

Datasheet for ABIN3089412

ATP8B1 Protein (AA 412-949) (His tag)



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1 Image

Overview

Quantity:	1 mg
Target:	ATP8B1
Protein Characteristics:	AA 412-949
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ATP8B1 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence: RLGQSHFINW DLQMYAEKD TPAKARTTTL NEQLGQIHVI FSDKTGTLTQ NIMTFKKCCI
 NGQIYGDHRD ASQHNHNKIE QVDFSWNTYA DGKLAFYDHY LIEQIQSGKE PEVRQFFFL
 AVCHTVMVDR TDGQLNYQAA SPDEGALVNA ARNFGFAFLA RTQNTITISE LGTERTYNVL
 AILDFNSDRK RMSIIVRTP EGNKLYCKGA DTVIYERLHR MNPTKQETQD ALDIFANETL
 RTLCLCYKEI EEKEFTWENK KFMAASVAST NRDEALDKVY EEIEKDLILL GATAIEDKLQ
 DGVPETISKL AKADIKIWL TGDKKETAEN IGFACELLTE DTTICYGEDI NSLLHARMEN
 QRNRGGVYAK FAPPVQESFF PPGGNRALII TGSWLNEILL EKKTKRNKIL KLKFPRTTEE
 RRMRTQSKRR LEAKKEQRQK NFVDLACECS AVICCRVTPK QKAMVVDLVK RYKKAITLAI
 GDGANDVNMI KTAHIGVGIS GQEGMQAVMS SDYSFAQFRY LQRLLLVHGR WSYIRMCK

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.
 - Human ATP8B1 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:	ATP8B1
Alternative Name:	ATP8B1 (ATP8B1 Products)
Background:	<p>Catalytic component of a P4-ATPase flippase complex which catalyzes the hydrolysis of ATP coupled to the transport of aminophospholipids from the outer to the inner leaflet of various membranes and ensures the maintenance of asymmetric distribution of phospholipids. Phospholipid translocation seems also to be implicated in vesicle formation and in uptake of lipid signaling molecules. May play a role in asymmetric distribution of phospholipids in the canicular membrane. May have a role in transport of bile acids into the canaliculus, uptake of bile acids from intestinal contents into intestinal mucosa or both. In cooperation with ABCB4 may be involved in establishing integrity of the canalicular membrane thus protecting hepatocytes from bile salts. Together with TMEM30A is involved in uptake of the synthetic drug alkylphospholipid perfosine. Involved in the microvillus formation in polarized epithelial cells, the function seems to be independent from its flippase activity. Required for the preservation of cochlear hair cells in the inner ear. May act as cardiolipin transporter during inflammatory injury. {ECO:0000269 PubMed:17948906, ECO:0000269 PubMed:20510206, ECO:0000269 PubMed:20512993}.</p>
Molecular Weight:	62.5 kDa Including tag.
UniProt:	O43520

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

Handling Advice:	Avoid repeated freeze-thaw cycles.
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Storage:	-80 °C
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Storage Comment:	Store at -80°C.
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Expiry Date:	Unlimited (if stored properly)
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Images



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