

# 1 SHC1

Homo sapiens SHC (Src homology 2 domain containing) transforming protein 1 (SHC1), transcript variant 3, mRNA. This gene encodes three main isoforms that differ in activities and subcellular location. While all three are adapter proteins in signal transduction pathways, the longest (p66Shc) may be involved in regulating life span and the effects of reactive oxygen species. The other two isoforms, p52Shc and p46Shc, link activated receptor tyrosine kinases to the Ras pathway by recruitment of the GRB2/SOS complex. p66Shc is not involved in Ras activation. Unlike the other two isoforms, p46Shc is targeted to the mitochondrial matrix. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2011]. This gene shows strong expression in human samples with a trend to upregulation over time in all samples. In bat samples, expression is approximately halved, but still strong. Again, there is a trend to stronger expression over time for all samples.

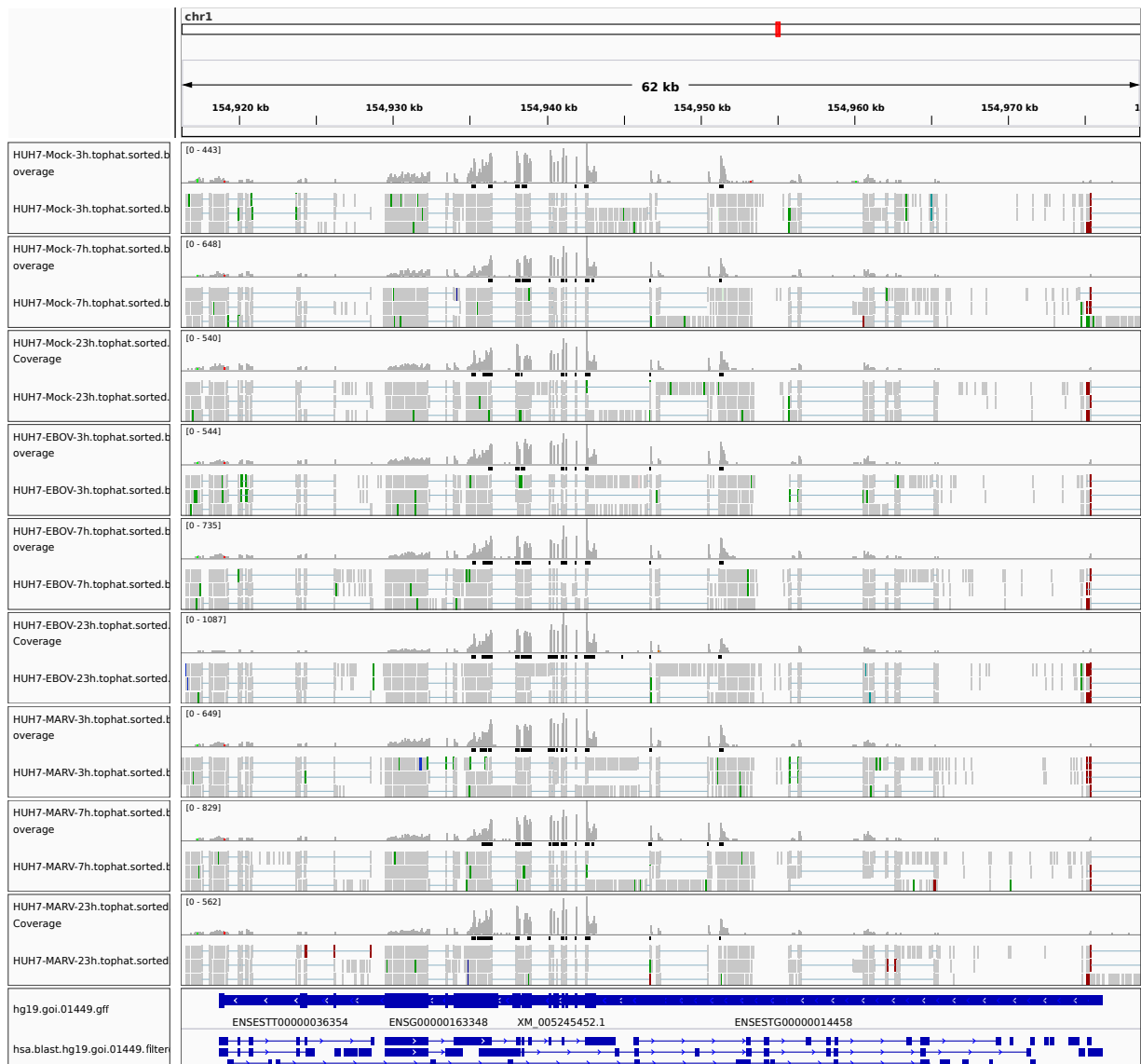


Figure 1: IGV Genome Browser screenshot of gene SHC1.

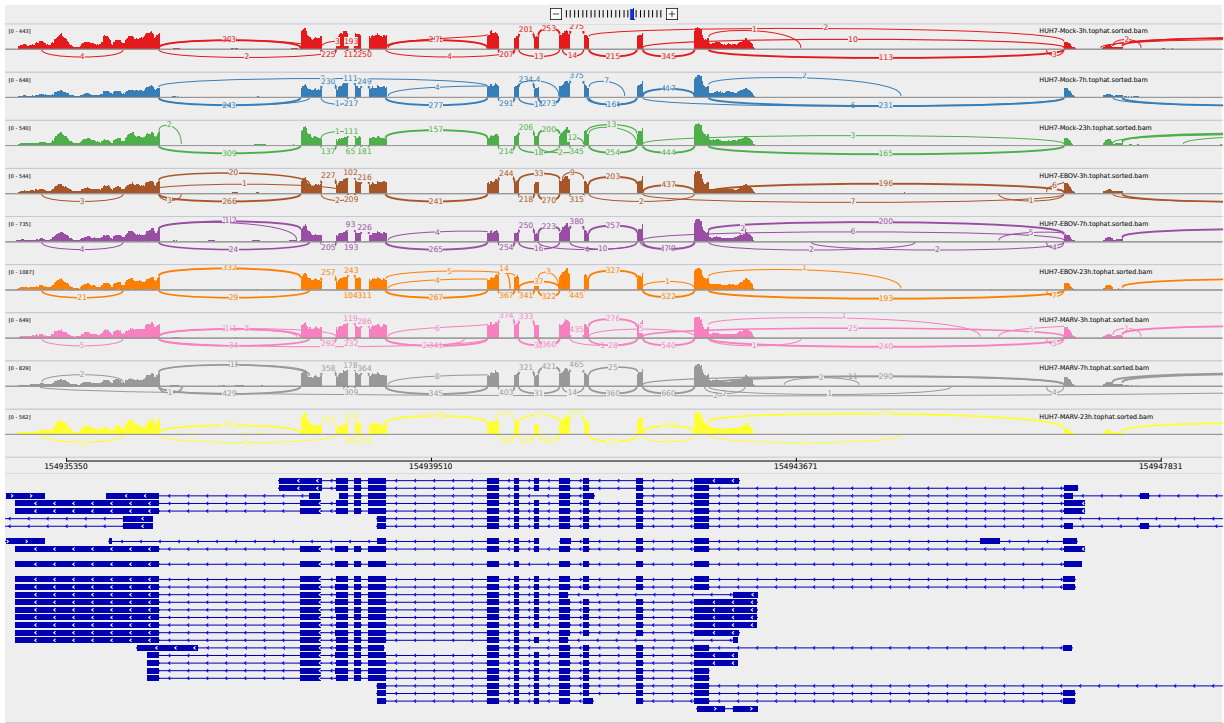


Figure 2: Sashimi plot of gene SHC1.

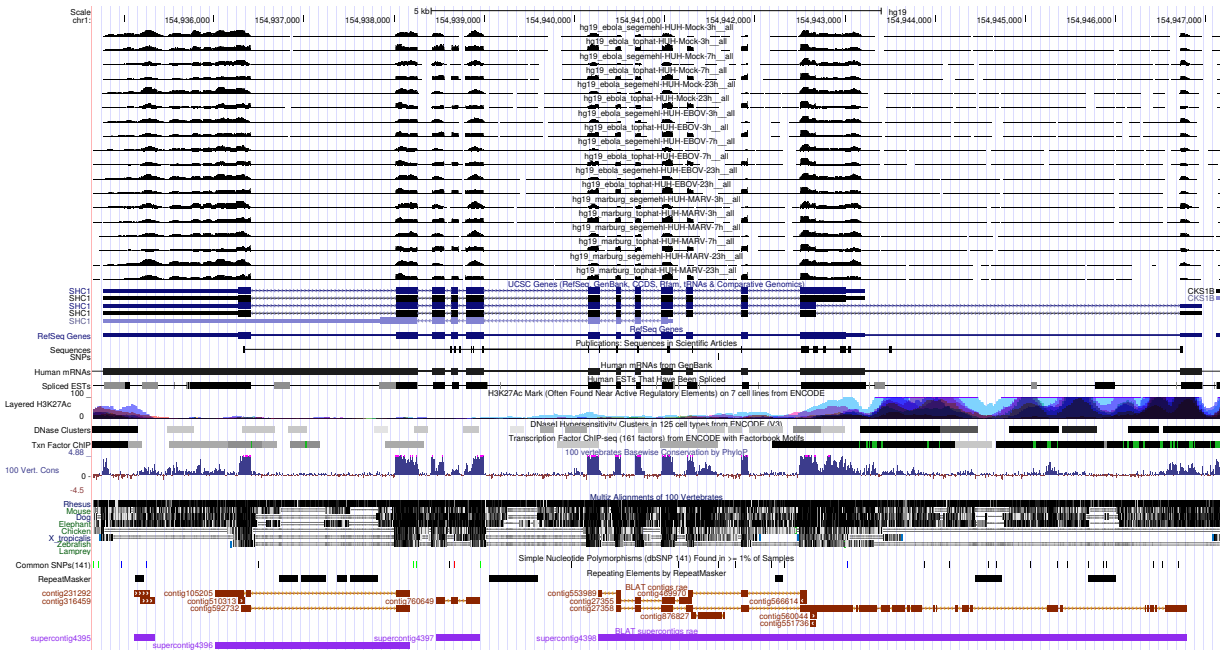


Figure 3: UCSC Genome Browser screenshot of gene SHC1.