

Polyclonal Anti-mouse IL-15 R α -Phycoerythrin

Catalog Number: FAB551P

Lot Number: ABOD01

100 Tests

Reagents Provided

Phycoerythrin (PE)-conjugated goat polyclonal anti-mouse IL-15 R α :

Supplied as 25 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

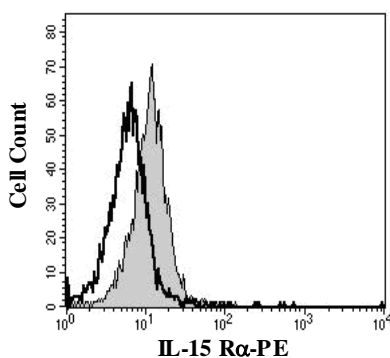
Reagents are stable for **twelve months** from the date of receipt when stored in the dark at 2° - 8° C.

Intended Use

Designed to quantitatively determine the percentage of cells bearing IL-15 R α within a population and qualitatively determine the density of IL-15 R α on cell surfaces by flow cytometry.

Product Description

Produced in goats immunized with purified, NS0-derived, recombinant mouse interleukin 15 receptor alpha (rmIL-15 R α) extracellular domain. Mouse IL-15 R α specific IgG was purified by mouse IL-15 R α affinity chromatography. The purified antibody was then conjugated to PE fluorochrome. Cell surface expression of IL-15 R α is determined by flow cytometry using 488 nm wavelength excitation and monitoring emitted fluorescence with a detector optimized to collect peak emissions at 565 - 605 nm.



EL-4 cells were stained with PE-conjugated anti-mouse IL-15 R α (Catalog # FAB551P, filled histogram) or isotype control (Catalog # IC108P, open histogram).

Background Information

Interleukin 15 receptor alpha (IL-15 R α) is a high affinity receptor that specifically binds IL-15 with high affinity, and associates as a heterotrimer with the IL-2 receptor beta and gamma subunits to initiate signal transduction. IL-15 R α is expressed on a wide variety of T cells and B cells, as well as non-lymphoid cells. Signaling of IL-15 can occur in one of three ways, through the heterotrimeric complex of IL-15 R α , IL-2 R β , and IL-2 R γ c, through the heterodimeric complex of IL-2 receptors beta and gamma common, or through a novel 60 - 65 kDa IL-15 RX subunit found on mast cells. The binding of IL-15 to IL-15 R α has been reported to antagonize TNF- α -mediated apoptosis in fibroblasts by competing with TNF RI for TRAF-2 binding. IL-15 has a key role in promoting survival, proliferation, and activation of natural killer (NK) and CD8+ T cells.

Flow Cytometry Validation

This antibody has been tested for flow cytometry using EL-4 cells.

- Cells may be Fc-blocked with 1 μ g of mouse 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 Mouse 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 PE-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.