

Figure s1: Oxygen evolving activity of whole cells (A) and isolated PSII complexes (B) of the WT, $\Delta psbA3$ and $\Delta psbA1/A2$ mutants, using continuous light of 8000 $\mu E^*m^{-2}*s^{-1}$ intensity. Data are presented as mean \pm SD of 3 independent measurements.

Figure s2:

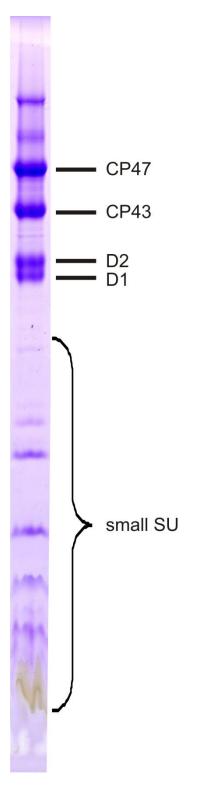


Figure s2: For the detection the D1-D2 area, a 12% PAGE containing 6M Urea and 0.1 % SDS was loaded with 1 μ g Chl of the previously mixed isolated PSII samples. Subsequently the region containing D1 and D2 was cut out of the gel and used for chymotrypsine digest, followed by ESI-MS/MS measurements.