SMC1A monoclonal antibody, clone C2M

Catalog # MAB2014 Size 100 ug

Applications

Western Blot (Cell lysate)

Western blotting using SMC1A monoclonal antibody, clone C2M (Cat # MAB2014) on HeLa cell lysate at 1 ug/mL .

Specification

Product Description	Mouse monoclonal antibody raised against partial recombinant SMC1A.
Immunogen	Recombinant protein corresponding to amino acids 402-894 of human SMC1A.
Host	Mouse
Reactivity	Human
Form	Liquid
Isotype	IgG
Quality Control Testing	Antibody Reactive Against Recombinant Protein.
Recommend Usage	Western blot (1 to 5 ug/mL) Immunofluorescence (5 to 10 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.08% sodium azide)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.

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Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Immunofluorescence
- Western Blot (Cell lysate)

  Western blotting using SMC1A monoclonal antibody, clone C2M (Cat # MAB2014) on HeLa cell lysate at 1 ug/mL .

Gene Info — SMC1A

Entrez GeneID	8243
Gene Name	SMC1A
Gene Alias	CDLS2, DKFZp686L19178, DXS423E, KIAA0178, MGC138332, SB1.8, SMC1, SMC1L1, SM C1alpha, SMCB
Gene Description	structural maintenance of chromosomes 1A
Omim ID	300040 300590
Gene Ontology	Hyperlink
Gene Summary	Proper cohesion of sister chromatids is a prerequisite for the correct segregation of chromosome s 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 SMC1L2 or the protein encoded by this gene. Most of the cohesin complexes di ssociate from the chromosomes before mitosis, although those complexes at the kinetochore rem ain. 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 r ole 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. [provided by RefSeq
Other Designations	OTTHUMP00000061876|SMC1 (structural maintenance of chromosomes 1, yeast)-like 1|SMC1 structural maintenance of chromosomes 1-like 1|segregation of mitotic chromosomes 1

Publication Reference

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- Association of mammalian SMC1 and SMC3 proteins with meiotic chromosomes and synaptonemal complexes.

  Eijpe M, Heyting C, Gross B, Jessberger R.

  Journal of Cell Science 2000 Feb; 113(Pt 4):673.

  Application: IF, WB-Ti, Rat, Spermatocytes, Testis

- Cloning and characterization of mammalian SMC1 and SMC3 genes and proteins, components of the DNA recombination complexes RC-1.

  Stursberg S, Riwar B, Jessberger R.

  Gene 1999 Mar; 228(1-2):1.

  Application: IF, WB-Ti, Mouse, 70/Z3, Mouse tissues, Spleen cells

- SMC1: an essential yeast gene encoding a putative head-rod-tail protein is required for nuclear division and defines a new ubiquitous protein family.

  Strunnikov AV, Larionov VL, Koshland D.

  The Journal of Cell Biology 1993 Dec; 123(6 Pt 2):1635.

Pathway

- Cell cycle

Disease

- De Lange Syndrome

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