

# Anti-Lhca4 protein of LHCI, C-terminal antibody

Catalog: PHY0666A

## 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 photosystem with which it is closely associated. The light-harvesting protein Lhca4 is one of the four main and highly conserved types of chlorophyll a/b-binding proteins (Lhca1-4) of the light harvesting antenna (LHCI) of plant photosystem I. Lhca4 is imported as a precursor from the cytosol into the chloroplast. Upon insertion into the thylakoid membrane Lhca4 forms a heterodimer (LHCI-730) with Lhca1 that associates with the PSI core close to PsaG and PsaF.
<b>Synonyms:</b>	Lhca4, CAB4, LHCA4, LIGHT-HARVESTING CHLOROPHYLL-PROTEIN COMPLEX I SUBUNIT A4
<b>Immunogen:</b>	KLH-conjugated synthetic peptide (15 aa from C terminal section) derived from <i>Arabidopsis thaliana</i> Lhca4 (AT3G47470).
<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.
------------------------------	--

Research Use Only

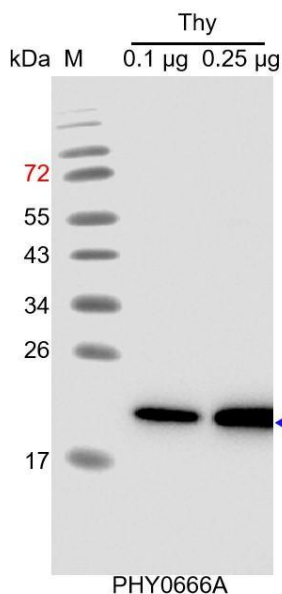
**Expected / apparent MW:** 28 / 23 kDa

**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 *Solanum lycopersicum*, *Vitis vinifera*, *Solanum tuberosum*, *Nicotiana tabacum*, *Medicago truncatula*, *Panicum virgatum*, *Glycine max*, *Zea mays*, *Spinacia oleracea*, *Brassica rapa*, *Gossypium raimondii*, *Cucumis sativus*, *Sorghum bicolor*, *Setaria viridis*, *Populus trichocarpa*, *Oryza sativa*, *Triticum aestivum*, *Hordeum vulgare*, *Cucumis sativus*.

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 1 h.

**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.