

Human IL-10 Protein

Cat. No. IL1-HM010

Description

Source	Recombinant Human IL-10 Protein is expressed from HEK293 without tag. It contains Ser19-Asn178.
Accession	P22301
Molecular Weight	The protein has a predicted MW of 18.8 kDa same as Bis-Tris PAGE result.
Endotoxin	Less than 0.1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

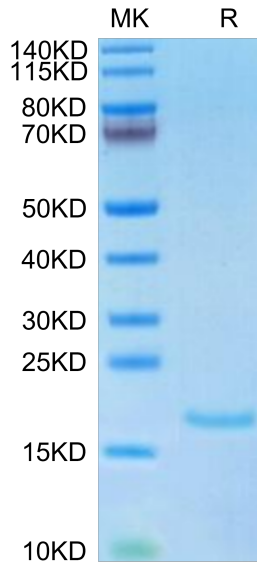
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled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

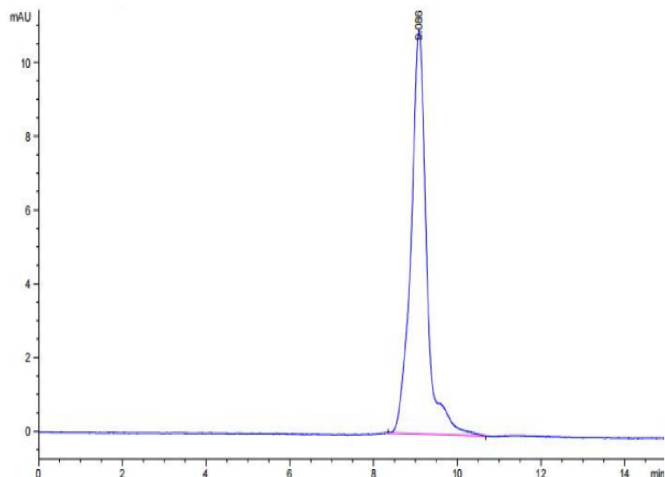
Bis-Tris PAGE



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

SEC-HPLC

Assay Data

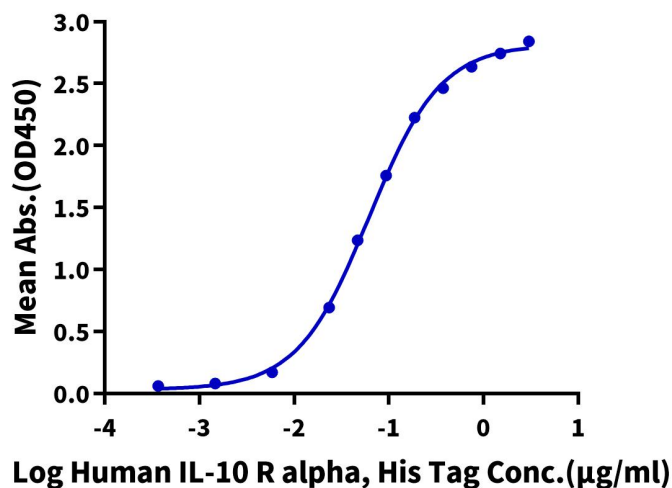


The purity of Human IL-10 is greater than 95% as determined by SEC-HPLC.

ELISA Data

Human IL-10, His Tag ELISA

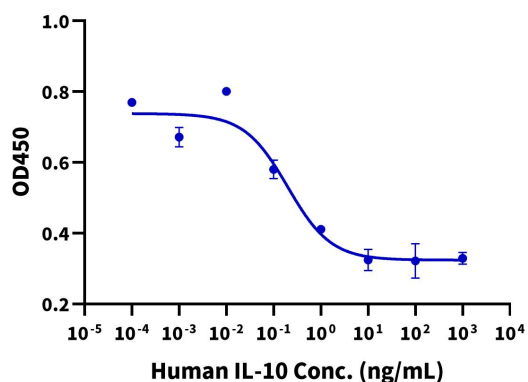
0.2µg Human IL-10, No Tag Per Well



Immobilized Human IL-10, No Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Human IL-10 R alpha, His Tag with the EC50 of 61.9ng/ml determined by ELISA (QC Test).

Cell Based Assay

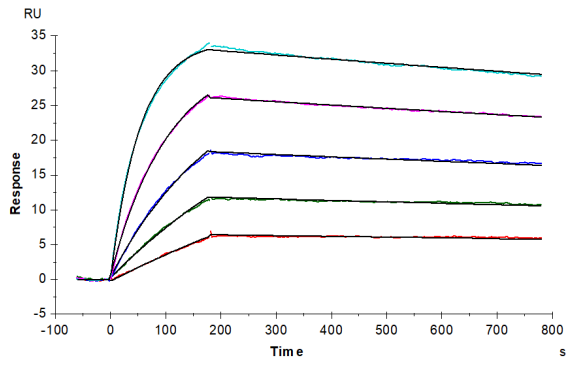
Recombinant Human IL-10 Bioactivity



Measured by its ability to inhibit IL-6 secretion by RAW264.7 cells. The ED50 for this effect is 0.1 - 1.0 ng/mL (QC Test).

SPR Data

Assay Data



Human IL-10 R alpha, His Tag captured on CM5 Chip via Anti-His Antibody can bind Human IL-10, No Tag with an affinity constant of 0.255 nM as determined in SPR assay (Biacore T200).