

AP1145

Leader in Biomolecular Solutions for Life Science



Phospho-SMC1-S957 Rabbit mAb

Catalog No.: AP1145

Recombinant

Basic Information

Observed MW

160kDa

Calculated MW

143kDa

Category

SMab Recombinant Monoclonal
Antibody

Applications

WB,IHC-P,ELISA

Cross-Reactivity

Human,Mouse,Rat

CloneNo number

ARC1606

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

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

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

Contact

 www.abclonal.com

Product Information

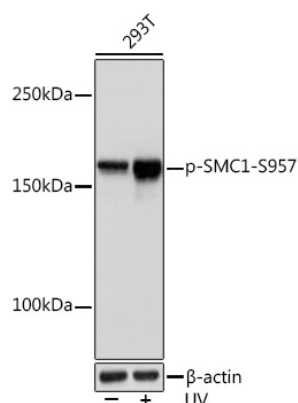
Source
Rabbit**Isotype**
IgG**Purification**
Affinity purification

Storage

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

Buffer: PBS with 0.02% sodium azide, 0.05% BSA, 50% glycerol, pH7.3.

Validation Data



Western blot analysis of lysates from 293T cells, using Phospho-SMC1-S957 Rabbit mAb (AP1145) at 1:1000 dilution. 293T cells were treated with UV at room temperature for 15-30 minutes.

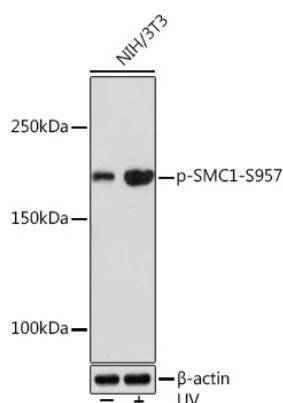
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% BSA.

Detection: ECL Basic Kit (RM00020).

Exposure time: 1s.



Western blot analysis of lysates from NIH/3T3 cells, using Phospho-SMC1-S957 Rabbit mAb (AP1145) at 1:1000 dilution. NIH/3T3 cells were treated with UV at room temperature for 15-30 minutes.

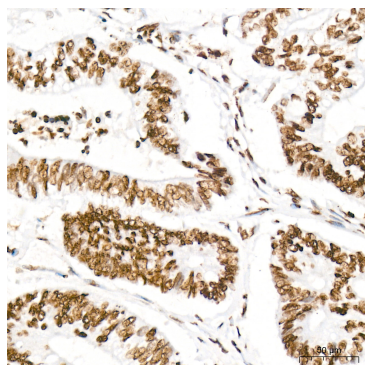
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

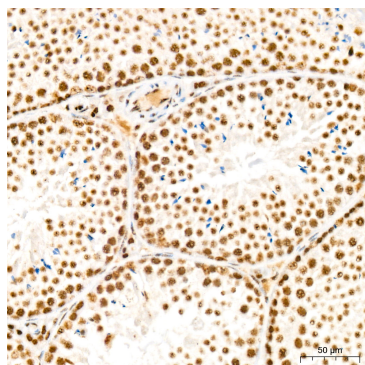
Blocking buffer: 3% BSA.

Detection: ECL Enhanced Kit (RM00021).

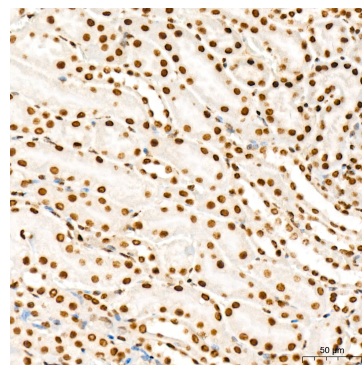
Exposure time: 3min.



Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma tissue using Phospho-SMC1-S957 Rabbit mAb (AP1145) at a dilution of 1:200 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.

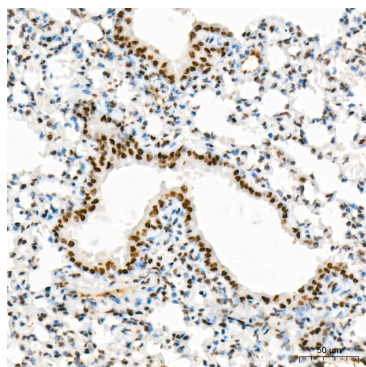


Immunohistochemistry analysis of paraffin-embedded Mouse testis tissue using Phospho-SMC1-S957 Rabbit mAb (AP1145) at a dilution of 1:200 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse kidney tissue using Phospho-SMC1-S957 Rabbit mAb (AP1145) at a dilution of 1:200 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.

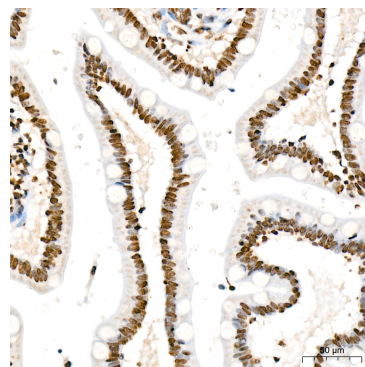
Validation Data



Immunohistochemistry analysis of paraffin-embedded Rat lung tissue using Phospho-SMC1-S957 Rabbit mAb (AP1145) at a dilution of 1:200 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human esophagus tissue using Phospho-SMC1-S957 Rabbit mAb (AP1145) at a dilution of 1:200 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human small intestine tissue using Phospho-SMC1-S957 Rabbit mAb (AP1145) at a dilution of 1:200 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.