

## GFH142 Recombinant Human Myostatin Propeptide

### Description

Myostatin, also known as GDF-8, a conserved member of the TGF- $\beta$  superfamily, is an essential regulator of skeletal muscle mass and cardiac muscle development and function. The recombinant myostatin propeptide binds and inhibits myostatin to enhance the repair and regeneration of injured muscle and bone.

<b>Length</b>	109 / 218 aa
<b>Molecular Weight</b>	12.8 / 24.8 kDa
<b>Source</b>	E. coli
<b>Accession Number</b>	O14793(267-375)
<b>Purity</b>	$\geq 95\%$ determined by reducing and non-reducing SDS-PAGE

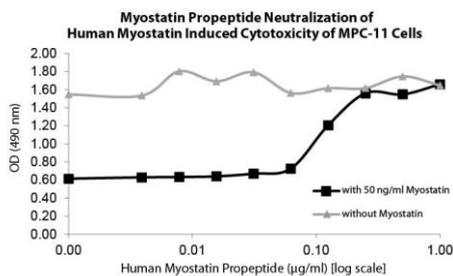
### Specifications

<b>Alternative Names</b>	Fibroblast Growth Factor 8, FGF8, FGF 8, androgen-induced growth factor, AIGF, heparin-binding growth factor 8, HBGF-8
<b>Biological Activity</b>	Human Myostatin Propeptide is fully biologically active when compared to standard. The activity is determined by the neutralization of the induced cytotoxicity of MPC-11 cells by Myostatin.
<b>Endotoxin Level</b>	$\leq 1.00$ EU/ $\mu$ g as measured by kinetic LAL
<b>Formulation</b>	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 5 mM sodium phosphate, 50 mM sodium chloride, pH 7.5
<b>AA Sequence</b>	DFGLDCDEHS TESRCCRYPL TVDFEAFGWD WIIAPKRYKA NYCSGECEFV FLQKYPHTHL VHQANPRGSA GPCCTPTKMS PINMLYFNGK EQIIYGKIPA MVVDRCGCS

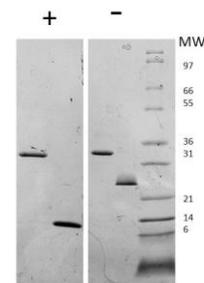
### Preparation and Storage

<b>Reconstitution</b>	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 water at 0.1 mg/ml, which can be further diluted into other aqueous solutions.
<b>Stability and Storage</b>	12 months from date of receipt when stored at $-20^{\circ}\text{C}$ to $-80^{\circ}\text{C}$ as supplied. 1 month when stored at $4^{\circ}\text{C}$ after reconstituting as directed. 3 months when stored at $-20^{\circ}\text{C}$ to $-80^{\circ}\text{C}$ after reconstituting as directed.

### Data



Neutralization of human Myostatin induced cytotoxicity of MPC-11 cells assay. Cell proliferation was measured to calculate the ED50.



Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1  $\mu$ g of protein was loaded in each lane. Human Myostatin Propeptide has a predicted Mw of 27.8 kDa (but runs higher in the gel) and Myostatin has a predicted Mw of 24.8 kDa (each monomer is 12.4 kDa).