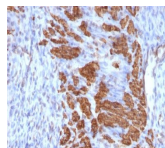


Calponin-1 Monoclonal Mouse Antibody (CALP + CNN1/832)



Product Description

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. 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. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. **Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0833, Anti-Calponin-1 (CALP CNN1/832)

Product attributes

Antibody number	#0833
Antibody reactivity (target)	Calponin-1
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	CALP + CNN1/832
Isotype	IgG's
Molecular weight	34 kDa
Synonyms	Calponin-1; CNN1; Calponin 1 basic smooth muscle; Calponin H1 smooth muscle
Human gene symbol	CNN1
Entrez gene ID	1264
SwissProt	P51911
Unigene	465929
Immunogen	Recombinant full-length human CNN1 protein (CNN1/832); Crude human uterus extract (CALP)
Verified antibody applications	Flow (intracellular) (verified), IF (verified), IHC (FFPE) (verified)
Antibody target cellular localization	Cytoskeleton
Species reactivity	Human, Rat
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 1-2 ug/mL, Immunohistochemistry formalin-fixed 0.5-1 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM Tris with 1 mM EDTA, pH 9.0, for 10-20 min followed by cooling at RT for 20 minutes, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user
Positive control	Myoepithelial cells in breast ducts or uterus
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Cytoskeleton
Cell/tissue expression	Smooth muscle

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405
BNC88	CF®488A	490/515	488	GFP, FITC
BNC68	CF®568	562/583	532, 561	RFP, TRITC
BNC94	CF®594	593/614	561	Texas Red®
BNC40	CF®640R	642/662	633-640	Cy®5
BNC47	CF®647	650/665	633-640	Cy®5
BNCB	Biotin	N/A	N/A	N/A
BNUB	Purified	N/A	N/A	N/A
BNUM	Purified, BSA-free	N/A	N/A	N/A

Dye Features

[CF®405S Features](#)

[CF®488A Features](#)

[CF®568 Features](#)

[CF®594 Features](#)

[CF®640R Features](#)

[CF®647 Features](#)

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