

## **DATASHEET** Version 20181206

## IL-10, Rat

Cat. No.: Z03018-10

Size: 10.0 ug

Synonyms: Cytokine synthesis inhibitory factor;

CSIF; TGIF; IL10A

## **Description:**

Interleukin-10 (IL-10), also known as cytokine synthesis inhibitory factor (CSIF), is an anti-inflammatory cytokine produced by a variety of cell lines including T-cells, macrophages and mast cells. IL-10 is classified as a class-2 cytokine, a set of cytokines including IL-19, IL-20, IL-22, IL-24, and IL-26. IL-10 can inhibit the synthesis of pro-inflammatory cytokines such as IFN-gamma, IL-2, IL-3, TNF and GM-CSF. It also stimulates Th2 responses, but suppresses the antigen-presentation capacity of antigen presenting cells.

Recombinant rat Interleukin-10 (IL-10)produced in *E. coli* is a single non-glycosylated polypeptide chain containing 161 amino acids. A fully biologically active molecule, recombinant rat Interleukin-10 (IL-10) has a molecular mass of 18.7kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

## **Amino Acid Sequence:**

00001 MSKGHSIKGD NNCTHFPVSQ THMLRELRAA FSQVKTFFQK 00041 KDQLDNIVLT DSLLQDFKGY LGCQALSEMI KFYLVEVMPQ 00081 AENHGPEIKE HLNSLGEKLK TLWIQLRRCH RFLPCENKSK 00121 AVEQVKNDFN KLQDKGVYKA MNEFDIFINC IEAYVTLKMK Source: E. coli
Species: Rat

**Biological Activity**:  $ED_{50} < 0.5 \mu g/ml$ , measured by a cell proliferation assay using C6 cells, corresponding to a specific activity of  $> 2.0 \times 10^3$  units/mg.

**Molecular Weight**: 18.7 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

**Reconstitution**: Reconstituted in  $ddH_2O$  at 100  $\mu q/ml$ .

Purity: > 95% by SDS-PAGE and HPLC analyses.

Endotoxin Level: < 0.2 EU/µg, determined by LAL method.

**Storage**: Lyophilized recombinant rat Interleukin-10 (IL-10) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, IL-10 should be stable up to 2 weeks at 4°C or up to 3 months at -20°C.