

## Basic Information

<b>Product Name</b>	Anti-P glycoprotein/ABCB1 Antibody	
<b>Gene Name</b>	ABCB1	
<b>Source</b>	Rabbit	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human,mouse,rat	
<b>Tested Application</b>	WB, IHC, FCM, ELISA	
<b>Contents</b>	500 ug/ml antibody with PBS , 0.02% NaN3 , 1 mg BSA and 50% glycerol.	
<b>Immunogen</b>	E.coli-derived human P Glycoprotein/ABCB1 recombinant protein (Position: R669-Y710).	
<b>concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	130-180KD	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Immunohistochemistry in paraffin section IHC:	1:50-400
	Flow cytometry (FCM):	1-3 $\mu\text{g}/1 \times 10^6$ cells
	ELISA:	1:100-1000

## 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.

## Selected Validation Data

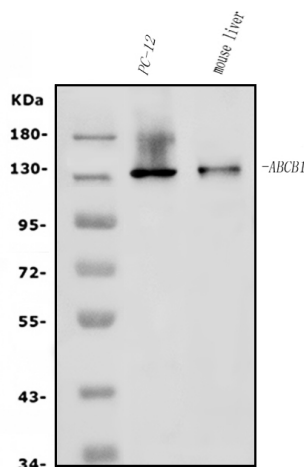


Figure 1. Western blot analysis of anti- ABCB1 antibody (A00049-3).The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: rat PC-12 whole cell lysates,Lane 2: mouse liver tissue lysates. Use rabbit anti- ABCB1 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for ABCB1 at approximately 130-180KD. The expected band size for ABCB1 is at 141KD.

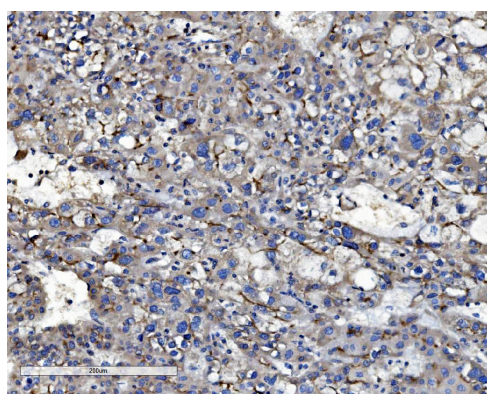


Figure 3.IHC analysis using anti-ABCB1 antibody (A00049-3).detected in paraffin-embedded section of human liver cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

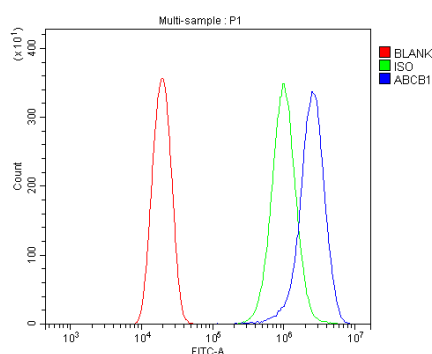


Figure 2. Flow cytometry analysis of U2OS cell (1x10<sup>6</sup>) DyLight 488 conjugated goat anti- rabbit IgG(blue) was used as secondary antibody.Isotype control antibody (Green line) was rabbit IgG DyLight 488. Unlabelled sample (Red line).