# antibodies -online.com





# CBLN1 Protein (AA 22-193) (His tag)



# Image



# Overview

Quantity:	1 mg
Target:	CBLN1
Protein Characteristics:	AA 22-193
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CBLN1 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA, Crystallization (Crys)
Product Details	
Sequence:	QNETEPIVLE GKCLVVCDSN PTSDPTGTAL GISVRSGSAK VAFSAIRSTN HEPSEMSNRT
	MIIYFDQVLV NIGNNFDSER STFIAPRKGI YSFNFHVVKV YNRQTIQVSL MLNGWPVISA
	FAGDQDVTRE AASNGVLIQM EKGDRAYLKL ERGNLMGGWK YSTFSGFLVF PL
	Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a
	special request, please contact us.
Characteristics:	<ul> <li>Made in Germany - from design to production - by highly experienced protein experts.</li> <li>Mouse Cbln1 Protein (raised in E. Coli) purified by multi-step, protein-specific process to ensure crystallization grade.</li> <li>State-of-the-art algorithm used for plasmid design (Gene synthesis).</li> </ul>
	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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

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.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

#### Purification:

Two step purification of proteins expressed in bacterial culture:

- 1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. 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 Western blot.

Purity:

>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility:

0.22 µm filtered

Endotoxin Level:

Endotoxin has not been removed. Please contact us if you require endotoxin removal.

Grade:

Crystallography grade

### **Target Details**

Target:	CBLN1
Alternative Name:	Cbln1 (CBLN1 Products)
Background:	Required for synapse integrity and synaptic plasticity. During cerebellar synapse formation,
	essential for the formation and maintenance of parallel fiber and Purkinje cell synapses. When
	parallel fibers make contact with Purkinje spines, CBLN1 interaction with GRID2 triggers the
	recruitment of NRXN1 and secretory vesicles to the sites of contact. NRXN1-CBLN1-GRID2

signaling induces presynaptic morphological changes, which may further accumulate pre- and postsynaptic components to promote bidirectional maturation of parallel fiber - Purkinje cell functionally active synapses by a positive feedback mechanism. Required for CBLN3 export from the endoplasmic reticulum and secretion. {ECO:0000269|PubMed:16234806, ECO:0000269|PubMed:17030622, ECO:0000269|PubMed:17331201, ECO:0000269|PubMed:20395510, ECO:0000269|PubMed:21410790, ECO:0000269|PubMed:23141067}., The cerebellin peptide exerts neuromodulatory functions. Directly stimulates norepinephrine release via the adenylate cyclase/PKA-dependent signaling pathway, and indirectly enhances adrenocortical secretion in vivo, through a paracrine

mechanism involving medullary catecholamine release (By similarity). {ECO:0000250}.

molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible

options with you in detail to assure that you receive your protein of interest.

Molecular Weight:

19.9 kDa Including tag.

UniProt:

Q9R171

# **Application Details**

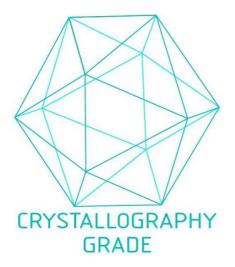
Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a gurantee though.
Comment:	Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher

Restrictions:

For Research Use only

# Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)



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