Human IL-4 R alpha & IL-13 R alpha 1 Protein, Fc Tag&Fc Tag (MALS verified)

Catalog # ILR-H525b

Synonym

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

Source

Human IL-4 R alpha & IL-13 R alpha 1 Protein, Fc Tag&Fc Tag(ILR-H525b) is expressed from human 293 cells (HEK293). It contains AA Met 26 - His 232 & Gly 22 - Thr 343 (Accession # P24394-1 & NP_001551.1).
Predicted N-terminus: Met 26 & Gly 22

Molecular Characterization

IL4Ra (Met 26 - His 232) P24394-1	Fc(Pro 100 - Lys 330) P01857
IL13Ra1 (Gly 22 - Thr 343) NP_001551.1	Fc(Pro 100 - Lys 330) P01857

Human IL-4 R alpha & IL-13 R alpha 1 Protein, Fc Tag&Fc Tag is produced by co-expression of IL-4 R alpha and IL-13 R alpha 1, has a calculated MW of 50.2 kDa & 63.1 kDa. Subunit IL-4 R alpha is fused with a human IgG1 Fc tag at the C-terminus and subunit IL-13 R alpha 1 is fused with a human IgG1 Fc tag at the C-terminus. The protein migrates as 65-95 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>95% 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

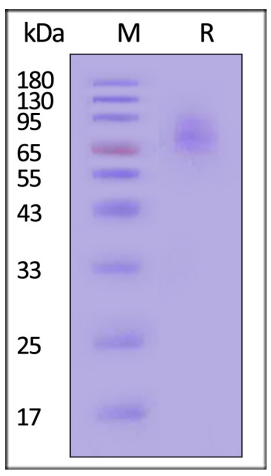
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

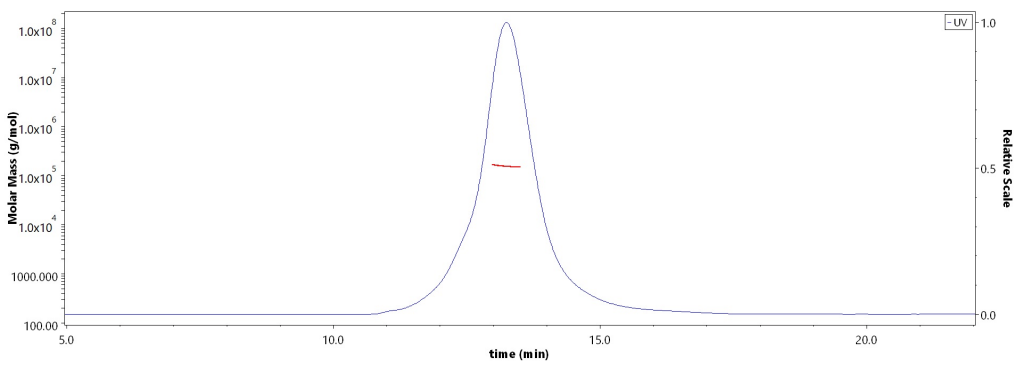
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human IL-4 R alpha & IL-13 R alpha 1 Protein, Fc Tag&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% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS

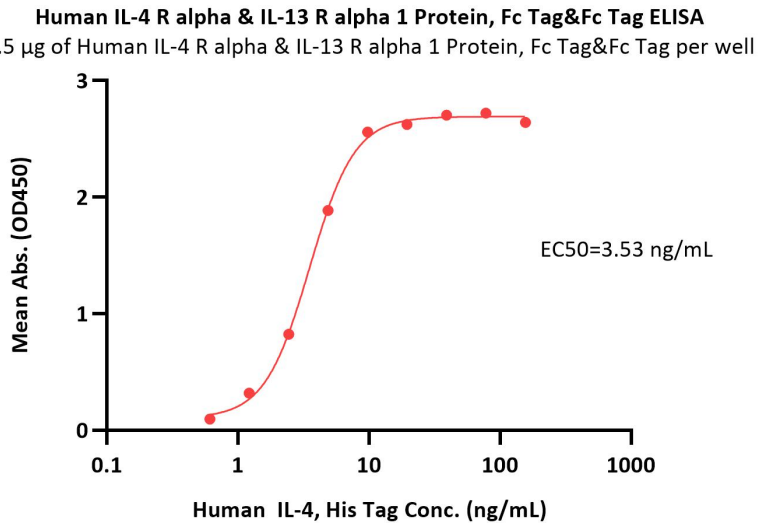


The purity of Human IL-4 R alpha & IL-13 R alpha 1 Protein, Fc Tag&Fc Tag (Cat. No. ILR-H525b) is more than 90% and the molecular weight of this protein is around 140-170 kDa verified by SEC-MALS.
Report

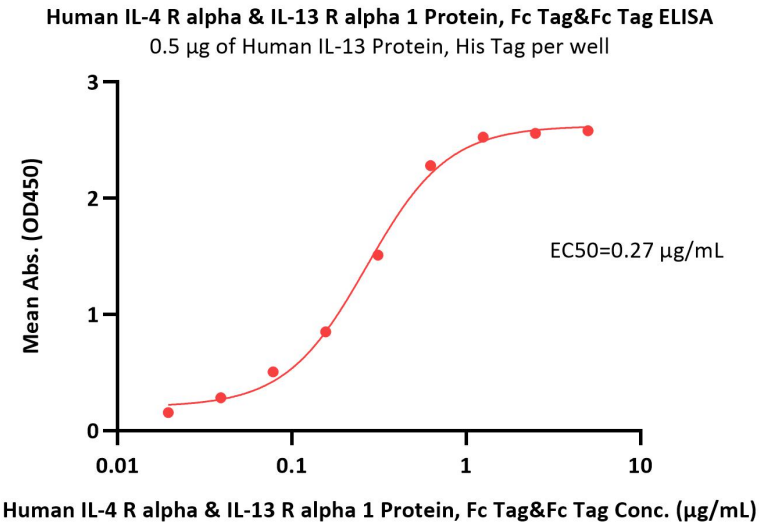
Bioactivity-ELISA

Human IL-4 R alpha & IL-13 R alpha 1 Protein, Fc Tag&Fc Tag (MALS verified)

Catalog # ILR-H525b



Immobilized Human IL-4 R alpha & IL-13 R alpha 1 Protein, Fc Tag&Fc Tag (Cat. No. ILR-H525b) at 5 μg/mL (100 μL/well) can bind Human IL-4, His Tag (Cat. No. IL4-H52H9) with a linear range of 0.6-5 ng/mL (QC tested).



Immobilized Human IL-13 Protein, His Tag (Cat. No. IL3-H52H4) at 5 μg/mL (100 μL/well) can bind Human IL-4 R alpha & IL-13 R alpha 1 Protein, Fc Tag&Fc Tag (Cat. No. ILR-H525b) with a linear range of 0.02-0.625 μg/mL (Routinely tested).

Background

Interleukin 4 Receptor (IL4R) also known as CD124, IL4Rα 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.