

product **AS05 060**
PsbW | small subunit W of PSII

product information

background	PsbW is a nuclear-encoded protein located in the thylakoid membrane of the chloroplast. It is a core component of Photosystem II. Alternative name: PSII 6.1 kDa protein
immunogen	<u>KLH</u> -conjugated synthetic peptide derived from PsbW protein sequence of <i>Arabidopsis thaliana</i> <u>At2g30570</u>
antibody format	rabbit polyclonal serum, lyophilized
quantity	100 µl, for reconstitution add 100 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)
additional information	to be added when available

application information

recommended dilution	1:15 000 with standard ECL (WB)
expected apparent MW	13.6 6.1 kDa
confirmed reactivity	<i>Arabidopsis thaliana</i> , <i>Hordeum vulgare</i> , <i>Nicotiana tabacum</i> , <i>Spinacia oleracea</i>
predicted reactivity	dicots including <i>Vitis vinifera</i> , monocots including <i>Oryza sativa</i> , <i>Zea mays</i> , moss <i>Physcomitrella patens</i>
not reactive in	<i>Chlamydomonas reinhardtii</i> , <i>Synechococcus</i> sp. PCC 7942
additional information	not available at the moment
selected references	<u>Suorosa</u> et al. (2006). PsbR, a missing link in the assembly of the oxygen-evolving complex of plant photosystem II. J. Biol. Chem. 1: 145-150. <u>Garcia-Cerdan</u> et al. (2008). Antisense inhibition of the PsbX protein affects PSII integrity in the higher plant <i>Arabidopsis thaliana</i> . Plant Cell Physiol. 2: 191-202.

application example

2 µg of total protein from (1) *Arabidopsis thaliana* leaf, (2) *Hordeum vulgare* leaf), (3) *Chlamydomonas reinhardtii* total cell , (4) *Synechococcus* sp. 7942 total cell were all extracted with PEB (**AS08 300**) and separated on **4-12%** NuPage (Invitrogen) **LDS-PAGE** and blotted 1h to **PVDF**. Blots were blocked immediately following transfer in 2% ECL Advance blocking reagent (GE Healthcare) in 20 mM Tris, 137 mM sodium chloride pH 7.6 with 0.1% (v/v) Tween-20 (TBS-T) for 1h at room temperature with agitation. Blots were incubated in the primary antibody at a dilution of 1: 50 000 for 1h at room temperature with agitation. The antibody solution was decanted and the blot was rinsed briefly twice, then washed once for 15 min and 3 times for 5 min in TBS-T at room temperature with agitation. Blots were incubated in secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated, from Abcam) diluted to 1:50 000 in 2% ECL Advance blocking solution for 1h at room temperature with agitation. The blots were washed as above and developed for 5 min with ECL Advance detection reagent according to the manufacturers instructions. Images of the blots were obtained using a CCD imager (FluorSMax, Bio-Rad) and Quantity One software (Bio-Rad). Exposure time was 1 second.

