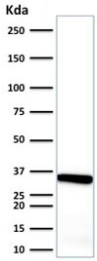
Calponin Antibody [clone CALP] (V2463)

Catalog No.	Formulation	Size
V2463-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2463-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2463SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

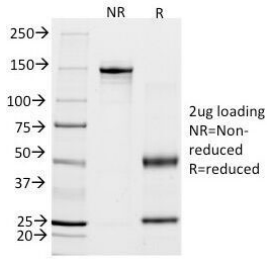
Citations (4)

Bulk quote request

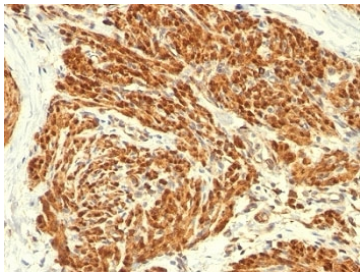
Availability	1-3 business days
Species Reactivity	Human, Rat
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	CALP
Purity	Protein G affinity chromatography
UniProt	P51911
Localization	Cytoplasmic
Applications	Flow cytometry: 1-2ug/10^6 cells Immunofluorescence: 1-2ug/ml Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This Calponin antibody is available for research use only.



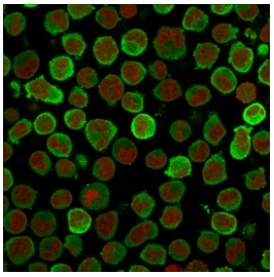
Calponin Antibody Endometrium Tissue WB. Western blot testing of human endometrium tissue lysate with Calponin antibody. Predicted molecular weight ~34 kDa.



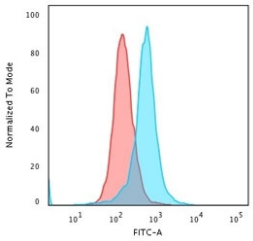
SDS-PAGE Analysis of Purified, BSA-Free Calponin Antibody (clone CALP). Confirmation of Integrity and Purity of the Antibody.



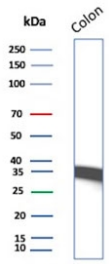
IHC: Formalin-fixed, paraffin-embedded human uterus stained with Calponin antibody (CALP).



Calponin Antibody Human K562 Cell IF. Immunofluorescent staining of PFA-fixed human K562 cells with Calponin antibody (green, clone CALP) and Reddot nuclear stain (red).



Calponin Antibody FACS Staining. Flow cytometry testing of PFA-fixed human K562 cells with Calponin antibody (clone CALP); Red=isotype control, Blue= Calponin antibody.



Calponin Antibody Immunoblot. Western blot testing of human colon tissue lysate with Calponin antibody. Predicted molecular weight ~34 kDa.

Description

CNN1, also known as Calponin 1, is a smooth muscle-associated protein involved in regulating actin filament dynamics and contractile function. Multiple isoelectric variants of calponin have been identified, however only two molecular weight isoforms exist; a 34 kDa form and a 29 kDa form. Expression of the 29 kDa form, I-calponin, is primarily restricted to muscle of the urogenital tract, whereas the higher molecular weight variant has been demonstrated in vascular and visceral smooth muscle. In Western blotting, this mAb reacts with only the 34 kDa form of calponin in extracts of human aortic medial smooth muscle and is unreactive with fibroblast extracts of cultivated human foreskin. Calponin is a calmodulin, F-actin and tropomyosin binding protein, which is thought to be involved in the regulation of smooth muscle contraction. Calponin expression is restricted to smooth muscle cells and has been shown to be a marker of the

differentiated (contractile) phenotype of developing smooth muscle.

This Calponin antibody complements a related Calponin 1 antibody targeting CNN1 and smooth muscle-associated contractile protein biology.

Application Notes

Optimal dilution of the Calponin 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

Immunogen

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

Storage

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

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