ELK Biotechnology

SMC1 (phospho Ser966) rabbit pAb

Cat No.:ES7660

For research use only

Overview

Product Name	SMC1 (phospho Ser966) rabbit pAb
Host species	Rabbit
Applications	WB;IHC;IF;ELISA
Species Cross-Reactivity	Human;Mouse;Rat
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 Ser966. AA range:932-981
Specificity	Phospho-SMC1 (S966) Polyclonal Antibody detects endogenous levels of SMC1 protein only when phosphorylated at S966.
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	160kD
Human Gene ID	8243
Human Swiss-Prot Number	Q14683
Alternative Names	SMC1A; DXS423E; KIAA0178; SB1.8; SMC1; SMC1L1;

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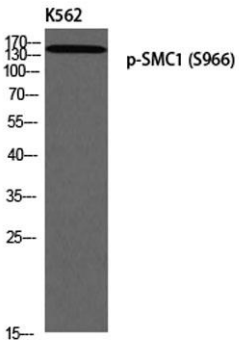
Background

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



Western blot analysis of K562 using p-SMC1 (S966) antibody.

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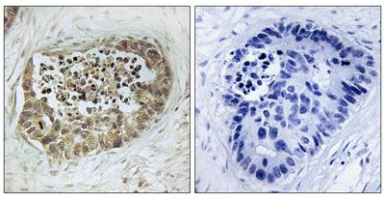
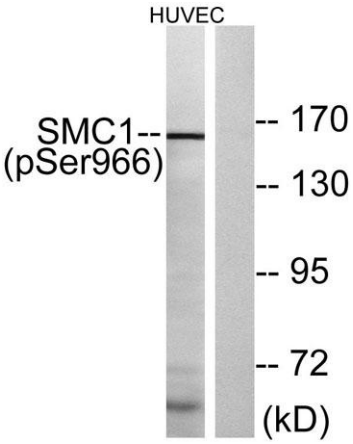


Immunohistochemistry analysis of paraffin-embedded human lung carcinoma, using SMC1 (Phospho-Ser966) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HUVEC cells treated with etoposide 24uM 24h, using SMC1 (Phospho-Ser966) Antibody. The lane on the right is blocked with the phospho peptide.

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