

## SMC1(Ab-957) Antibody

Catalog No: #21190

Package Size: #21190-1 50ul #21190-2 100ul

## Description

Product Name	SMC1(Ab-957) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.
Applications	WB IHC
Species Reactivity	Hu
Specificity	The antibody detects endogenous level of total SMC1 protein.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around aa. 955~959 (G-S-S-Q-G) derived from Human SMC1.
Conjugates	Unconjugated
Target Name	SMC1
Other Names	SM1A; SMC1A; SMC1L1; SMC1 alpha protein;
Accession No.	Swiss-Prot: Q14683NCBI Protein: NP_006297.2
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

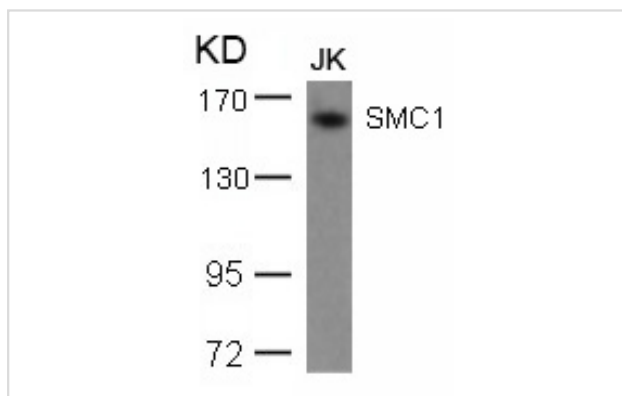
## Application Details

Predicted MW: 145kd

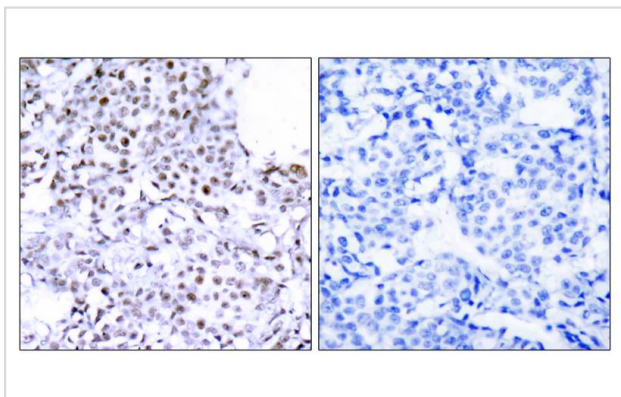
Western blotting: 1:500~1:1000

Immunohistochemistry: 1:50~1:100

## Images



Western blot analysis of extracts from JK cells using SMC1(Ab-957) Antibody #21190.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using SMC1(Ab-957) Antibody #21190(left) or the same antibody preincubated with blocking peptide(right).

## Background

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.

Yang XM. et al. (2004) Mol Cell Biol. 24(12): 5290-5303.

Kim ST. et al. (2002) Genes Dev. 16(5): 560-570.

Revenkova E. et al. (2001) Mol Cell Biol. 21(20): 6984-6998

Note: This product is for in vitro research use only and is not intended for use in humans or animals.