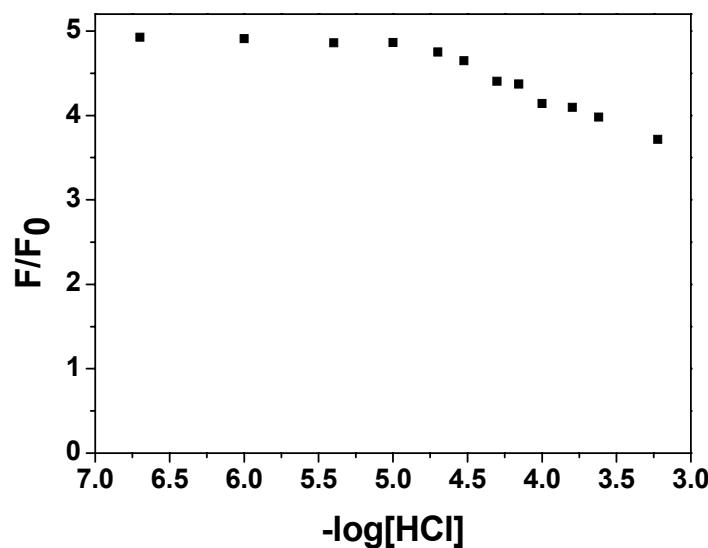


## Supporting Materials

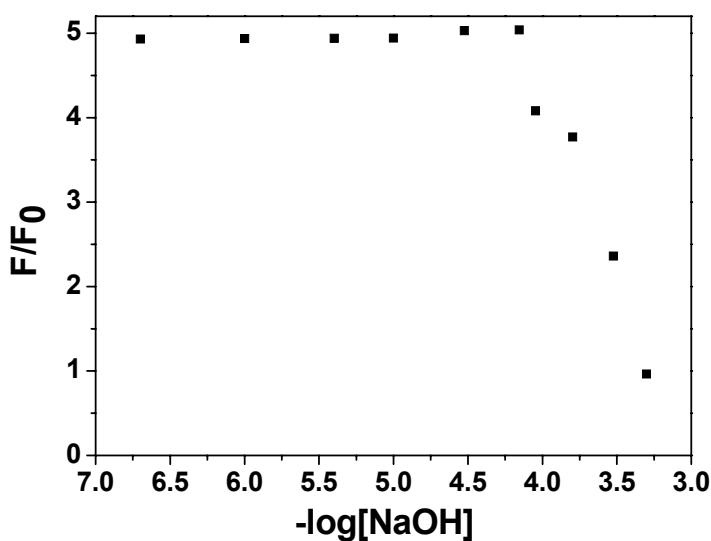
### Dansyl-based fluorescent chemosensors for selective responses of Cr(III)

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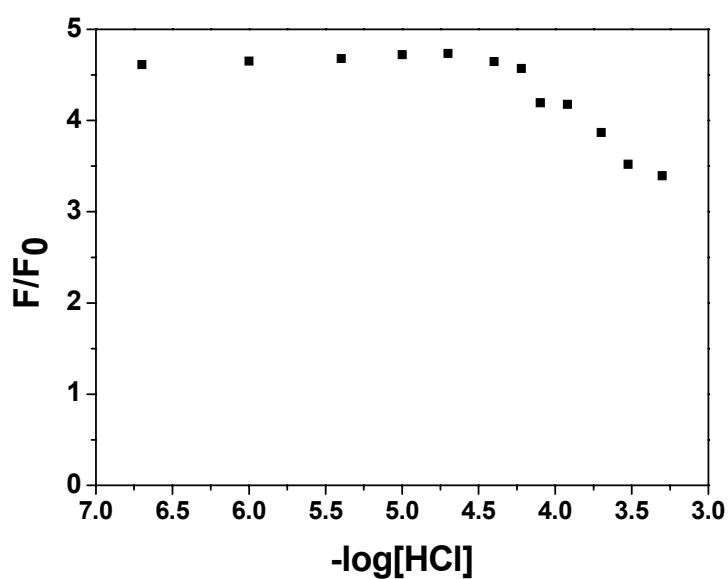
State Key Laboratory of Fine Chemicals, Dalian University of Technology Dalian,  
116012, China. E-mail: [cyduan@dlut.edu.cn](mailto:cyduan@dlut.edu.cn)



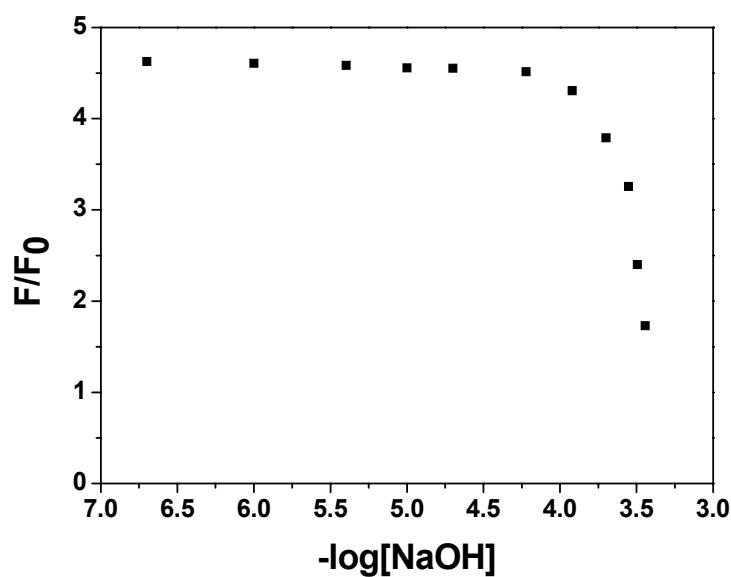
**Figure S1** The fluorescence intensity of the **DN1** (20  $\mu\text{M}$ ) in the presence of  $\text{Cr}^{3+}$  (100  $\mu\text{M}$ ), upon the addition of HCl. The emission intensities were integrated at 545 nm (excitation at 350 nm)



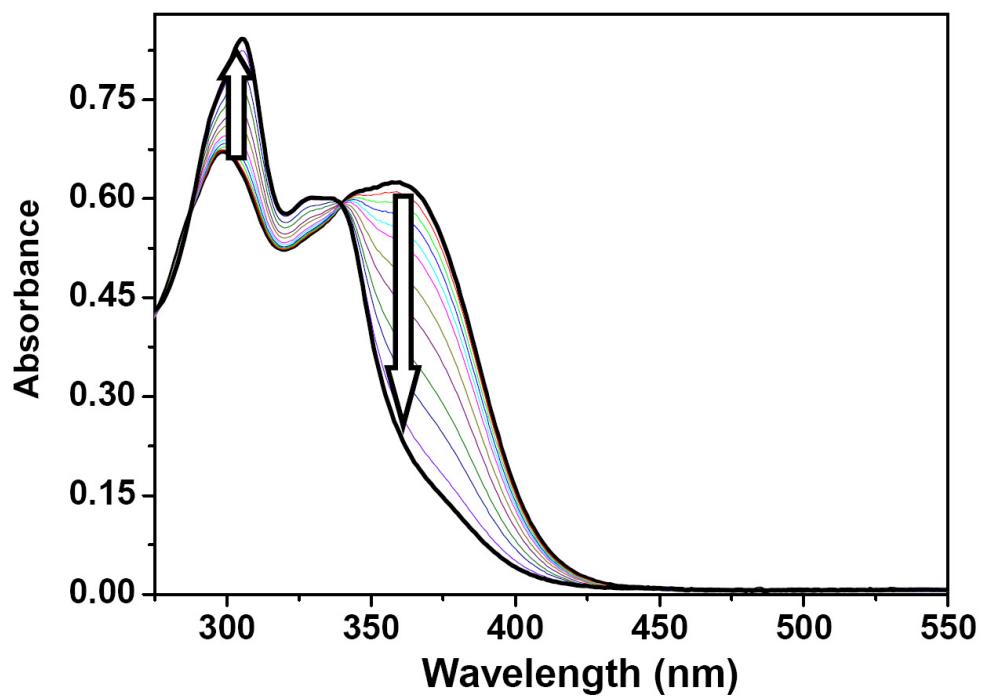
**Figure S2** The fluorescence intensity of the **DN1** (20  $\mu\text{M}$ ) in the presence of  $\text{Cr}^{3+}$  (100  $\mu\text{M}$ ), upon the addition of NaOH. The emission intensities were integrated at 545 nm (excitation at 350 nm)



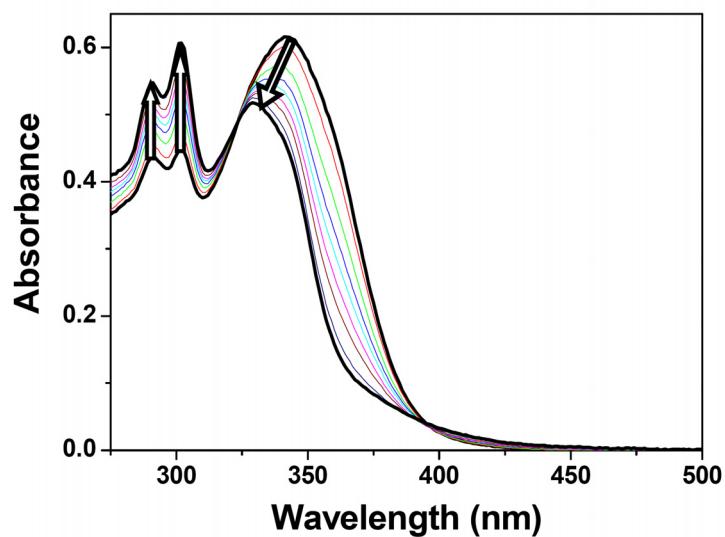
**Figure S3** The fluorescence responses of the **DN2** (20  $\mu\text{M}$ ) in the presence of  $\text{Cr}^{3+}$  (100  $\mu\text{M}$ ), upon the addition of HCl. The emission intensities were integrated at 540 nm (excitation at 360 nm)



**Figure S4** The fluorescence responses of the **DN2** (20  $\mu\text{M}$ ) in the presence of  $\text{Cr}^{3+}$  (100  $\mu\text{M}$ ), upon the addition of NaOH. The emission intensities were integrated at 540 nm (excitation at 360 nm)



**Figure S5** Absorption spectra of **DN2** (20  $\mu\text{M}$ ), upon addition of increasing amount of  $\text{Cr}^{3+}$  (0 to 0.2 mM) in the DMF/ $\text{H}_2\text{O}$  (9:1) solution.



**Figure S6** Absorption spectra of **DN3** (20  $\mu\text{M}$ ), upon addition of increasing amount of  $\text{Cr}^{3+}$  (0 to 0.2 mM) in the DMF/ $\text{H}_2\text{O}$  (9:1) solution.