Product no AS01 005
Lhca1 | PSI type I chlorophyll a/b-binding protein

Product information

- **Immunogen**: BSA-conjugated synthetic peptide derived from the Lhca1 protein of *Arabidopsis thaliana*. UniProt: Q01667, TAIR: At3g54890. This sequence is highly conserved in Lhca1 proteins of angiosperms (monocots and dicots) and gymnosperms.

- **Host**: Rabbit

- **Clonality**: Polyclonal

- **Purity**: Total IgG. Protein G purified in PBS pH 7.4.

- **Format**: Lyophilized

- **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 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**: Antibody format is a total IgG fraction, which means that it is a pool of polyclonal antibodies obtained by purification of serum on Protein G, not on a specific antigen column.

Application information

- **Recommended dilution**: 1 : 2000-1 : 5000 (WB)

- **Expected | apparent MW**: 25.99 | 22 kDa for *Arabidopsis thaliana*

- **Confirmed reactivity**: *Arabidopsis thaliana*, *Arachis hypogaea*, *Bryopsis corticulans*, *Citrus reticulata*, *Colobanthus quitensis Kunt Bartl*, *Echinochloa crus-galli*, *Fortunella margarita Swingle*, *Guzmania hybrid*, *Hordeum vulgare*, *Lycopersicon esculentum* (Solanum lycopersicum), *Nicotiana tabacum*, *Oryza sativa*, *Panicum miliaceum*, *Picrorhiza kurroa*, *Physcomitrium patens*, *Pinus strobus*, *Pism sativum*, *Phaseolus vulgaris*, *Posidonia oceanica*, *Solanum lycopersicum*, *Spinacia oleracea*, *Tillandsia fiabellate*, *Triticale*, *Triticum aestivum*, *Zea mays*

- **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).

- **Selected references**

Application example

![Image of Western blot with bands labeled M, B, E, R, and D showing expected and confirmed reactivity.](https://example.com/image)
1.0 µg of chlorophyll from mesophyll (M) and bundle sheath (BS) thylakoids of various C4 plants (Echinochloa crus-galli, Panicum miliaceum, Zea mays) extracted with 0.4 M sorbitol, 50 mM Heps NaOH, pH 7.8, 10 mM NaCl, 5 mM MgCl2 and 2 mM EDTA. 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 1h at room temperature (RT) with agitation. Blot was incubated in the primary antibody at a dilution of 1:2000 overnight at 4°C with agitation in 1% milk in TBS-T. 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 horse radish peroxidase conjugated, from Agrisera, AS09 602, Lot 1702) diluted to 1:25 000 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 15 seconds.

Courtesy of Dr. Wioleta Wasilewska, Warsaw University, Poland