

Datasheet for ABIN3094449

**ALIX Protein (AA 2-868) (His tag)**[Go to Product page](#)**1** Image

## Overview

Quantity:	1 mg
Target:	ALIX (PDCD6IP)
Protein Characteristics:	AA 2-868
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ALIX protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

## Product Details

Sequence:	ATFISVQLKK TSEVDLAKPL VKFIQQTYPG GGEQQAQYCR AAEELSKLRR AAVGRPLDKH EGALETLLRY YDQICSIEPK PPFSENQICL TFTWKDAFDK GSLFGGSVKL ALASLGYEKS CVLFNCAALA SQIAAEQNLD NDEGLKIAAK HYQFASGAFL HIKETVLSAL SREPTVDISP DTVGTLSLIM LAQAQEVFFL KATRDKMKDA IIAKLANQAA DYFGDAFKQC QYKDTLPKEV FPVLAAKHCI MQANAIEYHQS ILAKQKKKFG EEIARLQHAA ELIKTVASRY DEYVNVKDFS DKINRALAAA KKDNDFIYHD RVPDLKDLDP IGTKATLVKST PVNVPISQKF TDLFEKMVPV SVQQSLAAYN QRKADLVNRS IAQMREATTI ANGVLASLNL PAAIEDVSGD TVPQSILTKS RSVIEQGGIQ TVDQLIKELP ELLQRNREIL DESLRLLEE EATDNDLRK FKRWQRTPS NELYKPLRAE GTNFRTVLDP AVQADGQVKE CYQSHRDTIV LLCKPEPELN AAIPSANPAK TMQGSEVVNV LKSLLSNLDE VKKEREGLN DLKSVNFDMT SKFLTALAQD GVINEEALSV TELDVYGGGL TTKVQESLKK QEGLLKNIQV SHQEFKMKQ SNNEANLREE VLKNLATAYD NFVELVANLK EGTFKYNELT EILVRFQNKD SDIVFARKTE RDELLKDLQQ SIAREPSAPS
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IPTPAYQSSP AGGHAPTPT PAPRTMPPTK PQPPARPPPP VLPANRAPSA TAPSPVGAGT  
AAPAPSQTPG SAPPPQAQGP PYPTYPGYPG YCQMPMPMGY NPYAYGQYNM PYPPVYHQSP  
GQAPYPGPQQ PSYPFPQPPQ QSYYPQQ

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

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### Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Human PDCD6IP 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.

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### 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.

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### Purity:

>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

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### Sterility:

0.22 µm filtered

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## Product Details

Endotoxin Level: Protein is endotoxin free.

Grade: Crystallography grade

## Target Details

Target: ALIX (PDCD6IP)

Alternative Name: PDCD6IP ([PDCD6IP Products](#))

Background: Class E VPS protein involved in concentration and sorting of cargo proteins of the multivesicular body (MVB) for incorporation into intraluminal vesicles (ILVs) that are generated by invagination and scission from the limiting membrane of the endosome. Binds to the phospholipid lysobisphosphatidic acid (LBPA) which is abundant in MVBs internal membranes. The MVB pathway appears to require the sequential function of ESCRT-O, -I, -II and -III complexes. The ESCRT machinery also functions in topologically equivalent membrane fission events, such as the terminal stages of cytokinesis and enveloped virus budding (HIV-1 and other lentiviruses). Appears to be an adapter for a subset of ESCRT-III proteins, such as CHMP4, to function at distinct membranes. Required for completion of cytokinesis. Involved in HIV-1 virus budding. Can replace TSG101 in its role of supporting HIV-1 release, this function implies the interaction with CHMP4B. May play a role in the regulation of both apoptosis and cell proliferation. Regulates exosome biogenesis in concert with SDC1/4 and SDCBP (PubMed:22660413). {ECO:0000269|PubMed:14505569, ECO:0000269|PubMed:14505570, ECO:0000269|PubMed:14739459, ECO:0000269|PubMed:17428861, ECO:0000269|PubMed:17556548, ECO:0000269|PubMed:17853893, ECO:0000269|PubMed:22660413}.

Molecular Weight: 96.8 kDa Including tag.

UniProt: [Q8WUM4](#)

Pathways: [p53 Signaling](#), [EGFR Signaling Pathway](#), [Sensory Perception of Sound](#), [Cellular Response to Molecule of Bacterial Origin](#), [Tube Formation](#)

## 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

## Application Details

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