

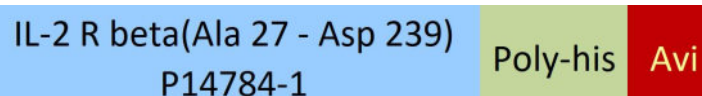
Synonym

IL2RB,RP5-1170K4.6,CD122,P70-75

Source

Biotinylated Human IL-2 R beta, His,Avitag(ILB-H82E3) is expressed from human 293 cells (HEK293). It contains AA Ala 27 - Asp 239 (Accession # [P14784-1](#)).

Predicted N-terminus: Ala 27

Molecular Characterization


This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™)

The protein has a calculated MW of 28.2 kDa. The protein migrates as 35-38 kDa and 42-45 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

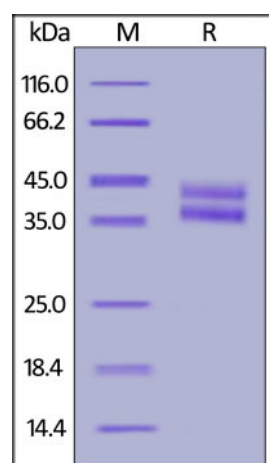
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

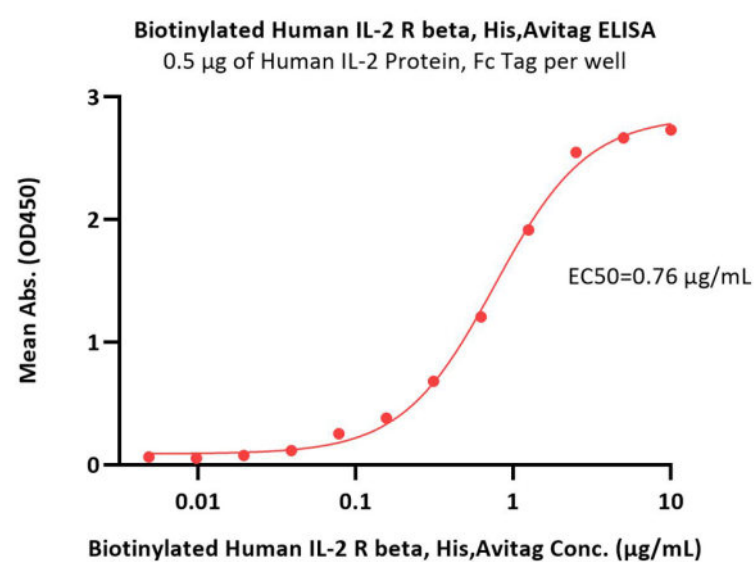
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

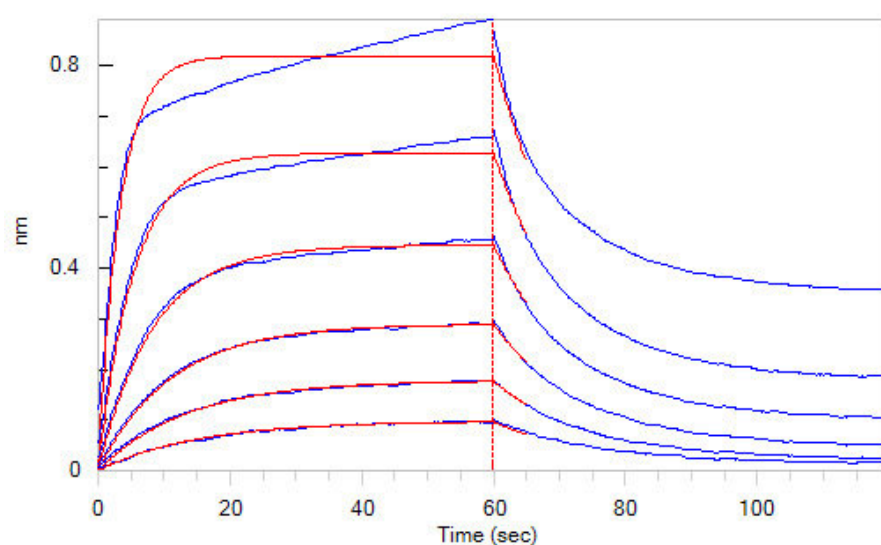
Biotinylated Human IL-2 R beta, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA

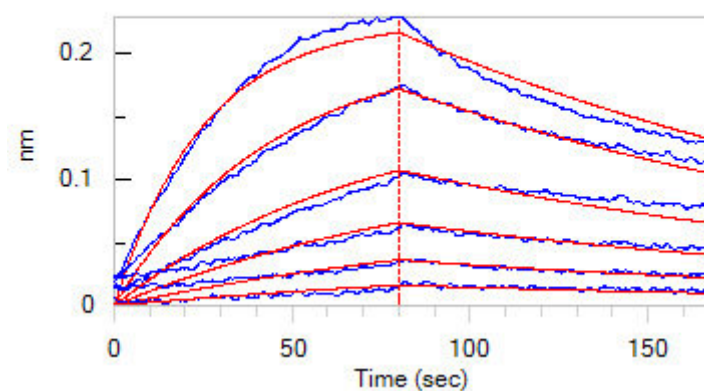


Immobilized Human IL-2 Protein, Fc Tag (Cat. No. IL2-H5269) at 5 µg/mL (100 µL/well) can bind Biotinylated Human IL-2 R beta, His,Avitag (Cat. No. ILB-H82E3) with a linear range of 0.005-1.25 µg/mL (Routinely tested).

Bioactivity-BLI



Loaded Biotinylated Human IL-2 R beta, His,Avitag (Cat. No. ILB-H82E3) on SA Biosensor, can bind Human IL-2, Tag Free with an affinity constant of 0.71 µM as determined in BLI assay (ForteBio Octet Red96e) (QC tested).



Loaded Biotinylated Human IL-2 R beta, His,Avitag (Cat. No. ILB-H82E3) on SA Biosensor, can bind Human IL-15, premium grade (Cat. No. IL5-H4117) with an affinity constant of 16.5 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Interleukin-2 receptor (IL-2R) is a heterotrimeric protein expressed on the surface of certain immune cells, such as lymphocytes, that binds and responds to a cytokine called IL-2. The IL-2R is made up of 3 subunits - α (CD25), β (CD122) and γ (CD132) - non-covalently associating. The α and β chains are involved in binding IL-2, while signal transduction following cytokine interaction is carried out by the γ -chain, along with the β subunit.

CD122 is also known as IL2R beta, is a member of the type I cytokine receptor family. CD122 is the receptor for interleukin-2 and is involved in receptor mediated endocytosis and transduces the mitogenic signals of IL2.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.