

## **NALP2 Antibody**

Catalog # ASC10169

## Specification

## **NALP2 Antibody - Product Information**

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype

O9NX02 NP\_060322, 8923473 Human, Mouse, Rat Rabbit Polyclonal

WB. E

IgG

Application Notes

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**

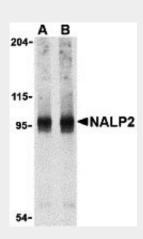
Expressed at high levels in lung, placenta and thymus and at lower levels in ovary, intestine and brain (PubMed:15456791). Highly abundant in oocytes and early embryos, however poorly expressed in somatic tissues such as brain, kidney, liver and spinal cord (PubMed:30877238).

### **NALP2 Antibody - Protocols**

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

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

# **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 proIL-1 $\beta$ -processing activity and is thought to function as a modulator of NF- $\kappa$ 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-κB 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.