Phospho-SMC1-S957 Rabbit pAb

Catalog No.: AP0090



Basic Information

Observed MW 160kDa

Calculated MW 143kDa

Category Polyclonal Antibody

Applications WB,IHC-P,IP,ELISA

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
ELISA	Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Contact

Ð

www.abclonal.com

Immunogen Information

Gene ID 8243 Swiss Prot Q14683

Immunogen

Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms

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

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 with 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 with 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.



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 buffer (pH 6.0) prior to IHC staining.

Validation Data



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.