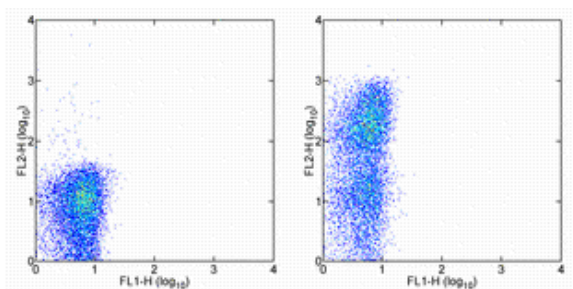


Anti-Human CD127 Functional Grade Purified

Catalog Number: 16-1278

Also Known As: Interleukin-7 Receptor alpha, IL-7Ra

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



Staining of normal human peripheral blood mononuclear cells with 0.5 ug of Mouse IgG1 K Isotype Control Purified (cat. 14-4714) (left) or 0.06 ug of Anti-Human CD127 Purified (right) followed by Anti-Mouse IgG PE (cat. 12-4010). Cells in the lymphocyte gate were used for analysis.

Product Information

Contents: Anti-Human CD127 Functional Grade Purified

 Catalog Number: 16-1278

Clone: eBioRDR5

Concentration: 1 mg/mL

Host/Isotype: Mouse IgG1, kappa

Handling Conditions: Use in sterile environment.

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

Formulation: aqueous buffer, no sodium azide

 Temperature Limitation: Store at 2-8°C.

 Batch Code: Refer to Vial

 Use By: Refer to Vial

Description

The eBioRDR5 monoclonal antibody reacts with human CD127 (Interleukin-7 Receptor alpha). CD127 complexes with CD132, also known as the common gamma chain (gamma c), to form the multi-functional IL-7 receptor (IL-7R). CD127 is a type I glycoprotein with a molecular weight of 75-80 kDa and is expressed by immature B cells through the early pre-B stage, by thymocytes during several stages of their development, and on most mature T cells, with transient down-regulation upon activation. Binding of IL-7 results in signal transduction which occurs through several tyrosine kinase pathways including the Jak/STAT pathway. IL-7 is indispensable for the development of lymphocytes, and the control of homeostatic proliferation of T-cells in the periphery. In addition, IL-7R signaling is known to be involved in the regulation of T cell receptor (TCR) locus rearrangement in gamma delta T cells.

Interestingly, recently it has been demonstrated that CD127 expression is down-regulated on CD4+CD25+ regulatory T cells (T regs). While the co-expression of CD4 and CD25 has become widely used as an indicator of T regs, this method of identification may also include cells without suppressive activity. It has clearly been shown that CD4+CD25+ cells that have down-regulated the expression of CD127 are significantly more highly-enriched for the regulatory T population, as defined by expression of the T reg-specific transcription factor Foxp3 and the suppressive activity of these cells, *in vitro*.

Binding of the eBioRDR5 monoclonal antibody to PBMCs is blocked by pre-incubation of the cells with recombinant human IL-7 (cat. 14-8079).

Applications Reported

This eBioRDR5 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This eBioRDR5 antibody has been tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at less than or equal to 0.06 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

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Related Products

11-4011 Anti-Mouse IgG FITC

12-4010 F(ab')₂ Anti-Mouse IgG PE (polyclonal)

16-4714 Mouse IgG1 K Isotype Control Functional Grade Purified (P3.6.2.1)

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