

SPT5 Rabbit mAb

Catalog # AP76719

Specification

SPT5 Rabbit mAb - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB, IHC-P, IHC-F, ICC 000267 Human Rabbit Monoclonal Antibody 121000

SPT5 Rabbit mAb - Additional Information

Gene ID 6829

Other Names SUPT5H

Dilution
WB~~1/500-1/1000
IHC-P~~N/A
IHC-F~~N/A
ICC~~N/A

Format Liquid

SPT5 Rabbit mAb - 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:1553615, PubMed:12718890, PubMed:12718890, PubMed:15136722, PubMed:15380072, PubMed:<a href="http:/



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href="http://www.uniprot.org/citations/9450929" target=" blank">9450929</a>, PubMed:<a
href="http://www.uniprot.org/citations/9857195" target="blank">9857195</a>). DSIF positively
regulates mRNA capping by stimulating the mRNA guanylyltransferase activity of RNGTT/CAP1A
(PubMed:<a href="http://www.uniprot.org/citations/10075709" target=" blank">10075709</a>,
PubMed:<a href="http://www.uniprot.org/citations/10421630" target=" blank">10421630</a>,
PubMed: <a href="http://www.uniprot.org/citations/10757782" target="blank">10757782</a>,
PubMed: <a href="http://www.uniprot.org/citations/10912001" target=" blank">10912001</a>,
PubMed:<a href="http://www.uniprot.org/citations/11112772" target="blank">11112772</a>,
PubMed: <a href="http://www.uniprot.org/citations/11553615" target="blank">11553615</a>,
PubMed: <a href="http://www.uniprot.org/citations/12653964" target="_blank">12653964</a>,
PubMed: <a href="http://www.uniprot.org/citations/12718890" target="_blank">12718890</a>,
PubMed:<a href="http://www.uniprot.org/citations/15136722" target="_blank">15136722</a>,
PubMed: <a href="http://www.uniprot.org/citations/15380072" target="blank">15380072</a>,
PubMed:<a href="http://www.uniprot.org/citations/9450929" target=" blank">9450929</a>.
PubMed:<a href="http://www.uniprot.org/citations/9857195" target="_blank">9857195</a>).
DSIF also acts cooperatively with the negative elongation factor complex (NELF complex) to
enhance transcriptional pausing at sites proximal to the promoter (PubMed: <a
href="http://www.uniprot.org/citations/10075709" target="_blank">10075709</a>, PubMed:<a
href="http://www.uniprot.org/citations/10199401" target=" blank">10199401</a>, PubMed:<a
href="http://www.uniprot.org/citations/10757782" target="_blank">10757782</a>, PubMed:<a
href="http://www.uniprot.org/citations/10912001" target="blank">10912001</a>, PubMed:<a
href="http://www.uniprot.org/citations/11112772" target="blank">11112772</a>, PubMed:<a
href="http://www.uniprot.org/citations/11553615" target="_blank">11553615</a>, PubMed:<a
href="http://www.uniprot.org/citations/12653964" target="blank">12653964</a>, PubMed:<a
href="http://www.uniprot.org/citations/12718890" target="_blank">12718890</a>, PubMed:<a
href="http://www.uniprot.org/citations/15136722" target="_blank">15136722</a>, PubMed:<a
href="http://www.uniprot.org/citations/15380072" target="blank">15380072</a>, PubMed:<a
href="http://www.uniprot.org/citations/9450929" target=" blank">9450929</a>, PubMed:<a
href="http://www.uniprot.org/citations/9857195" target="blank">9857195</a>). Transcriptional
pausing may facilitate the assembly of an elongation competent RNA polymerase II complex
(PubMed:<a href="http://www.uniprot.org/citations/10075709" target=" blank">10075709</a>,
PubMed:<a href="http://www.uniprot.org/citations/10199401" target=" blank">10199401</a>,
PubMed:<a href="http://www.uniprot.org/citations/10421630" target="blank">10421630</a>,
PubMed: <a href="http://www.uniprot.org/citations/10757782" target="blank">10757782</a>,
PubMed: <a href="http://www.uniprot.org/citations/10912001" target="blank">10912001</a>,
PubMed: <a href="http://www.uniprot.org/citations/11112772" target="blank">11112772</a>,
PubMed:<a href="http://www.uniprot.org/citations/11553615" target="_blank">11553615</a>,
PubMed: <a href="http://www.uniprot.org/citations/12653964" target="blank">12653964</a>,
PubMed:<a href="http://www.uniprot.org/citations/12718890" target="_blank">12718890</a>,
PubMed:<a href="http://www.uniprot.org/citations/15136722" target="_blank">15136722</a>,
PubMed:<a href="http://www.uniprot.org/citations/15380072" target="_blank">15380072</a>,
PubMed: <a href="http://www.uniprot.org/citations/9450929" target="blank">9450929</a>,
PubMed: <a href="http://www.uniprot.org/citations/9857195" target="blank">9857195</a>).
DSIF and NELF promote pausing by inhibition of the transcription elongation factor TFIIS/S-II
(PubMed:<a href="http://www.uniprot.org/citations/16214896" target=" blank">16214896</a>).
TFIIS/S-II binds to RNA polymerase II at transcription pause sites and stimulates the weak intrinsic
nuclease activity of the enzyme (PubMed: <a href="http://www.uniprot.org/citations/16214896"
target=" blank">16214896</a>). 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:<a
href="http://www.uniprot.org/citations/16214896" target=" blank">16214896</a>). Following
phosphorylation by CDK9, DSIF can also positively regulate transcriptional elongation (PubMed: <a
href="http://www.uniprot.org/citations/16427012" target=" blank">16427012</a>). Required for
the efficient activation of transcriptional elongation by the HIV-1 nuclear transcriptional activator,
Tat (PubMed:<a href="http://www.uniprot.org/citations/10393184"
target="_blank">10393184</a>, PubMed:<a href="http://www.uniprot.org/citations/10454543"
target=" blank">10454543</a>, PubMed:<a href="http://www.uniprot.org/citations/11809800"
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target="_blank">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 LocationUbiquitously expressed.

SPT5 Rabbit mAb - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

SPT5 Rabbit mAb - Images







