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SUPT4H1 antibody - middle region

Rabbit Polyclonal Antibody Catalog # AI12070

Product Information

Application WB Primary Accession P63272

Other Accession NM 003168, NP 003159

Reactivity Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Horse, Bovine

Predicted Human, Mouse, Rat, Chicken, Dog

Host Rabbit
Clonality Polyclonal
Calculated MW 13193

Additional Information

Gene ID 6827

Alias Symbol SPT4H, SUPT4H, SPT4

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

Format Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium

azide and 2% sucrose.

Reconstitution & Storage Add 50 ul of distilled water. Final anti-SUPT4H1 antibody concentration is 1

mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at

20°C. Avoid repeat freeze-thaw cycles.

Precautions SUPT4H1 antibody - middle region is for research use only and not for use in

diagnostic or therapeutic procedures.

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:<u>10912001</u>, PubMed:<u>11112772</u>, PubMed:<u>11553615</u>, PubMed:<u>12653964</u>, PubMed:<u>12718890</u>, PubMed:<u>15136722</u>,

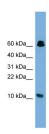
PubMed:<u>15380072</u>, PubMed:<u>9450929</u>, PubMed:<u>9857195</u>). DSIF positively regulates mRNA capping by stimulating the mRNA guanylyltransferase activity

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:<u>10199401</u>, PubMed:<u>10912001</u>, PubMed:<u>11112772</u>). 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.

Images



WB Suggested Anti-SUPT4H1 Antibody Titration: 0.2-1

μg/ml

ELISA Titer: 1:312500

Positive Control: 293T cell lysate

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