

## Anti-Plasma membrane H+ATPase, N-terminal antibody

Catalog: PHY0032S

## **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:** H+ATPase 1/2/3, AHA1/2/3, HA1/2/3

**Immunogen:** KLH-conjugated synthetic peptide (14 aa from N terminal section) derived from

Arabidopsis thaliana H+ATPase 1 (AT2G18960), H+ATPase 2 (AT4G30190)

and H+ATPase 3 (AT5G57350).

Form: Lyophilized

Quantity:150 μgPurification:Serum

Peptide affinity form antibody available upon request at <a href="mailto:info@phytoab.com">info@phytoab.com</a>.

**Reconstitution:** Reconstitution with 150 µl of sterile water.

"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 &**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

Storage: 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℃ 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: 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, Populus trichocarpa, Brassica rapa, Panicum virgatum, Vitis

vinifera, Medicago truncatula, Cucumis sativus, Brassica napus, Zea

mays, Sorghum bicolor, Spinacia oleracea, Solanum tuberosum,

Solanum lycopersicum, Setaria viridis, Gossypium raimondii.

The sequence of the synthetic peptide used for immunization is 93%

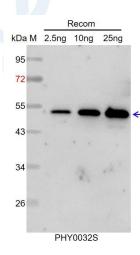
(13 / 14) homologues with the sequence in H+ATPase 5

(AT2G24520) and H+ATPase 9 (AT1G80660).

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 53 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°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.