

## APC Cynomolgus CD25 (IL-2R $\alpha$ ) Protein (C-His)

<b>Catalog Number:</b>	812103, 812104
<b>Size:</b>	25 ug, 100 ug
<b>Target Name:</b>	IL2RA, CD25, p55, IL2-RA, IL-2-RA
<b>Regulatory Status:</b>	RUO

### PRODUCT DETAILS

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<b>Application:</b>	Flow Cytometry
<b>Format:</b>	Liquid, APC
<b>Expression Host:</b>	CHO
<b>Species:</b>	Cynomolgus monkey
<b>Sources:</b>	Recombinant Cynomolgus CD25 (Glu22-Arg213) with C-terminus His-tag is expressed in CHO cell and conjugated to APC.
<b>Accession Number:</b>	P63309
<b>Molecular Weight:</b>	The protein has a predicted molecular weight of 23.5 kDa. Under DTT-reducing conditions, it migrates at approximately 35 kDa on SDS-PAGE prior to conjugation.
<b>Affinity Tag:</b>	C-His
<b>Formulation:</b>	1xPBS buffer, pH7.4, 0.09% NaN <sub>3</sub> with a carrier protein
<b>Endotoxin level:</b>	Not tested
<b>Protein Concentration:</b>	25 $\mu$ g size is bottled at 0.1mg/mL concentration. 100 $\mu$ g size is bottled at lot specific concentration.
<b>Storage and Handling:</b>	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, 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-2R $\alpha$ ) 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.