

1 PXN

The Homo sapiens paxillin (PXN), transcript variant 3 gene encodes a cytoskeletal protein involved in actin-membrane attachment at sites of cell adhesion to the extracellular matrix (focal adhesion). Alternatively spliced transcript variants encoding different isoforms have been described for this gene. These isoforms exhibit different expression pattern, and have different biochemical, as well as physiological properties.

The hg19 negativ strand annotated gene with equal expression patter for MOCK, upregulation in Ebola and up- (3-7h) and downregulation (7-23h) PXN shows at its 3' UTR an antisense ncRNA, which is strongly and differntial expressed for MOCK upregulated, ebola infected tissue two times two fold upregulated and marburg infected slight upregulated from 3 to 7h only. This suggest a direct regulatory function (Wutr:uu, Eutr:2u2u, Mutr:ue vs. W:ee, E:uu, M:ud). Furthermore the 5th or 6th intron shows to be trancribed with differential mapping results of MOCK downregulation beginning from the 7h sample, ebola infected upregulation from 3 to 7h and 7 to 23h and marburg infected first up- then downregulation. The homolog sequence in RAE is very strong expressed over all samples. The MOCK shows two times downregulation, whereas the ebola induced expression is first down- (3-7h) and later (7-23h) upregulated. The gene in marburg infected RAE tissue is two times upregulated.

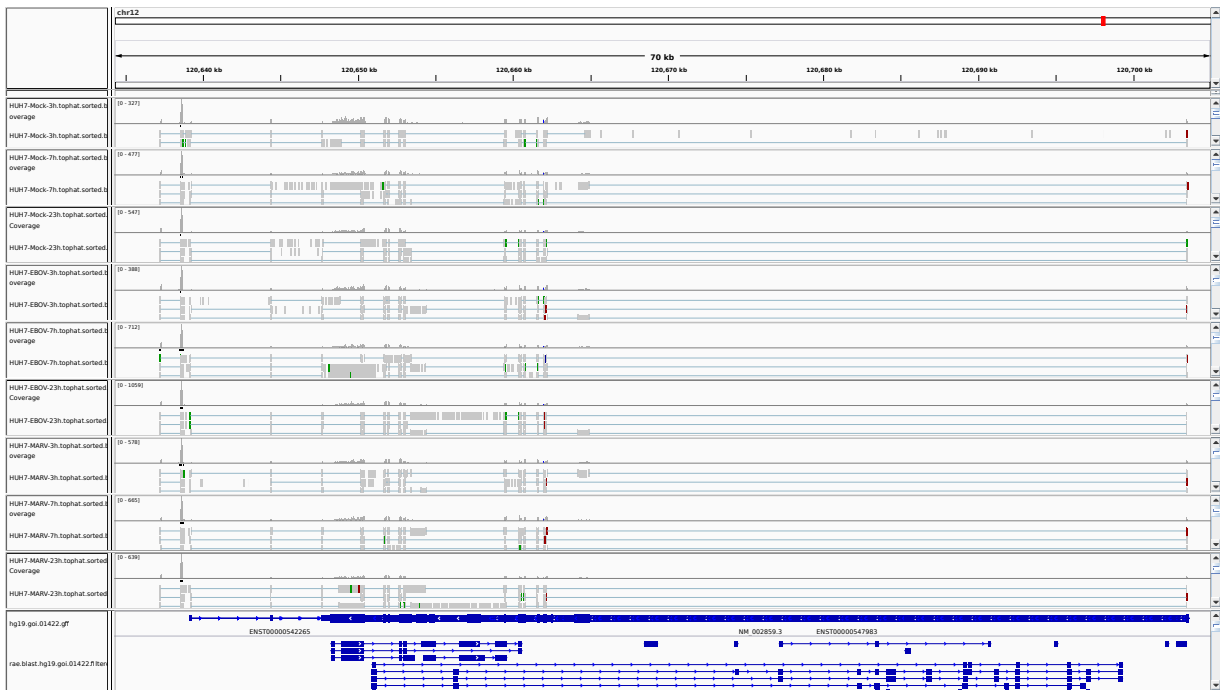


Figure 1: IGV Genome Browser screenshot of gene PXN.

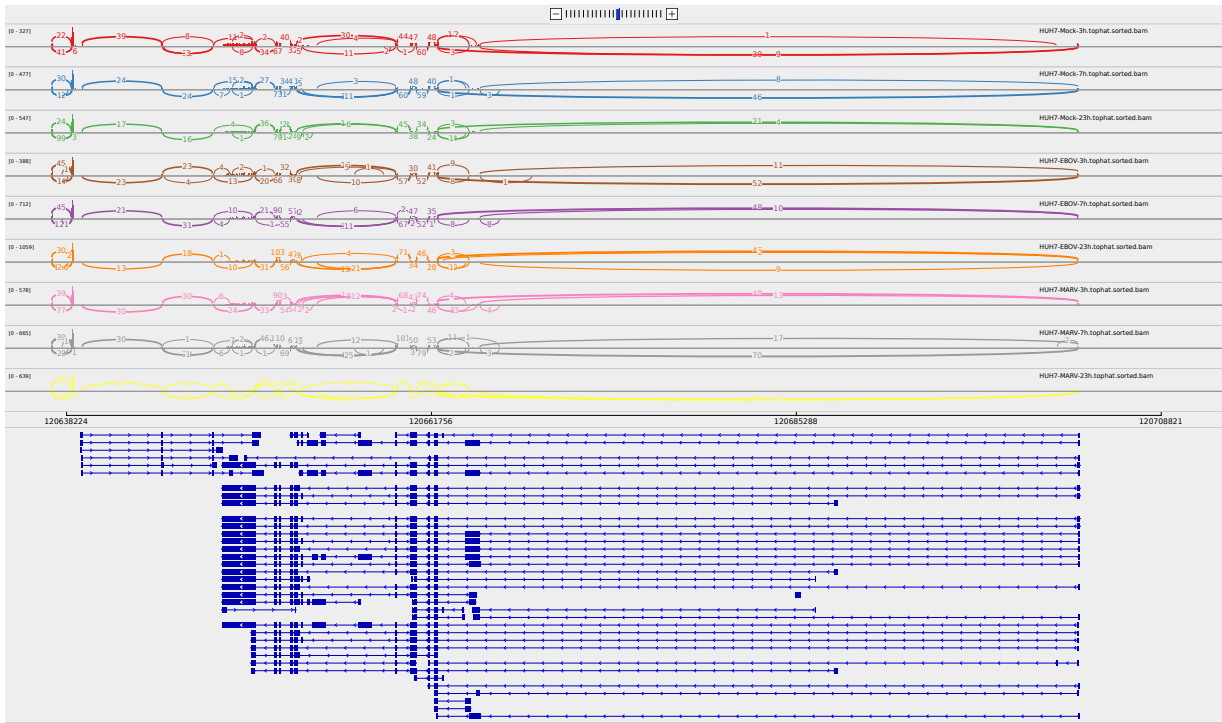


Figure 2: Sashimi plot of gene PXN.

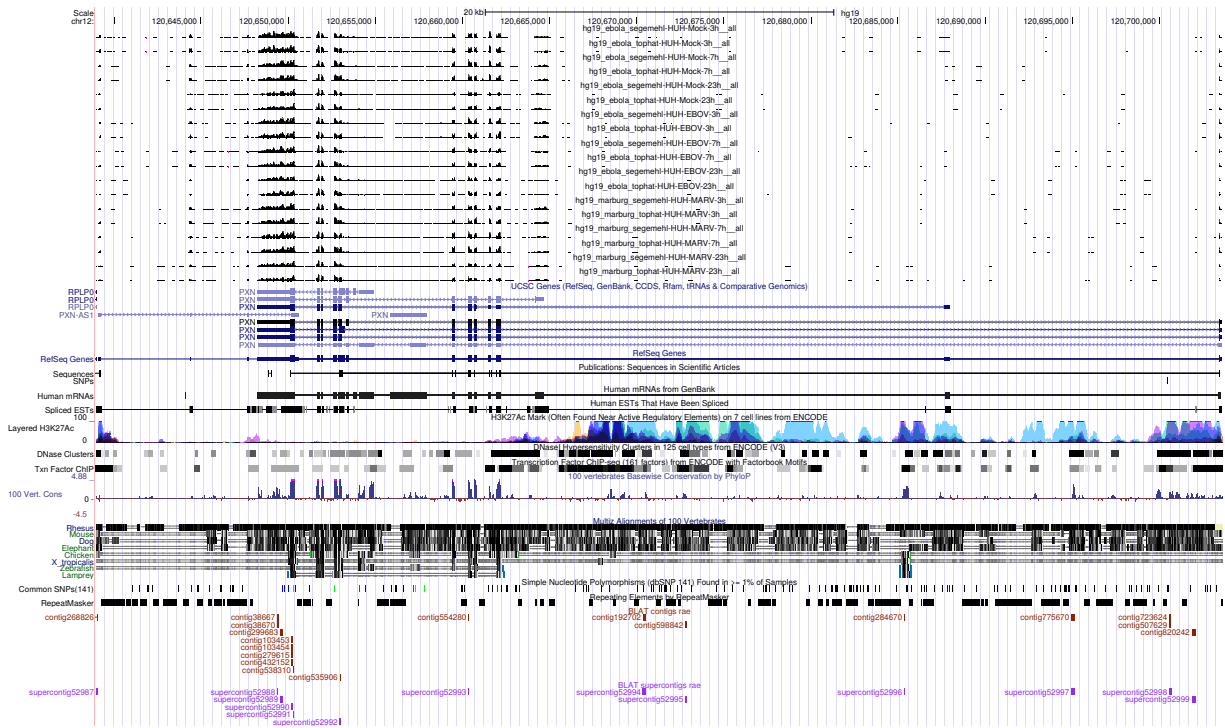


Figure 3: UCSC Genome Browser screenshot of gene PXN.