

# Cynomolgus IL-10 R alpha Protein

Cat. No. IL1-CM1RA

## Description

<b>Source</b>	Recombinant Cynomolgus IL-10 R alpha Protein is expressed from HEK293 with His tag at the C-Terminus. It contains His22-Asn233.
<b>Accession</b>	A0A2K5WJ66
<b>Molecular Weight</b>	The protein has a predicted MW of 25.34 kDa. Due to glycosylation, the protein migrates to 45-60 kDa based on Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

## Formulation and Storage

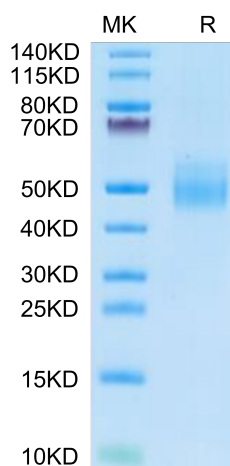
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein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

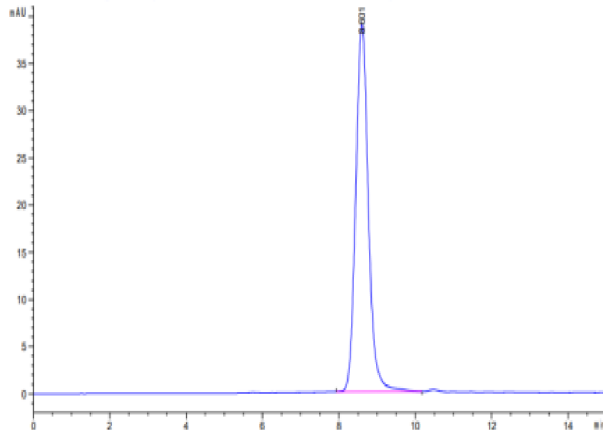
### Tris-Bis PAGE



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

### SEC-HPLC

Assay Data



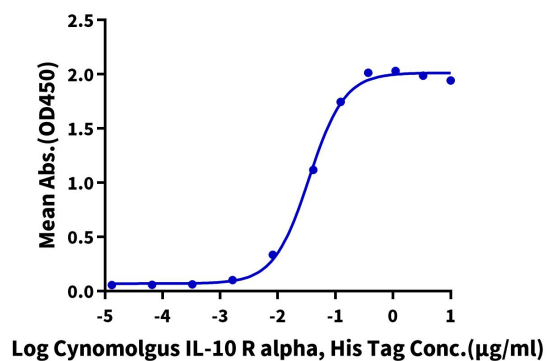
The purity of Cynomolgus IL-10 R alpha is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

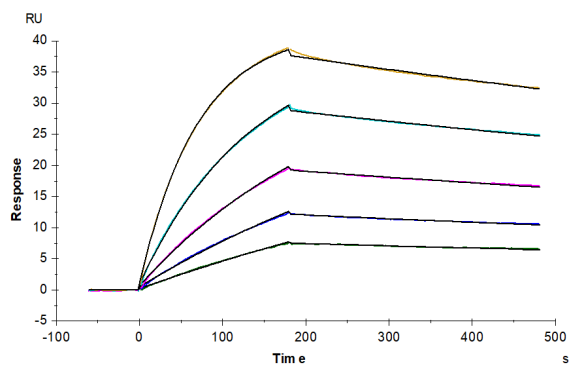
**Cynomolgus IL-10 R alpha, His Tag ELISA**

0.1µg Human IL-10, No Tag Per Well



Immobilized Human IL-10, No Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Cynomolgus IL-10 R alpha, His Tag with the EC50 of 35.0ng/ml determined by ELISA (QC Test).

SPR Data



Cynomolgus IL-10 R alpha, His Tag immobilized on CM5 Chip can bind Cynomolgus IL-10, His Tag with an affinity constant of 0.93 nM as determined in SPR assay (Biacore T200).