

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 Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB39349 **Calculated MW** 82563 354-382 **Antigen Region**

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.

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store Storage

at -20°C in small aliquots to prevent freeze-thaw cycles.

NCAPH Antibody (Center) is for research use only and not for use in **Precautions**

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.

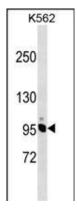
Background

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

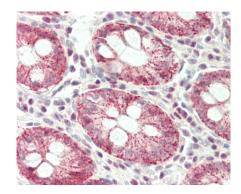
Olsen, J.V., et al. Cell 127(3):635-648(2006) Beausoleil, S.A., et al. Nat. Biotechnol. 24(10):1285-1292(2006) Nousiainen, M., et al. Proc. Natl. Acad. Sci. U.S.A. 103(14):5391-5396(2006) Nousiainen, M., et al. Proc. Natl. Acad. Sci. U.S.A. 103(14):5391-5396(2006) Heale, J.T., et al. Mol. Cell 21(6):837-848(2006)

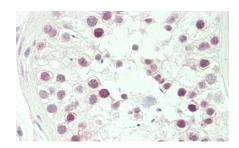
Images



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'.