

Datasheet for 600-401-H02**NALP3 Antibody****Overview**

Description:	Anti-NALP3 (RABBIT) Antibody - 600-401-H02
Item No.:	600-401-H02
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	NALP3 antibody detects human NALP3. NALP3, a member of Nod-like receptors, has a crucial role in inflammation and immunity and may be a proximal sensor of cellular stress and danger signals. NALP3 forms a caspase-1 activating molecular complex termed the inflammasome. The inflammasome allows activation of IL-1beta, the key player of the inflammation and fever. NALP3 gene encodes a pyrin like protein which contains a pyrin domain, a nucleotide binding site (NBS) domain, and a leucine rich repeat (LRR) motif. NALP3 protein interacts with apoptosis associated speck like protein containing a CARD and may function as an inducer of apoptosis and an activator of NF-kappaB signaling. Defects in NALP3 have been associated with familial cold autoinflammatory syndrome (FCAS), Muckle-Wells syndrome (MWS), chronic infantile neurological cutaneous and articular (CINCA) syndrome, and neonatal-onset multisystem inflammatory disease (NOMID). Anti-NALP3 antibodies are ideal for investigators involved in cytokine and growth factor research.
Synonyms:	NACHT, LRR and PYD domains-containing protein 3, Angiotensin/vasopressin receptor AII/AVP-like, Caterpillar protein 1.1, CLR1.1, Cold-induced autoinflammatory syndrome 1 protein, Cryopyrin, PYRIN-containing APAF1-like protein 1, NLRP3, C1orf7, CIAS1, NALP3, PYPAF1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	NLRP3
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Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide
Immunogen:	NALP3 Antibody was produced from whole rabbit serum prepared by repeated immunizations with a peptide near the n-terminus of human NALP3.
Purity/Specificity:	Anti-NALP3 Antibody was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross-reactivity with NALP3 with Human and Mouse based on 100% homology with the immunizing sequence. Cross-reactivity with NALP3 from other sources has not been determined.
Relevant Links:	<ul style="list-style-type: none">• NCBI - NP_001073289.1• UniProtKB - Q96P20• GeneID - 114548

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-NALP3 Antibody is tested for use in E, WB, IHC, and IF. Expect a band approximately ~118.1kDa on specific lysates. Western Blot in human, mouse and rat samples; Immunofluorescence in human, mouse and rat samples. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IF:	20µg/mL
WB:	0.5µg/mL

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

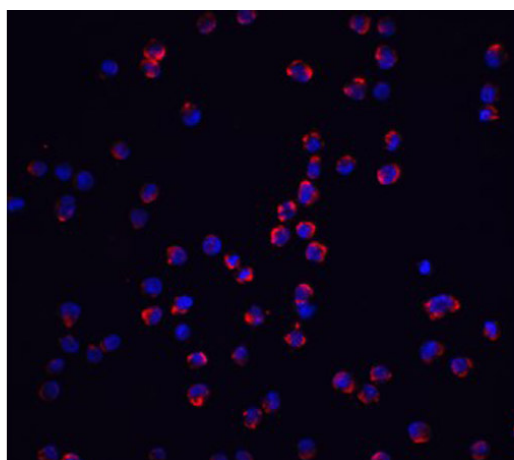
Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

Images



Immunofluorescence Microscopy

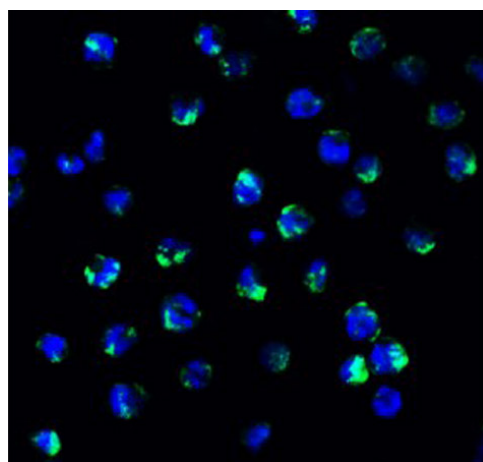
Immunofluorescence Validation of NALP3.

Cell: human K562 cells.

Fixation: 4% paraformaldehyde-fixed.

Primary Antibody: NALP3 at 5 µg/mL.

Secondary: goat anti-rabbit IgG secondary antibody at 1:500 dilution (red) and DAPI staining (blue).



Immunofluorescence Microscopy

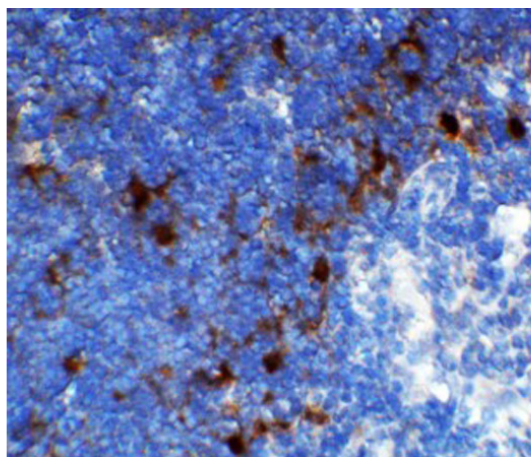
Immunofluorescence of NALP3.

Cell: Human Molt4 cells.

Fixation: 4% paraformaldehyde-fixed.

Primary Antibody: Anti-NALP3 at 20 µg/mL.

Secondary: goat anti-rabbit IgG secondary antibody at 1:500 dilution (green) and DAPI staining (blue).



Immunohistochemistry

Immunohistochemistry of NALP3.

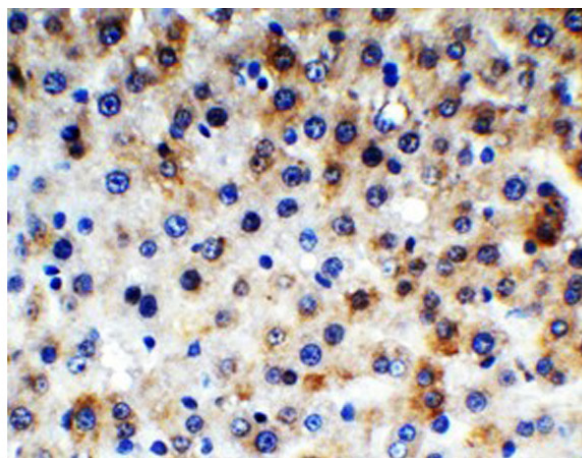
Tissue: mouse thymus tissue.

Fixation: paraffin-embedded, formaldehyde and blocked with 10% serum for 1 h at RT.

Antigen retrieval: heat mediation with a citrate buffer (pH6).

Primary Antibody: anti-NALP3 antibody at 1 µg/mL overnight at 4°C.

Secondary: goat anti-rabbit IgG H&L (HRP) at 1:250. Counter stained with Hematoxylin.



Immunohistochemistry

Immunohistochemistry of NALP3.

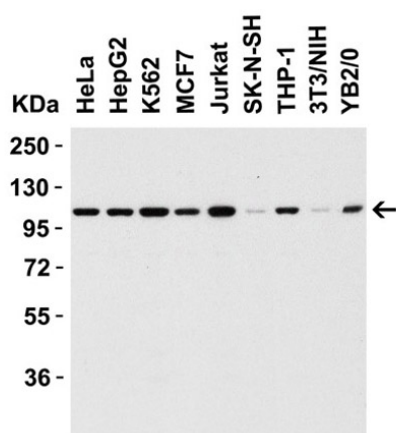
Tissue: rat liver tissue:

Fixation: paraffin-embedded, formaldehyde and blocked with 10% serum for 1 h at RT.

Antigen retrieval: heat mediation with a citrate buffer (pH6).

Primary Antibody: anti-NALP3 antibody at 1 µg/mL overnight at 4°C.

Secondary: goat anti-rabbit IgG H&L (HRP) at 1:250. Counter stained with Hematoxylin.



Western Blot

Western Blot of NALP3.

Loading: 15 µg of human, mouse and rat cell lysates. Lane 1:

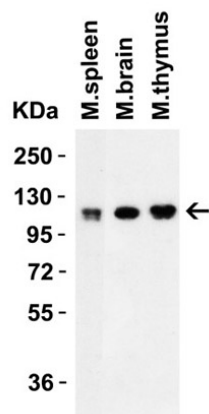
HeLa, Lane 2: HepG2, Lane 3: K562, Lane 4: MCF7, Lane 5:

Jurkat, Lane 6: SK-N-SH, Lane 7: THP-1, Lane 8: 3T3/NIH,

Lane 9: YB2/O.

Primary antibody: Anti-NALP3 at 0.5 µg/mL for 1h incubation at RT in 8% NFDm/TBST.

Secondary: Goat Anti-Rabbit IgG HRP conjugate at 1:10,000 dilution.



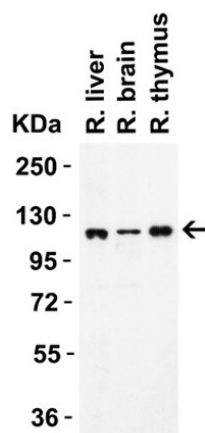
Western Blot

Western Blot of NALP3.

Load: 15 µg per lane. Lane 1: mouse spleen, Lane 2: mouse brain, Lane 3: mouse thymus.

Primary antibody: Anti-NALP3 at 0.5 µg/mL for 1h incubation at RT in 8% NFDm/TBST.

Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10,000 dilution.



Western Blot

Western Blot of NALP3.

Load: 15 µg per lane. Lane 1: rat liver, Lane 2: rat brain, Lane 3: rat thymus.

Primary antibody: Anti-NALP3 at 0.5 µg/mL for 1h incubation at RT in 5% NFDm/TBST.

Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10,000 dilution.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.