

Human IL10Rb Protein (His & Fc Tag)

Catalog Number: 10945-H03H



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

CDW210B; CRF2-4; CRFB4; D21S58; D21S66; IL-10R2; 6620401D04Rik; AI528744; CRF2-4; Crfb4; D16H21S58; D21S58h; IL-10R2; IL10r2

Protein Construction:

DNA sequence encoding the extracellular domain (Met 1-Ser 220) of human IL10R β (NP_000619.3) was fused with the C-terminal polyhistidine-tagged Fc region of human IgG1 at the C-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 92 % as determined by SDS-PAGE

Bio Activity:

Measured by its binding ability in a functional ELISA
Immobilized human IL28B at 20 $\mu\text{g/ml}$ (100 $\mu\text{l/well}$) can bind human IL10RB-Fc with a linear range of 3.125-25 $\mu\text{g/ml}$.

Endotoxin:

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

Stability:

Samples are stable for up to twelve months from date of receipt at -70 $^{\circ}\text{C}$

Predicted N terminal: Met 20

Molecular Mass:

The recombinant human IL10R β /Fc is a disulfide-linked homodimer. The reduced monomer consists of 449 amino acids and has a predicted molecular mass of 51.7 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rhIL10R β /Fc monomer is approximately 75-85 kDa due to glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

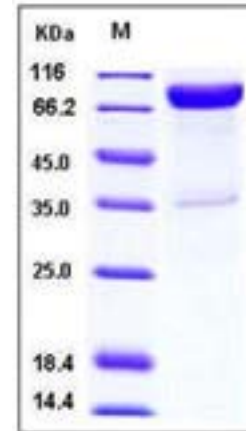
Store it under sterile conditions at -20 $^{\circ}\text{C}$ to -80 $^{\circ}\text{C}$ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Interleukin 10 receptor, beta subunit (IL10RB/IL-10RB) also known as Cytokine receptor family 2 member 4, Interleukin-10 receptor subunit 2, and cytokine receptor family II, member 4, is a subunit for the interleukin-10 receptor. IL10RB/IL-10RB belongs to the cytokine receptor family. It is an accessory chain essential for the active interleukin 10 receptor complex. Coexpression of this and IL10RA proteins has been shown to be required for IL10-induced signal transduction. Defects in IL10RB/IL-10RB are the cause of inflammatory bowel disease type 25 (IBD25). It is a chronic, relapsing inflammation of the gastrointestinal tract with a complex etiology. It is subdivided into Crohn disease and ulcerative colitis phenotypes. Crohn disease may affect any part of the gastrointestinal tract from the mouth to the anus, but most frequently it involves the terminal ileum and colon. Bowel inflammation is transmural and discontinuous; it may contain granulomas or be associated with intestinal or perianal fistulas. In contrast, in ulcerative colitis, the inflammation is continuous and limited to rectal and colonic mucosal layers; fistulas and granulomas are not observed. Both diseases include extraintestinal inflammation of the skin, eyes, or joints.

References

1. Josephson K, et al. (2001) Crystal structure of the IL-10/IL-10R1 complex reveals a shared receptor binding site. *Immunity*. 15 (1): 35-46.
2. Yoo KH, et al. (2011) Association of IL10, IL10RA, and IL10RB polymorphisms with benign prostate hyperplasia in Korean population. *J Korean Med Sci*. 26(5): 659-64.

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Fax :+86-10-51029969 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>