

Insulin Like Growth Factor 1 Active Protein | IGF1 active protein

Active Insulin Like Growth Factor 1 (IGF1)

CATALOG #
AAA150054

APPLICATIONS
Activity Assay, Cell Culture

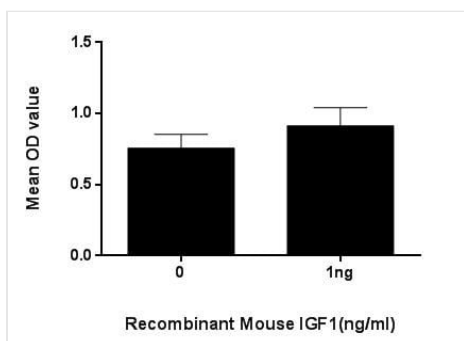
PRODUCT SYNONYMS

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

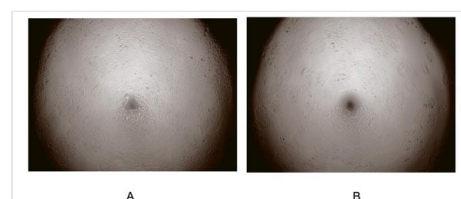
Purity/Purification	>97%
Form/Format	Freeze-dried powder 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Sequence Positions	Gly49~Met153
Sequence Length	143
Applicable Applications for IGF1 active protein	Activity Assay, Cell Culture
Species	Mouse
Tag	N-terminal His Tag
Isoelectric Point	9.7
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



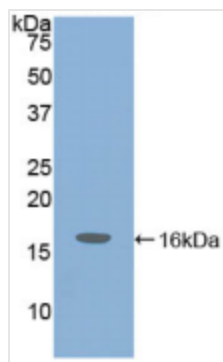
Bioactivity

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

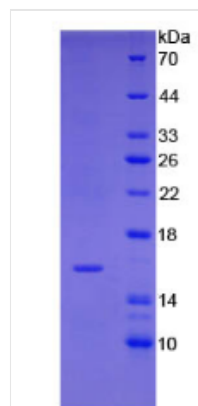


Application Data

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 mouse 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 96h observed by inverted microscope was shown in Figure 2. Cell viability was assessed by CCK-8 assay after incubation with recombinant IGF1 for 96h. 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 1ng/mL IGF1 for 96h; (B) Unstimulated MCF7 cells cultured in DMEM for 96h. Figure. Cell proliferation of MCF-7 cells after stimulated with IGF1.



WB (Western Blot)
Figure. Western Blot



SDS-PAGE
Figure. SDS-PAGE

ADDITIONAL INFORMATION

Product Categories/Family for IGF1
active protein

Tumor immunity; Endocrinology

NCBI AND UNIPROT INFORMATION

NCBI GI #	163659889
NCBI GeneID	16000
NCBI Accession #	NP_001104744.1
NCBI GenBank Nucleotide #	NP_001104744.1
UniProt Accession #	Q8CAR0; P05017
Molecular Weight	Predicted Molecular Mass: 15.4kDa Accurate Molecular Mass: 16kDa
NCBI Official Full Name	insulin-like growth factor I isoform 3
NCBI Official Synonym Full Names	insulin-like growth factor 1
NCBI Official Symbol	Igf1
NCBI Official Synonym Symbols	Igf-1; Igf-I; C730016P09Rik
NCBI Protein Information	insulin-like growth factor I
UniProt Protein Name	Insulin-like growth factor I
UniProt Gene Name	Igf1

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.

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Online datasheet: <https://stage.aaabiotech.com/igf1-active-protein/insulin-like-growth-factor-1/150054>