



PRODUCT DATA SHEET

Product: IGF-I (recombinant human)

Cat. No.: BC-263 (100 µg)

Description:

Recombinant Human Insulin-Like Growth Factor I (IGF-I). A single, non-glycosylated, polypeptide chain containing 70 amino acids and having a molecular mass of 7655 Dalton.

Amino Acid Sequence:

The sequence of the first five N-terminal amino acids was determined and was found to be Gly-Pro-Glu-Thr-Leu. N-terminal methionine has been completely removed enzymatically.

Origin: Produced in *E. coli*.

Format:

Sterile filtered white lyophilized (freeze-dried) powder. Protein was lyophilized after extensive dialysis against 50 mM acetic acid.

Purity:

Greater than 98.0% as determined by RP-HPLC, anion-exchange FPLC, reducing and non-reducing SDS-PAGE. Dimers and aggregates: less than 1% as determined by SDS-PAGE. Endotoxin: less than 0.1 ng/µg (1 EU/µg).

Reconstitution:

Reconstitute in sterile 18 MΩ-cm H₂O at not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Biological Activity:

IGF-I is fully active when compared to standards. The ED₅₀, calculated by the dose-dependent proliferation of mouse BALB/C 3T3 cells (measured by ³H-thymidine uptake) is < 1.0 ng/ml, corresponding to a specific activity of 1 x 10⁶ U/mg.

For most *in vitro* applications, IGF-I exerts its biological activity in the concentration range of 0.2 - 20 ng/ml.

Storage and Stability:

Store desiccated below -18°C. Upon reconstitution IGF-I can be stored at 4°C for up to 7 days, and for future use below -18°C. For long term storage we recommend adding a carrier protein (0.1% HSA or BSA). Avoid freeze / thaw cycles.

Limitations:

For *in vitro* research use only. Not for use in diagnostics or in humans.

Warranty:

No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.