

# Cynomolgus IL-2RB Protein; His Tag

## Product Information

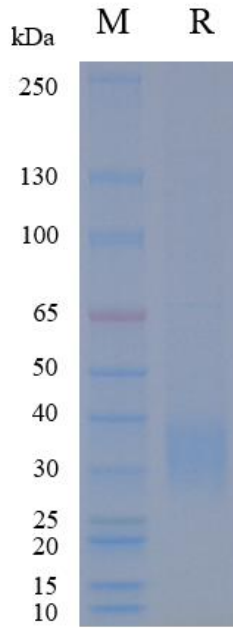
<b>Product Name</b>	Cynomolgus IL-2RB Protein; His Tag
<b>Storage temp</b>	Store at $\leq -70^{\circ}\text{C}$ , stable for 6 months after receipt. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.
<b>Catalog# / Size</b>	<b>GM-88506RP-100 / 100 <math>\mu\text{g}</math></b> <b>GM-88506RP-1000 / 1 mg</b>

## Protein Information

<b>Alternative Names</b>	IL2RB, RP5-1170K4.6, CD122, P70-75
<b>Source</b>	Cynomolgus IL-2RB Protein; His Tag (GM-88506RP) is expressed from human 293 cells (HEK-293). It contains AA Ala 27 - Thr 240 (Accession # Q38J85-1). This protein carries a His tag at the C-terminus.
<b>Purity</b>	> 90% as determined by SDS-PAGE
<b>Endotoxin</b>	< 1 EU/ $\mu\text{g}$ , determined by LAL gel clotting assay
<b>Predicted Mol Mass</b>	25.6 KDa
<b>Formulation</b>	Supplied as a 0.2 $\mu\text{m}$ filtered solution of PBS, pH7.2-7.4.
<b>Description</b>	<p>Interleukin-2 receptor beta chain (IL2RB), also known as CD122, is a shared subunit of the IL-2 receptor family that participates in signaling for IL-2, IL-15, and related cytokines. It is expressed on many immune cell types, including activated T cells, NK cells, and some myeloid cells, where it contributes to forming high- and intermediate-affinity receptor complexes. IL2RB itself signals upon cytokine binding, partnering with the common gamma chain (<math>\gamma\text{c}</math>) to assemble functional receptor ensembles that transduce intracellular signals necessary for cell activation, proliferation, and survival.</p> <p>Upon cytokine binding to receptor complexes containing IL2RB (for example, the IL-2/ IL-2R<math>\beta</math>/<math>\gamma\text{c}</math> assembly), receptor-associated JAK kinases (primarily JAK1 and JAK3) become activated, leading to phosphorylation of STAT proteins such as STAT5. Phosphorylated STATs dimerize and translocate to the nucleus to regulate transcription of genes controlling cell cycle progression, anti-apoptosis, and metabolic programs. In addition to the JAK-STAT axis, IL2RB-containing receptors can engage PI3K-AKT and MAPK pathways, contributing to robust cellular responses.</p>

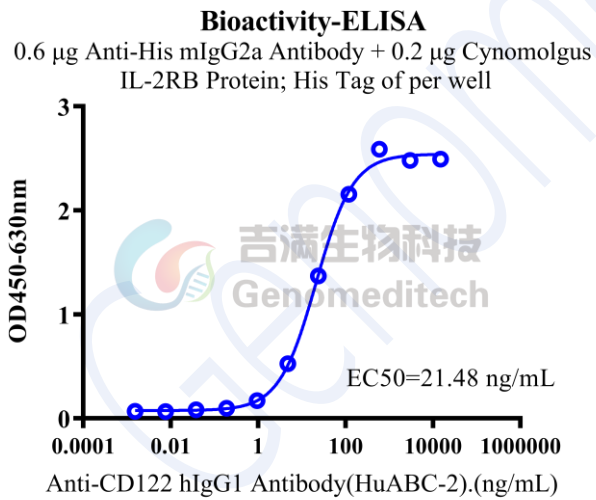
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## SDS-PAGE



On SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

## Bioactivity-ELISA



Cynomolgus IL-2RB Protein; His Tag (Catalog # GM-88506RP) was immobilized at 2  $\mu\text{g}/\text{ml}$  (100  $\mu\text{L}/\text{well}$ ) on Anti-His mIgG2a Antibody (Catalog # GM-59493AB) (0.6  $\mu\text{g}/\text{well}$ ) precoated. Increasing concentrations of Anti-CD122 hIgG1 Antibody(HuABC-2) (Catalog # GM-52319AB) were added.