

TLR1 Antibody

Catalog # ASC10369

Product Information

Application	WB, ICC, E
Primary Accession	Q15399
Other Accession	CAG38593 , 49065550
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	90291
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	TLR1 antibody can be used for detection of TLR1 by Western blot at 1 to 2 μ g/mL. Antibody can also be used for immunocytochemistry starting at 10 μ g/mL.

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;
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.

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

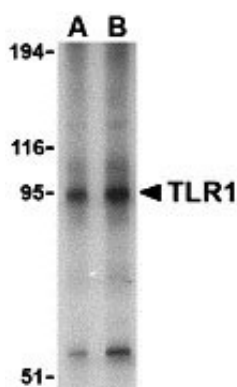
Background

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

References

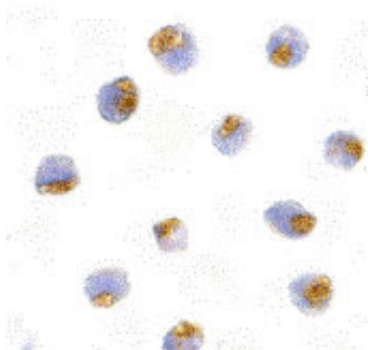
Vogel SN, Fitzgerald KA, and Fenton MJ. TLRs: differential adapter utilization by toll-like receptors mediates TLR-specific patterns of gene expression. *Mol. Interv.* 2003; 3:466-77.
Takeda K, Kaisho T, and Akira S. Toll-like receptors. *Annu. Rev. Immunol.* 2003; 21:335-76.
Janeway CA Jr. and Medzhitov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

Images



Western blot analysis of TLR1 in Daudi cell lysate with TLR1 antibody at (A) 1 and (B) 2 μ g/mL.

Immunocytochemistry of TLR1 in Daudi with TLR1 antibody at 10 μ g/mL.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.