Myostatin Fusion Protein, Recombinant, Human, E. coli (Lyophilized) (Growth Differentiation Factor 8, MSTN, gdf8)

Catalog number

M9875D

Supplier

United States Biological

Myostatin (GDF-8) is expressed uniquely in human skeletal muscle as a 12kD mature glycoprotein consisting of 113aa 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.

Total 152AA. M.W. 16.7kD (calculated). N-terminal His-tag and spacer (43AA – highlighted). The AA sequence of the human myostatin part of the fusion protein is corresponding to the UniProtKB/Swiss-Prot entry O14793.
MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDPSSRSAVR SRRDFGLDCD EHSTESRCCR YPLTVDFEAF GWDWIIAPKR YKANYCSGEC EFVFLQKYPH THLVHQANPR GSAGPCCTPT KMSPINMLYF NGKEQIIYGK IPAMVVDRCG CS

Recombinant Human Myostatin part of the fusion protein is corresponding to amino acid sequence of the human Myostatin (Acc. No. AF019627, R263-S376).

Applications

Suitable for use in ELISA and Western Blot. Other applications not tested.

Recommended Dilutions

Optimal dilutions to be determined by the researcher.

Storage and Stability

Lyophilized powder may be stored at -20°C. Reconstitute to nominal volume. Aliquot and store at -20°C. Reconstituted product is stable for 12 months at -20°C. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Further dilutions can be made in assay buffer.

Formulation

Supplied as a lyophilized powder from 0.05M acetate buffer, pH 5.5. Reconstitute in sterile 0.1M acetic acid, pH4.0 to ~0.5mg/ml. Let pellet dissolve completely.

Purity

≥ 95% by SDS-PAGE.

Grade

Affinity Purified

Applications

E WB

Storage

-20°C

Conjugate

x

Antigen Modification

Human, recombinant expressed in E. coli.

Reference

1. Artaza JN, et al., Endocrinology. 2005 Aug;146(8): 3547-57. Epub 2005 May 5. 2. Taylor WE, et al., Am J Physiol Endocrinol Metab. 2001 Feb; 280(2):E221-8. 3. McPherron AC, Lee SJ. Proc Natl Acad Sci U S A. 1997 Nov 11;94(23):12457-61. 4. Sharma M, et al., J Cell Physiol. 1999 Jul;180(1):1-9. 5. Gonzalez-Cadavid NF, et al., Proc Natl Acad Sci U S A. 1998 Dec 8;95(25):14938-43. 6. Gerard Y., et al., Infection 23, 310–311 (1995) 7. Assicot M., et al., Lancet 341, 515–518 (1993)