

Datasheet for ABIN6699964

**IGF1 Protein****2** Images[Go to Product page](#)

## Overview

Quantity:	100 µg
Target:	IGF1
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Application:	SDS-PAGE (SDS)

## Product Details

Purpose:	Human Insulin-like Growth Factor I Recombinant Protein (Animal Free)
Purification:	Insulin-like Growth Factor I is produced with no animal-derived raw products, animal free equipment and animal free protocols. Purity was determined to be greater than 98% as determined by HPLC, analysis by UV-Spectroscopy at 280nm, and by reducing and non-reducing SDS-PAGE.
Purity:	98,00%
Endotoxin Level:	Measured by LAL is typically $\leq 1$ EU/µg protein.
Grade:	Animal-Free
Biological Activity Comment:	The activity is determined by the dose-dependent proliferation of mouse FDC-P1 cells is typically less than 1.0 ng/mL.

## Target Details

Target:	IGF1
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## Target Details

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

Background: Synonyms: Somatamedin C, mechano growth factor (MGF), IGF-IA  
Background: Insulin-like Growth Factor I, IGF-I, is a growth factor produced by the liver when stimulated with growth hormone and can be found circulating throughout the body . IGF-I activates the IGF-I receptor (IGF1R) and the insulin receptor to mediate growth of almost every cell of the body. IGF-I is known as one of the most potent activators of the AKT signaling pathway which is known to be a stimulator of proliferation and an inhibitor of programmed cell death. Mature human IGF-I is 100 % homologous with bovine and porcine proteins.  
Recombinant human IGF-I is a non-glycosylated protein, containing 70 amino acids, with a molecular weight of 7.7 kDa.

UniProt: [P05019](#)

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

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Application Notes: Other: User Optimized  
Application\_Note: Insulin-like Growth Factor I Recombinant Protein has been tested by SDS-PAGE and biological activity and is suitable as a control for polyclonal or monoclonal anti-Insulin-like Growth Factor I in immunological assays.

Comment: Suggested\_Applications: Cellular Assay  
Other\_Performance\_Data:

Restrictions: For Research Use only

## Handling

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Format: Lyophilized

Reconstitution: Reconstitution\_Buffer: Restore with deionized water (or equivalent)  
Reconstitution\_Volume: 100 µL

Buffer: Buffer: 0.1 % Trifluoroacetic acid

## Handling

Stabilizer: None

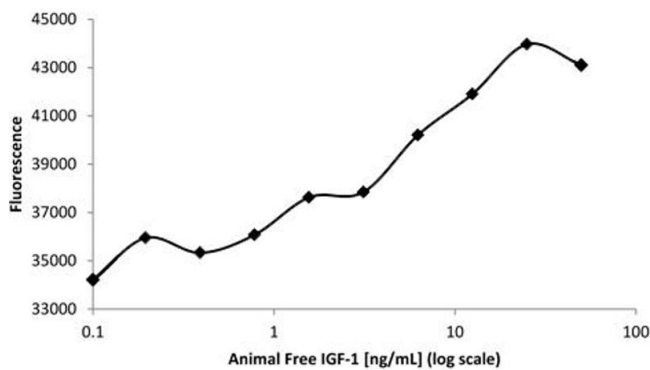
Preservative: Without preservative

Storage: 4 °C, -20 °C

Storage Comment: Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.

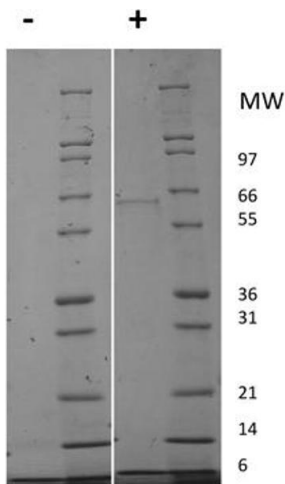
Expiry Date: 6 months

## Images



### SDS-PAGE

**Image 1.** SDS-PAGE of Human Insulin-like Growth Factor I Recombinant Protein (Animal Free) Bioactivity of Human Insulin-like Growth Factor I Recombinant Protein Animal Free. FDC-P1 cells were cultured with 0 to 50 ng/mL Human IGF-I AF. Cell proliferation was measured after 48 hours and the linear portion of the curve was used to calculate the ED50. The ED50 of Human IGF-I AF is 2.8-4.2 ng/mL.



### SDS-PAGE

**Image 2.** SDS-PAGE of Human Insulin-like Growth Factor I Recombinant Protein (Animal Free) SDS-PAGE of Human Insulin-like Growth Factor I Animal Free Recombinant Protein. Lane 1: 1 µg Human IGF-I AF in non-reducing conditions. Lane 2: Molecular weight marker. Lane 3: 1 µg Human IGF-I AF in reducing conditions (+). Lane 4: Molecular weight marker. Human IGF-I has a predicted MW of 7.7 kDa.