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

Cat. No. IL2-CM123



Description	
Source	Recombinant Cynomolgus IL-23 alpha&IL-12 beta Protein is expressed from HEK293 with His tag at the N-terminus of IL-23 alpha.
	It contains Val22-Pro189(IL-23 alpha) and Ile23-Ser328(IL-12 beta).
Accession	G7PIH8(IL-23 alpha)&XP_045250400.1(IL-12 beta)
Molecular Weight	The protein has a predicted MW of 19.52 kDa (IL-23 alpha) and 34.76 kDa (IL-12 beta). Due to glycosylation, the protein migrates to 20-25 kDa (IL-23 alpha) and 40-50 kDa (IL-12 beta) based on Bis-Tris PAGE result.
Endotoxin	Less than 1 EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE
	> 95% as determined by HPLC

## Formulation and Storage

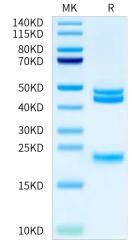
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Formulation	Lyophilized from 0.22 $\mu$ m filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 12 months as supplied from date of receipt80°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.

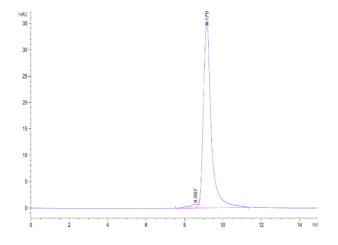
## **Assay Data**

## **Bis-Tris PAGE**



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

## **SEC-HPLC**



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

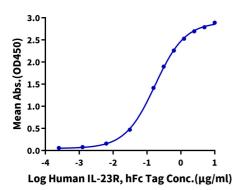
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## **Assay Data**

### **ELISA Data**

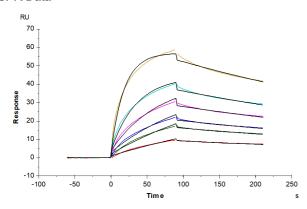
### Cynomolgus IL-23 alpha&IL-12 beta, His Tag ELISA

 $0.5 \mu g$  Cynomolgus IL-23 alpha&IL-12 beta, His Tag Per Well



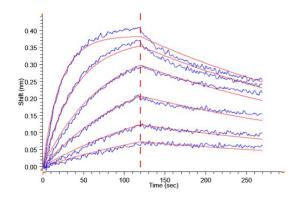
Immobilized Cynomolgus IL-23 alpha&IL-12 beta, His Tag at  $5\mu g/ml$  ( $100\mu l/well$ ) on the plate. Dose response curve for Human IL-23R, hFc Tag with the EC50 of  $0.17\mu g/ml$  determined by ELISA (QC Test).

### **SPR Data**



Human IL-23R, hFc Tag captured on CM5 Chip via Protein A can bind Cynomolgus IL-23 alpha&IL-12 beta, His Tag with an affinity constant of 4.05 nM as determined in SPR assay (Biacore T200).

## **BLI Data**



Loaded Human IL-23R, hFc Tag on ProA-Biosensor, can bind Cynomolgus IL-23 alpha&IL-12 beta, His Tag with an affinity constant of 6.60 nM as determined in BLI assay (Gator).