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SMC1B Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP13852C

Specification

SMC1B Antibody (Center) - Product Information

Application	**IHC-P, WB,E**
Primary Accession	Q8NDV3
Other Accession	NP_683515.3
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**143789**
Antigen Region	**737-765**

SMC1B Antibody (Center) - Additional Information

Gene ID 27127

Other Names
Structural maintenance of chromosomes protein 1B, SMC protein 1B, SMC-1-beta, SMC-1B, SMC1B, SMC1L2

Target/Specificity
This SMC1B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 737-765 amino acids from the Central region of human SMC1B.

Dilution
IHC-P~~1:10~50
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
SMC1B Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

SMC1B Antibody (Center) - Protein Information

Name SMC1B

Synonyms SMC1L2

Function Meiosis-specific component of cohesin complex. Required for the maintenance of meiotic cohesion, but not, or only to a minor extent, for its establishment. Contributes to axial element (AE) formation and the organization of chromatin loops along the AE. Plays a key role in synapsis, recombination and chromosome movements. The cohesin complex is required for the cohesion of sister chromatids after DNA replication. The cohesin complex apparently forms a large proteinaceous ring within which sister chromatids can be trapped. At anaphase, the complex is cleaved and dissociates from chromatin, allowing sister chromatids to segregate. The meiosis-specific cohesin complex probably replaces mitosis specific cohesin complex when it dissociates from chromatin during prophase I (By similarity).

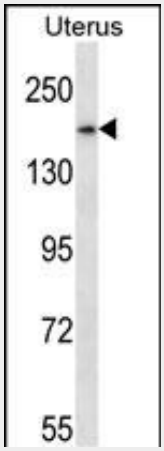
Cellular Location
Nucleus {ECO:0000250|UniProtKB:Q920F6}. Chromosome {ECO:0000250|UniProtKB:Q920F6}. Chromosome, centromere {ECO:0000250|UniProtKB:Q920F6}. Note=Associates with chromatin. In prophase I stage of meiosis, localizes along the AE of synaptonemal complexes. In late-pachytene-diplotene, the bulk of protein dissociates from the chromosome arms probably because of phosphorylation by PLK, except at centromeres, where cohesin complexes remain. Remains chromatin associated at the centromeres up to metaphase II. At anaphase II, dissociates from centromeres, allowing chromosomes segregation (By similarity). {ECO:0000250|UniProtKB:Q920F6}

SMC1B Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SMC1B Antibody (Center) - Images



SMC1B Antibody (Center) (Cat. #AP13852c) western blot analysis in human normal Uterus tissue lysates (35ug/lane).This demonstrates the SMC1B antibody detected the SMC1B protein (arrow).

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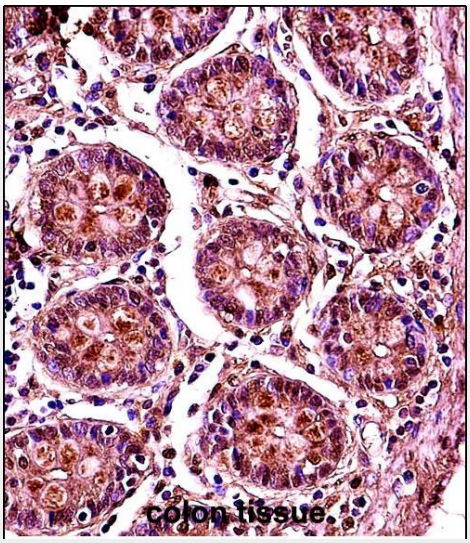

SMC1B Antibody (Center) (Cat. #AP13852c)immunohistochemistry analysis in formalin fixed and paraffin embedded human colon tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of SMC1B Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

SMC1B Antibody (Center) - Background

SMC1L2 belongs to a family of proteins required for chromatid cohesion and DNA recombination during meiosis and mitosis (3:Revenkova et al., 2001 [PubMed 11564881]).

SMC1B Antibody (Center) - References

Cobbe, N., et al. Mol. Biol. Evol. 21(2):332-347(2004) Revenkova, E., et al. Mol. Cell. Biol. 21(20):6984-6998(2001) Harrington, J.J., et al. Nat. Biotechnol. 19(5):440-445(2001)