

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant GH, Human(CHO-expressed)

Catalog Number: BK0210-1mg

Source: CHO

Quantity: 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. 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:

20-24 kDa, observed by non-reducing SDS-PAGE.

Purity:

> 95% as analyzed by SDS-PAGE and HPLC.

Biological Activity:

ED50 < 0.5 ng/ml, measured in a cell proliferation assay using Nb2-11 cells, corresponding to a specific activity of >2 x 10⁶ units/mg

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

FPTIPLSRLFDNASLRAHR-
LHQLAFDITYQEFEEAYIPKEQKYS-
FLQNPQTSLCFSESIPTPSNREETQQKSNLELL-
RISLLLIQ-
SWLEPVQFLRSVFANSLVYGASDSNVYDLLKDL
EEGIQTLMGRLEDGSPRT-
GQIFKQTYSKFDTNSHNDALLKNYGLLY-
CFRKDMDKVETFLRIVQCRSVEGSCGF

Endotoxin:

< 0.2 EU/μg, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O or PBS at 100 μg/ml.

Storage:

Lyophilized recombinant Human Growth Hormone (GH) remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, rhGH should be stable up to 1 week at 4 °C or up to 2 months at -20 °C.

Usage:

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. For research use only.