Cynomolgus IL-10 R alpha / CD210 Protein, Fc Tag

Catalog # ILR-C5256

Synonym

Interleukin-10 receptor subunit alpha,IL-10 receptor subunit alpha,IL-10R subunit alpha,IL-10RA,CDw210a,Interleukin-10 receptor subunit 1,IL-10R subunit 1,IL-10R1,CD210,IL10RA,IL10R

Source

Cynomolgus IL-10 R alpha Protein, Fc Tag(ILR-C5256) is expressed from human 293 cells (HEK293). It contains AA His 22 - Asn 235 (Accession # XP_005579838.2).
Predicted N-terminus: His 22

Molecular Characterization

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 50.8 kDa. The protein migrates as 60-70 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

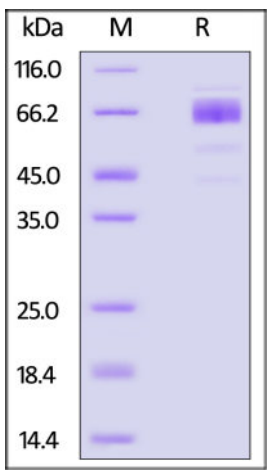
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

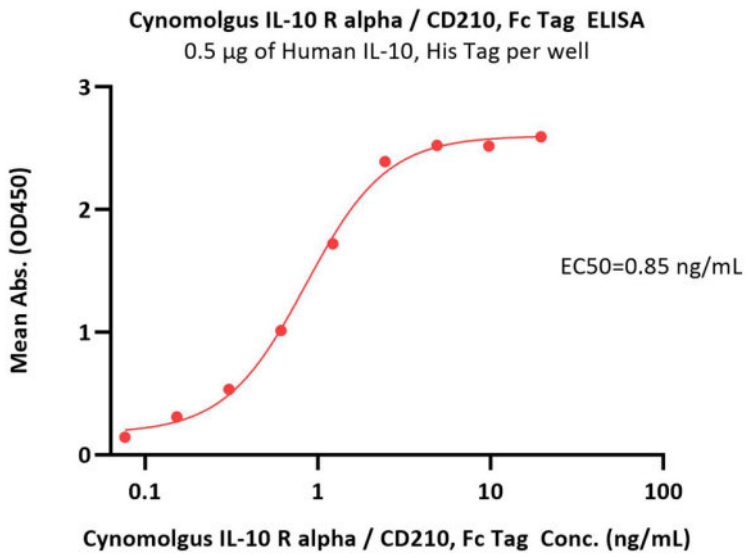
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



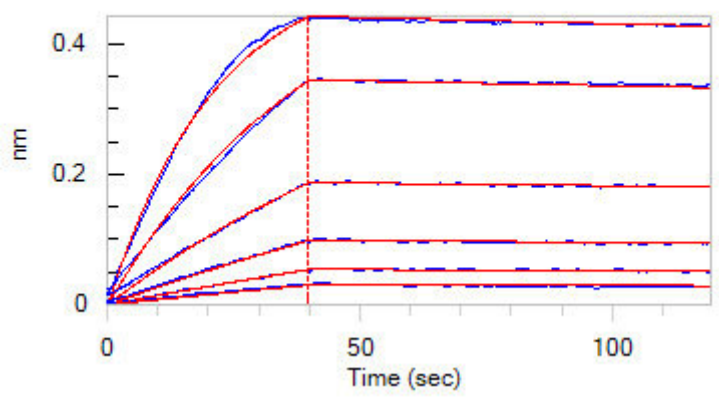
Cynomolgus IL-10 R alpha Protein, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA



Immobilized Human IL-10, His Tag (Cat. No. IL0-H4248) at 5 μg/mL (100 μL/well) can bind Cynomolgus IL-10 R alpha / CD210, Fc Tag (Cat. No. ILR-C5256) with a linear range of 0.2-2 ng/mL (QC tested).

Bioactivity-BLI



Loaded Cynomolgus IL-10 R alpha / CD210, Fc Tag (Cat. No. ILR-C5256) on Protein A Biosensor, can bind Human IL-10, His Tag (Cat. No. IL0-H4248) with an affinity constant of 0.96 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Interleukin-10 receptor subunit alpha (IL-10 R alpha) is a cell surface receptor for the cytokine IL-10 that participates in IL-10 mediated anti-inflammatory functions, limiting excessive tissue disruption caused by inflammation. Upon binding to IL10, induces a conformational change in IL10RB, allowing IL10RB to bind IL10 as well.In turn, the heterotetrameric assembly complex, composed of two subunits of IL10RA and IL10RB, activates the kinases JAK1 and TYK2 that are constitutively associated with IL10RA and IL10RB respectively.These kinases then phosphorylate specific tyrosine residues in the intracellular domain in IL10RA leading to the recruitment and subsequent phosphorylation of STAT3.

Clinical and Translational Updates