

# Human IL-15RA&IL-15 Protein

Cat. No. IL1-HM1R5

## Description

<b>Source</b>	Recombinant Human IL-15RA&IL-15 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Ile31-Ser108(IL-15RA)&Asn49-Ser162(IL-15).
<b>Accession</b>	Q13261-1(IL-15RA)&P40933-1(IL-15)
<b>Molecular Weight</b>	The protein has a predicted MW of 23.8 kDa. Due to glycosylation, the protein migrates to 26-28 kDa&30-32 kDa based on Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per ug by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

## Formulation and Storage

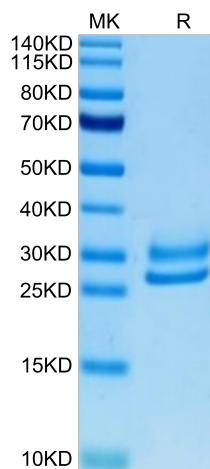
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Interleukin-15 receptor alpha (IL-15R alpha) is a high affinity IL-15 binding protein that is crucial for mediating IL-15 functions such as memory CD8 T cell proliferation and NK, NK/T cell, and intestinal intraepithelial lymphocyte development.

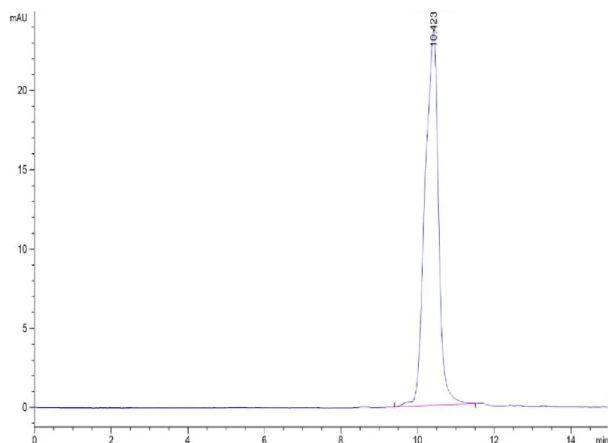
## Assay Data

### Tris-Bis PAGE



Human IL-15RA&IL-15 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



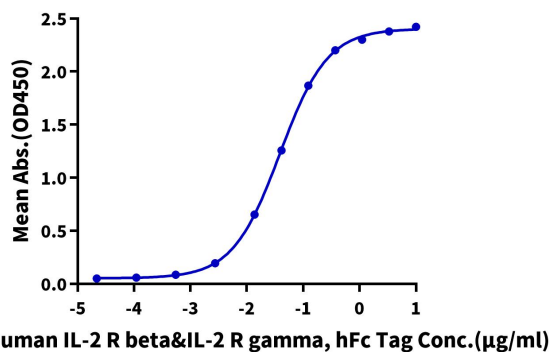
The purity of Human IL-15RA&IL-15 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

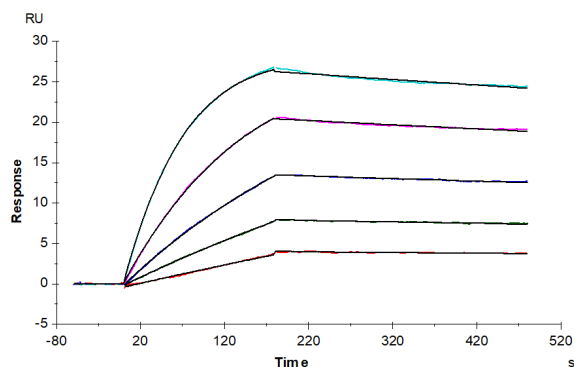
**Human IL-15RA&IL-15, His Tag ELISA**

0.1µg Human IL-15Ra&IL-15, His Tag Per Well



Immobilized Human IL-15RA&IL-15, His Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Human IL-2 R beta&IL-2 R gamma, hFc Tag with the EC50 of 38.8ng/ml determined by ELISA (QC Test).

SPR Data



Human IL-2 R beta&IL-2 R gamma, hFc Tag captured on CM5 Chip via Protein A can bind Human IL-15Ra&IL-15, His Tag with an affinity constant of 0.084 nM as determined in SPR assay (Biacore T200).