

# IL-7, Human CellExp™, human recombinant

<b>CATALOG #:</b>	7274-10	10 µg
<b>ALTERNATE NAMES:</b>	IL-7, IL7, Interleukin-7	
<b>SOURCE:</b>	HEK 293 cells (Asp26 - His177)	
<b>PURITY:</b>	≥ 95% by SDS-PAGE gel	
<b>MOL. WEIGHT:</b>	Calculated MW of 17 kDa with no tag. The predicted N-terminus is Asp26. DTT-reduced protein migrates as 19 kDa, 22 kDa and 26 kDa protein due to glycosylation.	
<b>ENDOTOXIN LEVEL:</b>	<1 EU/µg by LAL method	
<b>FORM:</b>	Lyophilized	

**FORMULATION:** Lyophilized from 0.22 µm filtered solution in in PBS, pH 7.4. Generally 5-8% Mannitol or trehalose is added as a protectant before lyophilization.

**STORAGE CONDITIONS:** Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.

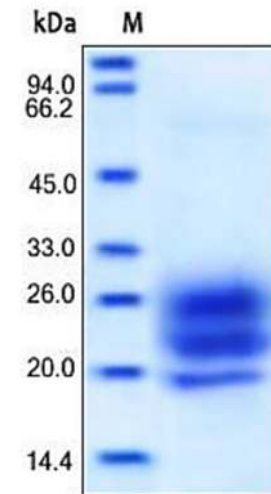
**RECONSTITUTION:** Centrifuge the vial prior to opening. Reconstitute in sterile deionized water to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

**DESCRIPTION:** Interleukin 7, also known as IL7, IL-7, and is a hematopoietic growth factor secreted by stromal cells in the red marrow and thymus. It is also produced by keratinocytes, dendritic cells, hepatocytes, neurons, and epithelial cells but is not produced by lymphocytes. IL-7 stimulates the differentiation of multipotent (pluripotent) hematopoietic stem cells into lymphoid progenitor cells. It also stimulates proliferation of all cells in the lymphoid lineage (B cells, T cells and NK cells). It is important for proliferation during certain stages of B-cell maturation, T and NK cell survival, development and homeostasis. IL-7 is a cytokine important for B and T cell development. This cytokine and the hepatocyte growth factor (HGF) form a heterodimer that functions as a pre-pro-B cell growth-stimulating factor. IL-7 binds to the IL-7 receptor, a heterodimer

promotes hematological malignancies (acute lymphoblastic leukemia, T cell lymphoma). Elevated levels of IL-7 have also been detected in the plasma of HIV-infected patients. IL-7 as an immunotherapy agent has been examined in many pre-clinical animal studies and more recently in human clinical trials for various malignancies and during HIV infection. IL-7 could also be beneficial in improving immune recovery after allogenic stem cell transplant.

## BIOLOGICAL ACTIVITY:

The bio-activity was determined by dose-dependent stimulation of the proliferation of mouse 2E8 cells. The ED<sub>50</sub> <0.2ng/ml, corresponding to a specific activity of >5X10<sup>6</sup> Unit/mg



Human recombinant IL-7

## RELATED PRODUCTS:

- IL-7 Antibody (Cat # 5103-100)
- IL-7 Antibody (Cat # 5148-100)
- IL-7, human recombinant (Cat # 4146-10, -1000)
- IL-7, murine recombinant (Cat # 4147-10, -1000)
- IL-7, rat recombinant (Cat # 4148-10, -50, -1000)

**FOR RESEARCH USE ONLY! Not to be used in humans.**