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NLRC4 Antibody (N-term) Blocking peptide

Synthetic peptide
Catalog # BP13307a

Specification

NLRC4 Antibody (N-term) Blocking peptide - Product Information

Primary Accession	Q9NPP4

NLRC4 Antibody (N-term) Blocking peptide - Additional Information

Gene ID 58484

Other Names
NLR family CARD domain-containing protein 4, CARD, LRR, and NACHT-containing protein, Clan protein, Caspase recruitment domain-containing protein 12, Ice protease-activating factor, Ipaf, NLRC4, CARD12, CLAN, CLAN1, IPAF

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP13307a was selected from the N-term region of NLRC4. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

NLRC4 Antibody (N-term) Blocking peptide - Protein Information

Name NLRC4

Function
Key component of inflammasomes that indirectly senses specific proteins from pathogenic bacteria and fungi and responds by assembling an inflammasome complex that promotes caspase-1 activation, cytokine production and macrophage pyroptosis (PubMed:15107016). The NLRC4 inflammasome is activated as part of the innate immune response to a range of intracellular bacteria (By similarity).

Cellular Location
Cytoplasm. Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q3UP24}. Inflammasome

Tissue Location

Isoform 2 is expressed ubiquitously, although highly expressed in lung and spleen. Isoform 1 is highly expressed in lung, followed by leukocytes especially monocytes, lymph node, colon, brain, prostate, placenta, spleen, bone marrow and fetal liver. Isoform 4 is only detected in brain

NLRC4 Antibody (N-term) Blocking peptide - Protocols

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

- Blocking Peptides

NLRC4 Antibody (N-term) Blocking peptide - Images

NLRC4 Antibody (N-term) Blocking peptide - Background

In C. elegans, Ced4 binds and activates Ced3, an apoptoticinitiator caspase, via caspase-associated recruitment domains(CARDs). Human Ced4 homologs include APAF1 (MIM 602233), NOD1/CARD4(MIM 605980), and NOD2/CARD15 (MIM 605956). These proteins have atleast 1 N-terminal CARD domain followed by a centrally locatednucleotide-binding domain (NBD or NACHT) and a C-terminalregulatory domain, found only in mammals, that contains either WD40repeats or leucine-rich repeats (LRRs). CARD12 is a member of theCed4 family and can induce apoptosis.

NLRC4 Antibody (N-term) Blocking peptide - References

Miao, E.A., et al. J. Clin. Immunol. 30(4):502-506(2010)Vinzing, M., et al. J. Immunol. 180(10):6808-6815(2008)Macaluso, F., et al. Exp. Dermatol. 16(8):692-698(2007)Bruey, J.M., et al. Cell 129(1):45-56(2007)Thalappilly, S., et al. FEBS J. 273(12):2766-2778(2006)