Chr	Start	End	Pea Strand Scor		on G	ene Name	Gene Description	Gene Type
chr16	72699350	72699538	+ 28.3	(NM_019	9413,	obo1	roundabout guidance	protein coding
chr13	109350231	109350419	+ 22.6	intron 1 0 intron (NM 011	M	fir582	receptor 1 microRNA 582	ncRNA
chr3	21479349	21479537	+ 22.1	intron 3	of 16)	bl1xr1	transducin	protein
				-			(beta)-like 1X- linked receptor 1	coding
chr6	79313862	105677803 79314050	+ 19.0	(NM_173	3004)	ntn4 gcc	contactin 4 regulator of cell	protein coding protein
chr14	118358371	118358559	+ 18.3			700044C05Rik	cycle RIKEN cDNA	coding
							1700044C05 gene	
chrX	169994078	169994266	+ 17.6	0 Intergen	ic G	530011O06Rik	RIKEN cDNA G530011006 gene	ncRNA
chr9	103687280	103687468	+ 16.7	(NM_178	3638,	mem108	transmembrane protein 108	protein coding
chr9	104042356	104042544	+ 14.8	intron 2 of the state of the st	U	ba5	ubiquitin-like modifier	protein coding
				exon 27			activating enzyme 5	couning
chr9	104014596	104014784	+ 13.8	0 intron (NM_172 intron 6	2460,	php3	nephronophthisis 3 (adolescent)	protein coding
chr6	54760270	54760458	+ 13.6	0 Intergen	ic Z	nrf2	zinc and ring finger 2	protein coding
chr14	73110850	73111038	+ 12.7	0 Intergen	ic R	cbtb2	regulator of chromosome condensation (RCC1) and BTB (POZ) domain containing protein 2	protein coding
chrY	90812814	90813002	+ 10.8	0 intron (NM 133		530011O06Rik	RIKEN cDNA G530011006	ncRNA
chr6	73644959	73645147	+ 10.7	intron 2	of 3)	m31747	gene predicted gene,	ncRNA
chr3	51199116	51199304	+ 10.2			loct	31747 nocturnin	protein
chr6	55120173	55120361	+ 9.8			rhr2	corticotropin	coding protein coding
				(NM_009 intron 2			releasing hormone receptor 2	coding
chr14	99348474	99348662	+ 9.6	4 Intergen	ic K	lf5	Kruppel-like factor 5	protein coding
chr14	72149553	72149741	+ 8.9	3 Intergen	ic 49	930434J06Rik	RIKEN cDNA 4930434J06 gene	ncRNA
chr10	74855431	74855619	+ 8.8			naz	guanine nucleotide binding protein, alpha z subunit	protein
chrX	170004256	170004444	+ 8.4	6 Intergen	ıc G	530011O06Rik	RIKEN cDNA G530011O06 gene	ncRNA
chrX	169986857	169987045	+ 8.3	8 intron (NM_001 intron 8	1290504,	530011O06Rik	RIKEN cDNA G530011O06 gene	ncRNA
chr9	121029933	121030121	+ 8.3	8 intron (NM_177	M7589,	1ir7090	microRNA 7090	ncRNA
chr2	84505115	84505303	+ 7.9	intron 35	5 of 36) G	m13710	predicted gene	ncRNA
chr13	93063438	93063626	+ 7.5	(NR_046 intron 1 exon	of 2)	m4814	13710 predicted gene	ncRNA
	33003430	33003020	7.0	(NM_023 exon 9 of	3821,		4814	HORTON
chr1	66569835	66570023	+ 7.4	3 exon (NM_175 exon 23	5510,	nc80	unc-80, NALCN activator	protein coding
chr5	133365892	133366080	+ 7.3	5 Intergen	ic C	astor2	cytosolic arginine sensor for mTORC1 subunit 2	protein coding
chr2	118554810	118554998	+ 7.2			mf	BCL2 modifying factor	protein coding
chr10	22212368	22212556	+ 6.0	1 intron (NM_009 intron 6	9018,	aet1c	retinoic acid early transcript gamma	protein coding
chr13	21811692	21811880	+ 5.6	-	r-TSS H l 195421)	ist1h4m	histone cluster 1, H4m	protein coding
chr8	44745847	44746035	+ 5.6	9 Intergen	ic Fa	at1	FAT atypical cadherin 1	protein coding
chr19	27124250	27124438	+ 5.4	5 Intergen	ic V	ldlr	very low density lipoprotein receptor	protein coding
chr2	82847769	82847957	+ 5.3	8 Intergen	ic F	sip2	fibrous sheath- interacting protein 2	protein coding
chr3	132207576	132207764	+ 5.3	8 Intergen	ic D	kk2	dickkopf WNT signaling pathway inhibitor 2	protein coding
chr6	78686538	78686726	+ 5.3	0 Intergen	ic R	eg3g	regenerating islet-derived 3	protein coding
chr6	8178327	8178515	+ 5.0			ol28a1	gamma collagen, type	protein
				(NM_001 intron 1	1037865, of 34)		XXVIII, alpha 1	coding
chr3	60570521	60570709	+ 4.9	8 intron (NM_001 intron 2	1310514,	fbnl1	muscleblind like splicing factor 1	protein coding
chr8	49015312	49015500	+ 4.9	0 Intergen	ic Te	enm3	teneurin transmembrane protein 3	protein
chr12					·			coding
14	16336510	16336698	+ 4.8	2 Intergen	IC L	pin1	lipin 1	coding
chr12	16336510 11306054	16336698 11306242	+ 4.8			pin1 bxo30	lipin 1 F-box protein 30	coding protein coding
				2 Intergen 9 intron (NM_001	ic Fi			protein coding protein coding
chr10	11306054	11306242	+ 4.8	2 Intergen 9 intron (NM_001) intron 8	ic F M 1081242, of 57)	bxo30	F-box protein 30 microRNA 190a par-3 family cell	protein coding protein coding ncRNA
chr10	11306054 67380147	11306242 67380335	+ 4.8	2 Intergen 9 intron (NM_001) intron 8	ic Final Part of 57) ic Part Benefit Part of 57,	bxo30 fir190a	F-box protein 30 microRNA 190a par-3 family cell polarity regulator beta branched chain ketoacid dehydrogenase	protein coding protein coding ncRNA
chr10 chr9 chr1	11306054 67380147 61621049	11306242 67380335 61621237	+ 4.8 + 4.5 + 4.5	2 Intergen 9 intron (NM_001 intron 8 9 Intergen 9 intron (NM_199 intron 3	ic Final Model 1081242, of 57) ic Page 195, of 10)	bxo30 fir190a ard3b	F-box protein 30 microRNA 190a par-3 family cell polarity regulator beta branched chain ketoacid	protein coding protein coding ncRNA protein coding protein coding
chr10 chr9 chr1 chr17	11306054 67380147 61621049 83979010 47981782	11306242 67380335 61621237 83979198 47981970	+ 4.5 + 4.5 + 4.5 + 4.5	2 Intergen 9 intron (NM_001) intron 8 9 Intergen 9 intron (NM_199) intron 3	ic Final Model of Street Stree	bxo30 fir190a ard3b ckdhb	F-box protein 30 microRNA 190a par-3 family cell polarity regulator beta branched chain ketoacid dehydrogenase E1, beta polypeptide RIKEN cDNA 1700122011 gene	protein coding protein coding ncRNA protein coding protein coding protein coding
chr10 chr9 chr9 chr9 chr17	11306054 67380147 61621049 83979010 47981782 83388070	11306242 67380335 61621237 83979198 47981970 83388258	+ 4.5 + 4.5 + 4.5 + 4.5 + 4.5	2 Intergen 9 intron (NM_001 intron 8 9 Intergen 9 intron (NM_199 intron 3	ic Final Model 1081242, of 57) ic Page 195, of 10) ic 1' ic G	bxo30 fir190a ard3b ckdhb 700122O11Rik m2087	F-box protein 30 microRNA 190a par-3 family cell polarity regulator beta branched chain ketoacid dehydrogenase E1, beta polypeptide RIKEN cDNA 1700122011 gene predicted gene 2087	protein coding protein coding ncRNA protein coding protein coding protein coding
chr10 chr9 chr1 chr17	11306054 67380147 61621049 83979010 47981782	11306242 67380335 61621237 83979198 47981970	+ 4.5 + 4.5 + 4.5 + 4.5	2 Intergen 9 intron (NM_001 intron 8 9 Intergen 9 intron (NM_199 intron 3	ic Final Management of State o	bxo30 fir190a ard3b ckdhb	F-box protein 30 microRNA 190a par-3 family cell polarity regulator beta branched chain ketoacid dehydrogenase E1, beta polypeptide RIKEN cDNA 1700122011 gene predicted gene	protein coding protein coding ncRNA protein coding protein coding protein coding
chr10 chr9 chr9 chr9 chr17	11306054 67380147 61621049 83979010 47981782 83388070	11306242 67380335 61621237 83979198 47981970 83388258	+ 4.5 + 4.5 + 4.5 + 4.5 + 4.5	2 Intergen 9 intron (NM_001 intron 8 9 Intergen 9 intron (NM_199 intron 3 1 Intergen 1 Intergen 1 3' UTR (NM_172 exon 9 of	ic Final Management of State o	bxo30 fir190a ard3b ckdhb 700122O11Rik m2087	F-box protein 30 microRNA 190a par-3 family cell polarity regulator beta branched chain ketoacid dehydrogenase E1, beta polypeptide RIKEN cDNA 1700122011 gene predicted gene 2087 macrophage expressed gene	protein coding protein coding ncRNA protein coding protein coding protein coding
chr10 chr9 chr17 chr17 chr19	11306054 67380147 61621049 83979010 47981782 83388070 12467560	11306242 67380335 61621237 83979198 47981970 83388258 12467748	+ 4.8 + 4.5 + 4.5 + 4.5 + 4.5 + 4.5	2 Intergen 9 intron (NM_001 intron 8 9 Intergen 9 intron (NM_199 intron 3 1 Intergen 1 3' UTR (NM_172 exon 9 of	ic Final Management of State o	bxo30 fir190a ard3b ckdhb 700122O11Rik m2087 fpeg1	F-box protein 30 microRNA 190a par-3 family cell polarity regulator beta branched chain ketoacid dehydrogenase E1, beta polypeptide RIKEN cDNA 1700122011 gene predicted gene 2087 macrophage expressed gene 1 zinc finger, CCHC domain	protein coding protein coding ncRNA protein coding protein coding protein coding protein coding
chr10 chr9 chr17 chr19 chr19 chr19	11306054 67380147 61621049 83979010 47981782 83388070 12467560 36202228	11306242 67380335 61621237 83979198 47981970 83388258 12467748 36202416	+ 4.8 + 4.5 + 4.5 + 4.5 + 4.5 + 4.5 + 4.4 + 4.4	2 Intergen 9 intron (NM_001 intron 8 9 Intergen 9 intron (NM_199 intron 3 1 Intergen 1 3' UTR (NM_172 exon 9 of 1 Intergen 3 intron (NM_198 intron 16	ic Final Part of State of Stat	bxo30 fir190a ard3b ckdhb 700122O11Rik m2087 fpeg1 cchc12	F-box protein 30 microRNA 190a par-3 family cell polarity regulator beta branched chain ketoacid dehydrogenase E1, beta polypeptide RIKEN cDNA 1700122011 gene predicted gene 2087 macrophage expressed gene 1 zinc finger, CCHC domain containing 12 activating signal cointegrator 1 complex subunit 3 MMS22-like, DNA repair	protein coding protein coding ncRNA protein coding protein coding protein coding protein coding
chr10 chr9 chr9 chr17 chr9 chr19 chr19	11306054 67380147 61621049 83979010 47981782 83388070 12467560 36202228 50704328	11306242 67380335 61621237 83979198 47981970 83388258 12467748 36202416 50704516	+ 4.8 + 4.5 + 4.5 + 4.5 + 4.5 + 4.5 + 4.4 + 4.4	2 Intergen 9 intron (NM_001 intron 8 9 Intergen 9 intron (NM_199 intron 3 1 Intergen 1 3' UTR (NM_172 exon 9 of 1 Intergen 3 intron (NM_198 intron 16 3 Intergen	ic Final Management of State o	bxo30 fir190a ard3b ckdhb 700122O11Rik m2087 fpeg1 cchc12 scc3	F-box protein 30 microRNA 190a par-3 family cell polarity regulator beta branched chain ketoacid dehydrogenase E1, beta polypeptide RIKEN cDNA 1700122011 gene predicted gene 2087 macrophage expressed gene 1 zinc finger, CCHC domain containing 12 activating signal cointegrator 1 complex subunit 3 MMS22-like,	protein coding protein coding ncRNA protein coding protein coding protein coding protein coding protein coding protein coding
chr10 chr9 chr9 chr17 chr9 chr19 chr19 chr14	11306054 67380147 61621049 83979010 47981782 83388070 12467560 36202228 50704328	11306242 67380335 61621237 83979198 47981970 83388258 12467748 36202416 23787714	+ 4.8 + 4.5 + 4.5 + 4.5 + 4.5 + 4.4 + 4.4 + 4.4 + 4.4	2 Intergen 9 intron (NM_001 intron 8 9 Intergen 9 intron (NM_199 intron 3 1 Intergen 1 3' UTR (NM_172 exon 9 of 1 Intergen 3 intron (NM_198 intron 16 3 Intergen 5 Intergen 5 Intergen 5 intron (NM_007	ic Final Part of Street	bxo30 fir190a ard3b ckdhb 700122O11Rik m2087 fpeg1 cchc12 scc3	F-box protein 30 microRNA 190a par-3 family cell polarity regulator beta branched chain ketoacid dehydrogenase E1, beta polypeptide RIKEN cDNA 1700122011 gene predicted gene 2087 macrophage expressed gene 1 zinc finger, CCHC domain containing 12 activating signal cointegrator 1 complex subunit 3 MMS22-like, DNA repair protein RIKEN cDNA 2310043L19 gene enhancer of polycomb	protein coding protein coding ncRNA protein coding protein coding protein coding protein coding protein coding protein coding
chr10 chr9 chr17 chr9 chr19 chr19 chr10 chr10	11306054 67380147 61621049 83979010 47981782 83388070 12467560 36202228 23787526 177685013	11306242 67380335 61621237 83979198 47981970 83388258 12467748 36202416 23787714 177685201	+ 4.8 + 4.5 + 4.5 + 4.5 + 4.5 + 4.4 + 4.4 + 4.4 + 4.4	2 Intergen 9 intron (NM_001 intron 8 9 Intergen 9 intron (NM_199 intron 3 1 Intergen 1 3' UTR (NM_172 exon 9 of 1 Intergen 3 intron (NM_198 intron 16 3 Intergen 5 Intergen 5 Intergen 5 intron (NM_007 intron 1	ic Final Management of State o	bxo30 fir190a ard3b ckdhb 700122011Rik m2087 fpeg1 cchc12 scc3	F-box protein 30 microRNA 190a par-3 family cell polarity regulator beta branched chain ketoacid dehydrogenase E1, beta polypeptide RIKEN cDNA 1700122011 gene predicted gene 2087 macrophage expressed gene 1 zinc finger, CCHC domain containing 12 activating signal cointegrator 1 complex subunit 3 MMS22-like, DNA repair protein RIKEN cDNA 2310043L19 gene enhancer of polycomb homolog 1 predicted gene predicted gene	protein coding
chr10 chr9 chr17 chr9 chr19 chr19 chr10 chr10	11306054 67380147 61621049 83979010 47981782 83388070 12467560 36202228 50704328 177685013 6501307	11306242 67380335 61621237 83979198 47981970 83388258 12467748 50704516 23787714 177685201	+ 4.8 + 4.5 + 4.5 + 4.5 + 4.4 + 4.4 + 4.4 + 4.3 + 4.3 + 4.3	2 Intergen 9 intron (NM_001) intron 8 9 Intergen 9 intron (NM_199) intron 3 1 Intergen 1 3' UTR (NM_172) exon 9 of 1 Intergen 3 intron (NM_198) intron 16 3 Intergen 5 Intergen 5 Intergen 5 Intergen 7 intron	ic Final Property of 57) ic Property of 57) ic Property of 57) ic Property of 10) ic Graph of 10 ic Graph of 41) ic Market of 41) ic Market of 41 ic Graph of 13) ic Graph of 13) ic Graph of 57935, of 13) ic Graph of 58 ic Graph of	bxo30 fir190a ard3b ckdhb 700122O11Rik m2087 fpeg1 cchc12 scc3 fms221 310043L19Rik pc1	F-box protein 30 microRNA 190a par-3 family cell polarity regulator beta branched chain ketoacid dehydrogenase E1, beta polypeptide RIKEN cDNA 1700122O11 gene predicted gene 2087 macrophage expressed gene 1 zinc finger, CCHC domain containing 12 activating signal cointegrator 1 complex subunit 3 MMS22-like, DNA repair protein RIKEN cDNA 2310043L19 gene enhancer of polycomb homolog 1 predicted gene 16551 solute carrier	protein coding
chr10 chr9 chr9 chr17 chr9 chr19 chr10 chr10 chr10	11306054 67380147 61621049 83979010 47981782 83388070 12467560 36202228 50704328 177685013 6501307 74603704	11306242 67380335 61621237 83979198 47981970 83388258 12467748 36202416 50704516 177685201 6501495 74603892	+ 4.8 + 4.5 + 4.5 + 4.5 + 4.4 + 4.4 + 4.4 + 4.3 + 4.3 + 4.3 + 4.3	2 Intergen 9 intron (NM_001 intron 8 9 Intergen 9 intron (NM_199 intron 3 1 Intergen 1 3' UTR (NM_172 exon 9 of 1 Intergen 3 intron (NM_198 intron 16 3 Intergen 5 Intergen 5 Intergen 7 intron (NM_007 intron 1 5 Intergen 7 intron (NM_021 intron 12	ic Final Parameters in Fin	bxo30 fir190a ard3b ckdhb 700122011Rik m2087 fpeg1 cchc12 scc3 fms221 310043L19Rik pc1	F-box protein 30 microRNA 190a par-3 family cell polarity regulator beta branched chain ketoacid dehydrogenase E1, beta polypeptide RIKEN cDNA 1700122011 gene predicted gene 2087 macrophage expressed gene 1 zinc finger, CCHC domain containing 12 activating signal cointegrator 1 complex subunit 3 MMS22-like, DNA repair protein RIKEN cDNA 2310043L19 gene enhancer of polycomb homolog 1 predicted gene 16551 solute carrier family 43, member 3 RAB guanine nucleotide	protein coding
chr10 chr9 chr17 chr19 chr19 chr10 chr10 chr10 chr10	11306054 67380147 61621049 83979010 47981782 83388070 12467560 36202228 50704328 6501307 74603704 84956378	11306242 67380335 61621237 83979198 47981970 83388258 12467748 36202416 50704516 23787714 6501495 74603892 84956566	+ 4.8 + 4.5 + 4.5 + 4.5 + 4.5 + 4.4 + 4.3 + 4.3 + 4.3 + 4.3 + 4.3 + 4.3 + 4.3	2 Intergen 9 intron (NM_001 intron 8 9 Intergen 9 intron (NM_199 intron 3 9 Intergen 1 Intergen 1 3' UTR (NM_172 exon 9 of 1 Intergen 3 intron (NM_198 intron 16 3 Intergen 5 Intergen 5 Intergen 7 intron (NM_001 intron 12 7 exon (NM_001 exon 2 of	ic Final Management of State Final Managemen	bxo30 fir190a ard3b ckdhb 700122011Rik m2087 fpeg1 cchc12 scc3 fms22l 310043L19Rik pc1 m16551 lc43a3	F-box protein 30 microRNA 190a par-3 family cell polarity regulator beta branched chain ketoacid dehydrogenase E1, beta polypeptide RIKEN cDNA 1700122O11 gene predicted gene 2087 macrophage expressed gene 1 zinc finger, CCHC domain containing 12 activating signal cointegrator 1 complex subunit 3 MMS22-like, DNA repair protein RIKEN cDNA 2310043L19 gene enhancer of polycomb homolog 1 predicted gene 16551 solute carrier family 43, member 3 RAB guanine	protein coding
chr10 chr17 chr19 chr19 chr10 chr10 chr10 chr10 chr16	11306054 67380147 61621049 83979010 47981782 83388070 12467560 36202228 50704328 50704328 47981782	11306242 67380335 61621237 83979198 47981970 83388258 12467748 36202416 50704516 23787714 177685201 6501495 74603892 84956566 130187653	+ 4.8 + 4.5 + 4.5 + 4.5 + 4.5 + 4.4 + 4.3 + 4.3 + 4.3 + 4.2 + 4.2 + 4.2 + 4.2	2 Intergen 9 intron (NM_001 intron 8 9 Intergen 9 intron (NM_199 intron 3 1 Intergen 1 3' UTR (NM_172 exon 9 of 1 Intergen 3 intron (NM_198 intron 16 3 Intergen 5 Intergen 5 Intergen 7 intron (NM_001 intron 12 7 exon (NM_001 intron 7 intron (NM_001 intron 7	ic Final Management of St. 1081242, of 57) ic Paragement of St. 1081242, of 10) ic G. Management of St. 1398, of 13) ic G. St. 1398, of 12) It 199059, of 9) It 199059, of 9) It 199059, of 9) It 199059, of 9)	bxo30 fir190a fir190a ard3b ckdhb 700122011Rik m2087 fpeg1 cchc12 scc3 fms22l 310043L19Rik pc1 m16551 lc43a3 abgef1	F-box protein 30 microRNA 190a par-3 family cell polarity regulator beta branched chain ketoacid dehydrogenase E1, beta polypeptide RIKEN cDNA 1700122011 gene predicted gene 2087 macrophage expressed gene 1 zinc finger, CCHC domain containing 12 activating signal cointegrator 1 complex subunit 3 MMS22-like, DNA repair protein RIKEN cDNA 2310043L19 gene enhancer of polycomb homolog 1 predicted gene 16551 solute carrier family 43, member 3 RAB guanine nucleotide exchange factor (GEF) 1	protein coding
chr10 chr17 chr19 chr19 chr10 chr10 chr10 chr18 chr18	11306054 67380147 61621049 83979010 47981782 83388070 12467560 36202228 50704328 23787526 177685013 6501307 74603704 84956378 130187465	11306242 67380335 61621237 83979198 47981970 83388258 12467748 36202416 50704516 23787714 177685201 6501495 74603892 84956566 130187653	+ 4.8 + 4.5 + 4.5 + 4.5 + 4.5 + 4.4 + 4.3 + 4.3 + 4.2 + 4.2 + 4.2 + 4.1	2 Intergen 9 intron (NM_001 intron 8 9 Intergen 9 intron (NM_199 intron 3 1 Intergen 1 3' UTR (NM_172 exon 9 of 1 Intergen 3 intron (NM_198 intron 16 3 Intergen 5 Intergen 5 Intergen 7 intron (NM_001 intron 12 7 exon (NM_001 intron 7 3 Intergen	ic Final Management of State o	bxo30 fir190a ard3b ckdhb 700122O11Rik m2087 fpeg1 cchc12 scc3 fms22l 310043L19Rik pc1 https://doi.or.or.or.or.or.or.or.or.or.or.or.or.or.	F-box protein 30 microRNA 190a par-3 family cell polarity regulator beta branched chain ketoacid dehydrogenase E1, beta polypeptide RIKEN cDNA 1700122011 gene predicted gene 2087 macrophage expressed gene 1 zinc finger, CCHC domain containing 12 activating signal cointegrator 1 complex subunit 3 MMS22-like, DNA repair protein RIKEN cDNA 2310043L19 gene enhancer of polycomb homolog 1 predicted gene 16551 solute carrier family 43, member 3 RAB guanine nucleotide exchange factor (GEF) 1 protein C RING1 and YY1	protein coding protein coding