

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 <i>PsbA</i> 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:	<i>PsbA</i> , 32 kDa thylakoid membrane protein, Photosystem II protein D1
Immunogen:	KLH-conjugated synthetic peptide (15 aa from N terminal section) derived from <i>Arabidopsis thaliana</i> <i>PsbA</i> (ATCG00020).
Form:	Lyophilized
Quantity:	150 µg
Purification:	Immunogen affinity purified
Reconstitution:	Reconstitution with 150 µl of sterile 1XPBS (PH=7.4). "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:	39 kDa
Predicted Reactivity:	Among species analyzed, the sequence of the synthetic peptide used for immunization is 100% homologues with the sequence in <i>Vitis vinifera</i> , <i>Glycine max</i> , <i>Nicotiana tabacum</i> , <i>Populus trichocarpa</i> ,

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Brassica napus, *Solanum tuberosum*, *Brassica rapa*, *Cucumis sativus*, *Spinacia oleracea*, *Gossypium raimondii*, *Solanum lycopersicum*, and 80-99% homologues with the sequence in *Medicago truncatula*, *Triticum aestivum*, *Zea mays*, *Oryza sativa*, *Hordeum vulgare*, *Panicum virgatum*.

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

Application Example

Example 1



CCD camera.

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.

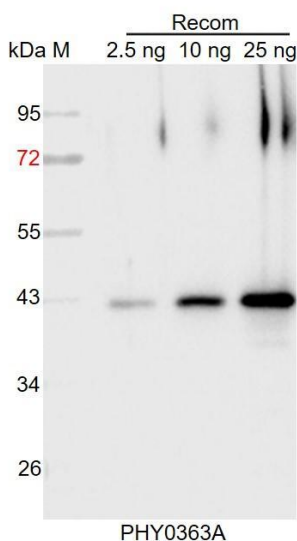
Blocking: 5% skim milk at RT or 4°C for 1 h.

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

Example 2



Recom: 2.5 ng, 10 ng and 25 ng recombinant protein containing the peptide for immunization and having a molecular mass of 42 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.