

ChemWhat Technical Data Sheet (TDS)

Catalog Number:	121-07
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 14.9 kDa, a single non-glycosylated polypeptide chain containing 129 amino acids.
Quantity:	2µg /10µg /1000µg
AA Sequence:	ECHIKDKEGK AYESVLMISI DELDKMTGTD SNCPNNEPNF FRKHVCDDTK EAAFLNRAAR KLKQFLKMNI SEEFNVHLLT VSQGTQTLVN CTSKEEKNVK EQKKNDACFL KRLLEIKTC WNKILKGS
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 × 10 ⁶ IU/mg.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4, 2 % trehalose.
Endotoxin:	Less than 1 EU/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.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70 °C as supplied.● 1 month, 2 to 8 °C under sterile conditions after reconstitution.● 3 months, -20 to -70 °C under sterile conditions after reconstitution.
Usage:	ChemWhat Limited in UK offers this branded product for research, development or further evaluation purposes. NOT FOR HUMAN USE.

Murine Interleukin-7

Interleukin-7 (IL-7) is encoded by the IL7 gene in mouse and secreted by stromal cells in the red marrow and thymus. The protein signals through 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 and it can stimulate 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.