

Synonym

IL13RA1,CD213A1,IL-13Ra,NR4,RP13-128O4.2,IL13Rα1

Source

Mouse IL-13RA1, Fc Tag(IL1-M5258) is expressed from human 293 cells (HEK293). It contains AA Ala 26 - Thr 340 (Accession # [NP_598751](#)).
 Predicted N-terminus: Ala 26

Molecular Characterization

IL-13RA1(Ala 26 - Thr 340) NP_598751	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus
 The protein has a calculated MW of 62.7 kDa. The protein migrates as 67-100 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

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 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

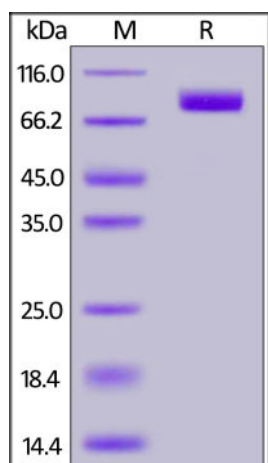
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

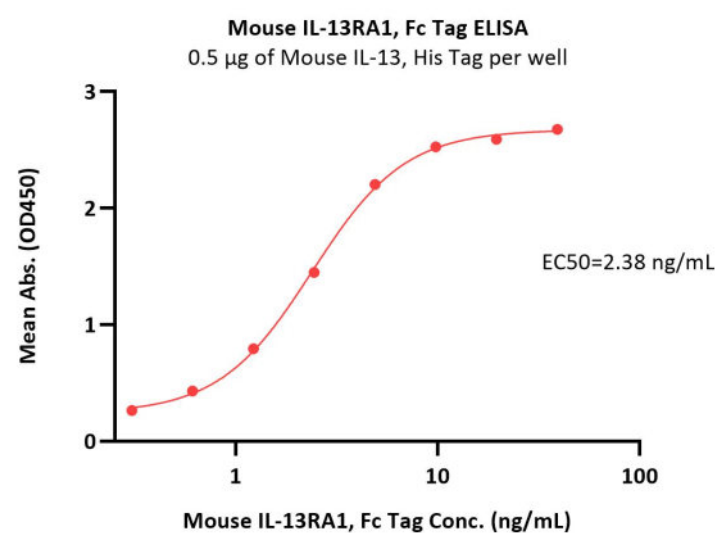
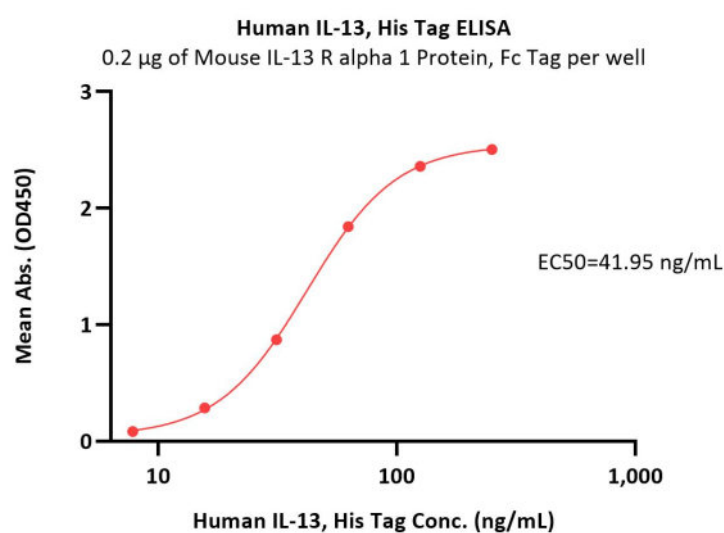
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Mouse IL-13RA1, 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%.

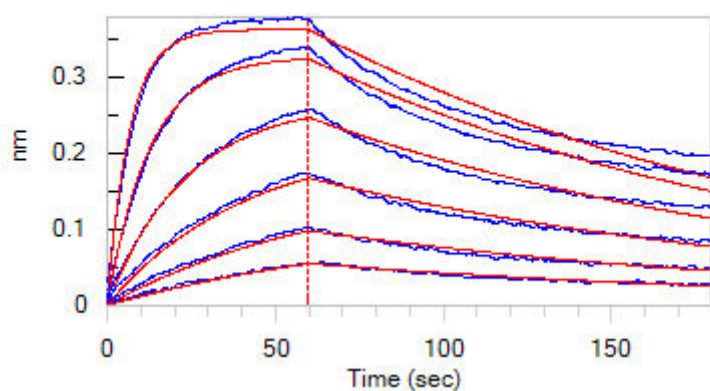
Bioactivity-ELISA



Immobilized Mouse IL-13RA1, Fc Tag (Cat. No. IL1-M5258) at 2 µg/mL (100 µL/well) can bind Human IL-13, His Tag (Cat. No. IL3-H52H4) with a linear range of 8-63 ng/mL (QC tested).

Immobilized Mouse IL-13, His Tag (Cat. No. IL3-M5249) at 5 µg/mL (100 µL/well) can bind Mouse IL-13RA1, Fc Tag (Cat. No. IL1-M5258) with a linear range of 0.3-5 ng/mL (Routinely tested).

Bioactivity-BLI



Loaded Mouse IL-13RA1, Fc Tag (Cat. No. IL1-M5258) on Protein A Biosensor, can bind Human IL-13, His Tag (Cat. No. IL3-H52H4) with an affinity constant of 22.5 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Interleukin 13 receptor, alpha 1 is also known as IL13RA1, NR4 and CD213A1 (cluster of differentiation 213A1), The IL13 Rα1 cDNA encodes a 427 amino acid (aa) residue precursor protein with a putative 21 aa residue signal peptide, a 324 aa residue extracellular domain, a 23 aa residue transmembrane region and a 59 aa residue cytoplasmic tail. Human and mouseIL13Rα1 share 76% aa sequence identity. IL13RA1 is a subunit of the interleukin 13 receptor. This subunit forms a receptor complex with IL4 receptor alpha, a subunit shared by IL13 and IL4 receptors. This subunit serves as a primary IL13-binding subunit of the IL13 receptor, and may also be a component of IL4 receptors. This protein has been shown to bind tyrosine kinase TYK2, and thus may mediate the signaling processes that lead to the activation of JAK1, STAT3 and STAT6 induced by IL13 and IL4.

Clinical and Translational Updates

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