

A4693

Leader in Biomolecular Solutions for Life Science



SMC1 Rabbit mAb

Catalog No.: A4693

Recombinant

1 Publications

Basic Information

Observed MW

160kDa

Calculated MW

143kDa

Category

SMab Recombinant Monoclonal
Antibody

Applications

WB,IF/ICC,ELISA

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 1:1000 - 1:6000

IF/ICC 1:100 - 1:400

ELISA Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID

8243

Swiss Prot

Q14683

Immunogen

Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms

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

Contact

 www.abclonal.com

Product Information

Source

Rabbit

Isotype

IgG

Purification

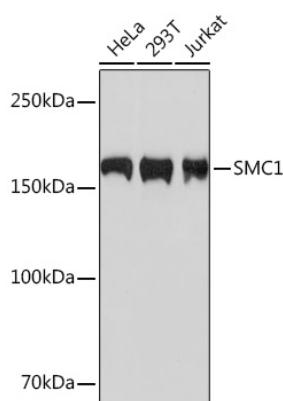
Affinity purification

Storage

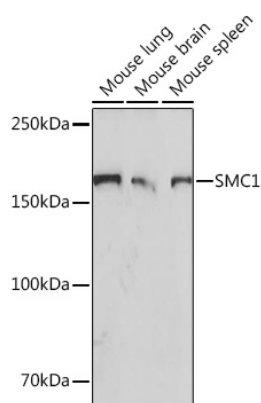
Store at -20°C. Avoid freeze / thaw cycles.

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

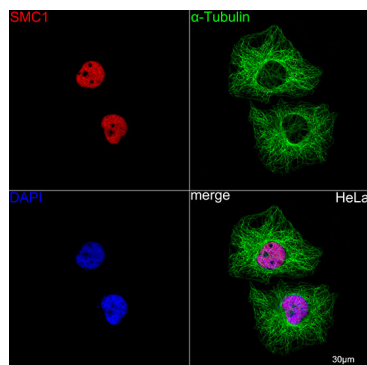
Validation Data



Western blot analysis of various lysates using SMC1 Rabbit mAb (A4693) at 1:1000 dilution.
Secondary antibody: HRP-conjugated 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 various lysates using SMC1 Rabbit mAb (A4693) at 1:1000 dilution.
Secondary antibody: HRP-conjugated 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.