

NCAPH Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51378

Product Information

Application WB **Primary Accession** 015003 Reactivity Human Host Rabbit Clonality Polyclonal **Calculated MW** 82563

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

Dilution WB~~1:1000

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage Store at -20 °C. Stable for 12 months from date of receipt

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

Tissue Location

Widely expressed at low level. Expressed in proliferating cells.

Background

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.

References

Nomura N.,et al.DNA Res. 1:223-229(1994).
Cabello O.A.,et al.Mol. Biol. Cell 12:3527-3537(2001).
Kimura K.,et al.J. Biol. Chem. 276:5417-5420(2001).
Daub H.,et al.Mol. Cell 31:438-448(2008).
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