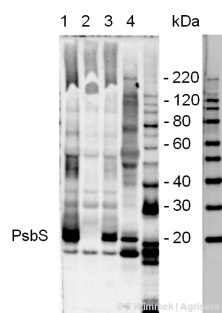


Product no **AS03 032****PsbS | 22 kDa Lhc-like PSII protein (chicken)****Product information**

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|------------------|---|
| Immunogen | KLH-conjugated synthetic peptide derived from available di and monocot PsbS sequences, including <i>Arabidopsis thaliana</i> (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

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| Recommended dilution | 1 : 2000-1 : 4000 (WB) |
| Expected apparent MW | 28 22 kDa for <i>Arabidopsis thaliana</i> |
| Confirmed reactivity | <i>Arabidopsis thaliana</i> , <i>Avena sativa</i> , <i>Brassica napus</i> , <i>Hordeum vulgare</i> , <i>Oryza sativa</i> , <i>Pinus sylvestris</i> , <i>Populus tremula</i> , <i>Spinacia oleracea</i> |
| Predicted reactivity | Dicots, Conifers |
| Not reactive in | <i>Chlamydomonas reinhardtii</i> , <i>Chlorella</i> sp. |
| Selected references | Hubbart et al. (2012). The photoprotective protein PsbS exerts control over CO ₂ 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 ([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 separately 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.