

Anti-SMTN Antibody Picoband®

Catalog Number: A04895-2

About SMTN

Smoothelin is a protein that in humans is encoded by the SMTN gene. This gene encodes a structural protein that is found exclusively in contractile smooth muscle cells. It associates with stress fibers and constitutes part of the cytoskeleton. This gene is localized to chromosome 22q12.3, distal to the TUPLE1 locus and outside the DiGeorge syndrome deletion. Alternative splicing of this gene results in multiple transcript variants encoding distinct isoforms.

Overview

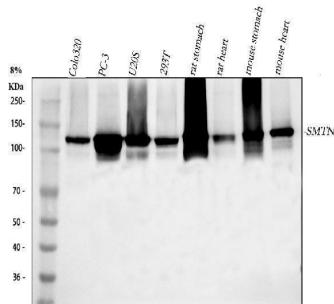
Product Name	Anti-SMTN Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-SMTN Antibody Picoband® catalog # A08225-2. Tested in WB, IHC, ICC/IF, ELISA applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that 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	ELISA, IF, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	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 freezing and thawing.
Host	Rabbit
Uniprot ID	P53814

Technical Details

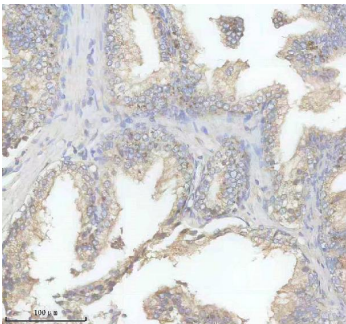
Immunogen	E.coli-derived human SMTN recombinant protein (Position: E72-D881).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for ICC.
Cross Reactivity	No cross reactivity with other proteins.
Isotype	IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.

Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.25 ug/ml, Human, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 2-5ug/ml, Human Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human ELISA, 0.1-0.5 ug/ml, -

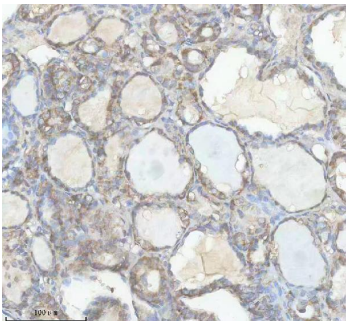
Anti-SMTN Antibody Picoband® (A04895-2) Images



Western blot analysis of SMTN using anti-SMTN antibody (A04895-2). 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 30 ug of sample under reducing conditions. Lane 1: human Colo320 whole cell lysates, Lane 2: human PC-3 whole cell lysates, Lane 3: human U20S whole cell lysates, Lane 4: human 293T whole cell lysates, Lane 5: rat stomach tissue lysates, Lane 6: rat heart tissue lysates, Lane 7: mouse stomach tissue lysates, Lane 8: mouse heart tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-SMTN antigen affinity purified polyclonal antibody (Catalog # A04895-2) at 0.25 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 SMTN at approximately 120 kDa. The expected band size for SMTN is at 99 kDa.

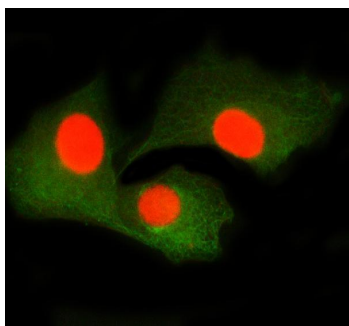


IHC analysis of FUCA using anti-FUCA antibody (A04895-2). FUCA was detected in a paraffin-embedded section of human prostate cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-FUCA Antibody (A04895-2) 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.



IHC analysis of FUCA using anti-FUCA antibody (A04895-2). FUCA was detected in a paraffin-embedded section of human thyroid 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-FUCA Antibody (A04895-2) 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.

IF analysis of SMTN using anti-SMTN antibody (A04895-2) and anti-Beta Tubulin antibody (M01857-3). SMTN was



detected in immunocytochemical section of A549 cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-SMTN Antibody (A04895-2) and mouse anti-Beta Tubulin antibody (M01857-3) overnight at 4°C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) and FITC Conjugated Goat Anti-Mouse IgG (BA1101) were used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

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Anti-SMTN Antibody

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