

**TECHNICAL DATA SHEET**

**Recombinant Human/Mouse/Rat Myostatin (Carrier-Free)**

Catalog Number: 21-9062

**RPx-Pro™ Recombinant Protein**

**PRODUCT INFORMATION**

**CONTENTS**

Recombinant Human/Mouse/Rat Myostatin (Carrier-Free)

**DESCRIPTION**

Myostatin is a TGF-Beta family member that acts as an inhibitor of skeletal muscle growth. Suppression of myostatin activity facilitates muscle formation, and may be useful in reducing and/or preventing adiposity and type-2 diabetes. The amino acid sequence of mature myostatin is extremely conserved across species, and is the same in Mouse, rat, chicken, turkey, porcine, and human. Myostatin is expressed as the C-terminal part of a precursor polypeptide, which also contains a short N-terminal signal sequence for secretion, and a propeptide of 243 amino acids.

**MOLECULAR MASS**

Recombinant Human Myostatin is a 25.0 kDa protein consisting of two identical 109 amino acid polypeptides linked by a single disulfide bond.

**AMINO ACID SEQUENCE**

DFGLDCDEHS TESRCCRYPL TVDFEAFGWD WIIAPKRYKA NYCSGECEFV FLQKYPHTHL VHQANPRGSA GPCCTPTKMS PINMLYFNGK EQIY GKIPA MVDRCGCS

**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**

Determined by its ability to inhibit the proliferation of MPC-11 cells. The expected ED50 for this effect is 17.0-25.0 ng/ml.

**RESEARCH AREAS**

Proliferation, Angiogenesis/Cardiovascular, Diabetes/Weight Regulation, Bones, Skeletal, Cartilage

**RECONSTITUTION**

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

**REFERENCES**

Murakami, M. Expression and function of alternative splice variants of the mouse TGF-beta type I receptor. 2008. Cell Biology International; 32(7):848-54.  
Liu, W. GDF11 decreases bone mass by stimulating osteoclastogenesis and inhibiting osteoblast differentiation. 2016. Nature Communications.

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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