Product no AS13 2704
Lhcb1-P | LHCII type I chlorophyll a/b-binding protein, phosphorylated

Product information

Background
The major light-harvesting antenna complex II (LHCII) in photosynthetic eukaryotes is located in the thylakoid membrane of the chloroplast. It is a heterotrimeric complex formed by up to 3 different individual subtypes of chlorophyll a/b-binding proteins: Lhcb1, Lhcb2, and Lhcb3. Lhcb1 is the most abundant chlorophyll a/b-binding protein in eukaryotic phototrophs and is often coded by several nuclear genes.

Immunogen
KLH-conjugated synthetic peptide RKT*VAKPKGP, where T* indicates phospho-Thr

Host
Rabbit

Clonality
Polyclonal

Purity
Affinity purified serum in PBS, pH 7.4

Format
Lyophilized

Quantity
25 µg

Reconstitution
For reconstitution add 25 µl of sterile water.

Storage
Store lyophilized/reconstituted at -20°C; once reconstituted make aliquots to avoid repeated freeze-thaw cycles. Please, remember to spin tubes briefly prior to opening them to avoid any losses that might occur from lyophilized material adhering to the cap or sides of the tubes.

Tested applications
Western blot (WB)

Related products

- AS01 004 | Anti-Lhcb1 | LHCII type I chlorophyll a/b-binding protein, rabbit antibodies
- AS13 2705 | Anti-Lhcb2 | LHCII type II chlorophyll a/b-binding protein, phosphorylated, rabbit antibodies
- Collection of anti-LHC antibodies
- Antibodies to other proteins involved in photosynthesis
- Plant and algal protein extraction buffer
- Secondary antibodies

Application information

Recommended dilution
1 : 10 000 (WB)

Expected | apparent MW
25 | 25 kDa for Arabidopsis thaliana

Confirmed reactivity
Arabidopsis thaliana

Predicted reactivity
Arachis hypogaea, Colobanthus quitensis Kunt Bartl, Hordeum vulgare, Mesembryanthemum crystallinum, Nicotiana tabacum, Oryza sativa, Pisum sativum, Phaseolus vulgaris, Silene vulgaris, Solanum lycopersicum, Spinacia oleracea, Zea mays

Species of your interest not listed? Contact us

Not reactive in
No confirmed exceptions from predicted reactivity are currently known.

Selected references
Rantala et al. (2017). Proteomic characterization of hierarchical megacomplex formation in Arabidopsis thylakoid

For high resolution images, please visit the specific product page at www.agrisera.com

Application example

1 ug of thylakoid membranes isolated from Arabidopsis thaliana wide-type and mutants were solubilized with 3X LB (6 M urea, 12% SDS, 30% glycerol, 100 mM DTT, 150 mM Tris pH7.0, 0.8% Comassie G-250). 1 µg of total chlorophyll was loaded and separated on 16% SDS-PAGE, and then blotted for 2 h onto nitrocellulose membrane. Blots were blocked with milk powder for 2 h and then incubated in the primary antibody solution, at a dilution of 1:5 000/2.5 h, RT incubation, which was then decanted and the blot was washed 3 times for 5 min in TBST. Membrane was incubated in secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated) diluted to 1:10 000 in for 1h, followed by washing steps as above. All the steps following transfer were performed in room temperature (RT) with agitation. Membrane was developed for 5 min with ECL according to the manufacturer’s instructions and recorded using FujiFilm CCD camera with 30 s increment time for around 5 min.

Courtesy of a phd candidate Małgorzata Pietrzykowska, Umeå Plant Science Centre, Sweden