

Synonym

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

Source

Human IL-3 R alpha Protein, Fc Tag(ILA-H5252) is expressed from human 293 cells (HEK293). It contains AA Thr 19 - Arg 305 (Accession # P26951-1). Predicted N-terminus: Thr 19

Molecular Characterization

IL-3 R alpha(Thr 19 - Arg 305) Fc(Pro 100 - Lys 330) P26951-1 P01857

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 70-90 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

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

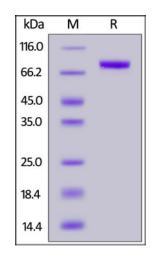
For long term storage, the product should be stored at lyophilized state at -20 $^{\circ}$ C or lower.

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.

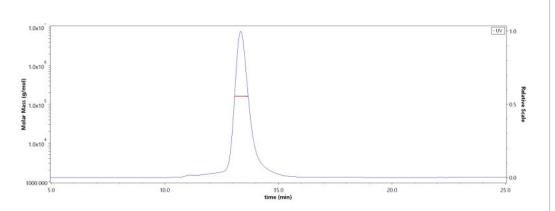
SDS-PAGE



Human IL-3 R alpha Protein, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-SPR

SEC-MALS



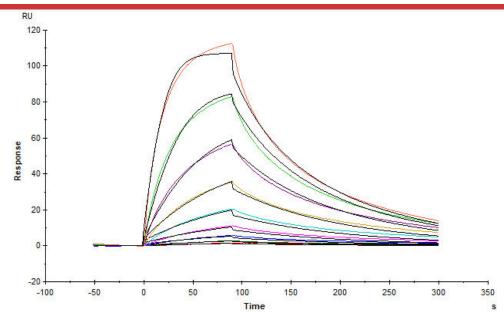
The purity of Human IL-3 R alpha Protein, Fc Tag (Cat. No. ILA-H5252) is more than 90% and the molecular weight of this protein is around 150-170 kDa verified by SEC-MALS.

Report

Human IL-3 R alpha / CD123 Protein, Fc Tag (MALS & SPR verified)

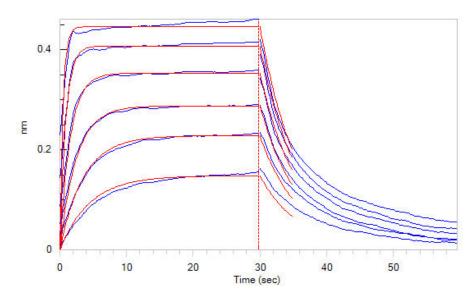






Anti-IL-3 R alpha Antibody, Human IgG1 immobilized on CM5 Chip can bind Human IL-3 R alpha, Fc Tag (Cat. No. ILA-H5252) with an affinity constant of 50.3 nM as determined in a SPR assay (Biacore T200) (QC tested).

Bioactivity-BLI



Loaded Human IL-3 R alpha, Fc Tag (Cat. No. ILA-H5252) on Protein A Biosensor, can bind Human IL-3, His Tag (Cat. No. IL3-H52H9) with an affinity constant of 0.71 μ M as determined in BLI assay (ForteBio Octet Red96e) (Routinely 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 <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.