A Reliable Research Partner in Life Science and Medicine

# **Recombinant Human IL10-RA/IL-10 Rα Protein (His Tag)**

Catalog No. PKSH033632

Note: Centrifuge before opening to ensure complete recovery of vial contents.

## **Description**

Synonyms 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;IL-10RA

Species Human

Expression Host HEK293 Cells
Sequence His22-Asn235

AccessionQ13651Calculated Molecular Weight25.2 kDaObserved molecular weight38-59 kDaTagC-His

**Bioactivity** Not validated for activity

#### **Properties**

**Purity** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin** < 1.0 EU per µg of the protein as determined by the LAL method.

**Storage** Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to

-80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots

of reconstituted samples are stable at < -20°C for 3 months.

**Shipping** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation** Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.

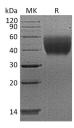
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as

protectants before lyophilization.

Please refer to the specific buffer information in the printed manual.

**Reconstitution** Please refer to the printed manual for detailed information.

## Data



> 95 % as determined by reducing SDS-PAGE.

# Background

#### For Research Use Only

Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Fax: 1-832-243-6017

Web: <u>www.elabscience.com</u> Email: <u>techsupport@elabscience.com</u>

### **Elabscience Bionovation Inc.**



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Interleukin-10 Receptor alpha (IL-10R $\alpha$ ) is a transmembrane glycoprotein member of the class II cytokine receptor family. Mature human IL-10 R $\alpha$  consists of a 214 amino acid (aa) extracellular domain (ECD), a 21 aa transmembrane segment, and a 322 aa cytoplasmic domain. Within the ECD, human IL-10 R $\alpha$  shares 59% aa sequence identity with mouse and rat IL-10R $\alpha$ . IL-10 R $\alpha$  is required for mediating the effects of IL-10,a critical molecule in the control of microbial infections, allergic and autoimmune inflammation, and cancer. IL-10R $\alpha$  is the ligand specific subunit of the IL-10 receptor complex. Noncovalent dimers of IL-10 bind to IL-10 R $\alpha$ , resulting in the recruitment of IL-10 R $\beta$ . Immunosuppressive signal transduction through the IL-10 receptor complex can be inhibited by activation of TLR2, 4, or 9, enabling strengthened immune responses during infection. Polymorphisms of human IL-10 R $\alpha$  may limit viral immune evasion by retaining full responsiveness to human IL-10 but responding weakly to the cytomegalovirus homolog of IL10.

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