

## Datasheet for ABIN7597412

# IL-7 Protein (AA 26-177) (Fc Tag)



#### Overview

Quantity:	10 μg
Target:	IL-7 (IL7)
Protein Characteristics:	AA 26-177
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This IL-7 protein is labelled with Fc Tag.

#### **Product Details**

Purpose:	Recombinant human IL7 Protein with C-terminal human Fc tag
Sequence:	IL7(Asp26-His177) hFc(Glu99-Ala330)
Purity:	The purity of the protein is greater than 95 % as determined by SDS-PAGE and Coomassie blue staining.

### **Target Details**

Target:	IL-7 (IL7)
Alternative Name:	IL7 (IL7 Products)
Background:	IL-7
	The protein encoded by this gene 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. IL7 is found to be a cofactor for V(D)J rearrangement of

the T cell receptor beta (TCRB) during early T cell development. This cytokine	can be produced
locally by intestinal epithelial and epithelial goblet cells, and may serve as a reg	gulatory factor for
intestinal mucosal lymphocytes. IL7 plays an essential role in lymphoid cell su	rvival, and in the
maintenance of naive and memory T cells. Alternative splicing results in multip	ole transcript
variants encoding distinct isoforms. Additional splice variants have been desc	ribed but their
presence in normal tissues has not been confirmed. Severe acute respiratory s	syndrome
coronavirus 2 (SARS-CoV-2) infection can be a potent inducer of proinflamma	tory cytokines
and chemokines which may defend against the infection, but may also mediat	e destructive
lung injury. Elevated serum IL7 levels, together with several other circulating cy	ytokines and
chemokines, has been found to be associated with the severity of Coronavirus	Disease 19
(COVID-19). [provided by RefSeq, Jul 2020]	

Molecular Weight:

predicted molecular mass of 43.5 kDa after removal of the signal peptide. The apparent molecular mass of IL7-hFc is 35-70 kDa due to glycosylation.

UniProt:

P13232

Pathways:

**JAK-STAT Signaling** 

### **Application Details**

Apı	plication	Notes:

Extracellular Domain Proteins (ECD) can be used as:

- · Immunogens for antibody drug development
- Reagents used for CAR-T positive cell monitoring
- · Reagents for antibody screening and functional testing
- · Reagents for antibody affinity measurement

Comment:

The protein was made using HEK293 mammalian cell secretion expression system to ensure the close-to-native structures and post-translational modifications of the target protein.

Restrictions:

For Research Use only

## Handling

Format:	Lyophilized
Buffer:	Lyophilized from sterile PBS, pH 7.4. Normally 5 % – 8% trehalose is added as protectants before lyophilization.
Storage:	-20 °C,-80 °C
Storage Comment:	Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for

## Handling

	use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing).  Lyophilized proteins are shipped at ambient temperature.
Expiry Date:	12 months