

KD-Validated Anti-SMC4 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody

Catalog # AGI1744

Product Information

Application	WB, FC, ICC
Primary Accession	Q9NTJ3
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	24GB2400
Calculated MW	147182
Gene Name	SMC4
Aliases	SMC4; Structural Maintenance Of Chromosomes 4; HCAP-C; SMC4L1; CAP-C; Structural Maintenance Of Chromosomes Protein 4; Chromosome-Associated Polypeptide C; SMC Protein 4; SMC-4; CAPC; SMC4 (Structural Maintenance Of Chromosomes 4, Yeast)-Like 1; SMC4 Structural Maintenance Of Chromosomes 4-Like 1 (Yeast); SMC4 Structural Maintenance Of Chromosomes 4-Like 1; XCAP-C Homolog
Immunogen	A synthesized peptide derived from human SMC4

Additional Information

Gene ID	10051
Other Names	Structural maintenance of chromosomes protein 4, SMC protein 4, SMC-4, Chromosome-associated polypeptide C, hCAP-C, XCAP-C homolog, SMC4, CAPC, SMC4L1

Protein Information

Name	SMC4
Synonyms	CAPC, SMC4L1
Function	Central component of the condensin complex, a complex required for conversion of interphase chromatin into mitotic-like condense chromosomes. The condensin complex probably introduces positive supercoils into relaxed DNA in the presence of type I topoisomerases and converts nicked DNA into positive knotted forms in the presence of type II topoisomerases.
Cellular Location	Nucleus. Cytoplasm. Chromosome. Note=In interphase cells, the majority of the condensin complex is found in the cytoplasm, while a minority of the complex is associated with chromatin. A subpopulation of the complex however remains associated with chromosome foci in interphase cells. During mitosis, most of the condensin complex is associated with the chromatin. At the onset of prophase, the regulatory subunits of the complex are

phosphorylated by CDC2, leading to condensin's association with chromosome arms and to chromosome condensation. Dissociation from chromosomes is observed in late telophase

Tissue Location

Widely expressed. Higher expression in testis, colon, thymus.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.