



### Synonym

IL-15, Interleukin-15, MGC9721

### Source

Human IL-15, premium grade (IL5-H5215) is expressed from human 293 cells (HEK293). It contains AA Asn 49 - Ser 162 (Accession # [P40933-1](#)).

Predicted N-terminus: Asn 49

### Molecular Characterization

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

This protein carries no "tag".

The protein has a calculated MW of 12.8 kDa. The protein migrates as 14-16 kDa under reducing (R) condition, and 14 kDa under non-reducing (NR) condition (SDS-PAGE) due to glycosylation.

### Endotoxin

Less than 0.01 EU per µg by the LAL method.

### Host Cell Protein

<0.5 ng/µg of protein tested by ELISA.

### Host Cell DNA

<0.02 ng/µg of protein tested by qPCR.

### Sterility

Negative

### Mycoplasma

Negative.

### Purity

>95% as determined by SDS-PAGE.

>98% 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

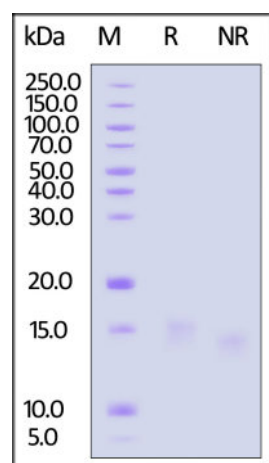
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

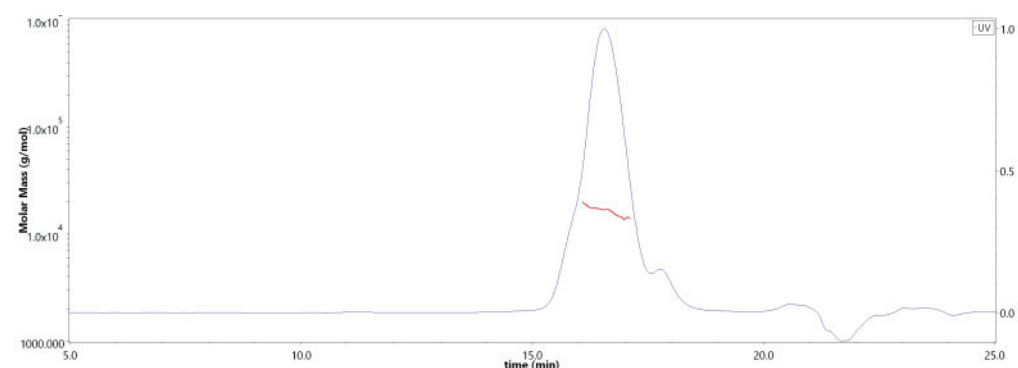
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

### SDS-PAGE



Human IL-15, premium grade on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

### SEC-MALS



The purity of Human IL-15, premium grade (Cat. No. IL5-H5215) is more than 98% and the molecular weight of this protein is around 12-20 kDa verified by SEC-MALS.

[Report](#)

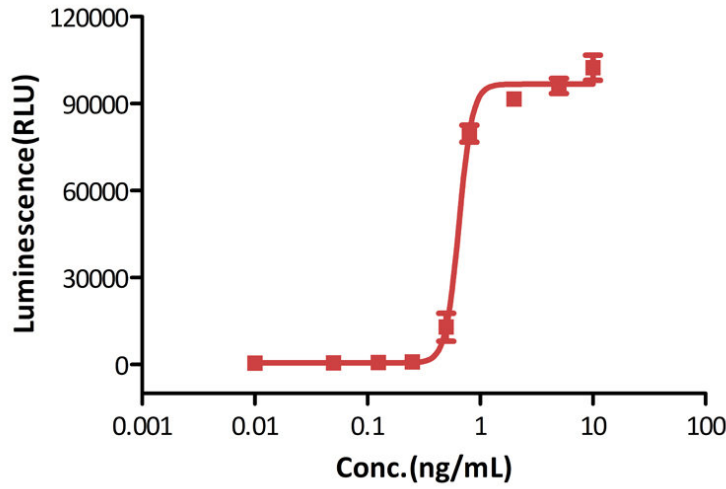
Discounts, Gifts,  
and more!





**Bioactivity-Bioactivity CELL BASE**

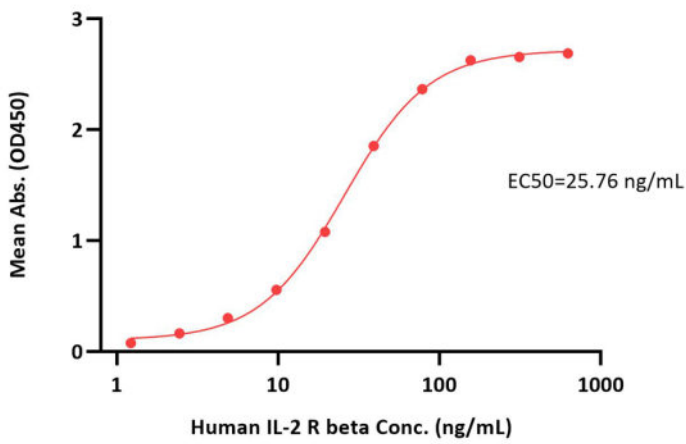
**Human IL-15, premium grade stimulates proliferation of CTLL-2**



Human IL-15, premium grade (Cat. No. IL5-H5215) stimulates proliferation of CTLL-2 cells. The specific activity of Human IL-15, premium grade is  $> 0.80 \times 10^7$  IU/mg, which is calibrated against human IL-15 WHO International Standard (NIBSC code: 95/554) (QC tested).

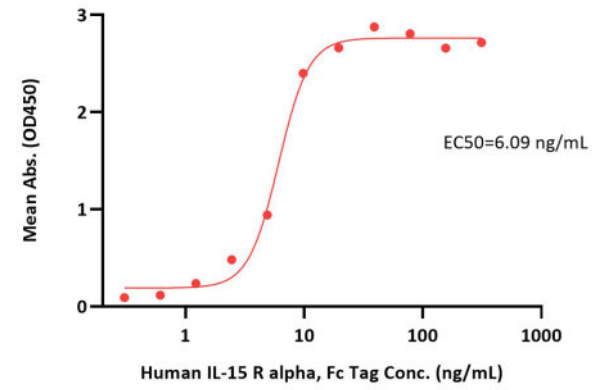
**Bioactivity-ELISA**

Human IL-15, premium grade ELISA  
0.2 µg of Human IL-15, premium grade per well



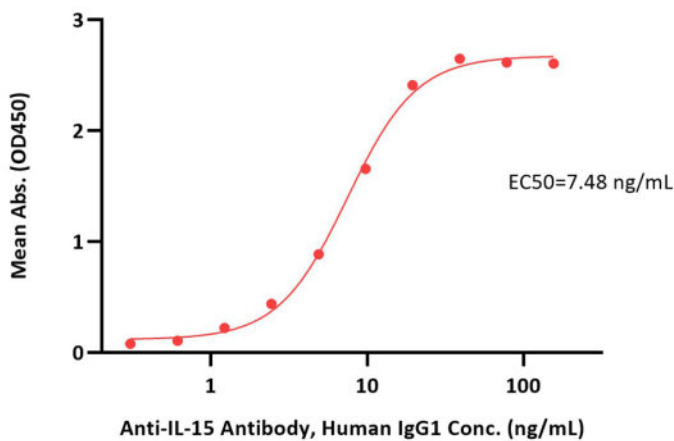
Immobilized Human IL-15, premium grade (Cat. No. IL5-H5215) at 2 µg/mL (100 µL/well) can bind Human IL-2 R beta with a linear range of 1.2-39 ng/mL (Routinely tested).

Human IL-15, premium grade ELISA  
0.2 µg of Human IL-15, premium grade per well



Immobilized Human IL-15, premium grade (Cat. No. IL5-H5215) at 2 µg/mL (100 µL/well) can bind Human IL-15 R alpha, Fc Tag (Cat. No. ILA-H5253) with a linear range of 0.3-10 ng/mL (Routinely tested).

Anti-Human IL15 (12B11E5) MAb, Mouse IgG1 ELISA  
0.1 µg of Human IL-15, premium grade per well



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## Human IL-15 Protein (HEK293), premium grade

Catalog # IL5-H5215



BIOSYSTEMS  
**Acro**

Immobilized Human IL-15, premium grade (Cat. No. IL5-H5215) at 1 µg/mL (100 µL/well) can bind Anti-IL-15 Antibody, Human IgG1 with a linear range of 0.3-10 ng/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

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