

## SMC1 (phospho Ser957) rabbit pAb

Cat No.: ES7659

For research use only

## Overview

Product Name SMC1 (phospho Ser957) rabbit pAb

Host species Rabbit

**Applications** WB;IHC;IF;ELISA **Species Cross-Reactivity** Human;Mouse

**Recommended dilutions** Western Blot: 1/500 - 1/2000.

Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications.

Immunogen The antiserum was produced against synthesized

peptide derived from human SMC1 around the phosphorylation site of Ser957. AA range:931-980

**Specificity** Phospho-SMC1 (S957) Polyclonal Antibody detects

endogenous levels of SMC1 protein only when

phosphorylated at S957.

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and

0.02% sodium azide.

Storage Store at -20°C. Avoid repeated freeze-thaw cycles.

Protein Name Structural maintenance of chromosomes protein 1A

Gene Name SMC1A

**Cellular localization** Nucleus . Chromosome . Chromosome, centromere,

kinetochore. Associates with chromatin. Before prophase it is scattered along chromosome arms. During prophase, most of cohesin complexes dissociate from chromatin probably because of

phosphorylation by PLK,

**Purification** The antibody was affinity-purified from rabbit

antiserum by affinity-chromatography using

epitope-specific immunogen.

Clonality Polyclonal
Concentration 1 mg/ml
Observed band 143kD
Human Gene ID 8243
Human Swiss-Prot Number Q14683

Alternative Names SMC1A; DXS423E; KIAA0178; SB1.8; SMC1; SMC1L1;



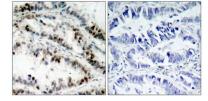
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**Background** 

Structural maintenance of chromosomes protein 1A; SMC protein 1A; SMC-1-alpha; SMC-1A; Sb1.8 structural maintenance of chromosomes 1A(SMC1A) Homo sapiens 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. Altern

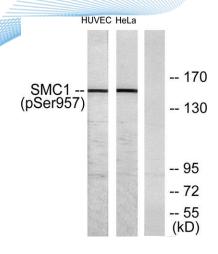
Immunohistochemistry analysis of paraffin-embedded human lung carcinoma, using SMC1 (Phospho-Ser957) Antibody. The picture on the right is blocked with the phospho peptide.



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Western blot analysis of lysates from HUVEC cells treated with EGF 200ng/ml 5'/HeLa cells treated with EGF 200ng/ml 15', using SMC1 (Phospho-Ser957) Antibody. The lane on the right is blocked with the phospho peptide.



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