

NCAPD3 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16786B**Specification**

NCAPD3 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	P42695
Other Accession	NP_056076.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	168891
Antigen Region	1050-1078

NCAPD3 Antibody (C-term) - Additional Information**Gene ID** 23310**Other Names**

Condensin-2 complex subunit D3, Non-SMC condensin II complex subunit D3, hCAP-D3, NCAPD3, CAPD3, KIAA0056

Target/Specificity

This NCAPD3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1050-1078 amino acids from the C-terminal region of human NCAPD3.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

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

Precautions

NCAPD3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

NCAPD3 Antibody (C-term) - 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

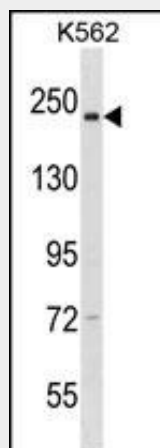
Nucleus.

NCAPD3 Antibody (C-term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

NCAPD3 Antibody (C-term) - Images



NCAPD3 Antibody (C-term) (Cat. #AP16786b) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the NCAPD3 antibody detected the NCAPD3 protein (arrow).

NCAPD3 Antibody (C-term) - Background

Condensin complexes I and II play essential roles in mitotic chromosome assembly and segregation. Both condensins contain 2 invariant structural maintenance of chromosome (SMC) subunits, SMC2 (MIM 605576) and SMC4 (MIM 605575), but they contain different sets of non-SMC subunits. NCAPD3 is 1 of 3 non-SMC subunits that define condensin II (Ono et al., 2003 [PubMed [14532007](#)]).

NCAPD3 Antibody (C-term) - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Takemoto, A., et al. Nat. Struct. Mol. Biol. 16(12):1302-1308(2009)
Lapointe, J., et al. Am. J. Surg. Pathol. 32(2):205-209(2008)
Sugiyama, N., et al. Mol. Cell Proteomics 6(6):1103-1109(2007)
Seshadri, S., et al. BMC Med. Genet. 8 SUPPL 1, S15 (2007) :