

Product datasheet

Recombinant Human NCBP1 protein ab114736

1 Image

Overview

Product name	Recombinant Human NCBP1 protein
Protein length	Full length protein

Description

Nature	Recombinant
Source	Wheat germ

Amino Acid Sequence

Accession	Q09161
Species	Human
Sequence	MSRRRHSDENDGGQPHKRRKTSANETEDHLES LICKVGEKSACSLESNL EGLAGVLEADLPNYKSKILRLLCTVARLLPEKLTITTLVGLLNARNYNF GGEFVEAMIRQLKESLKANNYNEAVYLVRFLSDLVNCHVIAAPSMVAMFE NFVSVTQEEDVPQVRRDWYVYAFSSLPWVGKELYEKKDAEMDRIFANTE SYLRRRQKTHVPMLQVWTADKPHPQEEYLDCLWAQIQKLKDRWQERHIL RPLYAFDSILCEALQHNLPPFTPPPHTEDSVYPMPRVIFRMFDYTDDEG PVMPGSHSVERFVIEENLHCIIKSHWKERKTCAAQLVSYPGKNKIPLNYH MEVIFAELFQLPAPPHIDVMYTTLLIELCKLQPGSLPQVLAQATEMLYM RLDTMNTTCVDRFINWFSSHLSNFQFRWSWEDWSDCLSQDPESPKPKFVR EVLEKCMRLSYHQRILDVPPPTFSALCPANPTCIKYGDESSNSLPGHVS ALCLAVAFKSKATNDEIFSILKDVPNPNQDDDDDEGFSFNPLKIEVFVQT LLHLAAKFSHSFSALAKFHEVFKTLAESDEGKLVLRVMEFVWRNHPQM IAVLVDKMIRTQVDCAAVANWIFSSSELSRDFTRLFVWEILHSTIRKMNK HVLKIQKELEEAKEKLARQHKRRSDDDDRSSDRKDGVL EEQIERLQEKVE SAQSEQKNLFLVIFQRFIMILTEHLVRCETDGTSVLTPWYKNCIERLQQI FLQHHQIQQYMTLENLLFTAELDPHILAVFQQFCALQA
Molecular weight	113 kDa including tags
Amino acids	1 to 790

Specifications

Our [Abpromise guarantee](#) covers the use of **ab114736** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications

ELISA
SDS-PAGE
Western blot

Form

Liquid

Additional notes

Protein concentration is above or equal to 0.05 mg/ml.
Best used within three months from the date of receipt.

Preparation and Storage

Stability and Storage

Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.
pH: 8.00
Constituents: 0.3% Glutathione, 0.79% Tris HCl

General Info

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 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 and is 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, NCBP1/CBP80 does not bind directly capped RNAs (m7GpppG-capped RNA) but is required to stabilize the movement of the N-terminal loop of NCBP2/CBP20 and lock the CBC into a high affinity cap-binding state with the cap structure.

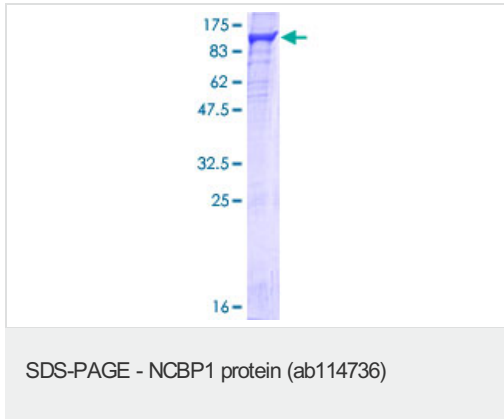
Sequence similarities

Belongs to the NCBP1 family.
Contains 1 MIF4G domain.

Cellular localization

Nucleus. Cytoplasm. Localized in cytoplasmic mRNP granules containing untranslated mRNAs.

Images



12.5% SDS-PAGE showing ab114736 at approximately 112.97kDa.
Stained with Coomassie Blue.

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