

# Anti-Chlorophyll a-b binding protein CP29.1, chloroplastic antibody

Catalog: PHY3434S

## Product Information

<b>Description:</b>	Rabbit polyclonal antibody
<b>Background:</b>	The light-harvesting complex (LHC) functions as a light receptor; it captures and delivers excitation energy to photosystems. Lhcb4 (CP29) is one of the 3 minor chlorophyll a/b-binding proteins associated with PSII in plants and algae. CP29 facilitates the State 1 to State 2 transition, where State I is induced by excess photosystem I (PSI) light and State 2 is induced by excess photosystem II (PSII) light.
<b>Synonyms:</b>	LHCB4.1, LIGHT HARVESTING COMPLEX PHOTOSYSTEM II
<b>Immunogen:</b>	KLH-conjugated synthetic peptide (15 aa from Central section) derived from <i>Arabidopsis thaliana</i> LHCB4.1 (AT5G01530).
<b>Form:</b>	Lyophilized
<b>Quantity:</b>	150 µg
<b>Purification:</b>	Serum Peptide affinity form antibody available upon request at <a href="mailto:info@phytoab.com">info@phytoab.com</a> .
<b>Reconstitution:</b>	Reconstitution with 150 µl of sterile water. "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>	31 / 27 kDa

Research Use Only

**Confirmed Reactivity:**

*Arabidopsis thaliana*

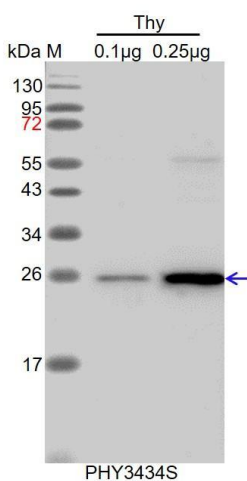
**Predicted Reactivity:**

Among species analyzed, the sequence of the synthetic peptide used for immunization is 80-99% homologues with the sequence in *Brassica rapa*, *Brassica napus*, *Solanum tuberosum*, *Nicotiana tabacum*, *Solanum lycopersicum*, *Glycine max*, *Medicago truncatula*, *Populus trichocarpa*, *Gossypium raimondii*, *Hordeum vulgare*, *Triticum aestivum*.

The sequence of the synthetic peptide used for immunization is 87% homologues with the sequence in LHCB4.2 (AT3G08940).

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

## Application Example



Thy: thylakoid membrane protein from *Arabidopsis thaliana* containing 0.1 µg, and 0.25 µg of chlorophyll, respectively.

**Electrophoresis:** 15% SDS-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:** 1:10000 dilution using Goat Anti-Rabbit IgG H&L (HRP) (Cat# PHY6000).

**Detection:** using chemiluminescence substrate and image were captured with CCD camera.