1 TLR3

The protein encoded by this gene is a member of the Toll-like receptor (TLR) family which plays a fundamental role in pathogen recognition and activation of innate immunity. TLRs are highly conserved from Drosophila to humans and share structural and functional similarities. They recognize pathogen-associated molecular patterns (PAMPs) that are expressed on infectious agents, and mediate the production of cytokines necessary for the development of effective immunity. The various TLRs exhibit different patterns of expression. This receptor is most abundantly expressed in placenta and pancreas, and is restricted to the dendritic subpopulation of the leukocytes. It recognizes dsRNA associated with viral infection, and induces the activation of NF-kappaB and the production of type I interferons. It may thus play a role in host defense against viruses. Use of alternative polyadenylation sites to generate different length transcripts has been noted for this gene.

*For TLR3 there was no expression in human, but good expression profile visible in bat; perhaps upregulated in Ebola and Marburg infected cells. *

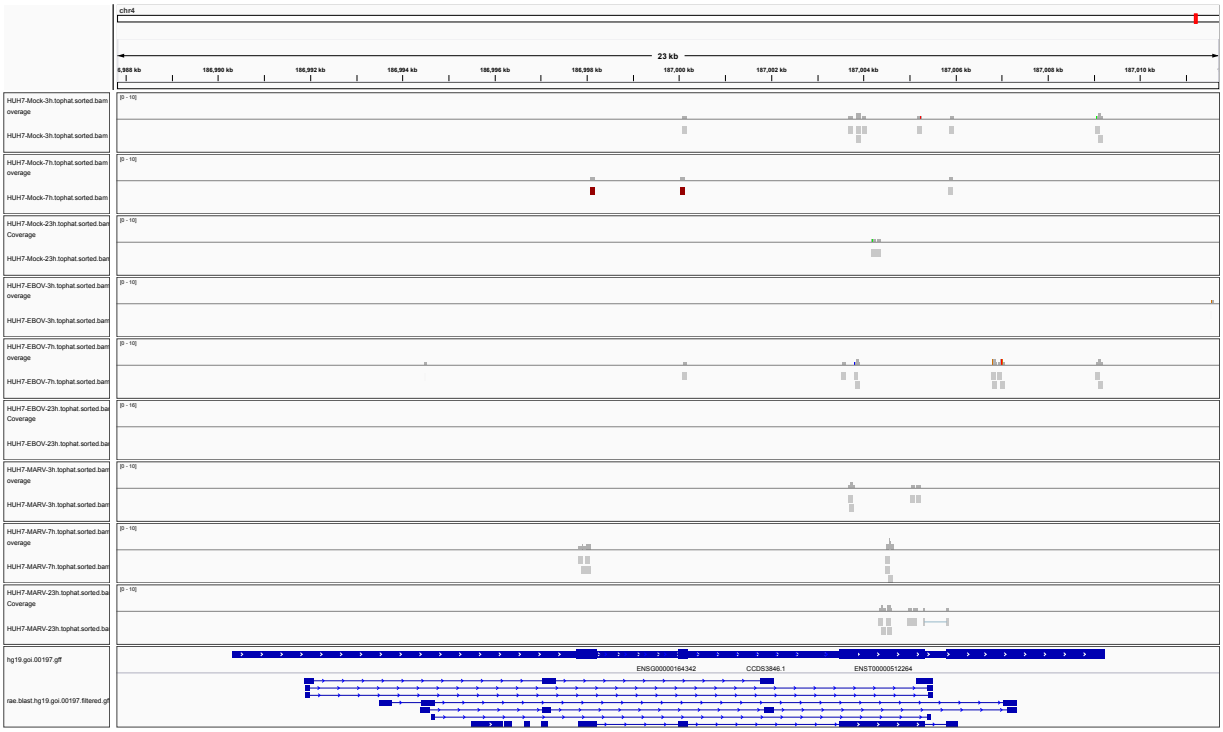

Figure 1: IGV Genome Browser screenshot of gene TLR3.

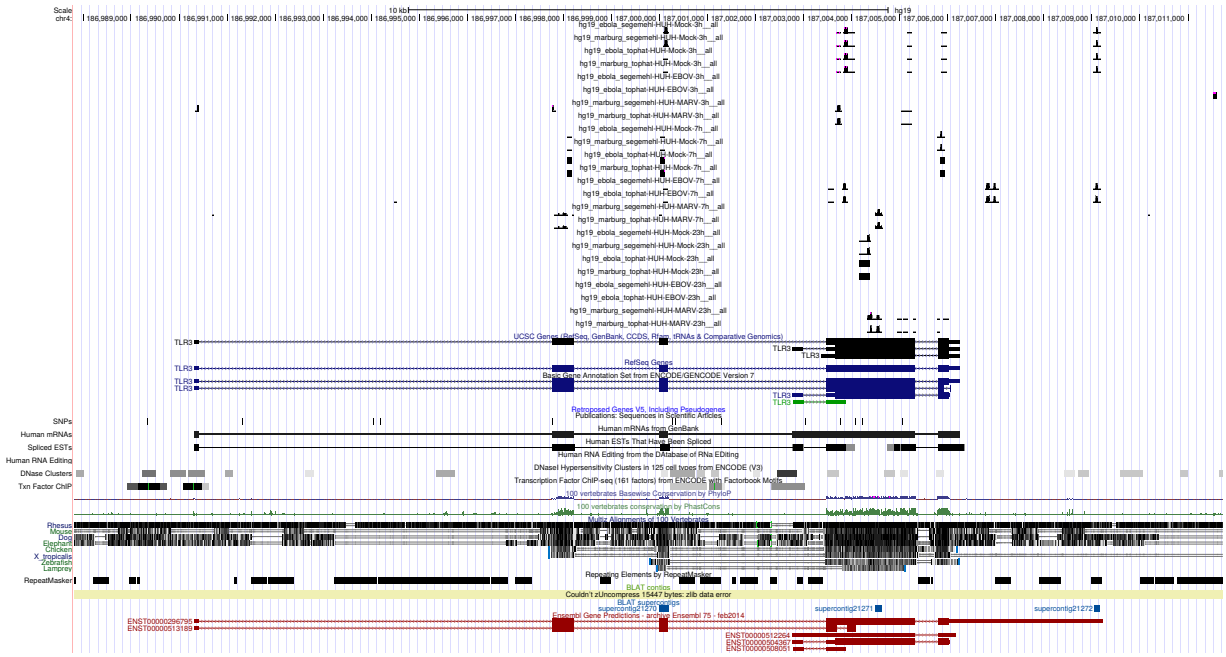

Figure 2: UCSC Genome Browser screenshot of gene TLR3.

Figure 3: IGV Genome Browser screenshot of homologous region to gene TLR3 in bat.