



RayBiotech, Inc.

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Certificate of Analysis and Data Sheet

Recombinant Mouse Interleukin-10 (IL-10)

Catalog No.
228-10856

Source:
Escherichia Coli.

Synonyms:

B-TCGF, CSIF, TGIF, IL-10, IL10A, MGC126450, MGC126451, Cytokine synthesis inhibitory factor.

Introduction:

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:

IL-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.

The 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 IL-10 Mouse Recombinant in sterile 18MΩ-cm H₂O not less than 100μg/ml, which can then be further diluted to other aqueous solutions.

Purity:

Greater than 98.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

**The products are furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.**



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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.

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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.

Biological Activity

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

Protein Content

Protein quantitation was carried out by two independent methods:

1. UV spectroscopy at 280 nm using the absorbency value of 0.34 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics).
2. Analysis by RP-HPLC, using a calibrated solution of IL-10 as a Reference Standard.

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