

## **Anti-Lhca2 protein of LHCI antibody**

Catalog: PHY0668A

## **Product Information**

**Description:** Rabbit polyclonal antibody

**Background:** 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.

Synonyms: Lhca2, LHCA2, PHOTOSYSTEM I LIGHT HARVESTING COMPLEX GENE 2

**Immunogen:** KLH-conjugated synthetic peptide (15 aa from C terminal section) derived from

Arabidopsis thaliana Lhca2 (AT3G61470).

Form: Lyophilized

**Quantity**: 150 μg

Purification: Immunogen affinity purified

**Reconstitution:** 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".

Stability &Storage: 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℃ under sterile conditions after reconstitution.

**Shipping:** The product is shipped at 4°C. Upon receipt, store it immediately at the

temperature recommended above.

## **Application Information**

**Recommended Dilution:** Western Blot (1:1000-1:4000)

Note: Optimal dilutions/concentrations should be determined by the

end user.

Expected / apparent MW: 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 *Physcomitrium patens*, and 80-99% homologues with the sequence in *Brassica napus*, *Brassica rapa*, *Glycine max*, *Cucumis sativus*, *Vitis vinifera*, *Gossypium raimondii*, *Spinacia oleracea*, *Solanum tuberosum*, *Solanum lycopersicum*, *Medicago truncatula*, *Nicotiana tabacum*, *Populus trichocarpa*, *Oryza sativa Japonica Group*, *Triticum aestivum*, *Zea mays*, *Hordeum vulgare subsp. vulgare*, *Setaria viridis*, *Sorghum bicolor*.

The sequence of the synthetic peptide used for immunization is 93% (14/15) homologues with the sequence in AT5G28450.

For more species homologues information, please contact tech support at <a href="mailto:tech@phytoab.com">tech@phytoab.com</a>.

## **Application Information**

Thy
kDa M 0.1μg 0.25μg

72
55
43
34
26

17

CCD camera.

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

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:** 1:4000 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