

Synonym

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

Source

Mouse IL-3 R alpha, His Tag(ILA-M52H4) is expressed from human 293 cells (HEK293). It contains AA Ser 17- Lys 331 (Accession # P26952-1).

Predicted N-terminus: Ser 17

Molecular Characterization

IL-3 R alpha(Ser 17- Lys 331)

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 36.4 kDa. The protein migrates as 50-65 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

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

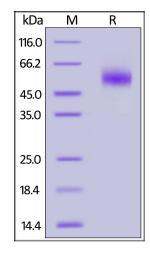
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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

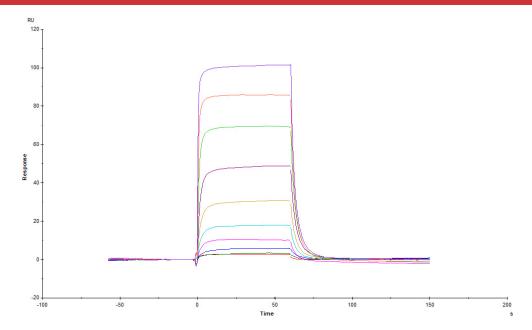


Mouse IL-3 R alpha, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-SPR

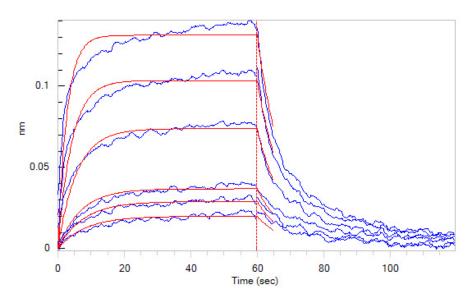






Immobilized Mouse IL-3 R alpha, His Tag (Cat. No. ILA-M52H4) on CM5 Chip can bind Mouse IL-3 Protein, His Tag (Cat. No. IL3-M52H8) with an affinity constant of 0.929 μ M as determined in a SPR assay (Biacore T200) (QC tested).

Bioactivity-BLI



Loaded Mouse IL-3 R alpha, His Tag (Cat. No. ILA-M52H4) on NTA Biosensor, can bind Mouse IL-3, Tag Free with an affinity constant of 0.38 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.

