Myostatin Human (E. coli)

Product Data Sheet

Type: Recombinant
Tag: His
Source: E. coli
Species: Human
Other names: GDF-8

Cat. nr.:

RD172005300	(0.1 mg)
RD172005300+	(10 x 0.1 mg)

Description

Total 152AA, MW: 16.7 kDa (calculated). N-terminal His-tag including the spacer 43AA (highlighted). The AA sequence of the human myostatin part of the fusion protein is corresponding to the UniProtKB/Swiss-Prot entry O14793, AA267-375.

Amino Acid Sequence

MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDPSSRSAVR SRRDFGLDCD EHSTESRCCR YPLTVDFEAF GWDWIIAPKR YKANYCSGEC EFVFLQKYPH THLVHQANPR GSAGPCCTPT KMSPINMLYF NGKEQIIYGK IPAMVVDRCG CS

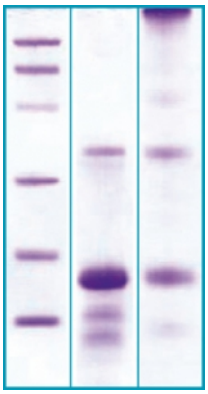
Source

E. coli

Purity

>95%

SDS-PAGE gel



12% SDS-PAGE separation of Human Myostatin
1. M.W. marker - 14, 21, 31, 45, 66, 97 kDa
2. reduced and heated sample, 10µg/lane
3. non-reduced and non-heated sample, 10µg/lane

Formulation

Filtered (0,4 µm) and lyophilized from 0.5 mg/mL in 0.05 M acetate buffer, pH 4.5

Reconstitution

Add 0.1M Acetate buffer pH4 to prepare a working stock solution of approximately 0.5 mg/mL and let the lyophilized pellet dissolve completely. For conversion into higher pH value, we recommend intensive dilution by relevant buffer to a concentration of 10µg/mL. In higher concentrations the solubility of this antigen is limited.

Product is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

Storage, Stability/Shelf Life

Store lyophilized protein at -20°C. Lyophilized protein remains stable until the expiry date when stored at -20°C Aliquot reconstituted protein to avoid repeated freezing/thawing cycles and store at -80°C for long term storage. 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.

Quality Control Test

BCA to determine quantity of the protein.
SDS PAGE to determine purity of the protein.

Applications

ELISA, Western blotting

Introduction to the Molecule

Myostatin (GDF 8) is expressed uniquely in human skeletal muscle as a 12 kDa mature glycoprotein consisting of 109 amino acid residues and secreted into plasma. Myostatin is a member of the transforming growth factor beta 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. In serum, myostatin circulates as part of a latent complex containing myostatin propeptide and/or follistatin-related gene. The myostatin propeptide is known to bind and inhibit myostatin in vitro. This interaction is relevant in vivo, with a majority (>70%) of myostatin in serum bound to its propeptide. The myostatin propeptide is negative regulator of myostatin in vivo.

References to this Product

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References

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