

Product no **AS01 008**

Lhca4 | PSI type IV chlorophyll a/b-binding protein

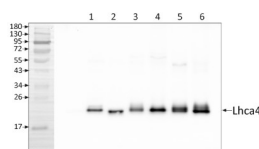
Product information

Immunogen	BSA-conjugated synthetic peptide derived from the Lhca4 protein of <i>Arabidopsis thaliana</i> UniProt: P27521 , TAIR: At3g47470 . This sequence is highly conserved in Lhca4 proteins of angiosperms (monocots and dicots) and gymnosperms.
Host	Rabbit
Clonality	Polyclonal
Purity	Total IgG
Format	Lyophilized in PBS pH 7.4
Quantity	0.5 mg
Reconstitution	For reconstitution add 100 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.

Application information

Recommended dilution	1 : 2000-1 : 5000 (WB)
Expected apparent MW	27.7 21 kDa for <i>Arabidopsis thaliana</i>
Confirmed reactivity	<i>Arabidopsis thaliana</i> , <i>Bryopsis corticulans</i> , <i>Citrus reticulata</i> , <i>Echinochloa crus-galli</i> , <i>Fortunella margarita</i> Swingle, <i>Hordeum vulgare</i> , <i>Mesembryanthemum crystallinum</i> , <i>Nicotiana tabacum</i> , <i>Oryza sativa</i> , <i>Physcomitrella patens</i> , <i>Pisum sativum</i> , <i>Posidonia oceanica</i> , <i>Spinacia oleracea</i> , <i>Triticum aestivum</i> , <i>Triticale</i> , <i>Zea mays</i>
Predicted reactivity	Dicots, Gymnosperms
Not reactive in	No confirmed exceptions from predicted reactivity are currently known.
Additional information	Protein is processed into mature form (Jansson 1999). For high resolution images, please visit the specific product page at www.agrisera.com
Selected references	Zhu et al. (2020). A NAC transcription factor and its interaction protein hinder abscisic acid biosynthesis by synergistically repressing NCED5 in <i>Citrus reticulata</i> . <i>J Exp Bot.</i> 2020 Jun 22;71(12):3613-3625. doi: 10.1093/jxb/eraa118. Forlani et al. (2020). HEBE, a novel positive regulator of senescence in <i>Solanum lycopersicum</i> . <i>Sci Rep.</i> 2020 Jul 3;10(1):11021. doi: 10.1038/s41598-020-67937-z. 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. 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. Li et al. (2018). Modulating plant growth-metabolism coordination for sustainable agriculture. <i>Nature.</i> 2018 Aug 15. doi: 10.1038/s41586-018-0415-5.

Application example



1 µg of chlorophyll from *Pisum sativum* (1), *Mesembryanthemum crystallinum* (2), mesophyll (3) and bundle sheath (4) of *Zea mays*, mesophyll (5) and bundle sheath (6) of *Echinochloa crus-galli* chloroplasts extracted with 0.4 M sorbitol, 50 mM Hepes NaOH, pH 7.8, 10 mM NaCl, 5 mM MgCl₂ and 2 mM EDTA were loaded to lanes. Samples were denatured with Laemmli buffer at 75 °C for 5 min and were separated on 12% SDS-PAGE, and blotted 30 min to PVDF using wet transfer. Blot was blocked with 5% milk for 2h at room temperature (RT) with agitation. Blot was incubated in the primary antibody Anti-Lhca4 (LOT 1908) at a dilution of 1: 3000 in 1% milk in TBS-T overnight at 4 °C with agitation. The antibody solution was decanted and the blot was washed 4 times for 5 min in TBS-T at RT with agitation. Blot was incubated in secondary antibody (anti-rabbit IgG HRP conjugated, from Agrisera, [AS09 602](#), LOT 1905) diluted to 1:20 000 in 1 % milk in TBS-T for 1h at RT with agitation. The blot was washed 5 times for 5 min in TBS-T and 2 times for 5 min in TBS, and developed for 1 min with 1.25 mM luminol, 0.198 mM coumaric acid and 0.009% H₂O₂ in 0.1 M Tris- HCl, pH 8.5. Exposure time in ChemiDoc System was 30 seconds.

