

Product Datasheet

TLR4 Antibody (MTS510) [PE] NBP2-24741

Unit Size: 0.1 ml

Store at 4C in the dark.

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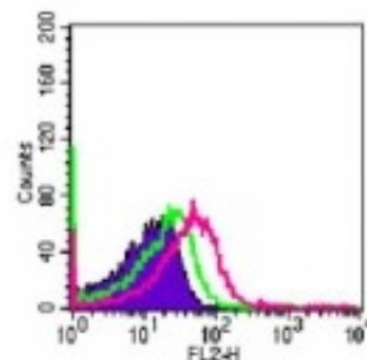
NBP2-24741

TLR4 Antibody (MTS510) [PE]

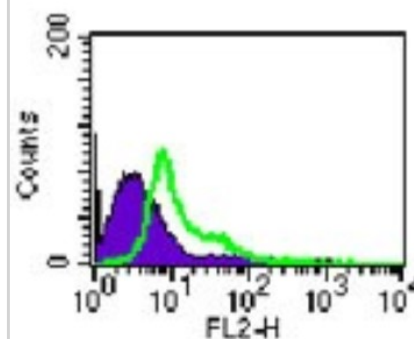
Product Information	
Unit Size	0.1 ml
Concentration	Please see the vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C in the dark.
Clonality	Monoclonal
Clone	MTS510
Preservative	0.05% Sodium Azide
Isotype	IgG2a Kappa
Conjugate	PE
Purity	Protein G purified
Buffer	PBS
Product Description	
Host	Rat
Gene ID	7099
Gene Symbol	TLR4
Species	Mouse
Reactivity Notes	Mouse. Not yet tested in other species.
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 antibody 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	Flow Cytometry
Recommended Dilutions	Flow Cytometry 1ul/1 million cells

Images

Flow Cytometry: TLR4 Antibody (MTS510) [PE] [NBP2-24741] - Cell surface analysis of TLR4 in mouse peritoneal cells using 0.5 ug of this antibody. Shaded histogram represents cells without antibody; green represents isotype control; red represents anti-TLR4 antibody.



Flow Cytometry: TLR4 Antibody (MTS510) [PE] [NBP2-24741] - Analysis of cell surface TLR4 using this antibody at 0.625 ug/10⁶ Raw cells (pretreated with anti-CD16/32). The shaded histogram represents the isotype control.



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 Apr [PMID: 20133493] (WB)

Details:
Western blot; human chronic myeloid leukemia KBM-5 cell line, Fig 4. 1. IKK β /IKK2 (IMG-129A) 2. IKK α /IKK1 (IMG-136A) 3. IKK α (IMG-127A) 4. IKK γ (IMG-324A & IMG-287A).

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 Jun 4 [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 mistl)

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 May 15 [PMID: 15879150] (Flow-CS)

Details:
1. TLR4 (IMG-428) [Flow (cell surface), Fig.1B (microglia cells)].

Ei Shikh ME, El Sayed RM, Wu Y et al. TLR4 on follicular dendritic cells: an activation pathway that promotes accessory activity. *J Immunol.* 2007 Oct 1 [PMID: 17878340]

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 Jun 14 [PMID: 23629653]

Details:

Antibodies cited (THP-1 cells): 1. TLR2, clone TL2.1 (IMG-416E): Neutralization assays (Fig 7), pre-treatment with the TLR2 mAb inhibited maltoheptaose-stimulated cytokine expression. Inhibition was TLR2 mAb dose dependent; WB (Fig 7), TLR2 was detected a

Ma CY, Shi GY, Shi CS et al. Monocytic thrombomodulin triggers LPS- and gram-negative bacteria-induced inflammatory response. *J Immunol.* 2012 Jun 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 Dec [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 Jan [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 Jan 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 Jun 15 [PMID: 21593379]

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

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 Jan 27 [PMID: 16338228]

Details:

1. IMG-428A (TLR4, Clone MTS510): IP (Figs 3 & 4), TLR4-transfected Ba/F3 cells. The antibody immunoprecipitated both the immature (less glycosylated) and mature (more glycosylated) forms of TLR4. 2. IMG-417A (TLR4, Clone HTA125): Flow (Cell Surface) (Fig



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NBP2-25295-1.0mg	LPS from E. Coli, TLR4 ligand
NBP2-26244	TLR4 Inhibitor Peptide Set
NBP1-43780-0.1mg	Rat IgG2a Kappa Light Chain Isotype Control (R2a) [PE]
NBP2-24450	TLR4 Antibody (MTS510) [FITC]

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