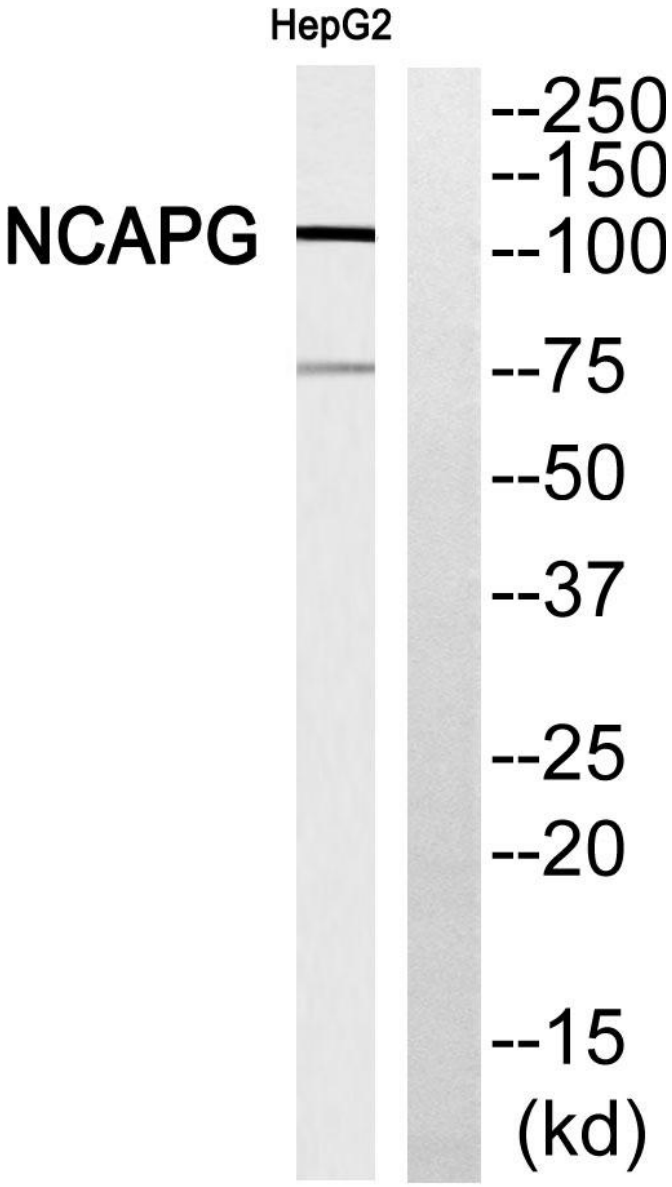
hCAP-G Monoclonal Antibody

Catalog No	BYmab-01756
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB
Gene Name	NCAPG
Protein Name	Condensin complex subunit 3
Immunogen	The antiserum was produced against synthesized peptide derived from human NCAPG. AA range:951-1000
Specificity	hCAP-G Monoclonal Antibody detects endogenous levels of hCAP-G protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	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
Observed Band	115kD
Cell Pathway	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.
Tissue Specificity	Highly expressed in testis.

Function	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 various cells using hCAP-G Monoclonal Antibody