

KD-Validated Anti-SUPT5H Rabbit Monoclonal Antibody

Rabbit monoclonal antibody

Catalog # AGI1413

Product Information

Application	WB, FC, ICC
Primary Accession	O00267
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	23GB4220
Calculated MW	121000
Gene Name	SUPT5H
Aliases	SUPT5H; SPT5 Homolog, DSIF Elongation Factor Subunit; SPT5H; SPT5; DRB Sensitivity-Inducing Factor 160 kDa Subunit; DRB Sensitivity-Inducing Factor Large Subunit; Transcription Elongation Factor SPT5; Tat-Cotransactivator 1 Protein; DSIF Large Subunit; DSIF P160; FLJ34157; HSPT5; Suppressor Of Ty 5 Homolog (S. Cerevisiae); Suppressor Of Ty (S.Cerevisiae) 5 Homolog; Suppressor Of Ty 5 Homolog; Tat-CT1 Protein; Tat-CT1
Immunogen	A synthesized peptide derived from human SUPT5H

Additional Information

Gene ID	6829
Other Names	Transcription elongation factor SPT5, hSPT5, DRB sensitivity-inducing factor 160 kDa subunit, DSIF p160, DRB sensitivity-inducing factor large subunit, DSIF large subunit, Tat-cotransactivator 1 protein, Tat-CT1 protein, SUPT5H, SPT5, SPT5H

Protein Information

Name	SUPT5H
Synonyms	SPT5, SPT5H
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: 10421630 , PubMed: 10757782 , 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: 10075709 , PubMed: 10421630 , PubMed: 10757782 , PubMed: 10912001 , PubMed: 11112772 , PubMed: 11553615 , PubMed: 12653964 , PubMed: 12718890 , PubMed: 15136722 , PubMed: 15380072 , PubMed: 9450929 ,

PubMed:[9857195](#)). DSIF also acts cooperatively with the negative elongation factor complex (NELF complex) to enhance transcriptional pausing at sites proximal to the promoter (PubMed:[10075709](#), PubMed:[10199401](#), PubMed:[10757782](#), PubMed:[10912001](#), PubMed:[11112772](#), PubMed:[11553615](#), PubMed:[12653964](#), PubMed:[12718890](#), PubMed:[15136722](#), PubMed:[15380072](#), PubMed:[9450929](#), PubMed:[9857195](#)). Transcriptional pausing may facilitate the assembly of an elongation competent RNA polymerase II complex (PubMed:[10075709](#), PubMed:[10199401](#), PubMed:[10421630](#), PubMed:[10757782](#), PubMed:[10912001](#), PubMed:[11112772](#), PubMed:[11553615](#), PubMed:[12653964](#), PubMed:[12718890](#), PubMed:[15136722](#), PubMed:[15380072](#), PubMed:[9450929](#), PubMed:[9857195](#)). DSIF and NELF promote pausing by inhibition of the transcription elongation factor TFIIS/S-II (PubMed:[16214896](#)). 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](#)). Following phosphorylation by CDK9, DSIF can also positively regulate transcriptional elongation (PubMed:[16427012](#)). Required for the efficient activation of transcriptional elongation by the HIV-1 nuclear transcriptional activator, Tat (PubMed:[10393184](#), PubMed:[10454543](#), PubMed:[11809800](#), PubMed:[9514752](#)). 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](#), PubMed:[14701750](#)).

Cellular Location

Nucleus.

Tissue Location

Ubiquitously expressed.

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