

# **SMC1** Monoclonal Antibody

## Description

Product type Antibody

Code BT-MCA2882

Host Mouse

 Isotype
 Mouse IgG1

 Size
 100μL, 50μL

Immunogen Purified recombinant fragment of human SMC1 expressed in E. Coli.

Mol wt 143kDa

Species reactivity Human

Clonality Monoclonal

Recommended

WB,IHC,ICC,FCM

application

Concentration N/A

Full name N/A

Synonyms SMC1;SMCB;CDLS2;SB1.8;SMC1L1;DXS423E;KIAA0178;MGC138332;SMC1alpha;DKFZp686L19178;SMC1A

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 SMC1L2 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.

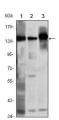
#### **Recommended Dilution**

WB: 1:500 - 1:2000 IHC-p: 1:200 - 1:1000 ICC: 1:200 - 1:1000 FCM: 1:200 - 1:400

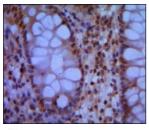
ELISA: 1:10000

Not yet tested in other applications.

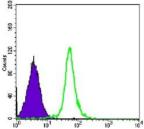
## Images



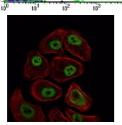
Western blot analysis using SMC1 mouse mAb against K562 (1), Jurkat (2) and A549 (3) cell lysate.



Immunohistochemical analysis of paraffin-embedded human colon using SMC1 mouse mAb with DAB staining.



Flow cytometric analysis of Hela cells using SMC1 mouse mAb (green) and negative control (purple).



 $Immun of luorescence\ analysis\ of\ NIH/3T3\ cells\ using\ SMC1\ mouse\ mAb\ (green).\ Red:\ Actin\ filaments\ have\ been\ labeled\ with\ Alexa\ Fluor-555\ phalloidin.$ 

# Storage

Store at 4°C short term. Aliquot and store at -20°C long term.

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