

## Technical Data Sheet

### PE conjugated Human CD25 (IL-2R) (C-Fc)

**Catalog Number:** 813001, 813002

**Size:** 25 ug, 100 ug

**Target Name:** IL2RA, CD25, p55

**Regulatory Status:** RUO

#### Product Details

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**Application:** FC

**Format:** Liquid, PE

**Expression Host:** CHO

**Species:** Human

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

**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% NaN<sub>3</sub> with a carrier protein

**Endotoxin level:** Not tested

**Protein Concentration:** 25µg size is bottled at 0.1mg/mL concentration. 100 µg 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

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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-2Ralpha) 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-2Ralpha in circulation reflects tumor activity and is associated with immune modulation in cancer progression.