

Interleukin-7, mouse recombinant (rmIL-7)

Catalog No: 50447 Lot No: XXXXX Source: E. coli

Synonyms: Lymphopoietin 1 (LP-1), pre-B cell factor, IL-7

Background

Interleukin-7 is a potent lymphoid cell growth factor produced primarily by stromal cells. IL-7 has been shown to support the proliferation and differentiation of pre B- and early T cells as well as displaying a biological effect on cells of NK and myeloid lineages.

Description

Interleukin-7 mouse recombinant produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 129 amino acids and having a molecular mass of 14.9 kDa. IL-7 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

Filtered (0.2 μm) and lyophilized from a concentrated (1 mg/ml) solution in 1×PBS, pH 7.4 and 2% trehalose.

Solubility

It is recommended to reconstitute the lyophilized Interleukin-7 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-7, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL-7 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

ECHIKDKEGK AYESVLMISI DELDKMTGTD SNCPNNEPNF FRKHVCDDTK EAAFLNRAAR KLKQFLKMNI SEEFNVHLLT VSQGTQTLVN CTSKEEKNVK EQKKNDACFL KRLLREIKTC WNKILKGSI

Activity

The ED50 as determined by the dose-dependant stimulation of murine 2E8 cells is <0.2 ng/ml, corresponding to a specific activity of \ge 5,000,000 units/mg.50447

Usage

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