

BACKGROUND

Myostatin (GDF-8), a member of the TGF- β superfamily, is a potent and specific negative regulator of skeletal muscle mass. The myostatin propeptide is known to bind and inhibit myostatin in vitro. This interaction is relevant in vivo, with a majority (>70%) of myostatin in serum bound to its propeptide acting as a negative regulator of myostatin.

Recombinant human Myostatin Propeptide is a 27.8 kDa protein, consisting of 244 amino acid residues.

Alternative Names:

None

Amino Acid Sequence:

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

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:

Recombinant human Myostatin Propeptide is lyophilized with no additives.

Stability:

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile 20 mM HCl at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:

The activity is determined by its ability to inhibit 50 ng/mL of Myostatin on MPC-11 cells and is typically 0.01-0.04 ug/mL.

Products are for research use only. They are not intended for human, animal, or diagnostic applications.

