

PsaC | PSI-C core subunit of photosystem I (PsaC antibody + PsaC protein positive control)

Cat PA00946

Size 50 μ l anti-PsaC antibody, 100 μ l PsaC protein standard

Host

Rabbit

Clonality

Polyclonal

Confirmed reactivity

Arabidopsis thaliana, *Chlamydomonas reinhardtii*, *Cyanophora paradoxa*, *Heterosigma akashiwo*, *Emiliania huxleyi*, *Euglena gracilis*, *Gonyaulax polyedra*, *Hordeum vulgare*, *Micromonas pusilla*, *Porphyra* sp. *Spinacia oleracea*, *Synechococcus* PCC 7942, *Thalassiosira pseudonana*

Immunogen

KLH-conjugated synthetic peptide conserved in all known PsaC proteins including *Arabidopsis thaliana* AtCg01060, *Hordeum vulgare* P69416, *Oryza sativa* P0C360, *Chlamydomonas reinhardtii* Q00914, *Synechococcus elongatus* Q31QV2

Host

Rabbit

Clonality

Polyclonal

Purity

Serum

Format

Lyophilized

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.

Application

Western blot (WB)

Recommended dilution

1 : 1000 (WB)

Expected | apparent MW

9 kDa

Confirmed reactivity

Arabidopsis thaliana, *Chlamydomonas reinhardtii*, *Cyanophora paradoxa*, *Heterosigma akashiwo*, *Emiliania huxleyi*, *Euglena gracilis*, *Gonyaulax polyedra*, *Hordeum vulgare*, *Micromonas pusilla*, *Porphyra* sp. *Spinacia oleracea*, *Synechococcus* PCC 7942, *Thalassiosira pseudonana*

Predicted reactivity

Algae, Cyanobacteria, *Glycine max*, *Nicotiana tabacum*, *Physcomitrium patens*, *Prochlorococcus* sp. (surface and a deep water ecotype), *Spinacia oleracea*

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

PsaC | PSI-C core subunit of photosystem I (PsaC antibody + PsaC protein positive control)

Cat PA00946

Size 50 μ l anti-PsaC antibody, 100 μ l PsaC protein standard

Not reactive in

No confirmed exceptions from predicted reactivity are currently known

Additional information

Peptide target used to elicit this antibody is well conserved in all photoautotrophs except some cyanobacteria, some red algae and *Cyanophora paradoxa*, which contain a conserved substitution of a valine to an isoleucine. The performance of the antibodies has been confirmed against taxa containing both the valine and isoleucine variants. For reconstitution of PsaC antibodies add 50 μ l of sterile water. For reconstitution of PsaC positive control add 100 μ l of sterile water. In some species minor cross reactions with some larger proteins are seen. These may contain related iron-sulfur binding motifs. Therefore size verification of the reacting band is required. Due to the small size of the protein, care should be taken to differentiate between chemiluminescent signal from PsaC and non-specific signals from chlorophylls or lipids if pigment is retained near the bottom of the blot. Protein standard: use a load of 2 μ l per well with ECL detection system and 4 μ l per well with alkaline phosphatase.

Description

PsaC is a conserved chloroplast-encoded Fe-S binding protein, approximately 10 kDa, present in all known photosystem I complexes. It is located on the stromal side of the thylakoid membrane. PsaC coordinates the Fe-S clusters FA and FB through two cysteine-rich domains.

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY