

Datasheet for ABIN3135072

NLRC4 Protein (AA 1-1024) (Strep Tag)[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	NLRC4
Protein Characteristics:	AA 1-1024
Origin:	Mouse
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:	<p>MNFIRNNRRA LIQRMGLTVT KQICDDL FAL NVLNNQEANV IYCEPLEQEA ARKIIHMTMQ KGSAAACNLFL KLENWDYFV YQDLTGQNL S YQVTEEDLNV LAQNLKDLYN SPAFLNFYPL GEDIDIIFNL EKTFTPEIMW KKDHRHHRVE QLTGLSLEA LKSPCLIEGE SGKGKSTLLQ RIAMLWASGG CRALKGFRLV FFIHLRSARG GLFETLYDQL LNIPDFISKP TFKALLKLH KEVLFLLDGY NEFHPQNCPE IEALIKENHR FKNMVIVTTT TECLRHIRHV GALTAEVGDM TEDSAKD LIE AVLVPDQVER LWAQIQESRC LRNL MKTPLF VVITCAIQMG RQEFQAHTQT MLFQTFYDLL IQKNSHRYRG GASGDFARSL DYCGDLA LEG VFAHKDFEPE EHGSSMNEDV LVTIGLLCKY TAQRLKPTYK FFHKS FQEY T AGRRLSLLT SKEPEEVSKG NSYLNKMVSI SDITSLYGNL LLYTCGSSTE ATRAVMRHLA MVYQHGS LQG LSVTKRPLWR QESIQLRNT TEQDVLKAIN VNSFVECGIN LFSSEMSKSD LSQEF EAFFQ GKS LYINSEN IPDYLFDFFE YLPNCASALD FVKLDFYERA TESQDKAEEN VPGVHTEGPS ETYIPRAVS LFFNWKQEFK TLEVTLRDIN KLNKQDIKYL GKIFSSATNL RLHIKRC AAM AGR LSSVLR T CKNMHTLMVE</p>
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ASPLTTDDEQ YITSVTGLQN LSIHRLHTQQ LPGGLIDSLG NLKNLERLIL DDIRMNEEDA
KNLAEGLRSL KKMRLHLHLS LSDIGEGMDY IVKSLSEESC DLQEMKLVAC CLTANSVKVL
AQNHLNLIKLSILDISENYL EKDGNALQE LIGRLGVLGE LTTLMPLPCW DVHTSLPKLL
KQLEGTPGLA KLGLKNWRLR DEEIKSLGEF LEMNPLRDLQ QLDLAGHCVS SDGWLYFMNV
FENLKQLVFF DFSTEEFLPD AALVRKLSQV LSKLTLLQEV KLTGWFEFDDY DISAIKGTKF 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.

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- 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 try to ensure that you receive soluble 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 against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Product Details

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Target Details

Target:	NLRC4
Alternative Name:	Nlrc4 (NLRC4 Products)
Background:	<p>NLR family CARD domain-containing protein 4 (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. The NLRC4 inflammasome is activated as part of the innate immune response to a range of intracellular bacteria. It senses pathogenic proteins of the type III secretion system (T3SS) and type IV secretion system (T4SS) such as flagellin and PrgJ-like rod proteins via the Naip proteins (Naip1, Naip2 or Naip5): specific Naip proteins recognize and bind pathogenic proteins, driving assembly and activation of the NLRC4 inflammasome. The NLRC4 inflammasome senses Gram-negative bacteria such as <i>L.pneumophila</i> and <i>P.aeruginosa</i>, enteric pathogens <i>S.typhimurium</i> (<i>Salmonella</i>) and <i>S.flexneri</i> and fungal pathogen <i>C.albicans</i>. In intestine, the NLRC4 inflammasome is able to discriminate between commensal and pathogenic bacteria and specifically drives production of interleukin-1 beta (IL1B) in response to infection by <i>Salmonella</i> or <i>P.aeruginosa</i>. In case of <i>L.pneumophila</i> infection the inflammasome acts by activating caspase-7. {ECO:0000269 PubMed:15190255, ECO:0000269 PubMed:16648852, ECO:0000269 PubMed:16648853, ECO:0000269 PubMed:18070936, ECO:0000269 PubMed:19343209, ECO:0000269 PubMed:20133635, ECO:0000269 PubMed:20603313, ECO:0000269 PubMed:21874021, ECO:0000269 PubMed:21918512, ECO:0000269 PubMed:22174673, ECO:0000269 PubMed:22231517, ECO:0000269 PubMed:22484733, ECO:0000269 PubMed:22547706, ECO:0000269 PubMed:22885697, ECO:0000269 PubMed:29146805, ECO:0000269 PubMed:29182158}.</p>
Molecular Weight:	116.7 kDa
UniProt:	Q3UP24

Target Details

Pathways: [Activation of Innate immune Response](#), [Positive Regulation of Endopeptidase Activity](#), [Inflammasome](#)

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.

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Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.
Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months