

**TECHNICAL DATA SHEET**

**Recombinant Mouse IGF-I (Carrier-Free)**

Catalog Number: 21-9137

**RPx-Pro™ Recombinant Protein**  
**PRODUCT INFORMATION**

**CONTENTS**

Recombinant Mouse IGF-I (Carrier-Free)

**DESCRIPTION**

The IGFs are mitogenic, polypeptide growth factors that stimulate the proliferation and survival of various cell types, including muscle, bone, and cartilage tissue in vitro. IGFs are predominantly produced by the liver, although a variety of tissues produce the IGFs at distinctive times. The IGFs belong to the Insulin gene family, which also contains insulin and relaxin. The IGFs are similar to insulin by structure and function, but have a much higher growth-promoting activity than insulin.

**MOLECULAR MASS**

Recombinant Mouse IGF-I is a 7.6 kDa globular protein containing amino acids including 3 intra-molecular disulfide bonds.

**AMINO ACID SEQUENCE**

GPETLCGAEL VDALQFVCGP RGFYFNKPTG YGSSIRRAPQ TGIVDECCFR SCDLRRLEMY CAPLKPTKAA

**SOURCE**

E. coli

**APPLICATIONS**

Bioassay

**PURITY**

98 %

**STORAGE**

-20°C

**PROTEIN CONTENT**

Content Verified by UV Spectroscopy and/or SDS-PAGE gel.

**ENDOTOXIN LEVEL**

Endotoxin level is <0.1 ng/μg of protein (<1EU/μg).

**AUTHENTICITY**

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

**CROSS REACTIVITY**

Human, Mouse, Rat

**BIOACTIVITY**

The ED50 was determined a cell proliferation assay using FDC-P1 cells is ≤ 2.0 ng/ml, corresponding to a specific activity of ≥ 5 x 10<sup>5</sup> units/mg.

**RESEARCH AREAS**

Inflammation, Proliferation, Wound Healing, Angiogenesis/Cardiovascular, Bone, Skeletal, Cartilage, Diabetes/Weight Regulation

**RECONSTITUTION**

See Certificate of Analysis (COA) for lot specific reconstitution information.

**REFERENCES**

Hobbs, R.M. Plzf regulates germline progenitor self-renewal by opposing mTORC1. 2010. Cell; 142(3):468-79. Mendez-Ferrer, S. Mesenchymal and haematopoietic stem cells form a unique bone marrow niche. 2010. Nature; 466(7308):829-34.

Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.

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