

### **Synonym**

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

#### **Source**

Human IL-2 R gamma, His Tag (ILA-H52H5) is expressed from human 293 cells (HEK293). It contains AA Leu 23 - Asn 254 (Accession # P31785-1). Predicted N-terminus: Leu 23

### **Molecular Characterization**

IL-2 R gamma(Leu 23 - Asn 254) P31785-1

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 29.3 kDa. The protein migrates as 55-65 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### Endotoxin

Less than 1.0 EU per µg by the LAL method.

#### **Purity**

>95% as determined by SDS-PAGE.

## Formulation

Lyophilized from  $0.22~\mu m$  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

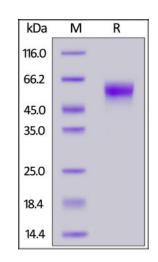
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

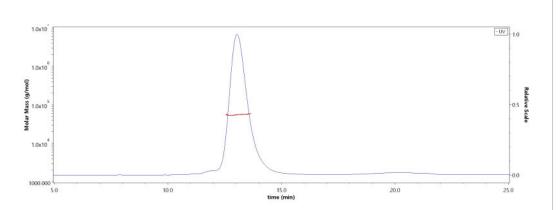
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## **SDS-PAGE**



Human IL-2 R gamma, 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 95%.

# **SEC-MALS**



The purity of Human IL-2 R gamma, His Tag (Cat. No. ILA-H52H5) is more than 85% and the molecular weight of this protein is around 50-60 kDa verified by SEC-MALS.

Report

# Background

IL-2R is a heterotrimeric protein binds and responds to the cytokine IL-2. Three distinct chains of IL-2R, termed as  $\alpha$ ,  $\beta$  and  $\gamma$ , which are non-covalently associated are identified. The  $\alpha$  and  $\beta$  chains are involved in binding IL-2, while signal transduction following cytokine interaction is carried out by the  $\gamma$  chain, along with the  $\beta$  subunit. The  $\alpha$  chain of the IL-2R can bind to the  $\beta$  chain before receptor interaction with IL-2. The  $\gamma$  chain alone has a very weak affinity for IL-2, but after the ligand is bound to the  $\alpha/\beta$  heterodimer, the  $\gamma$  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

# Human IL-2 R gamma / CD132 Protein, His Tag (MALS verified)

Catalog # ILA-H52H5



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 <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.