
Product Data Sheet

Product Name: IGF1 Human
 Cat. No.: GP20413
 Batch No.: 1

Product Data

Purity	Greater than 97.0% as determined by:(a) Analysis by RP-HPLC(b) Analysis by SDS-PAGE.	Source	Escherichia Coli.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.	Shipping Condition	Shipped at Room temp.
Synonyms	Somatomedin C; IGF-I; IGFI; IGF1; IGF-IA MGF.		
Amino Acid Sequence	GPETLCGAEL VDALQFVCGD RGFYFNKPTG YGSSRRAPQ TGIVDECCFR SCDLRRLEMY CAPLKPAKSA.		
Solubility	It is recommended to reconstitute the lyophilized IGF-1 in sterile 18MΩ-cm H ₂ O not less than 100μg/ml, which can then be further diluted to other aqueous solutions.		
Formulation	The protein was lyophilized from a 0.2μm filtered concentrated solution in PBS, pH 7.0.		

Introduction

The somatomedins, IGFs, comprise a family of peptides that play important roles in mammalian growth and development. IGF1 mediates many of the growth-promoting effects of GH. Early studies showed that GH 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. Three main somatomedins have been characterized: somatomedin C (IGF1), somatomedin A (IGF2; MIM 147470), and somatomedin B.

Biological Activity

The biological activity was determined by the cell proliferation assay using serum free

Caution: Product has not been fully validated for medical applications. For research use only.

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human MCF-7 cells in <2ng/ml, corresponding to a Specific Activity of >5.0 x 10⁵IU/mg.

Stability

Lyophilized IGF1 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.

Background

IGF1Human 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-1 is purified by proprietary chromatographic techniques.

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