

# Anti-D1 subunit of Photosystem II, DE-loop antibody

Catalog: PHY5269A

## Product Information

<b>Description:</b>	Rabbit polyclonal antibody
<b>Background:</b>	Photosystem II (PSII) is a light-driven water: plastoquinone oxidoreductase that uses light energy to abstract electrons from H <sub>2</sub> O, generating O <sub>2</sub> and a proton gradient subsequently used for ATP formation. It consists of a core antenna complex that captures photons, and an electron transfer chain that converts photonic excitation into a charge separation.
<b>Synonyms:</b>	PsbA
<b>Immunogen:</b>	KLH-conjugated synthetic peptide (19 aa from C terminal section) derived from <i>Synechocystis sp.</i> PCC 6803 PsbA1 (slr1181) and PsbA2 (slr1311).
<b>Form:</b>	Lyophilized
<b>Quantity:</b>	150 µg
<b>Purification:</b>	Immunogen affinity 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

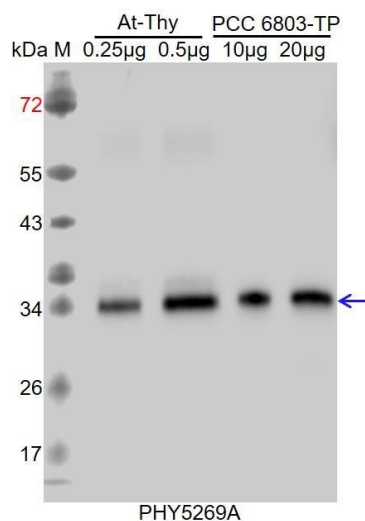
<b>Recommended Dilution:</b>	Western Blot (1:1000-1:2000) Note: Optimal dilutions/concentrations should be determined by the end user.
<b>Expected / apparent MW:</b>	40 / 34 kDa
<b>Confirmed Reactivity:</b>	<i>Synechocystis sp.</i> PCC 6803, <i>Arabidopsis thaliana</i>
<b>Predicted Reactivity:</b>	Among species analyzed, the sequence of the synthetic peptide used

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for immunization is 100% homologues with the sequence in *Solanum tuberosum*, *Vitis vinifera*, *Glycine max*, *Synechococcus elongatus* PCC 7942, *Triticum aestivum*, *Hordeum vulgare*, *Medicago truncatula*, *Zea mays*, *Physcomitrium patens*, *Brassica napus*, *Oryza sativa*, *Populus trichocarpa*, *Nicotiana tabacum*, *Cucumis sativus*, *Panicum virgatum*, *Chlamydomonas reinhardtii*, *Spinacia oleracea*, *Setaria viridis*, and 80-99% homologues with the sequence in *Gossypium raimondii*, *Brassica rapa*.

For homologues with other species especially algae, please contact tech support at [tech@phytoab.com](mailto:tech@phytoab.com).

## Application Example



At-Thy: thylakoid membrane protein from WT of *Arabidopsis thaliana* containing 0.25 µg and 0.5 µg of chlorophyll, respectively.

PCC 6803-TP is 10 µg and 20 µg whole-cell lysate protein from WT of *Synechocystis sp.* PCC 6803, respectively.

**Electrophoresis:** 15% SDS-Urea-PAGE

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

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

**Primary antibody:** 1:2000 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.