

Mouse Monoclonal Antibody to SMC1

Order Information		
Catalog#	20426	
Size/Concentration	100µl	50µl
Price(¥)	2180	1280

Description

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.

Specification

Aliases : SMC1; SMCB; CDLS2; SB1.8; SMC1L1; DXS423E; KIAA0178; MGC138332; SMC1alpha; DKFZp686L19178; SMC1A

Entrez GeneID : 8243

Swissprot : Q14683

clone : 5B6

WB Predicted band size : 143kDa

Host/Isotype : Mouse IgG1

Storage : Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Species Reactivity : Human

Immunogen : Purified recombinant fragment of human SMC1 expressed in E. Coli.

Formulation : Purified antibody in PBS with 0.05% sodium azide

Application		
WB	1/500 - 1/2000	
IHC	1/200 - 1/1000	
ICC	1/200 - 1/1000	
FCM	1/200 - 1/400	
ELISA	1/10000	

References

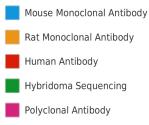
1. Cell Cycle. 2006 Nov 1;5(21):2537-42.

2. FEBS Lett. 2007 Jun 26;581(16):3005-12.

Protocal

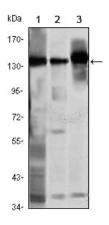
WB - www.promab.com/protocol/wb.html IHC - www.promab.com/protocol/ihc.html ICC - www.promab.com/protocol/icc.html HCM - www.promab.com/protocol/hcm.html **Antigen Sequence** is available upon request.



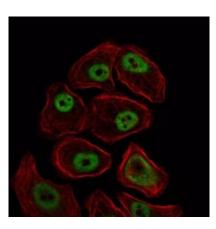




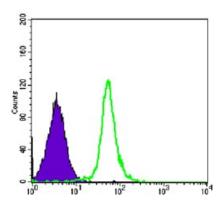
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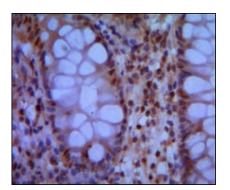
Western blot analysis using SMC1 mouse mAb against K562 (1), Jurkat (2) and A549 (3) cell lysate.



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 paraffinembedded human colon using SMC1 mouse mAb with DAB staining.

