

## NCAPD2 antibody - C-terminal region

Rabbit Polyclonal Antibody Catalog # Al12663

### **Specification**

## NCAPD2 antibody - C-terminal region - Product Information

Application WB
Primary Accession Q15021

Other Accession NM 014865, NP 055680

Reactivity

Human, Rabbit, Pig, Horse, Dog

Predicted

Human, Rabbit, Pig, Horse, Dog

Host Rabbit
Clonality Polyclonal
Calculated MW 157kDa KDa

### NCAPD2 antibody - C-terminal region - Additional Information

**Gene ID 9918** 

Alias Symbol

CAP-D2, CNAP1, KIAA0159, hCAP-D2

### **Other Names**

Condensin complex subunit 1, Chromosome condensation-related SMC-associated protein 1, Chromosome-associated protein D2, hCAP-D2, Non-SMC condensin I complex subunit D2, XCAP-D2 homolog, NCAPD2, CAPD2, CNAP1, KIAA0159

#### **Format**

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

### **Reconstitution & Storage**

Add 50 ul of distilled water. Final anti-NCAPD2 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

### **Precautions**

NCAPD2 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

## NCAPD2 antibody - C-terminal region - Protein Information

Name NCAPD2 {ECO:0000303|PubMed:27737959, ECO:0000312|HGNC:HGNC:24305}

### **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. May target the condensin complex to DNA via its C-terminal domain (PubMed:<a

href="http://www.uniprot.org/citations/11136719" target="\_blank">11136719</a>). May promote the resolution of double-strand DNA catenanes (intertwines) between sister chromatids.



Condensin-mediated compaction likely increases tension in catenated sister chromatids, providing directionality for type II topoisomerase-mediated strand exchanges toward chromatid decatenation. Required for decatenation of non-centromeric ultrafine DNA bridges during anaphase. 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:<a href="http://www.uniprot.org/citations/27737959">http://www.uniprot.org/citations/27737959</a> target="blank">27737959</a>).

#### **Cellular Location**

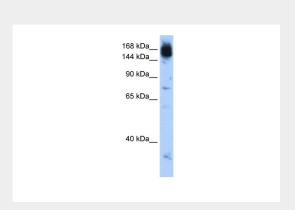
Nucleus. Cytoplasm. Chromosome. Note=In interphase cells, the majority of the condensin complex is found in the cytoplasm, while a minority of the complex is associated with chromatin. A subpopulation of the complex however remains associated with chromosome foci in interphase cells. During mitosis, 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

# NCAPD2 antibody - C-terminal region - Protocols

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

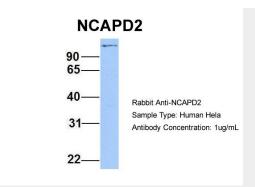
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## NCAPD2 antibody - C-terminal region - Images



WB Suggested Anti-NCAPD2 Antibody Titration: 0.2-1 µg/ml Positive Control: Jurkat cell lysate





Host:Rabbit

Target Name:NCAPD2 Sample Tissue:Hela

Antibody Dilution: 1.0µg/mlNCAPD2 is supported by BioGPS gene expression data to be expressed

in HeLa

# NCAPD2 antibody - C-terminal region - References

Lee, J.H., (er) Neurogenetics (2008) In press Reconstitution and Storage: For short termuse, store at 2-8 Cupt o 1 week. For long terms to rage, store at 2-20 Cinsmall aliquots to prevent freeze-thaw cycles.