Anti-L-ascorbate peroxidase antibody

Catalog: PHY2791A

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 (18 aa from C terminal 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 & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70℃ as supplied. 6 months, -20 to -70℃ under sterile conditions after reconstitution. 1 month, 2 to 8℃ under sterile conditions after reconstitution.
Shipping:	The product is shipped at 4℃. 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 / 38 kDa
Confirmed Reactivity:	*Arabidopsis thaliana*

Predicted Reactivity:

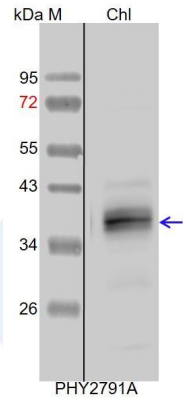
Among species analyzed, the sequence of the synthetic peptide used for immunization is 100% homologues with the sequence in *Panicum virgatum*, *Triticum aestivum*, *Cucumis sativus*, *Hordeum vulgare*, *Brassica rapa*, *Brassica napus*, *Nicotiana tabacum*, *Glycine max*, *Vitis vinifera*, *Populus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

The sequence of the synthetic peptide used for immunization is 83% (15/18) homologues with the sequence in SAPX (AT4G08390).

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

Application Example

Example1:



Chl: 10μl total chloroplast protein from *Arabidopsis thaliana*.

Electrophoresis: 15% SDS-PAGE

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

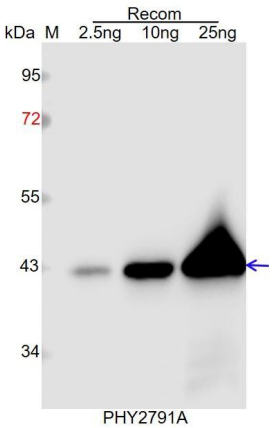
Blocking: 5% skim milk at RT or 4℃ for 1 h.

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

Secondary antibody: 1:10000 dilution using Goat Anti-Rabbit IgGH&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℃ 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.