TECHNICAL DATA SHEET

Recombinant Human Myostatin Propeptide (Carrier-Free)

Catalog Number: 21-9068

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

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Recombinant Human Myostatin Propeptide (Carrier-Free)

DESCRIPTION

Mature myostatin is obtained by proteolytic processing of a biologically-inactive precursor protein, which contains an N-terminal propeptide of 243 amino acid residues. Myostatin-Propeptide exhibits high binding affinity for myostatin, and has been shown to be a potent inhibitor of myostatin. Over-expression of myostatin-propeptide in mice resulted in large increases (up to 200%) in skeletal muscle mass, similar to those observed in myostatin knockout mice.

MOLECULAR MASS

Recombinant Human Myostatin-Propeptide is a 27.8 kDa protein consisting of 244 amino acid residues.

AMINO ACID SEQUENCE

MNENSEQKEN VEKEGLCNAC TWRQNTKSSR IEAIKIQILS KLRLETAPNI SKDVIRQLLP KAPPLRELID QYDVQRDDSS DGSLEDDDYH ATTETIITMP TESDFLMQVD GKPKCCFFKF SSKIQYNKVV KAQLWIYLRP VETPTTVFVQ ILRLIKPMKD GTRYTGIRSL KLDMNPGTGI WQSIDVKTVL QNWLKQPESN LGIEIKALDE NGHDLAVTFP GPGEDGLNPF LEVKVTDTPK RSRR

SOURCE	APPLICATIONS	PURITY	STORAGE
E.coli	Bioassay	98 %	-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

Mouse

BIOACTIVITY

Determined by its ability to neutralize the Myostatin inhibitory effect of Mouse MPC-11 cells. The expected ED50 is 0.01–0.04 ug/ml in the presence of 50 ng/ml Myostatin.

RESEARCH AREAS

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

RECONSTITUTION

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

REFERENCES

Walton KL, Johnson KE, Harrison CA. Front Pharmacol. 2017 Jul 14;8:461. doi: 10.3389/fphar.2017.00461. eCollection 2017. Fan S, Xu Y, Liu B, He W, Zhang B, Su J, Yu D. Comp Biochem Physiol B Biochem Mol Biol. 2017 Oct;212:24-31. doi: 10.1016/j.cbpb.2017.07.004.