

Active Recombinant Human IGF1 Protein (Gly49-Ala118, Glu51Arg), GMP Grade, Animal-Free

Cat. No. IGF1-19HG **Lot. No.** (See product label)

SPECIFICATION

Product Overview	GMP recombinant human LR3 IGF-I/IGF-1 protein (Gly49-Ala118, Glu51Arg) without tag was expressed in E. coli, produced using non-animal reagents in an Animal-Free laboratory and manufactured and tested under cGMP guidelines.
Species	Human
Source	E.coli
ProteinLength	Gly49-Ala118, Glu51Arg
Description	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.
Bio-activity	Measured in a serum-free cell proliferation assay using MCF-7 human breast cancer cells. The ED50 for this effect is 0.3-1.5 ng/mL. IGFBP-3 does not inhibit its activity.
Molecular Mass	Predicted Molecular Mass: 9 kDa SDS-PAGE: 8 kDa, reducing conditions
N-terminal Sequence	Met-Phe-Pro-Ala-Met-Pro-Leu-Ser-Ser-Leu

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Analysis	
Endotoxin	<0.01 EU/ µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. A minimum of 12 months when stored at ≤ -20 centigrade as supplied. Refer to lot specific COA for the Use by Date. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, ≤ -20 centigrade under sterile conditions after reconstitution.
Storage Buffer	Lyophilized from a 0.2 µm filtered solution in Acetic Acid.
Reconstitution	Reconstitute at 100-200 µg/mL in sterile 100 mM Acetic Acid
Shipping	The product is shipped with polar packs.

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; IGF-I; IGF-I;
Gene ID	3479

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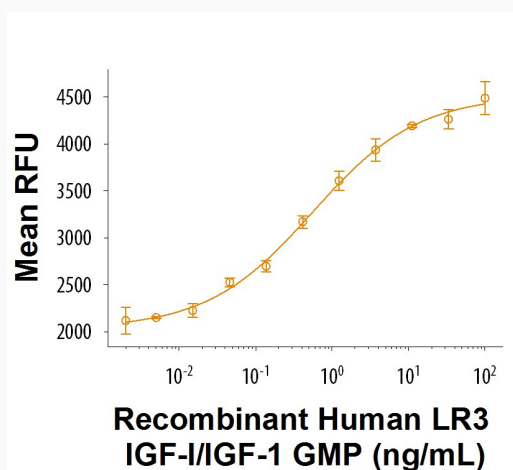
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Protein Refseq NP_000609

MIM 147440

UniProt ID P05019

Bioactivity

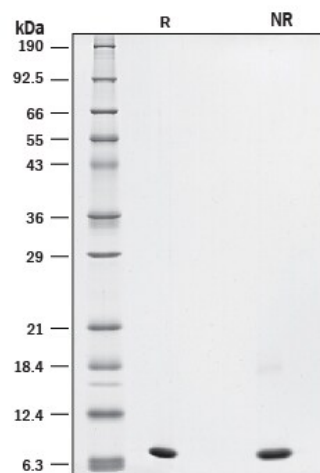


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SDS-PAGE



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