

# NLRP12 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14014a

#### **Product Information**

Application Primary Accession	WB, IHC-P, E <u>P59046</u>
Other Accession	<u>NP_653288.1</u> , <u>NP_150639.1</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB33963
Calculated MW	120173
Antigen Region	183-212

#### **Additional Information**

Gene ID	91662
Other Names	NACHT, LRR and PYD domains-containing protein 12, Monarch-1, PYRIN-containing APAF1-like protein 7, Regulated by nitric oxide, NLRP12, NALP12, PYPAF7, RNO
Target/Specificity	This NLRP12 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 183-212 amino acids from the N-terminal region of human NLRP12.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	NLRP12 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name	NLRP12
Synonyms	NALP12, PYPAF7, RNO

Function	Plays an essential role as an potent mitigator of inflammation (PubMed: <u>30559449</u> ). Primarily expressed in dendritic cells and macrophages, inhibits both canonical and non-canonical NF-kappa-B and ERK activation pathways (PubMed: <u>15489334</u> , PubMed: <u>17947705</u> ). Functions as a negative regulator of NOD2 by targeting it to degradation via the proteasome pathway (PubMed: <u>30559449</u> ). In turn, promotes bacterial tolerance (PubMed: <u>30559449</u> ). Also inhibits 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: <u>30902577</u> ). Also acts as a negative regulator of inflammatory response to mitigate obesity and obesity-associated diseases in adipose tissue (By similarity).
Cellular Location	Cytoplasm.
Tissue Location	Detected only in peripheral blood leukocytes, predominantly in eosinophils and granulocytes, and at lower levels in monocytes.

#### Background

This gene encodes a member of the CATERPILLER family of cytoplasmic proteins. The encoded protein, which contains an N-terminal pyrin domain, a NACHT domain, a NACHT-associated domain, and a C-terminus leucine-rich repeat region, functions as an attenuating factor of inflammation by suppressing inflammatory responses in activated monocytes. Alternatively spliced transcript variants encoding distinct isoforms have been described but the full-length nature of some of these has not been determined.

### References

Bailey, S.D., et al. Diabetes Care (2010) In press : Cummings, J.R., et al. Tissue Antigens 76(1):48-56(2010) Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009) Fahy, R.J., et al. Am. J. Respir. Crit. Care Med. 177(9):983-988(2008) Jeru, I., et al. Proc. Natl. Acad. Sci. U.S.A. 105(5):1614-1619(2008)

#### Images



NLRP12 Antibody (N-term)

(AP14014a)immunohistochemistry analysis in formalin fixed and paraffin embedded human pancreas tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of NLRP12 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



## Citations

• NLRP12 modulates host defense through IL-17A-CXCL1 axis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.