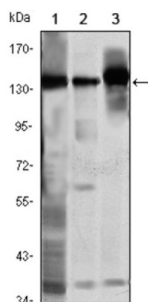
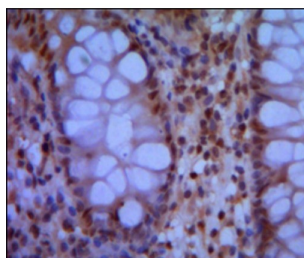


## Structural Maintenance of Chromosomes Protein 1A (SMC1) Antibody

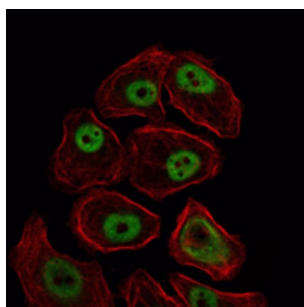
Catalogue No.: abx015996



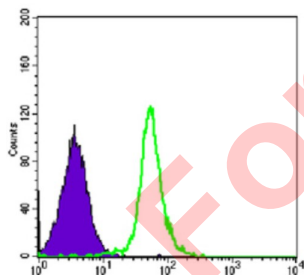
Western blot analysis using SMC1 antibody against K562 (1), Jurkat (2) and A549 (3) cell lysate.



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



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



Immunofluorescence analysis of NIH/3T3 cells using SMC1 antibody (green). Red: Actin filaments have been labeled with AF555 phalloidin.

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.

# Datasheet

Version: 3.0.0  
Revision date: 02 May 2025



<b>Target:</b>	Structural Maintenance of Chromosomes Protein 1A (SMC1)
<b>Clonality:</b>	Monoclonal
<b>Reactivity:</b>	Human
<b>Tested Applications:</b>	ELISA, WB, IHC, IF/ICC, FCM
<b>Host:</b>	Mouse
<b>Recommended dilutions:</b>	ELISA: 1/10000, WB: 1/500 - 1/2000, IHC: 1/200 - 1/1000, IF/ICC: 1/200 - 1/1000, FCM: 1/200 - 1/400. Optimal dilutions/concentrations should be determined by the end user.
<b>Conjugation:</b>	Unconjugated
<b>Immunogen:</b>	Purified recombinant fragment of human SMC1 expressed in E. coli.
<b>Isotype:</b>	IgG <sub>1</sub>
<b>Form:</b>	Liquid
<b>Purification:</b>	Purified from ascites by Protein G chromatography.
<b>Storage:</b>	Aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.
<b>UniProt Primary AC:</b>	Q14683 ( <a href="#">UniProt</a> , <a href="#">ExPASy</a> )
<b>Gene Symbol:</b>	SMC1A
<b>GeneID:</b>	<a href="#">8243</a>
<b>OMIM:</b>	<a href="#">300040</a>
<b>HGNC:</b>	11111
<b>KEGG:</b>	hsa:8243
<b>Ensembl:</b>	ENSG00000072501
<b>String:</b>	<a href="#">9606.ENSP00000323421</a>
<b>Molecular Weight:</b>	143 kDa
<b>Buffer:</b>	PBS, containing 0.05% sodium azide.

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Version: 3.0.0

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**Concentration:** 1 mg/ml

**Note:** THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.

For Reference Only