

# Datasheet for ABIN7554686 NLRP12 Protein (AA 1-1061) (His tag)



## Overview

Quantity:	1 mg
Target:	NLRP12
Protein Characteristics:	AA 1-1061
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This NLRP12 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details	
Purpose:	Custom-made recombinat NLRP12 Protein expressed in mammalien cells.
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 Purification-Tag is based on experiences 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 to order protein from design to production by highly experienced protein experts.
- Protein expressed in mammalien cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- 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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

## Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

#### 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 guarantee though.

Restrictions:

For Research Use only

## Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months