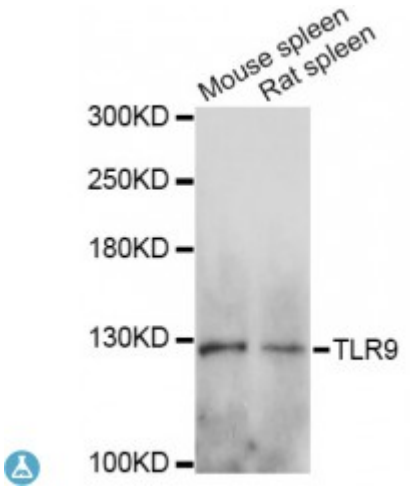
Anti-TLR9 Antibody



Description	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.

Model	STJ116849
Host	Rabbit
Reactivity	Mouse, Rat
Applications	WB
Immunogen	A synthetic peptide corresponding to a sequence within amino acids 350-450 of human TLR9 (NP_059138.1).
Gene ID	54106
Gene Symbol	TLR9
Dilution range	WB 1:500 - 1:2000
Tissue Specificity	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
Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	Toll-like receptor 9 CD antigen CD289
Molecular Weight	115.86 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:15633OMIM:605474Reactome:R-HSA-109704
Alternative Names	Toll-like receptor 9 CD antigen CD289
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 ,
Cellular Localization	Endoplasmic reticulum membrane
Post-translational Modifications	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,