Anti-Plasma membrane H^+-ATPase antibody

Catalog: PHY7169A

Product Information

Description:	Rabbit polyclonal antibody
Background:	H^+-ATPase is a primary proton pump in plants. It generates an electrochemical gradient across the plasma membrane, which drives the secondary active transport of nutrients (e.g., K^+, NO_3^-) and regulates cell elongation, stomatal opening, and pH homeostasis, crucial for growth and stress responses.
Synonyms:	H^+-ATPase
Immunogen:	KLH-conjugated synthetic peptide (16 aa from central section) derived from *Arabidopsis thaliana* AHA1 (AT2G18960), AHA2 (AT4G30190) and AHA3 (AT5G57350).
Form:	Lyophilized
Quantity:	150 μg
Purification:	Immunogen affinity purified
Reconstitution:	Reconstitution with 150 μl of sterile 1XPBS (PH=7.4) containing 30% glycerol. "Note: please spin tube briefly prior to opening it to avoid any losses that might occur from lyophilized material adhering to the cap or sides of the tube".
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70℃ as supplied. 6 months, -20 to -70℃ under sterile conditions after reconstitution. 1 month, 2 to 8℃ under sterile conditions after reconstitution.
Shipping:	The product is shipped at 4℃. Upon receipt, store it immediately at the temperature recommended above.

Application Information

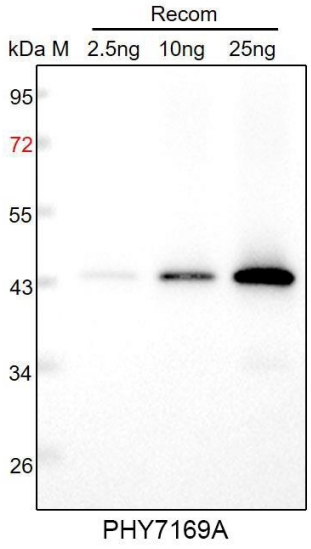
Recommended Dilution:	Western Blot (1:1000-1:2000) Note: Optimal dilutions/concentrations should be determined by the end user.
Expected / apparent MW:	104 / 103 kDa
Predicted Reactivity:	Among species analyzed, the sequence of the synthetic peptide used for immunization is 100% homologues with the sequence in

Gossypium raimondii, *Spinacia oleracea*, *Brassica rapa*, *Panicum virgatum*, *Zea mays*, *Setaria viridis*, *Sorghum bicolor*, *Oryza sativa*, *Hordeum vulgare*, *Triticum aestivum*, *Brassica napus*, *Glycine max*, *Zea mays*, and 80-99% homologues with the sequence in *Populus trichocarpa*, *Vitis vinifera*, *Cucumis sativus*, *Medicago truncatula*, *Solanum tuberosum*, *Solanum lycopersicum*, *Nicotiana tabacum*, *Physcomitrium patens*.

The sequence of the synthetic peptide used for immunization is 93% homologues with the sequence in AHA4 (AT3G47950), AHA5 (AT2G24520), AHA6 (AT2G07560), AHA7 (AT3G60330), AHA8 (AT3G42640), AHA9 (AT1G80660) and AHA11 (AT5G62670).

For more species homologues information, please contact tech support at tech@phytoab.com.

Application Example



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Recom: 2.5 ng, 10 ng and 25 ng recombinant protein containing the peptide for immunization and having a molecular mass of 44 kDa.

Electrophoresis: 12% SDS-PAGE

Transfer: blotting to NC (nitrocellulose) membrane for 1 h.

Blocking: 5% skim milk at RT or 4℃ for 1 h.

Primary antibody: 1:1000 dilution overnight at 4℃.

Secondary antibody: 1:10000 dilution using Goat Anti-Rabbit IgG H&L (HRP) (Cat# PHY6000).

Detection: using chemiluminescence substrate and image were captured with CCD camera.