

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

Catalog: PHY0363A

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 (15 aa from N terminal section) derived from

Arabidopsis thaliana PsbA (ATCG00020).

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 &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 kDa

Predicted Reactivity: Among species analyzed, the sequence of the synthetic peptide used

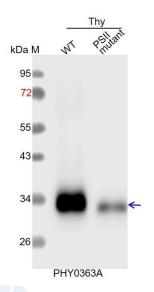
for immunization is 100% homologues with the sequence in *Vitis vinifera*, *Glycine max*, *Nicotiana tabacum*, *Populus trichocarpa*,



Brassica napus, Cucumis sativus, Spinacia oleracea, Brassica rapa, and 80-99% homologues with the sequence in Zea mays, Triticum aestivum, Oryza sativa Japonica Group, Hordeum vulgare, Gossypium raimondii, Panicum virgatum.

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

Application Example



Thy-WT: thylakoid membrane protein from WT of *Arabidopsis thaliana* containing 0.5 µg of chlorophyll.

Thy-PSII mutant: thylakoid membrane protein from an Arabidopsis mutant with low accumulation of PSII containing 0.5 µg of chlorophyll.

Electrophoresis: 15% SDS-PAGE

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

Blocking: 5% skim milk at RT or 4℃ 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.