

# Human IL-23 alpha&IL-12 beta Protein

Cat. No. IL2-HM1AB

## Description

<b>Source</b>	Recombinant Human IL-23 alpha&IL-12 beta Protein is expressed from HEK293 with His tag at the C-terminus. It contains Arg20-Pro189 (IL-23 alpha)&Ile23-Ser328 (IL-12 beta).
<b>Accession</b>	Q9NPF7 (IL-23 alpha)&P29460 (IL-12 beta)
<b>Molecular Weight</b>	The protein has a predicted MW of 19.77 kDa (IL-23 alpha) and 34.7 kDa (IL-12 beta). Due to glycosylation, the protein migrates to 23 kDa (IL-23 alpha) and 40-50 kDa (IL-12 beta) based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1 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

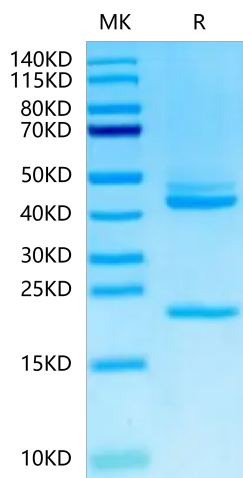
<b>Formulation</b>	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein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

## Background

The interleukin (IL)-12 family of cytokines, including IL12 and IL 23, play an important role in driving aberrant Th1 and Th17 immune responses in patients with Crohn's disease (CD). Targeting this pathway has opened new avenues for therapeutic intervention. The balance of proinflammatory cytokines interleukin (IL)-12 and IL-23 plays a key role in shaping the development of antitumor or protumor immunity.

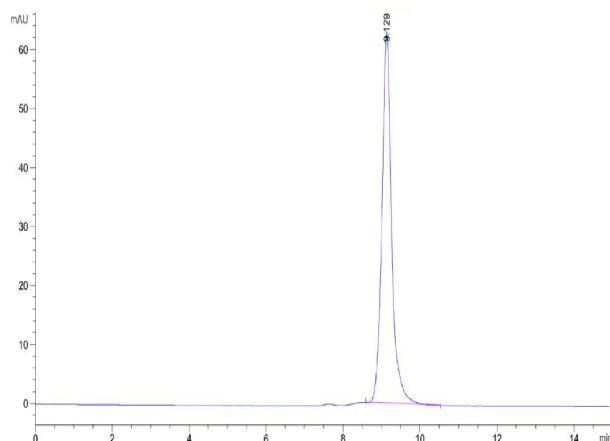
## Assay Data

### Bis-Tris PAGE



Human IL-23 alpha&IL-12 beta on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



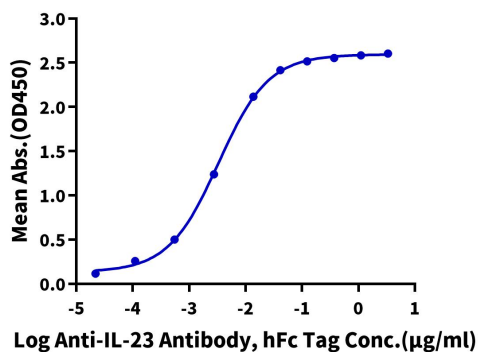
The purity of Human IL-23 alpha&IL-12 beta is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

**Human IL-23 alpha&IL-12 beta, His Tag ELISA**

0.1µg Human IL-23 alpha&IL-12 beta, His Tag Per Well

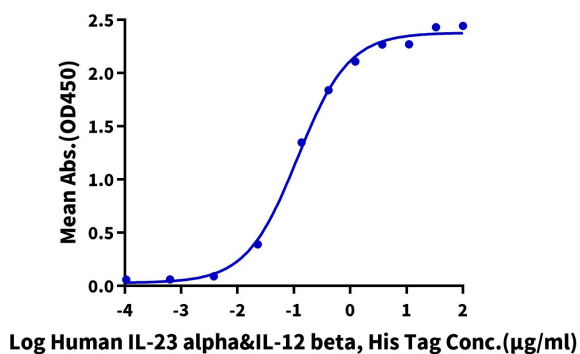


Immobilized Human IL-23 alpha&IL-12 beta, His Tag at 1 µg/ml (100 µl/well) on the plate. Dose response curve for Anti-IL-23 Antibody, hFc Tag with the EC50 of 3.3 ng/ml determined by ELISA (QC Test).

ELISA Data

**Human IL-23 alpha&IL-12 beta, His Tag ELISA**

0.2µg Human IL-23R, hFc Tag Per Well



Immobilized Human IL-23R, hFc Tag at 2 µg/ml (100 µl/well) on the plate. Dose response curve for Human IL-23 alpha&IL-12 beta, His Tag with the EC50 of 0.12 µg/ml determined by ELISA.