

Growth Factor Data Sheet

GoldBio growth factors are manufactured for **RESEARCH USE ONLY** and cannot be sold for human consumption!

Interleukin-7 (IL7) is encoded by the IL7 gene and secreted by stromal cells in the red marrow and thymus. IL7 binds to the IL7 receptor, a heterodimer consisting of IL7 receptor alpha and IL2 receptor gamma chain. IL7 stimulates the differentiation of hematopoietic stem cells into lymphoid progenitor cells. It also stimulates the proliferation of B-cells, T-cells and NK cells. Murine IL7 has approximately 61% and 88% amino acid sequence identity with human and rat IL7, and both proteins exhibit cross-species activity. IL7 as an immunotherapy agent has been examined in many human clinical trials for various malignancies and during HIV infection.

Catalog Number	1310-07
Product Name	IL7, Murine Recombinant Murine Interleukin-7 IL7 Interleukin 7
Source	<i>Escherichia coli</i>
MW	~14.9 kDa (129 amino acids)
Sequence	ECHIKDKEGK AYESVLMISI DELDKMTGTD SNCPNNEPNF FRKHVCDDTK EAAFLNRAAR KLKQFLKMNI SEEFNVHLLT VSQGTQTLVN CTSKEEKNVK EQKKNDACFL KRLREIKTC WNKILKGS
Accession Number	Q544C8
Purity	>96% by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using murine 2E8 cells is less than 0.2 ng/ml, corresponding to a specific activity of $>5.0 \times 10^6$ IU/mg.
Formulation	Sterile filtered white lyophilized powder. Purified and tested for use in cell culture.
Storage/Handling	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage. The reconstituted sample can be apportioned into working aliquots and stored at -80 °C for up to 6 months. Avoid repeated freeze/thaw cycles.
Reconstitution	The sample should be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a siliconized tube using PBS that contains a 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Reconstituted solutions are stable for up to one week at 2-8°C. Stock solutions should be aliquoted and stored at -80°C. Further dilutions should be made in appropriate buffered solutions containing BSA or serum.