


Anti-SMC4 antibody [EPR13366] - BSA and Azide free ab250130

Recombinant RabMAb

4 Images

Overview

Product name	Anti-SMC4 antibody [EPR13366] - BSA and Azide free
Description	Rabbit monoclonal [EPR13366] to SMC4 - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: WB, Flow Cyt (Intra), 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.
General notes	<p>ab250130 is the carrier-free version of ab179831.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <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>

Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Affinity purified
Clonality	Monoclonal
Clone number	EPR13366
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab250130 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		Use at an assay dependent concentration. Predicted molecular weight: 147 kDa.
Flow Cyt (Intra)		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.

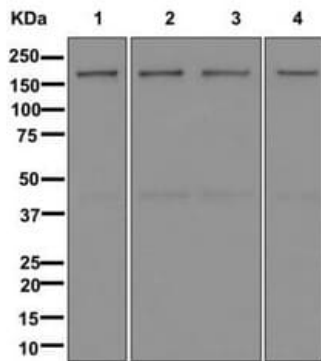
Application notes Is unsuitable for IHC-P or IP.

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] - BSA and Azide free (ab250130)

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

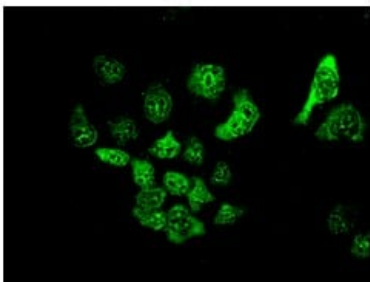
Lysates/proteins at 10 µg per lane.

Secondary

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

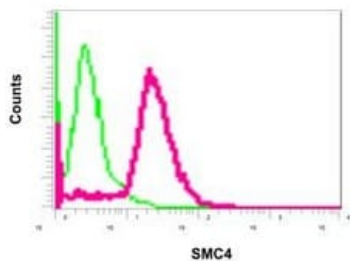
Predicted band size: 147 kDa

This data was developed using [ab179831](#), the same antibody clone in a different buffer formulation.



Immunocytochemistry/ Immunofluorescence - Anti-SMC4 antibody [EPR13366] - BSA and Azide free (ab250130)

This data was developed using [ab179831](#), the same antibody clone in a different buffer formulation. Immunofluorescent analysis of HeLa cells labeling SMC4 with [ab179831](#) at 1/50 dilution.



Flow Cytometry (Intracellular) - Anti-SMC4 antibody
[EPR13366] - BSA and Azide free (ab250130)

This data was developed using [**ab179831**](#), the same antibody clone in a different buffer formulation.

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] - BSA and Azide free (ab250130)

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