1 SKP2

This gene encodes a member of the F-box protein family which is characterized by an approximately 40 amino acid motif, the F-box. The F-box proteins constitute one of the four subunits of ubiquitin protein ligase complex called SCFs (SKP1-cullin-F-box), which function in phosphorylation-dependent ubiquitination. The F-box proteins are divided into 3 classes: Fbws containing WD-40 domains, Fbls containing leucine-rich repeats, and Fbxs containing either different protein-protein interaction modules or no recognizable motifs. The protein encoded by this gene belongs to the Fbls class; in addition to an F-box, this protein contains 10 tandem leucine-rich repeats. This protein is an essential element of the cyclin A-CDK2 S-phase kinase. It specifically recognizes phosphorylated cyclin-dependent kinase inhibitor 1B (CDKN1B, also referred to as p27 or KIP1) predominantly in S phase and interacts with S-phase kinase-associated protein 1 (SKP1 or p19). Gene is highly expressed in human, but strongly (7 fold) downregulated in EBOV 23h and 4 fold in MARV 23h. Expression in bat is much lower and also more stable, with a slight downregulation at 7h MARV and EBOV.

Figure 1: IGV Genome Browser screenshot of gene SKP2.

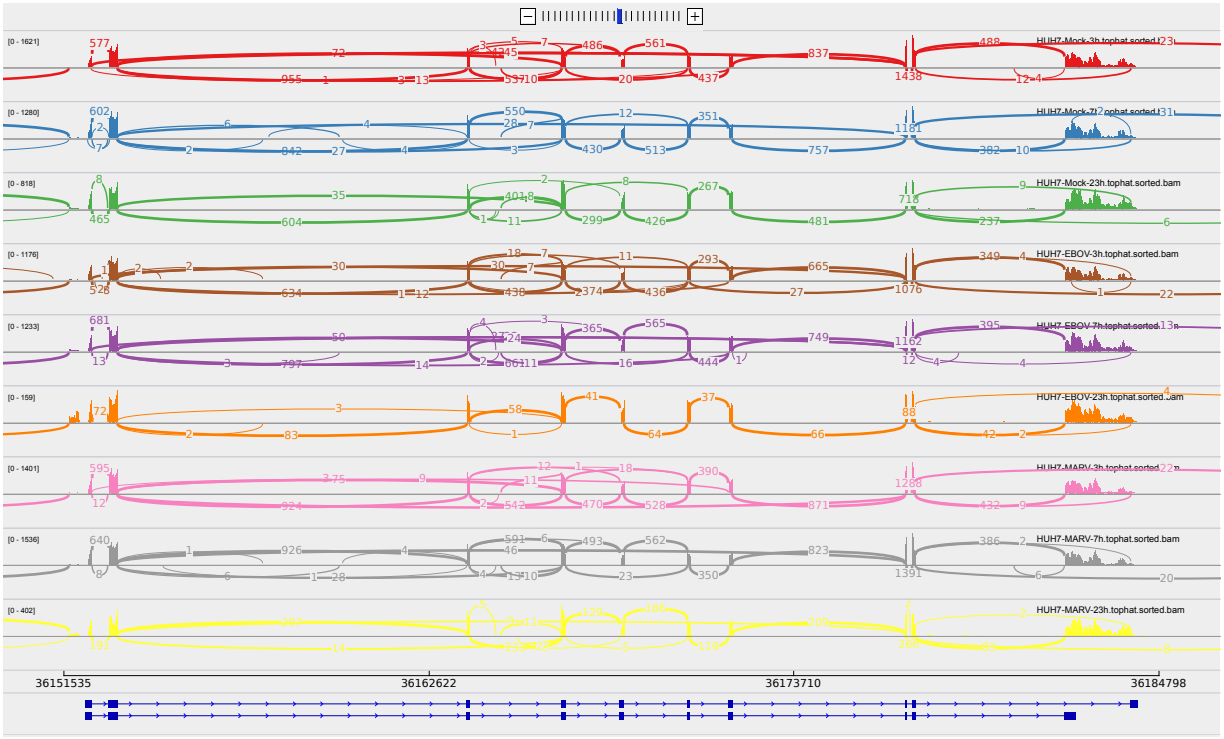

Figure 2: Sashimi plot of gene SKP2.

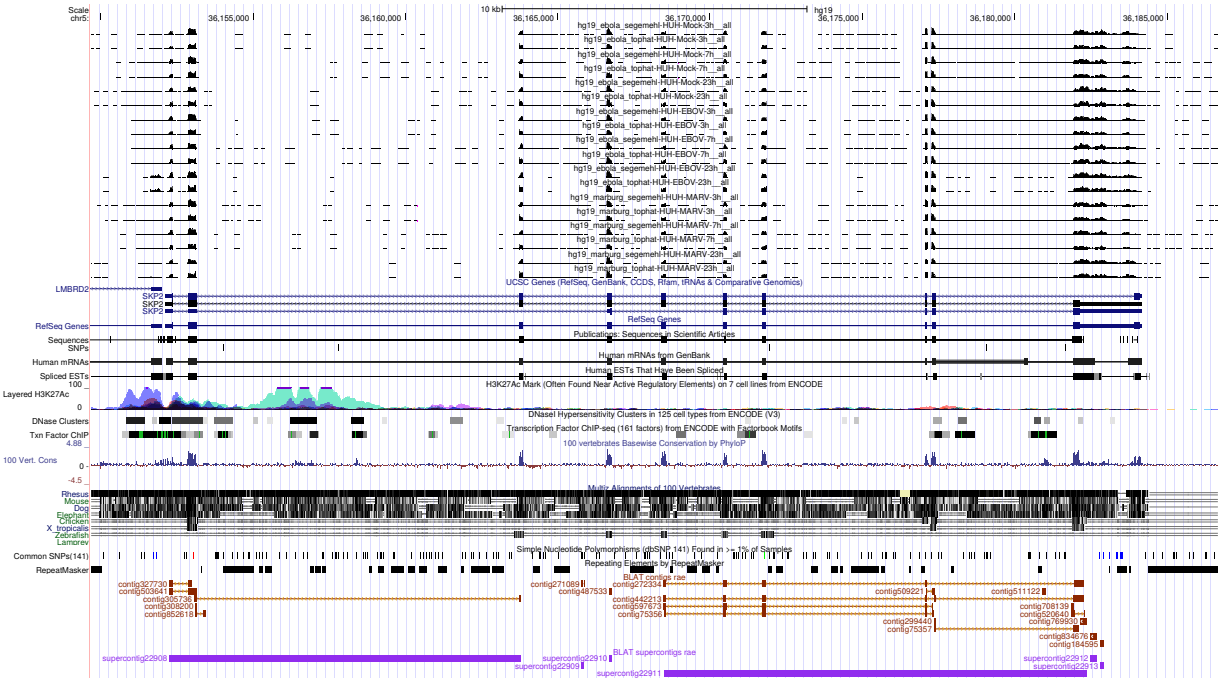

Figure 3: UCSC Genome Browser screenshot of gene SKP2.