

Anti-LHCB1/3, N-terminal antibody

Catalog: PHY0085A

Product Information

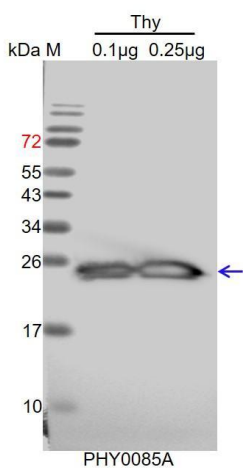
Description:	Rabbit polyclonal antibody
Background:	<p>The light-harvesting chlorophyll a/b-binding proteins of photosystem II (LHCII) are the major components of the photosynthetic machinery in plants which contain more than 60% of plant chlorophyll.</p> <p>The LHCII proteins can be grouped into six 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.</p>
Synonyms:	LHCB1/3
Immunogen:	<p>KLH-conjugated synthetic peptide (15 aa from N terminal section) derived from <i>Arabidopsis thaliana</i> LHCB1.1 (AT1G29920), LHCB1.2 (AT1G29910), LHCB1.3 (AT1G29930), LHCB1.4 (AT2G34430), LHCB1.5 (AT2G34420), LHCB3 (AT5G54270).</p>
Form:	Lyophilized
Quantity:	150 µg
Purification:	Immunogen affinity purified
Reconstitution:	<p>Reconstitution with 150 µl of 0.01 M sterile PBS.</p> <p>"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".</p>
Stability &	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
Storage:	<p>12 months from date of receipt, -20 to -70°C as supplied.</p> <p>6 months, -20 to -70°C under sterile conditions after reconstitution.</p> <p>1 month, 2 to 8°C under sterile conditions after reconstitution.</p>
Shipping:	The product is shipped at 4°C. Upon receipt, store it immediately at the temperature recommended above.

Research Use Only

Application Information

Recommended Dilution:	Western Blot (1:1000-1:2000)
	Note: Optimal dilutions/concentrations should be determined by the end user.
Expected / apparent MW:	28 / 25 kDa
Confirmed Reactivity:	<i>Arabidopsis thaliana</i>
Predicted Reactivity:	Among species analyzed, the sequence of the synthetic peptide used for immunization is 100% homologues with the sequence in <i>Brassica napus</i> , <i>Hordeum vulgare</i> , <i>Spinacia oleracea</i> , <i>Medicago truncatula</i> , <i>Vitis vinifera</i> , <i>Triticum aestivum</i> , <i>Panicum virgatum</i> , <i>Solanum tuberosum</i> , <i>Oryza sativa</i> , <i>Glycine max</i> , <i>Zea mays</i> , <i>Setaria viridis</i> , <i>Sorghum bicolor</i> , <i>Nicotiana tabacum</i> , <i>Brassica rapa</i> , <i>Solanum lycopersicum</i> , <i>Cucumis sativus</i> . The sequence of the synthetic peptide used for immunization is 93% homologues with the sequence in LHCB2.1 (AT2G05100), LHCB2.2 (AT2G05070) and LHCB2.4 (AT3G27690), and 80% homologues with the sequence in LHCB7 (AT1G76570). For more species homologues information, please contact tech support at tech@phytoab.com .

Application Example Example1



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

Electrophoresis: 15% SDS-PAGE.

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

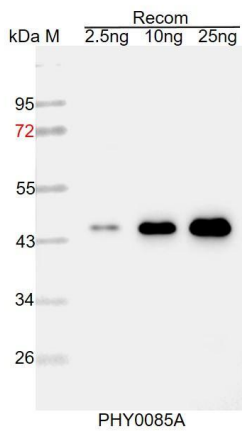
Blocking: 5% skim milk at RT or 4°C for 1h.

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 45 kDa.

Electrophoresis: 12% SDS-PAGE.

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

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

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.