

# Biotinylated Human IL-18 R1/CD218a Protein

Cat. No. IL8-HM4R1B

## Description

<b>Source</b>	Recombinant Biotinylated Human IL-18 R1/CD218a Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Ala19-Arg329.
<b>Accession</b>	AAH69575
<b>Molecular Weight</b>	The protein has a predicted MW of 38.8 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 > 95% as determined by HPLC

## Formulation and Storage

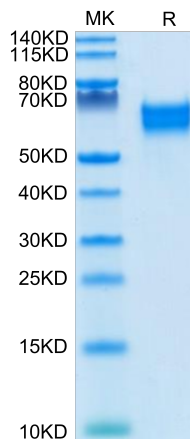
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 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-18 (IL-18) is a member of the interleukin-1 family of cytokines produced constitutively by different cell types and by adipose tissue. Interleukin (IL)-18 was originally discovered as a factor that enhanced IFN- $\gamma$  production from anti-CD3-stimulated Th1 cells, especially in the presence of IL-12. Upon stimulation with Ag plus IL-12, naive T cells develop into IL-18 receptor (IL-18R) expressing Th1 cells, which increase IFN- $\gamma$  production in response to IL-18 stimulation.

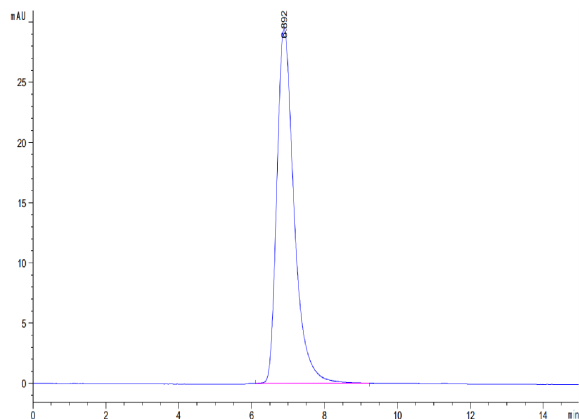
## Assay Data

### Bis-Tris PAGE



Biotinylated Human IL-18 R1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

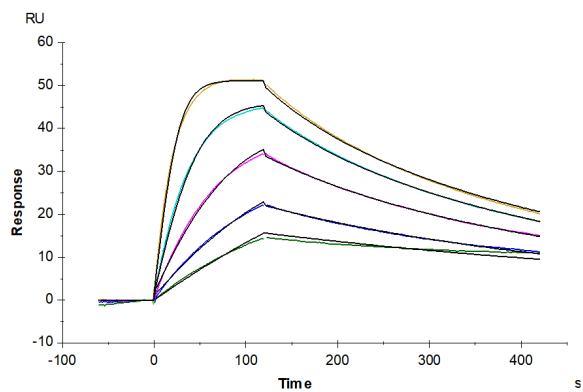
### SEC-HPLC



The purity of Biotinylated Human IL-18 R1 is greater than 95% as determined by SEC-HPLC.

Assay Data

SPR Data



Biotinylated Human IL-18 R1, His Tag captured on CM5 Chip via anti-his antibody can bind Human IL-18, No Tag with an affinity constant of 1.24 nM as determined in SPR assay (Biacore T200).