

Datasheet for ABIN3096220

**Ubiquilin 1 Protein (UBQLN1) (AA 2-589) (His tag)**[Go to Product page](#)**1** Image

## Overview

Quantity:	1 mg
Target:	Ubiquilin 1 (UBQLN1)
Protein Characteristics:	AA 2-589
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Ubiquilin 1 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

## Product Details

Sequence:	AESGESGGPP GSQDSAAGAE GAGAPAAAAS AEPKIMKVTV KTPKEKEEFA VPENSSVQQF KEEISKRFKS HTDQLVLIFA GKILKDQDTL SQHGIHDGLT VHLVIKTQNR PQDHSAQQTN TAGSNVTSS TPNSNSTSGS ATSNPFGLGG LGGLAGLSSL GLNTTNFSEL QSQMQRQLLS NPEMMVQIME NPFVQSMLSN PDLMRQLIMA NPQMQLIQR NPEISHMLNN PDIMRQTLEL ARNPAMMQEM MRNQDRALSN LESIPGGYNA LRRMYTDIQE PMLSAAQEQQF GGNPFASLVS NTSSGEGSQP SRTENRDPLP NPWAPQTSQS SSASSGTAST VGGTTGSTAS GTSGQSTTAP NLVPGVGASM FNTPGMQSLL QQITENPQLM QNMLSAPYMR SMMQSLSQNP DLAAQMMLNN PLFAGNPQLQ EQMRQQLPTF LQQMQNPDTL SAMSNPRAMQ ALLQIQQLQ TLATEAPGLI PGFTPLGAL GSTGGSSGTN GSNATPSENT SPTAGTTEPG HQQFIQQLQ ALAGVNPQLQ NPEVRFQQQL EQLSAMGFLN REANLQALIA TGGDINAAIE RLLGSQPS
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**Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**

## Product Details

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- Characteristics:
- Made in Germany - from design to production - by highly experienced protein experts.
  - Human UBQLN1 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
  - 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.

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 receipt 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 baculovirus infected SF9 insect cells:
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: Protein is endotoxin free.

Grade: Crystallography grade

## Target Details

Target:	Ubiquilin 1 (UBQLN1)
Alternative Name:	UBQLN1 ( <a href="#">UBQLN1 Products</a> )
Background:	<p>Plays an important role in the regulation of different protein degradation mechanisms and pathways including ubiquitin-proteasome system (UPS), autophagy and endoplasmic reticulum-associated protein degradation (ERAD) pathway. Mediates the proteasomal targeting of misfolded or accumulated proteins for degradation by binding (via UBA domain) to their polyubiquitin chains and by interacting (via ubiquitin-like domain) with the subunits of the proteasome (PubMed:15147878). Plays a role in the ERAD pathway via its interaction with ER-localized proteins UBXN4, VCP and HERPUD1 and may form a link between the polyubiquitinated ERAD substrates and the proteasome (PubMed:19822669, PubMed:18307982). Isoform 1, isoform 2 and isoform 3 play a role in unfolded protein response (UPR) by attenuating the induction of UPR-inducible genes, DDTI3/CHOP, HSPA5 and PDIA2 during ER stress (PubMed:18953672). Involved in the regulation of macroautophagy and autophagosome formation, required for maturation of autophagy-related protein LC3 from the cytosolic form LC3-I to the membrane-bound form LC3-II and may assist in the maturation of autophagosomes to autolysosomes by mediating autophagosome-lysosome fusion (PubMed:19148225, PubMed:20529957, PubMed:23459205). Negatively regulates the TICAM1/TRIF-dependent toll-like receptor signaling pathway by decreasing the abundance of TICAM1 via the autophagic pathway (PubMed:21695056). Isoform 1 and isoform 3 play a key role in the regulation of the levels of PSEN1 by targeting its accumulation to aggresomes which may then be removed from cells by autophagocytosis (PubMed:21143716). Promotes the ubiquitination and lysosomal degradation of ORAI1, consequently downregulating the ORAI1-mediated Ca<sup>2+</sup> mobilization (PubMed:23307288). Suppresses the maturation and proteasomal degradation of amyloid beta A4 protein (A4) by stimulating the lysine 63 (K63)-linked polyubiquitination. Delays the maturation of A4 by sequestering it in the Golgi apparatus and preventing its transport to the cell surface for subsequent processing (By similarity).</p> <p>{ECO:0000250 UniProtKB:Q9JJP9, ECO:0000269 PubMed:18307982, ECO:0000269 PubMed:18953672, ECO:0000269 PubMed:19148225, ECO:0000269 PubMed:19822669, ECO:0000269 PubMed:20529957, ECO:0000269 PubMed:21143716, ECO:0000269 PubMed:21695056, ECO:0000269 PubMed:23307288, ECO:0000269 PubMed:23459205, ECO:0000303 PubMed:15147878}.</p>
Molecular Weight:	63.3 kDa Including tag.
UniProt:	<a href="#">Q9UMX0</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:	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 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.
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)

## Images



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