

Product no **AS11 1787**

PsbC | CP43 protein of PSII

Product information

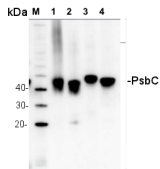
Immunogen	KLH-conjugated synthetic peptide chosen from known sequences of PsbC including <i>Arabidopsis thaliana</i> PsbC, UniProt: P56778 , TAIR: AtCg00280
Host	Rabbit
Clonality	Polyclonal
Purity	Serum
Format	Lyophilized
Quantity	50 µl
Reconstitution	For reconstitution add 50 µl of sterile water.
Storage	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.

Additional information | Contains 0.01% ProClin

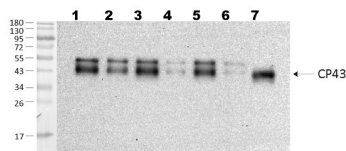
Application information

Recommended dilution	1 : 3 000 (WB)
Expected apparent MW	45 43 kDa
Confirmed reactivity	<i>Arabidopsis thaliana</i> , <i>Chlamydomonas reinhardtii</i> , <i>Chlorella sorokiniana</i> , <i>Chlorella vulgaris</i> , <i>Chromochloris zofingiensis</i> , <i>Echinochloa crus-galli</i> , <i>Hordeum vulgare</i> , <i>Oryza sativa</i> , <i>Panax ginseng</i> , <i>Physcomitrella patens</i> , <i>Pisum sativum</i> , <i>Phaseolus vulgaris</i> , <i>Pyropia yezoensis</i> , <i>Synochococcus</i> sp. PCC7002, <i>Synechocystis</i> sp. PCC6803, <i>Triticum aestivum</i> , <i>Triticale</i> , <i>Zea mays</i> , <i>Verbascum lychnitis</i> , <i>Vigna radiata</i>
Predicted reactivity	<i>Asimina parviflora</i> , <i>Borago officinalis</i> , <i>Cannabis sativa</i> , <i>Carthamus persicus</i> , <i>Casimirella guaranítica</i> , <i>Catalpa bungei</i> , <i>Calatola mollis</i> , <i>Citron x limon</i> , <i>Cunninghamia lanceolata</i> , <i>Deeringothamnus rugelii</i> , <i>Gonystylus bancanus</i> , <i>Ipomopsis aggregata</i> , <i>Leretia cordata</i> , <i>Lobatiriccardia lobata</i> , <i>Myricaria germanica</i> , <i>Nostoc</i> sp. PCC7120, <i>Nannochloropsis</i> sp., <i>Natsiatum herpeticum</i> , <i>Nothapodytes montana</i> , <i>Nerium oleander</i> , <i>Ottoschulzia rhodoxylon</i> , <i>Oxandra lanceolata</i> , <i>Solanum tuberosum</i> , <i>Oryza sativa</i> , <i>Panax quinquefolius</i> , <i>Prosopidastrum angusticarpum</i> , <i>Prosopis glandulosa</i> , <i>Rollinia mucosa</i> , <i>Rosmarinus officinalis</i> , <i>Saxifraga rivularis</i> , <i>Spinacia oleracea</i> , <i>Zelkova serrata</i> , <i>Zinnia violacea</i> , <i>Vachellia caven</i> , <i>Vitis vinifera</i> , <i>Zosteria marina</i> , <i>Xerocladia viridiramis</i>
	Species of your interest not listed? Contact us
Not reactive in	diatoms
Additional information	In C4 plants like <i>Echinochloa crus-galli</i> and <i>Zea mays</i> antibody detects 2 bands. For high resolution images, please visit the specific product page at www.agrisera.com
Selected references	Cecchin et al (2021) LPA2 protein is involved in photosystem II assembly in <i>Chlamydomonas reinhardtii</i> . Plant J. 2021 Jul 4. doi: 10.1111/tpj.15405. Epub ahead of print. PMID: 34218480. Kobayashi et al. (2020). Relationship Between Glycerolipids and Photosynthetic Components During Recovery of Thylakoid Membranes From Nitrogen Starvation-Induced Attenuation in <i>Synechocystis</i> sp. PCC 6803. Front Plant Sci. 2020 Apr 15;11:432. doi: 10.3389/fpls.2020.00432. eCollection 2020. Trinugroho et al. (2020). Chlorophyll F Synthesis by a Super-Rogue Photosystem II Complex. Nat Plants, 6 (3), 238-244 Dong et al. (2020). Plastid ribosomal protein LPE2 is involved in photosynthesis and the response to C/N balance in <i>Arabidopsis thaliana</i> . J Integr Plant Biol. 2020 Jan 15. doi: 10.1111/jipb.12907. Ma et al. (2020). Zinc toxicity alters the photosynthetic response of red alga <i>Pyropia yezoensis</i> to ocean acidification. Environ Sci Pollut Res Int. 2020 Jan;27(3):3202-3212. doi: 10.1007/s11356-019-06872-7.

Application example



5 µg of total protein from (1) *Arabidopsis thaliana* leaf extracted with **Protein Extraction Buffer, PEB (AS08 300)**, (2) *Hordeum vulgare* leaf extracted with PEB, (3) *Chlamydomonas reinhardtii* total cell extracted with PEB, (4) *Synechococcus* sp. 7942 total cell extracted with PEB, extracted with PEB 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 1:25 000 in 2% blocking solution for 1h at room temperature with agitation. The blots were washed as above and developed for 5 min with chemiluminescent 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 75 seconds.



1.5 µg of chlorophyll from thylakoids of various treatments of *Echinochloa crus-galli* (1-2), *Zea mays* (3-5), *Pisum sativum* (6-7), extracted with 0.4 M sorbitol, 50 mM Hepes NaOH, pH 7.8, 10 mM NaCl, 5 mM MgCl₂ and 2 mM EDTA. 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% fatty acid free milk for 1h at room temperature (RT) with agitation. Blot was incubated in the primary antibody at a dilution of 1: 3 000 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 horse radish peroxidase conjugated, **AS09 602**, Agrisera) 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 240 seconds.

Courtesy of Dr. Wiola Wasilewska, Warsaw University, Poland