

Anti-BRCA1 Antibody Picoband®

Catalog Number: A00005

About BRCA1

BRCA1, mapped to 17q21.3, is also known as BRCC1. This gene encodes a nuclear phosphoprotein that plays a role in maintaining genomic stability, and it also acts as a tumor suppressor. The encoded protein combines with other tumor suppressors, DNA damage sensors, and signal transducers to form a large multi-subunit protein complex known as the BRCA1-associated genome surveillance complex (BASC). BRCA1 product associates with RNA polymerase II, and through the C-terminal domain, also interacts with histone deacetylase complexes. This protein thus plays a role in transcription, DNA repair of double-stranded breaks, and recombination. In addition to it, BRCA1 may normally serve as a negative regulator of mammary epithelial cell growth and that this function is compromised in breast cancer either by direct mutation or by alterations in gene expression.

Overview

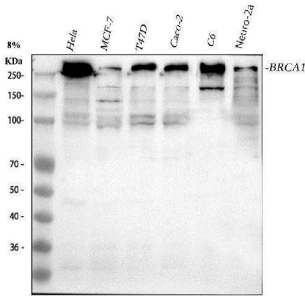
Product Name	Anti-BRCA1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-BRCA1 Antibody Picoband® catalog # A00005. Tested in ICC, IF, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees 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	IF, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na ₂ HPO ₄ .
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	P38398

Technical Details

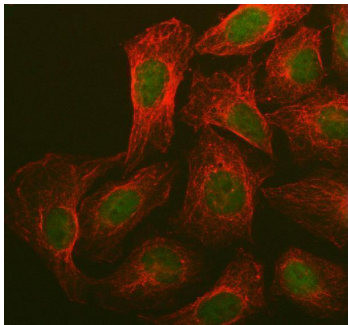
Immunogen	E.coli-derived human BRCA1 recombinant protein (Position: T1681-E1781). Human BRCA1 shares 73.3% and 74.3% amino acid (aa) sequence identity with mouse and rat BRCA1, respectively.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for 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 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml, Human Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human

Anti-BRCA1 Antibody Picoband® (A00005) Images



Western blot analysis of BRCA1 using anti-BRCA1 antibody (A00005). 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: human MCF-7 whole cell lysates, Lane 3: human T47D whole cell lysates, Lane 4: human CACO-2 whole cell lysates, Lane 5: rat C6 whole cell lysates, Lane 6: mouse Neuro-2a 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-BRCA1 antigen affinity purified polyclonal antibody (Catalog # A00005) 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 BRCA1 at approximately 290 kDa. The expected band size for BRCA1 is at 208 kDa.



IF analysis of BRCA1 using anti-BRCA1 antibody (A00005) and anti-Beta Tubulin antibody (M01857-3). BRCA1 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-BRCA1 Antibody (A00005) and mouse anti-Beta Tubulin antibody (M01857-3) overnight at 4°C. DyLight®488 Conjugated Donkey Anti-Rabbit IgG (BA1144) and DyLight®594 Conjugated Goat Anti-Mouse IgG (BA1141) 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.

1 Publications Citing This Product

1. PubMed ID: 23276146, Zhang Q, Zhang Q, Cong H, Zhang X. Diagn Pathol. 2012 Dec 31;7:181. Doi: 10.1186/1746-1596-7-181. The Ectopic Expression Of Brca1 Is Associated With Genesis, Progression, And Prognosis Of Breast Cancer In Young Patients.

Visit bosterbio.com/anti-brca1-picoband-trade-antibody-a00005-boster.html to see all 1 publications.

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Anti-BRCA1 Antibody

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