

Anti-ABCE1 Antibody Picoband®

Catalog Number: PB10020

About ABCE1

ATP binding cassette E1 (ABCE1, also RNase L inhibitor) is an ATPase found in humans involved in viral assembly. It is a member of the ATP-binding cassette (ABC) transporters superfamily and OABP subfamily. ABCE1 inhibits the action of ribonuclease L. Ribonuclease L normally binds to 2-5A (5'-phosphorylated 2',5'-linked oligoadenylates) and inhibits the interferon-regulated 2-5A/RNase L pathway, which is used by viruses. ABCE1 heterodimerize with ribonuclease L and prevents its interaction with 2-5A, antagonizing the anti-viral properties of ribonuclease L, and allow the virus to synthesize viral proteins. It has also been implicated to have an effect in tumor cell proliferation and antiapoptosis.

Overview

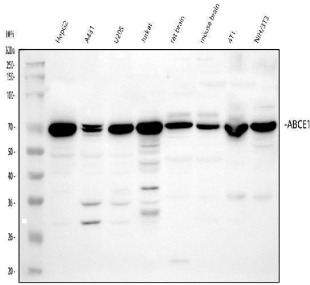
Product Name	Anti-ABCE1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-ABCE1 Antibody Picoband® catalog # PB10020. Tested in Flow Cytometry, IP, IF, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody 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	Flow Cytometry, IP, 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	P61221

Technical Details

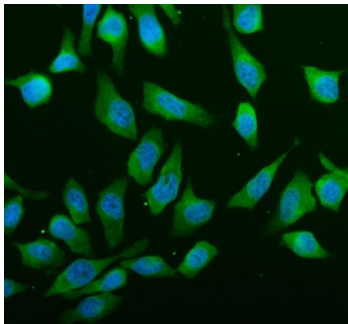
Immunogen	E. coli-derived human ABCE1 recombinant protein (Position: K419-D599). Human ABCE1 shares 100% amino acid (aa) sequence identity with mouse ABCE1.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated 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, Mouse, Rat Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human Immunoprecipitation, 0.5-2 ug/ml, Human Flow Cytometry(Fixed), 1-3 ug/1x10 ⁶ cells, Human

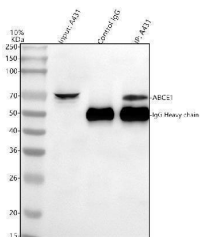
Anti-ABCE1 Antibody Picoband® (PB10020) Images



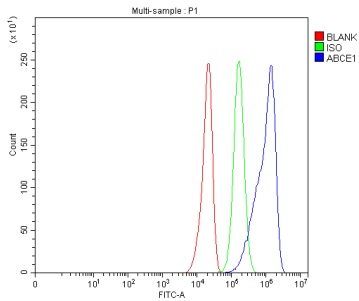
Western blot analysis of ABCE1 using anti-ABCE1 antibody (PB10020). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human HepG2 whole cell lysates, Lane 2: human A431 whole cell lysates, Lane 3: human U2OS whole cell lysates, Lane 4: human Jurkat whole cell lysates, Lane 5: rat brain tissue lysates, Lane 6: mouse brain tissue lysates, Lane 7: mouse 4T1 whole cell lysates, Lane 8: mouse NIH/3T3 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-ABCE1 antigen affinity purified polyclonal antibody (Catalog # PB10020) 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 ABCE1 at approximately 67 kDa. The expected band size for ABCE1 is at 67 kDa.



IF analysis of ABCE1 using anti-ABCE1 antibody (PB10020). ABCE1 was detected in an immunocytochemical section of HeLa cells. 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-ABCE1 Antibody (PB10020) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Immunoprecipitating ABCE1 in A431 whole cell lysate. Western blot analysis of ABCE1 using anti-ABCE1 antibody (PB10020). Lane 1: A431 whole cell lysates (30ug), Lane 2: Rabbit control IgG instead of anti-ABCE1 antibody in A431 whole cell lysate, Lane 3: anti-ABCE1 antibody (2ug) + A431 whole cell lysate (500ug). After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-ABCE1 antigen affinity purified polyclonal antibody (PB10020) at a dilution of 0.5 ug/mL and probed with a mouse anti-rabbit IgG-HRP secondary antibody (Heavy Chain). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1196-200). A specific band was detected for ABCE1 at approximately 67 kDa. The expected band size for ABCE1 is at 67 kDa.



Flow Cytometry analysis of U251 cells using anti-ABCE1 antibody (PB10020). Overlay histogram showing U251 cells stained with PB10020 (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-ABCE1 Antibody (PB10020, 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-ABCE1 Antibody

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