

#### 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.

#### Purification

Protein A purified/ Protein G purified

#### **Formulation**

Lyophilized from 0.22  $\mu m$  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.

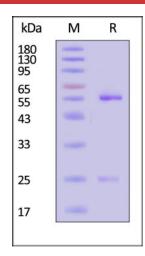
**SDS-PAGE** 



# Anti-Human IL-15 (12B11E5) mAb, Mouse IgG1

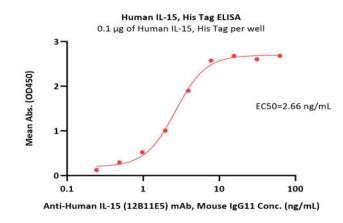
Catalog # IL5-M542





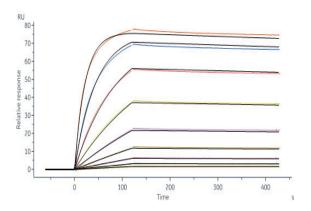
Anti-Human IL-15 (12B11E5) mAb, Mouse IgG1 on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

# **Bioactivity-ELISA**



Immobilized Human IL-15, His Tag (Cat. No. IL5-H52H8) at 1  $\mu$ g/mL (100  $\mu$ L/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**



# Anti-Human IL-15 (12B11E5) mAb, Mouse IgG1

Catalog # IL5-M542



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** 

