Agrisera
Part of Olink® Group

This product is **for research use only** (not for diagnostic or therapeutic use) **contact: support@agrisera.com**

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

Product no AS06 142-23

Anti-PsbP | 23 kDa protein of the oxygen evolving complex (OEC) of PSII (anti-protein)

Product information

Immunogen	native, purified 23 kDa protein from *Spinacia oleracea,*UniProt: P12302
Host	Rabbit
Clonality	Polyclonal
Purity	Total IgG. Protein G purified in PBS pH 7.4.
Format	Lyophilized
Quantity	200 µg
Reconstitution	For reconstitution add 200 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 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

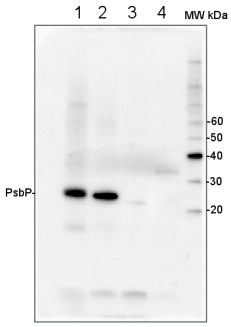
Recommended dilution	1 : 2000-1 : 5000 (WB)
Expected | apparent MW	28 | 23 kDa
Confirmed reactivity	*Arabidopsis thaliana, Chlamydomonas reinhardti, Hordeum vulgare, Pinus banksiana, Spinacia oleracea, Triticum aestivum*
Predicted reactivity	*Musa acuminata, Oryza sativa, Pinus monticola, Pisum sativum, Populus balsamifera, Solanum lycopersicum* Species of your interest not listed? Contact us
Not reactive in	*Synechococcus* sp. PCC 7942
Additional information	Load per well on cell extract of *Pinus banksiana* (Jack Pine) was 7 µg. This antibody can be used as a loading control for *Chlamydomonas reinhardtii* while it not so suitable for higher plants as accumulation of these proteins might drop to 12.5-25 % of the WT level in mutants defective for PSII core (Schult et al. 2007).
Selected references	Collombat et al. (2025). Arabidopsis conditional photosynthesis mutants abc1k1 and var2 accumulate partially processed thylakoid preproteins and are defective in chloroplast biogenesis. Commun Biol . 2025 Jan 22;8(1):111. doi: 10.1038/s42003-025-07497-y. Mu et al. (2024). Plastid HSP90C C-terminal extension region plays a regulatory role in chaperone activity and client binding.Plant J. 2024 Jul 5.doi: 10.1111/tpj.16917. Lim et al (2022). Arabidopsis guard cell chloroplasts import cytosolic ATP for starch turnover and stomatal opening. Nat Commun. 2022 Feb 3;13(1):652. doi: 10.1038/s41467-022-28263-2. PMID: 35115512; PMCID: PMC8814037. Lim et al (2022) Arabidopsis guard cell chloroplasts import cytosolic ATP for starch turnover and stomatal opening. Nat Commun. 2022 Feb 3;13(1):652. doi: 10.1038/s41467-022-28263-2. PMID: 35115512; PMCID: PMC8814037. Cecchin et al (2021) LPA2 protein is involved in photosystem II assembly in Chlamydomonas reinhardtii. Plant J. 2021 Jul 4. doi: 10.1111/tpj.15405. Epub ahead of print. PMID: 34218480. Jiang et al. (2020). Plastid chaperone HSP90C guides precursor proteins to the SEC translocase for thylakoid transport. J Exp Bot. 2020 Aug 27;eraa399.doi: 10.1093/jxb/eraa399. Nama et al. (2018). Non-photochemical quenching-dependent acclimation and thylakoid organization of Chlamydomonas reinhardtii to high light stress. Photosynth Res. 2018 Jul 7. doi: 10.1007/s11120-018-0551-7.

Application example

Agrisera
Part of Olink® Group

This product is **for research use only** (not for diagnostic or therapeutic use) **contact: support@agrisera.com**

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



2 µg of total protein from *Arabidopsis thaliana* leaf **(1)** *Hordeum vulgare* leaf **(2),** *Chlamydomonas reinhardtii* total cell **(3)**, *Synechococcus* sp. 7942 total cell **(4)**, all extracted with PEB (**AS08 300**) and 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) 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 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).