

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

Catalog # IL4-C52H9



BIOSYSTEMS
Acro

Synonym

IL4, BCGF1, BSF1

Source

Cynomolgus IL-4 Protein, His Tag (IL4-C52H9) is expressed from human 293 cells (HEK293). It contains AA His 25 - Ser 153 (Accession # [P79339-1](#)).

Predicted N-terminus: His 25

Molecular Characterization

IL-4(His 25 - Ser 153)
P79339-1

Poly-his

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

The protein has a calculated MW of 16.8 kDa. The protein migrates as 18-24 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 / rFC method.

Purity

>95% 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.

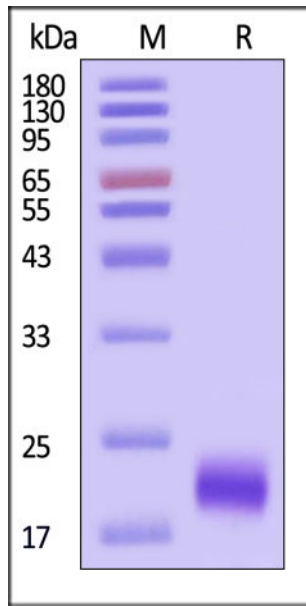
This product is stable after storage at:

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

ACRO Quality Management System

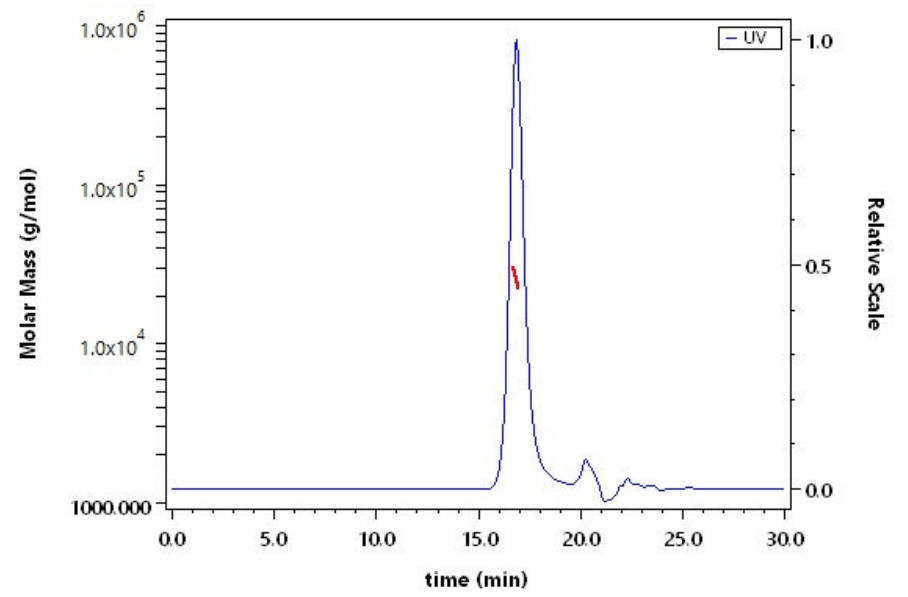
- [QMS\(ISO, GMP\)](#)
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



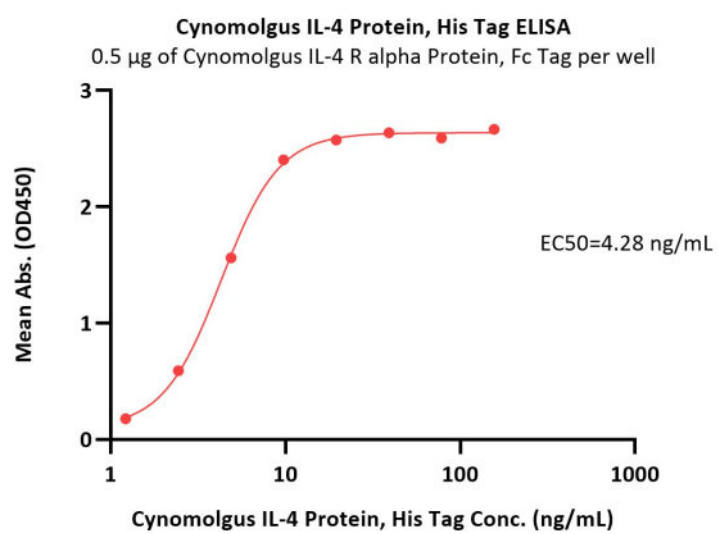
Cynomolgus IL-4 Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



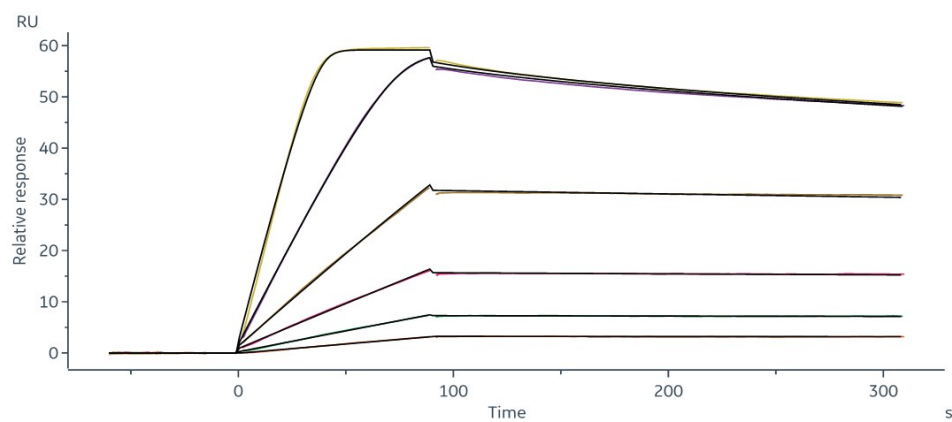
The purity of Cynomolgus IL-4 Protein, His Tag (Cat. No. IL4-C52H9) is more than 90% and the molecular weight of this protein is around 17-29 kDa verified by SEC-MALS.

Bioactivity-ELISA



Immobilized Cynomolgus IL-4 R alpha Protein, Fc Tag (Cat. No. ILR-C5258) at 5 µg/mL (100 µL/well) can bind Cynomolgus IL-4 Protein, His Tag (Cat. No. IL4-C52H9) with a linear range of 1-10 ng/mL (QC tested).

Bioactivity-SPR



Cynomolgus IL-4 R alpha Protein, Fc Tag (Cat. No. ILR-C5258) captured on Protein A Chip can bind Cynomolgus IL-4 Protein, His Tag (Cat. No. IL4-C52H9) with an affinity constant of 0.0488 nM as determined in a SPR assay (Biacore 8K) (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 I κ k, KLF2, CBP and Id3, without previous exposure to antigen.



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