

Datasheet for ABIN3136583

OPTN Protein (AA 1-584) (His tag)



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1 Image

Overview

Quantity:	1 mg
Target:	OPTN
Protein Characteristics:	AA 1-584
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This OPTN protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence: MSHQPLSCLT EKGDSPCETP GNGPSNMVHP SLDTFTPEEL LQQMKELLVE NHQLKEAMKL
 NNQAMKGRFE ELSAWTEKQK EERLLFEMQS KEVKERLKLK THENERLKEE LGKFKEKSEK
 PLEDLTGGYR YPRALEEEVE KLKTQVEQEV EHLKIQVMRL RAEKADLLGI VSELQLKLNS
 GGSEDSFVE IRMTEGETEG AMKEMKNCPT PTRTDPISL NCTEDARSCA EFEELTVSQL
 LLCLREGNQK VERLEVALRE AKERISDFEK KANGHSSTEK QTARRADREK EDKGQESVGS
 EVETLSIQVT SLFKELQEAH TKLSEAEMLK KRLQEKQAL ERKNSATPSE LNEKQELVYS
 NKKLELQVES MRSEIKMEQA KTEEEKSRLA TLQATHNKLL QEHNKALKTI EELTKQQA EK
 VDKMLLQELS EKLELAEQAL ASKQLQMDDEM KQTLAKQEED LETMAVLRAQ MEVYCSDFHA
 ERAAREKIHE EKEQLALQLA ILLKENNDIE EGGSRQSLME MQCRHGARTS DSDQQTYLFQ
 RGAEDRSWQH GQQPRSIPIH SCPKCGEVL P DIDTLQIHVM DCII

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

Product Details

- Characteristics:
- Made in Germany - from design to production - by highly experienced protein experts.
 - Mouse Optn 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:	OPTN
Alternative Name:	Optn (OPTN Products)
Background:	Plays an important role in the maintenance of the Golgi complex, in membrane trafficking, in exocytosis, through its interaction with myosin VI and Rab8. Links myosin VI to the Golgi complex and plays an important role in Golgi ribbon formation. Negatively regulates the induction of IFNB in response to RNA virus infection. Plays a neuroprotective role in the eye and optic nerve. Probably part of the TNF-alpha signaling pathway that can shift the equilibrium toward induction of cell death. May act by regulating membrane trafficking and cellular morphogenesis via a complex that contains Rab8 and huntingtin (HD). Mediates the interaction of Rab8 with the probable GTPase-activating protein TBC1D17 during Rab8-mediated endocytic trafficking, such as of transferrin receptor (TFRC/TfR), regulates Rab8 recruitment to tubules emanating from the endocytic recycling compartment. Autophagy receptor that interacts directly with both the cargo to become degraded and an autophagy modifier of the MAP1 LC3 family, targets ubiquitin-coated bacteria (xenophagy) and appears to function in the same pathway as SQSTM1 and CALCOCO2/NDP52 (By similarity). {ECO:0000250}.
Molecular Weight:	68.0 kDa Including tag.
UniProt:	Q8K3K8
Pathways:	M Phase

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:	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 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
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Handling

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