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Product no AS22 4811

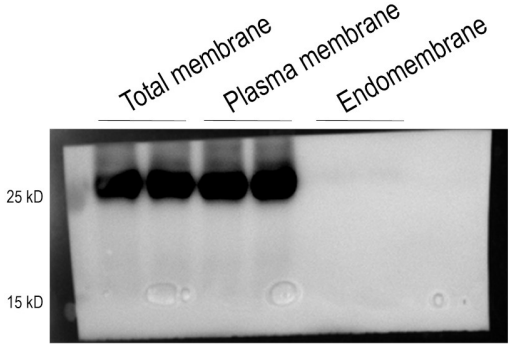
Anti-PIP1;3 | Aquaporin, plasma membrane intrinsic protein 1-3

Product information

Immunogen	KLH-conjugated peptide derived from *Oryza sativa* PIP1;3 protein sequence, UniProt: Q9SXF8
Host	Rabbit
Clonality	Polyclonal
Purity	Antigen affinity purified serum, in PBS pH 7.4
Format	Lyophilized
Quantity	50 µg
Reconstitution	For reconstitution, add 50 µl, of sterile or deionized water.
Storage	Store lyophilized/reconstituted at -20°C; once reconstituted 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 lyophilized material adhering to the cap or sides of the tubes.

Application information

Recommended dilution	1: 500 (IF), 1 : 1000 (WB)
Expected | apparent MW	26-29 kDa (*Oryza sativa*)
Confirmed reactivity	*Arabidopsis thaliana, Cardamine hirsuta, Oryza sativa, Zea mays*
Predicted reactivity	*Alium sativum, Glycine max, Hordeum vulgare, Miscanthus floridulus, Setaria italica, Triticum aestivum, Triticum urartu* Species of your interest not listed? Contact us
Not reactive in	*Nicotiana benthamiana, Physcomitrium patens, Solanum lycopersicum*
Selected references	To be added when available, antibody available in February 2026.



anti-PIP1;3

Samples:

Membrane proteins extracted from 3-week-old *Oryza sativa* plants, specifically the proteins collected and concentrated from the PEG fractions (containing plasma membrane protein) and DEX fractions (cAS22 ontaining endomembrane protein) during the microsomal protein fractionation process.

About 10 µg/well of membrane proteins (extracted from 3-week-old rice plants) were denatured in the corresponding buffer mixed with 6×Protein Loading Buffer at 37 °C for 10 min. Samples were separated at room temperature on 10% SDS-PAGE and blotted for 1 h to nitrocellulose (pore size of 0.45 um) using wet transfer in the cold. The blot was blocked with 5% milk for 1 h at room temperature with agitation. The blot was incubated in the primary antibody at a dilution of 1:5000 for 1 h at room temperature with agitation in TBS-T. The antibody solution was decanted and the blot was rinsed briefly three times, then washed 3 times for 5 min each in TBS-T at room temperature with agitation. The blot was incubated in the matching secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated) diluted to 1:10000 for 1 h at room temperature with agitation. The blot was washed as above and developed with the chemiluminescent detection reagent: Tanon High-sig ECL Western Blotting Substrate. The exposure time was 10 seconds.

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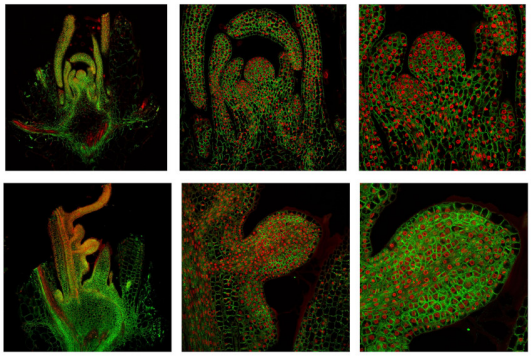
Courtesy of Dr. Shuoxun Wang, Institute of Genetics and Developmental Biology, Chinese Academy of Sciences, Beijing, China



Material: shoots of *Arabidopsis thaliana* (first set of images) and *Cardamine hirsuta* (second set of images)

The following protocol was applied:
Fixation: FAA: 4% formaldehyde, 50% ethanol, 5 % acetic acid (A. thaliana)
PFA: 4% formaldehyde in 50 mM phosphate buffer pH 7.5 (*C. hirsuta)*
Embedding and sectioning: Steedman wax/10 µm sections
Hydrophilization: no
Cell wall digestion: no
Membrane permeabilization: DMSO-IGEPAL
Antigen retrieval: no
Blocking buffer: TSA blocking reagent (Perkin Elmer)
Washing buffer: PBS with 0.1% gelatine
Primary antibody: 1: 500 incubation o/n at 4°C
Secondary antibody: GAR-alexa488 (ThermoFisher) 1:250, 2h/RT
Co-staining of the nucleus (DAPI): yes
Cell wall staining: no
Imaging: Leica Stellaris 5 confocal microscope

Note: fixation performed with: PFA or FAA was giving comparable results.

Dr. Ton Timmers, Max Planck Institute for Plant Breeding Reseach, Cologne, Germany