abcam

Product datasheet

Anti-Calponin 1 antibody [EP798Y] - BSA and Azide free ab216651

リコンビナント RabMAb

38 References 画像数 16

製品の概要

製品名	Anti-Calponin 1 antibody [EP798Y] - BSA and Azide free
製品の詳細	Rabbit monoclonal [EP798Y] to Calponin 1 - BSA and Azide free
由来種	Rabbit
アプリケーション	**適用あり:** WB, ICC/IF, IHC-P **適用なし:** Flow Cyt
種交差性	**交差種:** Mouse, Rat, Human, Pig **交差が予測される動物種:** Sheep
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	Human bladder lysate; HeLa cells; Human smooth muscle tissue.
特記事項	ab216651 is the carrier-free version of **ab46794**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit

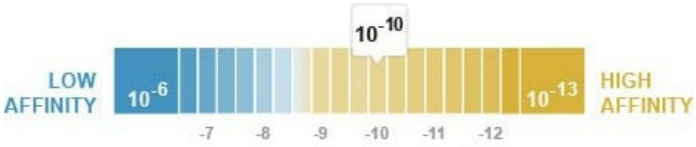
monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

解離定数（K_D 値） $K_D = 1.73 \times 10^{-10}$ M



Learn more about K_D

バッファー pH: 7.20
Constituent: PBS

キャリア・フリー はい

精製度 Protein A purified

ポリ/モノ モノクローナル

クローン名 EP798Y

アイソタイプ IgG

アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab216651の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		Use at an assay dependent concentration. Detects a band of approximately 34 kDa.
ICC/IF		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

追加情報 Is unsuitable for Flow Cyt.

ターゲット情報

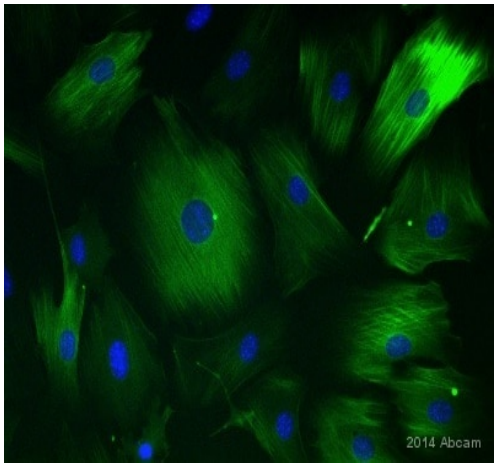
機能 Thin filament-associated protein that is implicated in the regulation and modulation of smooth muscle contraction. It is capable of binding to actin, calmodulin, troponin C and tropomyosin. The interaction of calponin with actin inhibits the actomyosin Mg-ATPase activity.

組織特異性 Smooth muscle, and tissues containing significant amounts of smooth muscle.

配列類似性 Belongs to the calponin family.

Contains 3 calponin-like repeats.
Contains 1 CH (calponin-homology) domain.

画像



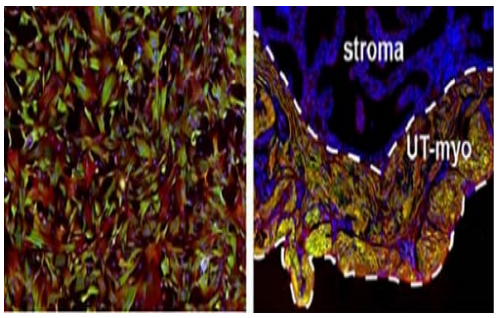
Immunocytochemistry/ Immunofluorescence - Anti-Calponin 1 antibody [EP798Y] - BSA and Azide free (ab216651)

Paraformadehyde-fixed, 0.25% Triton X-100 permeabilized mouse thoracic aortic smooth muscle cells labeling Calponin 1 using **ab46794** at 1/100 dilution in ICC/IF, followed by a Goat Anti-Rabbit IgG H&L (Alexa Fluor 488) (**ab150077**) at 1/400 dilution.

1.5% BSA used used as blocking agent for 30 minutes at 25°C. Incubated with primary antibody for 24 hours at 4°C.

VSMCs were seeded to 35-mm plates in a low density avoiding overlapping of cells. After fixation, VSMCs were treated with 0.25% Triton X-100 for 20 minutes.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab46794**).



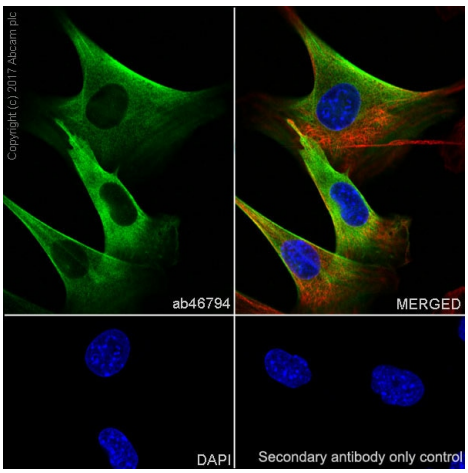
Immunocytochemistry/ Immunofluorescence - Anti-Calponin 1 antibody [EP798Y] - BSA and Azide free (ab216651)

Image from Herington et al PLoS One. 2015 Nov 24;10(11):e0143243. doi: 10.1371/journal.pone.0143243. eCollection 2015. Fig 1.

Representative photomicrograph of UT-myo cells (Left panel) and uterine myometrium (Right panel) stained with smooth muscle cell markers, alpha-SMA (red) and **ab46794** (green) and DAPI (blue). UT-myo cells and whole-mount uterine tissue were collected from day 19 of mouse pregnancy. The placenta and embryo were removed from whole-mount tissue sections.

For full details please see paper.

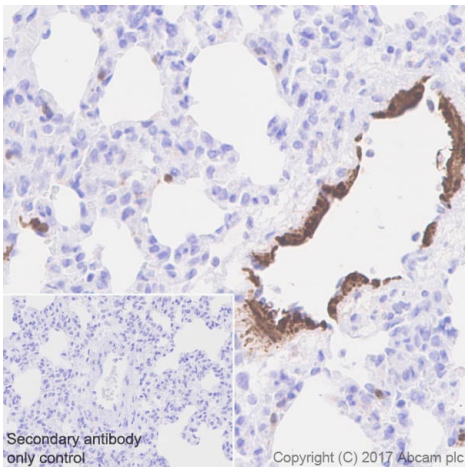
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab46794**).



Immunocytochemistry/ Immunofluorescence - Anti-Calponin 1 antibody [EP798Y] - BSA and Azide free (ab216651)

Immunocytochemistry/ Immunofluorescence analysis of C2C12 (Mouse myoblasts myoblast) cells labeling Calponin 1 with purified **ab46794** at 1:500 dilution. Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). **ab150077** Goat anti rabbit IgG(Alexa Fluor® 488) was used as the secondary antibody at 1:1000 dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab46794**).

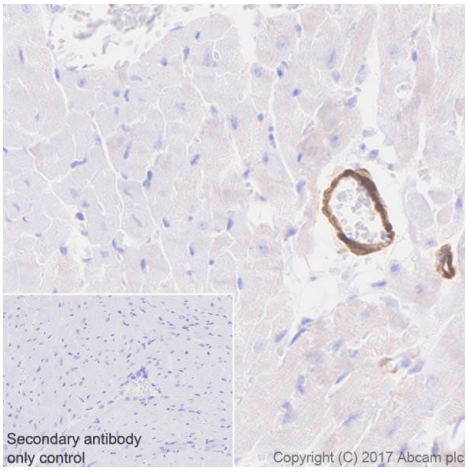


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Calponin 1 antibody [EP798Y] - BSA and Azide free (ab216651)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat lung tissue sections labeling Calponin 1 with purified **ab46794** at 1:1000 dilution. Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody.

PBS instead of the primary antibody was used as the negative control (inset).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab46794**).

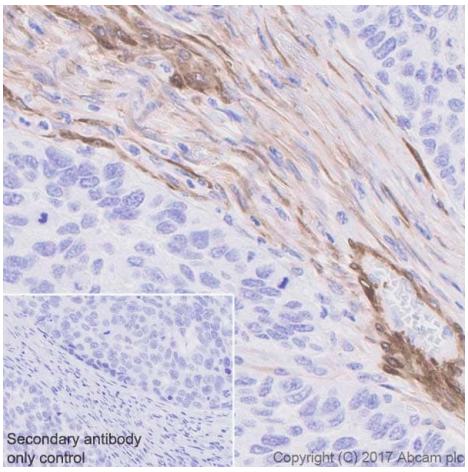


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Calponin 1 antibody [EP798Y] - BSA and Azide free (ab216651)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse cardiac muscle tissue sections labeling Calponin 1 with purified **ab46794** at 1:1000 dilution. Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used.

PBS instead of the primary antibody was used as the negative control (inset).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab46794**).

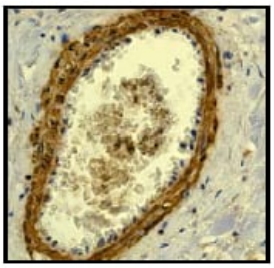


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Calponin 1 antibody [EP798Y] - BSA and Azide free (ab216651)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human lung carcinoma tissue sections labeling Calponin 1 with purified **ab46794** at a 1:1000 dilution. Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used.

PBS instead of the primary antibody was used as the negative control (inset).

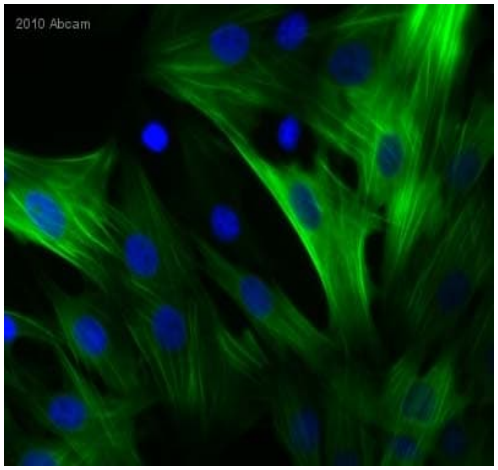
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab46794**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Calponin 1 antibody [EP798Y] - BSA and Azide free (ab216651)

Immunohistochemical staining of paraffin-embedded human smooth muscle using unpurified **ab46794** at 1/100 dilution

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab46794**).



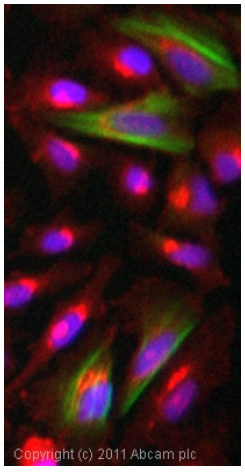
Immunocytochemistry/ Immunofluorescence - Anti-Calponin 1 antibody [EP798Y] - BSA and Azide free (ab216651)

This image is courtesy of an Abreview submitted by Jordan Carbary.

Unpurified **ab46794** staining Calponin in porcine aortic smooth muscle cells by Immunocytochemistry/ Immunofluorescence.

The cells were paraformaldehyde fixed, permeabilized in 0.1% Triton X-100. Samples were then incubated with primary antibody at 1/50 for 1 hour at 25°C. The secondary antibody used was **ab6717** Goat polyclonal to Rabbit IgG - H&L (FITC) (green) used at a 1/400 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab46794**).



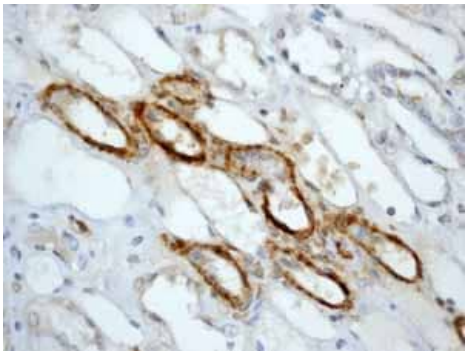
Immunocytochemistry/ Immunofluorescence - Anti-Calponin 1 antibody [EP798Y] - BSA and Azide free (ab216651)

ICC/IF image of unpurified **ab46794** stained HeLa (Human epithelial cell line from cervix adenocarcinoma) cells.

Cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilize the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (**ab46794**, 5µg/ml) overnight at +4°C. The secondary antibody (green) was DyLight® 488 goat anti-rabbit IgG - H&L, pre-adsorbed (**ab96899**) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and

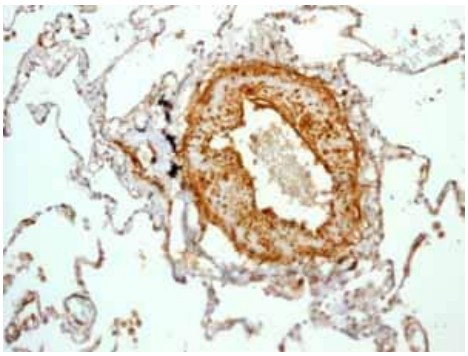
sodium azide (**ab46794**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Calponin 1 antibody [EP798Y] - BSA and Azide free (ab216651)

Unpurified **ab46794** showing positive staining in normal kidney vessels tissue.

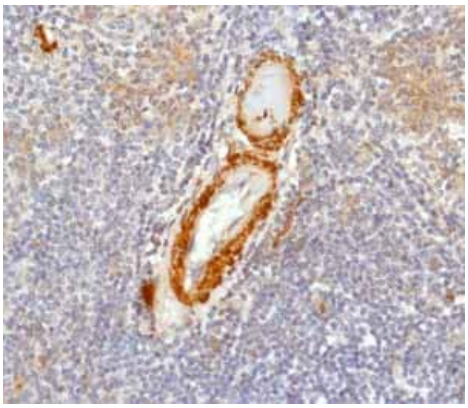
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab46794**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Calponin 1 antibody [EP798Y] - BSA and Azide free (ab216651)

Unpurified **ab46794** showing positive staining in normal lung vessel tissue.

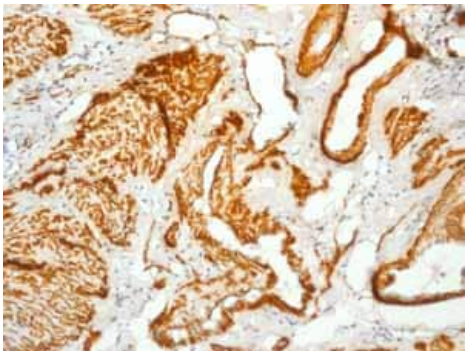
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab46794**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Calponin 1 antibody [EP798Y] - BSA and Azide free (ab216651)

Unpurified **ab46794** showing positive staining in normal tonsil vessel tissue.

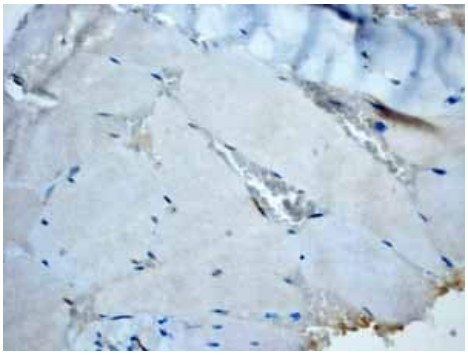
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab46794**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Calponin 1 antibody [EP798Y] - BSA and Azide free (ab216651)

Unpurified **ab46794** showing positive staining in normal uterus tissue.

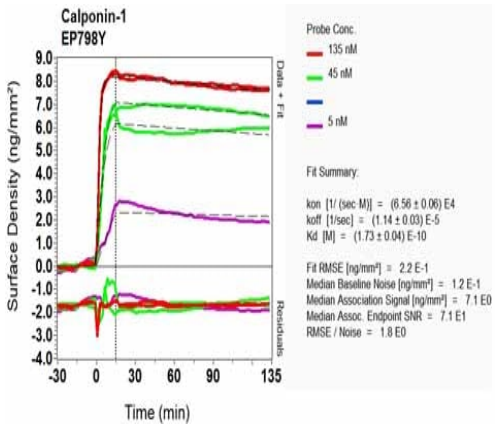
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab46794**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Calponin 1 antibody [EP798Y] - BSA and Azide free (ab216651)

Unpurified **ab46794** showing negative staining in skeletal muscle tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab46794**).



OI-RD Scanning - Anti-Calponin 1 antibody [EP798Y] - BSA and Azide free (ab216651)

Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab46794**).

Anti-Calponin 1 antibody [EP798Y] - BSA and Azide free (ab216651)

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