Biotinylated Human IL-2 R beta&IL-2 R alpha&IL-2 R gamma Protein, Fc,Avitag™&Fc,Avitag™ (MALS verified)

Catalog # ILG-H82F4





Synonym

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

Source

Biotinylated Human IL-2RB&IL-2RA&IL-2RG, Fc, Avitag&Fc, Avitag(ILG-H82F4) is expressed from human 293 cells (HEK293). It contains AA Ala 27 - Asp 239 & Glu 22 - Ser 212 & Leu 23 - Asn 254 (Accession # P14784-1 (IL-2RB) & P01589-1 (IL-2RA) & P31785-1 (IL-2RG)).

Predicted N-terminus: Ala 27 & Glu 22

Molecular Characterization

Biotinylated Human IL-2RB&IL-2RA&IL-2RG, Fc,Avitag&Fc,Avitag is produced by co-expression of IL-2RB and IL-2RA and IL-2RG, has a calculated MW of 52.8 kDa (IL-2RB) and 77.1 kDa (IL-2RA&IL-2RG). Subunit IL-2RB is fused with a human IgG1 Fc tag at the C-terminus, followed by a Avi tag (AvitagTM) and subunit IL-2RA&IL-2RG is fused with a human IgG1 Fc tag at the C-terminus, followed by a Avi tag (AvitagTM). The reducing (R) protein migrates as 65-70 kDa and 115-120 kDa respectively due to glycosylation.

The protein is designed as a heterodimer.

Labeling

Biotinylation of this product is performed using AvitagTM 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.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from $0.22~\mu m$ 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

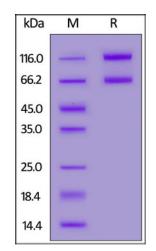
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

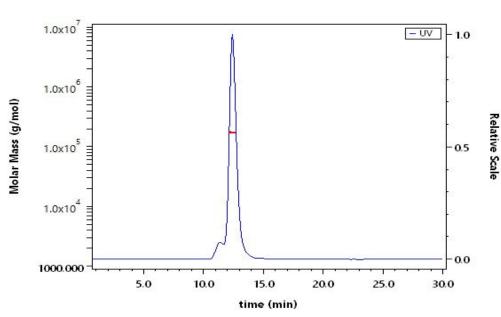
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



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

SEC-MALS



The purity of Biotinylated Human IL-2RB&IL-2RA&IL-2RG, Fc,Avitag&Fc,Avitag (Cat. No. ILG-H82F4) is more than 85% and the molecular weight of this protein is around 180-200 kDa verified by SEC-MALS.

Report



Biotinylated Human IL-2 R beta&IL-2 R alpha&IL-2 R gamma Protein, Fc,Avitag™&Fc,Avitag™ (MALS verified)

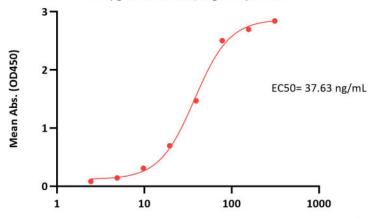
Catalog # ILG-H82F4





Bioactivity-ELISA

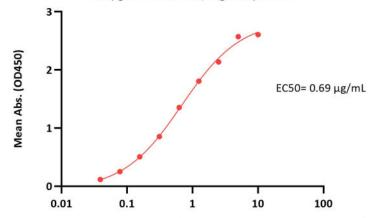
Biotinylated Human IL-2 RA & IL-2 RB& IL-2 RG, Fc, Avitag&Fc, Avitag ELISA 0.5 μg of Human IL-2, Tag Free per well



Biotinylated Human IL-2 RA & IL-2 RB& IL-2 RG, Fc, Avitag&Fc, Avitag Conc. (ng/mL)

Immobilized Human IL-2, Tag Free at 5 μg/mL (100 μL/well) can bind Biotinylated Human IL-2 RA & IL-2 RB& IL-2 RG, Fc, Avitag&Fc, Avitag (Cat. No. ILG-H82F4) with a linear range of 2-78 ng/mL (QC tested).

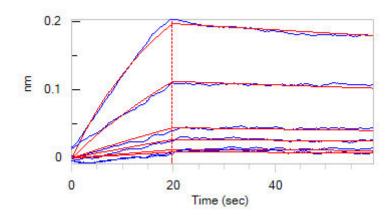
Biotinylated Human IL-2 RA & IL-2 RB& IL-2 RG, Fc, Avitag&Fc, Avitag ELISA 0.5 μg of Human IL-15, Tag Free per well



Biotinylated Human IL-2 RA & IL-2 RB& IL-2 RG, Fc, Avitag&Fc, Avitag Conc. (μg/mL)

Immobilized Human IL-15, premium grade (Cat. No. IL5-H4117) at 5 μg/mL (100 μL/well) can bind Biotinylated Human IL-2 RA & IL-2 RB& IL-2 RG, Fc, Avitag&Fc, Avitag (Cat. No. ILG-H82F4) with a linear range of 0.039-1.25 μg/mL (Routinely tested).

Bioactivity-BLI



Loaded Biotinylated Human IL-2RB&IL-2RA&IL-2RG, Fc, Avitag&Fc, Avitag (Cat. No. ILG-H82F4) on SA Biosensor, can bind Human IL-2, His Tag (Cat. No. IL2-H52H8) with an affinity constant of 2.41 nM as determined in BLI assay (ForteBio Octet Red96e) (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.

