

**TLR9 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP13721b****Specification**

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**TLR9 Antibody (C-term) - Product Information**

Application	FC, WB,E
Primary Accession	<a href="#">O9NR96</a>
Other Accession	<a href="#">NP_059138.1</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	115860
Antigen Region	842-870

**TLR9 Antibody (C-term) - Additional Information****Gene ID** 54106**Other Names**

Toll-like receptor 9, CD289, TLR9

**Target/Specificity**

This TLR9 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 842-870 amino acids from the C-terminal region of human TLR9.

**Dilution**

FC~~1:10~50

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

TLR9 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**TLR9 Antibody (C-term) - Protein Information****Name** TLR9

**Function** Key component of innate and adaptive immunity. TLRs (Toll- like receptors) control host immune response against pathogens through recognition of molecular patterns specific to microorganisms. TLR9 is a nucleotide-sensing TLR which is activated by unmethylated cytidine-phosphate-guanosine (CpG) dinucleotides (PubMed:[14716310](#)). Acts via MYD88 and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response (PubMed:[11564765](#), PubMed:[17932028](#)). Controls lymphocyte response to Helicobacter infection (By similarity). Upon CpG stimulation, induces B-cell proliferation, activation, survival and antibody production (PubMed:[23857366](#)).

#### **Cellular Location**

Endoplasmic reticulum membrane; Single-pass type I membrane protein {ECO:0000250|UniProtKB:Q9EQU3}. Early endosome membrane. Lysosome {ECO:0000250|UniProtKB:Q9EQU3} Cytoplasmic vesicle, phagosome {ECO:0000250|UniProtKB:Q9EQU3}. Golgi apparatus membrane. Note=Relocalizes from endoplasmic reticulum to endosome and lysosome upon stimulation with agonist. Exit from the ER requires UNC93B1. Endolysosomal localization is required for proteolytic cleavage and subsequent activation Intracellular localization of the active receptor may prevent from responding to self nucleic acid. {ECO:0000250|UniProtKB:Q9EQU3, ECO:0000269|PubMed:14716310, ECO:0000269|PubMed:38169466}

#### **Tissue Location**

Highly expressed in spleen, lymph node, tonsil and peripheral blood leukocytes, especially in plasmacytoid pre-dendritic cells. Levels are much lower in monocytes and CD11c+ immature dendritic cells. Also detected in lung and liver

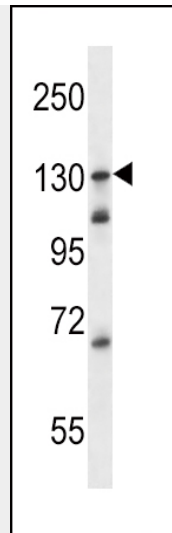
#### **TLR9 Antibody (C-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

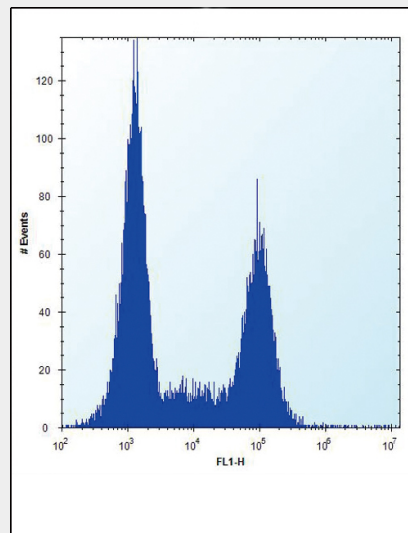
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **TLR9 Antibody (C-term) - Images**





TLR9 Antibody (C-term) (Cat. #AP13721b) western blot analysis in Ramos cell line lysates (35ug/lane). This demonstrates the TLR9 antibody detected the TLR9 protein (arrow).



TLR9 Antibody (C-term) (Cat. #AP13721b) flow cytometric analysis of Ramos cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated donkey-anti-rabbit secondary antibodies were used for the analysis.

### TLR9 Antibody (C-term) - Background

The protein encoded by this gene is a member of the Toll-like receptor (TLR) family which plays a fundamental role in pathogen recognition and activation of innate immunity. TLRs are highly conserved from *Drosophila* to humans and share structural and functional similarities. They recognize pathogen-associated molecular patterns (PAMPs) that are expressed on infectious agents, and mediate the production of cytokines necessary for the development of effective immunity. The various TLRs exhibit different patterns of expression. This gene is preferentially expressed in immune cell rich tissues, such as spleen, lymph node, bone marrow and peripheral blood leukocytes. Studies in mice and human indicate that this receptor mediates cellular response to unmethylated CpG dinucleotides in bacterial DNA to mount an innate

immune response.

#### **TLR9 Antibody (C-term) - References**

Engin, A., et al. Microbes Infect. 12 (12-13), 1071-1078 (2010) :  
Romero, R., et al. Am. J. Obstet. Gynecol. 203 (4), 361 (2010) :  
Veltkamp, M., et al. Clin. Exp. Immunol. 162(1):68-74(2010)  
Fiola, S., et al. J. Immunol. 185(6):3620-3631(2010)  
Selvaraj, P., et al. Tuberculosis (Edinb) 90(5):306-310(2010)