

Interleukin-3, human recombinant (rHulL-3)

Catalog No: 50433 Lot No: XXXXX Source: E. coli

Synonyms: MCGF (Mast cell growth factor), Multi-CSF, HCGF, P-cell stimulation factor, IL-3, MGC79398, MGC79399

Background

IL3 is a potent growth promoting cytokine. This cytokine is capable of supporting the proliferation of a broad range of hematopoietic cell types. It is involved in a variety of cell activities such as cell growth, differentiation and apoptosis. This cytokine has been shown to also possess neurotrophic activity, and it may be associated with neurologic disorders.

Description

Interleukin-3 human recombinant produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 133 amino acids and having a molecular mass of 15000 Dalton. IL-3 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

Lyophilized from a concentrated (1 mg/ml) solution in water containing 0.3 mg/ml of NaHCO₃.

Solubility

It is recommended to reconstitute the lyophilized Interleukin-3 in sterile 18 M Ω -cm H $_2$ O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized Interleukin-3, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL3 should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.

Purity

Greater than 98.0% as determined by (a) Analysis by SEC-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 Ala-Pro-Met-Thr-Gln.

Activity

The ED50 as determined by the dose-dependant stimulation of TF-1 cells is <0.1 ng/ml, corresponding to a specific activity of 10,000,000 IU/mg.

Usage

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