Technical Data Sheet

RecombinantMurine Interleukin-7（rMuIL-7）

Human Interleukin-7

Interleukin-7 (IL-7) is encoded by the IL7 gene and secreted by stromal cells in the red marrow and thymus. IL-7 binds to the IL-7 receptor, which is a heterodimer consisting of IL-7 receptor alpha and IL-2 receptor gamma chain. IL-7 stimulates the differentiation of hematopoietic stem cells into lymphoid progenitor cells. It also stimulates proliferation of B cells, T cells and NK cells. Murine IL-7 has approximately 65% and 88% amino acid sequence identity with human and rat IL-7 and both proteins exhibit cross-species activity. IL-7 as an immunotherapy agent has been examined in many human clinical trials for various malignancies and during HIV infection.

Catalog Number:	RC232-18
Source:	*Escherichia coli.*
Molecular Weight:	Approximately 14.9 kDa, a single non-glycosylated polypeptide chain containing 129 amino acids.
Quantity:	2μg/10μg/1000μg
Purity:	>96% by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED50 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 10^6 IU/mg.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2μm filtered concentrated solution in PBS, pH 7.4, 2% trehalose.
AA Sequence:	ECHIKDKEGK AYESVLMISI DELDKMTGTD SNCPNNEPNF FRKHVCDDTK EAAFLNRAAR KLKQFLKMNI SEEFNVHLLT VSQGTQTLVN CTSKEEKNVK EQKKNDACFL KRLLREIKTC WNKILKGSI
Endotoxin:	Less than 1EU/μg of rMuIL-7 as determined by LAL method.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at <-20°C. Further dilutions should be made in appropriate buffered solutions.
Storage:	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

Usage: This material is offered by Bio Basic Inc. for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.

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