

A5652SP

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NLRP3 Rabbit pAb

Catalog No.: A5652SP **197 Publications**

Basic Information

Observed MW

110 kDa

Calculated MW

84-118 kDa

Category

Polyclonal Antibody

Applications

WB,IF/ICC,IP,ELISA

Cross-Reactivity

Human,Mouse

Background

This gene encodes a pyrin-like protein containing a pyrin domain, a nucleotide-binding site (NBS) domain, and a leucine-rich repeat (LRR) motif. This protein interacts with the apoptosis-associated speck-like protein PYCARD/ASC, which contains a caspase recruitment domain, and is a member of the NLRP3 inflammasome complex. This complex functions as an upstream activator of NF-kappaB signaling, and it plays a role in the regulation of inflammation, the immune response, and apoptosis. The SARS-CoV 3a protein, a transmembrane pore-forming viroporin, has been shown to activate the NLRP3 inflammasome via the formation of ion channels in macrophages. Mutations in this gene are associated with familial cold autoinflammatory syndrome (FCAS), Muckle-Wells syndrome (MWS), chronic infantile neurological cutaneous and articular (CINCA) syndrome, neonatal-onset multisystem inflammatory disease (NOMID), keratoendotheliitis fugax hereditarian, and deafness, autosomal dominant 34, with or without inflammation. Multiple alternatively spliced transcript variants encoding distinct isoforms have been identified for this gene. Alternative 5' UTR structures are suggested by available data; however, insufficient evidence is available to determine if all of the represented 5' UTR splice patterns are biologically valid.

Recommended Dilutions

WB 1:1000 - 1:3000

IP 0.5 µg - 4 µg antibody
for 200 µg - 600 µg
extracts of whole cells

IF/ICC 1:200 - 1:400

ELISA Recommended starting
concentration is 1
µg/mL. Please optimize
the concentration
based on your specific
assay requirements. For
high-ratio antibody
dilutions (≥1:10000)

Immunogen Information

Gene ID
114548/216799

Swiss Prot
Q96P20/Q8R4B8

Immunogen

This information is considered to be commercially sensitive.

Synonyms

AII; AVP; FCU; MWS; FCAS; KEFH; CIAS1; FCAS1; NALP3; C1orf7; CLR1.1; DFNA34; PYPAF1; AGTAVPRL; NLRP3

Product Information

Source
Rabbit

Isotype
IgG

Purification
Affinity purification

Storage

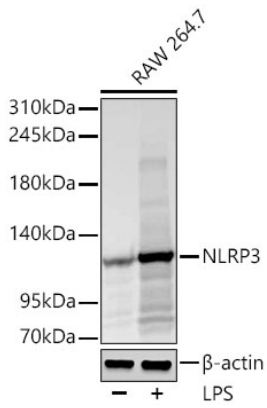
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS, pH 7.3, containing 50% glycerol. Preserved with Proclin300 or sodium azide. May contain 0.05% BSA as specified on the Certificate of Analysis.

Contact

 www.abclonal.com

Validation Data



Western blot analysis of lysates from RAW 264.7 cells using NLRP3 Rabbit pAb (A5652SP) at 1:2000 dilution incubated overnight at 4°C. RAW 264.7 cells were treated with LPS (1ug/ml) at 37°C for 24 hours.

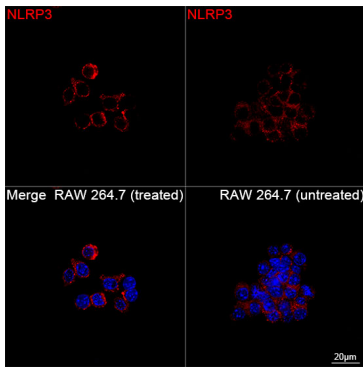
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 30 µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 20 s.



Confocal imaging of RAW 264.7 cells (treated with LPS) and RAW 264.7 cells (untreated) using NLRP3 Rabbit pAb (A5652SP, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.