

Bioactive

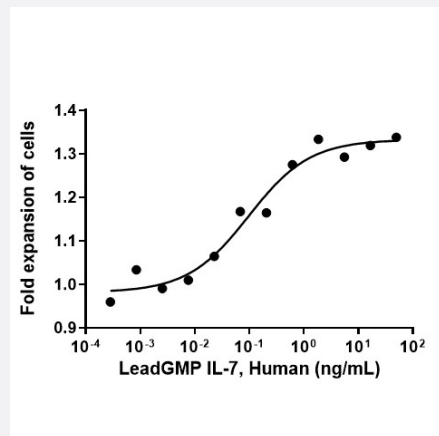
GMP Grade

## IL7 (Human) Recombinant Protein

Catalog # P6997

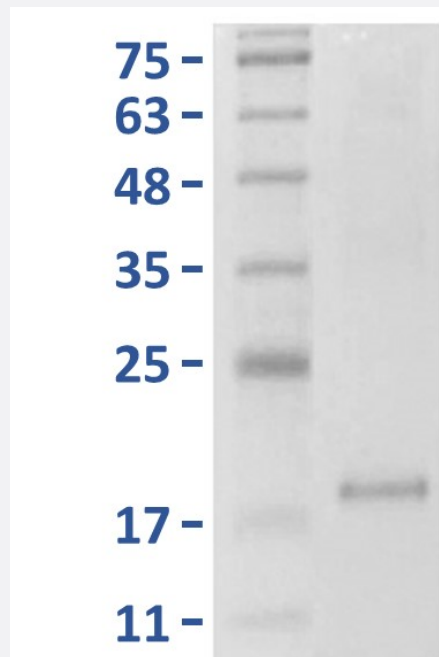
Size 100 ug

### Applications



### Functional Study

The ED<sub>50</sub> for this effect is <0.8 ng/mL, measured in a cell proliferation assay using PHAactivated human peripheral blood lymphocytes (PBMC).



### Specification

<b>Product Description</b>	Human IL7 recombinant protein with His tag expressed in <i>Escherichia coli</i> .
<b>Host</b>	Escherichia coli
<b>Theoretical MW (kDa)</b>	Calculated MW: 18.3
<b>Form</b>	Lyophilized
<b>Preparation Method</b>	<i>Escherichia coli</i> expression system
<b>Purification</b>	Ni-NTA chromatography
<b>Purity</b>	> 97% by SDS-PAGE
<b>Endotoxin Level</b>	< 0.05 EU/ug
<b>Activity</b>	The ED <sub>50</sub> for this effect is < 0.8 ng/mL, measured by the induction of PHA-activated human PBMCs proliferation. The specific activity of recombinant human IL-7 is > 1 x 10 <sup>8</sup> units/mg.
<b>Quality Control Testing</b>	SDS-PAGE Stained with Coomassie Blue
<b>Recommend Usage</b>	SDS-PAGE The optimal working dilution should be determined by the end user.
<b>Regulatory Status</b>	GMP grade
<b>Storage Buffer</b>	Lyophilized from PBS, pH 8.0. Reconstitute the lyophilized protein in sterile H <sub>2</sub> O to a concentration of at least 0.5 mg/mL and incubate the stock solution for at least 20 min to ensure sufficient redissolution. Please use the protein within one month after reconstitution.
<b>Storage Instruction</b>	Store at -20°C for 12 months in lyophilized state. After reconstitution with deionized water, store at -20 or -80°C for 1 month. Aliquot to avoid repeated freezing and thawing.

## Applications

- Functional Study

The ED<sub>50</sub> for this effect is <0.8 ng/mL, measured in a cell proliferation assay using PHAactivated human peripheral blood lymphocytes (PBMC).

- SDS-PAGE

## Gene Info — IL7

**Entrez GeneID** [3574](#)

**Gene Name** IL7

**Gene Alias** IL-7

**Gene Description** interleukin 7

**Omim ID** [146660](#)

**Gene Ontology** [Hyperlink](#)

**Gene Summary** 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. This cytokine 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 regulatory factor for intestinal mucosal lymphocytes. Knockout studies in mice suggested that this cytokine plays an essential role in lymphoid cell survival. [provided by RefSeq]

**Other Designations** IL7 nirs variant 6

## Pathway

- [Cytokine-cytokine receptor interaction](#)
- [Hematopoietic cell lineage](#)
- [Jak-STAT signaling pathway](#)

## Disease

- [Asthma](#)
- [Bronchiolitis](#)
- [Cardiovascular Diseases](#)
- [Celiac Disease](#)
- [Diabetes Mellitus](#)

- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Infant](#)
- [Multiple Sclerosis](#)
- [Respiratory Syncytial Virus Infections](#)