

Product information

Antibody name: anti-PsbQ (16 kDa protein of OEC)

Product number: P13S-1

Product description: polyclonal antibody;
contains 0.01% NaN₃

Origin: rabbit

Immunogen: recombinant PsbQ protein of the photosystem II

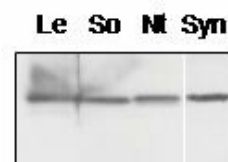
Applications: Western blot (1 : 2.000 for ECL with higher plant proteins and 1 : 1.000 for ECL with cyanobacterial proteins)

Immunocrossreaction: higher plants, cyanobacteria

Storage: short term +4°C; long term -20°. Repeated freezing and thawing is not recommended.

Quantity: 100 µl

Protein description: PsbQ or 16 kDa protein is one of the three components (PsbO, PsbP and PsbQ) of oxygen evolving complex (OEC) in higher plants. The cyanobacterial photosystem II have five associated extrinsic proteins, PsbO, PsbP, PsbQ, PsbU and PsbV. This class of subunits is located on the lumen face of the thylakoid membranes. PsbQ has a regulatory role on the water oxidation machinery. The lack of PsbQ in cyanobacteria affects the stability of PsbV protein. Therefore, it was concluded that the major function of cyanobacterial PsbQ is to stabilize the PsbV protein, thereby contributing to the protection of the catalytic Mn(4)-Ca(1)-Cl(x) cluster of the water oxidation machinery (De La Rivas et al., 2007, Biochim Biophys. Acta, 1767, 578 – 582; Roose et al., Proc. Natl. Acad. Sci. USA 104, 2548 – 2553).



Western blot analysis of chloroplast proteins from tomato (*Lycopersicon esculentum*; Le; spinach (*Spinacia oleracea*; So), tobacco (*Nicotiana tabacum*; Nt) and membrane proteins from *Synechocystis* sp. PCC 6803 (Syn) with anti-PsbQ

For research purposes only