

Recombinant Human Myostatin, His-Tag (Myostatin)

Source: E.Coli

Catalog No.: CYT-445

Introduction:

Myostatin (GDF-8) is expressed uniquely in human skeletal muscle as a 12 kDa mature glycoprotein consisting of 113 amino acid residues and secreted into plasma. Myostatin is a member of the transforming growth factor β superfamily of secreted growth and differentiation factors that is essential for proper regulation of skeletal muscle mass. Studies have shown that myostatin could play an important role in cardiac development and physiology.

Description:

Total 152AA. M.W. 16kDa (calculated). N-terminal His-tag and spacer (39AA – bold MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDPSSRSAXR SRRDFGLDCD EHSTESRCCR YPLTVDFEAF GWDWIIAPKR YKANYCSGEC EFVFLQKYPH THLVHQANPR GSAGPCCTPT KMSPINMLYF NGKEQIIYGK IPAMVVDRCG CS.

Synonyms:

GDF-8, MSTN, Growth/Differentiation Factor 8, MSTN Muscle Hypertrophy.

Physical Appearance:

Sterile Filtered White Lyophilized (freeze-dried) powder.

Formulation:

Sterile filtered and lyophilized from 0.5 mg/ml in 0.05 M acetate buffer, pH 5.5.

Specificity:

The human myostatin part of the fusion protein is corresponding to amino acid sequence of the human myostatin Swiss-Prot- O14793, R263 S375).

Purification Method:

Three-step procedure using affinity Ni-NTA chromatography and size exclusion chromatography before and after refolding.

Purity:

Greater than 95% (SDS-PAGE analyzed).

Solubility:

Add 0.2 ml of 0.1 M acetate buffer pH 4 and let the lyophilized pellet dissolve completely. The lyophilized myostatin is poorly soluble at neutral pH.

Storage:

Store lyophilized protein at -20 °C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4 °C for a limited period of time; it does not show any change after two weeks at 4 °C.

Stability:

The lyophilized protein remains stable until the expiry date when stored at -20°C.

Applications:

Western blotting, ELISA.

Usage:

Product is furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

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