

Anti-Violaxanthin de-epoxidase, chloroplastic antibody

Catalog: PHY1226A

Product Information

Description:	Rabbit polyclonal antibody
Background:	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.
Synonyms:	NPQ1, ARABIDOPSIS VIOLAXANTHIN DE-EPOXIDASE 1, AVDE1, NON-PHOTOCHEMICAL QUENCHING 1
Immunogen:	KLH-conjugated synthetic peptide (15 aa from C terminal section) derived from <i>Arabidopsis thaliana</i> NPQ1 (AT1G08550).
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°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.
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:	52 / 47 kDa
Confirmed Reactivity:	<i>Arabidopsis thaliana</i>
Predicted Reactivity:	Among species analyzed, the sequence of the synthetic peptide used

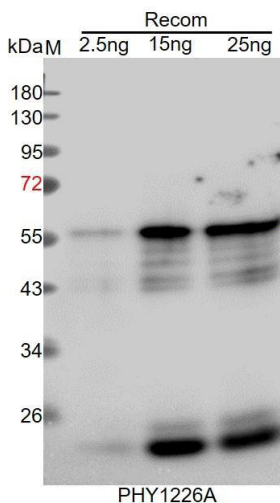
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for immunization is 100% homologues with the sequence in *Brassica napus*, *Brassica rapa*, and 80-99% homologues with the sequence in *Glycine max*, *Cucumis sativus*, *Nicotiana tabacum*, *Solanum tuberosum*, *Vitis vinifera*, *Hordeum vulgare*, *Gossypium raimondii*, *Triticum aestivum*, *Populus trichocarpa*, *Spinacia oleracea*, *Solanum lycopersicum*.

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

Application Example

Example 1



Recom: 2.5 ng, 15 ng and 25 ng recombinant protein containing the peptide for immunization and having a molecular mass of 57 kDa.

Electrophoresis: 12% SDS-PAGE

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

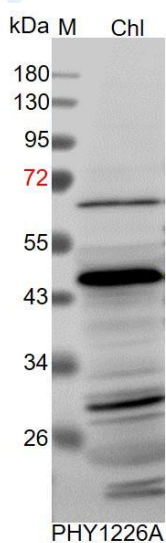
Blocking: 5% skim milk at RT or 4°C for 1 h.

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.

Example 2



Chl: 8 µg total chloroplast protein from *Arabidopsis thaliana*.

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.