
Product Data Sheet

Product Name: IGF1 Rat
 Cat. No.: GP20423
 Batch No.: 1

Product Data

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped at Room temp.
Synonyms	Somatomedin C; IGF-I; IGFIA; IGF1.		
Amino Acid Sequence	GPETLCGAEL VDALQFVCGP RGFYFNKPTG YGSSIRRAPQ TGIVDECCFR SCDLRRLEMY CAPLKPTKSA.		
Solubility	It is recommended to reconstitute the lyophilized IGF1 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 with a 0.2μm filtered concentrated solution in 20mM PBS, pH 7.0.		

Introduction

The somatomedins, or 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' (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).

Biological Activity

The ED₅₀ as determined by a cell proliferation assay using FDC-P1 cells is less than 2.0ng/ml, corresponding to a specific activity of >500,000units/mg.

Stability

Lyophilized IGF-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

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

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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

IGF-1Rat Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 70 amino acids and having a molecular mass of 7.7kDa. IGF-I is purified by proprietary chromatographic techniques.

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