

# 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 Expi293 with His tag at the C-terminal. 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 Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE

## Formulation and Storage

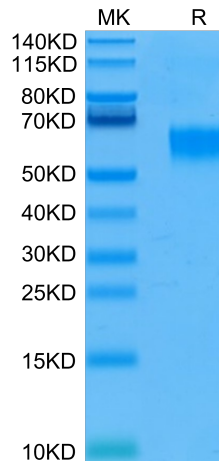
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 5% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge tubes before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended (usually we use 1mg/ml solution for lyophilization). Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please avoid 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

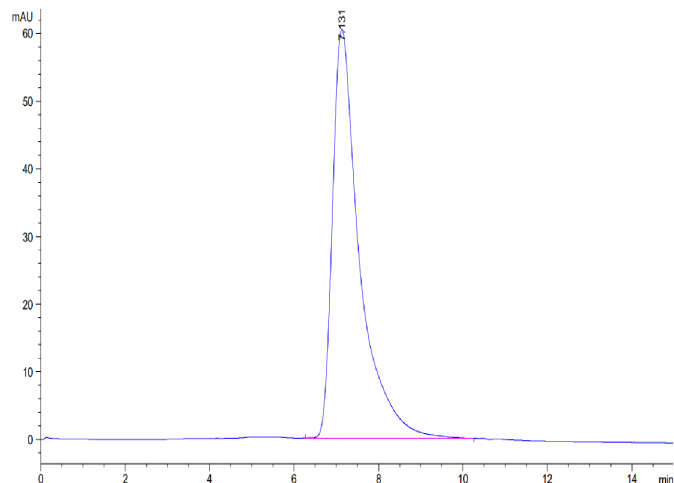
### Tris-Bis PAGE



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

### SEC-HPLC

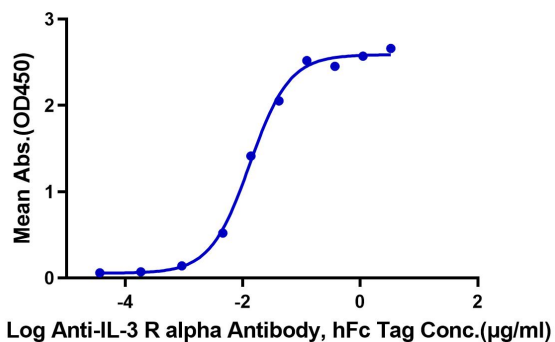
Assay Data



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

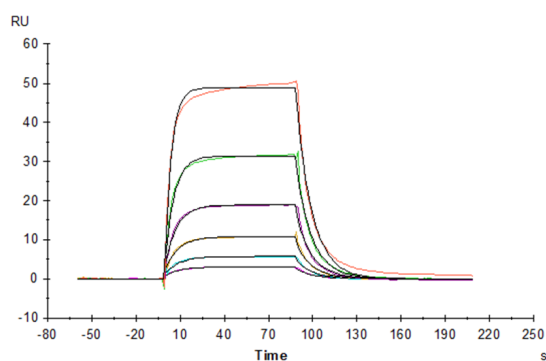
ELISA Data

**Human IL-3 R alpha, His Tag ELISA**  
0.05µg Human IL-3 R alpha, His Tag Per Well



Immobilized Human IL-3 R alpha, His Tag at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Anti-IL-3 R alpha Antibody, hFc Tag with the EC50 of 13.2ng/ml determined by ELISA.

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).