

NLRP12 Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7281C

Specification

NLRP12 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype WB,E <u>P59046</u> Human Rabbit Polyclonal Rabbit IgG

NLRP12 Antibody - 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 human NLRP12 recombinant protein.

Dilution WB~~1:500-1:2000

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 is for research use only and not for use in diagnostic or therapeutic procedures.

NLRP12 Antibody - 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>). 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:<u>30902577</u>). Acts also 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.

NLRP12 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

NLRP12 Antibody - Images



All lanes : Anti-NLRP12 Antibody at 1:500-1:2000 dilution Lane 1: HL-60 whole cell lysate Lane 2: Jurkat whole cell lysate Lane 3: U-87 MG whole cell lysate Lane 4: RPMI 8226 whole cell lysate Lane 5: Caco2 whole cell lysate Lane 6: HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 120 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

NLRP12 Antibody - Background



NALPs are cytoplasmic proteins that form a subfamily within the larger CATERPILLER protein family. Most short NALPs, such as NALP12, have an N-terminal pyrin (MEFV; MIM 608107) domain (PYD), followed by a NACHT domain, a NACHT-associated domain (NAD), and a C-terminal leucine-rich repeat (LRR) region. The long NALP, NALP1 (MIM 606636), also has a C-terminal extension containing a function to find domain (FIIND) and a caspase recruitment domain (CARD). NALPs are implicated in the activation of proinflammatory caspases (e.g., CASP1; MIM 147678) via their involvement in multiprotein complexes called inflammasomes.

NLRP12 Antibody - References

Ye,Z., Mol. Cell. Biol. 28 (5), 1841-1850 (2008) Jeru,I., Proc. Natl. Acad. Sci. U.S.A. 105 (5), 1614-1619 (2008) Arthur,J.C., J. Immunol. 179 (9), 6291-6296 (2007)