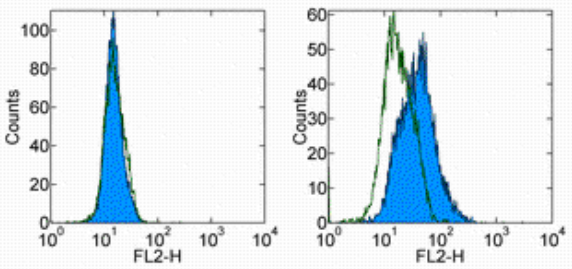
Anti-Human CD289 (TLR9) PE

Catalog Number: 12-9099
Also Known As:TLR-9, toll-like receptor 9
RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of non-transfected (left) and human CD289-transfected (right) HEK 293T cells with 1.0 ug of Rat IgG2a kappa Isotype Control PE (cat. 12-4321) (open histogram) or 1.0 ug of Anti-Human CD289 (TLR9) PE (filled histogram). Total viable cells were used for analysis.

Product Information

Contents: Anti-Human CD289 (TLR9) PE
REF **Catalog Number:** 12-9099
Clone: eB72-1665
Concentration: 0.2 mg/mL
Host/Isotype: Rat IgG2a, kappa

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer
Temperature Limitation: Store at 2-8°C. Do not freeze. Light sensitive material.
LOT **Batch Code:** Refer to Vial
Use By: Refer to Vial
Contains sodium azide

Description

eB72-1665 is generated against a portion of human toll-like receptor 9 (aa 273-288), a molecule reported to be expressed predominantly intracellularly. TLR9 is a ~115-120 kDa molecule, which mediates response to unmethylated CpG dinucleotides in bacterial DNA. CpG DNA induces a strong T-helper-1-like inflammatory response and the proliferation of TLR9-positive human B cells. When stimulated with CpG DNA, TLR9-deficient (TLR9-/-) mice lacked splenocyte proliferation, inflammatory cytokine production from macrophages, and dendritic cell maturation, as compared with normal mice. To date, at least twelve members of the Toll family have been identified. 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. Members of the TLR family are involved in recognition and response to different microbial components including lipoproteins, peptidoglycans, and nucleic acids and play important roles in innate immunity and inflammation. TLR9 is not detected by flow cytometry using this antibody on lysed whole human blood and/or isolated human PBMC stained for cell surface or intracellular TLR9. This may be due to limitations of antigen detection by flow cytometry. Human pDCs matured in the presence of IL-3 have been reported to stain with eB72-1665 by immunofluorescence microscopy (Nat Immunol. 5:190). Human Epithelial Cell lines were also reported to stain with this mAb (J. Immunol. 173: 1219). Further studies are needed to determine the relationship between mRNA expression and protein detection by flow cytometry.

Applications Reported

This eB72-1665 antibody has been reported for use in intracellular flow cytometric analysis.

Applications Tested

This eB72-1665 antibody has been tested by intracellular flow cytometric analysis of hTLR9 transfected cells. 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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