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

NCAPG Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19113a

Product Information

Application	WB, E
Primary Accession	Q9BPX3
Other Accession	NP_071741.2
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB40395
Calculated MW	114334
Antigen Region	117-145

Additional Information

Gene ID	64151
Other Names	Condensin complex subunit 3, Chromosome-associated protein G, Condensin subunit CAP-G, hCAP-G, Melanoma antigen NY-MEL-3, Non-SMC condensin I complex subunit G, XCAP-G homolog, NCAPG, CAPG, NYMEL3
Target/Specificity	This NCAPG antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 117-145 amino acids from the N-terminal region of human NCAPG.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
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	NCAPG Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NCAPG
Synonyms	CAPG, NYMEL3

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.
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
Tissue Location	Highly expressed in testis.

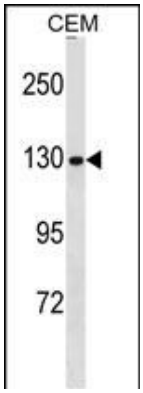
Background

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.

References

Okada, Y., et al. Hum. Mol. Genet. 19(11):2303-2312(2010)
Zhao, J., et al. BMC Med. Genet. 11, 96 (2010) :
Murphy, L.A., et al. Biochem. Biophys. Res. Commun. 377(3):1007-1011(2008)
Gudbjartsson, D.F., et al. Nat. Genet. 40(5):609-615(2008)
Sugiyama, N., et al. Mol. Cell Proteomics 6(6):1103-1109(2007)

Images



NCAPG Antibody (N-term) (Cat. #AP19113a) western blot analysis in CEM cell line lysates (35ug/lane).This demonstrates the NCAPG antibody detected the NCAPG protein (arrow).

Citations

- Prognostic comparative genes predict targets for sorafenib combination therapies in hepatocellular carcinoma

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