

### 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)  
P26952-1 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.

### Purity

>95% as determined by SDS-PAGE.

### Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. 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

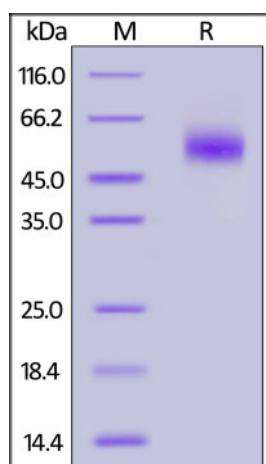
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

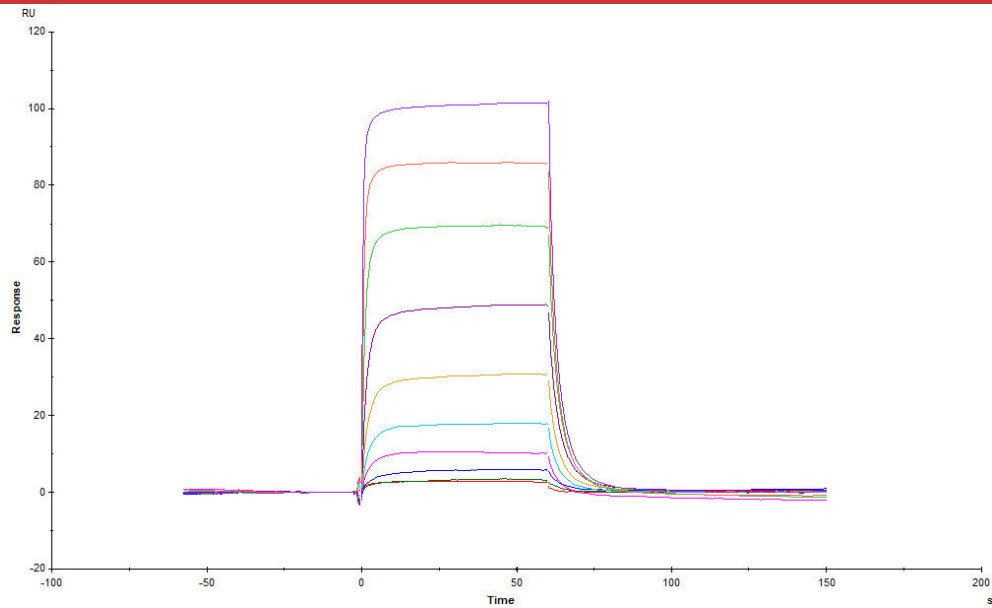
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

### SDS-PAGE



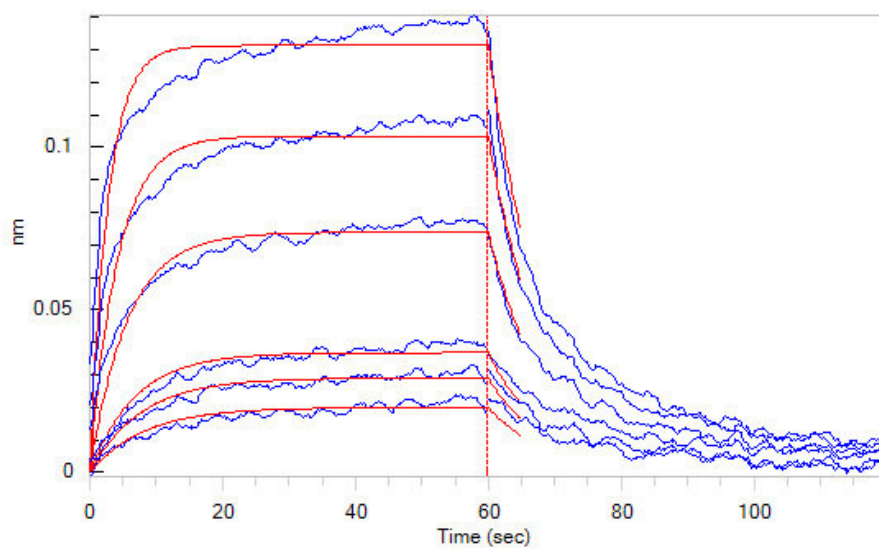
Mouse IL-3 R alpha, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

### Bioactivity-SPR



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  $\mu\text{M}$  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  $\mu\text{M}$  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  $\alpha$  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](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.