

Anti-Violaxanthin de-epoxidase, chloroplastic antibody

Catalog: PHY3504S

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 (14 aa from C terminal section) derived from

Arabidopsis thaliana NPQ1 (AT1G08550).

Form: Lyophilized

Quantity: 150 μg

Purification: Serum

Peptide affinity form antibody available upon request at info@phytoab.com.

Reconstitution: Reconstitution with 150 µl 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".

Stability &Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

Storage: 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: Arabidopsis thaliana

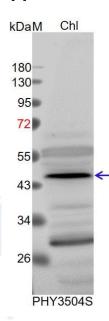
Research Use Only



Predicted Reactivity:

Among species analyzed, the sequence of the synthetic peptide used for immunization is 100% homologues with the sequence in *Glycine max*, *Sorghum bicolor*, *Panicum virgatum*, *Oryza sativa*, *Triticum aestivum*, *Hordeum vulgare subsp. vulgare*, *Setaria viridis*, 80-99% homologues with the sequence in *Populus trichocarpa*, *Medicago truncatula*, *Zea mays*, *Nicotiana tabacum*, *Solanum tuberosum*, *Solanum lycopersicum*, *Vitis vinifera*, *Brassica napus*, *Brassica rapa*. For more species homologues information, please contact tech support at tech@phytoab.com.

Application Example



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: 1:2000 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.