

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant Human Long R3 Insulin-like Growth factor-1 Receptor Grade (rHu LR3IGF-1)

Catalog Number: PR1081

Source: Escherichia coli.

Quantity: 20µg/100µg/1.0mg

Description

Insulin-like growth factor-1 (IGF-1) is the principal hormonal mediator of statural growth. Under normal circumstances, growth hormone (GH) binds to its receptor in the liver, and other tissues, and stimulates the synthesis/secretion of IGF-1. In target tissues, the Type 1 IGF receptor, which is homologous to the insulin receptor, is activated by IGF-1, leading to intracellular signaling which stimulates multiple processes leading to statural growth. The metabolic actions of IGF-1 are in part directed at stimulating the uptake of glucose, fatty acids, and amino acids so that metabolism supports growing tissues. The LR3 is a long-term analog of human IGF-1, specifically designed and manufactured for mammalian cell culture to support large-scale manufacturing of recombinant biopharmaceuticals.

Molecular Weight:

Approximately 9.1 kDa, a single non-glycosylated polypeptide chain containing 83 amino acids.

Purity:

>95% by SDS-PAGE and HPLC analyses.

Biological Activity:

Fully biologically active when compared to standard. The ED50 as determined by the stimulation of protein synthesis in L6 myoblasts is less than 10 ng/ml.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized from a 0.2mm filtered concentrated solution in PBS, pH 7.0.

AA Sequence:

M F P A M P L S S L F V N G P R T L C G A E L V D A L
Q F V C G D R G F Y F N K P T G Y G S S S R R A P Q T
G I V D E C C F R S C D L R R L E M Y C A P L K P A K
S A

Endotoxin:

Less than 50EU/mg of rHuLR3IGF-1 as determined by LAL method.

Reconstitution:

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at <-20°C. Further dilutions should be made in appropriate buffered solutions.

Storage:

This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

Usage:

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE. Made in China

MADE IN CHINA

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