

Datasheet for ABIN3137277

**PDZK1 Protein (AA 1-519) (His tag)**[Go to Product page](#)**1** Image

## Overview

Quantity:	1 mg
Target:	PDZK1
Protein Characteristics:	AA 1-519
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PDZK1 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), ELISA, Western Blotting (WB), Crystallization (Crys)

## Product Details

Sequence: MASTFNPREC KLSKQEGQNY GFFLRIEKDT DGHILRVIEE GSPA EKAGLL DGDRVLRING  
VFVDKEEHAQ VVELVRKSGN SVTLLVLDGD SYEKAVKNQV DLKELDQSQR EAALNDKKPG  
PGMNGAVEPC AQPRLCYLVK EGNSFGFSLK TIQKKGGVYL TDIMPQGVAM KAGVLADDHL  
IEVNGENVEN ASHEEVVEKV TKSGSRIMFL LVDKETARCH SEQKTQFKRE TASLKLLPHQ  
PRVVVIKKGS NGYGFYLRAG PEQKGQIKD IEPGSPA EAA GLKNNDLVVA VNGKSVEALD  
HDGVVEMIRK GGDQTLLVL DKEAESIYSL ARFSPLLYCQ SQELPNGSVK EGPAPIAPL  
EATGSEPTED AEGHKPKLCR LLKEDDSYGF HLNAIRGQPG SFVKEVQQGG PADKAGLENE  
DVIIEVNGEN VQEOPYDRVV ERIKSSGKHV TLLVCGKMAY SYFQAKKIPI VSSMAEPLVA  
GPDEKGETSA ESEHDAHPAK DRTLSTASHS SSNSDTEM

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

## Product Details

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- Characteristics:
- Made in Germany - from design to production - by highly experienced protein experts.
  - Mouse Pdzk1 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:	PDZK1
Alternative Name:	Pdzk1 ( <a href="#">PDZK1 Products</a> )
Background:	<p>A scaffold protein that connects plasma membrane proteins and regulatory components, regulating their surface expression in epithelial cells apical domains. May be involved in the coordination of a diverse range of regulatory processes for ion transport and second messenger cascades. In complex with SLC9A3R1, may cluster proteins that are functionally dependent in a mutual fashion and modulate the trafficking and the activity of the associated membrane proteins. May play a role in the cellular mechanisms associated with multidrug resistance through its interaction with ABCC2 and PDZK1IP1. May potentiate the CFTR chloride channel activity (By similarity). Required for normal cell-surface expression of SCARB1. Plays a role in maintaining normal plasma cholesterol levels via its effects on SCARB1. Plays a role in the normal localization and function of the chloride-anion exchanger SLC26A6 to the plasma membrane in the brush border of the proximal tubule of the kidney. May be involved in the regulation of proximal tubular Na(+)-dependent inorganic phosphate cotransport therefore playing an important role in tubule function. {ECO:0000250, ECO:0000269 PubMed:11051556, ECO:0000269 PubMed:12556478, ECO:0000269 PubMed:14531806, ECO:0000269 PubMed:15523054, ECO:0000269 PubMed:16141316, ECO:0000269 PubMed:20739281, ECO:0000269 PubMed:21602281}.</p>
Molecular Weight:	57.5 kDa Including tag.
UniProt:	<a href="#">Q9JIL4</a>

## 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