

# Myostatin Propeptide Human, Mouse Monoclonal Antibody, Clone: 6E8

## **Product Data Sheet**

Source of Antigen: *E. coli* Host: Mouse Isotype: IgG2b

Other names: Growth/differentiation factor 8, GDF-8, MSTN

Cat. No.: RD1820571006E8 (0.1 mg)

## **Research topic**

Muscle growth control

## Preparation

The antibody is a mouse monoclonal antibody against recombinant Human Myostatin Propeptide.

## Amino Acid Sequence

The immunization antigen (28 kDa) is a protein containing 243 AA of recombinant Human Myostatin Propeptide and 5 extra AA (highlighted).

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

The amino acid sequence of the recombinant Human Myostatin Propeptide is 100% homologous with the amino acid sequence of the Human Myostatin Propeptide without signaling sequence.

## Species Reactivity

Human Not yet tested in other species.

## **Purification Method**

Affinity chromatography on a column with immobilized protein G.

## Antibody Content

0.1 mg (determined by BCA method, BSA was used as a standard)

## Formulation

The antibody is lyophilized in 0.05 M phosphate buffer, 0.1 M NaCl, pH 7.2. AZIDE FREE.

### Reconstitution

Add 0.1 ml of deionized water and let the lyophilized pellet dissolve completely. Slight turbidity may occur after reconstitution, which does not affect activity of the antibody. In this case clarify the solution by centrifugation.

#### Shipping

At ambient temperature. Upon receipt, store the product at the temperature recommended below.

#### Storage/Stability

The lyophilized antibody remains stable and fully active until the expiry date when stored at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles and store frozen at -80°C. Reconstituted antibody can be stored at 4°C for a limited period of time; it does not show decline in activity after one week at 4°C.

## Expiration

See vial label.

## Lot Number

See vial label.

## **Quality Control Test**

Indirect ELISA - to determine titer of the antibody SDS PAGE - to determine purity of the antibody

## Applications

Immunohistochemistry, Western blotting

## Antibodies application



#### 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**

 Diel P, Schiffer T, Geisler S, Hertrampf T, Mosler S, Schulz S, Wintgens KF, Adler M. Analysis of the effects of androgens and training on myostatin propeptide and follistatin concentrations in blood and skeletal muscle using highly sensitive Immuno PCR. Mol Cell Endocrinol. 2010 Dec 15;330 (1-2):1-9

#### Note

This product is for research use only.

HEADQUARTERS: BioVendor Laboratorní medicína, a.s.	Karasek 1767/1	621 00 Brno CZECH REPUBLIC	Phone: +420-549-124-185 Fax: +420-549-211-460	E-mail: Web:	info@biovendor.com sales@biovendor.com www.biovendor.com
AUSTRIA: BioVendor GesmbH	Gaudenzdorfer Gürtel 43-45	1120 Vienna AUSTRIA	Phone: +43-1-89090-25 Fax: +43-1-89051-63	E-mail:	infoAustria@biovendor.com
GERMANY, SWITZERLAND: BioVendor GmbH	Otto-Hahn-Straße 16	34123 Kassel GERMANY	Phone: +49-6221-433-9100 Fax: +49-6221-433-9111	E-mail:	infoEU@biovendor.com
USA, CANADA AND MEXICO: BioVendor LLC	128 Bingham Rd. Suite 1300	Asheville, NC 28806 USA	Phone: +1-828-575-9250 +1-800-404-7807 Fax: +1-828-575-9251	E-mail:	infoUSA@biovendor.com