

# **SMC1** Polyclonal Antibody

## Description

Product type Primary Antibody

Code BT-AP08400

Host Rabbit

Isotype IgG

Size 20ul, 50ul, 100ul

Immunogen The antiserum was produced against synthesized peptide derived from human SMC1. AA range:931-980

Mol wt 143233

Species reactivity Human, Mouse

Clonality Polyclonal

Recommended application WB, IHC-p, ELISA

Concentration 1 mg/ml

Full name SMC1 Antibody

Synonyms SMC1A; DXS423E; KIAA0178; SB1.8; SMC1; SMC1L1; Structural maintenance of chromosomes protein

1A; SMC protein 1A; SMC-1-alpha; SMC-1A; Sb1.8

This product is for research use only, not for use in human, therapeutic or diagnostic procedure.

#### Background

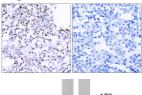
Proper cohesion of sister chromatids is a prerequisite for the correct segregation of chromosomes during cell division. The cohesin multiprotein complex is required for sister chromatid cohesion. This complex is composed partly of two structural maintenance of chromosomes (SMC) proteins, SMC3 and either 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. SMC1A (structural maintenance of chromosomes 1A), which belongs to the SMC gene family, is located in an area of the X-chromosome that escapes X inactivation. Mutations in SMC1A result in Cornelia de Lange syndrome. Alternative splicing results in multiple transcript variants encoding different isoforms.

## Recommended Dilution

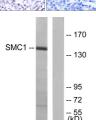
WB: 1: 500 - 1: 2000 IHC: 1: 100 - 1: 300 ELISA: 1: 10000

Not yet tested in other applications.

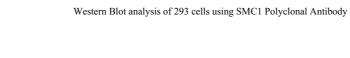
### **Images**



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using SMC1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from 293 cells, treated with UV 15', using SMC1 Antibody. The lane on the right is blocked with the synthesized peptide.



## Storage

-20°C for one year

 $501\ Changsheng\ S\ Rd,\ Nanhu\ Dist,\ Jiaxing,\ Zhejiang,\ China$  Tel: 86 21 31007137 | E-mail: save@bt-laboratory.com | www.bt-laboratory.com