



*Recombinant Human IL-7*  
(Interleukin-7)

*Catalog Number: 100-09*  
*Accession Number: PI3232*

*Specifications and Uses:*

**Alternate Names:** Lymphopoietin 1 (LP-1), pre-B cell Factor

**Description:**

Interleukin 7 (IL-7) is a hematopoietic cytokine that is constitutively produced by stromal cells from the bone marrow and thymus. IL-7 signals through the IL-7R to promote the differentiation of hematopoietic stem cells to lymphoid precursor cells, which give rise to T cells, B cells, and natural killer cells. Human and mouse IL-7 show species cross-reactivity. Recombinant human IL-7 is a non-glycosylated protein, containing 153 amino acids, with a molecular weight of 17.4 kDa.

**Source:** *E.coli*

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation and Stability:**

Recombinant human IL-7 is lyophilized with no additives.

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

**Reconstitution:**

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions.

**Protein Content and Purity (typically ≥ 98%) determined by:**

HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm

**Endotoxin Level:**

Measured by kinetic LAL analysis and is typically ≤ 1 EU/μg protein.

**Biological Activity:**

The activity is determined by the dose-dependant stimulation of mouse 2E8 cells and is typically less than 0.5 ng/mL.

**AA Sequence:**

MDCDIEGKDG KQYESVLMVS IDQLLDSTMKE IGSNCLNNEF NFFKRHICDA NKEGMFLFRA ARKLRQFLKM  
NSTGDFDLHL LKVSEGTTIL LNCTGQVKGR KPAALGEAQP TKSLEENKSL KEQKKLNDLC FLKRLQEI  
TCWINKILMGT KEH

**THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!**

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