

SMC3 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP14836c**Specification**

SMC3 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [Q9UQE7](#)**SMC3 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 9126**Other Names**

Structural maintenance of chromosomes protein 3, SMC protein 3, SMC-3, Basement membrane-associated chondroitin proteoglycan, Bamacan, Chondroitin sulfate proteoglycan 6, Chromosome-associated polypeptide, hCAP, SMC3, BAM, BMH, CSPG6, SMC3L1

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.

SMC3 Antibody (Center) Blocking Peptide - Protein Information**Name** SMC3**Synonyms** BAM, BMH, CSPG6, SMC3L1**Function**

Central component of cohesin, a complex required for chromosome cohesion during the cell cycle. The cohesin complex may form a large proteinaceous ring within which sister chromatids can be trapped. At anaphase, the complex is cleaved and dissociates from chromatin, allowing sister chromatids to segregate. Cohesion is coupled to DNA replication and is involved in DNA repair. The cohesin complex also plays an important role in spindle pole assembly during mitosis and in chromosomes movement.

Cellular Location

Nucleus {ECO:0000250|UniProtKB:Q9CW03}. Chromosome {ECO:0000250|UniProtKB:Q9CW03}. Chromosome, centromere {ECO:0000250|UniProtKB:Q9CW03}. Note=Associates with chromatin. Before prophase it is scattered along chromosome arms. During prophase, most of cohesin complexes dissociate from chromatin probably because of phosphorylation by PLK, except at centromeres, where cohesin complexes remain. At anaphase, the RAD21 subunit of the cohesin complex is cleaved, leading to the dissociation of the complex from chromosomes, allowing

chromosome separation. The phosphorylated form at Ser-1083 is preferentially associated with unsynapsed chromosomal regions (By similarity). {ECO:0000250|UniProtKB:Q9CW03}

SMC3 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

SMC3 Antibody (Center) Blocking Peptide - Images

SMC3 Antibody (Center) Blocking Peptide - Background

This gene belongs to the SMC3 subfamily of SMC proteins. The encoded protein occurs in certain cell types as either an intracellular, nuclear protein or a secreted protein. The nuclear form, known as structural maintenance of chromosomes 3, is a component of the multimeric cohesin complex that holds together sister chromatids during mitosis, enabling proper chromosome segregation. Post-translational modification of the encoded protein by the addition of chondroitin sulfate chains gives rise to this secreted proteoglycan, aggrecan, an abundant basement membrane protein.

SMC3 Antibody (Center) Blocking Peptide - References

Pie, J., et al. Am. J. Med. Genet. A 152A (4), 924-929 (2010) ; Terret, M.E., et al. Nature 462(7270):231-234(2009) Revenkova, E., et al. Hum. Mol. Genet. 18(3):418-427(2009) Ridinger, H., et al. Exp. Mol. Pathol. 86(1):23-31(2009) Mohan, K.V., et al. J. Neurovirol. 15(3):229-237(2009)