

# 1 MYC

The protein encoded by this gene is a multifunctional, nuclear phosphoprotein that plays a role in cell cycle progression, apoptosis and cellular transformation. It functions as a transcription factor that regulates transcription of specific target genes. Mutations, overexpression, rearrangement and translocation of this gene have been associated with a variety of hematopoietic tumors, leukemias and lymphomas, including Burkitt lymphoma. There is evidence to show that alternative translation initiations from an upstream, in-frame non-AUG (CUG) and a downstream AUG start site result in the production of two isoforms with distinct N-termini. The synthesis of non-AUG initiated protein is suppressed in Burkitt's lymphomas, suggesting its importance in the normal function of this gene.

\*This gene is expressed in all probes in human and bat. It is upregulated in Ebola infected probes in human, but not in bat. In Marburg infected probes the gene is upregulated after 7 h in human (even 2x) and bat. It is again downregulated in human after 23 h.\*

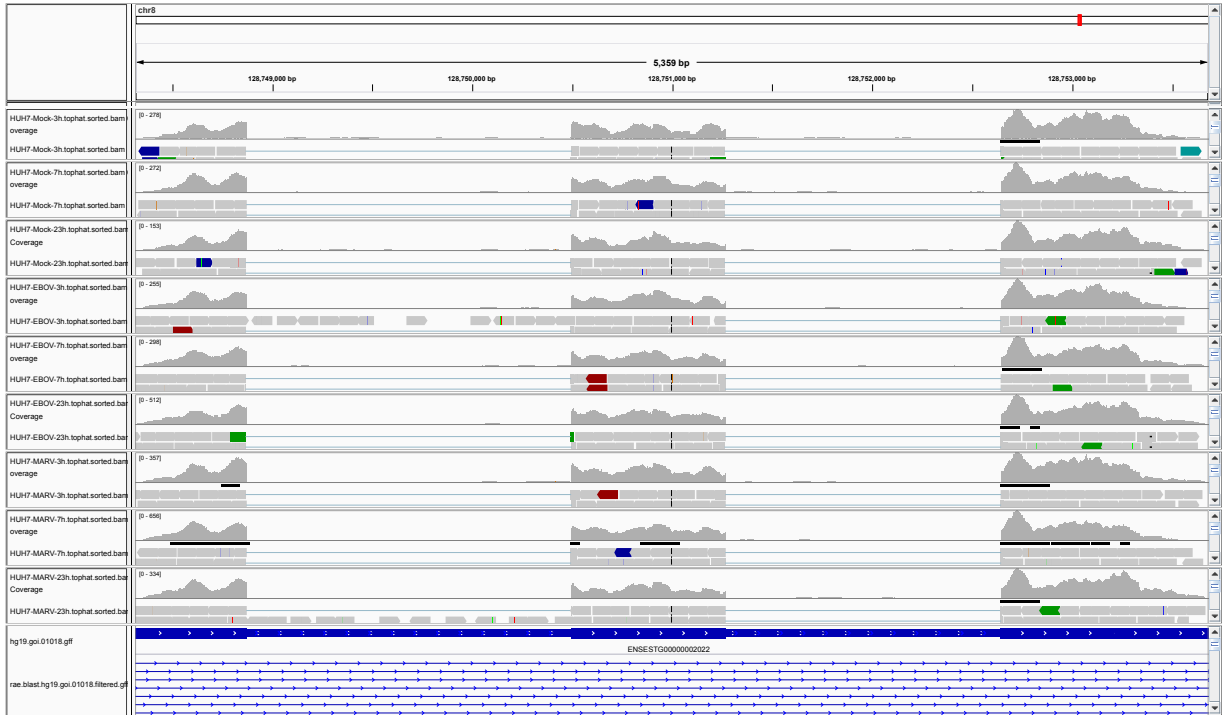


Figure 1: IGV Genome Browser screenshot of gene MYC.

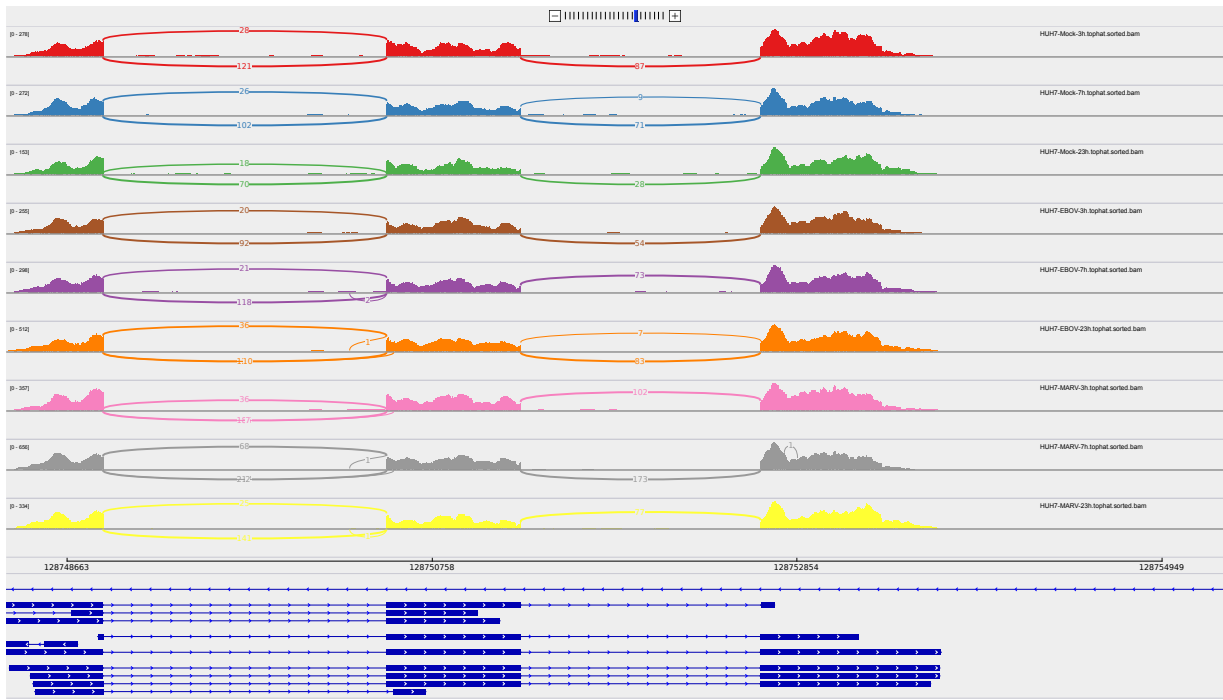


Figure 2: Sashimi plot of gene MYC.

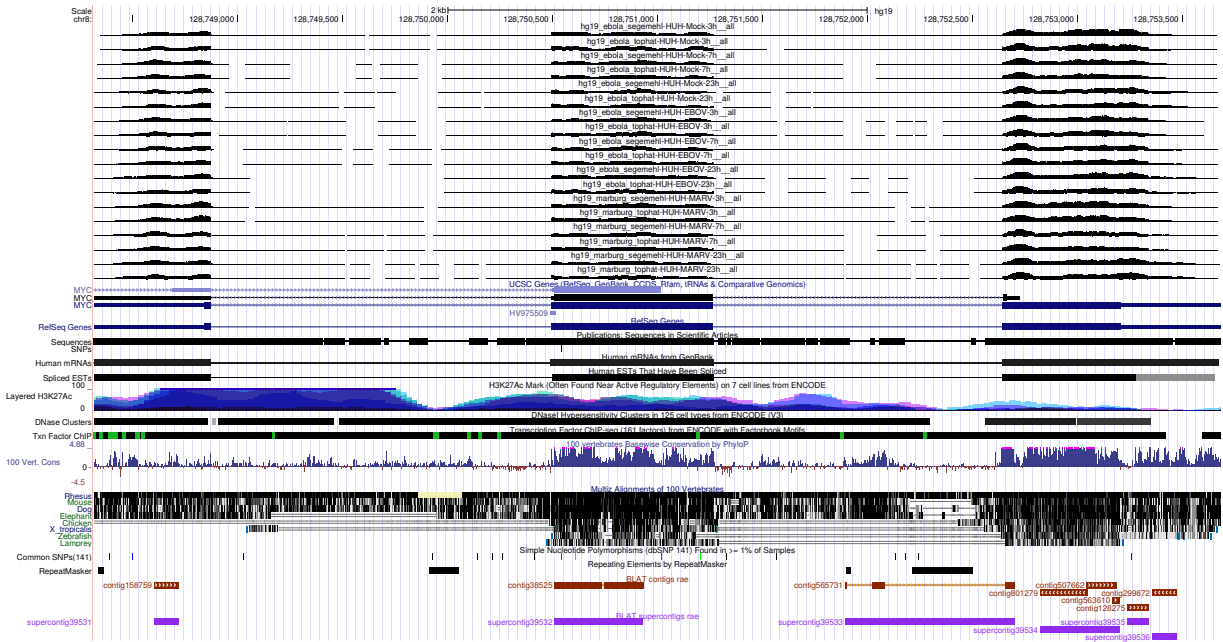


Figure 3: UCSC Genome Browser screenshot of gene MYC.