

NCAPD3 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP16786b**Specification**

NCAPD3 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [P42695](#)**NCAPD3 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 23310**Other Names**

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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

NCAPD3 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

NCAPD3 Antibody (C-term) Blocking Peptide - Images

NCAPD3 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - 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) :