

# Anti-L-ascorbate peroxidase antibody

Catalog: PHY2791A

## Product Information

|                                 |   |
|---------------------------------|---|
| <b>Description:</b>             | Rabbit polyclonal antibody  |
| <b>Background:</b>              | 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. |
| <b>Synonyms:</b>                | TAPX, THYLAKOIDAL ASCORBATE PEROXIDASE  |
| <b>Immunogen:</b>               | KLH-conjugated synthetic peptide (18 aa from C terminal section) derived from <i>Arabidopsis thaliana</i> TAPX (AT1G77490).   |
| <b>Form:</b>                    | Lyophilized   |
| <b>Quantity:</b>                | 150 µg  |
| <b>Purification:</b>            | Immunogen affinity purified   |
| <b>Reconstitution:</b>          | Reconstitution with 150 µl of 0.01 M sterile PBS.<br>"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".  |
| <b>Stability &amp; Storage:</b> | Use a manual defrost freezer and avoid repeated freeze-thaw cycles.<br>12 months from date of receipt, -20 to -70°C as supplied.<br>6 months, -20 to -70°C under sterile conditions after reconstitution.<br>1 month, 2 to 8°C under sterile conditions after reconstitution.   |
| <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)<br>Note: Optimal dilutions/concentrations should be determined by the end user. |
| <b>Expected / apparent MW:</b> | 46 / 38 kDa  |
| <b>Confirmed Reactivity:</b>   | <i>Arabidopsis thaliana</i>  |

Research Use Only

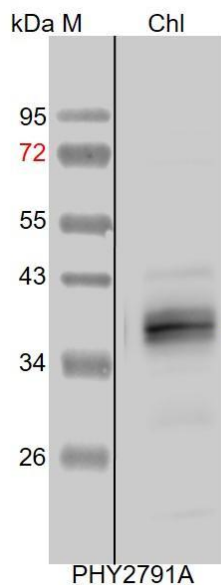
### Predicted Reactivity:

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](mailto:tech@phytoab.com).

### Application Example



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°C for 1 h.

**Primary antibody:** 1:2000 dilution overnight at 4°C.

**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.