

## **NCAPH Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18809c

## **Specification**

## **NCAPH Antibody (Center) - Product Information**

WB, IHC-P,E Application **Primary Accession** 015003 Other Accession NP 056156.2 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Antigen Region 354-382

## NCAPH Antibody (Center) - 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.

## NCAPH Antibody (Center) - 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**

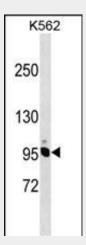
Widely expressed at low level. Expressed in proliferating cells.

#### **NCAPH Antibody (Center) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

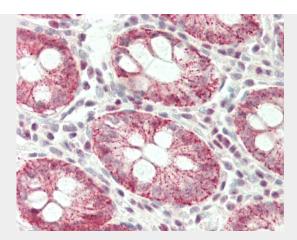
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# NCAPH Antibody (Center) - Images

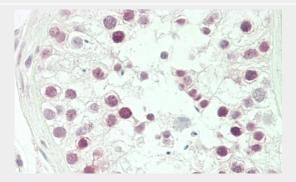


NCAPH Antibody (Center)(Cat. #AP18809c) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the NCAPH antibody detected the NCAPH protein (arrow).





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).

# NCAPH Antibody (Center) - 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.

# NCAPH Antibody (Center) - 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)