

NALP14 Antibody

Catalog # ASC11202

Product Information

Application	WB, E
Primary Accession	Q86W24
Other Accession	NP_789792 , 28827813
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	124733
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	NALP14 antibody can be used for detection of NALP14 by Western blot at 1 μ g/mL.

Additional Information

Gene ID	338323
Other Names	NACHT, LRR and PYD domains-containing protein 14, Nucleotide-binding oligomerization domain protein 5, NLRP14, NALP14, NOD5
Target/Specificity	NLRP14;
Reconstitution & Storage	NALP14 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	NALP14 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NLRP14
Synonyms	NALP14, NOD5 {ECO:0000303 PubMed:1276675}
Function	Component of cytoplasmic lattices, which consist in fibrous structures found in the cytoplasm of oocytes and preimplantation embryos (By similarity). They are required to store maternal proteins critical for embryonic development, such as ribosomal proteins, cytoskeletal tubulins and proteins controlling epigenetic reprogramming of the preimplantation embryo, in a poised but restrained state, regulating their availability for early embryonic development (By similarity). Cytoplasmic lattices also tightly control ubiquitination during the oocyte-to-embryo transition by trapping E3 ubiquitin-protein ligase UHRF1

in a compact autoinhibited conformation and maintaining SCF ubiquitin ligase complexes inactive (PubMed:[41951593](#)). Also plays a role in spermatogenesis by regulating differentiation of primordial germ cell-like cells, possibly by protecting HSPA2 from proteasome-mediated degradation (By similarity).

Cellular Location Cytoplasm {ECO:0000250|UniProtKB:Q6B966}.

Tissue Location Testis-specific..

Background

NALP14 Antibody: NALP proteins are cytoplasmic proteins that form a subfamily within the larger CATERPILLER family and are thought to play a crucial role in cell proliferation and reproduction. Like all other NALP family members, NALP14 has a C-terminal leucine-rich repeat (LRR) region, an N-terminal Pyrin domain (PYD) followed by a NACHT domain, and a NACHT-associated domain. While little is known about the function of NALP14, it has been suggested that it may play a role in spermatogenesis and that mutations in the NALP14 gene might cause spermatogenic failure.

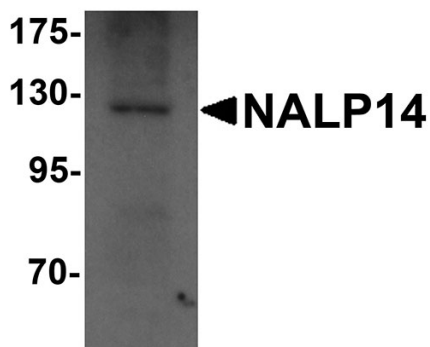
References

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

Tian X, Pascal G, and Monget P. Evolution and functional divergence of NLRP genes in mammalian reproductive system. *BMC Evol. Biol.*2009; 9:202.

Westerveld GH, Korver CM, van Pelt AMM, et al. Mutations in the testis-specific NALP14 gene in men suffering from spermatogenic failure. *Hum. Reprod.*2006; 21:3178-84.

Images



Western blot analysis of NALP14 in rat brain tissue lysate with NALP14 antibody at 1 µg/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.