

SPT4 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP55000

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	P63272
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	13193

Additional Information

Gene ID	6827
Other Names	Transcription elongation factor SPT4, hSPT4, DRB sensitivity-inducing factor 14 kDa subunit, DSIF p14, DRB sensitivity-inducing factor small subunit, DSIF small subunit, SUPT4H1, SPT4H, SUPT4H
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	SUPT4H1
Synonyms	SPT4H, SUPT4H
Function	Component of the DRB sensitivity-inducing factor complex (DSIF complex), which regulates mRNA processing and transcription elongation by RNA polymerase II (PubMed: 10075709 , PubMed: 10199401 , PubMed: 10454543 , PubMed: 10912001 , PubMed: 11112772 , PubMed: 11553615 , PubMed: 12653964 , PubMed: 12718890 , PubMed: 15136722 , PubMed: 15380072 , PubMed: 9450929 , PubMed: 9857195). DSIF positively regulates mRNA capping by stimulating the mRNA guanylyltransferase activity of RNGTT/CAP1A (PubMed: 15136722). DSIF also acts cooperatively with the negative elongation factor complex (NELF complex) to enhance transcriptional pausing at sites proximal to the promoter (PubMed: 10199401 , PubMed: 10912001 , PubMed: 11112772). Transcriptional pausing may facilitate the assembly of an elongation competent RNA polymerase II complex

(PubMed:[10199401](#), PubMed:[10912001](#), PubMed:[11112772](#)). DSIF and NELF promote pausing by inhibition of the transcription elongation factor TFIIS/S-II (PubMed:[10199401](#), PubMed:[10912001](#), PubMed:[11112772](#)). TFIIS/S-II binds to RNA polymerase II at transcription pause sites and stimulates the weak intrinsic nuclease activity of the enzyme (PubMed:[16214896](#)). Cleavage of blocked transcripts by RNA polymerase II promotes the resumption of transcription from the new 3' terminus and may allow repeated attempts at transcription through natural pause sites (PubMed:[16214896](#)). DSIF can also positively regulate transcriptional elongation and is required for the efficient activation of transcriptional elongation by the HIV-1 nuclear transcriptional activator, Tat (PubMed:[11112772](#)). DSIF acts to suppress transcriptional pausing in transcripts derived from the HIV-1 LTR and blocks premature release of HIV-1 transcripts at terminator sequences (PubMed:[11112772](#)).

Cellular Location

Nucleus.

Tissue Location

Widely expressed.

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