST000000078800	protein coding
Nfya-205	17	2.91	3.11	0.14	ENSMUST00000159535	protein coding
Nfya-206	17	0.27	51.01	0.1	ENSMUST00000160319	protein coding
Nfya-209	17	0.69	-74.9	0.1	ENSMUST00000161256	protein coding
Nfyb-204	10	70.82	-1.53	8.52E-09	ENSMUST00000130911	protein coding
Nfyc-204	4	1.69	-1.3	0.76	ENSMUST00000120779	protein coding
Nfyc-206	4	0.52	3.13	0.45	ENSMUST00000134979	protein coding
Nfyc-207	4	0.12	-9.72	0.42	ENSMUST00000136236	protein coding
Nfyc-209	4	0.96	-1.38	0.82	ENSMUST00000145658	protein coding
Nhlh2-202	3	0.04	-17.92	0.32	ENSMUST00000196324	protein coding
Nkrf-201	X	18.23	-1.38	0.13	ENSMUST000000057093	protein coding
Nkrf-202	X	5.32	1.48	0.15	ENSMUST00000239259	protein coding
Nkx2-1-202	12	0.02	2.37	NaN	ENSMUST00000178477	protein coding

Nkx3-1-201	14	2.52	1.86	0.17	ENSMUST000000 22646	protein coding
Nkx3-2-201	5	0.06	14.15	0.23	ENSMUST000000 60820	protein coding
Nkx6-2-201	7	0.85	-3.13	0.29	ENSMUST000000 97974	nonsense mediated decay
Nkx6-2-202	7	2.56	1.3	0.75	ENSMUST000001 06095	protein coding
Nobox-201	6	0.04	1.44	0.84	ENSMUST000000 31749	protein coding
Nobox-202	6	0.04	-1	1	ENSMUST000001 72554	protein coding
Noto-201	6	0.03	-7.84	NaN	ENSMUST000000 89578	protein coding
Npas4-203	19	0.07	1.02	1	ENSMUST000002 37881	nonsense mediated decay
Nr1h2-201	7	17.32	-1.49	0.1	ENSMUST000000 73488	protein coding
Nr1h2-202	7	12.28	1.15	0.69	ENSMUST000001 07910	protein coding
Nr1h2-207	7	0.48	1.95	0.7	ENSMUST000001 28600	protein coding
Nr1h2-212	7	2.99	-1.51	0.61	ENSMUST000001 42298	protein coding
Nr1h2-213	7	0.07	-21.64	0.29	ENSMUST000001 67197	protein coding
Nr1h2-215	7	0.58	33.92	0.11	ENSMUST000002 07737	protein coding
Nr1h2-216	7	0.06	13.58	0.27	ENSMUST000002 08322	protein coding
Nr1h2-217	7	0.39	-3.17	0.48	ENSMUST000002 08366	protein coding
Nr1h4-201	10	0.05	-1.87	0.73	ENSMUST000000 58126	protein coding
Nr1i2-201	16	0.1	-1.23	0.9	ENSMUST000000 23504	protein coding
Nr1i3-202	1	0.01	-3.31	NaN	ENSMUST000000 75469	protein coding
Nr1i3-208	1	0.14	1.33	0.84	ENSMUST000001 55126	protein coding
Nr2c2-201	6	5.15	-1.09	0.78	ENSMUST000001 13460	protein coding
Nr2c2-202	6	1.84	-1.68	0.49	ENSMUST000001 13463	protein coding
Nr2c2-203	6	0.17	1.86	0.72	ENSMUST000001 33133	protein coding
Nr2c2-205	6	8.96	-1.65	0.03	ENSMUST000001 46175	nonsense mediated decay
Nr3c1-201	18	0.91	-1.45	0.67	ENSMUST000000 25300	protein coding
Nr3c1-204	18	3.96	1.35	0.25	ENSMUST000001 15571	protein coding

Nr3c1-205	18	0.18	-19.04	0.29	ENSMUST000001 24115	protein coding
Nr3c1-206	18	0.36	4.48	0.33	ENSMUST000001 31885	protein coding
Nr3c1-207	18	0.1	-5.59	NaN	ENSMUST000001 50483	protein coding
Nr3c1-208	18	1.91	2.47	0.25	ENSMUST000001 52853	protein coding
Nr3c2-201	8	7.87E-03	4.26	NaN	ENSMUST000000 34031	protein coding
Nr3c2-202	8	0.11	52.64	0.08	ENSMUST000001 09911	protein coding
Nr3c2-203	8	0.16	-1.18	0.88	ENSMUST000001 09912	protein coding
Nr3c2-206	8	0.07	-7.65	NaN	ENSMUST000001 28862	protein coding
Nr3c2-208	8	0.11	-57.29	0.12	ENSMUST000001 48106	nonsense mediated decay
Nr4a1-201	15	45.31	1.37	0.03	ENSMUST000000 23779	protein coding
Nr4a1-203	15	0.41	-2.1	0.67	ENSMUST000002 30814	protein coding
Nr4a2-201	2	0.14	2.18	0.68	ENSMUST000000 28166	protein coding
Nr4a2-202	2	0.21	-1.42	0.84	ENSMUST000001 12627	protein coding
Nr4a2-203	2	0.29	1.33	0.86	ENSMUST000001 12629	protein coding
Nr4a2-206	2	0.03	-17.06	0.32	ENSMUST000001 83542	nonsense mediated decay
Nr6a1-207	2	0.04	-5.59	NaN	ENSMUST000001 42113	protein coding
Nr6a1-208	2	0.24	-2.25	0.67	ENSMUST000001 42130	protein coding
Nrf1-202	6	2.42	-1.04	1	ENSMUST000000 69808	protein coding
Nrf1-204	6	1.82	-1.41	0.66	ENSMUST000001 15199	protein coding
Nrf1-205	6	1.11	-1.89	0.41	ENSMUST000001 15200	protein coding
Nrf1-207	6	16.91	1	1	ENSMUST000001 15206	protein coding
Nrf1-208	6	0.11	-44.56	0.18	ENSMUST000001 15208	protein coding
Nrf1-210	6	13.18	1.34	0.19	ENSMUST000001 15211	protein coding
Nrf1-212	6	1.81	1.04	0.98	ENSMUST000001 23194	protein coding
Nrf1-218	6	0.14	-11.79	0.39	ENSMUST000001 48990	protein coding
Nrf1-220	6	5.15	-11.8	0.37	ENSMUST000001 70535	protein coding

Nrl-203	14	0.01	4.26	NaN	ENSMUST000001 78694	protein coding
Nrl-207	14	0.02	-3.31	NaN	ENSMUST000002 28902	protein coding
Olig3-201	10	0.03	-12.19	0.38	ENSMUST000000 53225	protein coding
Osr1-201	12	0.01	4.26	NaN	ENSMUST000000 57021	protein coding
Osr2-201	15	0.27	1.58	0.74	ENSMUST000000 22952	protein coding
Osr2-204	15	0.08	-17.06	0.32	ENSMUST000002 28152	protein coding
Otp-201	13	0.03	-1.05	0.99	ENSMUST000000 22195	protein coding
Ovol3-201	7	0.09	10.85	NaN	ENSMUST000001 89482	protein coding
Patz1-201	11	23.98	-1.62	8.60E-04	ENSMUST000000 57089	protein coding
Patz1-202	11	6.03	3.41	0.08	ENSMUST000000 93402	protein coding
Patz1-203	11	12.56	-1.26	0.28	ENSMUST000000 94471	protein coding
Patz1-205	11	2.21	2.59	0.09	ENSMUST000001 10043	protein coding
Patz1-212	11	0.16	2.02	0.68	ENSMUST000001 54319	protein coding
Pax1-201	2	0.17	1.29	0.86	ENSMUST000001 09968	protein coding
Pax2-201	19	0.2	3.06	0.36	ENSMUST000000 04340	protein coding
Pax2-202	19	0.02	-5.57	NaN	ENSMUST000001 73346	protein coding
Pax2-203	19	0.04	-2.27	0.69	ENSMUST000001 74490	protein coding
Pax4-205	6	0.01	-3.31	NaN	ENSMUST000001 74194	protein coding
Pax6-201	2	0.1	1.06	0.98	ENSMUST000000 90391	protein coding
Pax6-202	2	0.27	-1.6	0.68	ENSMUST000000 90397	protein coding
Pax6-203	2	0.09	37.08	0.11	ENSMUST000001 11082	protein coding
Pax6-204	2	0.74	-1.14	0.9	ENSMUST000001 11083	protein coding
Pax6-205	2	0.07	3.35	0.49	ENSMUST000001 11085	protein coding
Pax6-207	2	0.29	-2.15	0.66	ENSMUST000001 11087	protein coding
Pax6-214	2	0.08	-7.88	NaN	ENSMUST000001 42772	protein coding
Pax6-224	2	0.05	10.85	NaN	ENSMUST000001 56216	protein coding

Pax6-225	2	0.11	4.11	0.42	ENSMUST000001 67211	protein coding
Pbx2-203	17	28.44	-1.09	0.77	ENSMUST000001 73328	protein coding
Pbx2-204	17	0.8	1.36	0.84	ENSMUST000001 74532	protein coding
Pcgf2-201	11	0.95	1.44	0.73	ENSMUST000000 18681	protein coding
Pcgf2-202	11	48.87	-1.45	0.02	ENSMUST000001 03148	protein coding
Pcgf6-201	19	68.84	-1.88	2.73E-10	ENSMUST000000 26032	protein coding
Pcgf6-203	19	1.72	-1.19	0.84	ENSMUST000002 35633	nonsense mediated decay
Phf1-202	17	0.06	1.38	0.88	ENSMUST000002 36269	nonsense mediated decay
Phf1-205	17	2.84	1.47	0.4	ENSMUST000002 37189	protein coding
Phf20-201	2	58.95	-1.46	2.94E-09	ENSMUST000000 37401	protein coding
Pin1-201	9	58.68	1.41	4.10E-05	ENSMUST000000 34689	protein coding
Pin1rt1-201	2	0.04	7.56	NaN	ENSMUST000000 99659	protein coding
Pknox1-201	17	16.49	1.2	0.39	ENSMUST000000 97352	protein coding
Pknox1-202	17	2.25	1.22	0.81	ENSMUST000001 75806	protein coding
Pknox1-205	17	0.39	-10.22	0.18	ENSMUST000001 76701	protein coding
Pknox1-207	17	0.19	-1.66	0.8	ENSMUST000002 35255	protein coding
Pknox1-208	17	0.32	-10.81	0.43	ENSMUST000002 35401	nonsense mediated decay
Pknox1-212	17	1.65	1.49	0.62	ENSMUST000002 37248	protein coding
Pknox1-213	17	0.24	-45.21	0.18	ENSMUST000002 37748	protein coding
Pknox1-214	17	0.15	-1.84	0.78	ENSMUST000002 37887	nonsense mediated decay
Pknox2-201	9	0.07	34.53	0.14	ENSMUST000000 39674	protein coding
Pknox2-207	9	0.33	-1.13	0.91	ENSMUST000001 77218	protein coding
Plagl1-201	10	0.02	10.6	NaN	ENSMUST000001 21325	protein coding
Plagl1-202	10	0.07	3.45	0.43	ENSMUST000001 21646	protein coding
Plagl1-203	10	0.04	-1.35	0.88	ENSMUST000001 21766	protein coding
Plagl1-208	10	0.31	-31.46	0.22	ENSMUST000001 30313	protein coding

Plagl1-222	10	0.05	4.26	NaN	ENSMUST000001 45103	protein coding
Plagl2-201	2	11.09	-1.12	0.67	ENSMUST000000 56924	protein coding
Plscr2-201	9	0.02	7.56	NaN	ENSMUST000000 34932	protein coding
Plscr2-202	9	0.08	-2.14	0.7	ENSMUST000001 13044	protein coding
Plscr2-203	9	0.02	-3.31	NaN	ENSMUST000001 26911	protein coding
Pou1f1-203	16	0.02	4.26	NaN	ENSMUST000001 76330	protein coding
Pou2af1-202	9	0.02	4.26	NaN	ENSMUST000002 14322	protein coding
Pou2f1-206	1	1.53	1.86	0.44	ENSMUST000001 11429	protein coding
Pou2f1-207	1	1.24	-1.11	0.95	ENSMUST000001 59212	protein coding
Pou2f1-208	1	18.91	-1.44	1.31E-05	ENSMUST000001 60260	protein coding
Pou2f1-212	1	0.31	10.85	NaN	ENSMUST000001 76800	protein coding
Pou2f1-214	1	0.58	-3.08	0.39	ENSMUST000001 77358	protein coding
Pou2f1-217	1	0.45	3.64	0.45	ENSMUST000001 84799	protein coding
Pou2f2-201	7	0.1	2.18	0.65	ENSMUST000000 98679	protein coding
Pou2f2-205	7	0.08	-3.23	0.55	ENSMUST000001 08417	protein coding
Pou2f2-206	7	0.22	2.03	0.57	ENSMUST000001 08418	protein coding
Pou2f2-207	7	0.23	1.74	0.75	ENSMUST000001 47146	protein coding
Pou2f2-209	7	0.71	-1.86	0.37	ENSMUST000001 75774	protein coding
Pou2f2-210	7	8.19E-03	-3.31	NaN	ENSMUST000001 76408	protein coding
Pou3f2-201	4	4.02E-03	1.34	NaN	ENSMUST000001 78174	protein coding
Pou3f4-201	X	0.07	-34.89	0.19	ENSMUST000000 78229	protein coding
Pou4f1-201	14	0.91	-1.71	0.46	ENSMUST000000 53016	protein coding
Pou5f2-201	13	0.02	1.34	NaN	ENSMUST000001 75955	protein coding
Pou6f1-204	15	0.21	9.53	0.19	ENSMUST000001 76300	nonsense mediated decay
Pou6f2-202	13	0.06	-4.33	0.42	ENSMUST000001 75703	protein coding
Ppara-201	15	0.14	-5.27	0.32	ENSMUST000000 57979	protein coding

Ppara-202	15	0.45	3.6	0.07	ENSMUST000001 09422	protein coding
Ppara-203	15	0.14	1.98	0.68	ENSMUST000001 09423	protein coding
Prdm10-201	9	0.17	2.07	0.67	ENSMUST000000 74510	protein coding
Prdm10-202	9	4.04	1.14	0.83	ENSMUST000001 17389	protein coding
Prdm10-204	9	7.16	-1.32	0.22	ENSMUST000002 15499	protein coding
Prdm10-205	9	3.02	-1.29	0.6	ENSMUST000002 15847	protein coding
Prdm12-201	2	0.05	-1.7	0.75	ENSMUST000001 13470	protein coding
Prdm13-201	4	0.15	3.09	0.37	ENSMUST000000 76206	protein coding
Prdm15-203	16	4.53	-1.58	0.06	ENSMUST000001 21584	protein coding
Prdm15-210	16	1.6	-1.25	0.73	ENSMUST000001 42295	nonsense mediated decay
Prdm2-201	4	25.63	-1.22	5.56E-03	ENSMUST000001 05778	protein coding
Prdm2-202	4	0.04	4.26	NaN	ENSMUST000001 34791	protein coding
Preb-201	5	7.13	-1.14	0.66	ENSMUST000000 74840	protein coding
Preb-206	5	0.03	-1.03	0.99	ENSMUST000002 01821	protein coding
Preb-209	5	39.32	-1.14	0.4	ENSMUST000002 02567	protein coding
Prmt3-201	7	42.28	-1.51	4.81E-04	ENSMUST000000 32715	protein coding
Prmt3-206	7	0.24	3.68	0.4	ENSMUST000001 47401	nonsense mediated decay
Prr12-201	7	30.18	1.73	6.25E-07	ENSMUST000000 57293	protein coding
Prrx2-202	2	3.34	-2.22	0.24	ENSMUST000001 13592	protein coding
Ptf1a-201	2	0.03	7.56	NaN	ENSMUST000000 28068	protein coding
Rag1-201	2	0.01	10.85	NaN	ENSMUST000000 78494	protein coding
Rara-202	11	12.29	-1.15	0.61	ENSMUST000001 07473	protein coding
Rarb-202	14	0.03	4.26	NaN	ENSMUST000002 23576	nonsense mediated decay
Rarb-203	14	0.03	4.26	NaN	ENSMUST000002 23976	protein coding
Rarb-206	14	0.11	-12.38	0.37	ENSMUST000002 25594	nonsense mediated decay
Rarb-207	14	0.02	-1.8	0.78	ENSMUST000002 25921	protein coding

Rax-201	18	0.25	3.26	0.34	ENSMUST000000 25396	protein coding
Rax-207	18	0.02	-7.65	NaN	ENSMUST000002 38035	protein coding
Rbck1-207	2	2.4	1.95	0.51	ENSMUST000001 44865	protein coding
Rela-201	19	20.86	1.16	0.5	ENSMUST000000 25867	protein coding
Relb-202	7	6.99	2.47	0.12	ENSMUST000000 94762	protein coding
Relb-206	7	0.03	4.26	NaN	ENSMUST000001 41586	protein coding
Relb-208	7	0.81	1.94	0.58	ENSMUST000001 53309	protein coding
Repin1-201	6	0.35	12.27	0.08	ENSMUST000000 09420	protein coding
Repin1-202	6	4	1.9	0.31	ENSMUST000001 18229	protein coding
Repin1-204	6	3.45	1.26	0.83	ENSMUST000001 35151	protein coding
Repin1-206	6	0.15	25.54	0.17	ENSMUST000001 54010	protein coding
Rexo4-201	2	51.62	-1.53	5.01E-03	ENSMUST000000 64244	protein coding
Rexo4-207	2	1.58	3.11	0.27	ENSMUST000001 36710	protein coding
Rfx1-204	8	0.4	1.58	0.68	ENSMUST000002 11046	protein coding
Rfx3-201	19	0.79	-1.19	0.8	ENSMUST000000 46898	protein coding
Rfx3-202	19	1.8	1.62	0.11	ENSMUST000001 65566	protein coding
Rfx3-204	19	0.21	13.46	0.08	ENSMUST000001 72907	protein coding
Rfx3-207	19	0.17	-10.18	0.42	ENSMUST000001 74420	protein coding
Rfx3-208	19	1.04	-1.93	0.39	ENSMUST000001 74850	protein coding
Rfx5-205	3	0.15	3.44	0.44	ENSMUST000001 07260	protein coding
Rfx5-206	3	0.04	4.26	NaN	ENSMUST000001 32393	protein coding
Rfx5-210	3	0.18	1.82	0.75	ENSMUST000001 42311	protein coding
Rfx5-212	3	2.87	-1.29	0.66	ENSMUST000001 44132	nonsense mediated decay
Rfx5-217	3	0.34	-7.01	0.33	ENSMUST000001 52869	protein coding
Rfx6-204	10	5.74E-03	-3.31	NaN	ENSMUST000002 19364	protein coding
Rfx6-205	10	0.02	-1.01	1	ENSMUST000002 19771	nonsense mediated decay

Rfx7-201	9	26.04	-1.7	1.98E-13	ENSMUST000001 63401	protein coding
Rfx7-202	9	7.37	-1.58	0.36	ENSMUST000001 83372	protein coding
Rfx7-204	9	0.13	28.54	0.16	ENSMUST000001 84015	protein coding
Rfx8-202	1	0.31	1.9	0.65	ENSMUST000001 51913	protein coding
Rlf-201	4	37.11	-1.06	0.55	ENSMUST000000 56635	protein coding
Rora-202	9	0.9	1.28	0.8	ENSMUST000001 13624	protein coding
Rorc-201	3	0.03	-10.11	0.4	ENSMUST000000 29795	protein coding
Rorc-202	3	0.05	14.84	0.24	ENSMUST000001 97040	protein coding
Rorc-204	3	0.03	1.41	0.86	ENSMUST000002 00009	protein coding
Rreb1-201	13	7.39	1.51	0.27	ENSMUST000000 37232	protein coding
Rreb1-202	13	0.06	37.53	0.13	ENSMUST000001 10237	protein coding
Rreb1-204	13	0.51	30.63	0.12	ENSMUST000001 22842	protein coding
Rreb1-206	13	0.2	-2.14	0.64	ENSMUST000001 24373	nonsense mediated decay
Rreb1-207	13	10.71	2.56	0.08	ENSMUST000001 28570	protein coding
Rreb1-208	13	2.56	2.25	0.54	ENSMUST000001 38043	protein coding
Rreb1-209	13	0.56	-3.07	0.45	ENSMUST000001 38110	protein coding
Rreb1-210	13	7.75	1.67	0.07	ENSMUST000001 49745	protein coding
Rslcan18-201	13	0.8	-1.97	0.41	ENSMUST000000 91526	protein coding
Rxrb-202	17	29.51	-1.15	0.44	ENSMUST000001 16612	protein coding
Rxrb-203	17	3.83	1.15	0.84	ENSMUST000001 73354	protein coding
Rxrb-207	17	2.22	2.45	0.41	ENSMUST000001 74299	protein coding
Safb-201	17	85.48	1.24	2.43E-03	ENSMUST000000 95224	protein coding
Safb-207	17	23.95	-1.1	0.59	ENSMUST000001 82533	protein coding
Safb-208	17	1.36	63.58	0.05	ENSMUST000001 82800	protein coding
Safb2-201	17	47.24	1.41	2.06E-03	ENSMUST000000 75510	protein coding
Safb2-202	17	1.09	-1.03	0.98	ENSMUST000001 24111	protein coding

Safb2-205	17	2.75	-1.93	0.44	ENSMUST000001 31056	protein coding
Safb2-206	17	0.12	-32.66	0.23	ENSMUST000001 33604	nonsense mediated decay
Safb2-210	17	0.03	-3.31	NaN	ENSMUST000001 42752	protein coding
Safb2-211	17	0.36	56.9	0.08	ENSMUST000001 42940	protein coding
Safb2-212	17	7.25	1.47	0.19	ENSMUST000001 44255	nonsense mediated decay
Safb2-216	17	0.86	-1.97	0.56	ENSMUST000001 55983	nonsense mediated decay
Sall3-201	18	1.86	-1.49	0.2	ENSMUST000000 57950	protein coding
Sall3-203	18	1.83	2.49	0.21	ENSMUST000002 38808	protein coding
Sall4-201	2	83.97	-1.09	0.44	ENSMUST000000 29061	protein coding
Sall4-202	2	6.75	27.82	0.18	ENSMUST000000 75044	protein coding
Sall4-203	2	2.85	1.42	0.56	ENSMUST000001 03074	protein coding
Sall4-206	2	3.48	2.1	0.36	ENSMUST000001 37536	protein coding
Sall4-207	2	9.05	-3.75	0.06	ENSMUST000001 50588	protein coding
Scrt1-201	15	0.04	-1.43	0.83	ENSMUST000000 96365	protein coding
Scrt2-201	2	0.06	-4.38	0.38	ENSMUST000000 64061	protein coding
Sebox-202	11	0.1	-1.94	0.71	ENSMUST000001 25670	protein coding
Setdb1-202	3	59.6	-1.19	0.01	ENSMUST000001 07170	protein coding
Setdb1-203	3	15.74	-1.88	7.88E-04	ENSMUST000001 07171	protein coding
Sgsm2-201	11	4.91	-1.09	0.78	ENSMUST000000 57631	protein coding
Sgsm2-202	11	2.72	1.96	0.19	ENSMUST000000 81799	protein coding
Six4-201	12	7.15	-1.47	0.08	ENSMUST000000 43208	protein coding
Six4-202	12	0.62	-1.69	0.45	ENSMUST000001 75693	protein coding
Six5-201	7	3.94	1.59	0.36	ENSMUST000000 49454	protein coding
Six6-201	12	0.03	-2.16	0.64	ENSMUST000000 21519	protein coding
Skil-204	3	32.89	-1.22	0.01	ENSMUST000001 18470	protein coding
Smad1-202	8	14.04	1.14	0.65	ENSMUST000000 66091	protein coding

Smad1-203	8	0.3	1	1	ENSMUST00000109885	protein coding
Smad4-202	18	18.13	-1.77	0.01	ENSMUST00000114939	protein coding
Smad5-201	13	17.37	-1.72	7.10E-06	ENSMUST00000069557	protein coding
Smad5-203	13	0.52	2.46	0.25	ENSMUST00000109876	protein coding
Smyd3-202	1	7.62	1.22	0.73	ENSMUST00000111134	protein coding
Smyd3-204	1	7.24	-1.58	0.06	ENSMUST00000128302	protein coding
Smyd3-207	1	3.46	1.07	0.93	ENSMUST00000194237	protein coding
Snapc2-201	8	40.9	1.71	0.01	ENSMUST00000011981	protein coding
Snapc2-203	8	0.11	16.72	0.24	ENSMUST00000208316	protein coding
Snapc2-204	8	1.52	3.52	0.14	ENSMUST00000208459	protein coding
Snapc4-202	2	27.64	-1.03	0.93	ENSMUST00000114115	protein coding
Snapc4-203	2	0.22	-1.59	0.82	ENSMUST00000123934	protein coding
Sohlh1-201	2	0.11	-23.93	0.25	ENSMUST00000076989	protein coding
Son-201	16	25.31	1.57	7.16E-08	ENSMUST00000114036	protein coding
Son-202	16	43.8	-1.1	0.29	ENSMUST00000114037	protein coding
Son-204	16	14.17	-1.4	5.27E-03	ENSMUST00000119368	protein coding
Son-212	16	11.39	-1.02	0.95	ENSMUST00000147891	nonsense mediated decay
Sox12-201	2	18.53	-1.05	0.79	ENSMUST00000182625	protein coding
Sox13-201	1	1.34	-6.37	0.09	ENSMUST00000094551	protein coding
Sox13-203	1	14.61	-1.82	4.17E-03	ENSMUST00000144386	protein coding
Sox2-201	3	191.92	-1.09	0.31	ENSMUST00000099151	protein coding
Sox4-201	13	11.42	1.22	0.4	ENSMUST00000067230	protein coding
Sox5-202	6	0.02	7.56	NaN	ENSMUST00000077160	protein coding
Sox5-204	6	0.03	-2.29	0.67	ENSMUST00000111748	protein coding
Sox5-205	6	0.02	-14.61	0.33	ENSMUST00000111749	protein coding
Sox5-211	6	0.06	-1.77	0.78	ENSMUST00000144289	protein coding

Sox5-214	6	9.37E-03	10.51	NaN	ENSMUST000001 70367	protein coding
Sox6-203	7	0.1	-44.85	0.18	ENSMUST000001 66207	protein coding
Sox6-204	7	0.06	-1.2	0.91	ENSMUST000001 66877	protein coding
Sox6-206	7	0.02	10.6	NaN	ENSMUST000002 05405	protein coding
Sox6-207	7	0.13	-1.8	0.78	ENSMUST000002 05479	protein coding
Sox6-210	7	0.05	1.37	0.84	ENSMUST000002 06034	protein coding
Sox6-211	7	0.08	4.26	NaN	ENSMUST000002 06123	protein coding
Sox6-212	7	0.03	-2.92	0.58	ENSMUST000002 06369	protein coding
Sp1-201	15	60.38	-1.29	7.60E-04	ENSMUST000000 01326	protein coding
Sp1-203	15	0.43	37.87	0.12	ENSMUST000001 65837	protein coding
Sp1-204	15	0.79	2.72	0.45	ENSMUST000001 68802	protein coding
Sp1-205	15	3.11	-1.43	0.73	ENSMUST000001 69619	protein coding
Sp1-206	15	0.21	7.56	NaN	ENSMUST000001 70884	protein coding
Sp2-201	11	1.1	-1.52	0.61	ENSMUST000000 62652	protein coding
Sp2-203	11	19.8	1.25	0.33	ENSMUST000001 07624	protein coding
Sp3-201	2	59.64	-1.29	7.35E-04	ENSMUST000000 66003	protein coding
Sp5-201	2	0.18	-1.89	0.61	ENSMUST000001 00043	protein coding
Sp7-201	15	0.04	-19.35	0.31	ENSMUST000000 78508	protein coding
Sp7-202	15	0.05	-1.51	0.83	ENSMUST000002 29464	protein coding
Sp9-201	2	0.02	-3.82	0.43	ENSMUST000000 90813	protein coding
Spen-201	4	20.85	1.31	1.76E-03	ENSMUST000000 78886	protein coding
Spz1-201	13	0.02	4.26	NaN	ENSMUST000000 50658	protein coding
Srcap-201	7	0.51	2.11	0.33	ENSMUST000000 66582	protein coding
Srcap-203	7	0.1	53.7	0.07	ENSMUST000001 86672	protein coding
Srcap-206	7	15.74	-1.05	0.7	ENSMUST000001 87040	protein coding
Srcap-209	7	6.95	2.14	0.11	ENSMUST000001 88124	protein coding

Srcap-210	7	0.13	-1.11	0.95	ENSMUST000001 89136	protein coding
Srcap-213	7	18.38	-1.49	1.64E-04	ENSMUST000001 90390	protein coding
Srebf1-203	11	2.67	-1.6	0.36	ENSMUST000001 34660	protein coding
Srebf1-207	11	18.17	1.31	0.19	ENSMUST000001 44942	protein coding
St18-207	1	0.04	-5.59	NaN	ENSMUST000001 39838	protein coding
St18-212	1	6.35E-03	1.34	NaN	ENSMUST000001 51281	protein coding
Stat2-201	10	12.45	-1.12	0.68	ENSMUST000000 85708	protein coding
Stat3-201	11	6.31	1.37	0.3	ENSMUST000000 92671	protein coding
Stat3-203	11	77.73	1.12	0.14	ENSMUST000001 27638	protein coding
Stat6-201	10	31.47	1.47	1.12E-03	ENSMUST000000 92074	protein coding
Tal2-201	4	0.13	-1.26	0.88	ENSMUST000000 30124	protein coding
Tbp-201	17	30.29	-1.44	0.09	ENSMUST000000 14911	protein coding
Tbp-202	17	1.79	1.73	0.45	ENSMUST000001 17593	protein coding
Tbp-203	17	12.89	-1.07	0.82	ENSMUST000001 18001	protein coding
Tbp-205	17	3.46	-1.41	0.69	ENSMUST000001 43924	protein coding
Tbp-206	17	1.27	1.59	0.71	ENSMUST000001 47081	protein coding
Tbp-209	17	1.82	-2.29	0.39	ENSMUST000001 55051	protein coding
Tbp-210	17	0.79	-10.83	0.09	ENSMUST000001 59197	protein coding
Tbp-211	17	1.2	-1.19	0.57	ENSMUST000001 62505	protein coding
Tbpl1-201	10	23	1.06	0.84	ENSMUST000000 95794	protein coding
Tbpl1-202	10	25.98	1.54	0.02	ENSMUST000001 27698	protein coding
Tbx5-201	5	0.06	2.15	0.65	ENSMUST000000 18407	protein coding
Tbx5-203	5	0.04	-5.57	NaN	ENSMUST000002 02723	protein coding
Tbx6-201	7	1.05	1.5	0.63	ENSMUST000000 94037	protein coding
Tbx6-202	7	0.09	-1.29	0.9	ENSMUST000001 72352	protein coding
Tcf12-202	9	0.55	1.91	0.43	ENSMUST000001 83404	protein coding

Tcf12-203	9	0.12	10.6	NaN	ENSMUST000001 83492	protein coding
Tcf12-204	9	0.06	1.4	0.87	ENSMUST000001 83594	nonsense mediated decay
Tcf12-207	9	0.23	-156.84	0.06	ENSMUST000001 83918	protein coding
Tcf12-210	9	0.95	-124.76	0.08	ENSMUST000001 84072	protein coding
Tcf12-211	9	0.77	3	0.45	ENSMUST000001 84107	nonsense mediated decay
Tcf12-214	9	0.26	-3.13	0.55	ENSMUST000001 84416	nonsense mediated decay
Tcf12-216	9	1.45	-2	0.59	ENSMUST000001 84523	protein coding
Tcf12-218	9	1.01	1.96	0.51	ENSMUST000001 84783	protein coding
Tcf12-220	9	0.12	7.12	0.22	ENSMUST000001 84867	nonsense mediated decay
Tcf12-221	9	12.65	-1.8	0.01	ENSMUST000001 85117	protein coding
Tcf20-201	15	80.06	1.45	2.35E-07	ENSMUST000000 48966	protein coding
Tcf20-202	15	16.59	1.08	0.71	ENSMUST000001 09510	protein coding
Tcf20-204	15	0.67	7.55	0.15	ENSMUST000002 29547	protein coding
Tcf21-201	10	0.05	1	1	ENSMUST000000 49930	protein coding
Tcf3-201	10	9.94	-1.44	0.2	ENSMUST000000 20377	protein coding
Tcf3-203	10	0.24	65.54	0.07	ENSMUST000001 05339	protein coding
Tcf3-204	10	4.57	-1.23	0.71	ENSMUST000001 05340	protein coding
Tcf3-209	10	0.99	-1.04	1	ENSMUST000001 05345	protein coding
Tcf3-213	10	0.2	-3.14	0.53	ENSMUST000001 56244	protein coding
Tcf712-201	19	2.11	1.4	0.45	ENSMUST000000 41717	protein coding
Tcf712-202	19	1.08	2.49	0.36	ENSMUST000000 61496	protein coding
Tcf712-203	19	0.07	1.18	0.94	ENSMUST000001 11646	protein coding
Tcf712-209	19	3.3	1.97	0.21	ENSMUST000001 11656	protein coding
Tcf712-210	19	0.44	2.34	0.49	ENSMUST000001 11657	protein coding
Tcf712-212	19	0.2	-1.68	0.78	ENSMUST000001 11659	protein coding
Tcf712-221	19	2.35	2.22	0.27	ENSMUST000001 53888	protein coding

Tead1-202	7	66.5	1.63	7.78E-12	ENSMUST000000 69256	protein coding
Tead1-206	7	0.02	4.26	NaN	ENSMUST000001 64363	protein coding
Tead1-208	7	2.81	-1.83	0.41	ENSMUST000001 67060	protein coding
Tead1-210	7	0.53	-1.13	0.94	ENSMUST000001 68981	protein coding
Tead1-213	7	0.13	1.11	0.95	ENSMUST000001 71373	protein coding
Tead2-201	7	190.14	1.95	4.69E-16	ENSMUST000000 33060	protein coding
Tead2-205	7	0.12	10.51	NaN	ENSMUST000002 09343	protein coding
Tead2-207	7	0.53	-33.8	0.21	ENSMUST000002 09478	protein coding
Tef-202	15	7.29	1.37	0.22	ENSMUST000001 09553	protein coding
Tef-206	15	0.43	29.72	0.13	ENSMUST000001 68200	protein coding
Tef-210	15	1.39	1.65	0.73	ENSMUST000001 72208	protein coding
Terf2-201	8	0.72	1.89	0.51	ENSMUST000000 68388	protein coding
Terf2-202	8	5.79	1.09	0.85	ENSMUST000000 68421	protein coding
Terf2-204	8	9.69	-1.69	0.04	ENSMUST000001 33925	protein coding
Tfap2a-201	13	0.36	-2.34	0.43	ENSMUST000000 21787	protein coding
Tfap2a-202	13	1.83	2.11	0.31	ENSMUST000001 10193	protein coding
Tfap2a-203	13	0.21	1.13	0.96	ENSMUST000002 23869	protein coding
Tfap2a-209	13	0.36	3.67	0.4	ENSMUST000002 25180	protein coding
Tfap2d-201	1	0.03	-10.55	0.41	ENSMUST000000 37294	protein coding
Tfap4-201	16	12	-1.51	0.04	ENSMUST000000 05862	protein coding
Tfap4-203	16	0.78	-97.26	0.09	ENSMUST000002 30875	protein coding
Tfcp2-201	15	0.49	-4.19	0.38	ENSMUST000000 09877	protein coding
Tfcp2-202	15	0.61	-5.91	0.22	ENSMUST000002 29265	protein coding
Tfcp2-204	15	6.65	-1.49	0.09	ENSMUST000002 29696	protein coding
Tfcp2-208	15	0.24	14.15	0.25	ENSMUST000002 31138	protein coding
Tfdp1-202	8	12.34	1.03	0.96	ENSMUST000002 09282	protein coding

Tfdp1-203	8	31.53	-1.85	1.56E-03	ENSMUST000002 09396	protein coding
Tfdp1-204	8	98.01	1.73	2.25E-15	ENSMUST000002 09885	protein coding
Tfdp1-206	8	3.36	-1.06	0.96	ENSMUST000002 10165	protein coding
Tfdp1-207	8	13.45	-1.49	0.07	ENSMUST000002 10501	nonsense mediated decay
Tfdp2-201	9	17.78	-1.16	0.24	ENSMUST000000 34982	protein coding
Tfdp2-202	9	0.29	-1.52	0.83	ENSMUST000001 65120	protein coding
Tfdp2-203	9	7.69	-1.45	0.25	ENSMUST000001 65768	protein coding
Tfdp2-205	9	0.15	-57.08	0.15	ENSMUST000001 79416	protein coding
Tfdp2-206	9	2.09	1.13	0.89	ENSMUST000001 85644	protein coding
Tfdp2-207	9	0.6	3.27	0.35	ENSMUST000001 86609	protein coding
Tfdp2-208	9	9.1	1.84	0.18	ENSMUST000001 88008	protein coding
Tfdp2-209	9	10.81	1.72	0.06	ENSMUST000001 88750	protein coding
Tfdp2-210	9	0.15	-1.06	0.98	ENSMUST000001 88829	protein coding
Tfdp2-215	9	1.13	-1.47	0.78	ENSMUST000001 91133	protein coding
Tfe3-203	X	1.69	-1.91	0.49	ENSMUST000001 01695	protein coding
Tfe3-204	X	40.81	-1.33	0.02	ENSMUST000001 15677	protein coding
Tfe3-205	X	14.01	-1.96	9.22E-03	ENSMUST000001 15678	protein coding
Tfe3-206	X	8.05	1.49	0.09	ENSMUST000001 15679	protein coding
Tfe3-214	X	4.51	-1.18	0.87	ENSMUST000001 44900	protein coding
Tfeb-202	17	8	1.65	0.14	ENSMUST000000 86932	protein coding
Tfeb-203	17	0.4	-3.51	0.3	ENSMUST000001 13284	protein coding
Tfeb-206	17	0.03	-3.31	NaN	ENSMUST000001 25177	protein coding
Tfeb-208	17	0.17	-10.11	0.4	ENSMUST000001 30208	protein coding
Tfeb-211	17	0.96	53.92	0.07	ENSMUST000001 41631	protein coding
Tfeb-212	17	10.55	-1.67	0.14	ENSMUST000001 46782	protein coding
Tfeb-213	17	0.03	-3.31	NaN	ENSMUST000001 59641	protein coding

Tfeb-214	17	0.15	7.56	NaN	ENSMUST000001 60373	protein coding
Thap1-201	8	7.61	-1.32	0.29	ENSMUST000000 36807	protein coding
Thap1-203	8	6.08	-1.62	0.45	ENSMUST000001 30231	protein coding
Thap11-201	8	69.02	1.39	4.41E-03	ENSMUST000000 40445	protein coding
Thap12-201	7	39.19	-1.18	0.1	ENSMUST000000 33009	protein coding
Thap12-202	7	2.32	1.68	0.56	ENSMUST000001 26356	nonsense mediated decay
Thap12-204	7	1.83	-2.46	0.25	ENSMUST000001 53566	nonsense mediated decay
Thap4-201	1	36.13	-1.17	0.24	ENSMUST000001 12905	nonsense mediated decay
Thap4-202	1	0.61	1.26	0.89	ENSMUST000001 87445	nonsense mediated decay
Thap4-204	1	12.29	1.63	0.39	ENSMUST000001 89472	protein coding
Thap4-206	1	2.76	1.94	0.12	ENSMUST000001 90116	protein coding
Thap7-202	16	3.49	2.05	0.43	ENSMUST000002 31288	protein coding
Thap7-203	16	0.79	10.22	0.12	ENSMUST000002 31424	nonsense mediated decay
Thap7-205	16	8.2	-1.85	0.21	ENSMUST000002 31548	protein coding
Thap7-209	16	4.22	3.02	0.27	ENSMUST000002 32041	protein coding
Thra-201	11	6.45	2.06	0.07	ENSMUST000000 64187	protein coding
Thra-202	11	5.6	1.97	0.2	ENSMUST000001 03139	protein coding
Thra-203	11	2.21	-4.42	0.06	ENSMUST000001 24072	protein coding
Thra-208	11	0.23	-1.08	0.97	ENSMUST000001 53043	protein coding
Thrb-201	14	0.06	-3.06	0.46	ENSMUST000000 22303	protein coding
Thrb-202	14	0.02	1.72	0.78	ENSMUST000000 22304	protein coding
Thrb-203	14	0.03	-10.18	0.42	ENSMUST000000 91471	protein coding
Thrb-207	14	0.13	-2.29	0.67	ENSMUST000002 24934	protein coding
Tigd2-201	6	6.84	-1.11	0.71	ENSMUST000000 62626	protein coding
Tigd4-201	3	6.72E-03	1.34	NaN	ENSMUST000000 62623	protein coding
Tigd5-201	15	0.96	-1.41	0.62	ENSMUST000001 92937	protein coding

Tlx2-201	6	0.06	-1.58	0.81	ENSMUST000000 89641	protein coding
Tlx2-202	6	0.12	4.13	0.38	ENSMUST000001 74674	protein coding
Tmf1-201	6	9.37	1.29	0.36	ENSMUST000000 95664	protein coding
Tmf1-202	6	17.32	-1.08	0.8	ENSMUST000001 24173	nonsense mediated decay
Trp63-204	16	0.02	-1.76	0.79	ENSMUST000001 15305	protein coding
Trp63-205	16	6.56E-03	-5.59	NaN	ENSMUST000001 15306	protein coding
Trp73-202	4	0.12	4.17	0.41	ENSMUST000000 97763	nonsense mediated decay
Trp73-203	4	0.04	-11.79	0.39	ENSMUST000001 05643	protein coding
Trp73-204	4	0.27	6.15	0.19	ENSMUST000001 05644	protein coding
Trp73-207	4	0.13	-15.96	0.33	ENSMUST000001 55642	protein coding
Trp73-208	4	0.23	5.15	0.27	ENSMUST000002 39448	protein coding
Tshz2-201	2	0.13	2.28	0.57	ENSMUST000001 09157	protein coding
Tshz2-202	2	0.11	-2.9	0.44	ENSMUST000001 09159	protein coding
Ttf1-201	2	23.9	1.13	0.38	ENSMUST000001 00237	protein coding
Ubp1-201	9	46.1	-1.65	2.15E-06	ENSMUST000000 09885	protein coding
Usf2-201	7	31.62	1.84	4.07E-03	ENSMUST000000 58860	protein coding
Usf2-203	7	0.36	46.53	0.11	ENSMUST000001 62228	protein coding
Usf2-204	7	0.66	-1.84	0.73	ENSMUST000001 66340	nonsense mediated decay
Usf2-208	7	0.29	35.19	0.11	ENSMUST000001 70442	protein coding
Usf2-211	7	0.38	33.6	0.14	ENSMUST000001 72417	protein coding
Usf3-201	16	0.9	-1.1	0.95	ENSMUST000000 88356	protein coding
Usf3-202	16	2.86	-1.16	0.66	ENSMUST000001 19746	protein coding
Vax1-201	19	0.14	20.74	0.17	ENSMUST000001 72821	protein coding
Vsx1-201	2	0.02	3.41	0.46	ENSMUST000000 46095	protein coding
Wiz-203	17	3.12	-1.4	0.4	ENSMUST000000 87703	protein coding
Wiz-205	17	0.07	-9.72	0.42	ENSMUST000001 65912	protein coding

Wiz-207	17	6.69	1.35	0.33	ENSMUST000001 69488	protein coding
Wiz-209	17	0.48	33.93	0.1	ENSMUST000001 70603	protein coding
Wiz-210	17	0.71	-1.49	0.58	ENSMUST000001 70617	nonsense mediated decay
Wiz-211	17	0.21	3.14	0.39	ENSMUST000001 71728	nonsense mediated decay
Wiz-213	17	0.2	2.77	0.5	ENSMUST000002 36409	protein coding
Ybx2-205	11	8.15	1.91	0.23	ENSMUST000001 49194	protein coding
Ybx3-201	6	193.73	-1.46	1.40E-05	ENSMUST000000 32309	protein coding
Ybx3-202	6	150.78	-1.89	9.03E-21	ENSMUST000000 87865	protein coding
Yy1-201	12	42.87	1.05	0.6	ENSMUST000000 21692	protein coding
Zbed3-201	13	16.58	-1.02	0.95	ENSMUST000000 45909	protein coding
Zbed3-203	13	0.41	-4.22	0.38	ENSMUST000002 22456	protein coding
Zbed6-201	1	63.51	1.27	0.01	ENSMUST000001 79598	protein coding
Zbtb1-201	12	4.37	-1.63	0.02	ENSMUST000000 42779	protein coding
Zbtb11-201	16	21.75	-1.4	3.93E-03	ENSMUST000000 50248	protein coding
Zbtb14-201	17	12.56	-1.05	0.89	ENSMUST000000 62369	protein coding
Zbtb17-201	4	21.59	1.19	0.48	ENSMUST000000 06377	protein coding
Zbtb18-201	1	1.88	-1.58	0.45	ENSMUST000000 77225	protein coding
Zbtb18-202	1	3.25	-1.34	0.41	ENSMUST000000 94276	protein coding
Zbtb18-203	1	0.14	-5.57	NaN	ENSMUST000001 92699	protein coding
Zbtb18-204	1	0.27	-37.51	0.21	ENSMUST000001 92851	protein coding
Zbtb18-206	1	5.27	-1.18	0.53	ENSMUST000001 93480	protein coding
Zbtb18-208	1	1.47	-5.3	0.21	ENSMUST000001 94319	protein coding
Zbtb18-209	1	0.83	7.55	0.18	ENSMUST000001 95002	protein coding
Zbtb18-210	1	0.19	-15.96	0.33	ENSMUST000001 95388	protein coding
Zbtb18-211	1	0.97	-2.08	0.6	ENSMUST000001 95549	protein coding
Zbtb2-201	10	11.8	-1.91	4.07E-03	ENSMUST000001 00077	protein coding

Zbtb21-201	16	16.3	1.24	0.37	ENSMUST00000052089	protein coding
Zbtb21-206	16	0.86	1.97	0.65	ENSMUST000000231560	protein coding
Zbtb22-201	17	21.71	1.82	2.67E-03	ENSMUST000000053429	protein coding
Zbtb22-202	17	2.03	1.36	0.83	ENSMUST000000174463	protein coding
Zbtb24-201	10	10.41	-1.21	0.45	ENSMUST000000080771	protein coding
Zbtb24-202	10	0.15	52.99	0.08	ENSMUST000000213797	protein coding
Zbtb24-205	10	3.11	-1.84	0.2	ENSMUST000000216656	protein coding
Zbtb25-203	12	0.21	-17.06	0.32	ENSMUST000000176187	protein coding
Zbtb25-204	12	7.95	1.09	0.86	ENSMUST000000176278	protein coding
Zbtb25-205	12	2.56	-2.22	0.23	ENSMUST000000176509	protein coding
Zbtb26-201	2	5.55	1.34	0.25	ENSMUST000000067043	protein coding
Zbtb26-202	2	3.73	-2.21	0.08	ENSMUST000000102789	protein coding
Zbtb32-201	7	3.32	1.32	0.76	ENSMUST000000108150	protein coding
Zbtb32-202	7	15.85	-1.57	0.05	ENSMUST000000108151	protein coding
Zbtb33-201	X	8.16	1.62	0.04	ENSMUST000000049740	protein coding
Zbtb34-201	2	17.62	-1.88	8.85E-06	ENSMUST000000091037	protein coding
Zbtb37-201	1	3.08	-1.92	0.24	ENSMUST000000159250	protein coding
Zbtb37-202	1	0.26	2.03	0.68	ENSMUST000000160056	nonsense mediated decay
Zbtb37-203	1	5.23	1.42	8.31E-03	ENSMUST000000162226	protein coding
Zbtb37-204	1	0.54	2.48	0.5	ENSMUST000000163079	nonsense mediated decay
Zbtb37-205	1	0.3	3.54	0.36	ENSMUST000000171748	protein coding
Zbtb37-207	1	0.29	-1.4	0.86	ENSMUST000000177003	protein coding
Zbtb38-201	9	0.92	-2.36	0.36	ENSMUST000000093798	protein coding
Zbtb38-203	9	1.77	1.23	0.78	ENSMUST000000126066	non_stop_decay
Zbtb38-204	9	0.99	-3.16	0.36	ENSMUST000000128269	protein coding
Zbtb38-208	9	0.39	7.17	0.11	ENSMUST000000140121	protein coding

Zbtb38-212	9	6.46	1.04	0.91	ENSMUST000001 52594	protein coding
Zbtb39-201	10	15.62	1.28	0.03	ENSMUST000000 54287	protein coding
Zbtb40-201	4	6.62	-1.21	0.38	ENSMUST000000 49583	protein coding
Zbtb40-203	4	1.54	-1.28	0.81	ENSMUST000002 18160	protein coding
Zbtb41-201	1	4.21	1.51	0.11	ENSMUST000000 39867	protein coding
Zbtb41-202	1	6.27	-1.94	2.15E-03	ENSMUST000001 99011	nonsense mediated decay
Zbtb41-203	1	6.56	-1.72	0.06	ENSMUST000002 00243	protein coding
Zbtb43-201	2	11.37	-1.03	0.92	ENSMUST000000 28125	protein coding
Zbtb43-203	2	4.69	-2.51	0.05	ENSMUST000001 13156	protein coding
Zbtb43-204	2	2.62	-1.11	0.92	ENSMUST000001 26442	protein coding
Zbtb43-205	2	1.17	-125.15	0.07	ENSMUST000001 55198	protein coding
Zbtb44-203	9	0.31	-16.38	0.32	ENSMUST000002 13202	nonsense mediated decay
Zbtb44-204	9	0.06	16.72	0.24	ENSMUST000002 14585	protein coding
Zbtb48-201	4	11.61	-1.08	0.82	ENSMUST000000 66715	protein coding
Zbtb48-203	4	1.03	2.45	0.57	ENSMUST000001 31935	protein coding
Zbtb48-206	4	1.05	1.07	0.95	ENSMUST000001 55389	nonsense mediated decay
Zbtb48-208	4	2.62	-1.21	0.84	ENSMUST000001 56748	nonsense mediated decay
Zbtb49-201	5	1.8	2.27	0.27	ENSMUST000000 94833	protein coding
Zbtb49-202	5	0.77	-1.12	0.91	ENSMUST000001 14113	protein coding
Zbtb49-203	5	0.13	-2.29	0.67	ENSMUST000001 23106	nonsense mediated decay
Zbtb49-205	5	1	-1.38	0.78	ENSMUST000001 26267	nonsense mediated decay
Zbtb49-206	5	1.12	-1.35	0.8	ENSMUST000001 29161	nonsense mediated decay
Zbtb49-207	5	6.12E-03	-3.31	NaN	ENSMUST000001 36475	nonsense mediated decay
Zbtb49-209	5	0.31	-97.26	0.1	ENSMUST000001 38820	nonsense mediated decay
Zbtb49-210	5	1.27	2.05	0.33	ENSMUST000001 43436	nonsense mediated decay
Zbtb49-211	5	1.26	8.07	0.14	ENSMUST000001 46859	protein coding

Zbtb5-201	4	4.55	-1.15	0.61	ENSMUST00000055028	protein coding
Zbtb5-202	4	2.39	2.08	0.09	ENSMUST00000107817	protein coding
Zbtb6-201	2	10.44	1.62	0.04	ENSMUST00000053098	protein coding
Zbtb7a-201	10	6.58	-1.53	0.03	ENSMUST00000048128	protein coding
Zbtb7a-203	10	0.48	-6.66	0.24	ENSMUST00000119606	protein coding
Zbtb7a-204	10	0.06	-16.95	0.31	ENSMUST00000121840	protein coding
Zbtb7a-205	10	0.3	38.75	0.11	ENSMUST00000125261	protein coding
Zbtb7c-201	18	1.79	-1.35	0.61	ENSMUST00000058997	protein coding
Zbtb7c-203	18	0.03	16.25	0.24	ENSMUST00000236462	nonsense mediated decay
Zbtb8b-201	4	5.09	-1.89	0.07	ENSMUST00000053042	protein coding
Zbtb8b-202	4	0.84	11.84	0.32	ENSMUST00000106046	protein coding
Zbtb9-201	17	14.28	-1.15	0.58	ENSMUST00000120016	protein coding
Zbtb9-202	17	0.65	-2.43	0.4	ENSMUST00000237633	nonsense mediated decay
Zfand5-201	19	38.15	-1.03	0.86	ENSMUST00000025659	protein coding
Zfand5-204	19	7.17	1.24	0.79	ENSMUST00000149144	nonsense mediated decay
Zfat-202	15	1.89	1.42	0.46	ENSMUST00000160248	protein coding
Zfat-204	15	7.5	1.77	5.30E-03	ENSMUST00000162054	protein coding
Zfat-205	15	0.02	-13.87	0.36	ENSMUST00000162173	protein coding
Zfp1-201	8	13.49	-1.35	0.25	ENSMUST00000077791	protein coding
Zfp1-202	8	9.78	-1.9	0.11	ENSMUST00000211926	protein coding
Zfp1-203	8	5.74	1.91	0.29	ENSMUST00000212072	protein coding
Zfp1-204	8	0.83	-1.2	0.83	ENSMUST00000212206	nonsense mediated decay
Zfp110-201	7	28.38	-1.22	0.15	ENSMUST00000004614	protein coding
Zfp111-201	7	8.43	-1.44	0.15	ENSMUST00000056683	protein coding
Zfp111-202	7	0.08	-36.85	0.21	ENSMUST00000073833	protein coding
Zfp113-201	5	3.06	1.26	0.37	ENSMUST00000049393	protein coding

Zfp113-202	5	0.39	3.26	0.45	ENSMUST000001 32318	protein coding
Zfp113-204	5	1.9	-1.25	0.8	ENSMUST000001 65640	protein coding
Zfp12-202	5	9.63	1.06	0.85	ENSMUST000000 75916	nonsense mediated decay
Zfp12-205	5	1.16	2.27	0.53	ENSMUST000001 62861	protein coding
Zfp128-202	7	0.91	1.11	0.88	ENSMUST000001 44578	protein coding
Zfp131-202	13	13.13	1.66	0.09	ENSMUST000001 78271	protein coding
Zfp131-204	13	1.39	-7.79	0.11	ENSMUST000002 23797	protein coding
Zfp131-205	13	2.01	-1.58	0.63	ENSMUST000002 23812	protein coding
Zfp131-207	13	2.56	1.57	0.49	ENSMUST000002 24946	protein coding
Zfp131-209	13	0.18	-2.32	0.65	ENSMUST000002 25484	nonsense mediated decay
Zfp142-201	1	13.38	-1.44	2.06E-03	ENSMUST000000 27315	protein coding
Zfp142-203	1	1.42	-1.57	0.39	ENSMUST000001 13737	protein coding
Zfp142-208	1	0.53	-1.1	0.91	ENSMUST000001 56613	nonsense mediated decay
Zfp143-201	7	15.19	-1	1	ENSMUST000000 84727	protein coding
Zfp143-202	7	0.34	-1.53	0.7	ENSMUST000001 69638	protein coding
Zfp143-204	7	0.2	-2.12	0.67	ENSMUST000002 09505	protein coding
Zfp143-205	7	19.6	-1.82	0.01	ENSMUST000002 11798	protein coding
Zfp146-201	7	43.07	-1.46	3.64E-04	ENSMUST000000 62181	protein coding
Zfp148-201	16	10.23	-1.26	0.32	ENSMUST000000 89677	protein coding
Zfp148-202	16	5.76	1.28	0.23	ENSMUST000001 65418	protein coding
Zfp148-205	16	7.67	-1.34	0.28	ENSMUST000002 32023	protein coding
Zfp160-201	17	5.81	-1.21	0.47	ENSMUST000000 88811	protein coding
Zfp160-204	17	0.22	1.18	0.94	ENSMUST000002 32320	protein coding
Zfp160-206	17	2.62	-1.91	0.32	ENSMUST000002 32473	protein coding
Zfp160-207	17	2.13	1.13	0.89	ENSMUST000002 32595	protein coding
Zfp160-208	17	0.6	-4.84	0.31	ENSMUST000002 32663	protein coding

Zfp180-201	7	14.09	-1.34	0.13	ENSMUST00000068975	protein coding
Zfp180-203	7	1.55	1.28	0.82	ENSMUST00000206184	nonsense mediated decay
Zfp180-205	7	0.12	4.11	0.39	ENSMUST00000207002	protein coding
Zfp182-203	X	1.95	-1.07	0.91	ENSMUST00000115334	protein coding
Zfp189-201	4	0.23	15.92	0.27	ENSMUST00000042964	protein coding
Zfp189-202	4	5.78	-1.48	0.13	ENSMUST00000107696	protein coding
Zfp2-201	11	2.52	1.63	0.39	ENSMUST00000109128	protein coding
Zfp2-203	11	5.87	-1.36	0.26	ENSMUST00000116378	protein coding
Zfp207-201	11	163.72	-1.24	7.04E-03	ENSMUST00000017567	protein coding
Zfp207-205	11	0.33	-1.26	0.9	ENSMUST00000153824	protein coding
Zfp207-206	11	7.03	1.19	0.66	ENSMUST00000165565	protein coding
Zfp212-201	6	16.26	-1.21	0.49	ENSMUST00000009411	protein coding
Zfp213-201	17	6.22	1.29	0.45	ENSMUST00000095606	protein coding
Zfp219-202	14	2.56	-1.47	0.71	ENSMUST00000166169	protein coding
Zfp219-205	14	2.55	-1.78	0.45	ENSMUST00000226527	protein coding
Zfp219-206	14	0.39	-30.46	0.23	ENSMUST00000226554	protein coding
Zfp219-207	14	1.08	-1.42	0.8	ENSMUST00000226605	protein coding
Zfp219-208	14	2.05	1.99	0.47	ENSMUST00000226964	protein coding
Zfp219-210	14	0.05	4.26	NaN	ENSMUST00000228051	protein coding
Zfp219-211	14	0.28	-4.91	0.38	ENSMUST00000228162	protein coding
Zfp219-212	14	9.24	-1.09	0.82	ENSMUST00000228580	protein coding
Zfp219-213	14	2.9	-2.14	0.34	ENSMUST00000228747	protein coding
Zfp236-201	18	3.07	1.2	0.51	ENSMUST00000171071	protein coding
Zfp236-202	18	5.72	1.19	0.5	ENSMUST00000182122	protein coding
Zfp236-204	18	0.79	2.6	0.38	ENSMUST00000182866	protein coding
Zfp24-201	18	11.64	-1.83	6.52E-04	ENSMUST00000066497	protein coding

Zfp24-202	18	3.56	-1.45	0.67	ENSMUST000001 48525	protein coding
Zfp24-203	18	21.34	-1.92	3.86E-03	ENSMUST000001 53337	protein coding
Zfp248-201	6	4.48	1.01	0.99	ENSMUST000000 69292	protein coding
Zfp248-203	6	0.65	-1.97	0.63	ENSMUST000001 59403	protein coding
Zfp248-205	6	4.16	-2.32	0.08	ENSMUST000001 61519	protein coding
Zfp251-201	15	10.45	1.18	0.52	ENSMUST000000 80406	protein coding
Zfp251-202	15	1.16	4.46	0.06	ENSMUST000002 29494	protein coding
Zfp263-201	16	14.98	1.28	0.33	ENSMUST000000 23176	protein coding
Zfp275-202	X	8.2	1.34	0.21	ENSMUST000001 14499	protein coding
Zfp277-201	12	37.12	-1.63	3.09E-04	ENSMUST000000 69637	protein coding
Zfp277-202	12	0.71	-1.15	0.91	ENSMUST000000 69692	protein coding
Zfp280b-201	10	57.61	-1.5	2.61E-10	ENSMUST000000 61617	protein coding
Zfp280b-202	10	2.76	1.58	0.65	ENSMUST000002 18627	protein coding
Zfp280c-201	X	11.05	-1.38	0.18	ENSMUST000000 72292	protein coding
Zfp280c-204	X	5.6	-1.37	0.25	ENSMUST000001 14940	protein coding
Zfp280d-203	9	8.5	-1.76	0.1	ENSMUST000001 83410	protein coding
Zfp280d-208	9	0.64	-1.72	0.49	ENSMUST000001 83801	nonsense mediated decay
Zfp280d-212	9	0.41	2.13	0.36	ENSMUST000001 84053	nonsense mediated decay
Zfp280d-214	9	4.31	-1.77	0.45	ENSMUST000001 84216	protein coding
Zfp280d-217	9	0.93	3.14	0.12	ENSMUST000001 84517	protein coding
Zfp280d-219	9	1.36	-1.65	0.65	ENSMUST000001 84786	nonsense mediated decay
Zfp280d-221	9	1.27	-1.01	1	ENSMUST000001 85020	nonsense mediated decay
Zfp282-201	6	6.69	1.87	6.72E-03	ENSMUST000000 61890	protein coding
Zfp287-201	11	0.82	-1.22	0.82	ENSMUST000000 05399	protein coding
Zfp287-203	11	0.47	2.09	0.55	ENSMUST000001 28370	protein coding
Zfp287-204	11	9.94E-03	1.34	NaN	ENSMUST000001 49228	nonsense mediated decay

Zfp287-205	11	0.52	3.05	0.35	ENSMUST000001 50336	protein coding
Zfp287-206	11	1.16	-1.31	0.73	ENSMUST000001 85656	protein coding
Zfp292-201	4	19.87	-1.18	0.09	ENSMUST000000 47950	protein coding
Zfp292-202	4	0.48	-49.51	0.13	ENSMUST000000 98163	protein coding
Zfp3-201	11	4.72	1.32	0.66	ENSMUST000000 60444	protein coding
Zfp30-201	7	3.63	1.6	0.34	ENSMUST000000 32803	protein coding
Zfp30-202	7	0.05	1.3	0.9	ENSMUST000001 22387	protein coding
Zfp318-201	17	8.21	-1.18	0.23	ENSMUST000001 13481	protein coding
Zfp318-204	17	4.65	-1.29	0.24	ENSMUST000001 38127	protein coding
Zfp318-205	17	1.65	-6.36	0.09	ENSMUST000001 52472	nonsense mediated decay
Zfp324-201	7	2.18	-1.09	0.88	ENSMUST000000 38701	protein coding
Zfp324-202	7	0.38	1.97	0.45	ENSMUST000001 24387	nonsense mediated decay
Zfp326-201	5	22.46	1.48	0.07	ENSMUST000000 31227	protein coding
Zfp326-209	5	13.18	-1.55	0.09	ENSMUST000001 50440	protein coding
Zfp329-201	7	5.09	1.13	0.68	ENSMUST000000 72222	protein coding
Zfp329-202	7	0.42	2.02	0.55	ENSMUST000001 08546	protein coding
Zfp329-203	7	3.15	-2.15	0.09	ENSMUST000001 21215	nonsense mediated decay
Zfp335-201	2	21.61	1.82	4.54E-05	ENSMUST000000 41361	protein coding
Zfp341-201	2	6.19	1.35	0.26	ENSMUST000000 81926	protein coding
Zfp341-203	2	0.23	-110.68	0.08	ENSMUST000001 26421	nonsense mediated decay
Zfp346-201	13	26.68	1.16	0.24	ENSMUST000000 21937	protein coding
Zfp346-202	13	0.23	37.21	0.1	ENSMUST000001 59147	protein coding
Zfp346-205	13	0.3	-31.98	0.22	ENSMUST000001 60660	nonsense mediated decay
Zfp346-207	13	5.63	-1.32	0.73	ENSMUST000001 61077	protein coding
Zfp346-208	13	0.25	-2.75	0.6	ENSMUST000001 61315	protein coding
Zfp346-209	13	0.04	4.26	NaN	ENSMUST000001 61551	nonsense mediated decay

Zfp346-211	13	0.94	-1.21	0.86	ENSMUST000001 62428	nonsense mediated decay
Zfp354a-202	11	4.93	1.19	0.73	ENSMUST000001 02766	protein coding
Zfp354a-203	11	1.86	1.22	0.78	ENSMUST000001 09119	protein coding
Zfp354a-204	11	1.18	1.05	0.95	ENSMUST000001 09122	protein coding
Zfp354b-201	11	0.95	2.54	0.22	ENSMUST000001 09124	protein coding
Zfp354c-201	11	4.13	-2.71	0.09	ENSMUST000000 00632	protein coding
Zfp354c-202	11	5.87	-1.54	0.06	ENSMUST000001 09135	protein coding
Zfp365-201	10	7.03	1.02	0.94	ENSMUST000000 64656	protein coding
Zfp366-201	13	0.01	1.45	0.83	ENSMUST000000 56558	protein coding
Zfp367-201	13	10.47	-1.35	0.17	ENSMUST000000 59817	protein coding
Zfp367-202	13	1.04	1.47	0.67	ENSMUST000001 17241	protein coding
Zfp369-202	13	13.07	-1.42	0.1	ENSMUST000001 26879	protein coding
Zfp369-203	13	6.94	1.07	0.91	ENSMUST000001 30799	protein coding
Zfp369-204	13	4.18	1.37	0.7	ENSMUST000001 55732	protein coding
Zfp37-201	4	7.23	1.86	4.04E-04	ENSMUST000000 68822	protein coding
Zfp37-202	4	1.2	-1.04	1	ENSMUST000001 29511	protein coding
Zfp37-203	4	0.68	8.78	0.14	ENSMUST000002 12325	protein coding
Zfp37-206	4	4.68	1.19	0.83	ENSMUST000002 22050	protein coding
Zfp37-207	4	1.79	-2.91	0.27	ENSMUST000002 22748	protein coding
Zfp383-201	7	9.31	-1.43	0.15	ENSMUST000001 86475	protein coding
Zfp383-202	7	1.22	-1.38	0.69	ENSMUST000001 87028	nonsense mediated decay
Zfp384-201	6	8.03	1.29	0.4	ENSMUST000000 46064	protein coding
Zfp384-202	6	6.08	1.56	0.27	ENSMUST000000 54553	protein coding
Zfp384-203	6	15.91	-1.95	2.80E-03	ENSMUST000000 84275	protein coding
Zfp384-204	6	0.01	-5.59	NaN	ENSMUST000000 88308	protein coding
Zfp384-207	6	7.57E-03	4.26	NaN	ENSMUST000001 12427	protein coding

Zfp384-208	6	2.32	3.79	0.15	ENSMUST000001 12428	protein coding
Zfp384-216	6	1.19	-3.01	0.35	ENSMUST000001 52752	protein coding
Zfp384-217	6	2.18	2.74	0.27	ENSMUST000002 49621	protein coding
Zfp385a-201	15	12.52	-1.04	0.91	ENSMUST000001 68828	protein coding
Zfp385b-201	2	0.14	52.97	0.08	ENSMUST000000 90766	protein coding
Zfp385b-202	2	0.01	4.26	NaN	ENSMUST000001 11829	protein coding
Zfp385b-203	2	0.07	-1.38	0.86	ENSMUST000001 11830	protein coding
Zfp385b-204	2	0.02	-10.18	0.42	ENSMUST000001 11831	protein coding
Zfp39-201	11	7.43	1.34	0.23	ENSMUST000001 02703	protein coding
Zfp395-201	14	16.39	1.09	0.71	ENSMUST000000 66994	protein coding
Zfp395-202	14	0.1	1.34	NaN	ENSMUST000002 24623	protein coding
Zfp397-201	18	8.05	-1.03	0.93	ENSMUST000000 60762	protein coding
Zfp398-201	6	2.02	-1.47	0.51	ENSMUST000000 79881	protein coding
Zfp398-202	6	1.19	-1.66	0.35	ENSMUST000001 14598	protein coding
Zfp407-201	18	0.17	-2.08	0.71	ENSMUST000001 25450	protein coding
Zfp407-202	18	8.42	-1.04	0.87	ENSMUST000001 25763	protein coding
Zfp408-201	2	4.04	1.03	0.95	ENSMUST000000 99714	protein coding
Zfp408-202	2	8	1.48	0.11	ENSMUST000001 11333	protein coding
Zfp408-204	2	0.68	-1.04	0.98	ENSMUST000001 45582	nonsense mediated decay
Zfp41-201	15	1.48	-1.17	0.64	ENSMUST000000 54555	protein coding
Zfp41-203	15	0.09	1.33	0.89	ENSMUST000001 61752	protein coding
Zfp41-204	15	13.93	-1.54	0.06	ENSMUST000001 61785	protein coding
Zfp410-203	12	1.02	1.34	0.73	ENSMUST000002 20931	protein coding
Zfp410-208	12	0.9	1.19	0.87	ENSMUST000002 22258	protein coding
Zfp410-210	12	0.18	-13.87	0.36	ENSMUST000002 22450	protein coding
Zfp410-211	12	4.59	-3.49	0.12	ENSMUST000002 22471	protein coding

Zfp410-212	12	1.29	-1.26	0.83	ENSMUST000002 22506	nonsense mediated decay
Zfp410-215	12	1	1.01	1	ENSMUST000002 22832	protein coding
Zfp414-201	17	25.61	1.48	0.2	ENSMUST000000 73570	protein coding
Zfp414-202	17	1.51	2.01	0.59	ENSMUST000001 65504	protein coding
Zfp414-203	17	5.91	-1.41	0.52	ENSMUST000001 66627	protein coding
Zfp420-201	7	1.91	2.12	0.43	ENSMUST000000 57652	protein coding
Zfp420-202	7	4.52	-2.14	0.16	ENSMUST000000 74876	protein coding
Zfp426-201	9	4.85	1.23	0.73	ENSMUST000000 80386	protein coding
Zfp426-203	9	2.01	1.88	0.33	ENSMUST000001 63348	protein coding
Zfp426-204	9	0.46	2.21	0.61	ENSMUST000001 63427	nonsense mediated decay
Zfp426-205	9	0.15	13.58	0.28	ENSMUST000001 64250	protein coding
Zfp426-206	9	0.63	1.2	0.92	ENSMUST000001 64799	protein coding
Zfp426-207	9	0.06	7.56	NaN	ENSMUST000001 64825	protein coding
Zfp426-210	9	1.13	1.53	0.56	ENSMUST000001 67457	protein coding
Zfp426-211	9	0.71	1.39	0.8	ENSMUST000001 68095	nonsense mediated decay
Zfp426-213	9	1.79	-1.19	0.78	ENSMUST000001 69558	protein coding
Zfp428-201	7	20.13	-1.48	0.14	ENSMUST000000 71361	protein coding
Zfp428-202	7	4.48	1.84	0.32	ENSMUST000001 76880	protein coding
Zfp428-204	7	0.37	24.03	0.16	ENSMUST000001 77228	protein coding
Zfp444-201	7	1.99	1.73	0.45	ENSMUST000000 54680	protein coding
Zfp444-202	7	0.09	-1.58	0.8	ENSMUST000001 08565	protein coding
Zfp444-203	7	19.7	1.43	0.15	ENSMUST000001 08566	protein coding
Zfp444-204	7	0.32	2.15	0.41	ENSMUST000001 08567	protein coding
Zfp444-206	7	0.55	10.1	0.16	ENSMUST000001 34933	protein coding
Zfp444-207	7	0.28	3.07	0.5	ENSMUST000001 36777	protein coding
Zfp444-210	7	0.36	20.74	0.18	ENSMUST000002 07176	protein coding

Zfp446-201	7	1.66	1.59	0.34	ENSMUST00000045810	protein coding
Zfp446-203	7	7.26	1.71	0.02	ENSMUST00000108536	protein coding
Zfp446-204	7	0.18	-1.15	0.94	ENSMUST00000108537	protein coding
Zfp449-201	X	4.62	-1.29	0.37	ENSMUST00000101560	protein coding
Zfp455-201	13	0.1	-42.19	0.18	ENSMUST00000117110	protein coding
Zfp455-202	13	1.29	1.9	0.41	ENSMUST00000120861	protein coding
Zfp457-201	13	0.19	1.2	0.91	ENSMUST00000049705	protein coding
Zfp457-203	13	0.1	-1.22	0.9	ENSMUST00000224325	protein coding
Zfp457-205	13	0.23	-2.14	0.7	ENSMUST00000225338	protein coding
Zfp458-201	13	0.87	-1.1	0.91	ENSMUST00000045969	protein coding
Zfp458-202	13	0.07	7.56	NaN	ENSMUST00000223990	protein coding
Zfp458-204	13	0.17	80.08	0.05	ENSMUST00000225772	protein coding
Zfp462-202	4	12.76	-1.06	0.83	ENSMUST00000079605	protein coding
Zfp462-203	4	39.39	1.27	1.15E-03	ENSMUST00000098070	protein coding
Zfp462-204	4	17.23	2.22	0.22	ENSMUST00000133895	protein coding
Zfp473-201	7	1.94	1.57	0.49	ENSMUST00000060270	protein coding
Zfp473-202	7	2.96	-1.73	0.55	ENSMUST00000118162	protein coding
Zfp473-203	7	9.46	-1.4	0.16	ENSMUST00000120074	protein coding
Zfp473-204	7	11.03	-1.57	0.05	ENSMUST00000120798	protein coding
Zfp473-206	7	4.1	1.21	0.81	ENSMUST00000140599	protein coding
Zfp473-207	7	0.39	-1.91	0.31	ENSMUST00000149011	protein coding
Zfp507-201	7	18.09	1.37	0.01	ENSMUST00000061586	protein coding
Zfp507-203	7	0.69	-1.34	0.83	ENSMUST00000187282	protein coding
Zfp507-204	7	0.37	2.04	0.72	ENSMUST00000205670	protein coding
Zfp511-201	7	31.63	1.59	0.04	ENSMUST00000168194	protein coding
Zfp511-204	7	4.9	1.82	0.2	ENSMUST00000210882	protein coding

Zfp511-206	7	0.11	13.58	0.28	ENSMUST00000211789	nonsense mediated decay
Zfp512-201	5	27.78	-1.3	0.04	ENSMUST00000076264	protein coding
Zfp512-202	5	0.34	4.06	0.36	ENSMUST000000200782	protein coding
Zfp512-203	5	3.43	-2.59	0.14	ENSMUST000000201450	protein coding
Zfp512-207	5	0.76	1.27	0.86	ENSMUST000000202061	protein coding
Zfp512-208	5	1.45	-1.03	0.99	ENSMUST000000202244	protein coding
Zfp512b-201	2	3.44	-1.19	0.53	ENSMUST000000108789	protein coding
Zfp512b-202	2	15.74	1.05	0.8	ENSMUST000000128553	protein coding
Zfp512b-204	2	0.29	1.03	0.99	ENSMUST000000132538	nonsense mediated decay
Zfp512b-207	2	0.42	1.59	0.78	ENSMUST000000140103	protein coding
Zfp512b-209	2	2.3	4.52	0.15	ENSMUST000000153998	protein coding
Zfp513-207	5	0.14	-7.65	NaN	ENSMUST000000201968	protein coding
Zfp516-201	18	13.57	-1.7	1.10E-05	ENSMUST00000071233	protein coding
Zfp516-202	18	1.03	3.41	0.07	ENSMUST000000171238	protein coding
Zfp516-204	18	1.58	-89.17	0.1	ENSMUST000000235902	protein coding
Zfp516-205	18	1.18	-2.15	0.48	ENSMUST000000236468	protein coding
Zfp516-207	18	0.64	4.93	0.27	ENSMUST000000237340	protein coding
Zfp521-201	18	0.07	1.31	0.87	ENSMUST00000025288	protein coding
Zfp521-204	18	0.09	1.47	0.83	ENSMUST000000234410	protein coding
Zfp521-205	18	0.05	-28.94	0.23	ENSMUST000000234480	nonsense mediated decay
Zfp523-201	17	1.25	2.6	0.33	ENSMUST0000000202318	protein coding
Zfp523-203	17	0.81	2.32	0.5	ENSMUST000000129522	nonsense mediated decay
Zfp523-204	17	0.05	7.56	NaN	ENSMUST000000133868	protein coding
Zfp523-207	17	0.81	-2.63	0.53	ENSMUST000000155030	protein coding
Zfp523-208	17	1.01	-1.44	0.78	ENSMUST000000161275	nonsense mediated decay
Zfp523-209	17	0.15	-1.28	0.9	ENSMUST000000232845	nonsense mediated decay

Zfp523-212	17	5.65	-1.14	0.71	ENSMUST000002 33613	protein coding
Zfp523-213	17	0.04	13.58	0.27	ENSMUST000002 33841	nonsense mediated decay
Zfp523-214	17	0.01	-5.57	NaN	ENSMUST000002 33904	protein coding
Zfp526-201	7	9.98	1.8	5.27E-03	ENSMUST000000 55604	protein coding
Zfp541-201	7	0.03	-2.88	0.55	ENSMUST000001 08509	protein coding
Zfp541-203	7	0.02	-2.12	0.69	ENSMUST000002 10805	protein coding
Zfp560-201	9	1.82	-2.05	0.14	ENSMUST000000 68079	protein coding
Zfp560-202	9	5.85	-1.29	0.73	ENSMUST000001 43992	protein coding
Zfp574-201	7	22.78	1.18	0.48	ENSMUST000000 53410	protein coding
Zfp58-201	13	4.57	-1.7	0.31	ENSMUST000000 76123	protein coding
Zfp58-202	13	0.37	1.26	0.89	ENSMUST000000 91523	protein coding
Zfp58-203	13	0.05	4.26	NaN	ENSMUST000001 63534	protein coding
Zfp58-204	13	2.26	-2.37	0.31	ENSMUST000001 71518	protein coding
Zfp580-201	7	11.76	2.17	0.13	ENSMUST000000 69324	protein coding
Zfp580-202	7	0.22	-3.11	0.48	ENSMUST000002 08570	protein coding
Zfp592-201	7	13.52	1.2	0.12	ENSMUST000001 07353	protein coding
Zfp595-201	13	1.16	1.07	0.95	ENSMUST000001 09735	protein coding
Zfp595-203	13	0.76	-1.62	0.51	ENSMUST000001 68892	protein coding
Zfp595-204	13	0.01	-5.57	NaN	ENSMUST000001 69142	nonsense mediated decay
Zfp595-205	13	0.44	-1.32	0.85	ENSMUST000001 71466	protein coding
Zfp597-201	16	7.91	1.46	0.06	ENSMUST000000 90522	protein coding
Zfp598-201	17	44	-1.35	0.01	ENSMUST000000 47179	protein coding
Zfp605-201	5	1.88	-2.22	0.21	ENSMUST000000 86686	protein coding
Zfp605-202	5	7.04	-1.87	1.35E-03	ENSMUST000001 12528	protein coding
Zfp605-204	5	1.85	1.07	0.95	ENSMUST000001 47631	protein coding
Zfp606-201	7	2.12	-1.07	0.91	ENSMUST000000 98822	protein coding

Zfp606-202	7	1	2.28	0.28	ENSMUST000001 23589	protein coding
Zfp606-204	7	1.84	-1.46	0.43	ENSMUST000001 51933	nonsense mediated decay
Zfp608-201	18	0.18	1.12	0.92	ENSMUST000000 64763	protein coding
Zfp609-201	9	60.3	1.71	3.66E-17	ENSMUST000001 59109	protein coding
Zfp609-203	9	0.16	2.6	0.6	ENSMUST000001 60747	protein coding
Zfp612-201	8	1.25	3.29	0.21	ENSMUST000000 58804	protein coding
Zfp612-202	8	1.74	-2.07	0.1	ENSMUST000002 12754	protein coding
Zfp618-201	4	0.27	3.92	0.32	ENSMUST000000 30043	protein coding
Zfp618-202	4	0.34	-1.04	0.98	ENSMUST000000 64814	protein coding
Zfp618-203	4	0.61	1.02	0.99	ENSMUST000001 07415	protein coding
Zfp626-201	7	0.02	-3.31	NaN	ENSMUST000000 80175	protein coding
Zfp626-202	7	8.01	-1.71	0.01	ENSMUST000002 05671	protein coding
Zfp629-201	7	0.31	13.51	0.06	ENSMUST000000 58038	protein coding
Zfp629-202	7	1.51	1.23	0.73	ENSMUST000000 84564	protein coding
Zfp629-204	7	0.05	1.41	0.87	ENSMUST000001 28731	protein coding
Zfp629-207	7	0.07	1.38	0.88	ENSMUST000001 34446	protein coding
Zfp637-201	6	1.4	-1.52	0.65	ENSMUST000001 12858	protein coding
Zfp637-202	6	0.21	13.38	0.28	ENSMUST000001 12859	protein coding
Zfp637-203	6	0.26	43.66	0.1	ENSMUST000001 12860	protein coding
Zfp637-209	6	0.18	1.5	0.84	ENSMUST000001 37224	protein coding
Zfp637-210	6	12.41	-1.66	0.15	ENSMUST000001 64472	protein coding
Zfp637-211	6	0.12	1.18	0.94	ENSMUST000002 23041	protein coding
Zfp639-201	3	22.09	-1.08	0.81	ENSMUST000000 29203	protein coding
Zfp639-202	3	14.28	1.4	0.16	ENSMUST000001 91783	protein coding
Zfp639-203	3	5.11	-3.74	0.15	ENSMUST000001 92985	protein coding
Zfp639-204	3	0.93	-91.26	0.1	ENSMUST000001 93119	protein coding

Zfp639-205	3	3.75	2.12	0.12	ENSMUST000001 93287	protein coding
Zfp64-202	2	14.85	1.77	0.18	ENSMUST000001 09161	protein coding
Zfp64-204	2	1.47	6.2	0.2	ENSMUST000001 24599	protein coding
Zfp646-201	7	25.24	-1.01	0.94	ENSMUST000000 50383	protein coding
Zfp646-202	7	5.1	1.1	0.86	ENSMUST000001 31000	protein coding
Zfp647-201	15	0.39	-1.42	0.86	ENSMUST000000 48854	protein coding
Zfp647-202	15	6.61	-1.41	0.3	ENSMUST000002 29055	protein coding
Zfp647-204	15	1.4	-1.26	0.8	ENSMUST000002 30677	protein coding
Zfp648-201	1	0.04	7.89	NaN	ENSMUST000000 86195	protein coding
Zfp652-201	11	14.33	1.34	0.31	ENSMUST000000 91565	protein coding
Zfp652-202	11	16.43	1.23	0.06	ENSMUST000001 07717	protein coding
Zfp652-204	11	3.4	1.16	0.74	ENSMUST000001 48945	nonsense mediated decay
Zfp653-201	9	2.75	-1.29	0.66	ENSMUST000000 43922	protein coding
Zfp653-202	9	2.26	1.2	0.83	ENSMUST000001 79605	protein coding
Zfp655-201	5	2.45	-1.83	0.44	ENSMUST000000 85661	protein coding
Zfp655-202	5	36.32	-1.28	0.03	ENSMUST000001 67316	protein coding
Zfp655-203	5	3.86	1.04	0.97	ENSMUST000001 96069	protein coding
Zfp655-204	5	1.38	-1.68	0.68	ENSMUST000001 99003	protein coding
Zfp655-205	5	3.66	1.41	0.5	ENSMUST000001 99322	protein coding
Zfp661-201	2	4.26	-2.39	0.08	ENSMUST000000 77422	protein coding
Zfp661-202	2	0.22	-1.64	0.62	ENSMUST000001 10366	protein coding
Zfp661-203	2	4.57	1.13	0.85	ENSMUST000001 10368	protein coding
Zfp661-204	2	0.93	-1.69	0.73	ENSMUST000001 64551	protein coding
Zfp664-201	5	70.77	1.14	0.06	ENSMUST000001 11417	protein coding
Zfp667-202	7	11.15	1.38	0.16	ENSMUST000001 08562	protein coding
Zfp667-204	7	0.68	-2.38	0.53	ENSMUST000001 53840	protein coding

Zfp668-201	7	0.83	1.46	0.61	ENSMUST000000 54415	protein coding
Zfp668-202	7	2.44	-1.72	0.42	ENSMUST000001 06261	protein coding
Zfp668-204	7	3.49	-1.01	0.99	ENSMUST000001 06263	protein coding
Zfp668-205	7	0.28	-1.98	0.71	ENSMUST000001 44721	protein coding
Zfp672-201	11	2.1	1.64	0.41	ENSMUST000000 57836	protein coding
Zfp672-202	11	0.15	2.14	0.65	ENSMUST000000 64786	protein coding
Zfp672-203	11	1.54	1.85	0.36	ENSMUST000000 65533	protein coding
Zfp672-204	11	0.76	3.36	0.09	ENSMUST000001 08829	protein coding
Zfp672-207	11	1.15	-2.7	0.29	ENSMUST000001 55662	protein coding
Zfp687-201	3	35.79	1.4	3.12E-03	ENSMUST000000 19482	protein coding
Zfp687-203	3	0.06	4.26	NaN	ENSMUST000001 28438	protein coding
Zfp687-204	3	2.96	1.57	0.62	ENSMUST000001 32195	protein coding
Zfp687-208	3	4.77	2.38	0.25	ENSMUST000001 49747	protein coding
Zfp688-201	7	8.34	1.59	0.36	ENSMUST000001 06300	protein coding
Zfp688-202	7	3.05	-2.59	0.38	ENSMUST000001 26756	protein coding
Zfp688-203	7	0.28	19.56	0.21	ENSMUST000001 29038	nonsense mediated decay
Zfp689-201	7	3.89	1.3	0.52	ENSMUST000000 53392	protein coding
Zfp689-202	7	1.21	1.18	0.87	ENSMUST000001 06299	protein coding
Zfp69-201	4	4.53	2.51	0.06	ENSMUST000001 06280	protein coding
Zfp69-203	4	1.01	1.76	0.65	ENSMUST000001 30702	protein coding
Zfp691-201	4	1.46	-1.18	0.83	ENSMUST000000 52715	protein coding
Zfp691-202	4	9.65	1.47	0.21	ENSMUST000001 06355	protein coding
Zfp691-204	4	2.43	-1.79	0.43	ENSMUST000001 79290	protein coding
Zfp692-201	11	16.58	1.28	0.4	ENSMUST000000 49353	protein coding
Zfp692-202	11	7.13	2.08	0.15	ENSMUST000001 53510	protein coding
Zfp7-201	15	55.99	-1.29	0.01	ENSMUST000000 23179	protein coding

Zfp7-203	15	0.2	1.11	0.95	ENSMUST000002 29831	protein coding
Zfp7-204	15	11.79	1.71	0.29	ENSMUST000002 29990	protein coding
Zfp704-201	3	9.3	-1.7	1.61E-06	ENSMUST000000 41124	protein coding
Zfp704-203	3	9.74	-1.16	0.64	ENSMUST000001 93947	protein coding
Zfp706-201	15	77.76	-1.23	3.45E-03	ENSMUST000000 78976	protein coding
Zfp706-203	15	6.34	-4.2	0.09	ENSMUST000002 26453	protein coding
Zfp706-204	15	141.56	-1.88	1.48E-03	ENSMUST000002 26671	protein coding
Zfp706-205	15	3.56	-1.13	0.91	ENSMUST000002 28275	protein coding
Zfp729b-201	13	7.89	-1.76	4.91E-03	ENSMUST000000 12873	protein coding
Zfp729b-202	13	0.78	-1.01	1	ENSMUST000001 38725	protein coding
Zfp738-201	13	0.07	-7.84	NaN	ENSMUST000001 10973	protein coding
Zfp738-202	13	0.33	1.42	0.86	ENSMUST000001 25495	protein coding
Zfp738-203	13	1.92	-1.84	4.80E-03	ENSMUST000001 37496	protein coding
Zfp738-204	13	0.51	-3.58	0.41	ENSMUST000001 75678	protein coding
Zfp738-205	13	1.27	-128.96	0.05	ENSMUST000001 75821	protein coding
Zfp746-201	6	5.53	-1.59	0.03	ENSMUST000000 73124	protein coding
Zfp746-203	6	3.49	1.18	0.78	ENSMUST000002 03609	protein coding
Zfp748-202	13	8.23	-1.88	4.80E-04	ENSMUST000001 81892	protein coding
Zfp750-201	11	2.38	-1.38	0.56	ENSMUST000000 92298	protein coding
Zfp760-201	17	11.05	-1.88	2.48E-03	ENSMUST000000 73312	protein coding
Zfp764-201	7	5.39	1.31	0.57	ENSMUST000000 59199	protein coding
Zfp770-201	2	17.17	-1.07	0.73	ENSMUST000000 50668	protein coding
Zfp772-201	7	5.02	-1.02	0.97	ENSMUST000000 74455	protein coding
Zfp777-202	6	13.7	-1.03	0.91	ENSMUST000001 14583	protein coding
Zfp777-203	6	1.4	2.14	0.58	ENSMUST000001 25385	protein coding
Zfp777-204	6	1.23	-129.55	0.06	ENSMUST000001 47281	protein coding

Zfp78-203	7	0.47	1.97	0.38	ENSMUST000002 07314	protein coding
Zfp78-204	7	0.33	4.53	0.29	ENSMUST000002 07347	protein coding
Zfp78-206	7	0.87	2.9	0.24	ENSMUST000002 08390	protein coding
Zfp78-207	7	0.3	7.55	0.2	ENSMUST000002 08763	protein coding
Zfp780b-201	7	0.17	-2.4	0.61	ENSMUST000000 81618	protein coding
Zfp780b-203	7	3.44	1.27	0.68	ENSMUST000002 05874	protein coding
Zfp780b-204	7	7.37	-1.37	0.2	ENSMUST000002 06685	protein coding
Zfp800-201	6	0.61	-3.34	0.23	ENSMUST000000 35930	protein coding
Zfp800-203	6	4.87	-1	1	ENSMUST000001 15321	protein coding
Zfp800-204	6	0.24	65.76	0.05	ENSMUST000001 23098	protein coding
Zfp800-205	6	3.25	4.14	0.07	ENSMUST000001 55494	protein coding
Zfp804a-201	2	5.03E-03	4.26	NaN	ENSMUST000000 47527	protein coding
Zfp82-201	7	6.68	1.87	0.2	ENSMUST000000 80834	protein coding
Zfp82-203	7	1.1	-3.76	0.24	ENSMUST000001 82546	protein coding
Zfp82-204	7	0.15	-14.76	0.35	ENSMUST000001 82919	protein coding
Zfp82-207	7	0.72	1.91	0.46	ENSMUST000001 83190	protein coding
Zfp821-201	8	3.91	2.23	0.33	ENSMUST000000 34163	protein coding
Zfp821-203	8	2.05	1.44	0.58	ENSMUST000002 12000	protein coding
Zfp821-204	8	0.29	-77.07	0.1	ENSMUST000002 12192	protein coding
Zfp821-206	8	5.64	1.72	0.32	ENSMUST000002 12964	protein coding
Zfp830-201	11	40.04	1.35	0.18	ENSMUST000000 56677	protein coding
Zfp831-201	2	0.01	-4.82	0.39	ENSMUST000000 59452	protein coding
Zfp85-202	13	2.54	-1.3	0.64	ENSMUST000001 44183	protein coding
Zfp853-201	5	0.04	-1.46	0.85	ENSMUST000001 80336	protein coding
Zfp853-202	5	0.26	1.03	0.99	ENSMUST000002 12355	protein coding
Zfp872-201	9	0.04	7.56	NaN	ENSMUST000000 91508	protein coding

Zfp872-202	9	0.13	1.4	0.78	ENSMUST00000178901	protein coding
Zfp879-201	11	0.48	1.2	0.86	ENSMUST00000049625	protein coding
Zfp879-202	11	0.05	-17.51	0.31	ENSMUST000000109133	protein coding
Zfp879-203	11	0.21	-79.06	0.09	ENSMUST000000109134	protein coding
Zfp90-203	8	0.71	13.06	0.07	ENSMUST000000212606	protein coding
Zfp90-205	8	5.12	-1.94	0.18	ENSMUST000000212874	protein coding
Zfp90-206	8	1.24	1.31	0.74	ENSMUST000000213045	nonsense mediated decay
Zfp91-201	19	30.4	-1.11	0.28	ENSMUST00000038627	protein coding
Zfp94-201	7	4.46	-1.41	0.44	ENSMUST00000032673	protein coding
Zfp94-202	7	2.11	-3.71	0.13	ENSMUST000000108436	protein coding
Zfp942-202	17	9.67	1.49	0.08	ENSMUST00000091879	protein coding
Zfp943-201	17	3.79	1.49	0.5	ENSMUST00000055349	protein coding
Zfp943-203	17	0.12	-3.31	0.45	ENSMUST000000174015	nonsense mediated decay
Zfp944-201	17	6.8	-1.22	0.4	ENSMUST000000115535	protein coding
Zfp946-202	17	2.94	-1.28	0.68	ENSMUST000000120222	protein coding
Zfp954-201	7	17.16	1.59	0.04	ENSMUST00000056246	protein coding
Zfp956-201	6	9.24	-1.47	0.12	ENSMUST000000101445	protein coding
Zfp956-202	6	1.14	2.38	0.39	ENSMUST000000140719	nonsense mediated decay
Zfp957-201	14	8.59E-03	4.26	NaN	ENSMUST00000040802	protein coding
Zfp994-201	17	2.08	1.24	0.73	ENSMUST000000179996	protein coding
Zfp995-201	17	4.17	-3.86	0.07	ENSMUST000000106026	protein coding
Zfpm2-201	15	0.06	1.12	0.94	ENSMUST00000053467	protein coding
Zfta-202	19	5.58	-1.56	0.04	ENSMUST000000159348	protein coding
Zfx-202	X	3.36	-1.21	0.82	ENSMUST000000113925	protein coding
Zfx-203	X	11.69	-1.19	0.24	ENSMUST000000113926	protein coding
Zfx-204	X	1.68	1.6	0.71	ENSMUST000000113927	protein coding

Zfx-207	X	0.22	-1.06	0.98	ENSMUST000001 37853	protein coding
Zfy1-201	Y	0.05	-23.02	0.26	ENSMUST000000 65545	protein coding
Zglp1-201	9	0.18	-1.23	0.92	ENSMUST000001 15494	protein coding
Zgpat-203	2	12.99	1.16	0.56	ENSMUST000001 16366	nonsense mediated decay
Zgpat-206	2	2.58	-3.29	0.14	ENSMUST000001 56258	protein coding
Zhx1-201	15	2.87	-1.77	0.14	ENSMUST000000 70143	protein coding
Zhx1-203	15	0.19	-3.58	0.45	ENSMUST000001 75805	protein coding
Zhx1-206	15	0.35	-4.05	0.3	ENSMUST000001 77276	protein coding
Zik1-201	7	7.95	-1.85	3.86E-03	ENSMUST000000 32551	protein coding
Zkscan1-201	5	3.3	1.12	0.71	ENSMUST000000 19660	protein coding
Zkscan1-202	5	0.44	-1.04	1	ENSMUST000000 66617	protein coding
Zkscan1-204	5	2.37	-1.12	0.84	ENSMUST000001 10963	protein coding
Zkscan14-201	5	6.44	1.25	0.65	ENSMUST000000 31632	protein coding
Zkscan14-202	5	0.77	-99.35	0.09	ENSMUST000001 62220	protein coding
Zkscan14-203	5	0.45	1.03	0.98	ENSMUST000001 98959	protein coding
Zkscan3-201	13	6.54	1.84	0.19	ENSMUST000000 70785	protein coding
Zkscan3-202	13	0.31	3	0.46	ENSMUST000001 16433	protein coding
Zkscan3-203	13	2.52	-1.53	0.53	ENSMUST000001 16434	protein coding
Zkscan3-204	13	3.67	1.35	0.21	ENSMUST000001 17721	protein coding
Zkscan3-208	13	0.53	1.14	0.9	ENSMUST000002 24820	protein coding
Zkscan5-202	5	20.79	-1.51	2.92E-03	ENSMUST000000 85671	protein coding
Zkscan5-204	5	0.37	-1.46	0.84	ENSMUST000001 61881	protein coding
Zkscan5-205	5	0.15	27.33	0.14	ENSMUST000001 61896	nonsense mediated decay
Zkscan5-206	5	0.11	2.02	0.7	ENSMUST000001 62168	nonsense mediated decay
Zkscan6-202	11	10.24	1.34	0.22	ENSMUST000000 71465	protein coding
Zkscan8-202	13	0.16	1.78	0.75	ENSMUST000001 10481	protein coding

Zmat1-201	X	0.06	27.8	0.16	ENSMUST00000064659	protein coding
Zmat1-202	X	0.18	-2.93	0.44	ENSMUST00000113185	protein coding
Zscan12-201	13	5.53	1.06	0.91	ENSMUST00000053293	protein coding
Zscan12-203	13	2.31	-1.73	0.31	ENSMUST000000225545	protein coding
Zscan20-202	4	4.47	-1.2	0.5	ENSMUST00000097877	protein coding
Zscan20-203	4	1.34	-1.02	0.99	ENSMUST000000135309	nonsense mediated decay
Zscan20-204	4	0.72	-2.7	0.47	ENSMUST000000141040	protein coding
Zscan20-205	4	0.08	-1.26	NaN	ENSMUST000000147876	protein coding
Zscan21-202	5	5.05	1.78	0.51	ENSMUST00000080732	protein coding
Zscan21-203	5	0.28	1.36	0.83	ENSMUST000000110959	protein coding
Zscan21-206	5	0.7	-6.52	0.2	ENSMUST000000136425	protein coding
Zscan21-207	5	0.25	-20.37	0.29	ENSMUST000000142185	protein coding
Zscan22-201	7	2.83	-1.46	0.45	ENSMUST00000055528	protein coding
Zscan22-202	7	7.38	-1.03	0.93	ENSMUST000000117189	protein coding
Zscan22-203	7	1.89	-1.33	0.8	ENSMUST000000119989	protein coding
Zscan25-201	5	11.5	-1.1	0.73	ENSMUST00000094116	protein coding
Zscan25-202	5	2.4	-1.84	0.57	ENSMUST000000199563	nonsense mediated decay
Zscan25-203	5	1.82	7.45	0.1	ENSMUST000000200246	protein coding
Zscan26-202	13	21.22	2	2.07E-06	ENSMUST000000110485	protein coding
Zscan29-202	2	4.73	1.58	0.03	ENSMUST000000110661	protein coding
Zscan29-203	2	5.54	1.35	0.37	ENSMUST000000146243	protein coding
Zxdc-203	6	2.31	2.21	0.09	ENSMUST000000113539	protein coding
Zxdc-205	6	3.69	1.42	0.64	ENSMUST000000203493	protein coding
Zzz3-201	3	23.11	-1.34	0.04	ENSMUST00000089982	protein coding