

Anti-Calponin/CNN1 Antibody Picoband®

Catalog Number: PA2224

About CNN1

Calponin is a basic 34-kD protein first isolated from chicken gizzard and bovine aorta. This gene is mapped to 19p13.2. It is specifically expressed in smooth muscle and binds calmodulin, actin, and tropomyosin. It is able to inhibit the ATPase activity of myosin and is thought to play a role in smooth muscle contraction. Calponin is a smooth muscle specific, actin-, tropomyosin- and calmodulin-binding protein thought to be involved in some way in the regulation or modulation of contraction.

Overview

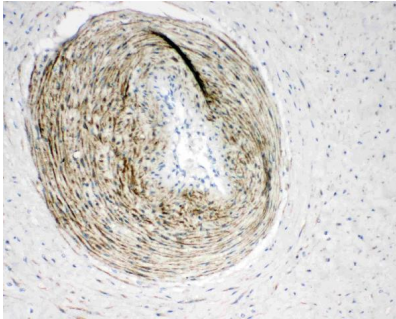
Product Name	Anti-Calponin/CNN1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Calponin/CNN1 Antibody catalog # PA2224. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees 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 antibody formulated with stabilizing components, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ . *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
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	P51911

Technical Details

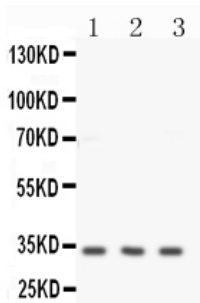
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Calponin, different from the related mouse and rat sequences by two amino acids.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated 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	Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat

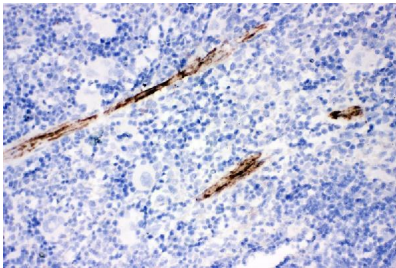
Anti-Calponin/CNN1 Antibody Picoband® (PA2224) Images



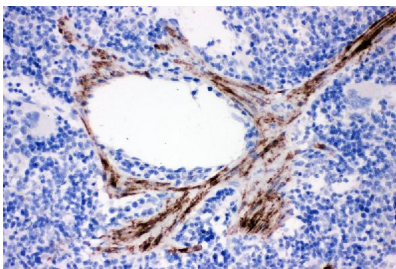
Anti-Calponin antibody, PA2224, IHC(P)IHC(P): Human Placenta Tissue



Anti-Calponin antibody, PA2224, Western blotting All lanes:
Anti -Calponin (PA2224) at 0.5ug/ml Lane 1: HELA Whole Cell Lysate at 40ug Lane 2: JURKAT Whole Cell Lysate at 40ug Lane 3: MCF-7 Whole Cell Lysate at 40ug Predicted bind size: 33KD Observed bind size: 33KD



IHC analysis of Calponin using anti-Calponin antibody (PA2224). Calponin was detected in paraffin-embedded section of mouse spleen tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Calponin Antibody (PA2224) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



IHC analysis of Calponin using anti-Calponin antibody (PA2224). Calponin was detected in paraffin-embedded section of rat spleen tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Calponin Antibody (PA2224) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

7 Publications Citing This Product

1. PubMed ID: 33650080, Li X, Hu B, Wang L, Xia Q, Ni X. P2X7 receptor-mediated phenotype switching of pulmonary artery smooth muscle cells in hypoxia. Mol Biol Rep. 2021 Mar 1. doi:10.1007/s11033-021-06222-2. Epub ahead of print. PMID: 33650080.

2. PubMed ID: 32742325, Zhao Y,Tang N,Xi D,Huang Z,Zhang T,Liu Y,Wang L,Tang Y,Zhong H,He F.Calcilytic NPS2143 promotes proliferation and inhibits apoptosis of spontaneously hypertensive rat vascular smooth muscle cells via activation of the renin-angiotensin system.Exp Ther Med

3. PubMed ID: 27391973, Reduced Expression of the Extracellular Calcium-Sensing Receptor (CaSR) Is Associated with Activation of the Renin-Angiotensin System (RAS) to Promote Vascular Remodeling in the Pathogenesis of Essential Hypertension

Visit bosterbio.com/anti-calponin-antibody-pa2224-boster.html to see all 7 publications.

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Anti-Calponin/CNN1 Antibody

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