Product Datasheet

TLR4 Antibody (HTA125) [PE]
NB100-56062

Unit Size: 0.1 ml

Store at 4C in the dark.

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Publications: 23

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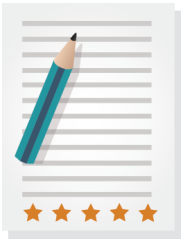
Updated 10/23/2024 v.20.1



NB100-56062

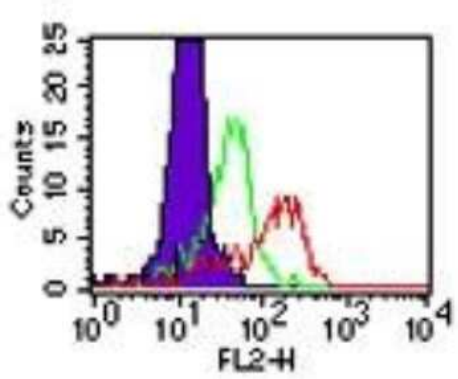
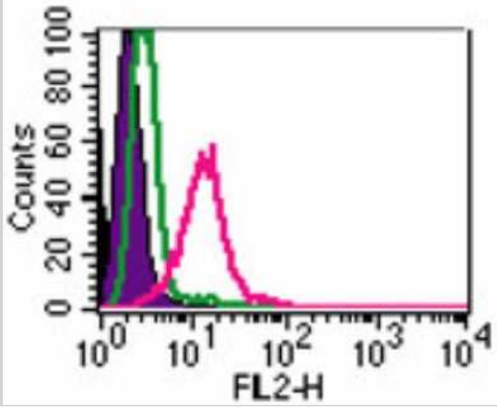
TLR4 Antibody (HTA125) [PE]

Product Information	
Unit Size	0.1 ml
Concentration	Please see the vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C in the dark.
Clonality	Monoclonal
Clone	HTA125
Preservative	0.05% Sodium Azide
Isotype	IgG2a
Conjugate	PE
Purity	Protein G purified
Buffer	PBS
Target Molecular Weight	95.7 kDa

Product Description	
Host	Mouse
Gene ID	7099
Gene Symbol	TLR4
Species	Human, Mouse, Canine
Specificity/Sensitivity	NB600-662 recognizes the human Toll like receptor 4 (TLR4) cell surface antigen. TLR4, also known as CD284, has been demonstrated to act as a receptor for LPS on human monocytes and macrophages. TLR4 signalling of LPS stimulation requires the presence of the MD-2 molecule. TLR4 is weakly expressed by resting cells, but is upregulated following stimulation with LPS. This antibody has been demonstrated to block activation of monocytes with LPS.
Immunogen	This TLR4 Antibody (HTA125) [FITC] was developed by immunizing mice with Ba/F3 cell line expressing human TLR4 cell surface antigen.

Product Application Details	
Applications	Flow Cytometry, Flow (Cell Surface), Flow (Intracellular), Immunocytochemistry/ Immunofluorescence, Western Blot (Negative)
Recommended Dilutions	Flow Cytometry 1 uL 1 million cells, Immunocytochemistry/ Immunofluorescence, Flow (Cell Surface), Flow (Intracellular), Western Blot (Negative)
Application Notes	Optimal dilution of this antibody should be experimentally determined.

Images

Flow Cytometry: TLR4 Antibody (HTA125) [PE] [NB100-56062] - Intracellular flow analysis of TLR4 in human PBMCs using NB100-56062 at 0.5 ug/10^6 cells. The shaded histogram represents cells without anti-TLR4 antibody; green represents the isotype control; red represents Nb100-56062, anti-TLR4.	
Flow Cytometry: TLR4 Antibody (HTA125) [PE] [NB100-56062] - Cell surface analysis of TLR4 on ThP1 cells using TLR4 antibody at 2 ug/10^6 cells. The shaded histogram represents ThP1 cells only, green represents isotype control antibody, and red represents TLR4 antibody.	

Publications

Moreira ML, Costa-Pereira C, Alves MLR. Vaccination against canine leishmaniosis increases the phagocytic activity, nitric oxide production and expression of cell activation/migration molecules in neutrophils and monocytes. Veterinary Parasitology [PMID: 26995719] (FLOW, Canine)

Details:
Used the PE form of this antibody.

Komine-Aizawa S, Hirohata N, Aizawa S, Abiko Y Porphyromonas gingivalis lipopolysaccharide inhibits trophoblast invasion in the presence of nicotine. Placenta. 2015-01-01 [PMID: 25468545] (FLOW, Human)

Details:
Citation using the PE version of this antibody.

Zanoni G, Navone R, Lunardi C et al. In Celiac Disease, a Subset of Autoantibodies Against Transglutaminase Binds Toll-Like Receptor 4 and Induces Activation of Monocytes PLoS Med 2006-09-01 [PMID: 16984219]

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] (Flow-CS, Flow Cytometry Control, Human)

Details:
TLR2-PE (IMG-416D), TLR4-PE (IMG-417D), TLR6 (IMG-304A), TLR8-PE (IMG-321D), TLR9-PE (IMG-305D). Applications: Intracellular Flow Cytomety 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.

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).

Matsunaga N, Tsuchimori N, Matsumoto T, Ii M. TAK-242 (resatorvid), a small-molecule inhibitor of Toll-like receptor (TLR) 4 signaling, binds selectively to TLR4 and interferes with interactions between TLR4 and its adaptor molecules. Mol Pharmacol. 2011-01-01 [PMID: 20881006]

Hammadi A, Billard C, Faussat AM et al. Stimulation of iNOS expression and apoptosis resistance in B-cell chronic lymphocytic leukemia (B-CLL) cells through engagement of Toll-like receptor 7 (TLR-7) and NF-kappaB activation. Nitric Oxide. 2008-09-01 [PMID: 18474259]

Shahrara S, Park CC, Temkin V et al. RANTES modulates TLR4-induced cytokine secretion in human peripheral blood monocytes. J Immunol. 2006-10-15 [PMID: 17015691] (Flow-CS)

Details:
TLR4 (IMG-417A): Flow (Cell Surface) [PB monocytes], Fig. 2C.

Yang X, Fullerton DA, Su X et al Pro-osteogenic phenotype of human aortic valve interstitial cells is associated with higher levels of Toll-like receptors 2 and 4 and enhanced expression of bone morphogenetic protein 2. J Am Coll Cardiol. 2009-02-10 [PMID: 19195606]

Details:
Citation using the Azide Free version of this antibody.

More publications at http://www.novusbio.com/NB100-56062

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Products Related to NB100-56062

NBP2-25295-1.0mg	LPS from E. Coli, TLR4 ligand
NBP2-26244	TLR4 Inhibitor Peptide Set
NB100-56059	TLR4 Antibody (HTA125) [FITC]
NBP2-24821PEP	TLR4 Antibody Blocking Peptide

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