

## Recombinant Rat IL-10 Protein(Trx Tag)

**Catalog Number: GPER0115**

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

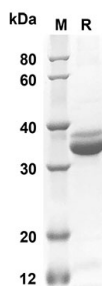
### Description

|                      |                                                                        |
|----------------------|------------------------------------------------------------------------|
| <b>Species</b>       | Rat                                                                    |
| <b>Source</b>        | E.coli-derived Rat IL-10 proteins Ser19-Asn178, with an N-terminal Trx |
| <b>Calculated MW</b> | 37.5 kDa                                                               |
| <b>Observed MW</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.

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