

## Recombinant Calponin-1 (Smooth Muscle Marker) Antibody

Mouse Monoclonal Antibody [Clone rCNN1/9164]

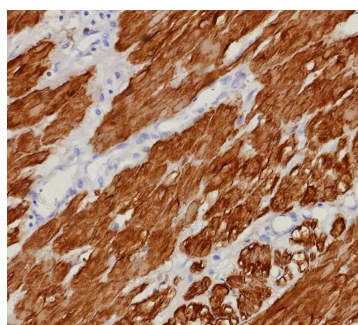
Catalog No	Format	Size
1264-MSM15-P0	Purified Ab with BSA and Azide	200ug/ml
1264-MSM15-P1	Purified Ab with BSA and Azide	200ug/ml
1264-MSM15-P1ABX	Purified Ab WITHOUT BSA and Azide	1.0mg/ml

Applications	Tested Dillution
Immunohistochemistry (IHC)	1-2ug/ml

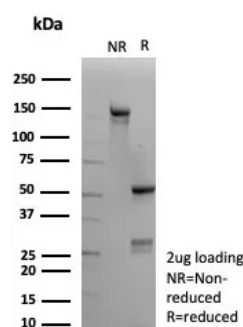
Product Details	
Clone	rCNN1/9164
Gene Name	CNN1
Immunogen	Recombinant fragment (around aa1-200) of human CNN1 protein (exact sequence is proprietary)
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2b / Kappa
Mol. Weight of Antigen	34kDa
Cellular Localization	Cytoplasm.
Species Reactivity	Human
Positive Control	K562 cells. Myoepithelial cells in breast ducts.

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

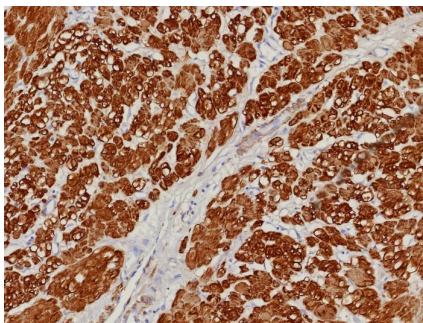
### Product Images for Recombinant Calponin-1 (Smooth Muscle Marker) Antibody



Formalin-fixed, paraffin-embedded human uterus stained with Calponin-1 Recombinant Mouse Monoclonal Antibody (rCNN1/9164). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.



SDS-PAGE Analysis of Purified Calponin-1 Recombinant Mouse Monoclonal Antibody (rCNN1/9164). Confirmation of Purity and Integrity of Antibody.



Formalin-fixed, paraffin-embedded human uterus stained with Calponin-1 Recombinant Mouse Monoclonal Antibody (rCNN1/9164). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.

### 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

Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT), (Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes), Optimal dilution for a specific application should be determined.

### 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.

### Supplied As

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.

### 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.