

Product name:	hCAP-G Rabbit Polyclonal Antibody
Cat number:	ABN11920
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human NCAPG. AA range:951-1000
Reactivity:	Human,Rat,Mouse
Applications:	WB 1:500-1:2000,ELISA 1:20000-1:40000
Molecular Weight:	115kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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.,