

**Synonym**

IL4R,CD124,IL4RA

**Source**

Cynomolgus / Rhesus macaque IL-4 R alpha, Fc Tag (ILR-C5258) is expressed from human 293 cells (HEK293). It contains AA Met 26 - Arg 232 (Accession # [G7Q0S7](#)). In the region Met 26 - Arg 232, the AA sequence of Cynomolgus and Rhesus macaque IL-4 R alpha are homologous.

Predicted N-terminus: Met 26

**Molecular Characterization**

|  |                                 |
|--|---------------------------------|
| IL-4 R alpha(Met 26 - Arg 232)<br>G7Q0S7 | Fc(Pro 100 - Lys 330)<br>P01857 |
|--|---------------------------------|

This protein carries a human IgG1 Fc tag at the C-terminus

The protein has a calculated MW of 50.4 kDa. The protein migrates as 60-90 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

&gt;95% as determined by SDS-PAGE.

**Formulation**

Lyophilized from 0.22 µm filtered solution in Tris with Glycine, Arginine and NaCl, pH7.5 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.*

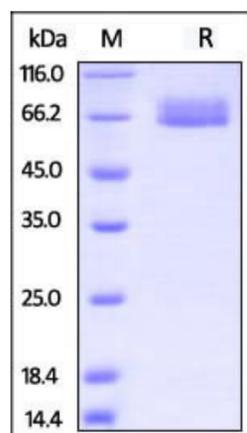
**Storage**

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

*Please avoid repeated freeze-thaw cycles.*

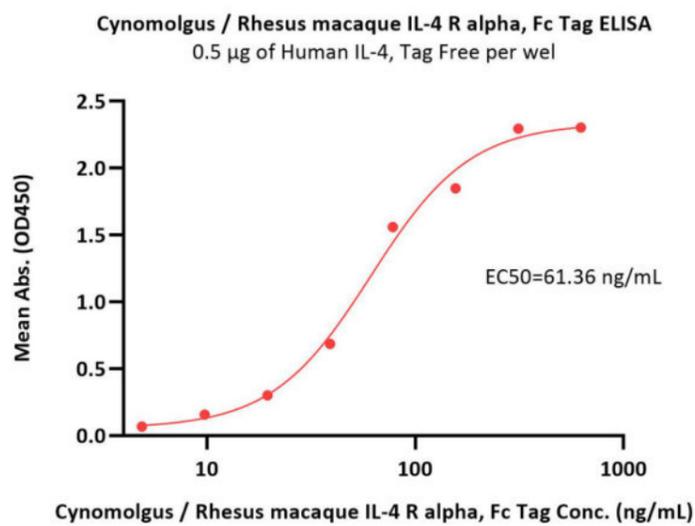
This product is stable after storage at:

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

**SDS-PAGE**

Cynomolgus / Rhesus macaque IL-4 R alpha, Fc 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 Human IL-4, premium grade (Cat. No. IL4-H4218) at 5 µg/mL (100 µL/well) can bind Cynomolgus / Rhesus macaque IL-4 R alpha, Fc Tag (Cat. No. ILR-C5258) with a linear range of 10-78 ng/mL (QC 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.