

**Synonym**

IL-15, Interleukin-15, MGC9721

**Source**

Biotinylated Mouse IL-15, Fc,Avitag(IL5-M82F3) is expressed from human 293 cells (HEK293). It contains AA Asn 49 - Ser 162 (Accession # [P48346-1](#)).

Predicted N-terminus: Asn 49

**Molecular Characterization**

IL-15(Asn 49 - Ser 162) P48346-1	Fc(Pro 100 - Lys 330) P01857	Avi
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This protein carries a human IgG1 Fc tag at the C-terminus, followed by an Avi tag (Avitag™)

The protein has a calculated MW of 41.5 kDa. The protein migrates as 50-60 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Labeling**

*Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.*

**Protein Ratio**

Passed as determined by the HABA assay / binding ELISA.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>95% as determined by SDS-PAGE.

**Formulation**

Lyophilized from 0.22 µm filtered solution in Tris with Glycine, Arginine and NaCl, pH7.5 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.*

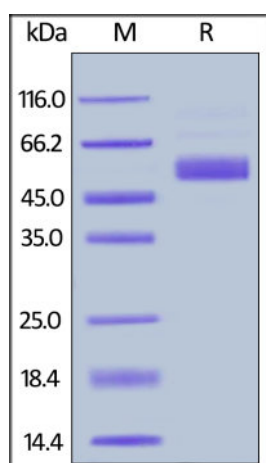
**Storage**

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

*Please avoid repeated freeze-thaw cycles.*

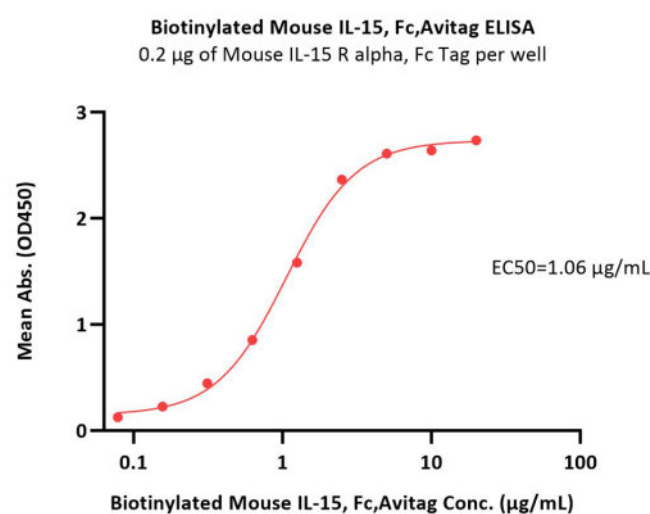
This product is stable after storage at:

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

**SDS-PAGE**

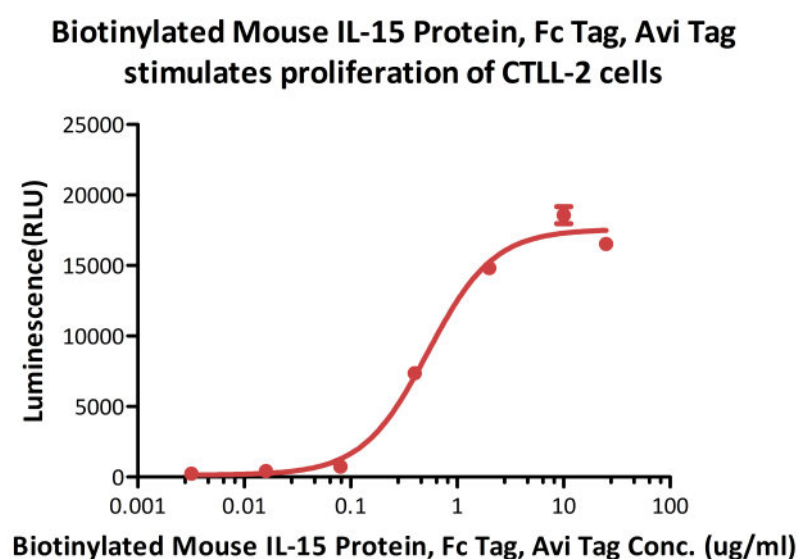
Biotinylated Mouse IL-15, Fc,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

**Bioactivity-ELISA**



Immobilized Mouse IL-15 R alpha, Fc Tag (Cat. No. ILA-M5253) at 2 µg/mL (100 µL/well) can bind Biotinylated Mouse IL-15, Fc,Avitag (Cat. No. IL5-M82F3) with a linear range of 0.078-2.5 µg/mL (QC tested).

**Bioactivity-Bioactivity CELL BASE**



Biotinylated Mouse IL-15, Fc,Avitag (Cat. No. IL5-M82F3) stimulates proliferation of CTLL-2 cells. The ED50 for this effect is 0.531-1.999 µg/mL (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.

**Clinical and Translational Updates**

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