Datasheet for ABIN3094027

NLRP12 Protein (AA 1-1061) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	NLRP12
Protein Characteristics:	AA 1-1061
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This NLRP12 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MLRTAGRDGL CRLSTYLEEL EAVELKKFKL YLGTATELGE GKIPWGSMEK AGPLEMAQLL ITHFGPEEAW RLALSTFERI NRKDLWERGQ REDLVRDTPP GGPSSLGNQS TCLLEVSLVT PRKDPQETYR DYVRRKFRLM EDRNARLGEC VNLSHRYTRL LLVKEHSNPM QVQQQLLDTG RGHARTVGHQ ASPIKIETLF EPDEERPEPP RTVVMQGAAG IGKSMLAHKV MLDWADGKLF QGRFDYLFYI NCREMNQSAT ECSMQDLIFS CWPEPSAPLQ ELIRVPERLL FIIDGFDELK PSFHDPQGPW CLCWEEKRPT ELLLNSLIRK KLLPELSLLI TTRPTALEKL HRLLEHPRHV EILGFSEAER KEYFYKYFHN AEQAGQVFNY VRDNEPLFTM CFVPLVCWVV CTCLQQQLEG GGLLRQTSRT TTAVYMLYLL SLMQPKPGAP RLQPPPNQRG LCSLAADGLW NQKILFEEQD LRKHGLDGED VSAFLNMNIF QKDINCERYY SFIHLSFQEF FAAMYYILDE GEGGAGPDQD VTRLLTEYAF SERSFLALTS RFLFGLLNEE TRSHLEKSLC WKVSPHIKMD LLQWIQSKAQ SDGSTLQQGS LEFFSCLYEI QEEEFIQQAL SHFQVIVVSN IASKMEHMVS SFCLKRCRSA

QVLHLYGATY SADGEDRARC SAGAHTLLVQ LPERTVLLDA YSEHLAAALC TNPNLIELSL YRNALGSRGV KLLCQGLRHP NCKLQNLRLK RCRISSSACE DLSAALIANK NLTRMDLSGN GVGFPGMMLL CEGLRHPQCR LQMIQLRKCQ LESGACQEMA SVLGTNPHLV ELDLTGNALE DLGLRLLCQG LRHPVCRLRT LWLKICRLTA AACDELASTL SVNQSLRELD LSLNELGDLG VLLLCEGLRH PTCKLQTLRL GICRLGSAAC EGLSVVLQAN HNLRELDLSF NDLGDWGLWL LAEGLQHPAC RLQKLWLDSC GLTAKACENL YFTLGINQTL TDLYLTNNAL GDTGVRLLCK RLSHPGCKLR VLWLFGMDLN KMTHSRLAAL RVTKPYLDIG C

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.

Product Details

- 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.

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	NLRP12
Alternative Name:	NLRP12 (NLRP12 Products)
Background:	NACHT, LRR and PYD domains-containing protein 12 (Monarch-1) (PYRIN-containing APAF1-like protein 7) (Regulated by nitric oxide),FUNCTION: Plays an essential role as an potent mitigator of inflammation (PubMed:30559449). Primarily expressed in dendritic cells and macrophages, inhibits both canonical and non-canonical NF-kappa-B and ERK activation pathways (PubMed:15489334, PubMed:17947705). Functions as a negative regulator of NOD2 by targeting it to degradation via the proteasome pathway (PubMed:30559449). In turn, promotes bacterial tolerance (PubMed:30559449). Inhibits also the RIGI-mediated immune signaling against RNA viruses by reducing the E3 ubiquitin ligase TRIM25-mediated 'Lys-63'-linked RIGI activation but enhancing the E3 ubiquitin ligase RNF125-mediated 'Lys-48'-linked RIGI degradation (PubMed:30902577). Acts also as a negative regulator of inflammatory response to mitigate obesity and obesity-associated diseases in adipose tissue (By similarity). {ECO:0000250|UniProtKB:E9Q5R7, ECO:0000269|PubMed:15489334, ECO:0000269|PubMed:17947705, ECO:0000269|PubMed:30559449, ECO:0000269|PubMed:30902577}.
Molecular Weight:	120.2 kDa
UniProt:	P59046
Pathways:	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

Application Details

	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. 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