

## GFR35AF Recombinant Rat IL-10 (Animal-Free)

### Description

Interleukin-10 (IL-10) is an anti-inflammatory cytokine produced by macrophages and type 2 T helper (Th2) cells. IL-10 inhibits the production of pro-inflammatory cytokines such as interferon- $\gamma$  (IFN- $\gamma$ ), Tumor Necrosis Factor  $\alpha$  (TNF- $\alpha$ ), interleukin-2 (IL-2), interleukin-3 (IL-3), interleukin-4 (IL-4), and Granulocyte-Macrophage Colony-Stimulating Factor (GM-CSF), made by macrophages and regulatory T cells. IL-10 also suppresses antigen presentation on antigen presenting cells, and enhances the survival, proliferation, and antibody production of B cells.

This product is produced with no animal-derived raw products. All processing and handling employs animal-free equipment and animal-free protocols.

<b>Length</b>	161 aa
<b>Molecular Weight</b>	18.8 kDa
<b>Source</b>	E. coli
<b>Accession Number</b>	P29456
<b>Purity</b>	$\geq 95\%$ determined by reducing and non-reducing SDS-PAGE

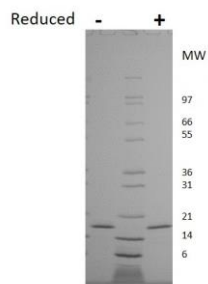
### Specifications

<b>Alternative Names</b>	Interleukin-10, interleukin 10, IL10, IL 10, B-TCGF, CSIF, TGIF, cytokine synthesis inhibitory factor
<b>Biological Activity</b>	Activity to be determined.
<b>Endotoxin Level</b>	$\leq 1.00$ EU/ $\mu$ g as measured by kinetic LAL
<b>Formulation</b>	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)
<b>AA Sequence</b>	MSKGHSIRGD NNCTHFPVSQ THMLRELRAA FSQVKTFQK KDQLDNILLT DSSLQDFKGY LGCQALSEMI KFYLVVMPQ AENHGPEIKE HLNSLGEKLE TLWQLRRCH RFLPCENKSK AVEQVKNDNFN KLQDKGVYKA MNEFDIFINC IEAYVTLKMK N

### Preparation and Storage

<b>Reconstitution</b>	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/ml, which can be further diluted into other aqueous solutions.
<b>Stability and Storage</b>	12 months from date of receipt when stored at $-20^{\circ}\text{C}$ to $-80^{\circ}\text{C}$ as supplied. 1 month when stored at $4^{\circ}\text{C}$ after reconstituting as directed. 3 months when stored at $-20^{\circ}\text{C}$ to $-80^{\circ}\text{C}$ after reconstituting as directed.

### Data



Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1  $\mu$ g of protein was loaded in each lane. Rat IL-10 has a predicted Mw of 18.8 kDa.