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SMC2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2611b

Product Information

Application	WB, E
Primary Accession	O95347
Other Accession	Q6IEE0
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB14711
Calculated MW	135656
Antigen Region	1166-1197

Additional Information

Gene ID	10592
Other Names	Structural maintenance of chromosomes protein 2, SMC protein 2, SMC-2, Chromosome-associated protein E, hCAP-E, XCAP-E homolog, SMC2, CAPE, SMC2L1
Target/Specificity	This SMC2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1166-1197 amino acids from the C-terminal region of human SMC2.
Dilution	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 prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	SMC2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SMC2
Synonyms	CAPE, SMC2L1

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

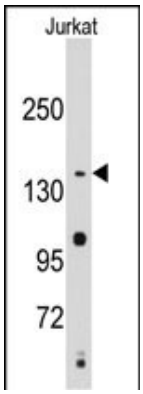
Background

SMC2 is a 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.

References

Schmiesing,J.A., Proc. Natl. Acad. Sci. U.S.A. 95 (22), 12906-12911 (1998)
Ham,M.F., Cancer Sci. 98 (7), 1041-1047 (2007)

Images



Western blot analysis of anti-SMC2 Antibody (C-term) (Cat.#AP2611b) in Jurkat cell line lysates (35ug/lane). SMC2(arrow) was detected using the purified Pab.