

SUPPORTING INFORMATION

What is the difference between the dynamics of anion- and keto-type of
photochromic salicylaldehyde azine ?

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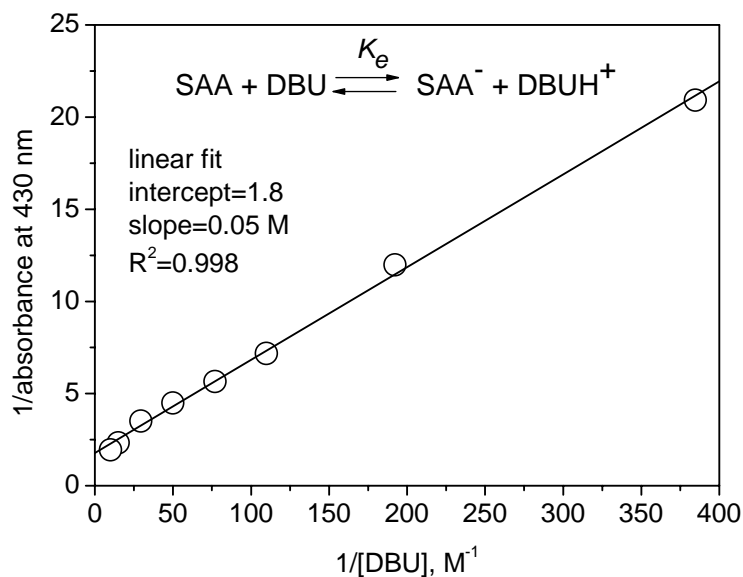


Fig. S1. Benesi-Hildebrand (BH) plot for the absorption change at 430 nm of SAA in DCM in the presence of DBU assuming 1:1 complex (SAA:DBU). The concentration of SAA was 4.4×10^{-5} M and those of DBU used for the plot were at least 30 times higher than that of SAA in order to apply the BH model. The absorption changes at 430 nm correspond to the intensity maximum of SAA anion absorption (see Fig. 1A). The calculated (ratio of the intercept and slope of the linear fit) equilibrium constant is $K_e=36 \pm 10 \text{ M}^{-1}$ at 293 K.

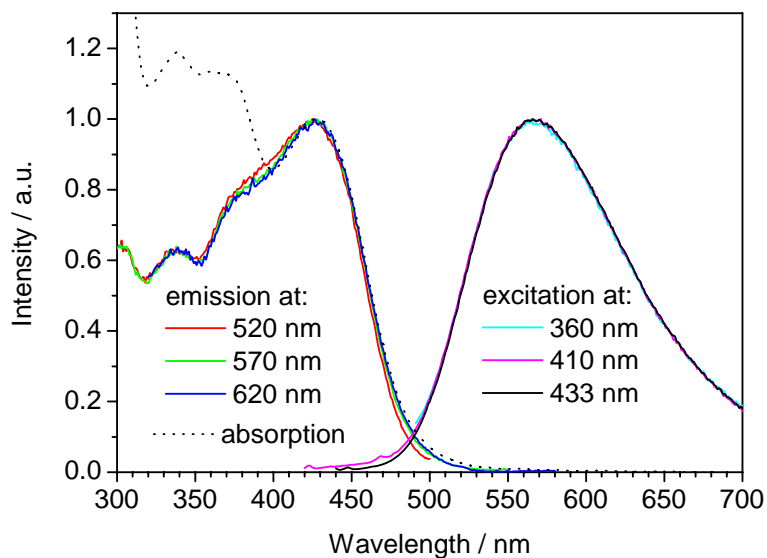


Fig. S2. Steady-state fluorescence, fluorescence excitation and UV-visible absorption spectra of SAA in DCM containing 0.1 M DBU. For fluorescence spectra, the emission and observation wavelengths are indicated.

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