

Tat SF1 Rabbit mAb

Catalog # AP78450

Product Information

Application WB, IHC-P, IF, ICC, IP

Primary Accession <u>043719</u>

Reactivity Human, Mouse

Host Rabbit

Clonality Monoclonal Antibody

Isotype IgG

Conjugate Unconjugated

Immunogen A synthesized peptide derived from human HTSF1

Purification Affinity Purified

Calculated MW 85853

Additional Information

Gene ID 27336

Other Names HTATSF1

Dilution WB~~1/500-1/1000 IHC-P~~N/A IF~~1:50~200 ICC~~N/A IP~~N/A

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

Storage Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

Protein Information

Name HTATSF1 {ECO:0000303 | PubMed:35597237,

ECO:0000312 | HGNC:HGNC:5276}

Function Component of the 17S U2 SnRNP complex of the spliceosome, a large

ribonucleoprotein complex that removes introns from transcribed pre-mRNAs (PubMed:30567737, PubMed:32494006, PubMed:34822310). The 17S U2 SnRNP complex (1) directly participates in early spliceosome assembly and (2) mediates recognition of the intron branch site during pre-mRNA splicing by promoting the selection of the pre-mRNA branch- site adenosine, the

nucleophile for the first step of splicing (PubMed:30567737,

PubMed:32494006, PubMed:34822310). Within the 17S U2 SnRNP complex, HTATSF1 is required to stabilize the branchpoint- interacting stem loop (PubMed:34822310). HTATSF1 is displaced from the 17S U2 SnRNP complex before the stable addition of the 17S U2 SnRNP complex to the spliceosome, destabilizing the branchpoint-interacting stem loop and allowing to probe intron branch site sequences (PubMed:32494006, PubMed:34822310). Also

acts as a regulator of transcriptional elongation, possibly by mediating the reciprocal stimulatory effect of splicing on transcriptional elongation (PubMed:10454543, PubMed:10913173, PubMed:11780068). Involved in double-strand break (DSB) repair via homologous recombination in S- phase by promoting the recruitment of TOPBP1 to DNA damage sites (PubMed:35597237). Mechanistically, HTATSF1 is (1) recruited to DNA damage sites in S-phase via interaction with poly-ADP-ribosylated RPA1 and (2) phosphorylated by CK2, promoting recruitment of TOPBP1, thereby facilitating RAD51 nucleofilaments formation and RPA displacement, followed by homologous recombination (PubMed:35597237).

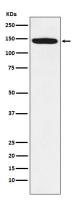
Cellular Location

Nucleus. Chromosome Note=Recruited to DNA damage sites during S-phase following interaction with poly-ADP-ribosylated RPA1.

Tissue Location

Widely expressed..

Images



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.