SUPPLEMENTARY MATERIAL

Emissive enhancement of the Singlet Oxygen Chemiluminescence probe after binding to bovine serum albumin

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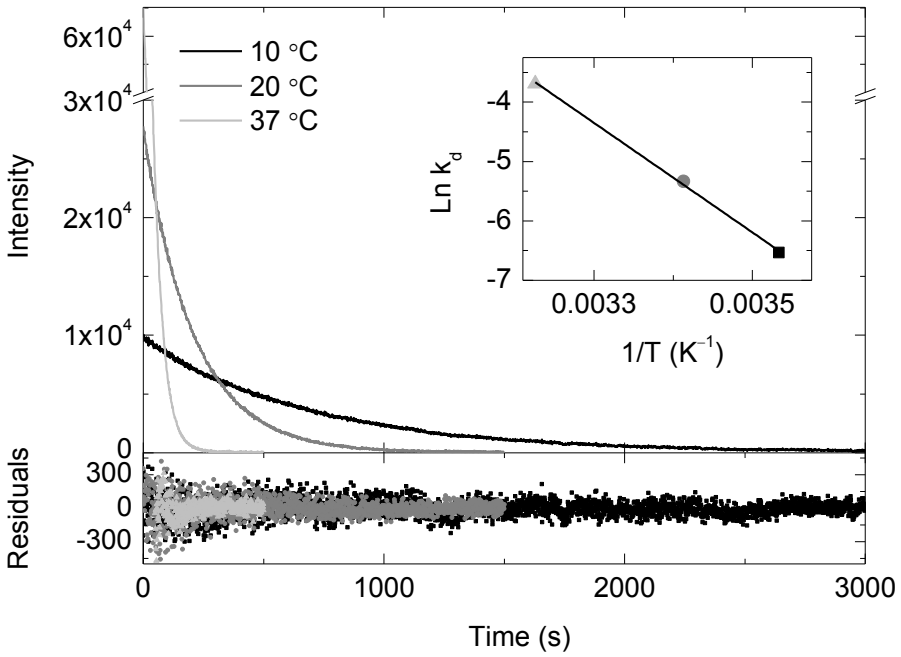

Figure S1. Time dependence of the chemiluminescence traces of the SOCL phenoxy-dioxetane derivative after the photooxygenation of SOCL with $^1O_2$ in PBS pH 7.4 at three different temperatures. Before monitoring the chemiluminescence traces, the reaction mixtures were set in the oxygen electrode chamber in equilibrium with an atmosphere of 100% O_2. 2 μM MB was present as $^1O_2$ photosensitizer and 0.5 mM SOCL as $^1O_2$ quencher. The reaction mixtures were illuminated with a red LED source with an intensity of 2 mE m^{-2} s^{-1} for 2 min. Samples were taken from the oxygen electrode chamber after illumination and placed in a 1-cm fluorescence cuvette pre-incubated each time at the temperature used in the oxygen electrode chamber. The inset shows the dependence of the decomposition rate constant of the SOCL phenoxy-dioxetane derivative on temperature using the Arrhenius equation. The data was fitted to a mono-exponential equation, $I_{515nm} = \alpha_0 + \alpha_1 \exp(-t/\tau_1)$; also shown are the corresponding residuals for each temperature experiment. The standard error for the decay rate constants is < 5%.