

**SMC3 Antibody**  
Rabbit mAb  
Catalog # AP91172

## Specification

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### SMC3 Antibody - Product Information

Application	WB, IHC, FC, ICC
Primary Accession	<a href="#">O9UQE7</a>
Reactivity	Rat
Clonality	Monoclonal
<b>Other Names</b>	
SMC protein 3; Bamacan; SMC3; BAM; BMH; CSPG6; SMC3L1;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	141542 Da

### SMC3 Antibody - Additional Information

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human SMC3
Description	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 plays also an important role in spindle pole assembly during mitosis and in chromosomes movement.
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.

### SMC3 Antibody - 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

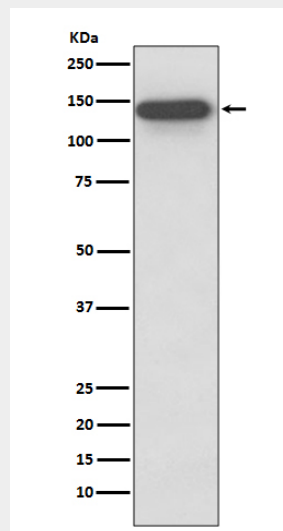
Nucleus {ECO:0000250|UniProtKB:Q9CW03}. Chromosome {ECO:0000250|UniProtKB:Q9CW03}. Chromosome, centromere {ECO:0000250|UniProtKB:Q9CW03}. Note=Associates with chromatin. Before prophase it is scattered along chromosome arms. During prophase, most of cohesin complexes dissociate from chromatin probably 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 - 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](#)

#### SMC3 Antibody - Images



Western blot analysis of SMC3 expression in HeLa cell lysate.