

Human IL-10 Protein

Cat. No. IL1-HM410

Description

Source	Recombinant Human IL-10 Protein is expressed from HEK293 with His tag and Avi tag at the N-Terminus. It contains Ser19-Asn178.
Accession	P22301
Molecular Weight	The protein has a predicted MW of 21.3 kDa. Due to glycosylation, the protein migrates to 23-25 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

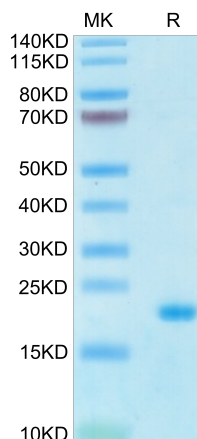
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized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

Background

Interleukin 10 (IL10) is a key anti-inflammatory cytokine that can inhibit proinflammatory responses of both innate and adaptive immune cells. An association between IL10 and intestinal mucosal homeostasis became clear with the discovery that IL10 and IL10 receptor (IL10R)-deficient mice develop spontaneous intestinal inflammation. Similarly, patients with deleterious mutations in IL10, IL10RA, or IL10RB present with severe enterocolitis within the first months of life.

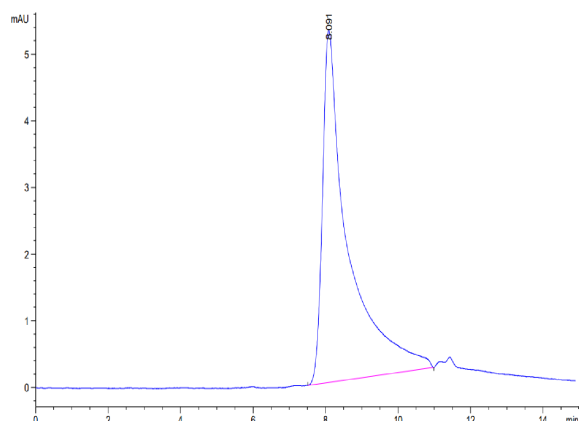
Assay Data

Bis-Tris PAGE



Human IL-10 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

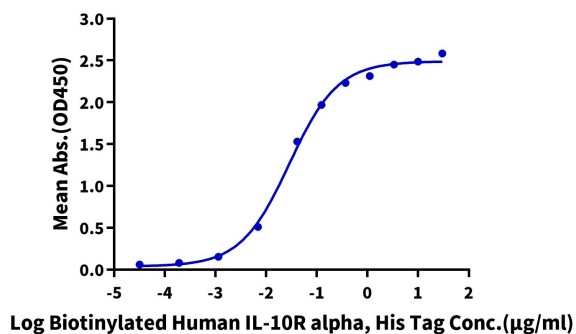


The purity of Human IL-10 is greater than 95% as determined by SEC-HPLC.

Assay Data

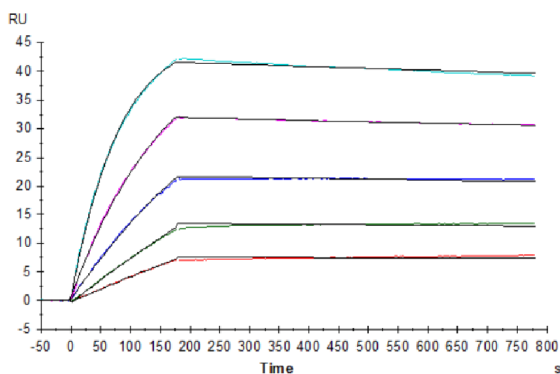
ELISA Data

Human IL-10, His Tag ELISA
0.1µg Human IL-10, His Tag Per Well



Immobilized Human IL-10, His Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Human IL-10R alpha, His Tag with the EC50 of 28.7ng/ml determined by ELISA (QC Test).

SPR Data



Human IL-10R alpha, His Tag immobilized on CM5 Chip can bind Human IL-10, His Tag with an affinity constant of 0.13 nM as determined in SPR assay (Biacore T200).