

Anti-Caspase-9/CASP9 Antibody Picoband™

Catalog Number: A00080-8

About CASP9

CASP9 is also known as MCH6 or APAF3. This gene encodes a member of the cysteine-aspartic acid protease (caspase) family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes which undergo proteolytic processing at conserved aspartic residues to produce two subunits, large and small, that dimerize to form the active enzyme. This protein can undergo autoproteolytic processing and activation by the apoptosome, a protein complex of cytochrome c and the apoptotic peptidase activating factor 1; this step is thought to be one of the earliest in the caspase activation cascade. This protein is thought to play a central role in apoptosis and to be a tumor suppressor. Alternative splicing results in multiple transcript variants.

Overview

Product Name	Anti-Caspase-9/CASP9 Antibody Picoband™
Reactive Species	Human
Description	Boster Bio Anti-Caspase-9/CASP9 Antibody Picoband™ catalog # A00080-8. Tested in ELISA, Flow Cytometry, WB applications. This antibody reacts with Human.
Application	ELISA, Flow Cytometry, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
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	P55211

Technical Details

Immunogen	E.coli-derived human Caspase-9/CASP9 recombinant protein (Position: D53-N268).
Predicted Reactive Species	Chicken
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
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.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Western blot, 0.25-0.5 ug/ml, Human Flow Cytometry, 1-3 ug/1x10⁶ cells, Human Direct ELISA, 0.1-0.5 ug/ml, Human

Anti-Caspase-9/CASP9 Antibody Picoband™ (A00080-8) Images

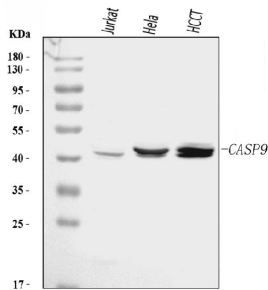


Figure 1. Western blot analysis of Caspase-9/CASP9 using anti-Caspase-9/CASP9 antibody (A00080-8). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Jurkat whole cell lysates,

Lane 2: human Hela whole cell lysates,

Lane 3: human HCCT 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-Caspase-9/CASP9 antigen affinity purified polyclonal antibody (Catalog # A00080-8) at 0.5 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 Caspase-9/CASP9 at approximately 46 kDa. The expected band size for Caspase-9/CASP9 is at 46 kDa.

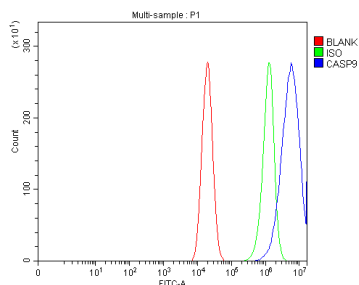


Figure 2. Flow Cytometry analysis of Caco-2 cells using anti-Caspase-9/CASP9 antibody (A00080-8).

Overlay histogram showing Caco-2 cells stained with A00080-8 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Caspase-9/CASP9 Antibody (A00080-8, 1 ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

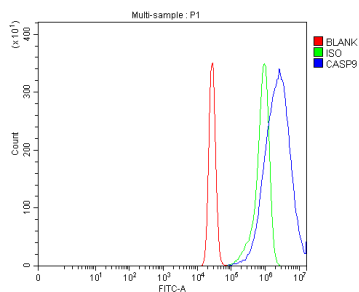


Figure 3. Flow Cytometry analysis of K562 cells using anti-Caspase-9/CASP9 antibody (A00080-8).

Overlay histogram showing K562 cells stained with A00080-8 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Caspase-9/CASP9 Antibody (A00080-8, 1 ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

1. PubMed ID: 10.3892/or.2011.1163, GRObeta and its downstream effector EGR1 regulate cisplatin-induced apoptosis in WHCO1 cells
2. PubMed ID: 10.1248/bpb.b13-00794, Involvement of substance P/neurokinin-1 receptor in the analgesic and anticancer activities of minimally toxic fraction from the traditional Chinese medicine Liu-Shen-Wan in vitro
3. PubMed ID: 10.1186/1556-276X-9-319, In vivo and in vitro evaluation of the cytotoxic effects of Photosan-loaded hollow silica nanoparticles on liver cancer

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