

Product datasheet for **TA381769**

SMC1 (SMC1A) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, IP, WB
Recommended Dilution:	WB,1:500 - 1:2000 IHC,1:50 - 1:200 IP,1:50 - 1:100
Reactivity:	Human, Mouse, Rat
Modifications:	Phospho S957
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	A synthetic phosphorylated peptide around S957 of human SMC1A (NP_006297.2).
Formulation:	Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C. Avoid freeze / thaw cycles.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	143kDa
Gene Name:	structural maintenance of chromosomes 1A
Database Link:	Entrez Gene 8243 Human Q14683



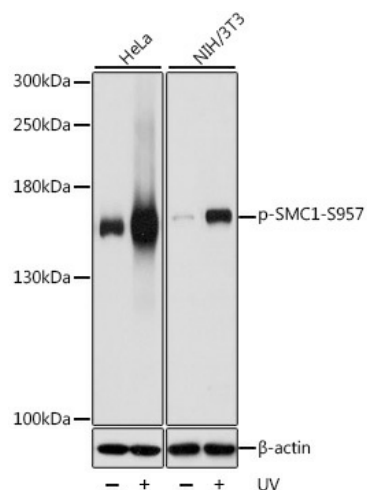
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Background:

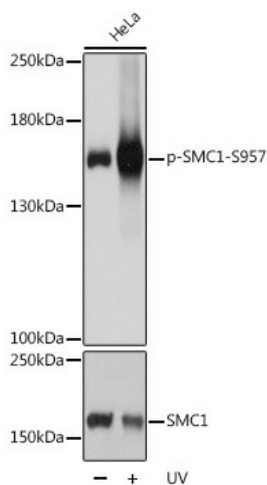
Proper cohesion of sister chromatids is a prerequisite for the correct segregation of chromosomes during cell division. The cohesin multiprotein complex is required for sister chromatid cohesion. This complex is composed partly of two structural maintenance of chromosomes (SMC) proteins, SMC3 and either 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.

Synonyms:

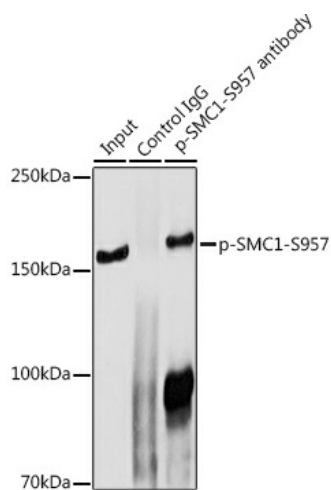
CDLS2; DKFZp686L19178; DXS423E; KIAA0178; MGC138332; SB1.8; SMC1; SMC1alpha; SMC1L1; SMCB

Product images:

Western blot analysis of extracts of various cell lines, using Phospho-SMC1-S957 antibody (TA381769) at 1:1000 dilution. HeLa and NIH/3T3 cells were treated by UV for 15-30 minutes. | Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. | Lysates/proteins: 25ug per lane. | Blocking buffer: 3% BSA. | Detection: ECL Basic Kit. | Exposure time: 3s.



Western blot analysis of extracts of HeLa cells, using Phospho-SMC1-S957 pAb (TA381769) at 1:1000 dilution or SMC1A antibody (A7008). HeLa cells were treated by UV at room temperature for 15-30 minutes. | Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. | Lysates/proteins: 25ug per lane. | Blocking buffer: 3% BSA. | Detection: ECL Basic Kit. | Exposure time: 3s.



Immunoprecipitation analysis of 300ug extracts of HeLa cells using 3ug Phospho-SMC1-S957 antibody (TA381769). Western blot was performed from the immunoprecipitate using Phospho-SMC1-S957 antibody (TA381769) at a dilution of 1:1000.