

DATASHEET
Version 20181206**IL-7, Human****Cat. No.:** Z02704-1**Size:** 1.0 mg**Synonyms:** Interleukin-7 (IL-7), Human;**Description:**

IL-7 is a hematopoietic growth factor which affects primarily early B and T cells. Produced by thymic stromal cells, spleen cells and keratinocytes, IL-7 can also co-stimulate the proliferation of mature T cells in combination with other factors such as ConA and IL-2.

Amino Acid Sequence:

```
00001 DCDIEGKDGK QYESVLMVSI DQLDSMKEI GSNCLNNEFN
00041 FFKRHICDAN KEGMFLFRAA RKLRLQFLKMN STGDFDLHLL
00081 KVSEGTIILL NCTGQVKGRK PAALGEAQPT KSLEENKSLK
00121 EQKKLNDLCF LKRLLEIKT CWNKILMGTK EH
```

Source: *E. coli***Species:** Human

Biological Activity: Fully biologically active when compared to standard. The ED₅₀ as determined by a cell proliferation assay using murine 2E8 cells is less than 0.5 ng/ml, corresponding to a specific activity of > 2.0 × 10⁶ IU/mg.

Molecular Weight: Approximately 17.4 kDa, a single non-glycosylated polypeptide chain containing 152 amino acids.

Formulation: Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.

Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

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.

Purity: > 97 % by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 1 EU/µg of rHuIL-7 as determined by LAL method.

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.