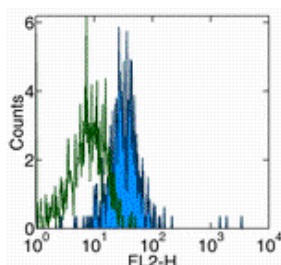


Anti-Human CD281 (TLR1) Functional Grade Purified

Catalog Number: 16-9911

Also Known As: TLR-1, toll-like receptor 1

RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of normal human peripheral blood cells with Anti-Human CD281 (TLR1) PE. Appropriate isotype controls were used (open histogram). Cells in the monocyte population were used for analysis.

Product Information

Contents: Anti-Human CD281 (TLR1) Functional Grade Purified

Formulation: aqueous buffer, no sodium azide

REF **Catalog Number:** 16-9911

Clone: GD2.F4

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

Concentration: 1 mg/ml

LOT **Batch Code:** Refer to Vial

Host/Isotype: Mouse IgG1, 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 GD2.F4 antibody reacts with human Toll-like receptor 1 (TLR1). TLR1 is expressed in low numbers on the surface of peripheral blood monocytes and even lower numbers on dendritic cells. A very high degree of donor variability has been reported for TLR1 expression. eBioscience manufactured GD2.F4 mAb has been tested by flow cytometry, in parallel with a sample from the developer using cells from healthy donors. eBioscience and the reference antibody gave similar results: donors tested confirmed low levels expression of TLR1 on PBMC (less than 1/4 log shift). While the ligand and exact function of TLR1 are not defined yet, it has been suggested that TLR1 may cooperate with TLR2 in response to certain antagonists. Despite low levels of surface expression as detected by flow cytometric analysis, TLRs are efficient signal transducing molecules in monocytes and dendritic cells. 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.

Applications Reported

The GD2.F4 antibody has been reported for use in flow cytometric analysis. To date, inhibition of function has not been reported.

Applications Tested

The GD2.F4 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

- A. Visintin, et al.** "Regulation of toll-like receptors in human monocytes and dendritic cells." J. Immunol. 166: 249 (2001).
D.H. Wyllie, et al. "Evidence for an accessory protein function for toll-like receptor 1 in anti-bacterial responses." J. Immunol. 165: 7125 (2000).
Krutzik SR, Ochoa MT, Sieling PA, et al. Activation and regulation of Toll-like receptors 2 and 1 in human leprosy. Nat Med. 2003 May;9(5):525-532.

Related Products

11-4011 Anti-Mouse IgG FITC

11-4317 Streptavidin FITC
12-4317 Streptavidin PE
13-4013 Anti-Mouse IgG Biotin (Polyclonal)
14-8185 B18R Recombinant Protein
16-4714 Mouse IgG1 K Isotype Control Functional Grade Purified (P3.6.2.1)
17-4317 Streptavidin APC
34-8185 B18R Recombinant Protein Carrier-Free

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