abcam

Product datasheet

Anti-SPT5 antibody [EPR5145(2)] ab126592

Recombinant RabMAb

4 References 5 Images

Overview

Product name Anti-SPT5 antibody [EPR5145(2)]

Description Rabbit monoclonal [EPR5145(2)] to SPT5

Host species Rabbit

Tested applications Suitable for: WB, IHC-P, ICC/IF

Unsuitable for: Flow Cyt or IP

Species reactivity Reacts with: Mouse, Rat, Human

Synthetic peptide within Human SPT5 aa 750-850. The exact sequence is proprietary. **Immunogen**

Positive control HeLa, HepG2, RAW264.7, PC12, NIH3T3, Jurkat and 293T cell lysates; Human colon tissue;

HeLa cells.

General notes This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

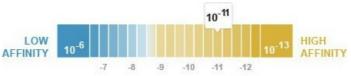
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb patents**.

Properties

Form

Storage instructions Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

Dissociation constant (K_D) $K_D = 5.31 \times 10^{-11} M$



Learn more about K_D

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

Purity Protein A purified

Clonality Monoclonal
Clone number EPR5145(2)

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab126592 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
WB		1/1000 - 1/10000. Detects a band of approximately 160 kDa (predicted molecular weight: 121 kDa).
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		1/100 - 1/250.

Application notes

Is unsuitable for Flow Cyt or IP.

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

 $\label{thm:constraints} \mbox{Ubiquitously expressed.}$

Sequence similarities

Belongs to the SPT5 family. Contains 5 KOW domains.

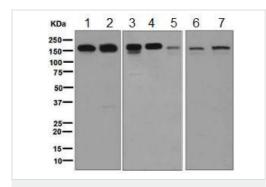
Post-translational modifications

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

Nucleus.

Images



Western blot - Anti-SPT5 antibody [EPR5145(2)] (ab126592)

All lanes : Anti-SPT5 antibody [EPR5145(2)] (ab126592) at 1/1000 dilution

Lane 1 : HeLa cell lysate

Lane 2: HepG2 cell lysate

Lane 3: RAW 264.7 cell lysate

Lane 4: PC-12 cell lysate

Lane 5: NIH/3T3 cell lysate

Lane 6: Jurkat cell lysate

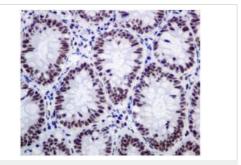
Lane 7: 293T cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes: Goat anti-rabbit HRP conjugated at 1/2000 dilution

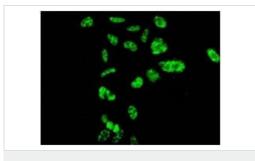
Predicted band size: 121 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SPT5 antibody
[EPR5145(2)] (ab126592)

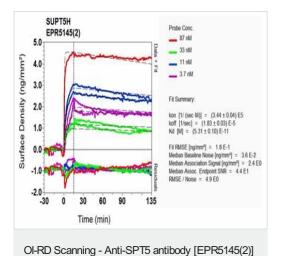
ab126592 at 1/100 dilution staining SPT5 in paraffin-embedded Human colon tissue by immunohistochemistry.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-SPT5 antibody [EPR5145(2)] (ab126592)

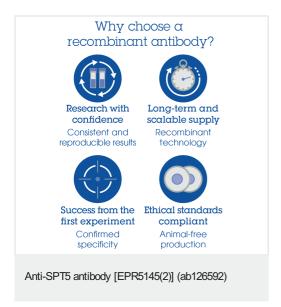
ab126592 at 1/100 dilution staining SPT5 in HeLa cells by immunofluorescence.



(ab126592)

Equilibrium disassociation constant (K_D) Learn more about K_D

Click here to learn more about K_D



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