

## Product information

**Antibody name:** anti-PsbA-int (D1)

**Product number:** P21S-1

**Product description:** polyclonal antibody;  
contains 0.01% NaN<sub>3</sub>

**Origin:** rabbit

**Immunogen:** synthetic peptide (a. a. 57 – 85) against PsbA2/3 proteins from *Synechocystis* sp. PCC 6803. The peptide is conservative in D1 protein sequences from all photosynthetic organisms

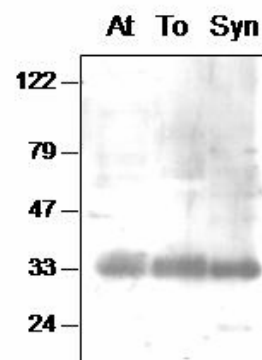
**Applications:** Western blot (1 : 1.000 for ECL)

**Immunocrossreaction:** higher plants, cyanobacteria. Antibody reacts with a 32 kDa protein in all tested photosynthetic organisms

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

**Quantity:** 200 µl

**Protein description:** D1 is one the major proteins of the reaction centre of photosystem II which carries the Q<sub>B</sub>-binding site. D1 reduces the reaction centre P680\* and provides the ligands to the manganese cluster of the water-oxidizing complex at the luminal side of thylakoid membrane. D1 protein is synthesized in a precursor form containing a C-terminal extension of 16 amino acid residues in cyanobacteria and 8 – 9 - in eukaryotes. The precursor D1 is co-translationally inserted into the thylakoid membrane and is C-terminally cleaved by CtpA protease (Anbudurai et al., 1994, PNAS 16, 8082 – 8086). D1 protein from higher plants and green algae can be phosphorylated by STN8 kinase (Bonardi et al., 2005, Nature 437, 1179 – 1182; Vaionen et al., 2005, J Biol. Chem. 280, 33679 – 33686).



Western blot analysis of *Arabidopsis* (At), tobacco (To) chloroplast and *Synechocystis* (Syn) thylakoid proteins with anti-PsbA-int

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*For research purposes only*