

# **Synonym**

IL-12 R beta 2,IL12RB2,IL-12RB2,IL-12R-beta-2

### **Source**

Human IL-12 R beta 2, His Tag(ILB-H52H6) is expressed from human 293 cells (HEK293). It contains AA Lys 24 - Asn 622 (Accession # Q99665-1).

### **Molecular Characterization**

IL-12RB2(Lys 24 - Asn 622) Q99665-1

Poly-his

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

The protein has a calculated MW of 70.0 kDa. The protein migrates as 85-95 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> 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 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

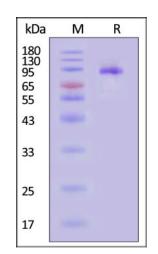
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

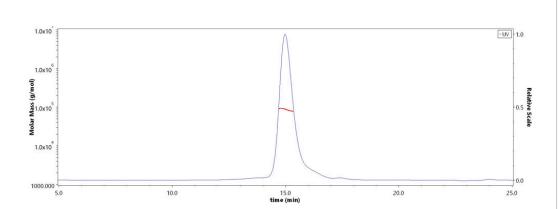
## **SDS-PAGE**



Human IL-12 R beta 2, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

# **Bioactivity-ELISA**

## **SEC-MALS**



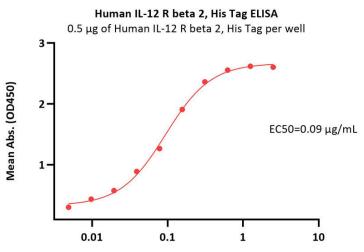
The purity of Human IL-12 R beta 2, His Tag (Cat. No. ILB-H52H6) is more than 85% and the molecular weight of this protein is around 75-95 kDa verified by SEC-MALS.

Report

# Human IL-12 R beta 2 Protein, His Tag (MALS verified)







Biotinylated Human IL-12B&IL-12A Heterodimer, His, Avitag&Flag Tag Conc. (μg/mL)

Immobilized Human IL-12 R beta 2, His Tag (Cat. No. ILB-H52H6) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Human IL-12B&IL-12A Heterodimer, His,Avitag&Flag Tag (Cat. No. IL2-H8210) with a linear range of 0.01-0.3  $\mu$ g/mL (QC tested).

# Background

The human IL-12 R subunit is a member of the cytokine receptor superfamily and the functional high-affinity IL-12R is composed of at least two beta-type cytokine receptor subunits, each independently exhibiting a low affinity for IL-12. IL-12RB2 is the signaling component coupling to the JAK2/STAT4 pathway. Promotes the proliferation of T-cells as well as NK cells. Induces the promotion of T-cells towards the Th1 phenotype by strongly enhancing IFN-gamma production. IL-12B2 gene acts as tumor suppressor in human acute and chronic B-cell leukemias/lymphomas. IL-12R beta 2 directly restrains multiple myeloma cell growth, and targeting of IL-12 to tumor cells holds promise as new therapeutic strategy.

# **Clinical and Translational Updates**

