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IGF1 Human Des1-3

Insulin-Like Growth Factor 1 Des (1-3) Human Recombinant
GRF0163

Product Overview

Name	IGF1 Human Des1-3

Description

Insulin-Like Growth Factor 1 Des (1-3) Human Recombinant

Accession (Primary)	P01343

Synonyms

Somatomedin C, IGF-I, IGFI, IGF1, IGF-IA, Mechano growth factor, MGF, Des(1-3), Des1-3, Des 1-3, Des (1-3), IGF-1 (4-70).

Introduction

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).

Source

Escherichia Coli.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation

The protein (1mg/ml) was lyophilized was lyophilized from a 0.2 μm filtered concentrated solution in 20mM PBS, pH 7.0.

Stability

Lyophilized IGF-I des(1-3) although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IGF1 des-1-3 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.

Purity

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Greater than 97.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Amino acid sequence

TLCGAELVDA LQFVCGDRGF YFNKPTGYGS SSRRAPQTGI VDECCFRSCD LRRLEMYCAP LKPAKSA.

Biological Activity

The ED 50 as determined by a cell proliferation assay using FDC-P1 cells is less than 2.0 ng/ml, corresponding to a specific activity of > 5×10 5 units/mg.

Solubility

It is recommended to reconstitute the IGF-I des(1-3) in sterile 18M-cm H 2 O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Precautions

IGF1 Human Des1-3 is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P01343)