



S1 Fig. Ion-transport activity of $I_1K_6\text{NaR}$. (a-c) Light-induced pH changes upon light-illumination (>500 nm, indicated by yellow lines) on the *E. coli* cells expressing $I_1K_6\text{NaR}$ in 100 mM NaCl (a), 100 mM Na_2SO_4 (b) and 100 mM KCl (c) without (blue lines) and with CCCP (green lines).