

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

Mouse IL-10 R alpha Protein, Fc Tag(ILR-M5254) is expressed from human 293 cells (HEK293). It contains AA Leu 17 - Ile 241 (Accession # [Q61727](#)). Predicted N-terminus: Leu 17

Molecular Characterization

IL10RA(Leu 17 - Ile 241) Q61727	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus

The protein has a calculated MW of 52.7 kDa. The protein migrates as 43 kDa,55 kDa and 55-90 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) 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

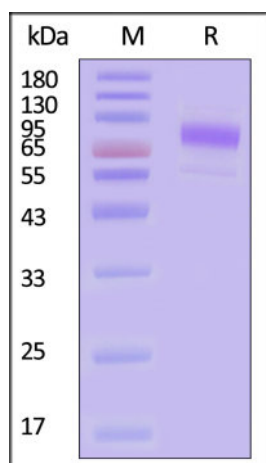
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

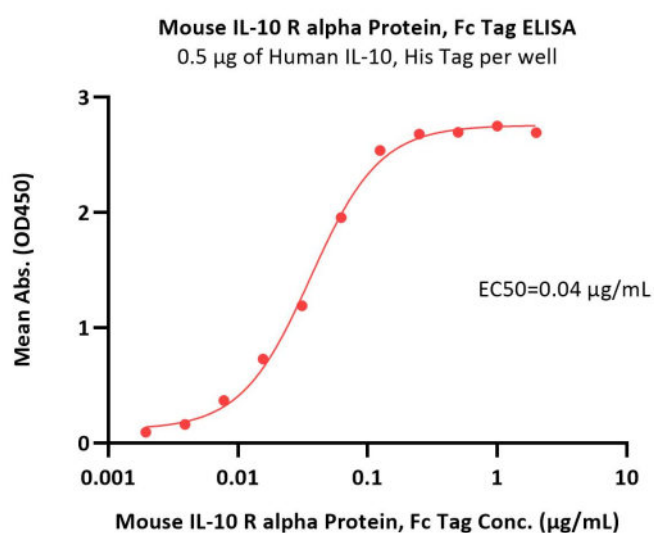
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



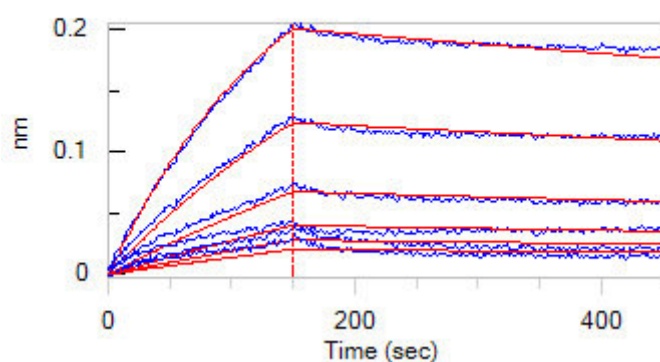
Mouse IL-10 R alpha Protein, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

Bioactivity-ELISA



Immobilized Human IL-10, His Tag (Cat. No. IL0-H4248) at 5 µg/mL (100 µL/well) can bind Mouse IL-10 R alpha Protein, Fc Tag (Cat. No. ILR-M5254) with a linear range of 0.002-0.063 µg/mL (QC tested).

Bioactivity-BLI



Loaded Mouse IL-10, His Tag (Cat. No. IL0-M4248) on HIS1K Biosensor, can bind Mouse IL-10 R alpha Protein, Fc Tag (Cat. No. ILR-M5254) with an affinity constant of 32.9 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

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.