

# Product Datasheet

## TLR4 Antibody NBP2-24773

Unit Size: 0.1 mg

Store at 4C in the dark.

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Updated 6/15/2014 v.20.1

**NBP2-24773**

TLR4 Antibody (76B357.1) [Alexa Fluor (R) 647]

Product Information	
Unit Size	0.1 mg
Concentration	0.5 mg/ml
Storage	Store at 4C in the dark.
Clonality	Monoclonal
Clone	76B357.1
Preservative	0.05% Sodium Azide
Isotype	IgG2b Kappa
Conjugate	Alexa Fluor (R) 647
Purity	Protein G purified
Buffer	50 mM Sodium Borate

Product Description	
Host	Mouse
Gene ID	7099
Gene Symbol	TLR4
Species	Human, Mouse, Rat, Mammal, Squirrel
Species Reactivity	Human, Mouse, Rat. Ground squirrel reactivity reported by a customer review. Predicted cross-reactivity based on sequence identity: Chimp (100%), Baboon (100%), Chinese Hamster (100%), Bovine (93%), Pig (93%). Mammal reactivity reported in scientific literature (PMID: 25130694)
Specificity/Sensitivity	The amino acid sequence used has 100% identity in human, chimp, baboon, chinese hamster, and rat; 93% identity in bovine and pig; 85% identity in sheep and 78% identity in cat, horse and mouse.
Immunogen	This antibody was developed against a portion of amino acids 100-200 of human TLR4 (NP_612564).
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Product Application Details	
Applications	Flow Cytometry
Recommended Dilutions	Flow Cytometry 0.5-1 ug/10 <sup>6</sup> cells

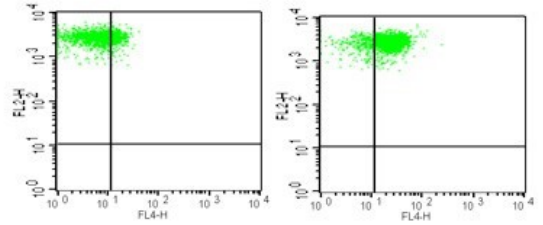


**Application Notes**

Flow (Intracellular) use reported in literature (See Cohen et al, 2008); Immunofluorescence (See Nowicki et al, 2009); IHC-F (Nowicki et al, 2012); Flow (cell surface) use reported in scientific literature (PMID 23796194)

**Images**

Flow Cytometry: TLR4 Antibody (76B357.1) [Alexa Fluor (R) 647] [NBP2-24773] - TLR4 expression on monocytes from human peripheral blood: PBMC were stained, in a 2 color flow test, with CD14 PE this antibody and 1 ug of either isotype control (Left, ) or TLR4-Alexa Fluor 647 (right). PPI negative, CD14+ cells were gated for analysis.



## Publications

Lacave-Lapalun JV, Benderitter M, Linard C. Flagellin and LPS each restores rat lymphocyte populations after colorectal irradiation. *J. Leukoc. Biol.* 2014 Feb 14 [PMID: 24532644] (Flow-CS, Rat)

### Details:

Primary leukocytes isolated from the lamina propria of rat colons, Fig 3C.

Wu J, Meng Z, Jiang M et al. Toll-like receptor-induced innate immune responses in non-parenchymal liver cells are cell type-specific. *Immunology.* 2010 Mar [PMID: 19922426]

Hsiao CC, Kao YH, Huang SC, Chuang JH. Toll-like receptor-4 agonist inhibits motility and invasion of hepatoblastoma HepG2 cells in vitro. *Pediatr Blood Cancer.* 2013 Feb [PMID: 22648929]

Allam JP, Peng WM, Appel T et al. Toll-like receptor 4 ligation enforces tolerogenic properties of oral mucosal Langerhans cells. *J Allergy Clin Immunol.* 2008 Feb [PMID: 18036651]

Cohen PA, Koski GK, Czerniecki BJ et al. STAT3- and STAT5-dependent pathways competitively regulate the pan-differentiation of CD34pos cells into tumor-competent dendritic cells. *Blood.* 2008 Sep 1 [PMID: 18577706]

Liu Y, Fatheree NY, Mangalat N, Rhoads JM. *Lactobacillus reuteri* strains reduce incidence and severity of experimental necrotizing enterocolitis via modulation of TLR4 and NF- $\kappa$ B signaling in the intestine. *Am J Physiol Gastrointest Liver Physiol.* 2012 Mar 15 [PMID: 22207578]

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]

### Details:

Antibodies cited: IMG-5031A (clone 76B357.1), WB: Fig 3B, Lane 1 (293T), Lane 2 [human TLR4 transfected 293T (TLR4-293T)], Lane 4 (TLR4-293T probed with biotinylated IMG-5031A), Lane 5 (TLR4-293T probed with biotinylated IMG-5031A after TLR4 depletion with

Weile C, Josefsen K, Buschard K. Glucose activation of islets of Langerhans up-regulates Toll-like receptor 5: possible mechanism of protection. *Clin Exp Immunol.* 2011 Nov [PMID: 21985371]

Janardhanam SB, Prakasam S, Swaminathan VT et al. Differential expression of TLR-2 and TLR-4 in the epithelial cells in oral lichen planus. *Arch Oral Biol.* 2012 May [PMID: 22119043]

Jazaeri F, Tavangar SM, Ghazi-Khansari M et al. Cirrhosis is associated with development of tolerance to cardiac chronotropic effect of endotoxin in rats. *Liver Int.* 2013 Mar [PMID: 23311391]

Abdi J, Mutis T, Garssen J, Redegeld F. Characterization of the Toll-like receptor expression profile in human multiple myeloma cells. *PLoS One.* 2013 Apr 8 [PMID: 23593278]

Zheng YX, Yang M, Rong TT et al. CD74 and macrophage migration inhibitory factor as therapeutic targets in gastric cancer. *World J Gastroenterol.* 2012 May 14 [PMID: 22611320]

More publications at <http://www.novusbio.com/NBP2-24773>





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### **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 guarantee, please visit [www.novusbio.com/guarantee](http://www.novusbio.com/guarantee).**

