

**Synonym**

IL4R,CD124,IL4RA

**Source**

Mouse IL-4 R alpha, His Tag(ILR-M52H1) is expressed from human 293 cells (HEK293). It contains AA Ile 26 - Arg 233 (Accession # [NP\\_001008700](#) ).

Predicted N-terminus: Ile 26

**Molecular Characterization**

IL-4 R alpha(Ile 26 - Arg 233) NP_001008700	Poly-his
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This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 26.3 kDa. The protein migrates as 37-45 kDa under reducing (R) condition (SDS-PAGE).

**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 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**

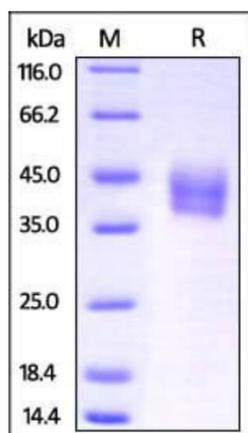
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

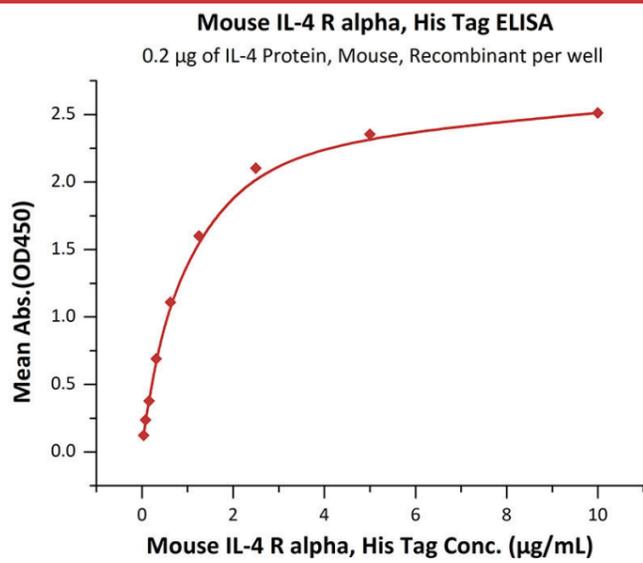
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

**SDS-PAGE**



Mouse IL-4 R alpha, His Tag 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 IL-4 Protein, Mouse, Recombinant at 2 µg/mL (100 µL/well) can bind Mouse IL-4 R alpha, His Tag (Cat. No. ILR-M52H1) with a linear range of 0.039-1.25 µg/mL (Routinely tested).

## Background

IL-4 is a pleiotropic cytokine produced by activated Th2 cells and mast cells, and plays a pivotal role in immune responses. The effects of IL-4 are mediated after binding to high affinity receptor complexes present on hematopoietic as well as non-hematopoietic cells. Hematopoietic cellular responses to IL-4 are mediated by a high affinity receptor complex comprised of the 140 kDa IL4R $\alpha$  (CD124) subunit and the 70 kDa common cytokine  $\gamma$ c chain (CD132).

Interleukin 4 Receptor (IL4R) also known as CD124, IL4R $\alpha$  and BSF receptor, is a type I cytokine receptor produced by activated Th2 cells and mast cells, and plays an important role in Th2-biased immune responses, alternative macrophage activation, mucosal immunity, allergic inflammation, tumor progression, and atherogenesis. A soluble form of the encoded IL4R protein can be produced by an alternate splice variant or by proteolysis of the membrane-bound protein, and this soluble form can inhibit IL4-mediated cell proliferation and IL5 upregulation by T-cells. IL4R can alternatively associate with IL-13R $\alpha$ 1 to form the type II receptor which is responsive to both IL4 and IL13. Interleukin-4 receptor has been shown to interact with SHC1.

## Clinical and Translational Updates

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