Product Datasheet

NLRP3/NALP3 Antibody (Nalpy3-b) - BSA Free
NBP1-97601

Unit Size: 0.05 mg

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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Publications: 7

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
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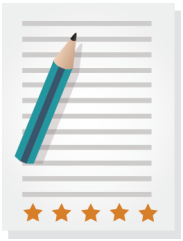
Updated 9/9/2025 v.20.1



NBP1-97601

NLRP3/NALP3 Antibody (Nalpy3-b) - BSA Free

Product Information

Unit Size	0.05 mg
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	Nalpy3-b
Preservative	0.02% Sodium Azide
Isotype	IgG1
Purity	Protein G purified
Buffer	PBS

Product Description

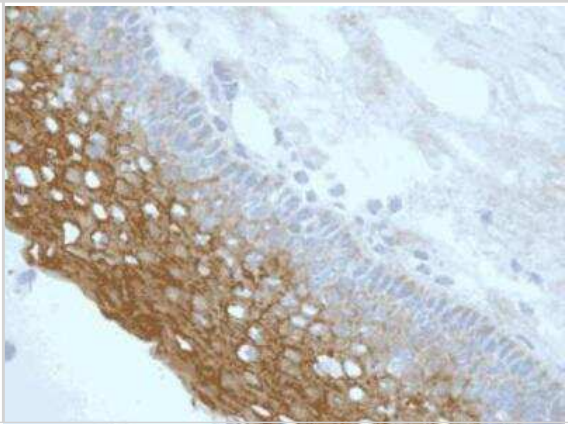
Description	Novus Biologicals Mouse NLRP3/NALP3 Antibody (Nalpy3-b) - BSA Free (NBP1-97601) is a monoclonal antibody validated for use in IHC, WB and IP. Anti-NLRP3/NALP3 Antibody: Cited in 7 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Mouse
Gene ID	114548
Gene Symbol	NLRP3
Species	Human
Specificity/Sensitivity	Recognizes human NLRP3/NALP3.
Immunogen	Recombinant human NLRP3/NALP3 Antibody (Nalpy3-b) (NACHT-, LRR- and PYD-containing protein 3) (pyrin domain).

Product Application Details

Applications	Western Blot, Immunohistochemistry-Paraffin, Immunohistochemistry, Immunohistochemistry-Frozen, Immunoprecipitation
Recommended Dilutions	Western Blot 1:1000, Immunohistochemistry 1:10-1:500, Immunoprecipitation 1:50, Immunohistochemistry-Paraffin 1:10 - 1:500, Immunohistochemistry-Frozen 1:10-1:500

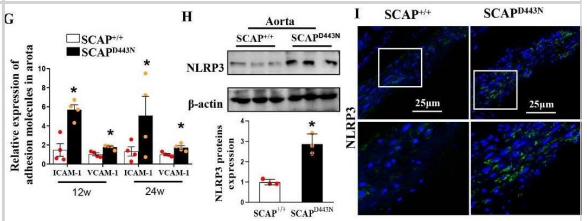
Images

Immunohistochemistry-Frozen: NLRP3/NALP3 Antibody (Nalpy3-b) [NBP1-97601] - Staining of endogenous NLRP3/NALP3 in epithelial layer of human tonsil (frozen section) using NLRP3/NALP3 (human), mAb (Nalpy3-b). Method: 5uM frozen section of tissue are dried and fixed with aceton. Tissue is washed with PBS and incubated with NLRP3/NALP3 (human), mAb (Nalpy3-b).

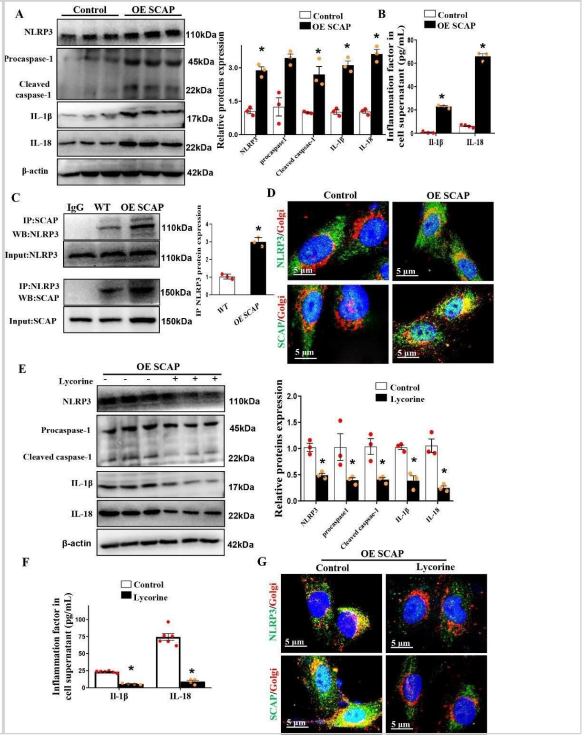


Western Blot: NLRP3/NALP3 Antibody (Nalpy3-b) [NBP1-97601] - Sterol-resistant SCAP overexpression induces the activation of NLRP3/NALP3 (NBP1-97601) infammasomes in VSMCs. Representative immunoblots for NLRP3/NALP3, Procaspase-1, cleaved caspase-1, IL-1 beta, and IL-18 in SCAP-overexpressing VSMCs. Image collected and cropped by CiteAb from the following publication (//pubmed.ncbi.nlm.nih.gov/34094640/) licensed under a CC-BY license.

Western Blot: NLRP3/NALP3 Antibody (Nalpy3-b) - BSA Free [NBP1-97601] - Sterol-resistant SCAP overexpression in VSMCs causes inflammation & lipid deposition in the aortas of SCAPD443N mice. (A & B) Representative images of an aortic root stained with Oil Red O in SCAPD443N mice & SCAP+/+ mice after 12 or 24 weeks of Western diet feeding. (C) Quantification of plaque areas in SCAPD443N mice & SCAP +/+ mice after 12 or 24 weeks of Western diet feeding (n=5). (D) Plasma levels of TC, TG, LDL-C & HDL-C in SCAPD443N mice & SCAP+/+ mice after 12 or 24 weeks of Western diet feeding (n=5). (E) mRNA expression of proin?ammatory cytokines (IL-1β, IL-6, IL-18, & TNF-α) as measured by qRT-PCR (n=4). (F) mRNA expression of pro-chemokine cytokines (MCP-1, MIP-1α, MIP-1β, & CX3CL1) as measured by qRT-PCR (n=4). (G) mRNA expression of ICAM-1 & VCAM-1 in aortas as measured by qRT-PCR (n=4). (H) Representative immunoblots for NLRP3 proteins in SCAP+/+ mice & SCAPD443N mice (n=3). (I) Representative images of immuno?uorescence staining of NLRP3 proteins in the aortas of SCAPD443N mice & SCAP+/+ mice (n=5). The data are presented as the means±SD of 3-5 independent experiments. *P<0.05, vs. the SCAP+/+ group. Statistical significance was calculated for the biological replicates by 2-tailed Student's t test. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/34094640), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Western Blot: NLRP3/NALP3 Antibody (Nalpy3-b) - BSA Free [NBP1-97601] - Sterol-resistant SCAP overexpression induces the activation of NLRP3 in?ammasomes in VSMCs. (A) Representative immunoblots for NLRP3, Procaspase-1, cleaved caspase-1, IL-1β, & IL-18 in SCAP-overexpressing VSMCs. (B) Expression of IL-1β & IL-18 in VSMC supernatants as measured by ELISA. (C) Immunoblotting of immunoprecipitation with anti-SCAP or anti-NLRP3 in SCAP-overexpressing VSMCs. (D) Representative images of immuno? uorescence staining of NLRP3 (green) or SCAP (green) with Golgi(red) in control & SCAP-overexpressing VSMCs. (E) Representative immunoblot for NLRP3, Pro-caspase-1, cleaved caspase-1, IL-1β, & IL-18 in SCAP-overexpressing VSMCs treated with lycorine for 4 h. (F) Expression of IL-1β & IL-18 in VSMC supernatants as measured by ELISA. (G) Representative images of the immuno?uorescence staining of NLRP3 (green) or SCAP (green) with Golgi (red) in SCAP VSMCs after treatment with lycorine for 4 h. The data are presented as the means±SD of 3 independent experiments. *P<0.05, vs the control group. Statistical significance was calculated for to the biological replicates by 2-tailed Student's t test. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/34094640), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Li D, Liu M, Li Z et al. Sterol-resistant SCAP Overexpression in Vascular Smooth Muscle Cells Accelerates Atherosclerosis by Increasing Local Vascular Inflammation through Activation of the NLRP3 Inflammasome in Mice Aging and disease 2021-06-01 [PMID: 34094640]

Mi-Hua Liu, Xiao-Long Lin, Le-Le Xiao Excess phosphate promotes SARS□CoV□2 N protein□induced NLRP3 inflammasome activation via the SCAP□SREBP2 signaling pathway. Molecular medicine reports 2024-01-29 [PMID: 38275129]

Ivarsson J, Ferrara F, Vallese A et al. Comparison of Pollutant Effects on Cutaneous Inflammasomes Activation International Journal of Molecular Sciences 2023-11-23 [PMID: 38068996] (IHC, Human)

Sun C, Diao Q, Lu J et al. Purple sweet potato color attenuated NLRP3 inflammasome by inducing autophagy to delay endothelial senescence J. Cell. Physiol. 2018-12-26 [PMID: 30585631] (WB, Human)

MT Shio et al. Malarial hemozoin activates the NLRP3 inflammasome through Lyn and Syk kinases. PLoS Pathog. 5, e1000559. 2009-01-01 [PMID: 19696895]

JA Kummer et al. Inflammasome components NALP 1 and 3 show distinct but separate expression profiles in human tissues suggesting a site-specific role in the inflammatory response. J. Histochem. Cytochem. 55, 443. 2007-01-01 [PMID: 17164409]

L Agostini et al. NALP3 forms an IL-1beta-processing inflammasome with increased activity in Muckle-Wells autoinflammatory disorder. Immunity 20, 319. 2004-01-01 [PMID: 15030775]

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NB7539	Goat anti-Mouse IgG (H+L) Secondary Antibody [HRP]
NBP1-97005-0.5mg	Mouse IgG1 Isotype Control (MG1)

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