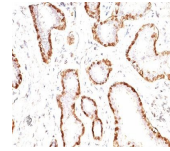


Calponin-1 Monoclonal Mouse Antibody (CNN1/832)



Calponin is a calmodulin, F-actin and tropomyosin binding protein, which is thought to be involved in the regulation of smooth muscle contraction. In Western blotting, this MAb reacts with only the 34 kDa form of calponin.

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 0832, Anti-Calponin-1 (CNN1/832)**

Antibody #	prefix	Conjugation	Ex/Em	Concentration	Storage Buffer
BNC04	CF®405S		404/431 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC05	CF®405M		408/452 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC06	CF®405L		395/545 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC88	CF®488A		490/515 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC14	CF®514		516/548 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC43	CF®543		541/560 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC55	CF®555		555/565 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC68	CF®568		562/583 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC94	CF®594		593/614 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC40	CF®640R		642/662 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC47	CF®647		650/665 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC60	CF®660C		667/685 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC61	CF®660R		663/682 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC80	CF®680		681/698 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC81	CF®680R		680/701 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC00	CF®700		695/720 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC70	CF®770		770/797 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNCR	R-PE (PE)		496, 546, 565/578 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNCA	APC		650/660 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNCP	PerCP		482/677 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNCB	Biotin	N/A		0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNCAP	Alkaline Phosphatase	N/A		0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNCH	Horse radish Peroxidase	N/A		0.1 mg/mL	PBS, 0.05% BSA, no azide
BNUB	Purified, with BSA	N/A		0.2 mg/mL	PBS, 0.05% BSA, 0.05% azide
BNUM	Purified, BSA-free	N/A		1 mg/mL	PBS, no BSA, no azide

References

Tang, D.C., et al. 1996. Structure-function relations of smooth muscle Calponin. The critical role of Serine 175. J. Biol. Chem. 271: 8605-8611. |

This datasheet was generated on January 26, 2021 at 04:11:10 PM. Visit product page to check for updated information before use. Product link: <https://biotium.com/product/monoclonal-anti-calponin-1-cnn1832/>

Product attributes

Antibody number	0832
Reactivity (target)	Calponin-1
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	CNN1/832
Isotype	IgG1, kappa
Molecular weight	34 kDa
Synonyms	Calponin 1 basic smooth muscle; Calponin H1 smooth muscle; Calponin-1; CNN1; Cnn1; Sm Calp; SMCC
Human gene symbol	CNN1
Entrez gene ID	1264
SwissProt	P51911
Unigene	465929
Immunogen	Recombinant human CNN1 protein
Cellular localization	Cytoplasmic
Species reactivity	Human, Rat
Applications	Immunofluorescence, Immunohistology (formalin), Flow cytometry
Application notes	Immunohistology 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, Immunofluorescence 1-2 ug/mL, Optimal dilution for a specific application should be determined by user
Positive control	Myoepithelial cells in breast ducts
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)
Research areas	Cytoskeleton
Cell/tissue expression	Smooth muscle