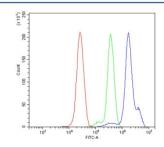


NALP3 Antibody / NLRP3 / CIAS1 (RQ6201)

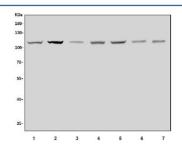
Catalog No.	Formulation	Size
RQ6201	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

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 1ug/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, pryin 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 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.