10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

NOD6 Antibody

Catalog # ASC11192

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q7RTR0
Other Accession	Q7RTR0, 74762418
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	113312
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	NOD6 antibody can be used for detection of NOD6 by Western blot at 1 g/mL. Antibody can also be used for immunohistochemistry starting at 10 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	338321
Other Names	NACHT, LRR and PYD domains-containing protein 9, Nucleotide-binding oligomerization domain protein 6, PYRIN and NACHT-containing protein 12, NLRP9, NALP9, NOD6, PAN12
Target/Specificity	NLRP9;
Reconstitution & Storage	NOD6 antibody can be stored at 4℃ for three months and -20℃, 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	NOD6 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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).

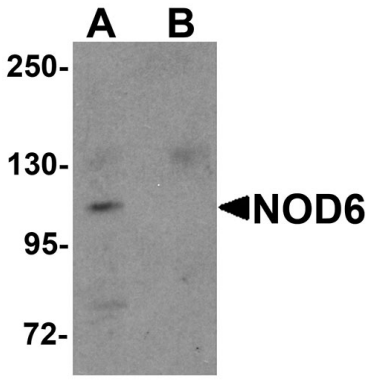
Background

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.

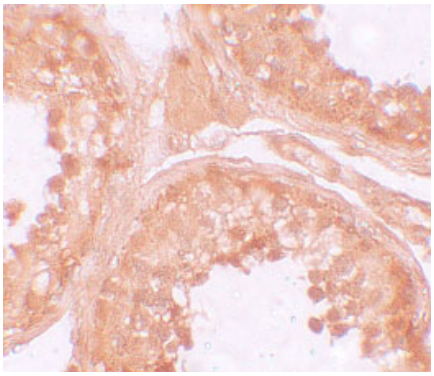
References

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.

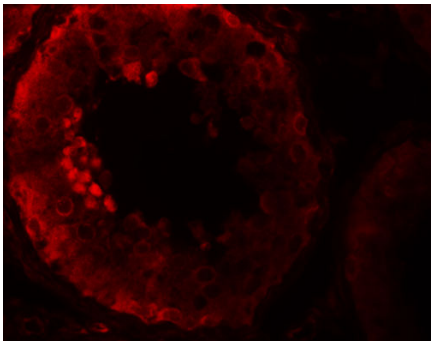
Images



Western blot analysis of NOD6 in EL4 cell lysate with NOD6 antibody at 1 µg/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 µg/mL.