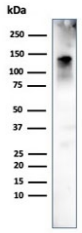
CAD Antibody / Caldesmon / CALD1 (HMW) [clone h-CALD] (V2940)

Catalog No.	Formulation	Size
V2940-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2940-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2940SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2940IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

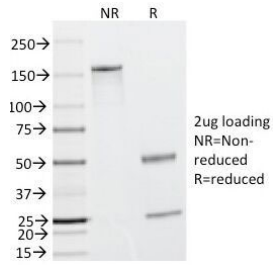
Citations (9)

Bulk quote request

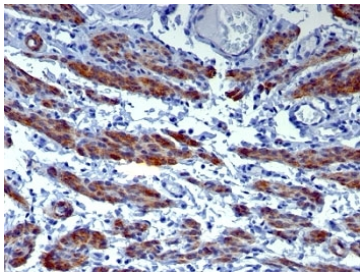
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	h-CALD
Purity	Protein G affinity chromatography
UniProt	Q05682
Localization	Cytoplasmic
Applications	Flow Cytometry : 1-2ug/10^6 cells Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT Western Blot : 1-2ug/ml
Limitations	This CAD antibody is available for research use only.



Western blot testing of human ovary tissue with CAD antibody (clone h-CALD). Predicted molecular weight ~93 kDa, can be observed at 70-80 kDa (non muscle tissue) and 120-150 kDa (smooth muscle).



SDS-PAGE Analysis of Purified, BSA-Free CAD Antibody (clone h-CALD). Confirmation of Integrity and Purity of the Antibody.



IHC: Formalin-fixed, paraffin-embedded human uterus stained with CAD antibody (h-CALD).

Description

Caldesmon is an 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. Involved in Schwann cell migration during peripheral nerve regeneration (By similarity). [UniProt]

Application Notes

Optimal dilution of the CAD antibody should be determined by the researcher.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 10-20 min followed by cooling at RT for 20 min.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Crude human uterus extract was used as the immunogen for the CAD antibody.

Storage

Store the CAD antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).