

# Datasheet for ABIN7554771 NLRC3 Protein (AA 1-1065) (His tag)



# Overview

| Quantity:                     | 1 mg   |
|-------------------------------|--|
| Target:                       | NLRC3  |
| Protein Characteristics:      | AA 1-1065                                    |
| Origin:                       | Human  |
| Source:                       | HEK-293 Cells                                |
| Protein Type:                 | Recombinant                                  |
| Purification tag / Conjugate: | This NLRC3 protein is labelled with His tag. |

## **Product Details**

| Purpose:  | Custom-made recombinant NLRC3 Protein expressed in mammalian cells. |
|-----------|---|
| Sequence: | MRKQEVRTGR EAGQGHGTGS PAEQVKALMD LLAGKGSQGS QAPQALDRTP DAPLGPCSND   |
|           | SRIQRHRKAL LSKVGGGPEL GGPWHRLASL LLVEGLTDLQ 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 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.

#### Specificity:

If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.

#### Characteristics:

#### Key Benefits:

- Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalian 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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

#### Grade:

custom-made

#### 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 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:

O7RTR2

## **Application Details**

Application Notes:

We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

For Research Use only

Restrictions:

# 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