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NLRP12 Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7281C

Product Information

Application	WB, E
Primary Accession	P59046
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	120173

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~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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.

Protein Information

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.

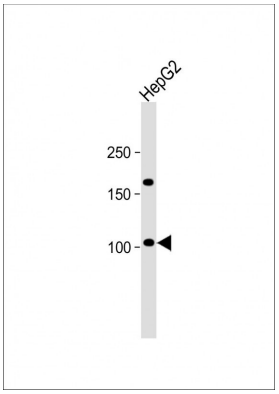
Background

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.

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)

Images



All lanes: Anti-NLRP12 Antibody at 1:500 dilution + HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 120 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

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