

Datasheet for ABIN934921
IGF1 Protein (AA 1-115)



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1 Image

Overview

Quantity:	100 µg
Target:	IGF1
Protein Characteristics:	AA 1-115
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Application:	SDS-PAGE (SDS)

Product Details

Sequence:	MGPETLCGAE LVDALQFVCG DRGFYFNKPT GYGSSRRAP QTGIVDECCF RSCDLRRLEM YCAPLPAKS A
Characteristics:	Purified recombinant Human IGF1 protein Expression System: E.coli Bioactivity: The ED50 for this effect is < 3.6 ng/mL. Measured in a cell proliferation assay using MCF7 cell. Molecular weight on SDS-PAGE will appear higher.
Purity:	> 95 % pure

Target Details

Target:	IGF1
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Target Details

Alternative Name: IGF1 ([IGF1 Products](#))

Background: The Insulin-like growth factor-1(IGF-1) is a mitogenic polypeptide growth factors that stimulates the proliferation and survival of various cell types including muscle, bone, and cartilage tissue in vitro. IGF-1 is predominantly produced by the liver, although a variety of tissues produce the IGFs at distinctive times. The IGF-1 belongs to the insulin gene family, which also contains insulin and relaxin. The IGF-1s are similar in structure and function to insulin, but have a much higher growth-promoting activity than insulin. This recombinant human IGF-I is a globular protein containing 70 amino acids, and 3 intra-molecular disulfide bonds. Recombinant IGF-1 was expressed in E. coli and purified by conventional chromatography, after refolding of the isolated inclusion bodies in a renaturation buffer.

Alternative Names: MGF protein, IGF 1 protein, IGF-IA protein, Insulin like growth factor 1 protein, Insulin like growth factor 1 (somatomedin C) protein, Insulin like growth factor IB protein, IGF1 protein, IGF1 protein, IGF IB protein, IGF1, IGF-1, IGF 1, IBP1 protein, IGF-1 protein, Insulin-like growth factor-1 protein, IGF1 protein, Mechano growth factor protein, IGF-1 protein, Somatomedin C protein, IGFI A protein, Insulin like growth factor IA protein, Insulin-like growth factor-1 IGF IA protein, IBP1 protein, Somatomedin-C protein

Molecular Weight: 7.7 kDa (71 AA)

Pathways: [RTK Signaling](#), [Intracellular Steroid Hormone Receptor Signaling Pathway](#), [Peptide Hormone Metabolism](#), [Hormone Activity](#), [Regulation of Intracellular Steroid Hormone Receptor Signaling](#), [Regulation of Hormone Metabolic Process](#), [Regulation of Hormone Biosynthetic Process](#), [Stem Cell Maintenance](#), [Glycosaminoglycan Metabolic Process](#), [Regulation of Carbohydrate Metabolic Process](#), [Autophagy](#), [Smooth Muscle Cell Migration](#), [Activated T Cell Proliferation](#), [Positive Regulation of fat Cell Differentiation](#)

Application Details

Application Notes: IGF1 protein has been used in SDS PAGE and may be suitable for use in other assays to be determined by the end user.

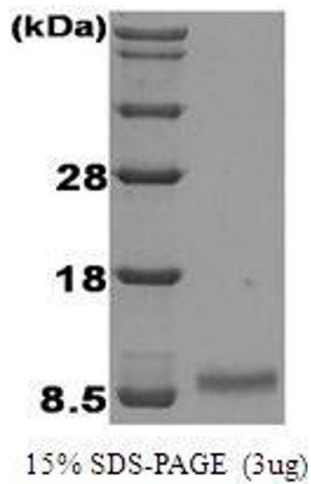
Assay Procedure: Cell line: MCF7 (human) Maintenance Condition: RPMI 1640 containing 10 % FBS Assay Medium: serum free RPMI 1640 Cell Density: 2 x 10,000 cells/well (96 well plate, final volume 100 µL) Serum Free Starvation: 24 h with RPMI1640 Incubation Time: 40 hr (after sample treatment) Concentration Range: 0.39 ng/mL - 29 ng/mL Detection Method: BrdU assay

Restrictions: For Research Use only

Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	Supplied as a liquid in PBS, pH 7.4.
Handling Advice:	Avoid repeated freeze/thaw cycles.
Storage:	RT/-20 °C
Storage Comment:	Store at 4 °C for short term storage (1/2 weeks). Aliquot and store at -20 °C or -70 °C for long term storage.

Images



SDS-PAGE

Image 1. Figure annotation denotes ug of protein loaded and % gel used.