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Product no **AS01 010**

Lhcb6 | CP24 chlorophyll a/b-binding protein of plant PSII

Product information

Background	Lhcb6 is one of the 3 highly conserved minor chlorophyll <i>a/b</i> -binding proteins exclusively associated with Photosystem II in plants and algae. Together with Lhcb4 and Lhcb5, it regulates the energy flow from the outer antenna to the reaction center through the action of the xanthophyll cycle.
Immunogen	<u>KLH</u> -conjugated synthetic peptide derived from <i>Arabidopsis thaliana</i> Lhcb6, UniProt: Q9LMQ2 , TAIR: At1g15820 . This sequence is highly conserved in angiosperms (monocots and dicots) and gymnosperms.
Host	Rabbit
Clonality	Polyclonal
Purity	Serum
Format	Lyophilized
Quantity	50 µl
Reconstitution	For reconstitution add 50 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	Western blot (WB)
Related products	AS01 011 A set of 10 plant anti-Lhca and anti-Lhcb antibodies AS01 011 Chlamydomonas A set of anti-Lhc antibodies for <i>Chlamydomonas</i> Plant protein extraction buffer
Additional information	This product can be sold containing ProClin if requested.

Application information

Recommended dilution	1 : 1000-1 : 5000 (WB)
Expected apparent MW	27.5 24 kDa for <i>Arabidopsis thaliana</i>
Confirmed reactivity	<i>Arabidopsis thaliana</i> , <i>Brassica napus</i> , <i>Hordeum vulgare</i> , <i>Triticum aestivum</i> , <i>Triticale</i>
Predicted reactivity	Dictos, <i>Gymnosperms</i> , <i>Physcomitrella patens</i> , <i>Pisum sativum</i> , <i>Selaginella martensii</i> , <i>Spinacia oleracea</i> , <i>Zea may</i> , Species of your interest not listed? Contact us
Not reactive in	No confirmed exceptions from predicted reactivity are currently known.
Additional information	Protein is processed into mature form (Jansson 1999). This antibody is a re-make of former Lhcb6 antibody from Agrisera and is made to the same peptide. For high resolution images, please visit the specific product page at www.agrisera.com
Selected references	Chen et al. (2019). Effects of Stripe Rust Infection on the Levels of Redox Balance and Photosynthetic Capacities in Wheat. <i>Int J Mol Sci</i> . 2019 Dec 31;21(1). pii: E268. doi: 10.3390/ijms21010268. Rogowski et al. (2019). Photosynthesis and organization of maize mesophyll and bundle sheath thylakoids of plants grown in various light intensities. <i>Environmental and Experimental Botany</i> Volume 162, June 2019, Pages 72-86. Mao et al. (2018). Comparison on Photosynthesis and Antioxidant Defense Systems in Wheat with Different Ploidy Levels and Octoploid Triticale. <i>Int J Mol Sci</i> . 2018 Oct 2;19(10). pii: E3006. doi: 10.3390/ijms19103006. Du et al. (2018). Galactoglycerolipid Lipase PGD1 Is Involved in Thylakoid Membrane Remodeling in Response to

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Adverse Environmental Conditions in Chlamydomonas. Plant Cell. 2018 Feb;30(2):447-465. doi: 10.1105/tpc.17.00446.

[Myouga](#) et al. (2018). Stable accumulation of photosystem II requires ONE-HELIX PROTEIN1 (OHP1) of the light harvesting-like family. Plant Physiol. 2018 Feb 1. pii: pp.01782.2017. doi: 10.1104/pp.17.01782.

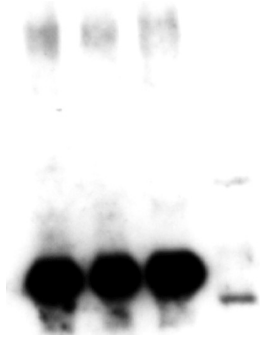
[Wang](#) et al. (2018). iTRAQ-based quantitative proteomics analysis of an immature high-oleic acid near-isogenic line of rapeseed. Molecular Breeding January 2018, 38:2.

[Tyutereva](#) et al. (2017). Stomata control is changed in a chlorophyll b-free barley mutant. Functional Plant Biology, doi.org/10.1071/FP17056

[Chen](#) et al. (2017). Comparison of Photosynthetic Characteristics and Antioxidant Systems in Different Wheat Strains. J Plant Growth Regul.

For high resolution images, please visit the specific product page at www.agrisera.com

Application example



5 µg of total protein from *Arabidopsis thaliana* extracted with Agrisera Protein Extraction Buffer PEB ([AS08 300](#)) and denatured in PEB at 70 °C for 5 min. were separated on 12% SDS-PAGE and blotted 1h to PVDF using semi-dry or tank transfer (blotted 15h to PVDF using tank-transfer - 30V). Blots were blocked with TBST with 4 % BSA for 1h at room temperature (RT) with agitation. Blot was incubated in the primary antibody at a dilution of 1: 1 000 for 1h at RT with agitation in TBS-T with 2% BSA. 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, from Agrisera, [AS09 602](#)) diluted to 1: 50 000 in for 1h at RT with agitation in TBS-T with 2% BSA. The blot was washed as above and developed with chemiluminescence detection reagent for 5 minutes. Exposure time was 25 seconds.

Courtesy of Dr. Robert Luciński, Department of Biology, UAM, Poznań, Poland