

Product no **AS08 324A****Anti-PsaE | PSI-E subunit of photosystem I (affinity purified)****Product information**

|                       |                                                                                                                                                                                                                                                                                                                                 |
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| <b>Immunogen</b>      | KLH-conjugated synthetic peptide derived from PsaE N-terminal part, conserved in di and monocots and some green algae PsaE protein (not <i>Chlamydomonas</i> ), including <i>Arabidopsis thaliana</i> PSI-E A <a href="#">Q9S831</a> , <a href="#">At4g28750</a> and PSI-E B <a href="#">Q9S714</a> , <a href="#">At2g20260</a> |
| <b>Host</b>           | Rabbit                                                                                                                                                                                                                                                                                                                          |
| <b>Clonality</b>      | Polyclonal                                                                                                                                                                                                                                                                                                                      |
| <b>Purity</b>         | Immunogen affinity purified serum in PBS pH 7.4.                                                                                                                                                                                                                                                                                |
| <b>Format</b>         | Lyophilized                                                                                                                                                                                                                                                                                                                     |
| <b>Quantity</b>       | 50 µg                                                                                                                                                                                                                                                                                                                           |
| <b>Reconstitution</b> | For reconstitution add 50 µl of sterile water                                                                                                                                                                                                                                                                                   |
| <b>Storage</b>        | Store lyophilized/reconstituted at -20°C; once reconstituted make aliquots to avoid repeated freeze-thaw cycles. 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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| <b>Recommended dilution</b>   | 1 : 1000 (WB)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Expected   apparent MW</b> | 10   12 kDa for <i>A. thaliana</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Confirmed reactivity</b>   | <i>Arabidopsis thaliana</i> , <i>Hordeum vulgare</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Predicted reactivity</b>   | <i>Chlamydomonas reinhardtii</i> , <i>Chlorella</i> , <i>Oryza sativa</i> , <i>Populus canadensis</i> , <i>Solanum lycopersicum</i> , <i>Spinacia oleracea</i> , <i>Zea mays</i><br>Species of your interest not listed? <a href="#">Contact us</a>                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Not reactive in</b>        | No confirmed exceptions from predicted reactivity are currently known                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Selected references</b>    | <a href="#">Simakawa</a> et al. (2020). Near-infrared in Vivo Measurements of Photosystem I and Its Lumenal Electron Donors With a Recently Developed Spectrophotometer. <i>Photosynth Res.</i> , 144 (1), 63-72<br><a href="#">Li</a> et al. (2018). Modulating plant growth-metabolism coordination for sustainable agriculture. <i>Nature</i> . 2018 Aug 15. doi: 10.1038/s41586-018-0415-5.<br><a href="#">Yang</a> et al. (2017). Tetratricopeptide repeat protein Pyg7 is essential for photosystem I assembly by interacting with PsaC in <i>Arabidopsis</i> . <i>Plant J.</i> 2017 Jun 21. doi: 10.1111/tpj.13618. |

**Application example**

Thylakoid membranes (10 µg of total chlorophyll) extracted freshly from *Hordeum vulgare* leaves with 100 mM HEPES-KOH (pH 7.5), 0.3 M sorbitol, 2 mM EDTA, and 1 mM MgCl<sub>2</sub> and denatured with a Laemmli buffer at 80°C for 5 min were separated on 12% SDS-PAGE and blotted 1 h to nitrocellulose (pore size of 0.2 µm), using semi-dry transfer. Blot was blocked with 4% milk for 2 h/RT with agitation. Blot was incubated in the primary antibody at a dilution of 1:5000 (PsaE) for 1 h/RT with agitation in PBS-T. The antibody solution was decanted and the blot was rinsed briefly, then washed 3 times for 5 min in PBS-T at RT with agitation. Blot was incubated in Agrisera matching secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated) diluted to 1:25000 in for 1 h/RT with agitation. The blot was washed as above and developed for 5 min with chemiluminescent detection reagent according to manufacture's recommendations. Exposure time was 30 seconds.

Courtesy Dr. Anja Liskay, CNRS, France