

Source

Mouse IL-7 Antibody, Mouse IgG1 (4C9F12) is a Mouse monoclonal antibody recombinantly expressed from HEK293 cells.

Clone

4C9F12

Species

Mouse

Isotype

Mouse IgG1 | Mouse Kappa

Conjugate

Unconjugated

Antibody Type

Recombinant Monoclonal

Reactivity

Human

Immunogen

IL-7.

Specificity

This product is a specific antibody specifically reacts with IL-7.

Application

Application	Recommended Usage
ELISA	0.1-25 ng/mL

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-HPLC.

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

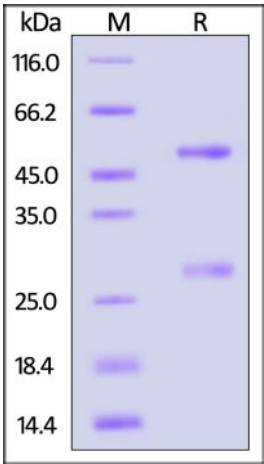
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

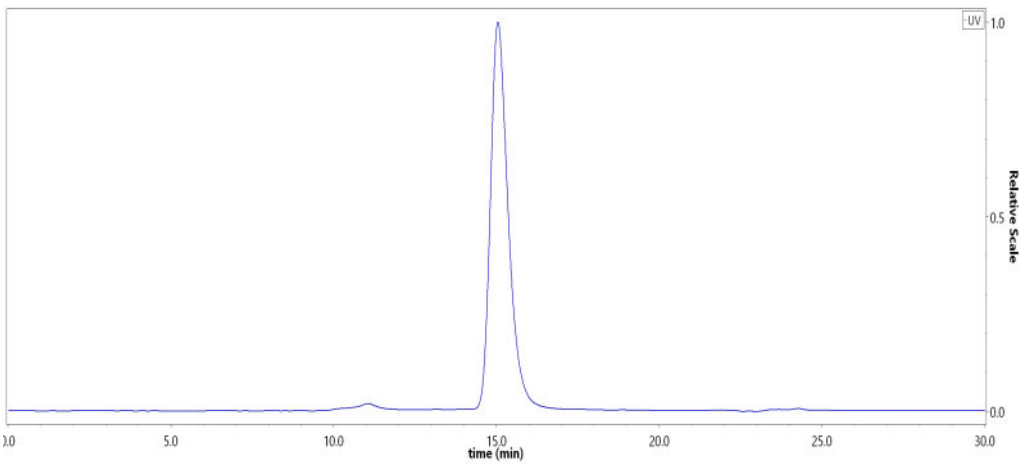
This product is stable after storage at:

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

SDS-PAGE



SEC-HPLC



Mouse IL-7 Antibody, Mouse IgG1 (4C9F12) (HPLC verified)

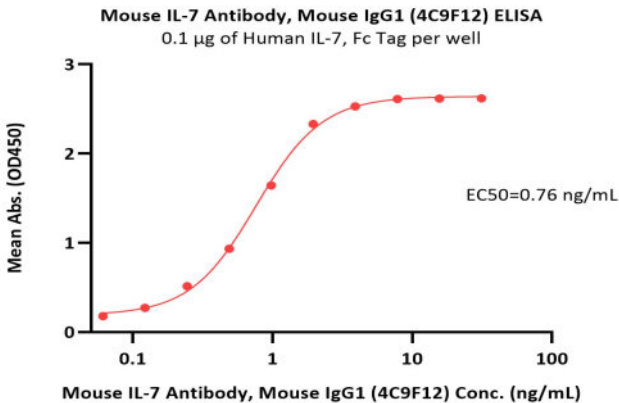
Catalog # IL7-Y84



Mouse IL-7 Antibody, Mouse IgG1 (4C9F12) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

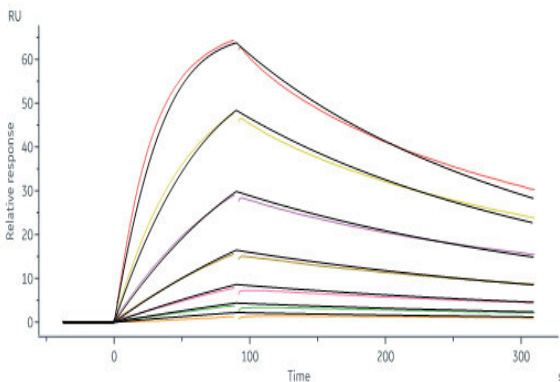
The purity of Mouse IL-7 Antibody, Mouse IgG1 (4C9F12)(Cat. No. IL7-Y84) was greater than 90% as determined by SEC-HPLC.

Bioactivity-ELISA



Immobilized Human IL-7, Fc Tag (Cat. No. IL7-H5253) at 1 µg/mL (100 µL/well) can bind Mouse IL-7 Antibody, Mouse IgG1 (4C9F12) (Cat. No. IL7-Y84) with a linear range of 0.1-2 ng/mL (QC tested).

Bioactivity-SPR



Mouse IL-7 Antibody, Mouse IgG1 (4C9F12) (Cat. No. IL7-Y84) immobilized on CM5 Chip can bind Human IL-7, premium grade (Cat. No. IL7-H4219) with an affinity constant of 2.83 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

Interleukin 7 is also known as IL7, IL-7, and is a hematopoietic growth factor secreted by stromal cells in the red marrow and thymus. It is also produced by keratinocytes, dendritic cells, hepatocytes, neurons, and epithelial cells, but is not produced by lymphocytes. IL-7 stimulates the differentiation of multipotent (pluripotent) hematopoietic stem cells into lymphoid progenitor cells, It also stimulates proliferation of all cells in the lymphoid lineage (B cells, T cells and NK cells). It is important for proliferation during certain stages of B-cell maturation, T and NK cell survival, development and homeostasis. IL-7 is a cytokine important for B and T cell development. This cytokine and the hepatocyte growth factor (HGF) form a heterodimer that functions as a pre-pro-B cell growth-stimulating factor. IL-7 binds to the IL-7 receptor, a heterodimer consisting of Interleukin-7 receptor alpha and common gamma chain receptor. Il-7 promotes hematological malignancies (acute lymphoblastic leukemia, T cell lymphoma). Elevated levels of IL-7 have also been detected in the plasma of HIV-infected patients. IL-7 as an immunotherapy agent has been examined in many pre-clinical animal studies and more recently in human clinical trials for various malignancies and during HIV infection. IL-7 could also be beneficial in improving immune recovery after allogenic stem cell transplant.

Discounts, Gifts,
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