

Technical Data Sheet

Biotinylated Cynomolgus CD25 (C-His-Avi)

Catalog Number: 811903, 811904

Size: 25 ug, 100 ug

Target Name: IL2RA, CD25, p55, IL2-RA, IL-2-RA

Regulatory Status: RUO

Product Details

Application: ELISA, BLI

Format: Liquid, Biotinylated

Expression Host: CHO

Species: Cynomolgus monkey

Sources: Recombinant Cynomolgus CD25 (Glu22-Arg213) with C-terminus His-Avi-tag is expressed in CHO cell. This protein was site-specifically labeled with Biotin by BirA ligase.

Accession Number: P63309

Molecular Weight: The protein has a predicted molecular weight of 25.3 kDa. Under DTT-reducing conditions, it migrates at approximately 35 kDa on SDS-PAGE.

Affinity Tag: C-His-Avi

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

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

Endotoxin level: Not tested

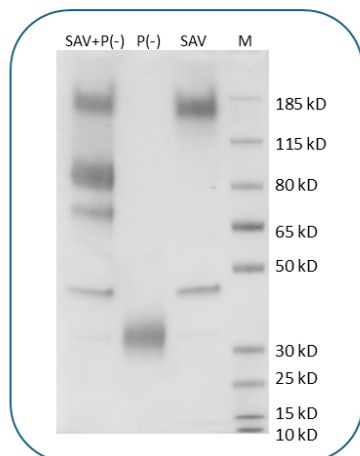
Protein Concentration: 25µg size is bottled at 0.2mg/mL concentration. 100 µg size is supplied at a lot-specific concentration.

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, or IL-2 receptor alpha chain (IL2RA), is a type I transmembrane glycoprotein expressed on activated T cells and regulatory T cells. It binds IL-2 with low affinity on its own but forms a high-affinity receptor complex with the IL-2 receptor beta and gamma chains, triggering intracellular signaling pathways like MAPK and JAK/STAT. While CD25 is considered an activation marker on dendritic cells, they do not express the beta-chain necessary for IL-2 signaling. CD25 is involved in immune responses and is linked to autoimmune diseases like type 1 diabetes (T1D). Additionally, elevated soluble IL-2 receptor alpha (sIL-2Ralpha) levels are found in hematological malignancies, such as leukemias and lymphomas, as well as solid tumors, including melanoma and carcinomas of the kidney, head and neck, esophagus, and lung, reflecting tumor burden and activity.

Product Data



Cynomolgus CD25 Protein (C-His-Avi) was biotinylated in vitro using BirA ligase. SDS-PAGE analysis under reducing (P-) conditions shows the protein has a purity greater than 95%. A gel shift assay using co-incubation with streptavidin indicates that the biotinylation efficiency of the CD25 protein exceeds 90%.