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**Electronic Supplementary Information**

**Colorimetric probes designed to provide high sensitivity and single selectivity for CN<sup>-</sup> in aqueous solution**

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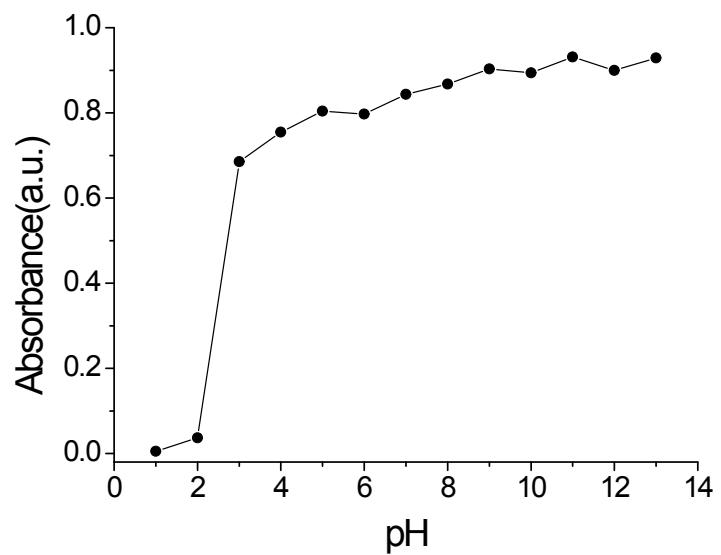
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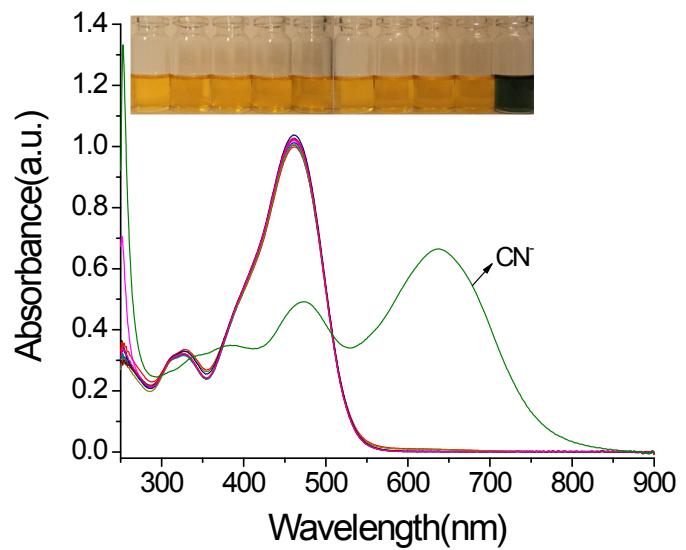
**Fig. S2** UV-vis spectra of probe **L2** ( $2 \times 10^{-5}$  mol/L) with various anions (F<sup>-</sup>, Cl<sup>-</sup>, Br<sup>-</sup>, I<sup>-</sup>, AcO<sup>-</sup>, H<sub>2</sub>PO<sub>4</sub><sup>-</sup>, HSO<sub>4</sub><sup>-</sup>, ClO<sub>4</sub><sup>-</sup> and CN<sup>-</sup>) in DMSO/H<sub>2</sub>O (v/v, 9/1) solution. Inset: color changes of **L2** with various anions.

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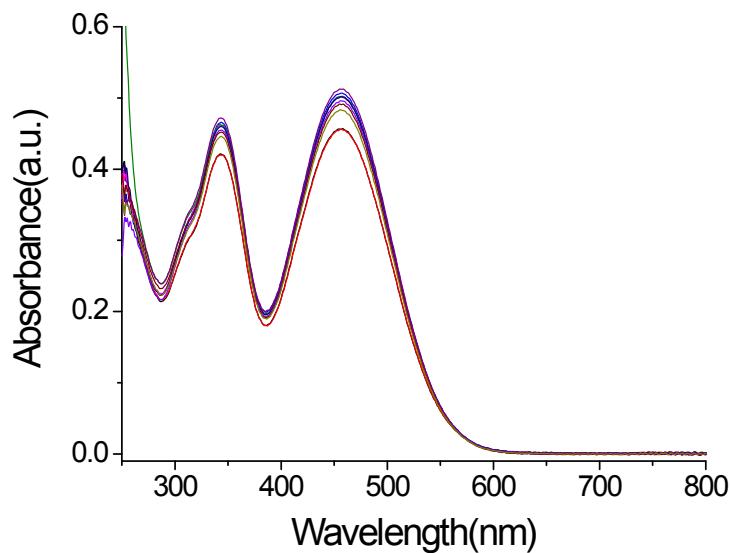
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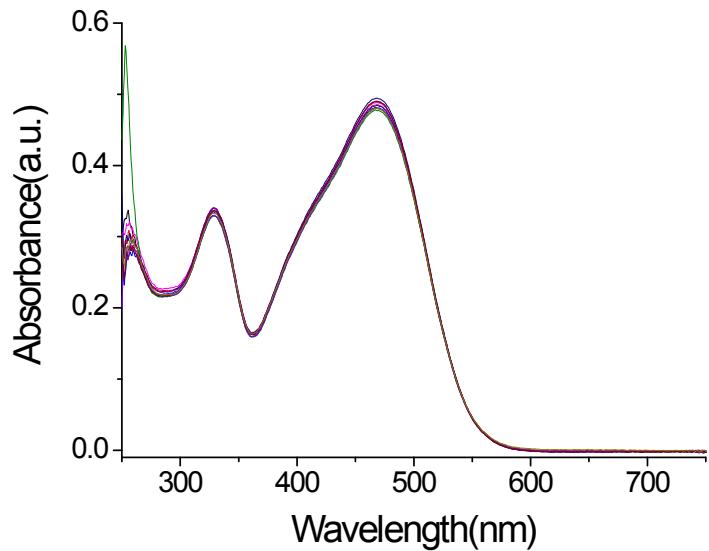
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