

# Anti-Violaxanthin de-epoxidase, chloroplastic antibody

Catalog: PHY1226S

## Product Information

<b>Description:</b>	Rabbit polyclonal antibody
<b>Background:</b>	NPQ1 is a violaxanthin deepoxidase involved in xanthophyll cycle. Two major consequences of the npq1 mutation are the absence of zeaxanthin formation in strong light and the partial inhibition of the quenching of singlet excited chlorophylls in the photosystem II light-harvesting complex.
<b>Synonyms:</b>	NPQ1, ARABIDOPSIS VIOLAXANTHIN DE-EPOXIDASE 1, AVDE1, NON-PHOTOCHEMICAL QUENCHING 1
<b>Immunogen:</b>	KLH-conjugated synthetic peptide (14 aa from C terminal section) derived from <i>Arabidopsis thaliana</i> NPQ1 (AT1G08550).
<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>	Reconstitution with 150µl 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".
<b>Stability &amp; Storage:</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 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°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

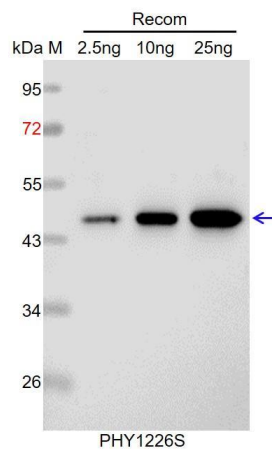
<b>Recommended Dilution:</b>	Western Blot (1:1000-1:2000) Note: Optimal dilutions/concentrations should be determined by the end user.
<b>Expected / apparent MW:</b>	52 kDa
<b>Predicted Reactivity:</b>	Among species analyzed, the sequence of the synthetic peptide used for immunization is 100% homologues with the sequence in <i>Glycine</i>

Research Use Only

*max*, *Gossypium raimondii*, *Hordeum vulgare*, *Brassica napus*, *Brassica rapa*, *Cucumis sativus*, *Triticum aestivum*, *Spinacia oleracea*, *Oryza sativa*, and 80-99% homologues with the sequence in *Sorghum bicolor*, *Panicum virgatum*, *Setaria viridis*, *Zea mays*, *Populus trichocarpa*, *Vitis vinifera*, *Nicotiana tabacum*, *Solanum tuberosum*, *Solanum lycopersicum*.

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 46 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.