

# Biotinylated Human IL-2 R beta/CD122 Protein

Cat. No. CD1-HM422B

## Description

<b>Source</b>	Recombinant Biotinylated Human IL-2 R beta/CD122 Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Ala27-Asp239.
<b>Accession</b>	NP_000869
<b>Molecular Weight</b>	The protein has a predicted MW of 27.5 kDa. Due to glycosylation, the protein migrates to 40-50 kDa based on Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

## Formulation and Storage

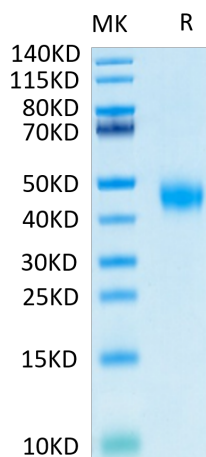
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

IL-2 R beta is a member of the cytokine receptor superfamily. Human IL-2 R beta cDNA encodes a 551 amino acid residue precursor Type I membrane protein with a 26 residue signal peptide, a 214 residue extracellular region, a 25 residue transmembrane region and a 286 residue cytoplasmic domain. Functional IL-2 receptors can exist in two affinity states on cell surfaces, the high affinity complex consisting of heterotrimers of the alpha, beta, and gamma chains, and the intermediate affinity complex comprising heterodimers of the beta and gamma chains.

## Assay Data

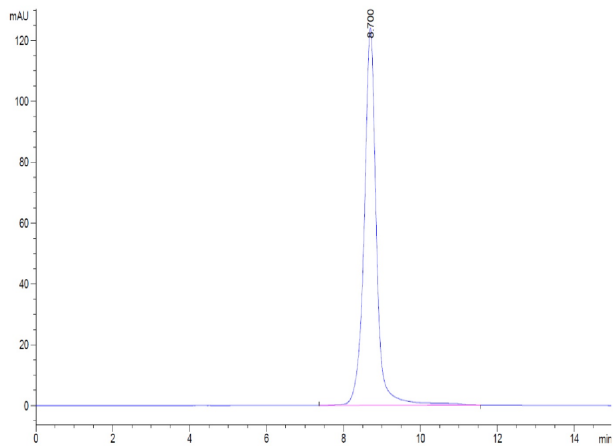
### Tris-Bis PAGE



Biotinylated Human IL-2 R beta on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data



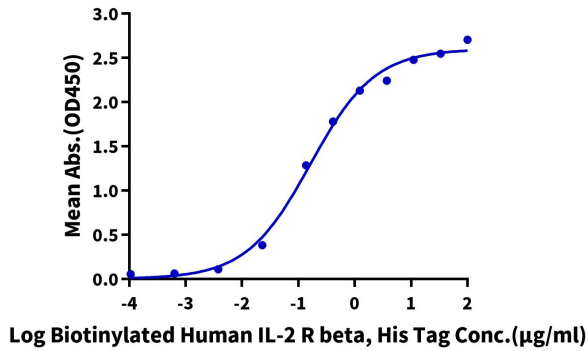
The purity of Biotinylated Human IL-2 R beta is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

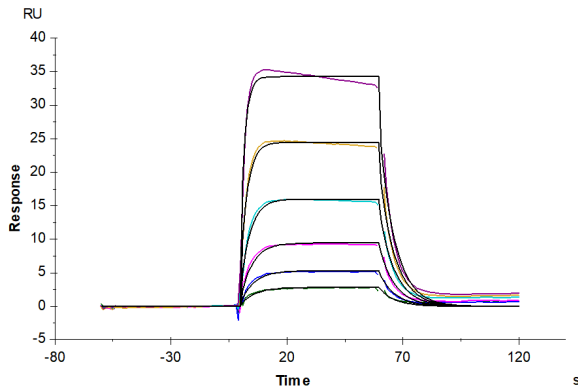
**Biotinylated Human IL-2 R beta, His Tag ELISA**

0.1µg Human IL-15Ra&IL-15, His Tag Per Well



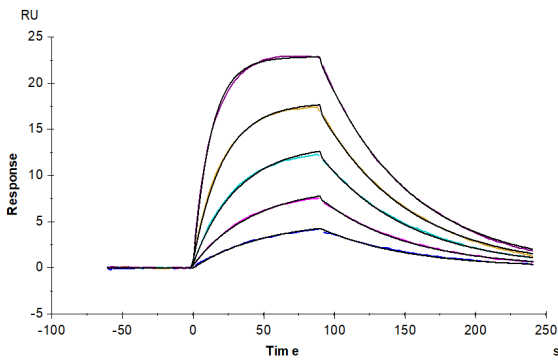
Immobilized Human IL-15Ra&IL-15, His Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Human IL-2 R beta, His Tag with the EC50 of 0.16µg/ml determined by ELISA (QC Test).

SPR Data



Biotinylated Human IL-2 R beta, His-Avi Tag captured on CM5 Chip via anti-his antibody can bind Human IL-2, No Tag with an affinity constant of 0.079 µM as determined in SPR assay (Biacore T200).

SPR Data



Biotinylated Human IL-2 R beta, His-Avi Tag captured on CM5 Chip via Anti-His Antibody can bind Human IL-15, No Tag with an affinity constant of 12.91 nM as determined in SPR assay (Biacore T200).