

# Recombinant Mouse IL-10

Catalog # FL118

## Product Specifications

Appearance	Sterile filtered White lyophilized (freeze-dried) powder.
Purity	> 98% by SDS-PAGE or HPLC.
Endotoxin	< 0.01 EU/ $\mu$ g of rMuIL-10 protein as determined by LAL method.
Expression System	Expressed in E. coli.
Species	Mouse
Tag	Tag free.
Activity	Fully biologically active when compared to standard. The ED50 as determined by a cell proliferation assay using mouse 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 10 mM HCl 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 #	P18893 Ser19-Ser178
Amino acid sequence	SRGQYSREDNNTHTFPGVQSHMLLELRTAFSQQVKTFFQTKDQLDNILLTDSLMDQDFKGYLGCQALSEMIQFYLVEVMPQAEKHGPEIKEHLNSLGEKLTLMRLRRCHRFLPCENKSKAVEQVKSDFNKLQDQGVYKAMNEFDIFINCLIEAYMMIKMKS
Molecular weight	Approximately 18.7 kDa, a single non-glycosylated polypeptide chain containing 160 amino acids.
Synonyms	CSIF
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 Mouse IL-10 is for research use only and not for use in diagnostic or therapeutic procedures.

## Background

Interleukin-10 (IL-10) is encoded by the IL10 gene and expressed in monocytes and Type 2 T helper cells (Th2). The biological activities of IL-10 are mediated by the IL-10 receptor complex, which is composed of the ligand-binding IL-10 R $\alpha$ /R1 and the accessory IL-10 R $\beta$ /R2 subunits. IL-10 is capable of inhibiting the synthesis of a number of cytokines, including IFN- $\gamma$ , IL-2, IL-3, TNF and GM-CSF produced by activated macrophages and by T helper cells. IL-10 is classified as a class 2 cytokine which consists of IL-10, IL-19, IL-20, IL-22, IL-24 and IL-26, several interferons and interferon-like molecules. Mature Mouse IL-10 shares 70%-77% amino acid sequence identity with human, bovine, porcine IL-10, but Mouse IL-10 does not act on human cells. Recombinant Mouse IL-10 is an 18.7kDa protein containing 160 amino acid residues.

