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Anti-TLR9 Antibody (clone 72-1665)

Rat Anti Human Monoclonal Antibody
Catalog # ALS17763

Product Information

Application	WB, IHC-P, FC
Primary Accession	Q9NR96
Predicted	Human
Host	Rat
Clonality	Monoclonal
Isotype	IgG2a,k
Clone Names	72-1665
Calculated MW	115860
Concentration (mg/ml)	0.5 mg/ml

Additional Information

Gene ID	54106
Alias Symbol	TLR9
Other Names	TLR9, CD289, CD289 antigen, Scri2a, Toll-like receptor 9
Reconstitution & Storage	Affinity purified
Precautions	Anti-TLR9 Antibody (clone 72-1665) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TLR9
Function	Key component of innate and adaptive immunity (PubMed: 14716310). TLRs (Toll-like receptors) control host immune response against pathogens through recognition of molecular patterns specific to microorganisms (PubMed:14716310). 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, PubMed:40980882). Also acts via ADCY7, leading to cyclic di-AMP (c-di- AMP) synthesis and activation of the NLRP3 inflammasome (By similarity). Plays a role in defense against systemic mouse cytomegalovirus infection (By similarity). 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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.