

Recombinant Human Insulin-Like Growth Factor 1 (somatomedin C)

Cat. No. IGF1-687H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant humanIGF1 was expressed in E. coli.
Species	Human
Source	E.coli
Description	Human [Leu24][Ala ³¹] Insulin-like Growth Factor-I (IGF-I) is an analog of human IGF-I with a Leu substitution in place of Tyr at position 24 and an Ala for Tyr at position 31 of the human IGF-I sequence. Human [Leu24] [Ala ³¹]IGF-I has greatly reduced binding to the Type 1 IGF receptor and to the insulin receptor compared to IGF [Leu24] IGF-I, and [Leu60]IGF-I. Human [Leu24] [Ala ³¹] IGF-I has normal binding to acid-stripped human serum binding proteins.
Purity	Greater than 95% (by HPLC and N-terminal sequence analysis).
Molecular Weight	7.507 kDa
Endotoxin Level	Less than 0.1 EU/ug
Biological Activity	Type 1 IGF receptor binding assay-ED ₅₀ >750 ng/ml. IGF binding protein assay-ED ₅₀ <10ng/ml. Stimulation of protein synthesis in rat L6 myoblasts: ED ₅₀ >2000ng/ml.
State and appearance	Lyophilized white powder. Dried from 0.1 M acetic acid and stored under dry nitrogen at slight vacuum (-25 kPa).

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N-terminal sequence analysis	5 residues Greater than 95% single sequence.
Storage	At least 2 years at 2-4°C (lyophilized).
Official Symbol	IGF1
GENE INFORMATION	
Gene Name	IGF1 insulin-like growth factor1 (somatomedin C) [Homo sapiens]
Synonyms	IGF1; insulin-like growth factor 1 (somatomedin C); insulin-like growth factor 1; MGF; IGF-IA; IGF-IB; somatomedin-C; OTTHUMP00000195080; OTTHUMP00000195081; OTTHUMP00000195082; OTTHUMP00000195083; OTTHUMP00000195084; mechano growth factor; insulin-like growth factor I; insulin-like growth factor IA; insulin-like growth factor IB
Gene ID	3479
mRNA Refseq	NM_000618
Protein Refseq	NP_000609
MIM	147440
UniProt ID	P05019
Chromosome Location	12q23
Pathway	Adipogenesis; Aldosterone-regulated sodium reabsorption; Apoptosis; Diabetes pathways; Dilated cardiomyopathy; Endochondral Ossification; Focal Adhesion;

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Glioma; Hemostasis; Id Signaling Pathway; Oocyte meiosis; Pathways in cancer; Platelet activation; Prostate cancer; Synthesis

Function

growth factor activity; hormone activity; insulin receptor binding; insulin-like growth factor receptor binding; integrin binding; protein binding

PDB rendering based on 1bqt.

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