Product no AS04 045
Lhcb4 | CP29 chlorophyll a/b binding protein of plant PSII

Product information

Immunogen | BSA-conjugated synthetic peptide derived from a highly conserved sequence of Lhb4 proteins from angiosperms (monocots and dicots) and gymnosperms, including Arabidopsis thaliana (Lhcb4.1 At1g01530 and Lhcb4.2 At3g08940 and Lhcb4.3 At2g40100).
Host | Rabbit
Clonality | Polyclonal
Purity | Total IgG. Protein G purified in PBS pH 7.4.
Format | Lyophilized
Quantity | 0.5 mg
Reconstitution | For reconstitution add 250 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 the tubes briefly prior to opening them to avoid any losses that might occur from material adhering to the cap or sides of the tube.

Additional information
An overview about the different Lhc-protein types in plants can be found in Klimmek et al. (2006) Abundantly and rarely expressed Lhc protein genes exhibit distinct regulation patterns in plants. Plant Physiol 140: 793-804.

Lhcb4 protein is processed into mature form (Jansson 1999).

Application information

Recommended dilution | 1 : 7 000 (WB)
Expected | apparent MW | 31.9 | 29 kDa for Arabidopsis thaliana
Predicted reactivity | Catalpa bungei, Cucumis sativus, Populus, gymnosperms and microalgae Ostreococcus tauri; the target sequence is only weakly conserved in Physcomitrium patens

Species of your interest not listed? Contact us

Not reactive in Chlamydomonas reinhardtii (please use AS06 117 for this organism)

Selected references

Application example

5 µg of total protein from embebed seeds of Nicotiana tabacum growing during 4 d in dark (0) and then transfer to continue light growing for 6 h (6) extracted with LB2x buffer and denatured 90 ºC for 2-5 min, were separated on 12.5 % SDS-PAGE and blotted 1h to PVDF using tank transfer. Blots were blocked with TBS-T with 5% dry-milk for 3h at room temperature (RT) with agitation. Blot was incubated in the primary antibody at a dilution of 1: 10 000 overnight at 4 ºC with agitation in TBS-T with 5% dry-milk. The antibody solution was decanted and the blot was...
rinsed briefly twice, then washed 4 times for 15 min in TBS-T at RT with agitation. Blot was incubated in secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated, AS09 602, from Agrisera) diluted to 1:30 000 in TBS-T with 5% dry-milk for 1h at RT with agitation. The blot was washed as above and developed for 5 min with chemiluminescent detection. Exposure time was 60 seconds.

Courtesy of Dr. Concha Almoguera, Inst. de Recursos Naturales y Agrobiología –CSIC, Spain