

Technical Data Sheet

Anti-Human CD25 (IL-2R α) Antibody

Catalog Number: 110801, 110802
Size: 100 μ g, 500 μ g
Target Name: CD25, IL-2R α chain, Low affinity IL-2R
Regulatory Status: RUO

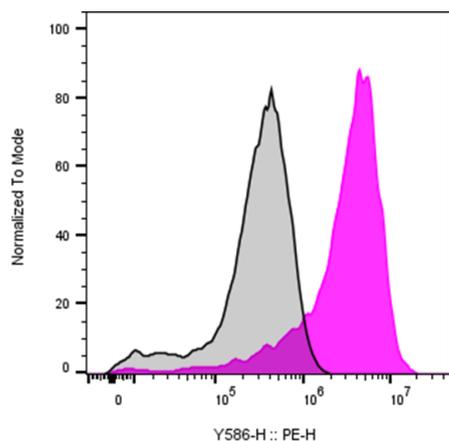
Product Details

Clone: BC96
Application: Flow Cytometry
Reactivity: Human
Format: Purified
Target Name: CD25, IL-2R α chain, Low affinity IL-2R
Isotype: Mouse IgG1
Antibody Type: Monoclonal
Regulatory Status: RUO
Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Protein Concentration: 0.5 mg/mL
Storage&Handling: The antibody solution should be stored between 2°C and 8°C
Recommended Usage: For flow cytometric staining, it is recommended to use less than 0.2 μ g 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.

Background Information

CD25 is a 55 kDa type I transmembrane glycoprotein and the alpha 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 α (sIL-2R α). 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 were stained with either purified Anti-Human CD25 Clone BC96 (color-filled histogram) or an isotype control (gray histogram), followed by PE Anti-Mouse IgG1.