

### BACKGROUND:

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. Mouse IL-10 is not active on human cells.

Recombinant Rat Interleukin-10 is a non-glycosylated protein monomer, containing 161 amino acids and having a molecular mass of 18.8 kDa.

**Cat. No.:**  
RP3035AF

**Alternate Names:**  
Cytokine synthesis inhibitory factor, CSIF

### AA Sequence:

MSKGH SIRGD	NNCTHFPVSQ	THMLRELRAA
FSQVK TFFQK	KDQLDNILLT	DSLLQDFKGY
LGCQALSEMI	KFYLVEVMPQ	AENHGPEIKE
HLNSLGEKLLK	TLWIQLRRCH	RFLPCENKSK
AVEQVKNDFN	KLQDKGVYKA	MNEFDIFINC
IEAYVTLKMK	N	

### TECHNICAL INFO

**Source:**  
*E. coli*

**Physical Appearance:**  
Sterile Filtered white lyophilized (freeze-dried) powder.

**Formulation:**  
0.1% Trifluoroacetic Acid (TFA)

**Stability:**  
Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

**Reconstitution:**  
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.

**Protein Content and Purity determined by:**

- UV spectroscopy at 280 nm.
- RP-HPLC calibrated against a known standard.
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

**Endotoxin Level:**  
Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

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

