

# Human IL-3 R alpha/CD123 Protein

Cat. No. IL3-HM1RA

## Description

<b>Source</b>	Recombinant Human IL-3 R alpha/CD123 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Thr19-Arg305.
<b>Accession</b>	P26951-1
<b>Molecular Weight</b>	The protein has a predicted MW of 33.9 kDa. Due to glycosylation, the protein migrates to 60-70 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE

## Formulation and Storage

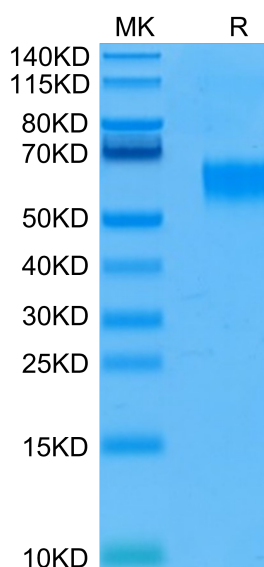
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 24 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Interleukin-3 receptor subunit alpha, also known as IL-3 receptor subunit alpha, IL-3R-alpha, CD123, and IL3RA, is a single-pass type I membrane protein which belongs to the type I cytokine receptor family and Type 5 subfamily. The specific alpha subunit of the interleukin-3 receptor (IL-3Ralpha, CD123) is strongly expressed in various leukemic blasts and leukemic stem cells and seems to be an excellent target for the therapy of leukemias.

## Assay Data

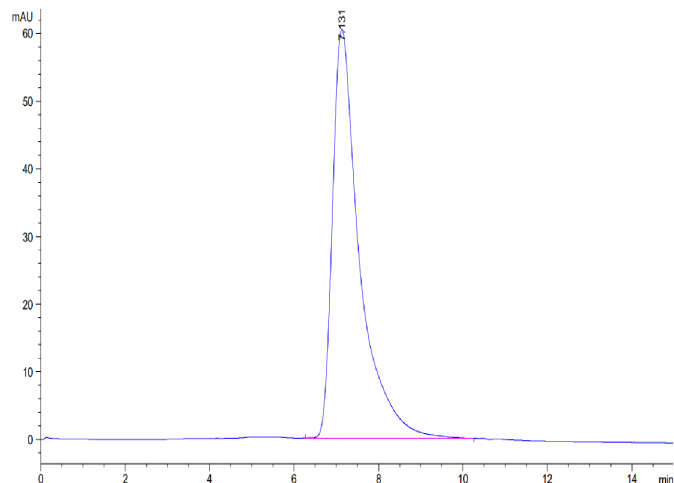
### Bis-Tris PAGE



Human IL-3 R alpha on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data

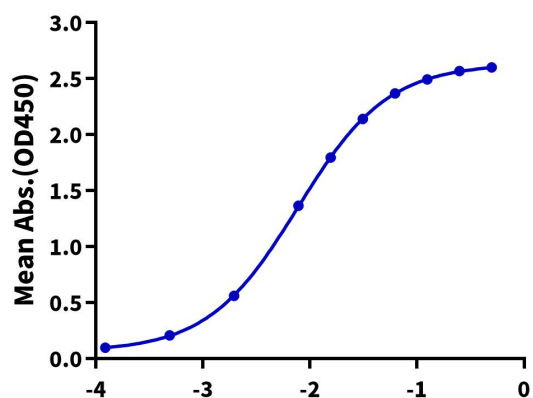


The purity of Human IL-3 R alpha is greater than 95% as determined by SEC-HPLC.

ELISA Data

**Human IL-3 R alpha, His Tag ELISA**

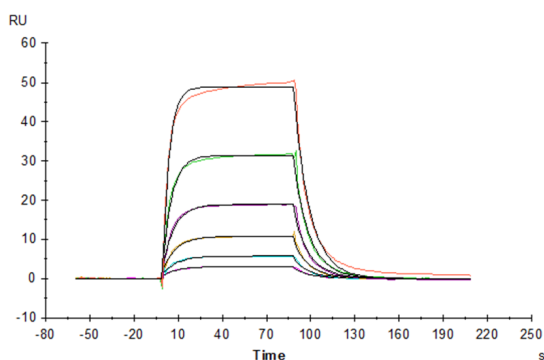
0.1µg Human IL-3 R alpha, His Tag Per Well



Immobilized Human IL-3 R alpha, His Tag at 1µg/ml (100µl/Well) on the plate. Dose response curve for Anti-IL-3 R alpha Antibody, hFc Tag with the EC50 of 7.7ng/ml determined by ELISA (QC Test).

Log Anti-IL-3 R alpha Antibody, hFc Tag Conc.(µg/ml)

SPR Data



Human IL-3, hFc Tag captured on CM5 Chip via Protein A can bind Human IL-3 R alpha, His Tag with an affinity constant of 0.276 µM as determined in SPR assay (Biacore T200).