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| Data Sheet | | |
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| Product Information | | |
| **Product Name** | **:** | **Recombinant Human Insulin-Like Growth Factor-1 (rhIGF-1)** |
| **Synonyms** | **:** | IGF-1; IGF1; IGF-I; IGF1A; IGFI; Mechano growth factor; MGF; Somatomedin A; Somatomedin C |
| **Description** | **:** | IGF-1 is a hormone similar in molecular structure to insulin. It plays an important role in childhood growth and continues to have anabolic effects in adults. IGF-1 is a primary mediator of the effects of growth hormone (GH). Growth hormone stimulates the liver to produce IGF-1. IGF-1 then stimulates systemic body growth, and has growth-promoting effects on almost every cell in the body, especially skeletal muscle, cartilage, bone, liver, kidney, nerves, skin, hematopoietic cell, and lungs. IGF-1 can also regulate cell growth and development, especially in nerve cells, as well as cellular DNA synthesis. (Ref. From Wikipedia) |
| **NCBI Accession No.** | **:** | NM\_001111285.1 |
| **Amino acid sequence** | **:** | **MGPETLCGAELVDALQFVCGDRGFYFNKPTGYGSSSRRAPQTGIVDECCFRSCDLRRLEMYCAPLKPAKSA** |
| **Molecular Mass** | **:** | 7.76 kDa (71 aa) |
| **Protein Tags** | **:** | No tagging |
| **Source** | **:** | *E. coli.* |
| **Cat. No.** | **:** | JW-H018-0500, JW-H018-1000 |
| **Storage** | **:** | Should be at ≤ -70 ℃ as undiluted aliquots of handy size. Avoid repeated freezing and thawing. |
| **Cross Reactivity** | **:** | Gerbil, Rat, Mouse, Human, Bacteria, Monkey, Mouse + Virus |

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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** | | **:** | | 0.5 mg/㎖, Bradford method |
| **Biological Activity** | | **:** | | Determined by proliferation of MCF7 indicator cells.  The ED50 is < 0.3 ng/ml, corresponding to a specific activity of > 3.3 × 106 EU/mg |
| **Endotoxin** | | **:** | | Less than 0.1 EU/㎍ as determined by the LAL method | |
| **Formulation** | | **:** | | PBS (pH7.4) 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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