Anion Response of Organogels: Dependence on the Intermolecular Interaction between Gelators

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Fig. S1 The absorption spectra of 1 in o-dichlorobenzene (1.1 mM) upon the addition of (a) F⁻, (b) Cl⁻, (c) Br⁻, (d) I⁻, (e) AcO⁻, and (f) H₂PO₄⁻.
Fig. S2 $^1$H NMR spectra of 1 (a) in CDCl$_3$ (4.2 mM) and 2 in d$_6$-DMSO (2.1 mM) before and after adding 4 equiv of TBAF.
**Fig. S3** The fluorescence spectral changes of 1 in o-dichlorobenzene (1.1 mM) upon the addition of (a) F\(^-\), (b) Cl\(^-\), (c) Br\(^-\), (d) I\(^-\), (e) AcO\(^-\), and (f) H\(_2\)PO\(_4\)\(^-\).
Fig. S4 Fluorescent spectral changes of 1 (10 μM) in CHCl₃ upon the addition of (a) F⁻, (b) H₂PO₄⁻, (c) AcO⁻, (d) Cl⁻, (e) Br⁻, and (f) I⁻ at 20 °C. Excitation wavelength was 340 nm. The insets show a plot of log ((F – Fₘᵢₙ)/(Fₘₐₓ – F)) at 420 nm vs. log(anions).

The binding constant of 1 to different anions can be obtained by following equation.

\[ \log \frac{F - F_{\text{min}}}{F_{\text{max}} - F} = n \log [G] + B \]

Fₘᵢₙ, Fₘₐₓ and F are the emission intensities of the solution at wavelength 420 nm in the absence of anions, the presence of a large excess of anions, and after the addition of a given amount of anions to certain concentration, respectively. [G] is the concentration of anions, n is the number of anions bound per 1, B is the he binding constant (log(Kₐₜₜ))).
Fig. S5 The absorption spectra of 2 (0.33 mM) in DMSO upon addition of (a) F⁻, (b) Cl⁻, (c) Br⁻, (d) I⁻, (e) AcO⁻, and (f) H₂PO₄⁻.
Fig. S6 The fluorescence spectra of 2 in DMSO (0.33 mM) upon the addition of (a) F⁻, (b) Cl⁻, (c) Br⁻, (d) I⁻, (e) AcO⁻, and (f) H₂PO₄⁻.