

Product: Anti-Lhca1

Product no: AS01 005

Product Information

Antibody clonality: Polyclonal
Raised in: Rabbit
Purity: Total IgG in PBS
pH 7.4
Quantity: 200 µl
Concentration: 5.2 µg/µl

Antibody form: Lyophilized. For reconstitution please add 200 µl of sterile water. Please, remember to spin tubes briefly prior to opening them to avoid any losses that might occur from liquid or lyophilized material adhering to the cap or sides of the tubes.

Storage instructions: -20°C or -80°C long term storage (years). Please, avoid freezing and thawing of antibodies. Make aliquots instead.

Background

The light-harvesting system of higher plant photosynthesis is composed of pigment-binding proteins belonging to the Lhc multigenic family. Lhc polypeptides are able to bind chlorophyll a, chlorophyll b, and xanthophylls molecules in a suitable structural and dynamic mutual arrangement, ensuring high efficiency of energy transfer processes involved in light-harvesting and photo protection. Each polypeptide binds eight chlorophylls a, two chlorophylls b, and three xanthophylls molecules. Lhca1 has two spectral forms absorbing at 688 and 700 nm and fluorescing with components at 690 and 701 nm, respectively, whose amplitude accounts for nearly one chlorophyll molecule per holoprotein. This is the most stable Lhca member so far expressed and reconstituted *in vitro*.

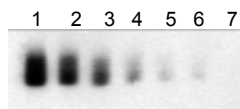
Immunogen: Synthetic peptide chosen from Lhca1 protein of *Arabidopsis thaliana* conjugated to BSA

Application information:

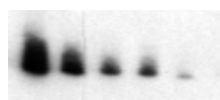
Western Blot: 1:2 000 to 1: 5 000(ECL system)

Reactivity: *Arabidopsis thaliana*, Barley, Groundnut, Pea, Spinach, *Chlamydomonas sp.*

MW of target protein: 26 kDa



Thylakoids from *Arabidopsis thaliana* wild type (20 µg/chl/lane)



PSI preparations from *Arabidopsis thaliana* wild type (10 µg/chl/lane)

Sample dilution: 1 – 1: 1 000; 2 - 1: 1 500; 3 – 1: 2 250; 4 – 1: 3 500; 5 – 1: 5 000; 6 – 1: 7 500; 7- 1: 10 000

References: Ganeteg U. et al. (2001). The properties of the chlorophyll a/b-binding proteins Lhca2 and Lhca3 studies in vivo using antisense inhibition. *Plant Physiol* 127:150-158.

Antibodies are intended for the research use only not for diagnostic or therapeutic use.

Product support: inquiry@agrisera.com, <http://www.agrisera.com/protocols/protocols.shtml>