

## 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 DQLLDSMKEI GSNCLNNEFN FFKRHICDAN KEGMFLFRAA RKLRQFLKMN STGDFDLHLL KVSEGTTILL NCTGQVKGRK PAALGEAQPT KSLEENKSLK
	EQKKLNDLCF LKRLLQEIKT CWNKILMGTK EHVDHHHHHH
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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 µg/mL.  Dissolve the lyophilized protein in ddH20.  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 week 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.