Polyclonal
Anti-mouse IL-10 Rβ-APC

Catalog Number: FAB5368A
Lot Number: ABAS01
100 Tests

Reagents Provided

Allophycocyanin (APC)-conjugated goat polyclonal anti-mouse IL-10 Rβ: Supplied as 10 μg of antibody in 1 mL saline containing up to 0.5% BSA and 0.1% sodium azide.

Isotype: goat IgG

Reagents Not Provided

- Flow Cytometry Staining Buffer (Catalog # FC001) or other BSA-supplemented saline buffer.

Storage

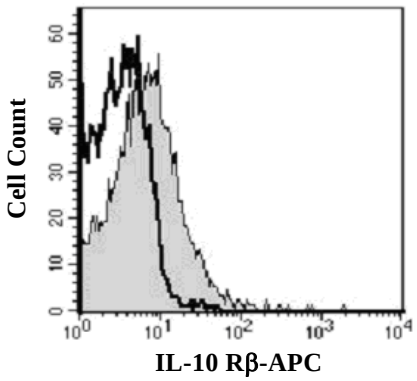
Reagents are stable for **twelve months** from the date of receipt when stored in the dark at 2° - 8° C.

Intended Use

Designed to quantitatively determine the percentage of cells bearing IL-10 Rβ within a population and qualitatively determine the density of IL-10 Rβ on cell surfaces by flow cytometry.

Product Description

Produced in goats immunized with purified, NS0-derived, recombinant mouse IL-10 Rβ extracellular domain (rmIL-10 Rβ; aa 21 - 220; Accession # Q61190). Mouse IL-10 Rβ specific IgG was purified by mouse IL-10 Rβ affinity chromatography. The purified antibody was then conjugated to APC fluorochrome. Cell surface expression of IL-10 Rβ is determined by flow cytometry using 620 - 650 nm wavelength excitation and monitoring emitted fluorescence with a detector optimized to collect peak emissions at 660 - 670 nm.



A20 cells were stained with APC-conjugated anti-mouse IL-10 Rβ (Catalog # FAB5368A, filled histogram) or isotype control (Catalog # IC108A, open histogram).

Background Information

IL-10 Rβ (Interleukin 10 receptor beta; also IL-10 R2, CD210b and CRF2-4) is an 80 - 85 kDa member of the type II cytokine receptor family of proteins. It is very widely expressed, and serves as a signal transducing accessory chain when complexed to the ligand-binding chains for IL-10, -22, -28A, -28B and -29 (plus IL-26 in human). Mature mouse IL-10 Rβ is a type I transmembrane protein that is 330 amino acids (aa) in length. It contains a 201 aa extracellular domain (aa 20 - 220) that possesses two fibronectin type III domains (aa 22 - 107 and 111 - 208). There is one alternate start site at Met20. Over aa 21 - 220, mouse IL-10 Rβ shares 87% and 74% aa identity with rat and human IL-10 Rβ, respectively.

Flow Cytometry Validation

This antibody has been tested for flow cytometry using A20 cells.

1. Cells may be Fc-blocked with 1 μg of mouse IgG/10^5 cells for 15 minutes at room temperature. Do not wash excess blocking IgG from this reaction.
2. After blocking, 10 μL of conjugated antibody was added to 1 - 2.5 x 10^5 cells and incubated for 30 minutes at room temperature.
3. Unbound antibody was removed by washing the cells twice in Flow Cytometry Staining Buffer (Catalog # FC001). Note that whole blood requires a RBC lysis step at this point using Flow Cytometry Mouse Lyse Buffer (Catalog # FC003).
4. The cells were resuspended in Flow Cytometry Staining Buffer for final analysis by flow cytometry. As a control for this analysis, cells in a separate tube should be treated with APC-labeled goat IgG antibody. This procedure may need to be modified, depending upon cell type and final utilization. Individual users may need to titrate to determine optimal reagent amount for their specific use.

Warning: Contains sodium azide as a preservative - sodium azide may react with lead and copper plumbing to form explosive metal azides. Flush with large volumes of water during disposal.

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