

hCAP-H (P-20): sc-55118

BACKGROUND

hCAP-H, also known as NCAH (non-SMC condensin I complex subunit H), BRRN, BRRN1 or CAPH, is a widely expressed 741 amino acid member of the CND2 (condensin subunit 2) family. Localized to the cytoplasm and the nucleus during interphase and to the nucleus during the rest of mitosis, hCAP-H is a regulatory subunit of the condensin complex, a multi-protein structure that converts interphase chromatin into condensed chromosomes. The condensin complex is thought to induce positive supercoils into relaxed DNA and may also convert nicked DNA into knotted forms that can properly condense. hCAP-H, as well as other subunits of the condensin complex, are subject to phosphorylation by Cdc2 (cell division cycle 2). This phosphorylation activates the condensin complex and is, therefore, required for chromosome condensation.

REFERENCES

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- Aono, N., Sutani, T., Tomonaga, T., Mochida, S. and Yanagida, M. 2002. Cnd2 has dual roles in mitotic condensation and interphase. *Nature* 417: 197-202.

CHROMOSOMAL LOCATION

Genetic locus: Ncaph (mouse) mapping to 2 F1.

SOURCE

hCAP-H (P-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of hCAP-H of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-55118 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

hCAP-H (P-20) is recommended for detection of hCAP-H of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for hCAP-H siRNA (m): sc-62446, hCAP-H shRNA Plasmid (m): sc-62446-SH and hCAP-H shRNA (m) Lentiviral Particles: sc-62446-V.

Molecular Weight of hCAP-H: 97 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.