Source

Anti-Human IL-15 (12B11E5) mAb, Mouse IgG1 is a Mouse monoclonal antibody recombinantly expressed from HEK293 cells.

Clone

12B11E5

Species

Mouse

Isotype

Mouse IgG1 | Mouse Kappa

Conjugate

Unconjugated

Antibody Type

Recombinant Monoclonal

Reactivity

Human

Immunogen

Recombinant Human IL-15 is expressed from human HEK293 cells

Specificity

This product is a specific antibody specifically reacts with IL-15, Human. No cross-reactivity is detected with other human cytokines, including IL-2, IL-4, IL-6, IL-10, IL-21,GM-CSF,TNF-alpha and IFNγ.

Application

Application	Recommended Usage
ELISA	0.2-60 ng/mL

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Purification

Protein A purified / Protein G purified

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.

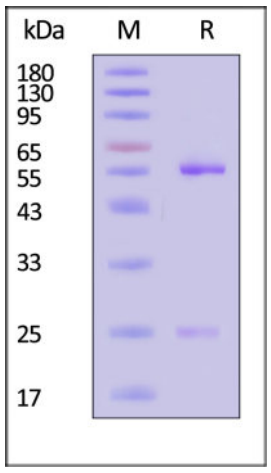
Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

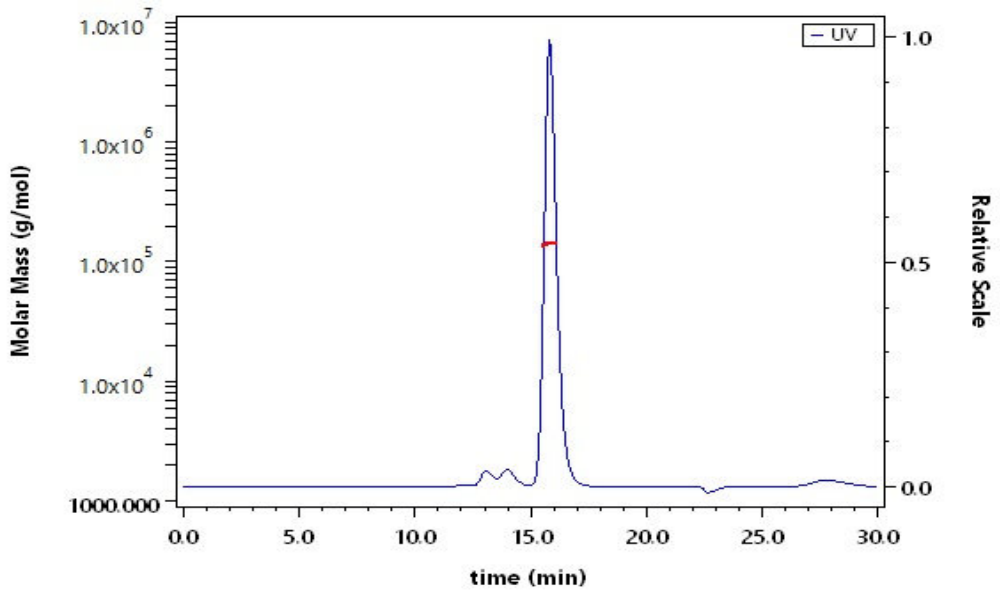
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

SEC-MALS

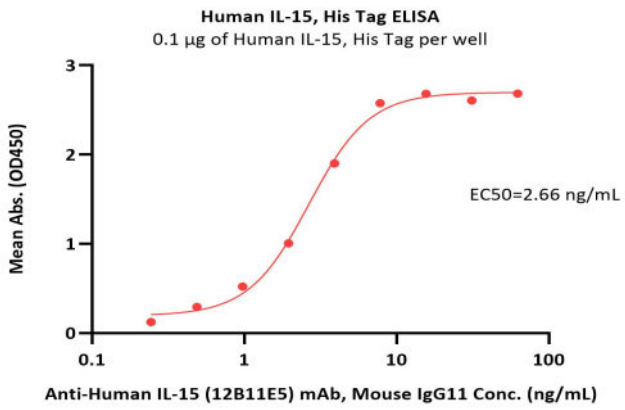


Anti-Human IL-15 (12B11E5) mAb, Mouse IgG1 on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).



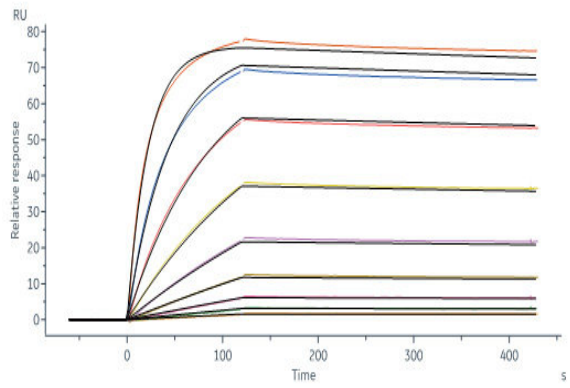
The purity of Anti-Human IL-15 (12B11E5) mAb, Mouse IgG1 (Cat. No. IL5-M542) is more than 90% and the molecular weight of this protein is around 130-160 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized Human IL-15, His Tag (Cat. No. IL5-H52H8) at 1 μg/mL (100 μL/well) can bind Anti-Human IL-15 (12B11E5) mAb, Mouse IgG1 (Cat. No. IL5-M542) with a linear range of 0.2-4 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).

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.