

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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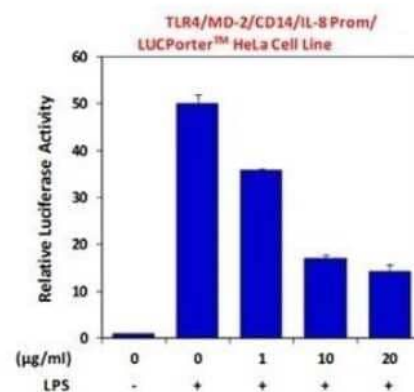
NB100-56727

TLR4 Antibody (HTA125) - Azide and BSA Free

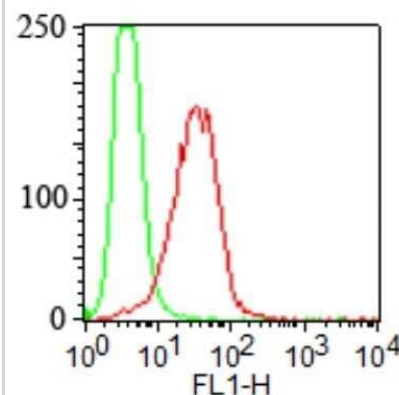
Product Information	
Unit Size	0.1 mg
Concentration	0.5 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	HTA125
Preservative	No Preservative
Isotype	IgG2a
Purity	Protein G purified
Buffer	Filter (0.2 micron) sterilized PBS
Target Molecular Weight	95.7 kDa
Product Description	
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

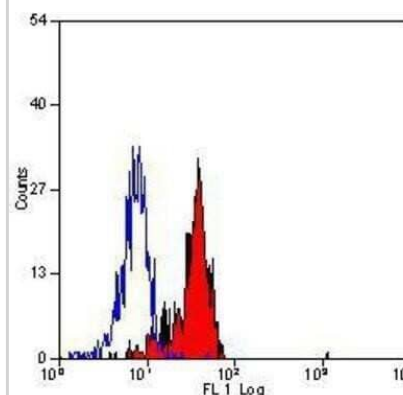
Flow (Cell Surface): TLR4 Antibody (HTA125) - Azide Free [NB100-56727] - Validation of the neutralizing effect of this antibody on TLR4 activity. The TLR4/MD-2/CD14/IL-8 Prom/LUCPorter HeLa cells were plated in 96-well white plates at 1×10^5 cells/well. After 16 h, cells were preincubated with different 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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Products Related to NB100-56727

NBP2-25295-1.0mg	LPS from E. Coli, TLR4 ligand
NBP2-26244	TLR4 Inhibitor Peptide Set
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-96778	Mouse IgG2a Isotype Control (M2A)

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