

Recombinant Human/Bovine/Porcine IGF1 Protein

Cat. No. IGF1-22H Lot. No. (See product label)

SPECIFICATION

Product Overview	<p>Recombinant human/bovine/porcine IGF-1 LR3 protein without tag was expressed in E. coli.</p> <p>Animal-free (AOF) and carrier protein-free.</p> <p>Mass spectrometry: single species with expected mass.</p> <p>Analytical reversed-phase: single sharp peak.</p> <p>Recovery from stock vial: >95%</p>
Species	Human
Source	E.coli
Description	<p>The protein encoded by this gene is similar to insulin in function and structure and is a member of a family of proteins involved in mediating growth and development. The encoded protein is processed from a precursor, bound by a specific receptor, and secreted. Defects in this gene are a cause of insulin-like growth factor I deficiency. Alternative splicing results in multiple transcript variants encoding different isoforms that may undergo similar processing to generate mature protein.</p>
Molecular Mass	9 kDa
Endotoxin	<0.005 EU/μg protein (below level of detection)
Applications	Tumor organoid culture
Storage	Resuspend in water at >100 μg/mL, prepare single use aliquots, add carrier protein if

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desired and store frozen at -20 or -80 centigrade

Storage Buffer Lyophilized from acetonitrile, TFA

GENE INFORMATION

Gene Name IGF1 insulin like growth factor 1 [Homo sapiens (human)]

Official Symbol IGF1

Synonyms IGF1; insulin like growth factor 1; IGF; MGF; IGFI; IGF-I; insulin-like growth factor I; insulin-like growth factor 1 (somatomedin C); insulin-like growth factor IB; mechano growth factor; somatomedin-C

Gene ID 3479

mRNA Refseq NM_000618

Protein Refseq NP_000609

MIM 147440

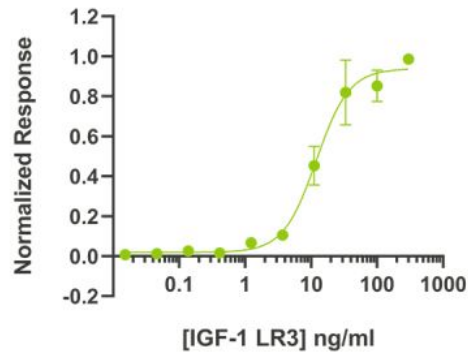
UniProt ID P05019

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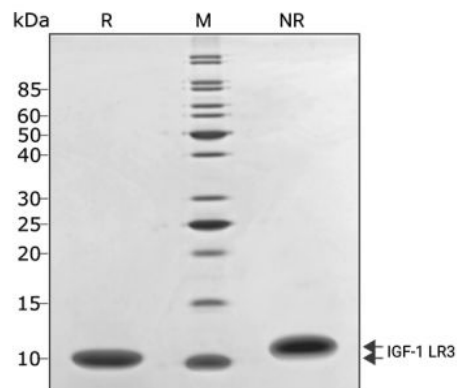
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Bioactivity



IGF-1 LR3 activity is determined using the serum response element luciferase reporter assay in transfected MCF-7 cells. EC₅₀ = 12.0 ng/mL (1.3 nM). Cells are treated in triplicate with a serial dilution of IGF-1 LR3 for 4 hours. Firefly luciferase activity is measured and normalized to the control Renilla luciferase activity.

Purity




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IGF-1 LR3 migrates as a single band at 10 kDa in non-reducing conditions and upon reduction (R). No contaminating protein bands are visible. Purified recombinant protein was resolved using 18% w/v SDS-PAGE in reduced and non-reduced conditions and stained with Coomassie Brilliant Blue R250.

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