



## *Recombinant Human Myostatin*

*Catalog Number: 100-22*

*Accession Number: O08689*

### *Specifications and Uses:*

**Alternate Names:** GDF-8, MSTN

**Description:**

Myostatin is a member of the TGF- $\beta$  superfamily that is essential for proper regulation of skeletal muscle mass in a number of species ranging from fish to humans. Myostatin is a secreted protein that negatively regulates skeletal muscle mass determining both muscle fiber number and size. Inhibition of myostatin can increase muscle mass in a number of animal models of human disease, including muscular dystrophy. Recombinant human Myostatin is a non-glycosylated homodimer, containing two 109 amino acid chains, with a total molecular weight of 24.8 kDa.

**Source:** *E.coli*

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation and Stability:**

Recombinant human Myostatin is lyophilized with no additives.

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 **20 mM HCl** at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions.

**Protein Content and Purity (typically  $\geq$  95%) determined by:**

Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm

**Endotoxin Level:**

Measured by kinetic LAL analysis and is typically  $\leq$  1 EU/ $\mu$ g protein.

**Biological Activity:**

The activity is determined by the inhibition of the proliferation of MPC-11 cells and is typically less than 20 ng/mL.

**AA Sequence:**

DFGLDCDEHS TESRCCRYPL TVDFEAFGWD WIIAPKRYKA NYCSGECEFV FLQKYPHTHL VHQANPRGSA  
GPCCTPTKMS PINMLYFNGK EQIIYGKIPA MVVDRCGCS

**THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!**

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