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antibody and ELISA experts

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Anti-Caspase 8/CASP8 Antibody

Catalog Number: A00042

About CASP8

CASP8 is also known as CAP4, MACH or MCH5. 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 composed of a prodomain, a large protease subunit, and a small protease subunit. Activation of caspases requires proteolytic processing at conserved internal aspartic residues to generate a heterodimeric enzyme consisting of the large and small subunits. This protein is involved in the programmed cell death induced by Fas and various apoptotic stimuli. The N-terminal FADD-like death effector domain of this protein suggests that it may interact with Fas-interacting protein FADD. In addtion, this protein was detected in the insoluble fraction of the affected brain region from Huntington disease patients but not in those from normal controls, which implicated the role in neurodegenerative diseases. Many alternatively spliced transcript variants encoding different isoforms have been described, although not all variants have had their full-length sequences determined.

Overview

Product Name	Anti-Caspase 8/CASP8 Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Caspase 8/CASP8 Antibody (Catalog # A00042). Tested in Flow Cytometry, IHC, ICC, IHC-F, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	Flow Cytometry, IHC, IHC-F, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg NaN3.
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	Q14790

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human Caspase 8, different from the related mouse and rat sequences by seven amino acids.
Predicted Reactive Species	Chicken
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) and ICC.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG

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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, 0.1-0.5 ug/ml, Human, Mouse, Rat Immunohistochemistry(Paraffin-embedded Section), 0.5-1 ug/ml, Human, Mouse, Rat, By Heat Immunohistochemistry(Frozen Section), 0.5-1 ug/ml, Human Immunocytochemistry, 0.5-1 ug/ml, Human Flow Cytometry, 1-3 ug/1x10^6 cells, Human

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Anti-Caspase 8/CASP8 Antibody (A00042) Images

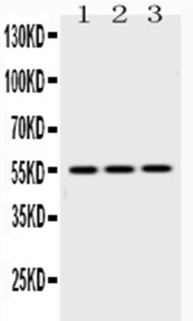

Figure 1. Western blot analysis of Caspase8 using anti-Caspase8 antibody (A00042).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: rat liver tissue lysates,
Lane 2: mouse liver tissue lysates,
Lane 3: HEPG2 whole cell lysates.
After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA 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-Caspase8 antigen affinity purified polyclonal antibody (Catalog # A00042) 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 1:10000 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 Caspase8 at approximately 55KD. The expected band size for Caspase8 is at 55KD.

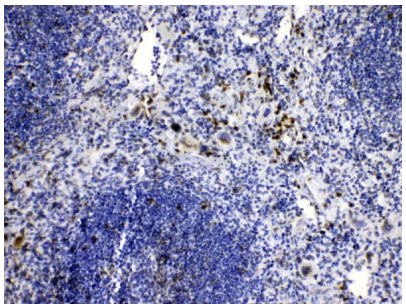

Figure 2. IHC analysis of Caspase8 using anti-Caspase8 antibody (A00042).
Caspase8 was detected in paraffin-embedded section of mouse spleen tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Caspase8 Antibody (A00042) 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.

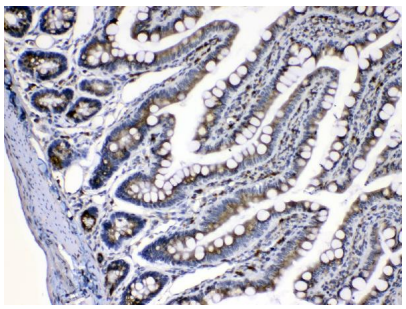

Figure 3. IHC analysis of Caspase8 using anti-Caspase8 antibody (A00042).
Caspase8 was detected in paraffin-embedded section of rat intestine tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Caspase8 Antibody (A00042) 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 4. IHC analysis of Caspase8 using anti-Caspase8 antibody (A00042).

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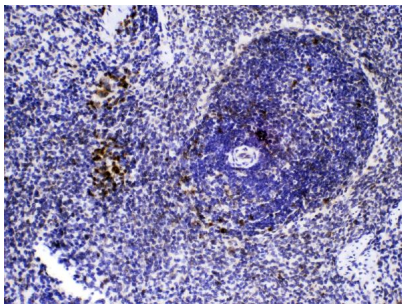

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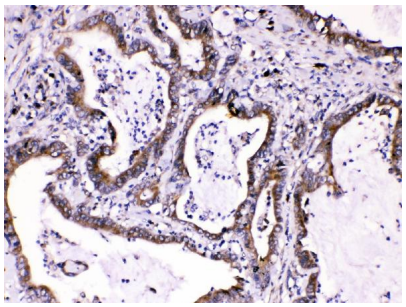

Figure 5. IHC analysis of Caspase8 using anti-Caspase8 antibody (A00042).
Caspase8 was detected in paraffin-embedded section of human intestinal cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Caspase8 Antibody (A00042) 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.

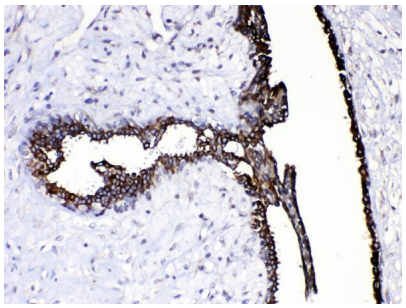

Figure 6. IHC analysis of Caspase8 using anti-Caspase8 antibody (A00042).
Caspase8 was detected in paraffin-embedded section of human mammary cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Caspase8 Antibody (A00042) 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.

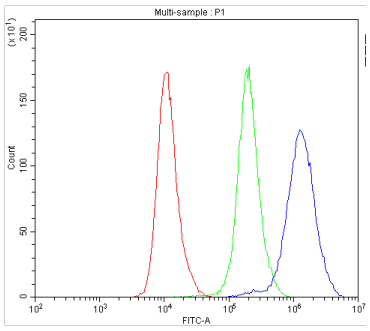

Figure 7. Flow Cytometry analysis of PC-3 cells using anti-CASP8 antibody (A00042).
Overlay histogram showing PC-3 cells stained with A00042 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CASP8 Antibody (A00042,1ug/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

Figure 8. Flow Cytometry analysis of Hela cells using anti-CASP8 antibody (A00042).
Overlay histogram showing Hela cells stained with A00042 (Blue line).The cells were blocked with 10% normal goat

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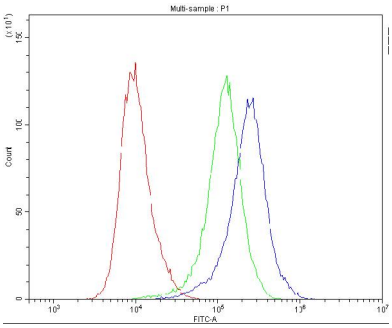

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31 Publications Citing This Product

1. PubMed ID: 10.1177/1934578X1200700826, Muscone Exerts Neuroprotection in an Experimental Model of Stroke via Inhibition of the Fas Pathway:

2. PubMed ID: 10.3892/or.2017.5395, Calcium release induced by 2-pyridinecarboxaldehyde thiosemicarbazone and its copper complex contributes to tumor cell death

3. PubMed ID: PMID:28559975, Inhibition of glioblastoma growth and invasion by 125I brachytherapy in rat glioma model

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