

# Datasheet for ABIN3093601 LONP2 Protein (AA 2-852) (His tag)



## Overview

Quantity:	1 mg
Target:	LONP2
Protein Characteristics:	AA 2-852
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This LONP2 protein is labelled with His tag.
Application:	Crystallization (Crys), ELISA, SDS-PAGE (SDS), Western Blotting (WB)

## **Product Details**

Sequence: SSVSPIQIPS RLPLLLTHEG VLLPGSTMRT SVDSARNLQL VRSRLLKGTS LQSTILGVIP

NTPDPASDAQ DLPPLHRIGT AALAVQVVGS NWPKPHYTLL ITGLCRFQIV QVLKEKPYPI

AEVEQLDRLE EFPNTCKMRE ELGELSEQFY KYAVQLVEML DMSVPAVAKL RRLLDSLPRE

ALPDILTSII RTSNKEKLQI LDAVSLEERF KMTIPLLVRQ IEGLKLLQKT RKPKQDDDKR VIAIRPIRRI

THISGTLEDE DEDEDNDDIV MLEKKIRTSS MPEQAHKVCV KEIKRLKKMP QSMPEYALTR

 ${\tt NYLELMVELP~WNKSTTDRLD~IRAARILLDN~DHYAMEKLKK~RVLEYLAVRQ~LKNNLKGPIL}$ 

 ${\tt CFVGPPGVGK} \ {\tt TSVGRSVAKT} \ {\tt LGREFHRIAL} \ {\tt GGVCDQSDIR} \ {\tt GHRRTYVGSM} \ {\tt PGRIINGLKT}$ 

VGVNNPVFLL DEVDKLGKSL QGDPAAALLE VLDPEQNHNF TDHYLNVAFD LSQVLFIATA

NTTATIPAAL LDRMEIIQVP GYTQEEKIEI AHRHLIPKQL EQHGLTPQQI QIPQVTTLDI ITRYTREAGV

RSLDRKLGAI CRAVAVKVAE GQHKEAKLDR SDVTEREGCR EHILEDEKPE SISDTTDLAL

PPEMPILIDF HALKDILGPP MYEMEVSQRL SQPGVAIGLA WTPLGGEIMF VEASRMDGEG

QLTLTGQLGD VMKESAHLAI SWLRSNAKKY QLTNAFGSFD LLDNTDIHLH FPAGAVTKDG

PSAGVTIVTC LASLFSGRLV RSDVAMTGEI TLRGLVLPVG GIKDKVLAAH RAGLKQVIIP RRNEKDLEGI PGNVRQDLSF VTASCLDEVL NAAFDGGFTV KTRPGLLNSK L

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

#### Characteristics:

- Made in Germany from design to production by highly experienced protein experts.
- Human LONP2 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 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 baculovirus infected SF9 insect cells:

- 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.
- 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

# **Product Details** Grade: Crystallography grade **Target Details** Target: LONP2 LONP2 (LONP2 Products) Alternative Name Background: ATP-dependent serine protease that mediates the selective degradation of misfolded and unassembled polypeptides in the peroxisomal matrix. Necessary for type 2 peroxisome targeting signal (PTS2)-containing protein processing and facilitates peroxisome matrix protein import (By similarity). May indirectly regulate peroxisomal fatty acid beta-oxidation through degradation of the self-processed forms of TYSND1. {ECO:0000255|HAMAP-Rule:MF\_03121, ECO:0000269|PubMed:22002062}. Molecular Weight: 95.4 kDa Including tag. UniProt: 086WA8 **Application Details** In addition to the applications listed above we expect the protein to work for functional studies **Application Notes:** as well. As the protein has not been tested for functional studies yet we cannot offer a gurantee 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. -80 °C Storage: Storage Comment: Store at -80°C. **Expiry Date:** Unlimited (if stored properly)