

Synonym

IL-2 R beta & IL-2 R alpha & IL-2 R gamma

Source

Biotinylated Human IL-2RB&IL-2RA&IL-2RG, His,Avitag&Twin Strep Tag(ILG-H82W9) is expressed from human 293 cells (HEK293). It contains AA Ala 27 - Asp 239 (IL-2RB) & Glu 22 - Ser 212 (IL-2RA) & Leu 23 - Asn 254 (IL-2RG) (Accession # [P14784-1](#) (IL-2RB) & [P01589-1](#) (IL-2RA) & [P31785-1](#) (IL-2RG)).

Predicted N-terminus: Ala 27 (IL-2RB) & Glu 22 (IL-2RA)

Molecular Characterization

Biotinylated Human IL-2RB&IL-2RA&IL-2RG, His,Avitag&Twin Strep Tag is produced by co-expression of IL-2RB and IL-2RA and IL-2RG, has a calculated MW of 31.5 kDa (IL-2RB) & 55.8 kDa (IL-2RA&IL-2RG). Subunit IL-2RB is fused with a his tag at the C-terminus, followed by a Avi tag (Avitag™) and subunit IL-2RA&IL-2RG is fused with a Twin-Strep Tag at the C-terminus. The reducing (R) protein migrates as 44 kDa,46 kDa and 80-90 kDa respectively 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

>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

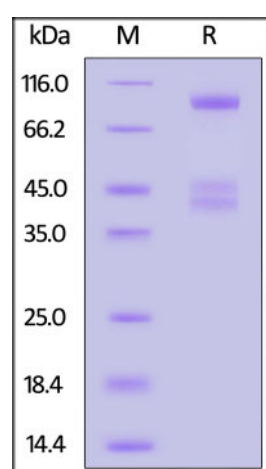
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

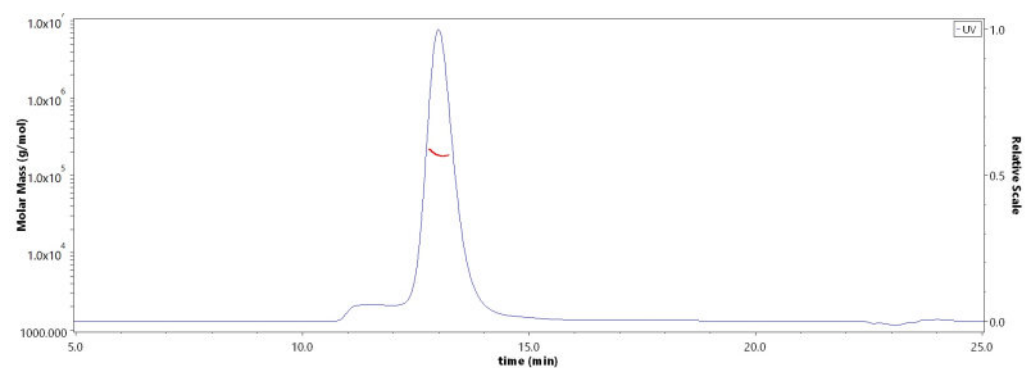
SDS-PAGE



Biotinylated Human IL-2RB&IL-2RA&IL-2RG, His,Avitag&Twin Strep Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA

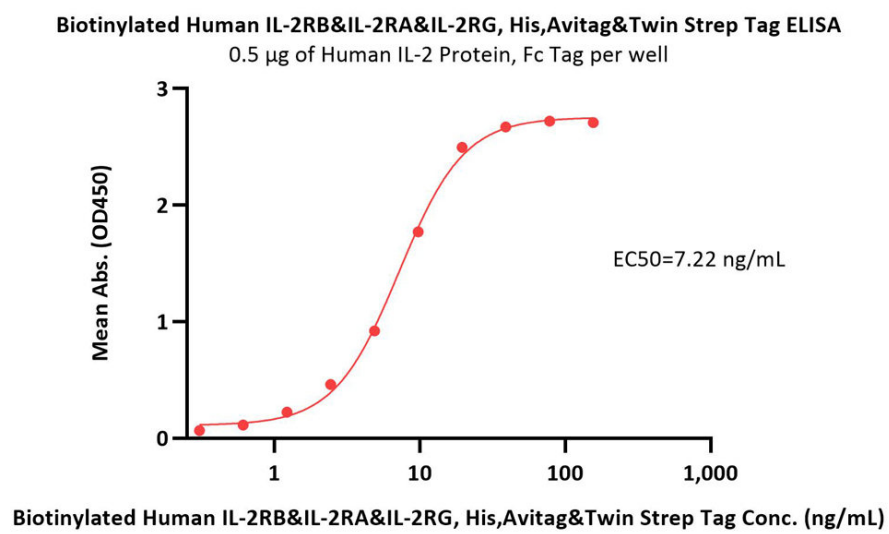
SEC-MALS



The purity of Biotinylated Human IL-2RB&IL-2RA&IL-2RG, His,Avitag&Twin Strep Tag (Cat. No. ILG-H82W9) is more than 85% and the molecular weight of this protein is around 155-190 kDa verified by SEC-MALS.

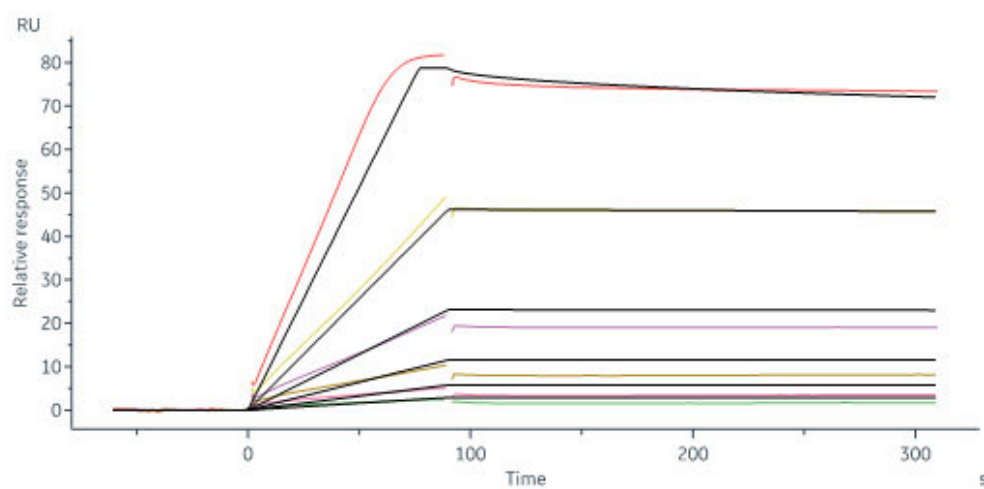
[Report](#)

Cat. No. ILG-H82W9



Immobilized Human IL-2 Protein, Fc Tag (Cat. No. IL2-H5269) at 5 µg/mL (100 µL/well) can bind Biotinylated Human IL-2RB&IL-2RA&IL-2RG, His,Avitag&Twin Strep Tag (Cat. No. ILG-H82W9) with a linear range of 0.3-39 ng/mL (QC tested).

Bioactivity-SPR



Biotinylated Human IL-2RB&IL-2RA&IL-2RG, His,Avitag&Twin Strep Tag (Cat. No. ILG-H82W9) captured on Biotin CAP-Series S Sensor Chip can bind Human IL-2 Protein, Tag Free with an affinity constant of 35.1 pM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

Both Interleukin-2 receptor subunit beta and Interleukin-2 receptor subunit gamma are receptor for interleukin-2. Common subunit for the receptors for a variety of interleukins. Interacts with SHB upon interleukin stimulation. Probably in association with IL15RA, involved in the stimulation of neutrophil phagocytosis by IL15. This beta subunit is involved in receptor mediated endocytosis and transduces the mitogenic signals of IL2. IL2R exists in 3 different forms: a high affinity dimer, an intermediate affinity monomer (beta subunit), and a low affinity monomer (alpha subunit). The high and intermediate affinity forms also associate with a gamma subunit.

Clinical and Translational Updates

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