

SMC1(Phospho-Ser957) Antibody

Catalog No: #11198



Package Size: #11198-1 50ul #11198-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

Description

| | |
|-----------------------|---|
| Product Name | SMC1(Phospho-Ser957) Antibody |
| Host Species | Rabbit |
| Clonality | Polyclonal |
| Purification | Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide. |
| Applications | WB IHC |
| Species Reactivity | Hu |
| Specificity | The antibody detects endogenous level of SMC1 only when phosphorylated at serine 957. |
| Immunogen Type | Peptide-KLH |
| Immunogen Description | Peptide sequence around phosphorylation site of serine 957 (G-S-S(p)-Q-G) derived from Human SMC1. |
| Target Name | SMC1 |
| Modification | Phospho |
| Other Names | SM1A; SMC1A; SMC1L1; SMC1 alpha protein; |
| Accession No. | Swiss-Prot: Q14683NCBI Protein: NP_006297.2 |
| Uniprot | Q14683 |
| GeneID | 8243; |
| Concentration | 1.0mg/ml |
| Formulation | Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. |
| Storage | Store at -20°C for long term preservation (recommended). Store at 4°C for short term use. |

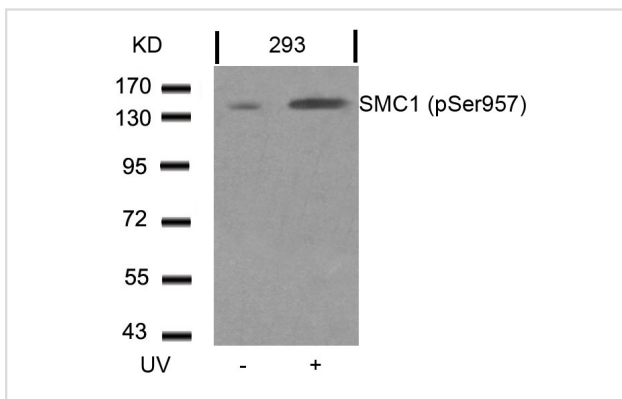
Application Details

Predicted MW: 145kd

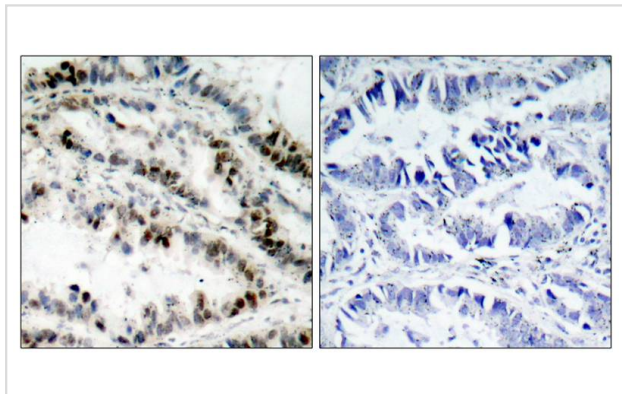
Western blotting: 1:500~1:1000

Immunohistochemistry: 1:50~1:100

Images



Western blot analysis of extracts from 293 cells untreated or treated with UV using SMC1(Phospho-Ser957) Antibody #11198.



Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue using SMC1(Phospho-Ser957) Antibody #11198(left) or the same antibody preincubated with blocking peptide(right).

Background

Involved in chromosome cohesion during cell cycle and in DNA repair. Central component of cohesin complex. The cohesin complex is required for the cohesion of sister chromatids after DNA replication. The cohesin complex apparently forms a large proteinaceous ring within which sister chromatids can be trapped. At anaphase, the complex is cleaved and dissociates from chromatin, allowing sister chromatids to segregate. The cohesin complex may also play a role in spindle pole assembly during mitosis. Involved in DNA repair via its interaction with BRCA1 and its related phosphorylation by ATM, or via its phosphorylation by ATR. Works as a downstream effector both in the ATM/NBS1 branch and in the ATR/MSH2 branch of S-phase checkpoint.

Yang XM. et al. (2004) *Mol Cell Biol.* 24(12): 5290-5303.

Kim ST. et al. (2002) *Genes Dev.* 16(5): 560-570.

Revenkova E. et al. (2001) *Mol Cell Biol.* 21(20): 6984-6998

Note: This product is for in vitro research use only