

Product Datasheet

TLR4 Antibody (MTS510) [FITC] NBP2-24450

Unit Size: 0.1 ml

Store at 4C in the dark.

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NBP2-24450**TLR4 Antibody (MTS510) [FITC]**

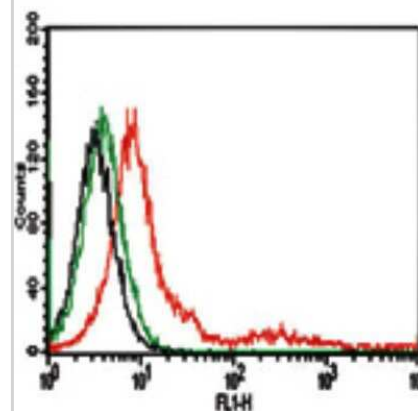
Product Information	
Unit Size	0.1 ml
Concentration	Please see the vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C in the dark.
Clonality	Monoclonal
Clone	MTS510
Preservative	0.05% Sodium Azide
Isotype	IgG2a Kappa
Conjugate	FITC
Purity	Protein G purified
Buffer	50 mM Sodium Borate
Target Molecular Weight	95.7 kDa

Product Description	
Host	Rat
Gene ID	7099
Gene Symbol	TLR4
Species	Human, Mouse
Reactivity Notes	Use in Human reported in scientific literature (PMID:21593379).
Specificity/Sensitivity	In FA, the antibody blocks activation of monocytes with LPS (Akashi et al. 2000). This antibody preferentially recognizes TLR4-MD-2 complex than of TLR4 alone. The optimal condition has to be determined for individual experiments.
Immunogen	This TLR4 Antibody (MTS510) was developed by immunizing rats with the Ba/F3 cell line expressing mouse TLR4 and MD-2 (Akashi et al, 2000).

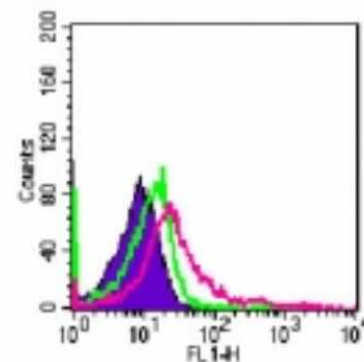
Product Application Details	
Applications	Western Blot, ELISA, Flow Cytometry, Flow (Cell Surface), Immunocytochemistry/ Immunofluorescence
Recommended Dilutions	Western Blot 1:100 - 1:2000, Flow Cytometry 1 uL / 1 million cells, ELISA, Immunocytochemistry/ Immunofluorescence 1:10 - 1:500, Flow (Cell Surface)
Application Notes	Optimal dilution of this antibody should be experimentally determined.

Images

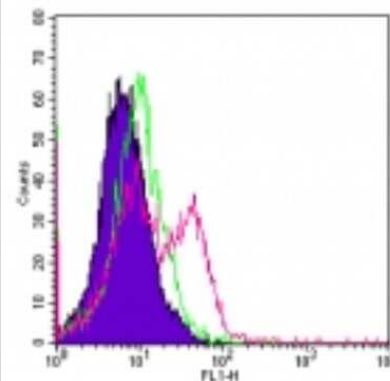
Flow Cytometry: TLR4 Antibody (MTS510) [FITC] [NBP2-24450] - Cell surface analysis of TLR4 in RAW cells using 0.5 ug of this antibody. Black histogram represents cells without antibody; green represents isotype control; red represents anti-TLR4 antibody.



Flow Cytometry: TLR4 Antibody (MTS510) [FITC] [NBP2-24450] - Cell surface analysis of TLR4 in mouse peritoneal cells using 1 ug of this antibody. Shaded histogram represents cells without antibody; green represents isotype control; red represents anti-TLR4 antibody.



Flow Cytometry: TLR4 Antibody (MTS510) [FITC] [NBP2-24450] - Cell surface analysis of TLR4 in mouse splenocytes using 2 ug of this antibody. Cells were stimulated with 1 ug/mL anti-CD3 for 72 hours. Shaded histogram represents cells without antibody, green represents rat IgG2a FITC isotype control, red represents this antibody.



Publications

Tsukamoto H, Fukudome K, Takao S et al. Lipopolysaccharide-binding protein-mediated Toll-like receptor 4 dimerization enables rapid signal transduction against lipopolysaccharide stimulation on membrane-associated CD14-expressing cells. *Int Immunol.* 2010-04-01 [PMID: 20133493] (WB)

Details:

TLR4 (IMG-578): WB, TLR4 stably transfected Ba/F3 cells. Note: These cells were immunoprecipitated with a TLR4 mAb (clone UT41) then western blotted with the IMG-578A TLR4 pAb Fig 3B. 3. TLR4 (IMG-428A): Flow (cell surface), RAW264 and TLR4 stably transfected Ba/F3 cells. Figs 1B, 1E.

Park HJ, Hong JH, Kwon HJ et al. TLR4-mediated activation of mouse macrophages by Korean mistletoe lectin-C (KML-C). *Biochem Biophys Res Commun.* 2010-06-04 [PMID: 20450885] (WB, Mouse)

Details:

The following antibodies were used: TLR4/CD284 (IMG-428E), TLR4/CD284 (IMG-577), and TLR4 (IMG-6307A). IMG-577 & IMG-6307A were used in Fig 1 (WB): Peritoneal primary mouse (BALB/C) macrophages stimulated with LPS and then treated with KML-C (Korean mistletoe)

Jung DY, Lee H, Jung BY et al. TLR4, but not TLR2, signals autoregulatory apoptosis of cultured microglia: a critical role of IFN-beta as a decision maker J Immunol 2005-05-10 [PMID: 15879150] (Flow-CS)

El Shikh ME, El Sayed RM, Wu Y et al. TLR4 on follicular dendritic cells: an activation pathway that promotes accessory activity. J Immunol. 2007-10-01 [PMID: 17878340] (Flow-CS)

Details:

Products cited: 1. TLR4-FITC (IMG-428C): Flow (Cell Surface), Fig 1C, D [primary follicular dendritic (FDC) and B cells isolated from BALB/c mouse splenic leukocytes]. FDC cells expressed TLR4, but the B cells did not. 2. TLR4 (IMG-579A): IHC (F), Fig 1A

Tsai CC, Lin CR, Tsai HY et al. The immunologically active oligosaccharides isolated from wheatgrass modulate monocytes via Toll-like receptor-2 signaling J Biol Chem 2013-05-01 [PMID: 23629653]

Ma CY, Shi GY, Shi CS et al. Monocytic thrombomodulin triggers LPS- and gram-negative bacteria-induced inflammatory response. J Immunol. 2012-06-15 [PMID: 22573811] (ICC/IF, Mouse)

Details:

TLR4 (IMG-428A). IF: mouse peritoneal macrophages (Fig 5D).

Corbucci C, Cenci E, Skrzypek F et al. Immune response to *Candida albicans* is preserved despite defect in O-mannosylation of secretory proteins. Med Mycol. 2007-12-01 [PMID: 17885949] (Flow-CS)

Details:

Products cited (mouse macrophages): 1. IMG-428C (TLR4): Flow (Cell Surface), Fig. 5A 2. IMG-428E (TLR4): FA, Fig. 5B.

Kim MY, Shu Y, Carsillo T et al. hsp70 and a novel axis of type I interferon-dependent antiviral immunity in the measles virus-infected brain. J Virol. 2013-01-01 [PMID: 23135720]

Macedo GC, Magnani DM, Carvalho NB et al. Central role of MyD88-dependent dendritic cell maturation and proinflammatory cytokine production to control *Brucella abortus* infection. J Immunol. 2008-01-15 [PMID: 18178848] (FLOW, Mouse)

Details:

IMG-428E: FA (mouse bone marrow derived and splenic dendritic cells), Fig. 7C,D.

Bruscia EM, Zhang PX, Satoh A et al. Abnormal trafficking and degradation of TLR4 underlie the elevated inflammatory response in cystic fibrosis. J Immunol. 2011-06-15 [PMID: 21593379] (WB, Flow-CS, ICC/IF, Human, Mouse)

Details:

1. TLR4/CD284 (IMG-428C) & TLR2/CD282 (IMG-6320C) : WB, IF/ICC, Flow (cell surface): Human macrophages with cystic fibrosis (CF) and wild type (WT) mouse macrophages, Fig 1 & S4. 2. TLR4/CD284 WB: CF and wild type macrophages treated with protein synthesis inhibitor

Konno K, Wakabayashi Y, Akashi-Takamura S et al. A molecule that is associated with Toll-like receptor 4 and regulates its cell surface expression. Biochem Biophys Res Commun. 2006-01-27 [PMID: 16338228]



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Products Related to NBP2-24450

NBP2-25295-1.0mg	LPS from E. Coli, TLR4 ligand
NBP2-26244	TLR4 Inhibitor Peptide Set
NBP1-43959-0.1mg	Rat IgG2a Kappa Light Chain Isotype Control (R2a) [FITC]
NBP2-24741	TLR4 Antibody (MTS510) [PE]

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