# Rat IL10RB / IL10R2 Protein (Fc Tag)

**Catalog Number:** **80184-R02H**

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:**

A DNA sequence encoding the rat IL10RB (Met1-Pro222) was expressed, fused with the Fc region of human IgG1 at the C-terminus.

**Source:** Rat

**Expression Host:** Human Cells

## QC Testing

**Purity:** > 95 % as determined by SDS-PAGE

**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 ℃

**Predicted N terminal:** Met 22

**Molecular Mass:**

The recombinant rat IL10RB/Fc is a disulfide-linked homodimer. The reduced monomer comprises 442 amino acids and has a predicted molecular mass of 50.7 kDa. The apparent molecular mass of the protein is approximately 68 kDa in SDS-PAGE under reducing conditions.

**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:**

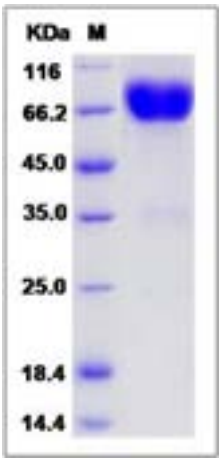
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**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.