Biotinylated Human IL-2 R alpha / CD25 Protein, His,Avitag™, premium grade

Catalog # ILA-H82E6





Synonym

IL2RA,CD25,p55,IL2-RA,IL-2-RA

Source

Biotinylated Human IL-2 R alpha, His, Avitag, premium grade(ILA-H82E6) is expressed from human 293 cells (HEK293). It contains AA Glu 22 - Cys 213 (Accession # P01589-1).

Predicted N-terminus: Glu 22

Biotinylated Human IL-2 R alpha, His, Avitag, premium grade (ILA-H82E6), designed for preclinical stage, has the same activity and performance with GMP Biotinylated Human IL-2 R alpha, which enables a seamless transition from preclinical development to clinical phases. Premium Grade product offer a cost efficient alternative of GMP Grade products for the early development phase when safety of raw materials is not top priority. By using Premium Grade products in early development phase, you can transition easily into clinical and commercial phase without need to revalidate the raw materials and modify manufacturing process.

Molecular Characterization

IL-2 R alpha(Glu 22 - Cys 213)
Poly-his Avi

This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (AvitagTM).

The protein has a calculated MW of 25.4 kDa. The protein migrates as 35-45 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

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

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 0.1 EU per µg by the LAL method.

Sterility

Negative

Mycoplasma

Negative.

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from $0.22~\mu m$ 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.

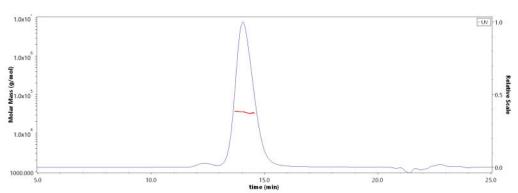
Please avoid repeated freeze-thaw cycles.

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

SEC-MALS





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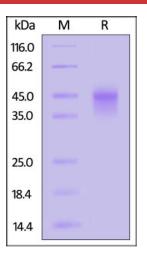


The purity of Biotinylated Human IL-2 R alpha, His, Avitag, premium grade

(Cat. No. ILA-H82E6) is more than 90% and the molecular weight of this

protein is around 25-40 kDa verified by SEC-MALS.

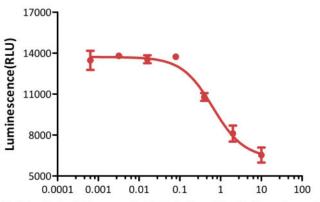
Report



Biotinylated Human IL-2 R alpha, His, Avitag, premium grade on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-Bioactivity CELL BASE

Biotinylated Human IL-2 R alpha, His, Avitag inhibits the IL-2-dependent proliferation of Mo7e cells

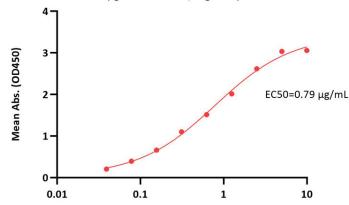


Biotinylated Human IL-2 R alpha, His, Avitag Conc. (μg/mL)

Biotinylated Human IL-2 R alpha, His, Avitag, premium grade (Cat. No. ILA-H82E6) inhibits the IL-2-dependent proliferation of Mo7e cells. The EC50 for this effect is 0.57-0.81 μg/mL (Routinely tested).

Bioactivity-ELISA

Biotinylated Human IL-2 R alpha / CD25 Protein, His,Avitag™, premium grade ELISA 0.5 μg of Human IL-2, Tag Free per well



Biotinylated Human IL-2 R alpha / CD25 Protein, His, Avitag™, premium grade Conc. (μg/mL)

Immobilized Human IL-2, Tag Free at 5 μ g/mL (100 μ L/well) can bind Biotinylated Human IL-2 R alpha, His,Avitag, premium grade (Cat. No. ILA-H82E6) with a linear range of 0.02-1 μ g/mL (QC tested).

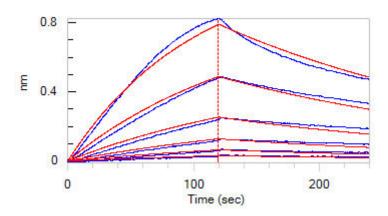
Bioactivity-BLI

Discounts, Gifts, and more!

Biotinylated Human IL-2 R alpha / CD25 Protein, His,Avitag™, premium grade

Catalog # ILA-H82E6





Loaded Biotinylated Human IL-2 R alpha, His, Avitag, premium grade (Cat. No. ILA-H82E6) on SA Biosensor, can bind Human IL-2, Tag Free with an affinity constant of 70.2 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Interleukin-2 receptor subunit alpha (IL2RA) is also known as IL-2R subunit alpha, IL-2-RA, IL2-RA, TAC antigen, p55, CD antigen CD25, is a type I transmembrane glycoprotein. IL2RA is expressed on activated T cells and regulatory T cells, and is capable of binding IL2 with low affinity by itself. However, a ligand-induced high affinity heterotrimeric receptor complex is produced when IL2RA is associated non-covelently with the IL2 receptor beta and gamma chain, and subsequently initiates the intacellular signal pathways such as MAPK or JAK/STAT. On dendritic cells (DC), CD25 has been previously regarded as an activation marker, while both murine and human DC can express CD25, they do not express the beta-chain of the IL-2 receptor, which is indispensable for the execution of IL-2 signaling.

Clinical and Translational Updates

