

Datasheet for ABIN7563651

## **NLR Family, Pyrin Domain Containing 1B (NLRP1B) (AA 1-1172) protein (His tag)**



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### Overview

Quantity:	1 mg
Target:	NLR Family, Pyrin Domain Containing 1B (NLRP1B)
Protein Characteristics:	AA 1-1172
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	His tag
Application:	SDS-PAGE (SDS), Western Blotting (WB)

### Product Details

Purpose:	Custom-made recombinat Nlrp1b Protein expressed in mammalian cells.
Sequence:	MEESPPKQKS NTKVAQHEGQ QDLNTRHMN VELKHPKLE RHLKLGMPV VYMKQREEIL YPAQSLKEEN LIQNFTSLPL LQKLYPKDPE NMVRKSWASC IPEEGGHMIN IQDLFGPNIG TQKEPQLVII EGAAGIGKST LARLVKRAWK EGQLYRDHFQ HVFFFSCREL AQCKKLSLAE LIAQGQEVPT APINQILSHP EKLLFILDGI DEPAWVLADQ NPELCLHWSQ RQPVHTLLGS LLGKSILPEA FFLLTTRTTA LQKFIPSLPM PCQVEVLGFS GIERENYFYK YFANQRHAIT AFMMVESNPV LLTLCEVPWV CWLVCTCLKK QMEQGRVLSL KSQTTTALCL KYPSLTIPDK HRRTQVKALC SLAAEGIWKR RTLFESDLC KQGLDEDAVA TFLKTGVLQK QASSLSYSFA HLCLQEFAA ISCILEDSEE RHGNMEMDRI VETLVERYGR QNLFEAPT VR FLFGLLGKEG VKGMEKLFSC SLHGKTKLKL LWHILGKSQP HQPSCLGLLH CLYENQDMEL LTHVMHDLQG TIVPGPN DIA HTVLQTNVKQ LVVQTDME LM VATFCIQFYC HVRTLQLNME KQQGYALTSP RMVLYRWTP I TNASWEILFY NLKFTRNLEG LDLSGNSLRY SVVQSLCNTL RYPGCQLKTL

## Product Details

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WLVKCGLTSR YCSLLASVLS AHSSLTELYL QLNDLGDDGV RMLCEGLRNP VCNLSILWLD  
LSSLSAQVIT ELRTLEEKNP KLYIRSIWMP HMMVPTENMD EEAILTTFKQ QRQESGDKPM  
EILGTEEDFW GPTGPVATEL VDRVRNLYRV QLPMAGSYHC PSTGLHFVVT RAVTIEIEFC  
AWSQFLDKTP LQQSHMVVGP LFDIKAEQGA VTAVYLPHFV SLKDTEASTF DFKVAHFQEH  
GIVLETPDRV KPGYTVLKNP SFSPMGDVL R IIPADRHFI ITSITLIYYR LNLEEVTLHL YLVPSDCTIQ  
KAIDDEEMKF QFVRINKPPP VDNLFISGRY IVSGSENLEI TPKELELCYR SSKEFQLFSE  
IYVGNMGSEI KLQIKNKKHM RLIWEALLKP GDLRPALPRI AQALKDAPSL LHFMDQHREQ  
LVARVTSVDP LLDKHLGLVL NEESYEAVRA ENTNQDKMRK LFNLSRSWSR ACKDLFYQAL  
KETHPHLVMD LLEKSGGVSL GS **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.**

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### 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.

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### Purity:

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

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### Grade:

custom-made

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## Target Details

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### Target:

NLR Family, Pyrin Domain Containing 1B (NLRP1B)

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### Alternative Name:

Nlrp1b ([NLRP1B Products](#))

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### Background:

NACHT, LRR and PYD domains-containing protein 1b allele 3,FUNCTION: May act as the sensor component of the Nlrp1b inflammasome, which mediates inflammasome activation in

## Target Details

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response to various pathogen-associated signals, leading to subsequent pyroptosis (By similarity). Inflammasomes are supramolecular complexes that assemble in the cytosol in response to pathogens and other damage-associated signals and play critical roles in innate immunity and inflammation (By similarity). May act as a recognition receptor (PRR), which recognizes specific pathogens and other damage-associated signals and forms an inflammasome complex: the inflammasome directly recruits pro-caspase-1 (proCASP1) independently of PYCARD/ASC and promotes caspase-1 (CASP1) activation, which subsequently cleaves and activates inflammatory cytokines IL1B and IL18 and gasdermin-D (GSDMD), leading to pyroptosis (By similarity). In the absence of GSDMD expression, the Nlrp1b inflammasome is able to recruit and activate CASP8, leading to activation of gasdermin-E (GSDME) (By similarity). Contrary to Nlrp1b allele 1, allele 3 is not activated by Bacillus anthracis lethal toxin (PubMed:16429160, PubMed:19651869, PubMed:23230290). The absence of autocatalytic cleavage within the FIIND domain, which regulates activation in other alleles, suggests that allele 3 may be non-functional (PubMed:31383852).  
{ECO:0000250|UniProtKB:Q2LKW6, ECO:0000269|PubMed:16429160, ECO:0000269|PubMed:19651869, ECO:0000269|PubMed:23230290, ECO:0000269|PubMed:31383852}.

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Molecular Weight: 133.6 kDa

UniProt: [Q2LKV5](#)

## Application Details

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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

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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.

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## Handling

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Expiry Date: 12 months