

# Recombinant Human Interleukin-7/IL-7 Protein (His Tag)

Catalog Number:PKSH032654



**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

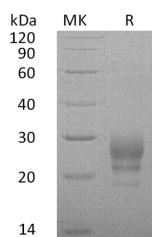
## Description

<b>Synonyms</b>	Interleukin-7;IL-7;IL7
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Asp26-His177
<b>Accession</b>	P13232
<b>Calculated Molecular Weight</b>	18.4 kDa
<b>Observed molecular weight</b>	19-30 kDa
<b>Tag</b>	C-His
<b>Bioactivity</b>	Measured in a cell proliferation assay using PHA-activated human peripheral blood lymphocytes (PBL). The ED50 for this effect is 50-300 pg/ml.

## Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 0.01 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed man
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

## Data



> 95 % as determined by reducing SDS-PAGE.

## Background

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 amino acid precursor protein containing a 25 amino acid signal peptide and a 152 amino acid 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

## For Research Use Only

A Reliable Research Partner in Life Science and Medicine

Toll-free: 1-888-852-8623

Web: [www.elabscience.com](http://www.elabscience.com)

Tel: 1-832-243-6086

Email: [techsupport@elabscience.com](mailto:techsupport@elabscience.com)

Fax: 1-832-243-6017

# Recombinant Human Interleukin-7/IL-7 Protein (His Tag)

Catalog Number:PKSH032654



also associated with cytoplasmic IL2-R gamma for signal transduction.

---

## For Research Use Only

A Reliable Research Partner in Life Science and Medicine

Toll-free: 1-888-852-8623

Web: [www.elabscience.com](http://www.elabscience.com)

Tel: 1-832-243-6086

Email: [techsupport@elabscience.com](mailto:techsupport@elabscience.com)

Fax: 1-832-243-6017