

## 染色体相关蛋白 2 抗体

产品货号： mlR7718

英文名称： CAPD2

中文名称： 染色体相关蛋白 2 抗体

别名： CAPD2; Chromosome condensation-related SMC-associated protein 1; Chromosome-associated protein D2; CND1; Condensin; hCAP-D2; hCAPD2; CND1\_HUMAN.

研究领域： 细胞生物 细胞周期蛋白 细胞分化 表观遗传学

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应： Human, Mouse, Rat, Dog, Cow, Horse, Rabbit, Sheep,

产品应用： WB=1:500-2000 ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 IF=1:100-500 （石蜡切片需做抗原修复）

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

分子量：157kDa

细胞定位：细胞核 细胞浆

性状：Lyophilized or Liquid

浓度：1mg/ml

免疫原：KLH conjugated synthetic peptide derived from human CAPD2/CNAP1:1101-1300/1401

亚型：IgG

纯化方法：affinity purified by Protein A

储存液：0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

保存条件：Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PubMed：PubMed

产品介绍：CAPD2 is a regulatory subunit of the condensin complex, a complex required for conversion of interphase chromatin into mitotic-like condensed 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. It may target the condensin complex to DNA via its C-terminal domain (referenced from Swissprot).

**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. May target the condensin complex to DNA via its C-terminal domain.

**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. Interacts with histones H1 and H3.

**Subcellular Location:**

Nucleus. Cytoplasm. Chromosome. Note=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.

**Post-translational modifications:**

Phosphorylated by CDK1. Its phosphorylation, as well as that of NCAPH and NCAPG subunits, activates the condensin complex and is required for chromosome condensation (By similarity).

**Similarity:**

Belongs to the CND1 (condensin subunit 1) family.

**SWISS:**

Q15021

**Gene ID:**

9918

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.