

## Basic Information

Product Name	Anti-P glycoprotein/ABCB1 Antibody	
Gene Name	ABCB1	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, FCM, ICC/IF	
Contents	500 ug/ml antibody with PBS , 0.02% NaN <sub>3</sub> , 1 mg BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence of human P Glycoprotein/ABCB1 (TKEALDESIPPVSFWRIMK).	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	130-180KD	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow cytometry (FCM): 1-3μg/1x10 <sup>6</sup> cells	

## Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

## 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1文献中。

## Selected Validation Data

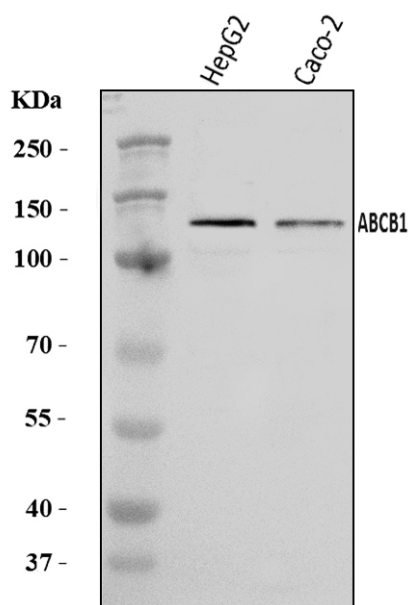


Figure 1. Western blot analysis of anti- P Glycoprotein/ABCB1 Antibody (A00049-4). The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: HepG2 whole cell lysates,

Lane 2: Caco-2 whole cell lysates.

Use rabbit anti- ABCB1 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for ABCB1 at approximately 141KD. The expected band size for ABCB1 is at 141KD.

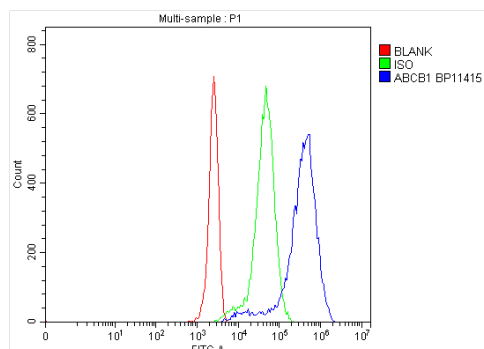


Figure 3. Flow cytometry analysis of 293T cell (1x10<sup>6</sup>) DyLight 488 conjugated goat anti- rabbit IgG(blue) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG DyLight 488. Unlabelled sample (Red line).

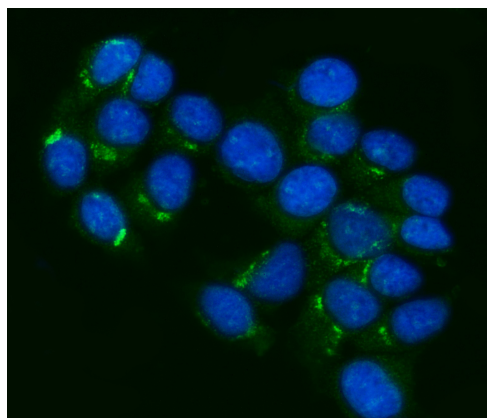


Figure 2. ICC analysis using anti- P Glycoprotein/ABCB1 Antibody (A00049-4). was detected in immersion fixed MCF-7 cell line. Cells were stained using the Dylight488-conjugated Anti-rabbit IgG Secondary Antibody (green)(Catalog # BA1127) and counterstained with DAPI (blue).