

Cynomolgus IL-13 Protein, His Tag (MALS verified)

Catalog # IL3-C52H5



Synonyms

IL13, ALRH, BHR1, MGC116786, MGC116788, MGC116789, P600, Interleukin-13

Source

Cynomolgus IL-13 Protein, His Tag (IL3-C52H5) is expressed from human 293 cells (HEK293). It contains AA Ser 21 - Asn 132 (Accession # [ABG75889.1](#)).

Predicted N-terminus: Ser 21

Molecular Characterization

IL-13(Ser 21 - Asn 132) ABG75889.1	Poly-his
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This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 14.2 kDa. The protein migrates as 11-12 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE).

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.

Shipping and Storage

This product is shipped at ambient temperature.

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

Please avoid repeated freeze-thaw cycles.

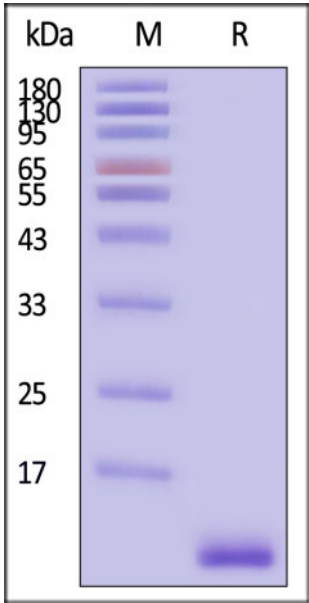
This product is stable after storage at:

- -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

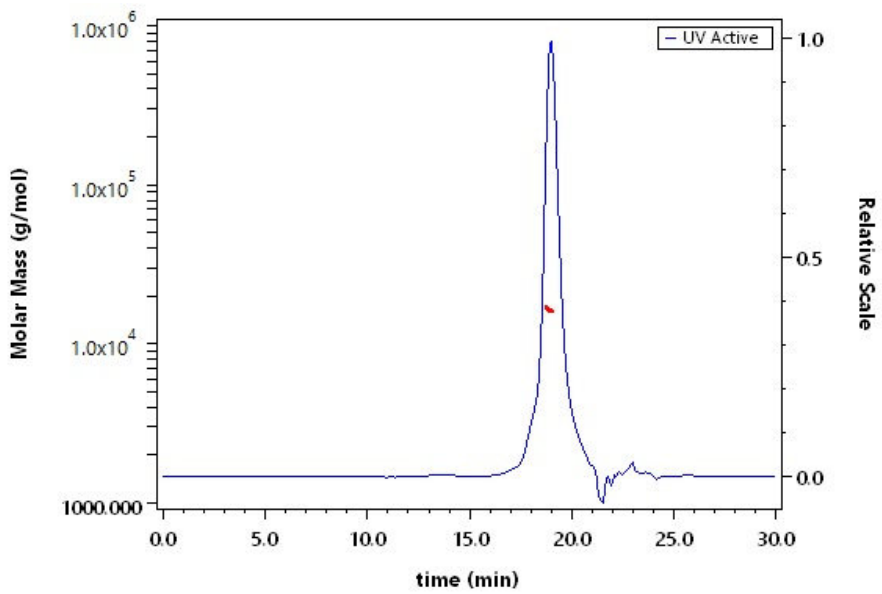
- [QMS\(ISO, GMP\)](#)
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



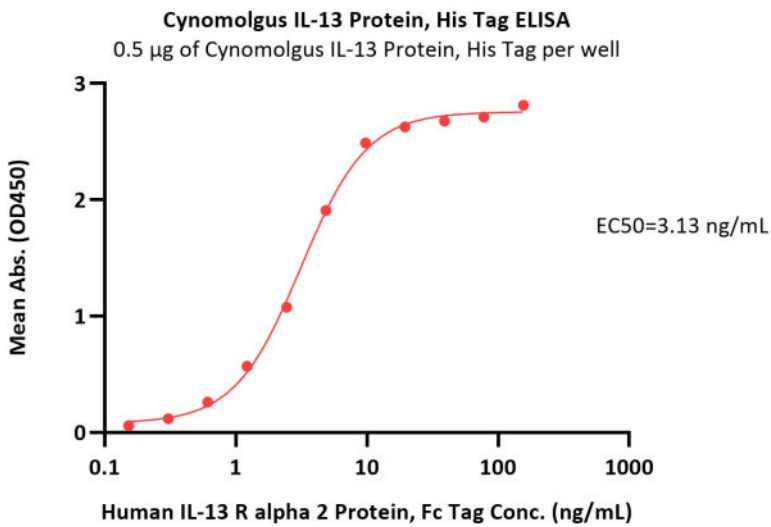
Cynomolgus IL-13 Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



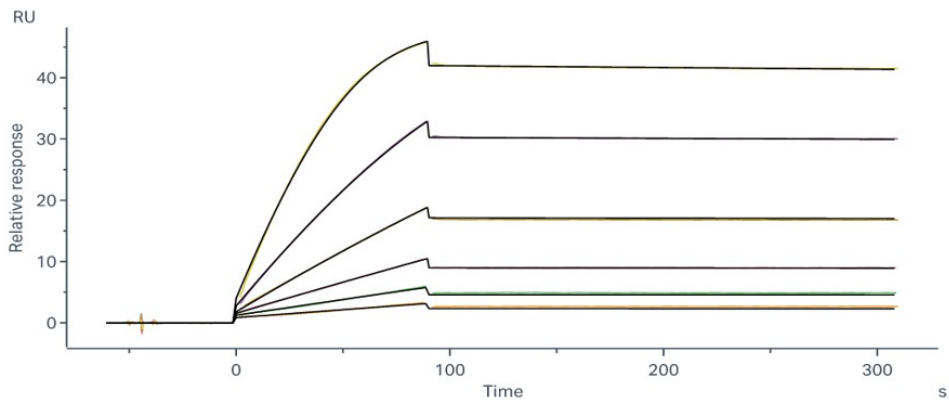
The purity of Cynomolgus IL-13 Protein, His Tag (Cat. No. IL3-C52H5) is more than 90% and the molecular weight of this protein is around 14-20 kDa verified by SEC-MALS.

Bioactivity-ELISA

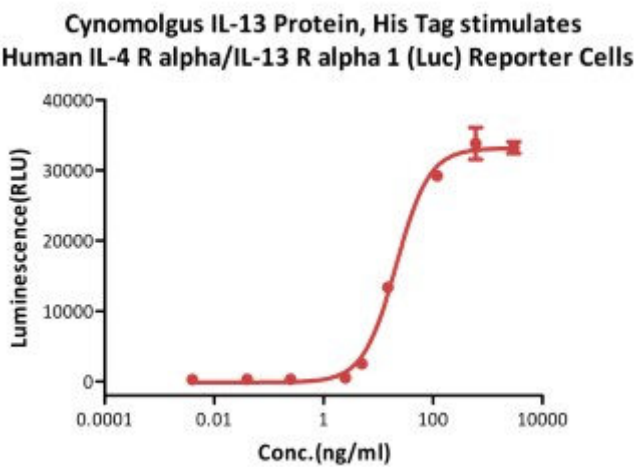


Immobilized Cynomolgus IL-13 Protein, His Tag (Cat. No. IL3-C52H5) at 5 µg/mL (100 µL/well) can bind Human IL-13 R alpha 2 Protein, Fc Tag (Cat. No. IL2-H5256) with a linear range of 0.2-10 ng/mL (QC tested).

Bioactivity-SPR



Human IL-13 R alpha 2 Protein, Fc Tag(Cat. No. IL2-H5256) captured on Protein A Chip can bind Cynomolgus IL-13 Protein, His Tag (Cat. No. IL3-C52H5) with an affinity constant of 0.013 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).



Cynomolgus IL-13 Protein, His Tag (Cat. No. IL3-C52H5) stimulates Human IL-4 R alpha/IL-13 R alpha 1 (Luc) Reporter Cells. The typical EC50 for this effect is 21.28 ng/ml (Routinely tested).

Background

Interleukin 13 (IL13) is also known as ALRH, BHR1 and P600, is a single-chain glycosylated polypeptide, and is a cytokine critical in regulating inflammatory and immune responses. IL13 is secreted by many cell types, but especially by T helper type 2 (Th2) cells. IL-13 induces its effects through a multi-subunit receptor that includes the alpha chain of the IL-4 receptor (IL-4R α) and at least one of two known IL-13-specific binding chains. The functions of IL-13 overlap considerably with those of IL-4, especially with regard to changes induced on hematopoietic cells, but these effects are probably less important given the more potent role of IL-4. IL-13 induces matrix metalloproteinases (MMPs) as part of a mechanism that protects against excessive allergic inflammation that predisposes to asphyxiation. IL-13 induces many features of allergic lung disease, including airway hyperresponsiveness, goblet cell metaplasia and mucus hypersecretion, which all contribute to airway obstruction.



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