



TLR4 Polyclonal Antibody

Catalog No	YP-Ab-01184
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	IHC;IF
Gene Name	TLR4
Protein Name	Toll-like receptor 4
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.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	IHC: 1:200-500. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	TLR4; Toll-like receptor 4; hToll; CD284
Observed Band	
Cell Pathway	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. .
Tissue Specificity	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).
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

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],

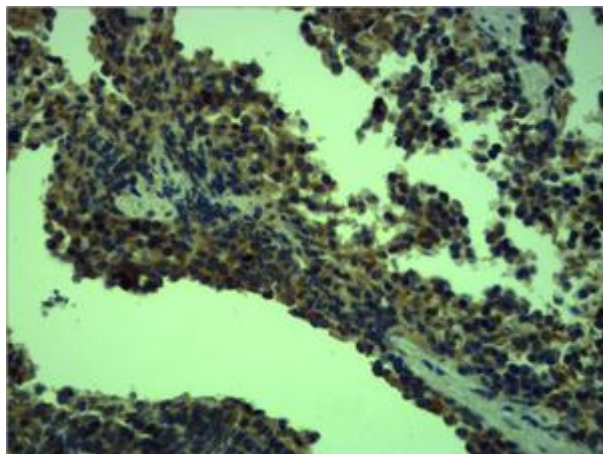
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



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