

# SMC1A(C-term) Antibody

Purified Mouse Monoclonal Antibody (Mab)

Catalog # AP52668

## Product Information

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<b>Application</b>	WB, ICC
<b>Primary Accession</b>	<a href="#">Q14683</a>
<b>Reactivity</b>	Human
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	IgG1
<b>Calculated MW</b>	143 KDa

## Additional Information

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<b>Other Names</b>	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;SMC1A_HUMAN;SMC1alpha;SMC1L1;SMCB;Structural maintenance of chromosomes 1A;Structural maintenance of chromosomes protein 1A.
<b>Dilution</b>	WB~~1:1000 ICC~~1:100
<b>Format</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

## Protein Information

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### Background

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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.

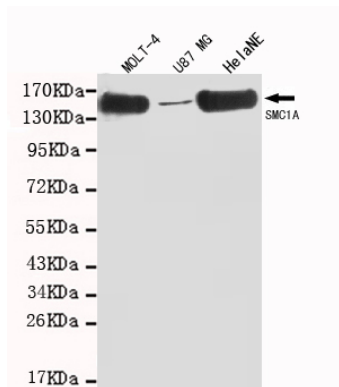
## References

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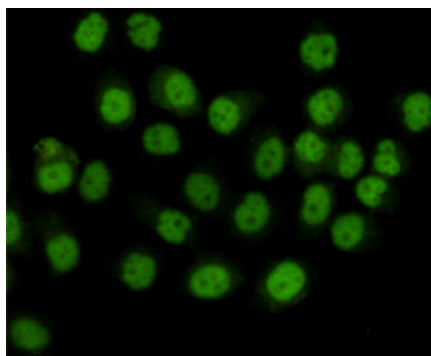
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Yazdi P.T.,et al.Genes Dev. 16:571-582(2002).

## Images

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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.



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.