



[Go to Product page](#)

Datasheet for ABIN1691666
IL-7 Protein (AA 26-177) (His tag)

Overview

Quantity:	50 µg
Target:	IL-7 (IL7)
Protein Characteristics:	AA 26-177
Origin:	Human
Source:	Human Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This IL-7 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human Interleukin-7/IL-7 (C-6His)
Sequence:	DCDIEGKDGK QYESVLMVSI DQLLDISMKEI GSNCLNNEFN FFKRHICDAN KEGMFLFRAA RKLRQFLKMN STGDFDLHLL KVSEGTILL NCTGQVKGRK PAALGEAQPT KSLEENKSLK EQKKLNDLCF LKRLLEIKT CWNKILMGTK EHVDDHHHHH
Characteristics:	Recombinant Human Interleukin-7/IL-7 (C-6His)
Purity:	> 95 % as determined by reducing SDS-PAGE.
Sterility:	0.2 µm filtered
Endotoxin Level:	Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test

Target Details

Target:	IL-7 (IL7)
---------	------------

Target Details

Alternative Name: [Interleukin-7/IL-7 \(IL7 Products\)](#)

Background: Recombinant Human Interleukin-7/IL-7 is produced by our mammalian expression system in human cells. The target protein is expressed with sequence (Asp26-His177) of Human IL-7 fused with a polyhistidine tag at the C-terminus.

Human Interleukin 7 (IL-7) is a potent lymphoid cell growth factor stimulating the proliferation of lymphoid progenitors. IL7 can associate with the hepatocyte growth factor (HGF) to form a hybrid cytokine that functions as a pre-pro-B cell growth-stimulating factor. Human IL7 cDNA encodes a 177 AA precursor protein containing a 25 AA signal peptide and a 152 AA mature protein. Human and mouse IL7 share 65 % sequence identity in the mature region and both exhibit cross-species activity. IL-7 signals via IL-7 receptor (IL7R) activating multiple pathways including JaK/STAT and PI3K/AKT, which regulate lymphocyte survival, glucose uptake, proliferation, and differentiation. IL-7 is also associated with cytoplasmic IL2-R γ for signal transduction.

Molecular Weight: 18.4 kDa

UniProt: [P13232](#)

Pathways: [JAK-STAT Signaling](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: It is not recommended to reconstitute to a concentration less than 100 $\mu\text{g}/\text{mL}$.
Dissolve the lyophilized protein in ddH₂O.
Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Buffer: Lyophilized from a 0.2 μm filtered solution of 20 mM PB, 150 mM NaCl, pH 7.4.

Handling Advice: Always centrifuge tubes before opening. Do not mix by vortex or pipetting.

Storage: 4 °C/-20 °C/-80 °C

Storage Comment: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks.
Reconstituted protein solution can be stored at 4-7°C for 2-7 days.
Aliquots of reconstituted samples are stable at < -20°C for 3 months.
