

# SMC1 Rabbit mAb

Catalog No.: A4693

Recombinant

1 Publications

## Basic Information

### Observed MW

160kDa

### Calculated MW

143kDa

### Category

Primary antibody

### Applications

ELISA,WB,IF/ICC

### Cross-Reactivity

Human, Mouse

### CloneNo number

ARC1095

## Background

Proper cohesion of sister chromatids is a prerequisite for the correct segregation of chromosomes during cell division. The cohesin multiprotein complex is required for sister chromatid cohesion. This complex is composed partly of two structural maintenance of chromosomes (SMC) proteins, SMC3 and either SMC1B or the protein encoded by this gene. Most of the cohesin complexes dissociate from the chromosomes before mitosis, although those complexes at the kinetochore remain. Therefore, the encoded protein is thought to be an important part of functional kinetochores. In addition, this protein interacts with BRCA1 and is phosphorylated by ATM, indicating a potential role for this protein in DNA repair. This gene, which belongs to the SMC gene family, is located in an area of the X-chromosome that escapes X inactivation. Mutations in this gene result in Cornelia de Lange syndrome. Alternative splicing results in multiple transcript variants encoding different isoforms.

## Recommended Dilutions

WB 1:500 - 1:1000

IF/ICC 1:50 - 1:200

## Immunogen Information

### Gene ID

8243

### Swiss Prot

Q14683

### Immunogen

A synthetic peptide corresponding to a sequence within amino acids 1134-1233 of human SMC1 (Q14683).

### Synonyms

SMC1; SMCB; CDLS2; DEE85; SB1.8; EIEE85; SMC1L1; DXS423E; SMC1alpha

## Contact

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## Product Information

### Source

Rabbit

### Isotype

IgG

### Purification

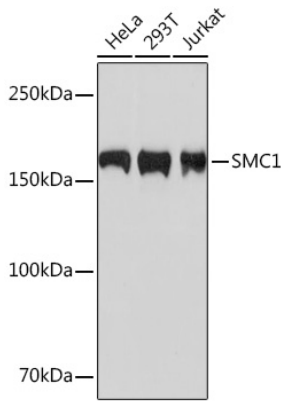
Affinity purification

### Storage

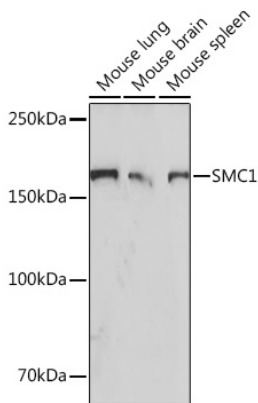
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide,0.05% BSA,50% glycerol,pH7.3.

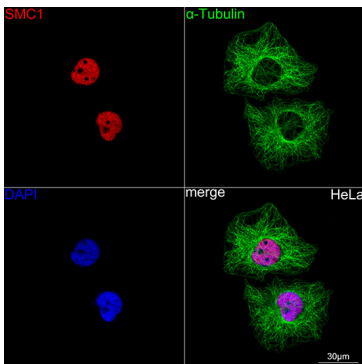
## Validation Data



Western blot analysis of extracts of various cell lines, using SMC1 Rabbit mAb (A4693) at 1:1000 dilution.  
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
Lysates/proteins: 25µg per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection: ECL Basic Kit (RM00020).  
Exposure time: 3s.



Western blot analysis of extracts of various cell lines, using SMC1 Rabbit mAb (A4693) at 1:1000 dilution.  
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
Lysates/proteins: 25µg per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection: ECL Basic Kit (RM00020).  
Exposure time: 10s.



Confocal imaging of HeLa cells using SMC1 Rabbit mAb (A4693, dilution 1:100) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) (Green). DAPI was used for nuclear staining (blue). Objective: 60x.