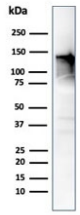
CAD Antibody / CALD1 / Caldesmon (HMW) [clone CALD1/820] (V2942)

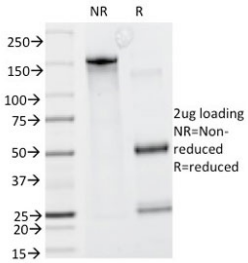
Catalog No.	Formulation	Size
V2942-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2942-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2942SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2942IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

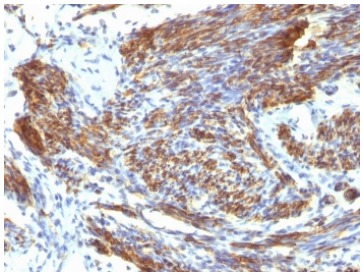
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	CALD1/820
Purity	Protein G affinity chromatography
UniProt	Q05682
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE) : 0.25-0.5ug/ml for 30 min at RT Western Blot : 2-4ug/ml
Limitations	This CAD antibody is available for research use only.



Western blot testing of human ovary tissue lysate using CAD antibody (clone CALD1/820). 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 CALD1/820) as confirmation of integrity and purity.



IHC: Formalin-fixed, paraffin-embedded human uterus stained with CAD antibody (CALD1/820).

Description

Recognizes a protein of 150kDa, which is identified as the high molecular weight variant of Caldesmon. Two closely related variants of human caldesmon have been identified which are different in their electrophoretic mobility and cellular distribution. The h-caldesmon variant (120-150kDa) is predominantly expressed in smooth muscle whereas l-caldesmon (70-80kDa) is found in non- muscle tissue and cells. Neither of the two variants has been detected in skeletal muscle. This mAb recognizes only the 150kDa variant (h-caldesmon) in Western blots of human aortic media extracts and is unreactive with fibroblast extracts from cultivated human foreskin. Caldesmon is a developmentally regulated protein involved in smooth muscle and non-muscle contraction.

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

Recombinant full-length human protein 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).