Interleukin-10, mouse recombinant (rmIL-10)

Catalog No: 95029
Lot No: XXXXX
Source: *E. coli*
Synonyms: B-TCGF, CSIF, TGIF, IL-10, IL10A, MGC126450, MGC126451, Cytokine synthesis inhibitory factor

Background

IL10 is a cytokine produced primarily by monocytes and to a lesser extent by lymphocytes. This cytokine has pleiotropic effects in immunoregulation and inflammation. It down-regulates the expression of Th1 cytokines, MHC class II Ags, and costimulatory molecules on macrophages. It also enhances B cell survival, proliferation, and antibody production. This cytokine can block NF-kappa B activity, and is involved in the regulation of the JAK-STAT signaling pathway. Knockout studies in mice suggested the function of this cytokine as an essential immunoregulator in the intestinal tract.

Description

Interleukin-10 recombinant mouse produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 161 amino acids and having a molecular mass of 18785 Dalton. Interleukin-10 mouse is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

The protein was lyophilized after extensive dialysis against PBS.

Solubility

It is recommended to reconstitute the lyophilized Interleukin-10 in sterile 18 MΩ-cm H_2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized IL-10 Mouse, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Interleukin10 Mouse recombinant should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity

Greater than 98.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

Amino Acid Sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Ser-Arg-Gly-Gln.

Activity

The ED50 as determined by the dose-dependant co-stimulation with IL-4 of mouse MC-9 cells was found to be <2 ng/ml, corresponding to a specific activity of 500,000 IU/mg.

Usage

This product is offered by Biomol for research purposes only. Not for diagnostic purposes or human use. It may not be resold or used to manufacture commercial products without written approval of Biomol GmbH.