

Anti-Plasma membrane H⁺ATPase antibody

Catalog: PHY2285A

Product Information

Description:	Rabbit polyclonal antibody
Background:	<p>The H⁺-ATPase, a protein with a molecular mass of about 100 kD, is composed of a single polypeptide that is predicted to be anchored in the plasma membrane by 10 membrane-spanning regions.</p> <p>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.</p>
Synonyms:	H ⁺ ATPase, AHA, HA
Immunogen:	KLH-conjugated synthetic peptide (18 aa from C 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:	<p>Reconstitution with 150 µl of 0.01 M sterile PBS.</p> <p>"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".</p>
Stability &	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
Storage:	<p>12 months from date of receipt, -20 to -70°C as supplied.</p> <p>6 months, -20 to -70°C under sterile conditions after reconstitution.</p> <p>1 month, 2 to 8°C under sterile conditions after reconstitution.</p>
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

Research Use Only

end user.

Expected / apparent MW:

104 / 103 kDa

Confirmed Reactivity:

Arabidopsis thaliana

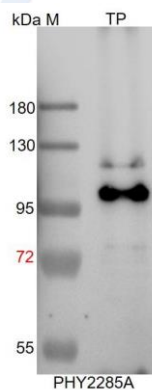
Predicted Reactivity:

Among species analyzed, the sequence of the synthetic peptide used for immunization is 100% homologues with the sequence in *Brassica rapa*, *Brassica napus*, *Gossypium raimondii*, *Zea mays*, *Setaria viridis*, *Oryza sativa Japonica Group*, *Hordeum vulgare*, *Panicum virgatum*, *Sorghum bicolor*, *Triticum aestivum*, *Glycine max*, *Spinacia oleracea*.

The sequence of the synthetic peptide used for immunization is 95% homologues with the sequence in AHA4 (AT3G47950), AHA6 (AT2G07560), AHA7 (AT3G60330), AHA8 (AT3G42640), AHA9 (AT1G80660) and AHA11 (AT5G62670), 89% homologues with the sequence in AHA5 (AT2G24520) and AHA10 (AT1G17260).

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

Application Example



TP: 20 µg total protein from *Arabidopsis thaliana*.

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: 1:2000 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.