

Mouse TLR6 Antibody (N-term) Blocking Peptide Synthetic peptide Catalog # BP1506b

Specification

Mouse TLR6 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Other Accession

<u>Q9EPW9</u> <u>NP 035734</u>

Mouse TLR6 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 21899

Other Names Toll-like receptor 6, CD286, Tlr6

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP1506b was selected from the N-term region of human Mouse TLR6 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Mouse TLR6 Antibody (N-term) Blocking Peptide - Protein Information

Name Tlr6

Function

Participates in the innate immune response to Gram-positive bacteria and fungi. Specifically recognizes diacylated and, to a lesser extent, triacylated lipopeptides (PubMed:19931471). In response to diacylated lipopeptides, forms the activation cluster TLR2:TLR6:CD14:CD36, this cluster triggers signaling from the cell surface and subsequently is targeted to the Golgi in a lipid-raft dependent pathway. Acts via MYD88 and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response. 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 TLR2. In complex with TLR4, 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 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 (PubMed:20037584, PubMed:23812099).

Cellular Location

Cell membrane; Single-pass type I membrane protein. Cytoplasmic vesicle, phagosome membrane; Single-pass type I membrane protein. Membrane raft

{ECO:0000250|UniProtKB:Q9Y2C9}. Golgi apparatus {ECO:0000250|UniProtKB:Q9Y2C9}. Note=Upon complex formation with CD36 and TLR4, internalized through dynamin-dependent endocytosis. 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 determine the intracellular targeting to the Golgi apparatus. {ECO:0000250|UniProtKB:Q9Y2C9}

Tissue Location

Detected in thymus, spleen, ovary and lung. Expressed in macrohpages.

Mouse TLR6 Antibody (N-term) Blocking Peptide - Protocols

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

<u>Blocking Peptides</u>

Mouse TLR6 Antibody (N-term) Blocking Peptide - Images

Mouse TLR6 Antibody (N-term) Blocking Peptide - Background

TLR6, a Type I membrane protein that belongs to the Toll-like rceptor family, participates in the innate immune response to Gram-positive bacteria and fungi. It acts via MyD88 and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response. The protein 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 TLR2. It binds to TLR2 via their respective extracellular domains, and to MyD88 via their respective TIR domains. TLR6 is detected in monocytes, CD11c+ immature dendritic cells, plasmacytoid pre-dendritic cells and dermal microvessel endothelial cells.

Mouse TLR6 Antibody (N-term) Blocking Peptide - References

Ozinsky, A., et al., Proc. Natl. Acad. Sci. U.S.A. 97(25):13766-13771 (2000).Takeuchi, O., et al., Gene 231 (1-2), 59-65 (1999).