

#### This product is for research use only (not for diagnostic or therapeutic use)

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

### **Product information**

| Immunogen      | <u>KLH</u> -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 $\mu$ l 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<br>MW | 18   17-18 (Arabidopsis thaliana)   |
| Confirmed reactivity      | Arabidopsis thaliana, Hordeum vulgare, Nicotiana tabaccum, Spinacia oleracea  |
| Predicted reactivity      | <i>Nicotiana benthamiana</i> , Monocots ( <i>Zea mays</i> )<br>Species of your interest not listed? <u>Contact us</u>   |
| Not reactive in           | Cyanobacteria   |
| Selected references       | Wang et al. (2020). Post-translational coordination of chlorophyll biosynthesis and breakdown by BCMs maintains chlorophyll homeostasis during leaf development. Nat Commun. 2020; 11: 1254.   Koh et al. (2019). Heterologous synthesis of chlorophyllÄ? bĂ? inĂ? Nannochloropsis salinaĂ? enhances growth and lipid production by increasing photosynthetic efficiency. Biotechnol Biofuels.Ă? 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. J Exp Bot.Ă? 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. Physiologia Plantarum, DOI: 10.1111/ppl.12116.   Bock (2012). The plastid genome-encodedYcf4 protein functions as a non-essential assembly factor for photosystem I in higher plants. Plant Physiol. 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 (<u>AS08 300</u>) were separated on 4-12% Nupage Bis-Tris gels in 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 probedwith anti-PsaL (AS06 148 1:1000) and secondary HRP-conjugated goat 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 min). All steps were performed at RT with agitation. Signals was detected using chemiluminescence detection reagent, according to



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the manufacturers instructions and a CCD imager (FluorSMax, Bio-Rad)

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