

Anti-TP53BP1 Antibody Picoband®

Catalog Number: A00397-1

About TP53BP1

TP53BP1 (Tumor Protein p53-Binding Protein 1), also called 53BP1, is a protein that in humans is encoded by the TP53BP1 gene. Iwabuchi et al. (1998) mapped the TP53BP1 gene to 15q15-q21 by FISH. Iwabuchi et al. (1994) showed that TP53BP1 binds to the conformationally sensitive central domain of wildtype p53 but not to mutant p53 in vitro. Immunoblot analysis by Iwabuchi et al. (1998) showed that expression of TP53BP1 or TP53BP2 enhances the transactivation function of p53 and induces the expression of p21 (CDKN1A). Wang et al. (2002) used small interfering RNA directed against TP53BP1 in mammalian cells to demonstrate that TP53BP1 is a key transducer of the DNA damage checkpoint signal. TP53BP1 was required for p53 accumulation, G2/M checkpoint arrest, and the intra-S-phase checkpoint in response to ionizing radiation.

Overview

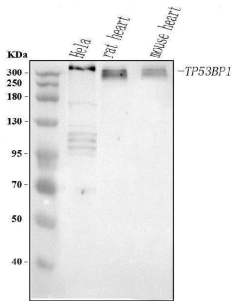
Product Name	Anti-TP53BP1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-TP53BP1 Antibody Picoband® catalog # A00397-1. Tested in WB, IHC, ICC/IF, Flow Cytometry, ELISA applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a 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, IF, IHC, ICC, 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	Q12888

Technical Details

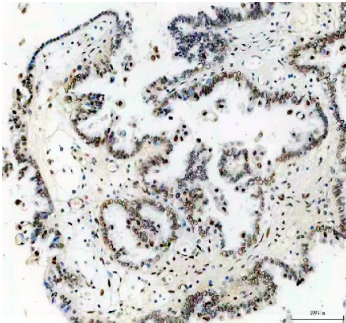
Immunogen	E.coli-derived human TP53BP1 recombinant protein (Position: Q1155-E1945).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for ICC.
Cross Reactivity	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 µg/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Human, Mouse, Rat Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Human Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human Flow Cytometry (Fixed), 1-3 ug/1x10 ⁶ cells, Human ELISA, 0.1-0.5 ug/ml, -

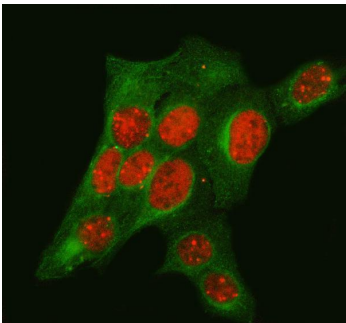
Anti-TP53BP1 Antibody Picoband® (A00397-1) Images



Western blot analysis of TP53BP1 using anti-TP53BP1 antibody (A00397-1). 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 30 ug of sample under reducing conditions. Lane 1: human Hela whole cell lysates, Lane 2: rat heart tissue lysates, Lane 3: mouse heart 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-TP53BP1 antigen affinity purified polyclonal antibody (Catalog # A00397-1) 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 1:5000 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 TP53BP1 at approximately 300-350 kDa. The expected band size for TP53BP1 is at 210 kDa.

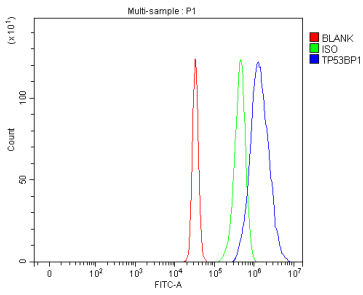


IHC analysis of TP53BP1 using anti-TP53BP1 antibody (A00397-1). TP53BP1 was detected in a paraffin-embedded section of human ovarian cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-TP53BP1 Antibody (A00397-1) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



IF analysis of TP53BP1 using anti-TP53BP1 antibody (A00397-1) and anti-Beta Tubulin antibody (M01857-3). TP53BP1 was detected in immunocytochemical section of U2OS cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-TP53BP1 Antibody (A00397-1) and mouse anti-Beta Tubulin antibody (M01857-3) overnight at 4°C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) and DyLight®488 Conjugated Goat Anti-Mouse IgG (BA1126) were used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

Flow Cytometry analysis of HepG2 cells using anti-TP53BP1 antibody (A00397-1). Overlay histogram showing HepG2 cells stained with A00397-1 (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-TP53BP1 Antibody (A00397-1, 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.

Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-TP53BP1 Antibody

For Research Use Only. Not for use in diagnostic procedures.