

NALP2 Antibody

Catalog # ASC10169

Specification

NALP2 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, E <u>O9NX02</u> <u>NP_060322</u>, <u>8923473</u> Human, Mouse, Rat Rabbit Polyclonal IgG NALP2 antibody can be used for detection of NALP2 by Western blot at 1 to 2 µg/mL.

NALP2 Antibody - Additional Information

Gene ID 55655 Other Names NALP2 Antibody: NBS1, PAN1, NALP2, PYPAF2, CLR19.9, NBS1, NACHT, LRR and PYD domains-containing protein 2, Nucleotide-binding site protein 1, NLR family, pyrin domain containing 2

Target/Specificity NLRP2;

Reconstitution & Storage

NALP2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions NALP2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

NALP2 Antibody - Protein Information

Name NLRP2

Synonyms NALP2, NBS1, PAN1, PYPAF2

Function

Suppresses TNF- and CD40-induced NFKB1 activity at the level of the IKK complex, by inhibiting NFKBIA degradation induced by TNF. When associated with PYCARD, activates CASP1, leading to the secretion of mature pro-inflammatory cytokine IL1B. May be a component of the inflammasome, a protein complex which also includes PYCARD, CARD8 and CASP1 and whose function would be the activation of pro-inflammatory caspases.

Cellular Location



Cytoplasm

Tissue Location

Expressed at high levels in lung, placenta and thymus and at lower levels in ovary, intestine and brain (PubMed:15456791). Highly abundant in oocytes and early embryos, however poorly expressed in somatic tissues such as brain, kidney, liver and spinal cord (PubMed:30877238).

NALP2 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

NALP2 Antibody - Images



Western blot analysis of NALP2 in PC-3 cell lysate with NALP2 antibody at (A) 1 and (B) 2 µg/mL.

NALP2 Antibody - Background

NALP2 Antibody: NALP2 belongs to a family of cytoplasmic proteins that have been implicated in cell responses to apoptotic and inflammatory stimuli. Unlike the prototypical NALP protein NALP1, NALP2 only contains a NACHT domain, leucine rich repeat (LRR), and pyrin-containing domain (PYD). This protein interacts with the adapter protein ASC in addition to CARD8 and caspase-1 to form an inflammasome with high prolL-1 β -processing activity and is thought to function as a modulator of NF- κ B and procaspase-1 activation in macrophages. It has also been suggested that NALP2, in addition to other NALP family members, can act as innate sensors of pathogens in a manner similar to the toll-like receptors (TLRs). At least two alternatively spliced transcript variants encoding distinct isoforms have been found for NALP2.

NALP2 Antibody - References

Tschopp J, Martinon F, and Burns K. NALPs: a novel protein family involved in inflammation. Nat. Rev. Mol. Cell Biol. 2003; 4:95-104.

Bruey JM, Bruey-Sedano N, Newman R, et al. PAN1/NALP2/PYPAF2, an inducible inflammatory



mediator that regulates NF- κ B and caspase-1 activation in macrophages. J. Biol. Chem. 2004; 279:51897-907.

Agostini L, Martinon F, Burns K, et al. NALP3 forms an IL-1β-processing inflammasome with increased activity in Muckle-Wells autoinflammatory disorder. Immunity 2004; 20:319-25. Martinon F and Tschopp J. NLRs join TLRs as innate sensors of pathogens. TRENDS Imm. 2005; 26:447-54.