

RP01039

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# Recombinant Human IL-2 Protein

Catalog No.: RP01039

Recombinant

1 Publications

## Sequence Information

Species	Gene ID	Swiss Prot
HEK293 cells	3558	P60568

### Tags

C-His

### Synonyms

IL2;IL-2;TCGF;lymphokine

## Background

The protein encoded by this gene is a secreted cytokine that is important for the proliferation of T and B lymphocytes. The receptor of this cytokine is a heterotrimeric protein complex whose gamma chain is also shared by interleukin 4 (IL4) and interleukin 7 (IL7). The expression of this gene in mature thymocytes is monoallelic, which represents an unusual regulatory mode for controlling the precise expression of a single gene. The targeted disruption of a similar gene in mice leads to ulcerative colitis-like disease, which suggests an essential role of this gene in the immune response to antigenic stimuli.

## Basic Information

### Description

Recombinant Human IL-2 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Ala21-Thr153) of human IL2 (Accession #NP\_000577.2) fused with a 6×His tag at the C-terminus.

### Bio-Activity

1. Measured in a cell proliferation assay using CTLL-2 mouse T cells. The ED<sub>50</sub> for this effect is 0.255 ± 1.02 ng/mL, corresponding to a specific activity of 9.80 × 10<sup>5</sup> ~ 3.92 × 10<sup>6</sup> units/mg. | 2. Measured in a cell proliferation assay using HT-2 Mouse T cells. The ED<sub>50</sub> for this effect is 0.25-0.5 ng/mL, corresponding to a specific activity of 2.0 × 10<sup>6</sup> ~ 4.0 × 10<sup>6</sup> units/mg. | 3. Measured by its binding ability in a functional ELISA. Immobilized Human IL2RA Protein at 2 µg/mL (100 µL/well) can bind Human IL2 with a linear range of 2.75-64.64 ng/mL.

### 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.

## Product Information

### Source

### Purification

> 95% by SDS-PAGE.

### 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

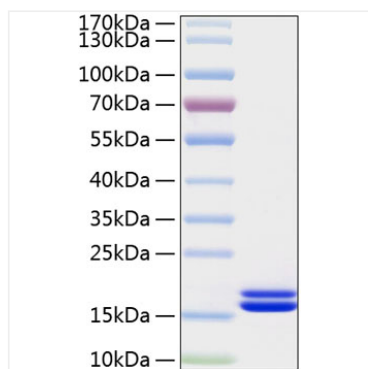
Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot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

## Contact

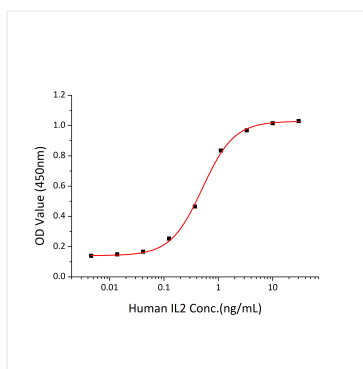


[www.abclonal.com](http://www.abclonal.com)

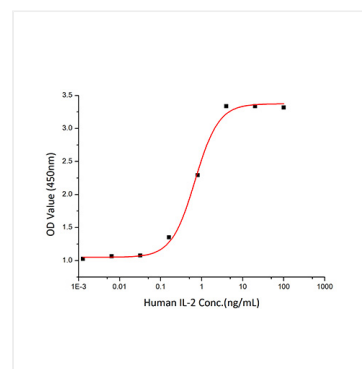
## Validation Data



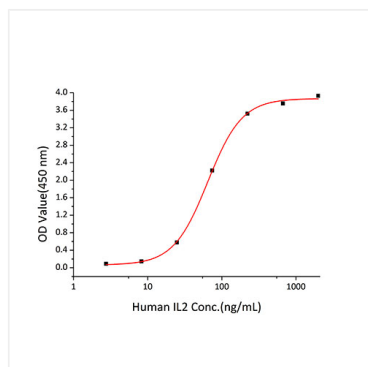
Recombinant Human IL-2 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Measured in a cell proliferation assay using CTLL $\kappa$  2 mouse T cells. The  $ED_{50}$  for this effect is  $0.255 \pm 1.02$  ng/mL, corresponding to a specific activity of  $9.80 \times 10^5 \sim 3.92 \times 10^6$  units/mg.



Recombinant Human IL2 stimulates cell proliferation of the HT-2 Mouse T cells. The  $ED_{50}$  for this effect is 0.25-0.5 ng/mL, corresponding to a specific activity of  $2.0 \times 10^6 \sim 4.0 \times 10^6$  units/mg.



Immobilized Human IL2RA Protein at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Human IL2 with a linear range of 2.75-64.64 ng/mL.