

SMC4 Antibody

Rabbit mAb Catalog # AP92234

Specification

SMC4 Antibody - Product Information

Application	WB, FC, ICC
Primary Accession	<u>Q9NTJ3</u>
Clonality	Monoclonal
Other Names	
CAPC; hCAP C; hCAP-C; SMC 4; SMC4; SMC4I	L1; XCAP C homolog;

Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	147182 Da

SMC4 Antibody - Additional Information

Dilution	WB~~1:1000 FC~~1:10~50 ICC~~N/A
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human SMC4
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

SMC4 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 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

SMC4 Antibody - Images



Western blot analysis of SMC4 expression in Ramos cell lysate.