

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects mouse NLRP3/NALP3 in direct ELISAs. In direct ELISAs, 100% cross-reactivity with recombinant human NLRP3/NALP3 is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 768319
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant mouse NLRP3/NALP3 Met1-Arg153 Accession # Q8R4B8
Conjugate	PerCP (Peridinin-chlorophyll Protein Complex) Excitation Wavelength: 482 and 564 nm Emission Wavelength: 675 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	10 µL/10 ⁶ cells	See Below

DATA

<p>Intracellular Staining by Flow Cytometry</p> <p>Detection of NLRP3/NALP3 in RAW 264.7 Mouse Cell Line by Flow Cytometry. RAW 264.7 mouse monocyte/macrophage cell line was stained with Rat Anti-Human/Mouse NLRP3/NALP3 PerCP-conjugated Monoclonal Antibody (Catalog # IC7578C, filled histogram) or isotype control antibody (Catalog # IC006C, open histogram). To facilitate intracellular staining, cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005). View our protocol for Staining Intracellular Molecules.</p>	<p>Intracellular Staining by Flow Cytometry</p> <p>Detection of NLRP3/NALP3 in Human Blood Monocytes by Flow Cytometry. Human peripheral blood monocytes were stained with Rat Anti-Human/Mouse NLRP3/NALP3 PerCP-conjugated Monoclonal Antibody (Catalog # IC7578C, filled histogram) or isotype control antibody (Catalog # IC006C, open histogram). To facilitate intracellular staining, cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005). View our protocol for Staining Intracellular Molecules.</p>
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PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

NLRP3, also known as NALP3, CIAS1, PYPAF or Cryopyrin, is a cytosolic ~120 kDa member of the NLRP family of proteins expressed in leukocytes, especially neutrophils. As a component of the inflammasome, NLRP3 activates caspases 1 and 5. Defects in NLRP3 may cause FCAS1, CINCA, or Muckle-Wells autoinflammatory syndromes. Mouse NLRP3 contains an N-terminal Pyrin domain (aa 1-91) followed by a Nacht region (aa 216-532), and seven LRRs (aa 739-988). Within the sequence used as an immunogen, mouse NLRP3 shares 78% and 93% aa identity with human and rat NLRP3, respectively. Alternate splicing of mouse NLRP3 generates additional isoforms that lack either LRR2 and 3, LRR 6 and 7, or LRR4-9.