

# Human IL-23R Protein

Cat. No. ILR-HM323

## Description

<b>Source</b>	Recombinant Human IL-23R Protein is expressed from HEK293 with mFc (IgG1) tag at the C-Terminus. It contains Gly24-Gly355.
<b>Accession</b>	Q5VWK5-1
<b>Molecular Weight</b>	The protein has a predicted MW of 63.7 kDa. Due to glycosylation, the protein migrates to 80-115 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 23 (IL-23) is a heterodimeric cytokine composed of two disulfide-linked subunits, a p19 subunit that is unique to IL-23, and a p40 subunit that is shared with IL-12. The functional IL-23 receptor complex consists of two receptor subunits, the IL-12 receptor beta 1 subunit (IL-12 R beta 1) and the IL-23-specific receptor subunit (IL-23 R). This receptor associates with IL12RB1 to form the interleukin-23 receptor. Binds IL23 and mediates T-cells, NK cells and possibly certain macrophage/myeloid cells stimulation probably through activation of the Jak-Stat signaling cascade.

## Assay Data

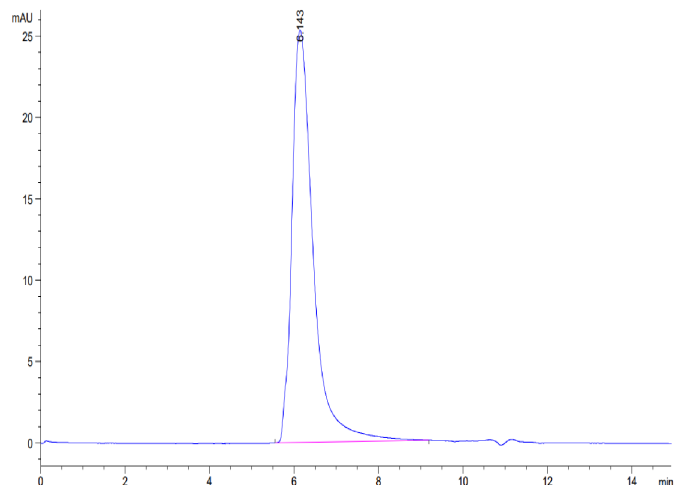
### Bis-Tris PAGE



Human IL-23R on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data

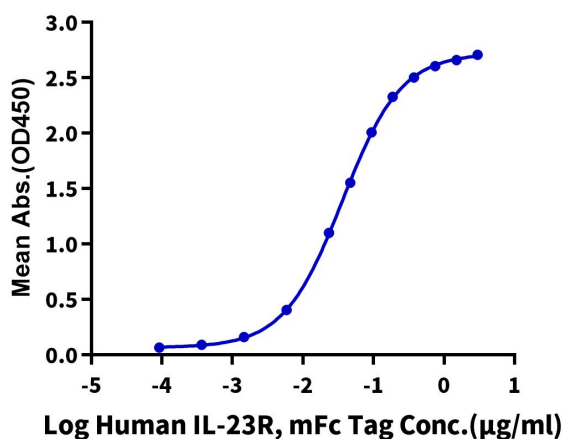


The purity of Human IL-23R is greater than 95% as determined by SEC-HPLC.

ELISA Data

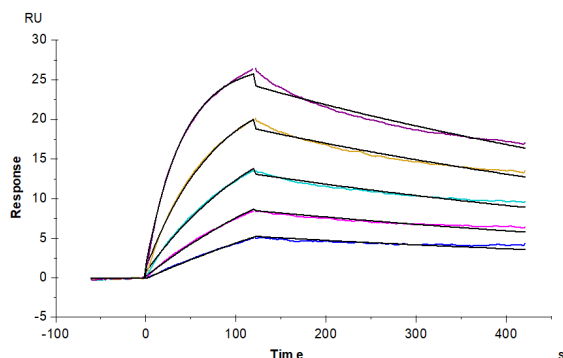
**Human IL-23R, mFc Tag ELISA**

0.5µg Biotinylated Human IL-23 alpha&IL-12 beta, His Tag Per Well



Immobilized Biotinylated Human IL-23 alpha&IL-12 beta, His Tag at 5µg/ml (100µl/well) on the streptavidin precoated plate (5µg/ml). Dose response curve for Human IL-23R, mFc Tag with the EC50 of 36.4ng/ml determined by ELISA (QC Test).

SPR Data



Human IL-23R, mFc Tag captured on CM5 Chip via Anti-Mouse Antibody can bind Human IL-23 alpha&IL-12 beta, His-Avi Tag with an affinity constant of 11.09 nM as determined in SPR assay (Biacore T200).