

Basic Information

Product Name	Anti-ABCE1 Antibody		
Gene Name	ABCE1		
Source	Rabbit		
Clonality	Polyclonal		
Isotype	IgG		
Species Reactivity	human, mouse, rat		
Tested Application	WB, ICC/IF, IP, FCM		
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.		
Immunogen	E. coli-derived human ABCE1 recombinant protein (Position: K419-D599). Human ABCE1 shares 100% amino acid (aa) sequence identity with mouse ABCE1.		
Concentration	500 ug/ml		
Purification	Immunogen affinity purified.		
Observed MW	67 kDa		
Dilution Ratios	Western blot (WB):	1:500-2000	
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400	
	ImmunoPrecipitation (IP):	1:250-300	
	Flow Cytometry (Fixed):	1:50-200	

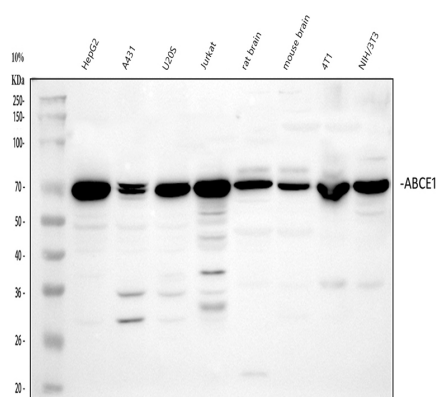
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

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.

Selected Validation Data



Western blot analysis of ABCE1 using anti-ABCE1 antibody (PB1072). 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,

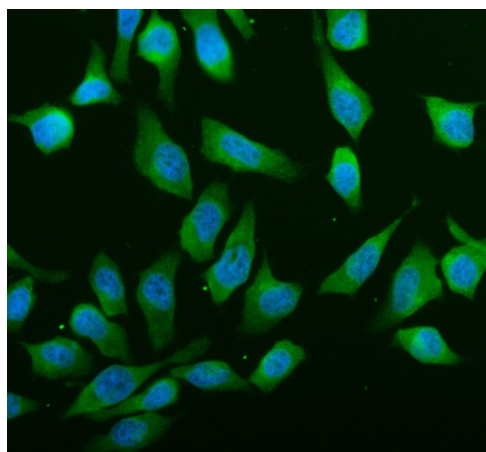
Lane 6: mouse brain tissue lysates,

Lane 7: mouse 4T1 whole cell lysates,

Lane 8: mouse NIN/3T3 whole cell lysates.

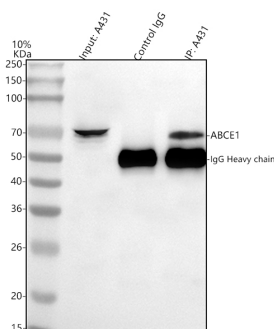
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-ABCE1 antigen affinity purified polyclonal antibody (PB1072) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for ABCE1 at approximately 67 kDa. The expected band size for ABCE1 is at 67 kDa.



ICC/IF analysis of ABCE1 using anti-ABCE1 antibody (PB1072).

ABCE1 was detected in an immunocytochemical section of Hela cells. The section was incubated with rabbit anti-ABCE1 Antibody (PB1072) at a dilution of 1:100. Fluoro488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



IP analysis of ABCE1 using anti-ABCE1 antibody (PB1072) in A431 whole cell lysate.

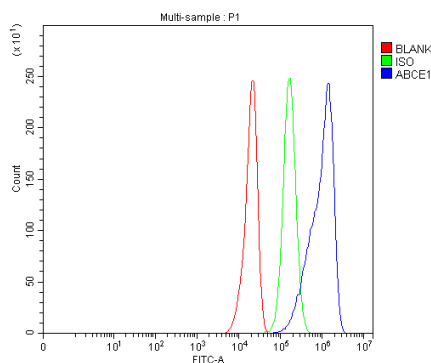
Western blot analysis of ABCE1 using anti- ABCE1 antibody (PB1072).

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 (2μg) + A431 whole cell lysate (500μg).

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti- ABCE1 antigen affinity purified polyclonal antibody (PB1072) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Heavy Chain). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). 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 (PB1072).

Overlay histogram showing U251 cells stained with PB1072 (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 (PB1072) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.