

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant GH, Human

Catalog Number: BK0063-10µg

Source: Escherichia coli.

Quantity: 10µg

Description:

Growth Hormone (GH) is a member of the somatotropin/prolactin family which play an important role in growth control. The human GH cDNA encodes a 217 amino acid (aa), and the first 26 aa is a signal peptide. By alternative splicing, at least four isoforms of GH have been identified. The major role of GH in stimulating body growth is to stimulate the liver and other tissues to secrete IGF-1. GH stimulates both the differentiation and proliferation of myoblasts, and also stimulates amino acid uptake and protein synthesis in muscle and other tissues. Recombinant human Growth Hormone (rhGH) produced in E.coli is a single non-glycosylated polypeptide chain containing 191 amino acids. A fully biologically active molecule, rhGH has a molecular mass of 22.1 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

Molecular Weight:

22.1 kDa, observed by reducing SDS-PAGE.

Purity:

> 95% by SDS-PAGE and HPLC analyses.

Biological Activity:

ED50 < 0.5 ng/ml, measured by a cell proliferation assay using Nb2-11 Cells, corresponding to a specific activity of > 2.0 × 10⁶ units/mg.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) pow-

der.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

FPTIPLSRLFDNAMLRAHR-
LHQLAFDITYQEFEEAYIPKEQKYS-
FLQNPQTSLCFSESIPTSPNREETQQKSNLELL-
RISLLLIQ-
SWLEPVQFLRSVFANSLVYGASDSNVYDLLKDL
EEGIQTLMGRLEDGSPRT-
GQIFKQTYSKFDTNSHNDDALLKNYGLLY-
CFRKDMDKVETFLRIVQCRSVEGSCGF

Endotoxin:

< 0.2 EU/µg, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O at 100 µg/ml.

Storage:

Lyophilized recombinant human Growth Hormone (rhGH) remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, rhGH should be stable up to 2 weeks at 4 °C or up to 3 months at -20 °C.

Usage:

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