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Agrisera AB | Box 57 | SE-91121 Vännäs | Sweden | +46 (0)935 33 000 | www.agrisera.com

Product no AS06 172

PsaA | PSI-A core protein of photosystem I

Product information

Background	**PsaA** is a core protein of photosystem I. In plants and cyanobacteria, the primary step in oxygenic photosynthesis, the light induced charge separation, is driven bytwo large membrane intrinsic protein complexes, the photosystems I and II. Synonym: Photosystem I P700 chlorophyll a apoprotein A1.
Immunogen	N-terminal part of recombinant PsaA protein from *Chlamydomonas reinhardtii* P12154
Host	Rabbit
Clonality	Polyclonal
Purity	Serum
Format	Lyophilized
Quantity	50 µl
Reconstitution	For reconstitution add 50 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	Immunogold (IG), Western blot (WB), Blue Native PAGE (BN-PAGE)
Related products	Collection of antibodies to PSI proteins recommended secondary antibody Plant and algal protein extraction buffer Secondary antibodies
Additional information	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

Recommended dilution	1 : 20 (IG), 1 : 1000-1 : 5000 (WB)
Expected | apparent MW	82 | 55-60 kDa
Confirmed reactivity	*Arabidopsis thaliana, Begonia* sp. , *Bryopsis corticulans, Chlamydomonas reinhardtii, psychrophilic Chlamydomonas* sp. UWO241 *and Chlamydomonas sp.* ICE-MDV, *Chlorella vulgaris, Chromochloris zofingiensis, Colobanthus quitensis Kunt Bartl, Craterostigma pumilum, Cytisus cantabricus* (Wilk.) Rchb. F., *Dianthus caryophyllus, Drosera capensis, Euonymus japonicus, Fucus vesiculosus, Haematococcus pluvialis, Halomicronema hongdechloris, Hieracium pilosella L., Hordeum vulgare, Lasallia hispanica, Nicotiana tabacum, Oryza sativa, Pisum sativum, Marchantia polymorpha* (liverwort), *micro Nannochloropsis gaditana, Phaseolus vulgaris, Physcomitrella patens, Picea abies, Pinus strobus, Sinapsis alba, Spinacia oleracea, Synechococcus* PCC 7942, *Synechocystis PCC* 6803, *Syntrichia muralis* (Hedw.) *Raab, Scenedesmus obliquus, Ulva prolifera*
Predicted reactivity	Algae, *Bigelowiella natans*, *Cannabis sativa*, *Catalpa bungei*, *Citrus* x limon, Cyanobacteria, *Cyanidioschyzon merolae strain 10D, Lycopersicum esculentum, Panax ginseng, Picea spinulosa, Pinus thunbergii, Phaeodactylum tricornutum, Populus alba, Thermosynechococcus elongatus* (strain BP-1), *Triticum aestivum* Species of your interest not listed? Contact us
Not reactive in	*Chromera velia*
Additional information	Immunogold localization has been done in leaf material of *Arabidopsis thaliana.*

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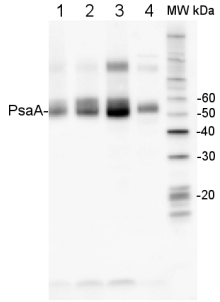
Application example



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 Extration 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, frecommended 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.