

Insulin Like Growth Factor 1 (IGF1) Active Protein | IGF1 active protein

Active Insulin Like Growth Factor 1 (IGF1)

CATALOG # AAA146604	HOST 293F cell	APPLICATIONS Activity Assay, Cell Culture
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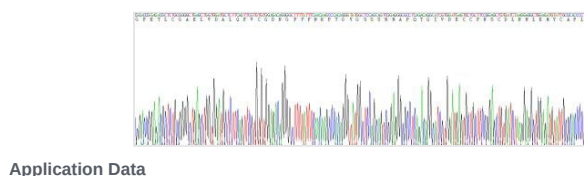
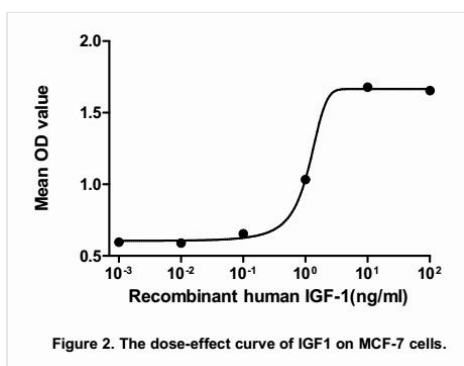
PRODUCT SYNONYMS

Insulin Like Growth Factor 1 (IGF1); Active Insulin Like Growth Factor 1 (IGF1); IGF1; IGF1A; IBP1; MGF; Somatomedin C; Mechano Growth Gactor; IGF1 active protein

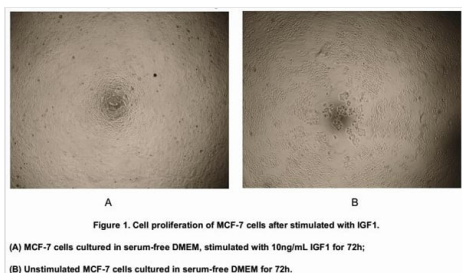
PRODUCT SPECIFICATIONS

Host	293F cell
Purity/Purification	> 95%
Form/Format	Freeze-dried powder
Sequence Length	153
Applicable Applications for IGF1 active protein	Activity Assay, Cell Culture
Fragment	Gly49~Ala118
Tag	N-terminal His Tag
Buffer Formulation	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Organism Species	Human
Isoelectric Point	7.8
Usage	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Avoid repeated freeze/thaw cycles. Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 degree C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

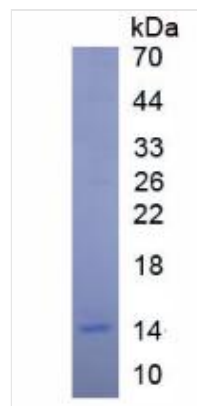
IMAGES



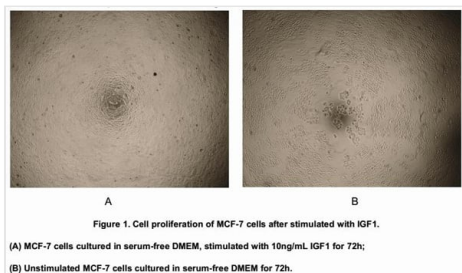
Application Data



Application Data



SDS-PAGE



Activity

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 2,000 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 uL 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 degree C. Cell proliferation of MCF-7 cells after incubation with IGF1 for 72h observed by inverted microscope was shown in Figure 1.

ADDITIONAL INFORMATION

Product Categories/Family for IGF1
active protein

Active Protein

NCBI AND UNIPROT INFORMATION

NCBI GI #	11024682
NCBI GeneID	3479
NCBI Accession #	NP_000609.1
NCBI GenBank Nucleotide #	NM_000618.4
UniProt Accession #	P05019; P01343; Q14620; B2RWM7; E9PD02
Molecular Weight	9.3kDa; 14kDa
NCBI Official Full Name	insulin-like growth factor I isoform 4 preproprotein
NCBI Official Synonym Full Names	insulin like growth factor 1
NCBI Official Symbol	IGF1
NCBI Official Synonym Symbols	MGF; IGF1; IGF-I

NCBI Protein Information	insulin-like growth factor I
UniProt Protein Name	Insulin-like growth factor I
UniProt Gene Name	IGF1
UniProt Synonym Gene Names	IBP1; IGF-I; MGF

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://www.aaabiotech.com/293f-active-protein/insulin-like-growth-factor-1-igf1/146604>