

Product datasheet

Anti-HP1 alpha antibody [EPR5776] ab133577

Recombinant RabMAb

3 Images

Overview

Product name	Anti-HP1 alpha antibody [EPR5776]
Description	Rabbit monoclonal [EPR5776] to HP1 alpha
Host species	Rabbit
Specificity	The immunogen used for this product shares 83% homology with CBX1/HP1 beta. Cross-reactivity with this protein has not been confirmed experimentally.
Tested applications	Suitable for: WB, Flow Cyt (Intra) Unsuitable for: ICC/IF, IHC-P or IP
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	SH-SY5Y cells; HeLa, SH-SY5Y, MCF7, A431, C6, RAW 264.7, PC12 and NIH 3T3 cell lysates
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
Purity	Tissue culture supernatant
Clonality	Monoclonal

Clone number EPR5776
Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab133577 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 22 kDa (predicted molecular weight: 22 kDa).
Flow Cyt (Intra)		1/10 - 1/100. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

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

Target

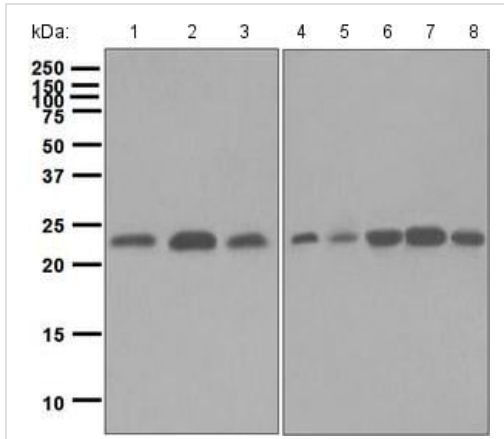
Function Component of heterochromatin that recognizes and binds histone H3 tails methylated at 'Lys-9' (H3K9me), leading to epigenetic repression. In contrast, it is excluded from chromatin when 'Tyr-41' of histone H3 is phosphorylated (H3Y41ph). Can interact with lamin-B receptor (LBR). This interaction can contribute to the association of the heterochromatin with the inner nuclear membrane. Involved in the formation of functional kinetochore through interaction with MIS12 complex proteins.

Sequence similarities Contains 2 chromo domains.

Post-translational modifications Phosphorylation of HP1 and LBR may be responsible for some of the alterations in chromatin organization and nuclear structure which occur at various times during the cell cycle (By similarity). Phosphorylated during interphase and possibly hyper-phosphorylated during mitosis. Ubiquitinated.

Cellular localization Nucleus. Chromosome. Chromosome > centromere. Component of centromeric and pericentromeric heterochromatin. Associates with chromosomes during mitosis. Associates specifically with chromatin during metaphase and anaphase.

Images



Western blot - Anti-HP1 alpha antibody [EPR5776] (ab133577)

All lanes : Anti-HP1 alpha antibody [EPR5776] (ab133577) at 1/1000 dilution

Lane 1 : HeLa cell lysate

Lane 2 : SH SY5Y cell lysate

Lane 3 : MCF7 cell lysate

Lane 4 : A431 cell lysate

Lane 5 : C6 cell lysate

Lane 6 : RAW 264.7 cell lysate

Lane 7 : PC12 cell lysate

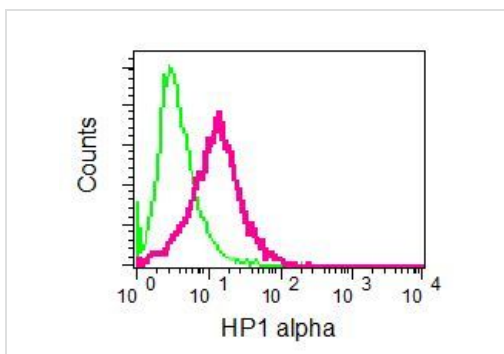
Lane 8 : NIH 3T3 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

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





Predicted band size: 22 kDa



Flow Cytometry (Intracellular) - Anti-HP1 alpha antibody [EPR5776] (ab133577)

Intracellular Flow Cytometric analysis of HP1 alpha in permeabilized SH SY5Y cells, using ab133577 at a 1/10 dilution (red) or a control rabbit IgG antibody (green).

Why choose a recombinant antibody?

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

Anti-HP1 alpha antibody [EPR5776] (ab133577)

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

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