Product Datasheet

TLR3 Antibody - BSA Free
NB100-56571

Unit Size: 0.1 mg

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

Reviews: 1 Publications: 19

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
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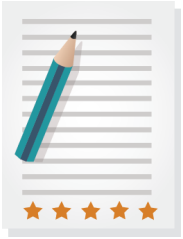
Updated 2/21/2025 v.20.1



NB100-56571

TLR3 Antibody - BSA Free

Product Information

Unit Size	0.1 mg
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.05% Sodium Azide
Isotype	IgG
Purity	Protein G purified
Buffer	PBS
Target Molecular Weight	104 kDa

Product Description

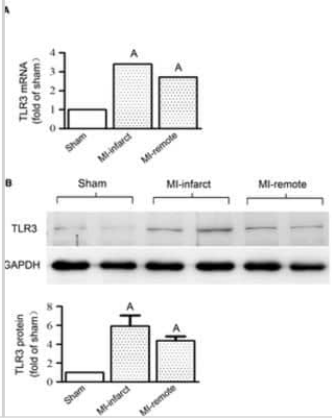
Host	Rabbit
Gene ID	7098
Gene Symbol	TLR3
Species	Human, Mouse, Porcine
Reactivity Notes	Predicted to cross-react with Rat. Porcine data from customer review.
Immunogen	A mix of synthetic peptides corresponding to amino acids 135-150 (SIHKIKSNPFKNQKNL), 828-844 (CRRFKVHHAVQQAIEQN), and 876-891 (CILNWPVQKERINAFH) of mouse TLR3.

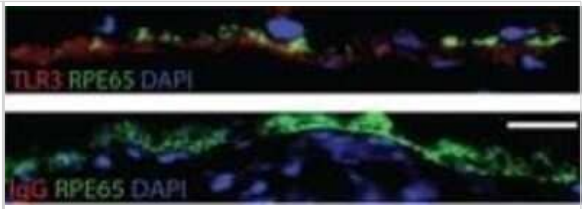
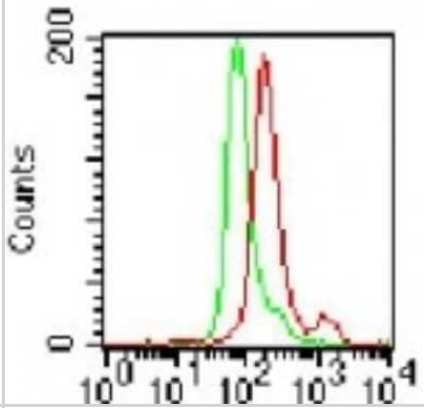
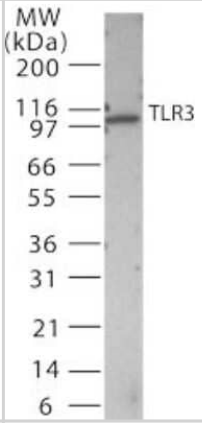
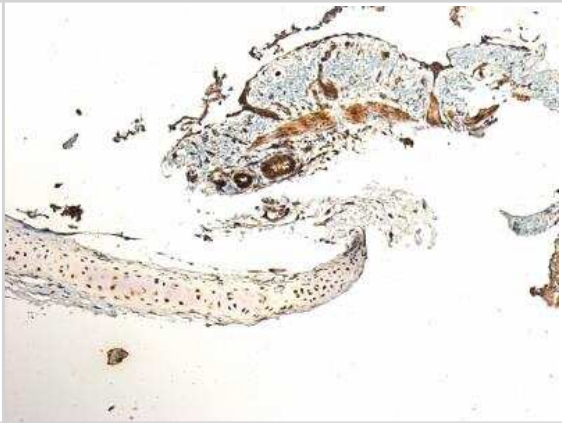
Product Application Details

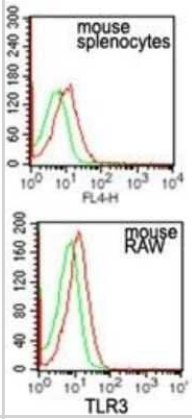
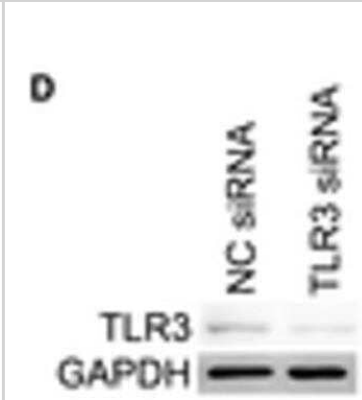
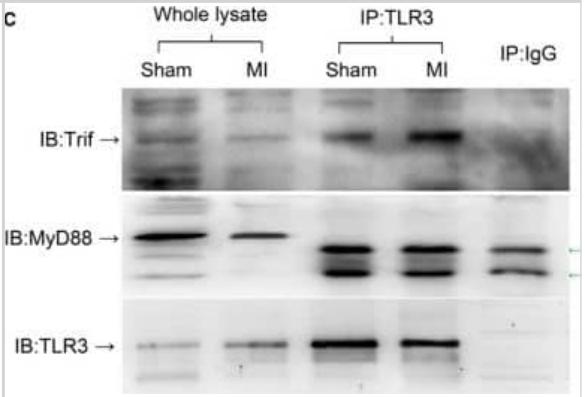
Applications	Western Blot, Dot Blot, Flow Cytometry, Flow (Cell Surface), Flow (Intracellular), Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Knockdown Validated
Recommended Dilutions	Western Blot 1-3 ug/ml, Flow Cytometry 1 ug/10^6 cells, Immunohistochemistry 1:20-1:1000, Immunohistochemistry-Paraffin 1:100. Use reported in scientific literature (Patole et al (2005)), Immunohistochemistry-Frozen 1:20-1:1000. Use reported in scientific literature (Pawar et al (2005)), Dot Blot reported in scientific literature (PMID 27248820), Flow (Cell Surface) reported in scientific literature (Pawar et al (2006)), Flow (Intracellular) 1 ug/1 million cells, Knockdown Validated
Application Notes	Use in Flow (Intracellular) reported in multiple pieces of scientific literature.

Images

Western Blot: TLR3 Antibody [NB100-56571] - Myocardial infarction (MI) increased TLR3 expression and its physical association with Trif in mouse myocardium. Heart samples were taken from infarct area at 4 weeks after MI. (A) and (B) show mRNA and protein levels of TLR3 in sham and MI hearts. n = 4 mice/group. Data are means +/- S.D. AP < 0.01 versus sham. Image collected and cropped by CiteAb from the following publication (https://doi.wiley.com/10.1111/jcmm.13328) licensed under a CC-BY license.



Immunohistochemistry-Frozen: TLR3 Antibody [NB100-56571] - Frozen mouse eye tissue sections stained with TLR3, a retinal pigment epithelium (RPE) marker and DAPI. Top panel: TLR3 (red) colocalized with the RPE (green) marker. Bottom panel: Tissue stained with isotype control (no TLR3 Ab), RPE and DAPI. Data courtesy of Kleinman et al.	
Flow Cytometry: TLR3 Antibody [NB100-56571] - Analysis using the FITC conjugate of NB100-56571. Staining of TLR3 in Balb/c mouse splenocytes using this antibody at 1 ug/10^6 cells. Green represents rabbit IgG isotype control this antibody; red represents anti-TLR3 antibody.	
Western Blot: TLR3 Antibody [NB100-56571] - Analysis of TLR3 in mouse spleen tissue lysate using NB100-56571 at 2 ug/ml.	
Immunohistochemistry: TLR3 Antibody [NB100-56571] - Pig lung poisoned through aspiration with gastric juice and organophosphate (dimethoate EC40) after 48 hours of IC ventilation. Image from verified customer review.	

Flow Cytometry: TLR3 Antibody [NB100-56571] - Intracellular flow analysis of TLR3 in Balb/c mouse splenocytes and mouse RAW cells using TLR3 antibody (red) and isotype control antibody (green) at 1 ug/10^6 cells.	
Western Blot: TLR3 Antibody [NB100-56571] - siRNA was transfected at 50 nM for 48 hrs, and poly(I:C) was added at 100 ug/ml for 4 hrs before cell harvest. Negative control (NC) siRNA served as control. RNAiMAX transfection reagent was used in all the siRNA experiments. Panel shows the knockdown effects of siRNAs. Image collected and cropped by CiteAb from the following publication (https://doi.wiley.com/10.1111/jcmm.13328) licensed under a CC-BY license.	
Western Blot: TLR3 Antibody [NB100-56571] - Myocardial infarction (MI) increased TLR3 expression & its physical association with Trif in mouse myocardium. Heart samples were taken from infarct area at 4 weeks after MI. (A) & (B) show mRNA & protein levels of TLR3 in sham & MI hearts. n = 4 mice/group. Data are means ± S.D. AP < 0.01 versus sham. (C) Representative immunohistochemistry images of heart sections stained for TLR3 (brown colour). An isotype IgG control was performed to verify the specificity of TLR3 reactivity. (D) Lysates of heart tissue were immunoprecipitated with anti□TLR3 antibodies (IP: TLR3), followed by SDS–PAGE & immunoblotting (IB) with indicated antibodies. IP with isotype IgG (IP: IgG) was performed as a control to exclude the non□specific binding of antibodies to cellular proteins. Green arrows indicate non□specific bands. The association between TLR3 & Trif, but not MyD88, was detectable in sham myocardium & was increased in infarct myocardium. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/28945004), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	

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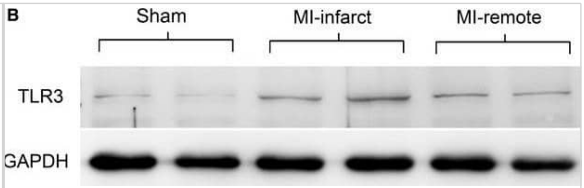
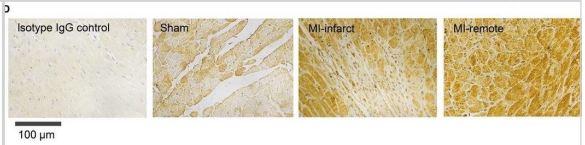
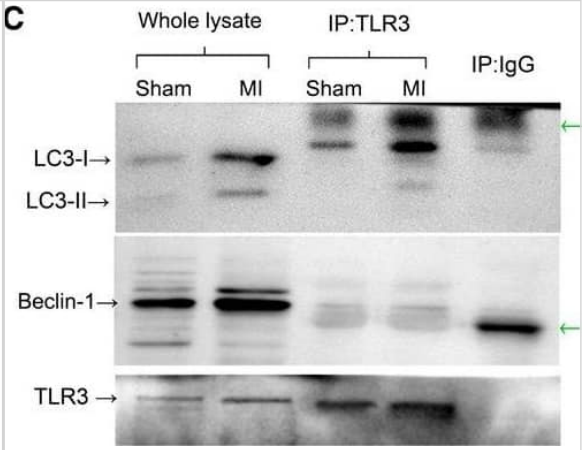


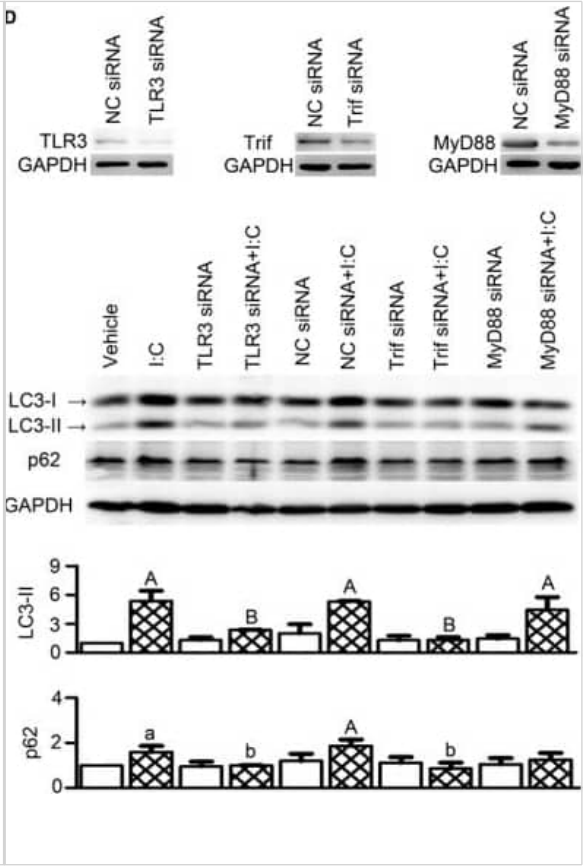
Immunohistochemistry: TLR3 Antibody [NB100-56571] - Myocardial infarction (MI) increased TLR3 expression & its physical association with Trif in mouse myocardium. Heart samples were taken from infarct area at 4 weeks after MI. (A) & (B) show mRNA & protein levels of TLR3 in sham & MI hearts. n = 4 mice/group. Data are means ± S.D. AP < 0.01 versus sham. (C) Representative immunohistochemistry images of heart sections stained for TLR3 (brown colour). An isotype IgG control was performed to verify the specificity of TLR3 reactivity. (D) Lysates of heart tissue were immunoprecipitated with anti□TLR3 antibodies (IP: TLR3), followed by SDS–PAGE & immunoblotting (IB) with indicated antibodies. IP with isotype IgG (IP: IgG) was performed as a control to exclude the non□specific binding of antibodies to cellular proteins. Green arrows indicate non□specific bands. The association between TLR3 & Trif, but not MyD88, was detectable in sham myocardium & was increased in infarct myocardium. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/28945004), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Western Blot: TLR3 Antibody [NB100-56571] - TLR3□knockout (TLR3□KO) attenuated cardiac autophagy induced by MI. The infarct & remote tissues were separately sampled from the left ventricle after 4 weeks of MI. Accordingly, anterior & posterior tissues of the left ventricle were sampled from sham hearts as controls. (A) Representative Western blot images & quantitative analyses of autophagy markers. n = 4–8/group. Quantitative data are fold changes of WT□sham. aP < 0.05, AP < 0.01 versus respective WT□sham; bP < 0.05, BP < 0.01 versus respective WT□MI. (B) Representative electron microphotographs of ultrathin sections of resin□embedded heart biopsies. Arrows indicate autophagic vacuoles. (C) Lysates of infarct tissue were immunoprecipitated (IP), followed by SDS–PAGE & immunoblotting (IB) with indicated antibodies. IP with isotype IgG served as a control. Green arrows indicate non□specific bands. Representative images were taken from four independent experiments. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/28945004), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Western Blot: TLR3 Antibody [NB100-56571] - A TLR3 agonist polyinosinic□polycytidylic acid (poly(I:C)) induced autophagy in cultured cardiomyocytes through a TRIF□dependent pathway. (A) Poly(I:C) increased autophagy markers in cultured H9c2 rat ventricular cells. (B) Poly(I:C) stimulated autophagosome formation but did not affect autophagic flux. Primary cultured neonatal rat ventricular myocytes (NRVMs) were transfected with a tandem mRFP□GFP□LC3 adenovirus for 24 hrs, followed by treatment with poly(I:C) (100 μg/ml, 4 hrs). Autophagosomes & autolysosomes were, respectively, visualized as yellow□ & red□only punctas under a confocal microscope. (C) An autophagic flux inhibitor chloroquine (CQ) induced accumulations of LC3□II & p62/SQSTM1 proteins in H9c2 myocytes receiving poly(I:C) (100 μg/ml, 4 hrs). CQ was applied at 10 μM, immediately prior to poly (I:C). (D) Effects of indicated siRNA on poly(I:C)□induced changes in autophagy markers in NRVMs. All the siRNAs were transfected at 50 nM for 48 hrs, & poly(I:C) was added at 100 μg/ml for 4 hrs before cell harvest. Negative control (NC) siRNA served as control. RNAiMAX transfection reagent was used in all the siRNA experiments. The upper panel shows the knockdown effects of siRNAs, & the lower panel shows representative Western blot images (presented from four independent experiments) & densitometry quantitative data (normalized into 'fold of vehicle group'). All quantitative data are expressed as means ± S.D. aP < 0.05, AP < 0.01 versus vehicle; bP < 0.05, BP < 0.01 versus poly(I:C). Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/28945004), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Min KW, Choi KM, Mun H et Al. Mature microRNA-binding protein QKI suppresses extracellular microRNA let-7b release J Cell Sci 2024-11-01 [PMID: 39308343]

Do?an G, Sand?kç? M, Karagenç L. et Al. Stage-specific expression of Toll-like receptors in the seminiferous epithelium of mouse testis Histochem Cell Biol 2024-07-31 [PMID: 39085445]

Cipollini OQ Investigating Microglial Innate Immune Responses to Amyloid-Beta (1-42) and Murine Betacoronavirus (MHV-A59) Thesis 1905-07-13 (WB)

Chen G Y, Hwang S M et al. Defective antiviral responses of induced pluripotent stem cells to baculoviral vector transduction. J Virol 2012-01-08 [PMID: 22623765] (FLOW, Mouse)

Nie H, Mei Z et al. Bushen recipe and its disassembled prescriptions inhibit inflammation of liver injury associated with Concanavalin A through Toll like receptor 3/9 signaling pathway. Mol Med Rep 2018-01-08 [PMID: 29845244] (WB, Mouse)

Gao T, Zhang SP, Wang JF et al. TLR3 contributes to persistent autophagy and heart failure in mice after myocardial infarction J. Cell. Mol. Med. 2017-09-25 [PMID: 28945004] (WB, Mouse)

Jeon YK, Kim CK, Koh J et al. Pellino-1 confers chemoresistance in lung cancer cells by upregulating cIAP2 through Lys63-mediated polyubiquitination. Oncotarget. 2016-07-05 [PMID: 27248820] (Cytometric Bead Assay Standard, Human)

Pawar Rahul D, Patole Prashant S, Ellwart Andreas et al. Ligands to nucleic acid-specific toll-like receptors and the onset of lupus nephritis. J Am Soc Nephrol. 2006-12-01 [PMID: 17082246]

Jiang M, Broering R, Trippler M et al. MicroRNA-155 controls Toll-like receptor 3- and hepatitis C virus-induced immune responses in the liver. J. Viral Hepat. 2014-02-01 [PMID: 24383923] (Flow-CS, Mouse)

Details:
BalbC lymphocytes, Fig S1C. Expression of TLR3 was detected using unconjugated anti-TLR3 antibodies and secondary antibodies.

Priya R, Dhanwani R, Patro IK et al. Differential regulation of TLR mediated innate immune response of mouse neuronal cells following infection with novel ECSA genotype of Chikungunya virus with and without E1:A226V mutation. Infect Genet Evol 2013-12-01 [PMID: 24126361] (WB, Mouse)

Wu J, Meng Z, Jiang M et al. Toll-like receptor-induced innate immune responses in non-parenchymal liver cells are cell type-specific. Immunology. [PMID: 19922426]

Details:
Citation using the PE/Cy5 form of this antibody.

Pawar RD, Patole PS, Zecher D et al. Toll-like receptor-7 modulates immune complex glomerulonephritis. J Am Soc Nephrol. 2006-01-01 [PMID: 16280469] (Flow-CS, Flow Cytometry Control)

Details:
Antibodies cited: 1. TLR3 (IMG-516) 2. TLR7 (IMG-581) [Flow (intracellular and cell surface), Fig.3: TLR3 (mesengial cells and J774 macrophages), TLR7 (J774 macrophages)]. [IHC-F, Fig.2 (kidneys of MRL1pr/1pr mice)].

More publications at http://www.novusbio.com/NB100-56571

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Products Related to NB100-56571

NB820-59670	Mouse Spleen Whole Tissue Lysate (Adult Whole Normal)
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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