

Datasheet for ABIN3078310

CPEB4 Protein (AA 1-729) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	CPEB4
Protein Characteristics:	AA 1-729
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CPEB4 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	<p>MGDYGFGVLV QSNTGNKSAF PVRFHPLQP PHHHQNATPS PAAFINNNTA ANGSSAGSAW</p> <p>LFPAPATHNI QDEILGSEKA KSQQEQQDP LEKQQLSPSP GQEAGILPET EKAKSEENQG</p> <p>DNSSENGNGK EKIRIESPVL TGFDYQATG LGTSTQPLTS SASSLTGFSN WSAAIAPSSS</p> <p>TIINEDASFF HQGGVPAASA NNGALLFQNF PHHVSPGFGG SFSPQIGPLS QHHPHHPHFQ</p> <p>HHHSQHQQQR RSPASPHPPP FTHRNAAFNQ LPHLANNLNK PPSPWSSYQS PSPTPSSSWS</p> <p>PGGGGYGGWG GSQGRDHRRG LNGGITPLNS ISPLKKNFAS NHIQLQKYAR PSSAFAPKSW</p> <p>MEDSLNRADN IFPFPDRPRT FDMHSLESSL IDIMRAENDT IKGRNLNYSYP GSDSSLLINA</p> <p>RTYGRRRGQS SLFPMEDGFL DDGRGDQPLH SGLGSPHCFS HQNGERVERY SRKVFGGLP</p> <p>PDIDEDITA SFRRFGPLIV DWPHKAESKS YFPPKGYAFL LFQDESSVQA LIDACIEEDG</p> <p>KLYLCVSSPT IKDKPVQIRP WNLSDSDFVM DGSQPLDPRK TIFVGGVPRP LRAVELAMIM</p> <p>DRLYGGVCYA GIDTDPOLKY PKGAGRVAFS NQSYIAAIS ARFVQLQHGE IDKRVEVKPY</p>

VLDDQLCDEC QGARCGGKFA PFFCANVTCL QYYCEYCWAA IHSRAGREFH KPLVKEGGDR
PRHISFRWN

Sequence without tag. The proposed Strep-Tag is based on experience s 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.

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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.

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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).

Product Details

Purity: > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade: custom-made

Target Details

Target: CPEB4

Alternative Name: CPEB4 ([CPEB4 Products](#))

Background: Cytoplasmic polyadenylation element-binding protein 4 (CPE-BP4) (CPE-binding protein 4) (hCPEB-4),FUNCTION: Sequence-specific RNA-binding protein that binds to the cytoplasmic polyadenylation element (CPE), an uridine-rich sequence element (consensus sequence 5'-UUUUUAU-3') within the mRNA 3'-UTR (PubMed:24990967). RNA binding results in a clear conformational change analogous to the Venus fly trap mechanism (PubMed:24990967). Regulates activation of unfolded protein response (UPR) in the process of adaptation to ER stress in liver, by maintaining translation of CPE-regulated mRNAs in conditions in which global protein synthesis is inhibited (By similarity). Required for cell cycle progression, specifically for cytokinesis and chromosomal segregation (PubMed:26398195). Plays a role as an oncogene promoting tumor growth and progression by positively regulating translation of t-plasminogen activator/PLAT (PubMed:22138752). Stimulates proliferation of melanocytes (PubMed:27857118). In contrast to CPEB1 and CPEB3, does not play role in synaptic plasticity, learning and memory (By similarity). {ECO:0000250|UniProtKB:Q7TN98, ECO:0000269|PubMed:22138752, ECO:0000269|PubMed:24990967, ECO:0000269|PubMed:26398195, ECO:0000269|PubMed:27857118}.

Molecular Weight: 80.2 kDa

UniProt: [Q17RY0](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment: ALICE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.

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Application Details

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Restrictions: For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol Might differ depending on protein.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months