

# Human IL-18 R1/CD218a Protein, Ultra Low Endotoxin

Cat. No. IL8-HM2R1-UL

## Description

<b>Source</b>	Recombinant Human IL-18 R1/CD218a Protein is expressed from HEK293 with hFc (IgG1) tag at the C-terminus. It contains Ala19-Arg329.
<b>Accession</b>	AAH69575.1
<b>Molecular Weight</b>	The protein has a predicted MW of 62.52 kDa. Due to glycosylation, the protein migrates to 75-95 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 0.01 EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

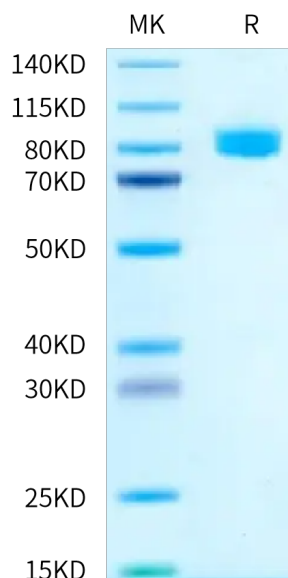
<b>Formulation</b>	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
<b>Storage</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-γ 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-γ production in response to IL-18 stimulation.

## Assay Data

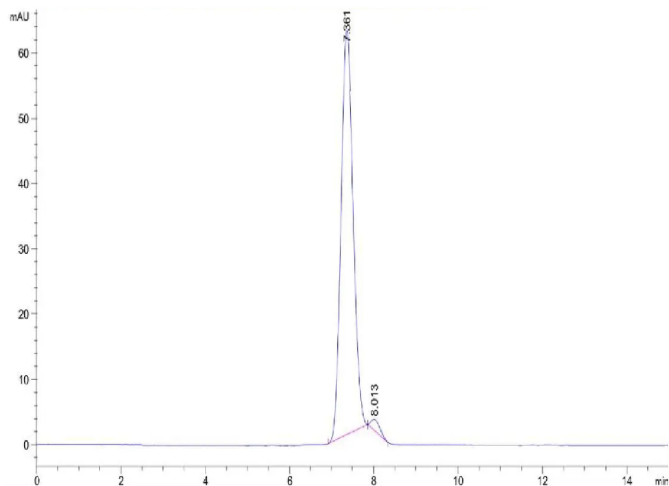
### Bis-Tris PAGE



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

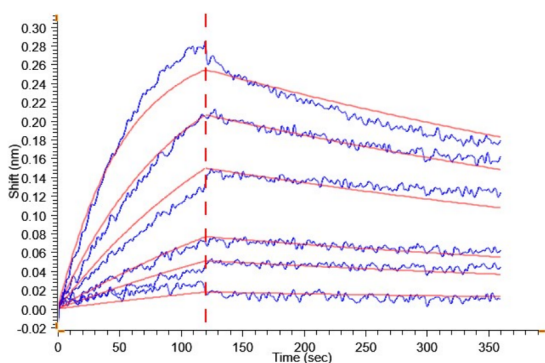
### SEC-HPLC

Assay Data



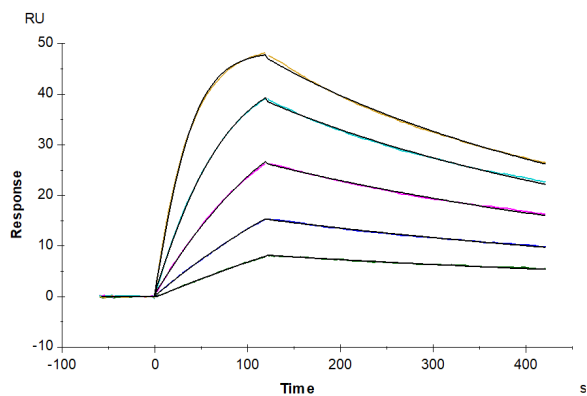
The purity of Human IL-18 R1 is greater than 95% as determined by SEC-HPLC.

BLI Data



Loaded Human IL-18 R1, hFc Tag on ProA-Biosensor can bind Human IL-18, No Tag with an affinity constant of 3.21 nM as determined in BLI assay .

SPR Data



Human IL-18 R1, hFc Tag captured on CM5 Chip via Protein A can bind Human IL-18, No Tag with an affinity constant of 0.73 nM as determined in SPR assay (Biacore T200).