

product **AS04 048**

PsaG | PSI-G subunit of photosystem I

product information

background	PsaG is subunit located in the Photosystem I complex. It plays a role in stabilizing the binding of the peripheral antenna. PsaG, together with PsaH and PsaN, are unique to higher plants and algae. Immunogen: Fusion protein between DHFR and the mature part of PsaG.
immunogen	Fusion protein between DHFR and the mature part of PSI-G (<i>Arabidopsis thaliana</i> , accession At1g55670) in the pQE42 vector
antibody format	rabbit polyclonal total IgG in PBS pH 7.4, 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	1:2000 - 1: 5000 with standard ECL (WB)
expected apparent MW	17 11 kDa
confirmed reactivity	<i>Arabidopsis thaliana</i> , <i>Spinacia oleracea</i>
predicted reactivity	<i>Pisum sativum</i>
not reactive in	<i>Hordeum vulgare</i> , <i>Chlamydomonas reinhardtii</i> , <i>Synechococcus sp. 7842</i>
additional information	not available at the moment
selected references	Jensen et al. (2002) Photosystem I activity is increased in the absence of the PSI-G subunit. J. Biol. Chem. 277: 2798-2803.

application example

2 µg of total protein from (1) *Arabidopsis thaliana* leaf extracted with PEB (**AS08 300**), (2) *Hordeum vulgare* leaf extracted with PEB (**AS08 300**), (3) *Chlamydomonas reinhardtii* total cell extracted with PEB (**AS08 300**), (4) *Synechococcus* sp. 7942 total cell extracted with PEB (**AS08 300**) 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 1:20 000 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).

