

TLR1 Antibody

Catalog # ASC10369

Specification

TLR1 Antibody - Product Information

Application IF
Primary Accession 015399

Other Accession <u>CAG38593</u>, <u>7096</u>

Reactivity
Host
Clonality
Polyclonal
Isotype
Human
Rabbit
Polyclonal

Application Notes TLR1 antibody can be used for detection of

TLR1 by Western blot at 1 to 2 μg/mL.

Antibody can also be used for

immunocytochemistry starting at 10

μg/mL.

TLR1 Antibody - Additional Information

Gene ID **7096**

Other Names

TLR1 Antibody: TIL, CD281, rsc786, TIL. LPRS5, KIAA0012, Toll-like receptor 1, TIL, toll-like receptor 1

Target/Specificity

TLR1 antibody was raised against a peptide corresponding to 17 amino acids near the center of human TLR1.

- the immunogen is located within amino acids 390 - 440 of TLR1.

Reconstitution & Storage

TLR1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

TLR1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TLR1 Antibody - Protein Information

Name TLR1

Synonyms KIAA0012

Function

Participates in the innate immune response to microbial agents. Specifically recognizes diacylated and triacylated lipopeptides. Cooperates with TLR2 to mediate the innate immune response to bacterial lipoproteins or lipopeptides (PubMed:21078852). Forms the



activation cluster TLR2:TLR1:CD14 in response to triacylated lipopeptides, this cluster triggers signaling from the cell surface and subsequently is targeted to the Golgi in a lipid-raft dependent pathway (PubMed:16880211). Acts via MYD88 and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response.

Cellular Location

Cell membrane; Single-pass type I membrane protein. Cytoplasmic vesicle, phagosome membrane {ECO:0000250|UniProtKB:Q9EPQ1}; Single-pass type I membrane protein. Membrane raft. Golgi apparatus. 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 triacylated lipoproteins, TLR2:TLR1 heterodimers are recruited in lipid rafts, this recruitment determine the intracellular targeting to the Golgi apparatus.

Tissue Location

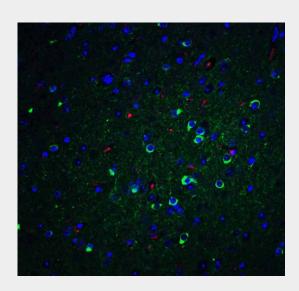
Ubiquitous. Highly expressed in spleen, ovary, peripheral blood leukocytes, thymus and small intestine

TLR1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

TLR1 Antibody - Images



Immunofluorescence of APO E in mouse brain tissue with APO E Antibodyat 20 µg/mL.

TLR1 Antibody - Background

TLR1 Antibody: Toll-like receptors (TLRs) are evolutionarily conserved pattern-recognition





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molecules resembling the toll proteins that mediate antimicrobial responses in Drosophila. These proteins recognize different microbial products during infection and serve as an important link between the innate and adaptive immune responses. The TLRs act through adaptor molecules such as MyD88 and TIRAP to activate various kinases and transcription factors so the organism can respond to potential infection. TLR1 is co-expressed with TLR2 on myeloid cells of the innate immune systems in lymphoid tissue such as monocytes and dendritic cells where they form heterodimers that can recognize triacylated lipoproteins.

TLR1 Antibody - References

Vogel SN, Fitzgerald KA, and Fenton MJ. TLRs: differential adapter utilization by toll-like receptors mediates TLR-specific patterns of gene expression. Mol. Interv. 2003; 3:466-77. Takeda K, Kaisho T, and Akira S. Toll-like receptors. Annu. Rev. Immunol. 2003; 21:335-76. Janeway CA Jr. and Medzhitov R. Innate immune recognition. Annu. Rev. Immunol. 2002; 20:197-216.

O'Neill LAJ, Fitzgerald FA, and Bowie AG. The Toll-IL-1 receptor adaptor family grows to five members. Trends in Imm. 2003; 24:286-9.