

Product no **AS09 522****Lhcb1 | LHCII type I chlorophyll a/b-binding protein (Arabidopsis specific)****Product information**

| | |
|-------------------------------|--|
| Immunogen | BSA-conjugated synthetic peptide derived from <i>Arabidopsis thaliana</i> At1g29910 (Lhcb1.1), At1g29920 (Lhcb1.2), At1g29930 (Lhcb1.3, most expressed), At2g34430 (Lhcb1.4), and At2g34420 (Lhcb1.5) |
| Host | Rabbit |
| Clonality | Polyclonal |
| Purity | Immunogen affinity purified serum in PBS pH 7.4. |
| Format | Lyophilized |
| Quantity | 100 µg |
| 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 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. |
| Additional information | A molecular characterisation of the LHCII proteins can be found in Caffarri et al. (2004) A Look within LHCII: Differential Analysis of the Lhcb1–3 Complexes Building the Major Trimeric Antenna Complex of Higher-Plant Photosynthesis. <i>Biochemistry</i> 43 (29): 9467–9476 |

Application information

| | |
|-------------------------------|--|
| Recommended dilution | 1 : 2500-1 : 5000 (WB) |
| Expected apparent MW | 28 25 kDa (<i>Arabidopsis thaliana</i>) |
| Confirmed reactivity | <i>Arabidopsis thaliana</i> , <i>Digitalia sanguinalis</i> , <i>Echinochloa crus-galli</i> , <i>Pinus strobus</i> L. |
| Predicted reactivity | Algae, Dicots, Mosses Species of your interest not listed? Contact us |
| Not reactive in | No confirmed exceptions from predicted reactivity are currently known |
| Additional information | This Lhcb1 antibody is directed specifically against the <i>Arabidopsis</i> Lhcb1 gene products, for those that would prefer higher specific activity over broader specificity offered by Agrisera older Lhcb1 antibody, AS01 004 Protein is processed into mature form (Jansson 1999). |
| Selected references | 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. Pralon et al. (2019) . Plastoquinone homeostasis by Arabidopsis proton gradient regulation 6 is essential for photosynthetic efficiency. <i>Commun Biol.</i> 2019 Jun 20;2:220. doi: 10.1038/s42003-019-0477-4. Lal et al. (2018) . The Receptor-like Cytoplasmic Kinase BIK1 Localizes to the Nucleus and Regulates Defense Hormone Expression during Plant Innate Immunity. <i>Cell Host Microbe.</i> 2018 Apr 11;23(4):485-497.e5. doi: 10.1016/j.chom.2018.03.010. Tamburino et al. (2017) . Chloroplast proteome response to drought stress and recovery in tomato (<i>Solanum lycopersicum</i> L.). <i>BMC Plant Biol.</i> 2017 Feb 10;17(1):40. doi: 10.1186/s12870-017-0971-0. Fristedt et al. (2017) . PSB33 sustains photosystem II D1 protein under fluctuating light conditions. <i>Journal of Experimental Botany</i> doi:10.1093/jxb/erx218. Hartings et al. (2017) . The DnaJ-Like Zinc-Finger Protein HCF222 Is Required for Thylakoid Membrane Biogenesis in Plants. <i>Plant Physiol.</i> 2017 Jul;174(3):1807-1824. doi: 10.1104/pp.17.00401. Correa-Galvis et al. (2016) . PsbS interactions involved in the activation of energy dissipation in Arabidopsis. <i>Nature Plants</i> 2, Article number: 15225 (2016) doi:10.1038/nplants.2015.225 Longoni et al. (2015) . Phosphorylation of the Lhcb2 isoform of Light Harvesting Complex II is central to state transitions. <i>Plant Physiol.</i> 2015 Oct 5. pii: pp.01498.2015. Wienties et al (2013) . LHCII is an antenna of both photosystems after long-term acclimation. <i>BBA</i> , Jan 6. |