

Cat. No. ILB-HM4ABB-UL

### Description

<b>Source</b>	Recombinant Biotinylated Human IL-23 alpha&Mouse IL-12 beta Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus of IL-23 alpha. It contains Arg20-Pro189 (Human IL-23 alpha) and Met23-Ser335 (Mouse IL-12 beta).
<b>Accession</b>	Q9NPF7(Human IL-23 alpha)&P43432-1(Mouse IL-12 beta)
<b>Molecular Weight</b>	The protein has a predicted MW of 21.7 kDa (Human IL-23 alpha) & 35.8 kDa (Mouse IL-12 beta). Due to glycosylation, the protein migrates to 22-25 kDa (Human IL-23 alpha) & 45-60 kDa (Mouse IL-12 beta) 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 > 90% as determined by HPLC

### Formulation and Storage

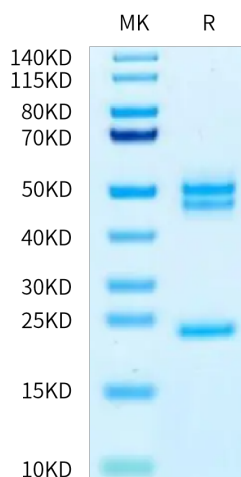
<b>Formulation</b>	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
<b>Storage</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 (IL)-12 and IL-23 belong to the IL-12 type family and are composite cytokines, consisting of the common β subunit p40 and the specific cytokine α subunit p35 and p19, respectively. IL-12 signals via the IL-12Rβ1·IL-12Rβ2 receptor complex, and IL-23 uses also IL-12Rβ1 but engages IL-23R as second receptor.

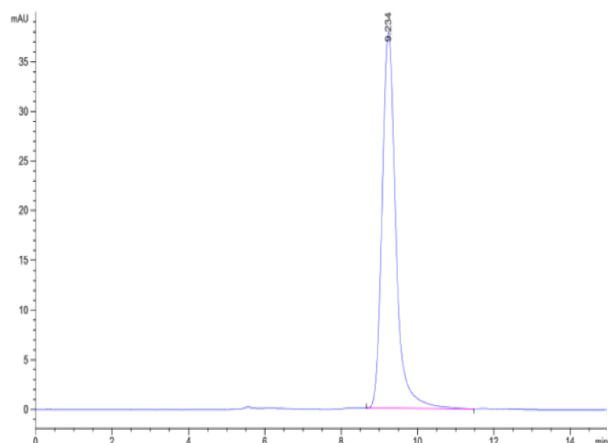
### Assay Data

#### Bis-Tris PAGE



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

#### SEC-HPLC



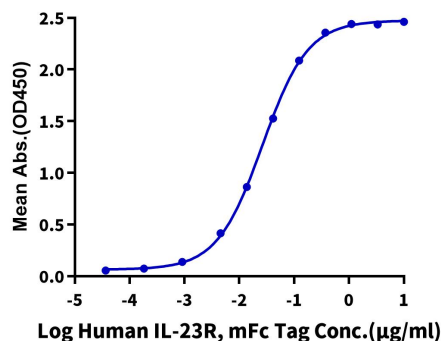
The purity of Biotinylated Human IL-23 alpha&Mouse IL-12 beta is greater than 90% as determined by SEC-HPLC.

Assay Data

ELISA Data

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

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

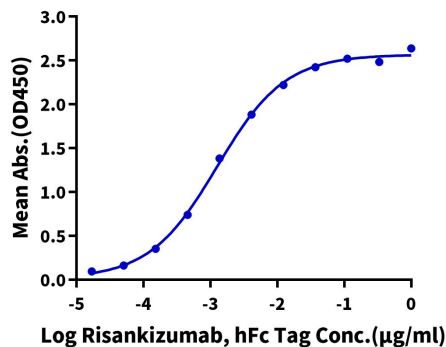


Immobilized Biotinylated Human IL-23 alpha & Mouse IL-12 beta, His Tag at 1µg/ml (100µl/well) on the streptavidin precoated plate (5µg/ml). Dose response curve for Human IL-23R, mFc Tag with the EC50 of 26.5ng/ml determined by ELISA.

ELISA Data

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

0.05µg Biotinylated Human IL-23 alpha&Mouse IL-12 beta, His Avi Tag Per Well



Immobilized Biotinylated Human IL-23 alpha&Mouse IL-12 beta, His Avi Tag at 0.5µg/ml (100µl/well) on the streptavidin precoated plate (5µg/ml). Dose response curve for Risankizumab, hFc Tag with the EC50 of 1.3ng/ml determined by ELISA.