10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

NCAPD2 antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI12663

Product Information

Application	WB
Primary Accession	Q15021
Other Accession	NM_014865, NP_055680
Reactivity	Human, Rabbit, Pig, Dog, Horse
Predicted	Human, Rabbit, Pig, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	157182

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.

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:11136719). 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:27737959).

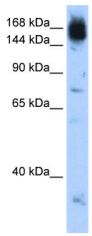
Cellular Location

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

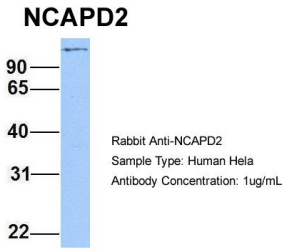
References

Lee,J.H.,(er)Neurogenetics(2008)InpressReconstitutionandStorage:Forshorttermuse,storeat2-8Cupto1week.Forlongtermstorage,storeat-20Cinsmallaliquotstopreventfreeze-thawcycles.

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.