

32-1342: mIGF1 Recombinant Protein

Alternative Name : Somatomedin C,IGF-I,IGFIA,IGF1.

Description

Source : Escherichia Coli. Insulin-Like Growth Factor I mouse Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 70 amino acids and having a molecular mass of 7600 Dalton. IGF-I is purified by proprietary chromatographic techniques. The somatomedins, or insulin-like growth factors (IGFs), comprise a family of peptides that play important roles in mammalian growth and development. IGF1 mediates many of the growth-promoting effects of growth hormone (GH; MIM 139250). Early studies showed that growth hormone did not directly stimulate the incorporation of sulfate into cartilage, but rather acted through a serum factor, termed 'sulfation factor,' which later became known as 'somatomedin' (Daughaday et al., 1972). Three main somatomedins have been characterized: somatomedin C (IGF1), somatomedin A (IGF2; MIM 147470), and somatomedin B (MIM 193190) (Rotwein, 1986; Rosenfeld, 2003).

Product Info

| | |
|----------------------------|--|
| Amount : | 50 µg |
| Purification : | Greater than 98.0% as determined by(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE. |
| Content : | The protein was lyophilized with no additives. |
| Storage condition : | Lyophilized IGF1 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IGF-1 should be stored at 4°C between 2-7 days and for future use below -18°C.For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Please prevent freeze-thaw cycles. |
| Amino Acid : | The sequence of the first five N-terminal amino acids was determined and was found to be Gly-Pro-Glu-Thr-Leu. |

Application Note

It is recommended to reconstitute the lyophilized IGF1 in sterile 18M Ω -cm H₂O not less than 100 Ω µg/ml, which can then be further diluted to other aqueous solutions. The ED50, calculated by the dose-dependant proliferation of murine BALBC 3T3 cells (measured by 3H-thymidine uptake) is < 1.0 ng/ml, corresponding to a specific activity of 1MU/mg.