

# Recombinant Human IL-10

Catalog # FL172

## Product Specifications

Appearance	Sterile filtered White lyophilized (freeze-dried) powder.
Purity	> 96% by SDS-PAGE or HPLC.
Endotoxin	< 0.01 EU/ $\mu$ g of rHuIL-10 protein as determined by LAL method.
Expression System	Expressed in E. coli.
Species	Human
Tag	Tag free.
Activity	Fully biologically active when compared to standard. The ED50 as determined by a cell proliferation assay using murine MC/9-2 cells is less than 1 ng/ml, corresponding to a specific activity of $\geq 1.0 \times 10^6$ IU/mg.
Formulation	Lyophilized from a 0.2 $\mu$ m filtered concentrated solution in 20 mM PB, with 150 mM NaCl, pH 7.4.
Reconstitution	Before use this product, please read the direction below carefully. This vial must be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at $\leq -20^\circ\text{C}$ . Further dilutions should be made in appropriate buffered solutions.
Accession #	P22301 Ser19-Asn178
Amino acid sequence	SPGQGTQSENSCTHFPGNLPNMLRDLRDAFSRVKTFQMKDQLDNLLKESLLEDFKGYLGCCALSEMIQFYLEEVMPPQAE NQDPDIKAHVNSLGENLKTLLRRLRRCHRFLPCENKSKAVEQVKNVAFNKLQEKGIYKAMSEFDIFINIEAYMTMKIRN
Molecular weight	Approximately 36.0 kDa, containing two noncovalently associated polypeptide chain.
Synonyms	B-TCGF, CSIF, TGIF
Stability & Storage	Shipped on wet ice. For long term storage, the product should be stored $\leq -20^\circ\text{C}$ . Please avoid repeated freeze-thaw cycles after reconstitution. 36 months from date of receipt, $-20$ to $-70^\circ\text{C}$ as supplied. 1 month, $2$ to $8^\circ\text{C}$ under sterile conditions after reconstitution. 3 months, $-20$ to $-70^\circ\text{C}$ under sterile conditions after reconstitution.
Precautions	Recombinant Human IL-10 is for research use only and not for use in diagnostic or therapeutic procedures.

## Background

IL-10 is an immunosuppressive cytokine produced by a variety of mammalian cell types including macrophages, monocytes, T cells, B cells and keratinocytes. IL-10 inhibits the expression of proinflammatory cytokines such as IL-1 and TNF- $\alpha$ . Like IL-4, IL-10 enhances humoral immune responses and attenuates cell-mediated immune reactions. IL-10 is a critical molecule in the control of viral infections and allergic and autoimmune inflammation. It promotes phagocytic uptake and Th2 responses but suppresses antigen presentation and Th1 proinflammatory responses. Human IL-10 is active on murine cells, but murine IL-10 is inactive on human cells. Recombinant Human IL-10 is expressed as a 36kDa noncovalently associated homodimer protein containing two 160 amino acid residues polypeptide chain.

