# Myostatin, His Tag, tobacco, human recombinant (rHuMyostatin-His)

**Catalog No:** 97547
**Lot No:** XXXXX
**Source:** *Nicotiana benthamiana*
**Synonyms:** GDF-8, MSTN, Growth Differentiation Factor 8, MSTN Muscle Hypertrophy

## Background

GDF8 is a member of the bone morphogenetic protein (BMP) family and the TGF-beta superfamily. This group of proteins is characterized by a polybasic proteolytic processing site which is cleaved to produce a mature protein containing seven conserved cysteine residues. The members of this family are regulators of cell growth and differentiation in both embryonic and adult tissues. This gene is thought to encode a secreted protein which negatively regulates skeletal muscle growth.

## Description

Myostatin human recombinant produced in *Nicotiana benthamiana* is a single chain protein containing 115 amino acids and 6-His Tag at the N-terminus having the total molecular mass of 13.2 kDa.

## Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

## Formulation

Lyophilized from 1 mg/ml solution in glycine 0.05 M buffer at pH 8.5 and 100 mM NaCl.

## Solubility

It is recommended to reconstitute the lyophilized Myostatin in sterile 18 MΩ-cm $H_2O$ not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

## Stability

Lyophilized Myostatin, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Myostatin should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

## Purity

Greater than 97.0% as determined by analysis by SDS-PAGE.

## Amino Acid Sequence

```
HHHHHHDFGL DCDEHSTESR CCRYPLTVDF EAFGWDWIIA PKRYKANYCS GECEFVFLQK
YPHTHLVHQA NPRGSAGPCC TPTKMSPINM LYFNGKEQII YGKIPAMVVD RCGCS
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## Usage

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