

SUPT5H Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14533c**Specification**

SUPT5H Antibody (Center) - Product Information

Application	WB,E
Primary Accession	O00267
Other Accession	O55201 , Q5Z108 , NP_001104490.1 , NP_001124297.1 , NP_001124296.1
Reactivity	Human
Predicted	Chicken, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	121000
Antigen Region	395-424

SUPT5H Antibody (Center) - 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

Target/Specificity

This SUPT5H antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 395-424 amino acids from the Central region of human SUPT5H.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

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

SUPT5H Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

SUPT5H Antibody (Center) - 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.

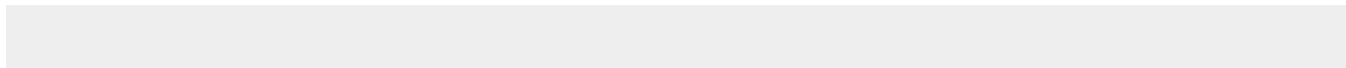
Tissue Location

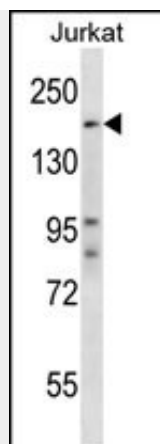
Ubiquitously expressed.

SUPT5H Antibody (Center) - 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](#)

SUPT5H Antibody (Center) - Images



SUPT5H Antibody (Center) (Cat. #AP14533c) western blot analysis in Jurkat cell line lysates (35ug/lane). This demonstrates the SUPT5H antibody detected the SUPT5H protein (arrow).

SUPT5H Antibody (Center) - Background

Component of the DRB sensitivity-inducing factor complex (DSIF complex), which regulates mRNA processing and transcription elongation by RNA polymerase II. DSIF positively regulates mRNA capping by stimulating the mRNA guanylyltransferase activity of RNGTT/CAP1A. DSIF also acts cooperatively with the negative elongation factor complex (NELF complex) to enhance transcriptional pausing at sites proximal to the promoter. Transcriptional pausing may facilitate the assembly of an elongation competent RNA polymerase II complex. DSIF and NELF promote pausing by inhibition of the transcription elongation factor TFIIIS/S-II. TFIIIS/S-II binds to RNA polymerase II at transcription pause sites and stimulates the weak intrinsic nuclease activity of the enzyme. 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. 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. 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.

SUPT5H Antibody (Center) - References

- Wenzel, S., et al. Biochem. J. 425(2):373-380(2010)
- Chen, Y., et al. Genes Dev. 23(23):2765-2777(2009)
- Komori, T., et al. Genes Cells 14(3):343-354(2009)
- Chen, H., et al. PLoS ONE 4 (9), E6918 (2009) :
- Amir-Zilberstein, L., et al. J. Biol. Chem. 283(3):1317-1323(2008)