

Human IL-4 Protein

Cat. No. IL4-HM001

Description

Source	Recombinant Human IL-4 Protein is expressed from HEK293 without tag. It contains His25-Ser153.
Accession	P05112-1
Molecular Weight	The protein has a predicted MW of 14.96 kDa. Due to glycosylation, the protein migrates to 23-25 kDa based on Tris-Bis PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

Formulation and Storage

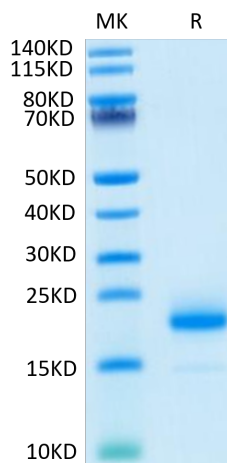
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Interleukin-4, also known as IL4, is a secreted protein which belongs to the IL-4 / IL-13 family. Interleukin-4 / IL4 has many biological roles, including the stimulation of activated B-cell and T-cell proliferation. In the presence of IL-4 and IL-13, cytokines that are produced in a Th-2 type response, particularly during allergy and parasitic infections, macrophages become differentially activated, And this cytokine is a ligand for interleukin 4 receptor.

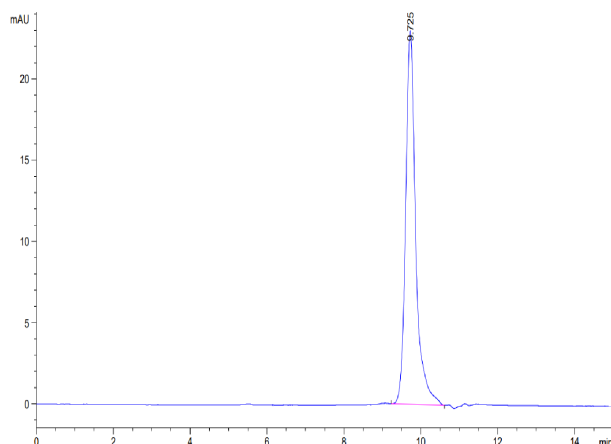
Assay Data

Tris-Bis PAGE



Human IL-4 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



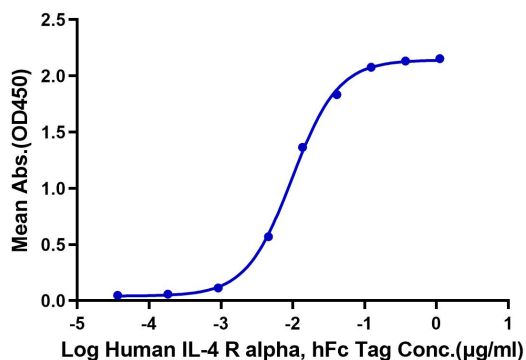
The purity of Human IL-4 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human IL-4, No Tag ELISA

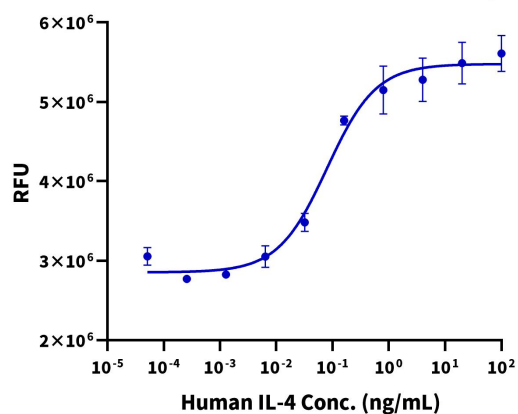
0.1µg Human IL-4, No Tag Per Well



Immobilized Human IL-4, No Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Human IL-4 R alpha, hFc Tag with the EC50 of 9.8ng/ml determined by ELISA.

Cell Based Assay

Recombinant Human IL-4 Bioactivity



Measured in a cell proliferation assay using TF1 human erythroleukemic cells. The ED50 for this effect is 0.05-0.35 ng/mL