

Human IGF1 protein, His tag (active)

Cat. No. GTX00085-pro

Applications Functional Assay**Species** Human**Package**

10 µg

Applications

Application Note

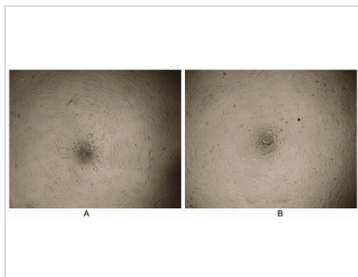
insulin-like growth factor I (IGF1), is a hormone similar in molecular structure to insulin but have a much higher growth-promoting activity, it belongs to a family of proteins involved in mediating growth and development. It is reported that IGF1 induces the proliferation, migration, differentiation of a large types of cells including the MCF-7 breast cancer cell line. To test the effect of growth factors on proliferation, MCF-7 cells were seeded into triplicate wells of 96-well plates at a density of 2000 cells/well and allowed to attach overnight, then the medium was replaced with serum-free standard DMEM prior to the addition of various concentrations of IGF-1. After incubated for 72h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10 µl of CCK-8 solution was added to each well of the plate, then measure the absorbance at 450nm using a microplate reader after incubating the plate for 1-4 hours at 37°C. Cell proliferation of MCF-7 cells after incubation with IGF1 for 72h observed by inverted microscope.

Observed MW (kDa) 14 kDa.

Properties

Form Lyophilized powder**Buffer** Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.**Preservative** ProClin 300**Storage** For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.**Region/Sequence** N-terminal His-Tag; EFKLAAALEGGRKLEF+Gly49~Ala118 (NP_000609.1)**Expression System** HEK293 cells**Purity** > 95%**Endotoxin** < 1 EU/µg**Conjugation** Unconjugated**Note** For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.

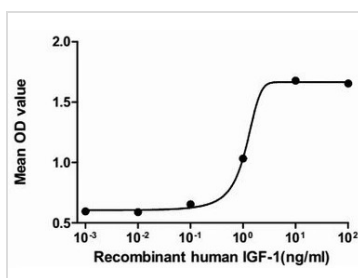
For full product information, images and publications, please visit our [website](#).

DATA IMAGES

GTX00085-pro Functional Assay Image

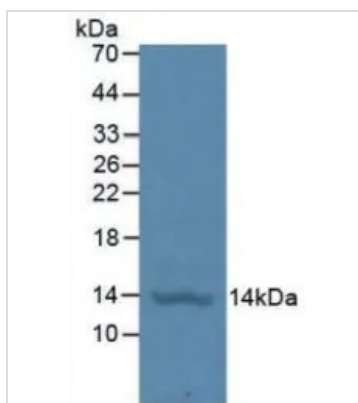
Cell proliferation effect of GTX00085-pro Human IGF1 protein (active).

(A) Unstimulated MCF-7 cells cultured in serum-free DMEM for 72hrs.

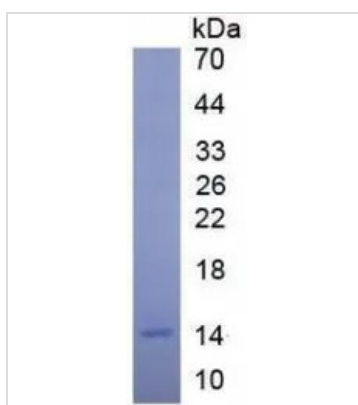
(B) MCF-7 cells cultured in serum-free DMEM, stimulated with 10 ng/ml IGF1 for 72hrs.


GTX00085-pro Functional Assay Image

The dose effect curve of GTX00085-pro Human IGF1 protein (active) on MCF-7 cells. After incubation of Human IGF1 protein (active) for 72 hrs, cell proliferation was measured by Cell Counting Kit-8 (CCK-8).


GTX00085-pro Image

WB analysis of GTX00085-pro Human IGF1 protein (active).


GTX00085-pro Image

SDS-PAGE analysis of GTX00085-pro Human IGF1 protein (active).



For full product information, images and publications, please visit our [website](http://www.genetex.com).