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## Calponin-1 (Clone ZM21) Mouse Monoclonal Antibody

**Specificity:** Human and Rat. Others not tested

**Immunogen:** Recombinant human CNN1 protein

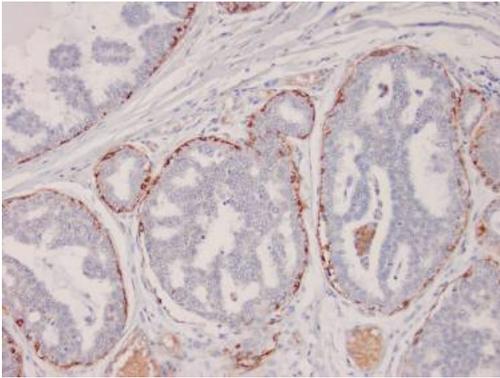
**Ig Class:** IgG1/ $\kappa$

**Storage:** Store vial at 4°C. When stored at 2-8°C, this antibody is stable for 24 months

**Staining procedures:** Use formalin-fixed and paraffin-embedded sections. *Retrieval conditions:* Pretreatment of deparaffinized tissue with heat-induced epitope retrieval is recommended. *Detection methods:* Polymer anti-mouse/rabbit Ig detection system. *Working dilution:* 1:100-200; *Positive Control:* Normal breast tissue; *Cellular Localization:* Cytoplasmic; *Intended Use:* In Vitro Diagnosis (IVD).

**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.

**Supplied As:** Purified antibody with 0.2% BSA and 15mM sodium azide.



### References:

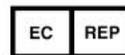
1. Benson JR, et al. *CRC Press*, Jan 3, 2013.
2. Liu R, et al. *Gene*. 2016; 585:143-53.
3. Wang NP, et al. *Appl Immunohistochem*1998; 5:141-51.

*Formalin-fixed, paraffin-embedded human breast ductal carcinoma in situ stained with anti-calponin-1 antibody using peroxidase-conjugate and DAB chromogen. Note cytoplasmic staining of myoepithelial cells*

Cat. #Z2341 (1.0 ml)

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