

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

Catalog: PHY3928S

## Product Information

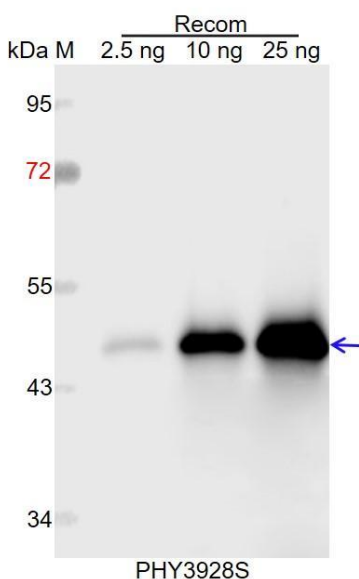
<b>Description:</b>	Rabbit polyclonal antibody
<b>Background:</b>	<p>The H<sup>+</sup>-ATPase, a protein with a molecular mass of about 100 kD, is composed of a single polypeptide that is predicted to be anchored in the plasma membrane by 10 membrane-spanning regions.</p> <p>The proton-pump ATPase (H<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 (15 aa from N terminal section) derived from <i>Arabidopsis thaliana</i> HA1 ( AT2G18960), HA2 (AT4G30190), HA3 (AT5G57350) and HA9 (AT1G80660).
<b>Form:</b>	Lyophilized
<b>Quantity:</b>	150 µg
<b>Purification:</b>	Serum Peptide affinity form antibody available upon request at <a href="mailto:info@phytoab.com">info@phytoab.com</a> .
<b>Reconstitution:</b>	<p>Reconstitution with 150 µl of sterile water.</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

Research Use Only

- Recommended Dilution:** Western Blot (1:1000-1:2000)  
 Note: Optimal dilutions/concentrations should be determined by the end user.
- Expected / apparent MW:** 104 kDa
- Predicted Reactivity:** Among species analyzed, the sequence of the synthetic peptide used for immunization is 100% homologues with the sequence in *Glycine max*, *Brassica napus*, *Brassica rapa*, *Vitis vinifera*, *Medicago truncatula*, *Cucumis sativus*, *Gossypium raimondii*, *Populus trichocarpa*, *Spinacia oleracea*.  
 The sequence of the synthetic peptide used for immunization is 93% (14/15) homologues with the sequence in AT4G11730.  
 For more species homologues information, please contact tech support at [tech@phytoab.com](mailto: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 47 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.