

## 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

<b>Amount :</b>	500 µg
<b>Purification :</b>	Greater than 98.0% as determined by:(a) Analysis by RP-HPLC(b) Analysis by SDS-PAGE.
<b>Content :</b>	The protein was lyophilized from a 0.2µm filtered concentrated solution in 20mM PB, pH 7.0, 130mM NaCl.
<b>Storage condition :</b>	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.
<b>Amino Acid :</b>	GPETLCGAEL VDALQFVCGD RGFYFNKPTG YGSSSRRAPQ TGIVDECCFR SCDLRRLEMY CAPLKPAKSA.

### Application Note

It is recommended to reconstitute the lyophilized IGF-1 in sterile 18MΩ-cm H<sub>2</sub>O not less than 100Åµg/ml, which can then be further diluted to other aqueous solutions. The ED<sub>50</sub> 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 > 1Å—106 units/mg.

