IGF1
Recombinant Human Insulin-like Growth Factor I

Catalog No.	CRI500A	**Quantity:**	20 µg
	CRI500B		100 µg
	CRI500C		1.0 mg

Alternate Names: IGF-I, Somatomedin-C, Mechano growth factor, MGF

Description: Insulin-like growth factor 1 (IGF-I) is a member of the IGF family of mitogenic peptide growth factors, along with insulin and IGF-II. IGF-I stimulates proliferation and survival of various cell types including muscle, bone, and cartilage tissue. IGF-1 is produced primarily by the liver as an endocrine hormone as well as in target tissues in a paracrine/ autocrine fashion. The production of IGF-1 is stimulated by growth hormone (GH). Both IGF-I and IGF-II signal through the tyrosine kinase type I receptor (IGF-IR). Proteolytic processing of inactive precursor proteins, which contain N-terminal and C-terminal propeptide regions, generates mature IGFs.

Gene ID: 3479

UniProt ID: P05019

Source: *E. coli*

Molecular Weight: Monomer, 7.7 kDa (70 aa)

Formulation: Lyophilized from a sterile filtered solution containing 0.1% Trifluoroacetic acid (TFA).

Purity: ≥95% by reducing and non-reducing SDS-PAGE

Endotoxin Level: ≤ 0.1 EU/µg using USP <85>/ EP 2.6.14

Biological Activity: ED_{50} ≤ 1.5 ng/ml, determined by dose-dependent proliferation of MCF-7 cells.
Note: MCF-7 bioassay replaces the previous FDC-P1 bioassay.

Amino Acid Sequence: GPETLCGAEL VDALQFVCGD RGFYFNKPTG YGSSSRRAPQ TGIVDECCFR SCDLRRLEMY CAPLKPAKSA

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water to reconstitute to a recommended concentration of 0.1 mg/mL and gently pipet the solution up and down the sides of the vial. **DO NOT VORTEX.** Allow several minutes for reconstitution.

Storage & Stability: **Upon receipt**, store as supplied at -20°C to -80°C for up to one year. **Upon reconstitution**, the preparation is stable for up to one month at 2-8 °C, 3 months at -20° C to -80°C. **For long term storage** reconstitute in working aliquots containing 0.1% BSA and store at -80 °C. **Avoid repeated freeze-thaw cycle.**

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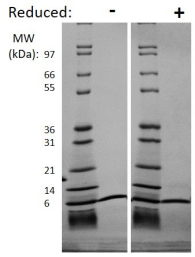

Human IGF-I Gel
Figure: 1 ug in each lane (-) non-reducing conditions and (+) reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue. Human IGF-I has a predicted MW of 7.7 kDa.

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

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