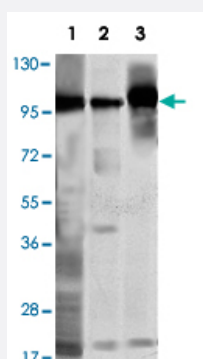


# SMC1A monoclonal antibody, clone 5B6

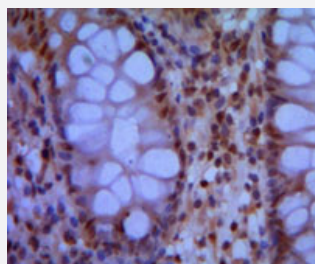
Catalog # MAB10393      Size 100 uL

## Applications



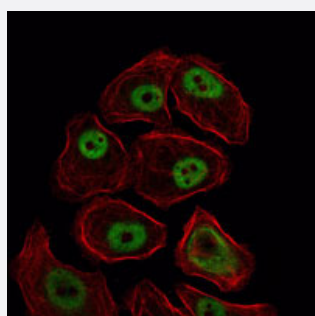
### Western Blot (Cell lysate)

Western blot analysis of SMC1A monoclonal antibody, clone 5B6 (Cat # MAB10393) against K-562 (1), Jurkat (2) and A-549 (3) cell lysate.



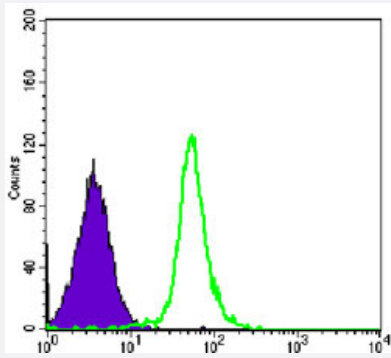
### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded human colon using SMC1A monoclonal antibody, clone 5B6 (Cat # MAB10393).



### Immunofluorescence

Immunofluorescence analysis of NIH/3T3 cells using SMC1A monoclonal antibody, clone 5B6 (Cat # MAB10393) (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



## Flow Cytometry

Flow cytometric analysis of HeLa cells using SMC1A monoclonal antibody, clone 5B6 (Cat # MAB10393) (green) and negative control (purple).

## Specification

Product Description	Mouse monoclonal antibody raised against recombinant SMC1A.
Immunogen	Recombinant protein corresponding to human SMC1A.
Host	Mouse
Theoretical MW (kDa)	143
Reactivity	Human
Form	Liquid
Isotype	IgG1
Recommend Usage	ELISA (1:10000) Western Blot (1:500-1:2000) Immunohistochemistry (1:200-1:1000) Immunofluorescence (1:200-1:1000) Flow cytometry (1:200-1:400) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.05% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

## Applications

- Western Blot (Cell lysate)

Western blot analysis of SMC1A monoclonal antibody, clone 5B6 (Cat # MAB10393) against K-562 (1), Jurkat (2) and A-549 (3) cell lysate.

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded human colon using SMC1A monoclonal antibody, clone 5B6 (Cat # MAB10393).

- Immunofluorescence

Immunofluorescence analysis of NIH/3T3 cells using SMC1A monoclonal antibody, clone 5B6 (Cat # MAB10393) (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

- Enzyme-linked Immunoabsorbent Assay

- Flow Cytometry

Flow cytometric analysis of HeLa cells using SMC1A monoclonal antibody, clone 5B6 (Cat # MAB10393) (green) and negative control (purple).

## 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

## Pathway

- [Cell cycle](#)

## Disease

- [De Lange Syndrome](#)