

## MSTN

### Recombinant Human Myostatin, Animal Free

Catalog No.	CRMY00A-AF	Quantity:	2 µg
	CRMY00B-AF		10 µg
	CRMY00C-AF		1.0 mg
	CRMY00D-AF		100 µg

**Alternate Names:** Growth/differentiation factor 8, GDF-8

**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.

**Gene ID:** 2660

**UniProt ID:** O14793 (Asp267-Ser375)

**Source:** *E. coli*

**Molecular Weight:** 12.4/24.8 kDa (109/218 aa)

**Formulation:** Lyophilized from a sterile-filtered solution containing 0.1% Trifluoroacetic (TFA)

**Purity:** ≥ 95% by reducing and non-reducing SDS-PAGE

**Endotoxin Level:** ≤ 1 EU/µg, by kinetic LAL analysis

**Biological Activity:** ≤ 50 ng/ml determined by cytotoxicity of MPC-11 cells

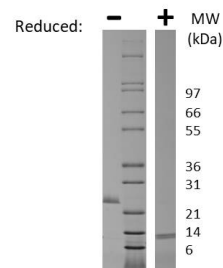
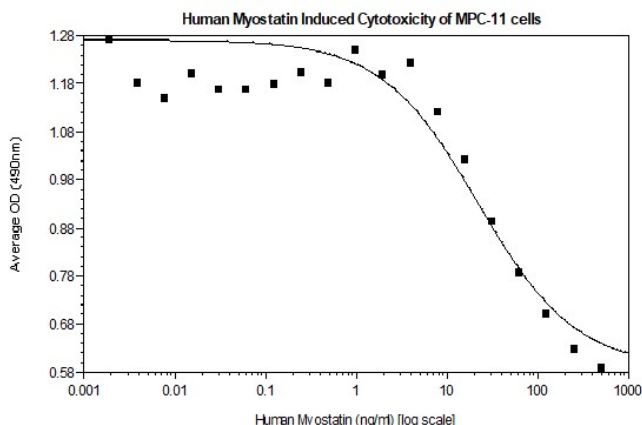
**Specific Activity:** ≥ 2.0 x 10<sup>4</sup> units/mg

**Amino Acid Sequence:** DFGLDCDEHS TESRCCRYPL TVDFEAFGWD WIIAPKRYKA NYCSGECEFV  
FLQKYPHTHL VHQANPRGSA GPCCTPTKMS PINMLYFNGK EQIIYGKIPA  
MVDRCGCS

**Reconstitution:** **Centrifuge vial prior to 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.

## Storage & Stability:

Upon receipt, store as supplied at -20°C to -80°C for up to 1 year. Upon reconstitution, the preparation is stable for up to one month at 2-8°C. For long term storage, reconstitute in working aliquots in 0.1% BSA solution and store at -80°C. Avoid repeated freeze-thaw cycles.



## Human Myostatin Gel

Figure: 1 ug run under (-) non-reducing conditions and (+) reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue. Human Myostatin is a homodimer with a predicted MW of 24.8 kDa (each monomer is 12.4 kDa).

**NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**



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