

Biotinylated Human IL-2 R beta/CD122 Protein

Cat. No. CD1-HM422B

Description

Source	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.
Accession	NP_000869
Molecular Weight	The protein has a predicted MW of 27.5 kDa. Due to glycosylation, the protein migrates to 40-50 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

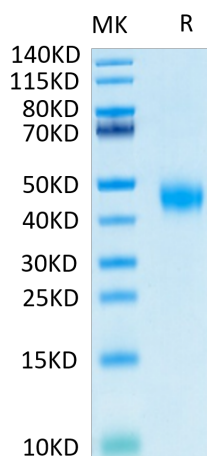
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months 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

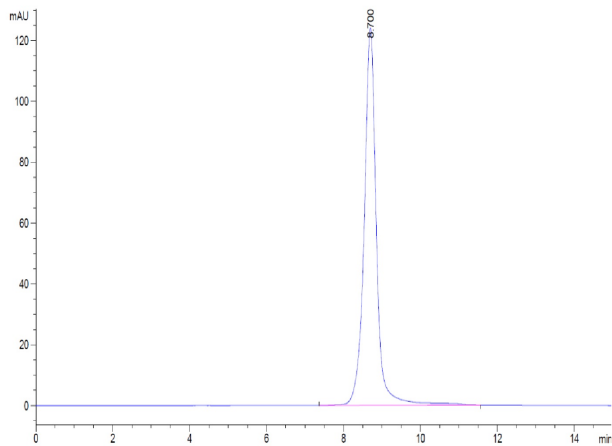
Bis-Tris PAGE



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

SEC-HPLC

Assay Data



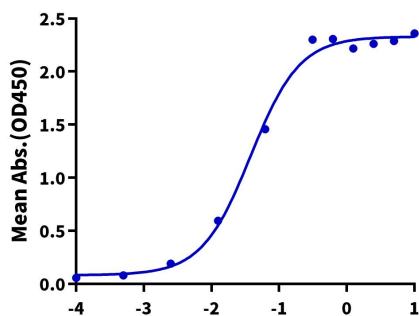
The purity of Biotinylated Human IL-2 R beta is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

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

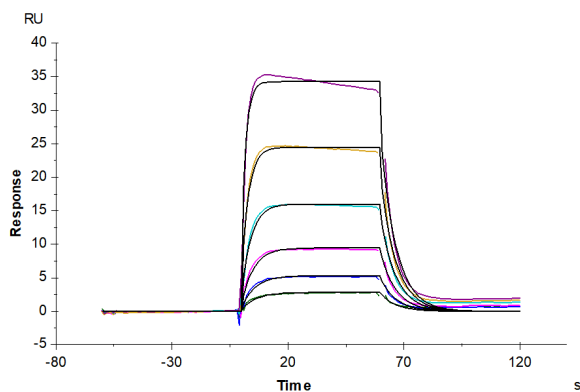
0.5µg Human IL-15Ra&IL-15, His Tag Per Well



Immobilized Human IL-15Ra&IL-15, His Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Human IL-2 R beta, His Tag with the EC50 of 38.0ng/ml determined by ELISA (QC Test).

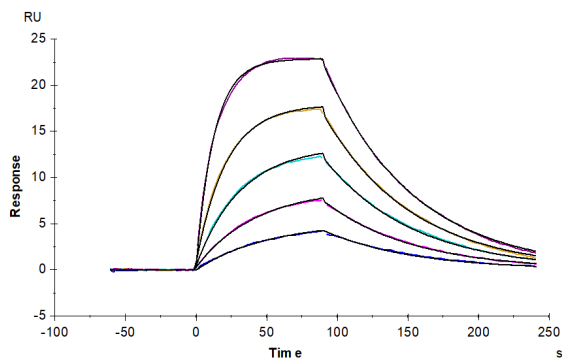
Log Biotinylated Human IL-2 R beta, His-Avi Tag Conc.(µg/ml)

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).