

Additional file 2:

List of private homozygous sequence variants of the sequenced animal located within homozygous IBD regions. Variants with predicted effects on the protein sequence are presented boldface.

Chromosome	Position	REF	ALT	EFFECT	IMPACT	CODON	GENE	BIOTYPE	TRID
4	11759089	T	TC	intron_variant	MODIFIER	c.375-5405_375-5404insC	DPP6	protein_coding	ENSBTAT00000029251
4	119134084	C	T	intron_variant	MODIFIER	c.967-48C>T	NOM1	protein_coding	ENSBTAT00000043572
6	16743580	TGGA	T	upstream_gene_variant	MODIFIER	c.-2888_-2886delTCC	RRH	protein_coding	ENSBTAT0000000997
6	16743580	TGGA	T	downstream_gene_variant	MODIFIER	c.4440_4442delTCC	GARI	protein_coding	ENSBTAT0000000992
6	16823750	C	CTAG	upstream_gene_variant	MODIFIER	c.-4986_-4985insTAG	PLA2G12A	protein_coding	ENSBTAT00000020263
6	16919900	C	T	intron_variant	MODIFIER	c.97-2874G>A	CCDC109B	protein_coding	ENSBTAT00000017276
6	17826103	G	A	downstream_gene_variant	MODIFIER	c.2047C>T	RPL34	protein_coding	ENSBTAT00000018910
6	17828429	ATTAAAT	A	intron_variant	MODIFIER	c.303-200_303-196delATTAA	RPL34	protein_coding	ENSBTAT00000018910
6	17829011	T	C	intron_variant	MODIFIER	c.303-77A>G	RPL34	protein_coding	ENSBTAT00000018910
6	17829229	T	TC	intron_variant	MODIFIER	c.303-996_303-995insG	RPL34	protein_coding	ENSBTAT00000018910
6	17829935	C	A	intron_variant	MODIFIER	c.302+118ZG>T	RPL34	protein_coding	ENSBTAT00000018910
6	17834638	G	A	upstream_gene_variant	MODIFIER	c.1927C>T	RPL34	protein_coding	ENSBTAT00000018910
6	17837169	G	A	upstream_gene_variant	MODIFIER	c.-4458C>T	RPL34	protein_coding	ENSBTAT00000018910
6	18386511	C	T	intron_variant	MODIFIER	c.415-25580C>T	LEF1	protein_coding	ENSBTAT00000009991
8	36597460	G	A	intron_variant	MODIFIER	c.1160-2921G>A	PTPRD	protein_coding	ENSBTAT00000013433
8	36795063	C	G	intron_variant	MODIFIER	c.5127-103C>G	PTPRD	protein_coding	ENSBTAT00000013433
8	38555403	C	T	intron_variant	MODIFIER	c.2838+490C>T	GLDC	protein_coding	ENSBTAT00000036700
8	38591977	G	A	intron_variant	MODIFIER	c.1013+114C>T	UHRF2	protein_coding	ENSBTAT00000027737
8	38687001	T	A	upstream_gene_variant	MODIFIER	n.-2885A>T	ENSBTAG00000011161	processed_pseudogene	ENSBTAT00000014822
8	38687001	T	A	downstream_gene_variant	MODIFIER	c.4667A>T	TPDS2L3	protein_coding	ENSBTAT00000014821
8	38744726	A	C	intron_variant	MODIFIER	c.-11-296T>G	IL33	protein_coding	ENSBTAT00000024412
8	38754204	A	G	intron_variant	MODIFIER	c.-167-689T>C	IL33	protein_coding	ENSBTAT00000024412
8	38754215	G	A	intron_variant	MODIFIER	c.-167-690ZC>T	IL33	protein_coding	ENSBTAT00000024412
8	38793421	G	A	upstream_gene_variant	MODIFIER	c.-4900ZC>T	IL33	protein_coding	ENSBTAT00000024412
8	38922272	C	T	upstream_gene_variant	MODIFIER	c.-180C>T	RANBP6	protein_coding	ENSBTAT00000016139
8	38929216	G	A	downstream_gene_variant	MODIFIER	c.299ZG>A	RANBP6	protein_coding	ENSBTAT00000016139
8	39038055	C	G	missense_variant	Moderate	c.926C>G	KIAA2026	protein_coding	ENSBTAT00000063356
8	39039595	A	C	downstream_gene_variant	MODIFIER	c.699A>C	KIAA2026	protein_coding	ENSBTAT00000063356
8	39040902	T	C	downstream_gene_variant	MODIFIER	c.2006T>C	KIAA2026	protein_coding	ENSBTAT00000063356
8	39043867	C	T	downstream_gene_variant	MODIFIER	c.4971C>T	KIAA2026	protein_coding	ENSBTAT00000063356
8	39052947	C	T	intron_variant	MODIFIER	c.175-693G>A	MLANA	protein_coding	ENSBTAT00000009784
8	39053495	C	T	intron_variant	MODIFIER	c.175-1241G>A	MLANA	protein_coding	ENSBTAT00000009784
8	39198684	T	G	intron_variant	MODIFIER	c.3614-257A>C	RIC1	protein_coding	ENSBTAT0000001692
8	39518556	A	C	upstream_gene_variant	MODIFIER	c.-302T>G	PD-L1	protein_coding	ENSBTAT00000008067
8	40251861	G	A	intron_variant	MODIFIER	c.91+1156C>T	SLC1A1	protein_coding	ENSBTAT00000025456
8	40252778	G	A	intron_variant	MODIFIER	c.91+239C>T	SLC1A1	protein_coding	ENSBTAT00000025456
8	42823339	T	C	intron_variant	MODIFIER	c.36-4330A>G	SMARCA2	protein_coding	ENSBTAT00000035681
8	44540416	C	T	intron_variant	MODIFIER	c.53+1270G>A	DOCK8	protein_coding	ENSBTAT0000002840
8	45214924	G	A	upstream_gene_variant	MODIFIER	c.5540G>A	PIP5K1B	protein_coding	ENSBTAT00000036688
8	45346048	A	G	downstream_gene_variant	MODIFIER	n.-3487T>C	snoU13	snoRNA	ENSBTAT00000062326
8	45346048	A	G	intron_variant	MODIFIER	c.1133-181A>G	PIP5K1B	protein_coding	ENSBTAT00000036688
8	45486980	A	G	upstream_gene_variant	MODIFIER	n.-4873A>G	SS_rRNA	rRNA	ENSBTAT00000062666
8	45487146	G	C	upstream_gene_variant	MODIFIER	c.4707G>C	SS_rRNA	rRNA	ENSBTAT00000062666
8	45487179	G	A	upstream_gene_variant	MODIFIER	n.-4674G>A	SS_rRNA	rRNA	ENSBTAT00000062666
8	45487597	G	C	upstream_gene_variant	MODIFIER	c.4256G>C	SS_rRNA	rRNA	ENSBTAT00000062666
8	45488763	G	A	upstream_gene_variant	MODIFIER	n.-309G>A	SS_rRNA	rRNA	ENSBTAT00000062666
8	45488904	C	T	upstream_gene_variant	MODIFIER	n.-2949C>T	SS_rRNA	rRNA	ENSBTAT00000062666
8	45488969	C	T	upstream_gene_variant	MODIFIER	n.-2884C>T	SS_rRNA	rRNA	ENSBTAT00000062666
8	45489561	T	G	upstream_gene_variant	MODIFIER	n.-2292T>G	SS_rRNA	rRNA	ENSBTAT00000062666
8	45489968	G	A	upstream_gene_variant	MODIFIER	n.-2155G>A	SS_rRNA	rRNA	ENSBTAT00000062666
8	45489803	G	A	upstream_gene_variant	MODIFIER	n.-2050G>A	SS_rRNA	rRNA	ENSBTAT00000062666
8	45489842	G	A	upstream_gene_variant	MODIFIER	n.-2011G>A	SS_rRNA	rRNA	ENSBTAT00000062666
8	45490008	G	T	upstream_gene_variant	MODIFIER	n.-1845G>T	SS_rRNA	rRNA	ENSBTAT00000062666
8	45490195	A	C	upstream_gene_variant	MODIFIER	n.-1658A>C	SS_rRNA	rRNA	ENSBTAT00000062666
8	45490197	A	G	upstream_gene_variant	MODIFIER	n.-1656A>G	SS_rRNA	rRNA	ENSBTAT00000062666
8	45490756	A	T	upstream_gene_variant	MODIFIER	n.-1097A>T	SS_rRNA	rRNA	ENSBTAT00000062666
8	45491283	AAG	A	upstream_gene_variant	MODIFIER	n.-569_568delAG	SS_rRNA	rRNA	ENSBTAT00000062666
8	45491287	T	A	upstream_gene_variant	MODIFIER	n.-567A>T	SS_rRNA	rRNA	ENSBTAT00000062666
8	45491306	C	T	upstream_gene_variant	MODIFIER	n.-547C>T	SS_rRNA	rRNA	ENSBTAT00000062666
8	45492214	C	T	downstream_gene_variant	MODIFIER	n.-269C>T	SS_rRNA	rRNA	ENSBTAT00000062666
8	45492951	T	C	downstream_gene_variant	MODIFIER	n.1006T>C	SS_rRNA	rRNA	ENSBTAT00000062666
8	45493363	T	G	downstream_gene_variant	MODIFIER	n.1418T>G	SS_rRNA	rRNA	ENSBTAT00000062666
8	45493378	G	A	downstream_gene_variant	MODIFIER	n.1433G>A	SS_rRNA	rRNA	ENSBTAT00000062666
8	45493436	A	G	downstream_gene_variant	MODIFIER	n.1491A>G	SS_rRNA	rRNA	ENSBTAT00000062666
8	45493720	A	C	downstream_gene_variant	MODIFIER	n.*1775A>C	SS_rRNA	rRNA	ENSBTAT00000062666
8	45494116	T	C	downstream_gene_variant	MODIFIER	n.2171T>C	SS_rRNA	rRNA	ENSBTAT00000062666
8	45494191	C	G	downstream_gene_variant	MODIFIER	n.2246C>G	SS_rRNA	rRNA	ENSBTAT00000062666
8	45494197	G	A	downstream_gene_variant	MODIFIER	n.2252G>A	SS_rRNA	rRNA	ENSBTAT00000062666
8	45494347	C	T	downstream_gene_variant	MODIFIER	n.2402C>T	SS_rRNA	rRNA	ENSBTAT00000062666
8	45494404	A	G	downstream_gene_variant	MODIFIER	n.2459A>G	SS_rRNA	rRNA	ENSBTAT00000062666
8	45494522	T	C	downstream_gene_variant	MODIFIER	n.2577T>C	SS_rRNA	rRNA	ENSBTAT00000062666
8	45494545	G	A	downstream_gene_variant	MODIFIER	n.2600G>A	SS_rRNA	rRNA	ENSBTAT00000062666
8	45495136	G	A	downstream_gene_variant	MODIFIER	n.3191G>A	SS_rRNA	rRNA	ENSBTAT00000062666
8	45495177	C	T	downstream_gene_variant	MODIFIER	n.3232C>T	SS_rRNA	rRNA	ENSBTAT00000062666
8	45495679	T	C	downstream_gene_variant	MODIFIER	n.3734T>C	SS_rRNA	rRNA	ENSBTAT00000062666
8	45496266	A	C	downstream_gene_variant	MODIFIER	n.4321A>C	SS_rRNA	rRNA	ENSBTAT00000062666
8	45496347	T	C	downstream_gene_variant	MODIFIER	n.4402T>C	SS_rRNA	rRNA	ENSBTAT00000062666
8	45496486	C	T	downstream_gene_variant	MODIFIER	n.4541C>T	SS_rRNA	rRNA	ENSBTAT00000062666
8	45496532	G	A	downstream_gene_variant	MODIFIER	n.4587G>A	SS_rRNA	rRNA	ENSBTAT00000062666
8	45496603	T	C	downstream_gene_variant	MODIFIER	n.4658T>C	SS_rRNA	rRNA	ENSBTAT00000062666
8	45496770	G	A	downstream_gene_variant	MODIFIER	n.4825G>A	SS_rRNA	rRNA	ENSBTAT00000062666
8	45496785	A	G	downstream_gene_variant	MODIFIER	n.4840A>G	SS_rRNA	rRNA	ENSBTAT00000062666
8	45499073	G	A	upstream_gene_variant	MODIFIER	c.-928G>A	FXN	protein_coding	ENSBTAT0000001725
8	45499525	T	C	upstream_gene_variant	MODIFIER	c.-4476T>C	FXN	protein_coding	ENSBTAT0000001725
8	45503463	A	G	upstream_gene_variant	MODIFIER	c.-538A>G	FXN	protein_coding	ENSBTAT0000001725
8	45503482	A	G	upstream_gene_variant	MODIFIER	c.-519A>G	FXN	protein_coding	ENSBTAT0000001725
8	45503499	C	G	upstream_gene_variant	MODIFIER	c.-502C>G	FXN	protein_coding	ENSBTAT0000001725
8	45503952	T	C	upstream_gene_variant	MODIFIER	c.-497C>T	FXN	protein_coding	ENSBTAT0000001725
8	45503984	C	T	5_prime_UTR_premature_start_codon_gain_variant	LOW	c.-17C>T	FXN	protein_coding	ENSBTAT0000001725
8	45503984	C	T	5_prime_UTR_variant	MODIFIER	c.-17C>T	FXN	protein_coding	ENSBTAT0000001725
8	45504888	T	C	intron_variant	MODIFIER	c.168-690T>C	FXN	protein_coding	ENSBTAT0000001725
8	45504871	A	C	intron_variant	MODIFIER	c.168-703A>C	FXN	protein_coding	ENSBTAT0000001725
8	45505013	A	G	intron_variant	MODIFIER	c.168-845A>G	FXN	protein_coding	ENSBTAT0000001725
8	45505089	C	T	intron_variant	MODIFIER	c.168-921C>T	FXN	protein_coding	ENSBTAT0000001725
8	45505493	C	T	intron_variant	MODIFIER	c.168+1325C>T	FXN	protein_coding	ENSBTAT0000001725
8	45505494	A	G	intron_variant	MODIFIER	c.168+1326A>G	FXN	protein_coding	ENSBTAT0000001725
8	45505524	A	C	intron_variant	MODIFIER	c.168+1356A>C	FXN	protein_coding	ENSBTAT0000001725
8	45505527	T	C	intron_variant	MODIFIER	c.168+1359T>C	FXN	protein_coding	ENSBTAT0000001725
8	45505557	T	G	intron_variant	MODIFIER	c.168+1389T>G	FXN	protein_coding	ENSBTAT0000001725
8	45505558	CG	C	intron_variant	MODIFIER	c.168+1391delG	FXN	protein_coding	ENSBTAT0000001725
8	45505598	A	G	intron_variant	MODIFIER	c.168+1430A>G	FXN	protein_coding	ENSBTAT0000001725
8	45506597	C	T	intron_variant	MODIFIER	c.168+1529C>T	FXN	protein_coding	ENSBTAT0000001725
8	45505073	C	T	intron_variant	MODIFIER	c.168+1535C>T	FXN	protein_coding	ENSBTAT0000001725
8	45505726	A	G	intron_variant	MODIFIER	c.168+1558A>G	FXN	protein_coding	ENSBTAT0000001725
8	45505775	G	A	intron_variant	MODIFIER	c.168+1607G>A	FXN	protein_coding	ENSBTAT0000001725
8	45505828	GC	G	intron_variant	MODIFIER	c.168+1661delC	FXN	protein_coding	ENSBTAT0000001725
8	45505832	C	T	intron_variant	MODIFIER	c.168+1664C>T	FXN	protein_coding	ENSBTAT0000001725
8	45505840	T	C	intron_variant	MODIFIER	c.168+1672T>C	FXN	protein_coding	

8	45505849	C	A	intron_variant	MODIFIER	c.168+1681C>A	FXN	protein_coding	ENSBTAT0000001725	
8	45505852	T	A	intron_variant	MODIFIER	c.168+1684T>A	FXN	protein_coding	ENSBTAT0000001725	
8	45505857	T	C	intron_variant	MODIFIER	c.168+1689T>C	FXN	protein_coding	ENSBTAT0000001725	
8	45505924	A	G	intron_variant	MODIFIER	c.168+1756A>G	FXN	protein_coding	ENSBTAT0000001725	
8	45505935	G	C	intron_variant	MODIFIER	c.168+1767G>C	FXN	protein_coding	ENSBTAT0000001725	
8	45505936	A	AT	intron_variant	MODIFIER	c.168+1768_168+1769insT	FXN	protein_coding	ENSBTAT0000001725	
8	45505955	C	A	intron_variant	MODIFIER	c.168+1787C>A	FXN	protein_coding	ENSBTAT0000001725	
8	45505980	T	C	intron_variant	MODIFIER	c.168+1812T>C	FXN	protein_coding	ENSBTAT0000001725	
8	45506047	T	G	intron_variant	MODIFIER	c.168+1879T>G	FXN	protein_coding	ENSBTAT0000001725	
8	45506251	C	T	intron_variant	MODIFIER	c.168+2083C>T	FXN	protein_coding	ENSBTAT0000001725	
8	45506707	C	T	intron_variant	MODIFIER	c.168+2539C>T	FXN	protein_coding	ENSBTAT0000001725	
8	45506743	G	C	intron_variant	MODIFIER	c.168+2575G>C	FXN	protein_coding	ENSBTAT0000001725	
8	45507034	C	T	intron_variant	MODIFIER	c.169-2297C>T	FXN	protein_coding	ENSBTAT0000001725	
8	45507145	C	T	intron_variant	MODIFIER	c.169-2186C>T	FXN	protein_coding	ENSBTAT0000001725	
8	45507277	T	C	intron_variant	MODIFIER	c.169-2054T>C	FXN	protein_coding	ENSBTAT0000001725	
8	45507459	G	T	intron_variant	MODIFIER	c.169-1872G>T	FXN	protein_coding	ENSBTAT0000001725	
8	45507524	C	T	intron_variant	MODIFIER	c.169-1807C>T	FXN	protein_coding	ENSBTAT0000001725	
8	45507695	A	G	intron_variant	MODIFIER	c.169-1636A>G	FXN	protein_coding	ENSBTAT0000001725	
8	45507715	T	C	intron_variant	MODIFIER	c.169-1616T>C	FXN	protein_coding	ENSBTAT0000001725	
8	45507894	T	G	intron_variant	MODIFIER	c.169-1437T>G	FXN	protein_coding	ENSBTAT0000001725	
8	45509017	A	G	intron_variant	MODIFIER	c.169-314A>G	FXN	protein_coding	ENSBTAT0000001725	
8	45509018	C	T	intron_variant	MODIFIER	c.169-313C>T	FXN	protein_coding	ENSBTAT0000001725	
8	45510634	C	A	intron_variant	MODIFIER	c.266+1206C>A	FXN	protein_coding	ENSBTAT0000001725	
8	45510648	C	T	intron_variant	MODIFIER	c.266+1220C>T	FXN	protein_coding	ENSBTAT0000001725	
8	45510728	C	T	intron_variant	MODIFIER	c.266+1300C>T	FXN	protein_coding	ENSBTAT0000001725	
8	45512468	G	C	intron_variant	MODIFIER	c.267+2206G>C	FXN	protein_coding	ENSBTAT0000001725	
8	45514964	G	C	intron_variant	MODIFIER	c.387+170G>C	FXN	protein_coding	ENSBTAT0000001725	
8	45516225	T	C	intron_variant	MODIFIER	c.387+1431T>C	FXN	protein_coding	ENSBTAT0000001725	
8	45517774	G	A	intron_variant	MODIFIER	c.387+298G>A	FXN	protein_coding	ENSBTAT0000001725	
8	45519408	G	A	intron_variant	MODIFIER	c.388+1815G>A	FXN	protein_coding	ENSBTAT0000001725	
8	45519633	G	A	intron_variant	MODIFIER	c.388+1590G>A	FXN	protein_coding	ENSBTAT0000001725	
8	45528856	T	C	downstream_gene_variant	MODIFIER	c.1356T>C	FXN	protein_coding	ENSBTAT0000001725	
8	45878592	G	A	intron_variant	MODIFIER	c.2175+1225C>T	APBA1	protein_coding	ENSBTAT0000001688	
8	46635751	A	C	intron_variant	MODIFIER	c.1019-2060A>C	MAMD2C	protein_coding	ENSBTAT00000023092	
8	46686651	T	C	intron_variant	MODIFIER	c.1792-2570T>C	MAMD2C	protein_coding	ENSBTAT00000023092	
8	47051771	G	T	intron_variant	MODIFIER	c.3133+20382C>A	TRPM3	protein_coding	ENSBTAT0000001517	
8	48435328	A	C	intron_variant	MODIFIER	c.3-19258T>G	FAM108B1	protein_coding	ENSBTAT00000009597	
8	48453730	C	G	upstream_gene_variant	MODIFIER	c.2680C>G	CSH9ORF85	protein_coding	ENSBTAT00000009597	
8	48453730	C	G	intron_variant	MODIFIER	c.4+1578G>C	FAM108B1	protein_coding	ENSBTAT00000009597	
8	48481515	C	CA	intron_variant	MODIFIER	c.103-9678_103-9677insA	CSH9ORF85	protein_coding	ENSBTAT00000009597	
8	48701986	G	C	intron_variant	MODIFIER	c.124-27302G>C	GDA	protein_coding	ENSBTAT00000015339	
8	48762541	CA	C	intron_variant	MODIFIER	c.988+3212deIA	GDA	protein_coding	ENSBTAT00000015339	
9	36713660	T	C	intron_variant	MODIFIER	c.145+14269T>C	HS3ST5	protein_coding	ENSBTAT0000000213	
9	36774504	G	A	intron_variant	MODIFIER	c.33+46464G>A	HS3ST5	protein_coding	ENSBTAT0000000213	
9	36775751	G	C	intron_variant	MODIFIER	c.33+47710G>C	HS3ST5	protein_coding	ENSBTAT0000000213	
9	36779755	TC	T	intron_variant	MODIFIER	c.33+51715deIC	HS3ST5	protein_coding	ENSBTAT0000000213	
9	36792378	C	A	intron_variant	MODIFIER	c.32+46312C>A	HS3ST5	protein_coding	ENSBTAT0000000213	
9	36793282	G	A	intron_variant	MODIFIER	c.32+5408G>A	HS3ST5	protein_coding	ENSBTAT0000000213	
9	36793689	A	C	intron_variant	MODIFIER	c.32+45001A>C	HS3ST5	protein_coding	ENSBTAT0000000213	
10	47533504	A	G	intron_variant	MODIFIER	c.36+19403T>C	TLN2	protein_coding	ENSBTAT0000001376	
10	47961801	CAT	C	downstream_gene_variant	MODIFIER	c.444+2413deAT	C2CD4A	protein_coding	ENSBTAT00000027736	
10	48248855	CTG	C	intron_variant	MODIFIER	c.10012-144_10012-143deITG	VPS13C	protein_coding	ENSBTAT0000001287	
12	24156210	C	G	intron_variant	MODIFIER	c.1241-510S>C	TRPC4	protein_coding	ENSBTAT00000012378	
12	78059230	C	T	upstream_gene_variant	MODIFIER	c.4614C>T	OXR1	protein_coding	ENSBTAT00000035454	
12	79380842	C	T	intron_variant	MODIFIER	c.1417+5538C>T	ENSBTAG0000000146	protein_coding	ENSBTAT0000000167	
12	79380887	C	T	intron_variant	MODIFIER	c.1417+5583C>T	ENSBTAG0000000146	protein_coding	ENSBTAT0000000167	
12	79381341	C	T	intron_variant	MODIFIER	c.1417+6037C>T	ENSBTAG0000000146	protein_coding	ENSBTAT0000000167	
13	10945513	A	G	intron_variant	MODIFIER	c.280+2886A>G	ENSBTAG00000023169	protein_coding	ENSBTAT000000050711	
13	10955908	C	A	intron_variant	MODIFIER	c.365-591C>A	ENSBTAG00000023169	protein_coding	ENSBTAT000000050711	
13	10968546	G	A	intron_variant	MODIFIER	c.1678-677G>A	ENSBTAG00000023169	protein_coding	ENSBTAT000000050711	
13	11329141	G	C	intron_variant	MODIFIER	c.706-605G>C	ANKRD26	protein_coding	ENSBTAT000000031151	
13	11329141	G	C	intron_variant	MODIFIER	c.299+122G>C	ANKRD26	protein_coding	ENSBTAT000000055503	
13	12298609	TA	T	intron_variant	MODIFIER	c.233+470deIT	DHTKD1	protein_coding	ENSBTAT0000000364	
14	44970900	C	T	intron_variant	MODIFIER	c.19+1776C>T	STMN2	protein_coding	ENSBTAT000000026776	
14	45297375	T	C	intron_variant	MODIFIER	c.399-1778A>G	MRP28	protein_coding	ENSBTAT00000001718	
14	45352499	G	C	intron_variant	MODIFIER	c.399-7290C>G	MRP28	protein_coding	ENSBTAT00000001718	
14	45413670	G	A	intron_variant	MODIFIER	c.398-61892C>T	MRP28	protein_coding	ENSBTAT00000001718	
14	45442660	C	T	intron_variant	MODIFIER	c.398-32902G>A	MRP28	protein_coding	ENSBTAT00000001718	
14	45504865	C	A	intron_variant	MODIFIER	c.624+312G>T	TPD52	protein_coding	ENSBTAT000000055321	
14	45504865	C	A	intron_variant	MODIFIER	c.435+312G>T	TPD52	protein_coding	ENSBTAT000000054316	
14	45504865	C	A	intron_variant	MODIFIER	c.555+312G>T	TPD52	protein_coding	ENSBTAT000000037262	
14	45830553	T	A	intron_variant	MODIFIER	c.966+1659T>A	ZBTB10	protein_coding	ENSBTAT00000004333	
14	45830774	T	TC	intron_variant	MODIFIER	c.966+1880_1880_966+1881insC	ZBTB10	protein_coding	ENSBTAT00000004333	
14	45992939	C	T	downstream_gene_variant	MODIFIER	c.2438G>A	ZNF704	protein_coding	ENSBTAT00000028982	
14	45995373	C	A	3_prime_UTR_variant	MODIFIER	c.4G>T	ZNF704	protein_coding	ENSBTAT00000028982	
14	45995671	A	G	intron_variant	MODIFIER	c.915-183T>C	ZNF704	protein_coding	ENSBTAT00000028982	
14	45995787	A	T	intron_variant	MODIFIER	c.915-299T>A	ZNF704	protein_coding	ENSBTAT00000028982	
14	45996342	G	A	intron_variant	MODIFIER	c.914+121C>T	ZNF704	protein_coding	ENSBTAT00000028982	
14	45997060	G	A	intron_variant	MODIFIER	c.817-500C>T	ZNF704	protein_coding	ENSBTAT00000028982	
14	45998126	T	C	intron_variant	MODIFIER	c.817-1566A>G	ZNF704	protein_coding	ENSBTAT00000028982	
14	46000274	C	T	intron_variant	MODIFIER	c.817-3714G>A	ZNF704	protein_coding	ENSBTAT00000028982	
14	46002299	C	G	intron_variant	MODIFIER	c.816+4874G>C	ZNF704	protein_coding	ENSBTAT00000028982	
14	46007734	A	T	intron_variant	MODIFIER	c.712-457T>A	ZNF704	protein_coding	ENSBTAT00000028982	
14	46008281	A	T	intron_variant	MODIFIER	c.712-1004T>A	ZNF704	protein_coding	ENSBTAT00000028982	
14	46008596	C	T	intron_variant	MODIFIER	c.711-934G>A	ZNF704	protein_coding	ENSBTAT00000028982	
14	46009058	C	T	intron_variant	MODIFIER	c.711+472G>A	ZNF704	protein_coding	ENSBTAT00000028982	
14	46009479	C	T	intron_variant	MODIFIER	c.711+51G>A	ZNF704	protein_coding	ENSBTAT00000028982	
14	46009512	T	C	intron_variant	MODIFIER	c.711+18A>G	ZNF704	protein_coding	ENSBTAT00000028982	
14	46009656	G	A	synonymous_variant	MODIFIER	LOW	S585C>T	ZNF704	protein_coding	ENSBTAT00000028982
14	46010003	T	C	intron_variant	MODIFIER	c.444-206A>G	ZNF704	protein_coding	ENSBTAT00000028982	
14	46010099	G	A	intron_variant	MODIFIER	c.444-302C>T	ZNF704	protein_coding	ENSBTAT00000028982	
14	46010294	GA	G	intron_variant	MODIFIER	c.444-498deIT	ZNF704	protein_coding	ENSBTAT00000028982	
14	46010367	C	T	intron_variant	MODIFIER	c.444-570G>A	ZNF704	protein_coding	ENSBTAT00000028982	
14	46010424	A	T	intron_variant	MODIFIER	c.444-627T>A	ZNF704	protein_coding	ENSBTAT00000028982	
14	46010710	A	G	intron_variant	MODIFIER	c.444-913T>C	ZNF704	protein_coding	ENSBTAT00000028982	
14	46010716	C	T	intron_variant	MODIFIER	c.444-919G>A	ZNF704	protein_coding	ENSBTAT00000028982	
14	46010717	A	G	intron_variant	MODIFIER	c.444-920T>C	ZNF704	protein_coding	ENSBTAT00000028982	
14	46010795	A	T	intron_variant	MODIFIER	c.444-998T>A	ZNF704	protein_coding	ENSBTAT00000028982	
14	46010802	GA	G	intron_variant	MODIFIER	c.444-1006deIT	ZNF704	protein_coding	ENSBTAT00000028982	
14	46010832	G	A	intron_variant	MODIFIER	c.444-1035C>T	ZNF704	protein_coding	ENSBTAT00000028982	
14	46010961	A	C	intron_variant	MODIFIER	c.444-1164T>G	ZNF704	protein_coding	ENSBTAT00000028982	
14	46011199	A	C	intron_variant	MODIFIER	c.444-1402T>G	ZNF704	protein_coding	ENSBTAT00000028982	
14	46011426	T	C	intron_variant	MODIFIER	c.444-1629A>G	ZNF704	protein_coding	ENSBTAT00000028982	
14	46011521	T	G	intron_variant	MODIFIER	c.444-1724A>C	ZNF704	protein_coding	ENSBTAT00000028982	
14	46011763	G	A	intron_variant	MODIFIER	c.444-1966C>T	ZNF704	protein_coding	ENSBTAT00000028982	
14	46013672	A	T	intron_variant	MOD					

14	46022818	A	G	intron_variant	MODIFIER	c.343-399T>C	ZNF704	protein_coding	ENSBAT00000028982
14	46025661	C	A	intron_variant	MODIFIER	c.343-6840G>T	ZNF704	protein_coding	ENSBAT00000028982
14	46026718	G	A	intron_variant	MODIFIER	c.343-7897C>T	ZNF704	protein_coding	ENSBAT00000028982
14	46026741	G	C	intron_variant	MODIFIER	c.343-7920C>G	ZNF704	protein_coding	ENSBAT00000028982
14	46026862	CT	C	intron_variant	MODIFIER	c.343-8042delA	ZNF704	protein_coding	ENSBAT00000028982
14	46027620	G	A	intron_variant	MODIFIER	c.342-7485C>T	ZNF704	protein_coding	ENSBAT00000028982
14	46027637	C	T	intron_variant	MODIFIER	c.342-7468G>A	ZNF704	protein_coding	ENSBAT00000028982
14	46027638	G	A	intron_variant	MODIFIER	c.342-7467C>T	ZNF704	protein_coding	ENSBAT00000028982
14	46027689	G	A	intron_variant	MODIFIER	c.342-7416C>T	ZNF704	protein_coding	ENSBAT00000028982
14	46027881	T	C	intron_variant	MODIFIER	c.342-7224A>G	ZNF704	protein_coding	ENSBAT00000028982
14	46028081	G	A	intron_variant	MODIFIER	c.342-7024C>T	ZNF704	protein_coding	ENSBAT00000028982
14	46028229	C	T	intron_variant	MODIFIER	c.342-6876G>A	ZNF704	protein_coding	ENSBAT00000028982
14	46028353	T	G	intron_variant	MODIFIER	c.342-6752A>C	ZNF704	protein_coding	ENSBAT00000028982
14	46028450	A	T	intron_variant	MODIFIER	c.342-6655T>A	ZNF704	protein_coding	ENSBAT00000028982
14	46028545	T	G	intron_variant	MODIFIER	c.342-6560A>C	ZNF704	protein_coding	ENSBAT00000028982
14	46029030	C	T	intron_variant	MODIFIER	c.342-6075G>A	ZNF704	protein_coding	ENSBAT00000028982
14	46029033	C	A	intron_variant	MODIFIER	c.342-6072G>T	ZNF704	protein_coding	ENSBAT00000028982
14	46029790	C	G	intron_variant	MODIFIER	c.342-5315G>C	ZNF704	protein_coding	ENSBAT00000028982
14	46029914	G	C	intron_variant	MODIFIER	c.342-5191C>G	ZNF704	protein_coding	ENSBAT00000028982
14	46029957	G	T	intron_variant	MODIFIER	c.342-5148C>A	ZNF704	protein_coding	ENSBAT00000028982
14	46030077	G	T	intron_variant	MODIFIER	c.342-5028C>A	ZNF704	protein_coding	ENSBAT00000028982
14	46030206	T	A	intron_variant	MODIFIER	c.342-4899A>T	ZNF704	protein_coding	ENSBAT00000028982
14	46030207	C	A	intron_variant	MODIFIER	c.342-4898G>T	ZNF704	protein_coding	ENSBAT00000028982
14	46030277	T	C	intron_variant	MODIFIER	c.342-4828A>G	ZNF704	protein_coding	ENSBAT00000028982
14	46030480	C	A	intron_variant	MODIFIER	c.342-4625G>T	ZNF704	protein_coding	ENSBAT00000028982
14	46030831	T	C	intron_variant	MODIFIER	c.342-4274A>G	ZNF704	protein_coding	ENSBAT00000028982
14	46031123	A	G	intron_variant	MODIFIER	c.342-3987T>C	ZNF704	protein_coding	ENSBAT00000028982
14	46031476	T	C	intron_variant	MODIFIER	c.342-3629A>G	ZNF704	protein_coding	ENSBAT00000028982
14	46031528	C	T	intron_variant	MODIFIER	c.342-3577G>A	ZNF704	protein_coding	ENSBAT00000028982
14	46032077	C	A	intron_variant	MODIFIER	c.342-3028G>T	ZNF704	protein_coding	ENSBAT00000028982
14	46032078	C	T	intron_variant	MODIFIER	c.342-3027G>A	ZNF704	protein_coding	ENSBAT00000028982
14	46032315	G	T	intron_variant	MODIFIER	c.342-2790C>A	ZNF704	protein_coding	ENSBAT00000028982
14	46032338	C	T	intron_variant	MODIFIER	c.342-2767G>A	ZNF704	protein_coding	ENSBAT00000028982
14	46032392	T	G	intron_variant	MODIFIER	c.342-2713A>C	ZNF704	protein_coding	ENSBAT00000028982
14	46032426	T	G	intron_variant	MODIFIER	c.342-2679A>C	ZNF704	protein_coding	ENSBAT00000028982
14	46032436	T	C	intron_variant	MODIFIER	c.342-2669A>G	ZNF704	protein_coding	ENSBAT00000028982
14	46032508	T	C	intron_variant	MODIFIER	c.342-2597A>G	ZNF704	protein_coding	ENSBAT00000028982
14	46032602	A	G	intron_variant	MODIFIER	c.342-2503T>C	ZNF704	protein_coding	ENSBAT00000028982
14	46032689	G	A	intron_variant	MODIFIER	c.342-2416C>T	ZNF704	protein_coding	ENSBAT00000028982
14	46032701	C	A	intron_variant	MODIFIER	c.342-2404G>T	ZNF704	protein_coding	ENSBAT00000028982
14	46032976	G	A	intron_variant	MODIFIER	c.342-2129C>T	ZNF704	protein_coding	ENSBAT00000028982
14	46033008	G	C	intron_variant	MODIFIER	c.342-2097C>G	ZNF704	protein_coding	ENSBAT00000028982
14	46033030	C	T	intron_variant	MODIFIER	c.342-2075G>A	ZNF704	protein_coding	ENSBAT00000028982
14	46033220	C	CA	intron_variant	MODIFIER	c.342-1884_342-1885insT	ZNF704	protein_coding	ENSBAT00000028982
14	46033563	C	CAG	intron_variant	MODIFIER	c.342-1541_342-1542insCT	ZNF704	protein_coding	ENSBAT00000028982
14	46033915	G	A	intron_variant	MODIFIER	c.342-190C>T	ZNF704	protein_coding	ENSBAT00000028982
14	46034026	T	C	intron_variant	MODIFIER	c.342-1079A>G	ZNF704	protein_coding	ENSBAT00000028982
14	46034233	T	G	intron_variant	MODIFIER	c.342-872A>C	ZNF704	protein_coding	ENSBAT00000028982
14	46034690	T	G	intron_variant	MODIFIER	c.342-415A>C	ZNF704	protein_coding	ENSBAT00000028982
14	46034730	GT	G	intron_variant	MODIFIER	c.342-374delA	ZNF704	protein_coding	ENSBAT00000028982
14	46034825	T	G	intron_variant	MODIFIER	c.342-280A>C	ZNF704	protein_coding	ENSBAT00000028982
14	46034917	G	C	intron_variant	MODIFIER	c.342-188C>G	ZNF704	protein_coding	ENSBAT00000028982
14	46034921	T	G	intron_variant	MODIFIER	c.342-184A>C	ZNF704	protein_coding	ENSBAT00000028982
14	46035093	T	C	intron_variant	MODIFIER	c.342-12A>G	ZNF704	protein_coding	ENSBAT00000028982
14	46036188	T	C	intron_variant	MODIFIER	c.110-851A>G	ZNF704	protein_coding	ENSBAT00000028982
14	46036420	A	G	intron_variant	MODIFIER	c.110-1083T>C	ZNF704	protein_coding	ENSBAT00000028982
14	46036443	T	C	intron_variant	MODIFIER	c.110-1106A>G	ZNF704	protein_coding	ENSBAT00000028982
14	46036684	C	T	intron_variant	MODIFIER	c.110-1347G>A	ZNF704	protein_coding	ENSBAT00000028982
14	46036848	A	AACAC	intron_variant	MODIFIER	c.110-1512_110-1511insGTGT	ZNF704	protein_coding	ENSBAT00000028982
14	46036850	G	A	intron_variant	MODIFIER	c.110-1513C>T	ZNF704	protein_coding	ENSBAT00000028982
14	46036892	C	T	intron_variant	MODIFIER	c.110-1555G>A	ZNF704	protein_coding	ENSBAT00000028982
14	46036912	A	G	intron_variant	MODIFIER	c.110-1575T>C	ZNF704	protein_coding	ENSBAT00000028982
14	46036938	G	A	intron_variant	MODIFIER	c.110-1601C>T	ZNF704	protein_coding	ENSBAT00000028982
14	46037179	C	T	intron_variant	MODIFIER	c.110-1842G>A	ZNF704	protein_coding	ENSBAT00000028982
14	46037187	A	G	intron_variant	MODIFIER	c.110-1850T>C	ZNF704	protein_coding	ENSBAT00000028982
14	46037233	C	T	intron_variant	MODIFIER	c.110-1896G>A	ZNF704	protein_coding	ENSBAT00000028982
14	46037553	T	C	intron_variant	MODIFIER	c.110-2216A>G	ZNF704	protein_coding	ENSBAT00000028982
14	46037599	C	T	intron_variant	MODIFIER	c.110-2262G>A	ZNF704	protein_coding	ENSBAT00000028982
14	46037603	C	A	intron_variant	MODIFIER	c.110-2266G>T	ZNF704	protein_coding	ENSBAT00000028982
14	46037666	T	C	intron_variant	MODIFIER	c.110-2292A>G	ZNF704	protein_coding	ENSBAT00000028982
14	46037836	T	G	intron_variant	MODIFIER	c.110-2499A>C	ZNF704	protein_coding	ENSBAT00000028982
14	46037891	C	T	intron_variant	MODIFIER	c.110-2554G>A	ZNF704	protein_coding	ENSBAT00000028982
14	46038002	A	C	intron_variant	MODIFIER	c.109-2650T>G	ZNF704	protein_coding	ENSBAT00000028982
14	46038304	T	C	intron_variant	MODIFIER	c.109-2348A>G	ZNF704	protein_coding	ENSBAT00000028982
14	46038319	T	C	intron_variant	MODIFIER	c.109-2333A>G	ZNF704	protein_coding	ENSBAT00000028982
14	46038622	G	T	intron_variant	MODIFIER	c.109-2030C>A	ZNF704	protein_coding	ENSBAT00000028982
14	46038814	A	T	intron_variant	MODIFIER	c.109-1833T>A	ZNF704	protein_coding	ENSBAT00000028982
14	46038820	T	C	intron_variant	MODIFIER	c.109-1832A>G	ZNF704	protein_coding	ENSBAT00000028982
14	46038821	G	A	intron_variant	MODIFIER	c.109-1831C>T	ZNF704	protein_coding	ENSBAT00000028982
14	46039034	T	C	intron_variant	MODIFIER	c.109-1618A>G	ZNF704	protein_coding	ENSBAT00000028982
14	46039260	A	G	intron_variant	MODIFIER	c.109-1392T>C	ZNF704	protein_coding	ENSBAT00000028982
14	46039406	G	A	intron_variant	MODIFIER	c.109-1246C>T	ZNF704	protein_coding	ENSBAT00000028982
14	46039413	T	C	intron_variant	MODIFIER	c.109-1239A>G	ZNF704	protein_coding	ENSBAT00000028982
14	46039488	G	A	intron_variant	MODIFIER	c.109-1164C>T	ZNF704	protein_coding	ENSBAT00000028982
14	46039555	TC	T	intron_variant	MODIFIER	c.109-1096delG	ZNF704	protein_coding	ENSBAT00000028982
14	46039603	A	G	intron_variant	MODIFIER	c.109-1049T>C	ZNF704	protein_coding	ENSBAT00000028982
14	46039656	C	T	intron_variant	MODIFIER	c.109-996G>A	ZNF704	protein_coding	ENSBAT00000028982
14	46039694	TC	T	intron_variant	MODIFIER	c.109-957delG	ZNF704	protein_coding	ENSBAT00000028982
14	46039745	C	T	intron_variant	MODIFIER	c.109-907G>A	ZNF704	protein_coding	ENSBAT00000028982
14	46039838	C	T	intron_variant	MODIFIER	c.109-814G>A	ZNF704	protein_coding	ENSBAT00000028982
14	46040027	A	G	intron_variant	MODIFIER	c.109-825T>C	ZNF704	protein_coding	ENSBAT00000028982
14	46040421	A	C	intron_variant	MODIFIER	c.109-231T>G	ZNF704	protein_coding	ENSBAT00000028982
14	46041317	A	T	upstream_gene_variant	MODIFIER	c.557T>A	ZNF704	protein_coding	ENSBAT00000028982
14	46041737	T	G	upstream_gene_variant	MODIFIER	c.977A>C	ZNF704	protein_coding	ENSBAT00000028982
14	46042459	G	A	upstream_gene_variant	MODIFIER	c.1699C>T	ZNF704	protein_coding	ENSBAT00000028982
14	46043072	G	C	upstream_gene_variant	MODIFIER	c.2312C>G	ZNF704	protein_coding	ENSBAT00000028982
14	46043383	A	G	upstream_gene_variant	MODIFIER	c.2623T>C	ZNF704	protein_coding	ENSBAT00000028982
14	46043446	T	G	upstream_gene_variant	MODIFIER	c.2686A>C	ZNF704	protein_coding	ENSBAT00000028982
14	46043588	T	C	upstream_gene_variant	MODIFIER	c.2828A>G	ZNF704	protein_coding	ENSBAT00000028982
14	46043886	T	C	upstream_gene_variant	MODIFIER	c.3126A>G	ZNF704	protein_coding	ENSBAT00000028982
14	46043899	T	C	upstream_gene_variant	MODIFIER	c.3139A>G	ZNF704	protein_coding	ENSBAT00000028982
14	46044196	T	C	upstream_gene_variant	MODIFIER	c.3436A>G	ZNF704	protein_coding	ENSBAT00000028982
14	46044335	A	G	upstream_gene_variant	MODIFIER	c.3575T>C	ZNF704	protein_coding	ENSBAT00000028982
14	46044439	C	T	upstream_gene_variant	MODIFIER	c.3679G>A	ZNF704	protein_coding	ENSBAT00000028982
14	46044459	C	T	upstream_gene_variant	MODIFIER	c.3699G>A	ZNF704	protein_coding	ENSBAT00000028982
14	46044793	G	C	upstream_gene_variant	MODIFIER	c.4033C>G	ZNF704	protein_coding</	

17	28634973	A	G	upstream_gene_variant	MODIFIER	n.-2238T>C	7SK	misc_RNA	ENSBTAT00000060712
17	38028857	T	G	downstream_gene_variant	MODIFIER	c.67146T>G	ENSBTAG00000047595	protein_coding	ENSBTAT00000064567
17	52969236	G	A	downstream_gene_variant	MODIFIER	c.5947C>T	AACS	protein_coding	ENSBTAT00000074549
17	52970236	C	T	downstream_gene_variant	MODIFIER	c.5947G>A	AACS	protein_coding	ENSBTAT00000074549
17	53003481	G	A	intron_variant	MODIFIER	c.571-1375C>T	AACS	protein_coding	ENSBTAT00000074549
17	53009053	G	A	intron_variant	MODIFIER	c.570-2151C>T	AACS	protein_coding	ENSBTAT00000074549
17	53640197	C	T	intron_variant	MODIFIER	c.1286-4889C>T	NCOR2	protein_coding	ENSBTAT00000034273
17	54379369	C	T	intron_variant	MODIFIER	c.801-3770C>T	RILPL1	protein_coding	ENSBTAT00000029668
17	54999680	C	T	upstream_gene_variant	MODIFIER	n.-2052G>A	SNORA70	snoRNA	ENSBTAT00000062459
17	54999680	C	T	intron_variant	MODIFIER	c.212-259G>A	ENSBTAG00000032433	protein_coding	ENSBTAT00000045988
17	55636176	T	C	intron_variant	MODIFIER	c.1581-632A>G	WDR66	protein_coding	ENSBTAT00000005477
17	56675700	G	A	intron_variant	MODIFIER	c.233-4781C>T	PPTC7	protein_coding	ENSBTAT00000024393
17	57292132	T	A	intron_variant	MODIFIER	c.301-9483T>A	CUX2	protein_coding	ENSBTAT0000002615
17	57977763	G	A	intron_variant	MODIFIER	c.5209-82G>A	CIT	protein_coding	ENSBTAT00000061505
17	59716009	C	T	intron_variant	MODIFIER	c.987-2052C>T	KSR2	protein_coding	ENSBTAT00000061442
17	60092232	AC	A	intron_variant	MODIFIER	c.1664-1060elC	NOS1	protein_coding	ENSBTAT00000016990
17	60335279	C	T	downstream_gene_variant	MODIFIER	c.3729C>T	TESC	protein_coding	ENSBTAT00000061490
17	60335279	C	T	downstream_gene_variant	MODIFIER	c.3858G>A	FBXW8	protein_coding	ENSBTAT00000064959
17	60335279	C	T	downstream_gene_variant	MODIFIER	c.3858G>A	FBXW8	protein_coding	ENSBTAT00000050675
18	14609330	C	T	upstream_gene_variant	MODIFIER	c.1437C>T	CDK10	protein_coding	ENSBTAT00000047400
18	14611199	C	T	intron_variant	MODIFIER	c.81-352C>T	CDK10	protein_coding	ENSBTAT00000047400
18	14628123	TGGGTACACA	T	intron_variant	MODIFIER	c.1282-43_1282+51delTGTGACCCCC	VPS9D1	protein_coding	ENSBTAT00000028205
18	14632547	C	T	upstream_gene_variant	MODIFIER	c.2755C>T	ZNF276	protein_coding	ENSBTAT0000002474
18	14632547	C	T	intron_variant	MODIFIER	c.175-329G>A	VPS9D1	protein_coding	ENSBTAT00000028205
18	14639106	A	G	upstream_gene_variant	MODIFIER	c.4534T>C	VPS9D1	protein_coding	ENSBTAT00000028205
18	14639106	A	G	intron_variant	MODIFIER	c.218-699A>G	ZNF276	protein_coding	ENSBTAT0000002476
18	14669751	C	A	intron_variant	MODIFIER	c.1718-242G>T	FANCA	protein_coding	ENSBTAT0000002478
18	14673330	C	T	intron_variant	MODIFIER	c.1362-301G>A	FANCA	protein_coding	ENSBTAT0000002478
18	14684754	G	A	intron_variant	MODIFIER	c.284-398C>T	FANCA	protein_coding	ENSBTAT0000002478
18	14692800	G	C	upstream_gene_variant	MODIFIER	c.1652G>C	SPIRE2	protein_coding	ENSBTAT0000001541
18	14692800	G	C	upstream_gene_variant	MODIFIER	c.1682G>C	SPIRE2	protein_coding	ENSBTAT00000064626
18	14740292	T	TG	upstream_gene_variant	MODIFIER	c.1645_-1644insG	TCF25	protein_coding	ENSBTAT00000016057
18	14743791	A	G	synonymous_variant	LOW	c.369A>G	TCF25	protein_coding	ENSBTAT00000016057
18	14751873	G	A	intron_variant	MODIFIER	c.1278-142G>A	TCF25	protein_coding	ENSBTAT00000016057
18	14756082	C	T	upstream_gene_variant	MODIFIER	c.-1533C>T	MC1R	protein_coding	ENSBTAT00000032494
18	14756082	C	T	downstream_gene_variant	MODIFIER	c.2181C>T	TCF25	protein_coding	ENSBTAT00000016057
18	14796948	G	A	intron_variant	MODIFIER	c.139-1948G>A	ENSBTAG00000038051	protein_coding	ENSBTAT00000056979
18	14802791	A	G	intron_variant	MODIFIER	c.546-655A>G	ENSBTAG00000038051	protein_coding	ENSBTAT00000056979
18	14802810	T	C	intron_variant	MODIFIER	c.546-674T>C	ENSBTAG00000038051	protein_coding	ENSBTAT00000056979
18	14803413	G	C	intron_variant	MODIFIER	c.547-861G>C	ENSBTAG00000038051	protein_coding	ENSBTAT00000056979
18	14806770	G	A	intron_variant	MODIFIER	c.1011-1041G>A	ENSBTAG00000038051	protein_coding	ENSBTAT00000056979
18	14820167	C	T	downstream_gene_variant	MODIFIER	c.4997C>T	ENSBTAG00000038051	protein_coding	ENSBTAT00000056979
18	14820167	C	T	intron_variant	MODIFIER	c.32-892G>A	DBNDD1	protein_coding	ENSBTAT00000027077
18	14822098	G	A	intron_variant	MODIFIER	c.31-2562C>T	DBNDD1	protein_coding	ENSBTAT00000027077
18	14830472	C	CT	intron_variant	MODIFIER	c.3+127_3+128insT	GASS	protein_coding	ENSBTAT00000009333
18	14846463	C	T	3_prime_UTR_variant	MODIFIER	c.263C>T	GASS	protein_coding	ENSBTAT00000009333
18	14846786	C	T	3_prime_UTR_variant	MODIFIER	c.586C>T	GASS	protein_coding	ENSBTAT00000009333
18	14849211	G	A	downstream_gene_variant	MODIFIER	c.3371G>A	GASS	protein_coding	ENSBTAT00000009333
18	14849326	C	T	downstream_gene_variant	MODIFIER	c.3486C>T	GASS	protein_coding	ENSBTAT00000009333
18	14882790	C	T	upstream_gene_variant	MODIFIER	n.-4945G>A	U1	srRNA	ENSBTAT00000042019
18	15077671	T	A	upstream_gene_variant	MODIFIER	c.823T>A	ENSBTAG000000023726	protein_coding	ENSBTAT000000032490
18	15077671	T	A	downstream_gene_variant	MODIFIER	c.2815T>A	ORC6	protein_coding	ENSBTAT00000024338
18	15046139	C	A	downstream_gene_variant	MODIFIER	c.1537C>A	GPT2	protein_coding	ENSBTAT0000003881
19	17685195	A	G	intron_variant	MODIFIER	c.95-19650A>G	MYO1D	protein_coding	ENSBTAT00000020634
19	17793549	AT	A	intron_variant	MODIFIER	c.1297-552delT	MYO1D	protein_coding	ENSBTAT00000035318
19	18272256	G	T	intron_variant	MODIFIER	c.1139-538C>A	RHOT1	protein_coding	ENSBTAT00000035318
19	18292007	C	G	intron_variant	MODIFIER	c.368-578G>C	RHOT1	protein_coding	ENSBTAT00000035318
19	18397920	G	A	upstream_gene_variant	MODIFIER	c.2837G>A	C19H17orf42	protein_coding	ENSBTAT00000024467
19	61710902	AAAAAG	A	intron_variant	MODIFIER	c.928-1804_928-1800delCTTTT	MAP2K6	protein_coding	ENSBTAT00000021115
19	61710907	G	A	intron_variant	MODIFIER	c.928-1804C>T	MAP2K6	protein_coding	ENSBTAT00000021115
19	61748890	A	G	intron_variant	MODIFIER	c.17-5190T>C	MAP2K6	protein_coding	ENSBTAT00000021115
19	61777308	G	A	intron_variant	MODIFIER	c.17-33608C>T	MAP2K6	protein_coding	ENSBTAT00000021115
19	62274726	C	T	intron_variant	MODIFIER	c.356-4098C>T	FAM20A	protein_coding	ENSBTAT0000001439
21	55537362	T	G	intron_variant	MODIFIER	c.862-1531A>C	TGMS	protein_coding	ENSBTAT000000045466
21	55625460	C	T	splice_region_variant&intron_variant	LOW	c.770-8C>T	ADAL	protein_coding	ENSBTAT00000019248
21	55625460	C	T	downstream_gene_variant	MODIFIER	c.4898G>A	ZSCAN29	protein_coding	ENSBTAT00000019251
21	55707719	T	C	intron_variant	MODIFIER	c.3627-608A>G	TP53BP1	protein_coding	ENSBTAT00000028388
21	55708316	T	C	intron_variant	MODIFIER	c.3627-11A>G	TP53BP1	protein_coding	ENSBTAT00000028388
23	11960224	TAA	T	intron_variant	MODIFIER	c.113-1005_113-1004delI	ZFAND3	protein_coding	ENSBTAT00000036100
23	12480092	C	A	downstream_gene_variant	MODIFIER	c.4750G>T	GLO1	protein_coding	ENSBTAT00000016884
23	12620146	G	A	intron_variant	MODIFIER	c.2954-5741G>A	DNAH8	protein_coding	ENSBTAT000000065917
23	12620146	G	A	intron_variant	MODIFIER	c.2569-2079C>A	DNAH8	protein_coding	ENSBTAT000000065917
23	12622781	C	A	intron_variant	MODIFIER	c.2569-2079C>A	DNAH8	protein_coding	ENSBTAT000000065917
23	12622781	C	A	intron_variant	MODIFIER	c.2569-2079C>A	DNAH8	protein_coding	ENSBTAT000000065917
23	12711687	C	G	intron_variant	MODIFIER	c.8331-494C>G	DNAH8	protein_coding	ENSBTAT000000065917
23	12711687	C	G	intron_variant	MODIFIER	c.7983-494C>G	DNAH8	protein_coding	ENSBTAT000000065917
23	13071905	G	A	intron_variant	MODIFIER	c.187-9651C>T	KCNK5	protein_coding	ENSBTAT000000014756
23	13104027	C	T	upstream_gene_variant	MODIFIER	c.801G>A	ENSBTAG00000007140	protein_coding	ENSBTAT00000009396
23	13481679	G	T	intron_variant	MODIFIER	c.391-1303C>A	KIF6	protein_coding	ENSBTAT0000004002
23	13481679	G	T	intron_variant	MODIFIER	c.391-1303C>A	KIF6	protein_coding	ENSBTAT00000009903
23	13481679	G	T	intron_variant	MODIFIER	c.391-1303C>A	KIF6	protein_coding	ENSBTAT0000004399
23	13793289	A	G	intron_variant	MODIFIER	c.796-394A>G	DAAM2	protein_coding	ENSBTAT00000036988
24	3880273	T	C	intron_variant	MODIFIER	c.533-3-5941A>G	ZNF407	protein_coding	ENSBTAT00000031106
24	4093660	G	A	intron_variant	MODIFIER	c.4701-1742G>C	ZNF407	protein_coding	ENSBTAT00000031106
24	4150517	CATT	C	intron_variant	MODIFIER	c.4700-3702_4700-3702delAAT	ZNF407	protein_coding	ENSBTAT00000031106
24	4261031	G	A	upstream_gene_variant	MODIFIER	c.5918C>T	CNDP1	protein_coding	ENSBTAT00000028564
24	4553586	T	G	intron_variant	MODIFIER	c.1007-440T>G	FBXO15	protein_coding	ENSBTAT00000012776
24	21008218	A	G	intron_variant	MODIFIER	c.338-66972T>C	FHD03	protein_coding	ENSBTAT0000001003
24	21153591	G	A	downstream_gene_variant	MODIFIER	n.1089C>T	U6	srRNA	ENSBTAT000000059186
24	21153591	G	A	intron_variant	MODIFIER	c.165-18271C>T	FHD03	protein_coding	ENSBTAT000000061003
24	2171558	G	C	intron_variant	MODIFIER	c.165+304C>G	FHD03	protein_coding	ENSBTAT000000061003
24	21222029	TC	T	frameshift_variant	HIGH	c.1881delG	MOCOS	protein_coding	ENSBTAT00000065375
24	21222029	TC	T	frameshift_variant	HIGH	c.1782delG	MOCOS	protein_coding	ENSBTAT00000087678
24	21923967	T	A	downstream_gene_variant	MODIFIER	c.2734T>A	INO80C	protein_coding	ENSBTAT00000065749
24	21923967	T	A	downstream_gene_variant	MODIFIER	c.2734T>A	INO80C	protein_coding	ENSBTAT00000064889
24	2207117	A	G	upstream_gene_variant	MODIFIER	c.3015A>G	ZNF24	protein_coding	ENSBTAT00000013547
24	2207117	A	G	intron_variant	MODIFIER	c.1261-10835A>G	ZNF24	protein_coding	ENSBTAT000000065887
24	2207117	A	G	intron_variant	MODIFIER	c.794+1781T>C	ZNF397	protein_coding	ENSBTAT000000065936
24	2209857	CA	C	upstream_gene_variant	MODIFIER	c.4137delT	ZNF397	protein_coding	ENSBTAT000000065936
24	2209857	CA	C	intron_variant	MODIFIER	c.81-487delT	ZNF397	protein_coding	ENSBTAT000000065936
24	22235790	G	A	intron_variant	MODIFIER	c.394-1265C>T	MAPRE2	protein_coding	ENSBTAT00000008987
24	22279375	TC	T	intron_variant	MODIFIER	c.120-6494delG	MAPRE2	protein_coding	ENSBTAT00000008987
24	22383874	C	T	upstream_gene_variant	MODIFIER	n.-1591G>A	5S_rRNA	rRNA	ENSBTAT000000060885
24	24745064	T	C	intron_variant	MODIFIER	c.1064-2072T>C	KLHL14	protein_coding	ENSBTAT000000026649
24	24745227	T	A	intron_variant	MODIFIER	c.1064-20565T>A	KLHL14	protein_coding	ENSBTAT000000026649
24	24747332</								

24	31055243	A	G	intron_variant	MODIFIER	c.232-3475A>G	SS18	protein_coding	ENSBTAT00000015327
24	31058279	C	A	downstream_gene_variant	MODIFIER	n.+3399C>A	bta-mir-2380	miRNA	ENSBTAT00000062477
24	31058279	C	A	intron_variant	MODIFIER	c.232-439C>A	SS18	protein_coding	ENSBTAT00000015327
24	31778728	G	T	intron_variant	MODIFIER	c.220-72614G>T	ZNF521	protein_coding	ENSBTAT00000048222
24	31960710	A	C	intron_variant	MODIFIER	c.3658+55508A>C	ZNF521	protein_coding	ENSBTAT00000048222
24	57302555	C	T	intron_variant	MODIFIER	c.784-203G>A	FECH	protein_coding	ENSBTAT00000008384
24	58149589	C	T	intron_variant	MODIFIER	c.5536+767G>A	ALPK2	protein_coding	ENSBTAT00000018977
24	58171163	G	A	intron_variant	MODIFIER	c.1885-10367C>T	ALPK2	protein_coding	ENSBTAT00000018977
24	58292677	C	T	intron_variant	MODIFIER	c.228-4364C>T	MALT1	protein_coding	ENSBTAT0000000465385
27	33752338	G	A	intron_variant	MODIFIER	c.61-2392G>A	PLEKHA2	protein_coding	ENSBTAT000000031486
27	34689026	C	T	intron_variant	MODIFIER	c.100-2006C>T	IDO1	protein_coding	ENSBTAT000000027449
27	34695686	T	C	intron_variant	MODIFIER	c.550-13T>C	IDO1	protein_coding	ENSBTAT000000027449
27	35335361	C	T	intron_variant	MODIFIER	c.578-3630?G>A	ZMAT4	protein_coding	ENSBTAT000000047349
27	35338339	G	A	intron_variant	MODIFIER	c.578-39285C>T	ZMAT4	protein_coding	ENSBTAT000000047349
27	35358557	C	T	intron_variant	MODIFIER	c.577+22579G>A	ZMAT4	protein_coding	ENSBTAT000000047349
27	35365674	G	A	intron_variant	MODIFIER	c.577+15462C>T	ZMAT4	protein_coding	ENSBTAT000000047349
27	35418117	C	T	intron_variant	MODIFIER	c.193-8821G>A	ZMAT4	protein_coding	ENSBTAT000000047349
27	35418155	C	A	intron_variant	MODIFIER	c.193-8859G>T	ZMAT4	protein_coding	ENSBTAT000000047349