

Product Datasheet

TLR4 Antibody (HTA125) - Azide and BSA Free NB100-56727

Unit Size: 0.1 mg

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

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NB100-56727

TLR4 Antibody (HTA125) - Azide and BSA Free

Product Information	
Unit Size	0.1 mg
Concentration	0.5 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	HTA125
Preservative	No Preservative
Isotype	IgG2a
Purity	Protein G purified
Buffer	Sterile - filtered PBS
Target Molecular Weight	95.7 kDa

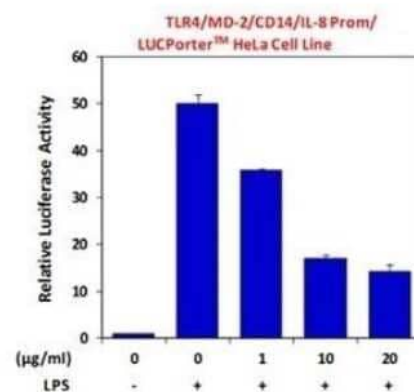
Product Description	
Description	Novus Biologicals Mouse TLR4 Antibody (HTA125) - Azide and BSA Free (NB100-56723) is a monoclonal antibody validated for use in WB, Flow, ICC/IF and IP. Anti-TLR4 Antibody: Cited in 26 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Mouse
Gene ID	7099
Gene Symbol	TLR4
Species	Human, Mouse, Canine
Immunogen	This TLR4 Antibody (HTA125) was developed by immunizing mice with Ba/F3 cell line expressing human TLR4 cell surface antigen.

Product Application Details	
Applications	Western Blot, Flow Cytometry, Flow (Cell Surface), Flow (Intracellular), Immunoblotting, Immunocytochemistry/ Immunofluorescence, In vitro assay, Immunoprecipitation, Block/Neutralize, CyTOF-ready
Recommended Dilutions	Western Blot reported in scientific literature (PMID 28546218), Flow Cytometry 1ul/1 million cells, Immunocytochemistry/ Immunofluorescence 1:10 - 1:2000. Use reported in scientific literature (Schneeman et al (2005)), Immunoprecipitation 1:10 - 1:500. Use reported in scientific literature (Shimazu et al (1999)), Immunoblotting reported in scientific literature (PMID 19195606), In vitro assay reported in scientific literature (PMID 24512642), Flow (Cell Surface) 2-5 ug/1 million cells, Flow (Intracellular), CyTOF-ready, Block/Neutralize reported in scientific literature (PMID 24512642)
Application Notes	The has been shown to block the activation of monocytes with LPS (Paik, et al, 2003). Confocal Microscopy: see Scheel et al. (2006) for details. FA (Neutralization): see Basek et al, 2005 for details.

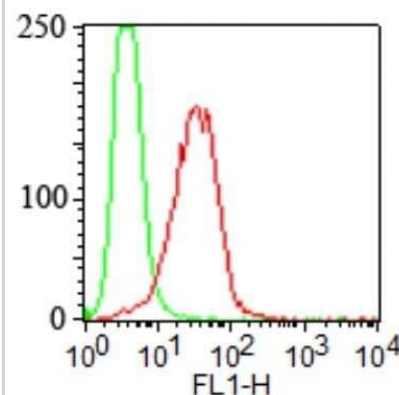


Images

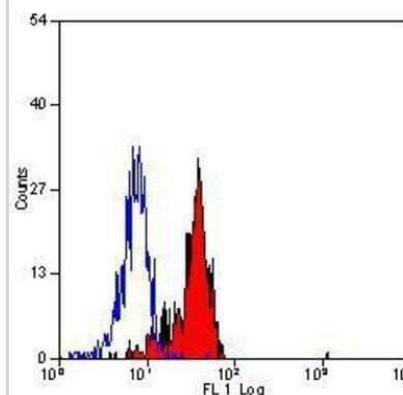
Flow (Cell Surface): TLR4 Antibody (HTA125) - Azide Free [NB100-56727] - Validation of the neutralizing effect of this antibody on TLR4 activity. The TLR4/MD-2/CD14/IL-8 Prom/LUCPorter HeLa cells were plated in 96-well white plates at 1×10^5 cells/well. After 16 h, cells were preincubated with different amounts of this antibody for 1 h and then stimulated with 10 ng/ml LPS for 6 h. Luciferase activity was then directly analyzed using the one-step luciferase reporter assay reagent. Data Summary: It inhibited LPS-mediated TLR4 activity in the TLR4/MD-2/CD14/IL-8 Prom/LUCPorter cell line.



Flow Cytometry: TLR4 Antibody (HTA125) - Azide Free [NB100-56727] - Analysis using Azide/BSA FREE version of NB100-56727. Cell surface analysis of TLR4 in stable HEK293/hTLR4 cells using this antibody. Secondary antibody goat anti-mouse IgG-PE at 0.25ug/10⁶ cells. Both stable HEK293/hTLR4 and HEK293/Vector cell lines were equally stained.



Flow Cytometry: TLR4 Antibody (HTA125) - Azide Free [NB100-56727] - Analysis using Azide/BSA FREE version of NB100-56727. Staining of human peripheral blood monocytes with Mouse anti Human CD284.



Publications

Ji X, Zhang X et al The Heparin-Binding Hemagglutinin of *Nocardia cyriacigeorgica* GUH-2 Stimulates Inflammatory Cytokine Secretion Through Activation of Nuclear Factor κ B and Mitogen-Activated Protein Kinase Pathways via TLR4 *Front Cell Infect Microbiol* 2020-03-03 [PMID: 32117792] (WB, WB, Human)

Details:

Citation using the Azide Free version of this antibody.

The E, Yao Q, Zhang P et al. Mechanistic Roles of Matrilin-2 and Klotho in Modulating the Inflammatory Activity of Human Aortic Valve Cells Cells. [PMID: 32046115] (WB, Human)

Ji X, Zhang X, Li H et al. Nfa34810 facilitates *Nocardia farcinica* invasion of host cells and stimulates TNF-alpha secretion through activation of the NF-kappa B and MAPK pathways via TLR4 *Infect Immun*. [PMID: 31964749]

Li F, Song R, Ao L et al. ADAMTS5 Deficiency in Calcified Aortic Valves Is Associated With Elevated Pro-Osteogenic Activity in Valvular Interstitial Cells Arterioscler thromb Vasc Biol 2017-05-25 [PMID: 28546218] (WB, B/N, Human)

Details:

This reference used the Azide Free version of NB100-56722.

Kabisch R, Mejias-Luque R, Gerhard M, Prinz C. Involvement of Toll-Like Receptors on Helicobacter pylori-Induced Immunity. PLoS ONE. [PMID: 25153703] (B/N, Human)

Details:

Citation using the Azide Free form of this antibody.

Cognasse F, Hamzeh H, Chavarin P et al. Evidence of Toll-like receptor molecules on human platelets. Immunol Cell Biol. 2005-04-01 [PMID: 15748217]

Details:

TLR2-PE (IMG-416D), TLR4-PE (IMG-417D), TLR6 (IMG-304A), TLR8-PE (IMG-321D), TLR9-PE (IMG-305D). Applications: Intracellular Flow Cytometry and Cell Surface Flow Cytometry: Figs 1 and 2. A comparison of staining results, intracellular versus cell surface flow cytometry is shown. Cell type: Human platelets.

Rojas-Bernabe A, Garcia-Hernandez O, Maldonado-Bernal C et al. Leishmania mexicana lipophosphoglycan activates ERK and p38 MAP kinase and induces production of proinflammatory cytokines in human macrophages through TLR2 and TLR4. Parasitology [PMID: 24512642] (In vitro, B/N, Human)

Details:

Used the Azide Free form of this antibody.

Basak C, Pathak SK, Bhattacharyya A et al. NF-kappaB- and C/EBPbeta-driven interleukin-1beta gene expression and PAK1-mediated caspase-1 activation play essential roles in interleukin-1beta release from Helicobacter pylori lipopolysaccharide-stimulated macrophages. J Biol Chem [PMID: 15561713] (FLOW)

Details:

Used the Azide Free form of this antibody.

Mempel M, Voelcker V, Kollisch G et al. Toll-like receptor expression in human keratinocytes: nuclear factor kappaB controlled gene activation by Staphylococcus aureus is toll-like receptor 2 but not toll-like receptor 4 or platelet activating factor receptor dependent. J Invest Dermatol. 2003-12-01 [PMID: 14675188] (ICC/IF, Human)

Details:

TLR2 (IMG-416) 2. TLR4 (IMG-417) [IF/ICC, Fig.2A and 2D (human keratinocytes)].

Pietschmann K, Beetz S, Welte S et al. Toll-like receptor expression and function in subsets of human gammadelta T lymphocytes. Scand J Immunol. 2009-09-01 [PMID: 19703014]

Wu CY, Chi PL, Hsieh HL et al. TLR4-dependent induction of vascular adhesion molecule-1 in rheumatoid arthritis synovial fibroblasts: Roles of cytosolic phospholipase A(2)alpha/cyclooxygenase-2. J Cell Physiol. 2010-05-01 [PMID: 20112284]

Prabha C, Rajashree P, Sulochana DD. TLR2 and TLR4 expression on the immune cells of tuberculous pleural fluid. Immunol Lett. 2008-04-15 [PMID: 18295348]

Details:

TLR2- FITC (IMG-416C): Flow (cell surface): Figs. 1A, B (human CD4+T cells, CD8+T cells, B cells, CD16+56+ cells and monocytes); 2(CD4+T cells); 4A, B (human Treg cells). Flow (intracellular): Fig. 3A, B (CD4+T cells) 2. TLR4-FITC (IMG-417C).Flow (cell surface): Figs. 1B, C (human CD4+T cells, CD8+T cells, B cells, CD16+56+ cells and monocytes); 2(CD4+T cells); 4A, B (human Treg cells). Flow (intracellular): Fig. 3A, B (CD4+T cells).

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