

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

Catalog: PHY0057A

## Product Information

<b>Description:</b>	Rabbit polyclonal antibody
<b>Background:</b>	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.
<b>Synonyms:</b>	PsbA, D1, 32 kDa thylakoid membrane protein, photosystem II protein D1
<b>Immunogen:</b>	KLH-conjugated synthetic peptide (15 aa from N terminal section) derived from <i>Arabidopsis thaliana</i> PsbA (ATCG00020).
<b>Form:</b>	Lyophilized
<b>Quantity:</b>	150 µg
<b>Purification:</b>	Immunogen affinity purified
<b>Reconstitution:</b>	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".
<b>Stability &amp; Storage:</b>	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.
<b>Shipping:</b>	The product is shipped at 4°C. Upon receipt, store it immediately at the temperature recommended above.

## Application Information

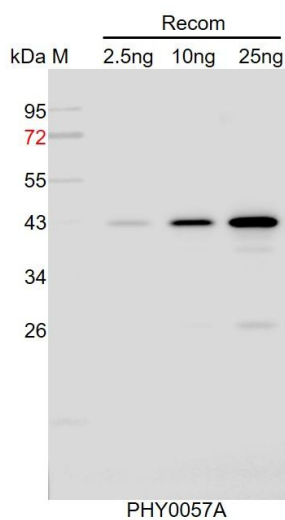
<b>Recommended Dilution:</b>	Western Blot (1:1000-1:2000) Note: Optimal dilutions/concentrations should be determined by the end user.
<b>Expected / apparent MW:</b>	39 kDa
<b>Predicted Reactivity:</b>	Among species analyzed, the sequence of the synthetic peptide used for immunization is 100% homologues with the sequence in <i>Glycine max</i> , <i>Brassica napus</i> , <i>Nicotiana tabacum</i> , <i>Solanum tuberosum</i> ,

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*Brassica rapa*, *Populus trichocarpa*, *Cucumis sativus*, *Spinacia oleracea*, *Gossypium raimondii*, and 80-99% homologues with the sequence in *Vitis vinifera*, *Medicago truncatula*, *Triticum aestivum*, *Hordeum vulgare*, *Zea mays*, *Oryza sativa*, *Panicum virgatum*, *Chlamydomonas reinhardtii*.

For more species homologues information, please contact tech support at [tech@phytoab.com](mailto:tech@phytoab.com).

## Application Example



Recom: 2.5 ng, 10 ng and 25 ng recombinant protein containing the peptide for immunization and having a molecular mass of 43 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.