Anti-ATPase 5, plasma membrane-type antibody

Catalog: PHY2378A

Product Information

Description:	Rabbit polyclonal antibody
Background:	The H+-ATPase, a protein with a molecular mass of about 100 kD, is composed of a single polypeptide that is predicted to beanchored in the plasma membrane by 10 membrane-spanning regions. The proton-pump ATPase (H+-ATPase) of the plant plasma membrane acts as a primary transporter by pumping protons out of the cell, thereby creating pH and electrical potential differences across the plasmalemma. Transport of many solutes (ions, metabolites, etc.) into and out of the cell involves secondary transporters whose ability to function is directly dependent on the proton-motive force created by the H+-ATPase.
Synonyms:	AHA5, H(+)-ATPASE 5, HA5
Immunogen:	KLH-conjugated synthetic peptide (15 aa from N terminal section) derived from *Arabidopsis thaliana* AHA5 (AT2G24520).
Form:	Lyophilized
Quantity:	150 µg
Purification:	Immunogen affinity purified
Reconstitution:	Reconstitution with 150 µl of 0.01 M sterile PBS. "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.

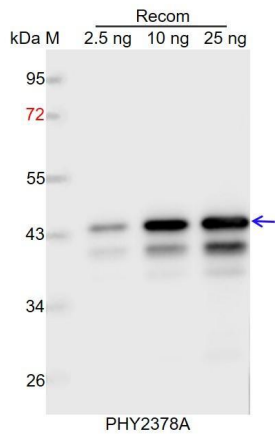
Application Information

Recommended Dilution:	Western Blot (1:1000-1:2000) Note: Optimal dilutions/concentrations should be determined by the end user.

Expected / apparent MW: 103 kDa

Predicted Reactivity: Among species analyzed, the sequence of the synthetic peptide used for immunization is 100% homologues with the sequence in *Brassica napus*, *Brassica rapa*, and 80-99% homologues with the sequence in *Spinacia oleracea*, *Gossypium raimondii*, *Zea mays*, *Glycine max*, *Vitis vinifera*, *Panicum virgatum*, *Oryza sativa Indica Group*, *Sorghum bicolor*, *Solanum tuberosum*, *Cucumis sativus*, *Triticum aestivum*, *Hordeum vulgare*, *Oryza sativa Japonica Group*, *Setaria viridis*, *Populus trichocarpa*, *Medicago truncatula*, *Nicotiana tabacum*.
The sequence of the synthetic peptide used for immunization is 93% homologues with the sequence in HA11 (AT5G62670), 87% homologues with the sequence in HA7 (AT3G60330), HA4 (AT3G47950), HA9 (AT1G80660), HA2 (AT4G30190), HA1 (AT2G18960), AHA10 (AT1G17260), and 80% homologues with the sequence in HA6 (AT2G07560), HA8 (AT3G42640).
For more species homologues information, please contact tech support at tech@phytoab.com.

Application Example



Recom: 2.5 ng, 10 ng and 25 ng recombinant protein containing the peptide for immunization and having a molecular mass of 45 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.