

product **AS09 472**

AtMRP1, AtABCC1 | ABC transporter C family member 1

product information

background	MRP1 (EC= 3.6.3.44) is a pump for glutathione S-conjugates. Alternative names: ABC transporter ABCC.1, multidrug resistance-associated protein 1, glutathione S-conjugate-transporting ATPase 1, ATP-energized glutathione S-conjugate pump 1
immunogen	<u>KLH</u> -conjugated synthetic peptide derived from <i>Arabidopsis thaliana</i> MRP1, <u>Q9C8G9</u>
antibody format	rabbit polyclonal, serum,
quantity	100 µl
storage	store at -20°C; make aliquots to avoid repeated freeze-thaw cycles. Please, remember to spin tubes briefly prior to opening them to avoid any losses that might occur from material adhering to the cap or sides of the tubes.
tested applications	ELISA (ELISA), western blot (WB)
additional information	0.1 % sodium azide is added as preservative. For antibody re-suspending information check the tube label. Antibodies will detect target protein in a few µg of a crude preparation loaded per well. If purified preparations of vacuolar and plasma membranes are used, one µg load per well should be sufficient. Protocol for plant tonoplast membrane preparation is available here .

application information

recommended dilution	1: 8000 (ELISA), 1: 2000 with standard ECL (WB)
expected apparent MW	181.9 180 kDa (<i>Arabidopsis thaliana</i>)
confirmed reactivity	<i>Arabidopsis thaliana</i>
predicted reactivity	dicots including: <i>Vitis vinifera</i> , monocots including: <i>Oryza sativa</i> , <i>Triticum aestivum</i> , trees: <i>Populus balsamifera</i> , moss: <i>Physcomitrella patens</i>
not reactive in	no confirmed exceptions from predicted reactivity known in the moment
additional information	Protein or membrane sample should be treated at 70°C for 10 min before loading on the gel. Diluted antibody solution can be used 2 to 3 times within one month if it contains 0.1 % sodium azide as preservative and is stored at -20°C to -80°C.

Manufactured by Operon Biotechnologies.

selected references

[Geisler et al., \(2004\)](#). *Arabidopsis* Immunophilin-like TWD1 Functionally Interacts with Vacuolar ABC Transporters. *Mol. Biol. Cell.* 15, 3393-3405.

application example

1 µg and 10 µg of crude membrane fraction/lane from *Arabidopsis thaliana* were separated on 12 % **SDS-PAGE** and blotted 1h to PVDF membrane (40 min. at 10 V using BioRad semidry transfer). Filters were blocked 1h with 5 % low-fat **milk powder** in TBS-T (0.05% Triton X.100). Membranes were washed 5 times with TBS-T, each time in a fresh polystyrene box and probed with anti-AtMTP4 antibodies (AS09 472, **1:1000**, 1h) and secondary anti-rabbit (**1:2000**, 1 h). All steps were performed in RT with agitation.

