

Synonym

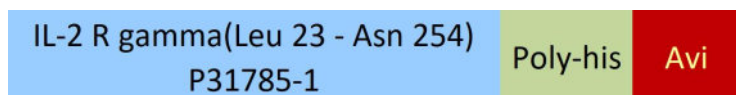
IL2RG,CD132,CIDX,IMD4,P64,SCIDX,SCIDX1,gammaC

Source

Biotinylated Human IL-2 R gamma, His,Avitag (ILG-H85E8) is expressed from Baculovirus-Insect cells. It contains AA Leu 23 - Asn 254 (Accession # [P31785-1](#)).

Predicted N-terminus: Leu 23

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 31.0 kDa. The protein migrates as 40-50 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Biotinylation

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

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. Normally trehalose is added as protectant before lyophilization.

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

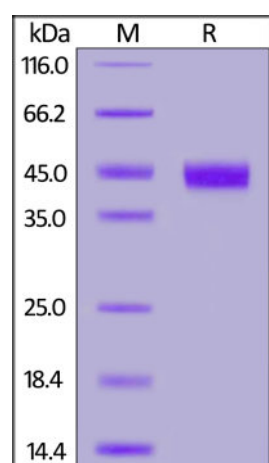
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

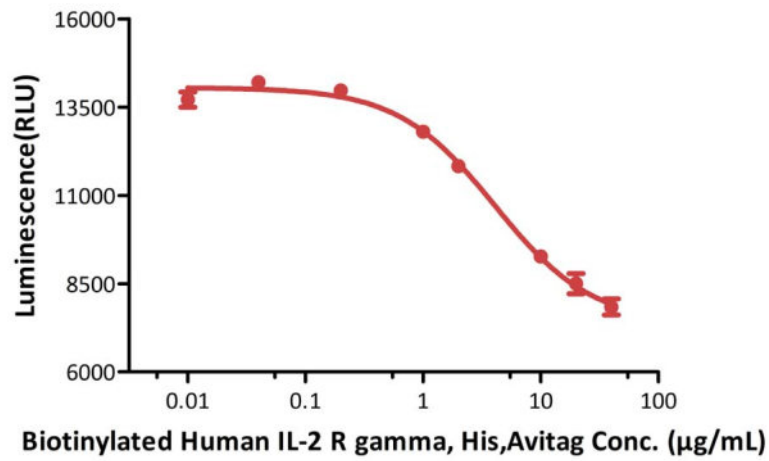
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



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

Bioactivity-Cell based assay

Biotinylated Human IL-2 R gamma, His,Avitag inhibits the IL-2-dependent proliferation of Mo7e cells

Biotinylated Human IL-2 R gamma, His,Avitag (Cat. No. ILG-H85E8) inhibits the IL-2-dependent proliferation of Mo7e cells. The EC50 for this effect is 4.08-5.90 µg/mL in the presence of 10 µg/mL of human IL-2 R beta and 50 ng/mL of human IL-2 (Routinely tested).

Background

IL-2R is a heterotrimeric protein binds and responds to the cytokine IL-2. Three distinct chains of IL-2R, termed as α , β and γ , which are non-covalently associated are identified. 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. The α chain of the IL-2R can bind to the β chain before receptor interaction with IL-2. The γ chain alone has a very weak affinity for IL-2, but after the ligand is bound to the α/β heterodimer, the γ chain becomes recruited to the complex to form a very stable macromolecular quaternary ligand/receptor complex. Interleukin-2 receptor subunit gamma (IL2RG), also known as cytokine receptor common subunit gamma, CD antigen CD132, gammaC, p64, which belongs to the type I cytokine receptor family or type 5 subfamily. IL2RG is located on the surface of immature blood-forming cells in bone marrow. Defects in IL2RG are the cause of severe combined immunodeficiency X-linked T-cell-negative/B-cell-positive/NK-cell-negative (XSCID).

Clinical and Translational Updates

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