

product **AS10 695**

PsaB | PSI-B core subunit of photosystem I

product information

background	Photosystem I (PSI) of chloroplasts is a multisubunit membrane-protein complex that catalyzes the electron transfer from the reduced plastocyanin (or cytochrome c6) in the thylakoid lumen to the oxidized ferredoxin (or flavodoxin) in the chloroplast stroma. PsaB is a core protein of PSI complex. Synonymes: Photosystem I P700 chlorophyll a apoprotein A2, PSI-B
immunogen	<u>KLH</u> -conjugated synthetic peptide derived from known PsaB sequences including <i>Arabidopsis thaliana</i> P56767
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 : 1000 with standard ECL (WB)
expected apparent MW	82.7 55-60 kDa
confirmed reactivity	<i>Arabidopsis thaliana</i> , <i>Hordeum vulgare</i> , <i>Chlamydomonas reinhardtii</i> , <i>Synechococcus</i> sp. PCC7942
predicted reactivity	dicots including: <i>Glycine max</i> , <i>Solanum tuberosum</i> , monocots including: <i>Triticum aestivum</i> , <i>Oryza sativa</i> , <i>Zea mays</i> , trees: <i>Pinus thunbergii</i> , <i>Populus trichocarpa</i> , algae, cyanobacteria
not reactive in	no confirmed exceptions from predicted reactivity known in the moment
additional information	to be added when available
selected references	to be added when available. Antibody released in March 2010

application example

5 µg of total protein from (1) *Arabidopsis thaliana* leaf extract, (2) *Synechococcus* sp. PCC 7942, (3) *Hordeum vulgare* leaf extract, (4) *Physcomitrella patens*, (5) *Pisum sativum*, (6) *Zea mays* were extracted with Agrisera Protein Extraction Buffer **PEB** and separated on **4-12% NuPage** (Invitrogen) **LDS-PAGE** and blotted 1h to nitrocellulose OSMONICS. 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 Agrisera, **AS09 602**) 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 30 seconds.

