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Product no 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	KLH-conjugated synthetic peptide derived from known PsaB sequences including *Arabidopsis thaliana* UniProt: P56767, TAIR: AtCg00340
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	Blyue Native PAGE (BN-PAGE), Western blot (WB)
Related products	AS06 172 | Anti-PsaA, rabbit antibodies collection of antibodies to PSI proteins Plant and algal protein extraction buffer Secondary antibodies

Application information

Recommended dilution	1 : 1000 (BN-PAGE), (WB)
Expected | apparent MW	82.7 | 55-60 kDa
Confirmed reactivity	*Arabidopsis thaliana, Brassica napus, Brassica rapa, Bryopsis corticulans, Echinola crus-galli, Hordeum vulgare, Neochloris oleoabundans* (chlorophyta), *Mesostigma viride, Nicotiana tabacum, Pisum sativum, Solanum lycopersicum, Synechococcus* sp. PCC7942, *Synechocystis* sp. PCC 6803, *Triticum aestivum, Ulva prolifera, Zea mays*
Predicted reactivity	Algae, *Aloysia triphylla, Beta vulgaris, Borago officinalis, Brachypodium distachyon, Cannabis sativa, Cercidiphyllum japonicum, Citrus x limon, Cyanobacteria, Exbucklandia populnea, Gunnera maniCata, Kalanchoe laciniata, Lagenaria siceraria, Lippia origanoides, Lippia alba, Indocalamus sinicus, Manihot esculenta, Morus notabilis, Medicago truncatula, Monsonia emarginata, Mytilaria laosensis, Geranium endressii, Glycine max, Glycine soja, Lotus japonicus, Oryza sativa, Pandanus utilis, Panax ginseng, Parnassia laxmannii , Pelargonium cotyledonis, Pennisetum americanum, Phaseolus pachyrrhizoides, Phaseolus lunatus, Phaseolus vulgaris, Phaeodactylum tricornutum, Phyla dulcis,, Pinus thunbergii, Populus trichocarpa, Ribes fasciculatum, Rhodoleia championii, Rhyticaryum macrocarpum, Salvia miltiorrhiza, Setaria italica, Solanum tuberosum, Spinacia oleracea, Triticum sp., Vigna angularis, Vitis vinifera* Species of your interest not listed? Contact us
Not reactive in	*Chlamydomonas reinhardtii,* dinoflagellate

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Additional information

This product can be sold containing ProClin if requested.

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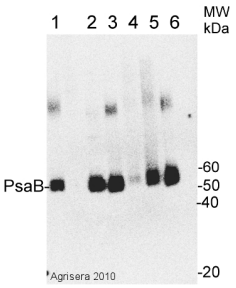
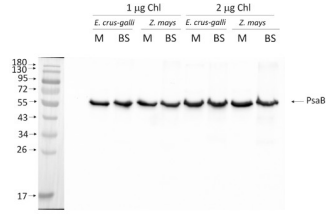
Application example



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 may* 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% 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, from Agrisera, 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 che,iluminescent 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.



1.0 or 2.0 µg of chlorophyll from mesophyll (M) and bundle sheath (BS) thylakoids of *Zea mays* and *Echinochloa crus-galli* extracted with 0.4 M sorbitol, 50 mM Hepes NaOH, pH 7.8, 10 mM NaCl, 5 mM $MgCl_2$ and 2 mM EDTA were loaded to lanes. Samples were denatured with Laemmli buffer at 75 °C for 5 min and were separated on 12% SDS-PAGE and blotted 30 min to PVDF using wet transfer. Blot was blocked with 5% milk for 2h at room temperature (RT) with agitation. Blot was incubated in the primary antibody at a dilution of 1: 1000 overnight at 4°C with agitation in 1% milk in TBS-T. The antibody solution was decanted and the blot was washed 4 times for 5 min in TBS-T at RT with agitation. Blot was incubated in secondary antibody (anti-rabbit IgG HRP conjugated, from Agrisera, AS09 602, Lot 1808) diluted to 1:25 000 in 1 % milk in TBS-T for 1h at RT with agitation. The blot was washed 5 times for 5 min in TBS-T and 2 times for 5 min in TBS, and developed for 1 min with 1.25 mM luminol, 0.198 mM coumaric acid and 0.009% H2O2 in 0.1 M Tris- HCl, pH 8.5. Exposure time in ChemiDoc System was 60 seconds.

Courtesy Dr. Wiola Wasilewska-Dąbrowska, Warsaw University, Poland