

Rat IL-4 R alpha & IL-13 R alpha 1 Protein, His Tag&His Tag (MALS & SPR verified)

Catalog # ILR-R52H5



Synonym

IL-4 R alpha & IL-13 R alpha 1, IL4RA & IL13RA1

Source

Rat IL-4 R alpha & IL-13 R alpha 1 Protein, His Tag&His Tag (ILR-R52H5) is expressed from human 293 cells (HEK293). It contains AA Ile 26 - Arg 232 & Thr 27 - Thr 342 (Accession # [Q63257-1](#) & [Q561K3](#)).

Predicted N-terminus: Ile 26 & Thr 27

Molecular Characterization

IL-4 R alpha (Ile 26 - Arg 232) Q63257-1	Poly-his
IL-13 R alpha 1 (Thr 27 – Thr 342) Q561K3	Poly-his

Rat IL-4 R alpha & IL-13 R alpha 1 Protein, His Tag&His Tag, produced by co-expression of IL-4 R alpha and IL-13 R alpha 1, has a calculated MW of 29.1 kDa (IL-4 R alpha) and 41 kDa (IL-13 R alpha 1). Subunit IL-4 R alpha is fused with a polyhistidine tag at the C-terminus, and subunit IL-13 R alpha 1 contains a polyhistidine tag at the C-terminus. The protein migrates as 43-53 kDa and 60-70 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

The protein is designed as a heterodimer.

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

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.

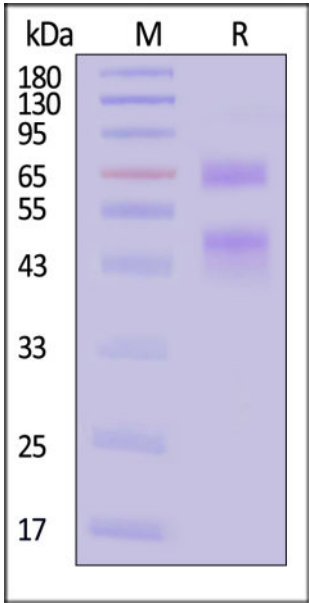
This product is stable after storage at:

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

ACRO Quality Management System

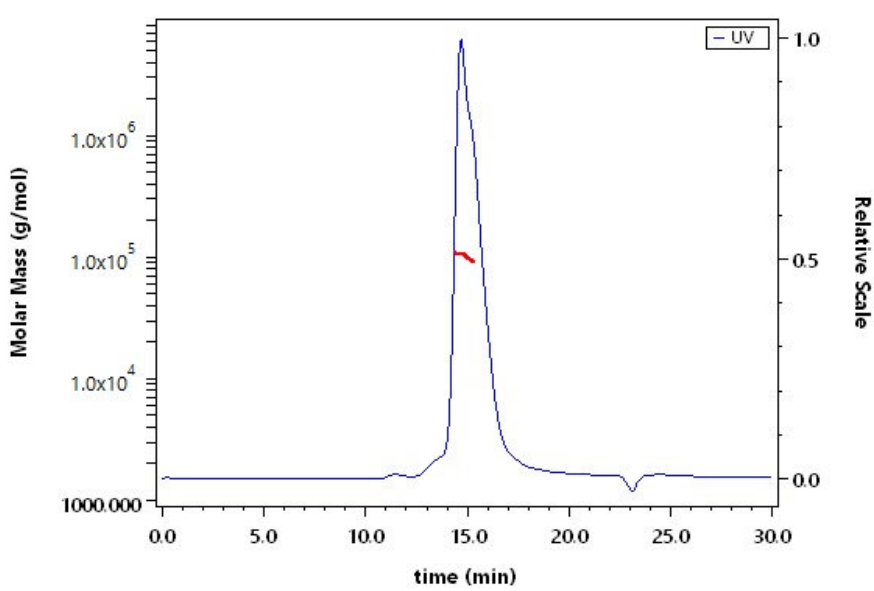
- [QMS\(ISO, GMP\)](#)
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



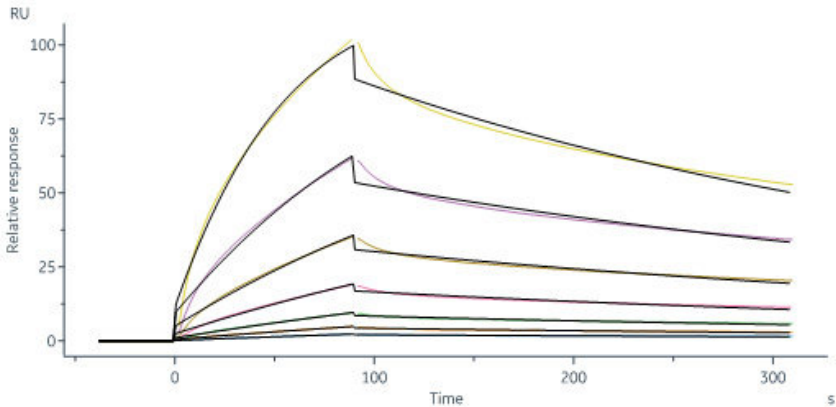
Rat IL-4 R alpha & IL-13 R alpha 1 Protein, His Tag&His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



The purity of Rat IL-4 R alpha & IL-13 R alpha 1 Protein, His Tag&His Tag (Cat. No. ILR-R52H5) is more than 90% and the molecular weight of this protein is around 90-110 kDa verified by SEC-MALS.

Bioactivity-SPR



Mouse IL-4, His Tag (Cat. No. IL4-M52H5) immobilized on CM5 Chip can bind Rat IL-4 R alpha & IL-13 R alpha 1 Protein, His Tag&His Tag (Cat. No. ILR-R52H5) with an affinity constant of 8.80 nM as determined in a SPR assay (Biacore 8K) (QC tested).

Background

Interleukin 4 Receptor (IL4R) also known as CD124, IL4R α 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 IL13Ra1 to form the type II receptor which is responsive to both IL4 and IL13. Interleukin-4 receptor has been shown to interact with SHC1.



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