

# Anti-Lhca1 protein of LHCI antibody

Catalog: PHY0043A

## 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 with which it is closely associated. The light-harvesting protein Lhca1 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. Lhca1 is imported as a precursor from the cytosol into the chloroplast. Upon insertion into the thylakoid membrane Lhca1 forms a heterodimer (LHCI-730) with Lhca4 that associates with the PSI core close to PsaG and PsaF.
<b>Synonyms:</b>	Lhca1, PHOTOSYSTEM I LIGHT HARVESTING COMPLEX GENE 1
<b>Immunogen:</b>	KLH-conjugated synthetic peptide of Lhca1 (13 aa from N terminal section) derived from <i>Arabidopsis thaliana</i> Lhca1 (AT3G54890).
<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>	26 / 23 kDa

Research Use Only

**Confirmed Reactivity:**

*Arabidopsis thaliana*

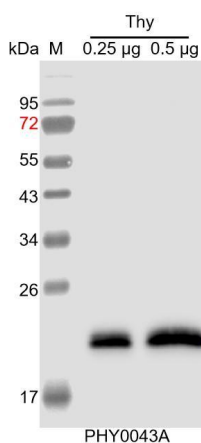
**Predicted Reactivity:**

Among species analyzed, the sequence of the synthetic peptide used for immunization is 100% homologues with the sequence in *Solanum lycopersicum*, *Nicotiana tabacum*, and 80-99% homologues with the sequence in *Gossypium raimondii*, *Solanum tuberosum*, *Populus trichocarpa*, *Vitis vinifera*, *Brassica napus*, *Brassica rapa*, *Glycine max*, *Medicago truncatula*, *Cucumis sativus*, *Physcomitrium patens*, *Spinacia oleracea*.

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

## Application Example

### Example1:



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

**Electrophoresis:** 15% SDS-PAGE

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

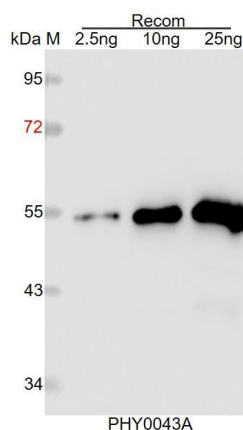
**Blocking:** 5% skim milk at RT or 4°C for 1 h.

**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.

### Example2:



Recom: 2.5 ng, 10 ng and 25 ng recombinant protein containing the peptide for immunization and having a molecular mass of 55 kDa.

**Electrophoresis:** 12% 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:** 1:1000 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.

