

1 RPTOR

This gene encodes a component of a signaling pathway that regulates cell growth in response to nutrient and insulin levels. The encoded protein forms a stoichiometric complex with the mTOR kinase, and also associates with eukaryotic initiation factor 4E-binding protein-1 and ribosomal protein S6 kinase. The protein positively regulates the downstream effector ribosomal protein S6 kinase, and negatively regulates the mTOR kinase. Multiple transcript variants encoding different isoforms have been found for this gene.

RPTOR is expressed in human and so is its homolog in bat. In human, Ebola-infected cells are slightly up-regulated after 7h and 23h of infection, whereas in Marburg-infected cells there is a slight up-regulation after 7h, after which expression drops down again after 23h. In bat, the homolog shows no change in expression in Ebola-infected cells, but is up-regulated in Marburg-infected cells.

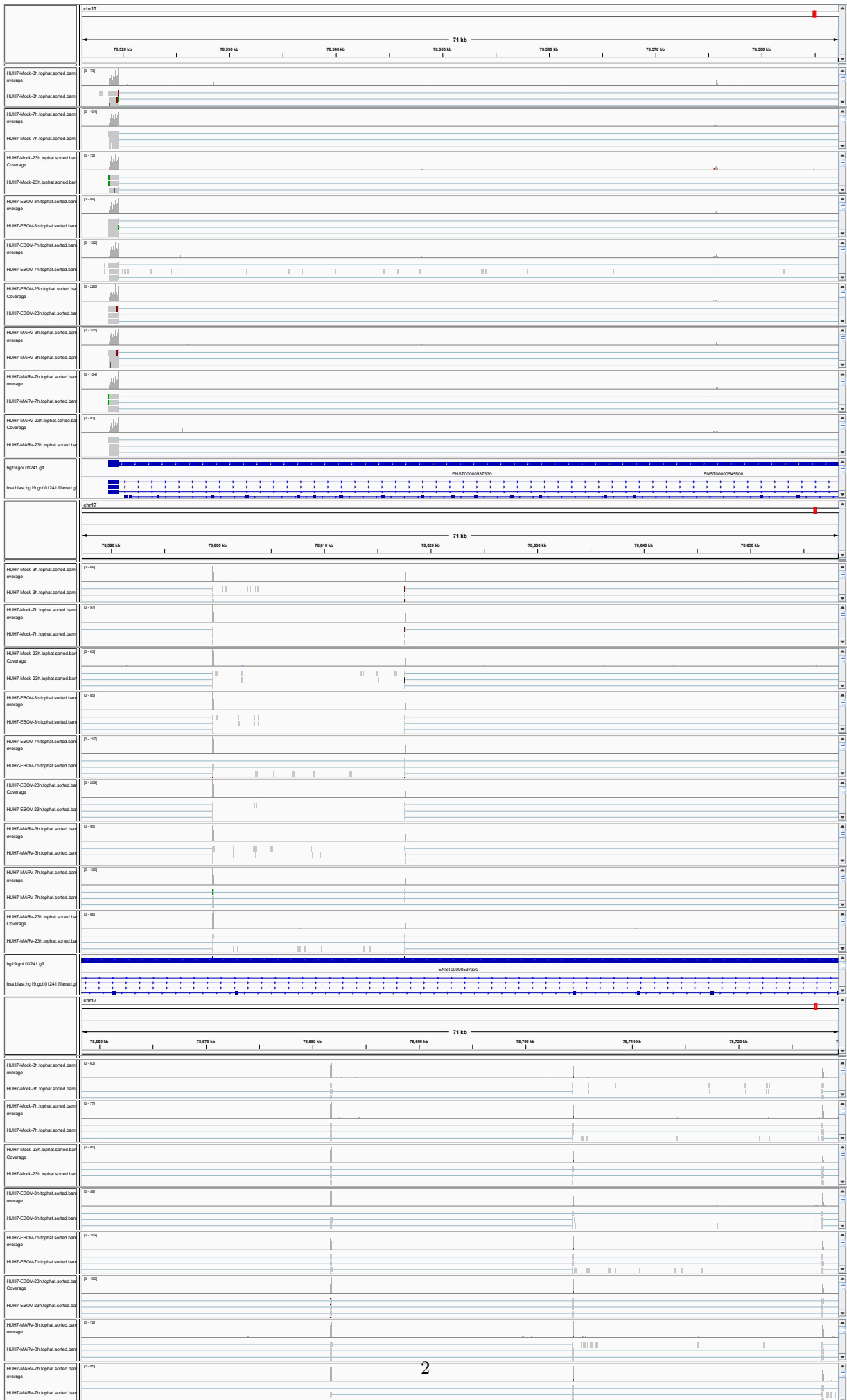


Figure 2: Sashimi plot of gene RPTOR.

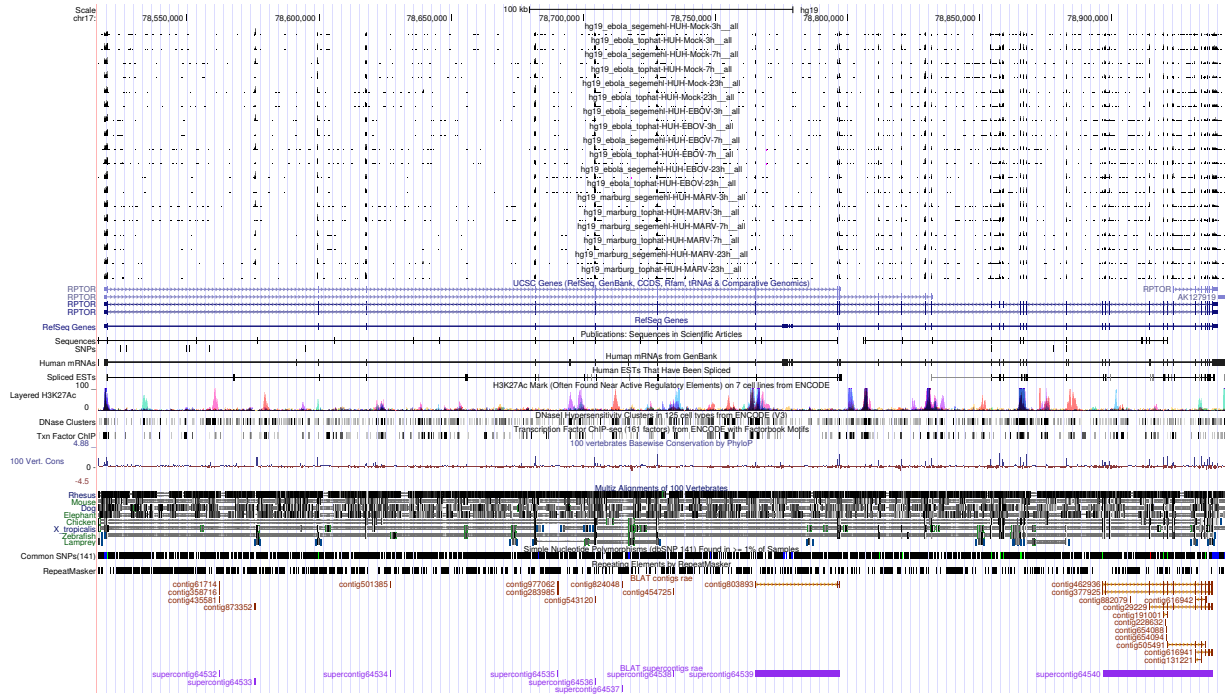


Figure 3: UCSC Genome Browser screenshot of gene RPTOR.