

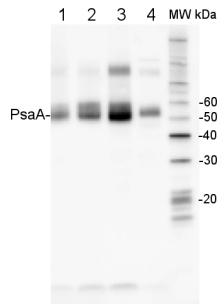
Product no **AS06 172****PsaA | PSI-A core protein of photosystem I****Product information**

<b>Immunogen</b>	N-terminal part of recombinant PsaA protein from <i>Chlamydomonas reinhardtii</i> <a href="#">P12154</a>
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Purity</b>	Serum
<b>Format</b>	Lyophilized
<b>Quantity</b>	50 µl
<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.
<b>Additional information</b>	PsaA is a hydrophobic protein and we recommend to use PVDF membrane for transfer to assure best results.  This product can be sold containing ProClin if requested.

**Application information**

<b>Recommended dilution</b>	1 : 20 (IG), 1 : 1000-1 : 5000 (WB)
<b>Expected   apparent MW</b>	82   55-60 kDa
<b>Confirmed reactivity</b>	<i>Arabidopsis thaliana</i> , <i>Begonia</i> sp., <i>Bryopsis corticulans</i> , <i>Chlamydomonas reinhardtii</i> , psychrophilic <i>Chlamydomonas</i> sp. UWO241 and <i>Chlamydomonas</i> sp. ICE-MDV, <i>Chlorella sorokiniana</i> , <i>Chlorella vulgaris</i> , <i>Chromochloris zofingiensis</i> , <i>Colobanthus quitensis</i> Kunt Bartl, <i>Craterostigma pumilum</i> , <i>Cytisus cantabricus</i> (Wilk.) Rchb. F., <i>Dianthus caryophyllus</i> , <i>Dioxonella giordanoi</i> (red alga), <i>Drosera capensis</i> , <i>Euonymus japonicus</i> , <i>Fraxinus ornus</i> , <i>Fucus vesiculosus</i> , <i>Haematococcus pluvialis</i> , <i>Halomicronema hongdechloris</i> , <i>Hieracium pilosella</i> L., <i>Hordeum vulgare</i> , <i>Lasallia hispanica</i> , <i>Nannochloropsis oceanica</i> strain IMET1, <i>Nicotiana tabacum</i> , <i>Oryza sativa</i> , <i>Pisum sativum</i> , <i>Marchantia polymorpha</i> (liverwort), <i>micro Nannochloropsis gaditana</i> , <i>Phaseolus vulgaris</i> , <i>Physcomitrium patens</i> , <i>Picea abies</i> , <i>Pinus strobus</i> , <i>Sinapsis alba</i> , <i>Spinacia oleracea</i> , <i>Synechococcus</i> PCC 7942, <i>Synechocystis</i> PCC 6803, <i>Syntrichia muralis</i> (Hedw.) Raab, <i>Scenedesmus obliquus</i> , <i>Tillandsia flabellate</i> , <i>Ulva prolifera</i>
<b>Predicted reactivity</b>	Algae, <i>Bigeloviella natans</i> , <i>Cannabis sativa</i> , <i>Catalpa bungei</i> , <i>Citrus x limon</i> , Cyanobacteria, <i>Cyanidioschyzon merolae</i> strain 10D, <i>Lycopersicon esculentum</i> , <i>Panax ginseng</i> , <i>Picea spinulosa</i> , <i>Pinus thunbergii</i> , <i>Phaeodactylum tricornutum</i> , <i>Populus alba</i> , <i>Thermosynechococcus elongatus</i> (strain BP-1), <i>Triticum aestivum</i> Species of your interest not listed? <a href="#">Contact us</a>
<b>Not reactive in</b>	<i>Chromera velia</i>
<b>Additional information</b>	Immunogold localization has been done in leaf material of <i>Arabidopsis thaliana</i> .
<b>Selected references</b>	<a href="#">Ivanov</a> et al. (2022) The decreased PG content of pgp1 inhibits PSI photochemistry and limits reaction center and light-harvesting polypeptide accumulation in response to cold acclimation. <i>Planta</i> 255, 36 (2022). <a href="https://doi.org/10.1007/s00425-022-03819-0">https://doi.org/10.1007/s00425-022-03819-0</a> <a href="#">Lim</a> et al (2022). <i>Arabidopsis</i> guard cell chloroplasts import cytosolic ATP for starch turnover and stomatal opening. <i>Nat Commun.</i> 2022 Feb 3;13(1):652. doi: 10.1038/s41467-022-28263-2. PMID: 35115512; PMCID: PMC8814037. <a href="#">Lim</a> et al (2022) <i>Arabidopsis</i> guard cell chloroplasts import cytosolic ATP for starch turnover and stomatal opening. <i>Nat Commun.</i> 2022 Feb 3;13(1):652. doi: 10.1038/s41467-022-28263-2. PMID: 35115512; PMCID: PMC8814037. <a href="#">Spaniol</a> et al. (2022) Complexome profiling on the <i>Chlamydomonas lpa2</i> mutant reveals insights into PSII biogenesis and new PSII associated proteins, <i>Journal of Experimental Botany</i> , Volume 73, Issue 1, 5 January 2022, Pages 245–262 <a href="#">Rogowski</a> et al. (2021) Light as a substrate: migration of LHCII antennas in extended Michaelis-Menten model for PSI kinetics. <i>J Photochem Photobiol B.</i> 2021 Dec;225:112336. doi: 10.1016/j.jphotobiol.2021.112336. Epub 2021 Oct 19. PMID: 34736069.

## 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 all extracted with Protein Extraction Buffer, 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% blocking reagent 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, recommended secondary antibody [AS09 602](#)) diluted to 1:50 000 in 2% blocking solution for 1h at room temperature with agitation. The blots were washed as above and developed for 5 min with chemiluminescence 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 10 seconds.