

36-2103: Anti-Calponin-1 (Smooth Muscle Marker) Monoclonal Antibody (Clone: rCNN1/832)

Clonality :	Monoclonal
Clone Name :	rCNN1/832
Application :	WB,FACS,IHC
Reactivity :	Human, Rat
Gene :	CNN1
Gene ID :	1264
Uniprot ID :	P51911
Alternative Name :	Calponin 1 basic smooth muscle; Calponin H1 smooth muscle; Calponin-1; CNN1; Cnn1; Sm Calp; SMCC
Isotype :	Mouse IgG1, kappa
Immunogen Information :	Recombinant full-length human CNN1 protein

Description

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.

Product Info

Amount :	20 µg / 100 µg
Content :	200µg/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.
Storage condition :	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months.

Application Note

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)

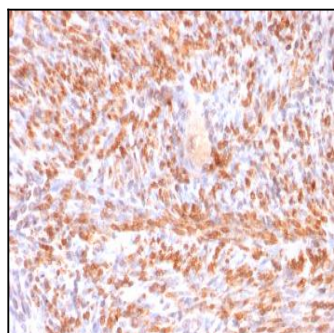


Fig.1: Formalin-fixed, paraffin-embedded human Uterus stained with Calponin-1 Recombinant Mouse Monoclonal Antibody (rCNN1/832).

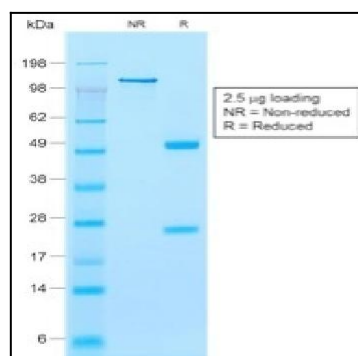


Fig. 2: SDS-PAGE Analysis Purified Calponin-1 Recombinant Mouse Monoclonal Antibody (rCNN1/832). Confirmation of Integrity and Purity of Antibody.

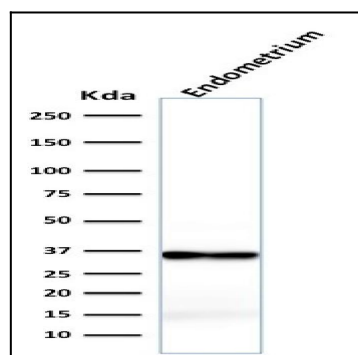


Fig. 3: Western Blot Analysis of Endometrium lysate using Calponin-1 Recombinant Mouse Monoclonal Antibody (rCNN1/832).

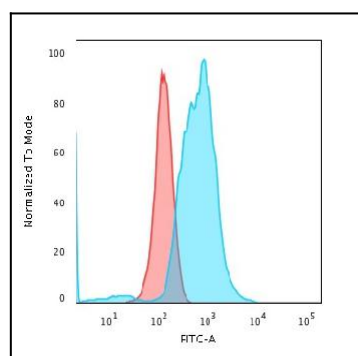


Fig. 4: Flow Cytometric Analysis of PFA-fixed K562 cells using Calponin-1 Recombinant Mouse Monoclonal Antibody (rCNN1/832) followed by Goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).