

1 TP53

This gene encodes a tumor suppressor protein containing transcriptional activation, DNA binding, and oligomerization domains. The encoded protein responds to diverse cellular stresses to regulate expression of target genes, thereby inducing cell cycle arrest, apoptosis, senescence, DNA repair, or changes in metabolism. Mutations in this gene are associated with a variety of human cancers, including hereditary cancers such as Li-Fraumeni syndrome. Alternative splicing of this gene and the use of alternate promoters result in multiple transcript variants and isoforms. Additional isoforms have also been shown to result from the use of alternate translation initiation codons (PMIDs: 12032546, 20937277)

This gene is strongly expressed in human and bat samples. In human MOCK and Marburg the expression level decreases. During Ebola infection this gene is upregulated. In contrast, the TP53 transcription increases in bat samples during Marburg infection and is downregulated in MOCK and Ebola samples.





