

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

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

## SPECIFICATION

<b>Product Overview</b>	Recombinant humanIGF1 was expressed in E. coli.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>Description</b>	Human [Leu24][Ala <sup>1</sup> ] 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 <sup>31</sup> ]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 <sup>1</sup> ] IGF-I has normal binding to acid-stripped human serum binding proteins.
<b>Purity</b>	Greater than 95% (by HPLC and N-terminal sequence analysis).
<b>Molecular Weight</b>	7.507 kDa
<b>Endotoxin Level</b>	Less than 0.1 EU/ug
<b>Biological Activity</b>	Type 1 IGF receptor binding assay-ED50 >750 ng/ml. IGF binding protein assay-ED50 <10ng/ml. Stimulation of protein synthesis in rat L6 myoblasts: ED50 >2000ng/ml.
<b>State and appearance</b>	Lyophilized white powder. Dried from 0.1 M acetic acid and stored under dry nitrogen at a slight vacuum (-25 kPa).

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<b>N-terminal sequence analysis</b>	5 residues Greater than 95% single sequence.
<b>Storage</b>	At least 2 years at 2-4°C (lyophilized).
<b>Official Symbol</b>	IGF1
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	IGF1 insulin-like growth factor1 (somatomedin C) [ Homo sapiens ]
<b>Synonyms</b>	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
<b>Gene ID</b>	3479
<b>mRNA Refseq</b>	NM_000618
<b>Protein Refseq</b>	NP_000609
<b>MIM</b>	147440
<b>UniProt ID</b>	P05019
<b>Chromosome Location</b>	12q23
<b>Pathway</b>	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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