1 VPS4A

The protein encoded by this gene is a member of the AAA protein family (ATPases associated with diverse cellular activities), and is the homolog of the yeast Vps4 protein. In humans, two paralogs of the yeast protein have been identified. The former share a high degree of aa sequence similarity with each other, and also with yeast Vps4 and mouse Skd1 proteins. The mouse Skd1 (suppressor of K+ transport defect 1) has been shown to be really an yeast Vps4 ortholog. Functional studies indicate that both human paralogs associate with the endosomal compartments, and are involved in intracellular protein trafficking, similar to Vps4 protein in yeast. The gene encoding this paralog has been mapped to chromosome 16; the gene for the other resides on chromosome 18.

Downregulated in Ebola and Marburg infected human cells 23 h after infection. The bat homolog is expressed but shows only a slight increase upon Marburg infection.

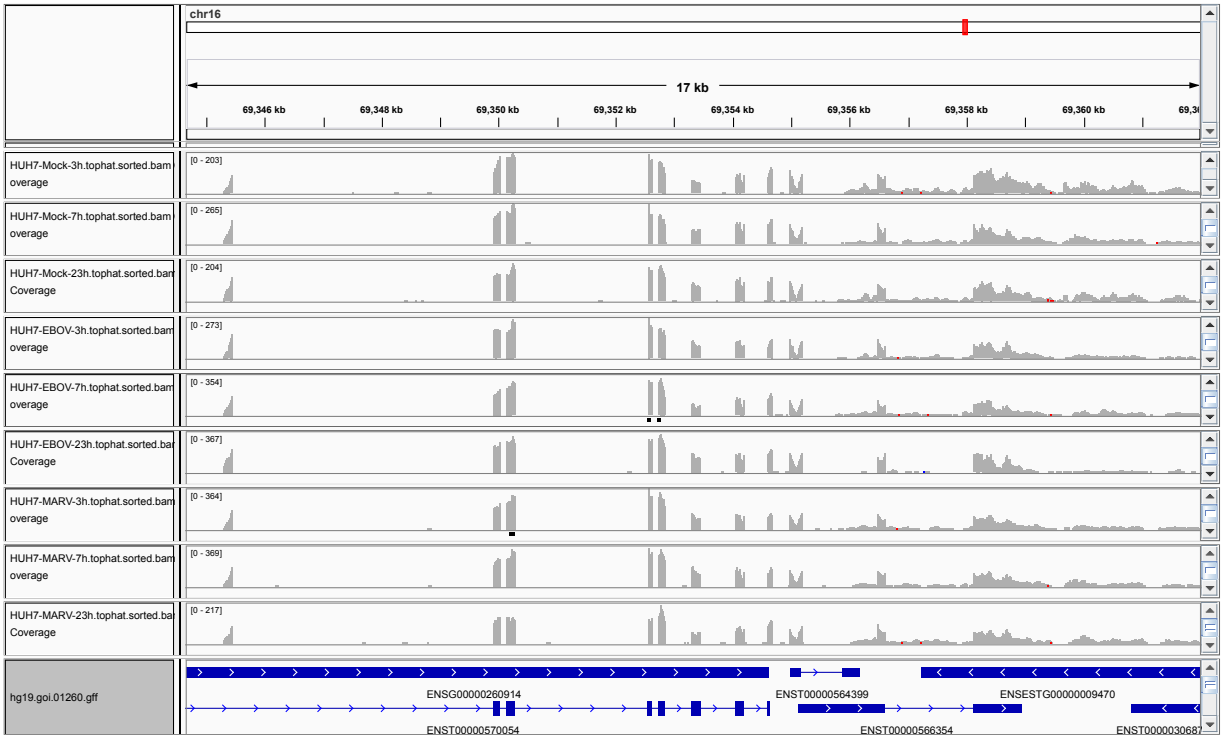

Figure 1: IGV Genome Browser screenshot of gene VPS4A.

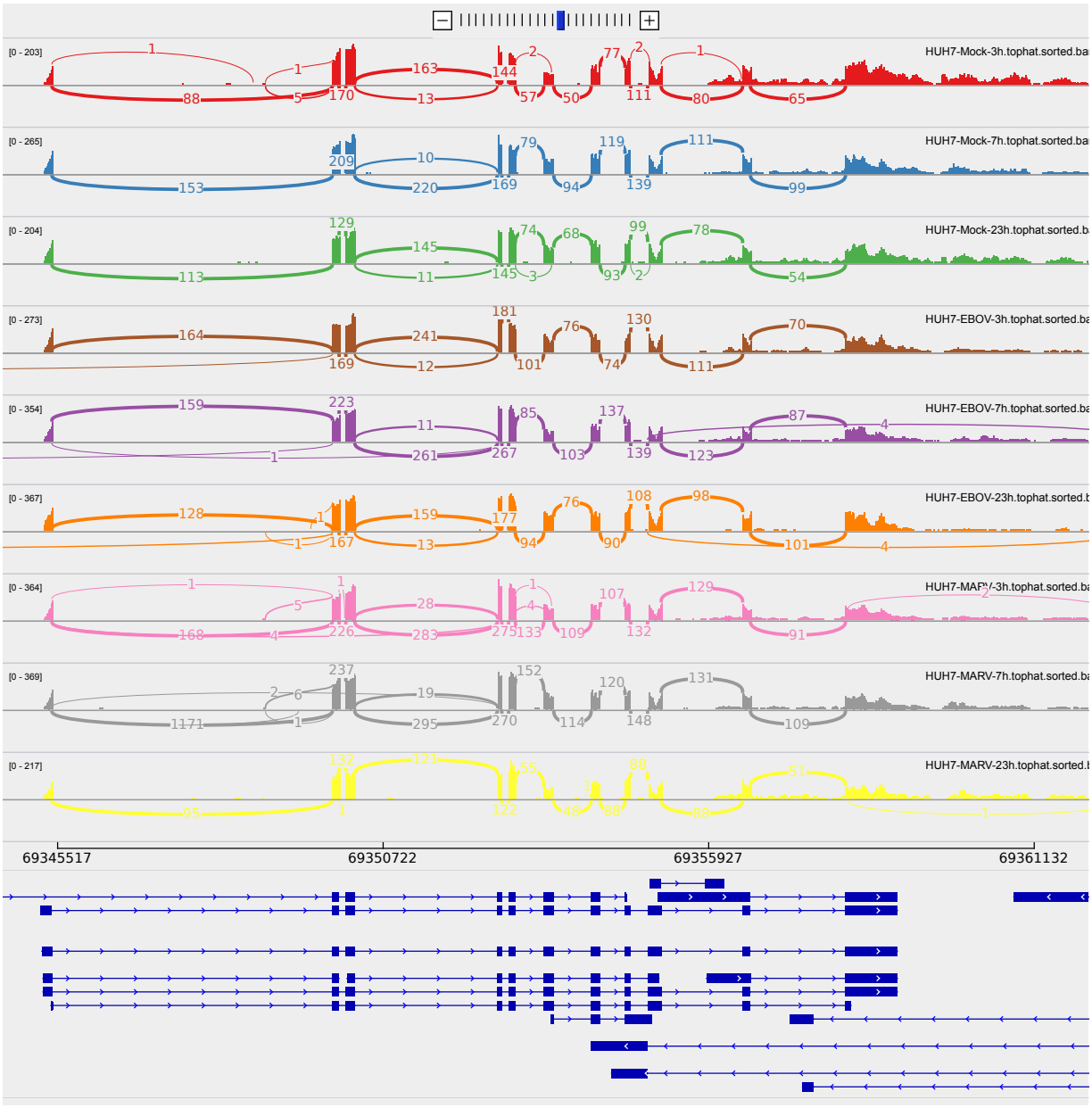

Figure 2: Sashimi plot of gene VPS4A.

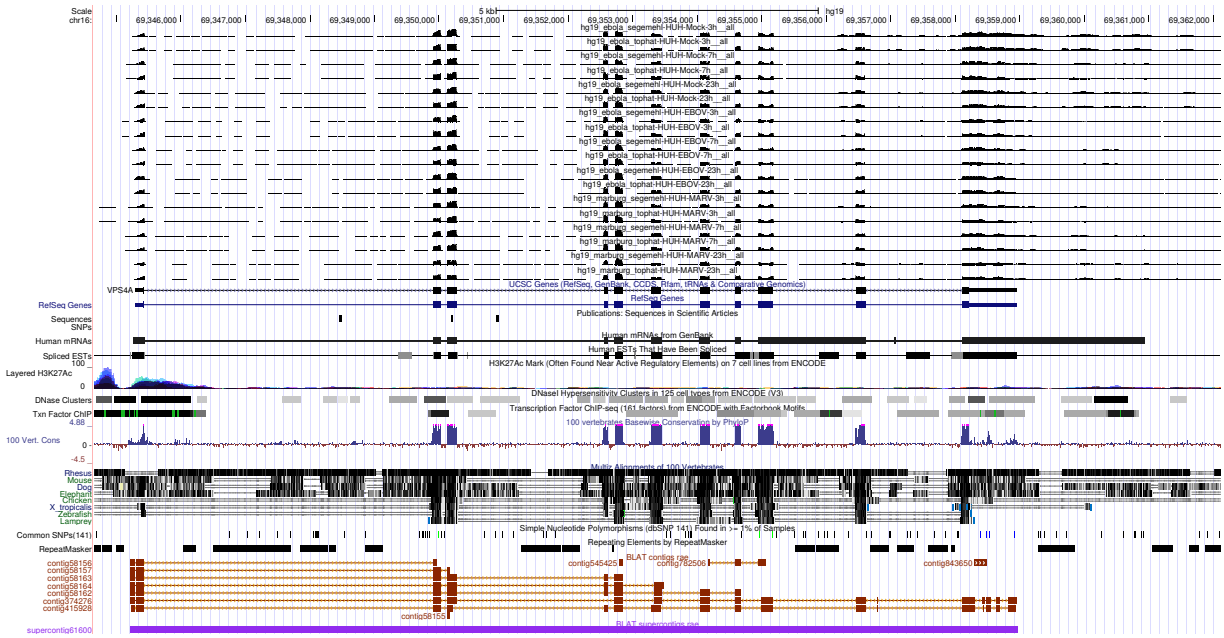

Figure 3: UCSC Genome Browser screenshot of gene VPS4A.