

35-1186: Polyclonal Antibody to SMC1 (Phospho-Ser957)

Clonality :	Polyclonal
Application :	WB,IHC
Reactivity :	Human
Gene :	SMC1A
Gene ID :	8243
Uniprot ID :	Q14683
Format :	Purified
Alternative Name :	SM1A, SMC1A, SMC1L1, SMC1 alpha protein
Isotype :	Rabbit IgG
Immunogen Information :	Peptide sequence around phosphorylation site of serine 957 (G-S-S(p)-Q-G) derived from Human SMC1.

Description

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.

Product Info

Amount :	50 µl / 100 µl
Content :	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 condition :	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

Predicted MW: 145kd, Western blotting: 1:500~1:1000, Immunohistochemistry: 1:50~1:100

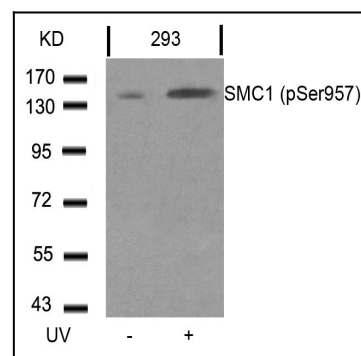


Figure 1: Western blot analysis of extracts from 293 cells untreated or treated with UV using SMC1(Phospho-Ser957) Antibody 35-1186 .

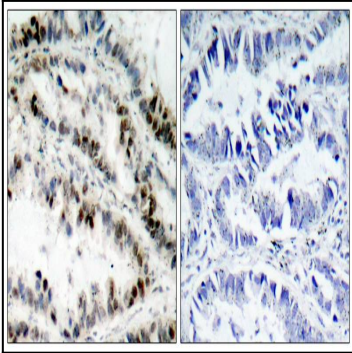


Figure 2: Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue using SMC1(Phospho-Ser957) Antibody 35-1186 (left) or the same antibody preincubated with blocking peptide(right).