

product **AS06 158**
Psbl | small subunit I of PSII

product information

background	The Psbl protein, previously named the 4.8-kDa protein, is encoded by the plastome. Psbl is a universal component of PSII and is highly conserved (e.g. there is 71% amino acid identity between the Arabidopsis and Synechocystis 6803 proteins). The protein contains 36 to 38 amino acids in most species, with molecular masses ranging between 4.1 and 4.5 kDa. Synonyms: PSII-I, PSII 4.8 kDa protein
immunogen	<u>KLH</u> -conjugated synthetic peptide derived from Psbl protein of <i>Arabidopsis thaliana</i> <u>P62100</u>
antibody format	rabbit polyclonal serum lyophilized
quantity	200 µl for reconstitution add 200 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 : 5000 with standard ECL (WB)
expected apparent MW	4 (<i>Arabidopsis thaliana</i>)
confirmed reactivity	<i>Arabidopsis thaliana</i> , <i>Hordeum vulgare</i>
predicted reactivity	dicots including: <i>Glycine max</i> , <i>Phaseolus vulgaris</i> , <i>Spinacia oleracea</i> , monocots: <i>Triticum aestivum</i> , <i>Zea mays</i> , trees: <i>Populus trichocarpa</i>
not reactive in	<i>C.reinhardtii</i> , <i>Synechococcus</i> sp 7942
additional information	to be added when available
selected references	to be added when available

application example

2 µg of total protein from (1) *Arabidopsis thaliana* leaf extracted with **Protein Extraction Buffer, PEB (AS08 300)**, (2) *Hordeum vulgare* leaf extracted with PEB, (3) *Chlamydomonas reinhardtii* total cell extracted with PEB, (4) *Synechococcus* sp. 7942 total cell extracted with PEB, were 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: 10 000 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 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 3 seconds.

