Recombinant Human IL-2 Protein

ABclonal

www.abclonal.com

Catalog No.: RP01039 Recombinant 1 Publications

Sequence Information

Species Gene ID **Swiss Prot** Human 3558 P60568

Tags C-His

Synonyms

IL2;IL-2;TCGF;lymphokine

Product Information

Purification HEK293 cells ≥ 95 % as

determined by SDS-

PAGE.

Calculated MW Observed MW

16.26 kDa 16 kDa, 18 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 stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

| <u>a</u> | | 400-999-6126 |
|-----------|---|---------------------------|
| \bowtie | | cn.market@abclonal.com.cn |
| • | T | www.abclonal.com.cn |

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 $6 \times \text{His}$ tag at the C-terminus.

Bio-Activity

1.Measured in a cell proliferation assay using CTLL-2 mouse T cells. The ED₅₀ for this effect is 0.255-1.02 ng/mL, corresponding to a specific activity of 9.80×10⁵~3.92×10⁶units/mg. |2.Measured in a cell proliferation assay using HT-2 Mouse T cells. The ED₅₀ 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.|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.

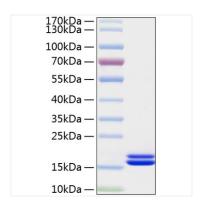
Storage

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

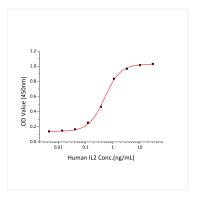
After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

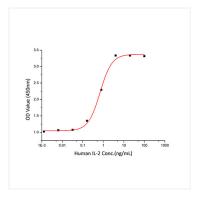
Validation Data



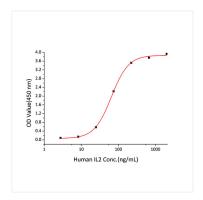
Recombinant Human IL-2 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Measured in a cell proliferation assay using CTLL-2 mouse T cells. The ED $_{50}$ for this effect is 0.255-1.02 ng/mL,corresponding to a specific activity of $9.80\times10^5\sim3.92\times10^6$ 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 μ g/mL (100 μ L/well) can bind Human IL2 with a linear range of 2.75-64.64 ng/mL.