

## Product datasheet for **AP09253PU-N**

### **BRRN1 (NCAPH) (440-457) Rabbit Polyclonal Antibody**

#### **Product data:**

<b>Product Type:</b>	Primary Antibodies
<b>Applications:</b>	ELISA, WB
<b>Recommended Dilution:</b>	ELISA: 1/8000 - 1/35000. Western Blot: 1/500 - 1/2000.
<b>Reactivity:</b>	Chimpanzee, Human
<b>Host:</b>	Rabbit
<b>Isotype:</b>	IgG
<b>Clonality:</b>	Polyclonal
<b>Immunogen:</b>	Synthetic peptide corresponding to amino acids 440-457 of Human BRRN-1
<b>Specificity:</b>	This antibody reacts against BRRN1 protein.
<b>Formulation:</b>	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 containing 0.01% (w/v) Sodium Azide State: Aff - Purified State: Liquid
<b>Concentration:</b>	lot specific
<b>Purification:</b>	Immunoaffinity chromatography
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	Store the antibody at -20°C. Avoid repeated freezing and thawing.
<b>Stability:</b>	Shelf life: one year from despatch.
<b>Gene Name:</b>	non-SMC condensin I complex subunit H
<b>Database Link:</b>	<a href="#">Entrez Gene 23397 Human Q15003</a>



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**Background:**

BRNN1, also called Barren, Condensin subunit 2, Barren homolog protein 1, Chromosome-associated protein H, hCAP-H, and XCAP-H homolog, is encoded by a gene that is a member of the barr gene family. Brnn1 is the 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. The condensin complex contains the SMC2L1 and SMC4L1 heterodimer, and three non SMC subunits that probably regulate the complex: BRRN1/CAPH, CNAP1/CAPD2 and CAPG. BRRN1 has both a nuclear and cytoplasmic localization. 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. BRRN1 is widely expressed at low level in most proliferating cells. CDC2 phosphorylates BRRN1. Its phosphorylation, as well as that of CNAP1 and CAPG subunits, activates the condensin complex and is required for chromosome condensation.

**Synonyms:**

BRRN, BRRN1, CAPH, KIAA0074