

SMC2 Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10573**Specification**

SMC2 Antibody - Product Information

Application	WB
Primary Accession	O95347
Other Accession	NP_006435.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	135656

SMC2 Antibody - Additional Information**Gene ID** 10592

Application & Usage	Western blotting (1:500 - 1:2000). However, the optimal concentrations should be determined individually. HEK293T cell lysate can be used as a positive control. The antibody recognizes the SMC2 of human origin. Reactivity to other species has not been tested.
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Other Names

SMC2, structural maintenance of chromosomes 2; SMC2L1, structural maintenance of chromosomes 2-like 1; CAPE, CAP-E, hCAP-E, human chromosome-associated protein E

Target/Specificity

SMC2

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

SMC2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

SMC2 Antibody - Protein Information

Name SMC2

Synonyms CAPE, SMC2L1

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

SMC2 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](#)

SMC2 Antibody - Images**SMC2 Antibody - Background**

Structural maintenance of chromosomes (SMC) proteins are part of the cohesin and condensin multisubunit complexes that play a critical role in chromosome organization, segregation, gene regulation, and DNA repair. The core condensin complex includes a heterodimer of SMC2 and SMC4 that functions to create positively supercoiled loops for chromatin condensation and metaphase chromatid shaping. A function for condensin in the DNA damage checkpoint response and gene repression has also been suggested.