

# Recombinant Rat IL-10 Protein(Trx Tag)

Catalog Number: PDER100115

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

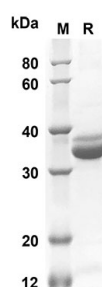
## Description

<b>Species</b>	Rat
<b>Source</b>	E.coli-derived Rat IL-10 proteins Ser19-Asn178, with an N-terminal Trx
<b>Mol_Mass</b>	37.5 kDa
<b>Accession</b>	P29456
<b>Bio-activity</b>	Not validated for activity

## Properties

<b>Purity</b>	> 90% as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 10 EU/mg of the protein as determined by the LAL method
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
<b>Reconstitution</b>	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

## Data



SDS-PAGE analysis of Rat IL-10 proteins, 2 µg/lane of Recombinant Rat IL-10 proteins was resolved with an SDS-PAGE under reducing conditions, showing bands at 37.5 KD

## Background

Major immune regulatory cytokine that acts on many cells of the immune system where it has profound anti-inflammatory functions, limiting excessive tissue disruption caused by inflammation. Mechanistically, IL10 binds to its heterotetrameric receptor comprising IL10RA and IL10RB leading to JAK1 and STAT2-mediated phosphorylation of STAT3. In turn, STAT3 translocates to the nucleus where it drives expression of anti-inflammatory mediators. Targets antigen-presenting cells (APCs) such as macrophages and monocytes and inhibits their release of pro-inflammatory cytokines including granulocyte-macrophage colony-stimulating factor /GM-CSF, granulocyte colony-stimulating factor/G-CSF, IL-1 alpha, IL-1 beta, IL-6, IL-8 and TNF-alpha. Interferes also with antigen presentation by reducing the expression of MHC-class II and co-stimulatory molecules, thereby inhibiting their ability to induce T cell activation.

## For Research Use Only