

Catalog Number: 230-30030

Recombinant Human Insulin-like growth factor I (IGF-I)

Source

Species	Human
Accession Number	P05019
Gene Symbol	IGF1
Gene ID	3479
Expressed Region	Gly49-Lys195
Synonyms	Insulin-like growth factor I, IGF-I, Mechano growth factor, MGF, Somatomedin-C, Insulin-Like Growth Factor 1, IBP1, IGF1

Preparation

Expression System	Human Embryonic Kidney 293 Cells
Tag	N-terminal 6x histidine tag and C-terminal mouse IgG Fc tag
Purification	His-tag affinity purification by immobilized metal ion affinity chromatography (IMAC)
Purity	> 90%
Purity Determined By	SDS-PAGE under reducing conditions and visualized by Coomassie blue staining
Molecular Weight	Recombinant mouse IGF-I has a calculated molecular mass of 43 kDa (including a C-terminal mouse IgG Fc tag, 27 kDa). Due to the abundant glycosylation, it migrates as approximately 43-45 kDa protein bands in SDS-PAGE under DTT, beta-mercaptoethanol reducing conditions.

Protein Specifications

Format	Lyophilized powder
Formulation	Lyophilized from a 0.2 um filtered solution in PBS
Concentration	Determined by BCA protein assay kit (Thermo Scientific)
Preservative	None
Endotoxin Level	Not determined
Recommended Applications	ELISA, EIA, protein-protein interaction studies, Western Blotting, Dot Blotting, Immunoprecipitation, Protein Array
Reconstitution	Briefly spin the vial and bring the contents to the bottom prior to opening. It is recommended to reconstitute at 0.5 - 1.0 mg/mL with sterile deionized water or 1x PBS.

SDS-PAGE Image

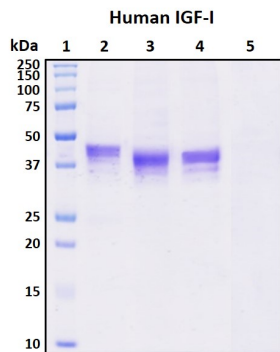
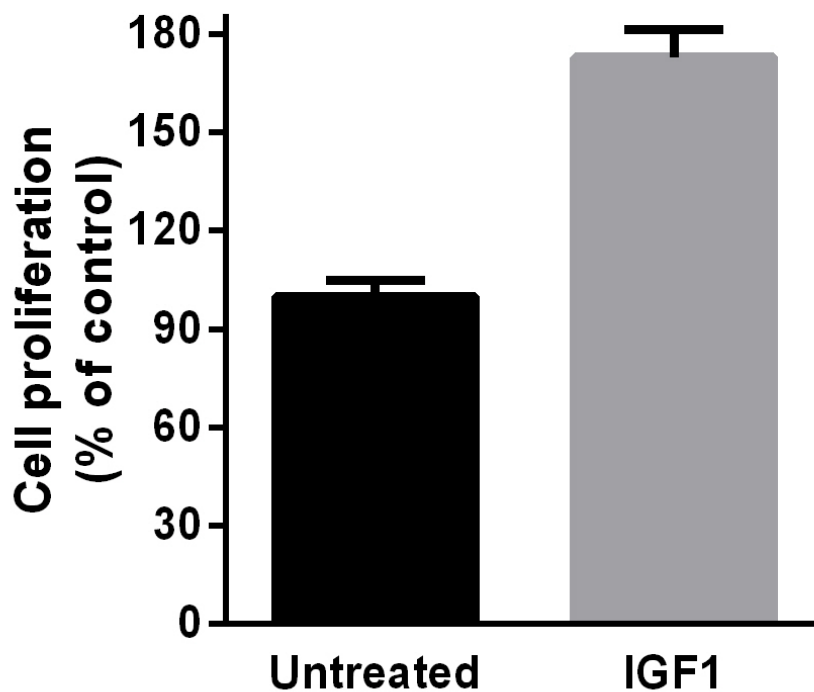


Figure 1. Deglycosylation of purified recombinant proteins. Purified proteins were untreated (Lane 2) or treated with protein deglycosylation enzymes under native (Lane 3) or reducing (Lane 4) conditions. Deglycosylation treatment resulted in a mobility shift of the protein to produce one major band at the expected size, thus indicating that the untreated recombinant protein (Lane 2) was glycosylated.
Lane 1: Protein standard ladder (kDa).
Lane 2: Untreated protein under reducing conditions.
Lane 3: Treated protein with deglycosylation enzymes under native conditions.
Lane 4: Treated protein with deglycosylation enzymes under reducing conditions.
Lane 5: Deglycosylation mixture only without target proteins.

Activity

Stimulating cell growth significantly. Measured in a cell proliferation assay using MCF7 human breast cancer cells.



Shipping

Ice packs

Storage/Stability

Upon arrival, the protein may be stored for 2 weeks at 4 °C. For long term storage, it is recommended to store at -20 °C or -80 °C in appropriate aliquots. Avoid repeated freeze-thaw cycles.

This product is furnished for LABORATORY RESEARCH USE ONLY.

Not for diagnostic or therapeutic use.