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HTSF1 Antibody

Rabbit mAb
Catalog # AP92560

Product Information

Application	WB, IHC, IF, ICC, IP, IHF
Primary Accession	O43719
Reactivity	Human, Mouse
Clonality	Monoclonal
Other Names	HTATSF1; HTSF1; TAT SF1;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	85853

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).

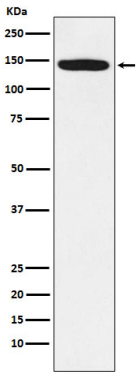
Cellular Location

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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