

## BACKGROUND:

Interleukin 10 (IL-10) is an anti-inflammatory cytokine mainly produced by macrophages and Th2 cells. IL-10 functions by inhibiting pro-inflammatory cytokines made by macrophages and regulatory T cells including, IFN- $\gamma$ , TNF- $\alpha$ , IL-2, and IL-3, IL-4, and GM-CSF. IL-10 is also known to suppress antigen presentation on antigen presenting cells. While human IL-10 can act on murine cells, murine IL-10 cannot act on human cells.

Recombinant human IL-10 is a non-glycosylated protein, containing 161 amino acids and having a molecular mass of 16.6 kDa.

**Cat. No.:**  
RP1083AF

**Alternate Names:**  
B-TCGF, CSIF, TGIF

### AA Sequence:

MSPGQGTQSE	NSCTHFPGNL	PNMLRDLRDA
FSRVKTFFQM	KDQLDNLLLK	ESLLEDFKGY
LGCQALSEMI	QFYLEEVMPQ	AENQDPDIKA
HVNSLGENLK	TLRLRLRRCH	RFLPCENKSK
AVEQVKNAFN	KLQEKGIYKA	MSEFDIFINY
IEAYMTMKIR	N	

## TECHNICAL INFO

**Source:**  
*E. coli*

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

**Formulation:**  
10 mM sodium phosphate, pH 7.5

**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.

**Biological Activity:**  
The activity is measured by dose-dependent MC/9 cell Proliferation, with Bioactivity Acceptance Criteria ED50 at 5 ng/mL.

**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.

