

**Synonym**

IL-23 R,IL-23 Receptor

**Source**

Biotinylated Human IL-23 R, Fc,Avitag(ILR-H82F3) 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) Q5VWK5-1	Fc(Pro 100 - Lys 330) P01857	Avi
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This protein carries a human IgG1 Fc tag at the C-terminus, followed by an Avi tag (Avitag™)

The protein has a calculated MW of 66.3 kDa. The protein migrates as 95-105 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Labeling**

*Biotinylation of this product is performed using Avitag™ 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.

**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.*

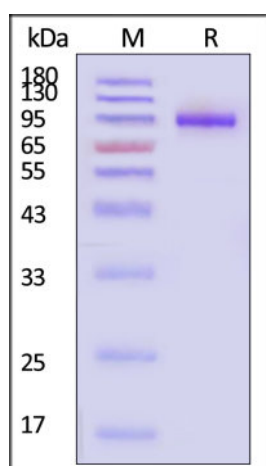
**Storage**

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

*Please avoid repeated freeze-thaw cycles.*

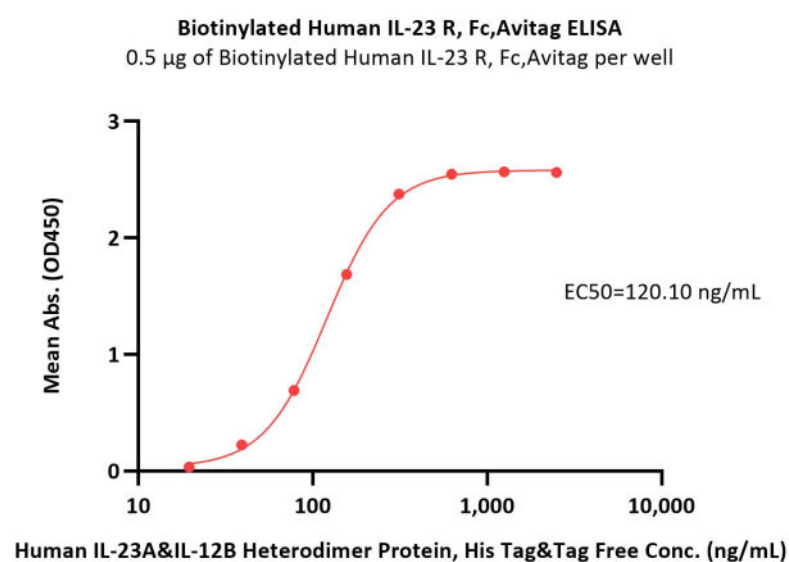
This product is stable after storage at:

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

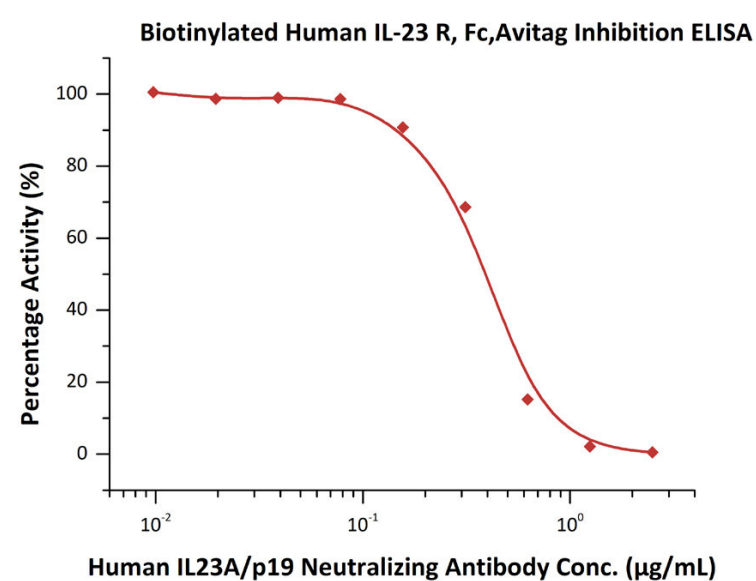
**SDS-PAGE**

Biotinylated Human IL-23 R, 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% (With [Star Ribbon Pre-stained Protein Marker](#)).

**Bioactivity-ELISA**



Immobilized Biotinylated Human IL-23 R, Fc,Avitag (Cat. No. ILR-H82F3) at 5 µg/mL (100 µL/well) on Streptavidin precoated (0.5 µg/well) plate can bind Human IL-23A&IL-12B Heterodimer Protein, His Tag&Tag Free (Cat. No. ILB-H52W5) with a linear range of 39-156 ng/mL (QC tested).



Immobilized Biotinylated Human IL-23 R, Fc,Avitag (Cat. No. ILR-H82F3) at 5 µg/mL (100 µL/well), can bind pre-mixed increasing concentrations of Human IL23A/p19 Neutralizing Antibody and 0.25 µg/mL (100 µL/well) Human IL-23A&IL-12B Heterodimer Protein, His Tag&Tag Free (Cat. No. ILB-H52W5) with a half maximal inhibitory concentration (IC50) of 0.3889 µg/mL (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

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.