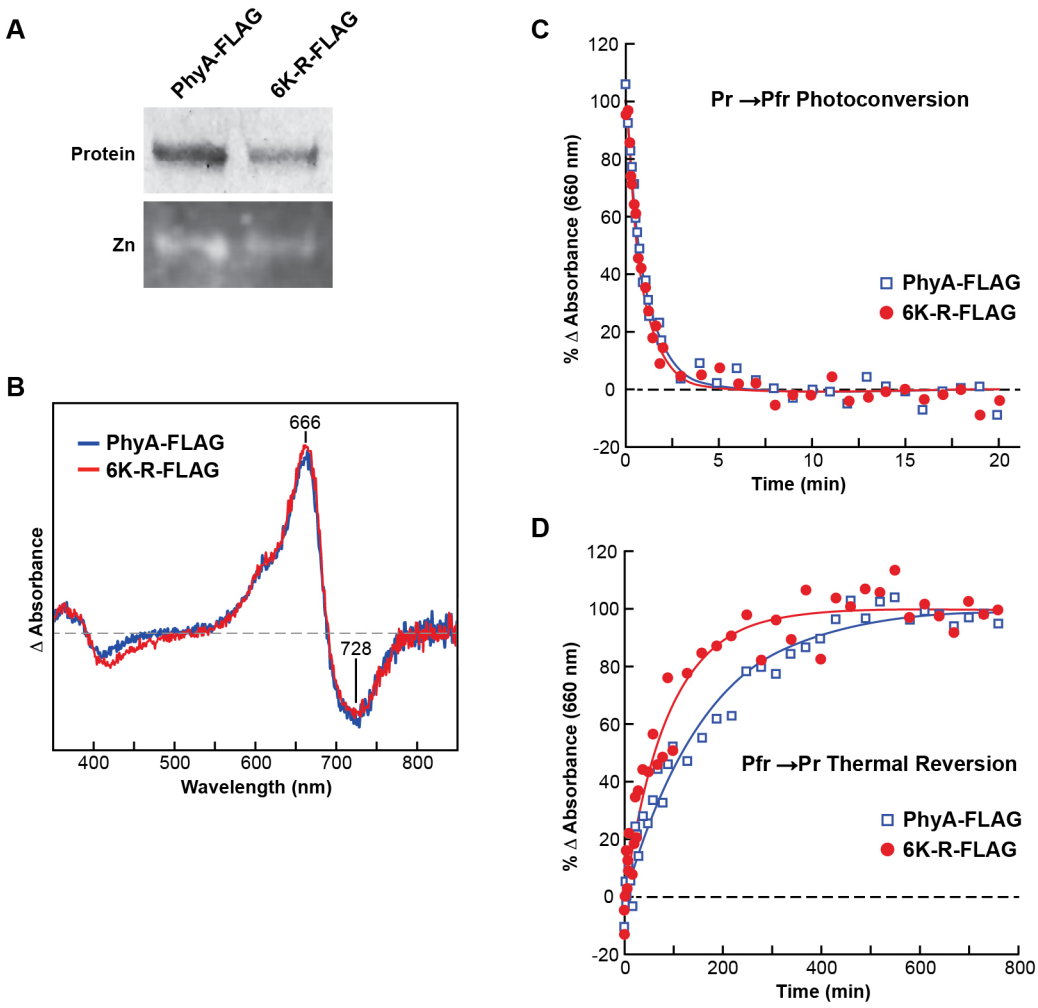

Supplemental Figure 6. The 6K-R Mutant of *Arabidopsis* PhyA Binds Phytochromobilin and Displays Near Normal Photochemical Properties.

The WT and 6K-R version of PhyA bearing a C-terminal FLAG tag were expressed in the *phyA-211* background and enrich from 7-d-old etiolated seedling extracts using anti-FLAG beads.

(A) 6K-R PhyA polypeptide binds phytochromobilin. The affinity-purified samples were subjected to SDS-PAGE and either stained for protein with Coomassie Blue or assayed for the bound bilin by zinc (Zn)-induced fluorescence under UV light.

(B) FR-minus-R difference absorption spectra of the samples. Difference maxima are indicated.

(C) Pr→Pfr photoconversion rates during irradiation of dark-adapted Pr samples with 660-nm light. Loss of Pr absorption was monitored at 660 nm.

D) Pfr→Pr thermal reversion rates of Pfr-enriched samples generated by R irradiation. Gain of Pr absorption was monitored at 660 nm. Samples in (B-D) were maintained at 25°C.