

TLR4 Polyclonal Antibody

Catalog No :	YN5450
Reactivity :	Human;Mouse;Rat
Applications :	IHC;IF
Target :	TLR4
Fields :	>>NF-kappa B signaling pathway;>>HIF-1 signaling pathway;>>Phagosome;>>PI3K-Akt signaling pathway;>>Necroptosis;>>Neutrophil extracellular trap formation;>>Toll-like receptor signaling pathway;>>NOD-like receptor signaling pathway;>>Alcoholic liver disease;>>Pathogenic Escherichia coli infection;>>Shigellosis;>>Salmonella infection;>>Pertussis;>>Legionellosis;>>Yersinia infection;>>Leishmaniasis;>>Chagas disease;>>Malaria;>>Toxoplasmosis;>>Amoebiasis;>>Tuberculosis;>>Hepatitis B;>>Measles;>>Influenza A;>>Human immunodeficiency virus 1 infection;>>Coronavirus disease - COVID-19;>>Proteoglycans in cancer;>>PD- L1 expression and PD-1 checkpoint pathway in cancer;>>Inflammatory bowel disease;>>Rheumatoid arthritis;>>Lipid and atherosclerosis
Gene Name :	TLR4
Protein Name :	Toll-like receptor 4
Human Gene Id :	7099
Human Swiss Prot No :	O00206
Mouse Swiss Prot	Q9QUK6
Rat Swiss Prot No :	Q9QX05
Immunogen :	Recombinant Protein of TLR4
Specificity :	The antibody detects endogenous TLR4 protein.
Formulation :	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.



Best Tools for immunology Research	
Source :	Polyclonal, Rabbit,IgG
Dilution :	IHC 1:200-500. IF 1:50-200
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity- chromatography using epitope-specific immunogen.
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Cell Pathway :	Toll_Like;Pathogenic Escherichia coli infection;
Background :	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 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 receptor has been implicated in signal transduction events induced by lipopolysaccharide (LPS) found in most gram-negative bacteria. Mutations in this gene have been associated with differences in LPS responsiveness. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2012],
Function :	disease:Genetic variation in TLR4 is associated with age-related macular degeneration type 10 (ARMD10) [MIM:611488]. ARMD is a multifactorial eye disease and the most common cause of irreversible vision loss in the developed world. In most patients, the disease is manifest as ophthalmoscopically visible yellowish accumulations of protein and lipid that lie beneath the retinal pigment epithelium and within an elastin-containing structure known as Bruch membrane.,domain:The TIR domain mediates interaction with NOX4.,function:Cooperates with LY96 and CD14 to mediate the innate immune response to bacterial lipopolysaccharide (LPS). Acts via MYD88, TIRAP and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response.,polymorphism:Allele TLR4*B (Gly-299, Ile-399) is associated with a blunted response to inhaled LPS.,PTM:N-glycosylated. Glycosylation of Asn-526 an
Subcellular Location :	Cell membrane ; Single-pass type I membrane protein . Early endosome . Cell projection, ruffle . Upon complex formation with CD36 and TLR6, internalized through dynamin-dependent endocytosis (PubMed:20037584). Colocalizes with RFTN1 at cell membrane and then together with RFTN1 moves to endosomes, upon lipopolysaccharide stimulation.
Expression :	Highly expressed in placenta, spleen and peripheral blood leukocytes (PubMed:9435236, PubMed:9237759). Detected in monocytes, macrophages, dendritic cells and several types of T-cells (PubMed:9237759,



PubMed:27022195).

Products Images



Disturbance of neuron-microglia crosstalk mediated by GRP78 in Neuropsychiatric systemic lupus erythematosus mice. Ling Qin IHC,IF Mouse 1:200 brain tissue BV2 cell



Immunohistochemical analysis of paraffin-embedded Mouse Spleen Tissue using TLR4 Polyclonal Antibody.