

product **AS09 509**
TIP2;1 | tonoplast intrinsic protein 2-1

product information

background	TIP2-1 belongs to aquaporin protein family and facilitates transport of water and small neutral solutes across tonoplast membrane.
immunogen	<u>KLH</u> -conjugated peptide derived from <i>Oryza sativa</i> TIP2-1 <u>Q7XA61</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. Vacuolar membrane protocol is available here .

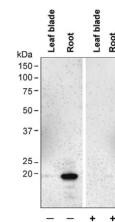
application information

recommended dilution	1: 8000 (ELISA), 1: 2000 with standard ECL (WB)
expected apparent MW	24.8 20-24 kDa
confirmed reactivity	<i>Oryza sativa</i>
predicted reactivity	monocots including: <i>Triticum aestivum</i> , <i>Zea mays</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	

[Sakurai](#) et al. (2008). Tissue and cell-specific localization of rice aquaporins and their water transport activities- Plant Cell Physiol. 49: 30-39.

application example

1.5 µg of crude membrane fraction/lane from *Oryza sativa* L. cv. Akitakomachi leaf blade and root 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-TIP2;1 antibodies (AS09 509, **1:1000**, 1h) and secondary anti-rabbit (**1:2000**, 1 h). All steps were performed in RT with agitation.



Peptide used to elicti this antibody has been added to primary antibody incubation (right panel, + +) and therefore specific signal has been depleted in this neutralization/immunocompetition assay.