

Technical Data Sheet

Human CD25 (IL-2R) (C-Fc)

Catalog Number: 812901, 812902

Size: 25 ug, 100 ug

Target Name: IL2RA, CD25, p55

Regulatory Status: RUO

Product Details

Application: ELISA, BLI

Format: Liquid, Purified

Expression Host: CHO

Species: Human

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

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.

Affinity Tag: C-Fc

Purity: >95% based on SDS-PAGE under reducing condition

Formulation: 1xPBS buffer, pH7.4, 0.22 µm filtered

Endotoxin level: Not tested

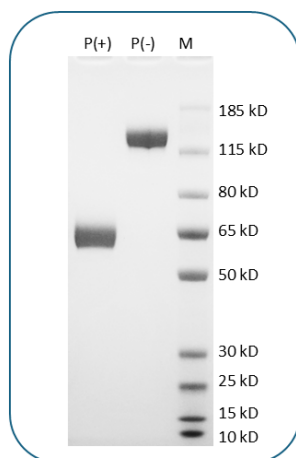
Protein Concentration: 25µg size is bottled at 0.2mg/mL concentration. 100 µg size is supplied at a lot-specific concentration.

Storage and Handling: Briefly centrifuge the vial upon receipt. An unopened vial can be stored at 4°C for up to 2 weeks, or at -20°C or below for up to six months. The protein may be further diluted to 0.1 mg/mL using 0.22 µm-filtered PBS buffer (pH 7.4). For long-term storage, the diluted stock solution should be aliquoted and stored at ≤ -70°C to minimize freeze-thaw cycles. If additional dilution is required, carrier proteins such as FBS or BSA should be added to maintain protein stability.

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-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.

Product Data



Human CD25 (C-Fc) on SDS-PAGE under reducing condition (P+) and non-reducing condition (P-). The gel was stained for 1 hour with BlinkBlue (catalog 700102). The purity of this protein appears to be greater than 95%.