

Goat Anti-HCAP-H Antibody

Peptide-affinity purified goat antibody Catalog # AF1522a

Specification

Goat Anti-HCAP-H Antibody - Product Information

Application WB
Primary Accession Q15003

Other Accession <u>NP_056156</u>, <u>23397</u>

Reactivity
Host
Clonality
Concentration
Conc

Isotype IgG
Calculated MW 82563

Goat Anti-HCAP-H Antibody - 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

Format

0.5~mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-HCAP-H Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-HCAP-H Antibody - 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

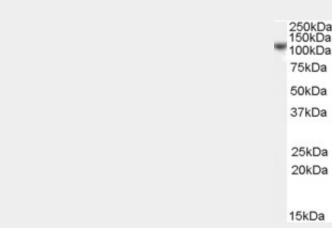
Widely expressed at low level. Expressed in proliferating cells.

Goat Anti-HCAP-H Antibody - Protocols

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

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

Goat Anti-HCAP-H Antibody - Images



AF1522a (0.01 μ g/ml) staining of K562 cell lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-HCAP-H Antibody - 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.



Goat Anti-HCAP-H Antibody - References

Toward a confocal subcellular atlas of the human proteome. Barbe L, et al. Mol Cell Proteomics, 2008 Mar. PMID 18029348.

A probability-based approach for high-throughput protein phosphorylation analysis and site localization. Beausoleil SA, et al. Nat Biotechnol, 2006 Oct. PMID 16964243.

Phosphoproteome analysis of the human mitotic spindle. Nousiainen M, et al. Proc Natl Acad Sci U S A, 2006 Apr 4. PMID 16565220.

Condensin I interacts with the PARP-1-XRCC1 complex and functions in DNA single-strand break repair. Heale JT, et al. Mol Cell, 2006 Mar 17. PMID 16543152.

The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Gerhard DS, et al. Genome Res, 2004 Oct. PMID 15489334.