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Product datasheet for TA347052

SMC1 (SMC1A) Mouse Monoclonal Antibody [Clone ID: 4C5-C8-A11]

Product data:

Product Type: Primary Antibodies

Clone Name: 4C5-C8-A11

Applications: IF, WB

Recommend Dilution: WB: 1:1000, IF: 1:100

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: The immunogen for SMC1A antibody: purified recombinant human SMC1A(C-term.) protein

fragments expressed in E.coli.

Formulation: Purified mouse monoclonal antibody in PBS(pH 7.4) containing with 0.02% sodium azide and

50% glycerol.

Purification: Affinity purified

Predicted Protein Size: 143 kDa

Gene Name: structural maintenance of chromosomes 1A

Database Link: NP 006297 Entrez Gene 8243 Human

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. [provided by RefSeq, Jul 2008]

Synonyms: CDLS2; DXS423E; SB1.8; SMC1; SMC1alpha; SMC1L1; SMCB

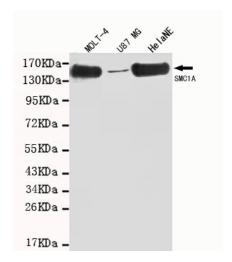
Protein Families: Druggable Genome



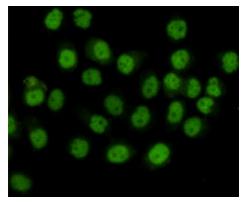


Protein Pathways: Cell cycle, Oocyte meiosis

Product images:



Western blot detection of SMC1A (C-term) in MOLT-4, U87 MG and HelaNE cell lysates using SMC1A (N-terminus) mouse mAb (1:1000 diluted).Predicted band size: 143KDa.Observed band size: 143KDa.



Immunocytochemistry staining of HeLa cells fixed with 4% Paraformaldehyde and using anti-SMC1A mouse mAb (dilution 1:100).