MAb-mTLR2
Monoclonal antibody to mouse TLR2
Catalog # mab2-mtlr2
http://www.invivogen.com/mab-mtlr2

For research use only, not for diagnostic or therapeutic use
Version # 17F16-MM

PRODUCT INFORMATION

Content
100 μg of MAb-mTLR2 provided azide-free and lyophilized

Target: Mouse TLR2
Species reactivity: Reacts with human and mouse TLR2
Clonality: Monoclonal antibody
Clone: T2.5
Isotype: Mouse IgG1
Source: CHO cells
Formulation: 0.2 mm filtered solution in sodium phosphate buffer with glycine, saccharose and stabilizing agents

Antibody resuspension
Add 1 ml of sterile water to obtain a concentration of 0.1 mg/ml.

Storage
- Product is shipped at room temperature. Store lyophilized MAb-mTLR2 at -20°C. Product is stable for 1 year.
- Reconstituted MAb-mTLR2 is stable up to 1 year when stored at -20°C.

Quality control
- This product has been validated for neutralization and flow cytometry.
- The complete sequence of this antibody has been verified.
- The absence of bacterial contamination (e.g. lipoproteins and endotoxins) has been confirmed using HEK-Blue™ TLR2 and HEK-Blue™ TLR4 cells.

BACKGROUND

TLR2 recognizes lipopolysaccharides from Legionella and Rhizobium, stimulating mouse bone marrow granulocytes via Toll-like receptor 2. It cooperates with TLR6 in response to diacylated mycoplasmal lipopeptide, and associates with TLR1 to recognize triacylated lipopeptides. TLR2 recognizes peptidoglycan, lipoteichoic acid and lipoprotein from gram-positive bacteria, lipoarabinomannan from mycobacteria, and zymosan from yeast cell wall. TLR2 cooperates with TLR6 in response to diacylated mycoplasmal lipopeptide, and associates with TLR1 to recognize triacylated lipopolysaccharides. Simultaneous expression of the extracellular and intracellular domains of both TLR1 and TLR2 is essential for ligand recognition and subsequent ligand-induced signal activation. Furthermore, pathogen recognition by TLR2 is strongly enhanced by CD14.


DESCRIPTION

MAb-mTLR2 (T2.5) is a monoclonal antibody that reacts with mouse Toll-like receptor 2 (TLR2, CD282). MAb-mTLR2 is an antagonistic antibody. The antibody is cross reactive with human TLR2.

MAb-mTLR2 was generated by recombinant DNA technology. It has been produced in CHO cells and purified by affinity chromatography.

APPLICATIONS

MAb-mTLR2 (T2.5) can be used for flow cytometry and neutralization as described below. MAb-mTLR2 can also be used for immunohistology on frozen tissue sections and immunoprecipitation.

Neutralization

The exact concentration of antibody required to neutralize murine TLR2 activity is dependent on the cell type and growth conditions. InvivoGen has determined the neutralization dose for this antibody using FSL-1 and HEK-Blue™ TLR2 cells (HEK239 cells expressing TLR2 and an NF-κB-inducible SEAP reporter gene).

Procedure for neutralization using HEK-Blue™ TLR2 cells
1. Prepare a cell suspension at 500,000 cells/ml.
2. Add 100 μl of MAb-mTLR2 or control antibody (0.1-10 μg/ml final) per well of a 96-well plate.

Note: We recommend using Mouse Control IgG1 (which targets E. coli β-galactosidase) as a negative control antibody.
3. Add 100 μl of cell suspension per well.
4. Incubate 1 hour at 37°C.
5. Add 50 μl FSL-1 (1 ng/ml final).
6. Incubate overnight at 37°C.
7. Add 20 μl of supernatant to 180 μl QUANTI-Blue™ in a 96-well plate.
8. Incubate 1-3 hours at 37°C.
9. Assess SEAP levels with the naked eye or spectrophotometrically by reading the optical density (OD) at 655 nm.

Flow Cytometry

MAb-mTLR2 (TL2.5) was used at 500-2000 ng/10⁶ cells with a PE goat anti-mouse IgG secondary antibody for indirect immunofluorescence staining of HEK-Blue™ mTLR2 cells by flow cytometry.

RELATED PRODUCTS

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<td>mabg1-ctrlm</td>
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<td>FSL-1</td>
<td>tlr-fsl</td>
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<td>HEK-Blue™ mTLR2 Cells</td>
<td>hkb-mlr2</td>
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