

Synonym

IL13RA2,CD213A2,CT19,IL-13R,IL13BP

Source

Human IL-13 R alpha 2 Protein, Fc Tag(IL2-H5256) is expressed from human 293 cells (HEK293). It contains AA Asp 27 - Arg 343 (Accession # [NP_000631.1](#)).

Predicted N-terminus: Pro

Molecular Characterization

Fc(Pro 100 - Lys 330) P01857	IL-13RA2(Asp 27 - Arg 343) NP_000631.1
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This protein carries a human IgG1 Fc tag at the N-terminus

The protein has a calculated MW of 63.5 kDa. The protein migrates as 66-80 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

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.

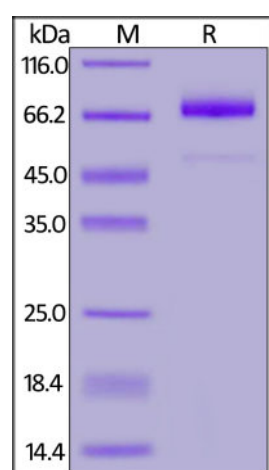
Storage

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

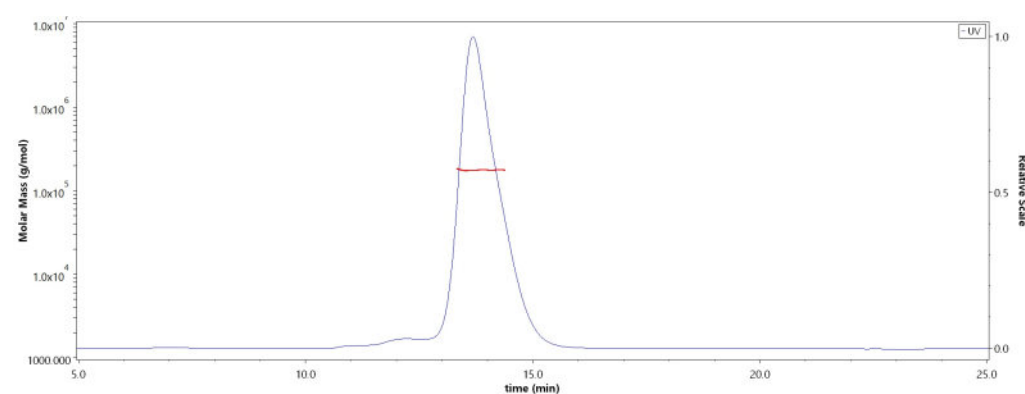
Please avoid repeated freeze-thaw cycles.

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.

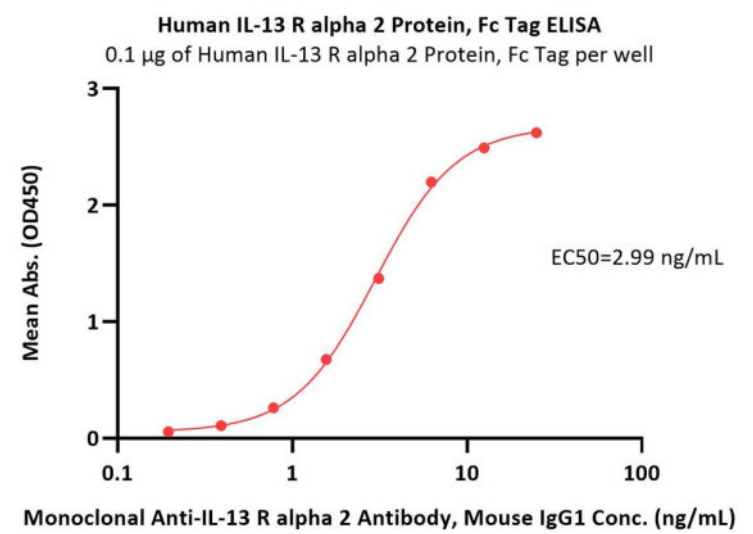
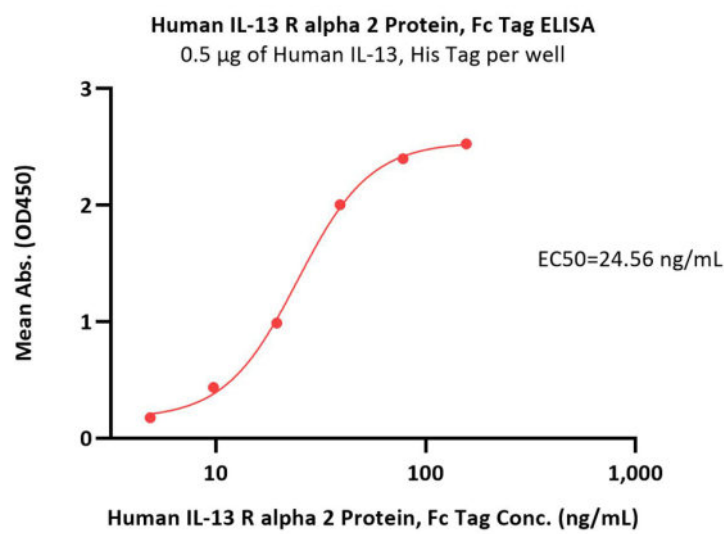
SDS-PAGE

Human IL-13 R alpha 2 Protein, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA**SEC-MALS**

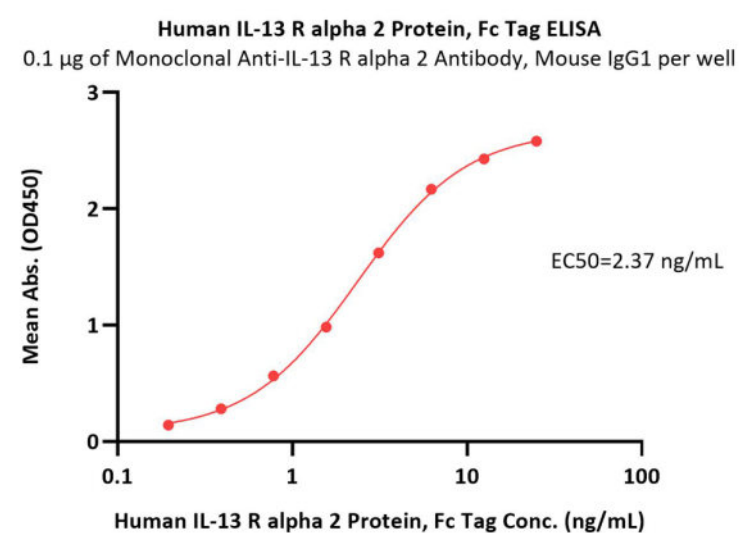
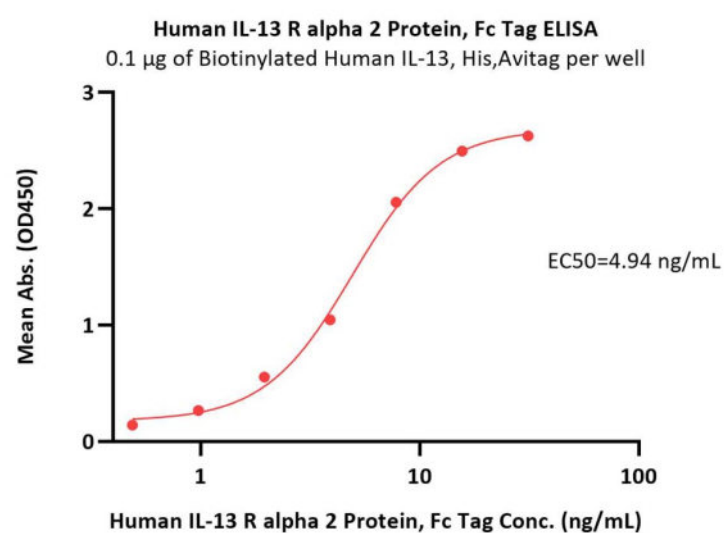
The purity of Human IL-13 R alpha 2 Protein, Fc Tag (Cat. No. IL2-H5256) is more than 90% and the molecular weight of this protein is around 160-190 kDa verified by SEC-MALS.

[Report](#)



Immobilized Human IL-13, His Tag (Cat. No. IL3-H52H4) at 5 µg/mL (100 µL/well) can bind Human IL-13 R alpha 2 Protein, Fc Tag (Cat. No. IL2-H5256) with a linear range of 5-39 ng/mL (QC tested).

Immobilized Human IL-13 R alpha 2 Protein, Fc Tag (Cat. No. IL2-H5256) at 1 µg/mL (100 µL/well) can bind Monoclonal Anti-IL-13 R alpha 2 Antibody, Mouse IgG1 with a linear range of 0.2-6 ng/mL (QC tested).



Immobilized Biotinylated Human IL-13, His,Avitag (Cat. No. IL3-H82E5) at 1 µg/mL (100 µL/well) on streptavidin precoated (0.5 µg/well) plate, can bind Human IL-13 R alpha 2 Protein, Fc Tag (Cat. No. IL2-H5256) with a linear range of 0.5-8 ng/mL (Routinely tested).

Immobilized Monoclonal Anti-IL-13 R alpha 2 Antibody, Mouse IgG1 at 1 µg/mL (100 µL/well) can bind Human IL-13 R alpha 2 Protein, Fc Tag (Cat. No. IL2-H5256) with a linear range of 0.2-3 ng/mL (Routinely tested).

Background

Interleukin-13 receptor subunit alpha-2 is also known as IL13R α 2, IL13R α 2 cluster of differentiation 213A2, CD213A2, CT19, IL-13R, IL13BP, and is a membrane bound protein that in humans is encoded by the IL13RA2 gene. IL13R α 2 is closely related to IL13R α 1, a subunit of the interleukin-13 receptor complex. This protein binds IL13 with high affinity, but lacks any significant cytoplasmic domain, and does not appear to function as a signal mediator. It is, however able to regulate the effects of both IL13 and IL4, despite the fact it is unable to bind directly to the latter. It is also reported to play a role in the internalization of IL13. IL13R α 2 is a component of the cell surface receptors, however, the majority exists in intracellular pools and in soluble form, and thus plays an opposite role as a potent IL13 antagonist compared with IL13R α 1. It also functions as an inhibitor of IL4-dependent pathway probably through the physical interaction between the short intracellular domain of and cytoplasmic domain of IL13R α 2 and the IL4R α chain. In spite of the failed STAT signaling function, IL13R α 2 dose induce TGF-beta production and fibrosis. Additionally, IL13R α 2 has been reported to be abundantly and specifically overexpressed in glioblastoma multiforme.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.