

Anti-GDF8/Myostatin/MSTN Antibody Picoband®

Catalog Number: A00926-2

About MSTN

Myostatin (also known as growth differentiation factor 8, abbreviated GDF-8) is a myokine, a protein produced and released by myocytes that acts on muscle cells' autocrine function to inhibit myogenesis: muscle cell growth and differentiation. In humans it is encoded by the MSTN gene. This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. The encoded preproprotein is proteolytically processed to generate each subunit of the disulfide-linked homodimer. This protein negatively regulates skeletal muscle cell proliferation and differentiation. Mutations in this gene are associated with increased skeletal muscle mass in humans and other mammals.

Overview

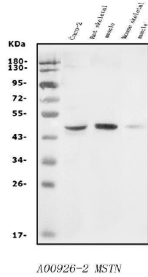
Product Name	Anti-GDF8/Myostatin/MSTN Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-GDF8/Myostatin/MSTN Antibody Picoband® catalog # A00926-2. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.01mg NaN ₃ .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	O14793

Technical Details

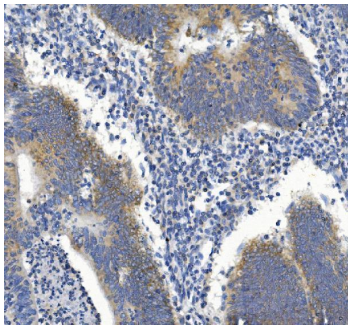
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human GDF8/Myostatin/MSTN, identical to the related mouse and rat sequences.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG

Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5ug/ml, Human, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 2-5ug/ml, Human

Anti-GDF8/Myostatin/MSTN Antibody Picoband® (A00926-2) Images



Western blot analysis of GDF8/Myostatin/MSTN using anti-GDF8/Myostatin/MSTN antibody (A00926-2). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human CACO-2 whole cell lysates, Lane 2: rat skeletal muscle tissue lysates, Lane 3: mouse skeletal muscle tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-GDF8/Myostatin/MSTN antigen affinity purified polyclonal antibody (Catalog # A00926-2) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for GDF8/Myostatin/MSTN at approximately 50KD. The expected band size for GDF8/Myostatin/MSTN is at 50KD.



IHC analysis of GDF8/Myostatin/MSTN using anti-GDF8/Myostatin/MSTN antibody (A00926-2). GDF8/Myostatin/MSTN was detected in a paraffin-embedded section of human colon cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-GDF8/Myostatin/MSTN Antibody (A00926-2) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

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Anti-GDF8/Myostatin/MSTN Antibody

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