

Rabbit Anti-SMC1A Polyclonal Antibody

CPB-1082RH Rabbit(SMC1A)

Lot. No. (See product label)

PRODUCT INFORMATION

Product Overview	Rabbit Anti-SMC1A Polyclonal Antibody
Antigen Description	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.
specificity	The antibody detects endogenous level of total SMC1A protein.
Target	SMC1A
Immunogen	Peptide sequence around aa. 955-959 (G-S-S-Q-G) derived from Human SMC1A
Host	Rabbit
Species	Human
Cross Reactivity	Human; Mouse
conjugation	N/A
Applications	WB,IHC

PACKAGING

Format	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C /1 year

ANTIGEN GENE INFORMATION

Gene Name	SMC1A structural maintenance of chromosomes 1A [Homo sapiens]
Official Symbol	SMC1A
Synonyms	SMC1A; structural maintenance of chromosomes 1A; SMC1 (structural maintenance of chromosomes 1, yeast) like 1 , SMC1 structural maintenance of chromosomes 1 like 1 (yeast) , SMC1L1; structural maintenance of chromosomes protein 1A; DXS423E; KIAA0178; SB1.8; Smcb; SMC-1A; SMC-1-alpha; SMC protein 1A; segregation of mitotic chromosomes 1; SMC1 structural maintenance of chromosomes 1-like 1; SMC1 (structural maintenance of chromosomes 1, yeast)-like 1; SMC1; SMCB; CDLS2; SMC1L1; SMC1alpha; MGC138332; DKFZp686L19178;
GeneID	8243
mRNA Refseq	NM_006306
Protein Refseq	NP_006297
MIM	300040

UniProt ID	Q14683
Chromosome Location	Xp11.22-p11.21
Pathway	Cell Cycle, organism-specific biosystem; Cell Cycle, Mitotic, organism-specific biosystem; Cell cycle, organism-specific biosystem; Cell cycle, organism-specific biosystem; Cell cycle, conserved biosystem; Chromosome Maintenance, organism-specific biosystem; DNA Replication, organism-specific biosystem;
Function	ATP binding; chromatin binding; microtubule motor activity; nucleotide binding; protein binding; protein heterodimerization activity;