# IL-7/LP-1, Human, Recombinant

**Cat. No. : PCK079**

## General Information

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|---|---|
| **Synonyms** | Interleukin-7;IL-7;IL7 |
| **Species** | Human |
| **Expression host** | E.coli |
| **Sequence** | Asp26-His177 |
| **Accession** | P13232 |
| **Mol mass** | 17.5 KDa |
| **Expiration date** | 12 months |
| **Bio activity** | Measured in a cell proliferation assay using PHA-activated human peripheral blood lymphocytes (PBL). The ED50 for this effect is 0.02-0.08 ng/mL. |

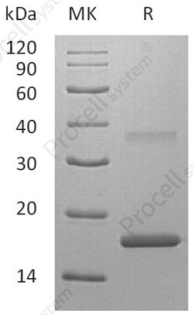
## Product feature

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|---|---|
| **Purity** | > 95% as determined by reducing SDS-PAGE. |
| **Endotoxin (EU/μg)** | < 0.1 |
| **Storage** | Lyophilized protein should be stored at -5~-20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at -5~-20°C for 3 months. |
| **Shipping** | Ice bag |
| **Formulation** | Lyophilized from a 0.2 μm filtered solution of 20 mM PB, 300 mM NaCl, pH 8.0. |
| **Reconstitution** | Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 μg/mL. Dissolve the lyophilized protein in sterile water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles. |

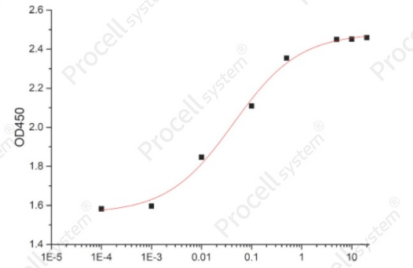
## Background

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

## SDS-PAGE




## Bio activity




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