

Synonym

IL-15, Interleukin-15, MGC9721

Source

Human IL-15, His Tag (IL5-H52H8) is expressed from human 293 cells (HEK293). It contains AA Asn 49 - Ser 162 (Accession # [P40933-1](#)).

Molecular Characterization

IL-15(Asn 49 - Ser 162)
P40933-1

Poly-his

[Other Tags and Version](#) [Biotin & Other Labeled Version](#)

This protein carries a polyhistidine tag at the C-terminus.
The protein has a calculated MW of 14.8 kDa. The protein migrates as 17-25 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

>90% as determined by SDS-PAGE.

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

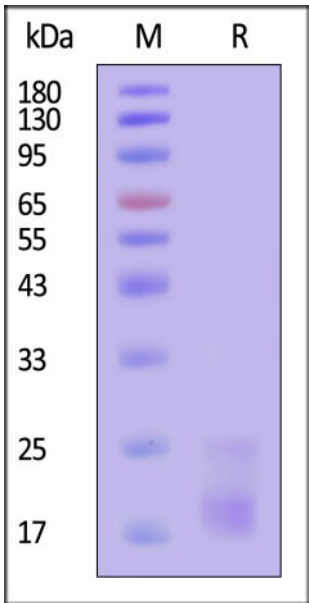
For long term storage, the product should be stored at lyophilized state at -20°C or lower.
Please avoid repeated freeze-thaw cycles.
This product is stable after storage at:

- -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

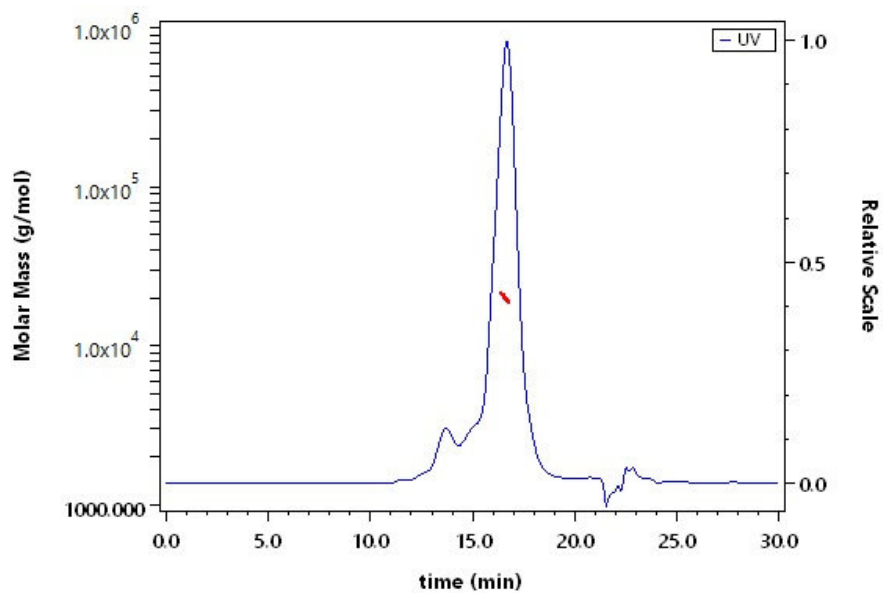
- [QMS\(ISO, GMP\)](#)
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



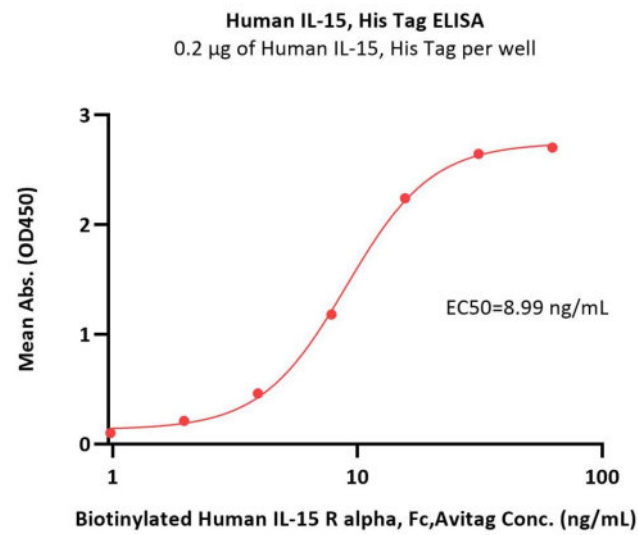
Human IL-15, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



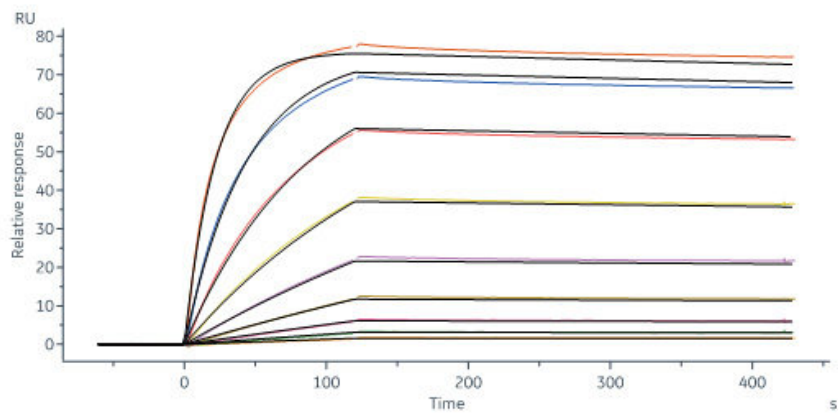
The purity of Human IL-15, His Tag (Cat. No. IL5-H52H8) is more than 85% and the molecular weight of this protein is around 15-25 kDa verified by SEC-MALS.

Bioactivity-ELISA

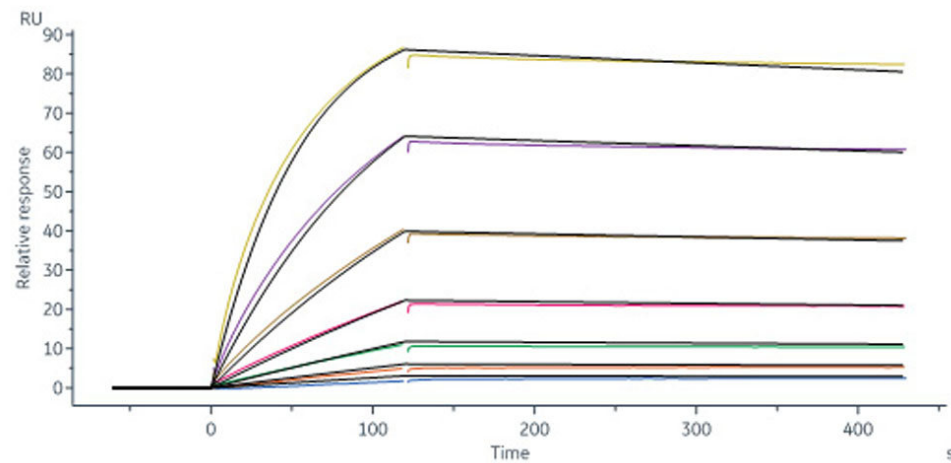


Immobilized Human IL-15, His Tag (Cat. No. IL5-H52H8) at 2 µg/mL (100 µL/well) can bind Biotinylated Human IL-15 R alpha, Fc,Avitag (Cat. No. ILA-H82F4) with a linear range of 2-31 ng/mL (QC tested).

Bioactivity-SPR



Anti-Human IL-15 (12B11E5) mAb, Mouse IgG1 (Cat. No. IL5-M542) captured on CM5 chip via anti-mouse antibodies surface can bind Human IL-15, His Tag (Cat. No. IL5-H52H8) with an affinity constant of 0.138 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).



Anti-Human IL-15 (9B5G1) MAb, Mouse IgG1 (Cat. No. IL5-M543) captured on CM5 chip via anti-mouse antibodies surface can bind Human IL-15, His Tag (Cat. No. IL5-H52H8) with an affinity constant of 2.76 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

Interleukin 15 is also known as IL15, IL-15, and is a cytokine with structural similarity to IL-2. Like IL-2, IL-15 binds to and signals through the IL-2/IL-15 beta chain (CD122) and the common gamma chain (gamma-C, CD132). IL-15 is secreted by mononuclear phagocytes (and some other cells) following infection by virus(es). This cytokine induces cell proliferation of natural killer cells; cells of the innate immune system whose principal role is to kill virally infected cells. Interleukin 15 (IL-15) regulates T and natural killer (NK) cell activation and proliferation. Survival signals that maintain memory T cells in the absence of antigen are provided by IL-15. This cytokine is also implicated in NK cell development. In rodent lymphocytes, IL-15 prevents apoptosis by inducing an apoptosis inhibitor, BCL2L1/BCL-x(L). IL-15 has been shown to enhance the anti-tumor immunity of CD8+ T cells in pre-clinical models. A phase I clinical trial to evaluate the safety, dosing, and anti-tumor efficacy of IL-15 in patients with metastatic melanoma and renal cell carcinoma (kidney cancer) has begun to enroll patients at the National Institutes of Health.

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