

Anti-Calponin CNN1 Rabbit Monoclonal Antibody

Catalog # ABO13916

Specification

Anti-Calponin CNN1 Rabbit Monoclonal Antibody - Product Information

WB, IHC, IF, ICC Application **Primary Accession** P51911 Rabbit Host Isotype **Rabbit IgG** Reactivity Rat, Human, Mouse Clonality Monoclonal Format Liquid Description Anti-Calponin CNN1 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF applications. This antibody reacts with Human, Mouse, Rat.

Anti-Calponin CNN1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 1264

Other Names Calponin-1, Basic calponin, Calponin H1, smooth muscle, CNN1

Calculated MW 33170 MW KDa

Application Details WB 1:500-1:2000
IHC 1:50-1:200
ICC/IF 1:50-1:200

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

Contents Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human Calponin

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-Calponin CNN1 Rabbit Monoclonal Antibody - Protein Information



Name CNN1

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 and tropomyosin. The interaction of calponin with actin inhibits the actomyosin Mg-ATPase activity (By similarity).

Tissue Location

Smooth muscle, and tissues containing significant amounts of smooth muscle

Anti-Calponin CNN1 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Calponin CNN1 Rabbit Monoclonal Antibody - Images



All lanes use the Antibody at 1:1W dilution for 1 hour at room temperature.





IHC analysis of Calponin using anti-Calponin antibody (M08065-1).

Calponin was detected in a paraffin-embedded section of human appendicitis tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-Calponin Antibody (M08065-1) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



Figure 1. Western blot analysis of CNN1 using anti-CNN1 antibody (M08065-1).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human MCF-7 whole cell lysates,

Lane 2: human K562 whole cell lysates,

Lane 3: human U20S whole cell lysates,

Lane 4: human Caco-2 whole cell lysates,

Lane 5: mouse stomach tissue lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CNN1 antigen affinity purified monoclonal antibody (Catalog # M08065-1) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit



(Catalog # EK1002) with Tanon 5200 system. A specific band was detected for CNN1 at approximately 35 kDa. The expected band size for CNN1 is at 33 kDa.