

Insulin Like Growth Factor 1 Active Protein | IGF1 active protein

Active Insulin Like Growth Factor 1 (IGF1)

CATALOG #
AAA150053

APPLICATIONS
Activity Assay, Cell Culture

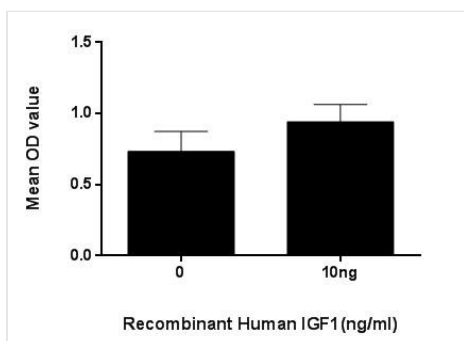
PRODUCT SYNONYMS

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

PRODUCT SPECIFICATIONS

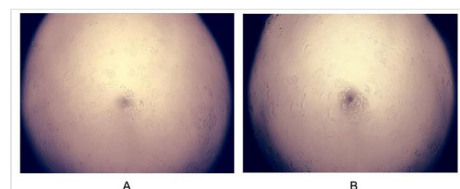
Purity/Purification	>95%
Form/Format	Freeze-dried powder 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Sequence Positions	Gly49~Ala118
Sequence Length	195
Applicable Applications for IGF1 active protein	Activity Assay, Cell Culture
Species	Human
Tag	N-terminal His Tag
Isoelectric Point	6.5
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (PH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. Avoid repeated freeze/thaw cycles. Stability: 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



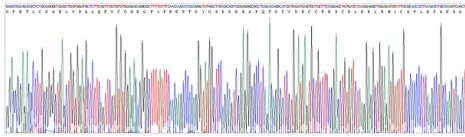
Bioactivity

Figure. Cell proliferation of MCF-7 cells after stimulated with IGF1.

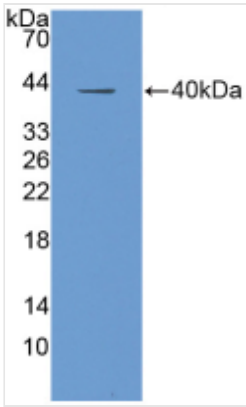


Application Data

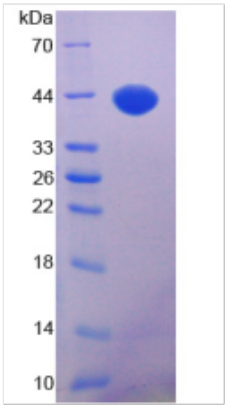
To measure the effect of IGF1 on cell proliferation, breast cancer MCF-7 cells were seeded into triplicate wells of 96-well plates at a density of 5,000 cells/well and allowed to attach, replaced with serum-free overnight, then the medium was replaced with 1% serum standard DMEM prior to the addition of various concentrations of recombinant human IGF1. After incubated for 96h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10uL of CCK-8 solution was added to each well of the plate, then the absorbance at 450nm was measured using a microplate reader after incubating the plate for 1-4 hours at 37. Proliferation of MCF-7 cells after incubation with IGF1 for 72h observed by inverted microscope was shown in Figure 2. Cell viability was assessed by CCK-8 assay after incubation with recombinant IGF1 for 72h. The result was shown in Figure 3. It was obvious that IGF1 significantly increased cell viability of MCF-7 cells.(A) MCF-7 cells cultured in DMEM, stimulated with 10ng/mL IGF1 for 72h; (B) Unstimulated MCF7 cells cultured in DMEM for 72h.Figure. Cell proliferation of MCF-7 cells after stimulated with IGF1.



Gene Sequencing
 Figure. Gene Sequencing (Extract



WB (Western Blot)
 Figure. Western Blot



SDS-PAGE
 Figure. SDS-PAGE

ADDITIONAL INFORMATION

Product Categories/Family for IGF1 active protein	Tumor immunity; Endocrinology
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NCBI AND UNIPROT INFORMATION

NCBI GI #	163659903
NCBI GeneID	3479
NCBI Accession #	NP_001104755.1
NCBI GenBank Nucleotide #	NP_001104755.1
UniProt Accession #	P05019
Molecular Weight	Predicted Molecular Mass: 37.7kDa Accurate Molecular Mass: 40kDa
NCBI Official Full Name	insulin-like growth factor I isoform 3 preproprotein
NCBI Official Synonym Full Names	insulin like growth factor 1
NCBI Official Symbol	IGF1
NCBI Official Synonym Symbols	IGF; MGF; IGF-I; 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
UniProt Entry Name	IGF1_HUMAN

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://stage.aaabiotech.com/igf1-active-protein/insulin-like-growth-factor-1/150053>