abcam

Product datasheet

Anti-SPT5 antibody ab245650

1 Image

Overview

Product name Anti-SPT5 antibody

Description Rabbit polyclonal to SPT5

Host species Rabbit

Tested applications Suitable for:

□

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Orangutan

Immunogen Synthetic peptide within Human SPT5 aa 50-100. The exact sequence is proprietary.

NP_003160.2

Database link: 000267

Positive control IP: HeLa whole cell lysate.

General notesThe Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7

Preservative: 0.09% Sodium azide Constituent: Tris citrate/phosphate

pH 7 to 8

Purity Immunogen affinity purified

Purification notes ab245650 was affinity purified using an epitope specific to SPT5 immobilized on solid support.

Clonality Polyclonal

1

Isotype IgG

Applications

The Abpromise guarantee

Our Abpromise quarantee covers the use of ab245650 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		Use at 2-5 μg/mg of lysate.

Target

Function

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 TFIIS/S-II. TFIIS/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.

Tissue specificity

Ubiquitously expressed.

Sequence similarities

Belongs to the SPT5 family.

Contains 5 KOW domains.

Post-translational modifications

Methylated by PRMT1/HRMT1L2 and PRMT5/SKB1. Methylation negatively regulates interaction

with P-TEFb and RNA polymerase II.

Phosphorylated. Phosphorylation by P-TEFb alleviates transcriptional pausing and can stimulate transcriptional elongation from the HIV-1 LTR. P-TEFb dependent phosphorylation is stimulated

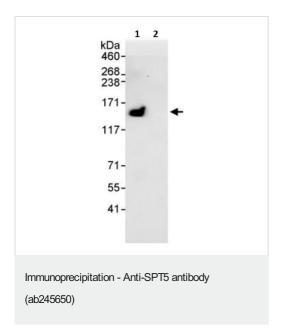
by the HIV-1 Tat protein. Phosphorylation may also stimulate interaction with PIN1. Bulk

phosphorylation occurs predominantly in mitosis.

Cellular localization

Nucleus.

Images



SPT5 was immunoprecipitated from HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate (1 mg per IP reaction; 20% of IP loaded).

ab245650 used for IP at 3 μ g/mg lysate. For WB another anti-SPT5 antibody was used at 1 μ g/ml.

Lane 1: ab245650 IP in HeLa whole cell lysate.

Lane 2: Control IgG in HeLa whole cell lysate.

Chemiluminescence detection: 30 seconds.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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