

Technical Data Sheet

APC Human CD25 (IL-2R α ;) Protein (C-Fc)

Catalog Number: 813003, 813004

Size: 25 ug, 100 ug

Target Name: IL2RA, CD25, p55

Regulatory Status: RUO

Product Details

Application: Flow Cytometry

Format: Liquid, APC

Expression Host: CHO

Species: Human

Sources: Recombinant Human CD25 (Glu22-Cys213) with C-terminus Fc-tag is expressed in CHO cell and conjugated to APC.

Accession Number: P01589

Molecular Weight: The protein has a predicted molecular weight of 48.0 kDa. Under DTT-reducing conditions, it migrates at approximately 65 kDa on SDS-PAGE prior to conjugation.

Affinity Tag: C-Fc

Formulation: 1xPBS buffer, pH7.4, 0.09% NaN₃ with a carrier protein

Endotoxin level: Not tested

Protein Concentration: 25 μ g size is bottled at 0.1mg/mL concentration. 100 μ g size is bottled at lot specific concentration.

Storage and Handling: Briefly centrifuge the vial upon receipt. An unopened vial may be stored at 2–8°C for up to six months.

Background Information

CD25 (IL2RA), a type I transmembrane glycoprotein, is expressed on activated T cells, regulatory T cells, and dendritic cells. It binds IL-2 with low affinity on its own, but upon associating with the IL-2 receptor beta (CD122) and common gamma chain (CD132), it forms a high-affinity complex that triggers intracellular signaling pathways like MAPK and JAK/STAT. CD25 is involved in immune regulation and plays a role in autoimmune diseases, including type 1 diabetes. Soluble CD25 (sIL-2R α) is released during immune responses and is a marker for tumor burden in hematological malignancies, including leukemias and lymphomas, as well as some solid tumors like melanoma and carcinomas. The presence of sIL-2R α in circulation reflects tumor activity and is associated with immune modulation in cancer progression.