

CAPD2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58729

Specification

CAPD2 Polyclonal Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB, IHC-P, IHC-F, IF, E O15021 Rat, Dog, Bovine Rabbit Polyclonal 157182

CAPD2 Polyclonal Antibody - Additional Information

Gene ID 9918

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

Dilution

WB~~1:1000<br \> <span class
="dilution_IHC-P">IHC-P~~N/A<br \> <span class
="dilution_IHC-F">IHC-F~~N/A<br \> <span class
="dilution_IF">IF~~1:50~200<br \> E~~N/A

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

CAPD2 Polyclonal Antibody - Protein Information

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

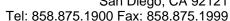
Function

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

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

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

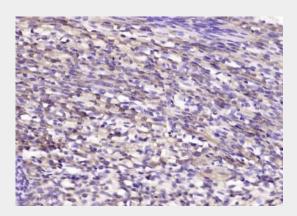
Nucleus. Cytoplasm. Chromosome. Note=In interphase cells, the majority of the condensin complex is found in the cytoplasm, while a minority of the complex is associated with chromatin. A subpopulation of the complex however remains associated with chromosome foci in interphase cells. During mitosis,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

CAPD2 Polyclonal Antibody - Protocols

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

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

CAPD2 Polyclonal Antibody - Images



Paraformaldehyde-fixed, paraffin embedded (mouse embryo); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CAPD2) Polyclonal Antibody, Unconjugated (bs-7718R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.