

Table S2: Genes in RetroFat chromosome 1 QTL interval.

Gene Symbol	Gene Name	Start location	Gene Function (UniProt)	Non-synonymous variants in founders with the haplotype effect†
LOC103691392	uncharacterized	280573647	Unknown	
Emx2	empty spiracles homeobox 2	280633938	Transcription factor which acts to generate the boundary between the roof and archipallium in the developing brain.	
LOC108349711	uncharacterized	280653842	Unknown	
LOC502394	hypothetical	280753676	Unknown	
LOC102555781	uncharacterized	280796426	Unknown	
LOC108349712	uncharacterized	280934585	Unknown	
Rab11fip2	RAB11 family interacting protein 2	281065346	A Rab11 effector binding preferentially phosphatidylinositol 3,4,5-trisphosphate (PtdInsP3) and phosphatidic acid (PA) and acting in the regulation of the transport of vesicles from the endosomal recycling compartment (ERC) to the plasma membrane. Involved in insulin granule exocytosis. Also involved in receptor-mediated endocytosis and membrane trafficking of recycling endosomes, probably originating from clathrin-coated vesicles.	
LOC102556164	uncharacterized	281227923	Unknown	
LOC102556108	uncharacterized	281289720	Unknown	
LOC102556023	acyl carrier protein, mitochondrial-like	281304776	Unknown	
Fam204a	family with sequence similarity 204, member A	281343692	Unknown	

Gene Symbol	Gene Name	Start location	Gene Function (UniProt)	Non-synonymous variants in founders with the haplotype effect†
LOC103691393	uncharacterized	281395030	Unknown	
LOC108349713	uncharacterized	281397476	Unknown	
<b>Prlhr</b>	prolactin releasing hormone receptor	281754472	Receptor for prolactin-releasing peptide (PrRP). Implicated in lactation, <b>regulation of food intake</b> and pain-signal processing.	281755911 C to T translation start site in BUF and WKY
Cacul1	CDK2-associated, cullin domain 1	281814226	Cell cycle associated protein capable of promoting cell proliferation through the activation of CDK2 at the G1/S phase transition.	

The gene in bold (Prlhr) is the most likely candidate in the region.

†RetroFat chromosome 1 haplotype effects: BUF, MR, WKY haplotypes lead to increased fat pad weight (Figure 6D).