

Mouse anti-Human SMC1A Monoclonal Antibody | anti-SMC1A antibody

SMC1A(C-term) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA290468	Mouse	Human	Immunocytochemistry, Western Blot

PRODUCT SYNONYMS

SMC1A; Monoclonal Antibody; SMC1A(C-term) Antibody; Purified Mouse Monoclonal Antibody (Mab); Chromosome segregation protein SmcB; DXS423E; KIAA0178; MGC138332; Sb1.8; Segregation of mitotic chromosomes 1; SMC protein 1A; SMC-1-alpha; SMC-1A; SMC1 (structural maintenance of chromosomes 1 yeast) like 1; SMC1; SMC1 structural maintenance of chromosomes 1 like 1; SMC1A_HUMAN; SMC1alpha; SMC1L1; SMCB; Structural maintenance of chromosomes 1A; Structural maintenance of chromosomes protein 1A.; anti-SMC1A antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Form/Format	Purified mouse monoclonal antibody in PBS(pH 7.4) containing with 0.02% sodium azide and 50% glycerol.
Sequence Length	1233
Applicable Applications for anti-SMC1A antibody	ICC (Immunocytochemistry), WB (Western Blot)
Antigen Source	Human
Antigen Type	Recombinant Protein
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



ICC (Immunocytochemistry)

Immunocytochemistry staining of HeLa cells fixed with 4% Paraformaldehyde and using anti-SMC1A mouse mAb(dilution 1:100).



WB (Western Blot)

Western blot detection of SMC1A(C-term) in MOLT-4,U87 MG and HeLaNE cell lysates using SMC1A (N-terminus) mouse mAb (1:1000 diluted).Predicted band size: 143KDa.Observed band size: 143KDa.

ADDITIONAL INFORMATION

Related Product Information for anti-SMC1A antibody	Involved in chromosome cohesion during cell cycle and in DNA repair. Central component of cohesin complex. The cohesin complex is required for the cohesion of sister chromatids after DNA replication. The cohesin complex apparently forms a large proteinaceous ring within which sister chromatids can be trapped. At anaphase, the complex is cleaved and dissociates from chromatin, allowing sister chromatids to segregate. The cohesin complex may also play a role in spindle pole assembly during mitosis. Involved in DNA repair via its interaction with BRCA1 and its related phosphorylation by ATM, or via its phosphorylation by ATR. Works as a downstream effector both in the ATM/NBS1 branch and in the ATR/MSH2 branch of S-phase checkpoint.
Product Categories/Family for anti-SMC1A antibody	Cell Biology

References	Rocques P.J.,et al.Hum. Mol. Genet. 4:243-249(1995). Nagase T.,et al.DNA Res. 3:17-24(1996). Nakajima D.,et al.DNA Res. 9:99-106(2002). Ross M.T.,et al.Nature 434:325-337(2005). Yazdi P.T.,et al.Genes Dev. 16:571-582(2002).
------------	---

NCBI AND UNIPROT INFORMATION

NCBI GI #	30581135
NCBI GeneID	8243
NCBI Accession #	NP_006297.2
NCBI GenBank Nucleotide #	NM_006306.3
UniProt Accession #	Q14683; O14995; Q16351; Q2M228
Molecular Weight	143233
NCBI Official Full Name	structural maintenance of chromosomes protein 1A isoform 1
NCBI Official Synonym Full Names	structural maintenance of chromosomes 1A
NCBI Official Symbol	SMC1A
NCBI Official Synonym Symbols	SMC1; SMCB; CDLS2; SB1.8; SMC1L1; DXS423E; SMC1alpha
NCBI Protein Information	structural maintenance of chromosomes protein 1A
UniProt Protein Name	Structural maintenance of chromosomes protein 1A
UniProt Gene Name	SMC1A
UniProt Synonym Gene Names	DXS423E; KIAA0178; SB1.8; SMC1; SMC1L1; SMC protein 1A; SMC-1-alpha; SMC-1A
UniProt Entry Name	SMC1A_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.