

# Anti-Plasma membrane H<sup>+</sup>ATPase antibody

Catalog: PHY2283A

## Product Information

|                        |  |
|------------------------|--|
| <b>Description:</b>    | Rabbit polyclonal antibody   |
| <b>Background:</b>     | <p>The H<sup>+</sup>-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<sup>+</sup>-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<sup>+</sup>-ATPase.</p> |
| <b>Synonyms:</b>       | H <sup>+</sup> ATPase, AHA, HA   |
| <b>Immunogen:</b>      | KLH-conjugated synthetic peptide (20 aa from central section) derived from <i>Arabidopsis thaliana</i> HA1 ( AT2G18960), HA2 (AT4G30190), HA4 (AT3G47950), HA5 (AT2G24520) and HA11 (AT5G62670).   |
| <b>Form:</b>           | Lyophilized  |
| <b>Quantity:</b>       | 150 µg   |
| <b>Purification:</b>   | Immunogen affinity purified  |
| <b>Reconstitution:</b> | <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>  |
| <b>Stability &amp;</b> | Use a manual defrost freezer and avoid repeated freeze-thaw cycles.  |
| <b>Storage:</b>        | <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>  |
| <b>Shipping:</b>       | The product is shipped at 4°C. Upon receipt, store it immediately at the temperature recommended above.  |

## Application Information

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|------------------------------|--|
| <b>Recommended Dilution:</b> | Western Blot (1:1000-1:2000)                                       |
|                              | Note: Optimal dilutions/concentrations should be determined by the |

Research Use Only

end user.

**Expected / apparent MW:**

104 kDa

**Confirmed Reactivity:**

Coming soon

**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*, *Glycine max*, *Gossypium raimondii*, *Oryza sativa Japonica Group*, *Physcomitrium patens*, *Panicum virgatum*, *Vitis vinifera*, *Nicotiana tabacum*, *Populus trichocarpa*, *Solanum lycopersicum*, *Cucumis sativus*, *Setaria viridis*, *Sorghum bicolor*, *Solanum tuberosum*, *Zea mays*.

The sequence of the synthetic peptide used for immunization is 95% homologues with the sequence in HA3 (AT5G57350), HA6 (AT2G07560), HA8 (AT3G42640), HA9 (AT5G43350), and 85% homologues with the sequence in HA7 (AT3G60330), AHA10(AT1G17260).

For more species homologues information, please contact tech support at [tech@phytoab.com](mailto:tech@phytoab.com).