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CAPD3 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58737

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	P42695
Reactivity	Rat, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	168891
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CAPD3/hCAP-D3
Epitope Specificity	651-760/1498
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Nucleus.
SIMILARITY	Contains 4 HEAT repeats.
SUBUNIT	Component of the condensin-2 complex, which contains the SMC2 and SMC4 heterodimer, and 3 non SMC subunits that probably regulate the complex: NCAPH2, NCAPD3 and NCAPG2.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Condensin complexes I and II play essential roles in mitotic chromosome assembly and segregation. Condensins contain 2 invariant structural maintenance of chromosome (SMC) subunits, SMC2 and SMC4. hCAP-D3 is a regulatory non-SMC subunit of the condensin II complex.

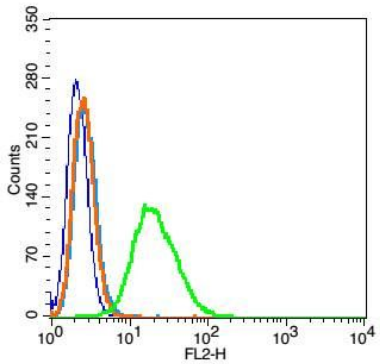
Additional Information

Gene ID	23310
Other Names	Condensin-2 complex subunit D3, Non-SMC condensin II complex subunit D3, hCAP-D3, NCAPD3 {ECO:0000303|PubMed:27737959, ECO:0000312|HGNC:HGNC:28952}
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=1 g/Test,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 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.

Protein Information

Name	NCAPD3 {ECO:0000303|PubMed:27737959, ECO:0000312|HGNC:HGNC:28952}
Function	Regulatory subunit of the condensin-2 complex, a complex which establishes mitotic chromosome architecture and is involved in physical rigidity of the chromatid axis (PubMed:14532007). 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. Specifically required for decatenation of 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.

Images



Blank control:RSC96 (fixed with 2% paraformaldehyde (10 min) , then permeabilized with 90% ice-cold methanol for 30 min on ice).
Primary Antibody:Rabbit Anti- CAPD3 antibody(AP58737), Dilution: 1 µg in 100 µL 1X PBS containing 0.5% BSA;
Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions);
Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.