Product Datasheet

TLR7 Antibody - BSA Free
NB100-56588

Unit Size: 0.1 mg

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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Publications: 13

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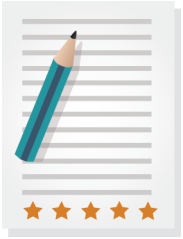
Updated 2/21/2025 v.20.1



NB100-56588

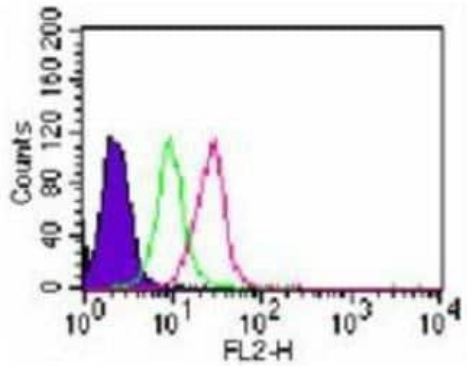
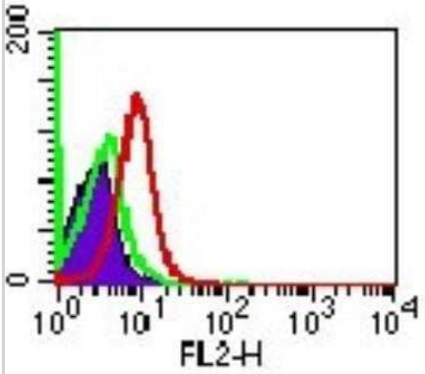
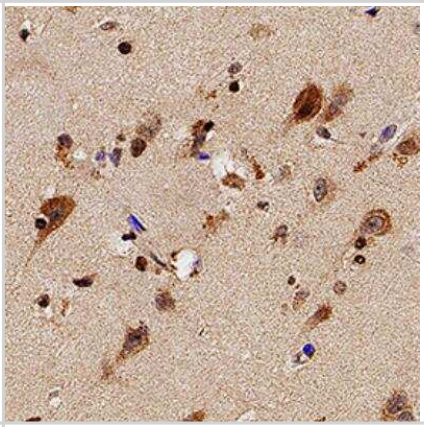
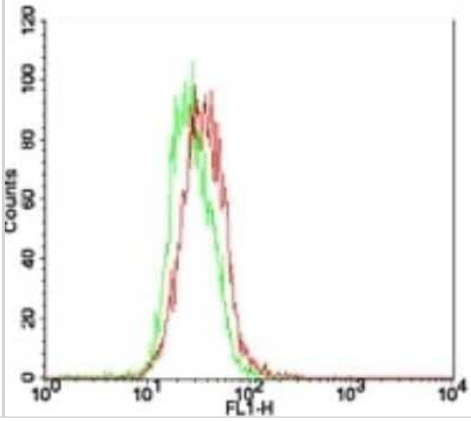
TLR7 Antibody - BSA Free

Product Information	
Unit Size	0.1 mg
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.05% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS

Product Description	
Host	Rabbit
Gene ID	51284
Gene Symbol	TLR7
Species	Human, Mouse
Reactivity Notes	72% sequence identity with rat protein.
Immunogen	This antibody was developed against KLH-conjugated synthetic peptide corresponding to a portion of amino acids 684-701 of human TLR7 (NP_057646).

Product Application Details	
Applications	Flow Cytometry, Flow (Cell Surface), Flow (Intracellular), Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin
Recommended Dilutions	Flow Cytometry, Immunohistochemistry 1:10 - 1:500, Immunohistochemistry-Paraffin 1:10 - 1:50, Immunohistochemistry-Frozen 1:20. Use 1:20, Flow (Cell Surface) reported in scientific literature (Wong et al (2007)), Flow (Intracellular) 0.5 - 2 ug/1x10^6 cells
Application Notes	Immunohistochemistry-Frozen reported in scientific literature (Chen et al (2005))

Images

Flow Cytometry: TLR7 Antibody [NB100-56588] - Intracellular flow analysis of TLR7 in 10^6 ThP1 cells using 2 ug of NB100-56588. Shaded histogram represents cells without antibody. Green: isotype control. Red: TLR7 antibody. Intracellular flow kit was used for this test, and an anti-rabbit IgG PE conjugated secondary.	
Flow Cytometry: TLR7 Antibody [NB100-56588] - Analysis using the PE conjugate of NB100-56588. Staining of TLR7 in human PBMCs (monocytes) using 0.5 ug/10^6 cells of NBP2-24761. The shaded histogram represents cells alone. Green: PE-conjugated rabbit IgG isotype control (20304D). Red: TLR7 antibody.	
Immunohistochemistry-Paraffin: TLR7 Antibody [NB100-56588] - Analysis of FFPE human brain using TLR7 antibody at 1:20 on a Bond Rx autostainer (Leica Biosystems). The assay involved 20 minutes of heat induced antigen retrieval (HIER) using 10 mM sodium citrate buffer (pH 6.0) and endogenous peroxidase quenching with peroxide block. The sections were incubated with primary antibody for 30 minutes and Bond Polymer Refine Detection (Leica Biosystems) with DAB was used for signal development followed by counterstaining with hematoxylin. Whole slide scanning and capturing of representative images was performed using Aperio AT2 (Leica Biosystems). Neuronal staining of TLR7 was observed. Staining was performed by Histowiz.	
Flow (Intracellular): TLR7 Antibody [NB100-56588] - Analysis using the FITC conjugate of NB100-56588. Staining of TLR7 in TLR7/HEK 293 cells using this antibody at 2 ug/10^6 cells. Green: Vector/HEK 293 cells. Red: TLR7/HEK 293 cells.	

Publications

Matsuoka S, Hashimoto D, Kadowaki M et al. The myeloid differentiation factor 88 signaling in donor T cells accelerates graft-versus-host disease Haematologica 2019-05-02 [PMID: 31048358] (FLOW, Mouse)

Zimmermann M, Aguilera FB, Castellucci M et al. Chromatin remodelling and autocrine TNFalpha are required for optimal interleukin-6 expression in activated human neutrophils. Nat Commun. [PMID: 25616107] (FLOW, Human)

Details:
Citation using the PE form of this antibody.

Vatakis Dimitrios N, Nixon Christopher C, Bristol Gregory, Zack Jerome A. Differentially stimulated CD4+ T cells display altered human immunodeficiency virus infection kinetics: implications for the efficacy of antiviral agents J Virol [PMID: 19129455] (FLOW)

Details:
Used the FITC form of this antibody.

Zhou M, McFarland-Mancini MM, Funk HM et al. Toll-like receptor expression in normal ovary and ovarian tumors. Cancer Immunol Immunother. 2009-09-01 [PMID: 19184006] (IHC-P, Human)

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. 2008-09-01 [PMID: 18577706]

Details:
Flow (intracellular), mouse bone marrow cells, Fig. 1E: 1. TLR3 FITC (IMG-315C) 2. TLR4 FITC (IMG-417C) 3. TLR7 (IMG-665A) 4. TLR8 FITC (IMG-321C) 5. TLR9 FITC (IMG-305C).

Mansson A, Cardell LO. Role of atopic status in Toll-like receptor (TLR)7- and TLR9-mediated activation of human eosinophils. J Leukoc Biol. 2009-04-01 [PMID: 19129482] (Human)

Details:
1. IMG-665F (TLR7-Atto 488) [replaced by IMG-665C (TLR7-FTIC)]: Flow (intracellular), human eosinophils, Fig. 1B.

Clancy RM, Alvarez D, Komissarova E et al. Ro60-associated single-stranded RNA links inflammation with fetal cardiac fibrosis via ligation of TLRs: a novel pathway to autoimmune-associated heart block. J Immunol. 2010-02-15 [PMID: 20089705] (Flow Cytometry Control, Human)

Details:
Antibodies cited: 1. TLR-7 (IMG-665A): Primary human macrophages derived from PBMCs, Flow (Intracellular): Fig 1A 2. TLR-8 FITC (IMG-321C): Primary human macrophages derived from PBMCs Flow (Intracellular): Fig 1A 3. TLR-7 (IMG-581A): Fetal cardiac fibrob

van den Brand JM, Haagmans BL, Leijten L et al. Pathology of experimental SARS coronavirus infection in cats and ferrets. Vet Pathol. 2008-07-01 [PMID: 18587105] (Flow Cytometry Control)

Details:
IF/ICC (SARS infected ferret and cat). STAT3 and STAT5-dependent pathways competitively regulate the pan-differentiation of DC34pos cells into tumor-competent dendritic cells. Cohen P, Koski G, Czerniecki B, Bunting K, Fu X, Wang Z, Zhang W, Carter C, Awa

Chamberlain ND, Kim SJ, Vila OM et al. Ligation of TLR7 by rheumatoid arthritis synovial fluid single strand RNA induces transcription of TNF-alpha in monocytes. Ann Rheum Dis. 2013-03-01 [PMID: 22730373]

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] (Flow Cytometry Control, Flow-CS, Human)

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).

Chen YW, Nagaraju K, Bakay M et al. Early onset of inflammation and later involvement of TGFbeta in Duchenne muscular dystrophy. Neurology. 2005-09-27 [PMID: 16093456] (IHC-Fr)

Details:
Antibodies cited: 1. TLR7 (IMG-665) [IHC-F, Fig.3 (DMD muscle fibers)].

Schwab N, Zozulya AL, Kieseier BC et al. An imbalance of two functionally and phenotypically different subsets of plasmacytoid dendritic cells characterizes the dysfunctional immune regulation in multiple sclerosis. J Immunol. 2010-05-01 [PMID: 20357264] (Flow Cytometry Control)

Details:
TLR8 (IMG-321A): Flow (intracellular), human pDC's, Fig 1.

More publications at http://www.novusbio.com/NB100-56588

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Products Related to NB100-56588

NBP2-26228-1mg	Imiquimod, TLR7 ligand
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NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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