Product Datasheet

TLR4 Antibody (HTA125) [PE]
NB100-56062

Unit Size: 0.1 ml

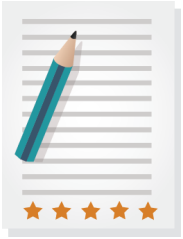
Store at 4C in the dark.

www.novusbio.com technical@novusbio.com

Publications: 23

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NB100-56062

Updated 10/12/2016 v.20.1



NB100-56062

TLR4 Antibody (HTA125) [PE]

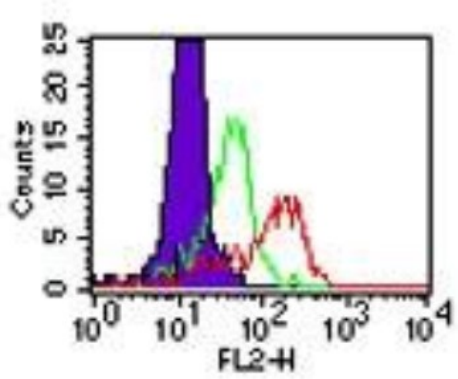
Product Information	
Unit Size	0.1 ml
Concentration	Please see the vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C in the dark.
Clonality	Monoclonal
Clone	HTA125
Preservative	0.05% Sodium Azide
Isotype	IgG2a
Conjugate	PE
Purity	Protein G purified
Buffer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

Product Description	
Host	Mouse
Gene ID	7099
Gene Symbol	TLR4
Species	Human, Mouse, Porcine, Canine, Guinea Pig, Primate
Reactivity Notes	Cross-reacts with Human and Guinea Pig.Not yet tested in other species.
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	Ba/F3 cell line expressing TLR4

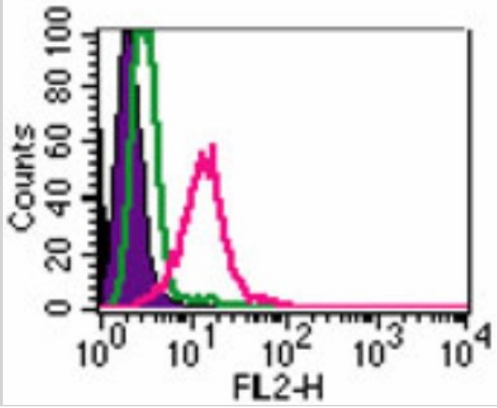
Product Application Details	
Applications	Flow Cytometry, Western Blot (Negative)
Recommended Dilutions	Flow Cytometry 1ul/1 million cells, Western Blot (Negative)
Application Notes	Confocal Microscopy: see Scheel et al. (2006) for details FA (Neutralization): please Basek et al, 2005 for details. Flow (Cell Surface): 2-5 ug/ 1x10^6 cells IF/ICC: please see Schneeman et al (2005) for details. IP: please see Shimazu et al, 1999 for details

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 Feb 15 2016 12:00AM [PMID: 26995719] (FLOW, Canine)

Komine-Aizawa S, Hirohata N, Aizawa S, Abiko Y. Porphyromonas gingivalis lipopolysaccharide inhibits trophoblast invasion in the presence of nicotine Placenta et al. 2014 Nov 07 [PMID: 25468545] (FLOW, Human)

Details:
TLR4 antibody used for FLOW on immortalized human first-trimester trophoblast cell line HTR-8/Svneo treated or not with Porphyromonas gingivalis lipopolysaccharide and nicotine (Fig. 1a and b)

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] (Flow-Cs, Flow-IC, 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, K0llisch 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]

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, 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 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.

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 Feb 10 [PMID: 19195606]

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

Novus Biologicals USA
8100 Southpark Way, A-8
Littleton, CO 80120
USA
Phone: 303.730.1950
Toll Free: 1.888.506.6887
Fax: 303.730.1966
novus@novusbio.com

Novus Biologicals Canada
461 North Service Road West, Unit B37
Oakville, ON L6M 2V5
Canada
Phone: 905.827.6400
Toll Free: 855.668.8722
Fax: 905.827.6402
canada@novusbio.com

Novus Biologicals Europe
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@bio-techne.com

General Contact Information
www.novusbio.com
Technical Support: technical@novusbio.com
Orders: orders@novusbio.com
General: novus@novusbio.com

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 Blocking Peptide

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.

For more information on our 100% guarantee, please visit www.novusbio.com/guarantee

Earn gift cards/discounts by submitting a review: www.novusbio.com/reviews/submit/NB100-56062

Earn gift cards/discounts by submitting a publication using this product: www.novusbio.com/publications