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antibody and ELISA experts

BOSTER BIOLOGICAL TECHNOLOGY
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Anti-Calponin-1 (Smooth Muscle Marker) Monoclonal Antibody

Catalog Number: M08065

About CNN1

Multiple isoelectric variants of calponin have been identified, however only two molecular weight isoforms exist; a 34kDa form and a 29kDa form. Expression of the 29kDa form, I-calponin, is primarily restricted to muscle of the urogenital tract, whereas the higher molecular weight variant has been demonstrated in vascular and visceral smooth muscle. In Western blotting, This monoclonal antibody reacts with only the 34kDa form of calponin in extracts of human aortic medial smooth muscle and is unreactive with fibroblast extracts of cultivated human foreskin. Calponin is a calmodulin, F-actin and tropomyosin binding protein, which is thought to be involved in the regulation of smooth muscle contraction. Calponin expression is restricted to smooth muscle cells and has been shown to be a marker of the differentiated (contractile) phenotype of developing smooth muscle.

Overview

Product Name	Anti-Calponin-1 (Smooth Muscle Marker) Monoclonal Antibody
Reactive Species	Human, Rat
Description	Boster Bio Anti-Calponin-1 (Smooth Muscle Marker) Monoclonal Antibody (Catalog # M08065). Tested in WB, Flow Cytometry, IHC applications. This antibody reacts with Human, Rat.
Conjugate	Biotin
Application	Flow Cytometry, IHC, WB
Clonality	Monoclonal Clone: rCNN1/832
Formulation	Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage Instructions	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.
Host	Mouse
Uniprot ID	P51911

Technical Details

Immunogen	Recombinant full-length human CNN1 protein
Predicted Reactive Species	Pig, Rabbit
Cross Reactivity	Does not cross-react with primate, avian or amphibian GR.
Isotype	IgG1, kappa
Form	Liquid

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Concentration	Purified antibody with BSA and azide at 200ug/ml
Purification	200ug/ml of recombinant monoclonal antibody purified by Protein A/G.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Western Blot (1-2ug/ml) Flow Cytometry (1-2ug/million cells) Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT)(Staining of formalin-fixed tissues requires heating tissue sections in 1mM EDTA, pH 7.5-8.5, for 45 min at 95&degC followed by cooling at RT for 20 minutes)Optimal dilution for a specific application should be determined.

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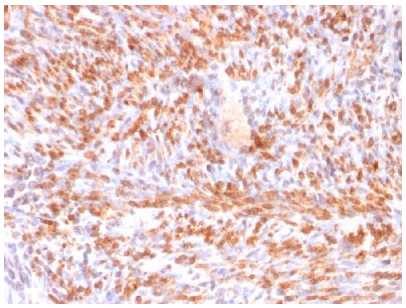
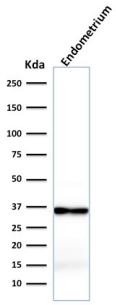
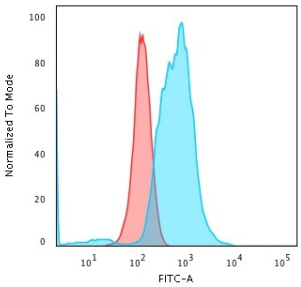
Anti-Calponin-1 (Smooth Muscle Marker) Monoclonal Antibody (M08065) Images



Formalin-fixed, paraffin-embedded human Uterus stained with Anti-Calponin-1 Recombinant Mouse Monoclonal Antibody (rCNN1/832).



Western Blot analysis of Endometrium lysate using Anti-Calponin-1 Recombinant Mouse Monoclonal Antibody (rCNN1/832).



Flow Cytometric analysis of PFA-fixed K562 cells using Anti-Calponin-1 Recombinant Mouse Monoclonal Antibody (rCNN1/832) followed by Goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).

2 Publications Citing This Product

1. 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

2. PubMed ID: 25120772, Effects of BMSCs interactions with adventitial fibroblasts in transdifferentiation and ultrastructure processes

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