

TLR9 Antibody (Internal)
Rabbit Polyclonal Antibody
Catalog # ALS11524

Specification

TLR9 Antibody (Internal) - Product Information

Application	ICC, IF, WB, IHC
Primary Accession	O9NR96
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	116kDa KDa

TLR9 Antibody (Internal) - Additional Information

Gene ID 54106

Other Names

Toll-like receptor 9, CD289, TLR9

Target/Specificity

15 amino acids from an internal region of human TLR9

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions

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

TLR9 Antibody (Internal) - 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](http://www.uniprot.org/citations/14716310)). Acts via MYD88 and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response (PubMed: [11564765](http://www.uniprot.org/citations/11564765), PubMed: [17932028](http://www.uniprot.org/citations/17932028)). Controls lymphocyte response to Helicobacter infection (By similarity). Upon CpG stimulation, induces B-cell proliferation, activation, survival and antibody production (PubMed: [23857366](http://www.uniprot.org/citations/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

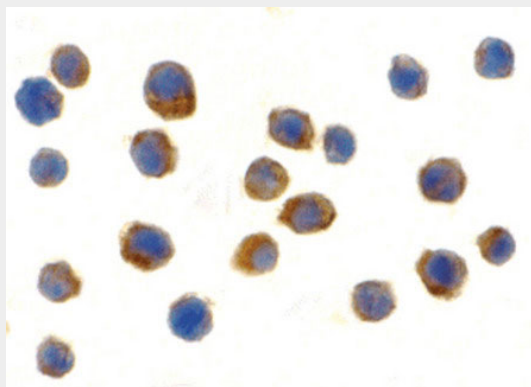
Volume

50 µl

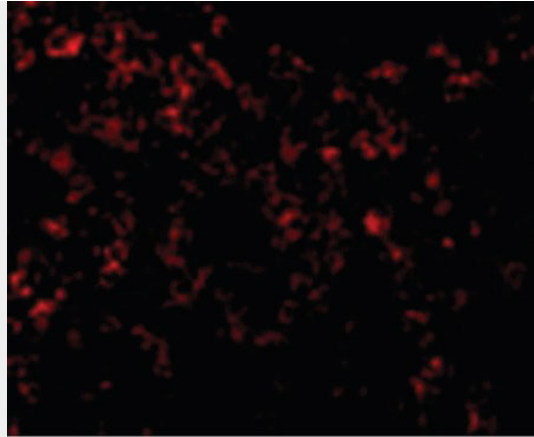
TLR9 Antibody (Internal) - Protocols

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

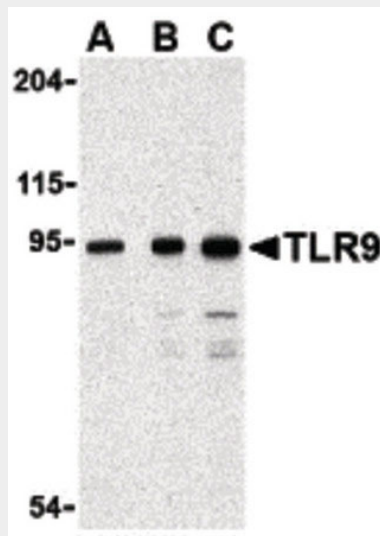
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

TLR9 Antibody (Internal) - Images

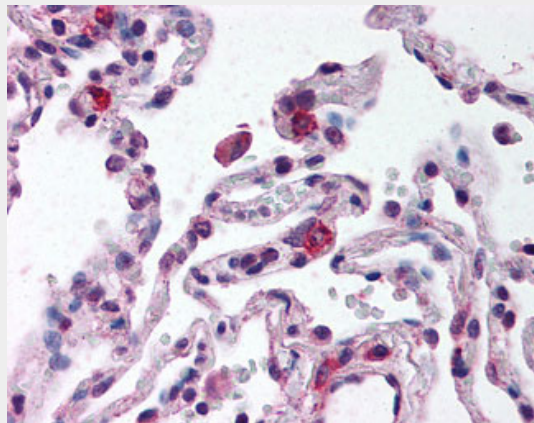
Immunocytochemistry of TLR9 in Jurkat cells with TLR9 antibody at 2 ug/ml.



Immunofluorescence of TLR9 in Mouse Spleen cells with TLR9 antibody at 10 ug/ml.



Western blot of TLR9 in Jurkat cell lysate with TLR9 antibody at (A) 0.5, (B) 1 and (C) 2 ug/ml.



Anti-TLR9 antibody IHC of human lung.

TLR9 Antibody (Internal) - Background

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. Acts via MYD88 and TRAF6, leading to NF-kappa-B activation, cytokine

secretion and the inflammatory response. Controls lymphocyte response to Helicobacter infection.

TLR9 Antibody (Internal) - References

- Du X., et al. Eur. Cytokine Netw. 11:362-371(2000).
Chuang T.-H., et al. Eur. Cytokine Netw. 11:372-378(2000).
Hemmi H., et al. Nature 408:740-745(2000).
Liu Z., et al. Submitted (SEP-2007) to the EMBL/GenBank/DDBJ databases.
Nakajima T., et al. Immunogenetics 60:727-735(2008).