

# Anti-D2 subunit of Photosystem II, DE-loop antibody

Catalog: PHY0323

## Product Information

<b>Description:</b>	Rabbit polyclonal antibody
<b>Background:</b>	The D1/D2 (PsbA/PsbD) reaction center heterodimer binds P680, the primary electron donor of PSII as well as several subsequent electron acceptors. D2 is needed for assembly of a stable PSII complex.
<b>Synonyms:</b>	PsbD
<b>Immunogen:</b>	KLH-conjugated synthetic peptide (16 aa from C terminal section) derived from <i>Arabidopsis thaliana</i> DE-loop of D2 (ATCG00270) subunit.
<b>Form:</b>	Lyophilized
<b>Quantity:</b>	150 µg
<b>Purification:</b>	Protein A purified
<b>Reconstitution:</b>	Reconstitution with 150 µl of 0.01M 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

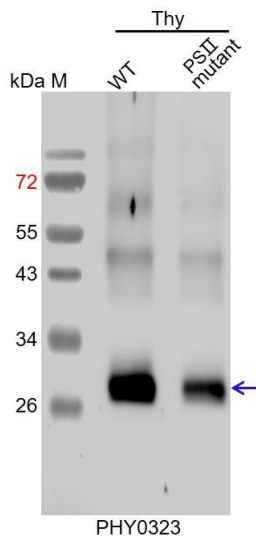
<b>Recommended Dilution:</b>	Western Blot (1:1000-1:4000) Note: Optimal dilutions/concentrations should be determined by the end user.
<b>Expected / apparent MW:</b>	40 / 30 kDa
<b>Confirmed Reactivity:</b>	<i>Arabidopsis thaliana</i>
<b>Predicted Reactivity:</b>	Among species analyzed, the sequence of the synthetic peptide used for immunization is 100% homologues with the sequence in <i>Brassica napus</i> , <i>Medicago truncatula</i> , <i>Glycine max</i> , <i>Brassica rapa</i> , <i>Solanum tuberosum</i> , <i>Oryza sativa</i> , <i>Triticum aestivum</i> , <i>Sorghum bicolor</i> ,

Research Use Only

*Cucumis sativus*, *Vitis vinifera*, *Hordeum vulgare*, *Nicotiana tabacum*, *Populus trichocarpa*, *Spinacia oleracea*, *Setaria viridis*, *Zea mays*, *Solanum lycopersicum*, *Chlamydomonas reinhardtii*, *Gossypium raimondii*, *Leymus chinensis*, and 80-99% homologues with the sequence in *Physcomitrella patens*, *Synechococcus elongatus* PCC 7942.

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

## Application Example



Thy-WT: thylakoid membrane protein from WT of *Arabidopsis thaliana* containing 0.25 µg of chlorophyll.

Thy-PS II mutant: thylakoid membrane protein from an *Arabidopsis* mutant with low accumulation of PS II containing 0.25 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:** 1:4000 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.