

Summary

Production Name	hCAP-G Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB
Reactivity	Human,Rat,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	NCAPG
Alternative Names	NCAPG; CAPG; NYMEL3; 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
Gene ID	64151.0
SwissProt ID	Q9BPX3.The antiserum was produced against synthesized peptide derived from human NCAPG. AA range:951-1000

Application

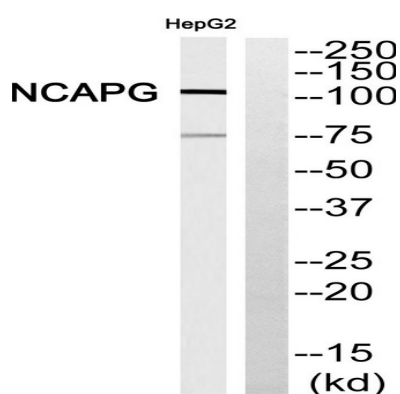
Dilution Ratio	WB 1:500-1:2000. ELISA: 1:40000.
Molecular Weight	115kD

Background

This gene encodes a subunit of the condensin complex, which is responsible for the condensation and stabilization of chromosomes during mitosis and meiosis. Phosphorylation of the encoded protein activates the condensin complex. There are pseudogenes for this gene on chromosomes 8 and 15. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2012],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.,miscellaneous:Overexpressed in some cancer lines and some tumor cells.,PTM:Phosphorylated by CDC2. Its phosphorylation, as well as that of NCAPD2 and NCAPH subunits, activates the condensin complex and is required for chromosome condensation.,sequence caution:Wrong choice of frame.,similarity:Belongs to the CND3 (condensin subunit 3) family.,similarity:Contains 10 HEAT repeats.,subcellular location: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 CDC2, leading to condensin's association with chromosome arms and to chromosome condensation. Dissociation from chromosomes is observed in late telophase.,subunit:Component of the condensin complex, which contains the SMC2 and SMC4 heterodimer, and three non SMC subunits that probably regulate the complex: NCAPH/BRRN1, NCAPD2/CAPD2 and NCAPG.,tissue specificity:Highly expressed in testis.,

Research Area

Image Data



Western blot analysis of NCAPG Antibody. The lane on the right is blocked with the NCAPG peptide.

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Catalog #: APRab11920



Note

For research use only.