

Datasheet for ABIN3137527

**Dematin Protein (AA 1-405) (His tag)**[Go to Product page](#)**1** Image

## Overview

Quantity:	1 mg
Target:	Dematin (EPB49)
Protein Characteristics:	AA 1-405
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Dematin protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

## Product Details

Sequence: MERLQKQPLT SPGSVSSSRD SSVPGSPSSI VAKMDNQVLG YKDAAIPKD KAILDIERPD  
LMIYEPHFTY SLLEHVELPR SRECSLSPKS TSPPPSPEVW AESRTLGIIS QASTPRTTGT  
PRTSLPHFHH PETTRPDSNI YKKPPIYKQR ESVGGSPQSK HLIEDLIIES SKFPAAQPPD  
PNQPAKIETD YWPCPPSLAV VETEWKRKA SRKGAEEDDDSEEEI KAIRERQKEE  
LSKVTSNLGK MILKEEMEKS LPIRRKTRSL PDRTPFHTSL HSGTSKSSSL PSYGRTTLR  
LQSTEFSPSG SEAGSPGLQN GEGQRGRMDR GNSLPCVLEQ KIYPYEMLVV TNKGRCLKPP  
GVDRMLRLERH LSAEDFSRVF AMSPEEFGKL ALWKRNELKK KASLF

**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: | <ul style="list-style-type: none"><li>• Made in Germany - from design to production - by highly experienced protein experts.</li><li>• Mouse Dmtn Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.</li></ul> |
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## Product Details

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- 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

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Target:	Dematin (EPB49)
Alternative Name:	Dmtn ( <a href="#">EPB49 Products</a> )

## Target Details

Background:	<p>Membrane-cytoskeleton-associated protein with F-actin-binding activity that induces F-actin bundles formation and stabilization. Its F-actin-bundling activity is reversibly regulated upon its phosphorylation by the cAMP-dependent protein kinase A (PKA). Binds to the erythrocyte membrane glucose transporter-1 SLC2A1/GLUT1, and hence stabilizes and attaches the spectrin-actin network to the erythrocytic plasma membrane. Plays a role in maintaining the functional integrity of PKA-activated erythrocyte shape and the membrane mechanical properties. Plays also a role as a modulator of actin dynamics in fibroblasts, acts as negative regulator of the RhoA activation pathway. In platelets, functions as a regulator of internal calcium mobilization across the dense tubular system that affects platelet granule secretion pathways and aggregation. Also required for the formation of a diverse set of cell protrusions, such as filopodia and lamellipodia, necessary for platelet cell spreading, motility and migration. Acts as a tumor suppressor and inhibits malignant cell transformation.</p> <p>{ECO:0000269 PubMed:12011427, ECO:0000269 PubMed:18505823, ECO:0000269 PubMed:23060452}.</p>
Molecular Weight:	46.4 kDa Including tag.
UniProt:	<a href="#">Q9WV69</a>
Pathways:	<a href="#">Regulation of Actin Filament Polymerization</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
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.

## Handling

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