Datasheet for ABIN3094197

NLRC3 Protein (AA 1-1065) (Strep Tag)

1 Image

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Overview

Quantity:	1 mg
Target:	NLRC3
Protein Characteristics:	AA 1-1065
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This NLRC3 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence:	MRKQEVRTGR EAGQGHGTGS PAEQVKALMD LLAGKGSQGS QAPQALDRTP DAPLGPCSND SRIQRHRKAL LSKVGGGPEL GGPWHRLASL LVEGLTDLQ LREHDFTQVE ATRGGGHPAR TVALDRLFLP LSRVSVPPRV SITIGVAGMG KTTLVRHFVR LWAHGQVGKD FSLVLPLTFR DLNTHEKLCA DRLICSVFPH VGEPSLAVAV PARALLILDG LDECRTPLDF SNTVACTDPK KEIPVDHLIT NIIRGNLFPE VSIWITSRPS ASGQIPGGLV DRMTEIRGFN EEEIKVCLEQ MFPEDQALLG WMLSQVQADR ALYLMCTVPA FCRLTGMALG HLWRSRTGPQ DAELWPPRTL CELYSWYFRM ALSGEGQEKG KASPRIEQVA HGGRKMVGTL GRLAFHGLLK KKYVFYEQDM KAFGVDLALL QGAPCSCFLQ REETLASSVA YCFTHLSLQE FVAAAYYYGA SRRAIFDLFT ESGVSWPRLG FLTHFRSAAQ RAMQAEDGRL DVFLRFLSGL LSPRVNALLA GSLLAQGEHQ AYRTQVAELL QGCLRPDAAV CARAINVLHC LHELQHTELA RSVEEAMESG ALARLTGPAH RAALAYLLQV SDACAQEANL SLSLSQGVLQ SLLPQLLYCR KLRLDTNQFQ DPVMELLGSV LSGKDCRIQK ISLAENQISN KGAKALARSL LVNRSLTSLD LRGNSIGPQG AKALADALKI

NRTLTSLSLQ GNTVRDDGAR SMAEALASNR TLSMLHLQKN SIGPMGAQRM ADALKQNRSL KELMFSSNSI GDGGAKALAE ALKVNQGLES LDLQSNSISD AGVAALMGAL CTNQTLLSLS LRENSISPEG AQAIAHALCA NSTLKNLDLT ANLLHDQGAR AIAVAVRENR TLTSLHLQWN FIQAGAAQAL GQALQLNRSL TSLDLQENAI GDDGACAVAR ALKVNTALTA LYLQVASIGA SGAQVLGEAL AVNRTLEILD LRGNAIGVAG AKALANALKV NSSLRRLNLQ ENSLGMDGAI CIATALSGNH RLQHINLQGN HIGDSGARMI SEAIKTNAPT CTVEM

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 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.

Product Details

	• The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer. • We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.
Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 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. 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:	>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

Target:	NLRC3
Alternative Name:	NLRC3 (NLRC3 Products)
Background:	NLR family CARD domain-containing protein 3 (CARD15-like protein) (Caterpiller protein 16.2) (CLR16.2) (NACHT, LRR and CARD domains-containing protein 3) (Nucleotide-binding oligomerization domain protein 3),FUNCTION: Negative regulator of the innate immune response (PubMed:15705585, PubMed:22863753, PubMed:25277106). Attenuates signaling pathways activated by Toll-like receptors (TLRs) and the DNA sensor STING/TMEM173 in response to pathogen-associated molecular patterns, such as intracellular poly(dA:dT), but not poly(I:C), or in response to DNA virus infection, including that of Herpes simplex virus 1 (HSV1) (By similarity) (PubMed:22863753). May affect TLR4 signaling by acting at the level of TRAF6 ubiquitination, decreasing the activating 'Lys-63'-linked ubiquitination and leaving unchanged the degradative 'Lys-48'-linked ubiquitination (PubMed:22863753). Inhibits the PI3K-AKT-mTOR pathway possibly by directly interacting with the posphatidylinositol 3-kinase regulatory subunit p85 (PIK3R1/PIK3R2) and disrupting the association between PIK3R1/PIK3R2 and the catalytic subunit p110 (PIK3CA/PIK3CB/PIK3CD) and reducing PIK3R1/PIK3R2 activation. Via its regulation of the PI3K-AKT-mTOR pathway, controls cell proliferation, predominantly in intestinal epithelial cells (By similarity). May also affect NOD1- or NOD2-mediated NF-kappa-B activation (PubMed:25277106). Might also affect the inflammatory response by preventing

Target Details

	NLRP3 inflammasome formation, CASP1 cleavage and IL1B maturation (PubMed:25277106). {ECO:0000250|UniProtKB:Q5DU56, ECO:0000269|PubMed:15705585, ECO:0000269|PubMed:22863753, ECO:0000269|PubMed:25277106}.
Molecular Weight:	114.7 kDa
UniProt:	Q7RTR2

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:	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

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