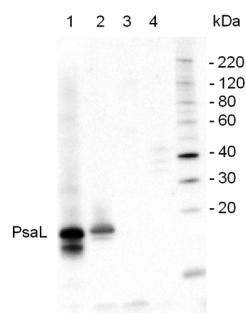


Product no **AS06 108****Anti-PsaL | PSI-L subunit of photosystem I****Product information**

Immunogen	KLH-conjugated synthetic peptide derived from PsaL protein sequence from <i>Arabidopsis thaliana</i> (<u>At4g12800</u>). This sequence is well conserved in most mono- and dicots but not in <i>Physcomitrella patens</i> .
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.

Application information

Recommended dilution	1 : 1000 (WB)
Expected apparent MW	18 17-18 (<i>Arabidopsis thaliana</i>)
Confirmed reactivity	<i>Arabidopsis thaliana</i> , <i>Hordeum vulgare</i> , <i>Nicotiana tabaccum</i> , <i>Spinacia oleracea</i>
Predicted reactivity	<i>Nicotiana benthamiana</i> , Monocots (<i>Zea mays</i>) Species of your interest not listed? Contact us
Not reactive in	Cyanobacteria
Selected references	Lin et al. (2022) . Chlorophyll dephytylase 1 and chlorophyll synthase: a chlorophyll salvage pathway for the turnover of photosystems I and II. <i>Plant J.</i> 111(4):979-994. Wang et al. (2020) . Post-translational coordination of chlorophyll biosynthesis and breakdown by BCMs maintains chlorophyll homeostasis during leaf development. <i>Nat Commun.</i> 2020; 11: 1254. Koh et al. (2019) . Heterologous synthesis of chlorophyll <i>b</i> in <i>Nannochloropsis salina</i> enhances growth and lipid production by increasing photosynthetic efficiency. <i>Biotechnol Biofuels.</i> 2019 May 14;12:122. doi: 10.1186/s13068-019-1462-3. eCollection 2019. Schöttler et al. (2017) . The plastid-encoded PsaL subunit stabilizes photosystem I during leaf senescence in tobacco. <i>J Exp Bot.</i> 2017 Feb 1;68(5):1137-1155. doi: 10.1093/jxb/erx009. Sook Seok et al. (2013) . AtFKBP16-1, a chloroplast lumenal immunophilin, mediates response to photosynthetic stress by regulating PsaL stability. <i>Physiologia Plantarum</i> , DOI: 10.1111/ppl.12116. Bock (2012) . The plastid genome-encoded Ycf4 protein functions as a non-essential assembly factor for photosystem I in higher plants. <i>Plant Physiol.</i> ahead of print.

Application example

2 µg of total leaf protein of *Arabidopsis thaliana* (1) and *Hordeum vulgare* (2) and **total cellular protein** of *Chlamydomonas reinhardtii* (3) and *Synechococcus PCC 7942* (4) isolated with PEB (**AS08 300**) were separated on **4-12% Nupage Bis-Tris** gels in MES running buffer (Invitrogen) at 200V for 35 minutes. Proteins were transferred for 80 minutes at 30V to a **PVDF** membrane pre-wetted in methanol and equilibrated in 1X transfer buffer. 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) and probed with **anti-PsaL** (AS06 148 **1:1000**) and **secondary HRP-conjugated** goat

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anti-rabbit antibody (**1:50 000**) for 1 hr in TBS-T containing 2% blocking reagent. Antibody incubations were followed by **washings in TBS-T** (15, +5, +5, +5 min). All steps were performed **at RT with agitation**. Signals was detected using chemiluminescence detection reagent, according to the manufacturers instructions and a CCD imager (FluorSMax, Bio-Rad)