

# Recombinant Rat IGF-I

**CATALOG #:** 4121-20 20 µg  
4121-100 100 µg  
4121-1000 1 mg

**LOT #:** \_\_\_\_\_

**SOURCE:** *E. coli*

**PURITY:** >95% by SDS-PAGE and HPLC analyses  
Endotoxin level is <0.1 ng per µg of IGF-I.

**MOL. WEIGHT:** 7.69 kDa

**FORMULATION:** Lyophilized without additives

## RECONSTITUTION:

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. This solution can then be diluted into other aqueous buffers and stored at 4°C for 1 week or –20°C for future use.

## STORAGE CONDITIONS:

The lyophilized IGF-I is best-stored desiccated below 0°C. Reconstituted IGF-I should be stored at working aliquots at -20°C.

## DESCRIPTION:

IGF-I (Insulin-like Growth Factor-I) is a polypeptide growth factor that stimulates the proliferation of a wide range of cell types including muscle, bone, and cartilage tissue. Rat IGF-I is a 7.69 kDa protein containing 70 amino acid residues (plus an additional 21 aa as N-terminal His-tag).

## BIOLOGICAL ACTIVITY:

The ED<sub>50</sub> was determined by two methods: 1) By stimulation of protein synthesis in rat L6 myoblasts, the ED<sub>50</sub> was found to be <30 ng/ml; 2) By Type I IGF receptor binding assay, the ED<sub>50</sub> was found to be < 10 ng/ml.

**NOTE:** For Research Use Only! Not to be used in humans.

## RELATED PRODUCTS:

### Apoptosis Detection Kits & Reagents

- Annexin V Kits & Bulk Reagents
- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set
- Apoptosis siRNA Vectors

### Cell Fractionation System

- Mitochondria/Cytosol Fractionation Kit
- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

### Cell Proliferation & Senescence

- Quick Cell Proliferation Assay Kit
- Senescence Detection Kit
- High Throughput Apoptosis/Cell Viability Assay Kits
- LDH-Cytotoxicity Assay Kit
- Bioluminescence Cytotoxicity Assay Kit
- Live/Dead Cell Staining Kit

### Cell Damage & Repair

- HDAC Fluorometric & Colorimetric Assays & Drug Discovery Kits
- HAT Colorimetric Assay Kit & Reagents
- DNA Damage Quantification Kit
- Glutathione & Nitric Oxide Fluorometric & Colorimetric Assay Kits

### Signal Transduction

- cAMP & cGMP Assay Kits
- Akt & JNK Activity Assay Kits
- Beta-Secretase Activity Assay Kit

### Adipocyte & Lipid Transfer

- Recombinant Adiponectin, Survivin, & Leptin
- CETP Activity Assay & Drug Discovery Kits
- PLTP Activity Assay & Drug Discovery Kits
- Total Cholesterol Quantification Kit

### Molecular Biology & Reporter Assays

- siRNA Vectors
- Cloning Insert Quick Screening Kit
- Mitochondrial & Genomic DNA Isolation Kits
- 5 Minutes DNA Ligation Kit
- 20 Minutes Gel Staining/Destaining Kit
- β-Galactosidase Staining Kit & Luciferase Reporter Assay Kit

### Growth Factors and Cytokines

### Monoclonal and Polyclonal Antibodies