Recombinant Human IL-2 Protein

Catalog No.: RP01039

Sequence Information

Species
Human

Gene ID
3558

Swiss Prot
P60568

Tags
C-His

Synonyms
IL2,IL-2,TCGF,lymphokine

Product Information

Source
HEK293 cells

Purification
≥ 95 % as determined by SDS-PAGE.

Calculated MW
16.26 kDa

Observed MW
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.

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.

Activity
1.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 $\times10^5$~3.92$\times10^6$units/mg.
2.Measured in a cell proliferation assay using 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 × 10^6~4.0× 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.

Shipping
Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

Storage
Store at -20℃

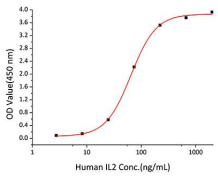
Operational Notes
For your safety and health, please wear a lab coat and disposable gloves for handling.

Contact

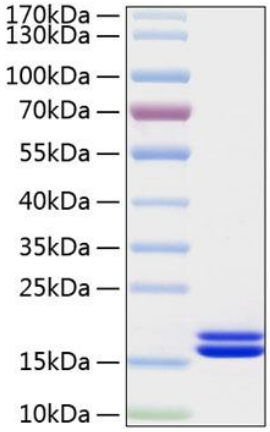
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For research use only. Not for therapeutic or diagnostic purposes.
Please visit http://abclonal.com for a complete listing of recommended products.

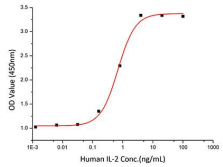
Validation Data



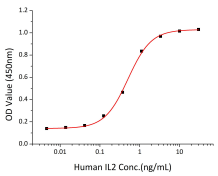
Immobilized Human IL2RA Protein at 2 μg/mL (100 μL/well) can bind Human IL2 with a linear range of 2.75-64.64 ng/mL.



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



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 × 10^6 ~4.0× 10^6 units/mg.



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 9.80×10^5~3.92×10^6 units/mg.