

Human IL-12 Protein

Cat. No. IL1-HM412



Description

Source	Recombinant Human IL-12 Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Ile23-Ser328 (IL-12B) & Arg23-Ser219 (IL-12A).
Accession	P29460(IL-12B)&P29459(IL-12A)
Molecular Weight	The protein has a predicted MW of 34.7 kDa(IL-12B) & 25.5 kDa(IL-12A). Due to glycosylation, the protein migrates to 40-45 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 > 95% as determined by SEC-HPLC

Formulation and Storage

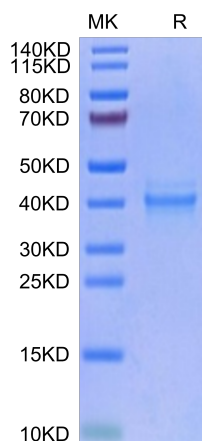
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled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

Interleukin 12 (IL-12) is a pleiotropic cytokine that plays an essential role in Th1-type immune response against cancer, a condition where cells in a particular part of the body grow and reproduce uncontrollably.

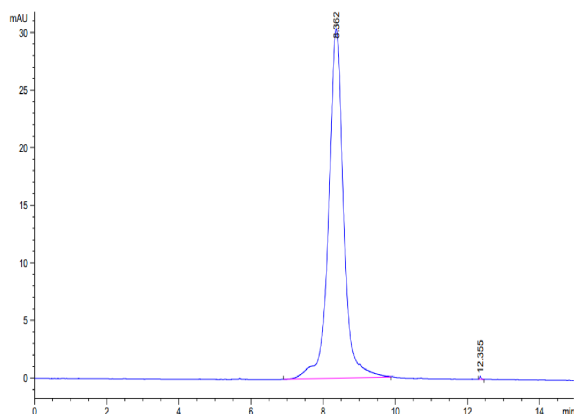
Assay Data

Bis-Tris PAGE



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

SEC-HPLC



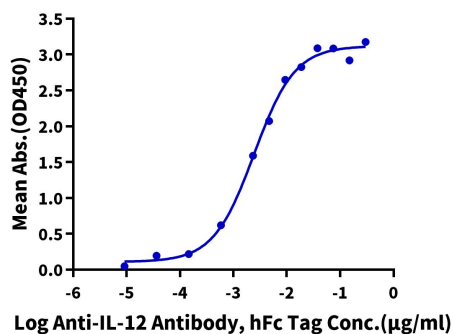
The purity of Human IL-12 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human IL-12, His Tag ELISA

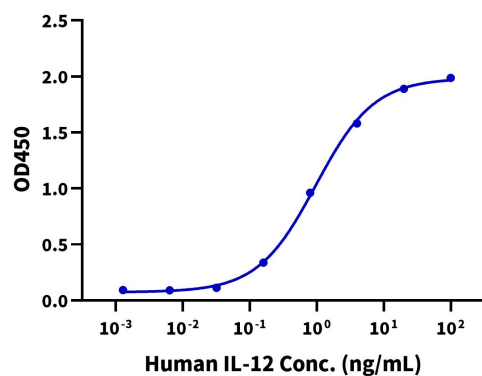
0.1µg Human IL-12, His Tag Per Well



Immobilized Human IL-12, His Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Anti-IL-12 Antibody, hFc Tag with the EC50 of 2.4ng/ml determined by ELISA (QC Test).

Cell Based Assay

Recombinant Human IL-12 Bioactivity



Measured by its ability to induce Interferon gamma secretion by human natural killer lymphoma NK-92 cells. The ED50 for this effect is 0.1 - 1 ng/mL.