

Datasheet for ABIN3094174

## NLRC4 Protein (AA 1-1024) (Strep Tag)



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### 1 Image

#### Overview

Quantity:	1 mg
Target:	NLRC4
Protein Characteristics:	AA 1-1024
Origin:	Human
Source:	Tobacco ( <i>Nicotiana tabacum</i> )
Protein Type:	Recombinant
Purification tag / Conjugate:	This NLRC4 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

#### Product Details

Sequence: MNFIKDNSRA LIQRMGMTVI KQITDDLFVW NVLNREEVNI ICCEKVEQDA ARGIIHMILK  
 KGSESCNLF L KSLKEWNYPL FQDLNGQSLF HQTSEGLDD LAQDLKDLYH TPSFLNFYPL  
 GEDIDIIFNL KSTFTEPVLW RKDQHHRVE QLTNLGLLQA LQSPCIEGE SGKGKSTLLQ  
 RIAMLWGSGK CKALTKFKFV FFLRLSRAQG GLFETLCDQL LDIPGTIRKQ TFMAMLLKLR  
 QRVLFLLDGY NEFKPQNCPE IEALIKENHR FKNMVIVTTT TECLRHIRQF GALTAEVGDM  
 TEDSAQALIR EVLIKELAEG LLLQIQSRC LRNLMKTPLF VVITCAIQMG ESEFHSHTQT  
 TLFHTFYDLL IQKNKHKHKG VAASDFIRSL DHCGLALEG VFSHKFDFEL QDVSSVNEDEV  
 LLTTGLLCKY TAQRFKPKYK FFHKSFEY AGRRLSSLLT SHEPEEVTKG NGYLQKMVSI  
 SDITSTYSSL LRYTCGSSVE ATRAVMKHLA AVYQHGCCLLG LSIKRPLWR QESLQSVKNT  
 TEQEILKAIN INSFVECGIH LYQUESTSKSA LSQEFEAFFQ GKSLYINSGN IPDYLFDFFE  
 HLPNCASALD FIKLDFYGGA MASWEKAAED TGGIHMEEAP ETYIPSRAVS LFFNWKQEFR  
 TLEVTLRDFS KLNKQDIRYL GKIFSSATSL RLQIKRCAGV AGSLSLVLST CKNIYSLMVE

ASPLTIEDER HITSVTNLKT LSIHDLQNR LPGGLTDSLGL NLKNLTKLIM DNIKMNNEEDA  
IKLAEGLKNL KKMCLFHLTH LSDIGEGMDY IVKSLSSSEPC DLEEIQLVSC CLSANAVKIL  
AQNHLNLVKL SILDLSENYL EKDGNALHE LIDRMNVLEQ LTALMLPWGC DVQGSLSLL  
KHLEEVPLV KLGLKNWRLT DTEIRILGAF FGKNPLKNFQ QLNLAGNRVS SDGWLAFMGV  
FENLKQLVFF DFSTKEFLPD PALVRKLSQV LSKLTFLQEA RLVGWQFDDD DLSVITGAFK LVTA

**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:	NLRC4
Alternative Name:	NLRC4 ( <a href="#">NLRC4 Products</a> )
Background:	NLR family CARD domain-containing protein 4 (CARD, LRR, and NACHT-containing protein) (CED-4-like protein Clan) (Caspase recruitment domain-containing protein 12) (Ice protease-activating factor) (IpaF),FUNCTION: Key component of inflammasomes that indirectly senses specific proteins from pathogenic bacteria and fungi and responds by assembling an inflammasome complex that promotes caspase-1 activation, cytokine production and macrophage pyroptosis (PubMed:15107016). The NLRC4 inflammasome is activated as part of the innate immune response to a range of intracellular bacteria (By similarity). {ECO:0000250 UniProtKB:Q3UP24, ECO:0000269 PubMed:15107016}.
Molecular Weight:	116.2 kDa
UniProt:	<a href="#">Q9NPP4</a>
Pathways:	<a href="#">Activation of Innate immune Response</a> , <a href="#">Positive Regulation of Endopeptidase Activity</a> , <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
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## Application Details

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as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment: 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!

Restrictions: For Research Use only

## Handling

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Format: Liquid

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

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: Unlimited (if stored properly)



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