ARG54946
anti-TLR9 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes TLR9
Tested Reactivity	Hu, Ms
Tested Application	ELISA, ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	TLR9
Species	Human
Immunogen	Synthetic peptide (16 aa) within aa. 960-1010 of Human TLR9.
Conjugation	Un-conjugated
Alternate Names	CD289; Toll-like receptor 9; CD antigen CD289

Application Instructions

Application table

Application	Dilution
ELISA	Assay-dependent
ICC/IF	10 µg/ml
IHC-P	Assay-dependent
WB	1 µg/ml

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Positive Control: Mouse Spleen Tissue Lysate

Properties

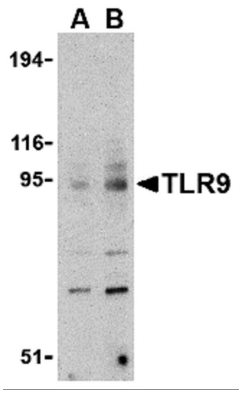
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS and 0.02% Sodium azide
Preservative	0.02% Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

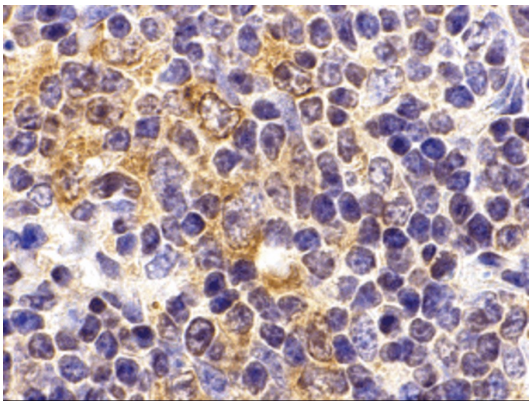
Database links	GeneID: 54106 Human GeneID: 81897 Mouse Swiss-port # Q9EQU3 Mouse Swiss-port # Q9NR96 Human
Gene Symbol	TLR9
Gene Full Name	toll-like receptor 9
Background	TLR9 Antibody: Toll-like receptors (TLRs) are evolutionarily conserved pattern-recognition molecules resembling the toll proteins that mediate antimicrobial responses in Drosophila. These proteins recognize different microbial products during infection and serve as an important link between the innate and adaptive immune responses. TLR9 forms a subfamily along with TLR7 and TLR8 that recognize viral RNA and CpG DNA sequences and are localized in intracellular acidic compartments such as the phagolysosome. Unlike other TLRs which act through adaptor molecules such as TOLLIP, TIRAP, TRIF, and MyD88 to activate various kinases and transcription factors to respond to potential infection, TLR9 is strictly dependent on MyD88.
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. Acts via MYD88 and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response. Controls lymphocyte response to Helicobacter infection. [UniProt]
Research Area	Immune System antibody; Signaling Transduction antibody
Calculated Mw	116 kDa
PTM	Activated by proteolytic cleavage of the flexible loop between repeats LRR14 and LRR15 within the ectodomain. Cleavage requires UNC93B1. Proteolytically processed by first removing the majority of the ectodomain by either asparagine endopeptidase (AEP) or a cathepsin followed by a trimming event that is solely cathepsin mediated and required for optimal receptor signaling.

Images



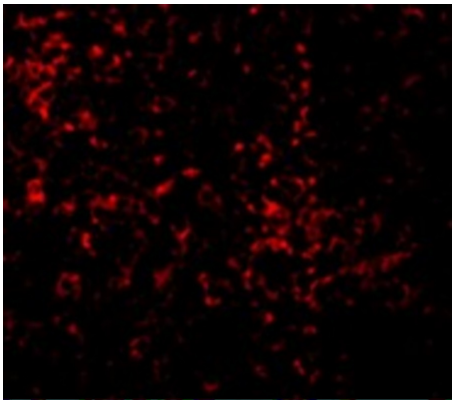
ARG54946 anti-TLR9 antibody WB image

Western blot: mouse spleen cell lysate stained with ARG54946 anti-TLR9 antibody at (A) 0.5 and (B) 1 ug/ml dilution.



ARG54946 anti-TLR9 antibody IHC image

Immunohistochemistry: TLR9 in mouse spleen cells stained with ARG54946 anti-TLR9 antibody at 2 ug/ml dilution.



ARG54946 anti-TLR9 antibody ICC/IF image

Immunofluorescence: mouse spleen cells stained with ARG54946 anti-TLR9 antibody at 10 ug/ml dilution.