

Insulin (INS) Active Protein | INS active protein

Active Insulin (INS)

CATALOG # AAA146619	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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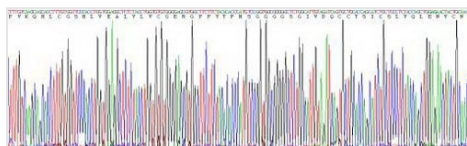
PRODUCT SYNONYMS

Insulin (INS); Active Insulin (INS); Insulin; INS active protein

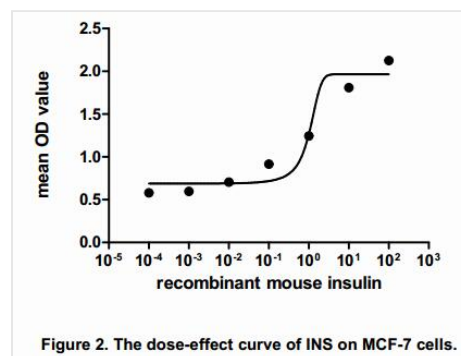
PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	> 97%
Form/Format	Freeze-dried powder
Sequence Length	108
Applicable Applications for INS active protein	Activity Assay, Cell Culture
Fragment	Phe25~Ser54 and Gly90~Asn110 linked by GGGGS
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	Mouse
Isoelectric Point	7.1
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.

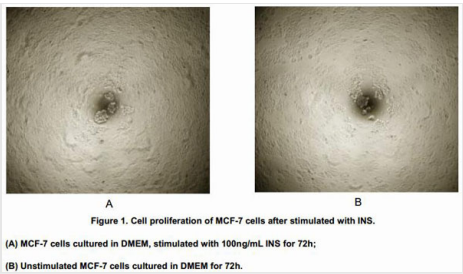
IMAGES



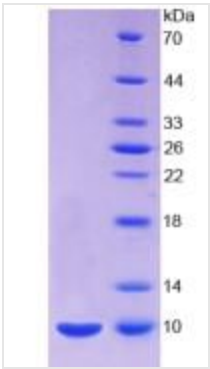
Application Data



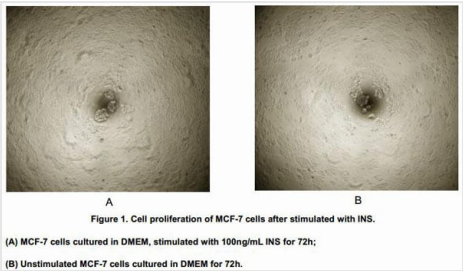
Application Data



Application Data



SDS-PAGE



Activity

INS (Insulin) is a peptide hormone produced by beta cells of the pancreatic islets, which decreases blood glucose concentration and increases cell permeability to monosaccharides, amino acids and fatty acids. It has been reported that insulin triggers phosphorylation of a number of substrates by binding to its receptors, which was important for cell proliferation, cell cycle progression, cell division and differentiation. To detect the effect of Insulin on cell 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 INS. After incubated for 48h, 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 degree C.

ADDITIONAL INFORMATION

Product Categories/Family for INS active protein	Active Protein
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NCBI AND UNIPROT INFORMATION

NCBI GI #	172073148
NCBI GeneID	397415
NCBI Accession #	NP_001103242.1
NCBI GenBank Nucleotide #	NM_001109772.1
UniProt Accession #	P01315; Q9TSJ5
Molecular Weight	10.3kDa; 10kDa
NCBI Official Full Name	insulin
NCBI Official Symbol	INS
NCBI Protein Information	insulin
UniProt Protein Name	Insulin
UniProt Gene Name	INS

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/e-coli-active-protein/insulin-ins/146619>