

Rabbit Anti-Calponin 1 antibody

SL0095R

Product Name Calponin 1

Chinese Name 钙调节蛋白-1 抗体

Alias Basic calponin; Calponin-1; Calponin 1 basic smooth muscle; Calponin H1 smooth muscle; Calponin1; Calponins basic; CNN 1; CNN1; Sm Calp; SMCC; CNN1_HUMAN; Calponin H1; Calponin1; Sm Calp; smooth muscle.

Research Area Cardiovascular Signal transduction Stem cells Cytoskeleton

Immunogen Species Rabbit

Clonality Polyclonal

React Species Human, Mouse, Rat, (predicted: Chicken, Dog, Pig, Cow, Sheep,)

Applications WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 33kDa

Cellular localization cytoplasmic

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human Calponin 1: 201-297/297

Lsotype IgG

Purification affinity purified by Protein A

Buffer Solution 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

PubMed [PubMed](#)

Predicted to enable actin binding activity. Involved in negative regulation of vascular associated smooth muscle cell proliferation. Located in cytoskeleton. [provided by Alliance of Genome Resources, Nov 2021]

Function:

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 (By similarity).

Subunit:

Part of cGMP kinase signaling complex at least composed of ACTA2/alpha-actin, CNN1/calponin H1, PLN/phospholamban, PRKG1 and ITPR1.

Tissue Specificity:

Smooth muscle, and tissues containing significant amounts of smooth muscle.

Similarity:

Belongs to the calponin family.

Contains 3 calponin-like repeats.

Contains 1 CH (calponin-homology) domain.

**Product
Detail**

SWISS:

P51911

Gene ID:

1264

Database links:

[Entrez Gene: 1264](#) Human

[Entrez Gene: 484937](#) Dog

[Entrez Gene: 12797](#) Mouse

[Entrez Gene: 396911](#) Pig

[Entrez Gene: 65204](#) Rat

[Omim: 600806](#) Human

[SwissProt: P51911](#) Human

[SwissProt: Q08091](#) Mouse

[SwissProt: Q08092](#) Pig

[SwissProt: Q08290](#) Rat

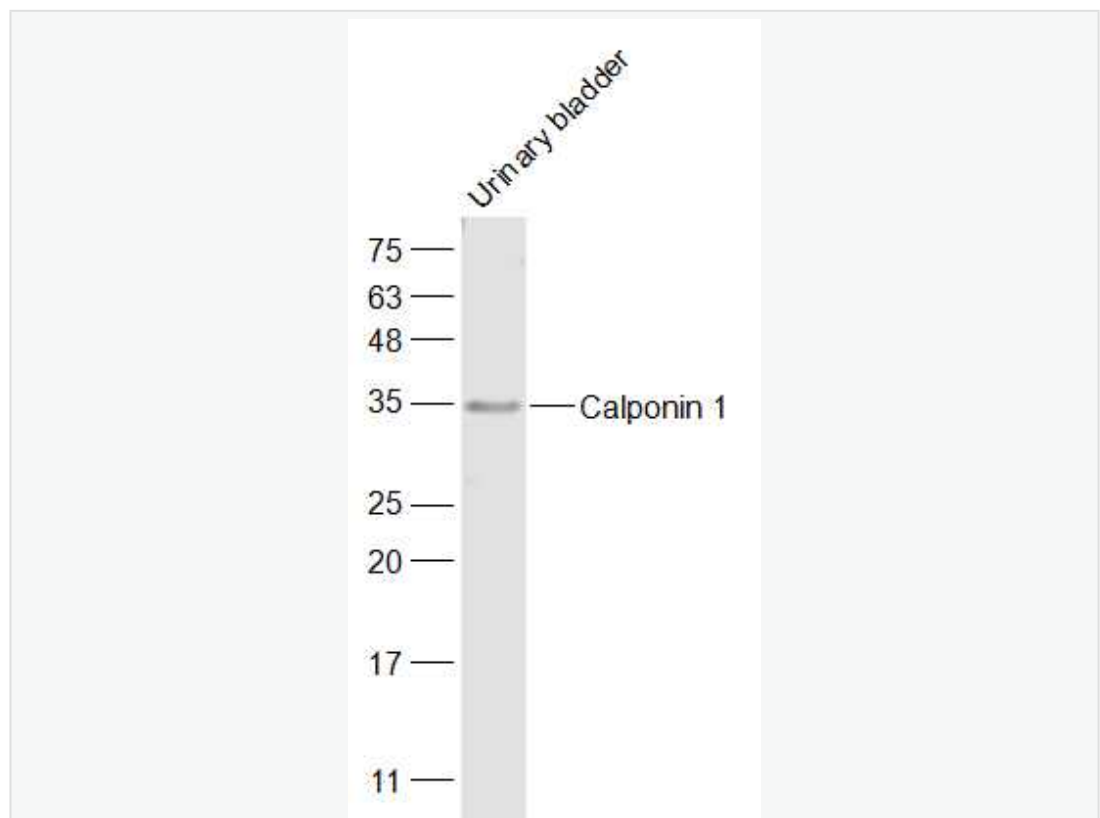
[Unigene: 465929](#) Human

[Unigene: 4356](#) Mouse

[Unigene: 31788](#) Rat

Calponin1 是一种激动蛋白 Binding protein，是平滑肌特有的一种蛋白，可以与肌动蛋白、原肌球蛋白和钙调素结合,具有抑制平滑肌细胞收缩的功能，主要用于平滑肌 Tumour 和乳腺等组织中的肌 epithelial cells 分布的研究。

**Product
Picture**



Sample:

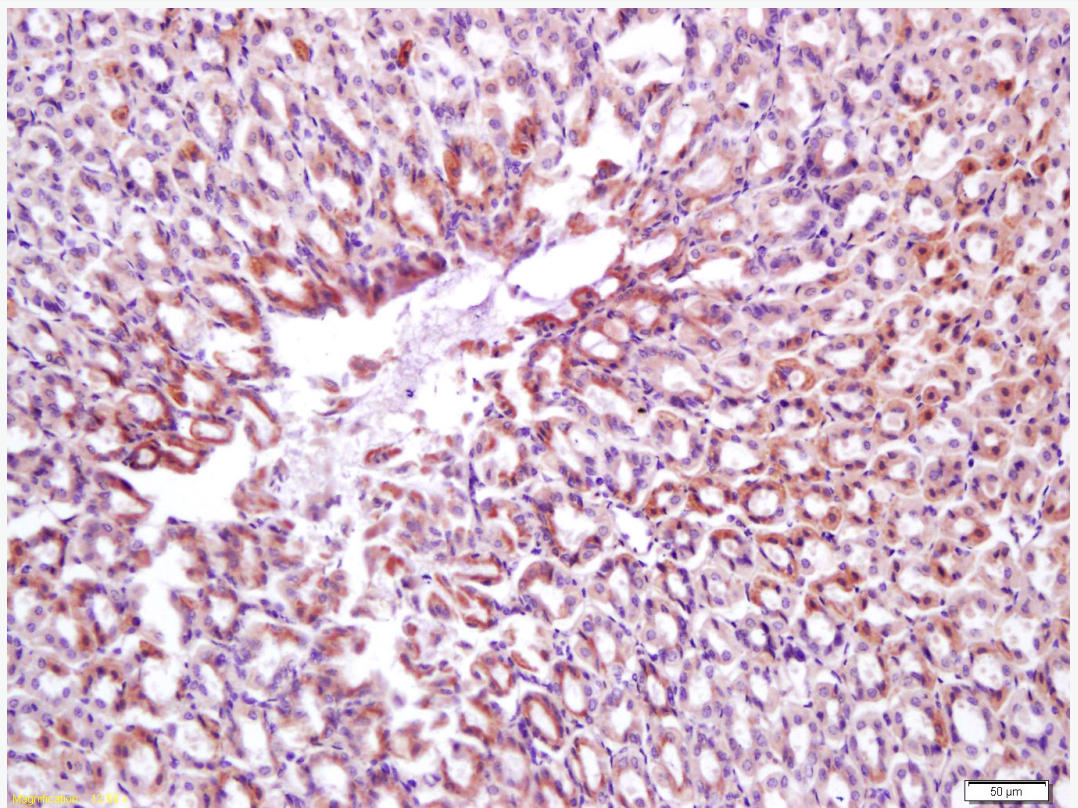
Urinary bladder (Mouse) Lysate at 40 ug

Primary: Anti-Calponin 1 (SL0095R) at 1/500 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 33 kD

Observed band size: 33 kD

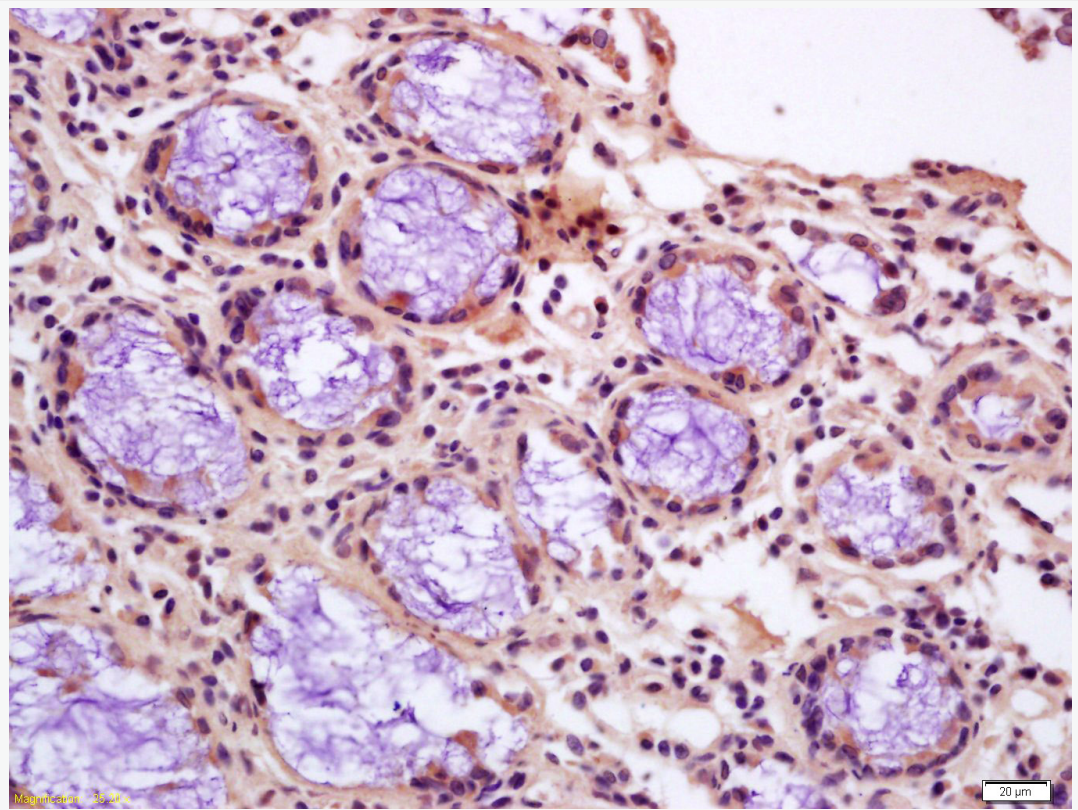


Tissue/cell: mouse stomach tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-Calponin 1 Polyclonal Antibody, Unconjugated(SL0095R) 1:200, overnight at 4°C, followed by conjugation to the secondary

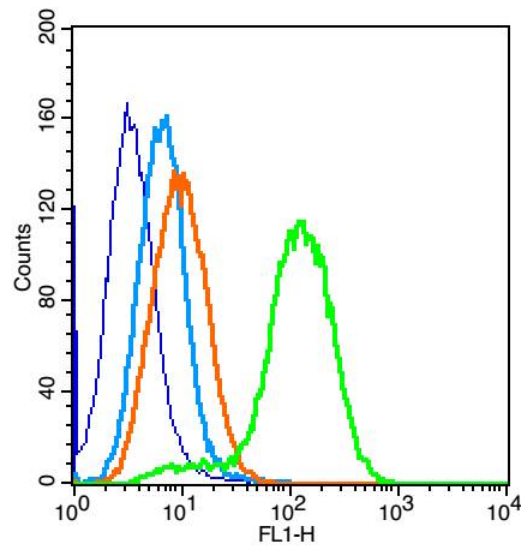
antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: human gastric carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-Calponin 1 Polyclonal Antibody, Unconjugated(SL0095R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



| Key | Name | Parameter | Gate |
|-----|-------------------------------|-----------|------|
| — | H9C2-blank.039 | FL1-H | G1 |
| — | bs-0295G-FITC(CST)-H9C2-1.040 | FL1-H | G1 |
| — | bs-0295P-(FITC)-H9C2-1.041 | FL1-H | G1 |
| — | bs-0095R-(FITC)-H9C2-1.047 | FL1-H | G1 |

Positive control: H9C2(2% Paraformaldehyde-fixed)

Isotype Control Antibody

Antibody: Rabbit IgG; Dilution: 1 μ g in 100 μ l 1 X PBS containing 0.5% BSA

Secondary Antibody

Antibody: Goat anti-rabbit IgG-FITC; Dilution: 1:200 in 1 X PBS containing 0.5% BSA

Primary Antibody

Supplier catalog number: SL0095R; Dilution: 1 μ g in 100 μ l 1X PBS containing 0.5% BSA