

# 1 PZP

This gene encodes the *Homo sapiens* pregnancy-zone protein (PZP). It is able to inhibit all four classes of proteinases by a unique ‘trapping’ mechanism. This protein has a peptide stretch, called the ‘bait region’ which contains specific cleavage sites for different proteinases. When a proteinase cleaves the bait region, a conformational change is induced in the protein which traps the proteinase. The entrapped enzyme remains active against low molecular weight substrates (activity against high molecular weight substrates is greatly reduced). Following cleavage in the bait region a thioester bond is hydrolyzed and mediates the covalent binding of the protein to the proteinase available.

\*It is highly expressed in bat and looks to be highly expressed in human, but post-transcriptionally completely degraded. Several cleavage sites are visible where some RNA may still be protected by the endoribonuclease.\*

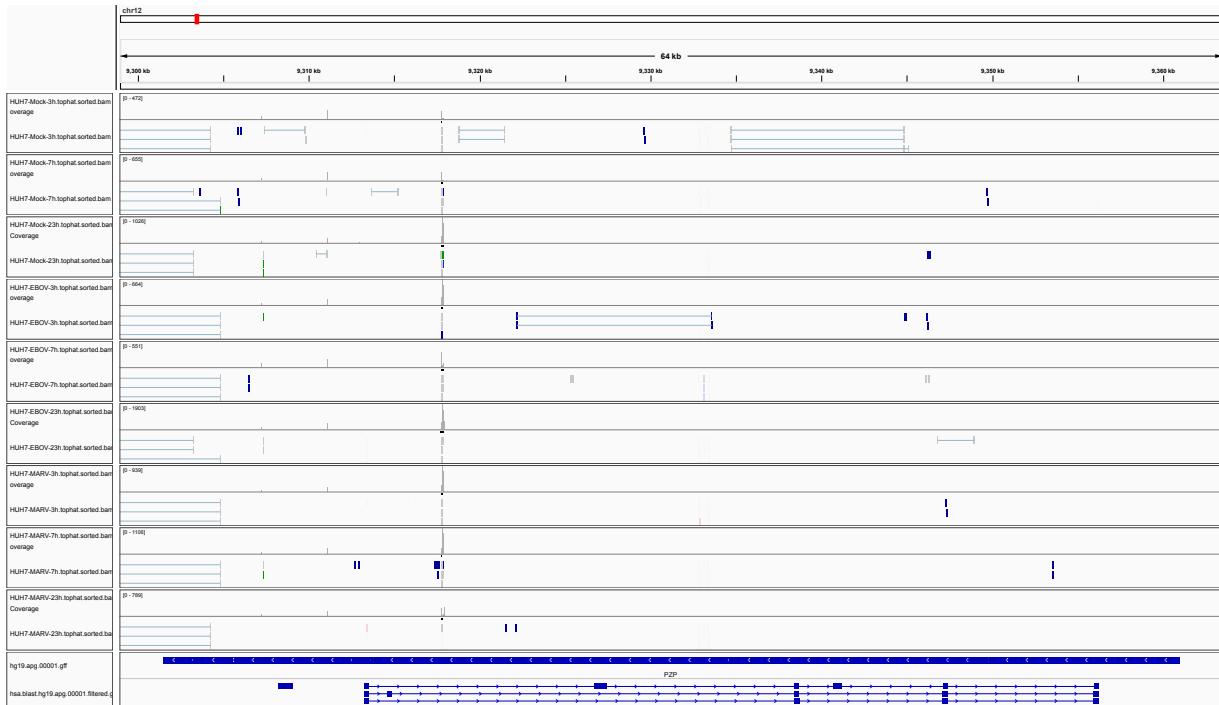


Figure 1: IGV Genome Browser screenshot of gene PZP.

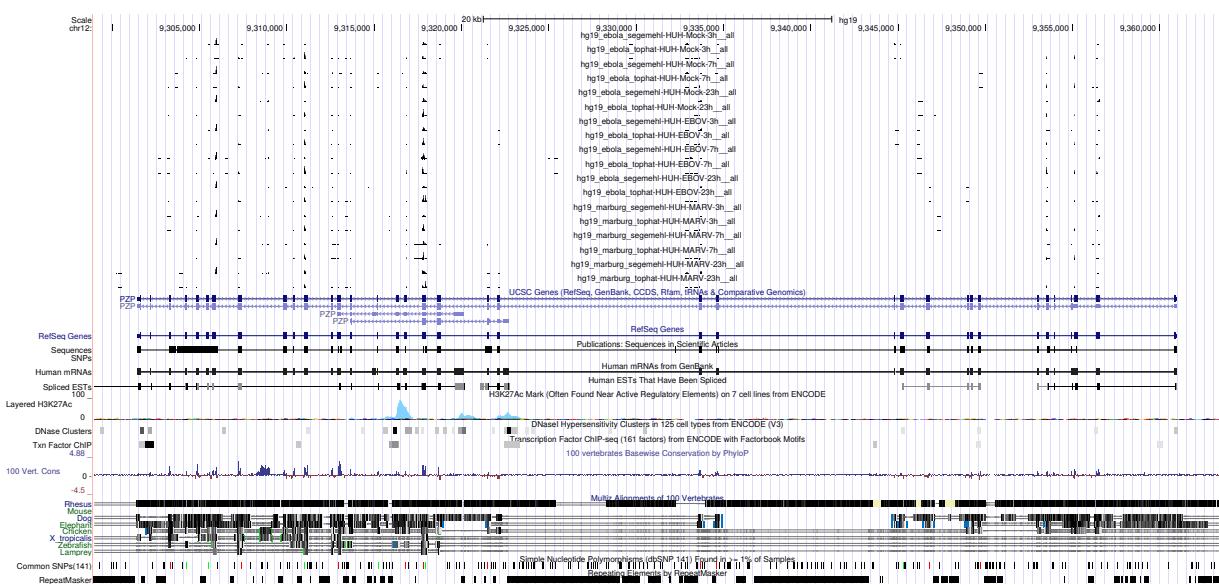


Figure 2: UCSC Genome Browser screenshot of gene PZP.

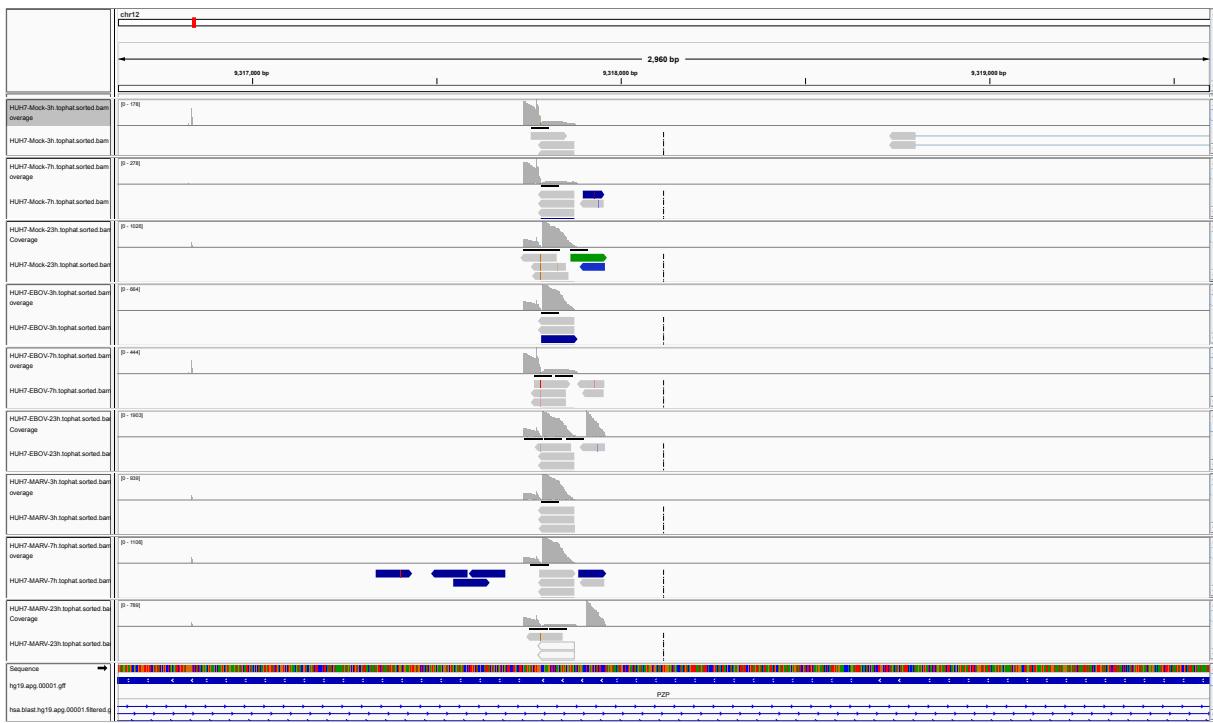


Figure 3: IGV Genome Browser screenshot of gene PZP. Possible cleavage site.

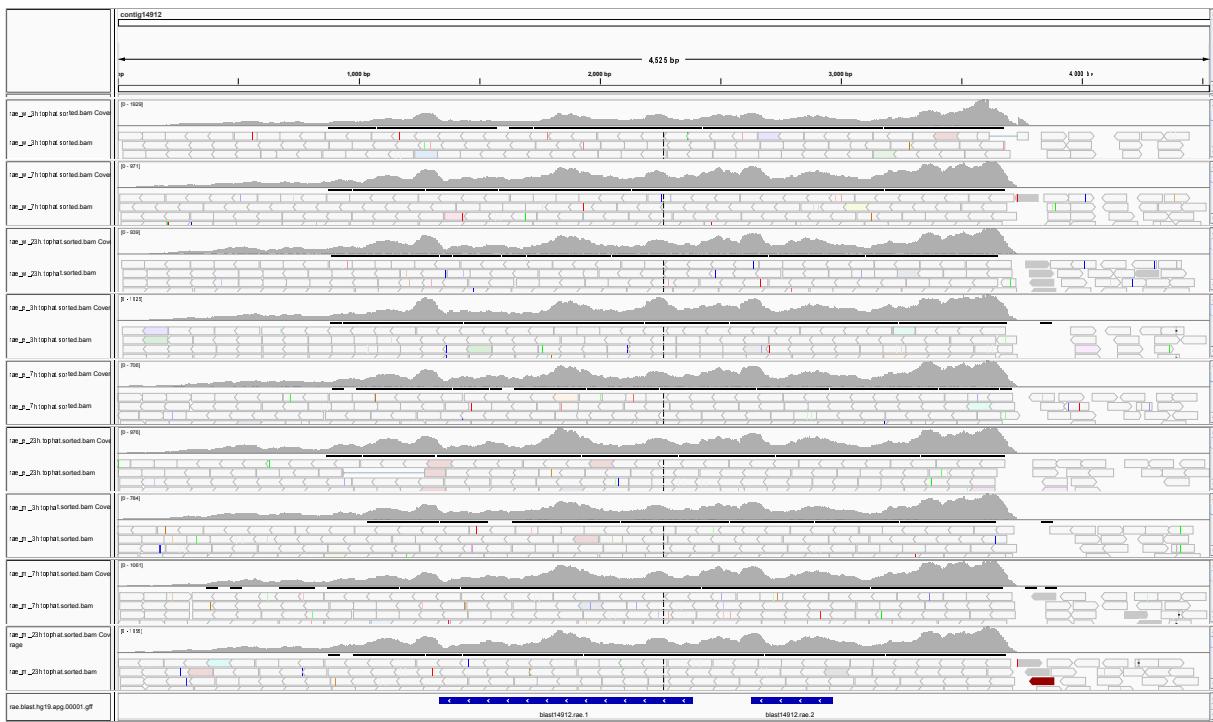


Figure 4: IGV Genome Browser screenshot of bat homolog to gene PZP. Highly expressed.