

Datasheet for ABIN3134613

## CPEB1 Protein (AA 1-561) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	CPEB1
Protein Characteristics:	AA 1-561
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CPEB1 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

### Product Details

Brand:	AliCE®
Sequence:	<p>MAFSLEEAAG RIKDCWDNQE VPALSTCSNA NIFRRINAIL DDSLDFSKVC TTPINRGIHD</p> <p>QLPDFQDSEE TVTSRMLFPT SAQESPRGLP DANGLCLGLQ SLSLTGWDRP WSTQDSDSSA</p> <p>QSSTQSVLSM LQNPLGNVLG KAPLSFLSLD PLGSDLDKFP APSVRGSRLD TRPILDSRSS</p> <p>SPSDSDTSGF SSGSDHLSDL ISSLRISPL PFLSMTGNGP RDPLKMGVGS RMDQEQAALA</p> <p>AVAPSPTSAP KRWPGASVWP SWDLLGAPKD PFSIEREARL HRQAAVNEA TCTWSQLP</p> <p>RNYKNPIYSC KVFLGGVPWD ITEAGLVNTF RVFGSLVSEV PGKDGKHPRC PPKGNMPKGY</p> <p>VYLVFELEKS VRALLQACSH DPLSPDGLSE YYFKMSSRRM RCKEVQVIPW VLADSNFVWS</p> <p>PSQRLDPSRT VFGALHGML NAEALAAILN DLFGGVVYAG IDTDKHKYPI GSGRVTFNNQ</p> <p>RSYLKAVTAA FVEIKTTKFT KKVQIDPYLE DSLCLICSSQ GGPFFCRDQV CFKYFCRSCW</p> <p>HWRHSMQGLR HHSPLMRNQK N</p>

**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.**

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### 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.

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### Purification:

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

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### Purity:

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

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### Grade:

custom-made

## Target Details

Target:	CPEB1
Alternative Name:	Cpeb1 ( <a href="#">CPEB1 Products</a> )
Background:	<p>Cytoplasmic polyadenylation element-binding protein 1 (CPE-BP1) (CPE-binding protein 1) (mCPEB) (mCPEB-1),FUNCTION: Sequence-specific RNA-binding protein that regulates mRNA cytoplasmic polyadenylation and translation initiation during oocyte maturation, early development and at postsynapse sites of neurons. Binds to the cytoplasmic polyadenylation element (CPE), an uridine-rich sequence element (consensus sequence 5'-UUUUUAU-3') within the 3'-UTR of mRNAs. In absence of phosphorylation and in association with TACC3 is also involved as a repressor of translation of CPE-containing mRNA, a repression that is relieved by phosphorylation or degradation (By similarity). Involved in the transport of CPE-containing mRNA to dendrites, those mRNAs may be transported to dendrites in a translationally dormant form and translationally activated at synapses. Its interaction with APLP1 promotes local CPE-containing mRNA polyadenylation and translation activation. Induces the assembly of stress granules in the absence of stress (By similarity). Required for cell cycle progression, specifically for prophase entry (By similarity). {ECO:0000250 UniProtKB:Q9BZB8, ECO:0000269 PubMed:11526086, ECO:0000269 PubMed:11980711, ECO:0000269 PubMed:12629046}.</p>
Molecular Weight:	61.9 kDa
UniProt:	<a href="#">P70166</a>
Pathways:	<a href="#">Synaptic Membrane</a>

## 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:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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.</p> <p>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</p>

Application Details

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!

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