

IGF1

Recombinant Mouse Insulin-Like Growth Factor 1

Catalog No.	CRI501A	Quantity:	10 µg
	CRI501B		50 µg
	CRI501C		1.0 mg

Alternate Names: Somatamedin C, mechano growth factor, IGF-IA

Gene ID: 16000

Description: Insulin-like Growth Factor I, IGF-I, is a growth factor produced in response to growth hormone-stimulated liver and can be found circulating throughout the body and throughout life. IGF-I activates the IGF-I receptor (IGF1R) and the insulin receptor to mediate growth of almost every cell of the body. IGF-I is known as one of the most potent activators of the AKT signaling pathway which is known to be a stimulator of proliferation and an inhibitor of programmed cell death. Mature human IGF-I is 100% homologous with bovine and porcine proteins. Recombinant mouse IGF-I is a non-glycosylated protein, containing 70 amino acids, with a molecular weight of 7.6 kDa.

Source: *E. coli*

Molecular Weight: 7.6 kDa.

Formulation: Recombinant mouse IGF-1 is lyophilized with no additives.

Purity: ≥ 98% determined by: HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm

Endotoxin Level: Measured by kinetic LAL analysis and is typically ≤ 1 EU/µg protein.

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Biological Activity: The activity is determined by the dose-dependent proliferation of FDC-P1 cells and is typically less than 20 ng/mL.

Specific Activity: 1 x 10⁶ U/mg

Amino Acid Sequence: GPETLCGAEL VDALQFVCGP RGFYFNKPTG YGSSIRRAPQ TGIVDECCFR
SCDLRRLEMY CAPLKPTKAA

Reconstitution: **Centrifuge vial before opening.** When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions.

Storage & Stability: Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is



cellsciences.com

added for long term storage.

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



Cell Sciences®
480 Neponset Street
Bldg 12A
Canton, MA 02021

Toll Free: 888-769-1246
Phone: 781-828-0610
Fax: 781-828-0542

E-mail: info@cellsciences.com
Website: www.cellsciences.com