

Human IL-10 R alpha Protein

Cat. No. IL1-HM4RA

Description

Source	Recombinant Human IL-10 R alpha Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains His22-Asn235.
Accession	Q13651
Molecular Weight	The protein has a predicted MW of 27 kDa. Due to glycosylation, the protein migrates to 40-48 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

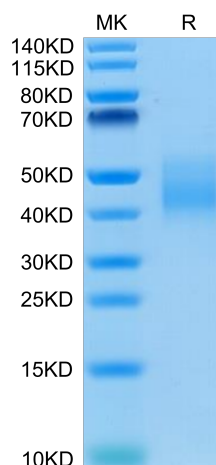
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled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

The interleukin-10 receptor alpha (IL10RA) gene codes for the alpha chain of the IL-10 receptor which binds the cytokine IL-10. IL-10 is an anti-inflammatory cytokine with immunoregulatory function during the pathogenesis of many inflammatory disorders in livestock, including Johne's disease (JD). JD is a chronic enteritis in cattle caused by *Mycobacterium avium* subsp. *paratuberculosis* (MAP) and is responsible for significant economic losses to the dairy industry. Several candidate genes including IL10RA have been found to be associated with JD.

Assay Data

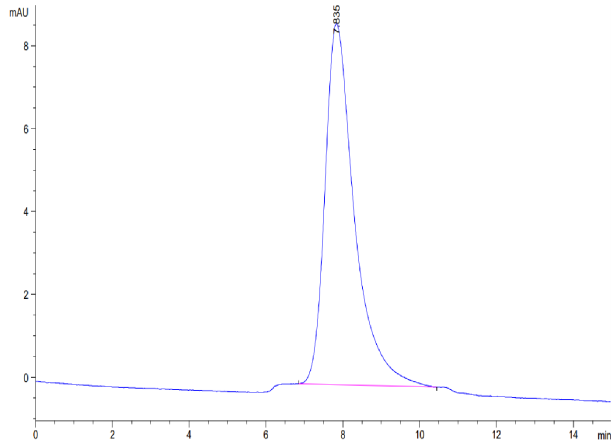
Tris-Bis PAGE



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

SEC-HPLC

Assay Data

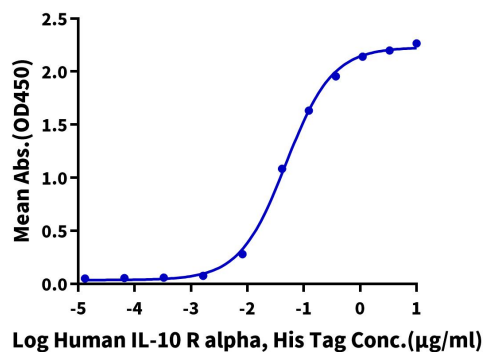


The purity of Human IL-10 R alpha is greater than 95% as determined by SEC-HPLC.

Assay Data

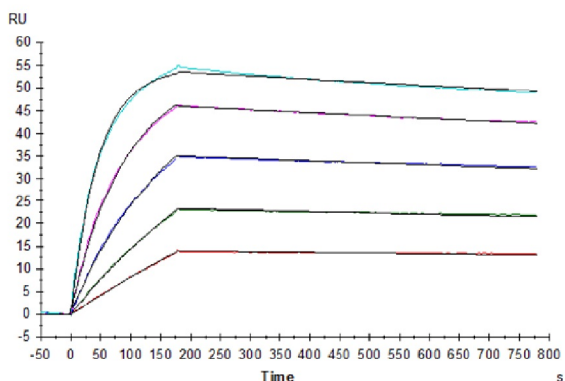
ELISA Data

Human IL-10 R alpha, 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 48.4ng/ml determined by ELISA (QC Test).

SPR Data



Human IL-10 R 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).