



Interleukin-4, mouse recombinant (rmlL-4)

Catalog No: 51557
Lot No: XXXXX
Source: *E. coli*
Synonyms: BCGF, BCDF, B cell stimulating factor, BSF-1, Lymphocyte stimulatory factor 1, IL-4, MGC79402, Binetrakin, Pitrakinra

Background

Interleukin-4 is a pleiotropic cytokine produced primarily by activated T lymphocytes, basophils and mast cells. Multiple immune response-modulating functions are performed by IL-4 on a variety of cell types and it has an important role in the regulator of isotype switching, induction of IgE production in B lymphocytes and differentiation of precursor T helper cells. IL-4 binds to both membrane-bound and secreted soluble IL-4 receptors.

Description

Interleukin-4 mouse recombinant produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 120 amino acids and having a molecular mass of 13500 Dalton. IL-4 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

Lyophilized from a 0.2 µm concentrated (1 mg/ml) solution in PBS pH 7.4.

Solubility

It is recommended to reconstitute the lyophilized Interleukin-4 in sterile 10 mM HAc not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized Interleukin-4, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL4 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 96.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

Amino Acid Sequence

MHIHGCDKNH LREIIGILNE VTGEGTPCTE MDVPNVLTAT KNTTESELVC RASKVLRIFY LKHGKTPCLK KNSSVLMELQ
RLFRAFRCCLD SSISCTMNES KSTSLKDFLE SLKSIMQMDY S

Activity

The ED50 as determined by the dose-dependant induction of HT-2 cell proliferation is less than 2 ng/ml corresponding to a specific activity of 500,000 IU/mg.

CONTACT US TODAY

BIOMOL GmbH • Kieler Straße 303a • 22525 Hamburg • Germany • info@biomol.de • www.biomol.de

Fon: +49 (0)40-853 260 0 • TOLL FREE IN GERMANY: Fon: 0800-246 66 51



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.

CONTACT US TODAY

BIOMOL GmbH • Kieler Straße 303a • 22525 Hamburg • Germany • info@biomol.de • www.biomol.de

Fon: +49 (0)40-853 260 0 • TOLL FREE IN GERMANY: Fon: 0800-246 66 51