

## Product information

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

**Product number:** P22A-1

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

**Origin:** rabbit

**Immunogen:** synthetic peptide against PsbA N-terminus (a. a. 1 – 17) from *Arabidopsis thaliana* PsbA protein

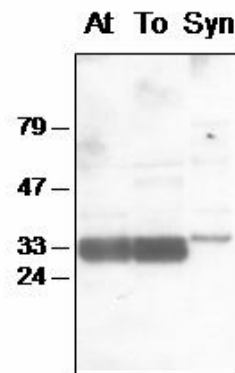
**Applications:** Western blot (1 : 2.000 for ECL)

**Immunocrossreaction:** higher plants. According to sequence homology antisera may reacts in *Synechocystis* only with PsbA2/3 but not with PsbA1. For analysis of cyanobacterial D1 proteins the dilution 1 : 1.000 is recommended.

**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 chloroplast (*Arabidopsis* and tobacco) and *Synechocystis* thylakoid proteins with anti-PsbA-Nt

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*For research purposes only*