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Product no AS05 092

PsbO | 33 kDa of the oxygen evolving complex (OEC) of PSII (anti-peptide)

Product information

Background	The **PsbO** protein is an extrinisic subunit of the water splitting photosystem II (PSII) complex. The protein is exposed on the luminal side of the thylakoid membrane, and is hihgly conserved in all known oxygenic photosynthetic organisms. Alternative names of PsbO1 include 33 kDa subunit of oxygen evolving system of photosystem II, OEC 33 kDa subunit, 33 kDa thylakoid membrane protein, manganese-stabilizing protein 1 and for PsbO2 33 kDa subunit of oxygen evolving system of photosystem II, OEC 33 kDa subunit, 33 kDa thylakoid membrane protein, manganese-stabilizing protein 2.
Immunogen	N-terminually located peptide chosen from *Arabidopsis thaliana* PsbO1 and PsbO2 isoforms. UniProt: P23321 , PsbO1, TAIR: At5g66570 ; UniProt:A0A178VBH5, TAIR: At3g50820
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 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	Immunohistochemistry (IHC), Immunoprecipitation (IP), Western blot (WB)
Related products	AS14 2824 | Anti-PsbO1 | 33 kDa of the oxygen evolving complex (OEC) of PSII, rabbit antibodies AS14 2825 | Anti-PsbO2 | 33 kDa of the oxygen evolving complex (OEC) of PSII, rabbit antibodies AS06 142-33 | Anti-PsbO | 33 kDa of the oxygen evolving complex (OEC) of PSII, rabbit antibodies AS06 167 | Anti-PsbP | 23 kDa protein of the oxygen evolving complex (OEC) of PSII, rabbit antibodies AS08 305 | Anti-PsbP | 23 kDa protein of the oxygen evolving complex (OEC) of PSII, rabbit antibodies AS06 142-16 | Anti-PsbQ | 16 kDa protein of the oxygen evolving complex (OEC) of PSII, rabbit antibodies Plant protein extraction buffer
Additional information	Loading based on 50-100 ng of chlorophyll is enough to obtain good signal with this antibody

Application information

Recommended dilution	1 : 1000 (WB)
Expected | apparent MW	33 kDa
Confirmed reactivity	*Arabidopsis thaliana, Cucumis sativus, Hordeum vulgare, Manihot esculenta, Nicotiana tabacum, Pisum sativum, Sinapsis alba, Triticum aestivum, Zea mays*
Predicted reactivity	*Brassica oleracea, Pisum sativum, Populus tremula, Picea sitcHensis, Vitis vinifera* Species of your interest not listed? Contact us
Not reactive in	*Chlamydomonas reinhardtii, Synechococcus* sp. PCC 7942
Additional information	Good signal is obtained with this antibody with a load from 0.5 chlorophyll µg/well.

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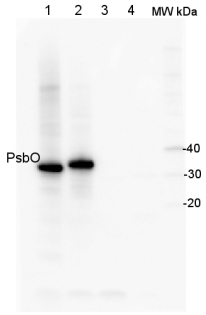
Application example



2 µg of total protein from (**1**) *Arabidopsis thaliana* leaf, (**2**) *Horderum vulgare* leaf), (**3**) *Chlamydomonas reinhardtii* total cell , (**4**) *Synechococcus* sp. 7942 total cell were 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 chemiluminescence 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).