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

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Product no AS06 167

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

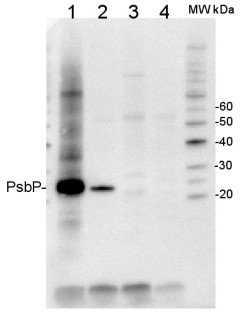
Product information

Immunogen	KLH-conjugated synthetic peptide derived from PsbP protein of *Arabidopsis thaliana* Q42029, At1g06680
Host	Rabbit
Clonality	Polyclonal
Purity	Serum
Format	Lyophilized
Quantity	100 µl
Reconstitution	For reconstitution add 100 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.
Additional information	This product can be sold containing ProClin if requested

Application information

Recommended dilution	1 : 2000 (WB)
Expected | apparent MW	28 | 23 kDa (*Arabidopsis thaliana*)
Confirmed reactivity	*Arabidopsis thaliana, Hordeum vulgare, Nicotiana tabacum, Picea abies, Pisum sativum, Physcomitrium patens*
Predicted reactivity	*Oryza sativa, Solanum tuberosum, Triticum aestivum, Picea sitchenisis, Populus balsamifera* Species of your interest not listed? Contact us
Not reactive in	*Chlamydomonas reinhardtii*, *Synechococcus* sp. PCC 7942, *Zostera marina*
Additional information	If you work with *Chlamydomonas reinhardii*, please use following PsbP antibody: AS06 142-23
Selected references	Mazur et al. (2021) The SnRK2.10 kinase mitigates the adverse effects of salinity by protecting photosynthetic machinery. Plant Physiol. 2021 Dec 4;187(4):2785-2802. doi: 10.1093/plphys/kiab438. PMID: 34632500; PMCID: PMC8644180. Tamburino et al. (2017). Chloroplast proteome response to drought stress and recovery in tomato (Solanum lycopersicum L.). BMC Plant Biol. 2017 Feb 10;17(1):40. doi: 10.1186/s12870-017-0971-0. Pavlovic et al. (2016). Light-induced gradual activation of photosystem II in dark-grown Norway spruce seedlings. Biochim Biophys Acta. 2016 Feb 18. pii: S0005-2728(16)30028-7. doi: 10.1016/j.bbabio.2016.02.009. Albanese et al. (2016). Isolation of novel PSII-LHCII megacomplexes from pea plants characterized by a combination of proteomics and electron microscopy. Photosynth Res. 2016 Jan 9. Grassl et al. (2012). Early events in plastid protein degradation in stay-green Arabidopsis reveal differential regulation beyond the retention of LHCII and chlorophyll. J. Proteome Res. October 2. Lang et al. (2011).Simultaneous isolation of pure and intact chloroplasts and mitochondria from moss as the basis for sub-cellular proteomics. Plant Cell Rep. 2011 Feb;30(2):205-15.doi: 10.1007/s00299-010-0935-4.

Application example



2 µg of total protein from (**1**) *Arabidopsis thaliana* leaf extracted with **P**rotein **E**xtration **B**uffer, 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, 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: 50 000 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 1:10 000 in 2% blocking solution for 1h at room temperature with agitation. The blots were washed as above and developed for 5 min withchemiluminescent 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).