Human IL-4 Protein, His Tag (MALS verified)

Catalog # IL4-H52H9

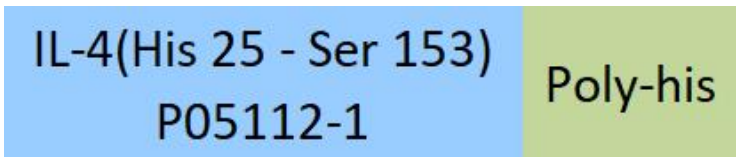
Synonym

IL4,BCGF1,BSF1

Source

Human IL-4, His Tag(IL4-H52H9) is expressed from human 293 cells (HEK293). It contains AA His 25 - Ser 153 (Accession # P05112-1).
Predicted N-terminus: His 25

Molecular Characterization



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

The protein has a calculated MW of 16.9 kDa. The protein migrates as 22-24 kDa when calibrated against Star Ribbon Pre-stained Protein Marker 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

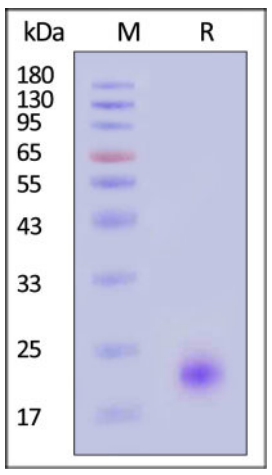
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

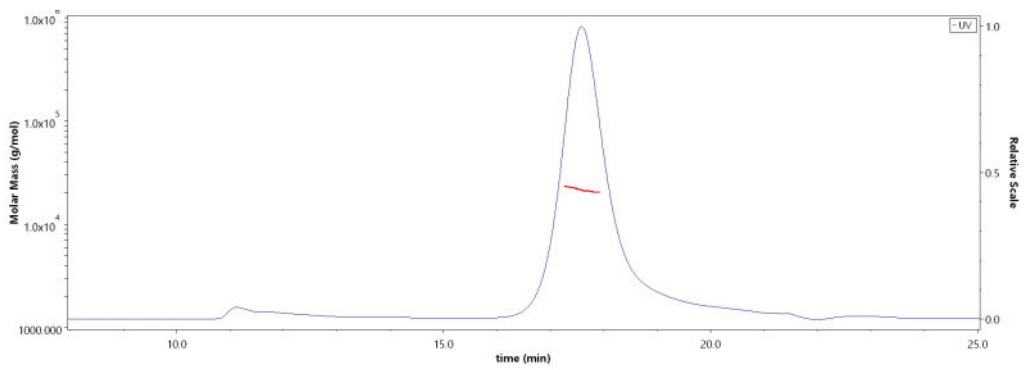
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



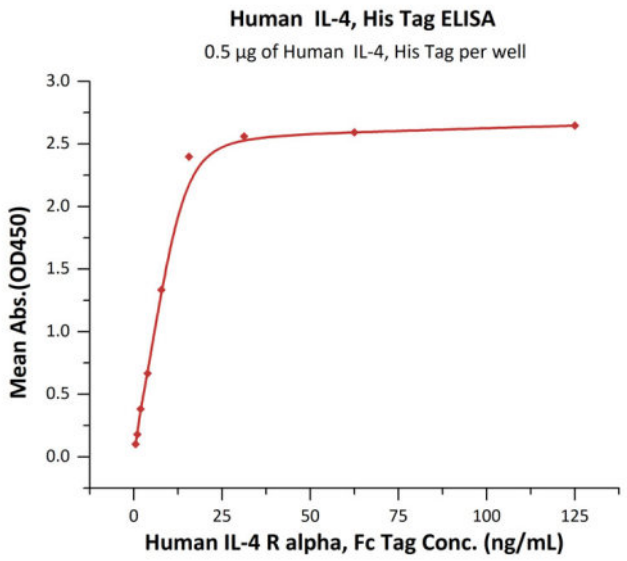
Human IL-4, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS



The purity of Human IL-4, His Tag (Cat. No. IL4-H52H9) is more than 90% and the molecular weight of this protein is around 18-27 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized Human IL-4, His Tag (Cat. No. IL4-H52H9) at 5 μg/mL (100 μL/well) can bind Human IL-4 R alpha, Fc Tag (Cat. No. ILR-H5253) with a linear range of 0.5-16 ng/mL (QC 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 if you have any question on this product.