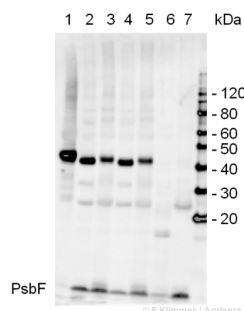


Product no **AS06 113****Anti-PsbF | beta subunit of Cytochrome b559 of PSII****Product information**

Immunogen	KLH-conjugated synthetic peptide derived from plant PsbF sequences including <i>Arabidopsis thaliana</i> P62095 , AtCg00570
Host	Rabbit
Clonality	Polyclonal
Purity	Serum
Format	Lyophilized
Quantity	200 µl
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.
Additional information	This product can be sold containing ProClin if requested

Application information

Recommended dilution	1 : 1000 (WB)
Expected apparent MW	4 kDa
Confirmed reactivity	<i>Arabidopsis thaliana</i> , <i>Pisum sativum</i> , <i>Triticum aestivum</i>
Predicted reactivity	<i>Cannabis sativa</i> , <i>Marchantia polymorpha</i> , <i>Nicotiana tabacum</i> , <i>Pinus sylvestris</i> , <i>Populus tremula</i> Species of your interest not listed? Contact us
Not reactive in	<i>Chlamydomonas reinhardtii</i> , cyanobacteria
Additional information	This antibody works better on thylakoid and chloroplast fractions than on a total cell extract
Selected references	Zhao et al. (2024) . Psb28 protein is indispensable for stable accumulation of PSII core complexes in Arabidopsis. Plant J. 2024 May 26. doi: 10.1111/tpj.16844. Hackett et al. (2017) . An Organelle RNA Recognition Motif Protein Is Required for Photosystem II Subunit psbF Transcript Editing. Plant Physiol. 2017 Yang-Er Chen et al. (2017) . Responses of photosystem II and antioxidative systems to high light and high temperature co-stress in wheat. J. of Exp. Botany, Volume 135, March 2017, Pages 45–55. Nishimura et al. (2016) . The N-terminal sequence of the extrinsic PsbP protein modulates the redox potential of Cyt b559 in photosystem II. Sci Rep. 2016 Feb 18;6:21490. doi: 10.1038/srep21490. Lucinski et al. (2011) . Involvement of Deg5 protease in wounding-related disposal of PsbF apoprotein. Plant Physiol Biochem. 49(3):311-20. Garcia-Cerdan et al. (2008) . Antisense inhibition of the PsbX protein affects PSII integrity in the higher plant Arabidopsis thaliana. Plant Cell Physiol 50: 191-202

Application example

5µg protein of *Arabidopsis thaliana* (1) leaf, extracted with PEB ([AS08 300](#)), (2) chloroplasts (normal light), (3) thylakoids (extracted from 2), (4) chloroplasts (high light), (5) thylakoids (extracted from 4), (6) Photosystem I, and (7) BBY particles (enriched in Photosystem II) from pea were separated on **4-12% NuPage** (Invitrogen) LDS-PAGE and blotted 1.5h (30V) to nitrocellulose. Filters were blocked 1h with 2% low-fat **milk powder in TBS-T** (0.1% TWEEN 20) and probed with AS06 113 (1:1000, 1h) and secondary anti-rabbit (1:20000, 1 h) antibody (HRP conjugated)

in TBS-T containing 2% low fat milk powder. Antibody incubations were followed by **washings in TBS-T** (15, +5, +5, +5 min). All steps were performed at **RT with agitation**. Signal was detected with chemiluminescent detection reagent, using a Fuji LAS-3000 CCD (150s, high sensitivity). The PsbF protein is detected with an **apparent mass of < 10 kDa**.
With this protocol, there is a cross-reaction with a target at ~43 kDa.