

Calponin Rabbit mAb

Catalog No: #48742



Package Size: #48742-1 50ul #48742-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

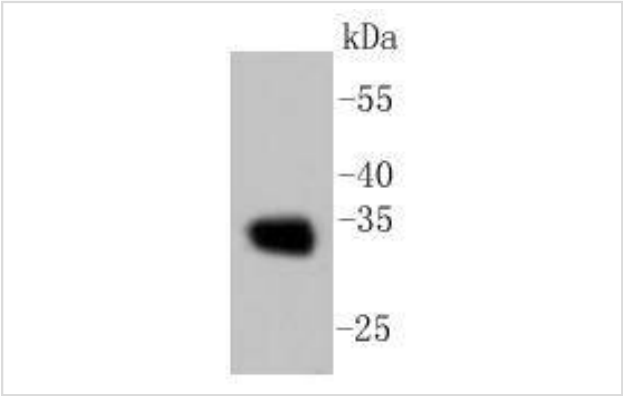
Description

Product Name	Calponin Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SI67-01
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC
Species Reactivity	Hu, Ms, Rt, Dog, Pig
Immunogen Description	recombinant protein
Other Names	Basic calponin antibody Calponin 1 antibody Calponin 1 basic smooth muscle antibody Calponin H1 antibody Calponin H1 smooth muscle antibody Calponin-1 antibody Calponin1 antibody Calponins basic antibody CNN 1 antibody Cnn1 antibody CNN1_HUMAN antibody Epididymis secretory protein Li 14 antibody HEL S 14 antibody Sm Calp antibody SMCC antibody smooth muscle antibody
Accession No.	Swiss-Prot#:P51911
Calculated MW	33 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

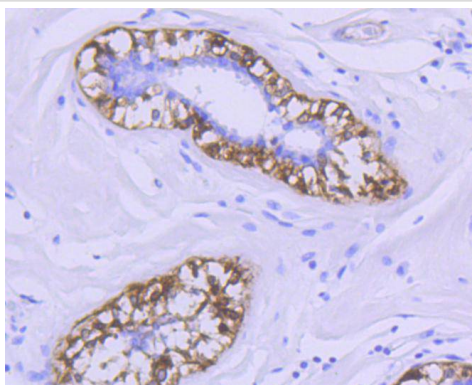
Application Details

WB: 1:1,000-1:2,000 IHC: 1:50-1:200ICC: 1:50-1:200

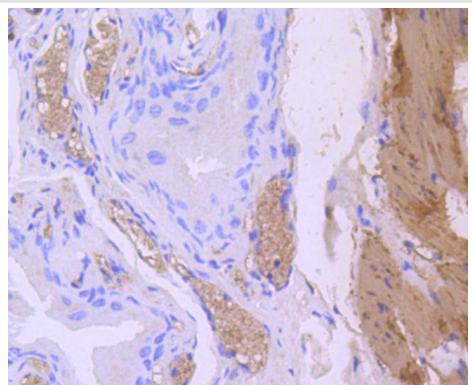
Images



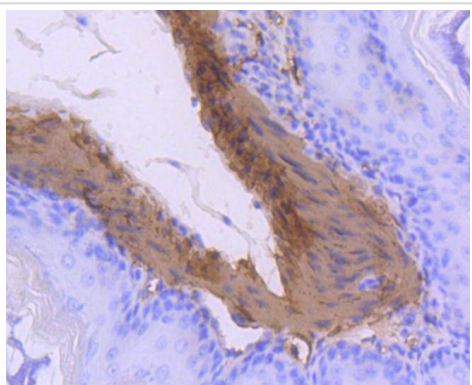
Western blot analysis of Calponin on Hela cell lysates using anti-Calponin antibody at 1/1,000 dilution.



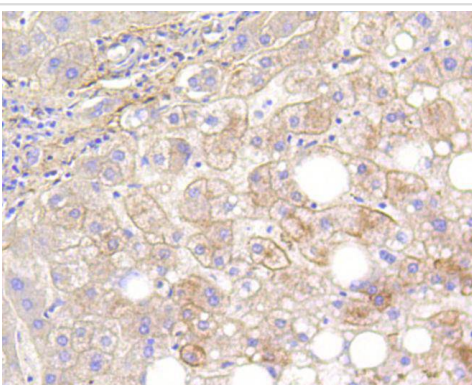
Immunohistochemical analysis of paraffin-embedded human breast tissue using anti-Calponin antibody. Counter stained with hematoxylin.



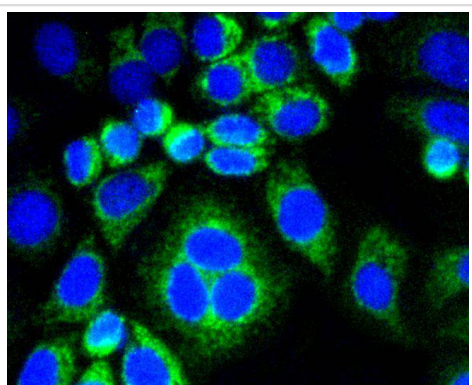
Immunohistochemical analysis of paraffin-embedded mouse bladder tissue using anti-Calponin antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded mouse stomach tissue using anti-Calponin antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded mouse heart tissue using anti-Calponin antibody. Counter stained with hematoxylin.



ICC staining Calponin in HepG2 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

Background

Calponin regulates smooth muscle cell contraction and is a marker of smooth muscle cell differentiation. Calponin, an Actin- and Tropomyosin-binding protein, is characterized as an inhibitory factor of smooth-muscle actomyosin activity. Calponin is implicated in the regulation of smooth muscle contraction through its interaction with F-Actin and inhibition of the Actin-activated MgATPase activity of phosphorylated Myosin. Both properties are lost following phosphorylation (primarily at Serine 175) by protein kinase C or calmodulin-dependent protein kinase II. The three forms of Calponin, Calponin 1 (basic Calponin), Calponin 2 (neutral Calponin) and Calponin 3 (acidic Calponin), are found in smooth muscle tissue. Additionally, Calponin 2 is found in heart muscle tissue and Calponin 3 is found in the brain.

References

1. Battiston KG et al. Monocyte/macrophage cytokine activity regulates vascular smooth muscle cell function within a degradable polyurethane scaffold. *Acta Biomater* 10:1146-55 (2014).
2. Nyp MF et al. TRIP-1 via AKT modulation drives lung fibroblast/myofibroblast trans-differentiation. *Respir Res* 15:19 (2014).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.