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Product datasheet for TA321759

SMC1 (SMC1A) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:500-1000, IHC: 1:50-100
Reactivity:	Human, Mouse
Modifications:	Phospho-specific
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Peptide sequence around phosphorylation site of serine 957 (G-S-S(p)-Q-G) derived from Human SMC1.
Formulation:	PBS pH7.3, 0.05% NaN3, 50% glycerol
Concentration:	lot specific
Purification:	Antigen affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	143 kDa
Gene Name:	structural maintenance of chromosomes 1A
Database Link:	NP_006297 Entrez Gene 24061 MouseEntrez Gene 8243 Human Q14683

View online »

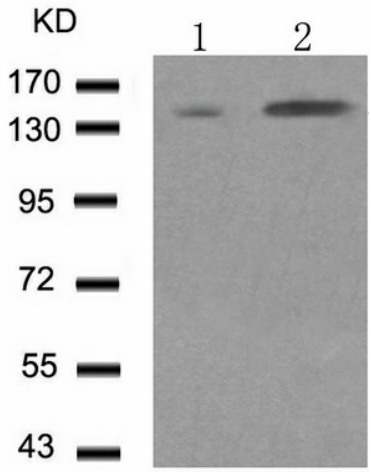
Background: Involved in chromosome cohesion during cell cycle and in DNA repair. Central component of cohesin complex. The cohesin complex is required for the cohesion of sister chromatids after DNA replication. The cohesin complex apparently forms a large proteinaceous ring within which sister chromatids can be trapped. At anaphase, the complex is cleaved and dissociates from chromatin, allowing sister chromatids to segregate. The cohesin complex may also play a role in spindle pole assembly during mitosis. Involved in DNA repair via its interaction with BRCA1 and its related phosphorylation by ATM, or via its phosphorylation by ATR. Works as a downstream effector both in the ATM/NBS1 branch and in the ATR/MSH2 branch of S-phase checkpoint.

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

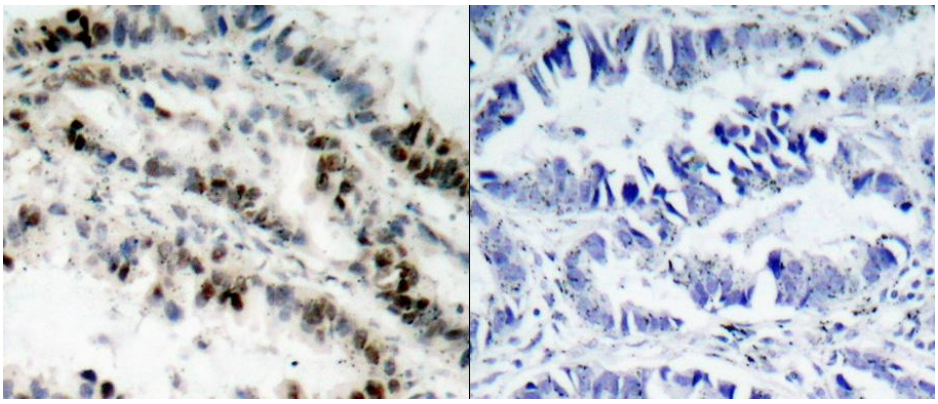
Protein Families: Druggable Genome

Protein Pathways: Cell cycle, Oocyte meiosis

Product images:



Predicted band size: 143 kDa. Positive control: 293 cells untreated or treated with UV lysate. Recommended dilution: 1/ 500-1000. (Gel: 8%SDS-PAGE Lane 1: 293 cells untreated with UV lysate Lane 2: 293 cells treated with UV lysate Lysates: 30 ug per lane Primary antibody: 1/500 dilution Secondary antibody: Goat anti Rabbit IgG - H&L (HRP) at 1/10000 dilution Exposure time: 1 minute)



Predicted cell location: Nucleus. Positive control: Human lung carcinoma tissue. Recommended dilution: 1/ 50-100 The image on the left is immunohistochemistry of paraffin-embedded human lung carcinoma tissue using SMC1A (Phospho-Ser957) antibody at dilution 1/50, on the right is treated with the synthetic peptide. (Original magnification:x200)