

# Recombinant Mouse IL-7 Protein

Catalog No.: RP01766LQ **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
Mouse	16196	P10168

### Tags

C-6His

### Synonyms

IL-7; hlb368; A630026I06Rik[il7]

## Product Information

Source	Purification
HEK293 cells	

Calculated MW	Observed MW
15.74 kDa	20-30 kDa

### Endotoxin

&lt; 0.01EU/μg

### Formulation

Supplied as a 0.22 μm filtered solution in PBS, pH 7.4.

### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## Contact

 | 400-999-6126 | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn) | [www.abclonal.com.cn](http://www.abclonal.com.cn)

## Background

IL7, also known as interleukin 7, is a hematopoietic growth factor that 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 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?) 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.

## Basic Information

### Description

Recombinant Mouse IL-7 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Glu26-Ile154) of mouse IL7(Accession #NP\_032397.1) fused with and a 6×His tag at the C-terminus.

### Bio-Activity

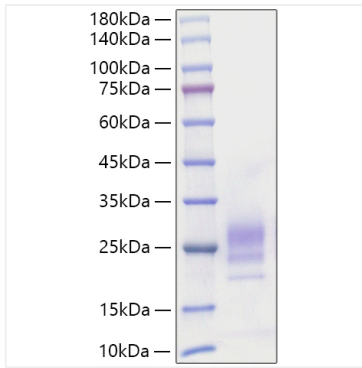
Measured in a cell proliferation assay using murine 2E8 cells. The ED<sub>50</sub> for this effect is 0.8-3.2 ng/mL, corresponding to a specific activity of 3.23×10<sup>5</sup>~1.25×10<sup>6</sup> units/mg.

### Storage

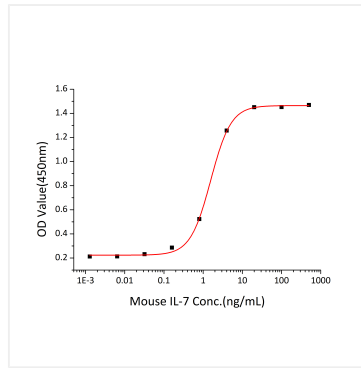
Store at -70°C. This product is stable at ≤ -70°C for up to 1 year from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature. Avoid repeated freeze-thaw cycles. Avoid repeated freeze/thaw cycles.

## Validation Data

---



Recombinant Mouse IL-7 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 15-25 kDa.



Recombinant Mouse IL-7 stimulates cell proliferation of the murine 2E8 cells. The  $ED_{50}$  for this effect is 0.8-3.2 ng/mL, corresponding to a specific activity of  $3.23 \times 10^5 \sim 1.25 \times 10^6$  units/mg.