

# Anti-Lhca2 protein of LHCI antibody

Catalog: PHY2786A

## 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 Lhca2 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. Lhca2 is imported as a precursor from the cytosol into the chloroplast. Upon integration in the thylakoid membrane Lhca2 forms a heterodimer (LHCI-680) with Lhca3 that associates with the PSI core close to PsaF and PsaK.
<b>Synonyms:</b>	Lhca2
<b>Immunogen:</b>	KLH-conjugated synthetic peptide of Lhca2 (16 aa from central section) derived from <i>Arabidopsis thaliana</i> (AT3G61470).
<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>	28 / 24 kDa

Research Use Only

**Confirmed Reactivity:**

*Arabidopsis thaliana*

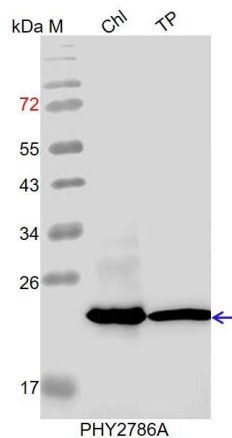
**Predicted Reactivity:**

Among species analyzed, the sequence of the synthetic peptide used for immunization is 100% homologues with the sequence in *Brassica napus*, *Brassica rapa*, *Zea mays*, and 80-99% homologues with the sequence in *Solanum tuberosum*, *Nicotiana tabacum*, *Solanum lycopersicum*, *Medicago truncatula*, *Triticum aestivum*, *Hordeum vulgare*, *Vitis vinifera*, *Oryza sativa*, *Gossypium raimondii*, *Populus trichocarpa*, *Glycine max*, *Panicum virgatum*, *Sorghum bicolor*, *Spinacia oleracea*, *Cucumis sativus*.

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

## Application Example

### Example 1:



Chl: 7.5 µg total chloroplast protein from *Arabidopsis thaliana*.

TP: 15 µg total protein from *Arabidopsis thaliana*.

**Electrophoresis:** 15% SDS-PAGE

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

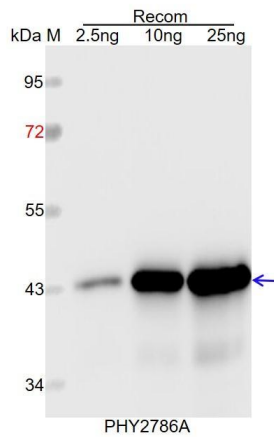
**Blocking:** 5% skim milk at RT or 4°C for 1 h.

**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 44 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.