

Phospho-SMC1-S957 Rabbit pAb

Catalog No.: AP0090

Basic Information

Observed MW

160kDa

Calculated MW

143kDa

Category

Primary antibody

Applications

ELISA,WB,IHC-P,IP

Cross-Reactivity

Human, Mouse, Rat

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.

Recommended Dilutions

WB 1:500 - 1:2000**IHC-P** 1:50 - 1:200**IP** 0.5µg-4µg antibody for
200µg-400µg extracts of
whole cells

Immunogen Information

Gene ID

8243

Swiss Prot

Q14683

Immunogen

A synthetic phosphorylated peptide around S957 of human SMC1A (NP_006297.2).

Synonyms

SMC1; SMCB; CDLS2; DEE85; SB1.8; EIEE85; SMC1L1; DXS423E; SMC1alpha; Phospho-SMC1-S957

Contact

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Product Information

Source

Rabbit

Isotype

IgG

Purification

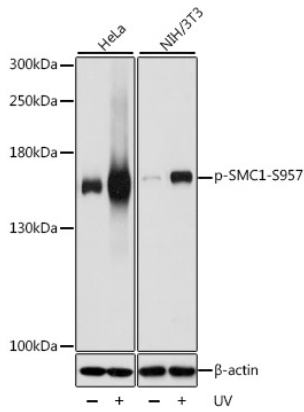
Affinity purification

Storage

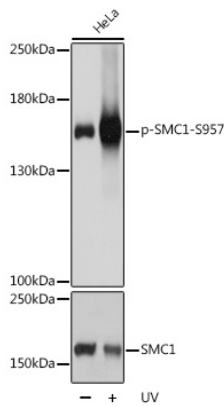
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.

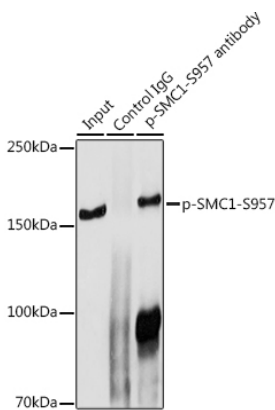
Validation Data



Western blot analysis of various lysates, using Phospho-SMC1-S957 Rabbit pAb (AP0090) at 1:1000 dilution. HeLa and NIH/3T3 cells were treated by UV at room temperature for 15-30 minutes. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% BSA. Detection: ECL Basic Kit (RM00020). Exposure time: 3s.

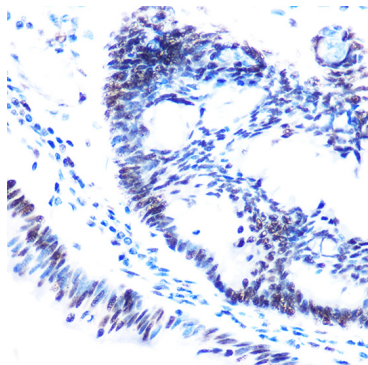


Western blot analysis of lysates from HeLa cells, using Phospho-SMC1-S957 Rabbit pAb (A7008). HeLa cells were treated by UV at room temperature for 15-30 minutes. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% BSA. Detection: ECL Basic Kit (RM00020). Exposure time: 3s.



Immunoprecipitation analysis of 300 µg extracts of HeLa cells using 3 µg Phospho-SMC1-S957 antibody (AP0090). Western blot was performed from the immunoprecipitate using Phospho-SMC1-S957 antibody (AP0090) at a dilution of 1:1000.

Validation Data



Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma using Phospho-SMC1-S957 Rabbit pAb (AP0090) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.