

Recombinant Human Myostatin-Propeptide

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

Typical Specifications

Species	Human
Expression	E. Coli Cell Expressed
Activity	Typically 0.01-0.04 µg/mL ED ₅₀
Purity	≥98%
Endotoxin	<1.0 EU/µg
Molecular Mass	27.8 kDa
Formulation	20mm HCl
Country of Origin	USA

Purity Confirmation

This was determined by SDS-PAGE gel and HPLC analysis.

Activity Assay

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

AA Sequence

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

Reconstitution Buffer

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex.

Storage

For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% HSA) and store in working aliquots at -20°C to -80°C.

Limited Use and Restrictions

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