

# Product datasheet

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# ARG54702 anti-CD284 / TLR4 antibody

Package: 100 μl, 50 μl Store at: -20°C

### **Summary**

Product Description Rabbit Polyclonal antibody recognizes CD284 / TLR4

Tested Reactivity Hu, Ms, Rat

Predict Reactivity Bov, Hm, Pig

Tested Application FACS, WB

Host Rabbit

Clonality Polyclonal

Cionality

Isotype IgG

Target Name CD284 / TLR4

Species Human

Immunogen KLH-conjugated synthetic peptide corresponding to aa. 669-698 (Center) of Human TLR4

(NP\_003257.1).

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	1:10 - 1:50
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### **Properties**

Purification Protein A purified

Buffer PBS and 0.09% (W/V) Sodium azide

Preservative 0.09% (W/V) Sodium azide

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 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 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. [From Uniprot]

Highlight Related products:

TLR4 antibodies; TLR4 ELISA Kits;

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

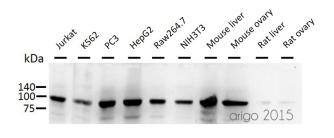
on the cell surface and the LPS-response. Likewise, mutants lacking two or more of the other N-

glycosylation sites were deficient in interaction with LPS.

Cellular Localization Cell membrane; Single-pass type I membrane protein. Note=Upon complex formation with CD36 and

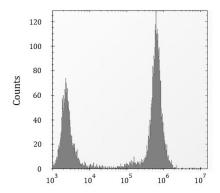
TLR6, internalized through dynamin-dependent endocytosis

#### **Images**



#### ARG54702 anti-CD284 / TLR4 antibody WB image

Western blot: 30  $\mu$ g of Jurkat, K562, PC3, HepG2, Raw264.7, NIH3T3, Mouse liver, Mouse ovary, Rat liver and Rat ovary lysates stained with ARG54702 anti-CD284 / TLR4 antibody at 1:500 dilution.



#### ARG54702 anti-CD284 / TLR4 antibody FACS image

Flow Cytometry: U251 cells stained with ARG54702 anti-CD284 / TLR4 antibody (right histogram) or without primary antibody control (left histogram).