

Rabbit anti-Human SMC1A-S957 Antibody | anti-SMC1A antibody

Phospho-SMC1A-S957 Polyclonal Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA36761	Rabbit	Human	Immunofluorescence, Immunohistochemistry, Western Blot

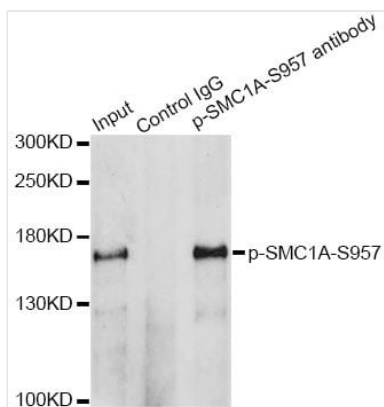
PRODUCT SYNONYMS

SMC1A-S957; Phospho-SMC1A-S957 Polyclonal Antibody; Phospho-SMC1A-S957: SMC1; SMCB; CDLS2; SB1.8; SMC1L1; DXS423E; SMC1alpha; anti-SMC1A antibody

PRODUCT SPECIFICATIONS

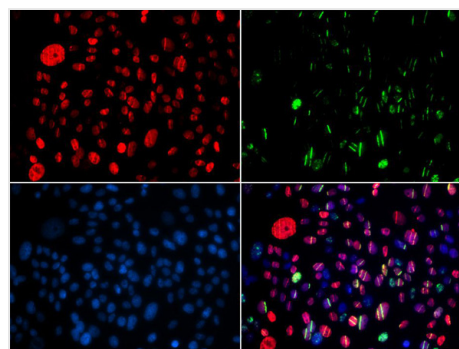
Host	Rabbit
Reactivity	Human
Isotype	IgG
Purity/Purification	Affinity Purification
Concentration	1mg/ml (varies by lot)
Sequence Length	1233
Applicable Applications for anti-SMC1A antibody	IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Species	Human
Route	Synthetic Peptide
Immunogen	A phospho specific peptide corresponding to residues surrounding S957 of human SMC1A
Calculated Molecular Weight	143kDa
Preparation and Storage	Store at -20 degree C (regular) or -80 degree C (long term). Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

IMAGES



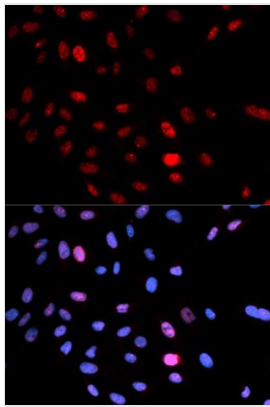
IP (Immunoprecipitation)

Immunoprecipitation analysis of 200ug extracts of HeLa cells treated by UV using 2.5ug Phospho-SMC1A-S957 antibody. Western blot was performed from the immunoprecipitate using Phospho-SMC1A-S957 antibody at a dilution of 1:1000.



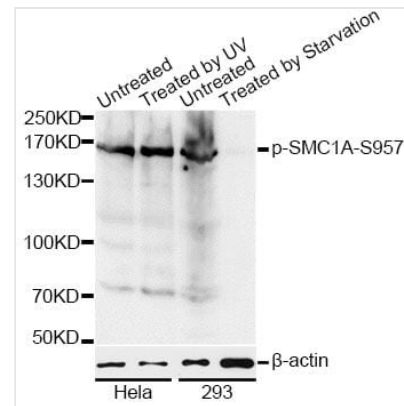
IF (Immunofluorescence)

Immunofluorescence analysis of GFP-RNF168 transgenic U2OS cells using Phospho-SMC1A-S957 antibody. Green:GFP-RNF168 fusion protein expression for DNA damage marker. Blue: DAPI for nuclear staining. RNF168(GFP) can be used to mark cells damaged by UV-A laser for they always gather around DNA damage region.



IF (Immunofluorescence)

Immunofluorescence analysis of U2OS cells using Phospho-SMC1A-S957 antibody. Blue: DAPI for nuclear staining.



WB (Western Blot)

Western blot analysis of extracts of HeLa and 293 cells, using Phospho-SMC1A-S957 antibody at 1:1000 dilution. HeLa cells were treated by UV for 15-30 minutes. 293 cells were treated by serum-starvation overnight. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% BSA.

ADDITIONAL INFORMATION

Related Product Information for anti-SMC1A antibody	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 SMC1B 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. Mutations in this gene result in Cornelia de Lange syndrome. Alternative splicing results in multiple transcript variants encoding different isoforms.
Product Categories/Family for anti-SMC1A antibody	Phosphorylation

NCBI AND UNIPROT INFORMATION

NCBI GI #	29336622
NCBI GeneID	8243
UniProt Accession #	Q14683 ; O14995 ; Q16351 ; Q2M228
Molecular Weight	1233
NCBI Official Full Name	Structural maintenance of chromosomes protein 1A
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; SMC-1-alpha; SMC protein 1A; segregation of mitotic chromosomes 1; SMC1 (structural maintenance of chromosomes 1, yeast)-like 1
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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://www.aaabiotech.com/rabbit-human-antibody/smc1a-s957/36761>