

Recombinant Human IGF-I Protein

RPCB0759

Description

This high-purity Recombinant Human IGF-I 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:	RPCB0759
Contents:	10 µg, 20 µg, 50 µg, 100 µg Bradford Reagent: 1 vial (2ml)
Synonyms:	IGF1, IGF-I, IGFI, MGF, IGFI, MGF
Species:	Human
Gene ID:	3479
Expression Host:	HEK293 cells
Tags:	C-hFc&His
Calculated MW:	34.44 kDa
Observed MW:	41 kDa
Purification:	≥ 85 % as determined 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.
Bio- Activity:	1. Measured by its ability to stimulate p70 S6 Kinase(Thr389) and p85 S6 Kinase(Thr412) autophosphorylation in 293T human embryonic kidney cells. 0.01-1 ng/mL of Recombinant Human IGF1 can effectively enhance p70 S6 Kinase(Thr389) and p85 S6 Kinase(Thr412) autophosphorylation.

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

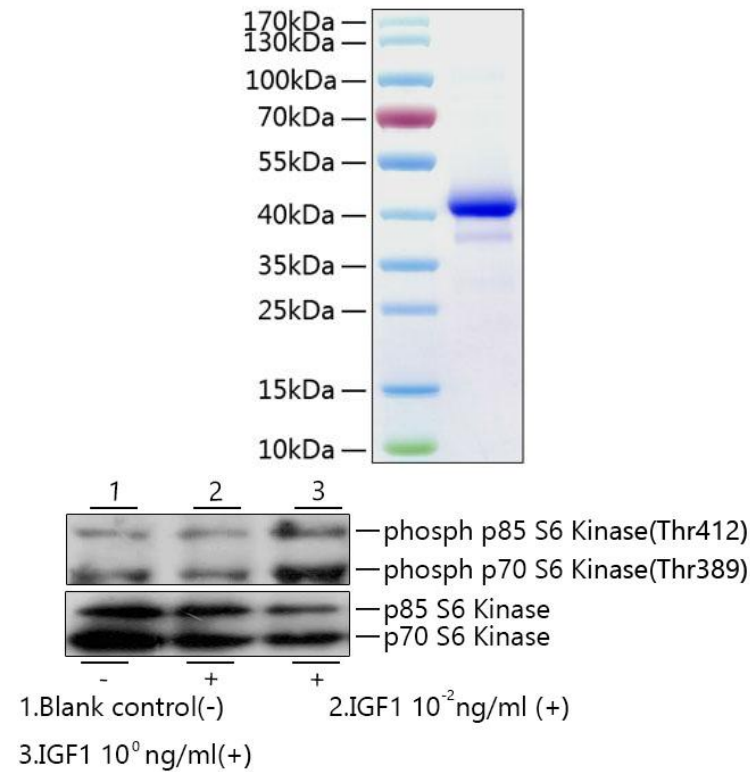
2. Measured by its binding ability in a functional ELISA. Immobilized recombinant human IGFBP6 at 1 µg/mL (100 µL/well) can bind recombinant human IGF1 with a linear range of 30-250 ng/mL.
3. Measured in a cell proliferation assay using MCF-7 cells. The ED 50 for this effect is typically 7.5-30 ng/mL, corresponding to a specific activity of $3.33 \times 10^4 - 1.33 \times 10^5$ 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

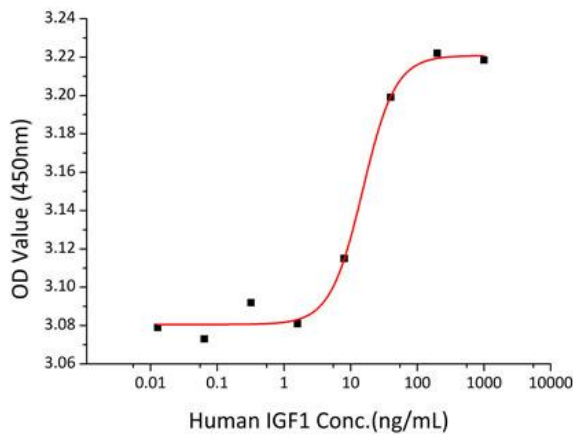
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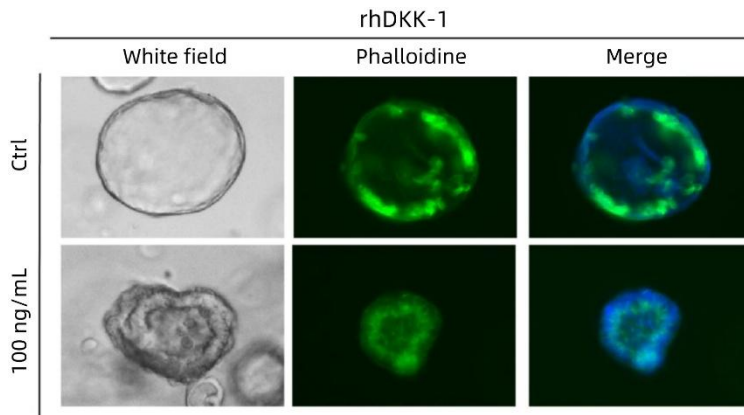


Description

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

Recombinant Human IGF1 enhances p70S6 Kinase(Thr389) and p85 S6 Kinase(Thr412) autophosphorylation in 293T human embryonic kidney cells. 0.01-1ng/mL of Recombinant Human IGF1 can effectively enhance p70S6 Kinase(Thr389) and p85 S6 Kinase(Thr412) autophosphorylation. Recombinant Human IGF1 promotes the proliferation of MCF-7 cells. The ED50 for this effect is typically 7.5-30 ng/mL.





Human kidney organoids were cultured with EGF, FGF2(RPCB0853), FGF7(RPCB1793), FGF9(RPCB1059), FGF10(RPCB0828), IGF-(RPCB0759), NOG(RPCB0864), RSPO1(RPCB0176), WNT-3a(Cat. RP01618SLQ). And further, DKK-1(RPCB0891) was used to induce the establishment of cell polarity.