Product Datasheet

TLR7 Antibody - Azide and BSA Free
NBP2-24905

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: 22

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
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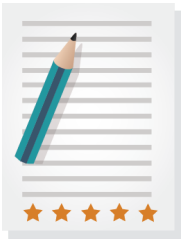
Updated 9/9/2025 v.20.1



NBP2-24905

TLR7 Antibody - Azide and BSA Free

Product Information

Unit Size	0.1 mg
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	No Preservative
Isotype	IgG
Purity	Protein G purified
Buffer	Sterile - filtered PBS

Product Description

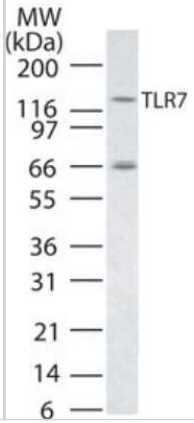
Description	Novus Biologicals Rabbit TLR7 Antibody - Azide and BSA Free (NBP2-24906) is a polyclonal antibody validated for use in IHC, WB, Flow, ICC/IF and IP. Anti-TLR7 Antibody: Cited in 22 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	51284
Gene Symbol	TLR7
Species	Human, Mouse, Rat
Immunogen	This antibody was developed against KLH-conjugated synthetic peptide corresponding to amino acids 706-749 of human TLR7; GenBank no. gb|AAF78035.1|AF245702_1. It will cross-react with mouse TLR7. In human Ramos cells, additional bands are seen.

Product Application Details

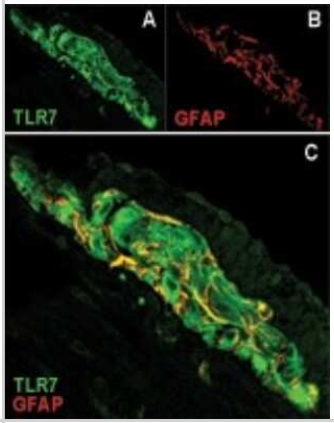
Applications	Western Blot, Immunohistochemistry-Paraffin, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunoprecipitation
Recommended Dilutions	Western Blot 1-3 ug/ml, Flow Cytometry 1ul/1 million cells, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence 1:10-1:500, Immunoprecipitation reported in scientific literature (PMID 17452530), Immunohistochemistry-Paraffin 1:10-1:500, Immunohistochemistry-Frozen 1:10-1:500

Images

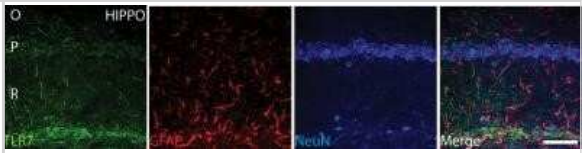
Western Blot: TLR7 Antibody - Azide Free [NBP2-24905] - analysis of TLR7 in RAW cell lysate using this antibody.



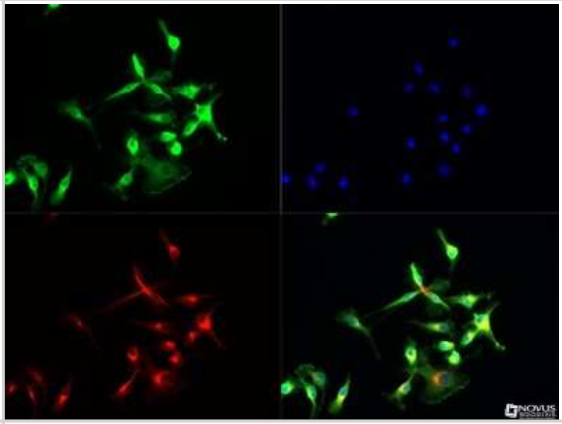
Immunocytochemistry/Immunofluorescence: TLR7 Antibody - Azide Free [NBP2-24905] - Immunolocalization of TLR7 (A) and glial fibrillary acidic protein (GFAP) (B) in murine myenteric plexus. Most of the GFAP positive cells were also positive for TLR7 in the merged image (C, yellow staining). (Courtesy of Barajon I, et al., Journal of Histochemistry and Cytochemistry, 57(11): 1013-;1023, 2009.) Image using the standard format of this product.



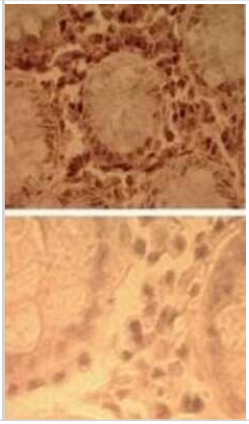
Immunohistochemistry: TLR7 Antibody - Azide Free [NBP2-24905] - The expression of TLR-7 in the hippocampal brain region. The immunofluorescence of TLR7 recognized by Alexa 488, green. GFAP recognized by Alexa 594, red. NEUN recognized by Alexa 633, (blue) and merged image in the hippocampal region. NeuN and GFAP were applied to show the distribution of TLR7 within neuronal and supportive tissue populations. Scale bar 80 um. Image collected and cropped by CiteAb from the following publication (//doi.org/10.1371/journal.pone.0222818) licensed under a CC-BY license. Image using the standard format of this product.



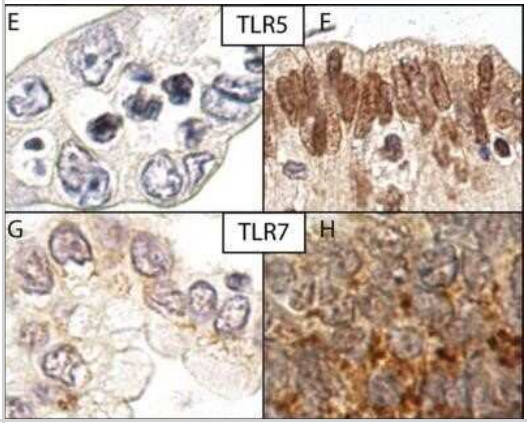
Immunocytochemistry/Immunofluorescence: TLR7 Antibody - Azide Free [NBP2-24905] - TLR7 antibody was tested in Raw 246.7 cells with Dylight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and Dylight 550 (red). Image objective 40x. An antibody dilution of 1:10 was used.



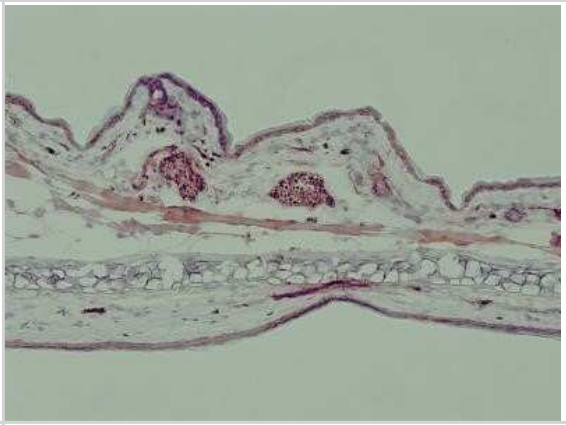
Immunohistochemistry-Paraffin: TLR7 Antibody - Azide Free [NBP2-24905] - Analysis of human colon tissue using NBP2-24905 (top) and an isotype control (bottom) at 5 ug/ml.



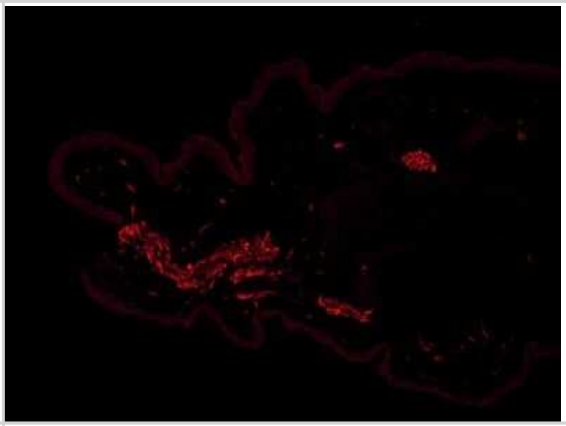
Immunohistochemistry: TLR7 Antibody - Azide Free [NBP2-24905] - Expression of the TLRs 5 and 7 were evaluated in the PDAC tissue by their staining intensity using TLR5 antibody (NBP2-24787) and TLR7 antibody (NBP2-24906). Note negative staining in E and G; positive staining in F and H. For TLR7 immunopositivity was detectable in the cytoplasm with no notable membranous or nuclear positivity. TLR5 showed distinctive nuclear positivity, and detectable positivity in the cytoplasm in some samples. Image collected and cropped by CiteAb from the following publication (//doi.org/10.1371/journal.pone.0219245) licensed under a CC-BY license. Image using the standard format of this product.



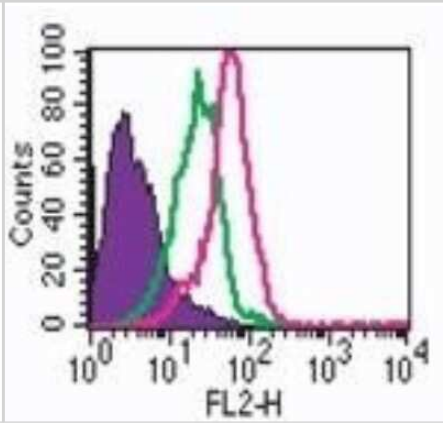
Immunohistochemistry-Frozen: TLR7 Antibody - Azide Free [NBP2-24905] - Analysis of frozen mouse ear skin tissue using anti-TLR7 antibody. Image from verified customer review. Image using the standard format of this product.



Immunohistochemistry-Frozen: TLR7 Antibody - Azide Free [NBP2-24905] - Analysis of TLR7 in acetone-fixed, frozen mouse ear skin section using anti-TLR7 antibody. Image from verified customer review. Image using the standard format of this product.



Flow Cytometry: TLR7 Antibody - Azide Free [NBP2-24905] - Intracellular staining by analysis of TLR7 in human PBMC using this antibody at 0.5 ug/ml. Shaded histogram is cells alone, green is rabbit IgG isotype control (NBP2-24891), red represents anti-TLR7 antibody. NBP2-30343PE was used for secondary.



Publications

Caccuri F, Messali S, Bortolotti D et al. Competition for dominance within replicating quasispecies during prolonged SARS-CoV-2 infection in an immunocompromised host Virus Evolution 2022-06-14 [PMID: 35706980] (Western Blot, Human)

Bortolotti D, Gentili V, Rizzo S et al. TLR3 and TLR7 RNA Sensor Activation during SARS-CoV-2 Infection Microorganisms 2021-08-26 [PMID: 34576716] (WB, Human)

Details:
Citation using the Azide Free format of this antibody.

Zeng M, Nouri-Shirazi E, Guinet E, Nouri-Shirazi M. The genetic background influences the cellular and humoral immune responses to vaccines Clin. Exp Immunol. [PMID: 27393001] (FLOW, Mouse)

Details:
Citation using the Azide Free form of this antibody.

Liu T, Xu ZZ, Park CK et al. Toll-like receptor 7 mediates pruritus. Nat Neurosci. [PMID: 21037581]

Details:
Citation using the Azide Free form of this antibody.

Kalali BN, Kollisch G, Mages J et al. Double-stranded RNA induces an antiviral defense status in epidermal keratinocytes through TLR3-, PKR-, and MDA5/RIG-I-mediated differential signaling. J Immunol. 2008-08-15 [PMID: 18684960] (IHC-Fr, Human)

Details:
IHC (frozen cryostat sections): human skin biopsies, Fig 6A, B. Stronger TLR7 staining was seen in human papillomavirus-infected skin compared to healthy skin.

Barajon I, Serrao G, Arnaboldi F et al. Toll-like receptors 3, 4, and 7 are expressed in the enteric nervous system and dorsal root ganglia. J Histochem Cytochem. 2009-11-01 [PMID: 19546475] (Human)

Details:
TLR7 (IMG-581A). IHC (paraffin): Submucous plexus of murine intestine (Fig 1), murine small bowel (Fig 3), and myenteric plexus from human intestine (Fig 4). IF/ICC: Murine myenteric plexus, Fig 2.

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. [PMID: 19922426]

Details:
Citation using the PE/Cy5 form of this antibody.

Pawar RD, Patole PS, Zecher D et al. Toll-like receptor-7 modulates immune complex glomerulonephritis. J Am Soc Nephrol. 2006-01-01 [PMID: 16280469]

Details:
Antibodies cited: 1. TLR3 (IMG-516) 2. TLR7 (IMG-581) [Flow (intracellular and cell surface), Fig.3: TLR3 (mesengial cells and J774 macrophages), TLR7 (J774 macrophages)]. [IHC-F, Fig.2 (kidneys of MRL1pr/1pr mice)].

Xirakia C, Koltsida O, Stavropoulos A et al. Toll-like receptor 7-triggered immune response in the lung mediates acute and long-lasting suppression of experimental asthma. Am J Respir Crit Care Med. 2010-06-01 [PMID: 20224068] (ICC/IF, Mouse)

Details:
TLR7 (IMG-581A) IF/ICC, Fig E2, mouse lung epithelial cells.

Hart OM, Athie-Morales V, O'Connor GM, Gardiner CM. TLR7/8-mediated activation of human NK cells results in accessory cell-dependent IFN-gamma production. J Immunol. 2005-08-01 [PMID: 16034103] (WB)

Details:
Antibodies cited: 1. TLR7 [(IMG-581A) WB, Fig. 1: TLR7 transfected cells and NKL human leukemia cell line. The specificity of the TLR7 antibody has been validated by WB using overexpressed TLR7 in 293T cells in Fig. 1.]. 2. TLR8 [(IMG-321A) WB, Fig. 1: TL

Brinkmann MM, Spooner E, Hoebe K et al. The interaction between the ER membrane protein UNC93B and TLR3, 7, and 9 is crucial for TLR signaling. J Cell Biol. 2007-04-23 [PMID: 17452530] (IP, Mouse)

Details:
IMG-581A (TLR7): IP (mouse bone marrow-derived dendritic cells), Fig. 6A,B,C.

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]

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

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Products Related to NBP2-24905

NBP2-26228-1mg	Imiquimod, TLR7 ligand
NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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