

TLR9 Antibody
Rabbit Polyclonal Antibody
Catalog # ALS14418**Specification**

TLR9 Antibody - Product Information

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

TLR9 Antibody - Additional Information**Gene ID** 54106**Other Names**

Toll-like receptor 9, CD289, TLR9

Target/Specificity

Human TLR9. Predicted cross-reactivity based on amino acid sequence homology: bovine (84%), cat (85%), dogs (83%), pig (84%), monkey (95%).

Reconstitution & Storage

Aliquot and store at -20°C. Minimize freezing and thawing.

Precautions

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

TLR9 Antibody - 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

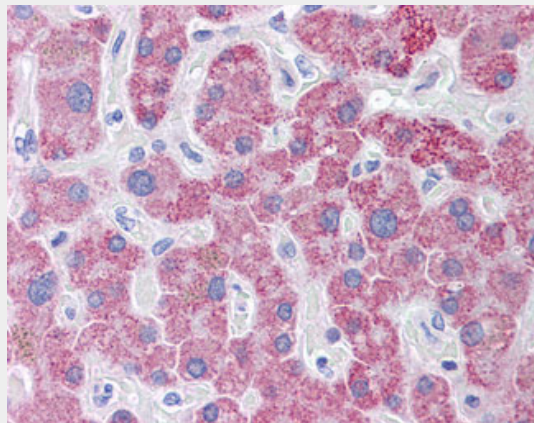
Highly expressed in spleen, lymph node, tonsil and peripheral blood leukocytes, especially in plasmacytoid pre-dendritic cells. Levels are much lower in monocytes and CD11c+ immature dendritic cells. Also detected in lung and liver

TLR9 Antibody - Protocols

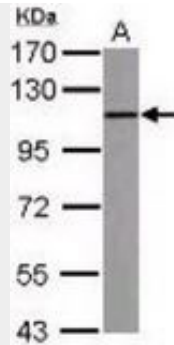
Provided below are standard protocols that you may find useful for product applications.

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

TLR9 Antibody - Images



Anti-TLR9 antibody IHC of human liver.



Sample (30 ug of whole cell lysate) A: THP-1. 7.5% SDS PAGE. TLR9 antibody diluted at 1:1000.

TLR9 Antibody - 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 - 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).