

# NALP12 Rabbit pAb

Catalog # AP99344

## Product Information

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| <b>Application</b>             | IHC-P, IHC-F, IF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Primary Accession</b>       | <a href="#">P59046</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Other Accession</b>         | <a href="#">P59046</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Host</b>                    | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Clonality</b>               | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Calculated MW</b>           | 120173                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Physical State</b>          | Liquid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Immunogen</b>               | KLH conjugated synthetic peptide derived from human NALP12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Epitope Specificity</b>     | 176-270/1061                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Isotype</b>                 | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Purity</b>                  | affinity purified by Protein A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Buffer</b>                  | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>SIMILARITY</b>              | Belongs to the NLRP family. Contains 1 DAPIN domain. Contains 8 LRR (leucine-rich) repeats. Contains 1 NACHT domain.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>SUBUNIT</b>                 | Binds to ASC with its DAPIN domain. Interacts with FAF1 UBA domain via its DAPIN domain.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>DISEASE</b>                 | Defects in NLRP12 are the cause of familial cold autoinflammatory syndrome type 2 (FCAS2) [MIM:611762]. FCAS are rare autosomal dominant systemic inflammatory diseases characterized by episodes of rash, arthralgia, fever and conjunctivitis after generalized exposure to cold.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Important Note</b>          | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Background Descriptions</b> | May mediate activation of CASP1 via ASC and promote activation of NF-kappa-B via IKK. NALP proteins are cytoplasmic proteins that form a subfamily within the larger CATERPILLER family and are thought to play a crucial role in cell proliferation and reproduction. Like all other NALP family members, NALP12, also known as Monarch-1, has a C-terminal leucine-rich repeat (LRR) region, an N-terminal Pyrin domain (PYD) followed by a NACHT domain, and a NACHT-associated domain. NALP12 is thought to act as an attenuating factor of inflammation by suppressing inflammatory responses such as NF-kB activation by TLR-signaling molecules MyD88, IRAK-1, TRAF6 and RIPK1 in activated monocytes. Recent evidence suggests that mutations in NALP12 result in hereditary periodic fever syndromes. |

## Additional Information

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| <b>Gene ID</b>     | 91662                                                                                                                                                                                                                                                                                                                                            |
| <b>Other Names</b> | CLR19.3; FCAS2; NALP12; PAN6; PYPAF7; RNO; RNO2; monarch-1; NAL12_HUMAN; NLRP12; PYRIN-containing APAF1-like protein 7; Regulated by nitric oxide; Q08EE9_MOUSE; Q14BA2_MOUSE; NLR family pyrin domain containing 12; NACHT, leucine rich repeat and PYD containing 12; nucleotide-binding oligomerization domain, leucine rich repeat and pyrin |

domain containing 12

**Dilution**

IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

**Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

## Protein Information

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**Name**

NLRP12

**Synonyms**

NALP12, PYPAF7, RNO

**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](#)). 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:[30902577](#)). 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.

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