Calponin-1 (Smooth Muscle Marker) Antibody

Mouse Monoclonal Antibody [Clone CNN1/832 + CALP]

Catalog No	Format	Size
1264-MSM3-P0	Purified Ab with BSA and Azide	200ug/ml
1264-MSM3-P1	Purified Ab with BSA and Azide	200ug/ml
1264-MSM3-P1ABX	Purified Ab WITHOUT BSA and Azide	1.0mg/ml

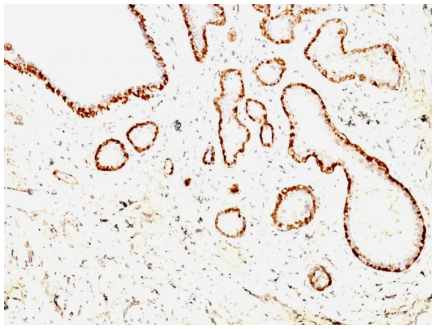
Applications	Tested Dillution
Flow Cytometry (Flow)	1-2ug/million cells
Immunofluorescence (IF)	1-3ug/ml
Immunohistochemistry (IHC)	1-2ug/ml

Product Details

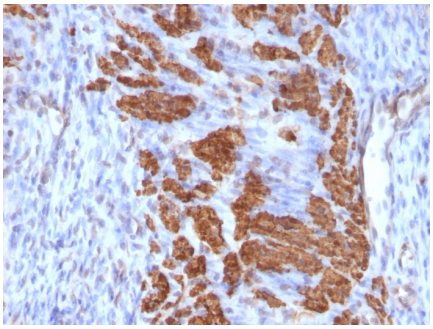
Clone	CNN1/832 + CALP
Gene Name	CNN1
Immunogen	Recombinant full-length human CNN1 protein (CNN1/832); Crude human uterus extract (CALP)
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1 / Kappa
Mol. Weight of Antigen	34kDa
Species Reactivity	Human, Rat
Positive Control	K562, Myoepithelial cells in breast ducts or uterus.

**Optimal dilution for a specific application should be determined.*

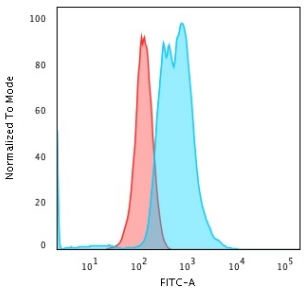
Product Images for Calponin-1 (Smooth Muscle Marker) Antibody



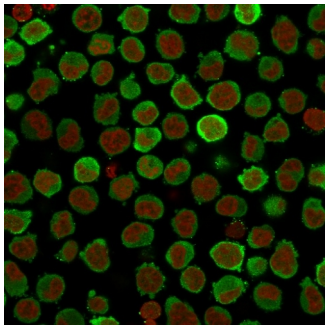
Formalin-fixed, paraffin-embedded human Breast Carcinoma stained with Calponin-1 Mouse Monoclonal Antibody (CNN1/832 + CALP).



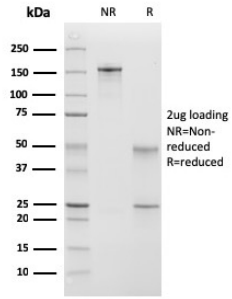
Formalin-fixed, paraffin-embedded Rat Uterus stained with Calponin-1 Mouse Monoclonal Antibody (CNN1/832 + CALP).



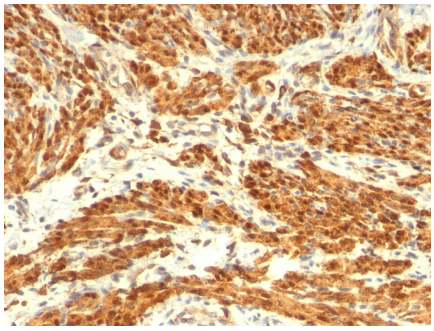
Flow Cytometric Analysis of PFA-fixed K562 cells using Calponin-1 Mouse MAb (CNN1/832 + CALP) followed by Goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).



Immunofluorescence Analysis of PFA-fixed K562 cells labeling Calponin using Calponin-1 Mouse MAb (CNN1/832 + CALP) followed by Goat anti-Mouse IgG-CF488 (Green). The nuclear counterstain is Redot.



SDS-PAGE Analysis Purified Calponin-1 Mouse MAb (CNN1/832 + CALP). Confirmation of Purity and Integrity of Antibody



Formalin-fixed, paraffin-embedded human Uterus stained with Calponin-1 Mouse Monoclonal Antibody (CNN1/832 + CALP).

Specificity & Comments

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.

Research Areas

Cardiovascular, Mesenchymal Stem Cell Differentiation

Known Applications & Suggested Dilutions

Flow Cytometry (1-2ug/million cells) | Immunofluorescence (1-2ug/ml) | 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.

Supplied As

200ug/ml of Ab Purified from Bioreactor Concentrate 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 and Stability

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.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.

There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

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