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| Data Sheet | | |
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| Product Information | | |
| **Product Name** | **:** | **Recombinant human Growth Hormone (rhGH)** |
| **Synonyms** | **:** | GH, GH-N, Somatotropin, Growth Hormone 1 |
| **Description** | **:** | Growth hormone (GH), also known as somatotropin, is a peptide hormone that stimulates growth, cell reproduction, and cell regeneration in humans and other animals. It is thus important in human development. It is a type of mitogen which is specific only to certain kinds of cells. Growth hormone is a 191-amino acid, single-chain polypeptide that is synthesized, stored, and secreted by somatotropic cells within the lateral wings of the anterior pituitary gland.  GH is a stress hormone that raises the concentration of glucose and free fatty acids. It also stimulates production of IGF-1. (Ref. From Wikipedia) |
| **NCBI Accession No.** |  | NM\_000515.4 |
| **Amino acid sequence** | **:** | **MFPTIPLSRLFDNAMLRAHRLHQLAFDTYQEFEEAYIPKEQKYSFLQNPQTSLCFSESIPTPSNREETQQKSNLELLRISLLLIQSWLEPVQFLRSVFANSLVYGASDSNVYDLLKDLEEGIQTLMGRLEDGSPRTGQIFKQTYSKFDTNSHNDDALLKNYGLLYCFRKDMDKVETFLRIVQCRSVEGSCGF\*** |
| **Molecular Mass** | **:** | 22.3 kDa (192 aa) |
| **Protein Tags** | **:** | No tagging |
| **Source** | **:** | *E. coli.* |
| **Cat. No.** | **:** | JW-H022-0010, JW-H022-0025, JW-H022-0100, JW-H022-0250, JW-H022-0500, JW-H022-1000 |
| **Storage** | **:** | Should be at ≤ -70 ℃ as undiluted aliquots of handy size. Avoid repeated freezing and thawing. |
| **Cross Reactivity** | **:** | Rat |

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| Quality Control | | | | | | |
| **Test items** |  | | | **Specifications** | | |
| **Appearance** | | | **:** | | Clear, colorless liquid | |
| **Purity** | | | **:** | | Greater than 95 % by SDS-PAGE | |
| **Specificity** | | | **:** | | Using Western blot, detection |  |
| **Concentration** | | | **:** | | 0.1 mg/㎖, Bradford method |
| **Biological Activity** | | | **:** | | Determined by proliferation of Nb2-11 indicator cells.  The ED50 is ≤ 0.05 ng/ml, corresponding to a specific activity of > 2.0 × 107 U/mg |
| **Endotoxin** | | | **:** | | Less than 0.1 EU/㎍ as determined by the LAL method | |
| **Formulation** | | | **:** | | 10mM Tris, 1% sucrose (pH 8.5) without preservative or carrier proteins. | |
| **Stability** | | | **:** | | Stable for up to 12 months at -70 ℃. Stable for a month at 4 ℃. | |
| **Sterility** | | | **:** | | Sterilized through a 0.2 ㎛ membrane filter and packaged aseptically. Culture for 2 weeks, no growth | |
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