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Calponin-1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6795A

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P51911
Other Accession	Q08290, Q08091, Q2HJ38
Reactivity	Human
Predicted	Mouse, Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB19472
Calculated MW	33170
Antigen Region	10-39

Additional Information

Gene ID	1264
Other Names	Calponin-1, Basic calponin, Calponin H1, smooth muscle, CNN1
Target/Specificity	This Calponin-1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 10-39 amino acids from the N-terminal region of human Calponin-1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Calponin-1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CNN1
Function	Thin filament-associated protein that is implicated in the regulation and modulation of smooth muscle contraction. It is capable of binding to actin,

	calmodulin and tropomyosin. The interaction of calponin with actin inhibits the actomyosin Mg-ATPase activity (By similarity).
Tissue Location	Smooth muscle, and tissues containing significant amounts of smooth muscle

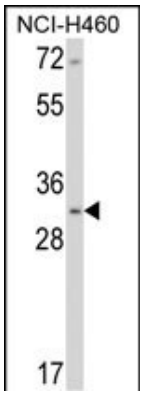
Background

Thin filament-associated protein that is implicated in the regulation and modulation of smooth muscle contraction. It is capable of binding to actin, calmodulin, troponin C and tropomyosin. The interaction of calponin with actin inhibits the actomyosin Mg-ATPase activity (By similarity).

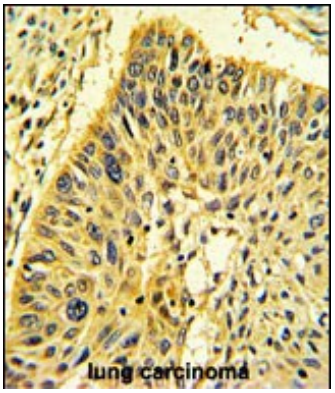
References

Marsh,W.L., et.al., Appl. Immunohistochem. Mol. Morphol. 17 (3), 216-219 (2009)

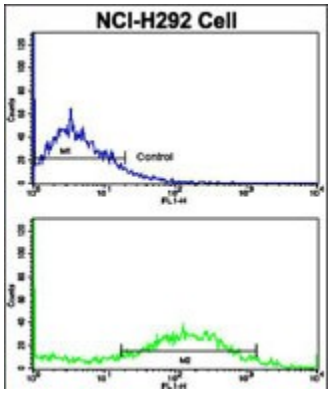
Images



Western blot analysis of Calponin-1 Antibody (N-term) (Cat. #AP6795a) in NCI-H460 cell line lysates (35ug/lane). CNN1 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human lung carcinoma with Calponin-1 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Flow cytometric analysis of NCI-H292 cells using Calponin-1 Antibody (N-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Citations

- Actin cytoskeleton mediates BMP2-Smad signaling via calponin 1 in preosteoblast under simulated microgravity.