

# Phospho-SMC1A-S957 Antibody kit

**Catalog No.: RK05750**

## Basic Information

**Observed MW**

160kDa

**Calculated MW**

143kDa

**Category**

Primary antibody

## Recommended Dilutions

**AP0090 WB** 1:500 - 1:2000**A7008 WB** 1:500 - 1:2000For more information please visit  
[www.abclonal.com](http://www.abclonal.com)


## Product Information

**Source** Rabbit  
**Isotype** IgG**Purification**

Affinity purification

**Storage**Store at -20°C. Avoid freeze / thaw cycles.  
Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

## Contact

 | 400-999-6126 | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn) | [www.abclonal.com.cn](http://www.abclonal.com.cn)

## Background

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.

## Component

Catalog No.	Product Name	Applications	Cross-Reactivity
AP0090	Phospho-SMC1-S957 Rabbit pAb	ELISA, WB, IHC-P, IP	Human, Mouse, Rat
A7008	SMC1 Rabbit pAb	ELISA, WB	Human, Mouse, Rat

## Immunogen Information

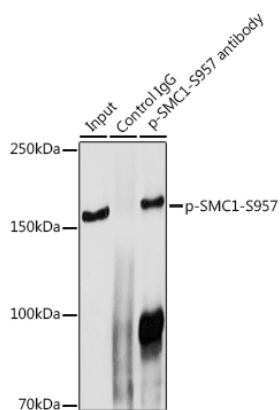
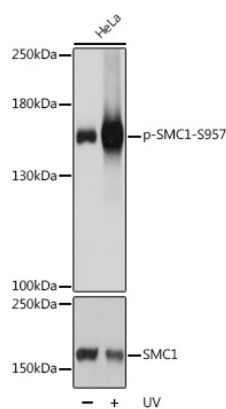
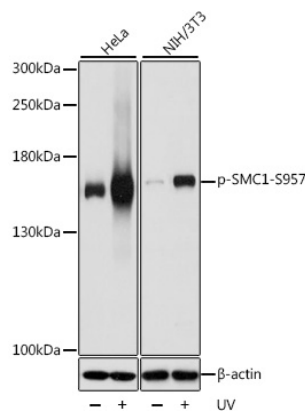
**Gene ID**  
8243**Swiss Prot**  
Q14683**Immunogen**

A synthetic phosphorylated peptide around S957 of human SMC1A (NP\_006297.2).  
Recombinant fusion protein containing a sequence corresponding to amino acids 1-130 of human SMC1 (NP\_006297.2).

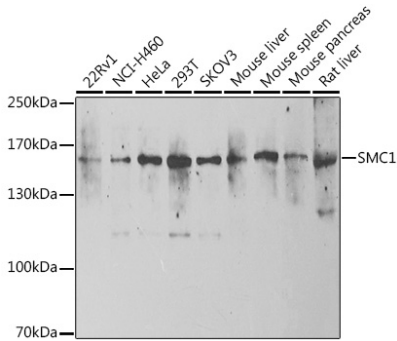
**Synonyms**

SMC1A;CDLS2;DXS423E;SB1.8;SMC1;SMC1L1;SMC1alpha;SMCB

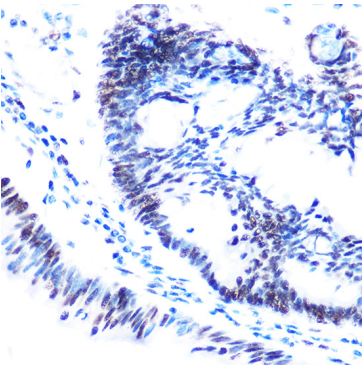
Validation Data



## Validation Data



Western blot analysis of extracts of various cell lines, using SMC1 antibody (A7008) at 1:1000 dilution.  
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
Lysates/proteins: 25µg per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection: ECL Basic Kit (RM00020).  
Exposure time: 90s.



Immunohistochemistry analysis of Phospho-SMC1-S957 in paraffin-embedded human colon carcinoma using Phospho-SMC1-S957 Rabbit pAb (AP0090) at dilution of 1:100 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.