

## Anti-L-ascorbate peroxidase antibody

Catalog: PHY1322A

#### **Product Information**

**Description:** Rabbit polyclonal antibody

**Background:** Ascorbate peroxidases are enzymes that scavenge hydrogen peroxide in plant

cells. Eight types of APX have been described for Arabidopsis: three cytosolic

(APX1 (AT1G07890), APX2 (AT3G09640), APX6 (AT4G32320)), two

chloroplastic types (stromal sAPX (AT4G08390), thylakoid tAPX (AT1G77490)),

and three microsomal (APX3 (AT4G35000), APX4 (AT4G09010), APX5

(AT4G35970)) isoforms.

Synonyms: TAPX, THYLAKOIDAL ASCORBATE PEROXIDASE

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

Arabidopsis thaliana TAPX (AT1G77490).

Form: Lyophilized

**Quantity**: 150 μg

Purification: Immunogen affinity purified

**Reconstitution:** Reconstitution with 150 µl of 0.01 M sterile PBS.

"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  $-70^{\circ}$  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: 46 kDa

Confirmed Reactivity: Arabidopsis thaliana

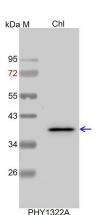


#### **Predicted Reactivity:**

Among species analyzed, the sequence of the synthetic peptide used for immunization is 100% homologues with the sequence in *Vitis vinifera*, and 80-99% homologues with the sequence in *Brassica rapa*, *Brassica napus*, *Gossypium raimondii*, *Medicago truncatula*, *Glycine max*, *Spinacia oleracea*, *Nicotiana tabacum*, *Solanum lycopersicum*, *Solanum tuberosum*, *Cucumis sativus*, *Populus trichocarpa*, *Sorghum bicolor*, *Panicum virgatum*, *Zea mays*, *Setaria viridis*.

For more species homologues information, please contact tech support at <a href="mailto:tech@phytoab.com">tech@phytoab.com</a>.

# Application Example Example1:



Chl: 80 µg total chloroplast protein from Arabidopsis thaliana.

Electrophoresis: 15% SDS-PAGE

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

**Blocking:** 5% skim milk at RT or  $4^{\circ}$ C for 1 h.

**Primary antibody:** 1:2000 dilution overnight at 4℃.

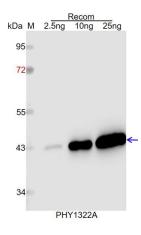
Secondary antibody: 1:10000 dilution using Goat Anti-Rabbit IgG

H&L(HRP) (Cat# PHY6000).

**Detection:** using chemiluminescence substrate and image were captured

with CCD camera.

### Example2:



Recom: 2.5 ng, 10 ng and 25 ng recombinant protein containing the peptide for immunization and having a molecular mass of 43 kDa.

Electrophoresis: 12% SDS-PAGE

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

**Blocking:** 5% skim milk at RT or  $4^{\circ}$ C for 1 h.

**Primary antibody:** 1:1000 dilution overnight at 4℃.

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.