

核帽结合蛋白2抗体

产品货号: mlR19044

英文名称: NCBP2

中文名称: 核帽结合蛋白 2 抗体

别 名: 20 kDa nuclear cap binding protein; CBC2; CBP20; Cell proliferation inducing gene 55 protein; NCBP 2; NCBP2_HUMAN; NCBP 20 kDa subunit; NCBP interacting protein 1; NIP1; Nuclear cap binding protein subunit 2; PIG55.

研究领域: 细胞生物 结合蛋白 表观遗传学

抗体来源: Rabbit

克隆类型: Polyclonal

交叉反应: Human, Mouse, Rat,

产品应用 : ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 ICC=1:100-500 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: 18kDa

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 NCBP2:2-100/156

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: The product of this gene is a component of the nuclear cap-binding protein complex (CBC), which binds to the monomethylated 5' cap of nascent pre-mRNA in the nucleoplasm. The encoded protein has an RNP domain commonly found in RNA binding proteins, and contains the cap-binding activity. The CBC promotes pre-mRNA splicing, 3'-end processing, RNA nuclear export, and nonsense-mediated mRNA decay. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Function:

Component of the cap-binding complex (CBC), which binds co-transcriptionally to the 5' cap of pre-mRNAs and is involved in various processes such as pre-mRNA splicing, translation regulation, nonsense-mediated mRNA decay, RNA-mediated gene silencing (RNAi) by microRNAs (miRNAs) and mRNA export. The CBC complex is involved in mRNA export from the nucleus via its interaction with ALYREF/THOC4/ALY, leading to the recruitment of the mRNA export machinery to the 5' end of mRNA and to mRNA export in a 5' to 3' direction through the nuclear pore. The CBC complex is also involved in mediating U snRNA and intronless mRNAs export from the nucleus. The CBC complex is essential for a pioneer round of mRNA translation, before steady state translation when the CBC complex is replaced by cytoplasmic cap-binding protein eIF4E. The pioneer round of mRNA translation mediated by the CBC complex plays a central role in nonsense-mediated mRNA decay (NMD), NMD only taking place in mRNAs bound to the CBC complex, but not on eIF4E-bound mRNAs. The CBC complex enhances NMD in mRNAs containing at least one exon-junction complex (EJC) via its interaction with UPF1, promoting the interaction between UPF1 and UPF2. The CBC complex is also involved in 'failsafe' NMD, which is independent of the EJC complex, while it does not participate in Staufen-mediated mRNA decay (SMD). During



cell proliferation, the CBC complex is also involved in microRNAs (miRNAs) biogenesis via its interaction with SRRT/ARS2, thereby being required for miRNA-mediated RNA interference. The CBC complex also acts as a negative regulator of PARN, thereby acting as an inhibitor of mRNA deadenylation. In the CBC complex, NCBP2/CBP20 recognizes and binds capped RNAs (m7GpppG-capped RNA) but requires NCBP1/CBP80 to stabilize the movement of its N-terminal loop and lock the CBC into a high affinity cap-binding state with the cap structure.

Subunit:

Component of the nuclear cap-binding complex (CBC), a heterodimer composed of NCBP1/CBP80 and NCBP2/CBP20 that interacts with m7GpppG-capped RNA. Found in a U snRNA export complex with RNUXA/PHAX, NCBP1/CBP80, NCBP2/CBP20, RAN, XPO1 and m7G-capped RNA. Interacts with RNUXA/PHAX, EIF4G1, HNRNPF, HNRNPH1 and ALYREF/THOC4/ALY.

Subcellular Location:

Nucleus. Cytoplasm

Similarity:

Belongs to the RRM NCBP2 family.

Contains 1 RRM (RNA recognition motif) domain.

swiss:

P52298

Gene ID:

22916



Important Note:

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