

**HTATSF1 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP6654a**

## Specification

---

### HTATSF1 Antibody (N-term) - Product Information

Application	<b>WB, IHC-P,E</b>
Primary Accession	<a href="#">O43719</a>
Other Accession	<a href="#">O8BGC0</a> , <a href="#">O5H919</a>
Reactivity	<b>Human</b>
Predicted	<b>Mouse</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Calculated MW	<b>85853</b>
Antigen Region	<b>1-30</b>

### HTATSF1 Antibody (N-term) - Additional Information

**Gene ID** 27336

#### Other Names

HIV Tat-specific factor 1, Tat-SF1, HTATSF1

#### Target/Specificity

This HTATSF1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human HTATSF1.

#### Dilution

WB~~1:1000  
IHC-P~~1:50~100

#### Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

HTATSF1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### HTATSF1 Antibody (N-term) - 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**

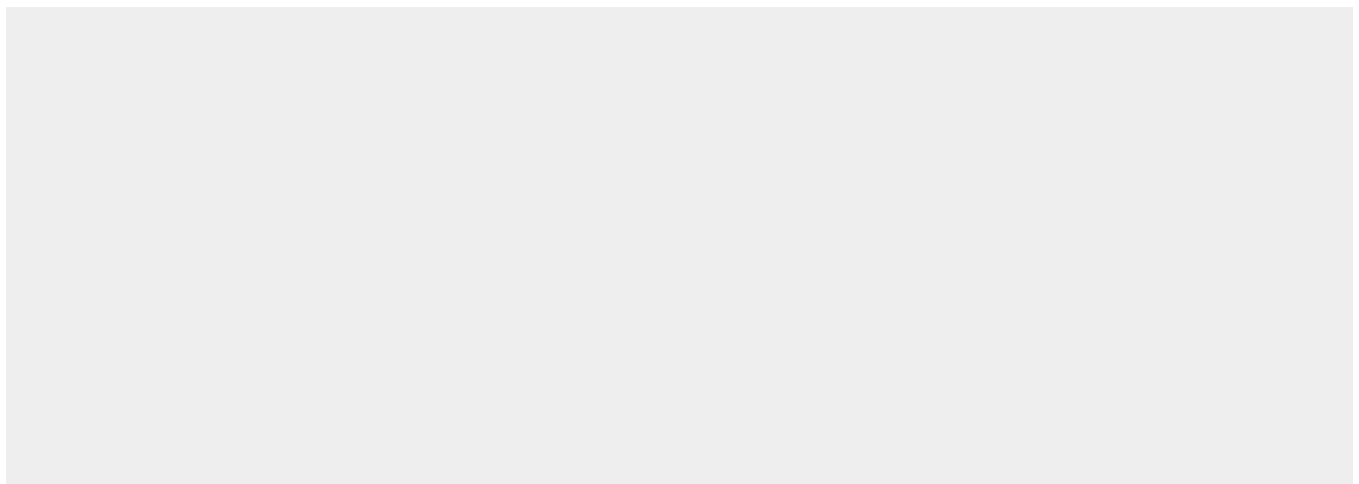
Widely expressed..

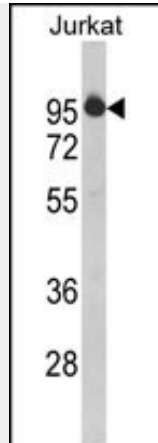
#### **HTATSF1 Antibody (N-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

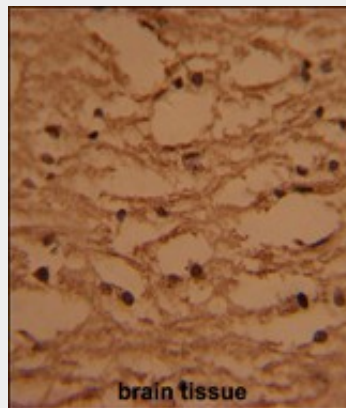
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **HTATSF1 Antibody (N-term) - Images**





Western blot analysis of HTATSF1 Antibody (N-term) (Cat. #AP6654a) in Jurkat cell line lysates (35ug/lane). HTATSF1 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human brain tissue with HTATSF1 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

### **HTATSF1 Antibody (N-term) - Background**

HTATSF1 functions as a cofactor for the stimulation of transcriptional elongation by HIV-1 Tat, which binds to the HIV-1 promoter through Tat-TAR interaction. This protein may also serve as a dual-function factor to couple transcription and splicing and to facilitate their reciprocal activation.

### **HTATSF1 Antibody (N-term) - References**

- Miller, H.B., PLoS ONE 4 (5), E5710 (2009)
- Remoli, A.L., Biochem. J. 396 (2), 371-380 (2006)