

1 IRAK3

Homo sapiens interleukin-1 receptor-associated kinase 3 (IRAK3), transcript variant 1 gene encodes a member of the interleukin-1 receptor-associated kinase protein family. Members of this family are essential components of the Toll/IL-R immune signal transduction pathways. This protein is primarily expressed in monocytes and macrophages and functions as a negative regulator of Toll-like receptor signaling. Mutations in this gene are associated with a susceptibility to asthma. Alternate splicing results in multiple transcript variants. IRAK3 inhibits dissociation of IRAK1 and IRAK4 from the Toll-like receptor signaling complex by either inhibiting the phosphorylation of IRAK1 and IRAK4 or stabilizing the receptor complex.

In bat a homolog with rarely mapped reads was found. Other homolog fragments are located at a human intron locus, which is not conserved between Human, Rhesus, Mouse, Dog, Elephant, but therefore in Chicken, *tropicalis, Zebrafish and Lamprey. The transcripts observed, are upregulated in MOCK, 2 fold upregulated during Ebola infection and 2 fold downregulated with slight upregulation to the 23h sample during Marburg infection.

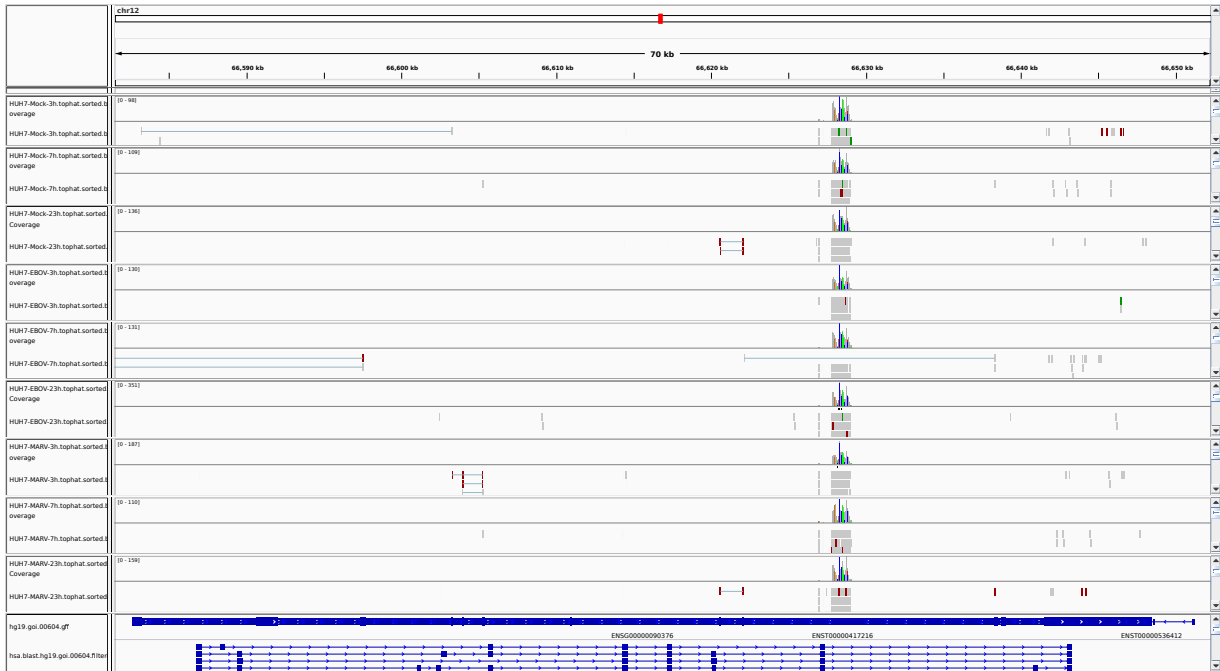


Figure 1: IGV Genome Browser screenshot of gene IRAK3.

Figure 2: UCSC Genome Browser screenshot of gene IRAK3.