

Recombinant Calponin-1 Monoclonal Antibody

catalog number: AN301341L

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

Reactivity	Human;Mouse;Rat
Immunogen	Recombinant Human Calponin-1 protein
Host	Rabbit
Isotype	IgG,k
Clone	B1108
Purification	Protein A
Buffer	PBS, 50% glycerol, 0.05% Proclin 300, 0.05% protein protectant.

Applications

Recommended Dilution

WB	1:2000-1:10000
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Data



Western Blot with Recombinant Calponin-1 Monoclonal Antibody at dilution of 1:1000 dilution. Lane A: Rat lung cell lysate.

Observed-MW:33 kDa

Calculated-MW:33 kDa

Preparation & Storage

Storage	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
Shipping	Ice bag

Background

CNN-1 (Calponin 1 [calcium and calmodulin-binding troponin T-like protein], also Calponin basic, CaP and Calponin H1) is a 32-36 kDa cytoplasmic member of the calponin family of proteins. Although reportedly expressed in fibroblasts and endothelial cells, it actually appears to be restricted to smooth muscle and smooth muscle-like cells such as myoepithelium and myofibroblasts in the adult. CNN-1 interacts with F-actin in a phosphorylation-dependent manner. When nonphosphorylated, CNN-1 blocks actomyosin ATPase activity, contributing to the stabilization of actin stress fiber bundles. Thus, CNN-1 expression inhibits cell motility and the formation of podosomes. Human CNN-1 is 297 amino acids (aa) in length. It contains one CH/calponin homology domain (aa 30-127), and three consecutive calponin-like repeats (aa 164-268). The repeats are suggested to mediate actin binding. There are five potential Ser/Thr phosphorylation sites. Full-length human CNN-1 shares 97% aa sequence identity with mouse CNN-1.

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