

Technical Data Sheet

iF647 Anti-Human CD25

Catalog Number: 110803, 110804
Size: 25 tests, 100 tests
Target Name: CD25, IL-2R α chain, Low affinity IL-2R
Regulatory Status: RUO

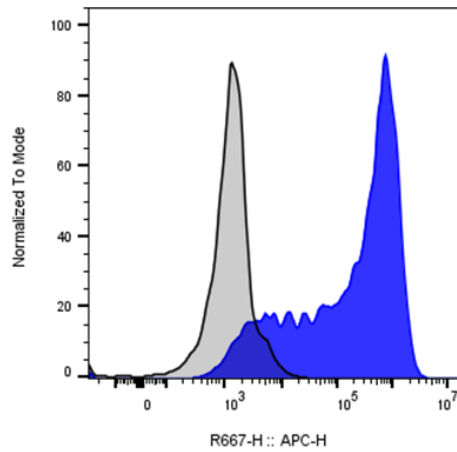
Product Details

Clone: BC96
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: Dec-25

Background Information

CD25 is a 55 kDa type I transmembrane glycoprotein and the α chain of the high-affinity interleukin-2 receptor (IL-2R). It is expressed on activated T and B cells, progenitor lymphocytes, activated monocytes/macrophages, and a subset of non-stimulated CD4⁺ regulatory T cells (Tregs). CD25 associates with the IL-2 receptor β (CD122) and common γ (CD132) chains to form the functional high-affinity IL-2R complex. Functionally, CD25 is critical for T cell activation, proliferation, and immune regulation. Deficiency of CD25 in mice causes severe autoimmunity and lethal lymphoproliferative disorders, mirroring defects seen in FOXP3 deficiency. In humans, genetic studies and case-control analyses have linked CD25 to autoimmune diseases such as Graves' disease, often accompanied by elevated soluble IL-2R β (sIL-2R β). Its role in immune regulation also makes it a target in certain cancer immunotherapies.

Product Data



Anti-human CD3 and Anti-Human CD28 stimulated human peripheral blood lymphocytes was stained with iF647 Anti-Human CD25 clone BC96 (color-filled histogram) or an isotype control (gray histogram).