

Interleukin-3 (IL-3), canine recombinant

Catalog No: 97367 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 canine recombinant produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 120 amino acids and having a molecular mass of 14 kDa. 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 1X PBS pH 7.4.

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 IL-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. Please prevent freeze-thaw cycles.

Purity

Greater than 97.0% as determined by (a) Analysis by HPLC, (b) Analysis by SDS-PAGE.

Amino Acid Sequence

RPFSTDLPKQ YFTMINEIME MLNKSPSPSE EPLDSNEKET LLEDTLLRPN LDVFLNASSK FHKNGLLIWN NLKEFLPLLP TPTPRGEPIS IMENNWGDFQ RKLKKYLEAL DNFLNFKNKP

Activity

The ED50 as determined by the dose-dependant stimulation of TF-1 cells is <0.2 ng/ml, corresponding to a specific activity of 5,000,000 IU/mg.

Usage

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