

Synonym

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

Source

Human IL-2 R beta Protein, His Tag(CD2-H5221) is expressed from human 293 cells (HEK293). It contains AA Ala 27 - Asp 239 (Accession # [NP_000869.1](#)).

Predicted N-terminus: Ala 27

Molecular Characterization

IL-2 R beta(Ala 27 - Asp 239)
NP_000869.1 Poly-his

This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 25.4 kDa. The protein migrates as 35-45 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% 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.

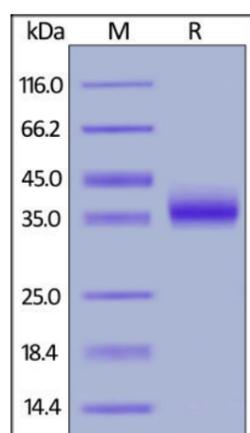
Storage

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

Please avoid repeated freeze-thaw cycles.

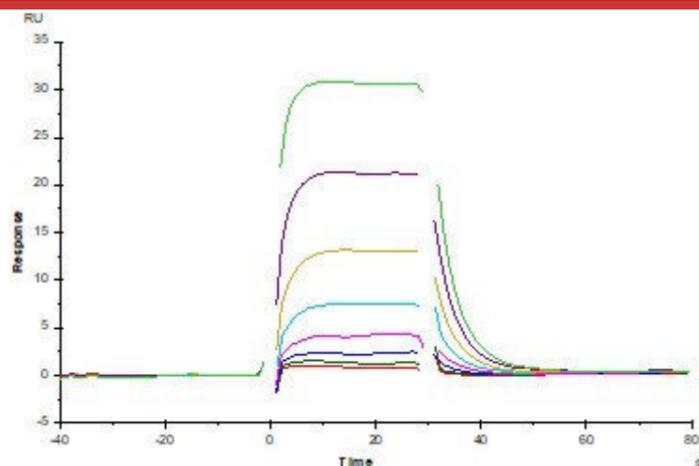
This product is stable after storage at:

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

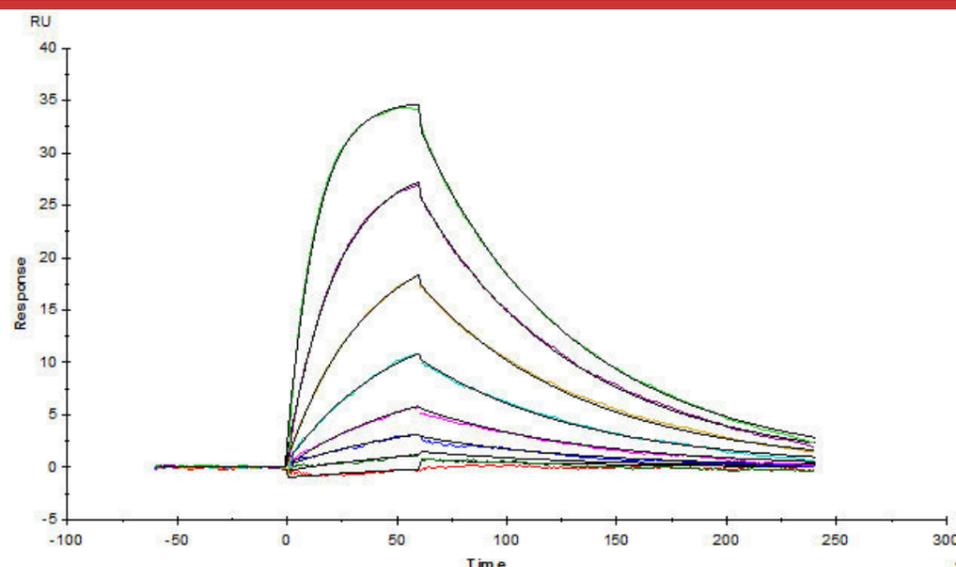
SDS-PAGE

Human IL-2 R beta Protein, His Tag 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-SPR

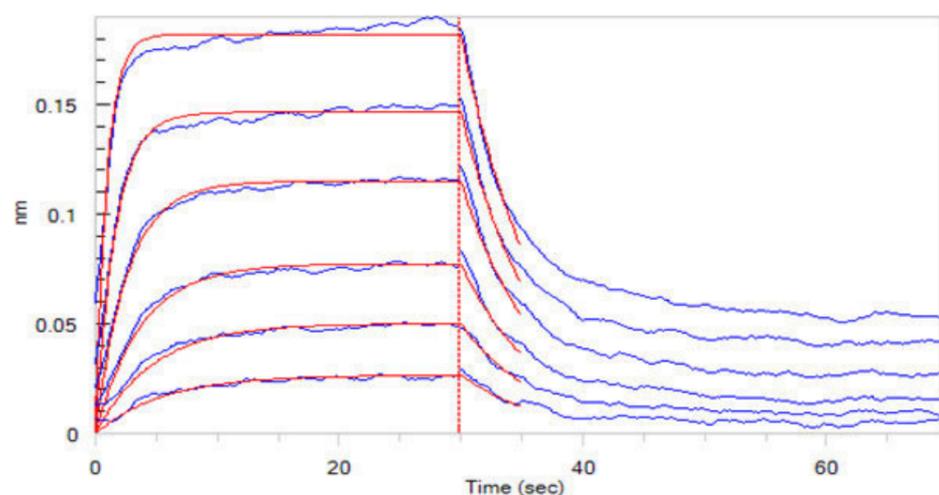


Human IL-2 R beta Protein, His Tag (Cat. No. CD2-H5221) captured on CM5 chip via anti-His antibody, can bind Human IL-2, premium grade (Cat. No. IL2-H5215) with an affinity constant of 1.62 μ M as determined in a SPR assay (Biacore T200) (QC tested).



Human IL-2 R beta Protein, His Tag (Cat. No. CD2-H5221) captured on CM5 chip via anti-His antibody, can bind Human IL-15, premium grade (Cat. No. IL5-H4117) with an affinity constant of 21.7 nM as determined in a SPR assay (Biacore T200) (Routinely tested).

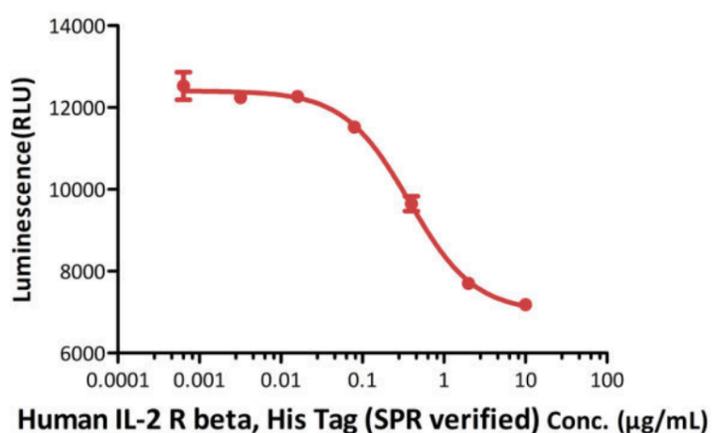
Bioactivity-BLI



Loaded Human IL-2 R beta Protein, His Tag (Cat. No. CD2-H5221) on HIS1K Biosensor, can bind Human IL-2, Tag Free with an affinity constant of 0.46 μ M as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Bioactivity-Bioactivity CELL BASE

Human IL-2 R beta, His Tag (SPR verified) inhibits the IL-15-dependent proliferation of Mo7e cells



Human IL-2 R beta Protein, His Tag (Cat. No. CD2-H5221) inhibits the IL-15-dependent proliferation of Mo7e cells. The EC50 for this effect is 0.38-0.45

µg/mL (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.