

Synonym

IL7Ra,CD127

Source

Biotinylated Human IL-7 R alpha, Fc,Avitag (IL7-H82F8) 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

| | | |
|--|-----------------------------------|------------|
| I66T, V138I IL-7 R alpha(Glu 21 - Gly 236) P16871-1 | Fc(Pro 100 - Lys 330) P01857-1 | Avi |
|--|-----------------------------------|------------|

This protein carries a human IgG1 Fc tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 53.3 kDa. As a result of glycosylation, the protein migrates as 70-100 kDa under reducing (R) condition, and 130-200 kDa under non-reducing (NR) condition (SDS-PAGE).

Biotinylation

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Biotin:Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

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. Normally trehalose is added as protectant before lyophilization.

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.

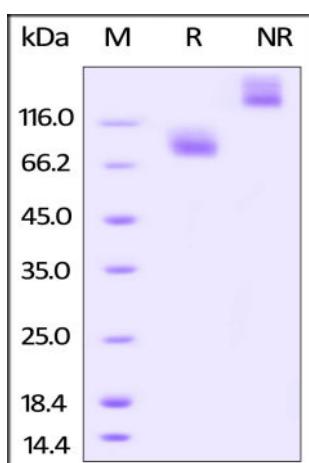
Storage

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

Please avoid repeated freeze-thaw cycles.

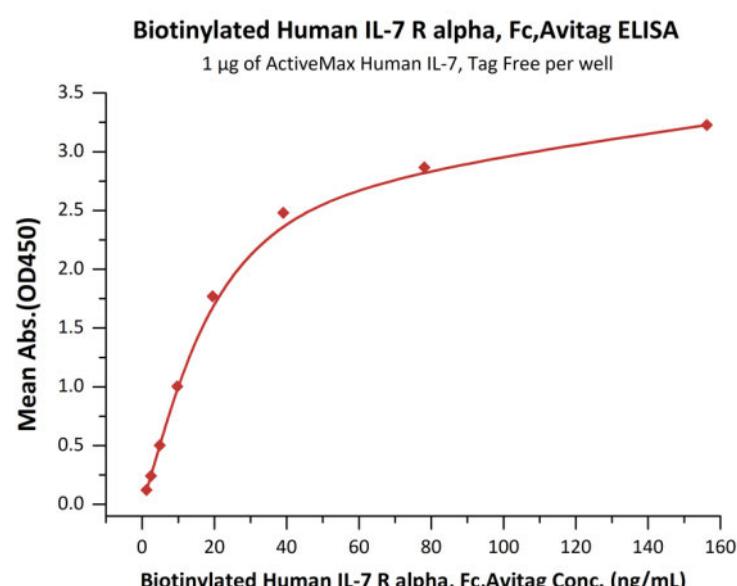
This product is stable after storage at:

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

SDS-PAGE

Biotinylated Human IL-7 R alpha, Fc,Avitag on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



Immobilized ActiveMax® Human IL-7, Tag Free (Cat. No. [IL7-H4219](#)) at 10 µg/mL (100 µL/well) can bind Biotinylated Human IL-7 R alpha, Fc,Avitag (Cat. No. [IL7-H82F8](#)) with a linear range of 139 ng/mL (QC 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.