

Anti-TLR2 Antibody
Catalog # ABO11557**Specification**

Anti-TLR2 Antibody - Product Information

Application	WB
Primary Accession	O60603
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Toll-like receptor 2(TLR2) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-TLR2 Antibody - Additional Information

Gene ID 7097

Other Names

Toll-like receptor 2, Toll/interleukin-1 receptor-like protein 4, CD282, TLR2, TIL4

Calculated MW

89838 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Membrane ; Single-pass type I membrane protein .

Tissue Specificity

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.

Protein Name

Toll-like receptor 2

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human TLR2(364-379aa YLDLSENLMVEEYLKN), different from the related mouse and rat sequences by one amino acid.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the Toll-like receptor family.

Anti-TLR2 Antibody - Protein Information

Name TLR2 ([HGNC:11848](#))

Synonyms TIL4

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](http://www.uniprot.org/citations/21078852), PubMed: [17889651](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/10426995), PubMed: [10426996](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/16622205)). MAPK activation in response to bacterial peptidoglycan also occurs via this receptor (PubMed: [16622205](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/19362712)). M.tuberculosis HSP70 (dnaK) but not HSP65 (groEL-2) acts via this protein to stimulate NF-kappa-B expression (PubMed: [15809303](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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

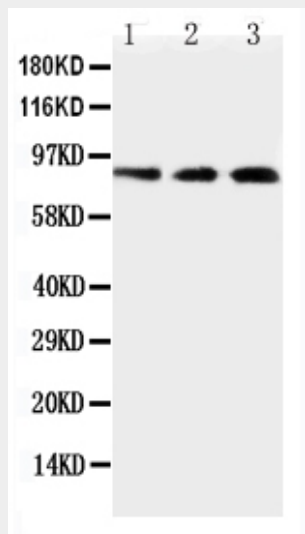
Highly expressed in peripheral blood leukocytes, in particular in monocytes, in bone marrow, lymph node and in spleen. Also detected in lung and in fetal liver. Levels are low in other tissues

Anti-TLR2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-TLR2 Antibody - Images



Anti-TLR2 antibody, ABO11557, Western blotting
Lane 1: U937 Cell Lysate
Lane 2: HELA Cell Lysate
Lane 3: JURKAT Cell Lysate

Anti-TLR2 Antibody - Background

Toll-like receptor 2 also known as TLR-2 is a protein that in humans is encoded by the TLR2 gene. TLR2 has also been designated as CD282(cluster of differentiation 282). TLR-2 plays a role in the immune system. TLR-2 is a membrane protein, a receptor, which is expressed on the surface of certain cells and recognizes foreign substances and passes on appropriate signals to the cells of the immune system. TLR2 expresses as 4- and 4.4-kb mRNAs in heart, brain, and muscle.