

# Product Datasheet

## TLR4 Antibody (HTA125) [FITC] NB100-56059

Unit Size: 0.1 ml

Store at 4C in the dark.

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**NB100-56059**

TLR4 Antibody (HTA125) [FITC]

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	FITC
Purity	Protein G purified
Buffer	50mM Sodium Borate

Product Description	
Host	Mouse
Gene ID	7099
Gene Symbol	TLR4
Species	Human, Mouse, Porcine, Canine, Guinea Pig, Primate
Specificity/Sensitivity	The has been shown to block the activation of monocytes with LPS (Paik, et al, 2003).
Immunogen	This antibody was developed by immunizing mice with Ba/F3 cell line expressing human TLR4 cell surface antigen.

Product Application Details	
Applications	Flow Cytometry, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Western Blot (Negative)
Recommended Dilutions	Flow Cytometry 1ul/1 million cells, Immunohistochemistry, Immunocytochemistry/Immunofluorescence, Western Blot (Negative)
Application Notes	Confocal Microscopy: see Scheel et al. (2006) for details FA (Neutralization): please Basek et al, 2005 for details. Flow (Cell Surface): 2-5 ug/ 1x10 <sup>6</sup> cells IF/ICC: please see Schneeman et al (2005) for details. IP: please see Shimazu et al, 1999 for details. Use in Immunohistochemistry and Immunocytochemistry/immunofluorescence reported in scientific literature (PMID 28219705)

**Publications**

Heftrig D, Sturm R, Oppermann E et al. Impaired Surface Expression of HLA-DR, TLR2, TLR4, and TLR9 in Ex Vivo-In Vitro Stimulated Monocytes from Severely Injured Trauma Patients.. Mediators Inflamm. Mar 3 2017 12:00AM [PMID: 28255201]

Larsson O, Tengroth L, Xu Y et al. Substance P represents a novel first-line defense mechanism in the nose. J. Allergy Clin. Immunol. Feb 20 2017 12:00AM [PMID: 28219705] (Flow, Mouse)



Jamin A, Dehoux L, Dossier C et al. Toll-like receptor 3 expression and function in childhood idiopathic nephrotic syndrome Clin. Exp. Immunol. 2015 Jun 30 [PMID: 26123900] (FLOW, Human)

**Details:**

TLR4 antibody clone HTA125 [FITC] (Imgenex: IMG-417C) was used for FLOW on peripheral blood mononuclear cells/PBMC of idiopathic nephrotic syndrome/INS children, including 28 in relapse, 23 in remission and 40 controls. The cells were incubated with conjugated antibodies along with isotype control for 30 minutes at 4C and 10(5) viable PBMCs were analyzed using FACSCantoll/FACSDiva.

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 Sep [PMID: 16984219]

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

**Details:**

The following TLR antibodies were cited in this publication: 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 compar

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 Dec [PMID: 14675188] (ICC/IF, Human)

**Details:**

1. 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 Sep [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 May [PMID: 20112284]

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

**Details:**

Antibodies cited: 1. 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-

Matsunaga N, Tsuchimori N, Matsumoto T, li 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 Jan [PMID: 20881006]

Hammadi A, Billard C, Faussat AM, Kolb JP. 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 Sep [PMID: 18474259]

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

**Details:**

Antibodies cited: 1. TLR4 (IMG-417A): Flow (Cell Surface) [PB monocytes], Fig. 2C.

More publications at <http://www.novusbio.com/NB100-56059>



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### **Products Related to NB100-56059**

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NBP2-25295-1.0mg	LPS from E. Coli, TLR4 ligand
NBP2-26244	TLR4 Inhibitor Peptide Set
NB100-56062	TLR4 Antibody (HTA125) [PE]
NBP2-24821PEP	TLR4 Blocking Peptide

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### **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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