

Human IL-23 alpha&IL-12 beta Protein

Cat. No. IL2-HM4AB

Description

Source	Recombinant Human IL-23 alpha&IL-12 beta Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Arg20-Pro189(IL-23 alpha)&Ile23-Ser328(IL-12 beta).
Accession	Q9NPF7(IL-23 alpha)&P29460(IL-12 beta)
Molecular Weight	The protein has a predicted MW of 21.7 (IL-23 alpha)&34.7 (IL-12 beta) kDa. Due to glycosylation, the protein migrates to 23 kDa (IL-23 alpha) and 40-50 kDa (IL-12 beta) kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE

Formulation and Storage

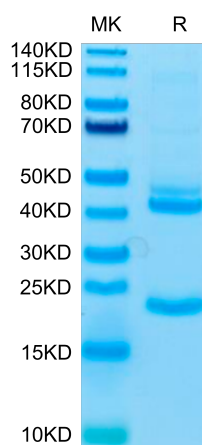
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled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

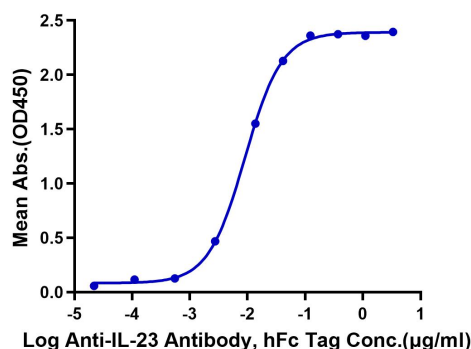
Bis-Tris PAGE



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

ELISA Data

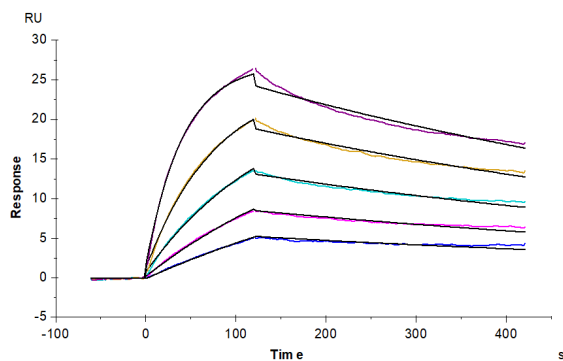
Human IL-23 alpha&IL-12 beta, His Tag ELISA
0.1µg Human IL-23 alpha&IL-12 beta, His Tag Per Well



Immobilized Human IL-23 alpha&IL-12 beta, His Tag at 1µg/ml (100µl/Well) on the plate. Dose response curve for Anti-IL-23 Antibody, hFc Tag with the EC50 of 6.0ng/ml determined by ELISA (QC Test).

Assay Data

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 Tag with an affinity constant of 11.09 nM as determined in SPR assay (Biacore T200).