


Product datasheet

Anti-SMC4 antibody [EPR13366] - C-terminal ab179831

Recombinant RabMAb

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Overview

Product name	Anti-SMC4 antibody [EPR13366] - C-terminal
Description	Rabbit monoclonal [EPR13366] to SMC4 - C-terminal
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, ICC/IF Unsuitable for: IHC-P or IP
Species reactivity	Reacts with: Human Predicted to work with: Mouse 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	Ramos, 293T, HeLa and Raji cell lysates. HeLa and Raji cells.
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> <p>Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.</p>

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
Clonality	Monoclonal
Clone number	EPR13366
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab179831 in the following tested applications.

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

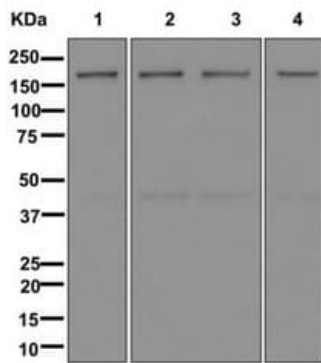
Application	Abreviews	Notes
Flow Cyt (Intra)		1/10 - 1/100. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/1000 - 1/10000. Predicted molecular weight: 147 kDa.
ICC/IF		1/50 - 1/100.

Application notes Is unsuitable for IHC-P or IP.

Target

Function	Central component of the condensin complex, a complex required for conversion of interphase chromatin into mitotic-like condense chromosomes. The condensin complex probably introduces positive supercoils into relaxed DNA in the presence of type I topoisomerases and converts nicked DNA into positive knotted forms in the presence of type II topoisomerases.
Tissue specificity	Widely expressed. Higher expression in testis, colon, thymus.
Sequence similarities	Belongs to the SMC family. SMC4 subfamily.
Domain	The hinge domain, which separates the large intramolecular coiled coil regions, allows the heterodimerization with SMC2, forming a V-shaped heterodimer.
Cellular localization	Nucleus. Cytoplasm. Chromosome. In interphase cells, the majority of the condensin complex is found in the cytoplasm, while a minority of the complex is associated with chromatin. A subpopulation of the complex however remains associated with chromosome foci in interphase cells. During mitosis, most of the condensin complex is associated with the chromatin. At the onset of prophase, the regulatory subunits of the complex are phosphorylated by CDC2, leading to condensin's association with chromosome arms and to chromosome condensation. Dissociation from chromosomes is observed in late telophase.

Images



Western blot - Anti-SMC4 antibody [EPR13366] - C-terminal (ab179831)

All lanes : Anti-SMC4 antibody [EPR13366] - C-terminal (ab179831) at 1/1000 dilution

Lane 1 : Ramos cell lysate

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

Lane 3 : HeLa cell lysate

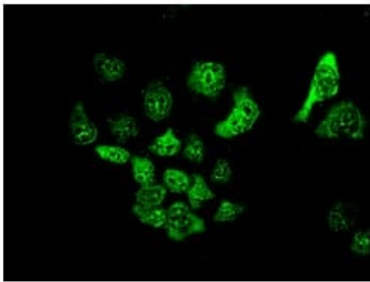
Lane 4 : Raji cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

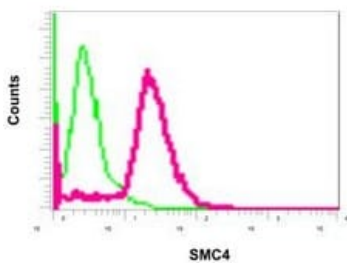
All lanes : Goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 147 kDa



Immunocytochemistry/ Immunofluorescence - Anti-SMC4 antibody [EPR13366] - C-terminal (ab179831)

Immunofluorescent analysis of HeLa cells labeling SMC4 with ab179831 at 1/50 dilution.



Flow Cytometry (Intracellular) - Anti-SMC4 antibody [EPR13366] - C-terminal (ab179831)

Intracellular flow cytometric analysis of permeabilized Raji cells using ab179831 at 1/10 (red) or a rabbit IgG negative (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-SMC4 antibody [EPR13366] - C-terminal
(ab179831)

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

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