



Recombinant Human IL-7

20220816DS



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	100-045
Size:	10 µg
Lot. No.:	According to product label

Scientific Background

Gene-ID (NCBI):	3574
Synonyms:	IL7; IL-7

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. Human and murine IL-7 are cross-species reactive. Recombinant human IL-7 is a 17.4 kDa protein containing 153 amino acid residues.

Sequence

```
MDCDIEGKDG KQYESVLMVS IDQLLDSMKE IGSNCLNNEF
NFFKRHICDA NKEGMFLFRA ARKLRQFLKM NSTGDFDLHL
LKVSEGTTIL LNCTGQVKGR KPAALGEAQP TKSLEENKSL
KEQKKLNDLC FLKRLLEIK TCWNKILMGT KEH
```

Database References

Protein RefSeq:	NP_000871.1
Uniprot ID:	P13232
mRNA RefSeq:	NM_000880

Product Specifications

Expressed in	E. coli
Purity	> 98% by SDS-PAGE & HPLC analyses
Endotoxin level	< 0.1 ng /µg of protein (<1EU/µg)
Formulation	Lyophilized from 10mM Acetic Acid
Length (aa):	153
MW:	17.4 kDa

Stability: The lyophilized protein is stable at room temperature for 1 month and at 4°C for 6 months. Reconstituted working aliquots are stable for 1 week at 2°C to 8°C and for 12 months at -20°C to -80°C.

Reconstitution: Centrifuge vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.



AVOID REPEATED FREEZE AND THAW CYCLES!

Biological Activity: The ED50 was determined by the dose-dependent stimulation of the proliferation of murine 2E8 cells is ≤ 0.5 ng/ml, corresponding to a specific activity of ≥ 2 x 10⁶ units/mg.