Electronic Supplementary Information

Photo-controlled metal-ion (Zn$^{2+}$ and Cd$^{2+}$) release in aqueous Tween-20 micelle solution

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Fig. 1. Absorption (black) and fluorescence (white) of sample 3 (20 μM) aqueous Tween-20 micelle solution (tris-HCl, 50 mM, pH = 7.4, KNO₃ = 0.1M) (λₑₓ = 328 nm).

Fig. 2. Absorption changes of 2 (20 μM) in aqueous Tween-20 micelle solution (tris-HCl, pH = 7.4, KNO₃ = 0.1M) upon 365 nm light irradiation (periods: 0, 4, 8, 12, 16 min).
Fig. 3. Fluorescence changes of complex 2 in aqueous Tween-20 micelle solution (tris-HCl, pH = 7.4, KNO₃ = 0.1M) upon 365 nm light irradiation ($\lambda_{ex} = 328$ nm, periods: 0, 4, 8, 12, 16 min).

Fig. 4. The kinetics of Cd²⁺-release with different irradiation times (monitoring fluorescence intensity of 3 at 454 nm)
Fig. 5. Titration of 20 μM of ligand with Cd$^{2+}$ in DMSO. The inset is the plot of the optical density of complex 2 at 418 nm against the amount of Cd$^{2+}$.

Fig. 6. Absorption spectral of sample 3 (20 μM) in aqueous Tween -20 micelle solution (tris-HCl, pH = 7.4, KNO$_3$ = 0.1M) with (white) and without (black) addition of Cd$^{2+}$ (20 μM).
Fig. 7. Absorption spectral of 3 (20 μM) in DMSO with (white) and without (black) addition of Cd^{2+} (20 μM).