

Datasheet for ABIN3093984  
**NLRP4 Protein (AA 1-994) (Strep Tag)**



[Go to Product page](#)

1 Image

Overview

Quantity:	1 mg
Target:	NLRP4
Protein Characteristics:	AA 1-994
Origin:	Human
Source:	Tobacco ( <i>Nicotiana tabacum</i> )
Protein Type:	Recombinant
Purification tag / Conjugate:	This NLRP4 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence: MAASFFSDFG LMWYLEELKK EEFKRFKEHL KQMTLQLELK QIPWTEVKKA SREELANLLI  
KHYYEQQAWN ITLRIFQKMD RKDLCMKVMR ERTGYTKTYQ AHAKQKFSRL WSSKSVTEIH  
LYFEEVKQE ECDHLDRLEFA PKEAGKQPR VIIQGPQGIG KTTLLMKLMM AWSDNKIFRD  
RFLYTFYFCC RELRELPPPTS LADLISREWP DPAAPITEIV SQPERLLFVI DSFEELQGG  
NEPDSLDCGD LMEKRPVQVL LSSLLRKKML PEASLLIAIK PVCPELRDQ VTISEIYQPR  
GFNESDRLVY FCCFFKDPKR AMEAFNLVRE SEQLFSCQI PLLCWILCTS LKQEMQKGGD  
LALTCQSTTS VYSSFVFNLF TPEGAEGPTP QTQHQLKALC SLAAEGMWT DTFECEDDLR  
RNGVVDADIP ALLGTKILLK YGERESSYVF LHVCIQEFCA ALFYLLKSHL DPHPAVRCV  
QELLVANFEK ARRAHWIFLG CFLTGLLNKK EQEKLDAFFG FQLSQEIKQQ IHQCLKSLGE  
RGNPQQQVDS LAIFYCLFEM QDPAFVKQAV NLLQEANFHI IDNVDLVVSA YCLKYCSSLR  
KLCFSVQNVF KKEDEHSSTS DYSLICWHHI CSVLTTSGLH RELQVQDSTL SESTFVTWCN  
QLRHPSCRLQ KLGINNVSFS GQSVLLFEVL FYQPDLYLS FTLTKLSRDD IRSLCDALNY

PAGNVKELAL VNCHLSPIDC EVLAGLLTNN KKLTYLVNVC NQLDTGVPLL CEALCSPDTV  
LVYLMLAFCH LSEQCCEYIS EMLLRNKSVR YLDLSANVLK DEGLKTLCEA LKHPDCCLDS  
LCLVKCFITA AGCEDLASAL ISNQNLIKILQ IGCNEIGDVG VQLLCRALTH TDCRLEILGL  
EECGLTSTCC KDLASVLTCS KTLQQLNLTL NTLDHTGVVV LCEALRHPEC ALQVLGLRKT  
DFDEETQALL TAEERNPNL TITDDCDTIT RVEI

**Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**

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### Characteristics:

#### Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified by multi-step, protein-specific process to ensure correct folding and modification.
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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.

#### Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

#### Concentration:

- 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

## Product Details

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specific reference buffer.

- 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 Almost Living Cell-Free Expression System (ALiCE®): <ol style="list-style-type: none"><li>1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE.</li><li>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.</li></ol>
Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

## Target Details

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Target:	NLRP4
Alternative Name:	NLRP4 ( <a href="#">NLRP4 Products</a> )
Background:	NACHT, LRR and PYD domains-containing protein 4 (Cancer/testis antigen 58) (CT58) (PAAD and NACHT-containing protein 2) (PAN2) (PYRIN and NACHT-containing protein 2) (PYRIN-containing APAF1-like protein 4) (PYPAF4) (Ribonuclease inhibitor 2),FUNCTION: May be involved in inflammation and recognition of cytosolic pathogen-associated molecular patterns (PAMPs) not intercepted by membrane-bound receptors. Acts as a negative regulator of the type I interferon signaling pathway by serving as an adapter to promote DTX4-mediated ubiquitination of activated TBK1, and its subsequent degradation. Suppresses NF-kappaB induction by the cytokines TNFA and IL1B, suggesting that it operates at a point of convergence in these two cytokine signaling pathways. {ECO:0000269 PubMed:12093792, ECO:0000269 PubMed:22388039}.
Molecular Weight:	113.4 kDa
UniProt:	<a href="#">Q96MN2</a>
Pathways:	<a href="#">Inflammasome</a>

## Application Details

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**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.

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During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

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**Restrictions:** For Research Use only

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## Handling

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**Format:** Liquid

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**Buffer:** The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.

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