

Human recombinant IGF-I (Insulin-like growth factor-I) protein, AF

Catalog Number: PROTP05019-3

Overview

Product Name	Human recombinant IGF-I (Insulin-like growth factor-I) protein, AF
Description	Insulin like Growth Factors 1 (IGF-I) is a 7.79 kDa member of the Insulin-like Growth Factors with 71 amino acid residues. IGF-I is mainly expressed from liver, adipose tissue, Endometrial stromal cells, Leydig cells, and can be isolated from plasma. IGF-I mediating the protein anabolic and promoting effect of pituitary growth hormone. IGF-I also affects metabolism of glycogen, DNA synthesis and glucose uptake via binding to IGF-I receptor.
Size	100ug,500ug
Tag	His Tag (C-term)
Form	Lyophilized
Source	Escherichia coli
Formulation	The protein was lyophilized from a 0.2 um filtered solution containing 1X PBS, pH 7.4. If you have any concerns or special requirements, please confirm with us.

Storage

Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to 8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10%FBS, 5%HSA or 5% trehalose solution), protein aliquots should be stored at -20°C or -80°C for 3-6 months. Avoid repeated freeze/thaw cycles.

Purity

>95% as determined by SDS-PAGE.

Molecular weight

The protein has a calculated MW of 8.59 kDa. The protein migrates as 8-10 kDa under reducing condition (SDS-PAGE analysis).

Activity

Measure by its ability to induce MCF-7 cells proliferation. The ED₅₀ for this effect is 0.9-3.1 ng/mL. The specific activity of recombinant human IGF-I is approximately $>1.2 \times 10^3$ IU/mg.

Endotoxin

<0.01 EU per 1 ug of the protein by the LAL method.

Amino Acid Sequence

MGPETLCGAELVDALQFVCGDRGFYFNKPTGYGSSRRAPQTGIVDECCFRSCDLRRLEMYCAPLKPAKSA with polyhistidine tag at the C-terminus.

Reconstitution

Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the lyophilized protein in sterile H₂O to a concentration not less than 100 ug/mL and incubate the stock solution at room temperature for at least 20 mins to ensure sufficient re-dissolved. Do Not Vortex!

Vigorous shaking may impair the biological activity of the protein.

Usage

Boster's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

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