Product no AS03 032
PsbS | 22 kDa Lhc-like PSII protein (chicken)

Product information

Immunogen | K LH-conjugated synthetic peptide derived from available di and monocot PsbS sequences, including Arabidopsis thaliana (At1g44575). 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 MW | 28 | 22 kDa for Arabidopsis thaliana
Confirmed reactivity | Arabidopsis thaliana, Avena sativa, Brassica napus, Hordeum vulgare, Oryza sativa, Pinus sylvestris, Populus tremula, Spinacia oleracea
Predicted reactivity | Dicots, Conifers
Not reactive in | Chlamydomonas reinhardtii, Chlorella sp.

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 (AS08 300) 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, +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.