

Synonym

IL7Ra,CD127

Source

Human IL-7 R alpha, Mouse IgG2a Fc Tag(IL7-H5258) is expressed from human 293 cells (HEK293). It contains AA Glu 21 - Gly 236 (Accession # [P16871-1](#) (I66T,V138I)).

Predicted N-terminus: Glu 21

Molecular Characterization

This protein carries a mouse IgG2a Fc tag at the C-terminus

The protein has a calculated MW of 52.0 kDa. The protein migrates as 65-115 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.

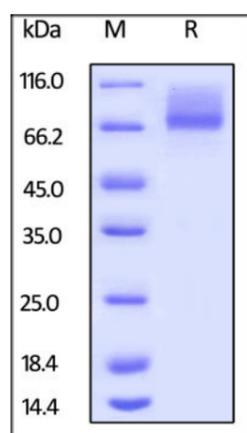
Storage

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

Please avoid repeated freeze-thaw cycles.

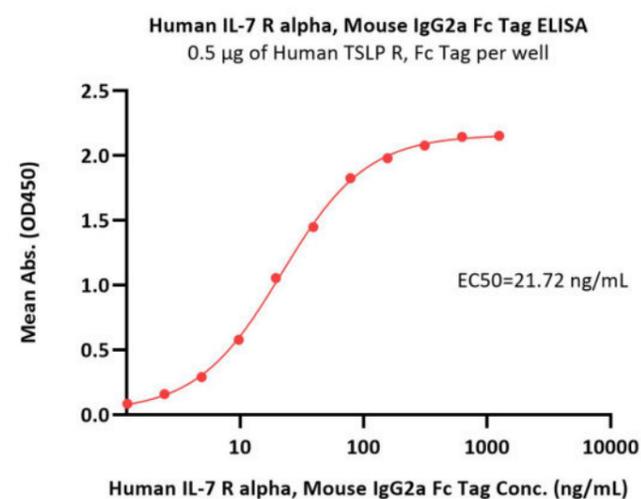
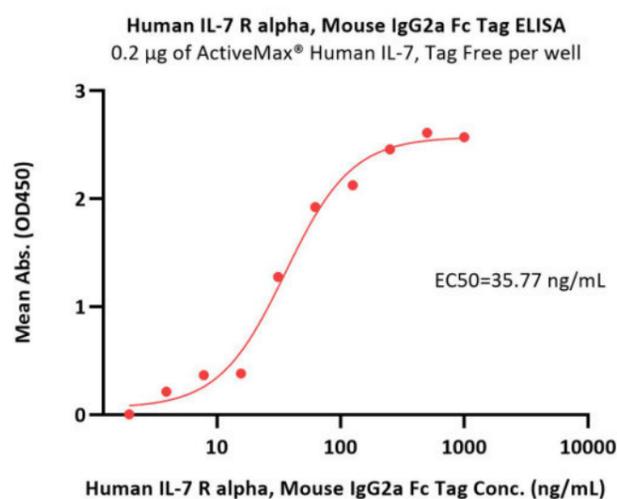
This product is stable after storage at:

- -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-7 R alpha, Mouse IgG2a 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%.

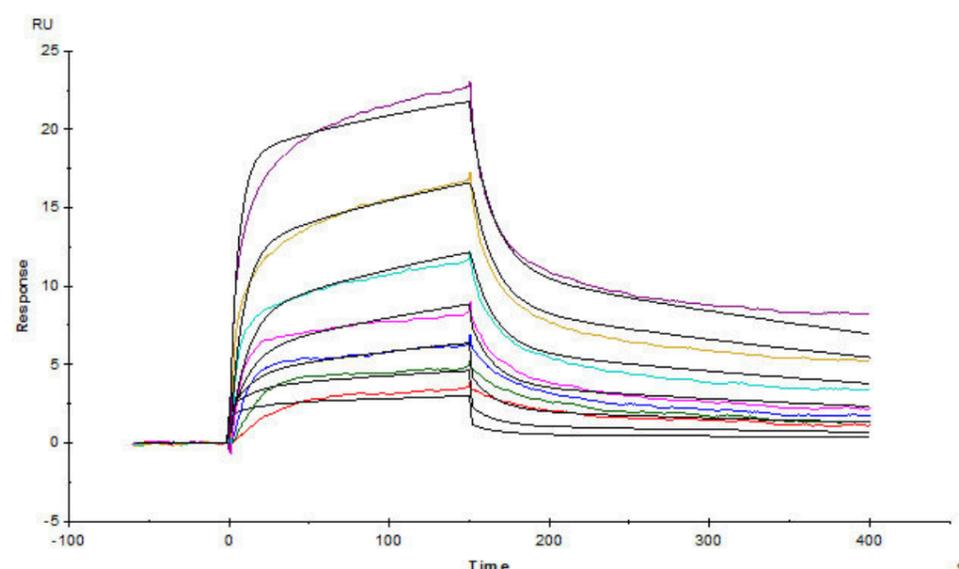
Bioactivity-ELISA



Immobilized Human IL-7 Protein, premium grade (Cat. No. IL7-H4219) at 2 µg/mL (100 µL/well) can bind Human IL-7 R alpha, Mouse IgG2a Fc Tag (Cat. No. IL7-H5258) with a linear range of 4-31 ng/mL (QC tested).

Biotinylated Human TSLP (R127A, R130A), His,Avitag (Cat. No. TSP-H82E0) immobilized at 2 µg/mL (100 µL/well) via precoated 5 µg/mL (100 µL/well) of Human TSLP R, Fc Tag (Cat. No. TSR-H525a), can bind Human IL-7 R alpha, Mouse IgG2a Fc Tag (Cat. No. IL7-H5258) with a linear range of 1-20 ng/mL (Routinely tested).

Bioactivity-SPR



Captured Human IL-7 R alpha, Mouse IgG2a Fc Tag (Cat. No. IL7-H5258) on CM5 chip via anti-mouse antibodies surface can bind ActiveMax® Human IL-7, Tag Free (Cat. No. IL7-H4219) with an affinity constant of 13.3 nM as determined in a SPR assay (Biacore T200) (Routinely tested).

Background

Interleukin-7 receptor subunit alpha (IL7Ra) is also known as CD antigen CD127, which belongs to the type I cytokine receptor family and type 4 subfamily. IL7Ra /CD127 contains 1 fibronectin type-III domain. IL7Ra /CD127 is expressed on various cell types, including naive and memory T cells and many others. IL7Ra /CD127 is receptor for interleukin-7 and also acts as a receptor for thymic stromal lymphopoietin (TSLP). The IL7 receptor is a heterodimer of IL7R and IL2RG. The TSLP receptor is a heterodimer of CRLF2 and IL7R.

Clinical and Translational Updates

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