

Datasheet for ABIN7565266

## CREB3L1 Protein (AA 1-519) (His tag)



[Go to Product page](#)

### Overview

Quantity:	1 mg
Target:	CREB3L1
Protein Characteristics:	AA 1-519
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CREB3L1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

### Product Details

Purpose:	Custom-made recombinat Creb3l1 Protein expressed in mammalian cells.
Sequence:	<p>MDAVLEPFPA DRLFPGSSFL DLGDLNESDF LNNAHFPEHL DHFVENMEDF SNDLFSSFFD</p> <p>DPVLDEKSAL LDMELDSPAP GIQAEHSYSL SGDSAPQSPL VPKMEDTTQ DVEHGAWALG</p> <p>NKLCSIMVKQ EQSPELPVDP LAASSAMAAA AAMATPPLL LSPMPRLPIP HQAPGEMTQL</p> <p>PVIAKEPPPEM SQFLKVTPED LVQMPPTPPS SHGSDSDGSQ SPRSLPPSSP VRPMARSSTA</p> <p>ISTSPLLTAP HKLQGTSGPL LLTEEEKRTL IAEGYPIPTK LPLTKAEEKA LKRVRRKIKN</p> <p>KISAQESRRK KKEYVECLEK KVETYSEN ELWKKVETLE TANRTLLQQL QKLQTLVTSK</p> <p>ISRPHYMAAT QTGTCLMVAA LCFVLVLGSL VPCLPAFSSG SMTVKEDPIA ADSVYAASQM</p> <p>PSRSLLFYDD GAGSWEDGRG ALLPVEPPEG WELKPGGPAE QRPQDHLRHD RADSIHETTK</p> <p>YLRETWPEDT DDNGTSPNFS HPEWFHDRDL GPNTTIKLS <b>Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special</b></p>

### **request, please contact us.**

#### Characteristics:

##### Key Benefits:

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- 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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

#### Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

#### Grade:

custom-made

## Target Details

---

#### Target:

CREB3L1

#### Alternative Name:

Creb3l1 ([CREB3L1 Products](#))

#### Background:

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 (Oasis N-terminal fragment) (OA-N)],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. 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. {ECO:0000269|PubMed:37178686},. FUNCTION: [Processed cyclic AMP-responsive element-

## Target Details

binding protein 3-like protein 1]: Transcription factor involved in cell type specific DNA damage and unfolded protein response (UPR) (PubMed:19767743, PubMed:37178686). Binds the DNA consensus sequence 5'-GTGXGCXGC-3' (By similarity). 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 (PubMed:19767743). 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 (PubMed:15665855, PubMed:12480185). 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 (PubMed:37178686). Required for TGFB1 to activate genes involved in the assembly of collagen extracellular matrix (By similarity). {ECO:0000250|UniProtKB:Q96BA8, ECO:0000269|PubMed:12480185, ECO:0000269|PubMed:15665855, ECO:0000269|PubMed:19767743, ECO:0000269|PubMed:37178686}.

Molecular Weight: 57.0 kDa

UniProt: [Q9Z125](#)

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.

Restrictions: For Research Use only

## Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

## Handling

---

Expiry Date: 12 months