

# 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.

[www.novusbio.com](http://www.novusbio.com)



[technical@novusbio.com](mailto:technical@novusbio.com)

**Publications: 22**

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:  
[www.novusbio.com/NBP2-24905](http://www.novusbio.com/NBP2-24905)

Updated 9/9/2025 v.20.1

Earn rewards for product  
reviews and publications.

Submit a publication at [www.novusbio.com/publications](http://www.novusbio.com/publications)

Submit a review at [www.novusbio.com/reviews/destination/NBP2-24905](http://www.novusbio.com/reviews/destination/NBP2-24905)



**NBP2-24905**

TLR7 Antibody - Azide and BSA Free

**Product Information**

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

**Product Description**

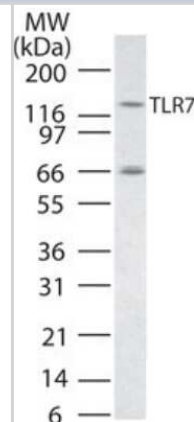
<b>Description</b>	Novus Biologicals Rabbit TLR7 Antibody - Azide and BSA Free (NBP2-24906) is a polyclonal antibody validated for use in IHC, WB, Flow, ICC/IF and IP. Anti-TLR7 Antibody: Cited in 22 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
<b>Host</b>	Rabbit
<b>Gene ID</b>	51284
<b>Gene Symbol</b>	TLR7
<b>Species</b>	Human, Mouse, Rat
<b>Immunogen</b>	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**

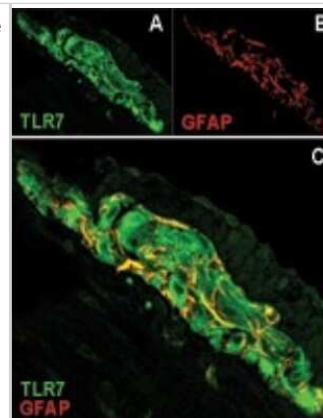
<b>Applications</b>	Western Blot, Immunohistochemistry-Paraffin, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunoprecipitation
<b>Recommended Dilutions</b>	Western Blot 1-3 ug/ml, Flow Cytometry 1ul/1 million cells, Immunohistochemistry, 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.



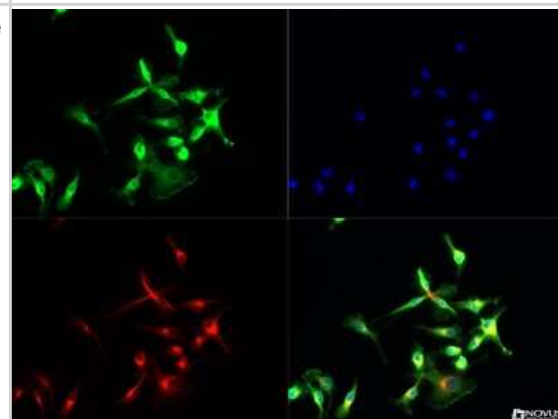
Immunocytochemistry/Immunofluorescence: TLR7 Antibody - Azide Free [NBP2-24905] - Immunolocalization of TLR7 (A) and glial fibrillary acidic protein (GFAP) (B) in murine myenteric plexus. Most of the GFAP positive cells were also positive for TLR7 in the merged image (C, yellow staining). (Courtesy of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



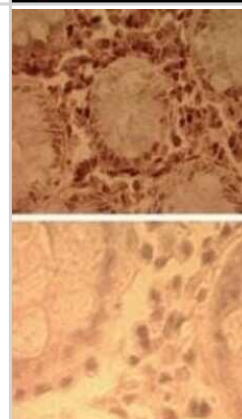
Immunohistochemistry: TLR7 Antibody - Azide Free [NBP2-24905] - The expression of TLR-7 in the hippocampal brain region. The immunofluorescence of TLR7 recognized by Alexa 488, green. GFAP recognized by Alexa 594, red. NEUN recognized by Alexa 633, (blue) and merged image in the hippocampal region. NeuN 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 (<https://doi.org/10.1371/journal.pone.0222818>) licensed under a CC-BY license. Image using the standard format of this product.



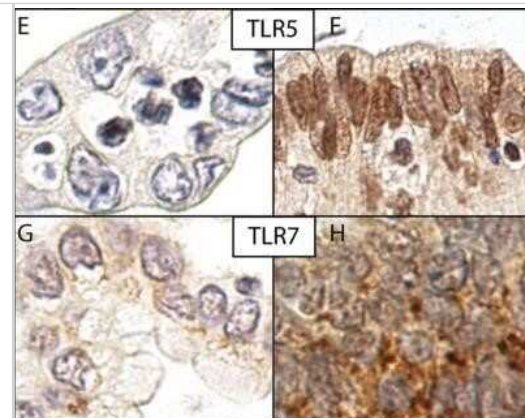
Immunocytochemistry/Immunofluorescence: TLR7 Antibody - Azide Free [NBP2-24905] - TLR7 antibody was tested in Raw 246.7 cells with Dylight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and Dylight 550 (red). Image objective 40x. An antibody dilution of 1:10 was used.



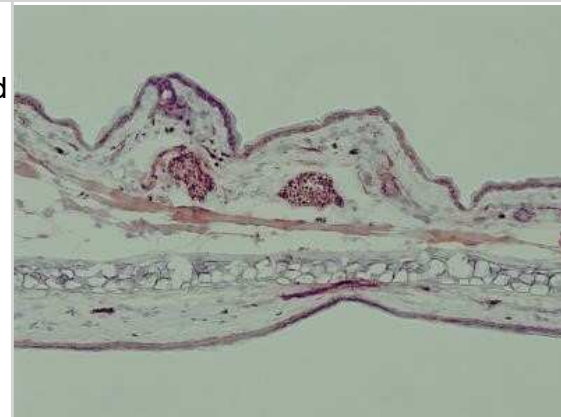
Immunohistochemistry-Paraffin: TLR7 Antibody - Azide Free [NBP2-24905] - Analysis of human colon tissue using NBP2-24905 (top) and an isotype control (bottom) at 5 ug/ml.



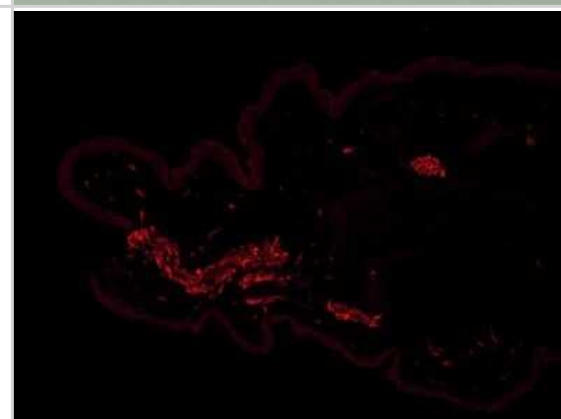
**Immunohistochemistry: TLR7 Antibody - Azide Free [NBP2-24905]** - Expression of the TLRs 5 and 7 were evaluated in the PDAC tissue by their staining intensity using TLR5 antibody (NBP2-24787) and TLR7 antibody (NBP2-24906). Note negative staining in E and G; positive staining in F and H. For TLR7 immunopositivity 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](https://doi.org/10.1371/journal.pone.0219245)) licensed under a CC-BY license. Image using the standard format of this product.



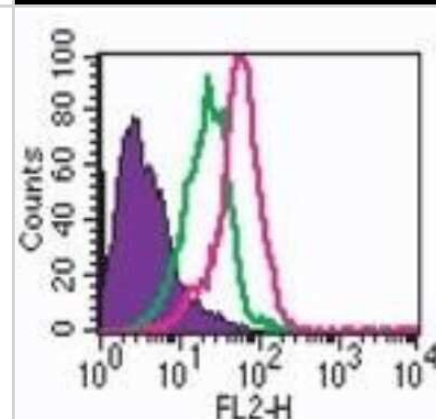
**Immunohistochemistry-Frozen: TLR7 Antibody - Azide Free [NBP2-24905]** - Analysis of frozen mouse ear skin tissue using anti-TLR7 antibody. Image from verified customer review. Image using the standard format of this product.



**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

More publications at <http://www.novusbio.com/NBP2-24905>







### **Novus Biologicals USA**

10730 E. Briarwood Avenue  
Centennial, CO 80112  
USA  
Phone: 303.730.1950  
Toll Free: 1.888.506.6887  
Fax: 303.730.1966  
nb-customerservice@bio-techne.com

### **Bio-Techne Canada**

21 Canmotor Ave  
Toronto, ON M8Z 4E6  
Canada  
Phone: 905.827.6400  
Toll Free: 855.668.8722  
Fax: 905.827.6402  
canada.inquires@bio-techne.com

### **Bio-Techne Ltd**

19 Barton Lane  
Abingdon Science Park  
Abingdon, OX14 3NB, United Kingdom  
Phone: (44) (0) 1235 529449  
Free Phone: 0800 37 34 15  
Fax: (44) (0) 1235 533420  
info.EMEA@bio-techne.com

### **General Contact Information**

www.novusbio.com  
Technical Support: nb-technical@bio-techne.com  
Orders: nb-customerservice@bio-techne.com  
General: novus@novusbio.com

### **Products Related to NBP2-24905**

---

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

---

### **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 100% guarantee, please visit [www.novusbio.com/guarantee](http://www.novusbio.com/guarantee)

Earn gift cards/discounts by submitting a review: [www.novusbio.com/reviews/submit/NBP2-24905](http://www.novusbio.com/reviews/submit/NBP2-24905)

Earn gift cards/discounts by submitting a publication using this product:  
[www.novusbio.com/publications](http://www.novusbio.com/publications)

