

1 GCLM

Glutamate-cysteine ligase, also known as gamma-glutamylcysteine synthetase, is the first rate limiting enzyme of glutathione synthesis. The enzyme consists of two subunits, a heavy catalytic subunit and a light regulatory subunit. Gamma glutamylcysteine synthetase deficiency has been implicated in some forms of hemolytic anemia.

This gene is alternatively spliced and shows different isoforms in human wildtype, which are subsequently limited during the Ebola infection by loss of one alternative splicing event. Regarding the expression, a high level can be observed as well as diverse regulations. The human and bat samples have in common wildtype downregulation, Ebola downregulation and Marburg upregulation. Between the human genome and bat transcriptome assembly the main difference is the drastic downregulation in human samples.

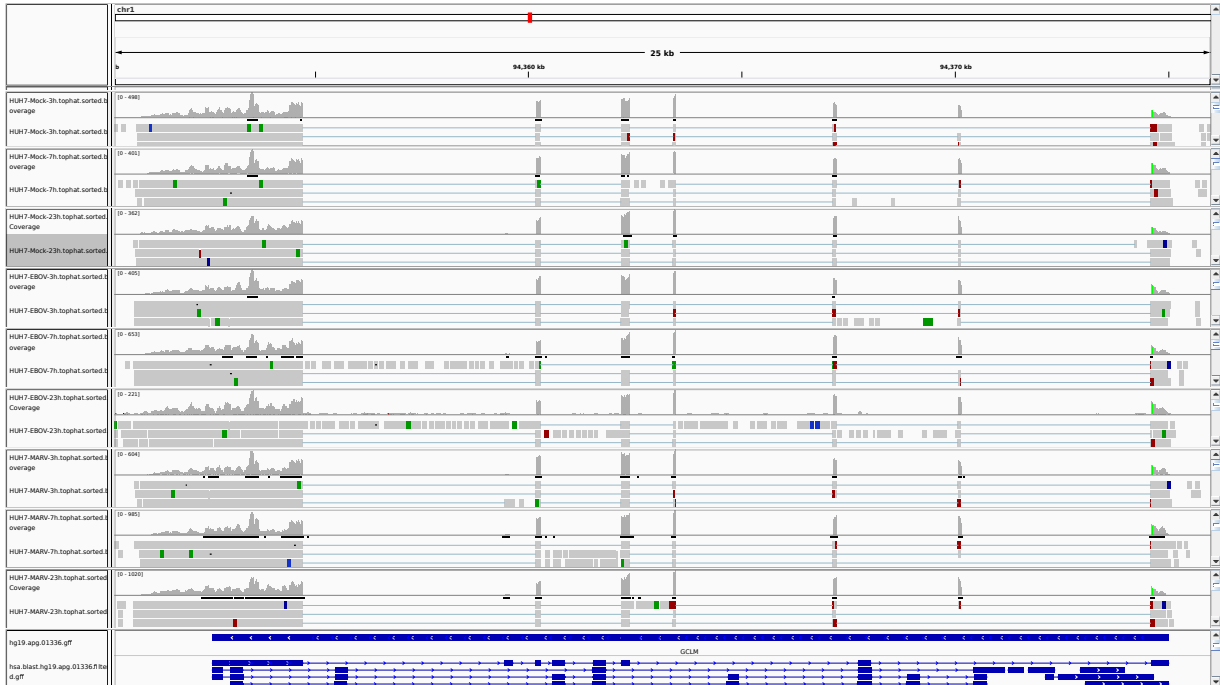


Figure 1: IGV Genome Browser screenshot of gene GCLM.

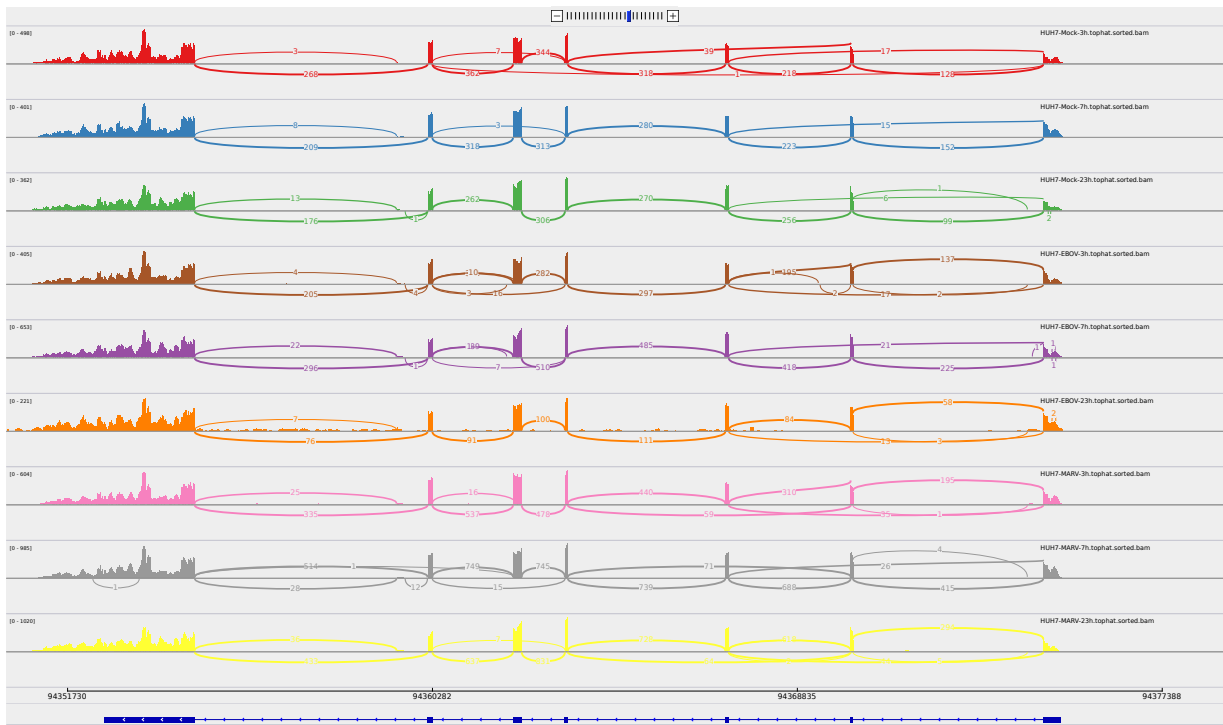


Figure 2: Sashimi plot of gene GCLM.

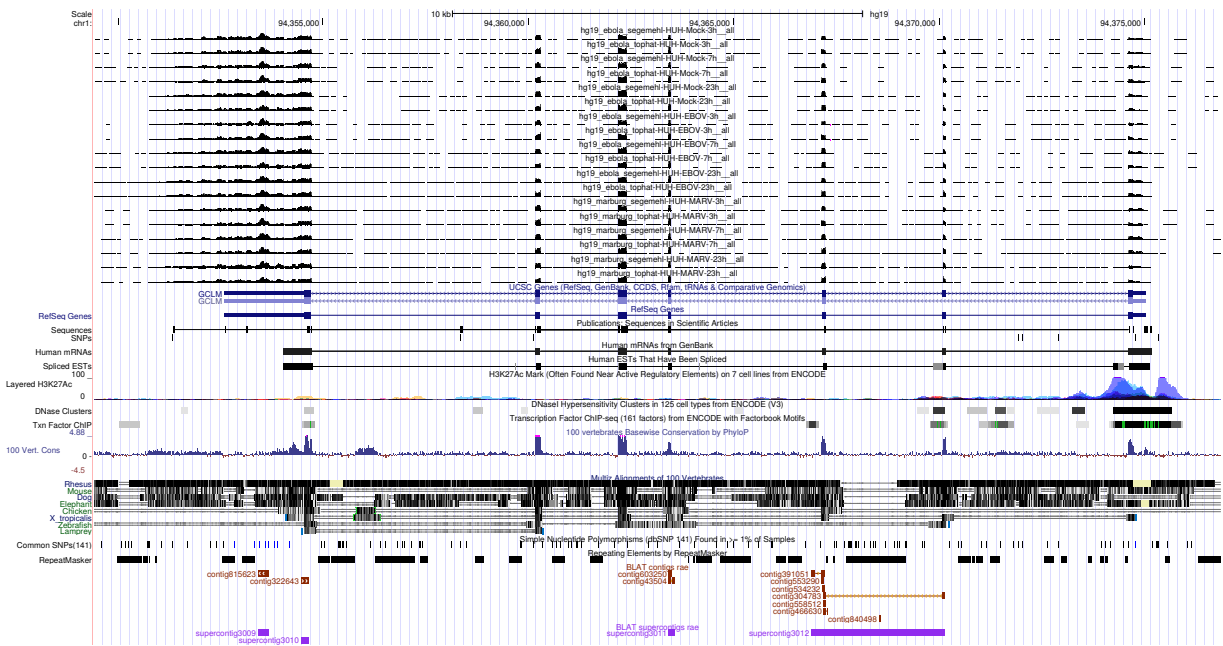


Figure 3: UCSC Genome Browser screenshot of gene GCLM.