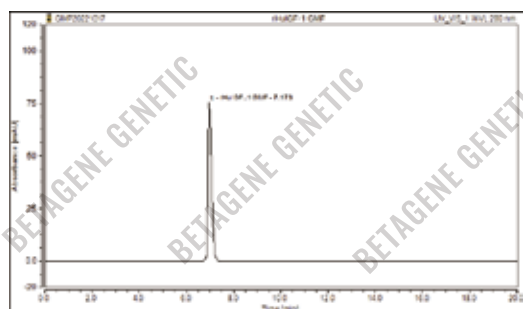


RECOMBINANT HUMAN IGF-1 TAG-FREE GMP

Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Gene ID	3479
Description	The insulin-like growth factors (IGFs) belonged to the insulin gene family, are mitogenic polypeptide growth factors that stimulate the proliferation and survival of various cell types including muscle, bone, and cartilage tissue in vitro. The IGFs are similar by structure and function to insulin, but have a much higher growth-promoting activity than insulin. The production of IGF-1 is stimulated by growth hormone (GH) and can be retarded by undernutrition, growth hormone insensitivity, lack of growth hormone receptors, or failures of the downstream signaling pathway post GH receptor including SHP2 and STAT5B.
Catalog Number	GE09.1/GE09.2
Unit Size	50µg/100µg
Source	E. coli
Molecular Weight	Approximately 7.6kDa, a non-glycosylated polypeptide chain containing 70 amino acids
AA Sequence	GPETLCGAELVDALQFVCGDRGFYFNKPTGYGSSSRRAPQTGIVDECCFRSCDLRRLREMYCAPLKPAKSA
Purity (HPLC)	> 98%
Purity (SDS-PAGE)	> 98%
Biological Activity	he ED ₅₀ as determined by a cell proliferation assay using serum free human MCF-7 cells is < 2 ng/mL, corresponding to a specific activity of > 5.0 × 10 ⁵ Units/mg.
Host Cell DNA Residue	< 0.02 ng/µg of protein tested by DNA Fluorescent Staining method.
Host Cell Protein Residue	< 0.5 ng/µg of protein tested by ELISA.
Formulation	Lyophilized from a 0.2µm sterile filtered solution in PBS, pH 7.0
Sterility	Negative
Endotoxin	< 0.01EU/µg as determined by LAL gel-clot method.
Mycoplasma	Negative
Reconstitution	Before use this product, please read the direction below carefully. 1. This vial must be briefly centrifuged prior to opening to bring the contents to the bottom. 2. Reconstitute in a sterile aqueous buffer to an appropriate concentration. 3. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.
Stability & Storage	For long term storage, the product should be stored ≤ -20 °C. Please avoid repeated freeze-thaw cycles after reconstitution. 1. At least 24 months from date of receipt, ≤ -20 °C as supplied; 2. 1 month, 2 to 8 °C under sterile conditions after reconstitution; 3. 3 months, -20 to -70 °C under sterile conditions after reconstitution.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended.



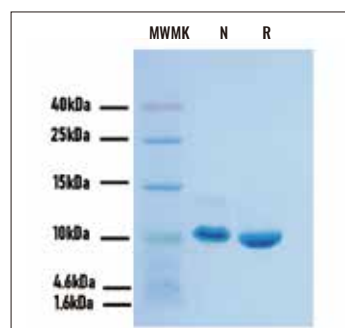
DATA



Purity of Recombinant Human IGF-1

HPLC

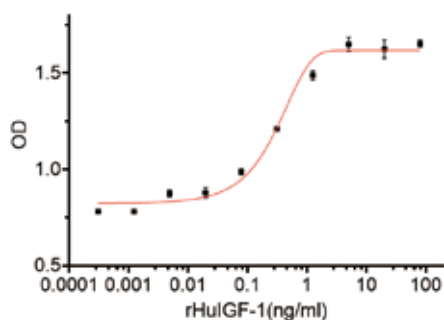
HPLC analysis of Recombinant Human IGF-1. The major peak corresponds to the calculated purity of > 98%.



Purity of Recombinant Human IGF-1

SDS-PAGE

4 µg/lane of Recombinant Human IGF-1 was resolved with SDS-PAGE under reducing (R) and non-reducing (N) conditions and visualized by Coomassie® Blue staining, showing R and NR bands at 7kDa.



Bioactivity of Recombinant Human IGF-1

Recombinant Human IGF-1 / IGF-1 stimulates proliferation in the MCF-7 human breast cancer cell line. The ED₅₀ as determined by a cell proliferation assay is < 2 ng/mL, corresponding to a specific activity of > 5.0 × 10⁵ Units/mg.

CONTENTS

Product	Cat. No.	Amount	Storage	Shelf life
Recombinant Human IGF-1 (GMP-Grade)	GE09.1 GE09.2	50µg 100µg	≤-20°C	24 months

LIMITED WARRANTY

BETAGENE™ Genetic and/or its affiliate(s) warrant their products as set forth in the BETAGENE Genetic' General Terms and Conditions of Sale. If you have any questions, please contact our staff at SALES@betagene.com.

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