

# Tlr2 Antibody

Purified Mouse Monoclonal Antibody

Catalog # AO2240a

## Product Information

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<b>Application</b>	WB, E
<b>Primary Accession</b>	<a href="#">Q9QUN7</a>
<b>Reactivity</b>	Human
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Clone Names</b>	8F11G10
<b>Isotype</b>	IgG1
<b>Calculated MW</b>	89449
<b>Description</b>	the activation of toll-like receptor (TLR) 2 induces oxidative stress and inflammation, TLR2 may be directly linked to skeletal muscle atrophy.
<b>Immunogen</b>	Purified recombinant fragment of mouse Tlr2 (AA: 628-777) expressed in E. Coli.
<b>Formulation</b>	Purified antibody in PBS with 0.05% sodium azide

## Additional Information

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<b>Gene ID</b>	24088
<b>Other Names</b>	Toll-like receptor 2, CD282, Tlr2
<b>Dilution</b>	WB~~1/500 - 1/2000 E~~1/10000
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Precautions</b>	Tlr2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	Tlr2
<b>Function</b>	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. Acts via MYD88 and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response (By similarity) (PubMed: <a href="#">15690042</a> ). May also promote apoptosis in response to lipoproteins

(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 (By similarity). Recognizes *M.tuberculosis* major T-antigen EsxA (ESAT-6) which inhibits downstream MYD88-dependent signaling (PubMed:[17486091](#)). Acts as the major receptor for *M.tuberculosis* lipoproteins LprA, LprG, LpqH and PhoS1 (pstS1), in conjunction with TLR1 and for some but not all lipoproteins CD14 and/or CD36. The lipoproteins act as agonists to modulate antigen presenting cell functions in response to the pathogen (PubMed:[19362712](#)). Recombinant MPT83 from *M.tuberculosis* stimulates secretion of cytokines (TNF, IL-6 and IL-12p40) by mouse macrophage cell lines in a TLR2-dependent fashion, which leads to increased host innate immunity responses against the bacterium (PubMed:[22174456](#)). Lung macrophages which express low levels of TLR2 respond poorly to stimulation by *M.tuberculosis* LpqH (PubMed:[19362712](#)). Required for normal uptake of *M.tuberculosis*, a process that is inhibited by *M.tuberculosis* LppM (PubMed:[27220037](#)). Interacts with TICAM2 (By similarity).

## 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:O60603}. 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 determine the intracellular targeting to the Golgi apparatus. Triacylated lipoproteins induce the same mechanism for TLR2:TLR1 heterodimers. {ECO:0000250|UniProtKB:O60603}

## Tissue Location

Detected in a macrophage cell line, smooth muscle, lung, spleen, thymus, brain and adipose tissue. Cell surface expression detected in lung alveolar macrophages, dendritic macrophages and at lower levels in lung macrophages (at protein level) (PubMed:19362712)

## References

1.Biochem Biophys Res Commun. 2015 Apr 10;459(3):534-40.2.Indian J Exp Biol. 2015 Feb;53(2):82-92.

## Images

