

Technical Data Sheet

Anti-Human CD25

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

Product Details

Clone: BC96
Application: FC
Reactivity: Human
Format: Purified
Isotype: Mouse IgG1
Antibody Type: Monoclonal
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
Release Date: Dec-25

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.