

product **AS01 011 CHLAMYDOMONAS** **2 | Set of 5 Chlamydomonas anti-Lhc antibodies**

This product includes following antibodies:

AS01 004 **Lhcb1** | LHCII type I chlorophyll a/b-binding protein

AS01 003 **Lhcb2** | LHCII type II chlorophyll a/b-binding protein

AS06 117 **Lhcb4** | CP29 (Lhcb4) homolog, Chlamydomonas

AS09 407 **Lhcb5** | CP26 (Lhcb5) homolog, Chlamydomonas

AS09 408 **Lhcbm5** | chlorophyll a-b binding protein of LHCII

product information

background	The outer light-harvesting antenna of the photosystems (PSI and PSII) of the green unicellular alga <i>Chlamydomonas reinhardtii</i> is composed of pigment-binding proteins belonging to the Lhc family highly conserved in photosynthetic eukaryotes. Some of the Lhc-subtypes of <i>Chlamydomonas</i> share sufficient high similarity with the respective functional homologs in plants to allow specific detection with antisera generated against conserved peptide domains from plant Lhc-proteins.
immunogen	<p>Lhcb1 - <u>BSA</u>-conjugated peptide</p> <p>Lhcb2 - <u>BSA</u>-conjugated peptide</p> <p>Lhcb4 - <u>KLH</u>-conjugated synthetic peptide derived from Lhcb4 (CP29, Lhcbm4) protein sequence from <i>Chlamydomonas reinhardtii</i> (<u>Q93WD2</u>)</p> <p>Lhcb5 - <u>KLH</u>-conjugated synthetic peptide derived from <i>Chlamydomonas reinhardtii</i> Lhcb5 protein sequence (<u>Q9FEK6</u>)</p> <p>Lhcbm5 - SDS-PAGE purified polypeptide from <i>Chlamydomonas reinhardtii</i> LHCII-type II-enriched fractions</p>
antibody format	rabbit polyclonal total IgG in PBS pH 7.4 (Lhcb1 and Lhcb2), serum (Lhcb4, Lhcb5, Lhcbm5) lyophilized
quantity	100 µl (Lhcb4, Lhcb5, Lhcbm5) 200 µl (Lhcb1, Lhcb2)
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)

additional information | to be added when available

application information

recommended dilution	1:2000 with standard ECL (WB) (Lhcb1) 1:5000 with standard ECL (WB) (Lhcb2,Lhcb5, Lhcbm5) 1: 10 000 with standard ECL (Lhcb4)
expected apparent MW	25 kDa (Lhcb1, Lhcb2) 29 kDa (Lhcb4) 29 30 kDa (Lhcbm5) 30 26 kDa (Lhcb5)
confirmed reactivity	<i>Chlamydomonas reinhardtii</i>
predicted reactivity	angiosperms (monocots and dicots), gymnosperms, mosses, green algae (Lhcb1, Lhcb2)
not reactive in	Lhcb4 - higher plants (use AS04_045 for those organisms), algae, cyanobacteria
additional information	to be added when available
selected references	Lhcb5 and Lhcbm5 - Takahashi et al. (2006) . Identification of the mobile light-harvesting complex II polypeptides for state transitions in <i>Chlamydomonas reinhardtii</i> . PNAS 103:477-482