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# HTSF1 Antibody

Rabbit mAb Catalog # AP92560

### **Product Information**

**Application** WB, IHC, IF, ICC, IP, IHF

Primary Accession <u>043719</u>

**Reactivity** Human, Mouse **Clonality** Monoclonal

Other Names HTATSF1; HTSF1; TAT SF1;

IsotypeRabbit IgGHostRabbitCalculated MW85853

## **Additional Information**

**Dilution** WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:50

**Purification** Affinity-chromatography

Immunogen A synthesized peptide derived from human HTSF1

**Description** HIV TAT specific factor(a.k.a. HTATSF1, Tat-SF1 or HTSF1) is an 86 kDa general

transcription factor that plays a role in the process of transcription

elongation. However, in HIV-infected cells, this factor is up-regulated by HIV Nef and gp120 and acts as a co-factor for the Tat-enhanced transcription of

the HIV virus.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium

azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

#### **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).

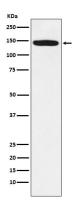
**Cellular Location** 

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

**Tissue Location** 

Widely expressed..

# **Images**



Western blot analysis of HTSF1 expression in Jurkat cell lysate.

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