

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant Human Growth Hormone (rHuGH)

Catalog Number: PR1039

Source: Escherichia coli.

Quantity: 20µg/100µg/1mg

Description

Growth hormone (GH), also known as somatotropin, is a member of a family of growth factors that includes prolactin, placental lactogens, proliferins, and somatolactin. It is synthesized primarily by somatotropes in the anterior pituitary and is stored in secretory granules. The pulsatile release of GH into circulation is regulated by the concerted actions of the hypothalamic hormones-GH-releasing hormone (GHRH) and somatostatin (SST) - as well as by signals from the periphery - ghrelin and leptin.⁴ The human GH cDNA encodes a 217 amino acid (aa) residue precursor protein with a 26 aa putative signal peptide. By alternative splicing, at least four isoforms of GH have been identified.

Molecular Weight:

Approximately 22 kDa, a single non-glycosylated polypeptide chain containing 191 amino acids

Purity:

>96% by SDS-PAGE and HPLC analyses.

Biological Activity:

Fully biologically active when compared to standard. The ED50 as determined by the assay of the proliferation of the rat lymphoma, NB2-11 was found to be less than 0.1 ng/ml, corresponding to a Specific Activity of 1×10^7 IU/mg.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized from a 0.2µm filtered concentrated solution with 5mM NaHCO₃, pH 7.0

AA Sequence:

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

Endotoxin:

Less than 1EU/µg of rHuGH 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 for several weeks 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

Bioworld Technology, Inc.

1660 South Highway 100, Suite 500 St. Louis Park, MN

55416, USA.

Tel: 6123263284

Email: info@bioworld.com

Fax: 6122933841

Bioworld technology, co, Ltd.

No 9, weidi road Qixia District Nanjing, 210046, P, R.China.

Tel: 0086-025-86371664

Email: info@biogot.com

Fax: 0086-025-86213570