# **Product Datasheet**

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

Unit Size: 0.1 ml

Store at 4C in the dark.

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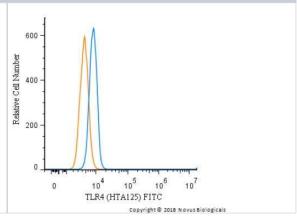
### NB100-56059

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	lgG2a
Conjugate	FITC
Purity	Protein G purified
Buffer	50 mM Sodium Borate
Target Molecular Weight	95.7 kDa
Product Description	
Host	Mouse
Gene Symbol	TLR4
Species	Human, Mouse, Canine
Specificity/Sensitivity	The antibody has been shown to block the activation of monocytes with LPS (Paik, et al, 2003).
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, Immunohistochemistry, Western Blot (Negative)
Recommended Dilutions	Flow Cytometry 1uL / 1 million cells, Immunohistochemistry, 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) [FITC] [NB100-56059] - An intracellular stain was performed on MG-63 cells with TLR4 Antibody [HTA125] NB100-56059 (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 10 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to FITC.



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#### **Publications**

Akhter N, Madhoun A, Arefanian H et al Oxidative Stress Induces Expression of the Toll-Like Receptors (TLRs) 2 and 4 in the Human Peripheral Blood Mononuclear Cells: Implications for Metabolic Inflammation Cell. Cell Physiol Biochem. 2019-01-01 [PMID: 31162913] (FLOW, Human)

#### Details:

Citation using the PE version of this antibody.

Ahmad Rasheed, Al-Roub Areej, Kochumon Shihab et al. The Synergy between Palmitate and TNF-a for CCL2 Production Is Dependent on the TRIF/IRF3 Pathway: Implications for Metabolic Inflammation J Immunol. 2018-04-09 [PMID: 29632147] (FLOW, Human)

Details:

Citation using the FITC form of this antibody.

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. [PMID: 28255201]

Details:

Citation using the FITC form of this antibody.

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

Details:

Citation using the FITC form of this antibody.

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

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]

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] (Flow Cytometry Control, Human)

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]

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

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### Novus Biologicals USA

10730 E. Briarwood Avenue Centennial, CO 80112 USA Phone: 303.730.1950 Toll Free: 1.888.506.6887 Fax: 303.730.1966 nb-customerservice@bio-techne.com

#### **Bio-Techne Canada**

21 Canmotor Ave Toronto, ON M8Z 4E6 Canada Phone: 905.827.6400 Toll Free: 855.668.8722 Fax: 905.827.6402 canada.inquires@bio-techne.com

# **Bio-Techne Ltd**

19 Barton Lane Abingdon Science Park Abingdon, OX14 3NB, United Kingdom Phone: (44) (0) 1235 529449 Free Phone: 0800 37 34 15 Fax: (44) (0) 1235 533420 info.EMEA@bio-techne.com

# **General Contact Information**

www.novusbio.com Technical Support: nb-technical@biotechne.com Orders: nb-customerservice@bio-techne.com General: novus@novusbio.com

## Products Related to NB100-56059

NBP2-25295-1.0mg	LPS from E. Coli, TLR4 ligand
NBP2-26244	TLR4 Inhibitor Peptide Set
NBP1-96848	Mouse IgG2a Isotype Control (M2A) [FITC]
NB100-56062	TLR4 Antibody (HTA125) [PE]

#### Limitations

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