

# 1 PIK3CB

This gene encodes an isoform of the catalytic subunit of phosphoinositide 3-kinase (PI3K). These kinases are important in signaling pathways involving receptors on the outer membrane of eukaryotic cells and are named for their catalytic subunit. The encoded protein is the catalytic subunit for PI3Kbeta (PI3KB). PI3KB has been shown to be part of the activation pathway in neutrophils which have bound immune complexes at sites of injury or infection. Alternative splicing results in multiple transcript variants.

This gene is expressed in human and bat with only slight variations. We observed only one isoform, with the two additional exons in 3' that are not part of all the RefSeq-Annotations. In the intronic region between these two exons a huge number of reads (*i*. 3000 reads) is mapped, possibly from the eukaryotic translation elongation factor 1 alpha 1.

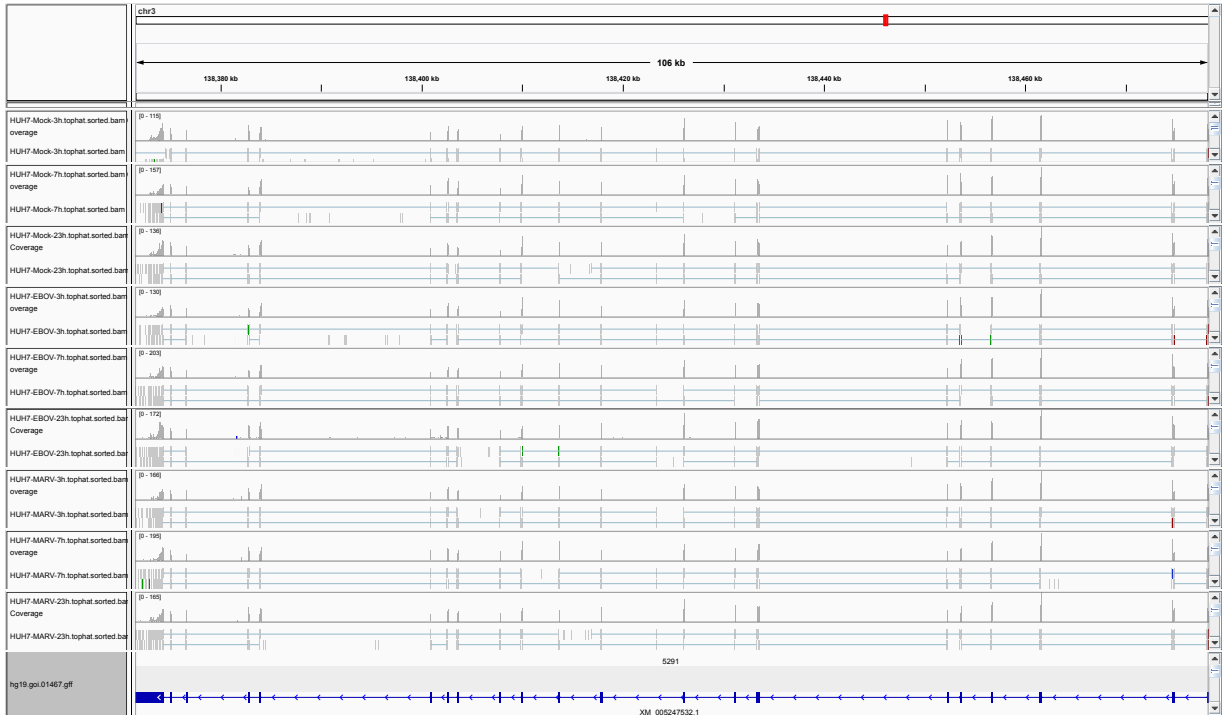


Figure 1: IGV Genome Browser screenshot of gene PIK3CB.

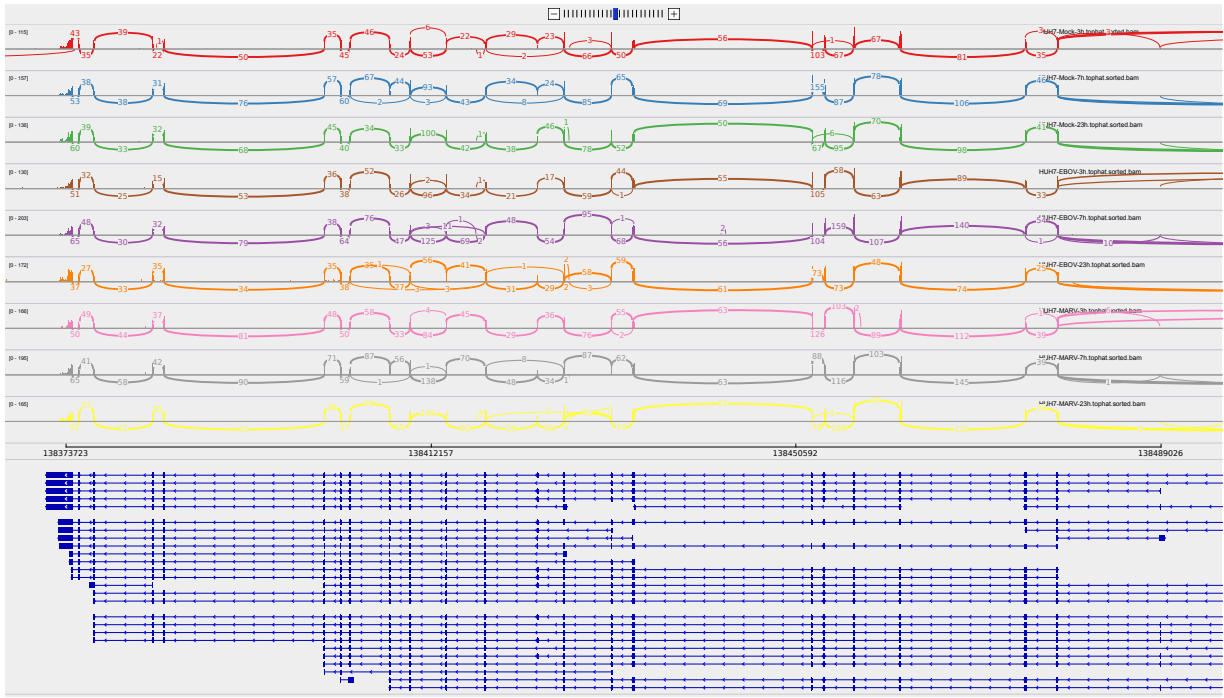


Figure 2: Sashimi plot of gene PIK3CB.

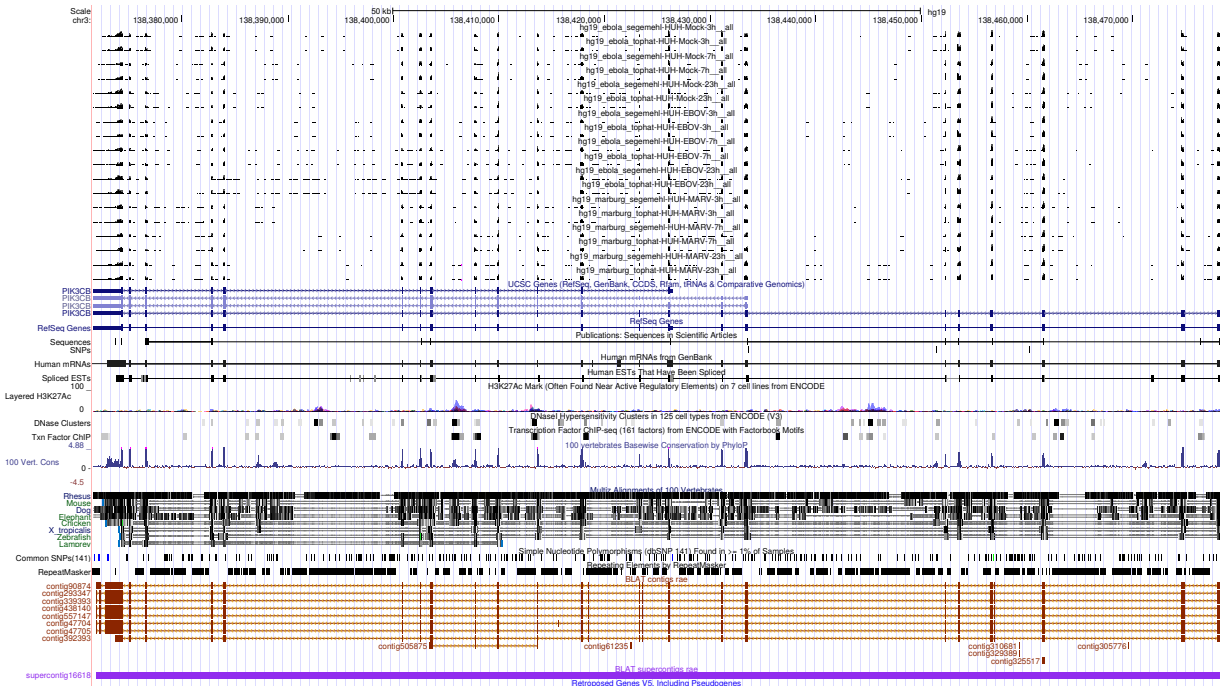


Figure 3: UCSC Genome Browser screenshot of gene PIK3CB.

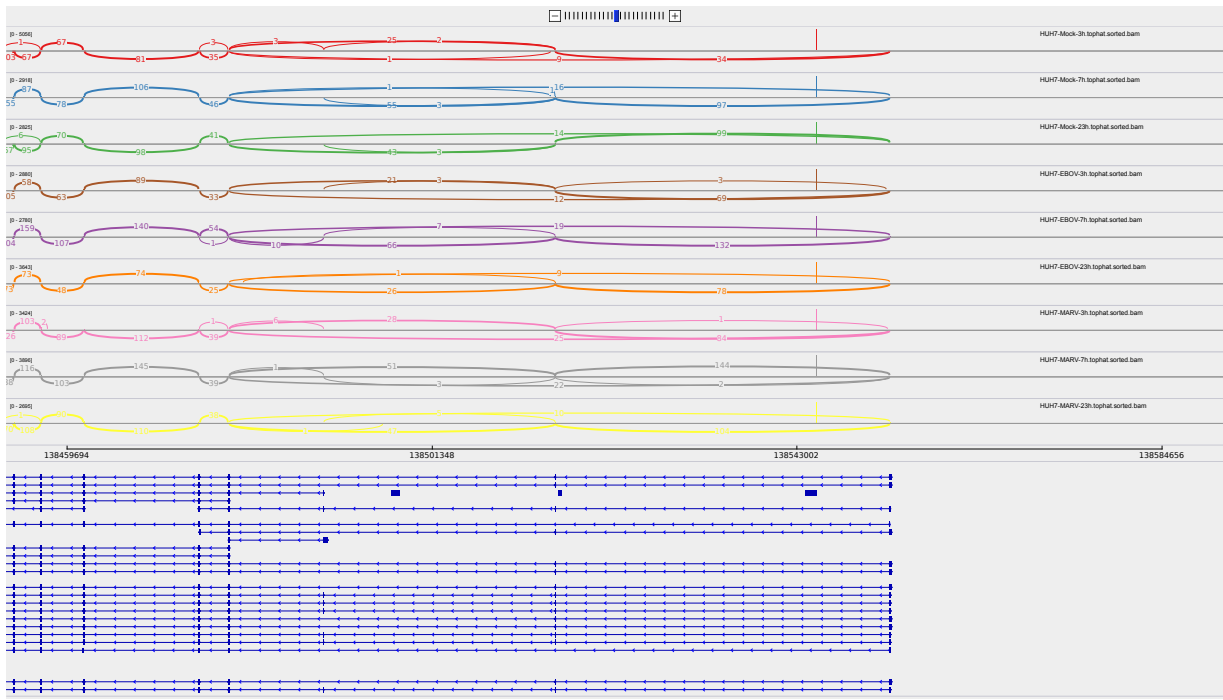


Figure 4: Sashimi plot of the two additional exons.

Figure 5: UCSC Genome Browser screenshot of the possible pseudogene of the eukaryotic translation elongation factor 1 alpha 1.