

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. It contains Val22-Pro189(IL-23 alpha) & 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 1EU per µg by the LAL method.
Purity	>95% as determined by Bis-Tris PAGE >95% as determined by HPLC

Formulation and Storage

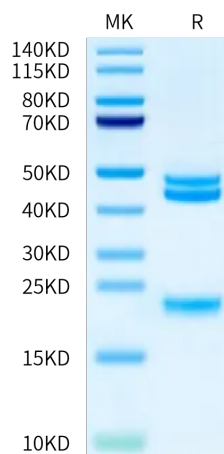
Formulation	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-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.

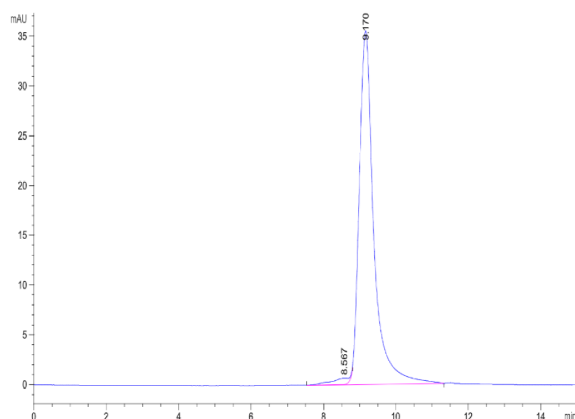
Assay Data

Bis-Tris PAGE



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

SEC-HPLC



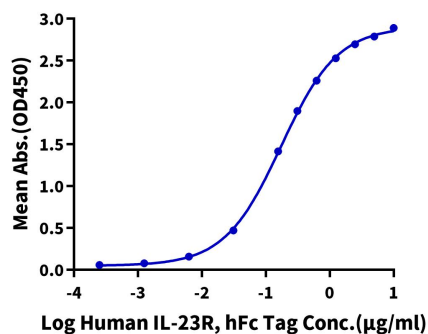
The purity of Cynomolgus IL-23 alpha&IL-12 beta is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

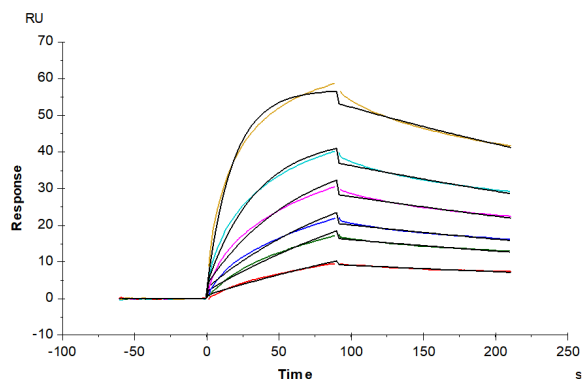
Cynomolgus IL-23 alpha&IL-12 beta, His Tag ELISA

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



Immobilized Cynomolgus IL-23 alpha&IL-12 beta, His Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Human IL-23R, hFc Tag with the EC50 of 0.17µg/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).