

Product datasheet

Anti-CBP80 antibody - N-terminal ab228885

3 Images

Overview

Product name	Anti-CBP80 antibody - N-terminal
Description	Rabbit polyclonal to CBP80 - N-terminal
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat, Chicken 
Immunogen	Recombinant fragment within Human CBP80 (N terminal). The exact sequence is proprietary. Database link: Q09161
Positive control	WB: HeLa whole cell lysate. ICC/IF: HeLa cells. IHC-P: Mouse fore brain tissue.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.00 Preservative: 0.01% Thimerosal (merthiolate) Constituents: 1.21% Tris, 0.75% Glycine, 20% Glycerol
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab228885** in the following tested applications.

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

Application	Abreviews	Notes
WB		1/500 - 1/3000. Predicted molecular weight: 92 kDa.

Application	Abreviews	Notes
IHC-P		1/100 - 1/1000.
ICC/IF		1/100 - 1/1000.

Target

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.

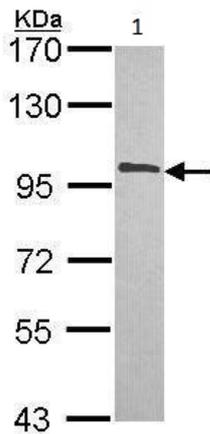
Sequence similarities

Belongs to the NCBP1 family.
Contains 1 MIF4G domain.

Cellular localization

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

Images



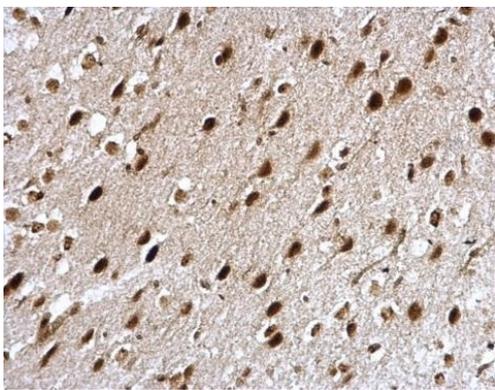
Western blot - Anti-CBP80 antibody - N-terminal (ab228885)

Anti-CBP80 antibody - N-terminal (ab228885) at 1/1000 dilution + HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate at 30 μ g

Developed using the ECL technique.

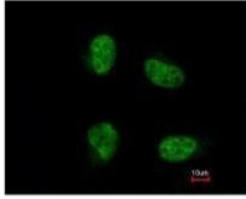
Predicted band size: 92 kDa

7.5% SDS-PAGE gel.



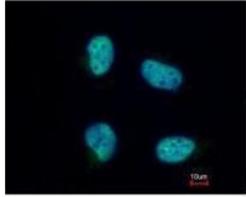
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CBP80 antibody - N-terminal (ab228885)

Paraffin-embedded mouse fore brain tissue stained for CBP80 using ab228885 at 1/500 dilution in immunohistochemical analysis.



Paraformaldehyde-fixed HeLa (human epithelial cell line from cervix adenocarcinoma) cells stained for CBP80 (green) using ab228885 at 1/200 dilution in ICC/IF.

Nuclear counterstain: Hoechst 33342 (blue)



Immunocytochemistry/ Immunofluorescence - Anti-CBP80 antibody - N-terminal (ab228885)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors