

Recombinant Human Myostatin

CATALOG #:	4623-10	10 µg
	4623-1000	1 mg
LOT #:	_____	
SOURCE:	<i>E. coli</i>	
PURITY:	>98% by SDS-PAGE and HPLC Endotoxin level is <0.1 ng per µg of Myostatin	
MOL. WEIGHT:	24.8 kDa	
FORM:	Sterile filtered and lyophilized with no additives	

RECONSTITUTION:

Centrifuge the vial prior to opening. It is recommended to reconstitute the lyophilized human Myostatin in sterile 20 mM acetic acid to a concentration of 0.1 to 1.0 mg/ml. This solution can then be diluted into other aqueous buffers.

STORAGE CONDITIONS:

The lyophilized protein is best-stored desiccated below 0°C. Reconstituted Myostatin can be stored at 4°C for 1 week or -20°C for further use. For long term storage it is recommended to add a carrier protein (0.1% HAS or BSA). Prevent freeze/thaw cycles.

DESCRIPTION:

Myostatin, also known as Growth Differentiation Factor-8 (GDF-8), belongs to the TGF-beta superfamily. Along with other members of the TGF-beta family, Myostatin plays a crucial role as a regulator for embryonic development and tissue homeostasis in adult animals. Early studies show that Myostatin has the ability to halt muscle growth. New research has further suggested that Myostatin may also be involved in reducing and preventing adiposity and type-2 diabetes. Human Myostatin is a homodimeric protein with each subunit containing 109 amino acid residues with a total molecular weight of 24.8 kDa.

BIOLOGICAL ACTIVITY:

Determined by its ability to inhibit the proliferation of MPC-11 cells. The ED₅₀ for this effect is <20 ng/ml.

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