

Rabbit anti-Human TLR2 Polyclonal Antibody | anti-TLR2 antibody

TLR2 Antibody (Center)

CATALOG # AAA286620	HOST Rabbit	REACTIVITY Human	APPLICATIONS ELISA, Western Blot
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PRODUCT SYNONYMS

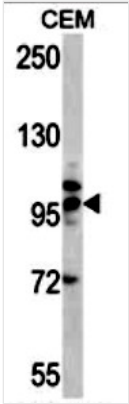
TLR2; Polyclonal Antibody; TLR2 Antibody (Center); Toll-like receptor 2; Toll/interleukin-1 receptor-like protein 4; CD282; TIL4; anti-TLR2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This TLR2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 281-310 amino acids from the Central region of human TLR2.
Purity/Purification	This antibody is purified through a protein A column, followed by peptide affinity purification.
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.
Sequence Positions	281-310
Sequence Length	784
Applicable Applications for anti-TLR2 antibody	ELISA, WB (Western Blot)
Function	Cooperates with LY96 to mediate the innate immune response to bacterial lipoproteins and other microbial cell wall components. Cooperates with TLR1 or TLR6 to mediate the innate immune response to bacterial lipoproteins or lipopeptides (PubMed:21078852, PubMed:17889651). Acts via MYD88 and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response. May also activate immune cells and promote apoptosis in response to the lipid moiety of lipoproteins (PubMed:10426995, PubMed:10426996). Recognizes mycoplasmal macrophage-activating lipopeptide-2kD (MALP-2), soluble tuberculosis factor (STF), phenol-soluble modulin (PSM) and B.burgdorferi outer surface protein A lipoprotein (OspA-L) cooperatively with TLR6 (PubMed:11441107). Stimulation of monocytes in vitro with M.tuberculosis PstS1 induces p38 MAPK and ERK1/2 activation primarily via this receptor, but also partially via TLR4 (PubMed:16622205). MAPK activation in response to bacterial peptidoglycan also occurs via this receptor (PubMed:16622205). Acts as a receptor for M.tuberculosis lipoproteins LprA, LprG, LpqH and PstS1, some lipoproteins are dependent on other coreceptors (TLR1, CD14 and/or CD36); the lipoproteins act as agonists to modulate antigen presenting cell functions in response to the pathogen (PubMed:19362712). M.tuberculosis HSP70 (dnaK) but not HSP65 (groEL-2) acts via this protein to stimulate NF-kappa-B expression (PubMed:15809303). Recognizes M.tuberculosis major T-antigen EsxA (ESAT-6) which inhibits downstream MYD88-dependent signaling (shown in mouse) (By similarity). Forms activation clusters composed of several receptors depending on the ligand, these clusters trigger signaling from the cell surface and subsequently are targeted to the Golgi in a lipid-raft dependent pathway. Forms the cluster TLR2:TLR6:CD14:CD36 in response to diacylated lipopeptides and TLR2:TLR1:CD14 in response to triacylated lipopeptides (PubMed:16880211). Required for normal uptake of M.tuberculosis, a process that is inhibited by M.tuberculosis LppM (By similarity).

Cellular Location	Membrane {ECO:0000250 UniProtKB:Q9QUN7}; Single- pass type I membrane protein. Cytoplasmic vesicle, phagosome membrane {ECO:0000250 UniProtKB:Q9QUN7}; Single-pass type I membrane protein. Membrane raft. Note=Does not reside in lipid rafts before stimulation but accumulates increasingly in the raft upon the presence of the microbial ligand. In response to diacylated lipoproteins, TLR2:TLR6 heterodimers are recruited in lipid rafts, this recruitment determines the intracellular targeting to the Golgi apparatus. Triacylated lipoproteins induce the same mechanism for TLR2:TLR1 heterodimers.
Tissue Location	Highly expressed in peripheral blood leukocytes, in particular in monocytes, in bone marrow, lymph node and in spleen. Also detected in lung and in fetal liver. Levels are low in other tissues
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



WB (Western Blot)
TLR2 Antibody (Center) western blot analysis in CEM cell line lysates (35ug/lane).This demonstrates the TLR2 antibody detected the TLR2 protein (arrow).

ADDITIONAL INFORMATION

Related Product Information for anti-TLR2 antibody	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 (PAMPs) 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 gene is expressed most abundantly in peripheral blood leukocytes, and mediates host response to Gram-positive bacteria and yeast via stimulation of NF-kappaB.
Product Categories/Family for anti-TLR2 antibody	Cardiovascular; Immunology; Microbiology; Signal Transduction
References	Chambers, M.A., et al. Biochem. Biophys. Res. Commun. 400(3):403-408(2010) Franchim, C.S., et al. Hypertens Pregnancy (2010) In press : Selvaraj, P., et al. Tuberculosis (Edinb) 90(5):306-310(2010) Xie, F., et al. Hypertens Pregnancy 29(4):390-398(2010) Qian, F.H., et al. J Investig Allergol Clin Immunol 20(4):340-346(2010)

NCBI AND UNIPROT INFORMATION

NCBI GI #	19718734
NCBI GeneID	7097
NCBI Accession #	NP_003255.2
NCBI GenBank Nucleotide #	NM_003264.3
UniProt Accession #	O60603; O15454; Q8NI00; B3Y612; D1CS45; D1CS48; D1CS49

Molecular Weight	89838
NCBI Official Full Name	toll-like receptor 2
NCBI Official Synonym Full Names	toll-like receptor 2
NCBI Official Symbol	TLR2
NCBI Official Synonym Symbols	TIL4; CD282
NCBI Protein Information	toll-like receptor 2
UniProt Protein Name	Toll-like receptor 2
UniProt Gene Name	TLR2
UniProt Synonym Gene Names	TIL4
UniProt Entry Name	TLR2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/tlr2-antibody-western-blot-elisa/286620>