



# hCAP-G Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-01756
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse;
<b>Applications</b>	WB;ELISA
<b>Gene Name</b>	NCAPG
<b>Protein Name</b>	Condensin complex subunit 3
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human NCAPG. AA range:951-1000
<b>Specificity</b>	hCAP-G Polyclonal Antibody detects endogenous levels of hCAP-G protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	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
<b>Observed Band</b>	115kD
<b>Cell Pathway</b>	Nucleus. Cytoplasm. Chromosome. 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.
<b>Tissue Specificity</b>	Highly expressed in testis.
<b>Function</b>	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

**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],

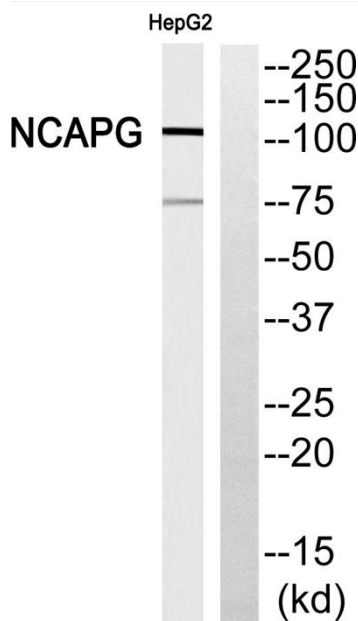
**matters needing attention**

Avoid repeated freezing and thawing!

**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

**Products Images**



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