A Reliable Research Partner in Life Science and Medicine

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

Catalog Number: PKSH033632

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

#### Description

Species Human

**Source** HEK293 Cells-derived Human IL10-RA; IL-10 Rα protein His 22-As n 235, with an C-

terminal His

Calculated MW 25.2 kDa
Observed MW 38-59 kDa
Accession Q13651

**Bio-activity** 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.

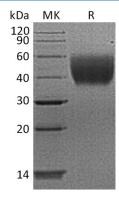
Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants

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

# Elabscience®

#### Elabscience Biotechnology Co., Ltd.

A Reliable Research Partner in Life Science and Medicine

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.