

Anti-Caspase 8/CASP8 Antibody Picoband™

Catalog Number: A00042-1

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 addition, 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 Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Caspase 8/CASP8 Antibody Picoband™ catalog # A00042-1. Tested in ELISA, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	ELISA, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Storage Instructions	Store 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 freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q14790

Technical Details

Immunogen	E. coli-derived human Caspase 8 recombinant protein (Position: Q389-D479).
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.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Western blot, 0.1-0.5ug/ml</p> <p>Direct ELISA, 0.1-0.5ug/ml</p>

Anti-Caspase 8/CASP8 Antibody Picoband™ (A00042-1) Images

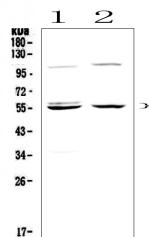


Figure 1. Western blot analysis of Caspase 8 using anti-Caspase 8 antibody (A00042-1). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: human Hela whole cell lysates,
Lane 2: human SGC-7901 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-Caspase 8 antigen affinity purified polyclonal antibody (Catalog # A00042-1) 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 Caspase 8 at approximately 55KD. The expected band size for Caspase 8 is at 55KD.

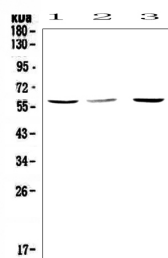


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Lane 1: rat thymus tissue lysates,
Lane 2: mouse spleen tissue lysates,
Lane 3: mouse thymus tissue lysates.
After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Caspase 8 antigen affinity purified polyclonal antibody (Catalog # A00042-1) 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 Caspase 8 at approximately 55-60KD. The expected band size for Caspase 8 is at 55KD.

8 Publications Citing This Product

1. PubMed ID: 33392195, Zhou L,Yu W,Jayabalan DS,Niesvizky R,Jaffrey SR,Huang X,Xu G.Caspase-8 Inhibition Prevents the Cleavage and Degradation of E3 Ligase Substrate Receptor Cereblon and Potentiates Its Biological Function.Front Cell Dev Biol.2020 Dec 17;8:605989.doi:10.3389/f

2. PubMed ID: 28032492, Croton Tiglium Extract Induces Apoptosis via Bax/Bcl-2 Pathways in Human Lung Cancer A549 Cells

3. PubMed ID: 26552967, 2-DG-Regulated RIP and c-FLIP Effect on Liver Cancer Cell Apoptosis Induced by TRAIL

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