

## Reagents Provided

**Carboxyfluorescein (CFS)-conjugated goat polyclonal anti-mouse IFN- $\alpha/\beta$  R2:** Supplied as 25  $\mu$ 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

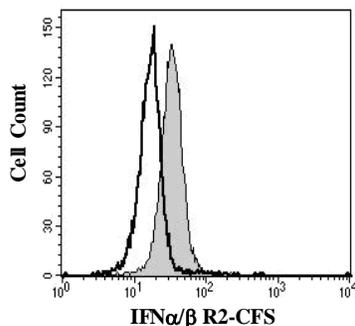
Reagents are stable for **twelve months** from the date of receipt when stored in the dark at 2° - 8° C.

## Intended Use

Designed to quantitatively determine the percentage of cells bearing IFN- $\alpha/\beta$  R2 within a population and qualitatively determine the density of IFN- $\alpha/\beta$  R2 on cell surfaces by flow cytometry.

## Product Description

Produced in goats immunized with purified, NS0-derived, recombinant mouse Interferon  $\alpha/\beta$  Receptor 2 (rmIFN- $\alpha/\beta$  R2) extracellular domain. Mouse IFN- $\alpha/\beta$  R2 specific IgG was purified by mouse IFN- $\alpha/\beta$  R2 affinity chromatography. The purified antibody was then conjugated to CFS fluorochrome. Cell surface expression of IFN- $\alpha/\beta$  R2 is determined by flow cytometry using 488 nm wavelength excitation and monitoring emitted fluorescence with a detector optimized to collect peak emissions at 515 - 545 nm.



A20 cells were stained with CFS-conjugated anti-mouse IFN- $\alpha/\beta$  R2 (Catalog # FAB1083F, filled histogram) or isotype control (Catalog # IC108A, open histogram).

## Background Information

IFN- $\alpha/\beta$  R2 belongs to the type II cytokine receptor family. It complexes with IFN- $\alpha/\beta$  R1 to form the signaling receptor complex for the family of  $\alpha$  and  $\beta$  IFN subtypes. By alternative splicing, IFN- $\alpha/\beta$  R2 can exist as a secreted soluble protein or as a type I membrane protein.

## Flow Cytometry Validation

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

- Cells may be Fc-blocked with 1  $\mu$ 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  $\mu$ L of conjugated antibody was added to 1 -  $2.5 \times 10^5$  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 CFS-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.