

**NALP5 Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP57350****Specification**

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**NALP5 Polyclonal Antibody - Product Information**

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	<a href="#">P59047</a>
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	134 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human NALP5
Epitope Specificity	101-200/1200
Isotype	IgG
<b>Purity</b>	
affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Mitochondrion. Nucleus > nucleolus. Cytoplasm. In the subcortical cytoplasm of early embryos from the 1-cell to the blastocyst stages. From the 2-cell stage, still detected in the subcortex, but excluded from cell-cell contact regions.
SIMILARITY	Belongs to the NLRP family. Contains 1 DAPIN domain. Contains 13 LRR (leucine-rich) repeats. Contains 1 NACHT domain.
SUBUNIT	Component of the SCMC which also includes at least OOEP and TLE6
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**Background Descriptions**

The protein encoded by this gene belongs to the NALP protein family. Members of the NALP protein family 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). Expression of this gene is restricted to the oocyte. A mouse gene that encodes a maternal oocyte protein, similar to this encoded protein, is required for normal early embryogenesis. [provided by RefSeq, Jul 2008]

**NALP5 Polyclonal Antibody - Additional Information****Gene ID** 126206**Other Names**

NACHT, LRR and PYD domains-containing protein 5, Mater protein homolog, NLRP5, MATER, NALP5

### Target/Specificity

Oocyte-specific.

### Dilution

`<span class = "dilution_IHC-P">IHC-P~~N/A</span><br \><span class = "dilution_IHC-F">IHC-F~~N/A</span><br \><span class = "dilution_IF">IF~~1:50~200</span><br \><span class = "dilution_ICC">ICC~~N/A</span><br \><span class = "dilution_E">E~~N/A</span>`

### Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

## NALP5 Polyclonal Antibody - Protein Information

**Name** NLRP5

**Synonyms** MATER {ECO:0000303|PubMed:19542546}, NAL

### Function

Component of the subcortical maternal complex (SCMC), a multiprotein complex that plays a key role in early embryonic development. The SCMC complex is a structural constituent of cytoplasmic lattices, which consist in fibrous structures found in the cytoplasm of oocytes and preimplantation embryos. They are required to store maternal proteins critical for embryonic development, such as proteins that control epigenetic reprogramming of the preimplantation embryo, and prevent their degradation or activation. Required for the localization of cortical granules to the cortex of oocytes, via association with the cortical actin scaffold. Required for cortical actin clearance prior to oocyte exocytosis and prevention of polyspermy. Involved in regulating post-fertilization Ca(2+) release and endoplasmic reticulum storage (ER) storage via regulation of cellular localization. May be involved in the localization of mitochondria to the cytoplasm and perinuclear region in oocytes and early stage embryos, independent of its role in CPL formation.

### Cellular Location

Cytoplasm. Cytoplasmic vesicle, secretory vesicle, Cortical granule. Mitochondrion. Nucleus, nucleolus. Golgi apparatus. Note=Core component of cytoplasmic lattices in oocytes (PubMed:37922900). In the subcortical cytoplasm of early embryos from the 1-cell to the blastocyst stages (By similarity). From the 2-cell stage, still detected in the subcortex, but excluded from cell-cell contact regions (By similarity). Expression largely disappears in blastocysts (By similarity). Located in mitochondria and nucleoli in primary follicle oocytes (By similarity) {ECO:0000250|UniProtKB:Q9R1M5, ECO:0000269|PubMed:37922900}

### Tissue Location

Expressed in cumulus cells (at protein level) (PubMed:19542546). Highly abundant in oocytes and early embryos, however poorly expressed in somatic tissues such as the liver and spinal cord (PubMed:11925379, PubMed:30877238)

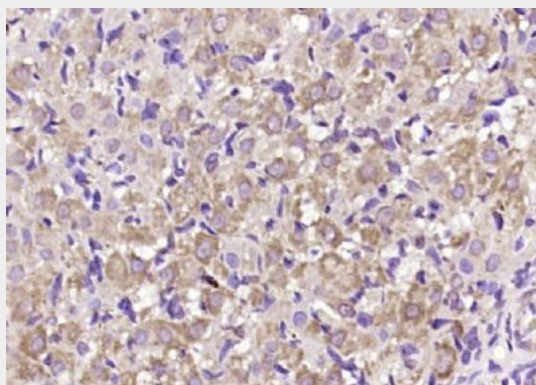
## NALP5 Polyclonal Antibody - Protocols

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

- [Western Blot](#)

- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **NALP5 Polyclonal Antibody - Images**



Paraformaldehyde-fixed, paraffin embedded (rat ovary); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (NALP5) Polyclonal Antibody, Unconjugated (bs-19006R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.