

Mouse anti-Human, Rat Calponin-1 Monoclonal Antibody | anti-CNN1 antibody

Calponin-1 (Smooth Muscle Marker)

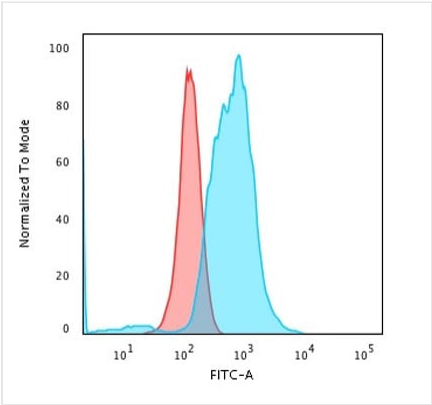
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA13848	Mouse	Human, Rat	Flow Cytometry, Functional Assay, Immunofluorescence, Immunohistochemistry

PRODUCT SYNONYMS

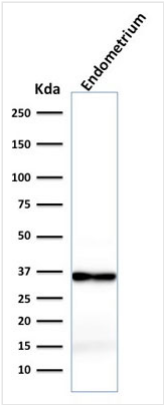
Calponin-1; Monoclonal Antibody; Calponin-1 (Smooth Muscle Marker); Calponin 1 basic smooth muscle; Calponin H1 smooth muscle; CNN1; Cnn1; Sm Calp; SMCC; anti-CNN1 antibody

PRODUCT SPECIFICATIONS

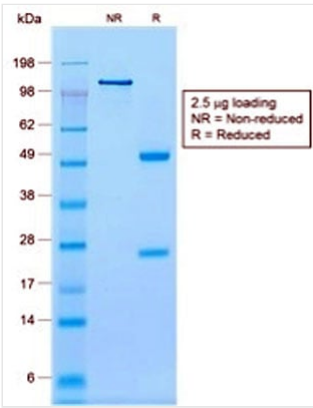
Host	Mouse
Reactivity	Human, Rat
Clonality	Monoclonal
Isotype	IgG1, kappa
Clone Number	rCNN1/832
Specificity	Multiple isoelectric variants of calponin have been identified, however only two molecular weight isoforms exist; a 34kDa form and a 29kDa form. Expression of the 29kDa form, I-calponin, is primarily 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 MAb 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.
Form/Format	200ug/ml of recombinant MAb purified by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Sequence Length	297
Applicable Applications for anti-CNN1 antibody	FCM/FACS (Flow Cytometry), IF (Immunofluorescence), IHC (Immunohistochemistry)
Application Notes	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°C followed by cooling at RT for 20 minutes) Optimal dilution for a specific application should be determined.
Immunogen	Recombinant full-length human CNN1 protein
Cellular Localization	Cytoplasmic
Hu-chromosome Location	19p13.2
Positive Control	K562 cells, Myoepithelial cells in breast ducts.
Preparation and Storage	Store at 2-8°C, Non-hazardous. No MSDS required.



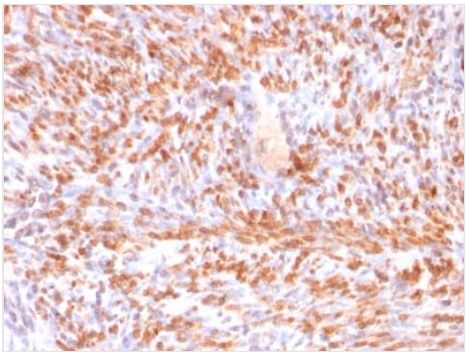
FCM (Flow Cytometry)
Flow Cytometric Analysis of PFA-fixed K562 cells using Calponin-1 Recombinant Mouse Monoclonal Antibody (rCNN1/832) followed by Goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).



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



SDS-PAGE
SDS-PAGE Analysis Purified Calponin-1 Recombinant Mouse Monoclonal Antibody (rCNN1/832). Confirmation of Integrity and Purity of Antibody.



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

ADDITIONAL INFORMATION

References	Tang, D.C., et al. 1996. Structure-function relations of smooth muscle Calponin. The critical role of Serine 175. J. Biol. Chem. 271: 8605-8611.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	21361120
NCBI GeneID	1264
NCBI Accession #	NP_001290.2
NCBI GenBank Nucleotide #	NM_001299.5
UniProt Accession #	P51911; O00638; Q15416; Q8IY93; Q99438; B2R868; B4DUX6
Molecular Weight	34kDa
NCBI Official Full Name	calponin-1 isoform 1
NCBI Official Synonym Full Names	calponin 1
NCBI Official Symbol	CNN1
NCBI Official Synonym Symbols	SMCC; Sm-Calp; HEL-S-14

NCBI Protein Information	calponin-1
UniProt Protein Name	Calponin-1
UniProt Gene Name	CNN1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/calponin-1-antibody-clone-rcnn1-832-flow-cytometry-immunofluorescence-immunohistochemistry-elisa/13848>