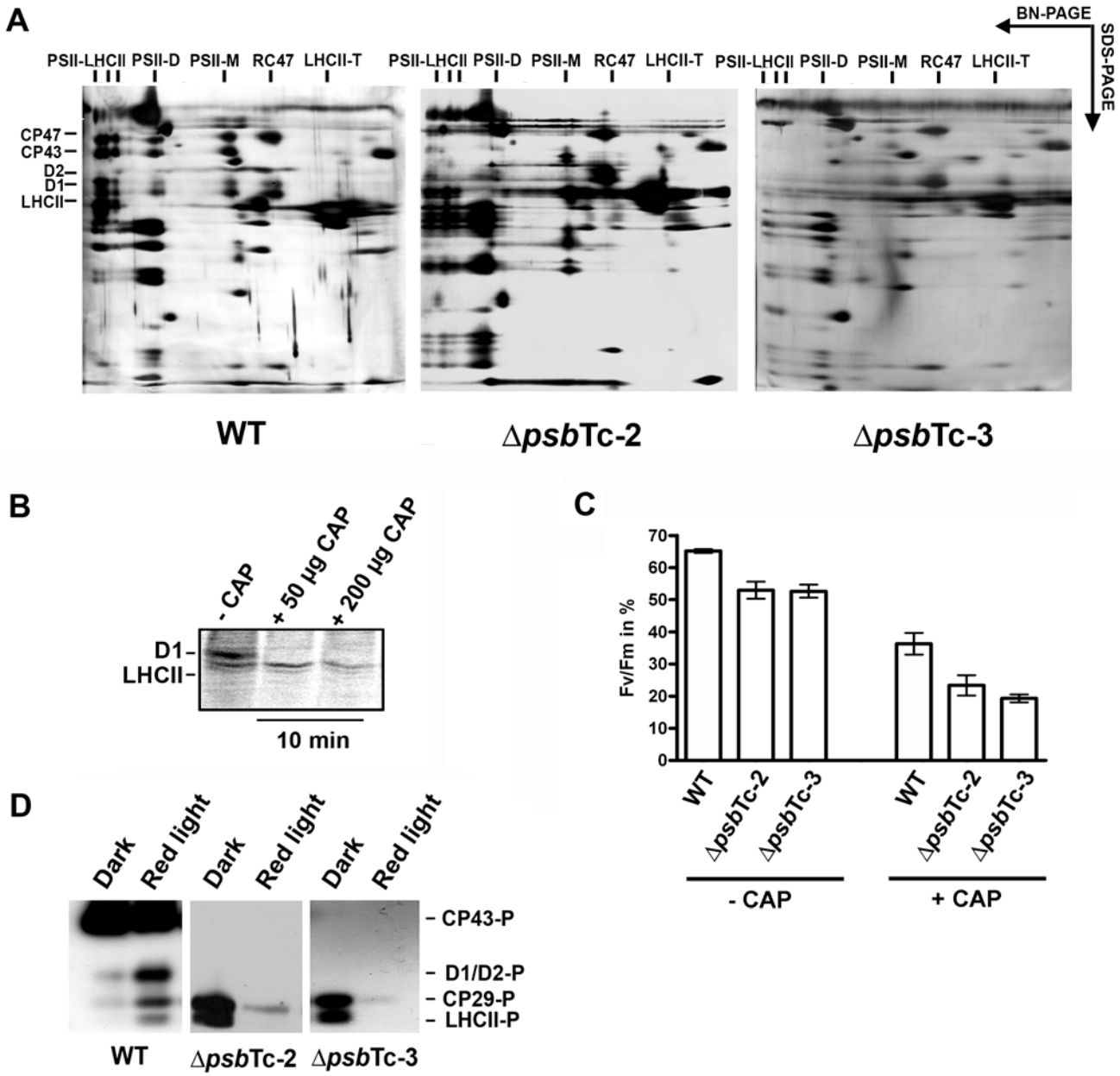

Supplemental Figure 1. Studies on assembly, photoinhibition, and phosphorylation patterns of the independent transformants Δ*psb*Tc-2 and Δ*psb*Tc-3. A, Separation of thylakoid protein complexes by BN-SDS-PAGE. Complexes and silver-stained proteins are labeled according to their identification by mass spectrometry. D, dimer; M, monomer; T, trimers; RC47, reaction center 47. B, Inhibition studies of plastid translation in tobacco leaves. To adjust the conditions sufficient to completely block plastid protein synthesis the amount of 50 and 200 µg/ml chloramphenicol (CAP) and 10 min of pre-treatment were chosen. It appeared that the chosen amounts are saturated and that the incubation time is sufficient to completely inhibit plastid translation. C, Photoinhibition of PSII of high light-treated WT and mutant leaves. Loss of quantum yield (Fv/Fm) with and without CAP after exposition to 1,200 µE m^{-2} s^{-1} for 4 h. Fv/Fm ratios are expressed relative to the initial values before starting the experiment in WT (Fv/Fm ~ 0.82) and mutants (Fv/Fm ~ 0.68), respectively. Error bars in panels represent SD of at least three independent experiments. D, Phosphorylation analysis of D1/D2, CP43 and LHCII proteins after 24 h dark adaptation, after 20 min red light illumination. Phosphorylation was detected with phosphothreonine antibodies.