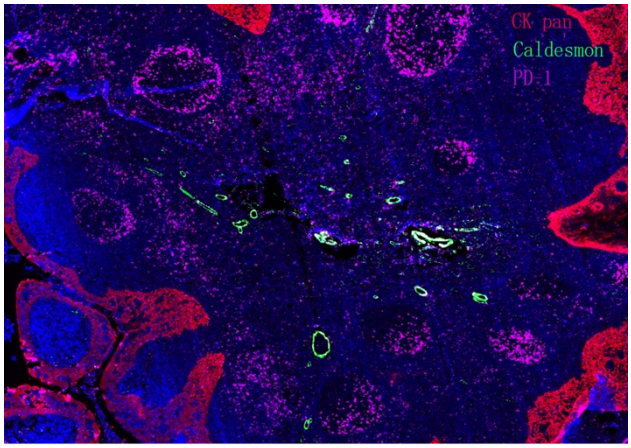
Caldesmon pan mouse mAb(ABT125)

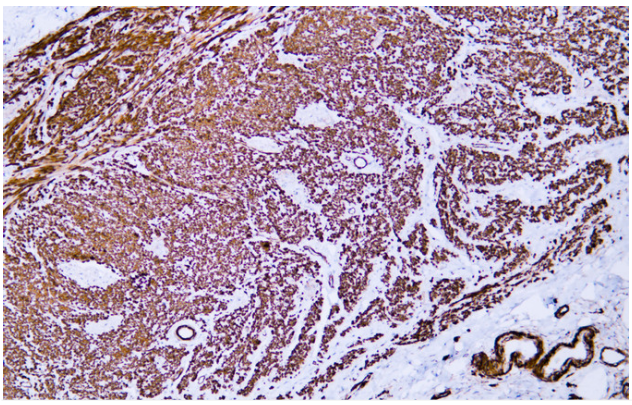
Catalog No	BYab-15539
Isotype	IgG
Reactivity	Human
Applications	IHC;WB;IF
Gene Name	CALD1 CAD CDM
Protein Name	Caldesmon pan
Immunogen	Synthesized peptide derived from human Caldesmon pan
Specificity	The antibody can recognize human h-caldesmon and l-caldesmon protein. In western blotting , the antibody labels a 93KDa band.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.165% sodium azide.
Source	Mouse, Monoclonal/IgG2a, Kappa
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Dilution	IHC-p 1:100-500, WB 1:200-1000, IF 1:100-500
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Caldesmon (CDM)
Observed Band	
Cell Pathway	Cytoplasm, cytoskeleton . Cytoplasm, myofibril . Cytoplasm, cytoskeleton, stress fiber . On thin filaments in smooth muscle and on stress fibers in fibroblasts (nonmuscle). .
Tissue 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.
Function	domain:The N-terminal part seems to be a myosin/calmodulin-binding domain, and the C-terminal a tropomyosin/actin/calmodulin-binding domain. These two domains are separated by a central helical region in the smooth-muscle form.,function:Actin- and myosin-binding protein implicated in the regulation of actomyosin interactions in smooth muscle and nonmuscle cells (could act as a bridge between myosin and actin filaments). Stimulates actin binding of tropomyosin which increases the stabilization of actin filament structure. In muscle tissues, inhibits the actomyosin ATPase by binding to F-actin. This inhibition is

	attenuated by calcium-calmodulin and is potentiated by tropomyosin. Interacts with actin, myosin, two molecules of tropomyosin and with calmodulin. Also play an essential role during cellular mitosis and receptor capping.,PTM:In non-muscle cells, phosphorylation by CDC2 during mit
Background	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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

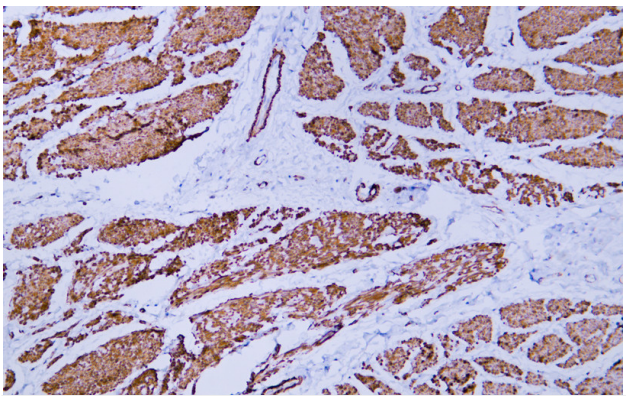
Products Images



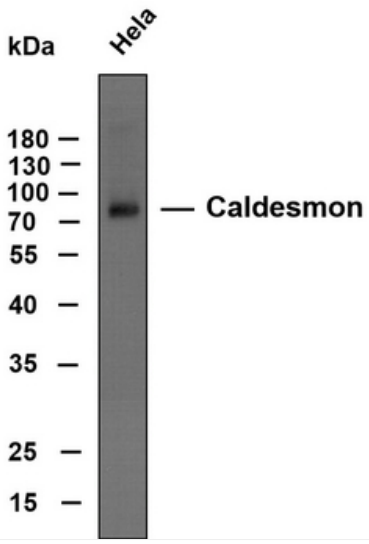
Fluorescence multiplex immunohistochemical analysis of normal human appendix tissue (formalin-fixed paraffin-embedded section).The section was incubated in 3 rounds of staining; in the order of CK PAN .(Catalog no:YM6815 1/200 dilution), PD-1.(Catalog no: YM6208 1/200 dilution), Caldesmon pan. (Catalog no:YM6826 1/200 dilution),each using a separate fluorescent tyramide signal amplification system : Treble-Fluorescence immunohistochemical mouse/rabbit kit Catalog NO: RS0035 (pH9.0)



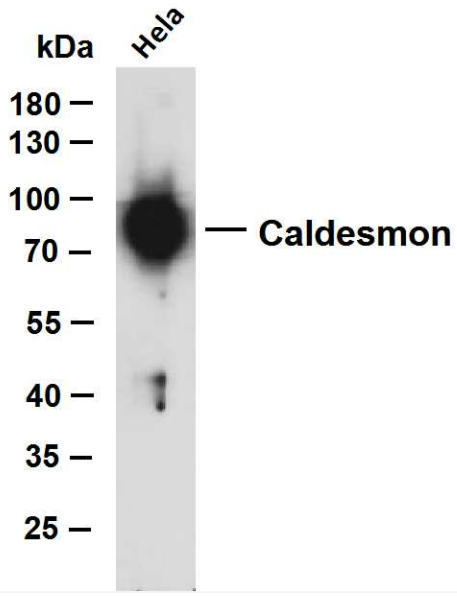
Human appendix tissue was stained with anti-Caldesmon(ABT125) antibody.



Human smooth muscle tissue was stained with anti-Caldesmon(ABT125) antibody.



Whole cell lysates of Hela were separated by 10% SDS-PAGE, and the membrane was blotted with anti-Caldesmon antibody. The HRP-conjugated anti-Mouse IgG antibody was used to detect the antibody. Predicted band size: 93(75)kDa



Hela whole cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with anti-Caldesmon(ABT125) antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: Hela Predicted band size: 93kDa Observed band size: 93kDa