

32-1337: IGF1 Recombinant Protein

Alternative Name : Somatomedin C,IGF-I,IGFI,IGF1,IGF-IA,Mechano growth factor,MGF.

Description

Source : Escherichia Coli. Insulin-Like Growth Factor-I Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 70 amino acids and having a molecular mass of 7.6kDa.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 :	500 µg
Purification :	Greater than 98.0% as determined by:(a) Analysis by RP-HPLC(b) Analysis by SDS-PAGE.
Content :	The protein was lyophilized from a 0.2µm filtered concentrated solution in 20mM PB, pH 7.0, 130mM NaCl.
Storage condition :	Lyophilized Insulin-Like Growth Factor-1 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IGF1 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 :	GPETLCGAEL VDALQFVCGD RGFYFNKPTG YGSSRRAPQ TGIVDECCFR SCDLRRLEMY CAPLKPAKSA.

Application Note

It is recommended to reconstitute the lyophilized IGF-1 in sterile 18MΩ·cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions. The ED₅₀ as determined by a cell proliferation assay using murine BALB/C 3T3 cells is less than 1.0 ng/ml, corresponding to a specific activity of > 10⁶ units/mg.

