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NLRP12 Antibody

Mouse Monoclonal Antibody (Mab)
Catalog # AM1894b

Product Information

Application	WB, E
Primary Accession	P59046
Other Accession	NP_150639.1, NP_653288.1
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgM,K
Clone Names	228CT4.1.3
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 monoclonal antibody is generated from mouse immunized with NLRP12 recombinant protein.
Dilution	WB~~1:500~1500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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.

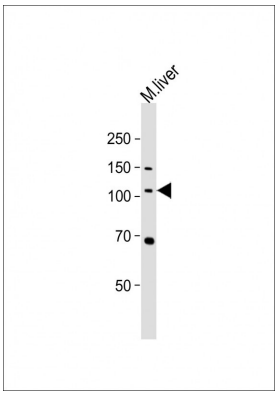
Background

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



All lanes : Anti-NLRP12 Antibody at 1:500 dilution + mouse brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Mouse lgM, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 120 kDa Blocking/Dilution buffer: 5% NFDM/TBST.