

## 36-2104: Anti-Calponin-1 (Smooth Muscle Marker) Monoclonal Antibody(Clone: CNN1/1408R)

|                                |  |
|--------------------------------|--|
| <b>Clonality :</b>             | Monoclonal   |
| <b>Clone Name :</b>            | CNN1/1408R   |
| <b>Application :</b>           | FACS,IF,IHC  |
| <b>Reactivity :</b>            | Human, Rat   |
| <b>Gene :</b>                  | CNN1   |
| <b>Gene ID :</b>               | 1264   |
| <b>Uniprot ID :</b>            | P51911   |
| <b>Alternative Name :</b>      | Calponin 1 basic smooth muscle; Calponin H1 smooth muscle; Calponin-1; CNN1; Cnn1; Sm Calp; SMCC |
| <b>Isotype :</b>               | Rabbit IgG   |
| <b>Immunogen Information :</b> | Recombinant human full-length 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

|                            |   |
|----------------------------|---|
| <b>Amount :</b>            | 20 µg / 100 µg  |
| <b>Content :</b>           | 200 µg/ml of Ab 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. |
| <b>Storage condition :</b> | 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.   |

### Application Note

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 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95&degC followed by cooling at RT for 20 minutes)

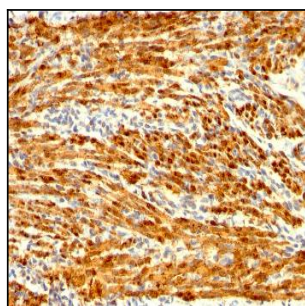


Fig. 1: Formalin-fixed, paraffin-embedded human Uterus stained with Calponin Rabbit Recombinant Monoclonal Antibody (CNN1/1408R).

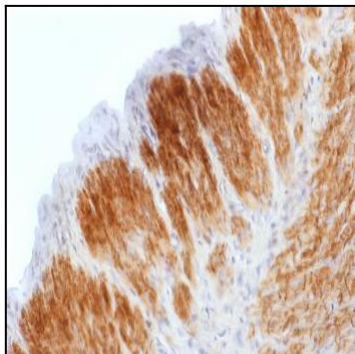


Fig. 2: Formalin-fixed, paraffin-embedded Rat Uterus stained with Calponin Rabbit Recombinant Monoclonal Antibody (CNN1/1408R).

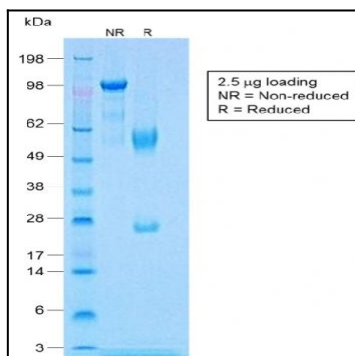


Fig. 3: SDS-PAGE Analysis of Purified Calponin Rabbit Recombinant Monoclonal Antibody (CNN1/1408R).

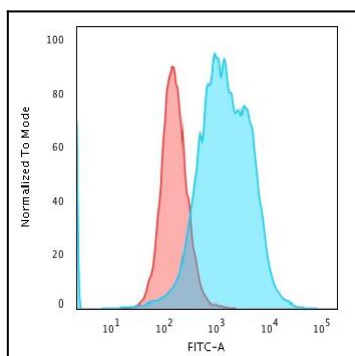


Fig. 4: Flow Cytometric Analysis of PFA-fixed K562 cells using Calponin Rabbit Recombinant MAb(CNN1/1408R) followed by Goat anti-Rabbit- IgG-CF488 (Blue); Isotype Control (Red).

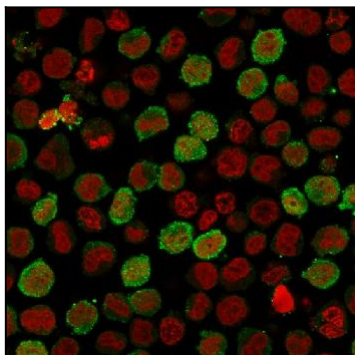


Fig. 5: Immunofluorescence Analysis of Human K562 cells labeling CD71 with Calponin Rabbit Recombinant Monoclonal Antibody (CNN1/1408R) followed by Goat anti-rabbit IgG-CF488 (Green). The nuclear counterstain is Reddot (Red)