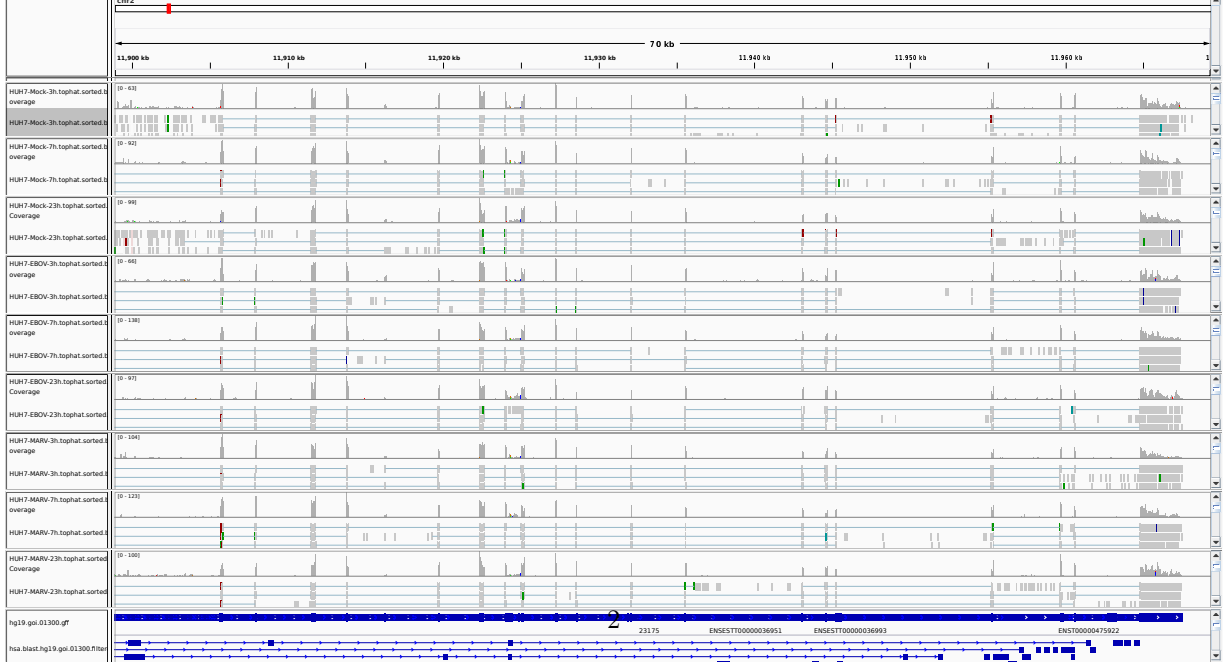
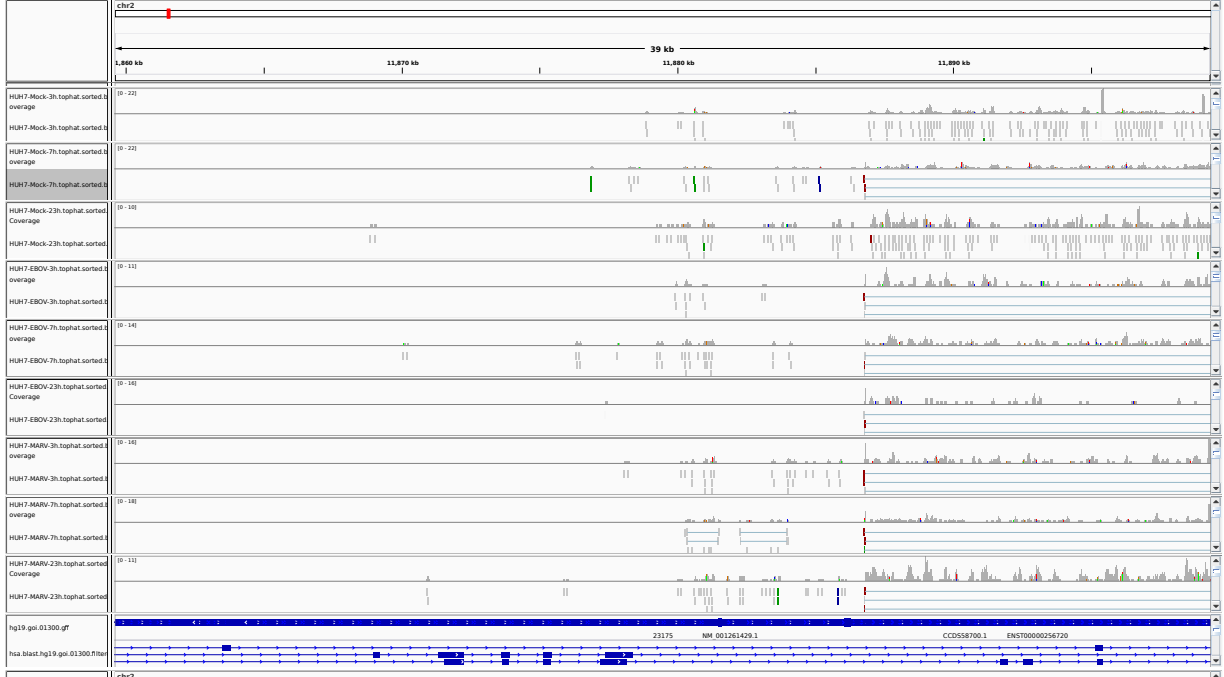
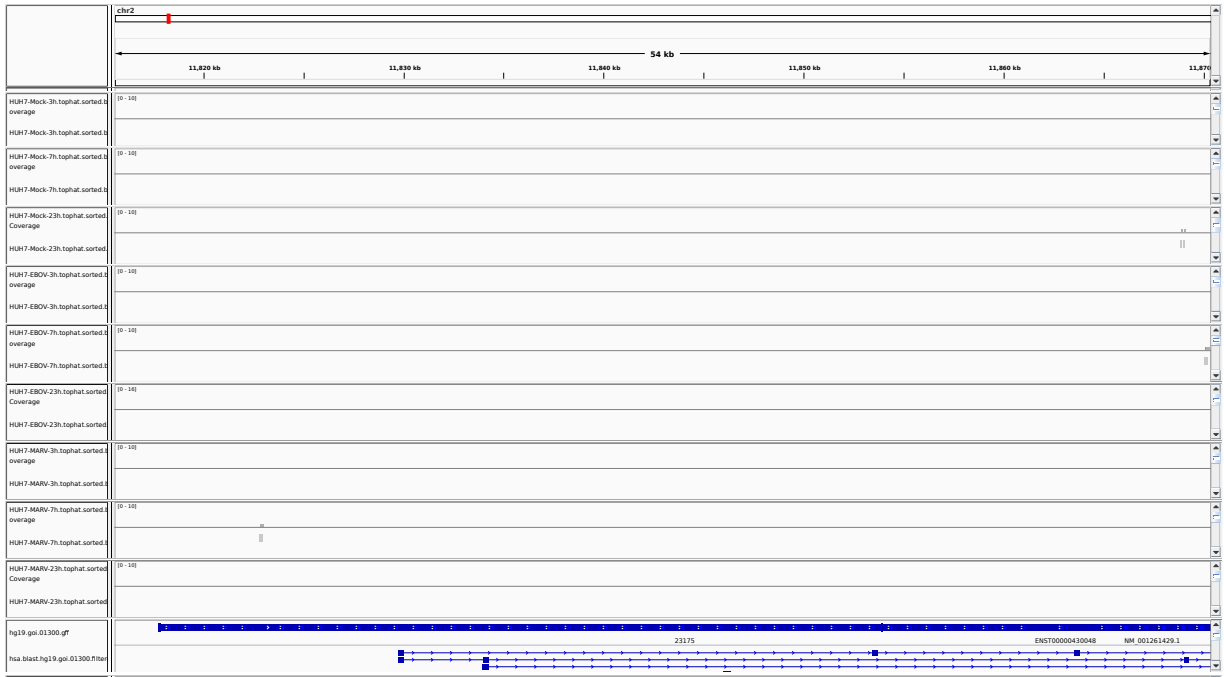
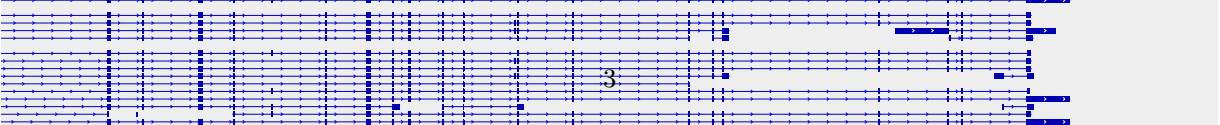
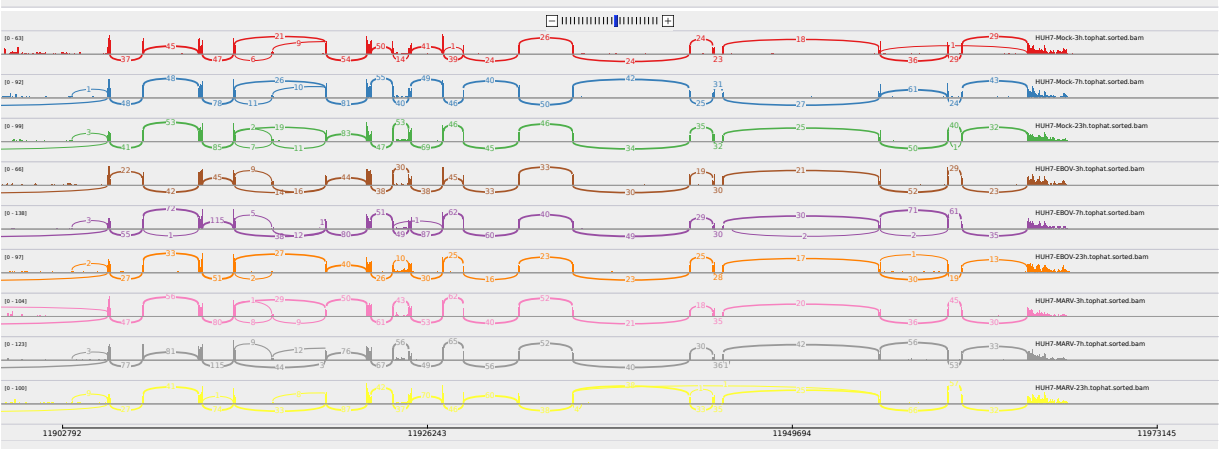
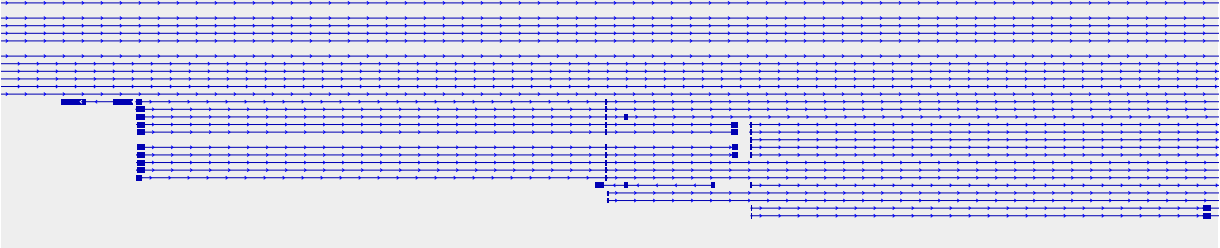
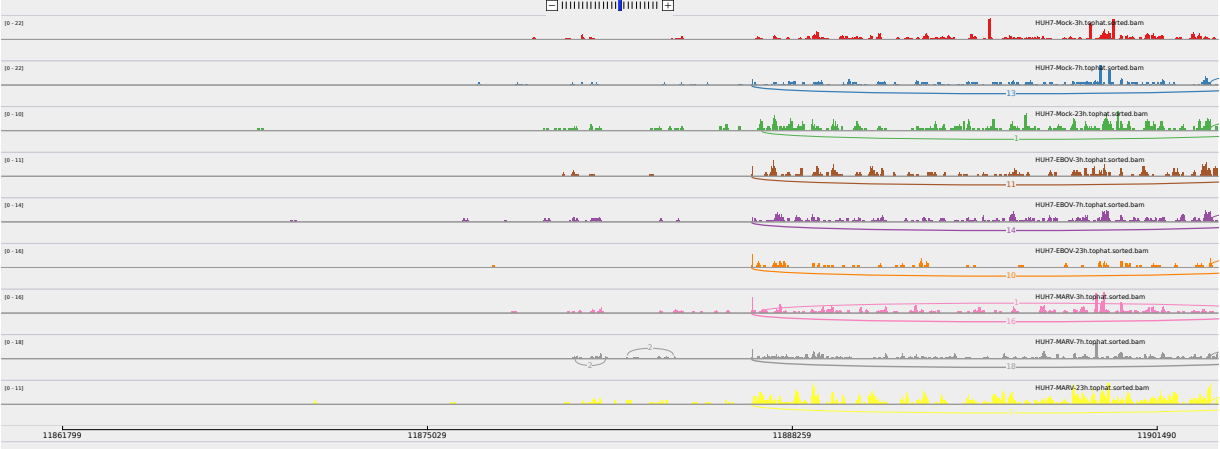
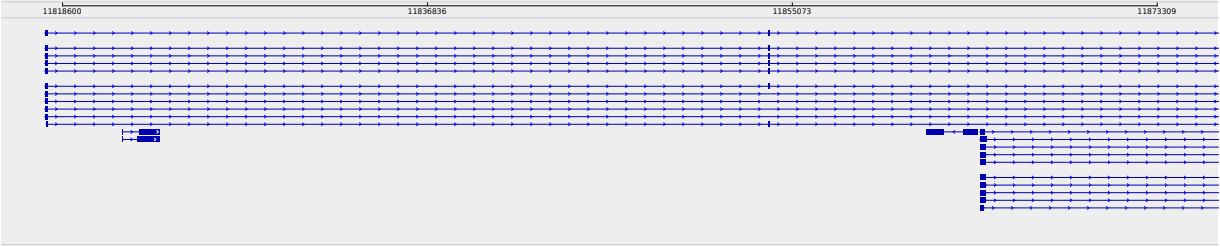
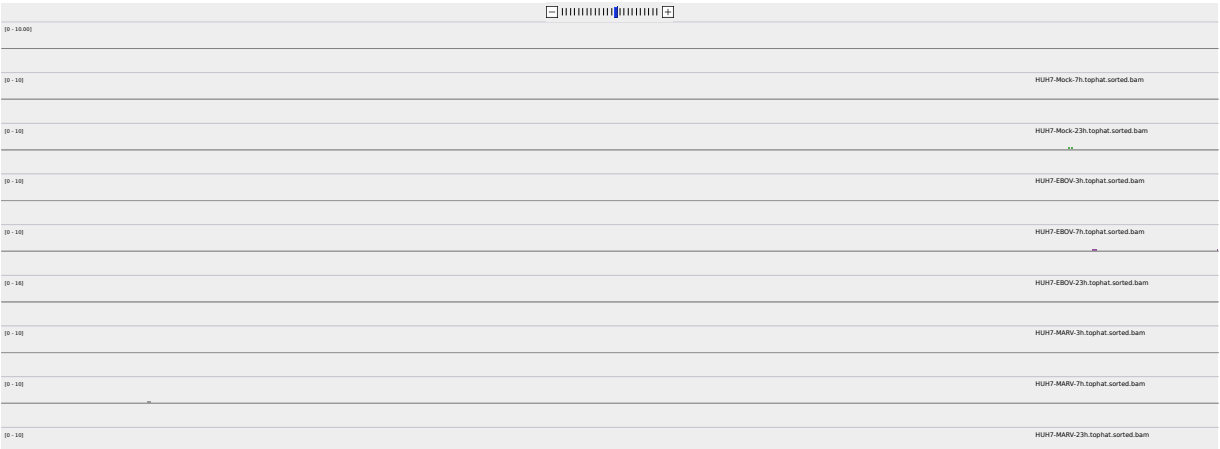


1 LPIN1

Homo sapiens lipin 1 (LPIN1), transcript variant 4, mRNA. This gene encodes a magnesium-ion-dependent phosphatidic acid phosphohydrolase enzyme that catalyzes the penultimate step in triglyceride synthesis including the dephosphorylation of phosphatidic acid to yield diacylglycerol. Expression of this gene is required for adipocyte differentiation and it also functions as a nuclear transcriptional coactivator with some peroxisome proliferator-activated receptors to modulate expression of other genes involved in lipid metabolism. Mutations in this gene are associated with metabolic syndrome, type 2 diabetes, and autosomal recessive acute recurrent myoglobinuria (ARARM). This gene is also a candidate for several human lipodystrophy syndromes. Alternative splicing results in multiple transcript variants encoding distinct isoforms. Additional splice variants have been described but their full-length structures have not been determined. [provided by RefSeq, May 2012]. This gene is weakly expressed in all samples. There is exclusively one isoform present.





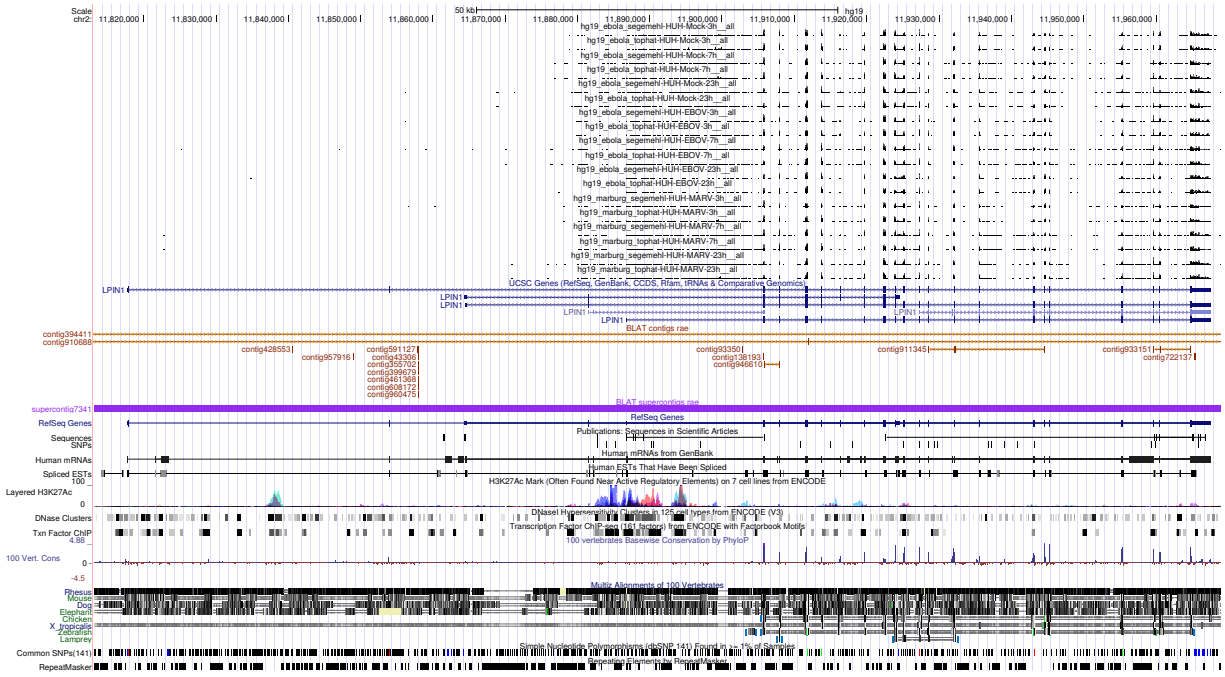


Figure 3: UCSC Genome Browser screenshot of gene LPIN1.