

Datasheet for ABIN3092366

ERO1L Protein (AA 24-468) (His tag)



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1 Image

Overview

Quantity:	1 mg
Target:	ERO1L
Protein Characteristics:	AA 24-468
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ERO1L protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS), Crystallization (Crys)

Product Details

Sequence: EEQPPETAAQ RCFCQVSGYL DDCTCDVETI DRFNYYRLFP RLQKLLESDY FRYYKVNLR
PCPFWNDISQ CGRRDCAVKP CQSDEVPDGI KSASYKYSEE ANNLIIECEQ AERLGAVDES
LSEETQKAVL QWTKHDDSSD NFCEADDIQS PEAHYVDLLL NPERYTGKYG PDAWKIWNVI
YEENCFKPQT IKRPLNPLAS GQGTSEENTF YSWLEGLCVE KRAFYRLISG LHASINVHLS
ARYLLQETWL EKKWGHNITE FQQRFDGILT EGEPRRLKN LYFLYLIELR ALSKVLPPFE
RPDFQLFTGN KIQDEENKML LLEILHEIKS FPLHFDENSF FAGDKKEAHK LKEDFRLHFR
NISRIMDCVG CFKCRLWGKL QTQGLGTALK ILFSEKLIAN MPESGPSYEF HLTRQEIVSL
FNAFGRISTS VKELNFRNL LQNIH

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 ERO1A 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: <ol style="list-style-type: none">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:	ERO1L
Alternative Name:	ERO1A (ERO1L Products)

Target Details

Background:	<p>Oxidoreductase involved in disulfide bond formation in the endoplasmic reticulum. Efficiently reoxidizes P4HB/PDI, the enzyme catalyzing protein disulfide formation, in order to allow P4HB to sustain additional rounds of disulfide formation. Following P4HB reoxidation, passes its electrons to molecular oxygen via FAD, leading to the production of reactive oxygen species (ROS) in the cell. Required for the proper folding of immunoglobulins. Involved in the release of the unfolded cholera toxin from reduced P4HB/PDI in case of infection by V.cholerae, thereby playing a role in retrotranslocation of the toxin. Plays an important role in ER stress-induced, CHOP-dependent apoptosis by activating the inositol 1,4,5-trisphosphate receptor IP3R1.</p> <p>{ECO:0000269 PubMed:10671517, ECO:0000269 PubMed:10970843, ECO:0000269 PubMed:11707400, ECO:0000269 PubMed:12403808, ECO:0000269 PubMed:18833192, ECO:0000269 PubMed:18971943, ECO:0000269 PubMed:23027870}.</p>
Molecular Weight:	52.9 kDa Including tag.
UniProt:	Q96HE7
Pathways:	Peptide Hormone Metabolism , ER-Nucleus Signaling , Brown Fat Cell Differentiation

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.

Handling

Expiry Date: Unlimited (if stored properly)

Images



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