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antibody and ELISA experts

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888-466-3604 | support@bosterbio.com | www.bosterbio.com

# Anti-Calponin 2/CNN2 Antibody Picoband™

**Catalog Number:** A08680-2

## About CNN2

Calponin 2 is a protein that in humans is encoded by the CNN2 gene. The protein encoded by this gene, which can bind actin, calmodulin, troponin C, and tropomyosin, may function in the structural organization of actin filaments. The encoded protein could play a role in smooth muscle contraction and cell adhesion. Several pseudogenes of this gene have been identified, and are present on chromosomes 1, 2, 3, 6, 9, 11, 13, 15, 16, 21 and 22. Alternative splicing results in multiple transcript variants encoding different isoforms.

## Overview

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| Product Name | Anti-Calponin 2/CNN2 Antibody Picoband™ |
| Reactive Species | Human |
| Description | Boster Bio Anti-Calponin 2/CNN2 Antibody Picoband™ catalog # A08680-2. Tested in Flow Cytometry, IHC, WB applications. This antibody reacts with Human. |
| Application | Flow Cytometry, IHC, WB |
| Clonality | Polyclonal |
| Formulation | Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4. |
| Storage Instructions | At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing. |
| Host | Rabbit |
| Uniprot ID | Q99439 |

## Technical Details

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| Immunogen | A synthetic peptide corresponding to a sequence at the C-terminus of human Calponin 2/CNN2, which shares 75% amino acid (aa) sequence identity with mouse CNN2. |
| Recommended Detection Systems | Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P). |
| Cross Reactivity | No cross-reactivity with other proteins. |
| Isotype | Rabbit IgG |
| Form | Lyophilized |
| Concentration | Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. |
| Purification | Immunogen affinity purified. |

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| Suggested Dilutions | Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.<br>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.<br>Some PubMed article(s) citing the expression level of this target are as follows:<br>Boster Bio's internal QC testing used:<br>Western blot, 0.1-0.25 ug/ml, Human<br>Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Human<br>Flow Cytometry, 1-3 ug/1x$10^6$ cells, Human |

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# Anti-Calponin 2/CNN2 Antibody Picoband™ (A08680-2) Images

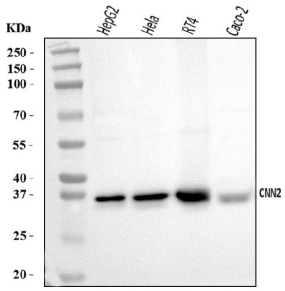


Figure 1. Western blot analysis of Calponin 2/CNN2 using anti-Calponin 2/CNN2 antibody (A08680-2).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human HepG2 whole cell lysates,
Lane 2: human Hela whole cell lysates,
Lane 3: human RT4 whole cell lysates,
Lane 4: human Caco-2 whole cell 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-Calponin 2/CNN2 antigen affinity purified polyclonal antibody (Catalog # A08680-2) at 0.25 ug/mL 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 Calponin 2/CNN2 at approximately 34 kDa. The expected band size for Calponin 2/CNN2 is at 34 kDa.

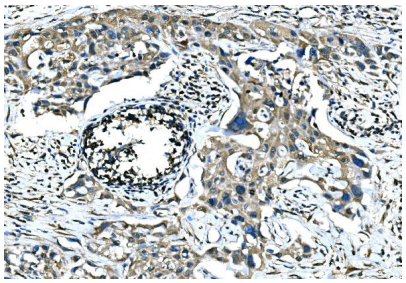

Figure 2. IHC analysis of Calponin 2/CNN2 using anti-Calponin 2/CNN2 antibody (A08680-2).
Calponin 2/CNN2 was detected in a paraffin-embedded section of human tonsil tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Calponin 2/CNN2 Antibody (A08680-2) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

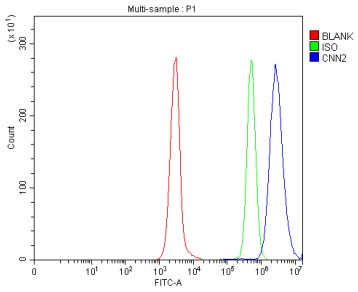


Figure 3. Flow Cytometry analysis of Daudi cells using anti-Calponin 2/CNN2 antibody (A08680-2).
Overlay histogram showing Daudi cells stained with A08680-2 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Calponin 2/CNN2 Antibody (A08680-2, 1 ug/1x$10^6$ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x$10^6$ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x$10^6$) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

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