

Anti-AHA1/2/3 antibody

Catalog: PHY0760A

Product Information

Description:	Rabbit polyclonal antibody
Background:	Plant plasma membrane H ⁺ -ATPase is a P-type proton pump that uses ATP hydrolysis to export H ⁺ from the cytoplasm to the apoplast. It establishes an electrochemical gradient that drives nutrient uptake, regulates pH homeostasis, and controls growth, development, and stress responses.
Synonyms:	H ⁺ ATPase, AHA, ATHA, HA, PLASMA MEMBRANE PROTON ATPASE, PMA
Immunogen:	KLH-conjugated synthetic peptide (16 aa from N terminal section) derived from <i>Arabidopsis thaliana</i> 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°C as supplied. 6 months, -20 to -70°C under sterile conditions after reconstitution. 1 month, 2 to 8°C under sterile conditions after reconstitution.
Shipping:	The product is shipped at 4°C. 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:	105 kDa
Predicted Reactivity:	Among species analyzed, the sequence of the synthetic peptide used for immunization is 100% homologues with the sequence in <i>Populus</i>

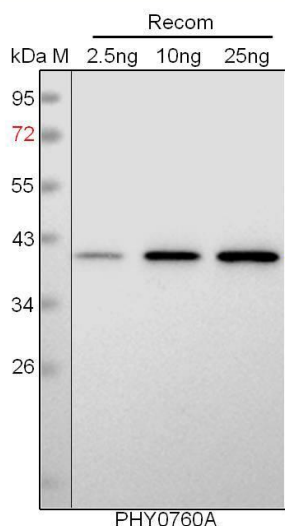
Research Use Only

trichocarpa, *Zea mays*, *Panicum virgatum*, *Brassica rapa*, *Brassica napus*, *Glycine max*, *Cucumis sativus*, *Vitis vinifera*, *Nicotiana truncatula*, *Setaria viridis*, *Gossypium raimondii*, *Spinacia oleracea*, *Sorghum bicolor*.

The sequence of the synthetic peptide used for immunization is 94% (15/16) homologues with the sequence in AHA4 (AT3G47950), AHA6 (AT2G07560), AHA7 (AT3G60330), AHA8 (AT3G42640) and AT4G11730, 88% (14/16) homologues with the sequence in AHA9 (AT1G80660), AHA11 (AT5G62670) and AHA10 (AT1G17260), and 81% (13/16) homologues with the sequence in AHA5 (AT2G24520).

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 41 kDa.

Electrophoresis: 12% SDS-PAGE

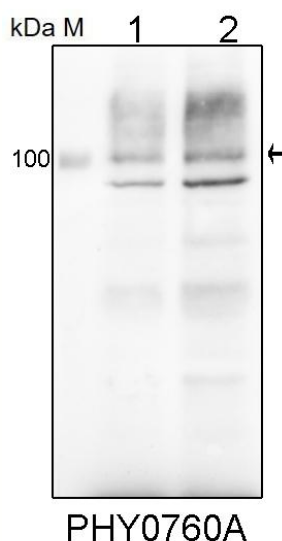
Transfer: blotting to NC (nitrocellulose) membrane for 1 h.

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

Primary antibody: 1:1000 dilution overnight at 4°C.

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.



Lane 1: 15 µg Arabidopsis crude microsome membrane protein.

Lane 2: 30 µg Arabidopsis crude microsome membrane protein.

Electrophoresis: 10% SDS-PAGE

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

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

Primary antibody: 1:1000 dilution overnight at 4°C.

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.