

SMC2 Antibody (C-term) Blocking Peptide

Synthetic peptide

Catalog # BP2611b

Specification

SMC2 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

[O95347](#)

Other Accession

[Q6IEE0](#)**SMC2 Antibody (C-term) Blocking Peptide - Additional Information**

Gene ID 10592

Other Names

Structural maintenance of chromosomes protein 2, SMC protein 2, SMC-2, Chromosome-associated protein E, hCAP-E, XCAP-E homolog, SMC2, CAPE, SMC2L1

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP2611b](/product/products/AP2611b) was selected from the C-term region of human SMC2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SMC2 Antibody (C-term) Blocking Peptide - 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 condensed 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 (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

SMC2 Antibody (C-term) Blocking Peptide - Images

SMC2 Antibody (C-term) Blocking Peptide - Background

SMC2 is a 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.

SMC2 Antibody (C-term) Blocking Peptide - References

Schmiesing, J.A., Proc. Natl. Acad. Sci. U.S.A. 95 (22), 12906-12911 (1998) Ham, M.F., Cancer Sci. 98 (7), 1041-1047 (2007)