

# Anti-Chlorophyll a-b binding protein 2, chloroplastic antibody

Catalog: PHY3288S

## Product Information

Description:	Rabbit polyclonal antibody	
Background:	The light-harvesting chlorophyll a/b-binding proteins of photosystem II (LHCII)	
	are the major components of the photosynthetic machinery in plants which	
	contain more than 60% of plant chlorophyll.	
	The LHCII proteins can be grouped into six subfamilies (Lhcb1-6) which are	
	encoded by LHC gene family, Lhcb1, Lhcb2 and Lhcb3 are the major	
	pigment-binding proteins which are encoded by Lhcb1, Lhcb2 and Lhcb3	
	genes, respectively. Lhcb1, Lhcb2 and Lhcb3 polypeptides each with about 232	
	amino acid residues are similar in sequence, Lhcb1-3 precursors are	
	synthesized in cytoplasm and following transport into chloroplasts inserted into	
	thylakoid membranes structure and function. Lhcb1 and Lhcb2 are the most	
	abundant proteins in the light harvesting antenna complex.	
Synonyms:	Lhcb2, Lhcb2.1/2.2/2.3	
Immunogen:	KLH-conjugated synthetic peptide (13 aa from C terminal section) derived from	
	Arabidopsis thaliana Lhcb2.1 (AT2G05100), Lhcb2.2 (AT2G05070), and	
	Lhcb2.3 (AT3G27690).	
Form:	Lyophilized	
Quantity:	150 µg	
Purification:	Serum	
	Peptide affinity form antibody available upon request at <u>info@phytoab.com</u> .	
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 $^\circ\!\!\!\mathrm{C}$ under sterile conditions after reconstitution.	
	1 month, 2 to 8 $^\circ C$ under sterile conditions after reconstitution.	
Shipping:	The product is shipped at $4^{\circ}$ C. Upon receipt, store it immediately at the	
	temperature recommended above.	

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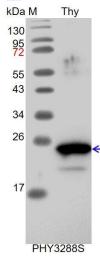


## **Application Information**

<b>Recommended Dilution:</b>	Western Blot (1:1000-1:2000)
	Note: Optimal dilutions/concentrations should be determined by the
	end user.
Expected / apparent MW:	29 / 25 kDa
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 <i>Brassica</i>
	napus, Brassica rapa, and 80-99% homologues with the sequence in
	Hordeum vulgare subsp. vulgare, Triticum aestivum, Medicago
	truncatula, Nicotiana tabacum, Spinacia oleracea, Solanum
	lycopersicum, Solanum tuberosum, Cucumis sativus.
	For more species homologues information, please contact tech
	support at <u>tech@phytoab.com</u> .

## **Application Example**

#### Example1



Thy: Thylakoid membrane protein from *Arabidopsis thaliana* leaf containing 0.1 µg of chlorophyll.

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 ℃.

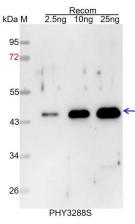
**Secondary antibody:** 1:10000 dilution using Goat Anti-Rabbit IgG H&L (HRP) (Cat# PHY6000).

**Detection:** using chemiluminescence substrate and image were captured with CCD camera.

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#### Example2



Recom: 2.5 ng, 10 ng and 25 ng recombinant protein containing the peptide for immunization and having a molecular mass of 48 kDa.

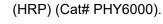
Electrophoresis: 12% SDS-PAGE

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

**Blocking:** 5% skim milk at RT or  $4^{\circ}$  for 1 h.

**Primary antibody:** 1:1000 dilution overnight at 4°C.

Secondary antibody: 1:10000 dilution using Goat Anti-Rabbit IgG H&L



**Detection:** using chemiluminescence substrate and image were captured with CCD camera.



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