# **Product Datasheet**

# TLR4 Antibody (HTA125) [Alexa Fluor® 488] NBP2-24897

Unit Size: 0.1 ml

Store at 4C in the dark.

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### NBP2-24897

TLR4 Antibody (HTA125) [Alexa Fluor® 488]

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	Alexa Fluor 488
Purity	Protein G purified
Buffer	50 mM Sodium Borate
Target Molecular Weight	95.7 kDa
Product Description	
Host	Mouse
Gene ID	7099
Gene Symbol	TLR4
Species	Human, Mouse, Canine
Specificity/Sensitivity	The has been shown to block the activation of monocytes with LPS (Paik, et al, 2003).
Immunogen	This TLR4 Antibody (HTA125) was developed by immunizing mice with Ba/F3 cell line expressing human TLR4 cell surface antigen.
Notes	Alexa Fluor (R) products are provided under an intellectual property license from Life Technologies Corporation. The purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components, or any materials made using the product or its components, in any activity to generate revenue, which may include, but is not limited to use of the product or its components: (i) in manufacturing; (ii) to provide a service, information, or data in return for payment; (iii) for therapeutic, diagnostic or prophylactic purposes; or (iv) for resale, regardless of whether they are resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, CA 92008 USA or outlicensing@lifetech.com. This conjugate is made on demand. Actual recovery may vary from the stated volume of this product. The volume will be greater than or equal to the unit size stated on the datasheet.
Product Application Details	
Applications	Flow Cytometry, Flow (Cell Surface), Immunocytochemistry/ Immunofluorescence, Western Blot (Negative)
Recommended Dilutions	Flow Cytometry 1 uL / 1 million cells, Immunocytochemistry/ Immunofluorescence 1:10 - 1:2000, Flow (Cell Surface), Western Blot (Negative)



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**Application Notes** 



#### **Publications**

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]

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, 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. 2011-01-01 [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.

Wong CK, Cheung PF, Ip WK et al. Intracellular signaling mechanisms regulating toll-like receptor-mediated activation of eosinophils. Am J Respir Cell Mol Biol. 2007-07-01 [PMID: 17332440]

Details:

Human blood eosinophils and neutrophils from buffy coat: For WB, Fig. 1A: TLR1 (IMG-5012), TLR5 (IMG-664), TLR6 (IMG-304A), TLR7 (IMG-540), TLR8 (IMG-321A), TLR9 (IMG-305A). For Flow (Intracellular) and Flow (Surface), Fig. 1B: TLR1 (IMG-5021), TLR2 (IMG-416C), TLR3 (IMG-315C), TLR4 (IMG-417C), TLR5 (IMG-663C), TLR6 (IMG-304C), TLR7 (IMG-665A), TLR8 (IMG-321C), TLR9 (IMG-305C).

Murciano C, Villamon E, Yanez A et al. In vitro response to Candida albicans in cultures of whole human blood from young and aged donors. FEMS Immunol Med Microbiol. 2007-11-01 [PMID: 17714490]

Details:

The following anitbodies were used in flow (cell surface) cytometry: TLR2/CD282 FITC (IMG-416C), TLR4 FITC (IMG-417C), TLR6/CD286 FITC (IMG-304C). Human whole blood from both young and elderly volunteers, Fig 1. Note: The fluorescence mean intensity was m

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## Products Related to NBP2-24897

NBP2-25295-1.0mg	LPS from E. Coli, TLR4 ligand
NBP2-26244	TLR4 Inhibitor Peptide Set
IC003G	Mouse IgG2a Isotype Control (20102) [Alexa Fluor® 488]
NB100-56059	TLR4 Antibody (HTA125) [FITC]

#### 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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