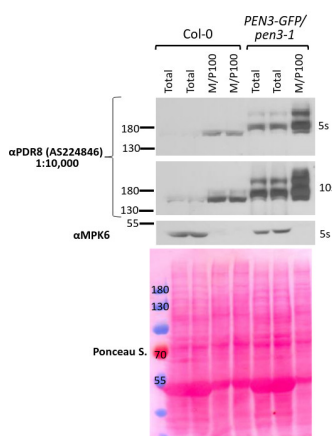


Product no **AS22 4846****PDR8 | ABC transporter G family member 36****Product information**

<b>Immunogen</b>	KLH-conjugated synthetic peptide derived from <i>Arabidopsis thaliana</i> PDR8, UniProt: <a href="#">Q9XIE2</a> , TAIR: <a href="#">At1g59870</a>
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Purity</b>	Serum
<b>Format</b>	Lyophilized
<b>Quantity</b>	50 µl
<b>Reconstitution</b>	For reconstitution, add 50 µl of sterile water
<b>Storage</b>	Store lyophilized/reconstituted at -20°C; once reconstituted make aliquots to avoid repeated freeze-thaw cycles. Please remember to spin the tubes briefly prior to opening them to avoid any losses that might occur from material adhering to the cap or sides of the tube.

**Application information**

<b>Recommended dilution</b>	1 : 10 000 (WB)
<b>Expected   apparent MW</b>	165   150 kDa ( <i>Arabidopsis thaliana</i> )
<b>Confirmed reactivity</b>	<i>Arabidopsis thaliana</i>
<b>Predicted reactivity</b>	<i>Camelina sativa</i> , <i>Eutrema salsugineum</i>
	Species of your interest not listed? <a href="#">Contact us</a>
<b>Not reactive in</b>	<i>Triticum</i> sp.
<b>Additional information</b>	Protein or membrane sample should be treated in temperatures not higher than 65°C -70°C for 10 min before loading to the gel.
<b>Selected references</b>	To be added when available. Antibody released in May 2023.



Total protein (T) or microsomal protein fraction (M/P100) were extracted from 8-day-old *Arabidopsis thaliana* seedlings according to (1). Seedling genotypes include Col-0 (wild-type) and PEN3-GFP/pen3-1, with pen3-1 being a knock-down mutant (2). Note that PEN3 is also referred to as PDR8 or ABCG36; and the expected apparent MW of PDR8/PEN3/ABCG36 is 165 kDa and that of PDR8/PEN3-GFP is 192 kDa. 37 µg of proteins were denatured at 65°C for 5 minutes, separated on an 8% SDS-PAGE and transferred to nitrocellulose membrane (0.45 µm) via tank transfer system at 50V for 70 minutes. The blots were blocked using PBS+0.1% Tween 20 (PBS-T)+5 % milk at room temperature (RT) while agitated for one hour. Blots were incubated in primary PDR8 antibody (Agrisera, AS22 4846) diluted to 1:10,000 in PBS-T+5 % milk at 4°C overnight. Primary antibody solution was removed, and blots were washed five times with PBS-T for each 5 minutes at RT while agitated. Blots were then incubated with secondary goat anti-rabbit IgG H&L (Agrisera, AS09602) diluted to 1:25,000 for one hour and washed four times with PBS-T for 5 minutes each while agitated. Blots were developed using a mixture of chemiluminescent reagents for indicated exposure time in seconds. Total protein stain Ponceau S and antibodies against cytoplasmic MPK6 were used as loading controls.

In this experiment PDR8 protein detection was validated using Col-0 (wild-type) and PEN3-GFP/*pen3-1*, with *pen3-1* being a knock-down mutant. Note that PEN3 is also referred to as PDR8 or ABCG36; and the expected apparent MW of PDR8/PEN3/ABCG36 is 165 kD and that of PEN3-GFP is 192 kD.

Courtesy of Eric Fritschi, Nga Nguyen, and Antje Heese at University of Missouri-Columbia, Div of Biochemistry, the Interdisciplinary Plant Group (IPG), Columbia, MO (USA).

Reference:

1. LaMontagne ED, Collins CA, Peck SC, Heese A. Isolation of Microsomal Membrane Proteins from Arabidopsis thaliana. *CurrProtocPlant Biol.* 2016 May;1(1):217-234. doi: 10.1002/cppb.20020. PMID: 31725992.
2. Lu et al. (2015) Mutant Allele-Specific Uncoupling of PENETRATION3 Functions Reveals Engagement of the ATP-Binding Cassette Transporter in Distinct Tryptophan Metabolic Pathways. *Plant Physiol.* 168 (3): 814–827.