

# Recombinant Human IL-7 Protein

Catalog No.: RP01040

Recombinant

## Sequence Information

Species	Gene ID	Swiss Prot
Human	3574	P13232-1

### Tags

C-His

### Synonyms

IL7;IL-7

## Product Information

Source	Purification
HEK293 cells	≥ 90 % as determined by SDS-PAGE; ≥ 90 % as determined by HPLC.

Calculated MW	Observed MW
18.23 kDa	30-35 kDa

### Endotoxin

< 0.1 EU/μg of the protein by LAL method.

### Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.

### 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

## Background

### Basic Information

#### Description

Active Recombinant Human IL-7 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Asp26-His177) of human IL-7 (Accession #NP\_000871.1) fused with a 6×His tag at the C-terminus.

#### Bio-Activity

1. Measured by its binding ability in a functional ELISA. Immobilized Human IL7 at 2 μg/mL (100 μL/well) can bind human IL7R with a linear range of 0.97 -159.1 ng/mL. 2. Measured in a cell proliferation assay using IL-2 (Catalog: RP01384)-activated mouse spleen cell. The ED<sub>50</sub> for this effect is 0.1-0.4 ng/mL, corresponding to a specific activity of 2.5×10<sup>6</sup>~1×10<sup>7</sup> units/mg. 3. Measured in a cell proliferation assay using murine 2E8 cells. The ED<sub>50</sub> for this effect is 0.78-3.1 ng/mL, corresponding to a specific activity of 3.23×10<sup>5</sup>~1.28×10<sup>6</sup> units/mg.

#### Storage

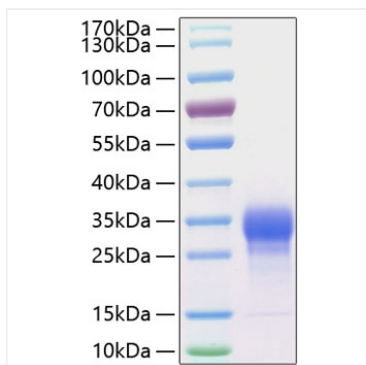
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

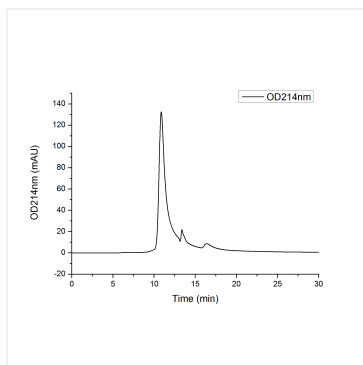
Avoid repeated freeze/thaw cycles.



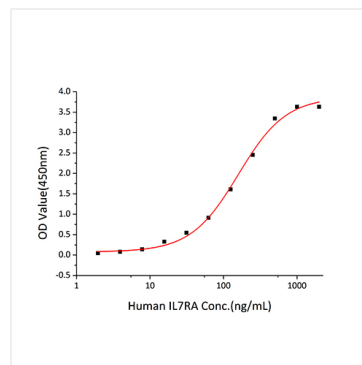
## Validation Data



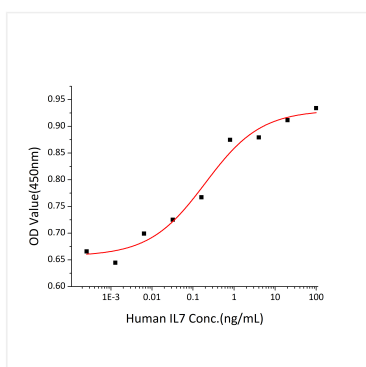
Recombinant Human IL-7 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



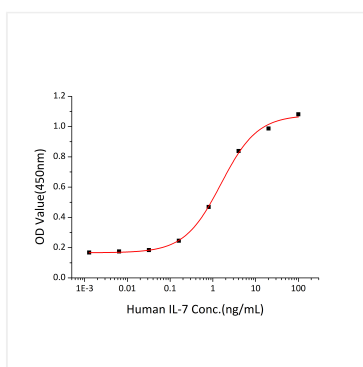
The purity of Human IL-7 Protein (Cat.RP01040) was greater than 90% as determined by SEC-HPLC.



Immobilized Human IL7 at 2  $\mu\text{g/mL}$  (100  $\mu\text{L/well}$ ) can bind human IL7R with a linear range of 0.97 -159.1 ng/mL.



Recombinant Human IL-7 stimulates cell proliferation of the IL-2(Catalog: RP01384)-activated mouse spleen cell. The  $\text{ED}_{50}$  for this effect is 0.1-0.4 ng/mL, corresponding to a specific activity of  $2.5 \times 10^6 \sim 1 \times 10^7$  units/mg.



Recombinant Human IL-7 stimulates cell proliferation of the murine 2E8 cells. The  $\text{ED}_{50}$  for this effect is 0.78-3.1ng/mL, corresponding to a specific activity of  $3.23 \times 10^5 \sim 1.28 \times 10^6$  units/mg.