

Synonym

IL3R,IL3RA,IL-3Ra,IL-3R-alpha,IL3RAY,IL3RX,IL3RY,CD123 antigen,CD123,hIL3Ra,hIL-3Ra,MGC34174,IL-3 R alpha

Source

FITC-Labeled Human IL-3 R alpha, Fc Tag (ILA-HF253) is expressed from human 293 cells (HEK293). It contains AA Thr 19 - Arg 305 (Accession # [P26951-1](#)). It is the FITC labeled form of Human IL-3 R alpha, Fc Tag (Cat. No. ILA-H5252).

Predicted N-terminus: Thr 19

Molecular Characterization

IL-3 R alpha(Thr 19 - Arg 305) P26951-1	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 59.5 kDa. The protein migrates as 90-100 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Conjugate

FITC

Excitation source: 488 nm spectral line, argon-ion laser

Excitation Wavelength: 488 nm

Emission Wavelength: 535 nm

Labeling

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with FITC using standard chemical labeling method. The residual FITC is removed by molecular sieve treatment during purification process.

Protein Ratio

The FITC to protein molar ratio is 3.5-5.5.

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 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

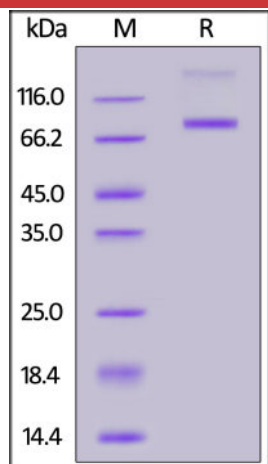
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please protect from light and avoid repeated freeze-thaw cycles.

This product is stable after storage at:

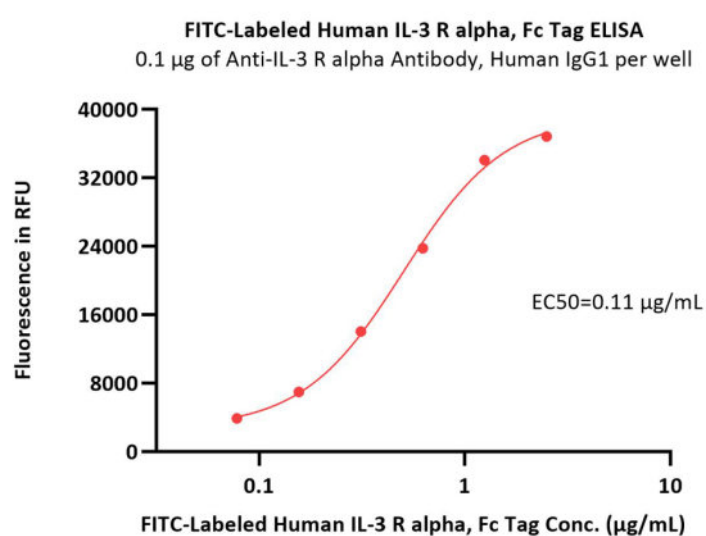
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



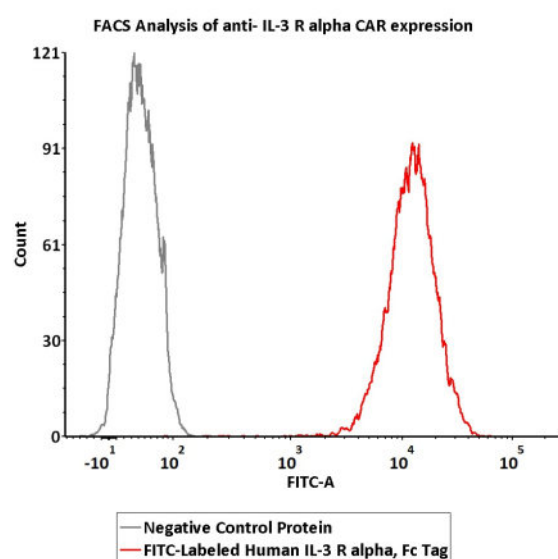
FITC-Labeled Human IL-3 R alpha, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA



Immobilized Anti-IL-3 R alpha Antibody, Human IgG1 at 1 µg/mL (100 µL/well) can bind FITC-Labeled Human IL-3 R alpha, Fc Tag (Cat. No. ILA-HF253) with a linear range of 0.078-0.625 µg/mL (QC tested).

Bioactivity-FACS



2e5 of anti-IL-3 R alpha CAR-293 cells were stained with 100 µL of 10 µg/mL of FITC-Labeled Human IL-3 R alpha, Fc Tag (Cat. No. ILA-HF253) and negative control protein respectively and analyzed with FACS (QC tested).

Background

Interleukin 3 receptor alpha (low affinity) (IL3RA), also known as CD123 (Cluster of Differentiation 123) is a 70-kD glycoprotein member of the hematopoietin receptor superfamily. This protein associates with a beta subunit common to the receptors for IL-5 and granulocyte-macrophage colony-stimulating factor (GM-CSF) to form a high-affinity receptor for IL-3. The interleukin-3 receptor α chain (CD123) has been identified as a potential immunotherapeutic target because it is overexpressed in AML compared with normal hematopoietic stem cells.

Clinical and Translational Updates

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