Datasheet for ABIN7563764

NCBP1 Protein (AA 1-790) (His tag)

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Overview

Quantity:	1 mg
Target:	NCBP1
Protein Characteristics:	AA 1-790
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This NCBP1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Ncbp1 Protein expressed in mammalian cells.
Sequence:	MSRRRHSYEN DGGQPHKRRK TSDANETEDH LESLICKVGE KSACSLESNL EGLAGVLEAD LPNYKSKILR LLCTVARLLP EKLTIYTTLV GLLNARNYNF GGEFVEAMIR QLKESLKANN YNEAVYLVRF LSDLVNCHVI AAPSMVAMFE NFVSVTQEED VPQVRRDWYV YAFLSSLPWV GKELYEKKDA EMDRIFSTTE SYLKRRQKTH VPMLQVWTAD KPHPQEEYLD CLWAQIQKLK KDRWQERHIL RPYLAFDSIL CEALQHNLPP FTPPPHTEDS VYPMPRVIFR MFDYTDDPEG PVMPGSHSVE RFVIEENLHC IIKSYWKERK TCAAQLVSYP GKNKIPLNYH IVEVIFAELF QLPAPPHIDV MYTTLLIELC KLQPGSLPQV LAQATEMLYM RLDTMSTTCV DRFINWFSHH LSNFQFRWSW EDWSDCLTQD LESPKPKFVR EVLEKCMRLS YHQHILDIVP PTFSALCPAN PTCIYKYGDE SSNSLPGHSV ALCLSVAFKS KATNDEIFSI LKDVPNPNQV DDDDEGFRFN PLKIEVFVQT LLHLAAKSFS HSFSALAKFH EVFKTLAESD KGKLHVLRVM FEVWRNHPQM IAVLVDKMIR TQIVDCAAVA NWIFSSELSR DFTRLFVWEI LHSTIRKMNK HVLKIQKELE EAKEKLARQH KRRSDDDDRS SDRKDGALEE QIERLQEKVE AAQSEQKNLF LVIFQRFIMI

Product Details

	LTEHLVRCET DGTSILTPWY KNCIERLQQI FLQHHQTIQQ YMVTLENLLF TAELDPHILA VFQQFCALQA **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalian cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	NCBP1
Alternative Name:	Ncbp1 (NCBP1 Products)
Background:	Nuclear cap-binding protein subunit 1 (80 kDa nuclear cap-binding protein) (CBP80) (NCBP 80 kDa subunit),FUNCTION: Component of the cap-binding complex (CBC), which binds cotranscriptionally 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'

Target Details

	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. Associates with NCBP3 to form an alternative cap-binding complex (CBC) which plays a key role in mRNA export and is particularly important in cellular stress situations such as virus infections. The conventional CBC with NCBP2 binds both small nuclear RNA (snRNA) and messenger (mRNA) and is involved in their export from the nucleus whereas the alternative CBC with NCBP3 does not bind snRNA and associates only with mRNA thereby playing a role only in mRNA export. NCBP1/CBP80 is required for cell growth and viability (By similarity). {ECO:0000250|UniProtKB:Q09161, ECO:0000269|PubMed:19632182}.
Molecular Weight:	91.9 kDa
UniProt:	Q3UYV9
Pathways:	Ribonucleoprotein Complex Subunit Organization, Photoperiodism, Methionine Biosynthetic Process

Application Details

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months