

Anti-Lhca1 protein of LHCI antibody

Catalog: PHY3821S

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 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.
Synonyms:	Lhca1, LHCA1, PHOTOSYSTEM I LIGHT HARVESTING COMPLEX GENE 1
Immunogen:	KLH-conjugated synthetic peptide (15 aa from Central section) derived from
	Arabidopsis thaliana Lhca1 (AT3G54890).
Form:	Lyophilized
Quantity:	150 µg
Purification:	Serum
	Peptide affinity form antibody available upon request at info@phytoab.com.
Reconstitution:	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".
Stability &	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
Storage:	12 months from date of receipt, -20 to -70 $^\circ C$ as supplied.
	6 months, -20 to -70 $^\circ C$ under sterile conditions after reconstitution.
	1 month, 2 to 8 $^\circ\!\mathrm{C}$ under sterile conditions after reconstitution.
Shipping:	The product is shipped at 4 $^\circ\!\mathrm{C}.$ Upon receipt, store it immediately at the
	temperature recommended above.

Application Information

Recommended Dilution:	Western Blot (1:1000-1:2000)
	Note: Optimal dilutions/concentrations should be determined by the
	end user.

Research Use Only



Expected / apparent MW: Predicted Reactivity: 26 kDa

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

Application Example



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.