

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

Catalog: PHY0057

## 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, 32 kDa thylakoid membrane protein, photosystem II protein D1
<b>Immunogen:</b>	KLH-conjugated synthetic peptide derived from N-terminal of D1 subunit in <i>Arabidopsis thaliana</i> ATCG00020.
<b>Form:</b>	Lyophilized
<b>Quantity:</b>	150 µg
<b>Purification:</b>	Protein A purified
<b>Reconstitution:</b>	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".
<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 / 31 kDa
<b>Confirmed Reactivity:</b>	<i>Arabidopsis thaliana</i> , <i>Glycine max</i> , <i>Zea mays</i> , <i>Oryza sativa</i> , <i>Hordeum vulgare</i>

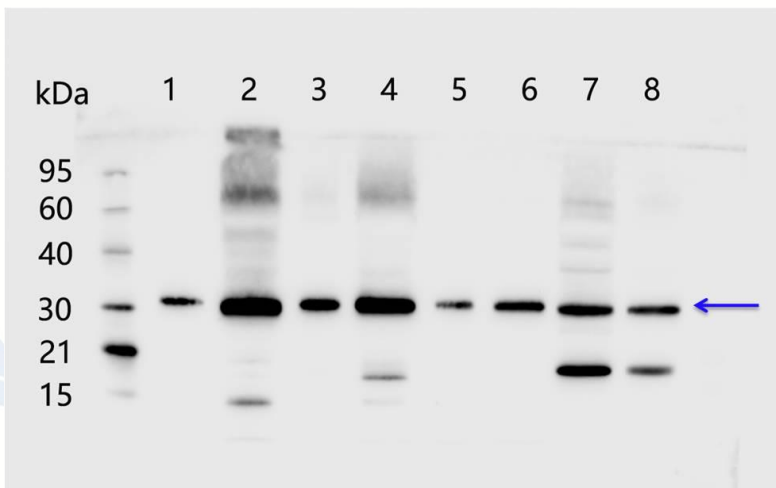
Research Use Only

### 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](mailto: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.