

Reagents Provided

Allophycocyanin (APC)-conjugated goat polyclonal anti-human

IL-13 R α 2: Supplied as 10 μ g 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

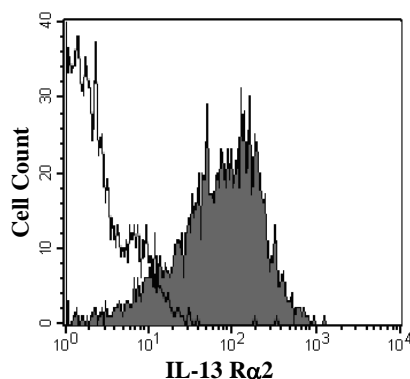
Reagents are stable for **twelve months** from the date of receipt when stored in the dark at 2° - 8° C.

Intended Use

Designed to quantitatively determine the percentage of cells bearing IL-13 R α 2 within a population and qualitatively determine the density of IL-13 R α 2 on cell surfaces by flow cytometry.

Product Description

This antibody was produced in goats immunized with purified, NS0-derived, recombinant human interleukin 13 receptor alpha 2 (rhIL-13 R α 2) extracellular domain. IL-13 R α 2 specific IgG was purified by human IL-13 R α 2 affinity chromatography. The purified antibody was then conjugated to APC fluorochrome. Cell surface expression of IL-13 R α 2 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.



A375 cells were stained with APC-conjugated anti-human IL-13 R α 2 (Catalog # FAB614A, filled histogram) or APC-conjugated control antibody (Catalog # IC108A, open histogram).

Background Information

Two type I membrane proteins belonging to the hemopoietin receptor family have been cloned and shown to bind IL-13 with high affinity. The lower affinity IL-13 binding protein is now referred to as IL-13 R α 1 and is also known as CD213a. IL-13 R α 1 combines with IL-4 R α to form a high affinity receptor complex capable of transducing an IL-13-dependent proliferative signal. The higher affinity IL-13 binding protein, now referred to as IL-13 R α 2, does not induce a signal and acts as a decoy receptor.

Flow Cytometry Validation

This antibody has been tested for flow cytometry using A375 cells.

- Cells may be Fc-blocked with 1 μ g of human IgG/ 10^5 cells for 15 minutes at room temperature. Do not wash excess blocking IgG from this reaction.
- After blocking, 10 μ L of conjugated antibody was added to up to 1×10^6 cells and incubated for 30 minutes at room temperature.
- 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 Human Lyse Buffer (Catalog # FC003).
- The cells were resuspended in Flow Cytometry Staining Buffer for final flow cytometric analysis. 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 the cell type and final utilization. Individual users may need to titrate to determine the 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.