

# Datasheet for ABIN3135577 PAN3 Protein (AA 1-837) (His tag)



Go to Product page

#### Overview

Quantity:	1 mg
Target:	PAN3
Protein Characteristics:	AA 1-837
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PAN3 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS), Crystallization (Crys)

#### **Product Details**

#### Sequence:

MNSGGGGGLP PPSAAASPSS SSLAAAVAVA VAASSGVGGV PGGPAAAAGV KLKYCRYYAK DKTCFYGEEC QFLHEDPAAG AAPGLGLHSN SVPLALAAAA GAAFPPGALP GGGAGPPAGP KKPELGVPGA ATAGGGLDGP RVAIPGMDGG ALTDASLTES YFSTSFIGVN GFGSPVETKY PLMQRMTSSS SSPSLLNDSA KPYTGHDLLT SSASSLFNDF GALNISQRRK TPNPTASEFI PKGGSTSRLS NVSQSNMSAF SQVFSHPSMG SPATAGLAPG MSLSAGSSPL HSPKITPHTS PAPRRRSHTP NPASFMVPPS ASTPANNPAP QPPSSGQVIQ KETVGGTTYF YTDTTPAPLT GMVFPNYHIY PPTAPHVAYM QPKANAPSFF MADELRQELI NRHLITMAQI DQADMPAVPT EVDSYHSLFP LEPLPPPNRI QKSSNFGYIT SCYKAVNSKD DLPYCLRRIH GFRLVNTKCM VLVDMWKKIQ HSNIVTLREV FTTKAFAEPS LVFAYDFHAG GETMMSRHFN DPNSDAYFTK RKWGQHDGPL PRQHAGLLPE SLIWAYIVQL SSALRTIHTA GLACRVMDPT KILITSKTRL RVNCVGVFDV LTFDNSQNNN PLALMAQYQQ ADLISLGKVV LALACNSLAG IQRENLQKAM ELVTINYSSD LKNLILYLLT DQNRMRSVND IMPMIGARFY TQLDAAQMRN DVIEEDLAKE

VQNGRLFRLL AKLGTINERP EFQKDPTWSE TGDRYLLKLF RDHLFHQVTE AGAPWIDLSH IISCLNKLDA GVPEKISLIS RDEKSVLVVT YSDLKRCFEN TFQELIAAAN GNDRNSN

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

#### Characteristics:

- Made in Germany from design to production by highly experienced protein experts.
- Mouse Pan3 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 receival 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.
- 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

Product Details	
Grade:	Crystallography grade
Target Details	
Target:	PAN3
Alternative Name:	Pan3 (PAN3 Products)
Background:	Regulatory subunit of the poly(A)-nuclease (PAN) deadenylation complex, one of two cytoplasmic mRNA deadenylases involved in general and miRNA-mediated mRNA turnover. PAN specifically shortens poly(A) tails of RNA when the poly(A) stretch is bound by poly(A)-binding protein (PABP), which is followed by rapid degradation of the shortened mRNA tails by the CCR4-NOT complex. Deadenylated mRNAs are then degraded by two alternative mechanisms, namely exosome-mediated 3'-5' exonucleolytic degradation, or deadenlyation-dependent mRNA decaping and subsequent 5'-3' exonucleolytic degradation by XRN1. PAN3 acts as a positive regulator for PAN activity, recruiting the catalytic subunit PAN2 to mRNA via its interaction with PABP and to miRNA targets via its interaction with GW182 family proteins. {ECO:0000255 HAMAP-Rule:MF_03181}.
Molecular Weight:	90.7 kDa Including tag.
UniProt:  Application Details	Q640Q5
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 gurantee 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)