

Caldesmon Rabbit mAb

Catalog No: #48809

Package Size: #48809-1 50ul #48809-2 100ul

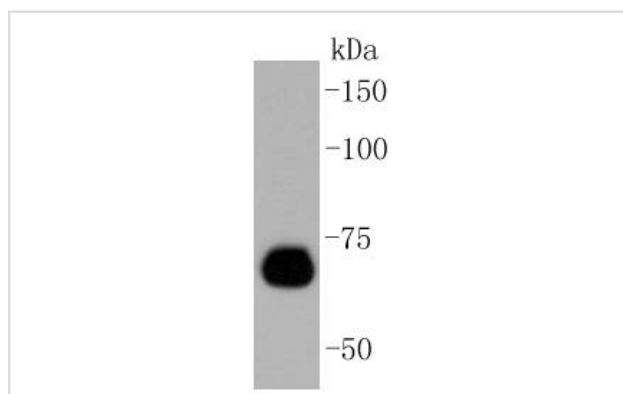
Description

Product Name	Caldesmon Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal
Clone No.	SU03-19
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, IP, FC
Species Reactivity	Hu, Ms, Rt
Immunogen Description	recombinant protein
Conjugates	Unconjugated
Other Names	CAD antibody CALD 1 antibody CALD1 antibody CALD1_HUMAN antibody Caldesmon 1 antibody Caldesmon 1 Isoform 1 antibody Caldesmon 1 Isoform 2 antibody Caldesmon 1 Isoform 3 antibody Caldesmon 1 Isoform 4 antibody Caldesmon 1 Isoform 5 antibody Caldesmon antibody Caldesmon1 antibody CDM antibody H CAD antibody HCAD antibody L CAD antibody LCAD antibody MGC21352 antibody NAG22 antibody
Accession No.	Swiss-Prot#:Q05682
Calculated MW	70 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

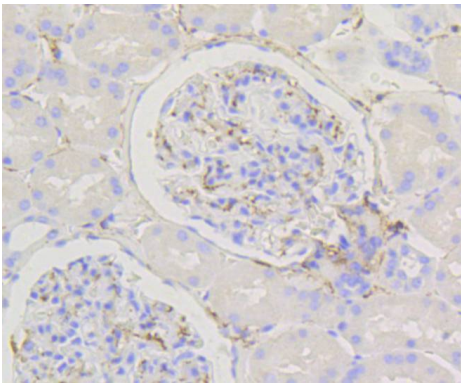
Application Details

WB: 1:1,000-1:2,000 IHC: 1:50-1:200 ICC: 1:50-1:200FC: 1:50-1:100

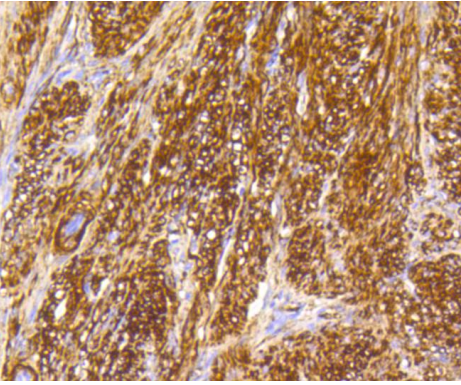
Images



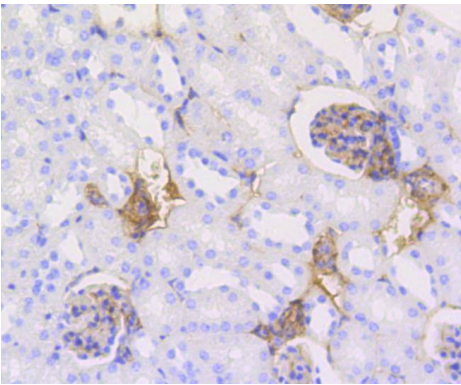
Western blot analysis of Caldesmon on NIH/3T3 cell lysates using anti-Caldesmon antibody at 1/1,000 dilution.



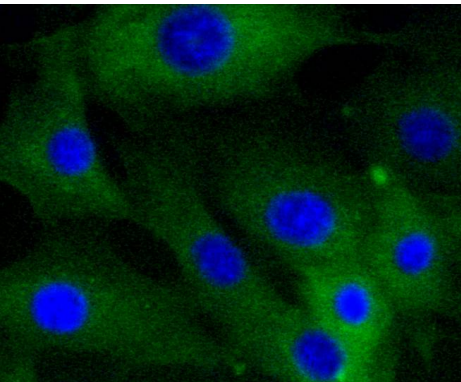
Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-Caldesmon antibody. Counter stained with hematoxylin.



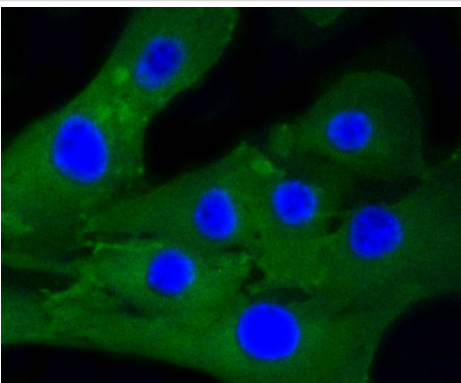
Immunohistochemical analysis of paraffin-embedded human uterus tissue using anti-Caldesmon antibody. Counter stained with hematoxylin.



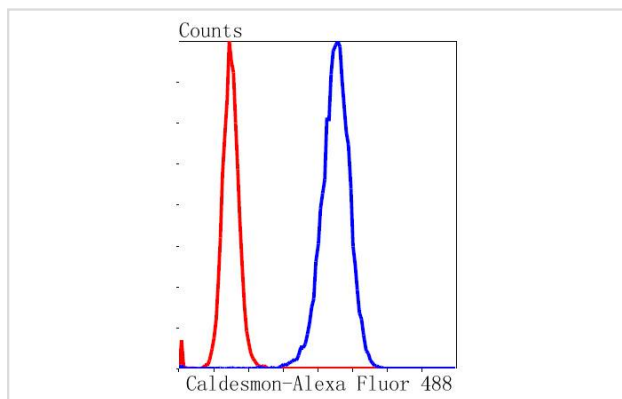
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue using anti-Caldesmon antibody. Counter stained with hematoxylin.



ICC staining Caldesmon in NIH/3T3 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining Caldesmon in C2C12 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Flow cytometric analysis of NIH/3T3 cells with Caldesmon antibody at 1/50 dilution (blue) compared with an unlabelled control (cells without incubation with primary antibody; red). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.

Background

Caldesmon, Filamin 1, Nebulin and Villin are differentially expressed and regulated Actin binding proteins. Both muscular and non-muscular forms of Caldesmon have been identified and each has been shown to bind to Actin as well as to calmodulin and Myosin. Alternative splicing of the gene encoding Caldesmon results in five isoforms. Muscular Caldesmon (isoform 1), also designated high molecular weight Caldesmon or H-Caldesmon (H-CAD), is expressed predominantly on thin filaments in smooth muscle. Non-muscular Caldesmon (isoforms 2-5), also designated low molecular weight Caldesmon or L-Caldesmon (L-CAD), is widely expressed in non-muscle tissues and cells. Filamin 1, which is ubiquitously expressed and exists as a homodimer, functions to crosslink Actin to filaments. Nebulin is a large filamentous protein specific to muscle tissue that may function as a ruler for filament length. Several isoforms of Nebulin are produced by alternative exon usage. Villin is Ca^{2+} -regulated and is the major structural component of the brush border of absorptive cells.

References

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