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Product no AS03 032

Anti-PsbS | 22 kDa Lhc-like PSII protein (chicken)

Product information

Immunogen KLH-conjugated synthetic peptide derived from available di and monocot PsbS sequences, including *Arabidopsis thaliana* (<u>At1q44575</u>). This sequence is even conserved in conifers.

Host Chicken

Clonality Polyclonal

Purity Purified, total IgY (chicken egg yolk immunoglobulin) in PBS pH 8. Contains 0.02 % sodium azide.

Format Liquid

Quantity 100 μl

Storage Store at 4°C; make aliquots to avoid working with a stock. 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.

Application information

Recommended dilution 1:2000-1:4000 (WB)

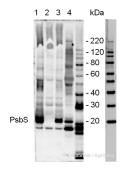
Expected | apparent 28 | 22 kDa for Arabidopsis thaliana

Predicted reactivity Dicots, Conifers

Not reactive in Chlamydomonas reinhardtii, Chlorella sp.

Selected references Hubbart et al. (2012). The photoprotective protein PsbS exerts control over CO2 assimilation rate in fluctuating light in rice. The Plant J. March 2012.

Application example



15 μg of *Arabidopsis thaliana* thylakoids from (1) PsbS-overexpressing line, (2) PsbS-deficient npq4-line, and (3) wt (col) together with (4) total leaf protein from *Arabidopsis thaliana* wt extracted with PEB (<u>AS08 300</u>) were separated on 4-12% NuPage (Invitrogen) LDS-PAGE and blotted 1h to nitrocellulose. Filters were blocked 1h with 2% low-fat milk powder in TBS-T (0.1% TWEEN 20) and probed with anti-PsbS (AS03 032, 1:2000, 1h) and secondary anti-rabbit (1:20000, 1 h) antibody (HRP conjugated) in TBS-T containing 2% low fat milk powder. Antibody incubations were followed by washings in TBS-T (15, +5, +5 min). All steps were performed at RT with agitation. Signal was detected chemiluminescent reagent, using a Fuji LAS-3000 CCD (300s, standard sensitivity). Technical note(s): (a) This IgY shows reactivity to both markers loaded in lane M (MagicMark and NovexSharp, both Invitrogen), for comparison a marker lane from same filter (probed seperately with a IgG-antiserum) is shown to the right. (b) the IgY reacts with 2 bands in leafs and thylakoids that both are absent in the PsbS-deficient npq4 line and therefore both might represent PsbS-forms with a difference in molecular weight of ~1 kDa.

Note: For this antibody, blocking needs to be increased to 10 % non-fat milk 1h/RT incubation.