

## Recombinant Human Interleukin-7/IL-7 Protein (Active)

Catalog No. PKSH030436

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

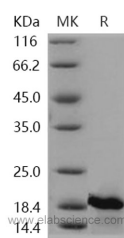
### Description

<b>Synonyms</b>	Interleukin-7; IL-7; IL7
<b>Species</b>	Human
<b>Expression Host</b>	E.coli
<b>Sequence</b>	Asp26-His177
<b>Accession</b>	NP_000871.1
<b>Calculated Molecular Weight</b>	17.5 kDa
<b>Observed molecular weight</b>	19 kDa
<b>Bioactivity</b>	Measured by its binding ability in a functional ELISA. Immobilized human IL7 at 10 µg/ml (100 µl/well) can bind human IL7Ra-Fch, The EC50 of human IL7Ra-Fch is 15.2-35.6 ng/ml. Measured in a cell proliferation assay using antibody against CD3-activated human peripheral blood lymphocytes (PBL). The ED50 for this effect is typically 1-10 ng/ml.

### Properties

<b>Purity</b>	> 90 % as determined by reducing SDS-PAGE.
<b>Storage</b>	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 sterile 25mM NaH2PO4, 400mM NaCl, pH 6.8
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



### Background

IL7, also known as interleukin 7, is a hematopoietic growth factor which belongs to the IL-7/IL-9 family. It is secreted by stromal cells in the bone marrow and thymus. IL7 stimulates the proliferation of lymphoid progenitors. It is important for proliferation during certain stages of B-cell maturation. IL7 and the hepatocyte growth factor (HGF) form a heterodimer

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that functions as a pre-pro-B cell growth-stimulating factor. It is found to be a cofactor for V(D)J rearrangement of the T cell receptor beta (TCR $\beta$ ) during early T cell development. IL7 can be produced locally by intestinal epithelial and epithelial goblet cells, and may serve as a regulatory factor for intestinal mucosal lymphocytes.