abcam

Product datasheet

Anti-SET/TAF-I antibody [EPR12972(B)] ab176567

Recombinant RabMAb

2 References 4 Images

Overview

Product name Anti-SET/TAF-I antibody [EPR12972(B)]

Description Rabbit monoclonal [EPR12972(B)] to SET/TAF-I

Host species Rabbit

Tested applications Suitable for: IP, Flow Cyt (Intra), WB

Unsuitable for: ICC/IF or IHC-P

Reacts with: Human Species reactivity

Predicted to work with: Mouse, Rat

Immunogen Synthetic peptide within Human SET/TAF-I aa 1-100 (Cysteine residue). The exact sequence is

proprietary.

Database link: Q01105

Positive control Jurkat, 293T, HepG2 and HeLa whole cell lysate (ab150035); Jurkat 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 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: 7.20

Preservative: 0.01% Sodium azide

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

supernatant

Purity Tissue culture supernatant

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Clonality Monoclonal

EPR12972(B)

Isotype IgG

Applications

Clone number

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab176567 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		1/10 - 1/100.
Flow Cyt (Intra)		1/10 - 1/100. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
WB		1/10000 - 1/50000. Predicted molecular weight: 33 kDa.

Application notes Is unsuitable for ICC/IF or IHC-P.

Target

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Ηı	ınctıon	١

Multitasking protein, involved in apoptosis, transcription, nucleosome assembly and histone binding. Isoform 2 anti-apoptotic activity is mediated by inhibition of the GZMA-activated DNase, NME1. In the course of cytotoxic T-lymphocyte (CTL)-induced apoptosis, GZMA cleaves SET, disrupting its binding to NME1 and releasing NME1 inhibition. Isoform 1 and isoform 2 are potent inhibitors of protein phosphatase 2A. Isoform 1 and isoform 2 inhibit EP300/CREBBP and PCAF-mediated acetylation of histones (HAT) and nucleosomes, most probably by masking the accessibility of lysines of histones to the acetylases. The predominant target for inhibition is histone H4. HAT inhibition leads to silencing of HAT-dependent transcription and prevents active demethylation of DNA. Both isoforms stimulate DNA replication of the adenovirus genome complexed with viral core proteins; however, isoform 2 specific activity is higher.

Tissue specificity

Widely expressed. Low levels in quiescent cells during serum starvation, contact inhibition or differentiation. Highly expressed in Wilms' tumor.

Involvement in disease

Note=A chromosomal aberration involving SET is found in some cases of acute undifferentiated leukemia (AUL). Translocation t(6;9)(q21;q34.1) with NUP214/CAN.

Sequence similarities

Belongs to the nucleosome assembly protein (NAP) family.

Domain

The C-terminal acidic domain mediates the inhibition of histone acetyltransferases and is

required for the DNA replication stimulatory activity.

Post-translational modifications

 $Isoform\ 2\ is\ phosphory lated\ on\ Ser\mbox{-}15\ and\ Thr\mbox{-}23.$

lsoform 2 is acetylated on Lys-11.

Some glutamate residues are gl

Some glutamate residues are glycylated by TTLL8. This modification occurs exclusively on glutamate residues and results in a glycine chain on the gamma-carboxyl group.

N-terminus of isoform 1 is methylated by METTL11A/NTM1. Mainly trimethylated.

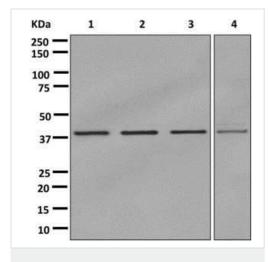
Cellular localization

Cytoplasm > cytosol. Endoplasmic reticulum. Nucleus > nucleoplasm. In the cytoplasm, found both

in the cytosol and associated with the endoplasmic reticulum. Following CTL attack, moves

rapidly to the nucleus, where it is found in the nucleoplasm, avoiding the nucleolus. Similar translocation to the nucleus is also observed for lymphocyte-activated killer cells after the addition of calcium. The SET complex is associated with the endoplasmic reticulum.

Images



Western blot - Anti-SET/TAF-I antibody [EPR12972(B)] (ab176567)

All lanes : Anti-SET/TAF-I antibody [EPR12972(B)] (ab176567) at 1/10000 dilution

Lane 1: Jurkat cell lysate

Lane 2: 293T (Human embryonic kidney epithelial cell) cell lysate

Lane 3 : HepG2 cell lysate

Lane 4 : HeLa cell lysate

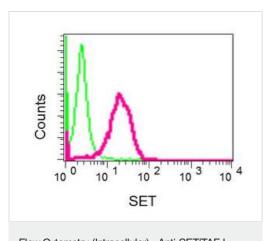
Lysates/proteins at 10 µg per lane.

Secondary

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

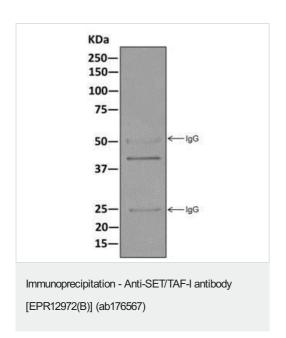
Developed using the ECL technique.

Predicted band size: 33 kDa

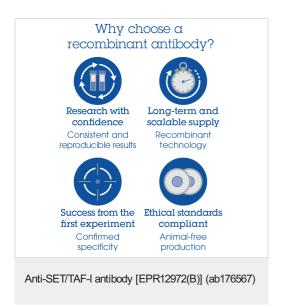


Flow Cytometry (Intracellular) - Anti-SET/TAF-l antibody [EPR12972(B)] (ab176567)

Intracellular Flow Cytometry analysis of permeabilized Jurkat cells labeling SET/TAF-I (red) with ab176567 at a 1/10 dilution, or negative control rabbit IgG (green)



Western blot analysis on immunoprecipitation pellet from HeLa cell lysate labeling SET/TAF-I with ab176567 at 1/10 dilution.



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