Myostatin Propeptide Human (E. coli)

Product Data Sheet

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

Cat. nr.:

RD172058100	(0.1 mg)
RD172058100+	(10 x 0.1 mg)

Description

Total 248 AA. MW: 28 kDa (calculated). 243 AA of recombinant human Myostatin Propeptide and 5 extra AA (highlighted).

Amino Acid Sequence

MGNENSEQKE NVEKEGLCNA CTWRQNTKSS RIEAIKIQIL SKLRLETAPN ISKDVIRQLL PKAPPLRELI
DQYDVQRDDS SDGSLEDDDY HATTETIITM PTESDFLMQV DGKPKCCFFK FSSKIQYNKV VKAQLWIYLR
PVETPTTVFV QILRLIKPMK DGTRYTGIRS LKLDMNPGTG IWQSIDVKTV LQNWLKQPES NLGIEIKALD
ENGHDLAVTF PGPGEDGLNP FLEVKVTDTP KRSRR**KLN**

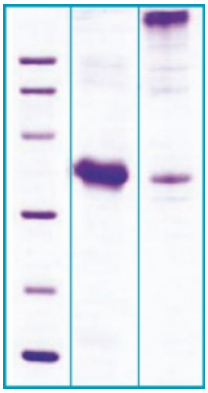
Source

E. coli

Purity

>95%

SDS-PAGE gel



12% SDS-PAGE separation of Human Myostatin Propeptide
1. M.W. marker - 14, 21, 31, 45, 66, 97 kDa
2. reduced and heated sample, 7µg/lane
3. non-reduced and non-heated sample, 7µg/lane

Formulation

Filtered (0,4 µm) and lyophilized in 0.5 mg/mL in 20mM TRIS, 20mM NaCl, pH 8.0

Reconstitution

Add deionized water to prepare a working stock solution of approximately 0.5 mg/mL and let the lyophilized pellet dissolve completely. 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

Note

This product is intended for research use only.

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

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HEADQUARTERS: BioVendor Laboratorní medicína, a.s.	CTPark Modrice Evropska 873	664 42 Modrice CZECH REPUBLIC	Phone: +420-549-124-185 Fax: +420-549-211-460	E-mail: info@biovendor.com Web: www.biovendor.com
EUROPEAN UNION: BioVendor GmbH	Im Neuenheimer Feld 583	D-69120 Heidelberg GERMANY	Phone: +49-6221-433-9100 Fax: +49-6221-433-9111	E-mail: infoEU@biovendor.com
USA, CANADA AND MEXICO: BioVendor LLC	1463 Sand Hill Road Suite 227	Candler, NC 28715 USA	Phone: +1-828-670-7807 +1-800-404-7807 Fax: +1-828-670-7809	E-mail: infoUSA@biovendor.com
CHINA - Hong Kong Office: BioVendor Laboratories Ltd	Room 4008 Hong Kong Plaza, No.188	Connaught Road West Hong Kong, CHINA	Phone: +852-2803-0523 Fax: +852-2803-0525	E-mail: infoHK@biovendor.com
CHINA - Mainland Office: BioVendor Laboratories Ltd	Room 2405 YiYa Tower TianYu Garden, No.150	Lihe Zhong Road Guang Zhou, CHINA	Phone: +86-20-3884-0399 +86-20-3884-0386 Fax: +86-20-3884-0386	E-mail: infoCN@biovendor.com

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