

# Anti-Caspase-10/CASP10 Antibody Picoband™

Catalog Number: A02190-2

#### **About CASP10**

Caspase-10 is an enzyme that, in humans, is encoded by the CASP10 gene. The Caspase 10 gene contains 11 exons and spans about 48 kb. This gene is mapped to 2q33.1. It is transcribed in the centromere-to-telomere direction. This gene encodes a protein that is 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 that undergo proteolytic processing at conserved aspartic residues to produce two subunits, large and small, that dimerize to form the active enzyme. This protein cleaves and activates caspases 3 and 7, and the protein itself is processed by caspase 8. Mutations in this gene are associated with apoptosis defects seen in type II autoimmune lymphoproliferative syndrome. Three alternatively spliced transcript variants encoding different isoforms have been described for this gene.

#### Overview

Product Name	Anti-Caspase-10/CASP10 Antibody Picoband™
Reactive Species	Human
Description	Boster Bio Anti-Caspase-10/CASP10 Antibody Picoband™ catalog # A02190-2. 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 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	Q92851

## **Technical Details**

Immunogen	E.coli-derived human Caspase-10/CASP10 recombinant protein (Position: K271-E482).
Predicted Reactive Species	Human
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





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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/1x10 <sup>6</sup> cells, Human  Direct ELISA, 0.1-0.5 ug/ml, Human



### Anti-Caspase-10/CASP10 Antibody Picoband™ (A02190-2) Images

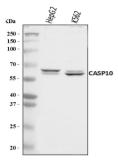


Figure 1. Western blot analysis of Caspase-10/CASP10 using anti-Caspase-10/CASP10 antibody (A02190-2). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HepG2 whole cell lysates,

Lane 2: human K562 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-Caspase-10/CASP10 antigen affinity purified polyclonal antibody (Catalog # A02190-2) 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-10/CASP10 at approximately 59 kDa. The expected band size for Caspase-10/CASP10 is at 59 kDa.

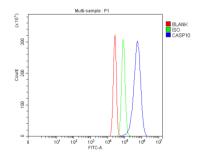


Figure 2. Flow Cytometry analysis of SiHa cells using anti-Caspase-10/CASP10 antibody (A02190-2). Overlay histogram showing SiHa cells stained with A02190-2 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Caspase-10/CASP10 Antibody (A02190-2, 1 ug/1x10 $^6$  cells) for 30 min at 20°C. DyLight® 488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10 $^6$  cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10 $^6$ ) used under the same conditions. Unlabelled sample (Red line) was also used as a control

# 1 Publications Citing This Product

 $1. \ PubMed\ ID: 10.1097/CEJ. 0b013e3283431c08, Profile\ of\ protein\ expression\ of\ the\ colon\ cancer\ cell\ line\ SW480\ with\ survivin/shRNA$ 

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