

Anti-APAF1 Antibody Picoband®

Catalog Number: A00889-2

About APAF1

Apoptotic peptidase activating factor 1, also known as APAF1, is a protein which in humans is encoded by the APAF1 gene. This gene is mapped to chromosome 12q23. It encodes a cytoplasmic protein that initiates apoptosis. And it is an essential downstream effector of p53-mediated apoptosis. This protein contains several copies of the WD40 repeat domain, a caspase recruitment domain(CARD), and an ATPase domain(NB-ARC). In the presence of cytochrome c and dATP, APAF1 assembles into an oligomeric apoptosome, which is responsible for activation of procaspase-9 and maintenance of the enzymatic activity of processed caspase-9. Furthermore, APAF1 is inactivated in metastatic melanomas, leading to defects in the execution of apoptotic cell death. Additionally, APAF1 has been shown to interact with NLRP1, Caspase-9, APIP, BCL2-like 1 and HSPA4.

Overview

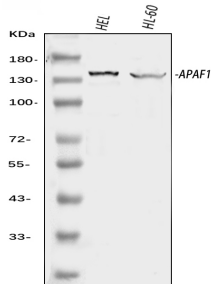
Product Name	Anti-APAF1 Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-APAF1 Antibody Picoband® catalog # A00889-2. Tested in ELISA, Flow Cytometry, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
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	O14727

Technical Details

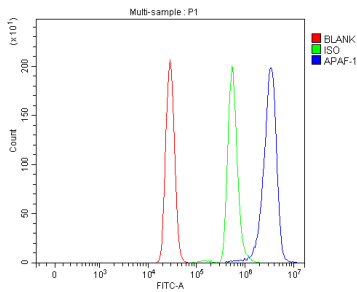
Immunogen	E.coli-derived human APAF1 recombinant protein (Position: M1-E1248).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG

Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Human Flow Cytometry (Fixed), 1-3 ug/1x10 ⁶ cells, Human ELISA, 0.1-0.5 ug/ml, -

Anti-APAF1 Antibody Picoband® (A00889-2) Images



Western blot analysis of APAF1 using anti-APAF1 antibody (A00889-2). 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 HEL whole cell lysates, Lane 2: human HL-60 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-APAF1 antigen affinity purified polyclonal antibody (Catalog # A00889-2) 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 APAF1 at approximately 135 kDa. The expected band size for APAF1 is at 135 kDa.



Flow Cytometry analysis of U937 cells using anti-APAF1 antibody (A00889-2). Overlay histogram showing U937 cells stained with A00889-2 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-APAF1 Antibody (A00889-2, 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 without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

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Anti-APAF1 Antibody

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