

SMC4/CAPC Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10674**Specification**

SMC4/CAPC Antibody - Product Information

Application	WB
Primary Accession	O9NTJ3
Other Accession	NP_005487.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	147182

SMC4/CAPC Antibody - Additional Information**Gene ID** 10051**Application & Usage**

Western blotting (1:200 - 1:2000).
However, the optimal concentrations should be determined individually. HEK293T cell lysate can be used as a positive control. The antibody recognizes the SMC4 of human origin. Reactivity to other species has not been tested.

Other Names

CAPC , SMC4 , SMC4L1 , hCAP-C

Target/Specificity

SMC4

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 µL affinity purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 1% BSA and 0.02% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

SMC4/CAPC Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

SMC4/CAPC Antibody - Protein Information

Name SMC4

Synonyms CAPC, SMC4L1

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.

Cellular Location

Nucleus. Cytoplasm. Chromosome. Note=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

Tissue Location

Widely expressed. Higher expression in testis, colon, thymus.

SMC4/CAPC Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

SMC4/CAPC Antibody - Images**SMC4/CAPC Antibody - Background**

The SMC (structural maintenance of chromosomes) family of proteins form heterodimeric complexes that modulate sister chromatid cohesion and chromosome condensation for mitosis. The two distinct classes of SMC protein complexes are comprised of SMC1 (also designated SB1.8) with SMC3 (also designated hCAP and Bamacan), and SMC2 (also designated hCAP-E for chromosome-associated polypeptide E) with hCAP-C. The SMC2/hCAP-C complex is required for mitotic chromosome condensation and functions independently of the SMC1/SMC3 complex during the cell cycle. Both SMC2 and hCAP-C are expressed throughout the cell cycle in a variety of cell lines, including HeLa cells, Daudi B cells, Jurkat T cells, SK2 neuronal cells, and HepG2 liver cells.