

1 DUSP5

Homo sapiens dual specificity phosphatase 5 (DUSP5) protein encoded by this gene is a member of the dual specificity protein phosphatase subfamily. These phosphatases inactivate their target kinases by dephosphorylating both the phosphoserine/threonine and phosphotyrosine residues. They negatively regulate members of the mitogen-activated protein (MAP) kinase superfamily (MAPK/ERK, SAPK/JNK, p38), which are associated with cellular proliferation and differentiation. Different members of the family of dual specificity phosphatases show distinct substrate specificities for various MAP kinases, different tissue distribution and subcellular localization, and different modes of inducibility of their expression by extracellular stimuli. This gene product inactivates ERK1, is expressed in a variety of tissues with the highest levels in pancreas and brain, and is localized in the nucleus.

HG19 samples are very high expressed and intronic transcripts can be observed. Especially for the second intron a differential expression could be observed: upregulation in MOCK till 7h and a 2 fold upregulation after 23h, up- then (7 to 23h) downregulation for ebola infected samples and a 2 fold upregulation for marburg after 7h, downregulated afterwards. The global expression profile shows clear upregulation in all HG19 samples after 7h. Only for ebola the transcripts decrease drastically (3 fold) after 7h.

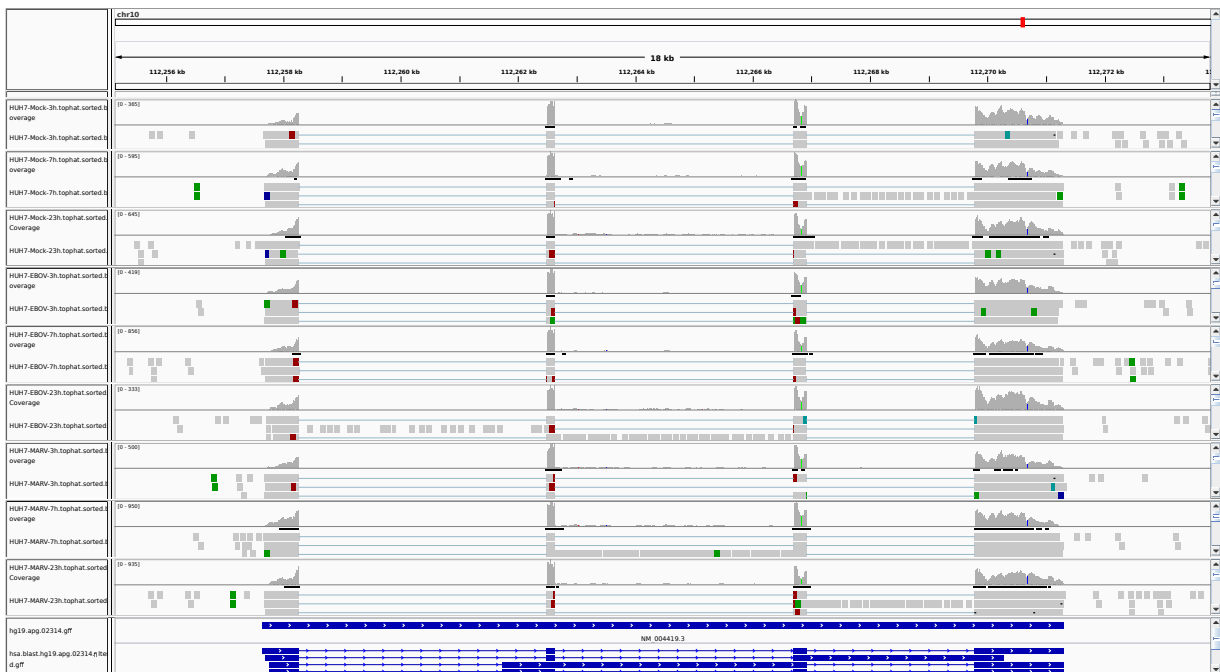


Figure 1: IGV Genome Browser screenshot of gene DUSP5.

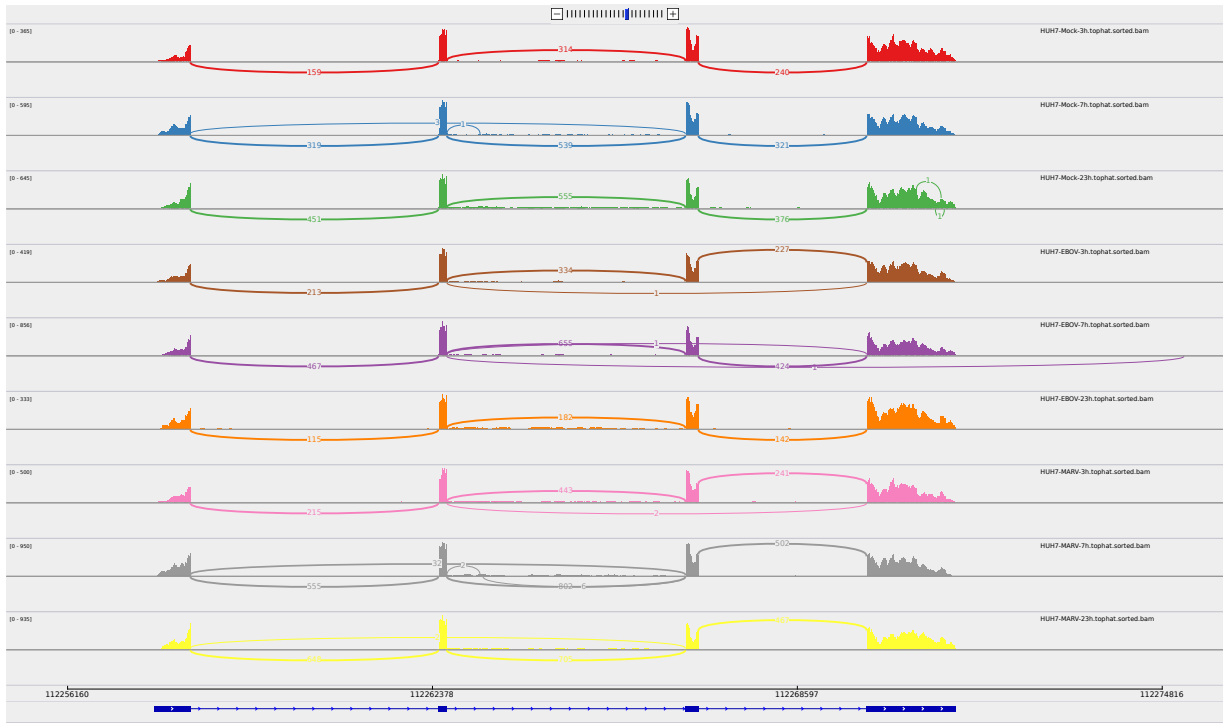


Figure 2: Sashimi plot of gene DUSP5.

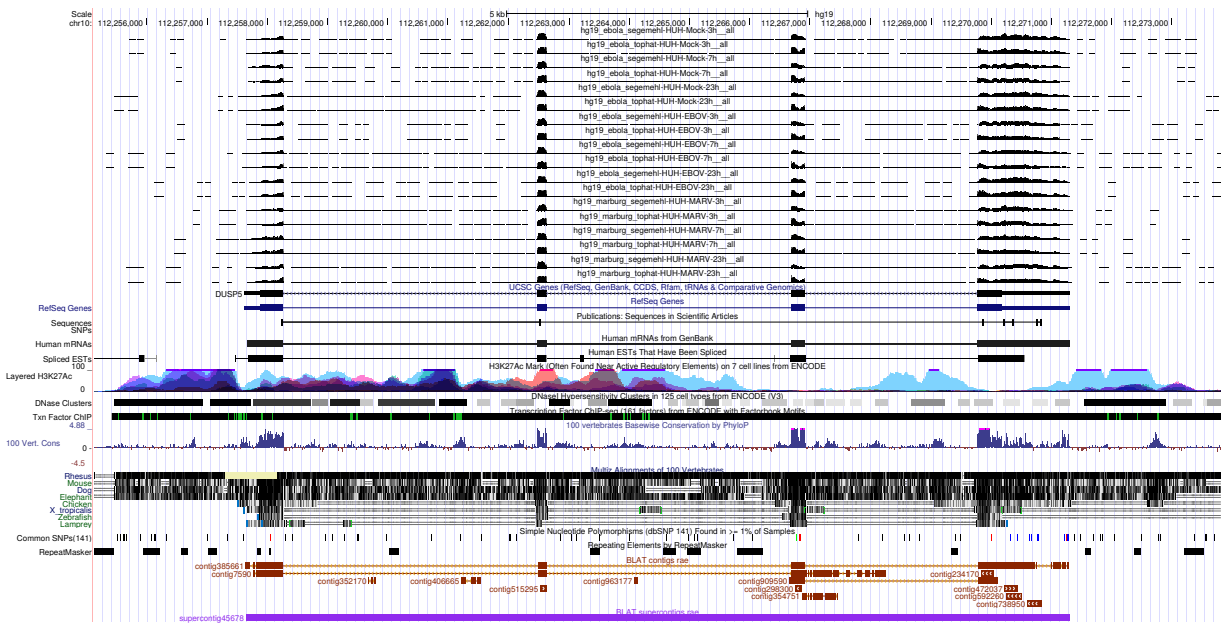


Figure 3: UCSC Genome Browser screenshot of gene DUSP5.