

Active Recombinant Human IGF1 Protein (71 aa)

Cat. No. IGF1-377I **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human IGF-I(N-Met) produced in E. coli is a polypeptide chain containing 71 amino acids. A fully biologically active molecule, rhIGF-I (N-Met) has a molecular mass of 7.8 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques.
Species	Human
Source	E.coli
ProteinLength	71
Description	Insulin-like growth factor I (IGF-I) also known as Somatamedin C is a hormone similar in molecular structure to insulin. Human IGF-I has two isoforms (IGF-IA and IGF-IB) which are differentially expressed by various tissues. Mature human IGF-I shares 94% and 96% aa sequence identity with mouse and rat IGF-I, respectively. Both IGF-I and IGF-II (another ligand of IGF) can signal through the IGF-I receptor (IGFIR), but only IGF-II can bind the IGF-II receptor (IGFIIR/Mannose-6-phosphate receptor). IGF-I plays an important role in childhood growth and continues to have anabolic effects in adults.
Form	Sterile Filtered White lyophilized (freeze-dried) powder.
Bio-activity	ED50 < 5 ng/mL, measured by a cell proliferation assay using FDC-P1 cells, corresponding to a specific activity of > 2.0 × 10 ⁵ units/mg.

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Molecular Mass	7.8 kDa, observed by reducing SDS-PAGE.
AA Sequence	MGPETLCGAELVDALQFVCGDRGFYFNKPTGYGSSRRAPQTGIVDECCFRSCDL RRLEMYCAPLKPAKSA
Endotoxin	< 0.2 EU/μg, determined by LAL method.
Purity	> 95% as analyzed by SDS-PAGE.
Storage	Lyophilized recombinant Human IGF-I(N-Met) remains stable up to 6 months at -80 centigrade from date of receipt. Upon reconstitution, Human IGF-I should be stable up to 1 week at 4 centigrade or up to 3 months at -20 centigrade.
Storage Buffer	Lyophilized after extensive dialysis against PBS.
Reconstitution	Reconstituted in ddH ₂ O or PBS at 100 μg/mL.

GENE INFORMATION

Gene Name	IGF1 insulin-like growth factor 1 (somatomedin C) [Homo sapiens]
Official Symbol	IGF1
Synonyms	IGF1; insulin-like growth factor 1 (somatomedin C); insulin-like growth factor 1; IGF1A; MGF; IGF-IA; IGF-IB; somatomedin-C; mechano growth factor; insulin-like growth factor I; insulin-like growth factor IA; insulin-like growth factor IB; IGFI; IGF-I;
Gene ID	3479
mRNA Refseq	NM_000618

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Protein Refseq	NP_000609
MIM	147440
UniProt ID	P05019

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