

# Human IL-12 R beta 1/CD212 Protein

Cat. No. ILR-HM112

## Description

<b>Source</b>	Recombinant Human IL-12 R beta 1/CD212 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Cys24-Glu540.
<b>Accession</b>	P42701-1
<b>Molecular Weight</b>	The protein has a predicted MW of 58.2 kDa. Due to glycosylation, the protein migrates to 70-80 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

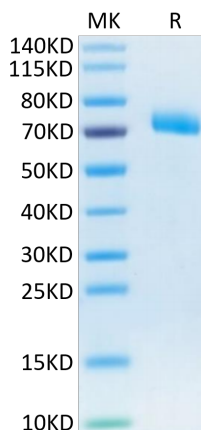
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. 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

Human IL12RB1 is an autosomal gene that is essential for mycobacterial disease resistance and T cell differentiation. Lung and T cell IL12RB1 expression is allele-biased, and the extent to which cells express one IL12RB1 allele is unaffected by activation. Furthermore following its expression the IL12RB1 pre-mRNA is processed into either IL12RB1 Isoform 1 (IL12R $\beta$ 1, a positive regulator of IL12 responsiveness) or IL12RB1 Isoform 2 (a protein of heretofore unknown function).

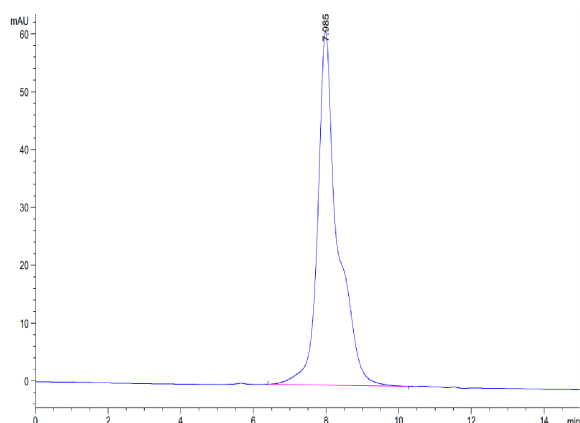
## Assay Data

### Bis-Tris PAGE



Human IL-12 R beta 1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

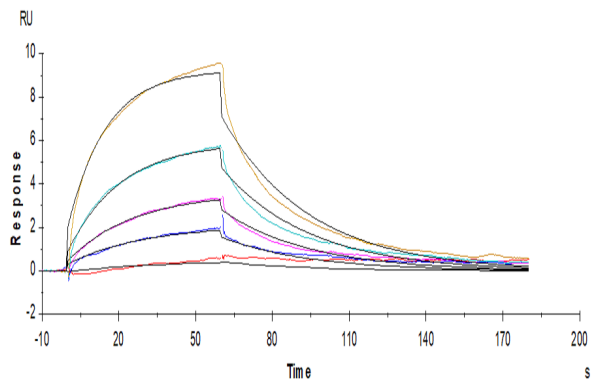
### SEC-HPLC



The purity of Human IL-12 R beta 1 is greater than 95% as determined by SEC-HPLC.

Assay Data

SPR Data



Human IL-12B, His Tag immobilized on CM5 Chip can bind Human IL-12 R beta 1, His Tag with an affinity constant of 98.1nM as determined in a SPR assay (Biacore T200).