

## 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% NaN <sub>3</sub> , 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

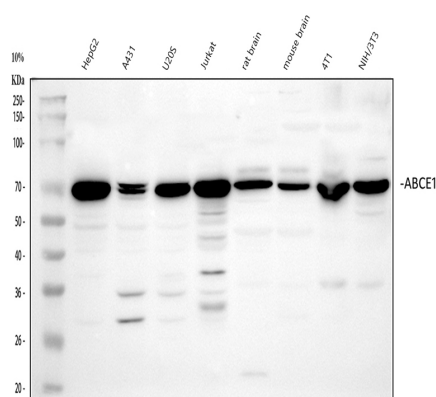
## Storage

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 tumorcell 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,

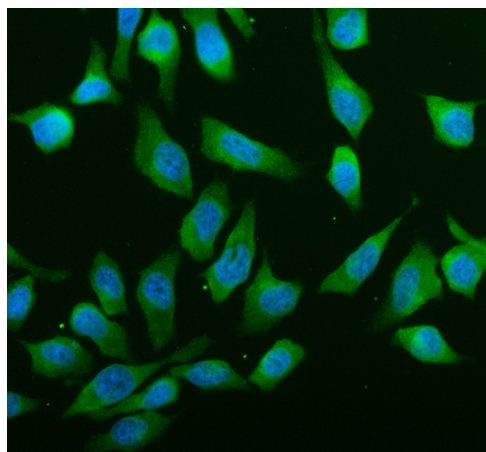
Lane 5: rat brain tissue lysates,

Lane 6: mouse brain tissue lysates,

Lane 7: mouse 4T1 whole cell lysates,

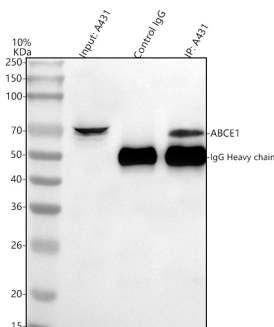
Lane 8: mouse NIN/3T3 whole cell lysates.

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.



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. DyLight®488 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.

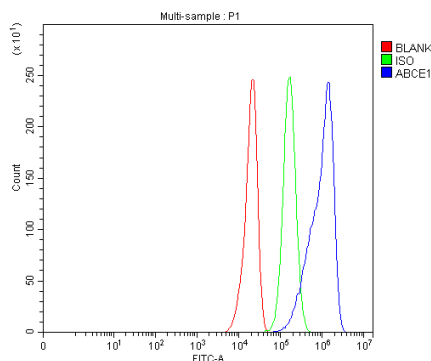
Western blot analysis of ABCE1 using anti- ABCE1 antibody (PB1072).

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. DyLight®488 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.