

# SMC3 Antibody

Rabbit mAb

Catalog # AP91172

## Product Information

|                          |                                                        |
|--------------------------|--------------------------------------------------------|
| <b>Application</b>       | WB, IHC, IF, FC, ICC, IHF                              |
| <b>Primary Accession</b> | <a href="#">Q9UQE7</a>                                 |
| <b>Reactivity</b>        | Rat, Human, Mouse                                      |
| <b>Clonality</b>         | Monoclonal                                             |
| <b>Other Names</b>       | SMC protein 3; Bamacan; SMC3; BAM; BMH; CSPG6; SMC3L1; |
| <b>Isotype</b>           | Rabbit IgG                                             |
| <b>Host</b>              | Rabbit                                                 |
| <b>Calculated MW</b>     | 141542                                                 |

## Additional Information

|                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Dilution</b>                     | WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 FC 1:50                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Purification</b>                 | Affinity-chromatography                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Immunogen</b>                    | A synthesized peptide derived from human SMC3                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Description</b>                  | 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. |
| <b>Storage Condition and Buffer</b> | 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.                                                                                                                                                                                                                                                                                                                               |

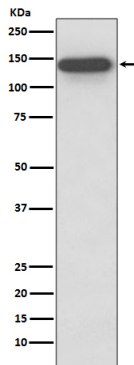
## Protein Information

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>              | SMC3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Synonyms</b>          | BAM, BMH, CSPG6, SMC3L1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Function</b>          | 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. |
| <b>Cellular Location</b> | 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}

## Images

---



Western blot analysis of SMC3 expression in HeLa cell lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.