

ARG20515
anti-CD284 / TLR4 antibodyPackage: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes CD284 / TLR4
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-Fr, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Target Name	CD284 / TLR4
Species	Human
Immunogen	Synthetic peptide around aa. 420-435 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
	FACS	Assay-dependent
	ICC/IF	Assay-dependent
	IHC-Fr	1:50
	IHC-P	1:50
	WB	1:500

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

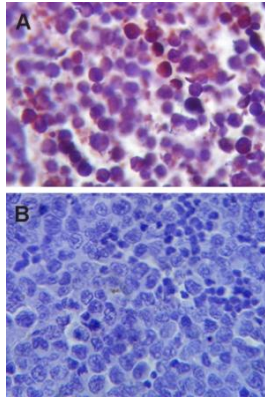
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS, 0.05% Sodium azide and 0.05% BSA
Preservative	0.05% Sodium azide
Stabilizer	0.05% BSA
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.

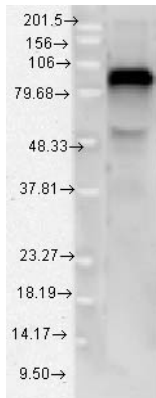
Bioinformation

Gene Symbol	TLR4
Gene Full Name	toll-like receptor 4
Background	<p>The Toll-like receptor (TLR) family in mammal comprises a family of trans-membrane proteins characterized by multiple copies of leucine rich repeats in the extracellular domain and 1L-1 receptor motif in the cytoplasmic domain. Like its counterparts in <i>Drosophila</i>, TLRs signal through adaptor molecules (1). The TLR family is a phylo-genetically conserved mediator of innate immunity that is essential for microbial recognition (2). Ten human homologs of TLRs (TLR1-10) have been described (3). Amount this family of receptors, TLR2 and TLR4 have been most studied. These studies have suggested that TLR2 and TLR4 may serve as potential main mediators of LPS signaling (4,5). The mouse TLR4 cDNA codes for a protein consisting of 839 amino acids, with an approximate molecular weight of 90kDa (6).</p> <ol style="list-style-type: none">1. JMuzio M., Natoli G. , Saccan S., Levrero M., and Mantovani A. (1998) <i>J. Exp. Med.</i> 187: 2097-2101.2. Medzhitov R. and Janeway C.A (1997). <i>Cell</i> 91: 295-298.3. Chuang T.H. and Ulevitch R.J. (2001) <i>Biochim. Biophys. Acta</i> 1518 (1-2): 157-161).4. Takeuchi O., et al. (1999) <i>Immunity</i> 11: 443.5. Poltorak A., Riccardi-Castagnoli P., Citterio S., and Butler B. (2000) <i>Proc. Natl. Acad. Sci USA</i> 97: 2163-2167.6. Medzhitov R., Preston-Hurlburt P. and Janeway C.A. (1997) <i>Jr. Nature</i> 388 (6640): 394-397.
Function	<p>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 Ni2+. Responses triggered by Ni2+ 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]</p>
Highlight	<p>Related products: TLR4 antibodies; TLR4 ELISA Kits;</p> <p>Related news: Detecting exosomal HMGB1 for ICD research</p>
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.



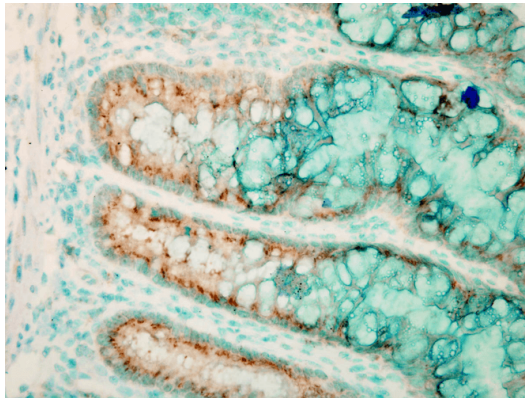
ARG20515 anti-CD284 / TLR4 antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Mouse spleen tissue stained with ARG20515 anti-CD284 / TLR4 antibody.



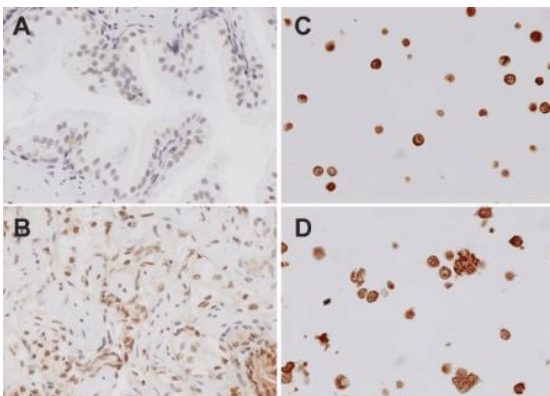
ARG20515 anti-CD284 / TLR4 antibody WB image

Western blot: TLR4 protein stained with ARG20515 anti-CD284 / TLR4 antibody at 1:1000 dilution.



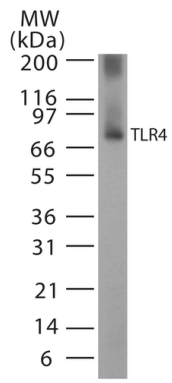
ARG20515 anti-CD284 / TLR4 antibody IHC image

Immunohistochemistry: Formalin-fixed Mouse colon colitis stained with ARG20515 anti-CD284 / TLR4 antibody at 1:100,000 for 12 hours at 4°C. Secondary antibody: Biotin Goat anti-Rabbit at 1:2000 for 1 hour at RT. Counterstain: Methyl Green at 200 µl for 2 min at RT.



ARG20515 anti-CD284 / TLR4 antibody IHC image

Immunohistochemistry: Mouse spleen tissue stained with ARG20515 anti-CD284 / TLR4 antibody at 1:100 dilution.



ARG20515 anti-CD284 / TLR4 antibody WB image

Western blot: TLR4 protein stained with ARG20515 anti-CD284 / TLR4 antibody at 1:1000 dilution.