

Rabbit anti-Human, Mouse NLRP6 Polyclonal Antibody | anti-NLRP6 antibody

Phospho-NLRP6 (Ser109) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329266	Rabbit	Human, Mouse	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry

PRODUCT SYNONYMS

NLRP6; Polyclonal Antibody; Phospho-NLRP6 (Ser109) Antibody; Angiotensin II/vasopressin receptor; AVR; CLR11.4; NACHT; leucine rich repeat and PYD containing 6; LRR and PYD containing protein 6; LRR and PYD domains-containing protein 6; NAVR; NAVR/AVR; NLR family; pyrin domain containing 6; Nlrp6; NLRP6_HUMAN; Nucleotide binding oligomerization domain; leucine rich repeat and pyrin domain containing 6; PAN3; PYPAF5; PYRIN containing APAF1 like protein 5; PYRIN-containing APAF1-like protein 5; anti-NLRP6 antibody

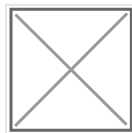
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-NLRP6 (Ser109) Antibody detects endogenous levels of NLRP6 only when phosphorylated at Ser109. Tissue Specificity: Expressed in peripheral blood leukocytes, predominantly in granulocytes and, at lower levels, in CD4 (+) and CD8 (+) T-cells. Expressed in colonic myofibroblasts (at protein level).
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-NLRP6 antibody	ELISA (Peptide ELISA), ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry)
Immunogen	A synthesized peptide derived from human NLRP6 around the phosphorylation site of Ser109.
Conjugation	Unconjugated
Fragment	Fab fragment
Subunit Structure	Sensor component of NLRP6 inflammasomes. Inflammasomes are supramolecular complexes that assemble in the cytosol in response to pathogens and other damage-associated signals and play critical roles in innate immunity and inflammation. The core of NLRP6 inflammasomes consists of a signal sensor component (NLRP6), an adapter (ASC/PYCARD), which recruits an effector proinflammatory caspase (CASP1 and, possibly, CASP4 and CASP5). Within the complex, NLRP6 and PYCARD interact via their respective pyrin domains. This interaction initiates speck formation (nucleation) which greatly enhances further addition of soluble PYCARD molecules to the speck in a prion-like polymerization process. NLRP6 localizes at the end of each PYCARD filament. Clustered PYCARD nucleates the formation of CASP1 filaments through the interaction of their respective CARD domains, acting as a platform for CASP1 polymerization. CASP1 filament formation increases local enzyme concentration, resulting in trans-autocleavage and activation. Active CASP1 then processes IL1B and IL18 precursors, leading to the release of mature cytokines in the extracellular milieu and inflammatory response. In this complex, the sensor protein is sub-stoichiometric to PYCARD, and PYCARD is further substoichiometric to CASP1, suggesting amplifications of signal transduction from the sensor, via the adapter, to the effector.
Similarity	Belongs to the NLRP family.
Subcellular Location	Cytoplasm. Inflammasome. Cell membrane. Nucleus membrane.

Preparation and Storage

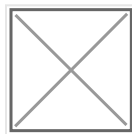
Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



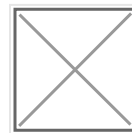
Application Data

At 25 degree C. Samples were then incubated with primary Ab(At 37 degree C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody. The nuclear counter stain is DAPI (blue).



IHC (Immunohistochemistry)

At 1/100 staining Mouse testis tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)

Staining Mouse colorectal tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-NLRP6 antibody

As the sensor component of the NLRP6 inflammasome, plays a crucial role in innate immunity and inflammation. In response to pathogens and other damage-associated signals, initiates the formation of the inflammasome polymeric complex, made of NLRP6, PYCARD and CASP1 (and possibly CASP4 and CASP5). Recruitment of proCASP1 to the inflammasome promotes its activation and CASP1-catalyzed IL1B and IL18 maturation and secretion in the extracellular milieu. The precise NLRP6 activation stimulus has not been identified yet (By similarity). Essential for gut mucosal self-renewal and proliferation. Maintains intestinal homeostasis and a healthy intestinal microbiota. This function is, at least partially, mediated by IL18, and not IL1B, produced by nonhematopoietic cells. Influences intestinal barrier function and microbial homeostasis through the regulation of goblet cell mucus secretion. Acts by promoting autophagy in goblet cells, an essential step for mucus granule exocytosis. Its role in goblet cell physiology is inflammasome-dependent, but IL1B- and IL18-independent. During systemic bacterial infections, may negatively regulate inflammatory signaling and inhibit the influx of monocytes and neutrophils to the circulation and to the peritoneum. May promote peripheral nerve recovery following injury via an inflammasome-independent mechanism (By similarity).

NCBI AND UNIPROT INFORMATION

NCBI GI #	21264320
NCBI GeneID	171389
NCBI Accession #	NP_612202
NCBI GenBank Nucleotide #	NM_138329.1
UniProt Accession #	P59044 ; A8K9F3 ; E9PJZ8
Molecular Weight	98,681 Da
NCBI Official Full Name	NACHT, LRR and PYD domains-containing protein 6
NCBI Official Synonym Full Names	NLR family, pyrin domain containing 6
NCBI Official Symbol	NLRP6
NCBI Official Synonym Symbols	AVR; NAVR; PAN3; NALP6; PYPAF5; CLR11.4; NAVR/AVR

NCBI Protein Information	NACHT, LRR and PYD domains-containing protein 6; angiotensin II/vasopressin receptor; PYRIN-containing APAF1-like protein 5; NACHT, LRR and PYD containing protein 6; NACHT, leucine rich repeat and PYD containing 6; nucleotide-binding oligomerization domai
UniProt Protein Name	NACHT, LRR and PYD domains-containing protein 6
UniProt Gene Name	NLRP6
UniProt Synonym Gene Names	NALP6; PYPAF5
UniProt Entry Name	NALP6_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/nlrp6-antibody-peptide-elisa-immunocytochemistry-immunofluorescence-immunohistochemistry-elisa/329266>