ARG54690
anti-CD284 / TLR4 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes CD284 / TLR4
Tested Reactivity	Hu
Tested Application	ELISA, ICC/IF, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	CD284 / TLR4
Species	Human
Immunogen	Synthetic peptide (15 aa) within aa. 30-80 of Human TLR4.
Conjugation	Un-conjugated
Alternate Names	CD284; CD antigen CD284; ARMD10; hToll; TLR-4; TOLL; Toll-like receptor 4

Application Instructions

Application table

Application	Dilution
ELISA	Assay-dependent
ICC/IF	2 µg/ml
WB	2.5 - 5 µg/ml

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

Positive Control: PC-3 Cell Lysate

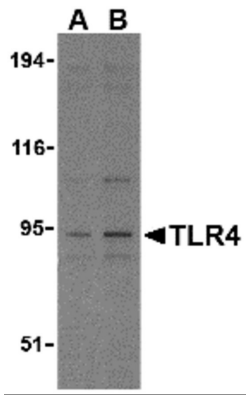
Properties

Form	Liquid
Purification	Purified by affinity chromatography.
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

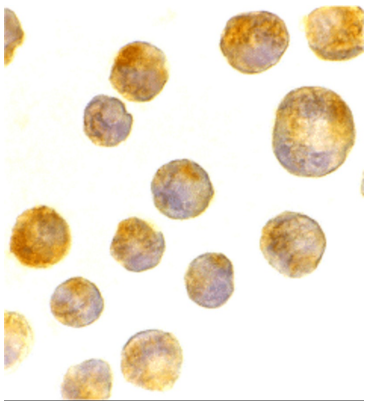
Database links	GeneID: 7099 Human Swiss-port # O00206 Human
Gene Symbol	TLR4
Gene Full Name	toll-like receptor 4
Background	TLR4 Antibody: Toll-like receptors (TLRs) are signaling molecules that recognize different microbial products during infection and serve as an important link between the innate and adaptive immune responses. These proteins act through adaptor molecules such as MyD88 and TIRAP to activate various kinases and transcription factors such as Protein Kinase C (PKC) alpha/beta and NF-κB. Studies with TLR4-deficient mice indicate that the main ligand for TLR is lipopolysaccharide. Consequently, these mice also showed increased susceptibility to Gram-negative sepsis.
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. Also involved in LPS-independent inflammatory responses triggered by free fatty acids, such as palmitate, and Ni(2+). Responses triggered by Ni(2+) require non-conserved histidines and are, therefore, species-specific. In complex with TLR6, promotes sterile inflammation in monocytes/macrophages in response to oxidized low-density lipoprotein (oxLDL) or amyloid-beta 42. In this context, the initial signal is provided by oxLDL- or amyloid-beta 42-binding to CD36. This event induces the formation of a heterodimer of TLR4 and TLR6, which is rapidly internalized and triggers inflammatory response, leading to the NF-kappa-B-dependent production of CXCL1, CXCL2 and CCL9 cytokines, via MYD88 signaling pathway, and CCL5 cytokine, via TICAM1 signaling pathway, as well as IL1B secretion. [UniProt]
Highlight	Related products: TLR4 antibodies; TLR4 ELISA Kits; Anti-Rabbit IgG secondary antibodies; Related news: Detecting exosomal HMGB1 for ICD research
Research Area	Cell Biology and Cellular Response antibody; Immune System antibody; Microbiology and Infectious Disease antibody
Calculated Mw	96 kDa
PTM	N-glycosylated. Glycosylation of Asn-526 and Asn-575 seems to be necessary for the expression of TLR4 on the cell surface and the LPS-response. Likewise, mutants lacking two or more of the other N-glycosylation sites were deficient in interaction with LPS.

Images



ARG54690 anti-CD284 / TLR4 antibody WB image

Western blot: PC-3 cell lysates stained with ARG54690 anti-CD284 / TLR4 antibody at (A) 2.5 and (B) 5 ug/ml dilution.



ARG54690 anti-CD284 / TLR4 antibody ICC/IF image

Immunocytochemistry: K562 cells stained with ARG54690 anti-CD284 / TLR4 antibody at 2 ug/ml dilution.