

### **Synonym**

IL-23 R,IL-23 Receptor

#### Source

Human IL-23 R, Fc Tag(ILR-H5254) is expressed from human 293 cells (HEK293). It contains AA Gly 24 - Gly 355 (Accession # Q5VWK5-1). Predicted N-terminus: Gly 24

### **Molecular Characterization**

IL-23R(Gly 24 - Gly 355) Fc(Pro 100 - Lys 330) Q5VWK5-1 P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 64.5 kDa. The protein migrates as 90-100 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 µm filtered solution in

Tris with Glycine, Arginine and NaCl, pH7.5 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

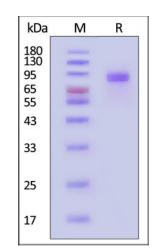
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

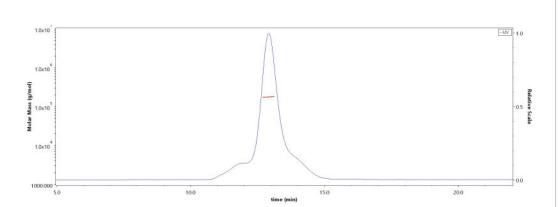
## **SDS-PAGE**



Human IL-23 R, Fc 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**

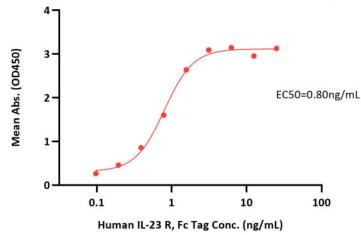
### **SEC-MALS**



The purity of Human IL-23 R, Fc Tag (Cat. No. ILR-H5254) is more than 85% and the molecular weight of this protein is around 155-185 kDa verified by SEC-MALS.

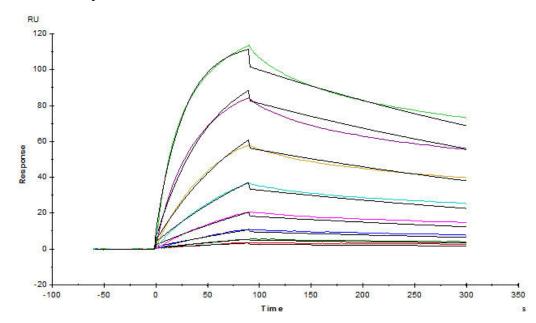
<u>Report</u>





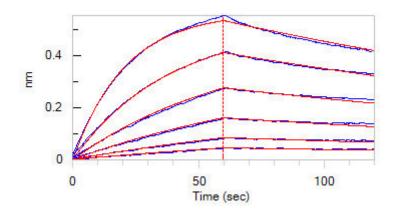
Immobilized Biotinylated Human IL-23A&IL-12B Heterodimer Protein, His,Avitag&Tag Free (Cat. No. ILB-H82W6) at 2  $\mu$ g/mL (100  $\mu$ L/well)on streptavidin (Cat. No. STN-N5116) precoated (0.2  $\mu$ g/well) plate. can bind Human IL-23 R, Fc Tag (Cat. No. ILR-H5254) with a linear range of 0.2-2 ng/mL (QC tested).

# **Bioactivity-SPR**



Captured Human IL-23 R, Fc Tag (Cat. No. ILR-H5254) on CM5 chip via anti-human IgG Fc antibodies surface can bind Human IL23A & IL12B, His Tag (Cat. No. ILB-H52W5) with an affinity constant of 5.36 nM as determined in a SPR assay (Biacore T200) (Routinely tested).

# **Bioactivity-BLI**





# **Human IL-23 R Protein, Fc Tag (MALS verified)**

Catalog # ILR-H5254



Loaded Human IL-23 R, Fc Tag (Cat. No. ILR-H5254) on Protein A Biosensor, can bind Human IL-23A&IL-12B Heterodimer Protein, His Tag&Tag Free (Cat. No. ILB-H52W5) with an affinity constant of 9.25 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

## **Background**

Interleukin 23 receptor (IL-23R) is a type I cytokine receptor, and IL-23R pairs with the receptor molecule IL12RB1/IL12Rbeta1, and both are required for IL23A signaling. Also, IL-23R associates constitutively with Janus kinase 2 (JAK2), and binds to transcription activator STAT3 in a ligand-dependent manner. Furthermore, IL-23R mediates T-cells, NK cells and possibly certain macrophage/myeloid cells stimulation probably through activation of the Jak-Stat signaling cascade. As for IL-23, it may be responsible for autoimmune inflammatory diseases and be important for tumorigenesis.

**Clinical and Translational Updates** 

