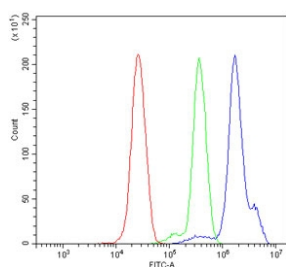


NALP3 Antibody / NLRP3 / CIAS1 (RQ6201)

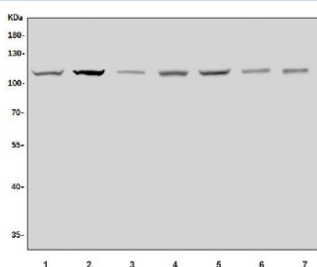
Catalog No.	Formulation	Size
RQ6201	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q96P20
Applications	Western Blot : 1-2ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This NALP3 antibody is available for research use only.



Flow cytometry testing of human ThP-1 cells with NALP3 antibody at 1 ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= NALP3 antibody.



Western blot testing of 1) human HeLa, 2) human U-87 MG, 3) rat spleen, 4) rat PC-12, 5) mouse thymus, 6) mouse lung and 7) mouse spleen lysate with NALP3 antibody. Predicted molecular weight ~118 kDa.

Description

NLRP3 (NLR FAMILY, PYRIN DOMAIN-CONTAINING 3), also known as CIAS1, CRYOPYRIN, NALP3 or PYPAF1, is a protein that in humans is encoded by the NLRP3(NOD-like receptor family, pyrin domain containing 3) gene. The NLRP3 gene encodes a pyrin-like protein expressed predominantly in peripheral blood leukocytes. And the NLRP3 gene is mapped on 1q44. NLRP3 interacts with apoptosis-associated speck-like protein containing a CARD(ASC). The encoded protein may play a role in the regulation of inflammation and apoptosis. Mutation of the NALP3 nucleotide-binding domain reduced ATP binding, CASP1 activation, IL1B production, cell death, macromolecular complex formation, self-association, and association with ASC. Consistent with an essential role for Nlrp3 inflammasomes in antifungal immunity, Gross et al. showed that Nlrp3-deficient mice are hypersusceptible to *C. albicans* infection. Activation of the NLRP3 inflammasome in response to virus or to RNA was dependent upon lysosomal maturation and reactive oxygen species production in human cells. The NLRP3 inflammasome senses obesity-associated danger signals and contributes to obesity-induced inflammation and insulin resistance.

Application Notes

Optimal dilution of the NALP3 antibody should be determined by the researcher.

Immunogen

A human recombinant partial protein (amino acids D812-S1035) was used as the immunogen for the NALP3 antibody.

Storage

After reconstitution, the NALP3 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.