

# Interleukin-3, mouse recombinant (rmIL-3)

Catalog No: 50443 Lot No: XXXXX Source: E. coli

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

#### **Background**

Interleukin-3 is a pleiotropic cytokine produced primarily by activated T cells. IL-3 is thought to function via specific cell surface receptors to stimulate the proliferation, differentiation and survival of haematopoietic cell lines. IL-3 has also been shown to affect the functional activity of a variety of other cell types including mast cells, eosinophils, megakaryocytes and basophils.

## Description

Interleukin-3 mouse recombinant produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 135 amino acids and having a molecular mass of 15100 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 no additives.

# Solubility

It is recommended to reconstitute the lyophilized Interleukin-3 in sterile 18 M $\Omega$ -cm H $_2$ O not less than 100  $\mu$ 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 IL-3 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 97.0% 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 Met-Asp-Thr-His-Arg.

#### Activity

The ED50 as determined by the dose-dependant stimulation of murine M-NFS-60 cells is <0.05 ng/ml, corresponding to a specific activity of 20,000,000 IU/mg.

## Usage

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