

IL-10, Rat

Cat. No.: Z03018-1

Size: 1.0 mg

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:

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00001 MSKGHSIKGD NNCTHFPVSQ THMLRELRAA FSQVKTFQK
00041 KDQLDNIVLT DSSLQDFKGY LGCQALSEMI KFYLVVMPQ
00081 AENHGPEIKE HLNSLGEKLK TLWIQLRRCH RFLPCENKSK
00121 AVEQVKNDNF KLQDKGVYKA MNEFDIFINC IEAYVTLKMK
00161 N
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Source: *E. coli*

Species: Rat

Biological Activity: ED₅₀ < 0.5µg/ml, measured by a cell proliferation assay using C6 cells, corresponding to a specific activity of > 2.0× 10³ units/mg.

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

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH₂O at 100 µg/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.