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NCAPH Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18809c

Product Information

Application	WB, IHC-P, E
Primary Accession	Q15003
Other Accession	NP_056156.2
Reactivity	Human
Predicted	Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB39349
Calculated MW	82563
Antigen Region	354-382

Additional Information

Gene ID	23397
Other Names	Condensin complex subunit 2, Barren homolog protein 1, Chromosome-associated protein H, hCAP-H, Non-SMC condensin I complex subunit H, XCAP-H homolog, NCAPH, BRRN, BRRN1, CAPH, KIAA0074
Target/Specificity	This NCAPH antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 354-382 amino acids from the Central region of human NCAPH.
Dilution	WB~~1:1000 IHC-P~~1:100 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	NCAPH Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NCAPH {ECO:0000303|PubMed:27737959, ECO:0000312|HGNC:HGNC:1112}
Function	Regulatory subunit 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 (PubMed:11136719). Early in neurogenesis, may play an essential role to ensure accurate mitotic chromosome condensation in neuron stem cells, ultimately affecting neuron pool and cortex size (PubMed:27737959).
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 CDK1, leading to condensin's association with chromosome arms and to chromosome condensation. Dissociation from chromosomes is observed in late telophase
Tissue Location	Widely expressed at low level. Expressed in proliferating cells.

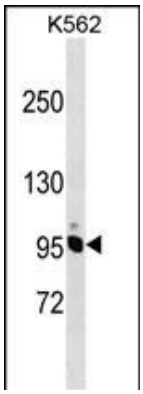
Background

This gene encodes a member of the barr gene family and a regulatory subunit of the condensin complex. This complex is required for the conversion of interphase chromatin into condensed chromosomes. The protein encoded by this gene is associated with mitotic chromosomes, except during the early phase of chromosome condensation. During interphase, the protein has a distinct punctate nucleolar localization.

References

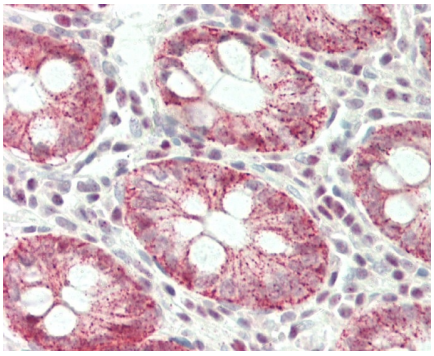
Olsen, J.V., et al. Cell 127(3):635-648(2006)
Beausoleil, S.A., et al. Nat. Biotechnol. 24(10):1285-1292(2006)
Nousiainen, M., et al. Proc. Natl. Acad. Sci. U.S.A. 103(14):5391-5396(2006)
Nousiainen, M., et al. Proc. Natl. Acad. Sci. U.S.A. 103(14):5391-5396(2006)
Heale, J.T., et al. Mol. Cell 21(6):837-848(2006)

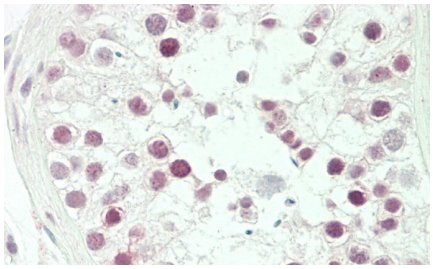
Images



NCAPH Antibody (Center)(Cat. #AP18809c) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the NCAPH antibody detected the NCAPH protein (arrow).

Formalin-fixed and paraffin-embedded H.colon tissue reacted with NCAPH Antibody (Center) (Cat#AP18809c).





Formalin-fixed and paraffin-embedded H.testis tissue reacted with NCAPH Antibody (Center) (Cat#AP18809c).

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