

Recombinant Human IL-7 Protein

RPCB0954

Description

This high-purity Recombinant Human IL-7 Protein is supplied as a kit for advanced applications. The kit includes Bradford Reagent to quantify total protein concentration for accurate sample normalization (Optional).

Protein Information

SKU:	RPCB0954
Contents:	10 µg, 20 µg, 50 µg, 100 µg Bradford Reagent: 1 vial (2ml)
Synonyms:	IL7, IL-7
Species:	Human
Gene ID:	3574
Expression Host:	HEK293 cells
Tags:	C-His
Calculated MW:	18.23 kDa
Observed MW:	30-35 kDa
Purification:	≥ 90 % as determined by SDS-PAGE, ≥ 90 % as determined by HPLC.
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.
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.

Manufacturers Statement - This final kit system is assembled and quality-released by Assay Genie Limited

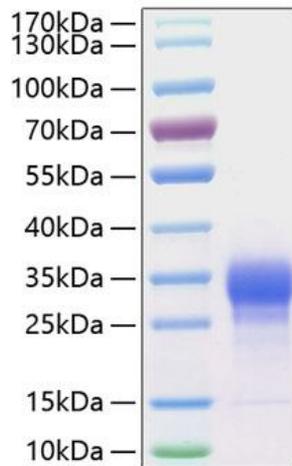
2. Measured in a cell proliferation assay using IL-2(RPCB0904)-activated mouse spleen cell. The ED 50 for this effect is 0.1-0.4 ng/mL, corresponding to a specific activity of $2.5 \times 10^6 \sim 1 \times 10^7$ units/mg.
3. Measured in a cell proliferation assay using murine 2E8 cells. The ED 50 for 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.

Preparation & Storage

- Shipping:** The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
- 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.
Store Bradford Reagent at Room Temperature for 1 Year.
- 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.
- Protein Quantification (Optional):** To quantify total protein levels, use the Bradford Reagent included in this kit. Visit <https://www.assaygenie.com/bradford-protein-assay-protocol/> to view the full protocol.

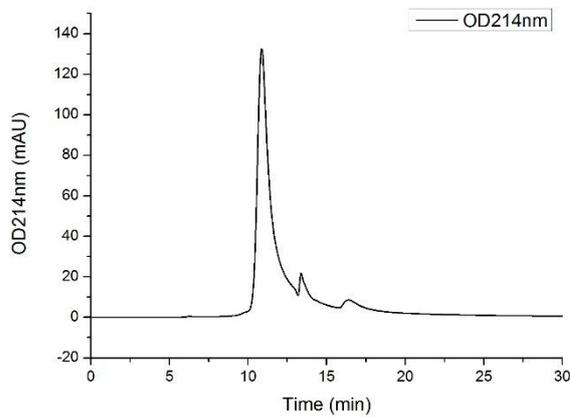
Validation Data

Image

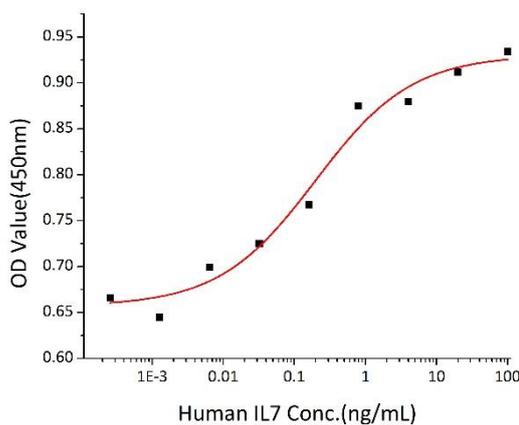


Description

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



The purity of Human IL-7 Protein (RPCB0954) was greater than 90% as determined by SEC-HPLC.



Recombinant Human IL-7 stimulates cell proliferation of the IL-2(RPCB0904)-activated mouse spleen cell. The ED50 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 ED50 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.

