



## User Manual

**Interleukin-10 (IL-10) (Rat)**

**Cat. No. REILP-10011**

**Description:**

Interleukin-10 also known as cytokine synthesis inhibitory factor (CSIF), is coded by IL10 gene on chromosome 13 in rat. the charter member of the IL 10 family of  $\alpha$  helical cytokines that also includes IL19, IL20, IL22, and IL24 (1, 2). IL10 is secreted by many activated hematopoietic cell types as well as hepatic stellate cells, 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. Human IL-10 active on murine cells, but murine IL-10 is inactive on human cells.

**Source:**

*Escherichia coli*

**Unit:**

2  $\mu$ g

**Reconstitution:**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in 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  $< -20^{\circ}\text{C}$ . Further dilutions should be made in appropriate buffered solutions.

**Formulation:**

Lyophilized from a 0.2  $\mu$ m filtered concentrated solution in PBS, pH 7.4.

**Storage:**

This lyophilized preparation is stable at 2-8 $^{\circ}\text{C}$ , but should be kept at -20 $^{\circ}\text{C}$  for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one

week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

### **Molecular Weight:**

Approximately 18.6 kDa, a single non-glycosylated polypeptide chain containing 160 amino acid residues.

### **Endotoxin:**

Less than 1 EU/μg of IL-10 as determined by LAL method.

### **Usage:**

This material is offered by Cyagen Biosciences for research, laboratory or further evaluation purposes. FOR RESEARCH USE ONLY. NOT INTENDED FOR ANY ANIMAL OR HUMAN THERAP EUTIC OR DIAGNOSTIC USE.

### **Biological Activity:**

The ED50 determined by a cell proliferation assay using murine MC/9-2 cells is less than 12 ng/mL, corresponding to a specific activity of  $> 8.3 \times 10^4$  IU/mg.

### **Physical Appearance:**

Sterile filtered white lyophilized (freeze-dried) powder.

### **AA Sequence:**

SKGHSIRGDN NCTHFPVSQT HMLRELRAAF SQVKTFQKK DQLDNIVLTD  
SLLQDFKGYL GCQALSEMIK FYLVEVMPQA ENHGPEIKEH LNSLGEKLKT  
LWIQLRRCHR FLPCENKSKA VEQVKNDFNK LQDKGVYKAM NEFDIFINCI  
EAYVTLKMKN

**Purity:**

> 97% by SDS-PAGE and HPLC analyses.

Material Safety Data Sheets (MSDSs) are available upon request.

The Certificate of Analysis (COA), which provides detailed quality control information for each product, is also available at the Cyagen website.

Cyagen Biosciences reserves all rights on the technical documents of its culture products. No part of this document may be reproduced or adapted for other purposes without written permission from Cyagen Biosciences.