

Human IL-5 Protein

Cat. No. IL5-HM401

Description

Source	Recombinant Human IL-5 Protein is expressed from HEK293 with His tag and Avi tag at the N-Terminus. It contains Ile20-Ser134.
Accession	P05113
Molecular Weight	The protein has a predicted MW of 16.1 kDa. Due to glycosylation, the protein migrates to 18-25 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 HPLC

Formulation and Storage

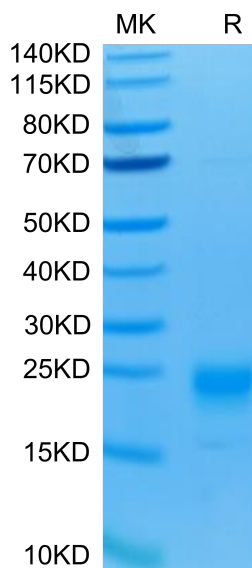
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized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

IL-5 is an important cytokine for priming and survival of mature eosinophils and for proliferation and maturation of their progenitors. IL-5(R α) targeting will be increasingly used in diseases where eosinophils are the key immune effector cells such as eosinophilic asthma (EA), hypereosinophilic syndrome (HES), eosinophilic esophagitis (EE), and eosinophilic granulomatosis with polyangiitis (EGPA).

Assay Data

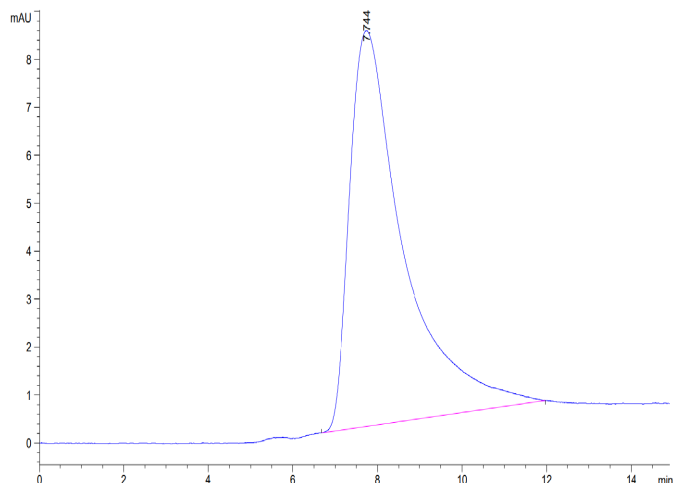
Bis-Tris PAGE



Human IL-5 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

Assay Data

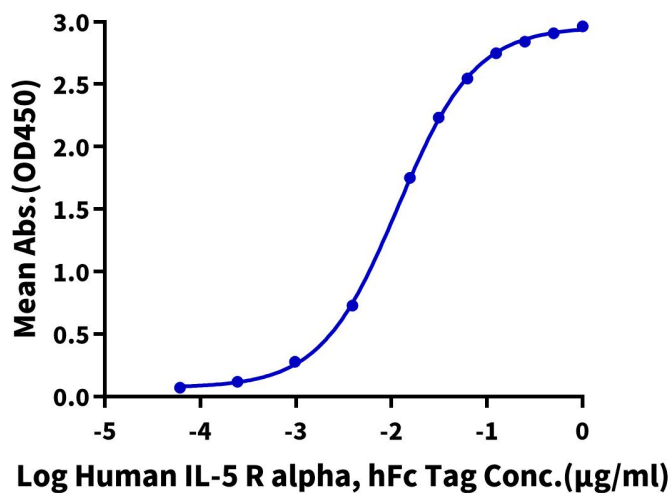


The purity of Human IL-5 is greater than 95% as determined by SEC-HPLC.

ELISA Data

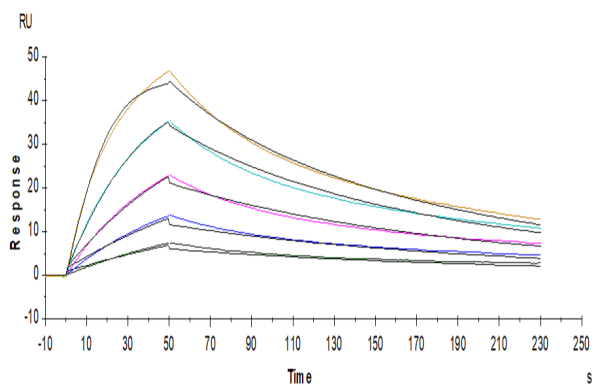
Human IL-5, His Tag ELISA

0.1µg Human IL-5, His Tag Per Well



Immobilized Human IL-5, His Tag at 1µg/ml (100µl/Well) on the plate. Dose response curve for Human IL-5 R alpha, hFc Tag with the EC50 of 11.7ng/ml determined by ELISA (QC Test).

SPR Data



Human IL-5, His Tag immobilized on CM5 Chip can bind Human IL-5Ra, His Tag with an affinity constant of 4.9nM as determined in a SPR assay (Biacore T200).