

**Figure S7.** Absorbance at 447 nm monitored as a function of time for VfAU1-LOV (black circles) and VfAU1-LOV-I28V (red circles) at 20°C. Solid lines represent single exponential fits. I28V substitution in VfAU1-LOV reduces photoadduct lifetime from 625 to 50 s. Inset: Absorption spectrum of VfAU1-LOV.