

Supplemental table 1. List of primers utilized for measuring the RNA expression of genes and of Gapmers used for the down-regulation

Primer name	Sequence
<i>xloc_010971_F</i>	GAACCACAGGAAGCAAGAGC
<i>xloc_010971_R</i>	GTGGCTCACGTGTCTGAGAA
<i>xloc_013310_F</i>	ATGCACAGGATTGCTGAGTG
<i>xloc_013310_R</i>	GCAACCACCTCACCTTTGTT
<i>Hm_xloc_013310_F</i>	TGCCTGCCTTCTAGGACTGT
<i>Hm_xloc_013310_R</i>	GAAAGGCAGCCAGCTATTTG
<i>Proinsulin_F</i>	GGAGCGTGGCTTCTTCTACA
<i>Proinsulin_R</i>	GCTGGTGCAGCACTGATCTA
<i>CyclophilinA_F</i>	CTCGAATAAGTTTGACTTGTGTTT
<i>CyclophilinA_R</i>	CTAGGCATGGGAGGGAACA
<i>18s_F</i>	GGAATTATTCCCATGAACG
<i>18s_R</i>	GGCCTCACTAAACCATCCAA
<i>B2M_F</i>	TCCATCCGACATTGAAGTTG
<i>B2M_R</i>	CGCAGGCATACTCATCTT
<i>Gapdh-F</i>	TGCACCACCAACTGCTTAGC
<i>Gapdh-R</i>	GGCATGGACTGTGGTCATGAG
Gapmer name	Sequence
Gap_Ctrl	AACACGTCTATACGC
Gap6_βlinc3	CTGAGAAAAGAAGAGC
Gap8_βlinc3	CAATCCAGAGCTTAGT

Supplemental table 2

Characteristics of mice utilised for the RNA-sequencing.

mouse ID	weight before diet	weight at sacrifice (g)	glycemia at sacrifice (mg/dl)	Insulinemia at sacrifice (ng/ml)
ND 1	21.7	30.3	138.6	0.52
ND 2	22.0	30.0	140.4	0.37
ND 3	19.5	27.1	138.6	0.61
Average	21.1	29.1	139.2	0.5
SEM	0.8	1.0	0.6	0.1
HDR1	22.2	44.2	169.2	4.05
HDR2	21.0	41.1	176.4	0.74
HDR3	22.6	44.0	165.6	4.05
Average	21.9	43.1	170.4	2.95
SEM	0.5	1.0	3.2	1.10

Supplemental table 3.

List of differentially expressed protein-coding genes in HFD versus ND mice

The list is available at the foot of GSE92602

(GSE92602_Differential_Expression_Results_HFD_vs_ND.xlsx)

Supplemental table 4

List of differentially expressed UCSC lncRNAs between HFD and ND mice

ID	XLOC	Regulation	logFC	Fold	AveExpr	P.Value	adj.P.Val	UCSC_ID	GeneSymbol	GeneID
XLOC_029148	XLOC_029148	Up	1.80994763	3.50629559	-0.5506566	9.70E-05	0.01752245	uc012evu.1	1700049E15Rik	100039727
XLOC_021912	XLOC_021912	Up	0.65835819	1.57828549	3.42991932	0.0001561	0.01956733	uc012cpw.1	Gm8234	666680
XLOC_029119	XLOC_029119	Up	1.59739788	3.02597042	-0.5458295	0.00017976	0.02045922	uc009epq.1	5330439B14Rik	321015
XLOC_010356	XLOC_010356	Up	0.86337084	1.81928409	1.76873487	0.00021611	0.02130071	uc007uiz.1	AK076947	
XLOC_029448	XLOC_029448	Up	2.20457966	4.60940222	-1.1147372	0.00038887	0.02574536	uc009cjp.1	AK219219	
XLOC_008742	XLOC_008742	Up	0.52985109	1.44378016	4.52345658	0.0004301	0.02644799	uc007pmb.1	AK203628	
XLOC_028867	XLOC_028867	Up	0.41603462	1.33425519	6.30583674	0.0005327	0.02790084	uc009dph.1	DQ693239	
XLOC_000191	XLOC_000191	Up	0.3308615	1.25776422	8.37183206	0.00059272	0.02873685	uc007beu.1	AK217854	
XLOC_004694	XLOC_004694	Up	0.69959539	1.62404925	8.71022589	0.00063276	0.02936456	uc007kgm.1	AK217986	237860
XLOC_034321	XLOC_034321	Up	2.59636201	6.04759704	-3.5893597	0.00064741	0.02946011	uc009kuu.1	AK047141	
XLOC_038841	XLOC_038841	Up	0.36822912	1.29076747	8.49241959	0.00076783	0.03060202	uc009uah.1	AK185530	11306
XLOC_018743	XLOC_018743	Up	0.58780002	1.50295313	7.47152883	0.00081776	0.03102346	uc008joj.1	EF437368	
XLOC_004765	XLOC_004765	Up	4.46879417	22.1432361	-4.9068956	0.00106877	0.03277531	uc007kpb.2	E230016K23Rik	414102
XLOC_031223	XLOC_031223	Up	1.26471749	2.40280153	2.99815655	0.00117378	0.03317261	uc009iei.1	AK199694	
XLOC_036122	XLOC_036122	Up	0.36556779	1.28838859	6.32563197	0.00162232	0.03702339	uc009qwi.1	DQ714940	
XLOC_025434	XLOC_025434	Up	1.16067122	2.23561417	2.46572737	0.00209699	0.04062686	uc008wdg.1	AK167606,BC064108,AK030886	
XLOC_021772	XLOC_021772	Up	0.61688447	1.5335985	6.565575	0.00226997	0.04171983	uc008ork.1	AK217986	
XLOC_013797	XLOC_013797	Up	1.0038028	2.00527876	-1.5352851	0.00227604	0.04174372	uc007zty.1	AK085322,AK085480	
XLOC_010411	XLOC_010411	Up	0.44265534	1.35910351	3.72058033	0.00245876	0.04324499	uc007uqa.1	AK135997	
XLOC_008884	XLOC_008884	Up	1.42250578	2.68050677	-1.5831504	0.00282958	0.04480063	uc007qca.1	AK141540	
XLOC_021954	XLOC_021954	Up	0.99401579	1.99172131	2.35431834	0.00303368	0.04601905	uc008pmm.1	AK044425	
XLOC_027481	XLOC_027481	Up	0.76159895	1.69536857	0.20985274	0.00370707	0.04972975	uc008znp.1	AK040553	
XLOC_028343	XLOC_028343	Up	0.55621474	1.47040619	3.62706814	0.00372074	0.04972975	uc009ayu.1	AK003812,AK143417	
ID	XLOC	Regulation	logFC	Fold	AveExpr	P.Value	adj.P.Val	UCSC_ID	GeneSymbol	GeneID
XLOC_027277	XLOC_027277	Down	-1.9088381	3.7550656	0.47174552	3.01E-06	0.00874554	uc008ysk.2	u Miat	330166
XLOC_009040	XLOC_009040	Down	-4.8872753	29.5948712	-5.3980178	3.93E-05	0.01343425	uc007quf.1	AK015470,AK030052	
XLOC_020670	XLOC_020670	Down	-0.9370078	1.91455325	2.9494688	9.89E-05	0.01752245	uc012cdx.1	4932416H05Rik	654409
XLOC_011841	XLOC_011841	Down	-0.8540675	1.80759008	4.58890139	0.00013959	0.01933069	uc011zxm.1	Mirlet7c-2,Mirlet7b	723966,387245
XLOC_014978	XLOC_014978	Down	-0.8803052	1.84076464	4.14013004	0.00015328	0.01956474	uc008bjk.1	AK015714	
XLOC_010936	XLOC_010936	Down	-0.9375514	1.91527479	4.76907252	0.00014628	0.01956474	uc007ukb.1	AK005591	
XLOC_008479	XLOC_008479	Down	-0.9105209	1.87972405	4.22613361	0.00017185	0.02038134	uc007qse.1	AK043531	
XLOC_034057	XLOC_034057	Down	-1.1171934	2.16924561	2.96760563	0.00018523	0.02068731	uc009mzp.1	AK139634	
XLOC_033912	XLOC_033912	Down	-1.2484843	2.37591685	-0.7313986	0.00024155	0.02203725	uc009mko.1	AK085891	
XLOC_019841	XLOC_019841	Down	-0.821528	1.76727677	4.20585727	0.0002443	0.02207741	uc008ofb.1	AK085136	14683
XLOC_022633	XLOC_022633	Down	-0.6885734	1.61168901	5.16588241	0.00027072	0.02322993	uc008pue.1	AK007191,AK008852	
XLOC_005204	XLOC_005204	Down	-0.8435503	1.79446065	2.59181443	0.00030377	0.02444607	uc007mtt.1	AK191498	
XLOC_033767	XLOC_033767	Down	-0.8218622	1.76768626	3.17130721	0.00033455	0.02532849	uc009lrg.1	AK083994	
XLOC_007454	XLOC_007454	Down	-0.858737	1.81345004	1.20158283	0.00038479	0.02574536	uc007nur.1	AK014974	
XLOC_029329	XLOC_029329	Down	-0.7534879	1.68586374	2.91062623	0.00039028	0.02576683	uc009btx.1	AK158926	
XLOC_032558	XLOC_032558	Down	-0.7879671	1.72663971	4.81062742	0.0004045	0.02607304	uc012fpb.1	AK084903,46324271	666737
XLOC_028715	XLOC_028715	Down	-0.5936811	1.50909231	3.44737885	0.00041543	0.02644183	uc012eop.1	Gm5577	434064
XLOC_019204	XLOC_019204	Down	-1.3429288	2.53665762	-0.5416471	0.00043143	0.02644799	uc008lft.1	C230071H18Rik	277414
XLOC_006144	XLOC_006144	Down	-0.6520298	1.57137747	3.23626109	0.00047034	0.02700892	uc011yix.1	AK013668	
XLOC_028547	XLOC_028547	Down	-0.8550312	1.80879786	4.56411187	0.00047569	0.02700892	uc009bxb.1	AK043004	
XLOC_017702	XLOC_017702	Down	-0.9027245	1.8695934	2.81116543	0.00048915	0.02732984	uc008ibo.1	AK143957	
XLOC_018695	XLOC_018695	Down	-0.638434	1.55663853	2.6906766	0.00051353	0.02762481	uc008jhz.1	AK147796,AK081497	
XLOC_023981	XLOC_023981	Down	-0.6099746	1.52623231	4.24250158	0.00052972	0.02790084	uc008tvm.1	AK002929	
XLOC_030762	XLOC_030762	Down	-0.7680126	1.7029223	2.50959449	0.00052659	0.02790084	uc009giy.1	AK087850	
XLOC_008496	XLOC_008496	Down	-0.7434735	1.67420182	4.99802992	0.00054178	0.02807659	uc007qve.1	Etoh2	13996
XLOC_011611	XLOC_011611	Down	-1.150621	2.22009434	0.83027076	0.0005533	0.02823084	uc007waz.1	AK085274	
XLOC_018767	XLOC_018767	Down	-0.7000802	1.62459514	3.61556768	0.00057637	0.02846482	uc008jqz.1	AK079699	
XLOC_011581	XLOC_011581	Down	-1.0338707	2.04751026	-0.6638605	0.00064739	0.02946011	uc007vxh.1	DQ557693,DQ716549,DQ724814,DQ555935,DI	
XLOC_001502	XLOC_001502	Down	-1.0718601	2.10214193	0.11490251	0.00065527	0.02950988	uc007dzz.1	BC072557	
XLOC_034392	XLOC_034392	Down	-1.2388409	2.36008848	0.22689078	0.00068554	0.03002511	uc009ldl.2	A930013F10Rik	68074
XLOC_019205	XLOC_019205	Down	-1.0651761	2.0924252	-1.0335943	0.00069663	0.03010489	uc008lga.1	AK165443,AK143789	
XLOC_012227	XLOC_012227	Down	-0.7926767	1.73228552	4.82766597	0.00070796	0.03018385	uc011ztp.1	Mir30b,Mir30d	387226,387228
XLOC_016478	XLOC_016478	Down	-1.2360718	2.35556276	0.41312444	0.00072859	0.03053237	uc008foo.1	AK085760	17191
XLOC_038271	XLOC_038271	Down	-0.9667744	1.95446589	4.52240504	0.00075973	0.03060202	uc012hnh.1	Mir374c	100526513
XLOC_029656	XLOC_029656	Down	-2.1888235	4.55933535	-3.1201513	0.00076275	0.03060202	uc009dih.1	AK076253	232334
XLOC_017364	XLOC_017364	Down	-0.8598534	1.81485388	2.5835536	0.0008156	0.03102346	uc008gkx.1	AK018996	
XLOC_033578	XLOC_033578	Down	-0.5920057	1.50734089	2.93221274	0.00088355	0.03178599	uc009kve.1	BC030398	
XLOC_022909	XLOC_022909	Down	-0.8163763	1.76097733	0.71613912	0.0009146	0.03182895	uc008rev.1	AK015409	
XLOC_036086	XLOC_036086	Down	-0.7668047	1.70149709	1.4760656	0.00093748	0.03202297	uc009qsg.1	AK017040	
XLOC_011604	XLOC_011604	Down	-1.1098088	2.1581705	-0.6857761	0.00094783	0.03210759	uc007vzd.1	Gsdmcl1	74460
XLOC_030771	XLOC_030771	Down	-0.7363391	1.66594303	3.55205535	0.00097263	0.03227482	uc012fio.1	E130304I02Rik	78547
XLOC_019903	XLOC_019903	Down	-0.6993394	1.62376114	3.40402851	0.00101154	0.03235366	uc008omf.1	AK082896	

XLOC_011034	XLOC_011034	Down	-1.0084113	2.01169453	-0.259548	0.00101775	0.03235366	uc007uwu.1	AK014964	
XLOC_007281	XLOC_007281	Down	-1.0379102	2.05325134	-0.9533642	0.00103732	0.032507	uc007mxz.1	AK040557	
XLOC_033669	XLOC_033669	Down	-0.6974174	1.62159935	4.35174316	0.00110714	0.03312904	uc009ldg.1	BC035532	20516
XLOC_009135	XLOC_009135	Down	-0.5303283	1.4442578	3.18980187	0.00117645	0.03317261	uc011zbn.1	D430050G20	328287
XLOC_000146	XLOC_000146	Down	-2.8986318	7.45718843	-5.0797239	0.00115635	0.03317261	uc007ayw.1	AK052226	
XLOC_024509	XLOC_024509	Down	-0.6523365	1.57171162	4.8977003	0.00121111	0.03350715	uc008sdd.2	4930528A17Rik	67735
XLOC_009841	XLOC_009841	Down	-0.6542054	1.57374898	3.22181604	0.00120017	0.03350715	uc007sgd.1	AK085942	
XLOC_008930	XLOC_008930	Down	-0.7141201	1.6404824	4.89400603	0.00129821	0.03413816	uc011yzb.1,u	Mirlet7d,Mirlet7f-1,	387247,387252,387244
XLOC_004526	XLOC_004526	Down	-1.012305	2.01713127	-0.8192838	0.00134556	0.03472533	uc007jip.1	AK005754	
XLOC_016431	XLOC_016431	Down	-0.7166607	1.64337381	4.13537382	0.001376	0.03496982	uc008bfc.1	AK040485	93687
XLOC_024546	XLOC_024546	Down	-0.6717303	1.59298234	2.06428387	0.00142721	0.03531284	uc008shn.1	AK016961	
XLOC_009979	XLOC_009979	Down	-1.0735794	2.1046487	0.75106964	0.00149958	0.03581222	uc007srp.1	4931406H21Rik	77592
XLOC_003579	XLOC_003579	Down	-1.0054132	2.00751837	-0.3077411	0.00157815	0.03667122	uc011xpd.1	Mirlet7i	387251
XLOC_031178	XLOC_031178	Down	-1.1758211	2.25921425	1.74195035	0.00160739	0.03695188	uc012fne.1	Mir7-2	723884
XLOC_035832	XLOC_035832	Down	-0.7077711	1.63327887	4.55652587	0.00170748	0.03762504	uc009pet.1	AK017092	
XLOC_005189	XLOC_005189	Down	-1.0784758	2.11180382	-1.6967466	0.00173763	0.03776689	uc007mrf.1	AK077811	
XLOC_000046	XLOC_000046	Down	-0.749113	1.68075918	5.98495836	0.00177899	0.03816261	uc011wip.1,u	Mir30a,Mir30c-2	387225,723964
XLOC_013778	XLOC_013778	Down	-0.8788589	1.83892026	4.08701031	0.00183832	0.03871062	uc012ahc.1	Mir691	751561
XLOC_016615	XLOC_016615	Down	-0.6661865	1.58687279	2.7525963	0.00185156	0.03877447	uc008elj.1,uc	BC094408,AK216043	
XLOC_019790	XLOC_019790	Down	-0.7866587	1.72507452	3.1520588	0.0018517	0.03877447	uc008nzz.1	AK077405	
XLOC_028431	XLOC_028431	Down	-0.8241209	1.77045593	-0.4898052	0.00186427	0.03878183	uc009bjy.1	AK137583	
XLOC_028716	XLOC_028716	Down	-0.8344089	1.78312631	3.2967317	0.00191064	0.03922364	uc009cut.1	AK185681	
XLOC_017740	XLOC_017740	Down	-0.7069239	1.63232002	1.33904899	0.00191907	0.03930543	uc008gat.1	AK086315	
XLOC_022616	XLOC_022616	Down	-1.0304365	2.0426422	-1.4946188	0.00196651	0.03959375	uc012crb.1	Rnu73a	19870
XLOC_017529	XLOC_017529	Down	-0.9463615	1.92700659	1.64775078	0.0019963	0.03978129	uc012bko.1	B430203M17Rik	19211
XLOC_033569	XLOC_033569	Down	-0.5782728	1.49306073	4.02476239	0.00200479	0.03979854	uc009kuf.1	AK007249	
XLOC_032016	XLOC_032016	Down	-0.8486389	1.80080116	-0.352128	0.00218593	0.04121498	uc009fvo.1	AK042797	
XLOC_019907	XLOC_019907	Down	-0.5866991	1.50180668	4.03285592	0.00221108	0.04132119	uc012cmr.1,u	Uckl1os	100271841
XLOC_005405	XLOC_005405	Down	-0.7349636	1.66435543	0.23167342	0.00222703	0.04141987	uc011xuh.1	Mir804	100049547
XLOC_006142	XLOC_006142	Down	-0.6085376	1.52471293	3.37296437	0.00227545	0.04174372	uc007msb.2	2810410L24Rik	100042332
XLOC_024992	XLOC_024992	Down	-1.3015758	2.46497971	0.282364	0.00228773	0.04174372	uc008uaf.1	AK140147	
XLOC_032596	XLOC_032596	Down	-0.9710373	1.96024948	-0.5542192	0.00231291	0.04189546	uc009imz.1	AK040808	
XLOC_029244	XLOC_029244	Down	-0.638813	1.55704759	4.6894092	0.00238679	0.04264858	uc009bfy.1	BC145649	
XLOC_028373	XLOC_028373	Down	-0.7079356	1.63346502	4.66653701	0.00239366	0.04264858	uc012eiv.1	Mir129-1	387237
XLOC_003139	XLOC_003139	Down	-0.5692614	1.48376378	2.82445221	0.00242416	0.04287358	uc007ezc.1	AK145144	
XLOC_019005	XLOC_019005	Down	-1.5569574	2.94232655	-3.2797779	0.00252602	0.04330932	uc012bzn.1	Mir1955	100316756
XLOC_006905	XLOC_006905	Down	-0.7965738	1.73697119	-0.1911132	0.00255807	0.04361372	uc007nsv.1	AK016427	
XLOC_013605	XLOC_013605	Down	-1.7701293	3.41084527	-3.0098627	0.00262126	0.04368929	uc007ywk.1	AK018484	
XLOC_005688	XLOC_005688	Down	-0.7404739	1.67072458	3.51290548	0.00267886	0.0438434	uc011yab.1	AK053376	
XLOC_038525	XLOC_038525	Down	-0.8260984	1.77288426	0.61698818	0.00275475	0.04447008	uc009ssq.1	AK170409	
XLOC_023703	XLOC_023703	Down	-0.8746578	1.83357309	-0.3081197	0.00276574	0.04451001	uc008sjb.1	AK086793	
XLOC_036830	XLOC_036830	Down	-1.2568013	2.38965324	0.79242946	0.00279355	0.04459347	uc009pxu.1	AK138089	23806
XLOC_034110	XLOC_034110	Down	-1.0073317	2.01018976	-0.9480135	0.00283754	0.04487443	uc009nga.1	AK015712	
XLOC_008173	XLOC_008173	Down	-0.7626069	1.69655344	1.03253991	0.00285891	0.04500298	uc007piv.1	AK164218	14569
XLOC_031457	XLOC_031457	Down	-1.4711303	2.77239014	-2.2366731	0.00288128	0.04516823	uc012fsj.1	A630005I04Rik	11865
XLOC_012455	XLOC_012455	Down	-1.1664822	2.244637	-0.1312978	0.00297752	0.04560339	uc007xeb.1	AK020795	
XLOC_034261	XLOC_034261	Down	-1.2477	2.37462557	-1.8543164	0.00310998	0.04645502	uc009nvw.1	AK013187	
XLOC_029644	XLOC_029644	Down	-0.7111258	1.6370811	0.82398592	0.00318272	0.04679629	uc009dfe.1	AK016007	
XLOC_006135	XLOC_006135	Down	-0.812701	1.75649688	1.15846233	0.00319871	0.04690461	uc007mre.1	AK182874	
XLOC_034729	XLOC_034729	Down	-0.7883099	1.72705005	4.88456036	0.00327911	0.04744422	uc012gil.1	4930488L21Rik	75809
XLOC_009299	XLOC_009299	Down	-0.5772451	1.49199744	4.26245205	0.00330788	0.04759604	uc007rzr.2	3110070M22Rik	67304
XLOC_017329	XLOC_017329	Down	-0.8518204	1.80477676	5.75432291	0.0033069	0.04759604	uc012bhf.1,u	AK009639,AK215842	
XLOC_024955	XLOC_024955	Down	-1.1711211	2.25186615	-1.0548457	0.00333746	0.04778011	uc008tui.1	AK145828	
XLOC_028671	XLOC_028671	Down	-0.6912429	1.614674	1.45376134	0.00337049	0.04780859	uc009cnm.1	B230319C09Rik	320775
XLOC_012505	XLOC_012505	Down	-0.9209195	1.89332164	0.52951075	0.00337342	0.04780859	uc011zjy.1	E330033B04Rik	319722
XLOC_035803	XLOC_035803	Down	-0.7363543	1.66596059	2.31750594	0.00343296	0.04825478	uc009pak.2,u	2610203C20Rik,Mir:	100042464,387236
XLOC_015351	XLOC_015351	Down	-0.6826405	1.60507472	2.77301781	0.003627	0.04930441	uc012app.1	H2-K2	630499
XLOC_002921	XLOC_002921	Down	-0.7511265	1.68310659	0.5626051	0.00366324	0.04952706	uc007hip.1	AK077682	
XLOC_034340	XLOC_034340	Down	-0.883764	1.84518311	-1.3646717	0.00366341	0.04952706	uc012fzw.1	Mir1968	100316713
XLOC_024068	XLOC_024068	Down	-0.8006946	1.74193957	0.22965874	0.00371943	0.04972975	uc008ugf.1	AK010894	
XLOC_002768	XLOC_002768	Down	-0.8282175	1.77549035	-0.7564176	0.00371459	0.04972975	uc007gvg.1	AK029692	
XLOC_013488	XLOC_013488	Down	-0.9531242	1.93606071	-1.1005545	0.00376365	0.04983494	uc007yep.1	AK046786	

Supplemental table 5**List of differentially expressed novel lncRNAs between HFD and ND mice****u= intergenic transcripts, x=exonic overlap with reference on the opposite strand**

ID	XLOC	Regulation	logFC	Fold	AveExpr	P.Value	adj.P.Val	classes
XLOC_010448	XLOC_010448	Up	2.314319	4.973698	-0.80642	4.45E-06	0.008746	u
XLOC_000549	XLOC_000549	Up	1.48123	2.791867	3.825912	8.97E-06	0.009413	u
XLOC_013715	XLOC_013715	Up	1.351881	2.552447	0.496467	2.26E-05	0.011576	u
XLOC_031464	XLOC_031464	Up	1.125345	2.181537	3.438429	2.37E-05	0.011576	u
XLOC_022331	XLOC_022331	Up	2.561897	5.904836	-2.16746	2.98E-05	0.012791	u
XLOC_007334	XLOC_007334	Up	0.741704	1.67215	5.457617	4.08E-05	0.013607	u
XLOC_037273	XLOC_037273	Up	1.015311	2.021339	3.327351	5.30E-05	0.015496	u
XLOC_028428	XLOC_028428	Up	1.365042	2.575838	-0.91402	7.34E-05	0.017213	x
XLOC_020248	XLOC_020248	Up	2.454472	5.481126	-2.60335	0.000115	0.018214	u
XLOC_007734	XLOC_007734	Up	1.945583	3.851935	-1.47961	0.000116	0.018272	u
XLOC_008534	XLOC_008534	Up	1.002527	2.003507	0.353877	0.000161	0.019892	u
XLOC_000634	XLOC_000634	Up	0.586385	1.50148	5.13006	0.000255	0.022499	u
XLOC_019806	XLOC_019806	Up	1.036558	2.051328	0.845087	0.000262	0.022681	u
XLOC_026280	XLOC_026280	Up	1.534385	2.896649	-0.59808	0.000289	0.023988	u
XLOC_008868	XLOC_008868	Up	3.035247	8.197855	-4.5979	0.000356	0.025417	u
XLOC_015577	XLOC_015577	Up	0.955376	1.939085	0.692593	0.000361	0.025417	x
XLOC_008391	XLOC_008391	Up	0.734433	1.663744	1.6392	0.000442	0.026572	u
XLOC_029617	XLOC_029617	Up	0.43282	1.349869	8.485714	0.000475	0.027009	u
XLOC_006854	XLOC_006854	Up	2.650058	6.276925	-3.41202	0.000636	0.029365	u
XLOC_034906	XLOC_034906	Up	1.107838	2.155225	0.526209	0.000751	0.030602	u
XLOC_004995	XLOC_004995	Up	0.642539	1.561074	2.388146	0.000925	0.031829	u
XLOC_011981	XLOC_011981	Up	1.050279	2.07093	1.942647	0.000966	0.03225	u
XLOC_027341	XLOC_027341	Up	1.294521	2.452955	-1.42291	0.001065	0.032721	u
XLOC_003494	XLOC_003494	Up	2.457293	5.491853	-2.77368	0.001167	0.033173	u
XLOC_028688	XLOC_028688	Up	0.419283	1.337263	6.852038	0.001114	0.033173	u
XLOC_006855	XLOC_006855	Up	1.358119	2.563507	-1.5097	0.00121	0.033507	u
XLOC_010971	XLOC_010971	Up	4.237334	18.861	-4.09862	0.001255	0.033634	u
XLOC_016513	XLOC_016513	Up	0.581835	1.496752	1.891336	0.001328	0.034524	u
XLOC_008551	XLOC_008551	Up	2.363265	5.145335	-0.59816	0.00143	0.035327	u
XLOC_015535	XLOC_015535	Up	0.401107	1.320521	5.321998	0.001487	0.035661	u
XLOC_010035	XLOC_010035	Up	0.805639	1.747919	0.397939	0.001863	0.038782	x u
XLOC_019718	XLOC_019718	Up	0.468946	1.384098	2.654318	0.002468	0.043258	u
XLOC_013602	XLOC_013602	Up	0.518949	1.432911	3.164743	0.002857	0.044993	u
XLOC_034616	XLOC_034616	Up	0.411102	1.329702	3.787673	0.003132	0.04655	u
XLOC_036151	XLOC_036151	Up	0.356448	1.28027	4.588407	0.003233	0.047083	u
XLOC_008444	XLOC_008444	Up	1.152489	2.222971	-1.79176	0.003277	0.047444	x
XLOC_031593	XLOC_031593	Up	2.182456	4.539255	-1.88431	0.00344	0.048277	u
XLOC_002282	XLOC_002282	Up	0.488084	1.402581	3.649477	0.003472	0.048459	u
XLOC_034750	XLOC_034750	Up	1.24701	2.373489	-2.26098	0.003701	0.049726	u
ID	XLOC	Regulation	logFC	Fold	AveExpr	P.Value	adj.P.Val	classes
XLOC_019771	XLOC_019771	Down	-1.60008	3.031596	0.764752	2.58E-05	0.011874	x
XLOC_028544	XLOC_028544	Down	-2.19159	4.568074	1.276436	3.08E-05	0.012791	u
XLOC_020954	XLOC_020954	Down	-1.20291	2.302033	3.302307	3.26E-05	0.013101	x u
XLOC_038703	XLOC_038703	Down	-1.07834	2.111601	1.528166	6.37E-05	0.016354	x
XLOC_034020	XLOC_034020	Down	-1.42395	2.683193	0.118686	0.000105	0.017815	u
XLOC_011701	XLOC_011701	Down	-1.55817	2.944798	-0.6072	0.00014	0.019331	x u
XLOC_029225	XLOC_029225	Down	-0.91838	1.889995	3.259011	0.000133	0.019331	u

XLOC_015709	XLOC_015709	Down	-0.65858	1.578523	4.214033	0.000189	0.020687	u
XLOC_037930	XLOC_037930	Down	-0.91678	1.887897	0.650216	0.000208	0.02087	x
XLOC_035831	XLOC_035831	Down	-0.96319	1.949611	1.510238	0.000213	0.021185	u
XLOC_016616	XLOC_016616	Down	-0.99652	1.995179	1.54494	0.00029	0.023988	u
XLOC_005277	XLOC_005277	Down	-1.07708	2.109767	-0.07309	0.000354	0.025417	u
XLOC_027054	XLOC_027054	Down	-0.76348	1.697584	2.894897	0.000404	0.026073	x
XLOC_005162	XLOC_005162	Down	-1.02218	2.030979	-0.37811	0.000438	0.026535	u
XLOC_036461	XLOC_036461	Down	-0.78761	1.726207	4.277073	0.000456	0.02674	u x
XLOC_034816	XLOC_034816	Down	-0.55938	1.473639	5.670942	0.000497	0.027437	x
XLOC_022273	XLOC_022273	Down	-0.8154	1.759782	1.045996	0.000535	0.027901	x u
XLOC_000763	XLOC_000763	Down	-0.83107	1.779005	2.42823	0.000578	0.028465	x
XLOC_032127	XLOC_032127	Down	-0.81676	1.761445	0.985533	0.000587	0.028563	u
XLOC_036316	XLOC_036316	Down	-0.93607	1.913307	-0.07464	0.000602	0.028933	u x
XLOC_037070	XLOC_037070	Down	-0.98107	1.973933	0.995139	0.00064	0.029366	u
XLOC_022418	XLOC_022418	Down	-0.88567	1.84762	-0.19779	0.000646	0.02946	u
XLOC_034742	XLOC_034742	Down	-0.87497	1.833975	3.721299	0.000657	0.029524	u x
XLOC_023840	XLOC_023840	Down	-0.7613	1.695018	2.179291	0.000683	0.029953	x u
XLOC_003146	XLOC_003146	Down	-1.20636	2.307551	1.895551	0.0007	0.030105	u
XLOC_007275	XLOC_007275	Down	-0.98054	1.973209	2.266201	0.0007	0.030105	o
XLOC_014904	XLOC_014904	Down	-1.91772	3.778265	-1.04713	0.000719	0.030405	u
XLOC_009975	XLOC_009975	Down	-0.74206	1.672565	1.189878	0.000732	0.030532	x u
XLOC_019476	XLOC_019476	Down	-1.00725	2.010074	3.093329	0.00077	0.030602	u
XLOC_036848	XLOC_036848	Down	-0.98384	1.977717	-0.37233	0.000756	0.030602	u
XLOC_027674	XLOC_027674	Down	-0.90306	1.870032	1.247379	0.000774	0.030602	u
XLOC_020879	XLOC_020879	Down	-0.83735	1.786761	1.818534	0.00077	0.030602	u
XLOC_011465	XLOC_011465	Down	-0.80243	1.744032	3.675404	0.000774	0.030602	x
XLOC_024020	XLOC_024020	Down	-0.77897	1.715909	1.151171	0.000747	0.030602	u
XLOC_022173	XLOC_022173	Down	-0.80996	1.753161	1.852383	0.0008	0.030779	u
XLOC_035792	XLOC_035792	Down	-0.69862	1.622951	4.670852	0.000849	0.031552	x
XLOC_000783	XLOC_000783	Down	-0.58954	1.504765	5.840444	0.00085	0.031552	x
XLOC_025189	XLOC_025189	Down	-0.87834	1.838264	2.262243	0.000855	0.03163	u
XLOC_034285	XLOC_034285	Down	-1.00593	2.008237	1.986357	0.000866	0.031673	u
XLOC_014743	XLOC_014743	Down	-1.27473	2.419527	-1.7331	0.000899	0.031829	u
XLOC_025089	XLOC_025089	Down	-1.10824	2.155826	-0.9945	0.000896	0.031829	u
XLOC_014202	XLOC_014202	Down	-0.80473	1.746821	0.526974	0.000911	0.031829	u
XLOC_012082	XLOC_012082	Down	-0.62833	1.545777	2.188797	0.000905	0.031829	u
XLOC_026952	XLOC_026952	Down	-0.96598	1.953397	2.530265	0.000951	0.032134	x
XLOC_002219	XLOC_002219	Down	-1.08822	2.126112	-0.29723	0.000961	0.032184	x
XLOC_005801	XLOC_005801	Down	-1.25946	2.394067	-1.70972	0.000999	0.032327	u
XLOC_018693	XLOC_018693	Down	-0.83707	1.78642	2.51624	0.001014	0.032354	x
XLOC_001474	XLOC_001474	Down	-0.62768	1.545079	3.843364	0.001014	0.032354	x
XLOC_015705	XLOC_015705	Down	-2.05159	4.145633	-3.1992	0.001039	0.03253	u
XLOC_008545	XLOC_008545	Down	-1.77185	3.41492	0.819291	0.001058	0.032626	u
XLOC_001068	XLOC_001068	Down	-0.66829	1.589186	3.210357	0.001054	0.032626	u
XLOC_022171	XLOC_022171	Down	-0.96339	1.949885	0.930083	0.001132	0.033173	u
XLOC_021046	XLOC_021046	Down	-1.07298	2.103774	-1.49399	0.001232	0.033507	u
XLOC_027452	XLOC_027452	Down	-0.97009	1.958963	-0.9473	0.001237	0.033507	x
XLOC_010467	XLOC_010467	Down	-0.91599	1.886863	0.527084	0.001228	0.033507	u
XLOC_022975	XLOC_022975	Down	-0.79552	1.735698	1.172789	0.001239	0.033507	x u
XLOC_000055	XLOC_000055	Down	-0.68074	1.602967	1.466001	0.00122	0.033507	u
XLOC_000257	XLOC_000257	Down	-0.79269	1.732307	0.273842	0.001251	0.033599	u
XLOC_010830	XLOC_010830	Down	-0.9831	1.976715	0.754617	0.00137	0.034932	u

XLOC_007007	XLOC_007007	Down	-0.60989	1.526144	3.062938	0.001382	0.034998	u
XLOC_018006	XLOC_018006	Down	-0.71471	1.641151	2.806129	0.001385	0.035027	u
XLOC_026639	XLOC_026639	Down	-0.55311	1.467247	3.13624	0.001411	0.035232	u
XLOC_017638	XLOC_017638	Down	-0.60496	1.520932	2.953094	0.001467	0.03559	x
XLOC_018649	XLOC_018649	Down	-0.84082	1.791073	1.381041	0.001595	0.036875	u
XLOC_008730	XLOC_008730	Down	-0.88087	1.841491	2.020269	0.00168	0.037344	x
XLOC_014949	XLOC_014949	Down	-0.99792	1.997112	-0.90915	0.001696	0.037547	u
XLOC_027655	XLOC_027655	Down	-1.04322	2.06082	-1.43816	0.001699	0.037572	o
XLOC_005709	XLOC_005709	Down	-0.98936	1.98531	-0.8753	0.001764	0.037998	x
XLOC_004779	XLOC_004779	Down	-0.69357	1.617275	4.425891	0.001788	0.038229	x u
XLOC_034422	XLOC_034422	Down	-1.70344	3.256774	-0.16492	0.001817	0.038496	u
XLOC_024479	XLOC_024479	Down	-0.60833	1.524491	2.442569	0.00183	0.038697	u
XLOC_026607	XLOC_026607	Down	-1.3882	2.617521	-2.13406	0.001866	0.038782	u
XLOC_000539	XLOC_000539	Down	-0.92529	1.899069	1.956548	0.001866	0.038782	x
XLOC_008895	XLOC_008895	Down	-0.7627	1.696668	1.246832	0.001856	0.038782	x
XLOC_019277	XLOC_019277	Down	-0.85767	1.812108	0.244704	0.001889	0.038985	u
XLOC_012449	XLOC_012449	Down	-0.89865	1.864324	1.133135	0.001897	0.039101	x
XLOC_002995	XLOC_002995	Down	-0.82516	1.771726	2.179702	0.001998	0.039784	x
XLOC_010323	XLOC_010323	Down	-1.43994	2.713087	-2.12113	0.002032	0.040073	u
XLOC_009129	XLOC_009129	Down	-1.81833	3.526736	-0.78953	0.002056	0.040232	u
XLOC_008457	XLOC_008457	Down	-0.71824	1.64517	1.404121	0.002062	0.040272	u x
XLOC_004561	XLOC_004561	Down	-0.73693	1.666628	4.076572	0.002116	0.040752	x
XLOC_020873	XLOC_020873	Down	-0.58504	1.500085	4.627907	0.002144	0.040896	x u
XLOC_011766	XLOC_011766	Down	-0.73476	1.664115	2.393839	0.002193	0.041215	x
XLOC_011941	XLOC_011941	Down	-0.72079	1.648081	0.385361	0.00222	0.041384	u
XLOC_014932	XLOC_014932	Down	-0.76954	1.704723	0.934733	0.002293	0.041809	u
XLOC_017688	XLOC_017688	Down	-0.71512	1.641625	1.598516	0.002393	0.042649	u x
XLOC_002514	XLOC_002514	Down	-1.22444	2.336651	-1.61384	0.002403	0.042711	u
XLOC_005186	XLOC_005186	Down	-0.81834	1.763381	1.030301	0.002408	0.042761	x u
XLOC_024265	XLOC_024265	Down	-0.93202	1.907941	2.35428	0.002619	0.043689	u
XLOC_033696	XLOC_033696	Down	-0.84703	1.798795	0.398422	0.002615	0.043689	u
XLOC_037309	XLOC_037309	Down	-0.7589	1.692199	0.489607	0.002621	0.043689	u
XLOC_008404	XLOC_008404	Down	-0.66211	1.582391	2.122125	0.002717	0.044223	x
XLOC_004944	XLOC_004944	Down	-0.93136	1.90707	-0.75639	0.002753	0.04447	x
XLOC_020478	XLOC_020478	Down	-0.62613	1.543421	2.489785	0.00285	0.044974	x
XLOC_018560	XLOC_018560	Down	-0.67357	1.595018	0.295176	0.002872	0.045074	u
XLOC_009292	XLOC_009292	Down	-0.5978	1.513409	0.712278	0.002904	0.04532	u
XLOC_007484	XLOC_007484	Down	-0.85724	1.811575	-0.05198	0.003006	0.045757	x
XLOC_008546	XLOC_008546	Down	-2.59514	6.04247	-3.16807	0.003022	0.045945	u
XLOC_010428	XLOC_010428	Down	-0.71931	1.646398	0.831949	0.003051	0.046108	x
XLOC_004622	XLOC_004622	Down	-0.43618	1.353017	3.991383	0.003073	0.046235	x
XLOC_032472	XLOC_032472	Down	-1.01699	2.023697	0.760867	0.003092	0.046308	u
XLOC_000467	XLOC_000467	Down	-0.60165	1.517447	1.643922	0.003323	0.047694	x u
XLOC_010007	XLOC_010007	Down	-0.73507	1.664483	1.763161	0.00337	0.047809	x
XLOC_011987	XLOC_011987	Down	-0.50781	1.42189	1.772613	0.003476	0.048459	x
XLOC_020962	XLOC_020962	Down	-1.19006	2.281624	-0.15226	0.003559	0.048985	u
XLOC_021045	XLOC_021045	Down	-0.61097	1.527289	2.593975	0.003556	0.048985	u
XLOC_025269	XLOC_025269	Down	-0.5826	1.497544	4.050271	0.003568	0.048993	u

Supplemental table 6

Genes overlapping with the list of Moran et al. [34]

XLOC	Moran ID	chr	Start Moran	Stop Moran	Start Transmap	Stop Transmap
XLOC_000378	HI-LNC568	chr5	102118175	102120991	102117031	102118514
XLOC_000607	HI-LNC277	chr1	161551566	161558346	161552261	161558202
XLOC_001068	HI-LNC401	chr2	232175903	232177639	232175262	232177541
XLOC_001159	HI-LNC1161	chr18	58336080	58341501	58339869	58341429
XLOC_002184	HI-LNC641	chr6	147334874	147437676	147364244	147494967
XLOC_002183	HI-LNC641	chr6	147334874	147437676	147425669	147439820
XLOC_002905	HI-LNC925	chr12	61283482	61302209	61291304	61312645
XLOC_003020	HI-LNC639	chr6	146177615	146178292	146177702	146193776
XLOC_005117	HI-LNC1135	chr17	70490082	70492536	70489518	70490586
XLOC_007547	HI-LNC989	chr14	76564788	76568092	76566271	76574722
XLOC_007775	HI-LNC1000	chr14	104142143	104143933	104142290	104144502
XLOC_008388	HI-LNC607	chr6	16869806	16874960	16869928	16872482
XLOC_008389	HI-LNC607	chr6	16869806	16874960	16873845	16874703
XLOC_008636	HI-LNC553	chr5	72829159	72829881	72827575	72829867
XLOC_008707	HI-LNC548	chr5	50296009	50308204	50292484	50297592
XLOC_009292	HI-LNC548	chr5	50296009	50308204	50297631	50302088
XLOC_011053	HI-LNC969	chr13	95123124	95127184	95126480	95127052
XLOC_011491	HI-LNC537	chr5	10405713	10406827	10406097	10406510
XLOC_011922	HI-LNC920	chr12	48963717	48965449	48963722	48966340
XLOC_012082	HI-LNC745	chr8	104566589	104582151	104576726	104581137
XLOC_012441	HI-LNC1275	chr22	43922535	43938389	43898740	43938326
XLOC_014712	HI-LNC77	chr6	43966418	43980669	43972620	43990399
XLOC_014802	HI-LNC570	chr5	107745699	107752110	107749107	107751822
XLOC_014932	HI-LNC333	chr2	47987466	47988690	47987270	47987658
XLOC_015022	HI-LNC567	chr5	98292760	98297936	98292734	98293541
XLOC_015492	HI-LNC77	chr6	43966418	43980669	43975227	43993373
XLOC_016517	HI-LNC1164	chr18	72458225	72471063	72459823	72464181
XLOC_017840	HI-LNC865	chr11	61112528	61132302	61125807	61133825
XLOC_017969	HI-LNC819	chr10	89406042	89409455	89369897	89409447
XLOC_018002	HI-LNC822	chr10	95351492	95355522	95351884	95353470
XLOC_019208	HI-LNC862	chr11	43557305	43619162	43532265	43559414
XLOC_019476	HI-LNC1228	chr20	22488058	22507515	22433986	22498945
XLOC_020471	HI-LNC863	chr11	43622102	43627312	43622257	43628877
XLOC_020734	HI-LNC1228	chr20	22488058	22507515	22489187	22497542
XLOC_020962	HI-LNC25	chr20	38066346	38082186	38075511	38077917
XLOC_021112	HI-LNC1241	chr20	61616032	61622561	61620130	61624080
XLOC_022873	HI-LNC256	chr1	108544498	108546760	108544534	108557545
XLOC_023633	HI-LNC740	chr8	95718761	95722245	95719530	95720663
XLOC_023846	HI-LNC780	chr9	111300415	111304868	111302057	111309613
XLOC_024101	HI-LNC232	chr1	43197435	43214586	43197281	43201999
XLOC_024386	HI-LNC205	chr1	9165045	9168248	9143829	9165882
XLOC_024473	HI-LNC730	chr8	61975545	61998369	61975986	61981926
XLOC_024734	HI-LNC782	chr9	114287664	114288774	114242241	114288523
XLOC_026157	HI-LNC321	chr2	28807932	28812738	28811926	28827944
XLOC_026780	HI-LNC659	chr7	5431572	5437419	5429778	5435128
XLOC_027418	HI-LNC943	chr12	119291544	119293808	119291601	119298328
XLOC_028700	HI-LNC342	chr2	69724714	69801511	69775382	69776030
XLOC_028832	HI-LNC809	chr10	44773186	44775022	44773788	44777752
XLOC_029225	HI-LNC14	chr7	127594961	127652181	127570130	127605065

XLOC_030688	HI-LNC1199	chr19	45165698	45168671	45165823	45166111
XLOC_031682	HI-LNC843	chr11	1287569	1288723	1287579	1287775
XLOC_031821	HI-LNC1216	chr19	63606046	63611874	63607244	63647229
XLOC_032127	HI-LNC1180	chr19	36532791	36556765	36532786	36547598
XLOC_034238	HI-LNC1072	chr16	88084761	88094621	88084539	88089851
XLOC_034728	HI-LNC1059	chr16	54780209	54782470	54715544	54782456
XLOC_035676	HI-LNC665	chr7	35701298	35705499	35701408	35706391
XLOC_035945	HI-LNC1019	chr15	70548686	70553720	70550770	70553858
XLOC_036461	HI-LNC1171	chr19	10623127	10625747	10625546	10625894
XLOC_036650	HI-LNC888	chr11	111645149	111648862	111647518	111654415
XLOC_037284	HI-LNC427	chr3	38466932	38469703	38469287	38470209
XLOC_037990	HI-LNC1281	chrX	45572443	45596484	45596010	45599223

Supplemental table 7**List of differentially expressed novel lncRNAs between HFD and ND mice (excluding HD3)**

u= intergenic transcripts, x=exonic overlap with reference on the opposite strand

ID	XLOC	Regulation	logFC	Fold change	AveExpr	P.Value	adj.P.Val	classes
XLOC_000549	XLOC_000549	Up	1.380937	2.604375388	3.640885	1.76E-06	0.000582	u
XLOC_010448	XLOC_010448	Up	2.398872	5.273906077	-1.00815	1.96E-06	0.000612	u
XLOC_031464	XLOC_031464	Up	1.129571	2.187936852	3.32685	9.01E-06	0.00131	u
XLOC_029617	XLOC_029617	Up	0.503165	1.417319379	8.468925	9.41E-06	0.00134	u
XLOC_022331	XLOC_022331	Up	2.708479	6.536321327	-2.36982	1.10E-05	0.001478	u
XLOC_000634	XLOC_000634	Up	0.660435	1.580558678	5.099281	1.11E-05	0.001478	u
XLOC_007334	XLOC_007334	Up	0.743285	1.673983431	5.384102	1.32E-05	0.00155	u
XLOC_013715	XLOC_013715	Up	1.393353	2.626884457	0.376411	1.74E-05	0.001813	u
XLOC_010971	XLOC_010971	Up	4.82865	28.4163637	-4.31713	1.94E-05	0.001887	u
XLOC_007734	XLOC_007734	Up	2.12894	4.373959778	-1.60537	2.29E-05	0.002052	u
XLOC_037273	XLOC_037273	Up	0.943528	1.923224987	3.199203	2.58E-05	0.00221	u
XLOC_019806	XLOC_019806	Up	1.180472	2.266509204	0.794755	2.67E-05	0.00226	u
XLOC_020248	XLOC_020248	Up	2.587447	6.010343411	-2.80251	6.78E-05	0.003971	u
XLOC_008551	XLOC_008551	Up	2.710381	6.544943924	-0.70201	0.000124	0.005422	u
XLOC_028428	XLOC_028428	Up	1.340263	2.531974485	-1.05957	0.000187	0.006567	x
XLOC_031593	XLOC_031593	Up	2.550804	5.859607394	-1.97695	0.000204	0.006763	u
XLOC_024419	XLOC_024419	Up	1.403909	2.646176837	-1.0111	0.000207	0.006833	u
XLOC_026280	XLOC_026280	Up	1.300294	2.462790364	-0.83709	0.000249	0.0075	u
XLOC_004995	XLOC_004995	Up	0.705776	1.631021644	2.347999	0.00031	0.008445	u
XLOC_008534	XLOC_008534	Up	0.965108	1.95220984	0.239862	0.000364	0.009135	u
XLOC_008868	XLOC_008868	Up	3.224025	9.343901779	-4.83616	0.000381	0.009267	u
XLOC_015577	XLOC_015577	Up	0.974232	1.964595576	0.603733	0.000417	0.009684	x
XLOC_034906	XLOC_034906	Up	1.154602	2.226228595	0.432118	0.000537	0.011071	u
XLOC_016371	XLOC_016371	Up	0.534862	1.448803364	5.607633	0.000547	0.011178	u
XLOC_006854	XLOC_006854	Up	2.698943	6.493261824	-3.66086	0.000677	0.012493	u
XLOC_028688	XLOC_028688	Up	0.407546	1.326428048	6.80566	0.000763	0.013284	u
XLOC_008391	XLOC_008391	Up	0.687359	1.610332962	1.548455	0.00082	0.013791	u
XLOC_003494	XLOC_003494	Up	2.515084	5.716309329	-2.99333	0.000915	0.014688	u
XLOC_011981	XLOC_011981	Up	0.999015	1.998635358	1.818511	0.00097	0.015214	u
XLOC_017840	XLOC_017840	Up	0.418569	1.336601246	4.176642	0.0011	0.016383	u
XLOC_014872	XLOC_014872	Up	0.410765	1.32939027	5.205512	0.001136	0.016673	u
XLOC_034750	XLOC_034750	Up	1.464357	2.759405322	-2.30755	0.001153	0.016759	u
XLOC_018066	XLOC_018066	Up	1.17659	2.260418545	-0.58568	0.001261	0.01754	u
XLOC_015535	XLOC_015535	Up	0.351481	1.275870121	5.263489	0.001341	0.018163	u
XLOC_016513	XLOC_016513	Up	0.60098	1.516746018	1.840006	0.001421	0.018716	u
XLOC_008444	XLOC_008444	Up	1.316289	2.490246734	-1.84785	0.001544	0.019573	x
XLOC_002282	XLOC_002282	Up	0.517057	1.431033085	3.61164	0.001798	0.021356	u
XLOC_019718	XLOC_019718	Up	0.488165	1.402659667	2.614647	0.002088	0.023064	u
XLOC_006855	XLOC_006855	Up	1.316258	2.490193931	-1.66047	0.002337	0.024616	u
XLOC_010035	XLOC_010035	Up	0.823172	1.769291726	0.322945	0.002541	0.025758	x u
XLOC_004793	XLOC_004793	Up	0.925114	1.898834377	-0.13261	0.002756	0.026877	u
XLOC_027341	XLOC_027341	Up	1.175887	2.259317737	-1.59737	0.002814	0.027109	u
XLOC_036151	XLOC_036151	Up	0.342384	1.267849571	4.547593	0.002961	0.027846	u
XLOC_034616	XLOC_034616	Up	0.403472	1.322687001	3.743769	0.002981	0.028003	u
XLOC_003492	XLOC_003492	Up	0.557878	1.472102496	1.669814	0.003151	0.028853	u
XLOC_028816	XLOC_028816	Up	0.363924	1.286921159	7.54088	0.003729	0.031669	u
XLOC_013602	XLOC_013602	Up	0.435885	1.352740156	3.08182	0.004329	0.034424	u
XLOC_000515	XLOC_000515	Up	0.987983	1.983410134	0.063509	0.004945	0.0373	u
XLOC_010698	XLOC_010698	Up	0.40591	1.324924325	3.971143	0.004975	0.037415	u
XLOC_011708	XLOC_011708	Up	0.501327	1.415514971	2.814948	0.00498	0.037429	u

XLOC_007700	XLOC_007700	Up	0.245771	1.18572614	6.297621	0.005654	0.040338	x
XLOC_013698	XLOC_013698	Up	1.395215	2.630277311	-2.37344	0.006077	0.042138	x u
XLOC_000898	XLOC_000898	Up	0.362986	1.286085312	6.606055	0.006104	0.042277	x
XLOC_019724	XLOC_019724	Up	0.486882	1.401412779	2.736638	0.006157	0.042506	u
XLOC_036229	XLOC_036229	Up	0.52024	1.434193671	1.45639	0.006884	0.045415	x
XLOC_007023	XLOC_007023	Up	0.663247	1.583643025	1.020597	0.006943	0.045627	x u
XLOC_019726	XLOC_019726	Up	0.393071	1.313185984	2.885379	0.007269	0.04697	u
XLOC_000009	XLOC_000009	Up	1.217786	2.325894508	-2.30061	0.007473	0.0476	u

ID	XLOC	Regulation	logFC	Fold change	AveExpr	P.Value	adj.P.Val	classes
XLOC_028544	XLOC_028544	Down	-2.58671	6.00725367	1.351558	2.08E-07	0.000221	u
XLOC_003146	XLOC_003146	Down	-1.485	2.799180736	1.911606	1.04E-05	0.001427	u
XLOC_034285	XLOC_034285	Down	-1.25228	2.382183608	1.995699	1.33E-05	0.00155	u
XLOC_038703	XLOC_038703	Down	-1.18961	2.280911302	1.59478	1.93E-05	0.001887	x
XLOC_020954	XLOC_020954	Down	-1.19598	2.291002486	3.423725	2.17E-05	0.001972	x u
XLOC_019771	XLOC_019771	Down	-1.67501	3.193204902	0.89683	2.28E-05	0.002052	x
XLOC_015709	XLOC_015709	Down	-0.70395	1.628960947	4.262943	5.51E-05	0.003527	u
XLOC_014904	XLOC_014904	Down	-2.39851	5.272570585	-1.02053	8.07E-05	0.004388	u
XLOC_025189	XLOC_025189	Down	-1.03572	2.050138202	2.29155	9.42E-05	0.004744	u
XLOC_032946	XLOC_032946	Down	-1.86893	3.65261291	-0.865	0.00012	0.00535	x
XLOC_029225	XLOC_029225	Down	-0.86443	1.820619367	3.370428	0.000142	0.005679	u
XLOC_019476	XLOC_019476	Down	-1.14922	2.217934003	3.140859	0.000152	0.005854	u
XLOC_034422	XLOC_034422	Down	-2.15562	4.455614067	-0.15565	0.000154	0.005883	u
XLOC_034020	XLOC_034020	Down	-1.23504	2.353880204	0.328727	0.00019	0.006602	u
XLOC_010467	XLOC_010467	Down	-1.1086	2.156356215	0.548257	0.00019	0.006602	u
XLOC_022171	XLOC_022171	Down	-1.14081	2.205052473	0.960247	0.000198	0.006685	u
XLOC_037070	XLOC_037070	Down	-1.11675	2.168585482	1.042144	0.000201	0.006686	u
XLOC_005186	XLOC_005186	Down	-1.01888	2.026343119	1.038121	0.00021	0.006914	x u
XLOC_015529	XLOC_015529	Down	-1.03956	2.05560443	0.628551	0.000224	0.007129	u
XLOC_002219	XLOC_002219	Down	-1.30413	2.469339966	-0.26508	0.000233	0.007246	x
XLOC_036461	XLOC_036461	Down	-0.82223	1.768135489	4.342228	0.000233	0.007246	u x
XLOC_020962	XLOC_020962	Down	-1.53949	2.906926589	-0.15995	0.000234	0.007246	u
XLOC_033969	XLOC_033969	Down	-1.03647	2.051203076	0.60402	0.000256	0.007553	x u
XLOC_008545	XLOC_008545	Down	-2.07278	4.206970533	0.887746	0.000318	0.008505	u
XLOC_018006	XLOC_018006	Down	-0.81569	1.760145632	2.839272	0.000325	0.008612	u
XLOC_016616	XLOC_016616	Down	-1.0082	2.011398476	1.638679	0.000325	0.008617	u
XLOC_034816	XLOC_034816	Down	-0.54998	1.464067987	5.730467	0.000343	0.008881	x
XLOC_037930	XLOC_037930	Down	-0.94665	1.927388459	0.730509	0.000372	0.009254	x
XLOC_000783	XLOC_000783	Down	-0.61798	1.53472488	5.888526	0.000374	0.009254	x
XLOC_035831	XLOC_035831	Down	-0.91561	1.886371328	1.622942	0.000381	0.009267	u
XLOC_011701	XLOC_011701	Down	-1.39458	2.629116811	-0.39356	0.000408	0.009564	x u
XLOC_012082	XLOC_012082	Down	-0.69716	1.621310817	2.225862	0.000428	0.009845	u
XLOC_037068	XLOC_037068	Down	-1.27996	2.428321508	0.051641	0.000463	0.010347	u
XLOC_027054	XLOC_027054	Down	-0.74095	1.671279541	2.979059	0.000486	0.010596	x
XLOC_017688	XLOC_017688	Down	-0.85451	1.808146639	1.618546	0.000487	0.010596	u x
XLOC_005162	XLOC_005162	Down	-1.12776	2.185192161	-0.31339	0.000518	0.010935	u
XLOC_008730	XLOC_008730	Down	-0.99749	1.996527336	2.063752	0.000551	0.011216	x
XLOC_008457	XLOC_008457	Down	-0.84374	1.794702594	1.4302	0.000579	0.011578	u x
XLOC_024489	XLOC_024489	Down	-0.81706	1.761807274	1.211381	0.000585	0.011602	u
XLOC_001474	XLOC_001474	Down	-0.65737	1.57720303	3.894712	0.000601	0.011759	x
XLOC_022173	XLOC_022173	Down	-0.86732	1.82426831	1.912598	0.000602	0.011762	u
XLOC_020873	XLOC_020873	Down	-0.64952	1.568642464	4.661872	0.000635	0.012015	x u
XLOC_009129	XLOC_009129	Down	-2.21395	4.639431332	-0.74841	0.000653	0.012239	u
XLOC_005277	XLOC_005277	Down	-1.11227	2.161851828	0.02242	0.000678	0.012493	u
XLOC_035792	XLOC_035792	Down	-0.69543	1.619363195	4.741905	0.000685	0.012546	x

XLOC_020879	XLOC_020879	Down	-0.87726	1.836885499	1.886446	0.000712	0.01277	u
XLOC_036848	XLOC_036848	Down	-1.10455	2.150322391	-0.31688	0.000713	0.012782	u
XLOC_024479	XLOC_024479	Down	-0.68355	1.606081803	2.475215	0.000742	0.013072	u
XLOC_024265	XLOC_024265	Down	-1.07745	2.110304446	2.393581	0.000776	0.013412	u
XLOC_034742	XLOC_034742	Down	-0.8154	1.759782628	3.829526	0.000785	0.013484	u x
XLOC_000763	XLOC_000763	Down	-0.80954	1.75265679	2.519772	0.000789	0.013501	x
XLOC_023840	XLOC_023840	Down	-0.76182	1.695632984	2.254578	0.000872	0.014302	x u
XLOC_009975	XLOC_009975	Down	-0.78205	1.719570773	1.250029	0.000904	0.01459	x u
XLOC_038779	XLOC_038779	Down	-1.02265	2.031646573	-0.24575	0.000908	0.01463	x u
XLOC_011465	XLOC_011465	Down	-0.76444	1.698705544	3.768981	0.000917	0.014712	x
XLOC_024020	XLOC_024020	Down	-0.81768	1.762567371	1.214358	0.00093	0.014863	u
XLOC_022273	XLOC_022273	Down	-0.81364	1.757640678	1.127287	0.001002	0.015493	x u
XLOC_030688	XLOC_030688	Down	-0.75449	1.687032338	1.432943	0.001032	0.015724	u
XLOC_017638	XLOC_017638	Down	-0.63832	1.55651582	3.001328	0.001052	0.015899	x
XLOC_007275	XLOC_007275	Down	-0.88706	1.849403595	2.397534	0.001134	0.016668	o
XLOC_013310	XLOC_013310	Down	-1.546	2.920072066	-1.26593	0.001139	0.016676	u
XLOC_034176	XLOC_034176	Down	-1.28439	2.435792973	-0.44471	0.001182	0.016936	u
XLOC_018693	XLOC_018693	Down	-0.83347	1.781961305	2.601414	0.001213	0.017205	x
XLOC_036048	XLOC_036048	Down	-0.9433	1.922915316	2.297411	0.001243	0.017413	u
XLOC_019277	XLOC_019277	Down	-0.97633	1.96745148	0.287307	0.001244	0.017413	u
XLOC_010428	XLOC_010428	Down	-0.84213	1.792694824	0.858122	0.001258	0.017515	x
XLOC_026952	XLOC_026952	Down	-0.93	1.905276688	2.6389	0.001292	0.017812	x
XLOC_004622	XLOC_004622	Down	-0.47724	1.392073622	4.020107	0.001295	0.01783	x
XLOC_027674	XLOC_027674	Down	-0.88688	1.84916908	1.342274	0.001298	0.017848	u
XLOC_004779	XLOC_004779	Down	-0.70766	1.63314934	4.488997	0.001324	0.018003	x u
XLOC_005339	XLOC_005339	Down	-2.15527	4.454504997	-2.6208	0.001351	0.018213	u
XLOC_008546	XLOC_008546	Down	-3.3184	9.975561863	-3.16319	0.001363	0.018296	u
XLOC_021974	XLOC_021974	Down	-1.00282	2.003912155	-0.02742	0.001397	0.018542	u
XLOC_032127	XLOC_032127	Down	-0.78191	1.719400952	1.079521	0.001417	0.018684	u
XLOC_014755	XLOC_014755	Down	-0.76469	1.699001925	1.185335	0.001463	0.019032	u
XLOC_000606	XLOC_000606	Down	-1.20897	2.311726642	0.834967	0.001484	0.019183	u
XLOC_027452	XLOC_027452	Down	-1.09898	2.142030826	-0.89577	0.001489	0.019231	x
XLOC_001068	XLOC_001068	Down	-0.58041	1.495272017	3.308718	0.001524	0.019489	u
XLOC_034523	XLOC_034523	Down	-1.16198	2.237650777	1.009205	0.00154	0.019548	u
XLOC_033696	XLOC_033696	Down	-0.96283	1.94912972	0.439564	0.001553	0.019648	u
XLOC_011002	XLOC_011002	Down	-1.87024	3.655940391	-2.43859	0.001569	0.019745	u
XLOC_012613	XLOC_012613	Down	-1.16481	2.242033098	-0.81753	0.001656	0.020437	u
XLOC_011835	XLOC_011835	Down	-0.9935	1.99101012	0.142647	0.001686	0.020539	u
XLOC_025089	XLOC_025089	Down	-1.1816	2.268277833	-0.90918	0.001739	0.020971	u
XLOC_022975	XLOC_022975	Down	-0.81216	1.755832825	1.245221	0.00175	0.021014	x u
XLOC_005709	XLOC_005709	Down	-1.12396	2.179444425	-0.82404	0.001805	0.021389	x
XLOC_036509	XLOC_036509	Down	-1.00473	2.006569328	0.544736	0.001841	0.021637	x
XLOC_013278	XLOC_013278	Down	-1.83955	3.578991595	-2.14895	0.001876	0.021846	x
XLOC_026639	XLOC_026639	Down	-0.52902	1.442948574	3.200898	0.001881	0.021891	u
XLOC_037309	XLOC_037309	Down	-0.85765	1.812089956	0.528761	0.001895	0.021972	u
XLOC_007007	XLOC_007007	Down	-0.57539	1.490085364	3.135811	0.001952	0.022314	u
XLOC_008895	XLOC_008895	Down	-0.80988	1.753060847	1.305727	0.001962	0.022335	x
XLOC_020918	XLOC_020918	Down	-1.12006	2.17355345	-0.04432	0.002027	0.022695	u
XLOC_000605	XLOC_000605	Down	-1.78887	3.455452767	-0.05281	0.002041	0.022755	u
XLOC_014202	XLOC_014202	Down	-0.80294	1.744652251	0.607475	0.002056	0.022838	u
XLOC_036316	XLOC_036316	Down	-0.88659	1.848805194	0.036958	0.002082	0.023008	u x
XLOC_028573	XLOC_028573	Down	-1.39206	2.624539449	-1.314	0.002095	0.023113	u
XLOC_004944	XLOC_004944	Down	-1.07917	2.112815695	-0.71719	0.002101	0.023126	x
XLOC_015705	XLOC_015705	Down	-2.28666	4.879246333	-3.07853	0.002127	0.023246	u
XLOC_022418	XLOC_022418	Down	-0.87207	1.830291604	-0.10399	0.00214	0.023334	u

XLOC_001098	XLOC_001098	Down	-1.14923	2.217957784	-1.02498	0.002239	0.023969	u
XLOC_010830	XLOC_010830	Down	-0.98006	1.97254409	0.853964	0.002257	0.0241	u
XLOC_008404	XLOC_008404	Down	-0.70549	1.630695742	2.172572	0.002302	0.024431	x
XLOC_026999	XLOC_026999	Down	-0.73119	1.660008952	0.663753	0.002317	0.024495	u
XLOC_001157	XLOC_001157	Down	-1.48307	2.795439153	-2.11805	0.002359	0.024769	u
XLOC_006072	XLOC_006072	Down	-1.48937	2.807654756	-2.01747	0.002362	0.024774	u
XLOC_000782	XLOC_000782	Down	-0.63974	1.558052582	1.933915	0.002416	0.02506	u
XLOC_004561	XLOC_004561	Down	-0.70609	1.631380288	4.16042	0.002445	0.025258	x
XLOC_024473	XLOC_024473	Down	-0.79951	1.740508506	0.562445	0.002466	0.0254	u
XLOC_036636	XLOC_036636	Down	-0.61573	1.532336972	3.24867	0.002478	0.025475	u
XLOC_022389	XLOC_022389	Down	-0.66257	1.582894775	1.645031	0.002503	0.025565	x
XLOC_021045	XLOC_021045	Down	-0.65582	1.575511325	2.637399	0.002522	0.025682	u
XLOC_020951	XLOC_020951	Down	-1.1373	2.199685185	1.564962	0.002627	0.026326	u
XLOC_014932	XLOC_014932	Down	-0.81177	1.75536135	0.995172	0.002641	0.026363	u
XLOC_032499	XLOC_032499	Down	-0.40085	1.320287625	3.996056	0.002669	0.026456	u
XLOC_021046	XLOC_021046	Down	-1.17106	2.251769726	-1.42066	0.002693	0.026546	u
XLOC_013494	XLOC_013494	Down	-0.62544	1.542679892	2.031394	0.002717	0.026672	x
XLOC_005745	XLOC_005745	Down	-0.4481	1.364243416	3.287587	0.002765	0.026886	u x
XLOC_033811	XLOC_033811	Down	-1.64278	3.12266761	-1.3255	0.002767	0.026886	u
XLOC_028705	XLOC_028705	Down	-2.07598	4.216299801	-2.40299	0.002834	0.027158	x
XLOC_017657	XLOC_017657	Down	-0.59785	1.51345747	2.343863	0.00289	0.027459	u
XLOC_011766	XLOC_011766	Down	-0.72756	1.6558398	2.46975	0.002918	0.02764	x
XLOC_036090	XLOC_036090	Down	-0.5185	1.43246921	3.698305	0.003023	0.028231	u
XLOC_005801	XLOC_005801	Down	-1.30267	2.466847845	-1.59784	0.003034	0.028253	u
XLOC_018649	XLOC_018649	Down	-0.80259	1.744234862	1.478252	0.003044	0.028294	u
XLOC_029709	XLOC_029709	Down	-0.42432	1.341941305	3.539424	0.003099	0.028577	u x
XLOC_025297	XLOC_025297	Down	-0.80575	1.748058736	0.473855	0.003113	0.028653	x
XLOC_000539	XLOC_000539	Down	-0.87037	1.828132219	2.068946	0.003156	0.028869	x
XLOC_000257	XLOC_000257	Down	-0.78197	1.71947282	0.356125	0.003183	0.028989	u
XLOC_000055	XLOC_000055	Down	-0.60402	1.51994783	1.562058	0.003235	0.02924	u
XLOC_036596	XLOC_036596	Down	-1.23266	2.3499984	-1.56936	0.003251	0.029326	u
XLOC_014743	XLOC_014743	Down	-1.27527	2.420448791	-1.60412	0.003264	0.029373	u
XLOC_025083	XLOC_025083	Down	-0.85296	1.806199888	1.594594	0.003309	0.029549	x u
XLOC_012449	XLOC_012449	Down	-0.87614	1.835454476	1.231855	0.003319	0.029579	x
XLOC_020478	XLOC_020478	Down	-0.63157	1.549252399	2.549914	0.003365	0.02981	x
XLOC_024246	XLOC_024246	Down	-1.45187	2.735628847	-1.66655	0.003374	0.029865	u
XLOC_018560	XLOC_018560	Down	-0.73788	1.66772834	0.339479	0.003647	0.03127	u
XLOC_018638	XLOC_018638	Down	-0.75524	1.687918033	1.421152	0.003656	0.031309	x
XLOC_002995	XLOC_002995	Down	-0.67075	1.591901547	2.318291	0.003713	0.031608	x
XLOC_004718	XLOC_004718	Down	-1.07475	2.106352729	-0.46076	0.003754	0.031769	x
XLOC_007485	XLOC_007485	Down	-1.55338	2.935044395	-1.98859	0.003841	0.032189	x
XLOC_000922	XLOC_000922	Down	-0.97117	1.960434431	-0.8621	0.003883	0.032399	x u
XLOC_025268	XLOC_025268	Down	-0.52679	1.440720956	2.306434	0.003924	0.032624	u
XLOC_003534	XLOC_003534	Down	-0.74118	1.671538468	0.26075	0.003924	0.032624	x
XLOC_028762	XLOC_028762	Down	-0.61534	1.531914022	3.571988	0.003928	0.032634	x
XLOC_019722	XLOC_019722	Down	-0.86245	1.818120975	-0.25899	0.003957	0.032755	u
XLOC_013215	XLOC_013215	Down	-0.51327	1.427277817	3.88973	0.004025	0.033178	u x
XLOC_007513	XLOC_007513	Down	-0.80321	1.74497839	0.453016	0.004056	0.033265	u
XLOC_024385	XLOC_024385	Down	-1.23565	2.354878824	-1.36513	0.004061	0.033284	u
XLOC_004227	XLOC_004227	Down	-2.46629	5.526220571	-3.47387	0.004126	0.033586	x
XLOC_015304	XLOC_015304	Down	-0.75483	1.687430656	0.381512	0.004209	0.033907	u
XLOC_026354	XLOC_026354	Down	-0.61227	1.528659982	1.171595	0.004219	0.033961	u
XLOC_014949	XLOC_014949	Down	-1.0106	2.014745579	-0.81253	0.004269	0.03417	u
XLOC_003516	XLOC_003516	Down	-1.10452	2.150279661	0.03449	0.004286	0.034215	u
XLOC_025413	XLOC_025413	Down	-0.50393	1.418072501	2.936519	0.004325	0.034407	u

XLOC_001003	XLOC_001003	Down	-3.18746	9.110052248	-5.03155	0.004335	0.034441	u
XLOC_000467	XLOC_000467	Down	-0.61879	1.535586949	1.697126	0.004346	0.03447	x u
XLOC_007273	XLOC_007273	Down	-0.89598	1.860874639	0.001757	0.004425	0.034827	u
XLOC_002813	XLOC_002813	Down	-1.03696	2.05189485	-0.67238	0.004503	0.035242	u
XLOC_002251	XLOC_002251	Down	-0.7334	1.662547176	0.605615	0.004517	0.0353	u
XLOC_013077	XLOC_013077	Down	-1.4468	2.726030381	-2.17016	0.004533	0.035336	u
XLOC_010458	XLOC_010458	Down	-2.38197	5.212496892	-2.85275	0.004707	0.036166	u
XLOC_012560	XLOC_012560	Down	-0.63183	1.549533497	1.492727	0.004797	0.03667	u
XLOC_013452	XLOC_013452	Down	-0.55915	1.473396456	2.452938	0.004965	0.037392	u
XLOC_036120	XLOC_036120	Down	-2.82214	7.072102945	-3.64501	0.005277	0.038657	u
XLOC_013855	XLOC_013855	Down	-1.09662	2.138530773	-0.80579	0.005287	0.038661	u
XLOC_011987	XLOC_011987	Down	-0.5173	1.43127492	1.81986	0.005371	0.039085	x
XLOC_025269	XLOC_025269	Down	-0.48242	1.397082196	4.145549	0.005517	0.03968	u
XLOC_005558	XLOC_005558	Down	-0.69965	1.624107207	0.61991	0.005552	0.03985	x
XLOC_007280	XLOC_007280	Down	-0.62928	1.546797693	1.389319	0.005672	0.040369	u
XLOC_005060	XLOC_005060	Down	-0.46927	1.384407075	2.167461	0.005724	0.040579	u
XLOC_003119	XLOC_003119	Down	-0.45279	1.368681305	2.638744	0.005753	0.040707	o
XLOC_014601	XLOC_014601	Down	-0.77474	1.710881593	0.088941	0.005783	0.040856	u
XLOC_002514	XLOC_002514	Down	-1.25666	2.389416736	-1.50304	0.005796	0.040921	u
XLOC_026482	XLOC_026482	Down	-0.69413	1.617911949	2.005315	0.005809	0.040957	x
XLOC_003160	XLOC_003160	Down	-2.08032	4.228999408	-2.67636	0.005813	0.040961	u
XLOC_005843	XLOC_005843	Down	-1.7368	3.332950358	-3.0165	0.005825	0.040998	u
XLOC_032472	XLOC_032472	Down	-0.96367	1.950262671	0.882218	0.005838	0.041075	u
XLOC_031252	XLOC_031252	Down	-0.85481	1.808522174	1.170942	0.006002	0.041891	u
XLOC_010007	XLOC_010007	Down	-0.69368	1.617405157	1.851312	0.006043	0.042031	x
XLOC_024285	XLOC_024285	Down	-0.66303	1.583403188	0.736566	0.006188	0.042665	u
XLOC_036637	XLOC_036637	Down	-0.90455	1.871955201	0.34771	0.006215	0.042765	u
XLOC_011941	XLOC_011941	Down	-0.68705	1.60999233	0.469164	0.006287	0.043112	u
XLOC_000699	XLOC_000699	Down	-0.46766	1.382869048	2.473823	0.006303	0.043167	u
XLOC_012115	XLOC_012115	Down	-0.40911	1.327870455	3.359017	0.006347	0.043376	x
XLOC_024203	XLOC_024203	Down	-0.69271	1.61632213	1.492118	0.006355	0.043389	u
XLOC_010462	XLOC_010462	Down	-0.90506	1.872616075	-0.41272	0.006491	0.043879	u
XLOC_017821	XLOC_017821	Down	-0.93016	1.905484434	-0.05328	0.006536	0.044083	u
XLOC_019773	XLOC_019773	Down	-0.44955	1.365618322	2.672978	0.006755	0.044849	x
XLOC_009292	XLOC_009292	Down	-0.59719	1.51276996	0.772121	0.006826	0.045184	u
XLOC_032225	XLOC_032225	Down	-0.65574	1.57542691	0.96039	0.006901	0.045464	u
XLOC_028346	XLOC_028346	Down	-0.77374	1.709701855	0.677482	0.006953	0.045661	u
XLOC_013087	XLOC_013087	Down	-0.81977	1.765129898	0.249062	0.007202	0.046729	u
XLOC_026607	XLOC_026607	Down	-1.32973	2.513547927	-1.97663	0.00722	0.046807	u
XLOC_037073	XLOC_037073	Down	-0.88793	1.850525259	-0.91005	0.007303	0.047042	u
XLOC_005454	XLOC_005454	Down	-0.69703	1.621163032	2.722133	0.007327	0.047044	x
XLOC_003585	XLOC_003585	Down	-0.61981	1.536670924	0.641272	0.007644	0.048222	u
XLOC_010545	XLOC_010545	Down	-0.75119	1.683181028	0.784994	0.007802	0.04882	x
XLOC_019208	XLOC_019208	Down	-0.64081	1.559205625	4.09699	0.007824	0.048878	x
XLOC_030509	XLOC_030509	Down	-0.73929	1.669355031	2.339516	0.007868	0.048996	u
XLOC_015278	XLOC_015278	Down	-1.08989	2.128574754	-0.62658	0.007995	0.049423	x
XLOC_000706	XLOC_000706	Down	-0.69991	1.624401248	0.470992	0.007998	0.049433	u

Supplemental table 8

Chromosomal description of the two novel lncRNAs *βlinc2* and *βlinc3*

Transcript n°	transcripts <i>βlinc2</i>	n° exons	coding_pote locus	chr.	strand	Average FPKM	Distance from closest prot cod gene
1	TCONS_00028200	7	3.04 chr14:72825060-72839586	chr14	-	0.0484	About 98.174 (Fndc3a)
2	TCONS_00028201	8	3.03 chr14:72825060-72839586	chr14	-	0.0004	
3	TCONS_00028202	7	2.37 chr14:72825060-72839586	chr14	-	0.0550	
transcripts <i>βlinc3</i>							
4	TCONS_00033681	1	-2.17 chr16:46348870-46372854	chr16	+	0.0740	About 20.000bp (Pvrl3)
5	TCONS_00033682	2	-1.37 chr16:46348870-46372854	chr16	+	0.0493	
6	TCONS_00033683	2	-1.58 chr16:46348870-46372854	chr16	+	0.0482	
7	TCONS_00033684	2	-1.09 chr16:46348870-46372854	chr16	+	0.0319	
exon_coordinates							
1	72825061..72826240,72827676..72827813,72831482..72831611,72833735..72833835,72834164..72834279,72835436..72835601,72835723..72835749						
2	72825061..72826240,72827676..72827813,72831482..72831611,72833735..72833835,72834164..72834279,72835436..72835613,72835723..72835883,72839522..72839586						
3	72828241..72828269,72831482..72831611,72833735..72833835,72834164..72834279,72835436..72835613,72835723..72835883,72839522..72839586						
4	46348871..46350916						
5	46348871..46349059,46359752..46360444						
6	46348883..46349059,46370862..46372854						
7	46359052..46360039,46370862..46372854						

Supplemental table 9

Characteristics of mice utilised for validating experiments and correlations.

mouse ID	weight before diet	weight at sacrifice (g)	glycemia at sacrifice (mg/dl)	Insulinemia at sacrifice (ng/ml)
ND 1.2	18.7	26.7	138.6	0.60
ND 3.1	20.2	24.9	131.4	0.52
ND 4.1	21.7	30.0	129.6	0.69
ND 4.2	21.2	29.2	142.2	0.60
ND 7.1	20.5	27.8	133.2	0.61
ND 9.1	21.4	30.6	156.6	0.69
ND 10.1	20.1	27.1	138.6	1.21
ND 11.1	19.5	26.0	126.0	0.87
Average	20.4	27.8	137.0	0.7
SEM	0.4	0.7	3.4	0.1
LDR 13.1	21.2	38.1	185.4	3.46
LDR 16.1	19.0	33.6	153.0	0.71
LDR 17.2	20.5	39.0	138.6	1.40
LDR 18.1	21.9	37.5	135.0	1.19
LDR 22.1	20.4	36.7	147.6	0.80
LDR 25.1	22.0	33.2	158.4	0.71
LDR 26.1	20.4	37.6	172.8	1.13
LDR 29.1	21.2	34.9	147.6	0.82
LDR 31.1	21.1	38.6	147.6	0.95
LDR 38.1	20.6	33.4	163.8	0.81
Average	20.8	36.3	155.0	1.20
SEM	0.3	0.7	4.9	0.26
20.1	21.0	41.1	176.4	0.74
20.2	20.6	42.8	228.6	3.63
27.2	21.8	46.4	268.2	10.73
28.1	24.1	45.6	219.6	2.78
28.2	19.6	42.1	151.2	1.56
30.1	24.7	43.1	178.2	0.84
33.1	20.6	42.6	154.8	1.67
39.1	22.4	43.7	165.6	1.07
Average	21.9	43.4	192.8	2.9
SEM	0.6	0.6	14.7	1.2

Supplemental table 10

Chromosomal location of transmapped region in human for *β linc3*.

XLOC ID	lncRNA name	Chromosomal location in mouse (mm9)	Transmapped region in Human (h18)
XLOC_013310	<i>βlinc3</i>	Chr16:46348870-46372854	Chr3:112413340-112434554
			Transmapped region in Human (h19)
			Chr3:112694493-112715707