Product Datasheet

TLR9 Antibody (26C593.2) - BSA Free
NBP2-24729

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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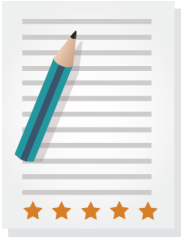
Updated 4/13/2025 v.20.1



NBP2-24729

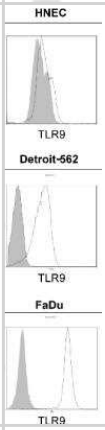
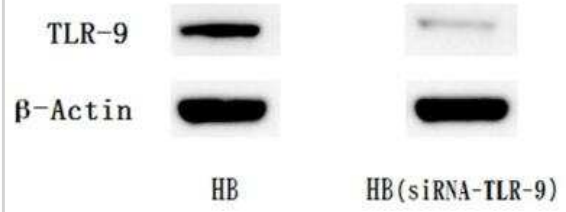
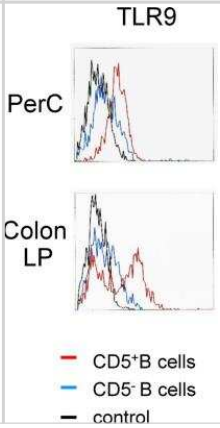
TLR9 Antibody (26C593.2) - BSA Free

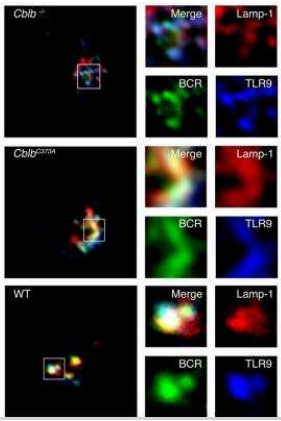
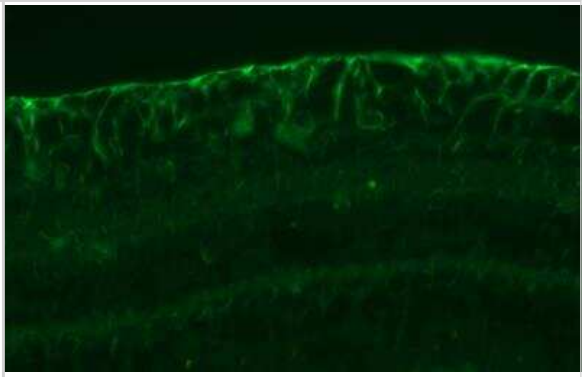
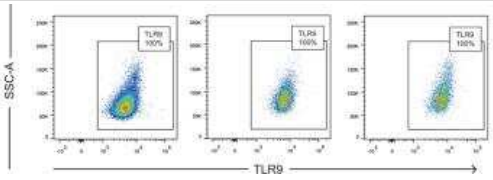
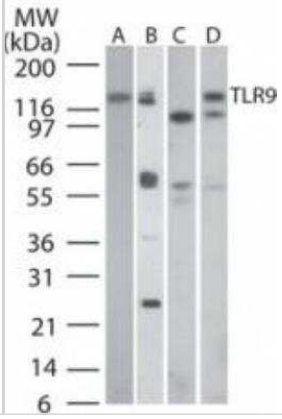
Product Information	
Unit Size	0.1 mg
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	26C593.2
Preservative	0.05% Sodium Azide
Isotype	IgG1 Kappa
Purity	Protein G purified
Buffer	PBS

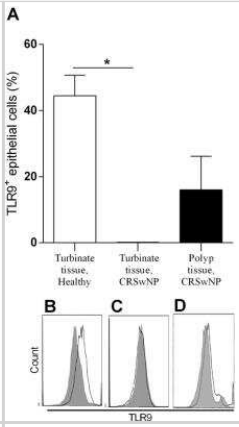
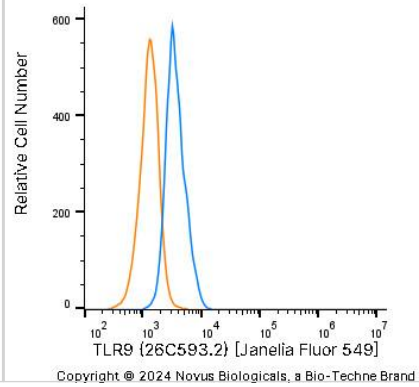
Product Description	
Host	Mouse
Gene ID	54106
Gene Symbol	TLR9
Species	Human, Mouse, Rat, Canine, Equine, Primate, Monkey
Reactivity Notes	Rhesus Monkey.
Immunogen	This antibody was developed against KLH-conjugated synthetic peptide corresponding to amino acids 268-300 of human TLR9 isoform A (Genbank accession no. AAF78037).

Product Application Details	
Applications	Western Blot, Simple Western, Dot Blot, ELISA, Flow Cytometry, Flow (Intracellular), Functional, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, In vitro assay, Immunoprecipitation, Block/Neutralize, CyTOF-ready, Knockdown Validated
Recommended Dilutions	Western Blot 2-5 ug/ml, Simple Western 30 ug/ml, Flow Cytometry, ELISA 1:100 - 1:2000. Use reported in multiple pieces of scientific literature, Immunohistochemistry reported in scientific literature (PMID 27744078), Immunocytochemistry/ Immunofluorescence 1:10-1:500, Immunoprecipitation 1:10 - 1:500. Use reported in scientific literature (PMID 25871979), Immunohistochemistry-Paraffin 5 ug/ml, Functional reported in scientific literature (PMID 25411258), In vitro assay reported in scientific literature (PMID 25411258), Dot Blot reported in scientific literature (PMID 27248820), Flow (Intracellular) 1:10 - 1:1000. Use reported in scientific literature (PMID 24986635), CyTOF-ready, Knockdown Validated reported in scientific literature (PMID 31655343), Block/Neutralize reported in scientific literature (PMID 25338738)
Application Notes	Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10 mM sodium citrate buffer, pH 6.0 for 10-20 min followed by cooling at RT for 20 min. In human PBMC, a ~120 kDa band is observed. A smaller isoform, TLR9 isoform B (Genbank accession no. AAF72190) containing 975 amino acids may also be observed in some cases. In Simple Western only 10 - 15 uL of the recommended dilution is used per data point. See Simple Western Antibody Database for Simple Western validation: Tested in Mouse Brain, Ramos lysate 0.5 mg/mL, separated by Size, antibody dilution of 1:50, 30 ug/mL, apparent MW was 90 kDa. Separated by Size-Wes, Sally Sue/Peggy Sue.

Images

Simple Western: TLR9 Antibody (26C593.2) [NBP2-24729] - Lane view shows a specific band for TLR9 in 0.5 mg/ml of Ramos lysate. This experiment was performed under reducing conditions using the 66-440 kDa separation system. Image using the Azide Free format of this antibody.	
Flow Cytometry: TLR9 Antibody (26C593.2) [NBP2-24729] - Expression of TLR9 protein on epithelial cells. HNEC, Detroit-562 and FaDu were stained intracellularly with PE-Ab against TLR9 (open histograms) or appropriate isotype control (shaded histograms) and analyzed by flow cytometry. Representative pictures from one out of three independent experiments are shown. Image collected and cropped by CiteAb from the following publication (//dx.plos.org/10.1371/journal.pone.0098239), licensed under a CC-BY license.	
Western Blot: TLR9 Antibody (26C593.2) [NBP2-24729] - Expression of TLR-9 protein in HB cells before and after 48 hr of transfection. Beta-actin was used as an internal control. Image collected and cropped by CiteAb from the following publication (//doi.org/10.1371/journal.pone.0092748) licensed under a CC-BY license.	
Flow Cytometry: TLR9 Antibody (26C593.2) [NBP2-24729] - Analysis of colonic LP or peritoneal cavity (PerC) of normal mice were evaluated by flow cytometry. B cells were intracellularly stained with the anti-TLR9 antibody after the cell surface staining with anti-B220 and CD5 antibodies, and examined using flow cytometry. N = 3, performed twice. Image collected and cropped by CiteAb from the following publication (//doi.org/10.1371/journal.pone.0146191) licensed under a CC-BY license.	

Immunocytochemistry/Immunofluorescence: TLR9 Antibody (26C593.2) [NBP2-24729] - Cbl-b is required for the endocytic transit of TLR9. Representative confocal microscopic images of splenocytes from mice with indicated genotypes. For experiments, cells were stimulated through the BCR (green) for 30 minutes then fixed and stained for TLR9 (blue) and Lamp-1 (red)(n = 3). Image collected and cropped by CiteAb from the following publication (//doi.org/10.1371/journal.pone.0089792) licensed under a CC-BY license.	
Immunohistochemistry-Paraffin: TLR9 Antibody (26C593.2) [NBP2-24729] - Monkey retina tissue. Image from verified customer review.	
Flow Cytometry: TLR9 Antibody (26C593.2) [NBP2-24729] - Gating strategy for the detection of TLR-7 and -9 in B cell subsets. PBMC were isolated from whole blood and stained for surface markers before cells were fixed, permeabilised and stained for TLR-9. FSC and SSC were first used to gate out debris and SSC-A and SSC-H was utilized to eliminate duplicates. Further gating was done on CD45 and CD19, to target B cells. To separate between the different B cell populations, we gated on CD27 and IgD (D), followed by TLR-9 expression on these subsets. Data from one representative patient is shown. Image collected and cropped by CiteAb from the following publication (//doi.org/10.1371/journal.pone.0120383) licensed under a CC-BY license.	
Western Blot: TLR9 Antibody (26C593.2) [NBP2-24729] - Analysis of TLR9 in A) human PBMC, B) human intestine, C) mouse intestine, and D) rat intestine tissue lysates using this antibody at a dilution of 3 ug/ml.	

Flow Cytometry: TLR9 Antibody (26C593.2) [NBP2-24729] - Expression of TLR9 on turbinate epithelial cells from healthy controls compared to turbinate and polyp epithelial cells from patients with CRSwNP, n = 5 (A). Intracellular staining for TLR9 (open histogram, black line) and isotype control (filled histogram) on turbinate epithelial cells from a healthy control (B), turbinate epithelial cells (C) and polyp epithelial cells from a patient (D), analysed using flow cytometry. Results are presented as mean +/- SEM, **P<0.01. Image collected and cropped by CiteAb from the following publication (//doi.org/10.1371/journal.pone.0105618) licensed under a CC-BY license.	
THP-1 human acute monocytic leukemia cell line was stained with Mouse anti-TLR9 (26C593.2) Protein-G purified Monoclonal Antibody conjugated to Janelia Fluor® 549 (Catalog # NBP2-24729JF549, blue histogram) or matched control antibody (orange histogram).	

Publications

Hiltunen N, Kemi N, Väyrynen JP et Al. Toll-like receptors 1-9 in small bowel neuroendocrine tumors-Clinical significance and prognosis PLoS One 2024-05-06 [PMID: 38709790]

Meng Y, Ma J, Yao C et Al. The NCF1 variant p.R90H aggravates autoimmunity by facilitating the activation of plasmacytoid dendritic cells J Clin Invest 2022-08-15 [PMID: 35788118]

Maletzko A, Key J, Wittig I Et al. Increased presence of nuclear DNAJA3 and upregulation of cytosolic STAT1 and of nucleic acid sensors trigger innate immunity in the ClpP-null mouse Neurogenetics 2021-08-03 [PMID: 34345994]

Ni H, Wang Y, Yao K et Al. Cyclical palmitoylation regulates TLR9 signalling and systemic autoimmunity in mice Nat Commun 2024-01-02 [PMID: 38169466]

Tripathi A, Bartosh A, Whitehead C, Pillai A Activation of cell-free mtDNA-TLR9 signaling mediates chronic stress-induced social behavior deficits Molecular psychiatry 2023-08-01 [PMID: 37528226] (Flow Cytometry, Mouse)

Taerim Oh, Gi-Sue Kang, Hye-Ju Jo, Hye-Joon Park, Ye-Rim Lee, G-One Ahn DNA-dependent protein kinase regulates cytosolic double-stranded DNA secretion from irradiated macrophages to increase radiosensitivity of tumors. Radiotherapy and oncology : journal of the European Society for Therapeutic Radiology and Oncology 2024-03-18 [PMID: 38286241]

Deborah Ramini, Angelica Giuliani, Katarzyna Malgorzata Kwiatkowska, Michele Guescini, Gianluca Storci, Emanuela Mensà, Rina Recchioni, Luciano Xumerle, Elisa Zago, Jacopo Sabbatinelli, Spartaco Santi, Paolo Garagnani, Massimiliano Bonafè, Fabiola Olivieri Replicative senescence and high glucose induce the accrual of self-derived cytosolic nucleic acids in human endothelial cells. Cell death discovery 2024-04-20 [PMID: 38643201]

Yu JI, Kim JH, Nam KE et al. Pneumococcal ?pep27 Immunization Attenuates TLRs and NLRP3 Expression and Relieves Murine Ovalbumin-Induced Allergic Rhinitis Journal of Microbiology and Biotechnology 2022-06-28 [PMID: 35484967] (Western Blot)

Spurgeon BEJ, Frelinger AL Platelet Phenotyping by Full Spectrum Flow Cytometry Current protocols 2023-02-01 [PMID: 36779850]

Ma X, Rawnsley D, Kovacs A et al. TRAF2, an Innate Immune Sensor, Reciprocally Regulates Mitophagy and Inflammation to Maintain Cardiac Myocyte Homeostasis JACC Basic Transl Sci 2022-04-12 [PMID: 35411325]

Lam LKM, Dobkin J, Eckart KA et al. Bat Red Blood Cells express Nucleic Acid Sensing Receptors and bind RNA and DNA Immunohorizons 2022-05-20 [PMID: 35595326]

Li Z, Fu WJ, Chen XQ et al. Autophagy-based unconventional secretion of HMGB1 in glioblastoma promotes chemosensitivity to temozolomide through macrophage M1-like polarization Journal of experimental & clinical cancer research : CR 2022-02-22 [PMID: 35193644] (ICC/IF, Human)

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