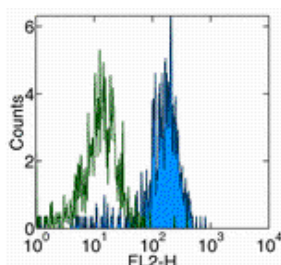


Anti-Human CD282 (TLR2) Functional Grade Purified

Catalog Number: 16-9922

Also Known As: toll-like receptor 2

RUO: For Research Use Only



Staining of normal human peripheral blood cells with Anti-Human CD282 (TLR2) PE. Appropriate isotype controls were used (open histogram). Cells in the monocyte population were used for analysis.

Product Information

Contents: Anti-Human CD282 (TLR2) Functional Grade Purified

Formulation: aqueous buffer, no sodium azide

REF **Catalog Number:** 16-9922

Clone: TL2.1

 **Temperature Limitation:** Store at 2-8°C.

Concentration: 1 mg/mL

LOT **Batch Code:** Refer to Vial

Host/Isotype: Mouse IgG2a, kappa

 **Use By:** Refer to Vial

Handling Conditions: Use in sterile environment.

Endotoxin Level: Less than 0.001 ng/ug antibody, as determined by the LAL assay.

Description

The TL2.1 monoclonal antibody reacts with human Toll-like receptor 2 (TLR2). To date, at least ten members of the Toll family have been identified in human. This family of type I transmembrane proteins is characterized by an extracellular domain with leucine-rich repeats and a cytoplasmic domain with homology to the type I IL-1 receptor. Two of these receptors, TLR2 and TLR4, are pattern recognition receptors and signaling molecules in response to bacterial lipoproteins and have been implicated in innate immunity and inflammation. TLR2 is expressed by peripheral blood monocytes and is responsible for distinguishing different pathogens. TL2.1, a blocking antibody, has been used to study the role of TLR-2 as a pattern recognition receptor in microbial lipoprotein/lipopeptide induced cytokine production from human peripheral blood mononuclear cells. TL2.1 has been reported to immunoprecipitate human TLR2 (~90 kDa) from PBMC and HMEC.

Applications Reported

TL2.1 has been reported for use in flow cytometric analysis and blocking of TLR2-mediated cytokine production. Inhibition of cytokine production has been reported in the literature using *Listeria monocytogenes* and peptidoglycans. Optimal conditions for the inhibition assays using TL2.1 and specific stimulatory reagents/suppliers have to be evaluated by individual investigators.

Neutralization Protocol: (Important note: make sure to eliminate LPS contamination in the culture system)

- 1) Prepare target cells of interest at the concentration of 2×10^6 /ml in 10% FBS-IMDM (or 5% human serum).
- 2) Pre-incubate the cells with 10-20 µg/ml of TL2.1 or isotype control antibody at room temperature for 30min.
- 3) Add the stimuli and incubate at 37°C, 5% CO₂ for 14 hours. Harvest the supernatants.
- 4) Follow the protocol of eBioscience Ready-SET-Go ELISA set to detect IL-6 or TNF-α production.

Applications Tested

The TL2.1 antibody has been tested by flow cytometric analysis of human peripheral blood leukocytes. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

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Related Products

11-4011 Anti-Mouse IgG FITC

14-8185 B18R Recombinant Protein

14-9029 Anti-Human CD282 (TLR2) Purified (TL2.3)

16-4724 Mouse IgG2a K Isotype Control Functional Grade Purified

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