

Datasheet for ABIN3117228  
**CREB3L1 Protein (AA 1-519) (Strep Tag)**[Go to Product page](#)

## 1 Image

## Overview

Quantity:	1 mg
Target:	CREB3L1
Protein Characteristics:	AA 1-519
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CREB3L1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

## Product Details

Sequence: MDAVLEPFPA DRLFPGSSFL DLGDLNESDF LNNAHFPEHL DHFTENMEDF SNDLFSSFFD  
DPVLDEKSPL LDMELDSPTP GIQAHSYSL SGDSAPQSPL VPIKMEDTTQ DAEHGAWALG  
HKLCSIMVKQ EQSPELPVDP LAAPSAMAAA AAMATTPLLG LSPLSRLPIP HQAPGEMTQL  
PVIKAEPLEV NQFLKVTPED LVQMPPTPPS SHGSDSDGSQ SPRSLPPSSP VRPMARSSTA  
ISTSPLLTAP HKLQGTSGPL LLTEEEKRTL IAEGYPIPTK LPLTKAEEKA LKRVRRIKIN  
KISAQESRRK KKEYVECLEK KVETFTSENN ELWKKVETLE NANRTLLQQL QKLQTLVTNK  
ISRPHYMAAT QTGTCLMVAA LCFVLVLGSL VPCLPEFSSG SQTVKEDPLA ADGVYTASQM  
PSRSLFYDD GAGLWEDGRS TLLPMEPPDG WEINPGGPAE QRPRDHLQHD HLDSTHETTK  
YLSEAWPKDG GNGTSPDFSH SKEWFHDRDL GPNTTIKLS

**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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 will ensure that you receive a correctly folded 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 in several dilutions and is 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:

Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®):

1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and

## Product Details

Western blot.

Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

## Target Details

Target:	CREB3L1
Alternative Name:	CREB3L1 ( <a href="#">CREB3L1 Products</a> )
Background:	<p>Cyclic AMP-responsive element-binding protein 3-like protein 1 (cAMP-responsive element-binding protein 3-like protein 1) (Old astrocyte specifically-induced substance) (OASIS) [Cleaved into: Processed cyclic AMP-responsive element-binding protein 3-like protein 1],FUNCTION: [Cyclic AMP-responsive element-binding protein 3-like protein 1]: Precursor of the transcription factor form (Processed cyclic AMP-responsive element-binding protein 3-like protein 1), which is embedded in the endoplasmic reticulum membrane with N-terminal DNA-binding and transcription activation domains oriented toward the cytosolic face of the membrane (PubMed:12054625, PubMed:16417584, PubMed:25310401). In response to ER stress or DNA damage, transported to the Golgi, where it is cleaved in a site-specific manner by resident proteases S1P/MBTPS1 and S2P/MBTPS2. The released N-terminal cytosolic domain is translocated to the nucleus where it activates transcription of specific target genes involved in the cell-cycle progression inhibition (PubMed:12054625, PubMed:21767813, PubMed:25310401). {ECO:0000269 PubMed:12054625, ECO:0000269 PubMed:16417584, ECO:0000269 PubMed:21767813, ECO:0000269 PubMed:25310401}., FUNCTION: [Processed cyclic AMP-responsive element-binding protein 3-like protein 1]: Transcription factor involved in cell type specific DNA damage and unfolded protein response (UPR). Binds the DNA consensus sequence 5'-GTGXGCXGC-3' (PubMed:21767813). Plays a critical role in bone formation through the transcription of COL1A1, and possibly COL1A2, and the secretion of bone matrix proteins. Directly binds to the UPR element (UPRE)-like sequence in an osteoblast-specific COL1A1 promoter region and induces its transcription. Does not regulate COL1A1 in other tissues, such as skin (By similarity). Required to protect astrocytes from ER stress-induced cell death. In astrocytes, binds to the cAMP response element (CRE) of the BiP/HSPA5 promoter and participate in its transcriptional activation (By similarity). In astrocytes and osteoblasts, upon DNA damage, inhibits cell-cycle progression after G2/M phase by binding to promoters and activating transcription of genes encoding cell-cycle inhibitors, such as p21/CDKN1A (By</p>

## Target Details

similarity). Required for TGFB1 to activate genes involved in the assembly of collagen extracellular matrix (PubMed:25310401). {ECO:0000250|UniProtKB:Q9Z125, ECO:0000269|PubMed:12054625, ECO:0000269|PubMed:21767813, ECO:0000269|PubMed:25310401}., FUNCTION: (Microbial infection) May play a role in limiting virus spread by inhibiting proliferation of virus-infected cells. Upon infection with diverse DNA and RNA viruses, inhibits cell-cycle progression by binding to promoters and activating transcription of genes encoding cell-cycle inhibitors, such as p21/CDKN1A (PubMed:21767813). {ECO:0000269|PubMed:21767813}.

Molecular Weight: 57.0 kDa

UniProt: [Q96BA8](#)

Pathways: [Thyroid Hormone Synthesis](#), [Chromatin Binding](#)

## 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.

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Restrictions: For Research Use only

## Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.

## Handling

Handling Advice:	Avoid repeated freeze-thaw cycles.
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Storage:	-80 °C
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Storage Comment:	Store at -80°C.
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Expiry Date:	Unlimited (if stored properly)
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## Images



**Image 1.** „Crystallography Grade“ protein due to multi-step, protein-specific purification process