



Swiss-Prot No.:	Q14683
Altename:	SMC1A
Storage/Stability:	Store at -20°C. Avoid freeze / thaw cycles.
Immunogen:	Recombinant fusion protein containing a sequence corresponding to amino acids 1-130 of human SMC1A (NP_006297.2).
Purification:	Affinity purified
Reactivity:	Human
Other Names:	SMC1; SMCB; CDLS2; SB1.8; SMC1L1; DXS423E; SMC1alpha
Cellular localization:	Centromere, Chromosome, Kinetochore, Nucleus
Relevance:	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.
Source:	Rabbit
Antibody type:	Polyclonal antibody
Isotype:	Rabbit IgG
Molecular Weight:	143kDa
Preservative:	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Recommended Dilutions:	IF 1:50 - 1:200(Optimal dilutions should be determined by the end user)