

Product Information

**LONG®R³ IGF-1, human
recombinant analog
expressed in *Escherichia coli***

Catalog Number **I1271**
Storage Temperature 2–8 °C

Synonyms: IGF-I, IGF, somatomedin c

Product Description

LONG®R³ IGF-I is a recombinant analog of insulin-like growth factor containing the complete human IGF-I amino acid sequence with substitution of Arg for Glu³ and a 13 amino acid N-terminal extension peptide. It was developed as an inexpensive, high quality potent analog of IGF for use as a growth factor supplement for serum-free or low serum cell culture.

Recombinantly produced in *E. coli* using a patented expression system, the peptide is harvested from cells in inclusion bodies, which are dissolved and desalted. The active molecule is properly folded under oxidizing conditions and then purified by several liquid chromatography steps. It is produced in a completely animal-component free system.

The product is lyophilized from 0.1 M acetic acid and is shown to stimulate protein synthesis in L6 myoblasts at an ED₅₀ of ≤10 ng/ml.

Molecular mass: 9,110±2 Da

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Prepare a stock solution of 1 mg/ml by adding 100 µl of 10 mM HCl to the vial. Stock solutions of peptide can be stored for at least 3 months at –20 °C or –70 °C. Avoid repeated freeze-thaw cycles.

For concentrations of <1 mg/ml in buffer, a carrier protein should be added to minimize adsorption of the peptide to plastic or glass surfaces. Bovine serum albumin (BSA) at concentrations between 1–5 mg/ml is recommended as a carrier protein in serum-free conditions. A carrier protein is not necessary in serum-supplemented media. Up to 400 µl of buffer solution containing BSA or serum-supplemented medium may be added to the stock solution in the vial and mixed. Long-term storage of solutions of <1 mg/ml is not recommended.

Additional Handling Suggestions:

- Do not add the peptide to low protein or protein free media prior to filter sterilization
- Use a low protein binding membrane for filter sterilization
- Filter sterilize solutions at a concentration of 1 mg/ml or greater if no carrier protein is present

Storage/Stability

Store the product at 2–8 °C.

LONG is a registered trademark of Repligen Sweden AB.

BG,JF,PCS,MAM,PHC 03/17-1