## **Calponin-1 Monoclonal Mouse Antibody** (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 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 <a href="mailto:order@biotium.com">order@biotium.com</a> to inquire about stock status and lead times before placing your order. **Catalog number key for antibody number 0832, Anti-Calponin-1 (CNN1/832)** 

Call us: 800-304-5357 Email: btinfo@biotium.com

requires boiling tissue sections in 10 mM	Product attributes				
target) Antibody type Primary Host species Mouse Clonality Monoclonal Clone CNN1/832 Isotype IgG1, kappa Molecular weight 34 kDa Synonyms Calponin-1; CNN1; Calponin 1 basic smooth muscle; Calponin H1 smooth muscle; Calponin H1 smooth muscle Human gene symbol CNN1 Entrez gene ID 1264 SwissProt P51911 Unigene 465929 Immunogen Recombinant human CNN1 protein IF (verified), IHC (FFPE) (verified) Cytoskeleton Iocalization Species reactivity 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, Isalining of formalin-fixed tissues requires boiling tissue sections in 10 mM bris with 1 mM EDTA, pH 9.0, for 10-20 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 Shipping condition Storage Conditions Storage Conditions  Storage Conditions For exearch use only (RUO) Antibody/conjugate formulation  Antibody research areas Cytoskelton	Antibody number	#0832			
Host species   Mouse	Antibody reactivity	Calponin-1			
Clonality Monoclonal Clone CNN1/832 Isotype IgG1, kappa 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 human CNN1 protein IF (verified), IHC (FFPE) (verified) Antibody target cellular localization Species reactivity Antibody application notes  Antibody application direct detection using primary antibody immunofluorescence: 1-2 ug/mL, Immunohistology formalin-fixed 0.5-1 ug/mL, Stalning of formalin-fixed tissues requires boiling issue sections in 10 mM ris with 1 mM EDTA, pH 9.0, for 10-20 minutes, Flow Cytometry 0.5-1 ug/millior cells/0.1 mL. Optimal dilution for a specific application should be determined by user  Positive control Myoepithelial cells in breast ducts Shipping condition Storage Conditions Storage Conditions  Stora 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  Antibody/conjugate formulation  Antibody/conjugate formulation  Antibody research areas Cytoskeleton	Antibody type	Primary			
Clone   CNN1/832   Isotype   IgG1, kappa   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 human CNN1 protein   If (verified), IHC (FFPE) (verified)   Antibody target cellular localization   Species reactivity   Antibody application   Higher concentration may be required for direct detection using primary antibody   Immunofluorescence: 1-2 ug/mL, Immunohistology formalin-fixed 0.5-1 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM   Iris with 1 mM EDTA, pH 9.0, for 10-20   minutes, Flow Cytometry 0.5-1 ug/millior cells/0.1 mL, Optimal dilution for a specific application should be determined by user   Positive control   Myoepithelial cells in breast ducts   Shipping condition   Storage Conditions   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   PBS/0.05% BSA/0.05% BSA/0.05% BSA/0.05% BSA/0.05% BSA/0.05% BSA/0.05% BSA/0.05% BSA/0.05% BSA/0.05% azide purified, BSA-free: 1 mg/mL in PBS without azide   Antibody research areas   Cytoskeleton	Host species	Mouse			
Isotype   IgG1, kappa	Clonality	Monoclonal			
Molecular weight   34 kDa	Clone	CNN1/832			
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 human CNN1 protein  IF (verified), IHC (FFPE) (verified)  Antibody target cellular localization Species reactivity  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, 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 tollowed 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  Shipping condition  Storage Conditions  Storage Conditions  Storage Conditions  Storage Conditions  Storage Conditions  Tore 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  Antibody research areas  Cytoskeleton	Isotype	IgG1, kappa			
## smooth muscle; Calponin H1 smooth muscle  ## Human gene symbol	Molecular weight	34 kDa			
Entrez gene ID  SwissProt  P51911  Unigene  465929  Immunogen  Recombinant human CNN1 protein  Verified antibody Antibody target cellular localization Species reactivity  Antibody application notes  Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofibiology formalin-fixed obs-1 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM Tris with 1 mM EDTA, pH 90, 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  Shipping condition  Storage Conditions  St	Synonyms	smooth muscle; Calponin H1 smooth			
SwissProt P51911  Unigene 465929  Immunogen Recombinant human CNN1 protein  Verified antibody IF (verified), IHC (FFPE) (verified)  Antibody target cellular localization Species reactivity  Antibody application notes  Antibody application and the secondary antibody on injugates than for indirect detection using primary antibody immunofluorescence: 1-2 ug/mL, lamunohistology formalin-fixed 0.5-1 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mW Tris with 1 mM EDTA, pH 9.0, for 10-20 min tollowed 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  Shipping condition  Storage Conditions  Torage Conditions  Storage Conditions  Storage Condition  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  Antibody research areas  Cytoskeleton	Human gene symbol	CNN1			
Unigene Immunogen Recombinant human CNN1 protein Verified antibody Antibody target cellular localization Species reactivity Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofibiology formalin-fixed 0.5-1 ug/mL, Staining of formalin-fixed 0.5-1 ug/mL, Staining of formalin-fixed discuss 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/millior cells/0.1 mL, Optimal dilution for a specific application should be determined by user  Positive control Mycepithelial cells in breast ducts  Shipping condition Storage Conditions Core 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  Antibody research areas  Cytoskeleton	Entrez gene ID	1264			
Immunogen   Recombinant human CNN1 protein	SwissProt	P51911			
Verified antibody Antibody target cellular localization Species reactivity  Antibody application notes  Antibody application notes  Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofilisology formallin-fixed 0.5-1 ug/mL, Immunofilisology formallin-fixed discusse 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  Shipping condition  Storage Conditions  To rea 12 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  Antibody/conjugate formulation  For search use only RSO.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	Unigene	465929			
Antibody target cellular localization Species reactivity  Antibody application notes  Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofilisology formallin-fixed 0.5-1 ug/mL, Immunofilisology formallin-fixed discusses 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/mllior cells/0.1 mL, Optimal dilution for a specific application should be determined by user  Positive control  Myoepithelial cells in breast ducts  Shipping condition  Storage Conditions  Tore 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  Antibody/conjugate formulation  For ing/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA, Purif	Immunogen	Recombinant human CNN1 protein			
Antibody target cellular localization Species reactivity  Antibody application notes  Human, Rat  Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, immunofluorescence: 1-2 ug/mL, limmunohistology formalin-fixed 0.5-1 ug/mL, staining of formalin-fixed dissues requires boiling tissue sections in 10 mM Tris with 1 mM EDTA, pH s.0, for 10-20 min followed by cooling at RT for 20 minutes, Flow Cytometry 0.5-1 ug/millior cells/0.1 mL, Optimal dilution for a specific application should be determined by user  Positive control  Myoepithelial cells in breast ducts  Shipping condition  Storage Conditions  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  Positive Conjugates: 0.1 mg/mL in PBS/0.1%  BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA/0.05% BS		IF (verified), IHC (FFPE) (verified)			
Species reactivity	Antibody target cellular localization	Cytoskeleton			
direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofiluorescence: 1-2 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 min followed by cooling at RT for 20 min followed by cooling at RT for 20 minutes, Flow Cytometry 0.5-1 ug/millior cells/0.1 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  Storage Conditions  Storage Conditions  Storage Conditions  Storage Conditions  Storage 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  For research use only (RUO)  Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HPP conjugates: 0.1 mg/mL in PBS/0.05% BSA/0.05% azide Purified, BSA-free: 1 mg/mL in PBS without azide  Antibody research areas  Cytoskeleton		Human, Rat			
Shipping condition  Storage Conditions  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/0.05% BSA, Purified: 0.2 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		direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 1-2 ug/mL, 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 tollowed 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			
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) Conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 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	Positive control	Myoepithelial cells in breast ducts			
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 SAV.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	Shipping condition	Room temperature			
date of receipt when stored as recommended  Regulatory status  For research use only (RUO)  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, 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	Storage Conditions	conjugates from light, Note: store			
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/0.05% BSA/	Shelf life	date of receipt when stored as			
formulation    SSÁ/Ö,05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/O,05% azide Purified, BSA-free: 1 mg/mL in PBS without azide   Antibody research areas   Cytoskeleton   Cytosk	Regulatory status	For research use only (RUO)			
•		BSÁ/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			
Cell/tissue expression Smooth muscle	Antibody research areas	Cytoskeleton			
	Cell/tissue expression	Smooth muscle			

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

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