

Anti-Calponin Antibody

Catalog # ABO11534

Specification

Anti-Calponin Antibody - Product Information

ApplicationWB, IHC-PPrimary AccessionP51911HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Calponin-1(CNN1) detection. Tested with WB, IHC-P inHuman;Mouse;Rat.Human;Mouse;Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Calponin Antibody - Additional Information

Gene ID 1264

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

Calculated MW 33170 MW KDa

Application Details Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

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

Protein Name Calponin-1

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen A synthetic peptide corresponding to a sequence at the C-terminus of human Calponin(283-297aa EPAHNHHAHNYYNSA), different from the related mouse and rat sequences by two amino acids.

Purification Immunogen affinity purified.

Cross Reactivity



No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the calponin family.

Anti-Calponin 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 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
- <u>Flow Cytomety</u>
- <u>Cell Culture</u>

Anti-Calponin Antibody - Images



Anti-Calponin antibody, ABO11534, IHC(P)IHC(P): Human Placenta Tissue





Anti-Calponin antibody, ABO11534,Western blottingAll lanes: Anti -Calponin (ABO11534) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: JURKAT Whole Cell Lysate at 40ugLane 3: MCF-7 Whole Cell Lysate at 40ugPredicted bind size: 33KDObserved bind size: 33KD

Anti-Calponin Antibody - Background

Calponin is a basic 34-kD protein first isolated from chicken gizzard and bovine aorta. This gene is mapped to 19p13.2. It is specifically expressed in smooth muscle and binds calmodulin, actin, and tropomyosin. It is able to inhibit the ATPase activity of myosin and is though to play a role in smooth muscle contraction. Calponin is a smooth muscle specific, actin-, tropomyosin- and calmodulin-binding protein though to be involved in some way in the regulation or modulation of contraction.