

Basic Information

Product Name	Anti-P glycoprotein/ABCB1 Antibody	
Gene Name	ABCB1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	FCM, WB, ICC/IF	
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human P Glycoprotein, which shares 62.9% amino acid (aa) sequence identity with rat P Glycoprotein.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	130-180 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200

Storage

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

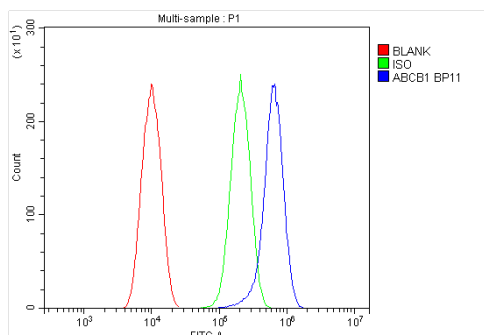
Background Information

P-GP, also called ABCB1 or PGY1, is a glycoprotein that in humans is encoded by the ABCB1 gene. It is mapped to 7q21.12. P-GP is a well-characterized ABC-transporter (which transports a wide variety of substrates across extra- and intracellular membranes) of the MDR/TAP subfamily. It is an important protein of the cell membrane that pumps many foreign substances out of cells. More formally, it is an ATP-dependent drug efflux pump with broad substrate specificity. P-GP is an ATP-dependent drug efflux pump for xenobiotic compounds with broad substrate specificity. It is responsible for decreased drug accumulation in multidrug-resistant cells and often mediates the development of resistance to anticancer drugs. This protein also functions as a transporter in the blood-brain barrier.

Reference

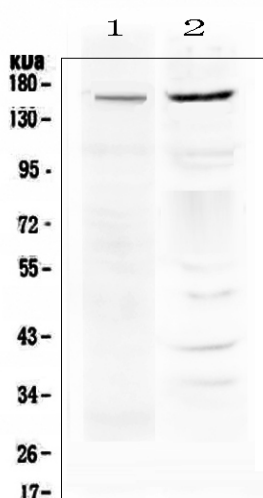
Anti-P glycoprotein/ABCB1 Antibody被引用在11文献中。

Selected Validation Data



Flow Cytometry analysis of U2OS cells using anti-P glycoprotein/ABCB1 antibody (A00049-1).

Overlay histogram showing U2OS cells stained with A00049-1 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-P glycoprotein/ABCB1 Antibody (A00049-1) 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.



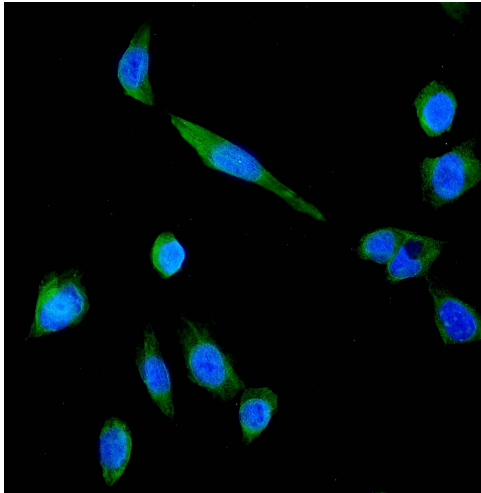
Western blot analysis of P glycoprotein/ABCB1 using anti-P glycoprotein/ABCB1 antibody (A00049-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human THP-1 whole cell lysates,

Lane 2: human A375 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-P glycoprotein/ABCB1 antigen affinity purified polyclonal antibody (A00049-1) 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 P glycoprotein/ABCB1 at approximately 130-180 kDa. The expected band size for P glycoprotein/ABCB1 is at 141 kDa.



ICC/IF analysis of P glycoprotein/ABCB1 using anti-P glycoprotein/ABCB1 antibody (A00049-1).

P glycoprotein/ABCB1 was detected in an immunocytochemical section of U2OS cells. The section was incubated with rabbit anti-P glycoprotein/ABCB1 Antibody (A00049-1) 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).