10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Caldesmon Recombinant Mouse mAb

Caldesmon Recombinant Mouse mAb
Catalog # AP94383

Product Information

Application	WB, IHC-P, IHC-F, IF
Host	Rabbit
Clonality	Recombinant
Physical State	Liquid
Isotype	IgG2b/Kappa
Purity	affinity purified by Protein G
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm, cytoskeleton. Cytoplasm, myofibril. Note=On thin filaments in smooth muscle and on stress fibers in fibroblasts (nonmuscle).
SIMILARITY	Belongs to the caldesmon family.
Post-translational modifications	In non-muscle cells, phosphorylation by CDK1 during mitosis causes caldesmon to dissociate from microfilaments. Phosphorylation reduces caldesmon binding to actin, myosin, and calmodulin as well as its inhibition of actomyosin ATPase activity. Phosphorylation also occurs in both quiescent and dividing smooth muscle cells with similar effects on the interaction with actin and calmodulin and on microfilaments reorganization. CDK1-mediated phosphorylation promotes Schwann cell migration during peripheral nerve regeneration (By similarity).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a calmodulin- and actin-binding protein that plays an essential role in the regulation of smooth muscle and nonmuscle contraction. The conserved domain of this protein possesses the binding activities to Ca(2+)-calmodulin, actin, tropomyosin, myosin, and phospholipids. This protein is a potent inhibitor of the actin-tropomyosin activated myosin MgATPase, and serves as a mediating factor for Ca(2+)-dependent inhibition of smooth muscle contraction. Alternative splicing of this gene results in multiple transcript variants encoding distinct isoforms.[provided by RefSeq, Jul 2008].

Additional Information

Target/Specificity	High-molecular-weight caldesmon (isoform 1) is predominantly expressed in smooth muscles, whereas low-molecular-weight caldesmon (isoforms 2, 3, 4 and 5) are widely distributed in non-muscle tissues and cells. Not expressed in skeletal muscle or heart.
Dilution	WB=1:500-1:1000,IHC-P=1:100-500,IHC-F=1:100-500,IF=0
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Background

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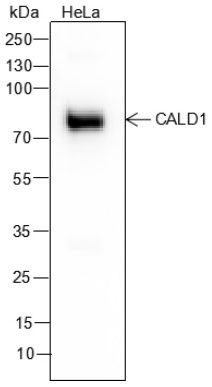
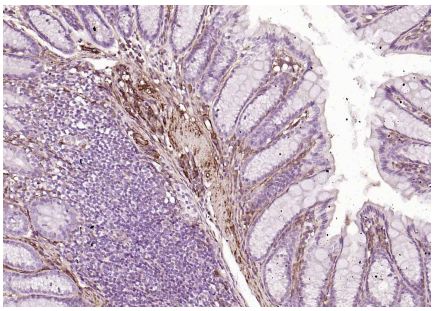
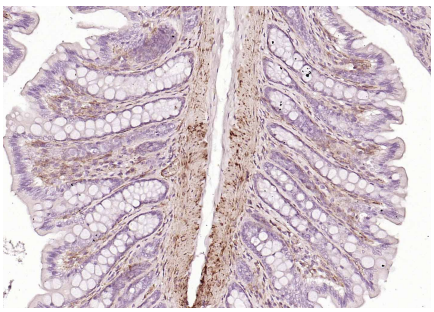
Images



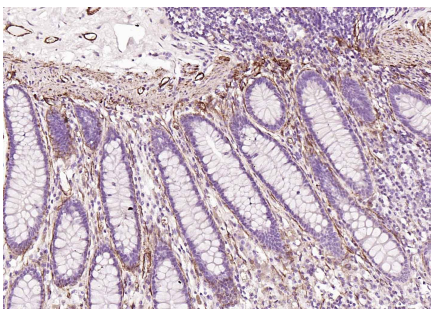
Blocking buffer: 5% NFDM/TBST Primary ab dilution: 1:1000 Primary ab incubation condition: 4°C overnight Lysate: HeLa Protein loading quantity: 20 µg Exposure time: 30 s Predicted MW: 75 kDa Observed MW: 80 kDa



Paraformaldehyde-fixed, paraffin embedded (mouse colon); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Incubation with (CALD1) Monoclonal Antibody, Unconjugated (AP94383) at 1:100 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructionsand DAB staining.

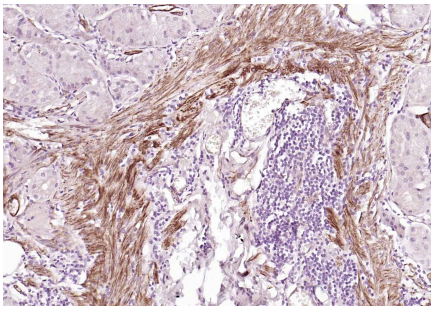


Paraformaldehyde-fixed, paraffin embedded (rat colon); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Incubation with (CALD1) Monoclonal Antibody, Unconjugated (AP94383) at 1:100 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructionsand DAB staining.

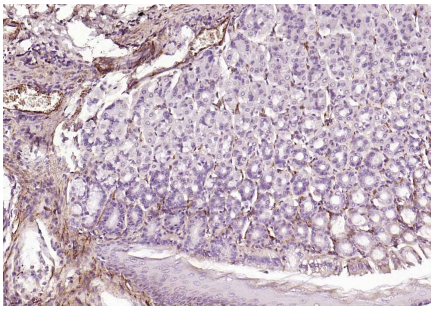


Paraformaldehyde-fixed, paraffin embedded (human colon); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Incubation with (CALD1) Monoclonal Antibody, Unconjugated (AP94383) at 1:100 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructionsand DAB staining.

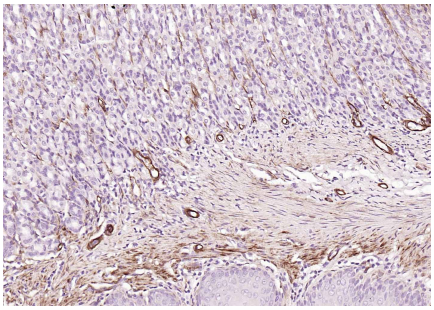
Paraformaldehyde-fixed, paraffin embedded (human stomach); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase



by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Incubation with (CALD1) Monoclonal Antibody, Unconjugated (AP94383) at 1:100 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (mouse stomach); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Incubation with (CALD1) Monoclonal Antibody, Unconjugated (AP94383) at 1:100 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat stomach); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Incubation with (CALD1) Monoclonal Antibody, Unconjugated (AP94383) at 1:100 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructionsand DAB staining.