Growth hormone replacement therapy regulates microRNA-29a and targets involved in insulin resistance

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Supplementary Figure 1. Changes in miRNA-29a expression do not influence the differentiation state or insulin sensitivity of human myotubes. Human myotubes were transfected with miR-29a mimics, miR-29a antagomirs or the respective scrambled control oligonucleotides. After 48 h cells were stimulated with or without 100 nM insulin (Ins) for 15 min before harvesting. AKT phosphorylation at serine 473 (pAKT), total AKT, adult myosin heavy chain (MHC) and GAPDH amounts were determined by western blotting. Proliferating undifferentiated myoblasts (Undiff.) were used to demonstrate specificity of MHC staining for the differentiated state. Shown are densitometry results for MHC normalized for GAPDH and for pAKT normalized for total AKT in arbitrary units (AU), n=4-6. Changes were analyzed using one-way ANOVA and Tukey's post test comparing all samples. ***, $p < 0.001$
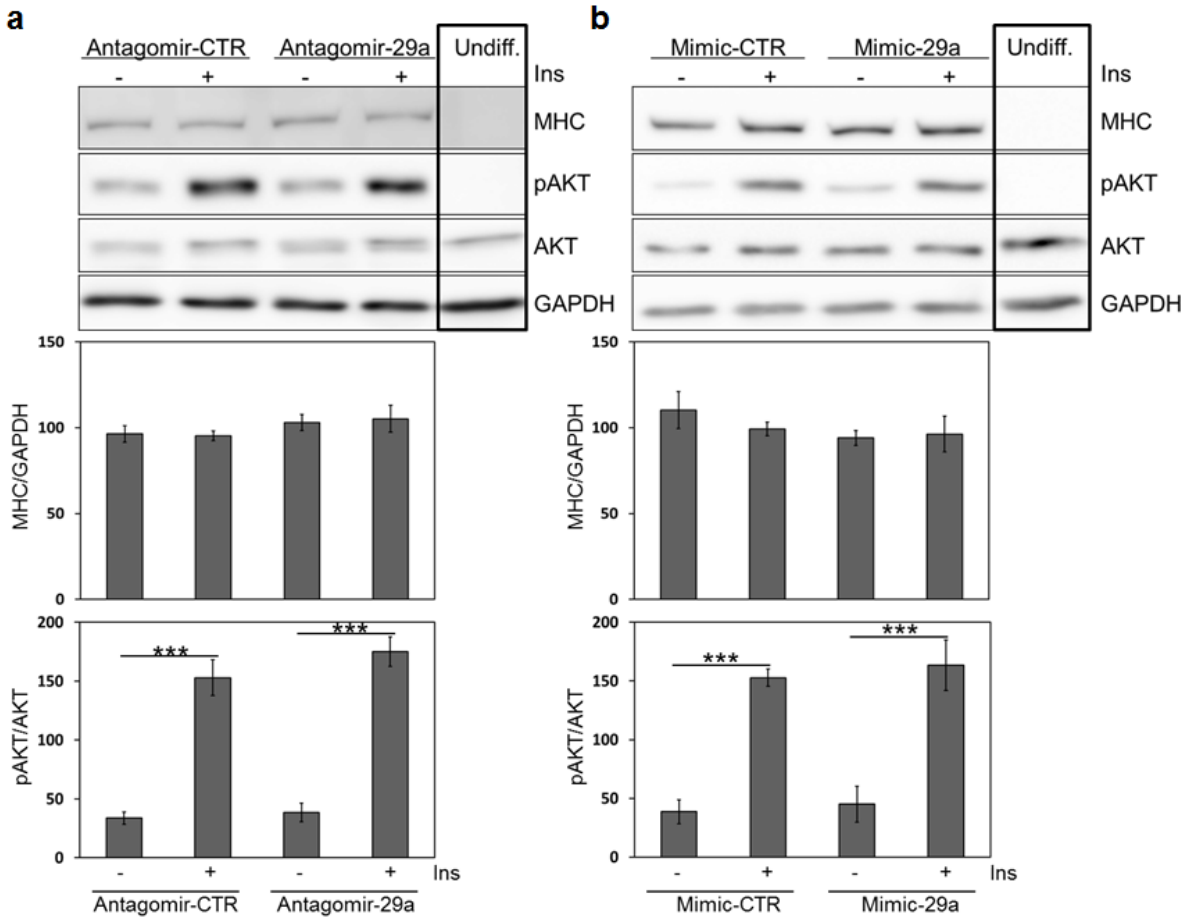
Supplementary Figure 2. MiR-29a levels in skeletal muscle do not correlate with insulin sensitivity in patients with prediabetes. OGTTs were performed in 33 subjects with prediabetes and the metabolic clearance rate (MCR) or the insulin sensitivity index (IS) calculated as described in Methods. miR-29a levels were measured in muscle biopsies (M.vastus lateralis) and normalized to miR-let-7 and shown as arbitrary units (AU). miRNA levels were plotted against MCR or ISI, respectively.
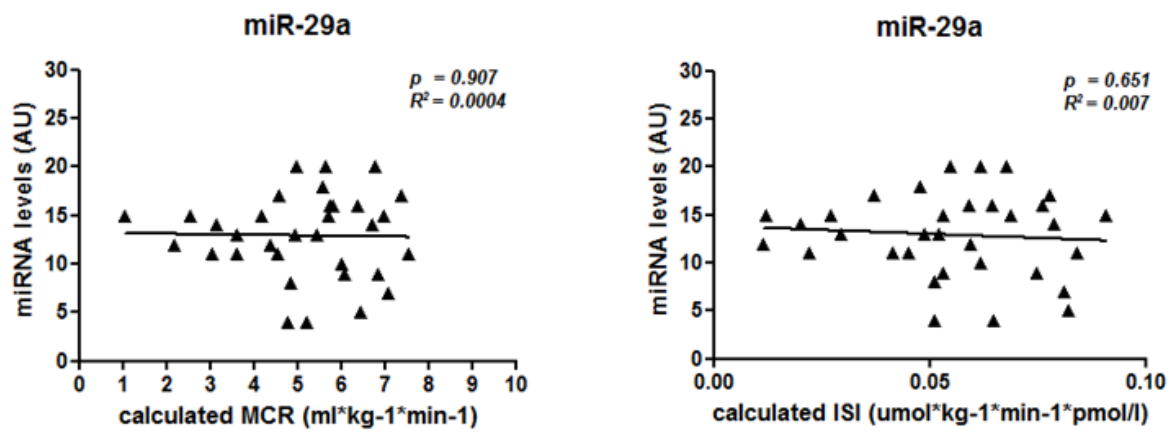
Supplementary Figure 3. Unchanged miR-29a levels and miR-29a target gene expression in skeletal muscle after HFD in mice. (A) C57Bl6 mice were subjected to HFD diet over 20 weeks and glucose values measured in the fasted or non-fasted state. miR-29a levels in tibialis anterior muscle were normalized to miR-let-7 and shown as arbitrary units (AU). (B) qRT-PCR analysis of miR-29a target genes in skeletal muscle after HFD (grey) or normal chow (white). Results for mice after HFD and normal chow (control) are each n=7 (male mice). mRNA was normalized to 18S RNA. Results for HFD versus control were analyzed using student`s t test. *: $p<0.05$, ***: $p<0.001$.
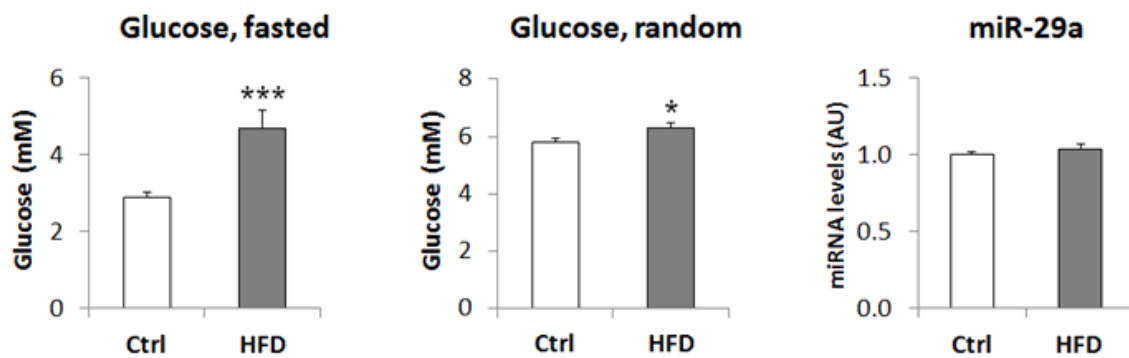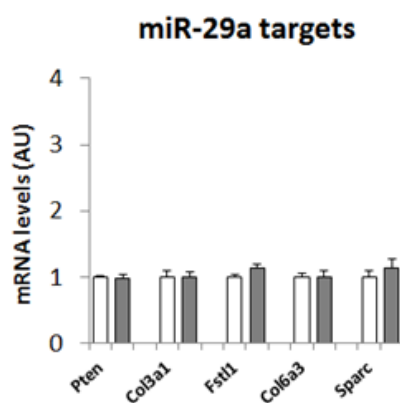
Supplementary Figure 4. Plasma levels of FSTL1 and SPARC in GHD patients before and after 4 months of GHRT. 10 GHD patients as described in Fig.4 were subjected to GHRT for 4 months. Plasma FSTL1 and SPARC levels were measured in fasted blood samples using ELISA. Values are shown for the whole cohort (all, n=10) or separately analyzed for individuals with improved IS (HOMA-IR decreased), n=5, or worsened IS (HOMA-IR increased), n=5, after GHRT. Baseline values are shown in white, values after GHRT shown in grey.*, $p<0.05$ (paired student`s t test).
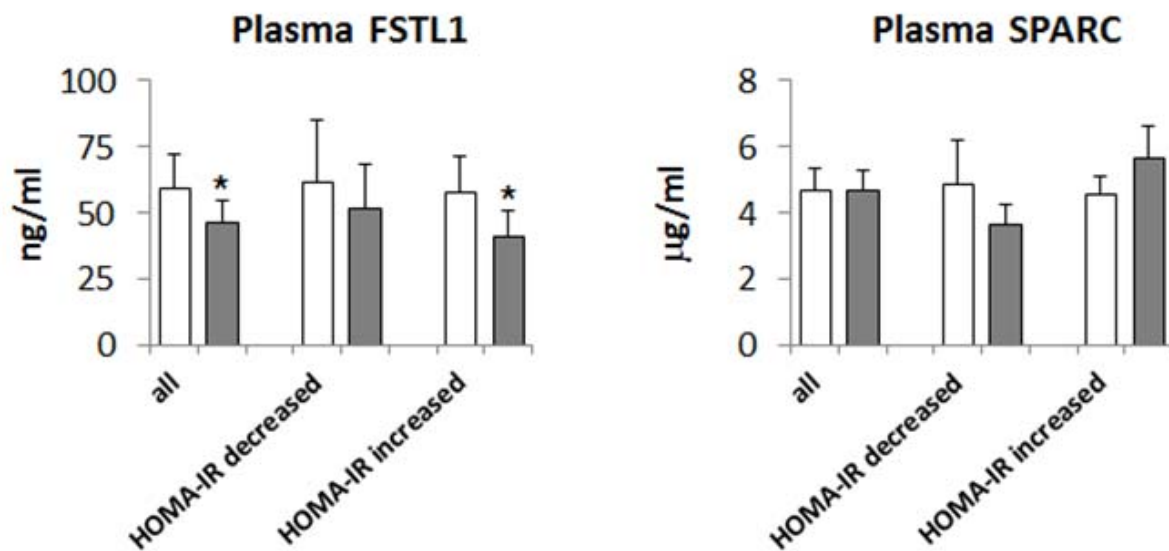
Supplementary Table 1. RNA transcript regulation in skeletal muscle from GHD mice after GHRT. GHD mice were treated with PBS or GH over 3 weeks. Total RNA was isolated from the tibialis anterior muscle and analyzed using RNA deep sequencing (n=3, male mice). Shown are all genes that were considered significantly regulated based on a q value < 0.05 as provided by the manufacturer.

gene_exp_diff_significant

				FPKM					
test_id	nearest_ref_id	gene	locus	GHPBS	GHT	log2(fol	p_value	q_value	significant
XLOC_000147	-	-	chr1:61221	0.00	220'322.00	inf	5.00E-005	8.65E-004	yes
XLOC_002208	-	-	chr10:9852	0.00	68'519.20	inf	5.00E-005	8.65E-004	yes
XLOC_017689	-	-	chr6:14504	0.00	34'961.50	inf	5.00E-005	8.65E-004	yes
XLOC_018570	-	-	chr7:13336	0.00	150'436.00	inf	5.00E-005	8.65E-004	yes
XLOC_011537	-	-	chr2:17258	0.00	13'451.90	inf	1.45E-003	1.43E-002	yes
XLOC_011581	NR_029528	Mir1a-1	chr2:18012	0.00	146.94	inf	1.45E-003	1.43E-002	yes
XLOC_003168	NR_027819;NR_027820;NR_	1810032O08Rik,Snord1a	chr11:1165	4.10	79.24	4.27	1.35E-003	1.36E-002	yes
XLOC_002953	NM_007742	Col1a1	chr11:9479	43.54	560.22	3.69	5.00E-005	8.65E-004	yes
XLOC_016519	NM_007743	Col1a2	chr6:44556	116.65	1'324.84	3.51	5.00E-005	8.65E-004	yes
XLOC_011289	NM_001126338;NM_023043	Prnd	chr2:13177	1.62	16.78	3.37	5.00E-005	8.65E-004	yes
XLOC_019851	-	-	chr7:10808	2.72	23.81	3.13	5.60E-003	4.09E-002	yes
XLOC_000099	NM_009930	Col3a1	chr1:45368	24.12	190.65	2.98	5.00E-005	8.65E-004	yes
XLOC_015928	NM_153107	Cpz	chr5:35844	0.48	3.66	2.94	5.00E-003	3.74E-002	yes
XLOC_002056	NM_001077638;NM_133182	Prmt2	chr10:7566	4.11	30.74	2.90	5.75E-003	4.16E-002	yes
XLOC_013057	NM_007729	Col11a1	chr3:11373	0.40	2.89	2.86	5.00E-005	8.65E-004	yes
XLOC_007152	NM_001204152;NM_0012041	C1qtnf6	chr15:7835	1.87	13.36	2.84	5.00E-005	8.65E-004	yes
XLOC_015132	-	-	chr4:57383	764.19	5'281.18	2.79	1.25E-003	1.28E-002	yes
XLOC_012178	NM_009608	Actc1	chr2:11387	238.90	1'450.41	2.60	5.00E-005	8.65E-004	yes
XLOC_016586	NM_008590	Mest	chr6:30688	1.05	6.27	2.58	1.50E-004	2.26E-003	yes
XLOC_001280	-	-	chr1:82288	7.10	42.24	2.57	5.00E-005	8.65E-004	yes
XLOC_000094	NM_024283	1500015O10Rik	chr1:43787	2.20	12.78	2.54	5.00E-005	8.65E-004	yes
XLOC_021643	NM_028638	Gadl1	chr9:11581	1.75	9.42	2.43	5.00E-005	8.65E-004	yes
XLOC_003425	NM_009242	Sparc	chr11:5520	184.85	915.32	2.31	5.00E-005	8.65E-004	yes
XLOC_020665	NM_026818	Cilp2	chr8:72404	1.49	7.24	2.28	5.00E-005	8.65E-004	yes
XLOC_004326	NM_001205343;NM_130887	Papln	chr12:8510	1.10	5.21	2.25	5.00E-005	8.65E-004	yes
XLOC_019146	NM_009131	Clec11a	chr7:51559	2.69	12.55	2.22	5.00E-005	8.65E-004	yes
XLOC_000738	NM_007737	Col5a2	chr1:45431	8.69	39.75	2.19	5.00E-005	8.65E-004	yes
XLOC_009262	-	-	chr17:3513	0.99	4.42	2.16	2.60E-003	2.24E-002	yes
XLOC_000733	NM_001013799	A530098C11Rik	chr1:44066	12.10	51.78	2.10	5.00E-005	8.65E-004	yes
XLOC_017212	NM_001136065;NM_010433	Hipk2	chr6:38647	7.36	31.49	2.10	5.00E-005	8.65E-004	yes
XLOC_010755	NM_015734	Col5a1	chr2:27741	12.13	51.63	2.09	5.00E-005	8.65E-004	yes
XLOC_021789	NM_001102404;NM_0011024	Acp5	chr9:21931	1.25	5.07	2.02	1.50E-004	2.26E-003	yes
XLOC_014295	NM_001161799;NM_008546	Mfap2	chr4:14056	4.85	18.99	1.97	5.00E-005	8.65E-004	yes
XLOC_006047	NM_033325	Loxl2	chr14:7000	10.30	40.24	1.97	5.00E-005	8.65E-004	yes
XLOC_004884	-	-	chr12:1024	28.99	112.88	1.96	5.00E-005	8.65E-004	yes
XLOC_002060	NM_146007	Col6a2	chr10:7605	23.94	89.58	1.90	5.00E-005	8.65E-004	yes
XLOC_017395	NM_001003955;NM_177466	Rab11fip5	chr6:85284	7.34	26.99	1.88	5.00E-005	8.65E-004	yes
XLOC_022095	NM_007730	Col12a1	chr9:7944€	2.75	10.10	1.87	5.00E-005	8.65E-004	yes
XLOC_002653	NM_029568	Mfap4	chr11:6129	10.26	37.15	1.86	5.00E-005	8.65E-004	yes
XLOC_000890	NM_001243008;NM_001243	Col6a3	chr1:92663	37.65	135.31	1.85	5.00E-005	8.65E-004	yes
XLOC_003878	NM_008815	Etv4	chr11:1016	1.43	5.14	1.84	5.00E-005	8.65E-004	yes
XLOC_014198	NM_028266	Col16a1	chr4:12972	2.91	10.42	1.84	5.00E-005	8.65E-004	yes
XLOC_001187	NR_037996	Hmga2-ps1	chr1:17874	2.36	8.41	1.83	1.50E-003	1.47E-002	yes
XLOC_014635	NM_011607	Tnc	chr4:63620	2.82	10.00	1.83	5.00E-005	8.65E-004	yes
XLOC_007391	-	-	chr15:4937	2.58	9.13	1.82	5.00E-003	3.74E-002	yes
XLOC_011287	NM_001177833;NM_0011778	Smox	chr2:13131	254.88	893.51	1.81	5.00E-005	8.65E-004	yes
XLOC_021758	NM_016919	Col5a3	chr9:20574	10.01	34.59	1.79	5.00E-005	8.65E-004	yes
XLOC_000842	NM_001001565;NM_0010015	Chpf	chr1:75471	3.32	11.14	1.75	5.00E-005	8.65E-004	yes
XLOC_012454	NM_013592	Matn4	chr2:16421	0.97	3.21	1.73	1.10E-003	1.16E-002	yes
XLOC_010460	NM_019698;NM_153554	Aldh18a1	chr19:4062	2.16	7.12	1.72	5.00E-005	8.65E-004	yes
XLOC_019208	NM_001136084;NM_009414	Tph1	chr7:53902	1.18	3.86	1.71	5.00E-005	8.65E-004	yes
XLOC_019809	NM_007631	Ccnd1	chr7:15211	2.39	7.62	1.68	5.00E-005	8.65E-004	yes
XLOC_016442	-	-	chr5:22230	12.77	40.67	1.67	5.00E-005	8.65E-004	yes
XLOC_013219	NM_007753	Cpa3	chr3:20115	1.41	4.42	1.65	5.00E-005	8.65E-004	yes
XLOC_012952	NM_007802	Ctsk	chr3:95303	7.68	24.02	1.64	5.00E-005	8.65E-004	yes
XLOC_013892	NM_009928	Col15a1	chr4:47220	35.87	111.30	1.63	5.00E-005	8.65E-004	yes
XLOC_022737	NM_022322	Tnmd	chrX:13038	13.35	41.37	1.63	5.00E-005	8.65E-004	yes
XLOC_017722	-	-	chr6:37820	4.11	12.61	1.62	5.70E-003	4.14E-002	yes
XLOC_010685	NM_027715	Otud1	chr2:19579	2.45	7.51	1.61	5.00E-005	8.65E-004	yes
XLOC_006336	NM_080728	Myh7	chr14:5558	2.07	6.26	1.59	5.00E-005	8.65E-004	yes
XLOC_022447	NM_021715	Chst7	chrX:19636	2.70	8.07	1.58	5.00E-005	8.65E-004	yes
XLOC_015100	NM_011985	Mmp23	chr4:15502	2.39	7.11	1.58	1.85E-003	1.73E-002	yes
XLOC_012244	NM_007993	Fbn1	chr2:12512	16.34	48.22	1.56	5.00E-005	8.65E-004	yes
XLOC_017421	NM_001039394;NM_133717	Rab43	chr6:87738	3.48	10.16	1.54	5.00E-005	8.65E-004	yes
XLOC_000504	NM_177068	Olfml2b	chr1:17257	10.60	30.52	1.53	5.00E-005	8.65E-004	yes
XLOC_008416	NM_009926	Col11a2	chr17:3417	12.11	34.71	1.52	5.00E-005	8.65E-004	yes
XLOC_017780	NM_173008	A430110N23Rik	chr7:48774	12.88	36.40	1.50	5.00E-005	8.65E-004	yes
XLOC_006744	NM_028195	Cyth4	chr15:7842	3.14	8.83	1.49	5.00E-005	8.65E-004	yes
XLOC_020490	NM_009931	Col4a1	chr8:11198	96.66	270.61	1.49	5.00E-005	8.65E-004	yes
XLOC_006354	NM_001164107;NM_0011641	Ripk3	chr14:5640	1.47	4.12	1.48	1.45E-003	1.43E-002	yes
XLOC_015492	NM_001204201;NM_0012042	Spp1	chr5:10486	4.01	11.20	1.48	5.00E-005	8.65E-004	yes
XLOC_002061	NM_009933	Col6a1	chr10:7617	70.39	196.68	1.48	5.00E-005	8.65E-004	yes
XLOC_016945	NM_001033382	Cacna2d4	chr6:11918	1.06	2.90	1.45	5.00E-005	8.65E-004	yes
XLOC_000386	NM_031189	Myog	chr1:13618	1.66	4.53	1.45	9.00E-004	9.88E-003	yes
XLOC_015610	NM_010861	Myl2	chr5:12255	3.59	9.68	1.43	5.00E-005	6.18E-004	yes
XLOC_004350	NM_010234	Fos	chr12:8681	1.60	4.25	1.41	5.00E-005	8.65E-004	yes
XLOC_002104	NM_010255	Gamt	chr10:7972	13.20	34.86	1.40	5.00E-005	8.65E-004	yes
XLOC_000591	NM_022019	Dusp10	chr1:18585	12.55	33.07	1.40	5.00E-005	8.65E-004	yes
XLOC_009694	NM_001034859	Gm4841	chr18:6042	1.77	4.66	1.40	5.00E-005	8.65E-004	yes
XLOC_010992	NM_011784	Aplnr	chr2:84976	14.87	39.06	1.39	5.00E-005	8.65E-004	yes
XLOC_018728	NM_145379	Mrgprf	chr7:15248	1.63	4.25	1.38	1.00E-004	1.63E-003	yes
XLOC_019704	NM_018867	Cpxm2	chr7:13923	7.73	19.97	1.37	5.00E-005	8.65E-004	yes
XLOC_018020	NM_133210	Sertad3	chr7:28258	2.28	5.87	1.36	5.00E-005	8.65E-004	yes
XLOC_005407	NM_009238	Sox4	chr13:2904	2.48	6.38	1.36	5.00E-005	8.65E-004	yes
XLOC_017701	NM_008970	Pthlh	chr6:14720	0.83	2.09	1.34	2.00E-004	2.93E-003	yes
XLOC_007252	NM_011161	Mapk11	chr15:8897	2.44	6.12	1.33	1.50E-004	2.26E-003	yes
XLOC_007613	NM_008047	Fstl1	chr16:3777	30.68	76.50	1.32	5.00E-005	8.65E-004	yes
XLOC_004155	NM_011519	Sdc1	chr12:8778	1.44	3.56	1.31	5.00E-005	8.65E-004	yes
XLOC_004856	-	-	chr12:1599	1.73	4.25	1.30	1.75E-003	1.66E-002	yes
XLOC_006129	NM_145467	Itgbl1	chr14:1240	7.08	17.42	1.30	5.00E-005	8.65E-004	yes
XLOC_005792	NM_008695	Nid2	chr14:2057	7.14	17.51	1.29	5.00E-005	8.65E-004	yes
XLOC_017693	NM_024469	Bhlhe41	chr6:14580	25.26	61.86	1.29	5.00E-005	8.65E-004	yes
XLOC_006809	NM_146061	Prr5	chr15:8451	2.78	6.81	1.29	5.00E-005	8.65E-004	yes
XLOC_009611	NM_001109988;NM_0011095	D0H4S114	chr18:3359	21.18	51.60	1.28	5.00E-005	8.65E-004	yes
XLOC_003100	NM_008626	Mrc2	chr11:1051	4.88	11.89	1.28	5.00E-005	8.65E-004	yes
XLOC_004173	NM_013614	Odc1	chr12:1755	44.78	108.74	1.28	5.00E-005	8.65E-004	yes
XLOC_020053	NM_026840	Pdgfrl	chr8:42011	4.59	11.08	1.27	5.00E-005	8.65E-004	yes

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XLOC_012750	NM 001198765;NM 001198'	Postn	chr3:54165	10.21	24.62	1.27	5.00E-005	8.65E-004	yes
XLOC_022575	NM_008253	Hmgb3	chrX:68809	3.91	9.41	1.26	5.00E-005	8.65E-004	yes
XLOC_004521	NM_178911	Pld4	chr12:1139	2.83	6.76	1.26	5.00E-005	8.65E-004	yes
XLOC_001958	NM_009665	Amd1	chr10:4000	127.88	305.35	1.26	5.00E-005	8.65E-004	yes
XLOC_012795	NM_133786	Smc4	chr3:68806	3.77	8.95	1.25	5.00E-005	8.65E-004	yes
XLOC_007662	NM_001014399;NM_0010144	Abi3bp	chr16:5647	6.35	15.08	1.25	5.00E-005	8.65E-004	yes
XLOC_001705	NM_008438	Kera	chr10:9706	6.42	15.23	1.25	5.00E-005	8.65E-004	yes
XLOC_012093	NM_011957	Creb3l1	chr2:91822	9.24	21.91	1.25	5.00E-005	8.65E-004	yes
XLOC_022312	-	-	chr9:14467	13.07	30.86	1.24	1.50E-004	2.26E-003	yes
XLOC_012282	NM_019696	Cpxm1	chr2:13021	2.55	6.00	1.23	5.00E-005	8.65E-004	yes
XLOC_007496	NM_153790	Scarf2	chr16:1779	4.08	9.54	1.23	5.00E-005	8.65E-004	yes
XLOC_011080	NM_011355	Sfpi1	chr2:90936	2.09	4.89	1.22	2.90E-003	2.42E-002	yes
XLOC_008952	NM_001142706;NM_008198	Cfb	chr17:3499	3.69	8.60	1.22	5.00E-005	8.65E-004	yes
XLOC_003038	NM_001163481;NM_010221	Fkbp10	chr11:1002	6.55	15.20	1.21	5.00E-005	8.65E-004	yes
XLOC_019785	NR_001592	H19	chr7:14976	554.64	1'283.05	1.21	5.00E-005	8.65E-004	yes
XLOC_012953	NM_021281	Ctss	chr3:9533C	4.93	11.37	1.21	5.00E-005	8.65E-004	yes
XLOC_017527	NM_026028	Ccdc77	chr6:12027	2.88	6.65	1.21	5.00E-005	8.65E-004	yes
XLOC_012486	NM_008968	Ptgis	chr2:16702	1.01	2.32	1.20	5.00E-005	8.65E-004	yes
XLOC_013422	NM_001081182	Atp8b2	chr3:89743	4.41	10.09	1.19	5.00E-005	8.65E-004	yes
XLOC_012655	NM_010634	Fabp5	chr3:10012	8.96	20.37	1.18	5.00E-005	8.65E-004	yes
XLOC_020977	-	-	chr8:72534	4.47	10.13	1.18	1.10E-003	1.16E-002	yes
XLOC_006667	NM_181277	Col14a1	chr15:5513	1.78	4.03	1.18	5.00E-005	8.65E-004	yes
XLOC_004898	-	-	chr12:1146	63.89	142.85	1.16	5.00E-005	8.65E-004	yes
XLOC_014375	NM_178406	Gpr153	chr4:15164	4.57	10.21	1.16	5.00E-005	8.65E-004	yes
XLOC_006176	NM_001013826	Dupd1	chr14:2249	54.26	121.06	1.16	5.00E-005	8.65E-004	yes
XLOC_020299	NM_024217	Cmtm3	chr8:10686	3.49	7.75	1.15	5.00E-005	8.65E-004	yes
XLOC_016395	NM_001172146;NM_146165	Aimp2	chr5:14457	145.42	323.27	1.15	5.00E-005	8.65E-004	yes
XLOC_008306	NM_001163416;NM_026747	Ptx4	chr17:2525	2.71	5.97	1.14	3.60E-003	2.88E-002	yes
XLOC_013542	NM_133859	Olfml3	chr3:10353	8.19	18.01	1.14	5.00E-005	8.65E-004	yes
XLOC_019395	NM_001111043;NM_001111(	Serpinh1	chr7:10649	69.01	151.46	1.13	5.00E-005	8.65E-004	yes
XLOC_014771	NM_146256	Hpdl	chr4:11649	2.38	5.21	1.13	2.00E-003	1.84E-002	yes
XLOC_006976	NR_038186	LOC100616095	chr15:3217	4.67	10.19	1.13	5.00E-005	8.65E-004	yes
XLOC_012866	NM_013691	Thbs3	chr3:89019	5.94	12.97	1.13	5.00E-005	8.65E-004	yes
XLOC_016383	NM_001033312	Fbxl18	chr5:14363	2.87	6.25	1.12	5.00E-005	8.65E-004	yes
XLOC_020324	NM_001081241;NR_035492	Fam65a	chr8:10812	27.37	59.54	1.12	5.00E-005	8.65E-004	yes
XLOC_005949	NM_008608	Mmp14	chr14:5505	16.05	34.65	1.11	5.00E-005	8.65E-004	yes
XLOC_010521	NM_175360	Obfc1	chr19:4757	3.52	7.59	1.11	1.00E-004	1.63E-003	yes
XLOC_019794	NM_001161624;NM_009876	Cdkn1c	chr7:15064	39.34	84.74	1.11	5.00E-005	8.65E-004	yes
XLOC_022995	NM_013912	Apln	chrX:45378	5.94	12.78	1.11	5.00E-005	8.65E-004	yes
XLOC_000130	NM_001080126;NM_009812	Casp8	chr1:58852	1.63	3.51	1.11	5.00E-005	8.65E-004	yes
XLOC_019166	NM_026555	Rcn3	chr7:52338	13.49	29.01	1.10	5.00E-005	8.65E-004	yes
XLOC_003551	NM_007528	Bcl6b	chr11:7003	3.97	8.52	1.10	5.00E-005	8.65E-004	yes
XLOC_021726	NM_019482	Panx1	chr9:14810	3.97	8.47	1.09	5.00E-005	8.65E-004	yes
XLOC_001138	NM_010185	Fcer1g	chr1:17315	3.85	8.20	1.09	3.40E-003	2.74E-002	yes
XLOC_014592	NM_022814	Svep1	chr4:58055	2.45	5.19	1.09	5.00E-005	8.65E-004	yes
XLOC_009684	NM_010728	Lox	chr18:5267	1.20	2.54	1.08	5.00E-005	8.65E-004	yes
XLOC_022102	NM_026122;NM_175074	Hmgn3	chr9:83003	2.36	5.01	1.08	1.80E-003	1.70E-002	yes
XLOC_002501	NM_026979	C1qtnf2	chr11:4328	2.16	4.55	1.08	2.20E-003	1.98E-002	yes
XLOC_020423	NM_007662	Cdh15	chr8:12537	2.66	5.61	1.08	6.00E-004	7.04E-003	yes
XLOC_020863	NM_017370	Hp	chr8:11209	3.50	7.36	1.07	5.00E-005	8.65E-004	yes
XLOC_023296	NM_001199246;NM_030700	Maged2	chrX:14724	9.87	20.74	1.07	5.00E-005	8.65E-004	yes
XLOC_004196	NM_008482	Lamb1	chr12:3195	10.61	22.24	1.07	5.00E-005	8.65E-004	yes
XLOC_006377	NM_030004	Cryl1	chr14:5789	4.33	9.07	1.07	3.50E-004	4.67E-003	yes
XLOC_007639	NM_026439	Ccdc80	chr16:4509	5.72	11.96	1.06	5.00E-005	8.65E-004	yes
XLOC_014784	NM_017377	B4galt2	chr4:11754	2.08	4.34	1.06	1.70E-003	1.63E-002	yes
XLOC_014816	NM_194060	Foxo6	chr4:11993	9.35	19.51	1.06	5.00E-005	8.65E-004	yes
XLOC_021095	NM_010493	Icam1	chr9:20820	4.29	8.93	1.06	5.00E-005	8.65E-004	yes
XLOC_016178	NM_146162	Tmem119	chr5:11424	2.11	4.40	1.06	1.30E-003	1.32E-002	yes
XLOC_008477	NM_133662	Ier3	chr17:3595	3.38	7.03	1.06	5.00E-005	8.65E-004	yes
XLOC_012896	NM_011311	S100a4	chr3:90407	10.31	21.44	1.06	1.00E-004	1.63E-003	yes
XLOC_015755	NM_007984	Fscn1	chr5:14372	5.88	12.23	1.06	5.00E-005	8.65E-004	yes
XLOC_019723	NM_029886	9430038I01Rik	chr7:14456	2.47	5.13	1.06	3.50E-003	2.81E-002	yes
XLOC_013496	NM_023320	Plekho1	chr3:95792	18.56	38.51	1.05	5.00E-005	8.65E-004	yes
XLOC_000962	NM_008567	Mcm6	chr1:13022	3.07	6.37	1.05	5.00E-005	8.65E-004	yes
XLOC_009663	NM_001136086;NM_009468	Dpysl3	chr18:4348	6.81	14.01	1.04	5.00E-005	8.65E-004	yes
XLOC_020637	NM_021788	Sap30	chr8:59961	3.06	6.23	1.03	1.15E-003	1.20E-002	yes
XLOC_004380	NM_029553;NM_198311	Ttc8	chr12:1001	1.16	2.37	1.03	5.00E-005	8.65E-004	yes
XLOC_016337	NM_008788	Pcolce	chr5:13804	75.55	153.71	1.02	5.00E-005	8.65E-004	yes
XLOC_014206	NM_010686	Laptm5	chr4:13046	7.27	14.79	1.02	5.00E-005	8.65E-004	yes
XLOC_012432	NM_177263	Zhx3	chr2:16055	6.70	13.62	1.02	1.95E-003	1.80E-002	yes
XLOC_004191	NM_181395	Pxdn	chr12:3062	12.94	26.28	1.02	5.00E-005	8.65E-004	yes
XLOC_022738	NM_001083895;NM_026838	Srpx2	chrX:13044	4.63	9.40	1.02	5.00E-005	8.65E-004	yes
XLOC_016148	NM_001164735;NM_016715	Crlf2	chr5:10998	3.66	7.43	1.02	2.35E-003	2.08E-002	yes
XLOC_003615	NM_011340	Serpinf1	chr11:7522	107.77	217.50	1.01	5.00E-005	8.65E-004	yes
XLOC_000359	NM_145509	5430435G22Rik	chr1:13358	2.40	4.84	1.01	1.50E-004	2.26E-003	yes
XLOC_019920	NM_009932	Col4a2	chr8:11312	84.60	170.54	1.01	5.00E-005	8.65E-004	yes
XLOC_020258	NM_008610	Mmp2	chr8:95351	23.93	48.10	1.01	5.00E-005	8.65E-004	yes
XLOC_016966	NM_015776	Mfap5	chr6:12246	16.29	32.71	1.01	5.00E-005	8.65E-004	yes
XLOC_023181	NM_013563	Il2rg	chrX:98459	4.13	8.26	1.00	3.00E-004	4.11E-003	yes
XLOC_021248	NM_009382	Thy1	chr9:43851	16.91	33.80	1.00	5.00E-005	8.65E-004	yes
XLOC_021691	NM_011606	Clec3b	chr9:12306	40.27	80.28	1.00	5.00E-005	8.65E-004	yes
XLOC_020129	NM_016685	Comp	chr8:72897	14.21	28.23	0.99	5.00E-005	8.65E-004	yes
XLOC_008570	NM 001081635;NM 001081(	Ccnd3	chr17:4764	12.44	24.71	0.99	5.00E-005	8.65E-004	yes
XLOC_011445	NM_008489	Lbp	chr2:15813	9.18	18.18	0.99	5.00E-005	8.65E-004	yes
XLOC_004929	NM_010917	Nid1	chr13:1352	26.84	53.15	0.99	5.00E-005	8.65E-004	yes
XLOC_002509	NM_009616	Adam19	chr11:4586	5.97	11.79	0.98	5.00E-005	8.65E-004	yes
XLOC_019648	NM_009898	Coro1a	chr7:13384	5.65	11.15	0.98	2.00E-004	2.93E-003	yes
XLOC_015443	NM_019932	Pf4	chr5:91201	8.58	16.93	0.98	4.00E-004	5.20E-003	yes
XLOC_020180	NM_010442	Hmox1	chr8:77617	11.41	22.51	0.98	1.00E-004	1.63E-003	yes
XLOC_008057	NM_009621	Adamts1	chr16:8579	11.94	23.53	0.98	5.00E-005	8.65E-004	yes
XLOC_017062	NM_010128	Emp1	chr6:13531	16.50	32.40	0.97	5.00E-005	8.65E-004	yes
XLOC_015013	NM_010329	Pdpn	chr4:14285	1.83	3.59	0.97	3.00E-004	4.11E-003	yes
XLOC_006199	NM_011103	Prkcd	chr14:3140	4.20	8.21	0.97	5.00E-005	8.65E-004	yes
XLOC_006665	NM_010930	Nov	chr15:5457	5.30	10.34	0.96	5.00E-005	8.65E-004	yes
XLOC_008717	NM_001081416	Fndc1	chr17:7931	25.79	50.24	0.96	5.00E-005	8.65E-004	yes
XLOC_000814	NM_010518	Igfbp5	chr1:72904	113.22	220.02	0.96	5.00E-005	8.65E-004	yes
XLOC_001946	NM_008538	Marcks	chr10:3685	9.87	19.13	0.95	5.00E-005	8.65E-004	yes
XLOC_002462	NR_002890	Gm12070	chr11:2668	11.35	21.94	0.95	5.00E-005	8.65E-004	yes
XLOC_022761	NM_011712	Wbp5	chrX:13277	10.11	19.47	0.95	5.00E-005	8.65E-004	yes

XLOC_009685	NM_008908	Ppic	chr18:5356	13.97	26.89	0.95	5.00E-005	8.65E-004	yes
XLOC_004072	NM_139147	Rab40b	chr11:1212	3.22	6.19	0.94	5.00E-005	8.65E-004	yes
XLOC_018368	NM_011671	Ucp2	chr7:10764	18.79	36.13	0.94	5.00E-005	8.65E-004	yes
XLOC_006454	NM_009755;NR_033241	Bmp1	chr14:7087	29.75	57.12	0.94	5.00E-005	8.65E-004	yes
XLOC_006068	NM_008879	Lcp1	chr14:7553	5.90	11.32	0.94	5.00E-005	8.65E-004	yes
XLOC_017563	NM_013534	Leprel2	chr6:12479	4.33	8.29	0.94	5.00E-005	8.65E-004	yes
XLOC_017218	NM_172477	Dennd2a	chr6:39412	1.67	3.19	0.94	5.00E-005	8.65E-004	yes
XLOC_000808	NM_010233	Fn1	chr1:71632	29.57	56.63	0.94	5.00E-005	8.65E-004	yes
XLOC_002158	NM_175451	Ckap4	chr10:8398	2.53	4.85	0.94	5.00E-005	8.65E-004	yes
XLOC_003394	NM_145974	N4bp3	chr11:5145	5.77	11.04	0.93	5.00E-005	8.65E-004	yes
XLOC_004013	NM_026280	Mxra7	chr11:1166	8.40	16.04	0.93	5.00E-005	8.65E-004	yes
XLOC_022595	NM_007542	Bgn	chrX:70728	75.23	143.53	0.93	5.00E-005	8.65E-004	yes
XLOC_012809	NM_133187	Fam198b	chr3:79689	4.02	7.65	0.93	5.00E-005	8.65E-004	yes
XLOC_001215	NM_008250	Hlx	chr1:18655	6.01	11.43	0.93	2.00E-004	2.93E-003	yes
XLOC_015365	NM_026667	Fam114a1	chr5:65361	8.50	16.15	0.93	5.00E-005	8.65E-004	yes
XLOC_014502	NM_027147	Enho	chr4:41516	23.60	44.74	0.92	5.00E-005	8.65E-004	yes
XLOC_007722	NM_001110498;NM_010509	Ifnar2	chr16:9137	4.74	8.98	0.92	5.00E-005	8.65E-004	yes
XLOC_014235	NM_001039677	Slc30a2	chr4:13389	4.93	9.34	0.92	5.00E-005	8.65E-004	yes
XLOC_007558	NM_008235	Hes1	chr16:3006	10.73	20.31	0.92	5.00E-005	8.65E-004	yes
XLOC_002665	NR_028550	Snord49a	chr11:6241	3'686.02	6'972.81	0.92	5.65E-003	4.12E-002	yes
XLOC_016870	NM_028766	Tmem43	chr6:91423	17.60	33.28	0.92	5.00E-005	8.65E-004	yes
XLOC_004358	NM_177354	Vash1	chr12:8801	3.91	7.38	0.92	5.00E-005	8.65E-004	yes
XLOC_005498	NM_001177371;NM_001177	Dbn1	chr13:5557	3.45	6.51	0.92	5.00E-005	8.65E-004	yes
XLOC_014266	NM_008305	Hspg2	chr4:13702	209.32	394.93	0.92	5.00E-005	8.65E-004	yes
XLOC_016374	NM_175274	Ttyh3	chr5:14109	6.50	12.26	0.92	5.00E-005	8.65E-004	yes
XLOC_001738	NM_009344	Phlda1	chr10:1109	4.08	7.70	0.92	1.00E-004	1.63E-003	yes
XLOC_005379	NM_001177653;NM_015787	Hist1h1e,Hist1h2be	chr13:2367	7.89	14.87	0.91	5.00E-005	8.65E-004	yes
XLOC_001392	NM_176837	Arhgap18	chr10:2649	2.35	4.43	0.91	5.00E-005	8.65E-004	yes
XLOC_009860	NM_054042	Cd248	chr19:5068	16.06	30.24	0.91	5.00E-005	8.65E-004	yes
XLOC_019058	NM_146186	Wdr62	chr7:31025	1.67	3.14	0.91	5.00E-005	8.65E-004	yes
XLOC_000736	NM_207281	4832428D23Rik	chr1:44260	3.33	6.25	0.91	5.00E-005	8.65E-004	yes
XLOC_008560	NM_025611	Cul7	chr17:4678	5.99	11.24	0.91	5.00E-005	8.65E-004	yes
XLOC_003475	NR_027800	Gm16516	chr11:6073	5.49	10.30	0.91	1.00E-004	1.63E-003	yes
XLOC_001475	NM_052994	Spock2	chr10:5956	3.81	7.14	0.91	5.00E-005	8.65E-004	yes
XLOC_007321	NM_011653	Tuba1a	chr15:9878	14.48	27.11	0.90	5.00E-005	8.65E-004	yes
XLOC_014124	NM_001042411;NM_019782	Lepre1	chr4:11890	5.35	10.01	0.90	5.00E-005	8.65E-004	yes
XLOC_003580	NM_177776	Smtnl2	chr11:7220	83.95	156.61	0.90	5.00E-005	8.65E-004	yes
XLOC_009554	NM_001110850;NM_001110	Crem	chr18:3266	3.67	6.83	0.90	5.00E-005	8.65E-004	yes
XLOC_000859	NM_001003948	Pid1	chr1:84032	4.67	8.67	0.89	1.50E-004	2.26E-003	yes
XLOC_020395	NM_027950	Osgin1	chr8:12196	7.24	13.42	0.89	5.00E-005	8.65E-004	yes
XLOC_002063	NM_001109991;NM_009929	Col18a1	chr10:7651	6.86	12.72	0.89	5.00E-005	8.65E-004	yes
XLOC_003187	NM_001204129;NM_001204	C1qtnf1	chr11:1182	6.00	11.05	0.88	5.00E-005	8.65E-004	yes
XLOC_020593	NM_001081150	Lonrf1	chr8:37279	7.14	13.16	0.88	5.00E-005	8.65E-004	yes
XLOC_017011	NM_010204	Fgf6	chr6:12696	2.96	5.45	0.88	6.65E-003	4.61E-002	yes
XLOC_014169	NM_172145	Fam176b	chr4:12582	5.78	10.62	0.88	1.05E-003	1.12E-002	yes
XLOC_001711	NM_026268	Dusp6	chr10:9872	4.08	7.49	0.88	5.00E-005	8.65E-004	yes
XLOC_010666	NM_011701	Vim	chr2:13495	187.63	343.54	0.87	5.00E-005	8.65E-004	yes
XLOC_019088	NM_001111073;NM_008761	Fxyd5	chr7:31817	11.11	20.32	0.87	1.00E-004	1.63E-003	yes
XLOC_011854	NM_007986	Fap	chr2:62339	3.60	6.59	0.87	5.00E-005	8.65E-004	yes
XLOC_006361	NM_010779	Mcpt4	chr14:5667	7.18	13.12	0.87	5.00E-005	6.18E-003	yes
XLOC_002950	NM_007689	Chad	chr11:9441	30.54	55.64	0.87	5.00E-005	8.65E-004	yes
XLOC_014185	NM_029219	Rnf19b	chr4:12873	14.35	26.08	0.86	5.00E-005	8.65E-004	yes
XLOC_019867	-	-	chr7:13339	6.51	11.83	0.86	5.00E-004	6.18E-003	yes
XLOC_016027	NM_001159518;NM_008048	Igfbp7	chr5:77739	96.99	175.85	0.86	5.00E-005	8.65E-004	yes
XLOC_003607	NM_001015046	Rap1gap2	chr11:7419	6.47	11.72	0.86	5.00E-005	8.65E-004	yes
XLOC_004059	NM_007621	Cbr2	chr11:1205	14.85	26.90	0.86	5.00E-005	8.65E-004	yes
XLOC_013532	NM_011197	Ptgfrn	chr3:10084	2.68	4.84	0.85	5.00E-005	8.65E-004	yes
XLOC_004900	-	-	chr12:1146	34.23	61.63	0.85	5.00E-005	8.65E-004	yes
XLOC_010231	NM_133803	Dpp3	chr19:4907	29.85	53.72	0.85	5.00E-005	8.65E-004	yes
XLOC_007145	NM_025931	Ift27	chr15:7798	10.28	18.46	0.84	5.00E-005	8.65E-004	yes
XLOC_002655	NM_027817	Grap	chr11:6146	5.42	9.74	0.84	5.00E-005	8.65E-004	yes
XLOC_012547	NR_040745	B230312C02Rik	chr2:18010	25.29	45.41	0.84	5.00E-005	8.65E-004	yes
XLOC_015773	NM_001081362	Trrap	chr5:14552	7.55	13.53	0.84	5.00E-005	8.65E-004	yes
XLOC_017586	NM_009829	Ccnd2	chr6:12707	3.11	5.57	0.84	5.00E-005	8.65E-004	yes
XLOC_010263	NM_001164057;NM_008893	Pola2	chr19:5940	8.19	14.62	0.84	5.00E-005	8.65E-004	yes
XLOC_011528	NM_001013369;NM_001110	Pfdn4	chr2:17030	3.50	6.22	0.83	1.65E-003	1.59E-002	yes
XLOC_018659	NM_027201	Zfp511	chr7:14722	5.21	9.26	0.83	8.00E-004	8.94E-003	yes
XLOC_011881	NM_025942;NM_030091	Ola1	chr2:72930	24.38	43.33	0.83	5.00E-005	8.65E-004	yes
XLOC_011905	NM_001113399;NM_001113	Zfp385b	chr2:77248	2.24	3.97	0.83	5.00E-005	8.65E-004	yes
XLOC_005415	NM_001166030	Mylk4	chr13:3279	416.89	737.38	0.82	5.00E-005	8.65E-004	yes
XLOC_014885	NM_025455	Ccdc28b	chr4:12929	16.33	28.87	0.82	5.00E-005	8.65E-004	yes
XLOC_001921	NM_008481	Lama2	chr10:2670	10.10	17.85	0.82	5.00E-005	8.65E-004	yes
XLOC_018506	NM_009627	Adm	chr7:11777	4.81	8.48	0.82	6.00E-004	7.04E-003	yes
XLOC_000999	NM_001081307;NR_015606	Ppp1r12b	chr1:13666	43.23	76.27	0.82	5.00E-005	8.65E-004	yes
XLOC_009096	NM_181397	Rftn1	chr17:5013	7.41	13.07	0.82	5.00E-005	8.65E-004	yes
XLOC_022005	NM_010729	Loxl1	chr9:58135	14.45	25.40	0.81	5.00E-005	8.65E-004	yes
XLOC_008855	NM_013642	Dusp1	chr17:2664	26.57	46.64	0.81	5.00E-005	8.65E-004	yes
XLOC_009476	NM_001037859	Csf1r	chr18:6126	6.78	11.89	0.81	5.00E-005	8.65E-004	yes
XLOC_002132	NM_027120	Itgb1bp3	chr10:8065	133.39	233.75	0.81	5.00E-005	8.65E-004	yes
XLOC_016913	NM_133930	Creld1	chr6:11343	22.50	39.39	0.81	5.00E-005	8.65E-004	yes
XLOC_010251	NM_001164480;NM_001164	Sipa1	chr19:5651	18.13	31.72	0.81	5.00E-005	8.65E-004	yes
XLOC_015875	NM_001170555;NM_001170	Prkag2	chr5:24368	2.57	4.49	0.81	5.00E-005	8.65E-004	yes
XLOC_011165	NM_033524	Spred1	chr2:11694	3.06	5.35	0.81	5.00E-005	8.65E-004	yes
XLOC_020952	NM_001081337	Sipa1l2	chr8:12794	6.62	11.56	0.80	9.50E-004	1.03E-002	yes
XLOC_017362	NM_001039392;NM_001190	Tmsb10	chr6:72392	108.20	188.85	0.80	5.00E-005	8.65E-004	yes
XLOC_004578	NM_010496	Id2	chr12:2577	1.65	2.88	0.80	5.50E-004	6.64E-003	yes
XLOC_006728	NM_027122	Mfsd3	chr15:7653	10.25	17.86	0.80	5.00E-005	8.65E-004	yes
XLOC_005979	NM_001168346;NM_023699	Nfatc4	chr14:5466	3.81	6.64	0.80	1.45E-003	1.43E-002	yes
XLOC_007575	NM_011638	Tfrc	chr16:3260	106.97	185.83	0.80	5.00E-005	8.65E-004	yes
XLOC_010606	NM_028804	Ccdc3	chr2:50588	9.64	16.70	0.79	5.00E-005	8.65E-004	yes
XLOC_009154	NM_133685	Rab31	chr17:6600	2.78	4.81	0.79	5.00E-005	8.65E-004	yes
XLOC_000068	NM_030266;NM_172971	Inpp4a	chr1:3756	3.00	5.19	0.79	5.00E-005	8.65E-004	yes
XLOC_010616	NM_172471	Itih5	chr2:10075	9.72	16.81	0.79	5.00E-005	8.65E-004	yes
XLOC_008740	NM_011581	Thbs2	chr17:1480	2.74	4.74	0.79	5.00E-005	8.65E-004	yes
XLOC_011642	NM_001012396;NM_013935	Ptpla	chr2:13948	41.23	71.24	0.79	5.00E-005	8.65E-004	yes
XLOC_014065	NM_026470	Spata6	chr4:11139	2.13	3.68	0.79	1.50E-004	2.26E-003	yes
XLOC_005535	NM_001145799;NM_007796	Ctla2a	chr13:6103	7.21	12.43	0.79	3.00E-005	4.11E-003	yes
XLOC_006749	NM_008495	Lgals1	chr15:7875	223.51	385.27	0.79	5.00E-005	8.65E-004	yes
XLOC_006291	NM_001033271	Tmem55b	chr14:5154	6.10	10.51	0.78	2.85E-003	2.39E-002	yes

XLOC_020908	NM_028071	Cotl1	chr8:12233	2.35	4.04	0.78	3.85E-003	3.05E-002	yes
XLOC_000625	NM_001111059;NM_133654	Cd34	chr1:19676	35.31	60.66	0.78	5.00E-005	8.65E-004	yes
XLOC_014112	NM_001039175;NM_001039	Elovl1	chr4:11810	11.76	20.18	0.78	1.50E-003	2.26E-003	yes
XLOC_005351	NM_175656	Hist1h4i	chr13:2213	9.36	16.05	0.78	2.75E-003	2.32E-002	yes
XLOC_014728	NM_172874	Podn	chr4:10768	15.96	27.32	0.78	5.00E-005	8.65E-004	yes
XLOC_003875	NM_026865	1700113I22Rik	chr11:1012	12.91	22.09	0.78	5.00E-005	8.65E-004	yes
XLOC_001704	NM_008524	Lum	chr10:9702	30.34	51.88	0.77	5.00E-005	8.65E-004	yes
XLOC_002125	NM_010722	Lmnb2	chr10:8036	4.52	7.72	0.77	1.15E-003	1.20E-002	yes
XLOC_013339	NM_175193	Golim4	chr3:75680	8.22	14.04	0.77	5.00E-005	8.65E-004	yes
XLOC_020642	NM_001081390	Palld	chr8:63993	47.86	81.74	0.77	5.00E-005	8.65E-004	yes
XLOC_013582	NM_028779	Ampd2	chr3:10787	3.47	5.92	0.77	1.50E-004	2.26E-003	yes
XLOC_013530	NM_001013026	Ttf2	chr3:10074	3.84	6.55	0.77	2.00E-003	2.93E-003	yes
XLOC_009165	NM_001164074;NM_001164	Tgif1	chr17:7119	2.03	3.46	0.77	2.65E-003	2.27E-002	yes
XLOC_008290	NM_013630	Pkd1	chr17:2468	15.16	25.82	0.77	4.45E-003	3.40E-002	yes
XLOC_017370	NM_025882	Pole4	chr6:82596	11.19	19.03	0.77	5.00E-005	8.65E-004	yes
XLOC_018003	NM_011577	Tgfb1	chr7:26472	10.13	17.22	0.77	5.00E-005	8.65E-004	yes
XLOC_007695	NM_139134	Chodl	chr16:7893	4.06	6.90	0.77	5.00E-005	8.65E-004	yes
XLOC_009110	NM_145934	Stap2	chr17:5613	3.05	5.19	0.77	6.00E-003	4.27E-002	yes
XLOC_008426	NM_010382	H2-Eb1	chr17:3444	6.90	11.72	0.76	5.00E-005	8.65E-004	yes
XLOC_010709	NM_001039386;NM_001039	Nelf	chr2:24909	8.29	14.07	0.76	5.00E-005	8.65E-004	yes
XLOC_016359	NM_008808	Pdgfa	chr5:13945	17.88	30.27	0.76	6.45E-003	4.51E-002	yes
XLOC_017978	NM_153112	Cadm4	chr7:25267	1.35	2.28	0.76	2.90E-003	2.42E-002	yes
XLOC_017298	NM_153573	Fkbp14	chr6:54527	2.62	4.42	0.76	5.00E-005	8.65E-004	yes
XLOC_014936	NM_024215	Zfp593	chr4:13379	4.09	6.91	0.76	2.40E-003	2.10E-002	yes
XLOC_001414	NM_001168304;NM_198164	Cdk19	chr10:4006	10.23	17.23	0.75	5.00E-005	8.65E-004	yes
XLOC_004901	-		chr12:1146	70.57	118.82	0.75	1.00E-004	1.63E-003	yes
XLOC_012842	NM_016701	Nes	chr3:87775	12.82	21.58	0.75	5.00E-005	8.65E-004	yes
XLOC_011100	NM_001025246	Trp53i11	chr2:93027	19.20	32.31	0.75	5.00E-005	8.65E-004	yes
XLOC_006582	NM_001008702;NM_001037	Dab2	chr15:6249	6.36	10.70	0.75	5.00E-005	8.65E-004	yes
XLOC_002248	NM_013590	Lyz1	chr10:1167	7.86	13.21	0.75	1.45E-003	1.43E-002	yes
XLOC_016199	NM_019682	Dynll1	chr5:11574	5.75	9.68	0.75	5.00E-005	8.65E-004	yes
XLOC_000382	NM_021355	Fmod	chr1:13593	217.93	365.98	0.75	5.00E-005	8.65E-004	yes
XLOC_017757	NM_001093764;NM_001093	Myadm	chr7:32890	25.25	42.40	0.75	5.00E-005	8.65E-004	yes
XLOC_017384	NM_024239	Stambp	chr6:83493	5.94	9.96	0.75	4.00E-004	5.20E-003	yes
XLOC_013587	NM_008596	Sypl2	chr3:10801	183.05	306.67	0.74	5.00E-005	8.65E-004	yes
XLOC_008977	NM_011655	Tubb5	chr17:3597	27.73	46.40	0.74	5.00E-005	8.65E-004	yes
XLOC_001046	NM_010683	Lamc1	chr1:15506	19.64	32.81	0.74	5.00E-005	8.65E-004	yes
XLOC_002247	NM_017372	Lyz2	chr10:1167	29.87	49.90	0.74	5.00E-005	8.65E-004	yes
XLOC_004422	NM_178613	4933433P14Rik	chr12:1069	9.67	16.14	0.74	5.00E-005	8.65E-004	yes
XLOC_020438	NM_018855	Gas8	chr8:12604	4.62	7.71	0.74	6.00E-003	4.27E-002	yes
XLOC_019685	NM_178600	Vkorc1	chr7:13503	12.93	21.58	0.74	2.50E-004	3.51E-003	yes
XLOC_001458	NM_010288	Gja1	chr10:5609	3.07	5.13	0.74	5.00E-005	8.65E-004	yes
XLOC_005704	NM_027127	Gpx8	chr13:1138	4.00	6.67	0.74	6.50E-004	7.51E-003	yes
XLOC_014237	NM_019641	Stmn1	chr4:13402	7.55	12.58	0.74	5.15E-003	3.83E-002	yes
XLOC_023259	NM_177919	Tceal5	chrX:13273	6.91	11.51	0.74	3.20E-003	2.61E-002	yes
XLOC_012927	NM_009112	S100a10	chr3:93359	51.48	85.58	0.73	5.00E-005	8.65E-004	yes
XLOC_022237	NM_177771	Klhl18	chr9:11032	6.00	9.98	0.73	5.00E-005	8.65E-004	yes
XLOC_016294	NM_001039162;NM_009990	Clip2	chr5:13496	8.66	14.37	0.73	5.00E-005	8.65E-004	yes
XLOC_003126	NM_011943	Map2k6	chr11:1102	11.24	18.64	0.73	5.00E-005	8.65E-004	yes
XLOC_003984	NM_008258	Hn1	chr11:1153	29.84	49.48	0.73	5.00E-005	8.65E-004	yes
XLOC_009733	NM_176832;NM_194355	Spire1	chr18:6764	4.69	7.77	0.73	5.00E-005	8.65E-004	yes
XLOC_004216	NM_008584	Meox2	chr12:3783	11.92	19.72	0.73	5.00E-005	8.65E-004	yes
XLOC_017570	NM_146171	Ncapd2	chr6:12511	15.67	25.92	0.73	5.00E-005	8.65E-004	yes
XLOC_011638	NM_009105	Rsu1	chr2:12998	7.08	11.70	0.72	5.00E-005	8.65E-004	yes
XLOC_000533	NM_178598	Tagln2	chr1:17443	45.97	75.93	0.72	5.00E-005	8.65E-004	yes
XLOC_006207	NM_138672	Stab1	chr14:3194	12.18	20.12	0.72	5.00E-005	8.65E-004	yes
XLOC_004147	NM_025323	0610009D07Rik	chr12:4824	11.03	18.20	0.72	5.00E-005	8.65E-004	yes
XLOC_003632	NM_001024920	Trp53i13	chr11:7732	5.06	8.35	0.72	7.25E-003	4.94E-002	yes
XLOC_004902	-		chr12:1146	92.87	153.00	0.72	5.00E-005	8.65E-004	yes
XLOC_004731	NM_146244	Rps6kl1	chr12:8647	7.05	11.61	0.72	5.00E-005	8.65E-004	yes
XLOC_002315	NM_016756;NM_183417	Cdk2	chr10:1281	3.55	5.84	0.72	1.75E-003	1.66E-002	yes
XLOC_006630	NM_018755;NM_176073	Pgcp	chr15:3301	10.65	17.53	0.72	1.95E-003	1.80E-002	yes
XLOC_000483	NM_019759	Dpt	chr1:16672	18.36	30.22	0.72	5.00E-005	8.65E-004	yes
XLOC_019509	NM_009685	Apbb1	chr7:11270	10.35	17.04	0.72	5.00E-005	8.65E-004	yes
XLOC_018571	NM_145587	Sbk1	chr7:13341	25.07	41.24	0.72	5.00E-005	8.65E-004	yes
XLOC_002293	NM_008512	Lrp1	chr10:1269	51.73	85.02	0.72	5.00E-005	8.65E-004	yes
XLOC_019604	NM_001033380	Itpripl2	chr7:12562	6.83	11.23	0.72	5.00E-005	8.65E-004	yes
XLOC_014944	NM_025382	Tmem57	chr4:13435	15.28	25.09	0.72	5.00E-005	8.65E-004	yes
XLOC_012309	NM_175113	Trmt6	chr2:13262	4.53	7.43	0.71	5.00E-004	6.18E-003	yes
XLOC_003936	NM_010655	Kpna2	chr11:1068	15.97	26.17	0.71	5.00E-005	8.65E-004	yes
XLOC_000433	NM_026369	Arpc5	chr1:15461	3.24	5.30	0.71	5.00E-005	8.65E-004	yes
XLOC_009924	NM_001013019	Lrrn4cl	chr19:8925	4.83	7.91	0.71	1.50E-004	2.26E-003	yes
XLOC_012508	NM_011497	Aurka	chr2:17218	6.34	10.39	0.71	1.00E-003	1.08E-002	yes
XLOC_013079	NM_024461	1810037I17Rik	chr3:12262	15.72	25.74	0.71	5.00E-005	8.65E-004	yes
XLOC_000966	NM_010016	Cd55	chr1:13233	11.26	18.44	0.71	5.00E-005	8.65E-004	yes
XLOC_016279	NM_007941	Stx2	chr5:12949	10.27	16.81	0.71	1.00E-004	1.63E-003	yes
XLOC_004189	NM_201357	Tssc1	chr12:2943	5.89	9.63	0.71	1.20E-003	1.24E-002	yes
XLOC_007736	NM_026700;NM_027293	Dopey2	chr16:9371	19.34	31.56	0.71	5.00E-005	8.65E-004	yes
XLOC_010669	NM_008625	Mrc1	chr2:14151	1.80	2.93	0.71	5.00E-005	8.65E-004	yes
XLOC_004903	-	-	chr12:1146	43.42	70.70	0.70	1.50E-004	2.26E-003	yes
XLOC_002182	NM_025914	Actr6	chr10:8917	1.97	3.21	0.70	1.80E-003	1.70E-002	yes
XLOC_011746	NM_030244	Ier5l	chr2:30328	4.04	6.57	0.70	6.65E-003	4.61E-002	yes
XLOC_020750	NM_010499	Ier2	chr8:87185	7.68	12.49	0.70	1.60E-003	1.55E-002	yes
XLOC_021529	NM_176979	Topbp1	chr9:1032	7.94	12.90	0.70	5.00E-005	8.65E-004	yes
XLOC_009446	NM_029394	Snx24	chr18:5340	10.11	16.41	0.70	5.00E-005	8.65E-004	yes
XLOC_006994	NM_008774	Pabpc1	chr15:3652	42.34	68.76	0.70	5.00E-005	8.65E-004	yes
XLOC_008425	NM_207105	H2-Ab1	chr17:3440	26.71	43.36	0.70	5.00E-005	8.65E-004	yes
XLOC_016244	NM_001110140;NM_00972	Atp2a2	chr5:12290	12.55	20.36	0.70	5.00E-005	8.65E-004	yes
XLOC_016686	NM_001243199;NM_001243	Gimap4	chr6:48634	3.45	5.59	0.70	1.85E-003	1.73E-002	yes
XLOC_017567	NM_026988	Ptms	chr6:12486	69.11	111.94	0.70	5.00E-005	8.65E-004	yes
XLOC_018895	NM_009046	Relb	chr7:20191	5.10	8.26	0.69	6.50E-004	7.51E-003	yes
XLOC_023325	NM_009214	Sms	chrX:15388	35.14	56.81	0.69	5.00E-005	8.65E-004	yes
XLOC_012891	NM_009113	S100a13	chr3:90318	12.58	20.33	0.69	6.50E-004	7.51E-003	yes
XLOC_007312	NM_007478	Arf3	chr15:9856	5.82	9.40	0.69	5.00E-005	8.65E-004	yes
XLOC_000026	NM_010267	Gdap1	chr1:17135	6.60	10.65	0.69	5.00E-005	8.65E-004	yes
XLOC_004032	NM_018822	Sgsh	chr11:1191	4.29	6.92	0.69	1.00E-004	1.63E-003	yes
XLOC_021499	NM_029620	Pcolce2	chr9:9553	7.07	11.42	0.69	2.50E-004	3.51E-003	yes
XLOC_003474	NM_025294	Gm16515	chr11:6071	9.67	15.61	0.69	5.00E-005	8.65E-004	yes
XLOC_001787	NM_177707	Stac3	chr10:1269	116.51	187.99	0.69	5.00E-005	8.65E-004	yes

XLOC_013008	NM_010937	Nras	chr3:10286	7.60	12.24	0.69	5.00E-005	8.65E-004	yes
XLOC_000449	NM_028333	Angptl1	chr5:15873	6.04	9.72	0.69	4.70E-003	3.57E-002	yes
XLOC_015666	NM_001130476;NM_013837	Tpst1	chr5:13054	12.19	19.63	0.69	1.00E-005	1.63E-003	yes
XLOC_001219	NM_178692	C130074G19Rik	chr1:18669	24.34	39.15	0.69	5.00E-005	8.65E-004	yes
XLOC_009492	NM_207255	Zfp532	chr18:6573	5.49	8.83	0.69	5.00E-005	8.65E-004	yes
XLOC_009111	NM_013664	Sh3gl1	chr17:5614	14.72	23.66	0.69	6.15E-003	4.35E-002	yes
XLOC_004023	NM_011594	Timp2	chr11:1181	77.00	123.75	0.68	5.00E-005	8.65E-004	yes
XLOC_001129	NM_001081304	Atf6	chr1:17263	9.05	14.55	0.68	5.00E-005	8.65E-004	yes
XLOC_014959	NM_009777	C1qb	chr4:13643	6.11	9.82	0.68	3.50E-004	4.67E-003	yes
XLOC_018331	NM_001162918;NM_025515	Ccdc90b	chr7:99709	12.35	19.82	0.68	5.00E-005	8.65E-004	yes
XLOC_017433	NM_008881	Plxna1	chr6:89266	8.90	14.28	0.68	5.00E-005	8.65E-004	yes
XLOC_022166	NM_133977	Trf	chr9:10311	16.33	26.18	0.68	5.00E-005	8.65E-004	yes
XLOC_003781	NM_001163608;NM_028199	Plxdc1	chr11:9778	7.30	11.70	0.68	3.00E-004	4.11E-003	yes
XLOC_002362	-	-	chr10:1336	10.77	17.24	0.68	2.25E-003	2.01E-002	yes
XLOC_012306	NM_011045	Pcna	chr2:13207	17.39	27.83	0.68	5.00E-005	8.65E-004	yes
XLOC_002795	NM_010813	Mnt	chr11:7464	7.10	11.35	0.68	5.00E-005	8.65E-004	yes
XLOC_013005	NM_001243132;NM_027533	Tspan2	chr3:10252	6.33	10.11	0.68	5.00E-005	8.65E-004	yes
XLOC_014300	NM_010139	Epha2	chr4:14085	4.74	7.57	0.68	1.60E-003	1.55E-002	yes
XLOC_012473	NM_144893	Slc35c2	chr2:16510	17.25	27.54	0.67	5.00E-005	8.65E-004	yes
XLOC_012106	NM_019657	Hsd17b12	chr2:93872	6.92	11.03	0.67	7.50E-004	8.46E-003	yes
XLOC_000003	NM_133826	Atp6v1h	chr1:50732	9.36	14.93	0.67	5.00E-005	8.65E-004	yes
XLOC_008050	NM_009770	Btg3	chr16:7836	6.17	9.84	0.67	4.50E-003	3.44E-002	yes
XLOC_018523	NM_001130479;NM_016773	Nucb2	chr7:123364	7.50	11.95	0.67	1.05E-003	1.12E-002	yes
XLOC_015617	NM_019805	Anapc7	chr5:12287	20.63	32.89	0.67	5.00E-005	8.65E-004	yes
XLOC_011156	NM_001165935;NM_028844	Aven	chr2:11233	15.33	24.41	0.67	2.00E-004	2.93E-003	yes
XLOC_010520	NM_001164717;NM_008018	Sh3pxd2a	chr19:4733	7.41	11.79	0.67	5.00E-005	8.65E-004	yes
XLOC_018764	NM_001146329	Sbk2	chr7:49076	104.51	166.24	0.67	5.00E-005	8.65E-004	yes
XLOC_000248	NM_028889	Efhd1	chr1:89160	4.63	7.36	0.67	2.10E-003	1.91E-002	yes
XLOC_014960	NM_007574	C1qc	chr4:13644	18.77	29.81	0.67	2.00E-004	2.93E-003	yes
XLOC_001470	NM_011030	P4ha1	chr10:5878	8.97	14.25	0.67	5.00E-005	8.65E-004	yes
XLOC_003249	NM_001190406;NM_0011904	Gas2l1	chr11:4954	1.84	2.93	0.67	1.85E-003	1.73E-002	yes
XLOC_012558	NM_183162	BC006779	chr2:18096	4.88	7.74	0.67	5.00E-005	8.65E-004	yes
XLOC_005432	NM_001166391;NM_028784	F13a1	chr13:3695	4.25	6.74	0.67	5.00E-005	8.65E-004	yes
XLOC_001054	NM_010500	Ier5	chr1:15694	2.19	3.48	0.67	4.50E-004	5.73E-003	yes
XLOC_018168	NM_008422	Kcnc3	chr7:51846	5.27	8.36	0.67	3.00E-004	4.11E-003	yes
XLOC_009844	NM_011778	Coro1b	chr19:4148	17.15	27.19	0.66	5.00E-005	8.65E-004	yes
XLOC_000743	NM_028696	Obfc2a	chr1:51526	3.48	5.51	0.66	1.50E-004	2.26E-003	yes
XLOC_009168	NM_145158	Emilin2	chr17:7160	7.25	11.47	0.66	4.50E-004	5.73E-003	yes
XLOC_014942	NM_207237	Man1c1	chr4:13411	3.72	5.88	0.66	6.00E-004	7.04E-003	yes
XLOC_014590	NM_011660	Txn1	chr4:57956	13.96	22.04	0.66	5.00E-005	8.65E-004	yes
XLOC_009644	NM_007858	Diap1	chr18:3800	42.07	66.43	0.66	5.00E-005	8.65E-004	yes
XLOC_001431	NM_009846	Cd24a	chr10:4329	165.15	260.73	0.66	5.00E-005	8.65E-004	yes
XLOC_006928	NM_008272	Hoxc9	chr15:1028	2.32	3.66	0.66	1.15E-003	1.20E-002	yes
XLOC_009832	NM_001161428;NM_019449	Unc93b1	chr19:3935	7.86	12.39	0.66	3.50E-004	4.67E-003	yes
XLOC_022890	NM_019755	Plp2	chrX:7235G	10.80	17.02	0.66	6.50E-003	7.51E-003	yes
XLOC_023220	NM_008409	Itm2a	chrX:10459	110.40	173.96	0.66	5.00E-005	8.65E-004	yes
XLOC_016672	NM_146175	Zfp282	chr6:47827	1.56	2.46	0.66	1.50E-004	2.26E-003	yes
XLOC_021761	NM_001199431;NM_0011994	Dnmt1	chr9:20711	13.81	21.74	0.65	5.00E-005	8.65E-004	yes
XLOC_016275	NM_133895	Slc15a4	chr5:12807	7.73	12.16	0.65	7.50E-004	8.46E-003	yes
XLOC_021236	NM_133733	9030425E11Rik	chr9:40494	2.49	3.93	0.65	2.65E-003	2.27E-002	yes
XLOC_004698	NM_001008550	Zfyve26	chr12:8033	5.79	9.10	0.65	5.00E-005	8.65E-004	yes
XLOC_020165	NM_001001491	Tpm4	chr8:74659	53.00	83.24	0.65	5.00E-005	8.65E-004	yes
XLOC_007368	NM_001033277	Spryd3	chr15:1019	6.03	9.47	0.65	8.50E-004	9.41E-003	yes
XLOC_003929	NM_010494	Icam2	chr11:1062	8.65	13.57	0.65	2.00E-003	1.84E-002	yes
XLOC_015072	NM_009498	Vamp3	chr4:15042	32.06	50.27	0.65	5.00E-005	8.65E-004	yes
XLOC_021487	NM_007801	Ctsh	chr9:89949	7.65	11.98	0.65	1.35E-003	1.36E-002	yes
XLOC_015527	NM_172717	Chfr	chr5:11056	6.76	10.58	0.65	5.00E-005	8.65E-004	yes
XLOC_003652	NM_197989	Fam58b	chr11:7856	13.22	20.67	0.64	5.50E-004	6.64E-003	yes
XLOC_012327	NM_024281;NM_133626	Rrbp1	chr2:14377	48.48	75.73	0.64	5.00E-005	8.65E-004	yes
XLOC_015458	NM_175096	Stbd1	chr5:93032	52.94	82.62	0.64	5.00E-005	8.65E-004	yes
XLOC_000385	NM_016749	Mybph	chr1:13609	86.46	134.88	0.64	5.00E-005	8.65E-004	yes
XLOC_000854	NM_010570	Irs1	chr1:82229	13.98	21.79	0.64	5.00E-005	8.65E-004	yes
XLOC_000231	NM_022417	Itm2c	chr1:87791	22.34	34.78	0.64	5.00E-005	8.65E-004	yes
XLOC_016821	NM_001170488;NM_176842	Tprkb	chr6:85865	10.56	16.43	0.64	5.00E-004	6.18E-003	yes
XLOC_016271	NM_001205082;NM_001205(	Scarb1	chr5:12575	31.15	48.49	0.64	5.00E-005	8.65E-004	yes
XLOC_000747	NM_133829;NM_178081	Mfsd6	chr1:52713	5.53	8.61	0.64	1.50E-004	2.26E-003	yes
XLOC_009926	NM_025463	1810009A15Rik	chr19:8963	16.33	25.41	0.64	1.15E-003	1.20E-002	yes
XLOC_009451	NM_026240	Gramd3	chr18:5659	4.50	7.00	0.64	5.00E-005	8.65E-004	yes
XLOC_019323	NM_016721	Iqgap1	chr7:87856	12.96	20.16	0.64	5.00E-005	8.65E-004	yes
XLOC_018885	NM_009499	Vasp	chr7:19842	21.62	33.61	0.64	5.00E-005	8.65E-004	yes
XLOC_019033	NM_011885	Mrps12	chr7:29524	46.93	72.88	0.64	5.00E-005	8.65E-004	yes
XLOC_001124	NM_022563	Ddr2	chr1:17189	3.75	5.82	0.63	5.00E-004	6.18E-003	yes
XLOC_016089	NM_133738	Antxr2	chr5:98313	11.16	17.29	0.63	5.00E-005	8.65E-004	yes
XLOC_017357	NM_145569	Mat2a	chr6:72382	43.37	67.17	0.63	5.00E-005	8.65E-004	yes
XLOC_015776	NM_023142	Arpc1b	chr5:14587	44.02	68.14	0.63	5.00E-005	8.65E-004	yes
XLOC_003612	NM_001098203;NM_010430	Hic1	chr11:7497	9.02	13.96	0.63	1.00E-004	1.63E-003	yes
XLOC_020927	NM_001037298	Fam38a	chr8:12500	1.55	2.41	0.63	5.00E-005	8.65E-004	yes
XLOC_001337	NR_033630	Gm5177	chr10:1032	19.93	30.83	0.63	5.00E-005	8.65E-004	yes
XLOC_007064	NM_027174	Col22a1	chr15:7162	8.09	12.49	0.63	5.00E-005	8.65E-004	yes
XLOC_007830	NM_001081633;NM_022408	Dgcr14	chr16:1790	8.74	13.48	0.63	6.00E-004	7.04E-003	yes
XLOC_011211	NM_007952	Pdia3	chr2:12123	8.22	12.67	0.62	5.00E-005	8.65E-004	yes
XLOC_012893	NM_026416	S100a16	chr3:90345	43.25	66.62	0.62	5.00E-005	8.65E-004	yes
XLOC_014151	NM_010213	Fhl3	chr4:12437	117.26	180.55	0.62	5.00E-005	8.65E-004	yes
XLOC_017185	NM_017478	Copg2	chr6:30688	9.42	14.50	0.62	1.15E-003	1.20E-002	yes
XLOC_013080	NM_027135	Sec24d	chr3:12297	3.59	5.52	0.62	2.00E-004	2.93E-003	yes
XLOC_014927	NM_016957	Hmgn2	chr4:13352	14.08	21.62	0.62	5.00E-005	8.65E-004	yes
XLOC_001855	NM_026793	Myct1	chr10:4739	3.70	5.68	0.62	5.00E-004	6.18E-003	yes
XLOC_012134	NM_009037	Rcn1	chr2:10522	2.81	4.31	0.62	2.50E-003	3.51E-002	yes
XLOC_016984	NM_001170395;NM_053094	Cd163	chr6:12425	3.28	5.02	0.62	1.35E-003	1.36E-002	yes
XLOC_014961	NM_007572	C1qa	chr4:13645	8.38	12.83	0.61	7.50E-004	8.46E-003	yes
XLOC_021903	NM_001110251;NM_013551	Hmbs	chr9:44144	12.99	19.88	0.61	1.50E-004	2.26E-003	yes
XLOC_012872	NM_026869	Pygo2	chr3:89234	7.63	11.67	0.61	7.50E-004	8.46E-003	yes
XLOC_009634	NM_010415	Hbegf	chr18:3666	1.64	2.51	0.61	4.50E-004	5.73E-003	yes
XLOC_015596	NM_001177594;NM_0011775	Slc24a6	chr5:12096	5.24	8.02	0.61	1.00E-003	1.08E-002	yes
XLOC_016423	NM_010229	Flt3	chr5:14814	2.26	3.45	0.61	5.90E-003	4.23E-002	yes
XLOC_001577	NM_148934	Gm16517	chr10:7913	13.56	20.70	0.61	5.50E-004	6.64E-003	yes
XLOC_014781	NM_023178	Dmap1	chr4:11734	10.29	15.70	0.61	2.50E-004	3.51E-003	yes
XLOC_016928	NM_001167763;NM_031177	Ift122	chr6:11580	11.07	16.89	0.61	5.00E-005	8.65E-004	yes
XLOC_008627	NM_008549	Man2a1	chr17:6495	3.61	5.50	0.61	5.00E-005	8.65E-004	yes

XLOC_019645	NM_019738	Nupr1	chr7:13376	12.56	19.14	0.61	7.10E-003	4.86E-002	yes
XLOC_020357	NM_175646	Txnl4b	chr8:11208	1.69	2.57	0.61	5.90E-003	4.23E-002	yes
XLOC_011280	NM_009730	Atrn	chr2:13073	7.51	11.43	0.61	5.00E-005	8.65E-004	yes
XLOC_022714	NM_019989	Sh3bgrl	chrX:10629	10.76	16.37	0.61	5.00E-005	8.65E-004	yes
XLOC_022044	NM_153119	Plekho2	chr9:65402	15.53	23.64	0.61	3.00E-004	4.11E-003	yes
XLOC_018241	NM_010882	Ndn	chr7:69493	14.07	21.38	0.60	3.50E-003	4.67E-003	yes
XLOC_009735	NM_001127177;NM_008977	Ptpn2	chr18:6782	6.16	9.36	0.60	3.45E-003	2.78E-002	yes
XLOC_017381	NM_183138	Tet3	chr6:83312	2.06	3.13	0.60	5.00E-005	8.65E-004	yes
XLOC_015807	NM_027519	6330406I15Rik	chr5:15021	6.89	10.46	0.60	1.00E-005	1.63E-003	yes
XLOC_016286	NM_133768	Asl	chr5:13048	6.38	9.67	0.60	6.40E-003	4.48E-002	yes
XLOC_009871	NM_007687	Cfl1	chr19:5490	67.72	102.64	0.60	5.00E-005	8.65E-004	yes
XLOC_004664	NM_001081453;NM_008697	Nin	chr12:7111	6.39	9.68	0.60	6.00E-004	7.04E-003	yes
XLOC_009454	NM_010721	Lmnb1	chr18:5686	3.90	5.90	0.60	2.55E-003	2.20E-002	yes
XLOC_017413	NM_013471	Anxa4	chr6:86686	8.38	12.69	0.60	1.00E-004	1.63E-003	yes
XLOC_002111	NM_001164147;NM_0011641	Tcf3	chr10:7987	14.72	22.29	0.60	1.50E-003	2.26E-003	yes
XLOC_008939	NM_010378	H2-Aa	chr17:3441	23.62	35.77	0.60	5.00E-005	8.65E-004	yes
XLOC_010055	NM_001201470;NM_011864	Papss2	chr19:3267	3.67	5.56	0.60	5.00E-005	8.65E-004	yes
XLOC_015092	NM_025582	2810405K02Rik	chr4:15427	109.54	165.78	0.60	5.00E-005	8.65E-004	yes
XLOC_020740	NM_172502	Dcaf15	chr8:86620	7.66	11.59	0.60	5.00E-003	3.74E-002	yes
XLOC_015639	NM_181410	Gtf2h3	chr5:12502	5.17	7.81	0.60	1.15E-003	1.20E-002	yes
XLOC_022254	NM_019922	Crtap	chr9:11427	7.16	10.81	0.59	4.00E-004	5.20E-003	yes
XLOC_004132	-	-	chr11:1103	5.91	8.92	0.59	5.00E-005	8.65E-004	yes
XLOC_013548	NM_183224	Fam19a3	chr3:10457	2.60	3.92	0.59	1.75E-003	1.66E-002	yes
XLOC_021371	NM_176922	Itga11	chr9:62525	5.08	7.66	0.59	1.80E-003	1.70E-002	yes
XLOC_012544	NM_145851	Cables2	chr2:17999	16.51	24.88	0.59	5.00E-005	8.65E-004	yes
XLOC_015761	NM_025841	Kdelr2	chr5:14416	8.76	13.20	0.59	5.00E-005	8.65E-004	yes
XLOC_019516	NM_001162943	Dchs1	chr7:11290	5.40	8.14	0.59	5.00E-005	8.65E-004	yes
XLOC_013326	NM_008467	Kpna4	chr3:68876	32.68	49.22	0.59	5.00E-005	8.65E-004	yes
XLOC_018096	NM_008820	Pepd	chr7:35697	17.74	26.71	0.59	5.00E-005	8.65E-004	yes
XLOC_004946	NM_009054	Trim27	chr13:2127	3.60	5.42	0.59	1.50E-004	2.26E-003	yes
XLOC_001980	NM_001199272;NM_053187	Gopc	chr10:5205	8.65	13.02	0.59	5.00E-005	8.65E-004	yes
XLOC_006624	NM_146057	Dap	chr15:3115	11.88	17.87	0.59	2.20E-003	1.98E-002	yes
XLOC_012926	NM_016740	S100a11	chr3:93324	29.97	45.04	0.59	4.50E-003	5.73E-003	yes
XLOC_019202	NM_001146346;NM_010129	Emp3	chr7:53173	11.95	17.96	0.59	6.20E-003	4.38E-002	yes
XLOC_001649	NM_011561;NM_172552	Tdg	chr10:8209	15.66	23.51	0.59	5.00E-005	8.65E-004	yes
XLOC_009711	NM_001164491;NM_198649	Ablim3	chr18:6195	25.79	38.72	0.59	5.00E-005	8.65E-004	yes
XLOC_004771	NM_183155	BC002230	chr12:1013	7.34	11.00	0.59	4.00E-004	5.20E-003	yes
XLOC_007221	NM_025445	Arfgap3	chr15:8313	2.41	3.61	0.58	2.60E-003	2.24E-002	yes
XLOC_013702	NM_001081298	Lphn2	chr3:14847	2.68	4.01	0.58	5.00E-005	8.65E-004	yes
XLOC_010773	NM_026615	Urm1	chr2:29682	18.78	28.11	0.58	6.50E-004	7.51E-003	yes
XLOC_007098	NM_025412	Pycr1	chr15:7574	9.31	13.94	0.58	5.60E-003	4.09E-002	yes
XLOC_004213	NM_146033	Ankmy2	chr12:3688	4.59	6.86	0.58	1.95E-003	1.80E-002	yes
XLOC_004009	NM_001167680;NM_172572	Rhbdf2	chr11:1164	20.27	30.29	0.58	5.00E-005	8.65E-004	yes
XLOC_009507	NM_172631	D18Ertd653e	chr18:6809	1.40	2.10	0.58	5.35E-003	3.95E-002	yes
XLOC_010360	NM_172442	Dtx4	chr19:1254	2.34	3.49	0.58	8.00E-003	8.94E-003	yes
XLOC_002685	NM_177369	Myh8	chr11:6709	2.41	3.59	0.58	1.20E-003	1.24E-002	yes
XLOC_007001	NM_001102458;NM_018745	Azin1	chr15:3841	6.32	9.42	0.58	5.00E-005	8.65E-004	yes
XLOC_014893	NM_172702	Serinc2	chr4:12993	33.51	49.85	0.57	5.00E-005	8.65E-004	yes
XLOC_017489	NM_175101	Tmem111	chr6:11346	47.64	70.83	0.57	5.00E-005	8.65E-004	yes
XLOC_010722	NM_009849	Entpd2	chr2:25251	4.07	6.04	0.57	3.50E-004	4.67E-003	yes
XLOC_002488	NM_009288	Stk10	chr11:3243	7.21	10.70	0.57	1.65E-003	1.59E-002	yes
XLOC_021253	NM_007875	Dpagt1	chr9:44134	15.84	23.51	0.57	4.00E-004	5.20E-003	yes
XLOC_014008	NM_028132	Pgm2	chr4:99602	649.27	963.26	0.57	3.50E-004	4.67E-003	yes
XLOC_005411	NM_025588	Exoc2	chr13:3090	11.71	17.37	0.57	5.00E-005	8.65E-004	yes
XLOC_020717	NM_145599	Tmem184c	chr8:80119	2.89	4.29	0.57	3.00E-004	4.11E-003	yes
XLOC_008439	NM_031176	Tnxb	chr17:3480	29.41	43.57	0.57	5.00E-005	8.65E-004	yes
XLOC_008656	NM_019919;NM_206958	Ltbp1	chr17:7540	3.03	4.48	0.57	5.00E-005	8.65E-004	yes
XLOC_002554	NM_175643	Adamts2	chr11:5041	19.06	28.21	0.57	1.50E-004	2.26E-003	yes
XLOC_007706	NM_144854	ORF63	chr16:8755	18.38	27.20	0.57	5.00E-005	6.18E-003	yes
XLOC_002854	NM_010927	Nos2	chr11:7873	3.87	5.73	0.56	1.70E-003	1.63E-002	yes
XLOC_002181	NM_198021	Scyl2	chr10:8910	13.51	19.98	0.56	5.00E-005	8.65E-004	yes
XLOC_003417	NM_178626	Cdc42se2	chr11:5453	32.46	47.99	0.56	5.00E-005	8.65E-004	yes
XLOC_001509	NM_001081347	Rhobtb1	chr10:6867	3.16	4.68	0.56	1.00E-003	1.08E-002	yes
XLOC_015691	NM_013560	Hspb1	chr5:13636	107.05	158.21	0.56	5.00E-005	8.65E-004	yes
XLOC_013337	NM_019745	Pdcd10	chr3:75320	10.48	15.49	0.56	3.50E-004	4.67E-003	yes
XLOC_021273	NM_001145947;NM_011792	Bace1	chr9:45646	18.07	26.69	0.56	5.00E-005	8.65E-004	yes
XLOC_006680	NM_144549	Trib1	chr15:5948	7.18	10.61	0.56	2.50E-003	3.51E-002	yes
XLOC_010470	NM_199447	Rrp12	chr19:4193	18.08	26.71	0.56	5.00E-005	8.65E-004	yes
XLOC_017763	NM_001159714;NM_027328	Prpf31	chr7:35815	13.54	19.99	0.56	3.00E-004	4.11E-003	yes
XLOC_016285	NM_010368	Gusb	chr5:13046	9.99	14.74	0.56	1.50E-004	2.26E-003	yes
XLOC_002282	NM_001166413;NM_028027	Arhgef25	chr10:1266	12.60	18.58	0.56	5.00E-005	6.18E-003	yes
XLOC_010270	NM_026912	Snx15	chr19:6119	9.62	14.18	0.56	5.80E-003	4.19E-002	yes
XLOC_016933	NM_027920	March8	chr6:11628	24.50	36.10	0.56	5.00E-005	8.65E-004	yes
XLOC_018512	NM_020606	Parva	chr7:11957	6.83	10.06	0.56	5.00E-005	8.65E-004	yes
XLOC_020941	NM_172288	Nup133	chr8:12642	13.45	19.81	0.56	5.00E-005	8.65E-004	yes
XLOC_003513	NM_021329	Rangrf	chr11:6878	47.00	69.12	0.56	1.00E-004	1.63E-003	yes
XLOC_010039	NM_021525	Rcl1	chr19:2917	5.59	8.22	0.56	4.25E-003	3.30E-002	yes
XLOC_015654	NM_001081342	Gpr133	chr5:12960	4.97	7.31	0.56	1.45E-003	1.43E-002	yes
XLOC_009324	NM_011755	Zfp35	chr18:2414	10.04	14.76	0.56	9.00E-004	9.88E-003	yes
XLOC_008431	NM_010929	Notch4	chr17:3470	10.06	14.77	0.56	5.00E-005	8.65E-004	yes
XLOC_022002	NM_001195431;NM_012043	Islr	chr9:58004	8.84	12.99	0.55	1.00E-004	1.63E-003	yes
XLOC_022869	NM_010797;NM_183151	Mid1	chrX:16612	17.93	26.34	0.55	1.50E-004	2.26E-003	yes
XLOC_021413	NM_007585	Anxa2	chr9:69301	78.67	115.42	0.55	5.00E-005	8.65E-004	yes
XLOC_007648	NM_020509	Retnla	chr16:4884	18.90	27.72	0.55	2.60E-003	2.24E-002	yes
XLOC_011188	NM_019454	Dll4	chr2:11914	11.29	16.55	0.55	3.00E-004	4.11E-003	yes
XLOC_016572	NM_012057	Irf5	chr6:29476	31.97	46.86	0.55	5.00E-005	8.65E-004	yes
XLOC_012994	NM_009323	Tbx15	chr3:99057	177.59	260.27	0.55	5.00E-005	8.65E-004	yes
XLOC_015621	NM_175423	Orai1	chr5:12346	38.49	56.40	0.55	1.50E-004	2.26E-003	yes
XLOC_008727	NM_010515	Igf2r	chr17:1287	21.94	32.13	0.55	5.00E-005	8.65E-004	yes
XLOC_009212	NM_001163622;NM_001163(	Prepl	chr17:8542	14.03	20.54	0.55	2.50E-004	3.51E-003	yes
XLOC_002923	NM_133215	Mtmr4	chr11:8740	3.52	5.15	0.55	1.50E-004	2.26E-003	yes
XLOC_015231	NM_009207	Slc4a2	chr5:23931	7.16	10.47	0.55	4.00E-004	5.20E-003	yes
XLOC_000279	NM_001039126;NM_023046	Asb1	chr1:93437	18.45	26.96	0.55	5.00E-005	8.65E-004	yes
XLOC_023281	NM_001033600;NM_019477;	Acsl4	chrX:13875	5.58	8.15	0.55	5.00E-005	8.65E-004	yes
XLOC_005123	NM_025596	Prelid1	chr13:5542	15.24	22.28	0.55	1.50E-004	2.26E-003	yes
XLOC_007376	NM_146065	Atf7	chr15:1023	3.00	4.38	0.55	2.50E-003	2.17E-002	yes
XLOC_003876	NM_011037	Vat1	chr11:1013	7.44	10.86	0.55	4.80E-003	3.62E-002	yes
XLOC_021108	NM_010700	Ldlr	chr9:21528	5.40	7.88	0.55	9.50E-003	1.03E-002	yes
XLOC_019836	-	-	chr7:59003	12'193.60	17'795.50	0.55	4.50E-004	5.73E-003	yes

XLOC_019110	NM_001024707	Lrp3	chr7:35971	8.01	11.69	0.54	5.50E-004	6.64E-003 yes
XLOC_004003	NM_001162872;NM_016857	Exoc7	chr11:1161	17.70	25.79	0.54	5.00E-005	8.65E-004 yes
XLOC_010377	NM_011600	Tle4	chr19:1452	4.13	6.02	0.54	5.00E-005	8.65E-004 yes
XLOC_006574	NM_024188	Oxct1	chr15:3970	233.29	339.77	0.54	5.00E-005	8.65E-004 yes
XLOC_008886	NM_027060;NM_172618	Btbd9	chr17:3035	2.69	3.92	0.54	6.00E-004	7.04E-003 yes
XLOC_000429	NM_022018	Fam129a	chr1:15341	12.01	17.49	0.54	7.50E-003	8.46E-003 yes
XLOC_010105	NM_020033	Ankrd2	chr19:4211	137.67	200.46	0.54	5.00E-005	8.65E-004 yes
XLOC_021603	NM_025858;NM_026381	Shisa5	chr9:10894	23.24	33.82	0.54	4.00E-004	5.20E-003 yes
XLOC_017415	NM_054041	Antxr1	chr6:87083	11.60	16.87	0.54	5.00E-005	8.65E-004 yes
XLOC_021387	NM_020043	Igdcc4	chr9:64949	5.82	8.47	0.54	5.00E-005	8.65E-004 yes
XLOC_008438	NM_017406	Atf6b	chr17:3478	11.48	16.70	0.54	5.80E-003	4.19E-002 yes
XLOC_012145	NM_026271	Fibin	chr2:11020	7.07	10.28	0.54	4.50E-003	3.44E-002 yes
XLOC_002245	NM_026570	Yeats4	chr10:1166	11.33	16.46	0.54	2.25E-003	2.01E-002 yes
XLOC_010307	NM_001160356	AI462493	chr19:8954	33.32	48.39	0.54	5.00E-004	6.18E-003 yes
XLOC_004040	NM_009609	Actg1	chr11:1202	328.27	476.47	0.54	5.00E-005	8.65E-004 yes
XLOC_009332	NM_172965	Sap130	chr18:3179	9.86	14.31	0.54	1.40E-003	1.40E-002 yes
XLOC_022703	NM_008828	Pgk1	chrX:10338	699.13	1'014.46	0.54	1.00E-004	1.63E-003 yes
XLOC_007507	NM_013805	Cldn5	chr16:1877	24.97	36.23	0.54	1.50E-003	2.26E-003 yes
XLOC_019197	NM_001112701;NM_011181	Cyth2	chr7:53062	19.04	27.61	0.54	5.00E-004	6.18E-003 yes
XLOC_019601	NM_019419	Arl6ip1	chr7:12526	6.29	9.13	0.54	3.10E-003	2.56E-002 yes
XLOC_016775	NM_026696	0610030E20Rik	chr6:72297	2.85	4.13	0.54	6.00E-004	7.04E-003 yes
XLOC_013070	NM_028044	Cnn3	chr3:12112	17.63	25.55	0.53	5.00E-005	8.65E-004 yes
XLOC_015044	NM_011122	Plod1	chr4:14728	17.92	25.95	0.53	5.00E-005	8.65E-004 yes
XLOC_000997	NM_001042485;NM_020588	Tmem183a	chr1:13624	2.71	3.93	0.53	4.50E-004	5.73E-003 yes
XLOC_014371	NM_001004156	Plekhg5	chr4:15147	11.36	16.44	0.53	5.00E-005	8.65E-004 yes
XLOC_020405	NM_001145896;NM_001145	Gse1	chr8:12301	6.95	10.06	0.53	2.50E-004	3.51E-003 yes
XLOC_001159	NM_026725	Dusp23	chr1:17456	53.08	76.85	0.53	5.00E-005	8.65E-004 yes
XLOC_021895	NM_178644	Oaf	chr9:43029	8.56	12.39	0.53	6.95E-003	4.79E-002 yes
XLOC_015400	NM_011626	Tmem165	chr5:76612	4.28	6.18	0.53	2.85E-003	2.39E-002 yes
XLOC_002438	NM_007912;NM_207655	Egfr	chr11:1665	3.50	5.06	0.53	6.05E-003	4.29E-002 yes
XLOC_009502	NM_026473	Tubb6	chr18:6755	25.84	37.36	0.53	5.00E-004	6.18E-003 yes
XLOC_005119	NM_153131	Unc5a	chr13:5505	12.98	18.74	0.53	5.00E-005	8.65E-004 yes
XLOC_015678	NM_001190437;NM_145215	Abhd11	chr5:13548	30.11	43.46	0.53	5.00E-005	8.65E-004 yes
XLOC_006750	NM_133800	Nol12	chr15:7876	16.58	23.93	0.53	8.00E-004	8.94E-003 yes
XLOC_008400	NM_172619;NR_037707;NR	Adamts10	chr17:3366	2.77	3.99	0.53	2.10E-003	1.91E-002 yes
XLOC_021719	NM_001081395	Amotl1	chr9:14346	94.96	136.93	0.53	5.00E-005	8.65E-004 yes
XLOC_000991	NM_001167949;NM_213616	Atp2b4	chr1:13559	3.81	5.49	0.53	5.00E-005	8.65E-004 yes
XLOC_002487	NM_173784	Ubtd2	chr11:3235	2.97	4.28	0.53	2.85E-003	2.39E-002 yes
XLOC_015674	NM_053266	Gtf2ird2	chr5:13465	2.61	3.76	0.53	3.30E-003	2.68E-002 yes
XLOC_010253	NM_001114595;NM_001114	Ehbp1l1	chr19:5707	120.79	173.94	0.53	5.00E-005	8.65E-004 yes
XLOC_003648	NM_199199	Tmem199	chr11:7832	17.72	25.51	0.53	1.65E-003	1.59E-002 yes
XLOC_014836	NM_001199136;NM_001199	Macf1	chr4:12302	12.53	18.03	0.53	5.00E-005	8.65E-004 yes
XLOC_019342	NM_133722	Fam108c	chr7:91257	7.72	11.10	0.52	3.05E-003	2.53E-002 yes
XLOC_006504	NM_177715	Kctd12	chr14:1033	1.96	2.82	0.52	2.50E-004	3.51E-003 yes
XLOC_019900	NM_001122818;NM_015801	Pnpla6	chr8:35153	6.96	9.99	0.52	1.80E-003	1.70E-002 yes
XLOC_009826	NM_172252	Mrpl21	chr19:3283	20.73	29.78	0.52	1.60E-003	1.55E-002 yes
XLOC_010384	NM_017375	Ostf1	chr19:1865	11.39	16.36	0.52	2.50E-004	3.51E-003 yes
XLOC_000241	NM_172974	Cops7b	chr1:88483	6.93	9.95	0.52	2.80E-003	2.36E-002 yes
XLOC_012383	NM_001195390;NM_133850	Commd7	chr2:15344	5.40	7.75	0.52	4.35E-004	3.36E-002 yes
XLOC_010416	NM_001081213	Ermp1	chr19:2968	5.04	7.23	0.52	3.50E-004	4.67E-003 yes
XLOC_003617	NM_138950	Wdr81	chr11:7525	4.44	6.37	0.52	5.50E-004	6.64E-003 yes
XLOC_016813	NM_001077694;NM_021469	Dysf	chr6:83958	51.86	74.34	0.52	5.00E-005	8.65E-004 yes
XLOC_021608	NM_007658	Cdc25a	chr9:10977	4.33	6.20	0.52	3.30E-003	2.68E-002 yes
XLOC_012778	NM_008772	P2ry1	chr3:60806	4.01	5.75	0.52	1.20E-003	1.24E-002 yes
XLOC_013296	NM_009174	Siah2	chr3:58478	8.08	11.56	0.52	1.75E-003	1.66E-002 yes
XLOC_023258	NM_001168578;NM_025703	Tceal8	chrX:1327C	6.39	9.14	0.52	2.60E-003	2.24E-002 yes
XLOC_007429	NM_031184	Glis2	chr16:4594	6.99	10.00	0.52	6.85E-003	4.72E-002 yes
XLOC_004514	NM_001097621	Kif26a	chr12:1133	6.08	8.70	0.52	1.35E-003	1.36E-002 yes
XLOC_000122	NM_009676	Aox1	chr1:58086	9.41	13.46	0.52	2.00E-004	2.93E-003 yes
XLOC_015433	NM_026735	Mobkl1a	chr5:89149	4.32	6.17	0.52	5.00E-005	8.65E-004 yes
XLOC_002904	NM_011115009;NM_194341	Synrg	chr11:8377	8.28	11.84	0.52	7.00E-004	8.00E-003 yes
XLOC_022106	NM_001081282	Ibtk	chr9:85580	45.01	64.34	0.52	5.00E-005	8.65E-004 yes
XLOC_003925	NM_001130187;NM_031878	Smarcd2	chr11:1061	10.96	15.65	0.51	1.50E-003	1.47E-002 yes
XLOC_021402	NM_011149	Ppib	chr9:65907	24.49	34.94	0.51	5.50E-004	6.64E-003 yes
XLOC_009472	NM_001042605;NM_010545	Cd74	chr18:6096	79.59	113.49	0.51	5.00E-005	8.65E-004 yes
XLOC_007446	NM_011955	Nubp1	chr16:1041	9.60	13.68	0.51	5.90E-003	4.23E-002 yes
XLOC_019950	NM_026792	Agpat5	chr8:18846	7.22	10.27	0.51	1.00E-004	1.63E-003 yes
XLOC_009291	NM_130449	Colec12	chr18:9707	7.53	10.70	0.51	1.25E-003	1.28E-002 yes
XLOC_008647	NM_027166	Ypel5	chr17:7318	3.73	5.29	0.51	1.00E-004	1.63E-003 yes
XLOC_002505	NM_001166553;NM_028862	Rnf145	chr11:4433	4.92	6.98	0.50	2.95E-003	2.45E-002 yes
XLOC_018258	NM_001191051;NM_175215	Lysmd4	chr7:74367	10.20	14.46	0.50	3.50E-003	2.81E-002 yes
XLOC_011212	NM_011354	Serf2	chr2:12127	59.98	85.05	0.50	5.00E-005	8.65E-004 yes
XLOC_020136	NM_010592	Jund	chr8:73221	12.11	17.15	0.50	5.00E-005	8.65E-004 yes
XLOC_006351	NM_026819	Dhrs1	chr14:5635	26.50	37.50	0.50	1.50E-004	2.26E-003 yes
XLOC_010793	NM_028846	Usp20	chr2:30837	9.84	13.93	0.50	1.25E-003	1.28E-002 yes
XLOC_000732	NM_026430	Uxs1	chr1:43807	4.89	6.92	0.50	7.30E-004	4.96E-002 yes
XLOC_000150	NM_001077403;NM_001077	Nrp2	chr1:62749	8.74	12.36	0.50	2.00E-004	2.93E-003 yes
XLOC_016000	NM_178599	Commd8	chr5:72548	7.03	9.95	0.50	1.80E-003	1.70E-002 yes
XLOC_015268	NM_133918	Emilin1	chr5:31216	13.58	19.19	0.50	3.45E-003	2.78E-002 yes
XLOC_004596	NM_153198;NM_177993	Hbp1	chr12:3233	68.10	96.20	0.50	5.00E-005	8.65E-004 yes
XLOC_009848	NM_027196	Pold4	chr19:4231	14.86	20.99	0.50	7.25E-003	4.94E-002 yes
XLOC_009849	NM_001162946;NM_008797	Pcx	chr19:4510	27.73	39.16	0.50	5.00E-005	8.65E-004 yes
XLOC_020026	NM_175136	Rnf122	chr8:32222	3.81	5.38	0.50	4.95E-004	3.71E-002 yes
XLOC_018893	NM_027189	Gemin7	chr7:20150	54.61	77.07	0.50	1.00E-004	1.63E-003 yes
XLOC_007331	NM_001113545;NM_023063	Lima1	chr15:9960	9.29	13.10	0.50	2.50E-004	3.51E-003 yes
XLOC_010675	NM_026162	Plxdc2	chr2:16277	21.06	29.70	0.50	5.00E-004	6.18E-003 yes
XLOC_015103	NM_147776	Vwa1	chr4:15514	18.11	25.53	0.50	5.50E-004	6.64E-003 yes
XLOC_012496	NM_001037177;NM_001037	Nfatc2	chr2:16830	3.93	5.54	0.50	6.55E-003	4.56E-002 yes
XLOC_001806	NM_054078	Baz2a	chr10:1275	8.86	12.48	0.49	5.00E-005	8.65E-004 yes
XLOC_008208	NM_022315	Smoc2	chr17:1441	96.96	136.59	0.49	5.00E-005	8.65E-004 yes
XLOC_008859	NM_007523	Bak1	chr17:2715	9.27	13.06	0.49	1.50E-004	2.26E-003 yes
XLOC_002420	NM_001146308;NM_001146	Dbnl	chr11:5688	20.54	28.90	0.49	1.05E-003	1.12E-002 yes
XLOC_013150	NM_009740	Bcl10	chr3:14558	2.67	3.76	0.49	7.00E-003	4.80E-002 yes
XLOC_006056	NM_021877	Hr	chr14:7095	86.50	121.65	0.49	5.00E-005	8.65E-004 yes
XLOC_015959	NM_024236	Qdpr	chr5:45825	65.49	92.08	0.49	5.00E-005	8.65E-004 yes
XLOC_009221	NM_007589	Calm2	chr17:8783	79.93	112.38	0.49	5.00E-005	8.65E-004 yes
XLOC_008976	NM_001198831;NM_001198	Ddr1	chr17:3581	6.76	9.49	0.49	1.35E-003	1.36E-002 yes
XLOC_005939	NM_001145921;NM_001145	Arhgef40	chr14:5260	13.89	19.50	0.49	4.60E-003	3.50E-002 yes
XLOC_001217	NM_133684	Mosc2	chr1:18663	22.46	31.51	0.49	5.00E-005	8.65E-004 yes

XLOC_013246	NM_009673	Anxa5	chr3:36347	78.16	109.67	0.49	5.00E-005	8.65E-004	yes
XLOC_018577	NM_011952	Mapk3	chr7:13390	47.84	67.11	0.49	2.00E-004	2.93E-003	yes
XLOC_002625	NM_178218	Hist3h2a	chr11:5876	6.84	9.58	0.49	6.85E-003	4.72E-002	yes
XLOC_007385	NM_010577	Itga5	chr15:1031	12.81	17.94	0.49	1.40E-003	1.40E-002	yes
XLOC_011353	NM_153781	Pygb	chr2:15061	3.62	5.07	0.49	2.15E-003	1.95E-002	yes
XLOC_004528	NM_007763	Crip1	chr12:1143	76.28	106.79	0.49	6.50E-004	7.51E-003	yes
XLOC_007959	NM_007508	Atp6v1a	chr16:4408	7.96	11.14	0.48	4.00E-004	5.20E-003	yes
XLOC_000078	NM_008696	Map4k4	chr1:39957	4.65	6.50	0.48	1.00E-004	1.63E-003	yes
XLOC_022076	NM_015806;NM_027418	Mapk6	chr9:75234	7.18	10.04	0.48	5.00E-005	8.65E-004	yes
XLOC_009475	NM_001146268;NM_008809	Pdgfrb	chr18:6120	17.89	25.00	0.48	5.00E-005	8.65E-004	yes
XLOC_019013	NM_001113549;NM_175641	Ltbp4	chr7:28090	129.73	181.34	0.48	5.00E-005	8.65E-004	yes
XLOC_017588	NM_175414	Tspan9	chr6:12791	32.32	45.18	0.48	5.00E-005	8.65E-004	yes
XLOC_021369	NM_001083927;NM_001083	Tle3	chr9:61220	2.41	3.36	0.48	5.65E-003	4.12E-002	yes
XLOC_020832	NM_177699	Fhod1	chr8:10785	36.02	50.29	0.48	5.00E-005	8.65E-004	yes
XLOC_002966	NM_201609	Zfp652	chr11:9561	16.68	23.27	0.48	1.15E-003	1.20E-002	yes
XLOC_020880	NM_146218	Rfwd3	chr8:11379	5.90	8.23	0.48	5.60E-003	4.09E-002	yes
XLOC_005994	NM_026401	Mrp63	chr14:5844	7.60	10.60	0.48	7.00E-004	8.00E-003	yes
XLOC_005065	NM_025387	Tmem14c	chr13:4111	47.97	66.85	0.48	2.50E-004	3.51E-003	yes
XLOC_007175	NM_001013360;NM_001013	Cbx6,Npcd,Nptxr	chr15:7961	20.62	28.72	0.48	1.00E-004	1.63E-003	yes
XLOC_019016	NM_011116	Pld3	chr7:28317	22.94	31.95	0.48	1.40E-003	1.40E-002	yes
XLOC_023116	NM_010227	Flna	chrX:71468	38.60	53.75	0.48	5.00E-005	8.65E-004	yes
XLOC_001622	NM_008655	Gadd45b	chr10:8039	36.55	50.90	0.48	2.50E-004	3.51E-003	yes
XLOC_004996	NM_023422	Hist1h2bc	chr13:2377	113.34	157.73	0.48	1.50E-004	2.26E-003	yes
XLOC_013156	NM_138744	Ssx2ip	chr3:14606	14.18	19.73	0.48	1.00E-004	1.63E-003	yes
XLOC_019758	NM_001130443;NM_001130	Hras1	chr7:14837	91.29	126.98	0.48	5.00E-005	8.65E-004	yes
XLOC_010054	NM_010799	Minpp1	chr19:3256	13.64	18.96	0.47	1.45E-003	1.43E-002	yes
XLOC_023112	NM_008224	Hcfc1	chrX:71188	48.56	67.48	0.47	5.00E-005	8.65E-004	yes
XLOC_001885	NM_025418	Vta1	chr10:1437	19.99	27.76	0.47	3.15E-003	2.58E-002	yes
XLOC_011366	NM_009328	Tcf15	chr2:15196	24.72	34.33	0.47	3.75E-003	2.98E-002	yes
XLOC_009489	NM_001114386;NM_031881	Nedd4l	chr18:6504	2.85	3.95	0.47	5.00E-005	8.65E-004	yes
XLOC_003078	NM_008175	Grn	chr11:1022	46.36	64.39	0.47	2.50E-004	3.51E-003	yes
XLOC_001683	NM_029166	Uhrf1bp1l	chr10:8920	5.44	7.55	0.47	1.25E-003	1.28E-002	yes
XLOC_012345	NM_009976	Cst3	chr2:14869	657.05	911.99	0.47	1.00E-004	1.63E-003	yes
XLOC_007149	NM_009437	Tst	chr15:7822	17.93	24.87	0.47	2.75E-003	2.32E-002	yes
XLOC_016014	NM_001114660;NM_178672	Scfd2	chr5:74600	4.64	6.44	0.47	6.35E-003	4.46E-002	yes
XLOC_022149	NM_025485	Mrps22	chr9:98489	14.12	19.57	0.47	1.05E-003	1.12E-002	yes
XLOC_007677	NM_178647	Cggbp1	chr16:6485	4.24	5.88	0.47	6.50E-004	7.51E-003	yes
XLOC_005645	NM_010169	F2r	chr13:9637	3.79	5.26	0.47	4.20E-003	3.28E-002	yes
XLOC_009179	NM_133771	Memo1	chr17:7460	37.49	51.90	0.47	1.50E-004	2.26E-003	yes
XLOC_013652	NM_025509	Ostc	chr3:13039	21.07	29.17	0.47	8.50E-004	9.41E-003	yes
XLOC_007707	NM_007520	Bach1	chr16:8769	6.12	8.47	0.47	5.00E-005	8.65E-004	yes
XLOC_003764	NM_134021	Pnpo	chr11:9679	7.77	10.75	0.47	2.00E-003	1.84E-002	yes
XLOC_013885	NM_146142	Tdrd7	chr4:46000	4.90	6.78	0.47	3.15E-003	2.58E-002	yes
XLOC_014522	NM_172691	B230312A22Rik	chr4:43045	23.10	31.93	0.47	4.00E-004	5.20E-003	yes
XLOC_016189	NM_001077359;NM_001077	Git2	chr5:11517	9.43	13.03	0.47	2.50E-004	3.51E-003	yes
XLOC_020107	NM_007509	Atp6v1b2	chr8:71561	37.68	52.07	0.47	5.00E-005	8.65E-004	yes
XLOC_014297	NM_172518	Fbxo42	chr4:14070	7.86	10.85	0.47	9.50E-004	1.03E-002	yes
XLOC_007253	NM_001159521;NM_138749	Plxnb2	chr15:8898	19.55	26.99	0.47	2.50E-004	3.51E-003	yes
XLOC_002744	NM_008876	Pld2	chr11:7035	7.29	10.07	0.46	1.45E-003	1.43E-002	yes
XLOC_003001	NM_010688	Lasp1	chr11:9766	30.73	42.40	0.46	2.50E-004	3.51E-003	yes
XLOC_019757	NM_001172100;NM_001172	Rnh1	chr7:14834	70.02	96.57	0.46	1.00E-004	1.63E-003	yes
XLOC_021445	NM_007555	Bmp5	chr9:75623	6.07	8.38	0.46	6.55E-003	4.56E-002	yes
XLOC_002757	NM_026559	Txndc17	chr11:7202	11.96	16.49	0.46	9.50E-004	1.03E-002	yes
XLOC_006922	NM_009319	Tarbp2	chr15:1023	24.76	34.13	0.46	1.70E-003	1.63E-002	yes
XLOC_014931	NM_080559	Sh3bgrl3	chr4:13368	41.36	56.99	0.46	3.00E-003	2.49E-002	yes
XLOC_014705	NM_146145	Jak1	chr4:10074	68.63	94.48	0.46	1.50E-004	2.26E-003	yes
XLOC_002727	NM_030064	Phf23	chr11:6980	10.49	14.44	0.46	5.90E-004	4.23E-002	yes
XLOC_014362	NM_023119	Eno1	chr4:14961	36.89	50.77	0.46	8.50E-004	9.41E-003	yes
XLOC_015354	NM_144517	Tbc1d19	chr5:54200	8.04	11.06	0.46	6.50E-004	7.51E-003	yes
XLOC_010665	NM_008961	Pter	chr2:12845	6.44	8.86	0.46	4.85E-003	3.65E-002	yes
XLOC_010403	NM_177474	D19Bwg1357e	chr19:2746	6.28	8.64	0.46	5.55E-003	4.08E-002	yes
XLOC_001612	NM_001100606;NM_019575	Adat3,Scamp4	chr10:8006	19.93	27.40	0.46	5.95E-003	4.25E-002	yes
XLOC_003756	NM_172300	Ube2z	chr11:9590	10.58	14.55	0.46	5.00E-004	6.18E-003	yes
XLOC_018035	NM_001037957;NM_010092	Dyrk1b	chr7:28964	95.93	131.83	0.46	5.00E-005	8.65E-004	yes
XLOC_015074	NM_001145929;NM_175152	Thap3	chr4:15135	24.93	34.25	0.46	2.70E-003	2.30E-002	yes
XLOC_014485	NM_134097	Topors	chr4:40206	7.97	10.95	0.46	3.00E-003	2.49E-002	yes
XLOC_004061	NM_026824	Dus1l	chr11:1206	17.79	24.44	0.46	4.50E-004	5.73E-003	yes
XLOC_018624	NM_019564	Htra1	chr7:13807	45.18	62.03	0.46	3.00E-004	4.11E-003	yes
XLOC_020502	NM_001024504;NM_001024	Dcun1d2	chr8:13255	50.39	69.18	0.46	4.00E-004	5.20E-003	yes
XLOC_019007	NM_053208	Egln2	chr7:27943	79.78	109.51	0.46	2.00E-004	2.93E-003	yes
XLOC_022889	NM_138603	Ccdc22	chrX:71356	21.10	28.96	0.46	6.10E-004	4.32E-002	yes
XLOC_001122	NM_009062	Rgs4	chr1:17167	9.66	13.26	0.46	3.85E-003	3.05E-002	yes
XLOC_011588	NM_029607	2310003C23Rik	chr2:18044	32.94	45.16	0.45	5.00E-004	6.18E-003	yes
XLOC_017523	NM_053204;NM_178085	Erc1	chr6:11952	12.48	17.10	0.45	1.50E-003	2.26E-003	yes
XLOC_021639	NM_146229	Dync1li1	chr9:11459	21.97	30.10	0.45	2.50E-004	3.51E-003	yes
XLOC_007608	NM_030035	Golgb1	chr16:3688	7.73	10.58	0.45	1.50E-004	2.26E-003	yes
XLOC_022195	NM_029103	Manf	chr9:10678	17.26	23.62	0.45	1.15E-003	1.20E-002	yes
XLOC_014886	NM_001005506;NM_001199	Txlna	chr4:12930	19.02	26.01	0.45	9.00E-004	9.88E-003	yes
XLOC_009445	NM_026386	Snx2	chr18:5333	18.94	25.91	0.45	9.50E-004	1.03E-002	yes
XLOC_004779	NM_011812	Fbln5	chr12:1029	3.96	5.41	0.45	1.60E-003	1.55E-002	yes
XLOC_017485	NM_133932	Tada3	chr6:11331	19.95	27.27	0.45	4.90E-003	3.68E-002	yes
XLOC_008450	NM_033444	Clic1	chr17:3518	28.91	39.51	0.45	2.05E-003	1.88E-002	yes
XLOC_022126	NM_194334	Tbc1d2b	chr9:9009	6.05	8.27	0.45	4.40E-003	3.38E-002	yes
XLOC_000129	NM_009805;NM_207653	Cflar	chr1:5877	6.58	8.99	0.45	1.50E-003	1.47E-002	yes
XLOC_007897	NM_001128094;NM_001128	Atp13a3	chr16:3031	4.58	6.25	0.45	2.50E-004	3.51E-003	yes
XLOC_020943	NM_133966	Taf5l	chr8:12652	9.87	13.48	0.45	2.75E-003	2.32E-002	yes
XLOC_007872	NM_023794	Etv5	chr16:2238	6.89	9.40	0.45	6.50E-004	7.51E-003	yes
XLOC_005633	NM_011582	Thbs4	chr13:9352	137.34	187.28	0.45	1.50E-004	2.26E-003	yes
XLOC_003627	NM_007754	Cpd	chr11:7659	15.35	20.91	0.45	1.00E-004	1.63E-003	yes
XLOC_009073	NM_001163729;NM_027910	Klhdc3	chr17:4681	116.80	159.10	0.45	5.00E-005	8.65E-004	yes
XLOC_000459	NM_025474	Mrps14	chr1:16212	7.73	10.52	0.44	1.10E-003	1.16E-002	yes
XLOC_016417	NM_011669	Usp12	chr5:14754	9.84	13.38	0.44	5.00E-004	6.18E-003	yes
XLOC_014290	NM_173867	Rcc2	chr4:14025	2.40	3.26	0.44	6.35E-003	4.46E-002	yes
XLOC_014879	NM_008228	Hdac1	chr4:12919	15.90	21.62	0.44	5.75E-003	4.16E-002	yes
XLOC_001633	NM_001146687;NM_008844	Pip5k1c	chr10:8075	43.34	58.91	0.44	2.00E-004	2.93E-003	yes
XLOC_007779	NM_025821	Carhsp1	chr16:8658	11.84	16.09	0.44	4.25E-003	3.30E-002	yes
XLOC_011436	NM_019642	Rpn2	chr2:15703	44.61	60.62	0.44	1.00E-004	1.63E-003	yes
XLOC_022841	NM_025357	Smpx	chrX:15413	254.79	346.17	0.44	5.00E-005	8.65E-004	yes
XLOC_006031	NM_145944	Ccdc25	chr14:6645	4.48	6.08	0.44	3.15E-003	2.58E-002	yes

XLOC_009925	NM_146093	Ubxn1	chr19:8946	190.32	258.55	0.44	2.00E-004	2.93E-003	yes
XLOC_020770	NM_028007	Itfg1	chr8:88241	17.83	24.22	0.44	5.00E-005	8.65E-004	yes
XLOC_022482	NM_019668	Ube2a	chrX:34414	25.98	35.27	0.44	1.15E-003	1.20E-002	yes
XLOC_005683	NM_175171	Mast4	chr13:1035	20.28	27.54	0.44	2.50E-004	3.51E-003	yes
XLOC_006451	NM_001135151;NM_0011351	Slc39a14	chr14:7070	4.80	6.52	0.44	2.70E-003	2.30E-002	yes
XLOC_014488	NM_001025444;NM_025545	Aptx	chr4:40629	4.84	6.58	0.44	5.85E-003	4.22E-002	yes
XLOC_007598	NM_008465	Kpna1	chr16:3598	40.74	55.29	0.44	2.00E-004	2.93E-003	yes
XLOC_002424	NM_001005867;NM_028601	Zmiz2	chr11:6289	113.85	154.38	0.44	5.00E-005	8.65E-004	yes
XLOC_014965	NM_009861	Cdc42	chr4:13687	140.14	189.98	0.44	5.00E-005	8.65E-004	yes
XLOC_005382	NM_010424	Hfe	chr13:2379	12.59	17.07	0.44	1.50E-003	1.47E-002	yes
XLOC_008839	NM_133719	Metrn	chr17:2593	56.93	77.13	0.44	6.00E-004	7.04E-003	yes
XLOC_017444	NM_018815	Nup210	chr6:90963	34.28	46.43	0.44	2.50E-004	3.51E-003	yes
XLOC_015598	NM_028041	Ddx54	chr5:12106	19.07	25.82	0.44	8.00E-004	8.94E-003	yes
XLOC_008284	NM_001039581;NM_013855	Abca3	chr17:2448	4.25	5.75	0.44	2.95E-003	2.45E-002	yes
XLOC_012871	NM_001113331;NM_011368	Shc1	chr3:89222	6.22	8.42	0.44	2.30E-003	2.45E-002	yes
XLOC_014620	NM_001045528	Fkbp15	chr4:61961	16.39	22.18	0.44	3.05E-003	2.53E-002	yes
XLOC_021105	NM_021531;NM_153141	Carm1	chr9:21351	57.17	77.38	0.44	5.95E-003	4.25E-002	yes
XLOC_018202	NM_016974	Dbp	chr7:52960	111.69	151.13	0.44	2.35E-003	2.08E-002	yes
XLOC_013803	NM_172988	Fbxl4	chr4:22284	9.05	12.24	0.44	6.00E-004	7.04E-003	yes
XLOC_007529	NM_001081366	Vps8	chr16:2142	9.10	12.32	0.44	4.25E-003	3.30E-002	yes
XLOC_022390	NM_173747	Gpkow	chrX:72742	6.80	9.19	0.44	3.00E-003	2.49E-002	yes
XLOC_015064	NM_027460	Slc25a33	chr4:14911	9.50	12.85	0.44	2.05E-003	1.88E-002	yes
XLOC_004498	NM_001048206;NM_011632	Traf3	chr12:1124	11.46	15.50	0.43	3.50E-004	4.67E-003	yes
XLOC_002010	NM_001146100;NM_010438	Hk1	chr10:6173	6.84	9.24	0.43	2.85E-003	2.39E-002	yes
XLOC_013127	NM_007409	Adh1	chr3:13794	40.08	54.12	0.43	3.50E-004	4.67E-003	yes
XLOC_003568	NM_178367	Dhx33	chr11:7079	6.30	8.51	0.43	5.95E-003	4.25E-002	yes
XLOC_009071	NM_029091	Klc4	chr17:4676	23.08	31.16	0.43	2.15E-003	1.95E-002	yes
XLOC_010003	NM_008139	Gnaq	chr19:1620	5.16	6.97	0.43	1.55E-003	1.51E-002	yes
XLOC_007758	NM_001025432	Crebbp	chr16:4084	13.93	18.79	0.43	7.50E-004	8.46E-003	yes
XLOC_007097	NM_023240;NM_029663	Eef1d	chr15:7572	53.41	72.04	0.43	3.00E-004	4.11E-003	yes
XLOC_016381	NM_001122730;NM_178242	Tnrc18	chr5:14320	6.44	8.68	0.43	2.50E-004	3.51E-003	yes
XLOC_020295	NM_009868	Cdh5	chr8:10662	83.96	113.18	0.43	2.50E-004	3.51E-003	yes
XLOC_006629	NM_008304	Sdc2	chr15:3285	10.84	14.61	0.43	4.00E-004	5.20E-003	yes
XLOC_002304	NM_010860	Myl6	chr10:1279	175.56	236.52	0.43	2.50E-004	3.51E-003	yes
XLOC_002004	NM_013753	X99384	chr10:6078	9.41	12.67	0.43	3.80E-003	3.01E-002	yes
XLOC_005301	NM_001081128	Mtr	chr13:1227	3.21	4.32	0.43	5.00E-003	3.74E-002	yes
XLOC_003025	NM_001176528;NM_0011773	Rara	chr11:9879	13.11	17.64	0.43	2.30E-003	2.04E-002	yes
XLOC_009207	NM_001001806	Zfp3612	chr17:8458	7.87	10.59	0.43	1.35E-003	1.36E-002	yes
XLOC_000949	NM_001085409;NM_133186	Steap3	chr1:12212	40.32	54.24	0.43	6.00E-004	7.04E-003	yes
XLOC_007195	NM_020507	Tob2	chr15:8167	8.35	11.24	0.43	4.50E-004	5.73E-003	yes
XLOC_020545	NM_001159774;NM_010546	Ikbkb	chr8:23769	5.68	7.64	0.43	2.45E-003	2.14E-002	yes
XLOC_005801	NM_009502	Vcl	chr14:2174	70.20	94.34	0.43	1.50E-003	2.26E-002	yes
XLOC_001967	NM_145743	Lace1	chr10:4203	14.52	19.50	0.43	2.45E-003	2.14E-002	yes
XLOC_013789	NM_181401	Tmem64	chr4:15192	30.64	41.15	0.43	2.00E-004	2.93E-003	yes
XLOC_013489	NM_001163617;NM_001163(	Tars2	chr3:95543	20.25	27.21	0.43	1.60E-003	1.55E-002	yes
XLOC_011885	NM_007389	Chrna1	chr2:73401	6.98	9.37	0.42	1.95E-003	1.80E-002	yes
XLOC_000921	NM_133825	DlErtd622e	chr1:9954(	3.51	4.71	0.42	7.20E-003	4.92E-002	yes
XLOC_001451	NM_030250	Nus1	chr10:5213	3.68	4.94	0.42	4.50E-004	5.73E-003	yes
XLOC_016208	NM_030704	Hspb8	chr5:11685	239.34	320.86	0.42	1.50E-003	2.26E-002	yes
XLOC_006396	NM_011892	Sgcg	chr14:6175	109.21	146.40	0.42	1.50E-004	2.26E-002	yes
XLOC_012746	NM_175386	Lhfp	chr3:52845	16.83	22.55	0.42	6.60E-004	4.59E-002	yes
XLOC_005773	NM_134080	Flnb	chr14:8650	6.09	8.16	0.42	5.50E-004	6.64E-003	yes
XLOC_010110	NM_001164531;NM_177319	Zfyve27	chr19:4224	6.26	8.38	0.42	5.00E-003	3.74E-002	yes
XLOC_006166	NM_001110794;NM_009674	Anxa7	chr14:2127	31.39	42.01	0.42	6.00E-004	7.04E-003	yes
XLOC_021448	NM_010295	Gclc	chr9:77602	13.49	18.05	0.42	6.45E-003	4.51E-002	yes
XLOC_019819	-	-	chr7:28975	8.59	11.49	0.42	4.50E-004	5.73E-003	yes
XLOC_009331	NM_181414	Pik3c3	chr18:3043	7.59	10.15	0.42	4.35E-004	3.36E-002	yes
XLOC_007948	NM_020260	Arhgap31	chr16:3859	6.61	8.84	0.42	3.50E-004	4.67E-003	yes
XLOC_016580	NM_029742	Klhdc10	chr6:30351	31.36	41.92	0.42	3.00E-004	4.11E-003	yes
XLOC_012350	NM_027977	2310001A20Rik	chr2:15040	15.13	20.22	0.42	4.75E-004	3.60E-002	yes
XLOC_018868	NM_007590	Calm3	chr7:17500	294.96	394.07	0.42	2.00E-004	2.93E-003	yes
XLOC_001425	NM_172416	Ostm1	chr10:4239	19.24	25.69	0.42	9.00E-004	9.88E-003	yes
XLOC_012817	NM_016784	Plrg1	chr3:82859	18.39	24.55	0.42	2.25E-003	2.01E-002	yes
XLOC_004038	NM_001164798;NM_0011647	Slc38a10	chr11:1199	14.79	19.74	0.42	3.00E-004	4.11E-003	yes
XLOC_022900	NM_026137;NR_029428	Wdr13	chrX:77004	7.57	10.10	0.42	5.95E-004	4.25E-003	yes
XLOC_002046	NM_172549	Cabin1	chr10:7510	9.97	13.30	0.42	4.20E-004	3.28E-002	yes
XLOC_021249	NM_016808;NM 198091;NM	Usp2	chr9:43875	48.28	64.38	0.42	6.00E-004	7.04E-003	yes
XLOC_006751	NM 001024716;NM 0010391	Triobp	chr15:7877	15.20	20.26	0.42	5.00E-004	6.18E-003	yes
XLOC_009375	NM_025594	Zmat2	chr18:3695	7.64	10.19	0.41	3.10E-004	2.56E-002	yes
XLOC_017216	NM_028123	Slc37a3	chr6:39284	4.07	5.43	0.41	6.30E-004	4.43E-002	yes
XLOC_012829	NM 001077687;NM 0010776	Lrba	chr3:86028	6.03	8.04	0.41	2.75E-003	2.32E-002	yes
XLOC_020231	NM_001122843;NM_145390	Tnpo2	chr8:87560	21.21	28.27	0.41	5.00E-004	6.18E-003	yes
XLOC_017202	NM_008098	Mtpn	chr6:35458	6.23	8.30	0.41	1.80E-003	1.70E-002	yes
XLOC_006321	NM_013768	Prmt5	chr14:5512	12.76	17.00	0.41	7.00E-004	8.00E-003	yes
XLOC_013646	NM_010113	Egf	chr3:12938	11.45	15.25	0.41	1.10E-003	1.16E-002	yes
XLOC_012898	NM_011313	S100a6	chr3:90416	76.82	102.25	0.41	5.50E-004	6.64E-003	yes
XLOC_001871	NM_175155	Sash1	chr10:8442	3.78	5.03	0.41	1.00E-003	1.08E-002	yes
XLOC_021258	NM_030256	Bcl91	chr9:44307	18.31	24.37	0.41	5.00E-004	6.18E-003	yes
XLOC_010244	NM_001243307;NM_198616	Ccdc85b	chr19:5447	14.84	19.74	0.41	2.50E-003	2.17E-002	yes
XLOC_000571	NM_178653	Sccpdh	chr1:18159	14.53	19.32	0.41	1.15E-003	1.20E-002	yes
XLOC_016026	NM_019836	2610024G14Rik	chr5:77723	7.27	9.66	0.41	6.10E-003	4.32E-002	yes
XLOC_023132	NM_001166453;NM_001166(	Pls3	chrX:73030	30.68	40.79	0.41	8.00E-004	8.94E-003	yes
XLOC_004576	NM_011739	Ywhaq	chr12:2139	24.30	32.29	0.41	2.20E-003	1.98E-002	yes
XLOC_021330	NM_139001	Cspg4	chr9:56712	2.88	3.82	0.41	1.85E-003	1.73E-002	yes
XLOC_004575	NM_009615	Adam17	chr12:2132	6.38	8.47	0.41	4.25E-003	3.30E-002	yes
XLOC_002999	NM_001085500	Cisd3	chr11:9754	49.60	65.84	0.41	1.70E-003	1.63E-002	yes
XLOC_004025	NM_011150	Lgals3bp	chr11:1182	31.94	42.38	0.41	3.75E-003	2.98E-002	yes
XLOC_006392	NM_001168535;NM_001168!	Cdadc1	chr14:6017	19.58	25.98	0.41	2.40E-003	2.10E-002	yes
XLOC_002053	NM_001161853;NM_011418	Smarcb1	chr10:7535	23.65	31.37	0.41	4.45E-003	3.40E-002	yes
XLOC_006881	NM_010271	Gpd1	chr15:9954	836.84	1'110.15	0.41	3.25E-003	2.65E-002	yes
XLOC_005890	NM_019637	Styx	chr14:4597	8.11	10.76	0.41	2.00E-003	1.84E-002	yes
XLOC_013614	NM_025517	Rtcd1	chr3:11619	7.96	10.55	0.41	1.95E-003	1.80E-002	yes
XLOC_016927	NM_025958	Cand2	chr6:11572	85.67	113.44	0.40	4.80E-003	3.62E-002	yes
XLOC_013872	NM_001080384;NM_0010803	Clta	chr4:44025	50.84	67.31	0.40	2.00E-003	1.84E-002	yes
XLOC_009647	NM_001205336;NM_139206	Arap3	chr18:3813	13.29	17.60	0.40	1.25E-003	1.28E-002	yes
XLOC_015114	NM_021604	Agrn	chr4:15553	7.38	9.77	0.40	1.75E-003	1.66E-002	yes
XLOC_002859	NM_001163018;NM_199196	Suz12	chr11:7980	6.81	9.01	0.40	3.90E-003	3.08E-002	yes
XLOC_013044	NM_011967	Psma5	chr3:10805	38.51	50.96	0.40	1.35E-003	1.36E-002	yes
XLOC_009510	NM_001083967;NM_013685	Tcf4	chr18:6950	17.52	23.17	0.40	5.50E-004	6.64E-003	yes

XLOC_003479	NM_026183	Slc47a1	chr11:6115	18.03	23.84	0.40	8.00E-004	8.94E-003 yes
XLOC_020001	NM_001081149	Myst3	chr8:23970	3.37	4.46	0.40	1.20E-003	1.24E-002 yes
XLOC_021910	NM_153537	Phldb1	chr9:44494	18.69	24.72	0.40	8.50E-004	9.41E-003 yes
XLOC_015062	NM_001029837;NM_001164(	Pik3cd	chr4:14902	14.74	19.48	0.40	1.15E-003	1.20E-002 yes
XLOC_010683	NM_029619	Msrb2	chr2:19293	14.99	19.81	0.40	5.85E-003	4.22E-002 yes
XLOC_019069	NM_029274	Wbp7	chr7:31353	14.30	18.90	0.40	2.10E-003	1.91E-002 yes
XLOC_008347	NM_001080769	Uhrf1bp1	chr17:2799	23.68	31.29	0.40	7.50E-004	8.46E-003 yes
XLOC_015950	NM_027295	Rab28	chr5:42016	19.05	25.17	0.40	5.00E-004	6.18E-003 yes
XLOC_015795	NM_009087;NM_181730	Polr1d	chr5:14788	76.97	101.61	0.40	8.00E-004	8.94E-003 yes
XLOC_022823	NM_019710	Smc1a	chrX:14845	30.44	40.19	0.40	1.10E-003	1.16E-002 yes
XLOC_022677	NM_013712	Itgb1bp2	chrX:98644	146.03	192.76	0.40	6.50E-004	7.51E-003 yes
XLOC_007971	NM_153412	Phldb2	chr16:4574	2.63	3.47	0.40	6.15E-003	4.35E-002 yes
XLOC_010919	NM_001110145;NM_009278	Ssb	chr2:69699	21.99	29.01	0.40	2.55E-003	2.20E-002 yes
XLOC_002189	NM_008682	Nedd1	chr10:9214	7.06	9.31	0.40	5.35E-003	3.95E-002 yes
XLOC_011600	NM_016775	Dnajc5	chr2:18125	42.68	56.27	0.40	4.50E-003	5.73E-003 yes
XLOC_007284	NM_175121	Slc38a2	chr15:9651	7.46	9.82	0.40	3.00E-004	4.11E-003 yes
XLOC_014563	NM_029572	Erp44	chr4:48206	16.82	22.15	0.40	7.00E-004	8.00E-003 yes
XLOC_021935	NM_001033324	Zbtb16	chr9:48459	32.29	42.48	0.40	2.00E-003	1.84E-002 yes
XLOC_015301	NM_011278	Rnf4	chr5:34679	12.38	16.29	0.40	3.55E-003	2.85E-002 yes
XLOC_008854	NM_001206335;NM_207217	Itfg3	chr17:2634	61.76	81.23	0.40	4.00E-004	5.20E-003 yes
XLOC_016297	NM_033561	Eif4h	chr5:13509	134.14	176.38	0.40	3.00E-004	4.11E-003 yes
XLOC_009931	NM_011842	Mta2	chr19:9016	20.60	27.08	0.39	1.15E-003	1.20E-002 yes
XLOC_015768	NM_001081109	Lmtk2	chr5:14486	11.09	14.58	0.39	7.00E-004	8.00E-003 yes
XLOC_022514	NM_001077712;NM_021465	Stag2	chrX:39502	15.15	19.91	0.39	4.00E-004	5.20E-003 yes
XLOC_016384	NM_007393	Actb	chr5:14366	173.09	227.32	0.39	7.50E-004	8.46E-003 yes
XLOC_022201	NM_008138	Gnai2	chr9:10751	109.28	143.44	0.39	6.00E-004	7.04E-003 yes
XLOC_023189	NM_008832;NM_173021	Phka1	chrX:99709	334.81	439.38	0.39	4.40E-003	3.38E-002 yes
XLOC_011850	NM_001159564;NM_021359	Itgb6	chr2:60436	13.30	17.44	0.39	1.35E-003	1.36E-002 yes
XLOC_015916	NM_178390	Fam53a	chr5:33943	80.90	106.09	0.39	8.50E-004	9.41E-003 yes
XLOC_016362	NM_197980	Cox19	chr5:13981	61.68	80.86	0.39	2.15E-003	1.95E-002 yes
XLOC_011313	NM_019771	Dstn	chr2:14374	56.74	74.37	0.39	9.50E-004	1.03E-002 yes
XLOC_009190	NM_026514	Cdc42ep3	chr17:7973	24.33	31.89	0.39	2.65E-003	2.27E-002 yes
XLOC_003915	NM_008740	Nsf	chr11:1036	14.41	18.88	0.39	4.15E-003	3.25E-002 yes
XLOC_010991	NM_001081260	Tnks1bp1	chr2:84890	24.92	32.64	0.39	1.95E-003	1.80E-002 yes
XLOC_002845	NM_201406	Pigs	chr11:7814	20.49	26.84	0.39	5.60E-003	4.09E-002 yes
XLOC_006850	NM_178789	Tmem117	chr15:9445	6.20	8.11	0.39	5.05E-003	3.77E-002 yes
XLOC_017094	NM_010656	Sspn	chr6:14588	13.77	18.03	0.39	6.50E-004	7.51E-003 yes
XLOC_007560	NM_001122683;NM_175177	Bdh1	chr16:3142	11.16	14.61	0.39	2.40E-003	2.10E-002 yes
XLOC_005726	-	-	chr13:3287	439.83	575.61	0.39	1.00E-003	1.08E-002 yes
XLOC_020755	NM_007591	Calr	chr8:87365	161.58	211.46	0.39	5.00E-004	6.18E-003 yes
XLOC_019185	NM_010240	Ftl1	chr7:52713	355.54	465.20	0.39	1.00E-003	1.08E-002 yes
XLOC_000240	NM_008972	Ptma	chr1:88423	68.12	89.10	0.39	3.50E-003	4.67E-003 yes
XLOC_000347	NM_026390	Ubxn4	chr17:13014	19.75	25.83	0.39	1.30E-003	1.32E-002 yes
XLOC_009069	NM_020493	Srf	chr17:4668	16.21	21.18	0.39	1.45E-003	1.43E-002 yes
XLOC_016432	NM_013559	Hsph1	chr5:15041	22.32	29.18	0.39	1.30E-003	1.32E-002 yes
XLOC_006676	NM_175226	Rnf139	chr15:5872	28.42	37.15	0.39	2.30E-003	2.04E-002 yes
XLOC_010044	NM_001081319	C030046E11Rik	chr19:2959	12.13	15.85	0.39	1.85E-003	1.73E-002 yes
XLOC_001409	NM_010681	Lama4	chr10:3868	13.28	17.34	0.39	1.35E-003	1.36E-002 yes
XLOC_022236	NM_001081043	Ptpn23	chr9:11028	4.72	6.16	0.39	3.30E-003	2.68E-002 yes
XLOC_003234	NR_002321;NR_002322	Tug1	chr11:3539	5.79	7.56	0.38	7.35E-003	4.98E-002 yes
XLOC_015397	NM_001083316;NM_011058	Pdgfra	chr5:75548	7.89	10.30	0.38	7.30E-003	4.96E-002 yes
XLOC_000646	NM_028173	Tram1	chr1:13554	15.24	19.89	0.38	3.15E-003	2.58E-002 yes
XLOC_018270	NM_001162939;NM_026531	Aen	chr7:86040	24.78	32.33	0.38	1.50E-003	1.47E-002 yes
XLOC_002659	NM_028360;NM_029704	Ttc19	chr11:6209	38.75	50.54	0.38	9.00E-004	9.88E-003 yes
XLOC_015339	NM_024434	Lap3	chr5:45884	23.27	30.35	0.38	2.25E-003	2.01E-002 yes
XLOC_000824	NM_153744	Prkag3	chr1:74785	100.32	130.85	0.38	5.50E-003	6.64E-003 yes
XLOC_003525	NM_013415	Atp1b2	chr11:6941	174.00	226.87	0.38	1.20E-003	1.24E-002 yes
XLOC_005800	NM_008873	Plau	chr14:2165	30.57	39.85	0.38	2.15E-003	1.95E-002 yes
XLOC_006811	NM_016714	Nup50	chr15:8475	8.72	11.37	0.38	5.70E-003	4.14E-002 yes
XLOC_006046	NM_026174	Entpd4	chr14:6995	33.78	43.97	0.38	7.50E-004	8.46E-003 yes
XLOC_001779	NM_009870	Cdk4	chr10:1265	22.83	29.71	0.38	4.60E-003	3.50E-002 yes
XLOC_000873	NM_008801	Pde6d	chr1:88439	20.06	26.08	0.38	5.60E-003	4.09E-002 yes
XLOC_007235	NM_001033273	5031439G07Rik	chr15:8477	95.93	124.72	0.38	1.05E-003	1.12E-002 yes
XLOC_002243	NM_007636	Cct2	chr10:1164	72.24	93.90	0.38	8.50E-004	9.41E-003 yes
XLOC_020111	NM_133224	Atp13a1	chr8:72315	14.18	18.42	0.38	4.65E-003	3.53E-002 yes
XLOC_013923	NM_001035532;NM_001035!	Akap2	chr4:57858	16.81	21.83	0.38	9.50E-004	1.03E-002 yes
XLOC_017123	NM_183308	Pon2	chr6:52146	21.51	27.91	0.38	1.70E-003	1.63E-002 yes
XLOC_011744	NM_139302	Sh3glb2	chr2:30200	16.00	20.76	0.38	6.75E-003	4.67E-002 yes
XLOC_000746	NM_008667	Nab1	chr1:52512	8.76	11.36	0.38	7.15E-003	4.89E-002 yes
XLOC_009855	NM_025553	Mrpl11	chr19:4962	41.70	54.04	0.37	2.75E-003	2.32E-002 yes
XLOC_020735	NM_001199593;NM_177262	Pkn1	chr8:86190	50.56	65.51	0.37	5.95E-003	4.25E-002 yes
XLOC_015930	NM_001042615;NM_030127	Htra3	chr5:35994	18.31	23.72	0.37	1.55E-003	1.51E-002 yes
XLOC_019658	NM_010772	Maz	chr7:13416	38.35	49.67	0.37	1.75E-003	1.66E-002 yes
XLOC_017313	NM_025574	Pigy	chr6:57634	7.35	9.52	0.37	2.10E-003	1.91E-002 yes
XLOC_012123	NM_001111289;NM_001111;	Caprin1	chr2:10360	21.85	28.29	0.37	6.30E-003	4.43E-002 yes
XLOC_019653	NM_001163774;NM_0011637	Taok2	chr7:13400	36.64	47.43	0.37	2.50E-003	2.17E-002 yes
XLOC_017911	NM_207525	Opa3	chr7:19813	55.51	71.83	0.37	6.00E-004	7.04E-003 yes
XLOC_010792	NM_133673	Tor1b	chr2:30808	23.82	30.82	0.37	2.75E-003	2.32E-002 yes
XLOC_003932	NM_001032378;NM_008816	Pecam1	chr11:1065	25.67	33.21	0.37	1.05E-003	1.12E-002 yes
XLOC_020903	NM_001167910;NM_019709	Mbtps1	chr8:12203	19.10	24.71	0.37	2.40E-003	2.10E-002 yes
XLOC_021251	NM_023061	Mcam	chr9:43942	39.65	51.27	0.37	2.50E-003	2.17E-002 yes
XLOC_011117	NM_001111060;NM_007652	Cd59a	chr2:10393	17.27	22.32	0.37	4.40E-003	3.38E-002 yes
XLOC_006900	NM_026566	9430023L20Rik	chr15:1011	15.86	20.50	0.37	7.10E-003	4.86E-002 yes
XLOC_010132	NM_001037758;NM_009771	Btrc	chr19:4543	3.32	4.29	0.37	2.40E-003	2.10E-002 yes
XLOC_013122	NM_016750	H2afz	chr3:13752	74.75	96.45	0.37	1.20E-003	1.24E-002 yes
XLOC_005499	NM_001114087;NM_001114(	Pdlim7	chr13:5559	427.86	551.94	0.37	1.65E-003	1.59E-002 yes
XLOC_010153	NM_001163480;NM_021360	Neurl1a	chr19:4725	105.00	135.34	0.37	5.50E-004	6.64E-003 yes
XLOC_011391	NM_007896	Mapre1	chr2:15356	9.01	11.61	0.37	1.95E-003	1.80E-002 yes
XLOC_010148	NM_020577	As3mt	chr19:4678	36.55	47.09	0.37	3.35E-003	2.72E-002 yes
XLOC_007267	NM_011994	Abcd2	chr15:9097	14.01	18.04	0.37	1.25E-003	1.28E-002 yes
XLOC_010220	NM_001001984	Kdm2a	chr19:4316	8.05	10.36	0.36	1.75E-003	1.66E-002 yes
XLOC_000923	NM_013626	Pam	chr1:99717	8.69	11.18	0.36	1.35E-003	1.36E-002 yes
XLOC_016553	NM_053098	Lmod2	chr6:24547	77.10	99.19	0.36	1.40E-003	1.40E-002 yes
XLOC_007194	NM_001146174;NM_011241	Rangap1	chr15:8153	12.44	16.00	0.36	5.15E-003	3.83E-002 yes
XLOC_005070	NM_007772	Hivep1	chr13:4214	4.06	5.22	0.36	3.60E-003	2.88E-002 yes
XLOC_005799	NM_027996	2310021P13Rik	chr14:2152	36.63	47.11	0.36	2.35E-003	2.08E-002 yes
XLOC_015493	NM_008861	Pkd2	chr5:10488	16.04	20.61	0.36	4.45E-003	3.40E-002 yes
XLOC_008846	NM_011822	Pigq	chr17:2606	41.34	53.11	0.36	3.70E-003	2.95E-002 yes
XLOC_002306	NM_011843	Esyt1	chr10:1279	37.19	47.76	0.36	6.05E-003	4.29E-002 yes

XLOC	NM	Gene	Locus	Value1	Value2	FC	p	q	sig
XLOC_000202	NM_001159883;NM_001159!	Dnajb2	chr1:75232	39.05	50.14	0.36	4.30E-003	3.34E-002	yes
XLOC_021838	NM_008408	Stt3a	chr9:36539	16.97	21.78	0.36	6.65E-003	4.61E-002	yes
XLOC_017504	NM_026376	Plxnd1	chr6:1159(	13.82	17.75	0.36	1.15E-003	1.20E-002	yes
XLOC_006523	NM_001081039;NM_001128;	Dock9	chr14:1219	4.53	5.82	0.36	4.00E-003	3.15E-002	yes
XLOC_015560	NM_026718	Ankrd13a	chr5:11522	9.21	11.82	0.36	5.90E-003	4.23E-002	yes
XLOC_013893	NM_009370	Tgfbr1	chr4:47366	8.02	10.28	0.36	6.60E-003	4.59E-002	yes
XLOC_021810	NM_001102455;NM_001102¢	Aplp2	chr9:30942	185.86	238.37	0.36	1.40E-003	1.40E-002	yes
XLOC_000247	NM_001039169;NM_001039;	Eif4e2	chr1:8911(	39.37	50.48	0.36	5.60E-003	4.09E-002	yes
XLOC_002191	NM_013508	Elk3	chr10:9271	14.14	18.12	0.36	5.00E-003	3.74E-002	yes
XLOC_005243	NM_173757	Mrps27	chr13:1001	45.73	58.61	0.36	4.10E-003	3.22E-002	yes
XLOC_001970	NM_175407	Sobp	chr10:4272	35.35	45.27	0.36	2.40E-003	2.10E-002	yes
XLOC_007070	NM_001033219;NM_001168;	Slc45a4	chr15:7341	12.77	16.35	0.36	3.80E-003	3.01E-002	yes
XLOC_013405	NM_134469	Fdps	chr3:88897	23.73	30.37	0.36	5.25E-003	3.89E-002	yes
XLOC_015528	NM_008146	Golga3	chr5:1106(	41.59	53.16	0.35	1.50E-003	1.47E-002	yes
XLOC_020462	NM_010578	Itgb1	chr8:1312(	12.97	16.58	0.35	1.40E-003	1.40E-002	yes
XLOC_001600	NM_021565	Midn	chr10:7961	9.28	11.86	0.35	4.10E-003	3.22E-002	yes
XLOC_009091	NM_009694	Apobec2	chr17:4855	219.66	280.43	0.35	2.00E-003	1.84E-002	yes
XLOC_016012	NM_011890	Sgcb	chr5:74023	36.62	46.72	0.35	1.75E-003	1.66E-002	yes
XLOC_017550	NM_001097617;NM_144938	C1s	chr6:12448	8.96	11.43	0.35	7.10E-003	4.86E-002	yes
XLOC_002417	NM_013842	Xbp1	chr11:5420	54.81	69.91	0.35	2.70E-003	2.30E-002	yes
XLOC_007285	NM_027052	Slc38a4	chr15:9682	22.79	29.05	0.35	2.40E-003	2.10E-002	yes
XLOC_008169	NM_001103181;NM_054040	Tulp4	chr17:6106	28.68	36.56	0.35	2.25E-003	2.01E-002	yes
XLOC_016283	NM_011079	Phkg1	chr5:13032	566.46	721.95	0.35	7.20E-003	4.92E-002	yes
XLOC_006897	NM_007395	Acvr1b	chr15:1010	23.72	30.22	0.35	2.20E-003	1.98E-002	yes
XLOC_010056	NM_008960	Pten	chr19:3283	6.01	7.66	0.35	2.30E-003	2.04E-002	yes
XLOC_021255	NM_021395	Hyou1	chr9:44187	13.70	17.45	0.35	5.05E-003	3.77E-002	yes
XLOC_002948	NM_009427	Tob1	chr11:9407	23.54	29.98	0.35	2.30E-003	2.04E-002	yes
XLOC_019001	NM_001190974;NM_001190¢	Axl	chr7:26541	24.48	31.14	0.35	2.30E-003	2.04E-002	yes
XLOC_021522	NM_024291	Ky	chr9:1024(	173.19	220.22	0.35	3.20E-003	2.61E-002	yes
XLOC_009122	NM_011218	Ptprs	chr17:5655	4.57	5.81	0.35	2.55E-003	2.20E-002	yes
XLOC_011417	NM_178111	Trp53inp2	chr2:15520	530.82	674.22	0.35	6.55E-003	4.56E-002	yes
XLOC_001005	NM_011590	Timm17a	chr1:13719	142.30	180.64	0.34	1.80E-003	1.70E-002	yes
XLOC_018381	NM_133947	Numa1	chr7:10911	72.03	91.43	0.34	2.45E-003	2.14E-002	yes
XLOC_002810	NM_008850	Pitpna	chr11:7540	70.53	89.33	0.34	2.50E-003	2.17E-002	yes
XLOC_015219	NM_028431	Pmpcb	chr5:21242	118.84	150.48	0.34	1.75E-003	1.66E-002	yes
XLOC_007436	NM_026666	Ubn1	chr16:5050	7.00	8.86	0.34	4.45E-003	3.40E-002	yes
XLOC_014252	NM_008254	Hmgcl	chr4:13550	56.94	72.05	0.34	5.75E-003	4.16E-002	yes
XLOC_009340	NM_001083334;NM_009668	Bin1	chr18:3253	174.50	220.57	0.34	5.20E-003	3.86E-002	yes
XLOC_021390	NM_173385	Cilp	chr9:65112	37.13	46.90	0.34	3.80E-003	3.01E-002	yes
XLOC_016196	NM_175403	Mlec	chr9:11559	48.86	61.70	0.34	2.50E-003	2.17E-002	yes
XLOC_010512	NM_016860	Actr1a	chr19:4645	43.86	55.35	0.34	3.90E-003	3.08E-002	yes
XLOC_002586	NM_173753	Fnip1	chr11:5425	11.45	14.43	0.33	3.70E-003	2.95E-002	yes
XLOC_007068	NM_153178	Eif2c2	chr15:7292	9.40	11.84	0.33	2.65E-003	2.27E-002	yes
XLOC_002221	NM_008657	Myf6	chr10:1069	78.28	98.58	0.33	4.10E-003	3.22E-002	yes
XLOC_012848	NM_001243065	Cct3	chr3:88101	83.38	104.99	0.33	3.70E-003	2.95E-002	yes
XLOC_010265	NM_001110504;NM_007600	Capn1	chr19:5988	64.36	81.02	0.33	3.65E-003	2.92E-002	yes
XLOC_004053	NM_010756	Mafg	chr11:1204	11.23	14.14	0.33	6.15E-003	4.35E-002	yes
XLOC_015946	NM_011715	Wdr1	chr5:38918	12.30	15.47	0.33	4.40E-003	3.38E-002	yes
XLOC_016132	NM_028876	Tmed5	chr5:10855	3.05	3.83	0.33	4.90E-003	3.68E-002	yes
XLOC_009163	NM_001033340	Lrrc30	chr17:6798	100.68	126.44	0.33	3.15E-003	2.58E-002	yes
XLOC_006899	NM_010444	Nr4a1	chr15:1010	66.86	83.96	0.33	3.40E-003	2.74E-002	yes
XLOC_011480	NM_018753	Ywhab	chr2:16382	11.56	14.51	0.33	4.55E-003	3.47E-002	yes
XLOC_021507	NM_015827	Copb2	chr9:98464	58.47	73.37	0.33	5.30E-003	3.93E-002	yes
XLOC_005495	NM_025828	Lman2	chr13:5544	42.43	53.23	0.33	3.15E-003	2.58E-002	yes
XLOC_019923	NM_001113517;NM_001113!	Arhgef7	chr8:11728	68.00	85.31	0.33	5.60E-003	4.09E-002	yes
XLOC_009933	NM_026007	Eef1g	chr19:9041	432.80	542.94	0.33	5.40E-003	3.98E-002	yes
XLOC_013480	NM_019914	Mllt11	chr3:95022	28.64	35.92	0.33	4.35E-003	3.36E-002	yes
XLOC_012855	NM_001198911;NM_001198¢	Arhgef2	chr3:8842(	28.25	35.39	0.33	6.85E-003	4.72E-002	yes
XLOC_006780	NM_177821	Ep300	chr15:8141	9.92	12.42	0.32	5.10E-003	3.80E-002	yes
XLOC_011288	NM_011170	Prnp	chr2:13173	54.53	68.27	0.32	3.60E-003	2.88E-002	yes
XLOC_009698	NM_008306	Ndst1	chr18:6084	54.40	68.09	0.32	5.75E-003	4.16E-002	yes
XLOC_020820	NM_001013380	Dync1li2	chr8:10694	15.23	19.06	0.32	4.25E-003	3.30E-002	yes
XLOC_019369	NM_029614	Prss23	chr7:96656	16.61	20.77	0.32	6.05E-003	4.29E-002	yes
XLOC_003533	NM_009089	Polr2a	chr11:6954	10.37	12.96	0.32	4.45E-003	3.40E-002	yes
XLOC_022652	NM_010833	Msn	chrX:93291	50.67	63.29	0.32	5.75E-003	4.16E-002	yes
XLOC_003026	NM_010517	Igfbp4	chr11:9890	69.34	86.54	0.32	6.30E-003	4.43E-002	yes
XLOC_004775	NM_026681	Ccdc88c	chr12:1021	15.63	19.51	0.32	6.65E-003	4.61E-002	yes
XLOC_009284	NM_001081963	9430020K01Rik	chr18:4634	16.89	21.08	0.32	6.35E-003	4.46E-002	yes
XLOC_020433	NM_001037877;NM_001037¢	Tcf25	chr8:12589	184.17	229.68	0.32	6.05E-003	4.29E-002	yes
XLOC_003221	NM_026272	Narf	chr11:1210	64.51	80.38	0.32	4.10E-003	3.22E-002	yes
XLOC_005709	NM_010887	Ndufs4	chr13:1150	156.70	195.16	0.32	5.60E-003	4.09E-002	yes
XLOC_006652	NM_025736	Ttc35	chr15:4330	79.84	99.39	0.32	5.90E-003	4.23E-002	yes
XLOC_005081	NM_001081425	Rbm24	chr13:4651	29.75	37.02	0.32	6.55E-003	4.56E-002	yes
XLOC_022188	NM_145619	Parp3	chr9:10637	42.44	52.78	0.31	4.40E-003	3.38E-002	yes
XLOC_018718	NM_133655	Cd81	chr7:15021	139.56	173.37	0.31	4.85E-003	3.65E-002	yes
XLOC_011670	NM_146116	Tubb2c	chr2:25074	216.40	268.74	0.31	4.95E-003	3.71E-002	yes
XLOC_003952	NM_153145	Abca8a	chr11:1098	16.19	20.11	0.31	7.00E-003	4.80E-002	yes
XLOC_021098	NM_019798;NM_183408	Pde4a	chr9:2097(	13.13	16.29	0.31	5.40E-003	3.98E-002	yes
XLOC_002640	NM_025757	4933439F18Rik	chr11:6023	51.80	64.02	0.31	5.90E-003	4.23E-002	yes
XLOC_003856	NM_019795	Dnajc7	chr11:1004	63.82	78.86	0.31	7.35E-003	4.98E-002	yes
XLOC_004923	NM_172585	Larp4b	chr13:9093	15.43	18.99	0.30	7.00E-003	4.80E-002	yes
XLOC_018209	NM_153057	Nomo1	chr7:53289	51.65	42.07	-0.30	7.00E-003	4.80E-002	yes
XLOC_003716	NM_001042541;NM_009648	Akap1	chr11:8869	26.10	21.18	-0.30	7.30E-003	4.96E-002	yes
XLOC_020025	NM_025869	Dusp26	chr8:3220(	201.79	163.33	-0.31	7.10E-003	4.86E-002	yes
XLOC_003295	NM_173752	1110067D22Rik	chr11:2072	20.54	16.62	-0.31	7.35E-003	4.98E-002	yes
XLOC_002117	NM_021462	Mknk2	chr10:8012	371.35	300.14	-0.31	6.70E-003	4.64E-002	yes
XLOC_022087	NM_001081490;NM_023605	Fbxo9	chr9:77929	78.93	63.51	-0.31	5.85E-003	4.22E-002	yes
XLOC_006178	NM_011299	Rps6ka2	chr17:7374	56.23	45.24	-0.31	6.30E-003	4.43E-002	yes
XLOC_021966	NM_144784	Acat1	chr9:53388	163.83	131.69	-0.31	6.40E-003	4.48E-002	yes
XLOC_001462	NM_020561	Smpdl3a	chr10:5751	117.32	94.09	-0.32	5.20E-003	3.86E-002	yes
XLOC_022202	NM_001199217;NM_001199;	Slc38a3	chr9:10755	109.99	88.11	-0.32	4.80E-003	3.62E-002	yes
XLOC_015965	NM_008904;NR_027710	Ppargc1a	chr5:51845	17.57	14.07	-0.32	5.70E-003	4.14E-002	yes
XLOC_019706	NM_016978	Oat	chr7:13974	256.35	205.13	-0.32	4.45E-003	3.40E-002	yes
XLOC_007804	NM_001161775;NM_013607	Myh11	chr16:1419	54.80	43.74	-0.33	4.60E-003	3.50E-002	yes
XLOC_001825	NM_008398	Itga7	chr10:1283	74.63	59.56	-0.33	3.50E-003	2.81E-002	yes
XLOC_019408	NM_001163182;NM_001163;	Plekhb1	chr7:10779	61.85	49.30	-0.33	5.30E-003	3.93E-002	yes
XLOC_002725	NM_026017	Ctdnep1	chr11:6978	238.98	190.39	-0.33	7.30E-003	4.96E-002	yes
XLOC_021367	NM_028283	Uaca	chr9:60642	215.55	171.69	-0.33	5.55E-003	4.08E-002	yes
XLOC_005131	NM_145975	Ddx46	chr13:5573	10.44	8.31	-0.33	4.00E-003	3.15E-002	yes

XLOC_014470	NM_001033225	Pnrc1	chr4:33332	70.66	56.22	-0.33	4.35E-003	3.36E-002	yes
XLOC_014418	NM_172417	2310042D19Rik	chr4:15559	312.70	248.01	-0.33	5.60E-003	4.09E-002	yes
XLOC_004611	NM_013562	Ifrd1	chr12:4092	38.15	30.24	-0.34	7.00E-003	4.80E-002	yes
XLOC_000473	NM_010629	Kifap3	chr1:16570	7.41	5.87	-0.34	7.35E-003	4.98E-002	yes
XLOC_010013	NM_013467	Aldh1a1	chr19:2067	131.71	104.34	-0.34	2.65E-003	2.27E-002	yes
XLOC_006688	NM_001081409	Phf2011	chr15:6640	14.32	11.34	-0.34	4.40E-003	3.38E-002	yes
XLOC_000993	NM_054077	Prelp	chr1:13580	48.46	38.27	-0.34	3.70E-003	2.95E-002	yes
XLOC_007589	NM_001145884;NM_010580	Itgb5	chr16:3382	119.28	94.03	-0.34	2.20E-003	1.98E-002	yes
XLOC_001017	NM_021605	Nek7	chr1:14038	60.66	47.81	-0.34	3.25E-003	2.65E-002	yes
XLOC_016901	NM_144799	Lmcd1	chr6:11222	313.29	246.73	-0.34	1.95E-003	1.80E-002	yes
XLOC_009520	NM_177470	Acaa2	chr18:7493	351.58	276.73	-0.35	2.55E-003	2.20E-002	yes
XLOC_018700	NM_001163689;NM_025802	Pnpla2	chr7:14864	383.64	301.84	-0.35	2.70E-003	2.30E-002	yes
XLOC_007757	NM_026508	Trap1	chr16:4037	214.61	168.63	-0.35	1.25E-003	1.28E-002	yes
XLOC_022042	NM_028974	Kbtbd13	chr9:65236	29.54	23.18	-0.35	5.20E-003	3.86E-002	yes
XLOC_013580	NM_010358	Gstm1	chr3:10781	261.80	205.45	-0.35	2.25E-003	2.01E-002	yes
XLOC_007049	NM_144846	Fam49b	chr15:6376	13.84	10.86	-0.35	6.75E-003	4.67E-002	yes
XLOC_018053	NM_016772	Ech1	chr7:29610	326.18	255.29	-0.35	1.60E-003	1.55E-002	yes
XLOC_005451	NM_001199304;NM_0011993	Atxn1	chr13:4564	3.80	2.97	-0.35	1.40E-003	1.40E-002	yes
XLOC_017389	NM_146169	Paip2b	chr6:83756	102.19	79.76	-0.36	1.20E-003	1.24E-002	yes
XLOC_020951	NM_053207	Egln1	chr8:12743	86.57	67.56	-0.36	3.10E-003	2.56E-002	yes
XLOC_019725	NM_001045483;NM_027115	Mapklip1	chr7:14602	28.19	21.99	-0.36	7.25E-003	4.94E-002	yes
XLOC_022168	NM_001134426;NM_0011344	Cdv3	chr9:10325	119.92	93.47	-0.36	3.40E-003	2.74E-002	yes
XLOC_005424	NM_001033167	Slc22a23	chr13:3427	13.36	10.41	-0.36	4.85E-003	3.65E-002	yes
XLOC_003939	NM_145823	Pitpnc1	chr11:1070	12.35	9.61	-0.36	1.55E-003	1.51E-002	yes
XLOC_011762	NM_001164357;NM_0011643	Slc25a25	chr2:32270	69.27	53.77	-0.37	5.80E-003	4.19E-002	yes
XLOC_012426	NM_009373	Tgm2	chr2:15794	44.22	34.31	-0.37	1.30E-003	1.32E-002	yes
XLOC_005262	NM_011056	Pde4d	chr13:1094	62.23	48.22	-0.37	1.55E-003	1.51E-002	yes
XLOC_010963	NM_080558	Ssfa2	chr2:79475	7.99	6.19	-0.37	4.75E-003	3.60E-002	yes
XLOC_001360	NM_001025392;NM_0010251	Bclaf1	chr10:2003	8.75	6.77	-0.37	2.05E-003	1.88E-002	yes
XLOC_001868	NM_145418	BC013529	chr10:7487	145.89	112.80	-0.37	9.50E-004	1.03E-002	yes
XLOC_005272	NM_172594	Dhx29	chr13:1137	32.29	24.96	-0.37	2.95E-003	2.45E-002	yes
XLOC_015225	NM_001161800;NM_026448	Klhl7	chr5:23606	9.82	7.59	-0.37	1.65E-003	1.59E-002	yes
XLOC_015892	NM_178878	Hadha	chr5:30431	484.93	374.76	-0.37	2.20E-003	1.98E-002	yes
XLOC_008096	NM_001099738;NM_138664	Dnajc28	chr16:9161	45.13	34.87	-0.37	2.20E-003	1.98E-002	yes
XLOC_018350	NM_028410	Prkrir	chr7:10585	50.17	38.70	-0.37	6.00E-004	7.04E-003	yes
XLOC_005194	NM_138953	Ell2	chr13:7584	13.54	10.44	-0.37	6.00E-004	4.27E-003	yes
XLOC_004586	NM_001161410;NM_0011614	Ttc15	chr12:2937	21.23	16.37	-0.38	6.50E-003	4.54E-002	yes
XLOC_008592	NM_001190846;NM_020005	Kat2b	chr17:5370	18.82	14.50	-0.38	1.15E-003	1.20E-002	yes
XLOC_006545	-	-	chr14:5151	24.29	18.71	-0.38	1.20E-003	1.24E-002	yes
XLOC_000682	NM_011200;NR_002688	Ptp4a1	chr1:30997	50.35	38.76	-0.38	1.20E-003	1.24E-002	yes
XLOC_003690	NM_177564	Dhrs11	chr11:8463	22.26	17.10	-0.38	3.15E-003	2.58E-002	yes
XLOC_007036	NM_175212	Tmem65	chr15:5861	81.22	62.40	-0.38	1.05E-003	1.12E-002	yes
XLOC_019689	NM_009943	Cox6a2	chr7:13531	1'435.96	1'102.64	-0.38	2.95E-003	2.45E-002	yes
XLOC_004373	NM_028105	Adck1	chr12:8959	48.29	37.07	-0.38	2.35E-003	2.08E-002	yes
XLOC_004738	NM_009368	Tgfb3	chr12:8739	11.44	8.78	-0.38	8.50E-004	9.41E-003	yes
XLOC_008367	NM_023734	Pi16	chr17:2945	27.46	21.04	-0.38	2.75E-003	2.32E-002	yes
XLOC_021840	NM_001029838;NM_148950	Pknox2	chr9:36698	11.32	8.66	-0.39	1.85E-003	1.73E-002	yes
XLOC_013487	NM_144899	Adamtsl4	chr3:95480	11.38	8.71	-0.39	3.20E-003	2.61E-002	yes
XLOC_011624	NM_001110228;NM_0011102	Celf2	chr2:64607	12.15	9.29	-0.39	7.50E-004	8.46E-003	yes
XLOC_003614	NM_001164223;NM_026653	Rpa1	chr11:7511	96.49	73.75	-0.39	6.00E-004	7.04E-003	yes
XLOC_005996	NM_027764	Rcbtb1	chr14:5982	7.74	5.90	-0.39	4.80E-003	3.62E-002	yes
XLOC_004724	NM_134042	Aldh6a1	chr12:8575	67.47	51.48	-0.39	8.00E-004	8.94E-003	yes
XLOC_010513	NM_019718	Arl3	chr19:4660	86.32	65.86	-0.39	2.75E-003	2.32E-002	yes
XLOC_012744	NM_019739	Foxo1	chr3:52072	27.74	21.16	-0.39	2.70E-003	2.30E-002	yes
XLOC_006874	NM_018786	Prpf40b	chr15:9912	36.58	27.89	-0.39	6.50E-003	4.54E-002	yes
XLOC_014234	NM_001039048	Trim63	chr4:13387	239.42	182.50	-0.39	7.00E-004	8.00E-003	yes
XLOC_008788	NM_153791	Flywch1	chr17:2389	35.81	27.29	-0.39	2.95E-003	2.45E-002	yes
XLOC_007576	NM_001110147;NM_016788	Tnk2	chr16:3264	67.04	51.07	-0.39	3.50E-004	4.67E-003	yes
XLOC_022145	NM_138756	Slc25a36	chr9:96975	4.89	3.73	-0.39	2.25E-003	2.01E-002	yes
XLOC_021304	NM_175535	Arhgap20	chr9:51573	4.94	3.75	-0.39	1.05E-003	1.12E-002	yes
XLOC_010459	NM_001034962;NM_0010349	Sorbs1	chr19:4036	69.26	52.55	-0.40	5.00E-004	6.18E-003	yes
XLOC_010482	NM_010324	Got1	chr19:4357	1'385.11	1'050.70	-0.40	2.80E-003	2.36E-002	yes
XLOC_004047	NM_026814	Dysfip1	chr11:1204	78.71	59.70	-0.40	2.75E-003	2.32E-002	yes
XLOC_017601	NR_040265;NR_040266;NR_	2310001H17Rik	chr6:12918	60.63	45.98	-0.40	6.05E-003	4.29E-002	yes
XLOC_018324	NM_181407	Me3	chr7:96781	45.82	34.74	-0.40	4.50E-004	5.73E-003	yes
XLOC_023289	NM_153319	Amot	chrX:14188	13.68	10.34	-0.40	3.50E-004	4.67E-003	yes
XLOC_020756	NM_001044744;NM_008097	Gcdh	chr8:87396	42.45	32.10	-0.40	1.45E-003	1.43E-002	yes
XLOC_015012	NM_001081355	Prdm2	chr4:14269	29.29	22.13	-0.40	4.50E-004	5.73E-003	yes
XLOC_016391	NM_028379	Zdhhc4	chr5:14407	25.04	18.91	-0.41	5.35E-004	3.95E-002	yes
XLOC_018373	NM_019990	Stard10	chr7:10846	80.92	61.00	-0.41	9.00E-004	9.88E-003	yes
XLOC_012856	NM_028814	2810403A07Rik	chr3:88489	23.57	17.76	-0.41	2.15E-003	1.95E-002	yes
XLOC_004385	NM_145448	9030617O03Rik	chr12:1020	18.86	14.20	-0.41	8.50E-004	9.41E-003	yes
XLOC_003266	NM_026538	Ddx56	chr11:6157	26.58	20.02	-0.41	2.95E-003	2.45E-002	yes
XLOC_011078	NM_009023	Rapsn	chr2:90875	47.93	36.08	-0.41	2.70E-003	2.30E-002	yes
XLOC_000362	NM_173865	Slc41a1	chr1:13372	60.92	45.77	-0.41	2.50E-004	3.51E-003	yes
XLOC_015584	NM_145564	Fbxo21	chr5:11842	16.62	12.47	-0.41	6.00E-003	4.27E-002	yes
XLOC_003036	NM_011508	Eif1	chr11:1001	571.82	428.44	-0.42	4.00E-004	5.20E-003	yes
XLOC_012308	NM_001042671;NM_0010426	Gpcpd1	chr2:13235	223.96	167.74	-0.42	6.50E-004	7.51E-003	yes
XLOC_000810	NM_001005423	Mreg	chr1:72205	16.94	12.68	-0.42	2.00E-002	2.93E-003	yes
XLOC_019368	NM_028343	Tmem135	chr7:96288	11.91	8.92	-0.42	1.40E-003	1.40E-002	yes
XLOC_000604	NM_011935	Esrrg	chr1:18982	14.04	10.49	-0.42	7.00E-004	8.00E-003	yes
XLOC_021469	NM_199195	Bckdhb	chr9:83842	16.65	12.43	-0.42	2.50E-003	2.17E-002	yes
XLOC_018102	NM_145633;NM_178263	Ankrd27	chr7:36371	17.57	13.12	-0.42	1.90E-003	1.77E-002	yes
XLOC_014056	NM_146150	Nrd1	chr4:10867	81.01	60.43	-0.42	3.45E-003	2.78E-002	yes
XLOC_010785	NM_001242407;NM_175392	Fam73b	chr2:30219	43.15	32.14	-0.42	1.70E-003	1.63E-002	yes
XLOC_020802	NM_134141	Ciapin1	chr8:97343	9.13	6.79	-0.43	3.40E-003	2.74E-002	yes
XLOC_002153	NM_010914	Nfyb	chr10:8221	11.99	8.92	-0.43	1.05E-003	1.12E-002	yes
XLOC_003262	NM_001174053;NM_0011740	Camk2b	chr11:5869	273.75	203.54	-0.43	5.00E-005	8.65E-004	yes
XLOC_007058	NM_008681	Ndrg1	chr15:6676	41.11	30.56	-0.43	4.00E-004	5.20E-003	yes
XLOC_004323	NM_001165256;NM_030246	Dcaf4	chr12:8486	40.13	29.82	-0.43	2.05E-003	1.88E-002	yes
XLOC_005854	NM_001033988;NM_019744	Ncoa4	chr14:3297	28.94	21.49	-0.43	5.00E-005	8.65E-004	yes
XLOC_012497	NM_015731	Atp9a	chr2:16845	38.64	28.65	-0.43	5.50E-003	6.64E-002	yes
XLOC_001448	NM_153786	Vgll2	chr10:5174	83.58	61.97	-0.43	6.00E-004	7.04E-003	yes
XLOC_021422	NM_146224	Zfp280d	chr9:72122	12.12	8.98	-0.43	2.40E-002	2.10E-002	yes
XLOC_002826	NM_139128;NM_139129;NM_	Coro6	chr11:7727	247.16	183.06	-0.43	1.60E-003	1.55E-002	yes
XLOC_011332	NM_001033298	Plk1s1	chr2:14668	28.68	21.21	-0.44	5.50E-004	6.64E-003	yes
XLOC_015549	NM_001010825	Ficd	chr5:11418	3.28	2.43	-0.44	6.30E-003	4.43E-002	yes
XLOC_003793	NM_145434	Nr1d1	chr11:9862	78.83	58.23	-0.44	1.50E-003	2.26E-003	yes
XLOC_009458	NM_001134697	Ctxn3	chr18:5762	29.42	21.73	-0.44	1.50E-003	1.47E-002	yes

XLOC_015325	NM_145920	Evc2	chr5:37729	9.90	7.30	-0.44	6.40E-003	4.48E-002	yes
XLOC_002372	-	-	chr10:5299	11.28	8.32	-0.44	2.40E-003	2.10E-002	yes
XLOC_011177	NM_019826	Ivd	chr2:11868	76.81	56.57	-0.44	3.50E-003	4.67E-003	yes
XLOC_022776	NM_023270	Rnf128	chrX:13614	10.25	7.54	-0.44	4.05E-003	3.19E-002	yes
XLOC_003395	NM_025319	0610009B22Rik	chr11:5149	35.78	26.31	-0.44	4.25E-003	3.30E-002	yes
XLOC_007005	NM_175456	Abra	chr15:4169	190.10	139.72	-0.44	4.00E-003	5.20E-003	yes
XLOC_014721	NM_025590	Acot11	chr4:10640	8.48	6.22	-0.45	4.25E-003	3.30E-002	yes
XLOC_013185	NM_001163302;NM_001163	Pxmp3	chr3:55601	19.02	13.95	-0.45	7.00E-002	8.00E-003	yes
XLOC_000288	NM_175118	Dusp28	chr1:94803	36.23	26.55	-0.45	2.70E-003	2.30E-002	yes
XLOC_007965	NM_010818	Cd200	chr16:4538	9.94	7.28	-0.45	6.00E-004	7.04E-003	yes
XLOC_001094	NM_001025570;NM_011127	Prrx1	chr1:16517	30.37	22.25	-0.45	5.00E-005	8.65E-004	yes
XLOC_021479	NM_001142943;NM_001163	Zfp949	chr9:88442	11.80	8.63	-0.45	6.60E-003	4.59E-002	yes
XLOC_021503	NM_001184706;NM_001184	Tfdp2	chr9:96096	17.86	13.06	-0.45	5.00E-005	8.65E-004	yes
XLOC_018507	NM_009667	Ampd3	chr7:11791	6.33	4.62	-0.46	5.45E-003	4.02E-002	yes
XLOC_010494	NM_001033343	Sec31b	chr19:4459	7.11	5.17	-0.46	1.00E-004	1.63E-003	yes
XLOC_022862	NM_026853	Asb11	chrX:16087	147.55	107.35	-0.46	1.00E-004	1.63E-003	yes
XLOC_021436	NM_001113283;NM_153584	BC031353	chr9:74800	18.76	13.63	-0.46	4.00E-004	5.20E-003	yes
XLOC_005682	NM_001024955;NM_001077	Pik3r1	chr13:1024	9.87	7.16	-0.46	3.50E-004	4.67E-003	yes
XLOC_000752	NM_133728	Asnsd1	chr1:53401	142.65	103.43	-0.46	5.00E-005	8.65E-004	yes
XLOC_017744	-	-	chr6:12088	10.32	7.47	-0.47	6.00E-004	7.04E-003	yes
XLOC_014020	NM_001177980;NM_001179	Pde4b	chr4:10192	83.35	60.29	-0.47	1.00E-004	1.63E-003	yes
XLOC_016644	NM_029555	Gstk1	chr6:42195	46.69	33.73	-0.47	1.05E-003	1.12E-002	yes
XLOC_022672	NM_018789	Foxo4	chrX:98449	80.50	58.00	-0.47	5.00E-005	8.65E-004	yes
XLOC_005328	NM_001013786	Zfp187	chr13:2153	15.59	11.21	-0.48	1.50E-004	2.26E-003	yes
XLOC_014302	NM_013868	Hspb7	chr4:14097	410.02	294.82	-0.48	5.00E-005	8.65E-004	yes
XLOC_008348	NM_181413	Anks1	chr17:2804	13.87	9.96	-0.48	3.50E-004	4.67E-003	yes
XLOC_018221	NM_001111016;NM_175272	Nav2	chr7:56214	6.36	4.57	-0.48	5.00E-005	8.65E-004	yes
XLOC_013727	-	-	chr3:21973	9.96	7.15	-0.48	2.90E-003	2.42E-002	yes
XLOC_010501	NM_013907	Fbxw4	chr19:4563	44.23	31.72	-0.48	6.30E-003	4.43E-002	yes
XLOC_020028	NM_001012517;NM_134161	Fut10	chr8:32297	12.65	9.04	-0.48	4.65E-003	3.53E-002	yes
XLOC_009532	NM_013666;NM_153124	St8sia5	chr18:7742	65.83	46.91	-0.49	1.50E-004	2.26E-003	yes
XLOC_013100	NM_023196;NM_183423	Pla2g12a	chr3:12956	72.43	51.59	-0.49	5.00E-005	8.65E-004	yes
XLOC_010258	NR_003513	Neat1	chr19:5842	813.04	577.85	-0.49	1.50E-004	2.26E-003	yes
XLOC_014970	NM_026880	Pink1	chr4:13786	712.96	506.43	-0.49	1.00E-004	1.63E-003	yes
XLOC_006428	NM_007940	Ephx2	chr14:6670	38.95	27.56	-0.50	1.00E-004	1.63E-003	yes
XLOC_014469	NM_001034867	Pm20d2	chr4:33257	46.93	33.10	-0.50	5.00E-005	8.65E-004	yes
XLOC_003059	NM_009675	Aoc3	chr11:1011	13.37	9.43	-0.50	2.50E-004	3.51E-003	yes
XLOC_015538	NM_001081235	Mn1	chr5:11184	54.29	38.27	-0.50	5.00E-005	8.65E-004	yes
XLOC_001225	NM_009367	Tgfb2	chr1:18844	4.40	3.10	-0.50	1.00E-004	1.63E-003	yes
XLOC_014264	NM_009523	Wnt4	chr4:13683	23.33	16.44	-0.51	1.50E-004	2.26E-003	yes
XLOC_003159	NM_001005608;NM_133663	Itgb4	chr11:1158	13.37	9.41	-0.51	1.30E-003	1.32E-002	yes
XLOC_001290	-	-	chr1:12154	8.10	5.70	-0.51	6.00E-004	7.04E-003	yes
XLOC_015141	-	-	chr4:94833	10.03	7.04	-0.51	1.85E-003	1.73E-002	yes
XLOC_020676	NM_001122830;NM_178771	Klhl26	chr8:72974	10.31	7.23	-0.51	3.25E-003	2.65E-002	yes
XLOC_017183	NM_178625	Tmem209	chr6:30431	11.10	7.78	-0.51	2.20E-003	1.98E-002	yes
XLOC_021439	NM_001081322	Myo5c	chr9:75079	9.70	6.79	-0.51	2.00E-004	2.93E-003	yes
XLOC_010475	NM_018780	Sfrp5	chr19:4227	20.89	14.62	-0.51	4.45E-003	3.40E-002	yes
XLOC_006209	NM_027949	Phf7	chr14:3205	3.63	2.54	-0.52	1.75E-003	1.66E-002	yes
XLOC_001601	NM_007705	Cirbp	chr10:7963	10.84	7.59	-0.52	3.00E-004	4.11E-003	yes
XLOC_021270	NM_022004	Fxyd6	chr9:45178	52.10	36.46	-0.52	5.00E-005	8.65E-004	yes
XLOC_001055	NM_008209	Mr1	chr1:15697	18.18	12.72	-0.52	1.00E-004	1.63E-003	yes
XLOC_010214	NM_134148	Carns1	chr19:4164	34.70	24.26	-0.52	5.00E-005	8.65E-004	yes
XLOC_003085	NM_025988	Acbd4	chr11:1029	19.08	13.34	-0.52	1.00E-003	1.08E-002	yes
XLOC_019382	NM_009381	Thrsp	chr7:10456	31.84	22.24	-0.52	2.20E-003	1.98E-002	yes
XLOC_014292	NM_008812	Padi2	chr4:14046	192.48	134.43	-0.52	5.00E-005	8.65E-004	yes
XLOC_017338	NM_007836	Gadd45a	chr6:66985	30.62	21.38	-0.52	1.50E-004	2.26E-003	yes
XLOC_014224	NM_016693	Map3k6	chr4:13279	7.96	5.56	-0.52	4.10E-003	3.22E-002	yes
XLOC_020153	NM_011977	Slc27a1	chr8:74092	82.41	57.51	-0.52	5.00E-005	8.65E-004	yes
XLOC_018992	NM_001039507;NM_010719	Lipe	chr7:26164	16.86	11.75	-0.52	9.00E-004	9.88E-003	yes
XLOC_000442	NM_008131	Glul	chr1:15574	46.22	32.18	-0.52	5.00E-005	8.65E-004	yes
XLOC_015456	NM_181728	Art3	chr5:92760	162.36	112.95	-0.52	5.00E-005	8.65E-004	yes
XLOC_006947	NM_178748	Egflam	chr15:7156	25.36	17.64	-0.52	4.50E-003	5.73E-003	yes
XLOC_015868	NM_080444	Asb10	chr5:24038	131.34	91.24	-0.53	5.00E-005	8.65E-004	yes
XLOC_007206	NM_001163472;NM_019823	Cyp2d22	chr15:8220	32.08	22.28	-0.53	3.00E-004	4.11E-003	yes
XLOC_009541	NM_001025245;NM_001025	Mbp	chr18:8264	62.31	43.25	-0.53	5.00E-005	8.65E-004	yes
XLOC_013020	NM_009196	Slc16a1	chr3:10444	15.73	10.92	-0.53	5.00E-005	8.65E-004	yes
XLOC_000272	NM_001168392;NM_016894	Ramp1	chr1:93076	30.80	21.36	-0.53	1.00E-004	1.63E-003	yes
XLOC_020184	NM_001083906	Nr3c2	chr8:79426	6.90	4.78	-0.53	2.45E-003	2.14E-002	yes
XLOC_010799	NM_144886	Exosc2	chr2:31526	9.22	6.36	-0.54	3.70E-003	2.95E-002	yes
XLOC_018349	NM_001113379	Lrrc32	chr7:10564	14.22	9.76	-0.54	2.10E-003	1.91E-002	yes
XLOC_002479	NM_030093	Snrnp25	chr11:3210	42.21	28.84	-0.55	4.00E-004	5.20E-003	yes
XLOC_009722	NM_001037294	Alpk2	chr18:6542	44.66	30.51	-0.55	5.00E-005	8.65E-004	yes
XLOC_003906	NM_152813	Plcd3	chr11:1029	9.58	6.54	-0.55	4.90E-003	3.68E-002	yes
XLOC_018022	NM_019412;NM_198048	Prx	chr7:28284	16.55	11.27	-0.55	5.00E-005	6.18E-003	yes
XLOC_021542	NM_011876	Twf2	chr9:10610	230.10	156.61	-0.56	5.00E-005	8.65E-004	yes
XLOC_017745	-	-	chr6:12090	6.70	4.55	-0.56	2.75E-003	2.32E-002	yes
XLOC_020712	NM_027485	Med26	chr8:75018	15.00	10.17	-0.56	3.60E-003	2.88E-002	yes
XLOC_006830	NM_145478	Pim3	chr15:8869	66.02	44.69	-0.56	5.00E-005	8.65E-004	yes
XLOC_021555	NM_175486	6430571L13Rik	chr9:10724	34.11	23.07	-0.56	5.00E-005	8.65E-004	yes
XLOC_017681	NM_008492	Ldhb	chr6:14243	250.47	169.31	-0.56	5.00E-005	8.65E-004	yes
XLOC_007838	NM_138583	D16H22S680E	chr16:1830	61.19	41.28	-0.57	5.00E-005	8.65E-004	yes
XLOC_004399	NM_001177841;NM_026580	Otub2	chr12:1046	5.88	3.96	-0.57	2.10E-003	1.91E-002	yes
XLOC_001423	NM_001013370;NM_001162	Sesn1	chr10:4153	8.88	5.97	-0.57	1.75E-003	1.66E-002	yes
XLOC_003704	NM_025638	Gdpd1	chr11:8684	5.23	3.52	-0.57	1.75E-003	1.66E-002	yes
XLOC_013121	NM_030143	Ddit4l	chr3:13728	158.82	106.52	-0.58	5.00E-005	8.65E-004	yes
XLOC_023215	NM_001001176;NM_001167	Taf9b	chrX:10340	5.83	3.90	-0.58	7.50E-004	8.46E-003	yes
XLOC_008538	NM_013737	Pla2g7	chr17:4370	102.65	68.48	-0.58	5.00E-005	8.65E-004	yes
XLOC_015553	NM_001040691;NM_011677	Ung	chr5:11458	8.39	5.59	-0.58	3.20E-003	2.61E-002	yes
XLOC_017052	NM_177687	Crebl2	chr6:13478	9.05	6.01	-0.59	1.70E-003	1.63E-002	yes
XLOC_019784	NR_002452	Nctc1	chr7:14973	173.75	115.49	-0.59	5.00E-005	8.65E-004	yes
XLOC_016873	NM_172730	C130022K22Rik	chr6:91828	6.33	4.20	-0.59	4.25E-003	3.30E-002	yes
XLOC_002604	NM_019440	Irgm2	chr11:5802	6.78	4.50	-0.59	1.45E-003	1.43E-002	yes
XLOC_011520	NM_009883	Cebpb	chr2:16751	87.32	57.77	-0.60	5.00E-005	8.65E-004	yes
XLOC_014364	NM_133753	Errfi1	chr4:15022	33.38	21.96	-0.60	5.00E-005	8.65E-004	yes
XLOC_017839	NM_022981	Zfp110	chr7:13420	15.40	10.13	-0.60	1.00E-004	1.63E-003	yes
XLOC_019275	NM_177893	Fan1	chr7:71491	9.88	6.49	-0.61	3.20E-003	2.61E-002	yes
XLOC_018474	NM_001163557;NM_008905	Ppfibp2	chr7:11473	19.19	12.60	-0.61	5.50E-003	6.64E-003	yes
XLOC_020925	NM_013914	Snai3	chr8:12497	8.59	5.63	-0.61	5.70E-003	4.14E-002	yes
XLOC_015073	NM_001081557;NM_001195	Camta1	chr4:15043	13.66	8.94	-0.61	2.50E-004	3.51E-003	yes

XLOC_012617	-	-	chr2:91091	6.66	4.34	-0.62	2.50E-004	3.51E-003	yes
XLOC_000947	NM_019432	Tmem37	chr1:12196	55.64	36.26	-0.62	5.00E-005	8.65E-004	yes
XLOC_005998	NM_145463	Shisa2	chr14:6024	50.26	32.73	-0.62	5.00E-005	8.65E-004	yes
XLOC_005717	NM_008710;NR_003544	Nnt	chr13:1201	43.00	28.00	-0.62	5.00E-005	8.65E-004	yes
XLOC_018199	NM_172418	Mamstr	chr7:52895	51.71	33.66	-0.62	2.55E-003	2.20E-002	yes
XLOC_016682	NM_173429	Zfp775	chr6:48563	9.65	6.28	-0.62	1.90E-003	1.77E-002	yes
XLOC_015329	NM_025281	Lyar	chr5:38611	25.53	16.60	-0.62	2.00E-004	2.93E-003	yes
XLOC_020439	NM_133955	Rhou	chr8:12617	22.26	14.47	-0.62	5.00E-005	8.65E-004	yes
XLOC_010440	NM_013468	Ankrd1	chr19:3618	25.50	16.54	-0.62	2.50E-004	3.51E-003	yes
XLOC_010442	NM_016854	Ppp1r3c	chr19:3680	319.50	207.27	-0.62	5.00E-005	8.65E-004	yes
XLOC_020858	NM_008706	Nqo1	chr8:10991	14.21	9.18	-0.63	5.00E-005	8.65E-004	yes
XLOC_004230	NM_029760	Nubpl	chr12:5319	12.96	8.35	-0.63	3.15E-003	2.58E-002	yes
XLOC_007067	NR_002864	Peg13	chr15:7242	6.29	4.04	-0.64	1.00E-003	1.08E-002	yes
XLOC_006195	NM_177111	Ccdc66	chr14:2824	4.98	3.20	-0.64	6.00E-004	7.04E-003	yes
XLOC_005106	NM_011817	Gadd45g	chr13:5194	136.17	87.39	-0.64	5.00E-005	8.65E-004	yes
XLOC_020636	NM_001009951	BC088983	chr8:59010	8.53	5.47	-0.64	5.40E-003	3.98E-002	yes
XLOC_003768	NM_198100	Tbkbp1	chr11:9699	13.49	8.66	-0.64	5.50E-004	6.64E-003	yes
XLOC_001100	NM_009721	Atp1b1	chr1:16623	186.68	119.58	-0.64	5.00E-005	8.65E-004	yes
XLOC_009815	-	-	chr18:7551	17.05	10.90	-0.64	4.15E-003	3.25E-002	yes
XLOC_016236	NM_178799	Acad12	chr5:12204	26.31	16.82	-0.65	5.00E-005	8.65E-004	yes
XLOC_008369	NM_008842	Pim1	chr17:2962	26.19	16.67	-0.65	5.00E-005	8.65E-004	yes
XLOC_015361	NM_029554	0610040J01Rik	chr5:64203	29.06	18.50	-0.65	1.50E-004	2.26E-003	yes
XLOC_007228	NM_001161628;NM_001161(	Efcab6	chr15:8369	10.16	6.44	-0.66	5.00E-005	8.65E-004	yes
XLOC_007833	NM_011172	Prodh	chr16:1807	8.83	5.59	-0.66	4.15E-003	3.25E-002	yes
XLOC_005684	NM_172592	Srek1	chr13:1045	12.78	8.03	-0.67	5.00E-005	8.65E-004	yes
XLOC_020313	NM_145604	D230025D16Rik	chr8:10774	22.05	13.85	-0.67	5.00E-005	8.65E-004	yes
XLOC_002603	NM_018738	Igtp	chr11:5801	13.93	8.74	-0.67	4.50E-004	5.73E-003	yes
XLOC_001661	NM_001013441;NM_183172	Ric8b	chr10:8438	38.32	24.03	-0.67	5.00E-005	8.65E-004	yes
XLOC_007420	-	-	chr15:1029	32.36	20.29	-0.67	5.00E-005	8.65E-004	yes
XLOC_007388	NM_021391	Ppp1r1a	chr15:1033	117.11	73.38	-0.67	5.00E-005	8.65E-004	yes
XLOC_018346	NM_011035	Pak1	chr7:10499	27.52	17.22	-0.68	5.00E-005	8.65E-004	yes
XLOC_018352	NM_001043355;NM_001048:	Mtap6	chr7:10641	13.67	8.55	-0.68	1.10E-003	1.16E-002	yes
XLOC_005202	NM_001042591	Arrdc3	chr13:8102	4.98	3.11	-0.68	5.00E-005	8.65E-004	yes
XLOC_008646	NM_030179;NM_175378	Clip4	chr17:7211	60.76	37.87	-0.68	5.00E-005	8.65E-004	yes
XLOC_011603	NM_009326	Tcea1	chr2:18141	7.72	4.79	-0.69	3.90E-003	3.08E-002	yes
XLOC_003978	NM_178035	Fads6	chr11:1151	13.92	8.63	-0.69	4.80E-003	3.62E-002	yes
XLOC_009115	NM_029796	Lrg1	chr17:5625	53.77	33.28	-0.69	5.00E-005	8.65E-004	yes
XLOC_011664	NM_001162485;NM_178408:	Arrdc1	chr2:24780	8.12	5.03	-0.69	4.35E-003	3.36E-002	yes
XLOC_002686	NM_001081250	Myh13	chr11:6714	13.86	8.57	-0.69	5.00E-005	8.65E-004	yes
XLOC_019393	NM_026384	Dgat2	chr7:10630	33.41	20.61	-0.70	5.00E-005	8.65E-004	yes
XLOC_009816	-	-	chr18:7551	11.16	6.88	-0.70	1.50E-004	2.26E-003	yes
XLOC_012933	NM_011281	Rorc	chr3:94176	94.52	58.15	-0.70	5.00E-005	8.65E-004	yes
XLOC_006617	NM_001034851;NM_025459	Fam134b	chr15:2577	28.46	17.46	-0.70	5.00E-005	8.65E-004	yes
XLOC_019286	NM_030101	Pgpep1l	chr7:75381	15.66	9.58	-0.71	3.35E-003	2.72E-002	yes
XLOC_004034	NM_001198785;NM_001198;	Aatk	chr11:1198	9.95	6.08	-0.71	3.50E-004	4.67E-003	yes
XLOC_009114	NM_001077348;NM_025874	Plin5	chr17:5625	28.68	17.49	-0.71	5.00E-005	8.65E-004	yes
XLOC_013002	NM_009814	Casq2	chr3:10189	62.71	38.10	-0.72	5.00E-005	8.65E-004	yes
XLOC_018267	NM_001199224	Agbl1	chr7:83374	22.10	13.42	-0.72	5.00E-005	8.65E-004	yes
XLOC_017496	NM_080639	Timp4	chr6:11508	63.91	38.51	-0.73	5.00E-005	8.65E-004	yes
XLOC_007031	NM_001042438;NM_009572	Zhx1	chr15:5787	13.40	8.06	-0.73	5.00E-005	8.65E-004	yes
XLOC_015484	NM_029270;NM_146161	Arhgap24	chr5:10291	32.84	19.69	-0.74	5.00E-005	8.65E-004	yes
XLOC_008873	NM_010220	Fkbp5	chr17:2853	32.48	19.45	-0.74	5.00E-005	8.65E-004	yes
XLOC_002305	NM_172259	Myl6b	chr10:1279	18.92	11.26	-0.75	4.00E-004	5.20E-003	yes
XLOC_003622	NM_177367	Gemin4	chr11:7602	8.20	4.88	-0.75	3.50E-004	4.67E-003	yes
XLOC_017352	NM_153778	Atoh8	chr6:72156	10.69	6.35	-0.75	5.50E-004	6.64E-003	yes
XLOC_018327	NM_001040085;NM_001040(	Sytl2	chr7:97497	7.00	4.16	-0.75	1.10E-003	1.16E-002	yes
XLOC_002605	NM_001040686;NM_182996	Zfp692	chr11:5812	11.20	6.62	-0.76	5.00E-005	8.65E-004	yes
XLOC_022924	NM_172778	Maob	chrX:16286	22.02	12.99	-0.76	5.00E-005	8.65E-004	yes
XLOC_005615	NM_134071	Ankrd32	chr13:7718	5.80	3.41	-0.76	5.00E-005	8.65E-004	yes
XLOC_006694	NM_001166388;NM_001166;	Ptp4a3	chr15:7355	845.06	496.02	-0.77	5.00E-005	8.65E-004	yes
XLOC_018201	NM_009800	Car11	chr7:52955	15.24	8.91	-0.78	7.00E-004	8.00E-003	yes
XLOC_016485	-	-	chr5:12358	6.67	3.89	-0.78	2.85E-003	2.39E-002	yes
XLOC_001315	-	-	chr1:19327	9.74	5.67	-0.78	1.50E-004	2.26E-003	yes
XLOC_004842	NM_010588	Jag2	chr12:1141	9.44	5.49	-0.78	5.00E-005	8.65E-004	yes
XLOC_001776	NM_009635	Avil	chr10:1264	3.21	1.86	-0.79	1.50E-004	2.26E-003	yes
XLOC_006826	NM_134096	Fam19a5	chr15:8745	11.89	6.89	-0.79	2.00E-004	2.93E-003	yes
XLOC_018515	NM_001243048;NM_007489	Arntl	chr7:12035	16.79	9.70	-0.79	5.00E-005	8.65E-004	yes
XLOC_021754	NM_001110309;NM_146221	Zfp426	chr9:20272	2.51	1.44	-0.80	5.00E-005	8.65E-004	yes
XLOC_010130	NM_178929	Kazald1	chr19:4515	24.50	14.06	-0.80	5.00E-005	8.65E-004	yes
XLOC_022278	NM_011724	Xirp1	chr19:11992	90.75	52.01	-0.80	5.00E-005	8.65E-004	yes
XLOC_007034	NM_177755	Klhl38	chr15:5814	47.58	27.12	-0.81	5.00E-005	8.65E-004	yes
XLOC_017378	NM_023547	Ino80b	chr6:83071	25.43	14.48	-0.81	5.00E-005	8.65E-004	yes
XLOC_011707	NM_026212	Agpat2	chr2:26449	7.58	4.31	-0.82	5.50E-003	4.05E-002	yes
XLOC_017124	NM_013743	Pdk4	chr6:54333	151.48	84.36	-0.84	5.00E-005	8.65E-004	yes
XLOC_018581	NM_001146347;NM_026884:	Fam57b	chr7:13396	152.34	84.70	-0.85	5.00E-005	8.65E-004	yes
XLOC_014579	NM_010637	Klf4	chr4:55540	24.86	13.81	-0.85	5.00E-005	8.65E-004	yes
XLOC_003315	NM_025740	Ccdc104	chr11:2912	8.18	4.53	-0.85	5.50E-004	6.64E-003	yes
XLOC_000397	NM_053106	Lmod1	chr1:13722	15.22	8.43	-0.85	5.00E-005	8.65E-004	yes
XLOC_002590	NM_001083929	Gpx3	chr11:5471	202.45	110.76	-0.87	5.00E-005	8.65E-004	yes
XLOC_015699	NM_001085387;NM_021611	Myl10	chr5:13716	25.45	13.82	-0.88	1.50E-004	2.26E-003	yes
XLOC_010215	NM_178650	Tbc1d10c	chr19:4184	8.29	4.49	-0.89	3.40E-003	2.74E-002	yes
XLOC_009653	NM_010197	Fgf1	chr18:3899	42.91	23.15	-0.89	5.00E-005	8.65E-004	yes
XLOC_015140	-	-	chr4:94832	8.53	4.59	-0.89	5.00E-005	8.65E-004	yes
XLOC_012351	NM_080575	Acss1	chr2:15044	10.91	5.86	-0.90	5.00E-005	8.65E-004	yes
XLOC_011632	NM_001177752;NM_001177;	Pfkfb3	chr2:11393	313.23	167.68	-0.90	5.00E-005	8.65E-004	yes
XLOC_021009	-	-	chr8:12272	5.57	2.98	-0.90	6.50E-004	7.51E-003	yes
XLOC_004860	-	-	chr12:3109	10.01	5.35	-0.91	6.00E-004	7.04E-003	yes
XLOC_006824	NM_001205353;NM_172611	Gramd4	chr15:8588	9.01	4.78	-0.91	5.00E-005	8.65E-004	yes
XLOC_013753	-	-	chr3:13722	6.93	3.68	-0.92	5.00E-005	8.65E-004	yes
XLOC_016239	NM_007804	Cux2	chr5:12231	9.83	5.19	-0.92	5.00E-005	8.65E-004	yes
XLOC_004862	-	-	chr12:3109	10.35	5.45	-0.93	2.35E-003	2.08E-002	yes
XLOC_009326	NM_026529	2700062C07Rik	chr18:2462	7.72	4.06	-0.93	2.80E-003	2.36E-002	yes
XLOC_008467	NM_023124	H2-Q8	chr17:3553	13.61	7.10	-0.94	1.25E-003	1.28E-002	yes
XLOC_014248	NM_001085509	Myom3	chr4:13531	33.04	17.20	-0.94	5.00E-005	8.65E-004	yes
XLOC_007026	NM_016667	Sntb1	chr15:5547	11.42	5.93	-0.95	5.00E-005	8.65E-004	yes
XLOC_019768	NM_001177576;NM_026646	Slc25a22	chr7:14861	45.75	23.74	-0.95	5.00E-005	8.65E-004	yes
XLOC_015559	NM_029992	Tchp	chr5:11515	4.96	2.53	-0.97	6.00E-004	7.04E-003	yes
XLOC_021125	NM_026189	Eepd1	chr9:25289	238.89	120.76	-0.98	5.00E-005	8.65E-004	yes
XLOC_014329	NM_001172424;NM_011303	Dhrs3	chr4:14448	49.82	25.16	-0.99	5.00E-005	8.65E-004	yes

XLOC_010745	NM_019833		Fam69b	chr2:26483	9.74	4.88	-1.00	4.50E-004	5.73E-003 yes
XLOC_020788	NM_053200		Ces1d	chr8:95689	45.55	22.76	-1.00	5.00E-005	8.65E-004 yes
XLOC_002638	NM_001037764;NM_009021	Rai1	chr11:5991	17.92	8.92	-1.01	5.00E-005	8.65E-004 yes
XLOC_016289	NM_177047		Auts2	chr5:13191	12.24	6.09	-1.01	5.00E-005	8.65E-004 yes
XLOC_008364	NM_001111099;NM_007669	Cdkn1a	chr17:2922	17.88	8.78	-1.03	5.00E-005	8.65E-004 yes
XLOC_017487	NM_178373		Cidec	chr6:11337	8.46	4.14	-1.03	5.00E-005	8.65E-004 yes
XLOC_019586	NM_015814		Dkk3	chr7:11925	3.79	1.85	-1.04	5.00E-005	8.65E-004 yes
XLOC_011113	NM_178890		Abtb2	chr2:10340	13.44	6.53	-1.04	5.00E-005	8.65E-004 yes
XLOC_018054	NM_010706;NM_010707	Lgals4,Lgals6	chr7:29619	8.30	4.03	-1.04	5.00E-005	8.65E-004 yes
XLOC_002682	NM_001039545		Myh2	chr11:6698	126.90	61.36	-1.05	5.00E-005	8.65E-004 yes
XLOC_013579	NM_008183		Gstm2	chr3:10778	137.75	66.58	-1.05	5.00E-005	8.65E-004 yes
XLOC_017969	NM_021307		Zfp112	chr7:24897	4.74	2.28	-1.06	5.00E-005	8.65E-004 yes
XLOC_009251	-		-	chr17:2665	4.41	2.06	-1.10	2.40E-003	2.10E-002 yes
XLOC_003051	NM_134028		Tubg2	chr11:1010	5.74	2.65	-1.12	1.95E-003	1.80E-002 yes
XLOC_007399	-		-	chr15:5814	5.20	2.39	-1.12	5.00E-005	8.65E-004 yes
XLOC_004062	NM_007988		Fasn	chr11:1206	22.39	10.28	-1.12	5.00E-005	8.65E-004 yes
XLOC_012663	NM_007606		Car3	chr3:14863	1'781.00	795.11	-1.16	5.00E-005	8.65E-004 yes
XLOC_011075	NM_026161		C1qtnf4	chr2:90725	4.03	1.78	-1.18	5.00E-005	8.65E-004 yes
XLOC_020688	NM_027560		Arrdc2	chr8:73359	58.15	25.45	-1.19	5.00E-005	8.65E-004 yes
XLOC_016248	NM_001003953;NM_001005{	Kdm2b	chr5:12332	13.19	5.75	-1.20	5.00E-005	8.65E-004 yes
XLOC_017979	NM_146183		Zfp428	chr7:25292	8.70	3.74	-1.22	5.50E-004	6.64E-003 yes
XLOC_020182	NM_029182		Rasd2	chr8:77737	39.59	17.02	-1.22	5.00E-005	8.65E-004 yes
XLOC_001010	NM_177642		Igfn1	chr1:13785	17.32	7.43	-1.22	5.00E-005	8.65E-004 yes
XLOC_007476	NM_007679		Cebpd	chr16:1588	14.40	6.12	-1.23	5.00E-005	8.65E-004 yes
XLOC_007000	NM_013692		Klf10	chr15:3822	21.15	8.92	-1.24	5.00E-005	8.65E-004 yes
XLOC_009818	-		-	chr18:7552	6.90	2.90	-1.25	8.50E-004	9.41E-003 yes
XLOC_009408	NM_001146299;NM_172966	Sh3rf2	chr18:4221	26.60	10.97	-1.28	5.00E-005	8.65E-004 yes
XLOC_006753	NM_001161712;NM_013847;	Galr3,Gcat	chr15:7886	20.78	8.53	-1.28	5.00E-005	8.65E-004 yes
XLOC_012972	NM_001009935;NM_023719	Txnip	chr3:96359	914.05	373.34	-1.29	5.00E-005	8.65E-004 yes
XLOC_013752	-		-	chr3:13722	6.32	2.52	-1.32	5.00E-005	8.65E-004 yes
XLOC_008925	NM_020581		Angptl4	chr17:3391	13.10	5.13	-1.35	5.00E-005	8.65E-004 yes
XLOC_009706	NR_029557		Mir145	chr18:6180	51.22	19.83	-1.37	6.70E-003	4.64E-002 yes
XLOC_019313	NM_173011		Idh2	chr7:87239	379.10	142.12	-1.42	5.00E-005	8.65E-004 yes
XLOC_005562	NM_001195435		1190003K10Rik	chr13:6458	6.19	2.22	-1.48	5.00E-005	8.65E-004 yes
XLOC_002385	-		-	chr10:9519	107.75	38.02	-1.50	7.00E-003	4.80E-002 yes
XLOC_013670	NM_177665		Gm4861	chr3:13721	5.29	1.80	-1.55	3.15E-003	2.58E-002 yes
XLOC_003095	NM_010858		Myl4	chr11:1044	37.91	12.69	-1.58	5.00E-005	8.65E-004 yes
XLOC_017302	NM_009349		Inmt	chr6:55120	31.22	10.24	-1.61	5.00E-005	8.65E-004 yes
XLOC_014976	NM_001122954;NM_011110	Pla2g5	chr4:13835	12.44	3.61	-1.79	5.00E-005	8.65E-004 yes
XLOC_010493	NM_009127		Scd1	chr19:4446	122.54	34.42	-1.83	5.00E-005	8.65E-004 yes
XLOC_011189	NM_026929		Chac1	chr2:11917	84.09	20.47	-2.04	5.00E-005	8.65E-004 yes
XLOC_021134	NM_013906		Adamts8	chr9:30750	5.99	1.43	-2.06	5.00E-005	8.65E-004 yes
XLOC_017390	NM_001177713;NM_175475	Cyp26b1	chr6:84521	10.41	2.40	-2.12	5.00E-005	8.65E-004 yes
XLOC_016938	NM_001166580;NM_145980	8430408G22Rik	chr6:11658	54.25	9.62	-2.50	5.00E-005	8.65E-004 yes
XLOC_013895	NM_015743		Nr4a3	chr4:48064	18.67	3.10	-2.59	5.00E-005	8.65E-004 yes
XLOC_015233	NM_133913;NR_030423	Chpf2	chr5:24092	75.81	11.18	-2.76	1.85E-003	1.73E-002 yes
XLOC_004688	-		-	chr12:7782	58'652'100.00	178'785.00	-8.36	5.00E-005	8.65E-004 yes
XLOC_016641	-		-	chr6:42027	44'260.10	0.00	-inf	5.00E-005	8.65E-004 yes

Supplementary Table 2. All upregulated predicted miR-29a targets in skeletal muscle from GHD mice after GHRT. Shown are all predicted miR-29a targets that are conserved between mouse and human according to the Targetscan database and that are upregulated in the gene set as shown in Suppl.Table 1.

		FPKM				
nearest_ref_id	gene	GHPBS	GHT	log2(fol	p_value	q_value
NM_007743	Col1a2	116.65	1'324.84	3.51	5.00E-005	8.65E-004
NM_009930	Col3a1	24.12	190.65	2.98	5.00E-005	8.65E-004
NM_007729	Col11a1	0.40	2.89	2.86	5.00E-005	8.65E-004
NM_001204152;NM_00120	C1qtnf6	1.87	13.36	2.84	5.00E-005	8.65E-004
NM_008590	Mest	1.05	6.27	2.58	1.50E-004	2.26E-003
NM_009242	Sparc	184.85	915.32	2.31	5.00E-005	8.65E-004
NM_007737	Col5a2	8.69	39.75	2.19	5.00E-005	8.65E-004
NM_015734	Col5a1	12.13	51.63	2.09	5.00E-005	8.65E-004
NM_146007	Col6a2	23.94	89.58	1.90	5.00E-005	8.65E-004
NM_001243008;NM_00124	Col6a3	37.65	135.31	1.85	5.00E-005	8.65E-004
NM_008815	Etv4	1.43	5.14	1.84	5.00E-005	8.65E-004
NM_016919	Col5a3	10.01	34.59	1.79	5.00E-005	8.65E-004
NM_009928	Col15a1	35.87	111.30	1.63	5.00E-005	8.65E-004
NM_007993	Fbn1	16.34	48.22	1.56	5.00E-005	8.65E-004
NM_009931	Col4a1	96.66	270.61	1.49	5.00E-005	8.65E-004
NM_010234	Fos	1.60	4.25	1.41	5.00E-005	8.65E-004
NM_008970	Pthlh	0.83	2.09	1.34	2.00E-004	2.93E-003
NM_008047	Fstl1	30.68	76.50	1.32	5.00E-005	8.65E-004
NM_008695	Nid2	7.14	17.51	1.29	5.00E-005	8.65E-004
NM_001111043;NM_00111	Serpinh1	69.01	151.46	1.13	5.00E-005	8.65E-004
NM_010728	Lox	1.20	2.54	1.08	5.00E-005	8.65E-004
NM_026122;NM_175074	Hmgn3	2.36	5.01	1.08	1.80E-003	1.70E-002
NM_181395	Pxdn	12.94	26.28	1.02	5.00E-005	8.65E-004
NM_009932	Col4a2	84.60	170.54	1.01	5.00E-005	8.65E-004
NM_008610	Mmp2	23.93	48.10	1.01	5.00E-005	8.65E-004
NM_009616	Adam19	5.97	11.79	0.98	5.00E-005	8.65E-004
NM_010128	Emp1	16.50	32.40	0.97	5.00E-005	8.65E-004
NM_008908	Ppic	13.97	26.89	0.95	5.00E-005	8.65E-004
NM_027147	Enho	23.60	44.74	0.92	5.00E-005	8.65E-004
NM_008305	Hspg2	209.32	394.93	0.92	5.00E-005	8.65E-004
NM_177776	Smtnl2	83.95	156.61	0.90	5.00E-005	8.65E-004
NM_172145	Fam176b	5.78	10.62	0.88	1.05E-003	1.12E-002
NM_009829	Ccnd2	3.11	5.57	0.84	5.00E-005	8.65E-004
NM_025455	Ccdc28b	16.33	28.87	0.82	5.00E-005	8.65E-004
NM_001168346;NM_02369	Nfatc4	3.81	6.64	0.80	1.45E-003	1.43E-002
NM_008596	Sypl2	183.05	306.67	0.74	5.00E-005	8.65E-004
NM_010683	Lamc1	19.64	32.81	0.74	5.00E-005	8.65E-004
NM_011943	Map2k6	11.24	18.64	0.73	5.00E-005	8.65E-004
NM_029394	Snx24	10.11	16.41	0.70	5.00E-005	8.65E-004
NM_010937	Nras	7.60	12.24	0.69	5.00E-005	8.65E-004
NM_008881	Plxna1	8.90	14.28	0.68	5.00E-005	8.65E-004
NM_001164717;NM_00801	Sh3pxd2a	7.41	11.79	0.67	5.00E-005	8.65E-004
NM_001008550	Zfyve26	5.79	9.10	0.65	5.00E-005	8.65E-004
NM_172717	Chfr	6.76	10.58	0.65	5.00E-005	8.65E-004
NM_010570	Irs1	13.98	21.79	0.64	5.00E-005	8.65E-004
NM_027174	Col22a1	8.09	12.49	0.63	5.00E-005	8.65E-004
NM_010415	Hbegf	1.64	2.51	0.61	4.50E-004	5.73E-003
NM_009730	Atrn	7.51	11.43	0.61	5.00E-005	8.65E-004
NM_183138	Tet3	2.06	3.13	0.60	5.00E-005	8.65E-004
NM_176922	Itga11	5.08	7.66	0.59	1.80E-003	1.70E-002
NM_008467	Kpna4	32.68	49.22	0.59	5.00E-005	8.65E-004
NM_011561;NM_172552	Tdg	15.66	23.51	0.59	5.00E-005	8.65E-004
NM_026615	Urm1	18.78	28.11	0.58	6.50E-004	7.51E-003
NM_172442	Dtx4	2.34	3.49	0.58	8.00E-004	8.94E-003
NM_001081347	Rhobtb1	3.16	4.68	0.56	1.00E-003	1.08E-002
NM_001145947;NM_01179	Bace1	18.07	26.69	0.56	5.00E-005	8.65E-004
NM_133215	Mtmr4	3.52	5.15	0.55	1.50E-004	2.26E-003
NM_001042485;NM_02058	Tmem183a	2.71	3.93	0.53	4.50E-004	5.73E-003
NM_172619;NR_037707;N	Adamts10	2.77	3.99	0.53	2.10E-003	1.91E-002
NM_173784	Ubtd2	2.97	4.28	0.53	2.85E-003	2.39E-002
NM_031184	Glis2	6.99	10.00	0.52	6.85E-003	4.72E-002
NM_001097621	Kif26a	6.08	8.70	0.52	1.35E-003	1.36E-002
NM_153198;NM_177993	Hbp1	68.13	96.20	0.50	5.00E-005	8.65E-004
NM_175136	Rnf122	3.81	5.38	0.50	4.95E-003	3.71E-002
NM_007523	Bak1	9.27	13.06	0.49	1.50E-004	2.26E-003
NM_008696	Map4k4	4.65	6.50	0.48	1.00E-004	1.63E-003
NM_001146268;NM_00880	Pdgfrb	17.89	25.00	0.48	5.00E-005	8.65E-004
NM_175414	Tspan9	32.32	45.18	0.48	5.00E-005	8.65E-004
NM_025509	Ostc	21.07	29.17	0.47	8.50E-004	9.41E-003
NM_010688	Lasp1	30.73	42.40	0.46	2.50E-004	3.51E-003
NM_053204;NM_178085	Erc1	12.48	17.10	0.45	1.50E-004	2.26E-003
NM_001163729;NM_02791	Klhdc3	116.80	159.10	0.45	5.00E-005	8.65E-004
NM_173867	Rcc2	2.40	3.26	0.44	6.35E-003	4.46E-002
NM_175171	Mast4	20.28	27.54	0.44	2.50E-004	3.51E-003
NM_001048206;NM_01163	Traf3	11.46	15.50	0.43	3.50E-004	4.67E-003
NM_001122730;NM_17824	Tnrc18	6.44	8.68	0.43	2.50E-004	3.51E-003
NM_009502	Vcl	70.20	94.34	0.43	1.50E-004	2.26E-003
NM_007590	Calm3	294.96	394.07	0.42	2.00E-004	2.93E-003
NM_001080769	Uhrf1bp1	23.68	31.29	0.40	7.50E-004	8.46E-003
NM_029572	Erp44	16.82	22.15	0.40	7.00E-004	8.00E-003
NM_001077712;NM_02146	Stag2	15.15	19.91	0.39	4.00E-004	5.20E-003
NM_001122683;NM_17517	Bdh1	11.16	14.61	0.39	2.40E-003	2.10E-002
NM_001111289;NM_00111	Caprin1	21.85	28.29	0.37	6.30E-003	4.43E-002
NM_001001984	Kdm2a	8.05	10.36	0.36	1.75E-003	1.66E-002
NM_001039169;NM_00103	Eif4e2	39.37	50.48	0.36	5.60E-003	4.09E-002
NM_010578	Itgb1	12.97	16.58	0.35	1.40E-003	1.40E-002
NM_008960	Pten	6.01	7.66	0.35	2.30E-003	2.04E-002
NM_024291	Ky	173.19	220.22	0.35	3.20E-003	2.61E-002
NM_008850	Pitpna	70.53	89.33	0.34	2.50E-003	2.17E-002
NM_019914	Mllt11	28.64	35.92	0.33	4.35E-003	3.36E-002
NM_008306	Ndst1	54.40	68.09	0.32	5.75E-003	4.16E-002
NM_172585	Larp4b	15.43	18.99	0.30	7.00E-003	0.0480396

Supplementary Table 3. ≥2-fold upregulated predicted miR-29a targets in skeletal muscle from GHD mice after GHRT. Shown are all predicted miR-29a targets as shown in Suppl.Table 2 that are upregulated at least 2-fold.

nearest_re	gene	FPKM		log2(fold	p_value	q_value
		PBS	GH			
NM_007729	Col11a1	0.40	2.89	2.86	5.00E-005	8.65E-004
NM_008970	Pthlh	0.83	2.09	1.34	2.00E-004	2.93E-003
NM_008590	Mest	1.05	6.27	2.58	1.50E-004	2.26E-003
NM_010728	Lox	1.20	2.54	1.08	5.00E-005	8.65E-004
NM_008815	Etv4	1.43	5.14	1.84	5.00E-005	8.65E-004
NM_010234	Fos	1.60	4.25	1.41	5.00E-005	8.65E-004
NM_0012041	C1qtnf6	1.87	13.36	2.84	5.00E-005	8.65E-004
NM_026122;	Hmgn3	2.36	5.01	1.08	1.80E-003	1.70E-002
NM_008695	Nid2	7.14	17.51	1.29	5.00E-005	8.65E-004
NM_007737	Col5a2	8.69	39.75	2.19	5.00E-005	8.65E-004
NM_016919	Col5a3	10.01	34.59	1.79	5.00E-005	8.65E-004
NM_015734	Col5a1	12.13	51.63	2.09	5.00E-005	8.65E-004
NM_181395	Pxdn	12.94	26.28	1.02	5.00E-005	8.65E-004
NM_007993	Fbn1	16.34	48.22	1.56	5.00E-005	8.65E-004
NM_008610	Mmp2	23.93	48.10	1.01	5.00E-005	8.65E-004
NM_146007	Col6a2	23.94	89.58	1.90	5.00E-005	8.65E-004
NM_009930	Col3a1	24.12	190.65	2.98	5.00E-005	8.65E-004
NM_008047	Fstl1	30.68	76.50	1.32	5.00E-005	8.65E-004
NM_009928	Col15a1	35.87	111.30	1.63	5.00E-005	8.65E-004
NM_0012430	Col6a3	37.65	135.31	1.85	5.00E-005	8.65E-004
NM_0011110	Serpinh1	69.01	151.46	1.13	5.00E-005	8.65E-004
NM_009932	Col4a2	84.60	170.54	1.01	5.00E-005	8.65E-004
NM_009931	Col4a1	96.66	270.61	1.49	5.00E-005	8.65E-004
NM_007743	Col1a2	116.65	1'324.84	3.51	5.00E-005	8.65E-004
NM_009242	Sparc	184.85	915.32	2.31	5.00E-005	8.65E-004

Supplementary Table 4. Regulation of myokines in skeletal muscle from GHD mice after GHRT.

GHD mice were treated with PBS or GH over 3 weeks. Total RNA was isolated from the tibialis anterior muscle and analyzed using RNA deep sequencing (n=3, male mice) as described in Suppl.Table 1. Shown are the results for the transcripts of known myokines [38,41,42].

	test_id	nearest_re	gene	locus	FPKM GHPBS	FPKM GHT	log2(fold	p_value	q_value	significan
Il6	XLOC_01525	NM_031168	Il6	chr5:30339	0.00	0.05	inf	1.00E+000	1.00E+000	no
Il7	XLOC_01318	NM_008371	Il7	chr3:75720	0.11	0.13	0.23	1.00E+000	1.00E+000	no
IL8	Cxcl8, not found in RNA seq data									
Il15	XLOC_02073	NM_008357	Il15	chr8:84855	8.39	6.75	-0.31	1.33E-001	3.40E-001	no
Lif	XLOC_00240	NM_0010395	Lif	chr11:4157	0.20	0.32	0.67	1.00E+000	1.00E+000	no
Mstn	XLOC_00010	NM_010834	Mstn	chr1:53118	22.01	19.56	-0.17	1.72E-001	3.97E-001	no
Bdnf	XLOC_01112	NM_0010481	Bdnf	chr2:10951	0.20	0.22	0.15	1.00E+000	1.00E+000	no
Angptl4	XLOC_00892	NM_020581	Angptl4	chr17:3391	13.10	5.13	-1.35	5.00E-005	8.65E-004	yes
Fgf21	XLOC_01919	NM_020013	Fgf21	chr7:52869	0.00	0.40	inf	1.00E+000	1.00E+000	no
Mcp-1	XLOC_00287	NM_011333	Ccl2	chr11:8184	0.77	0.99	0.36	1.00E+000	1.00E+000	no
Myonectin	Ctrp15, not found in RNA seq data									
Pai-1	XLOC_01632	NM_008871	Serpine1	chr5:13753	0.83	1.40	0.75	1.00E+000	1.00E+000	no
Pedf	XLOC_00361	NM_011340	Serpinf1	chr11:7522	107.77	217.50	1.01	5.00E-005	8.65E-004	yes
Fstl1	XLOC_00761	NM_008047	Fstl1	chr16:3777	30.68	76.50	1.32	5.00E-005	8.65E-004	yes
Irsin	XLOC_01418	NM_027402	Fndc5	chr4:12881	43.22	42.51	-0.02	8.32E-001	9.27E-001	no
Vegf	XLOC_00905	NM_0010252	Vegfa	chr17:4615	64.85	61.45	-0.08	4.96E-001	7.25E-001	no
Meteorin-like	XLOC_00322	NM_144797	Metrnl	chr11:1215	3.20	5.63	0.82	1.00E+000	1.00E+000	no
Sparc	XLOC_00342	NM_009242	Sparc	chr11:5520	184.85	915.32	2.31	5.00E-005	8.65E-004	yes

Supplementary Table 5. Regulation of Myh transcripts in skeletal muscle from GHD mice after GHRT. GHD mice were treated with PBS or GH over 3 weeks. Total RNA was isolated from the tibialis anterior muscle and analyzed using RNA deep sequencing (n=3, male mice) as described in Suppl.Table 1. Shown are the results as FPKM for the transcripts of all Myh genes that are represented in the RNAseq data.

test_id	nearest_re	gene	locus	GHPBS	GHT	log2(fold	p_value	q_value	significan
XLOC_00268	NM_030679	Myh1	chr11:6701	4'390.08	4'651.06	0.08	8.84E-001	9.48E-001	no
XLOC_00268	NM_0010395	Myh2	chr11:6698	126.90	61.36	-1.05	5.00E-005	8.65E-004	yes
XLOC_00268	NM_0010996	Myh3	chr11:6689	4.46	2.28	-0.97	1.00E+000	1.00E+000	no
XLOC_00268	NM_010855	Myh4	chr11:6705	36'724.80	36'202.40	-0.02	9.89E-001	9.94E-001	no
XLOC_00633	NM_0011641	Myh6	chr14:5556	1.41	1.14	-0.30	1.00E+000	1.00E+000	no
XLOC_00633	NM_080728	Myh7	chr14:5558	2.07	6.26	1.59	5.00E-005	8.65E-004	yes
XLOC_01141	NM_0010853	Myh7b	chr2:15543	11.34	7.01	-0.69	2.42E-001	4.85E-001	no
XLOC_00268	NM_177369	Myh8	chr11:6709	2.41	3.59	0.58	1.20E-003	1.24E-002	yes
XLOC_00714	NM_022410	Myh9	chr15:7759	66.92	82.04	0.29	9.20E-003	5.84E-002	no
XLOC_00269	NM_175260	Myh10	chr11:6850	6.30	7.28	0.21	1.12E-001	3.05E-001	no
XLOC_00780	NM_0011617	Myh11	chr16:1419	54.80	43.74	-0.33	4.60E-003	3.50E-002	yes
XLOC_00268	NM_0010812	Myh13	chr11:6714	13.86	8.57	-0.69	5.00E-005	8.65E-004	yes
XLOC_01915	NM_028021	Myh14	chr7:51861	53.67	49.37	-0.12	2.98E-001	5.45E-001	no
XLOC_00765	NM_0011662	Myh15	chr16:4905	0.03	0.02	-0.84	1.00E+000	1.00E+000	no

Supplementary Table 6. Primer sequences used.

Mouse Primers

mPten-F	TCGTTAGCAGAAACAAAAGGA
mPten-Re	TCTGCAGGAAATCCCATAGC
mCol3a1-F	GGAACCTGGTTTCTTCTCACC
mCol3a1-Re	TAGGACTGACCAAGGTGGCT
mFstl1-F	GAGCACGATGTGGAAACGA
mFstl1-Re	CGCAGATCTTGGATTTGCTT
mCol6a3-F	GGCAGCACACCGAGCATCCAGTTC
mCol6a3-Re	AGTGCCATAGTAACTTGAAGTC
mSerpinH1-F	GCCGAGGTGAAGAAACCCC
mSerpinH1-Re	CATCGCCTGATATAGGCTGAAG
mSparc-F	TTCAGACCGCCAGAACTCTT
mSparc-Re	CCAGGCAAAGGAGAAAGAAG
m18S-F	GACACGGACAGGATTGACAGATTG
m18S-Re	AAATCGCTCCACCAACTAAGAACG

Human Primers

HU_PTEN-F	TGAAGGCGTATACAGGAACAAT
HU_PTEN-Re	CGGTGTCATAATGTCTTTCAGC
HU_COL3A1-F	AGGGGAGCTGGCTACTTCTC
HU_COL3A1-Re	AGGACTGACCAAGATGGGAA
HU_FSTL1-F	CCAGACCACGATGTGGAAAC
HU_FSTL1-Re	GGCACAGATCTTGGATTTGC
HU_COL6A3-F	TAATTGAATCGAGGAGCCCA
HU_COL6A3-Re	AAGTGCCGATGTTTCCTCAT
HU_SERPINH1-F	AGAGTAGAATCGTGTCGCGG
HU_SERPINH1-Re	CATGGCCAGGAAGTGGTTT
HU_SPARC-F	CTTCAGACTGCCCGGAGA
HU_SPARC-Re	GAAAGAAGATCCAGGCCCTC
HU_18S-F	GTAACCCGTTGAACCCCATT
HU_18S-Re	CCATCCAATCGGTAGTAGCG