

Synonym

IL13,ALRH,BHR1,MGC116786,MGC116788,MGC116789,P600,Interleukin-13

SourceHuman IL-13, Fc Tag(IL3-H5256) is expressed from human 293 cells (HEK293). It contains AA Gly 21 - Asn 132 (Accession # [AAK53823.1](#)).

Predicted N-terminus: Gly 21

Molecular Characterization

IL-13(Gly 21 - Asn 132) AAK53823.1	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 38.8 kDa. The protein migrates as 50-60 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.

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.

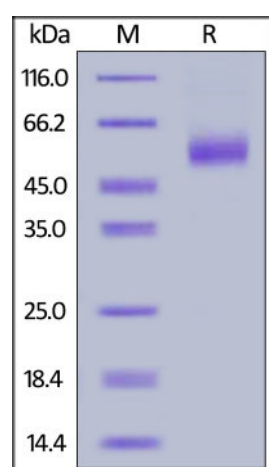
*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.***Storage**

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

Please avoid repeated freeze-thaw cycles.

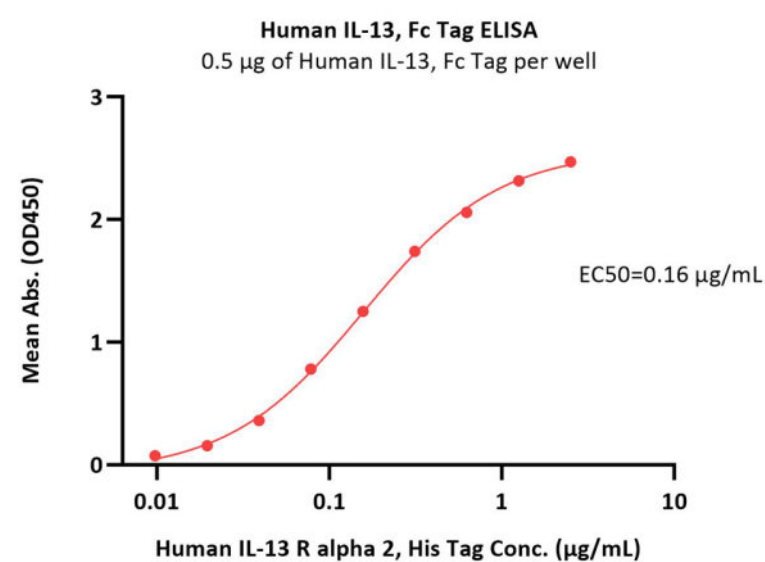
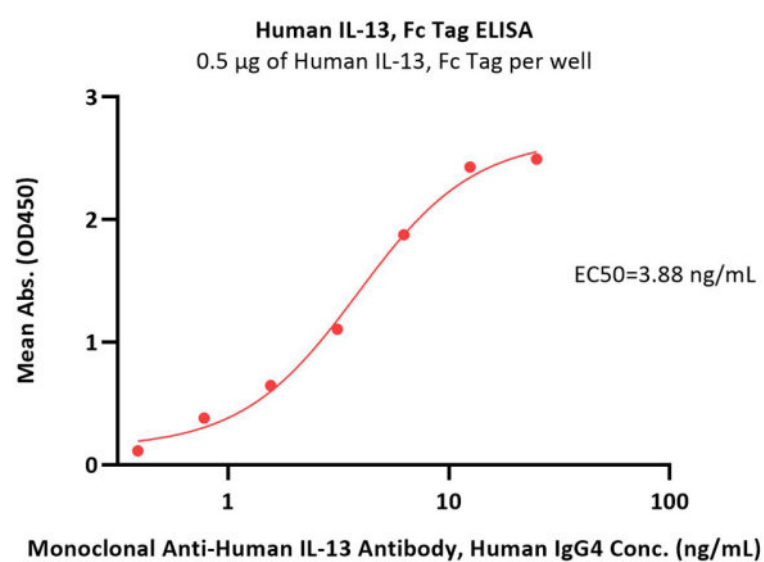
This product is stable after storage at:

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

SDS-PAGE

Human IL-13, 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%.

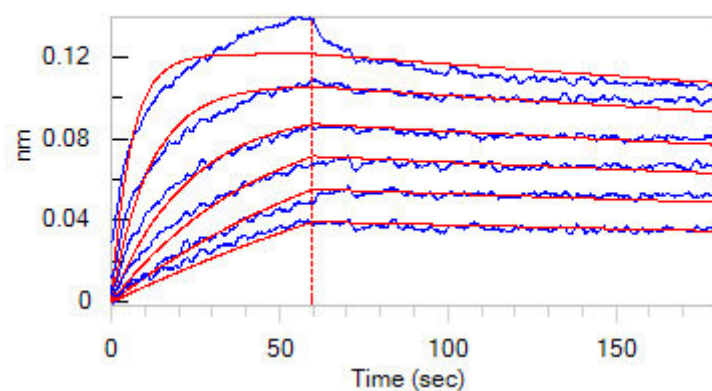
Bioactivity-ELISA



Immobilized Human IL-13, Fc Tag (Cat. No. IL3-H5256) at 5 µg/mL (100 µL/well) can bind Monoclonal Anti-Human IL-13 Antibody, Human IgG4 with a linear range of 0.4-6 ng/mL (QC tested).

Immobilized Human IL-13, Fc Tag (Cat. No. IL3-H5256) at 5 µg/mL (100 µL/well) can bind Human IL-13 R alpha 2, His Tag (Cat. No. IL2-H52H5) with a linear range of 0.02-0.313 µg/mL (Routinely tested).

Bioactivity-BLI



Loaded Human IL-13, Fc Tag (Cat. No. IL3-H5256) on Protein A Biosensor, can bind Human IL-13 R alpha 2, His Tag (Cat. No. IL2-H52H5) with an affinity constant of 6.09 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Interleukin 13 (IL13) is also known as ALRH, BHR1 and P600, is a single-chain glycosylated polypeptide, and is a cytokine critical in regulating inflammatory and immune responses. IL13 is secreted by many cell types, but especially by T helper type 2 (Th2) cells. IL-13 induces its effects through a multi-subunit receptor that includes the alpha chain of the IL-4 receptor (IL-4R α) and at least one of two known IL-13-specific binding chains. The functions of IL-13 overlap considerably with those of IL-4, especially with regard to changes induced on hematopoietic cells, but these effects are probably less important given the more potent role of IL-4. IL-13 induces matrix metalloproteinases (MMPs) as part of a mechanism that protects against excessive allergic inflammation that predisposes to asphyxiation. IL-13 induces many features of allergic lung disease, including airway hyperresponsiveness, goblet cell metaplasia and mucus hypersecretion, which all contribute to airway obstruction.

Clinical and Translational Updates

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