

Product Name: SMC1 Mouse Monoclonal Antibody**Catalog #: AMM80797**

For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB,IHC,ICC,ELISA,FC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Purified antibody in PBS with 0.05% sodium azide
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:200-1:1000,ICC 1:200-1:1000,ELISA 1:5000-1:20000,FC 1:200-1:400
Molecular Weight	143kDa

Antigen Information

Gene Name	SMC1
Alternative Names	SMC1; SMCB; CDLS2; SB1.8; SMC1L1; DXS423E; KIAA0178; MGC138332; SMC1alpha; DKFZp686L19178; SMC1A
Gene ID	8243.0
SwissProt ID	Q14683
Immunogen	Purified recombinant fragment of human SMC1 expressed in E. Coli.

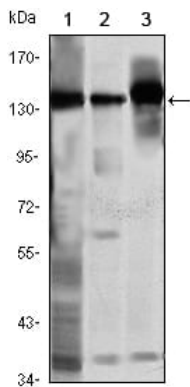
Background

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

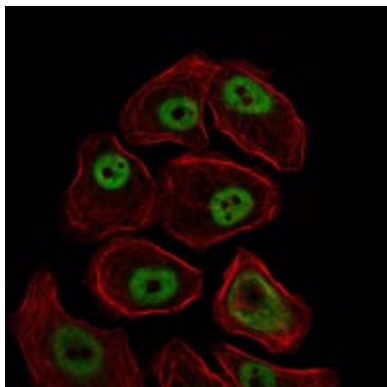
maintenance of chromosomes (SMC) proteins, SMC3 and either SMC1L2 or the protein encoded by this gene. Most of the cohesin complexes dissociate from the chromosomes before mitosis, although those complexes at the kinetochore remain. Therefore, the encoded protein is thought to be an important part of 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.

Research Area

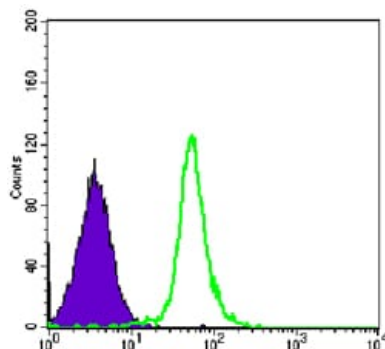
Image Data



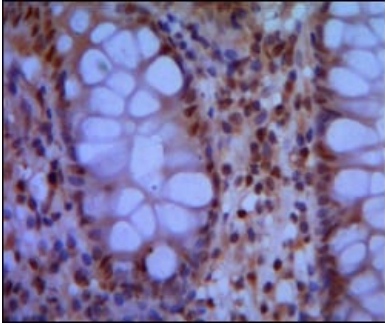
Western blot analysis using SMC1 mouse mAb against K562 (1), Jurkat (2) and A549 (3) cell lysate.



Immunofluorescence analysis of NIH/3T3 cells using SMC1 mouse mAb (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of HeLa cells using SMC1 mouse mAb (green) and negative control (purple).



Immunohistochemical analysis of paraffin-embedded human colon using SMC1 mouse mAb with DAB staining.