abcam

Product datasheet

Recombinant Human CBP80 protein ab114735

1 Image

Description

Product name Recombinant Human CBP80 protein

Expression system Wheat germ

Accession Q09161

Protein length Full length protein

Animal free No

Nature Recombinant

Species Human

Sequence MSRRRHSDENDGGQPHKRRKTSDANETEDHLESLICKVG

EKSACSLESNL

EGLAGVLEADLPNYKSKILRLLCTVARLLPEKLTIYTTLVGL

LNARNYNF

GGEFVEAMIRQLKESLKANNYNEAVYLVRFLSDLVNCHVI

AAPSMVAMFE

NFVSVTQEEDVPQVRRDWYVYAFLSSLPWVGKELYEKK

DAEMDRIFANTE

SYLKRRQKTHVPMLQVWTADKPHPQEEYLDCLWAQIQKL

KKDRWQERHIL

RPYLAFDSILCEALQHNLPPFTPPPHTEDSVYPMPRVIFRM

FDYTDDPEG

PVMPGSHSVERFVIEENLHCIIKSHWKERKTCAAQLVSYP

GKNKIPLNYH

IVEVIFAELFQLPAPPHIDVMYTTLLIELCKLQPGSLPQVLA

QATEMLYM

RLDTMNTTCVDRFINWFSHHLSNFQFRWSWEDWSDCLS

QDPESPKPKFVR

EVLEKCMRLSYHQRILDIVPPTFSALCPANPTCIYKYGDES

SNSLPGHSV

ALCLAVAFKSKATNDEIFSILKDVPNPNQDDDDDEGFSFN

PLKIEVFVQT

LLHLAAKSFSHSFSALAKFHEVFKTLAESDEGKLHVLRVM

FEVWRNHPQM

IAVLVDKMIRTQIVDCAAVANWIFSSELSRDFTRLFVWEILH

STIRKMNK

HVLKIQKELEEAKEKLARQHKRRSDDDDRSSDRKDGVLE

EQIERLQEKVE

1

SAQSEQKNLFLVIFQRFIMILTEHLVRCETDGTSVLTPWYK

NCIERLQQI

FLQHHQIIQQYMVTLENLLFTAELDPHILAVFQQFCALQA

Predicted molecular weight

113 kDa including tags

Amino acids

1 to 790

Specifications

Our Abpromise guarantee covers the use of ab114735 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

Preparation and Storage

Stability and Storage

Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

00.8 :Ha

Constituents: 0.3% Glutathione, 0.79% Tris HCI

General Info

Function

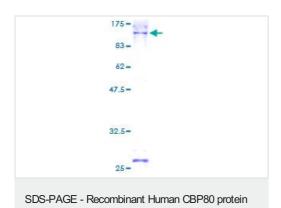
Component of the cap-binding complex (CBC), which binds co-transcriptionally to the 5' cap of pre-mRNAs and is involved in various processes such as pre-mRNA splicing, translation regulation, nonsense-mediated mRNA decay, RNA-mediated gene silencing (RNAi) by microRNAs (miRNAs) and mRNA export. The CBC 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 elF4E. 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 Nterminal 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.

Images

(ab114735)



12.5% SDS-PAGE showing ab114735 at approximately 112.64kDa.

Stained with Coomassie Blue.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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