

Anti-D1 subunit of Photosystem II, N-terminal antibody

Catalog: PHY0057

Product Information

Description: Rabbit polyclonal antibody

Background: The D1 protein of Photosystem II (PSII), encoded by the *PsbA* genes, is an

indispensable component of oxygenic photosynthesis. Due to strongly oxidative

chemistry of PSII water splitting, the D1 protein is prone to constant

photodamage requiring its replacement, whereas most of the other PSII

subunits remain ordinarily undamaged.

Synonyms: PsbA, 32 kDa thylakoid membrane protein, photosystem II protein D1

Immunogen: KLH-conjugated synthetic peptide derived from N-terminal of D1 subunit in

Arabidopsis thaliana ATCG00020.

Form: Lyophilized

Quantity: 150 μg

Purification: Protein A 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 &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: 39 / 31 kDa

Confirmed Reactivity: Arabidopsis thaliana, Glycine max, Zea mays, Oryza sativa,

Hordeum vulgare

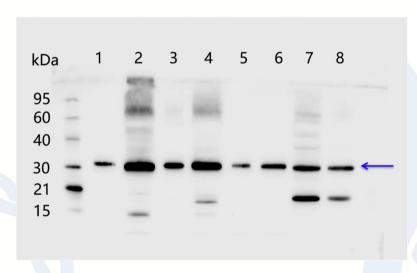


Predicted Reactivity:

Among 25 analyzed species, the sequence of the synthetic peptide used for immunization is 100% homologues with the sequence in *Brassica napus, Nicotiana tabacum, Populus trichocarpa, Solanum tuberosum, Cucumis sativus*, and 80-99% homologues with the sequence in *Triticum aestivum, Vitis vinifera, Gossypium raimondii, Medicago truncatula, Sorghum bicolor, Physcomitrella patens, Chlamydomonas reinhardtii.*

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

Application Example



Lane 1: thylakoid membrane protein from *Arabidopsis thaliana* leaf containing 0.1µg chlorophyll.

Lane 2: 50µg total protein from Arabidopsis thaliana leaf.

Lane 3: 10µg total protein from *Glycine*max leaf.

Lane 4: 50µg total protein from *Glycine* max leaf.

Lane 5: 10µg total protein from Zea

mays leaf.

Lane 6: 50µg total protein from Zea mays leaf.

Lane 7: 50µg total protein from Oryza sativa leaf.

Lane 8: 50µg total protein from Hordeum vulgare leaf.

Electrophoresis: 15% SDS-Urea-PAGE

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

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

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

Secondary antibody: 1:20000 dilution using Goat Anti-Rabbit IgG H&L (HRP) (Cat# PHY6000).

Detection: using chemiluminescence substrate and image were captured with CCD camera.