

## Anti-TLR4 Antibody (9Z608)

## Product Details

Ig Type:	hIgG1
Reactivity:	Human
Conjugation:	Unconjugated
Clone:	9Z608
Purification:	Affinity-chromatography

## Applications

Verified Activity:	Overlay Peak curve showing Hela cells stained with TMAH-01179 (red line) at 1:100. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1ug/1*10 <sup>6</sup> cells) for 45min at 4°C. The secondary antibody used was FITC-conjugated Goat Anti-human IgG (H+L) at 1:200 dilution for 35min at 4°C. Control antibody (green line) was human IgG (1ug/1*10 <sup>6</sup> cells) used under the same conditions. Acquisition of >10,000 events was performed.
Application:	ELISA,FCM
Recommended	FCM:1:50-1:200.

## Properties

Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

## Antigen Details

Immunogen:	Recombinant Protein: Human TLR4 Protein
Antigen Species:	Human
Gene ID:	7099
Uniprot ID:	O00206
Synonyms:	TOLL;toll-like receptor 4;TLR4;ARMD10;TLR-4;CD284
Biology Area:	Cardiovascular, Immunology, Microbiology

## Research Background

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. Both M. tuberculosis HSP70 (dnaK) and HSP65 (groEL-2) act via this protein to stimulate NF-kappa-B expression. 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

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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. Binds electronegative LDL (LDL(-)) and mediates the cytokine release induced by LDL(-). Stimulation of monocytes in vitro with M.tuberculosis PstS1 induces p38 MAPK and ERK1/2 activation primarily via TLR2, but also partially via this receptor. Activated by the signaling pathway regulator NMI which acts as damage-associated molecular patterns (DAMPs) in response to cell injury or pathogen invasion, therefore promoting nuclear factor NF-kappa-B activation.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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