

NOD6 Antibody

Catalog # ASC11192

Specification

NOD6 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes

WB, IHC, IF <u>O7RTR0</u> <u>O7RTR0</u>, <u>74762418</u> Human, Mouse Rabbit Polyclonal IgG NOD6 antibody can be used for detection of NOD6 by Western blot at 1 μg/mL. Antibody can also be used for immunohistochemistry starting at 10 μg/mL. For immunofluorescence start at 20 μg/mL.

NOD6 Antibody - Additional Information

Gene ID Target/Specificity NLRP9;

Reconstitution & Storage

NOD6 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.

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Precautions

NOD6 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

NOD6 Antibody - Protein Information

Name NLRP9

Synonyms NALP9, NOD6, PAN12

Function

As the sensor component of the NLRP9 inflammasome, plays a crucial role in innate immunity and inflammation. In response to pathogens, including rotavirus, initiates the formation of the inflammasome polymeric complex, made of NLRP9, PYCARD and CASP1. Recruitment of proCASP1 to the inflammasome promotes its activation and CASP1-catalyzed IL1B and IL18 maturation and release in the extracellular milieu. The active cytokines stimulate inflammatory responses. Inflammasomes can also induce pyroptosis, an inflammatory form of programmed cell death. NLRP9 inflammasome activation may be initiated by DHX9 interaction with viral double-stranded RNA (dsRNA), preferentially to short dsRNA segments.



Cellular Location Cytoplasm {ECO:0000250|UniProtKB:Q66X22}. Inflammasome

Tissue Location

Expressed in ileum intestinal epithelial cells. Not detected in peripheral blood mononuclear cells (PubMed:28636595) Expressed in cerebral endothelial cells and, at much lower levels, in brain pericytes (PubMed:28432035).

NOD6 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>

NOD6 Antibody - Images



Western blot analysis of NOD6 in EL4 cell lysate with NOD6 antibody at 1 μ g/mL in the (A) absence and (B) presence of blocking peptide.





Immunohistochemistry of NOD6 in human testis tissue with NOD6 antibody at 10 µg/mL.



Immunofluorescence of NOD6 in human testis tissue with NOD6 antibody at 20 μ g/mL.

NOD6 Antibody - Background

NOD6 Antibody: NOD6, also known as NALP9, is a member of the NALP family, a group of proteins that typically contain a NACHT domain, a NACHT-associated domain (NAD), a C-terminal leucine-rich repeat (LRR) region, and an N-terminal pyrin domain (PYD) and are involved in inflammation and innate immune defense. The bovine NOD6, which has 76% homology to its human counterpart, has been suggested to be an oocyte marker gene. In adult tissues, NALP9 mRNA is expressed exclusively in ovary and testis.

NOD6 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.

Dalbies-Tran R, Papillier P, Pennetier S, et al. Bovine mater-like NALP9 is an oocyte marker gene. Mol. Reprod. Dev.2005; 71:414-21.

Ponsuksili S, Brunner RM, Goldammer T, et al. Bovine NALP5, NALP8, and NALP9 genes: assignment to a QTL region and the expression in adult tissues, oocytes, and preimplantation embryos. Biol. Reprod.2006; 74:577-84.