

Product no **AS06 142-16****Anti-PsbQ | 16 kDa protein of the oxygen evolving complex (OEC) of PSII****Product information**

<b>Immunogen</b>	KLH-conjugated synthetic peptide derived from available PsbQ protein sequences including <i>Arabidopsis thaliana</i> At4g21280. Peptide used to elicit this antibody is conserved in both isoforms, <i>Arabidopsis thaliana</i> PsbQ1 and PsbQ2.
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Purity</b>	Serum
<b>Format</b>	Lyophilized
<b>Quantity</b>	50 µl
<b>Reconstitution</b>	For reconstitution add 200 µl of sterile water
<b>Storage</b>	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.

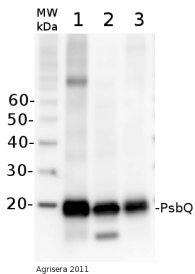
**Application information**

<b>Recommended dilution</b>	1 : 1000 (WB)
<b>Expected   apparent MW</b>	23.8   16 kDa
<b>Confirmed reactivity</b>	<i>Arabidopsis thaliana</i> , <i>Hordeum vulgare</i> , <i>Picea abies</i> , <i>Pisum sativum</i> , <i>Triticum aestivum</i> , <i>Zea mays</i>
<b>Predicted reactivity</b>	<i>Catalpa bungei</i> , <i>Lolium multiflorum</i> , <i>Oryza sativa</i> , <i>Picea sitchensis</i> , <i>Populus balsamifera</i> , <i>Spinacia oleracea</i> , <i>Triticum aestivum</i> Species of your interest not listed? <a href="#">Contact us</a>
<b>Not reactive in</b>	<i>Chlamydomonas reinhardtii</i> , <i>Physcomitrella patens</i> , <i>Zostera marina</i>
<b>Additional information</b>	This product can be sold with ProClin if requested
<b>Selected references</b>	<p><a href="#">Silvestre et al. (2025)</a>. A Holistic Investigation of Arabidopsis Proteomes Altered in Chloroplast Biogenesis and Retrograde Signalling Identifies PsbO as a Key Regulator of Chloroplast Quality Control. <i>Plant Cell Environ.</i> 2025 Aug;48(8):6373-6396. doi: 10.1111/pce.15611.</p> <p><a href="#">Collombat et al. (2025)</a>. Arabidopsis conditional photosynthesis mutants abc1k1 and var2 accumulate partially processed thylakoid preproteins and are defective in chloroplast biogenesis. <i>Commun Biol.</i> 2025 Jan 22;8(1):111. doi: 10.1038/s42003-025-07497-y.</p> <p><a href="#">Charras et al. (2024)</a>. An efficient protocol for extracting thylakoid membranes and total leaf proteins from <i>Posidonia oceanica</i> and other polyphenol-rich plants. <i>Plant Methods.</i> 2024 Mar 11;20(1):38. doi: 10.1186/s13007-024-01166-7.</p> <p><a href="#">Trotti et al. (2024)</a>. Physiological Responses to Salt Stress at the Seedling Stage in Wild (<i>Oryza rufipogon</i> Griff.) and Cultivated (<i>Oryza sativa</i> L.) Rice Plants (Basel). 2024 Jan 26;13(3):369.</p> <p><a href="#">Yang-Er Chen et al. (2017)</a>. Responses of photosystem II and antioxidative systems to high light and high temperature co-stress in wheat. <i>J. of Exp. Botany</i>, Volume 135, March 2017, Pages 45–55.</p> <p><a href="#">Pavlović et al. (2016)</a>. Light-induced gradual activation of photosystem II in dark-grown Norway spruce seedlings. <i>Biochim Biophys Acta.</i> 2016 Feb 18. pii: S0005-2728(16)30028-7. doi: 10.1016/j.bbabi.2016.02.009.</p> <p><a href="#">Albanese et al. (2016)</a>. Isolation of novel PSII-LHCII megacomplexes from pea plants characterized by a combination of proteomics and electron microscopy. <i>Photosynth Res.</i> 2016 Jan 9.</p> <p><a href="#">Grassl et al. (2012)</a>. Early events in plastid protein degradation in stay-green <i>Arabidopsis</i> reveal differential regulation beyond the retention of LHCII and chlorophyll. <i>J. Proteome Res.</i> October 2.</p>

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

contact: [support@agrisera.com](mailto:support@agrisera.com)

Agrisera AB | Box 57 | SE-91121 Vännäs | Sweden | +46 (0)935 33 000 | [www.agrisera.com](http://www.agrisera.com)



**5 µg of total protein** from *Arabidopsis thaliana* (1), *Hordeum vulgare* (2), *Zea mays* (3) extracted with Agrisera PEB buffer ([AS08.300](#)) were separated on **4-12 % NuPAGE Bis-Tris** gel (Invitrogen) and blotted 1h to **PVDF**. Blots were blocked with blocking reagent for 1.5 h at room temperature (RT) with agitation. Blot was incubated in the primary antibody at a dilution of 1: 10 000 for 1h at RT 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 RT with agitation. Blot was incubated in secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated, Agrisera, [AS09.602](#)) diluted to 1:25 000 in for 1h at RT with agitation. The blot was washed as above and developed for 5 min with chemiluminescent detection reagent, according to the manufacturers instructions. Exposure time was 44 seconds.