

Basic Information

Product Name	Anti-NLRP3 Antibody	
Gene Name	NLRP3	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human CIAS1/NALP3/NLRP3 recombinant protein (Position: D812-S1035).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	118 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Flow Cytometry (Fixed): 1:50-200 Enzyme linked immunosorbent assay (ELISA):1:100-1000	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

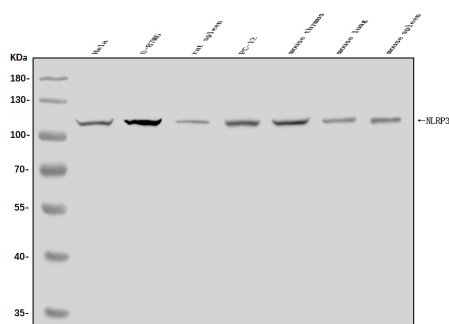
Background Information

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.

Reference

Anti-NLRP3 Antibody被引用在42文献中。

Selected Validation Data



Western blot analysis of NLRP3 using anti-NLRP3 antibody (A00034-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HELA whole cell lysates,

Lane 2: human U-87MG whole cell lysates,

Lane 3: rat spleen tissue lysates,

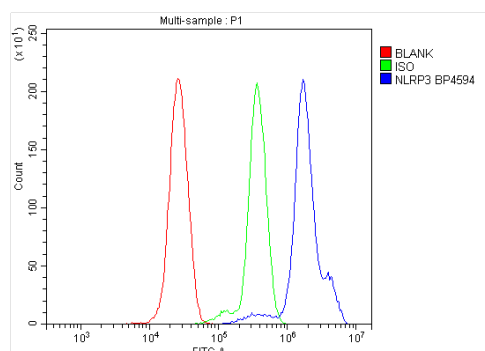
Lane 4: Rat PC-12 whole cell lysates,

Lane 5: mouse thymus tissue lysates,

Lane 6: mouse lung tissue lysates,

Lane 7: mouse spleen tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-NLRP3 antigen affinity purified polyclonal antibody (A00034-2) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for NLRP3 at approximately 118 kDa. The expected band size for NLRP3 is at 118 kDa.



Flow Cytometry analysis of THP-1 cells using anti-NLRP3 antibody (A00034-2).

Overlay histogram showing THP-1 cells stained with A00034-2 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-NLRP3 Antibody (A00034-2) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank

Product datasheet

Anti-NLRP3 Antibody

Catalog Number: **A00034-2**



antibody and ELISA experts

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