

**Synonym**

IL4,BCGF1,BSF1

**Source**

Human IL-4 Protein, Fc Tag(IL4-H5253) is expressed from human 293 cells (HEK293). It contains AA His 25 - Ser 153 (Accession # [P05112-1](#)).

Predicted N-terminus: His 25

**Molecular Characterization**

IL-4(His 25 - Ser 153) P05112-1	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus

The protein has a calculated MW of 41.4 kDa. The protein migrates as 46-55 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

**Formulation**

Lyophilized from 0.22 µm 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.*

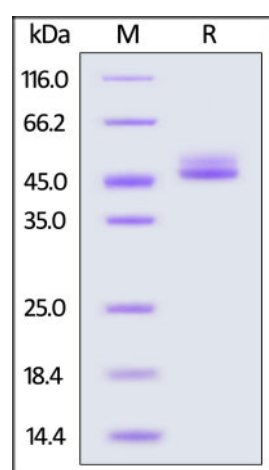
**Storage**

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

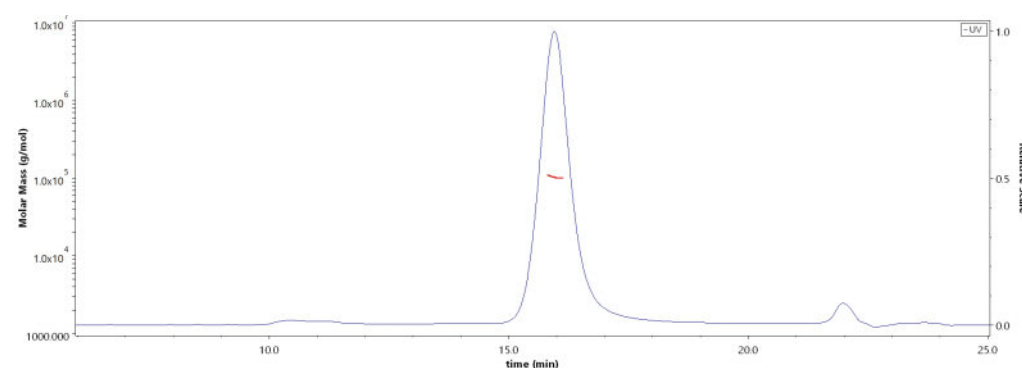
*Please avoid repeated freeze-thaw cycles.*

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.

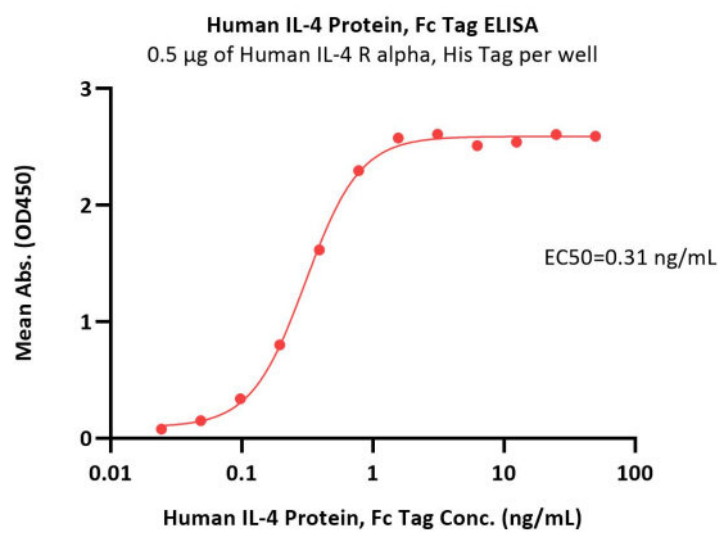
**SDS-PAGE**

Human IL-4 Protein, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

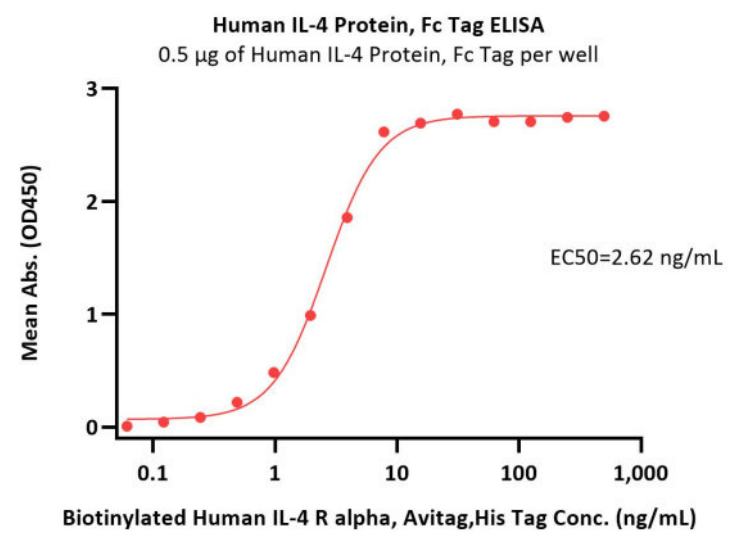
**Bioactivity-ELISA****SEC-MALS**

The purity of Human IL-4 Protein, Fc Tag (Cat. No. IL4-H5253) is more than 90% and the molecular weight of this protein is around 90-110 kDa verified by SEC-MALS.

[Report](#)



Immobilized Human IL-4 R alpha, His Tag (Cat. No. ILR-H5221) at 5 µg/mL (100 µL/well) can bind Human IL-4 Protein, Fc Tag (Cat. No. IL4-H5253) with a linear range of 0.1-1 ng/mL (QC tested).



Immobilized Human IL-4 Protein, Fc Tag (Cat. No. IL4-H5253) at 5 µg/mL (100 µL/well) can bind Biotinylated Human IL-4 R alpha, Avitag,His Tag (Cat. No. ILR-H82E9) with a linear range of 0.1-8 ng/mL (Routinely tested).

## Background

Interleukin-4, is a cytokine that induces differentiation of naive helper T cells (Th0 cells to Th2 cells). In the presence of IL-4 and IL-13, cytokines that are produced in a Th-2 type response, particularly during allergy and parasitic infections, macrophages become differentially activated, And this cytokine is a ligand for interleukin 4 receptor. The interleukin 4 receptor also binds to IL13, which may contribute to many overlapping functions of this cytokine and IL13. STAT6, a signal transducer and activator of transcription, has been shown to play a central role in mediating the immune regulatory signal of this cytokine. Recently, researcher found that the cytokine IL-4 plays a key role in development of innate CD8+ T cells in the thymus of several gene-deficient mouse strains, including Itk, KLF2, CBP and Id3, without previous exposure to antigen.

## Clinical and Translational Updates

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