Recombinant Human IGF-I Protein

Catalog No.: RP00996

Sequence Information

Species
Human

Gene ID
3479

Swiss Prot
P05019-1

Tags
C-hFc&His

Synonyms
IGF1,IGF-I,IGFI,MGF, IGFI, MGF

Product Information

Source
HEK293 cells

Purification
≥ 92 % as determined by SDS-PAGE.

Calculated MW
34.44 kDa

Observed MW
41 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

Basic Information

Description
Recombinant Human IGF-I Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Gly 49 - Ala 118) of human IGF1 (Accession #NP_001104755.1) fused with an Fc, 6×His tag at the C-terminus.

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.
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 3.33×10^{4}-1.33×10^{5}units/mg.

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℃

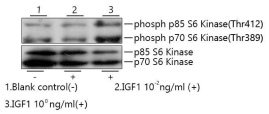
Operational Notes
For your safety and health, please wear a lab coat and disposable gloves for handling.

Contact

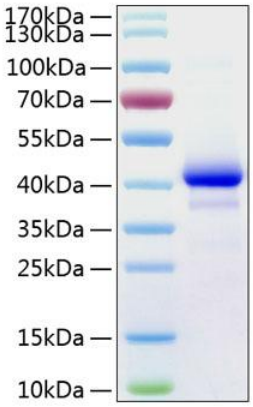
400-999-6126
cn.market@abclonal.com.cn
www.abclonal.com.cn

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

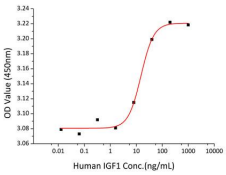
Validation Data



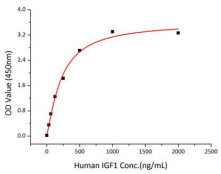
Recombinant Human IGF1 enhances p70S6 Kinase(Thr389) and p85 S6 Kinase (Thr412) autophosphorylation in 293T human embryonic kidney cells.0.01-1ng/mL of Recombinant Human IGF1 can effectively enhance p70S6 Kinase(Thr389) and p85 S6 Kinase(Thr412) autophosphorylation.



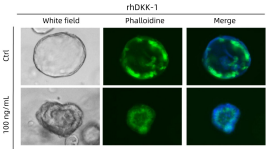
Recombinant Human IGF-I Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Recombinant Human IGF1 promotes the proliferation of MCF-7 cells. The ED_{50} for this effect is typically 7.5-30 ng/mL.



Measured by its binding ability in a functional ELISA. Immobilized recombinant human IGFBP6 at 1μg/mL (100 μL/well) can bind recombinant human IGF1 with a linear range of 30-250ng/mL.



Human kidney organoids were cultured with EGF(Cat. RP03287), FGF2(Cat. RP01042), FGF7(Cat. RP01717), FGF9(Cat. RP01710), FGF10(Cat. RP01140), IGF-(Cat. RP00996), NOG(Cat. RP01237), RSPO1(Cat. RP00071), WNT-3a(Cat. RP01618SLQ). And further, DKK-1(RP01343) was used to induce the establishment of cell polarity.