Supplementary Materials: A Biocompatible Colorimetric Triphenylamine-Dicyanovinyl Conjugated Fluorescent Probe for Selective and Sensitive Detection of Cyanide Ion in Aqueous Media and Living Cells

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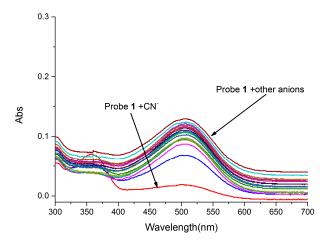


Figure S1. Changes in the absorption spectra of **1** (5 μ M) upon addition of various anions (50 μ M) in PBS/DMSO (4/6, pH = 7.4) solution.

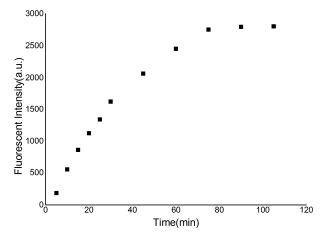


Figure S2. Time-dependent change of fluorescent intensity of probe **1** in absence or presence of CN⁻ (50 μ M) in PBS/DSMO (4/6, pH = 7.4) solution. λ_{ex} = 370 nm, slit: 2.5 nm/5 nm.

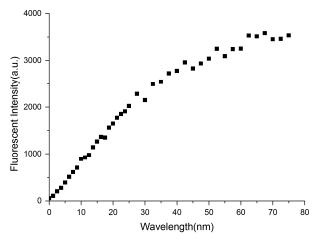


Figure S3. Fluorescent intensity of probe **1** (5 μ M) at 480 nm upon addition of different concentration of CN⁻ (0–75 μ M) in PBS/DSMO (4/6, μ H = 7.4) solution. λ_{ex} = 370 nm, Slits: 2.5 nm/5 nm.

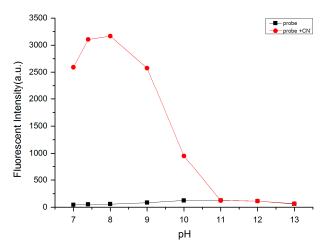


Figure S4. The effect of pH on the fluorescent intensity of probe **1** (5 μ M) in the absence and presence of CN⁻ (50 μ M) in PBS/DSMO (4/6) solution. Black line, probe; red line, probe + CN⁻. λ_{ex} = 370 nm, Slit: 2.5 nm/5 nm.



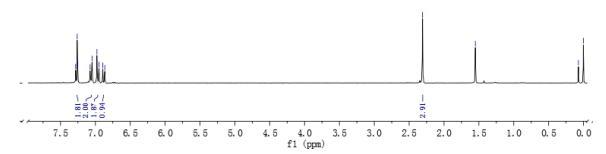


Figure 5. ¹H-NMR Spectrum of 3 in CDCl₃ (300 MHz).

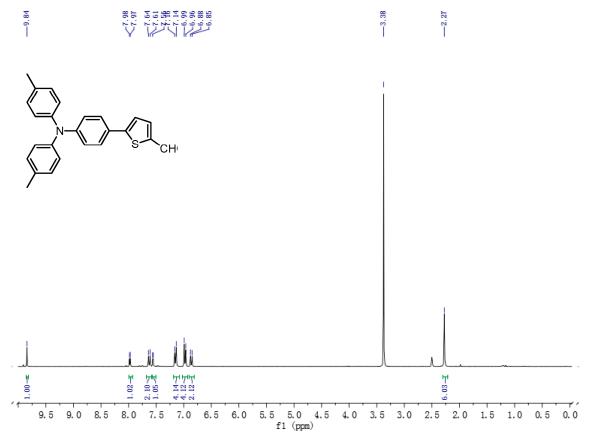


Figure S6. $^1\text{H-NMR}$ Spectrum of 4 in DMSO-d6 (300 MHz).

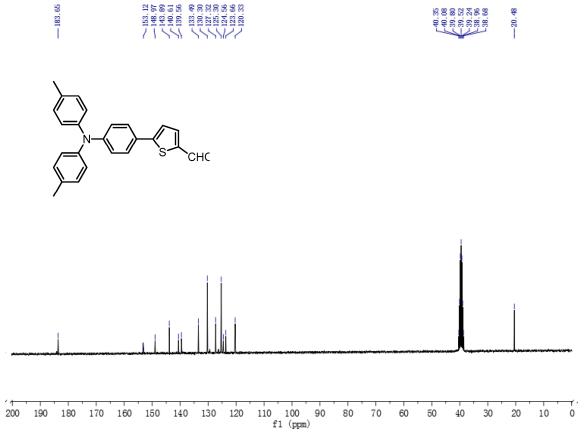


Figure S7. ¹³C-NMR Spectrum of 4 in DMSO-d₆ (75 MHz).

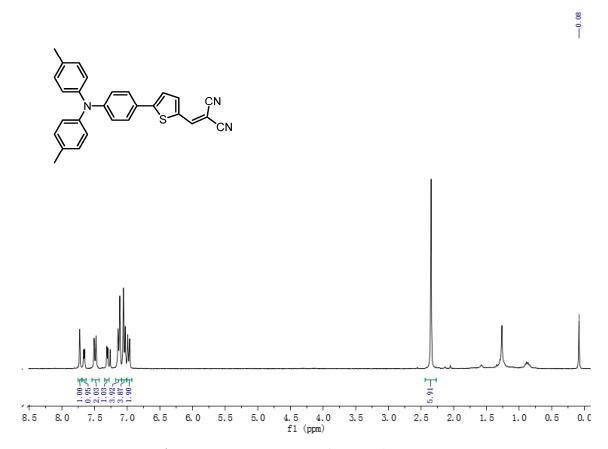


Figure S8. $^1\text{H-NMR}$ Spectrum of 1 in CDCl3 (300 MHz).



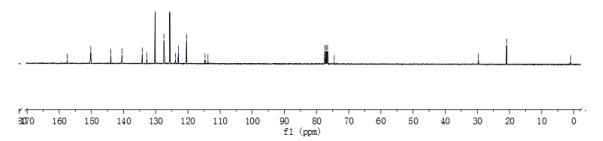


Figure S9. 13 C-NMR Spectrum of **1** in CDCl₃ (75 MHz).

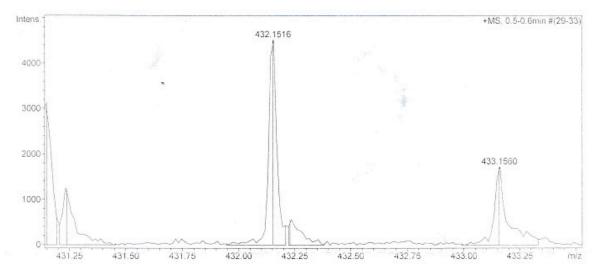


Figure S10. HRMS (ESI) Spectrum of **1**. calcd. for [M + H]⁺ 432.1529, found 432.1516.

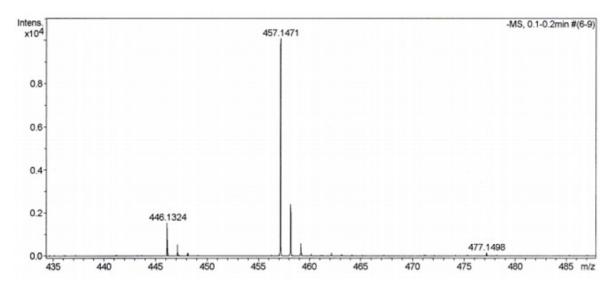


Figure S11. HRMS (ESI) Spectrum of **[1 + CN]**⁻ calcd. for [M]⁻ 457.1492, found 457.1471.