

Technical Data Sheet

iF647 Anti-Human IFN γ

Catalog Number: 110604, 110605
Size: 25 tests, 100 tests
Target Name: IFN γ , IFN-g, IFN-gamma, Interferon- γ
Regulatory Status: RUO

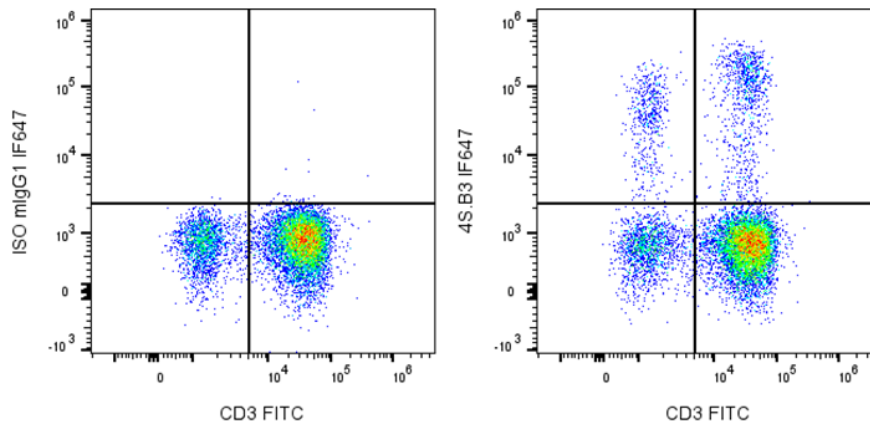
Product Details

Clone: 4S.B3
Application: FC
Reactivity: Human
Format: iF647
Isotype: Mouse IgG1
Antibody Type: Monoclonal
Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA
Protein Concentration: Supplied at a lot-specific concentration.
Storage&Handling: The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Recommended Usage: For flow cytometric staining, it is recommended to use 5 μ L of this reagent per 0.5-1.0 million cells in a 100 μ L volume. Optimal reagent performance should be determined by titration for each specific application.
Excitation Laser: Red Laser (633 nm)
Release Date: Nov-25

Background Information

Human Interferon gamma (hIFN- γ) is the sole member of Type II interferons and a potent macrophage-activating cytokine produced mainly by activated T lymphocytes and natural killer (NK) cells. Structurally, it is an antiparallel homodimeric glycoprotein of approximately 45 kDa, consisting of two identical 146-amino-acid subunits. Binding of hIFN- γ to its receptor (IFN- γ R1) activates the JAK/STAT signaling pathway, leading to the transcription of genes involved in antiviral, antibacterial, and immunoregulatory responses. Functionally, hIFN- γ upregulates MHC class I and II expression, enhances antigen presentation, and promotes Th1-type immune responses. It recruits and activates macrophages, NK cells, and cytotoxic T lymphocytes (CTLs), reinforcing innate and adaptive immunity. Although crucial for host defense, IFN- γ can also contribute to immune escape and tumor resistance in certain cancers.

Product Data



PMA/Ionomycin-stimulated human peripheral blood lymphocytes stained with FITC Anti-human CD3 and either iF647 Anti-Human IFN γ clone 4S.B2 (right panel) or an isotype control (left panel).