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NALP12 Rabbit pAb

Catalog # AP99344

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P59046
Other Accession	P59046
Reactivity	Rat, Human
Predicted	Pig, Mouse, Rabbit, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	120173
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human NALP12
Epitope Specificity	176-270/1061
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the NLRP family. Contains 1 DAPIN domain. Contains 8 LRR (leucine-rich) repeats. Contains 1 NACHT domain.
SUBUNIT	Binds to ASC with its DAPIN domain. Interacts with FAF1 UBA domain via its DAPIN domain.
DISEASE	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.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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

Gene ID	91662
Other Names	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

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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