



Datasheet for ABIN7138735
anti-SMC1A antibody (pSer957)



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2 Images

Overview

Quantity:	100 µL
Target:	SMC1A
Binding Specificity:	pSer957
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SMC1A antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA

Product Details

Immunogen:	Peptide sequence around phosphorylation site of serine 957 (G-S-S(p)-Q-G) derived from Human SMC1.
Isotype:	IgG
Cross-Reactivity:	Human, Mouse
Purification:	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using

Target Details

Target:	SMC1A
Alternative Name:	SMC1A (SMC1A Products)

Target Details

Background: 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

Aliases: Chromosome segregation protein SmcB antibody, DXS423E antibody, KIAA0178 antibody, MGC138332 antibody, Sb1.8 antibody, Segregation of mitotic chromosomes 1 antibody, SMC protein 1A antibody, SMC-1-alpha antibody, SMC-1A antibody, SMC1 (structural maintenance of chromosomes 1 yeast) like 1 antibody, SMC1 antibody, SMC1 structural maintenance of chromosomes 1 like 1 antibody, SMC1A antibody, SMC1A_HUMAN antibody, SMC1alpha antibody, SMC1L1 antibody, SMCB antibody, Structural maintenance of chromosomes 1A antibody, Structural maintenance of chromosomes protein 1A antibody

UniProt: [Q14683](#)

Pathways: [Stem Cell Maintenance](#)

Application Details

Application Notes: WB:1:500-1:1000, IHC:1:50-1:100,

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: Supplied at 1.0 mg/mL in phosphate buffered saline (without Mg²⁺ and Ca²⁺), pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which

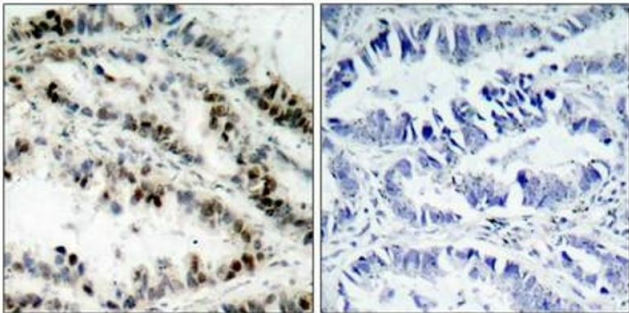
Handling

should be handled by trained staff only.

Storage: -20 °C,-80 °C

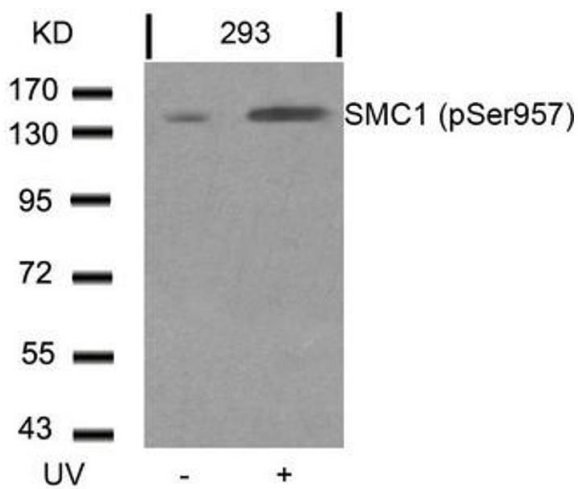
Storage Comment: Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



Immunohistochemistry

Image 1. Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue using SMC1(Phospho-Ser957) Antibody(left) or the same antibody preincubated with blocking peptide(right).



Western Blotting

Image 2. Western blot analysis of extracts from 293 cells untreated or treated with UV using SMC1(Phospho-Ser957) Antibody.