

## Product datasheet

### PE Anti-SET/TAF-I antibody [EPR12973] ab237445

Recombinant RabMAb

[1 References](#) [2 Images](#)

#### Overview

<b>Product name</b>	PE Anti-SET/TAF-I antibody [EPR12973]
<b>Description</b>	PE Rabbit monoclonal [EPR12973] to SET/TAF-I
<b>Host species</b>	Rabbit
<b>Conjugation</b>	PE. Ex: 488nm, Em: 575nm
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra)
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	Flow Cyt (intra): HeLa cells.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at +4°C. Store In the Dark.
<b>Storage buffer</b>	<p>pH: 7.4</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituents: 1% BSA, PBS</p>
<b>Purity</b>	Affinity purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR12973
<b>Isotype</b>	IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab237445 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
Flow Cyt (Intra)		1/2500.

## Target

### Function

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 phosphorylated on Ser-15 and Thr-23.

Isoform 2 is acetylated on Lys-11.

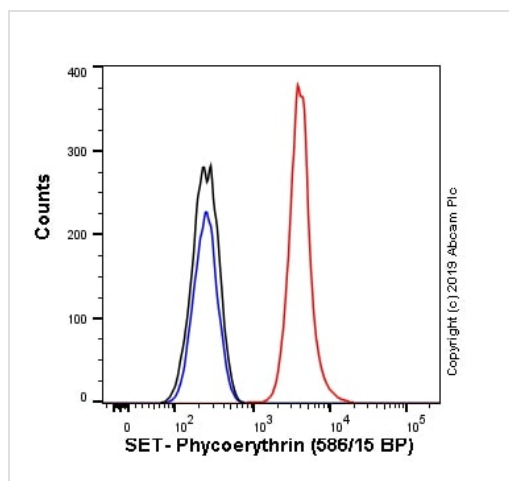
Some glutamate residues are glycylation by TTLL8. This modification occurs exclusively on glutamate residues and results in a glycine chain on the gamma-carboxyl group.

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



Flow Cytometry (Intracellular) - PE Anti-SET/TAF-I antibody [EPR12973] (ab237445)

Overlay histogram showing HeLa cells stained with ab237445 (red line).





The cells were fixed with 4% formaldehyde (10 min) and then permeabilized with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS / 10% normal Goat serum to block non-specific protein-protein interactions followed by the antibody (ab237445) ( $1 \times 10^6$  in 100  $\mu$ l at 0.2  $\mu$ g/ml (1/2500 dilution)) for 30 min at 22°C.

Isotype control antibody (black line) was Rabbit IgG (monoclonal) Phycoerythrin ([ab209478](#)) used at the same concentration and conditions as the primary antibody. Unlabeled sample (blue line) was also used as a control.

Acquisition of >5,000 events were collected using a 50 mW Yellow/Green laser (561nm) and 586/15 bandpass filter.

This antibody gave a positive signal in HeLa cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Triton X-100 for 15 min used under the same conditions.

Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

PE Anti-SET/TAF-I antibody [EPR12973] (ab237445)

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

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

#### **Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors