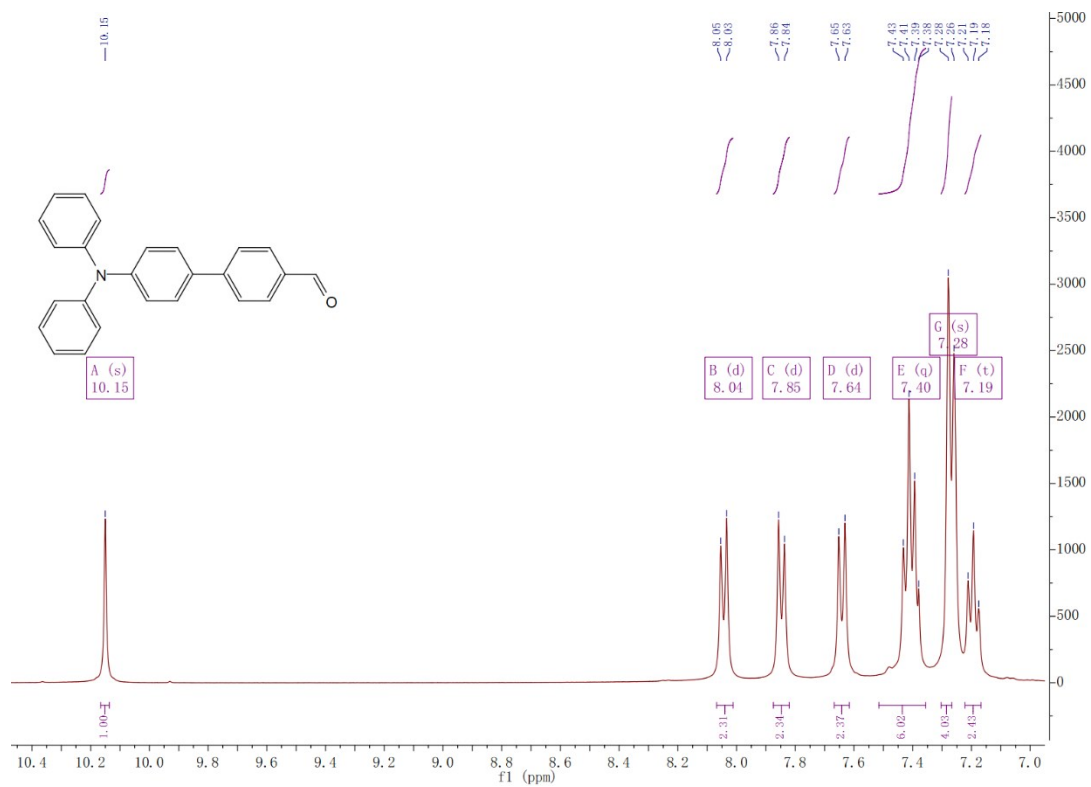


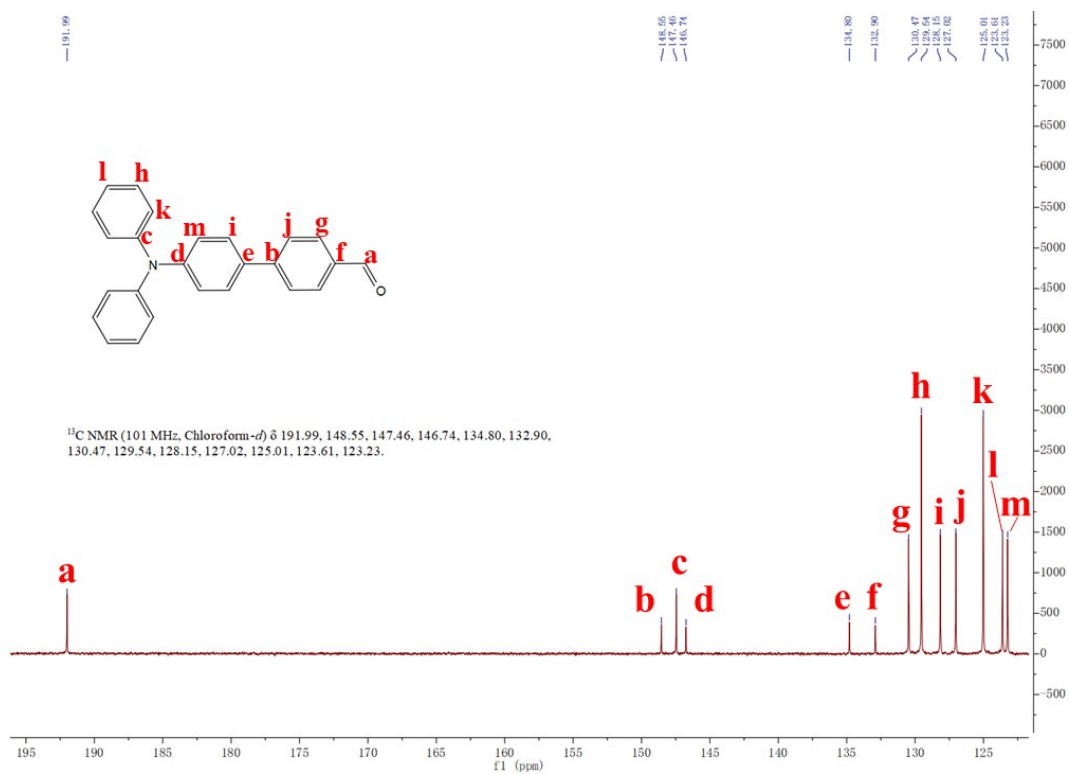
## Supporting information

### Preparation novel triphenylamine-based fluorescent probe with AIE active for high selectively detecting mercury (II) ion

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**Figure S1. <sup>1</sup>H NMR spectra of TPA-CHO**



**Figure S2. <sup>13</sup>C NMR spectra of TPA-CHO**

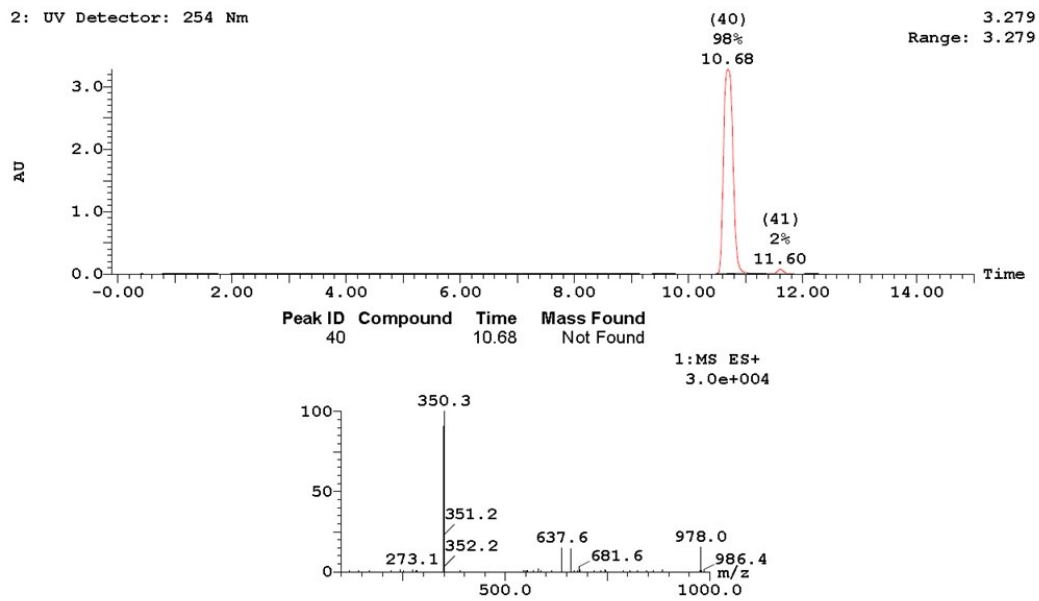


Figure S3. LC-MS spectra of TPA-CHO

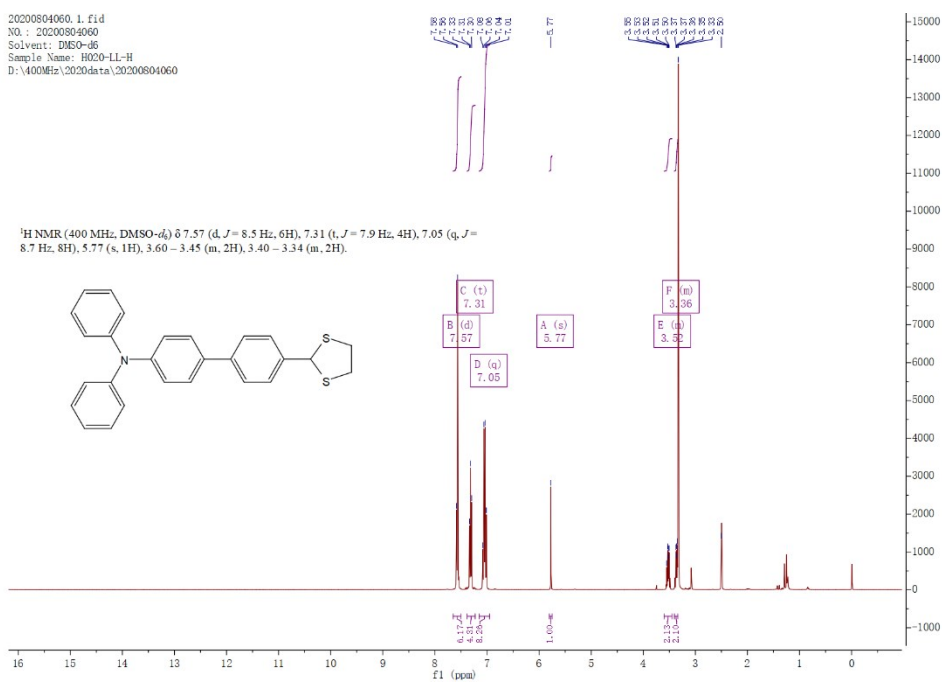


Figure S4. <sup>1</sup>H NMR spectra of TPA-ME

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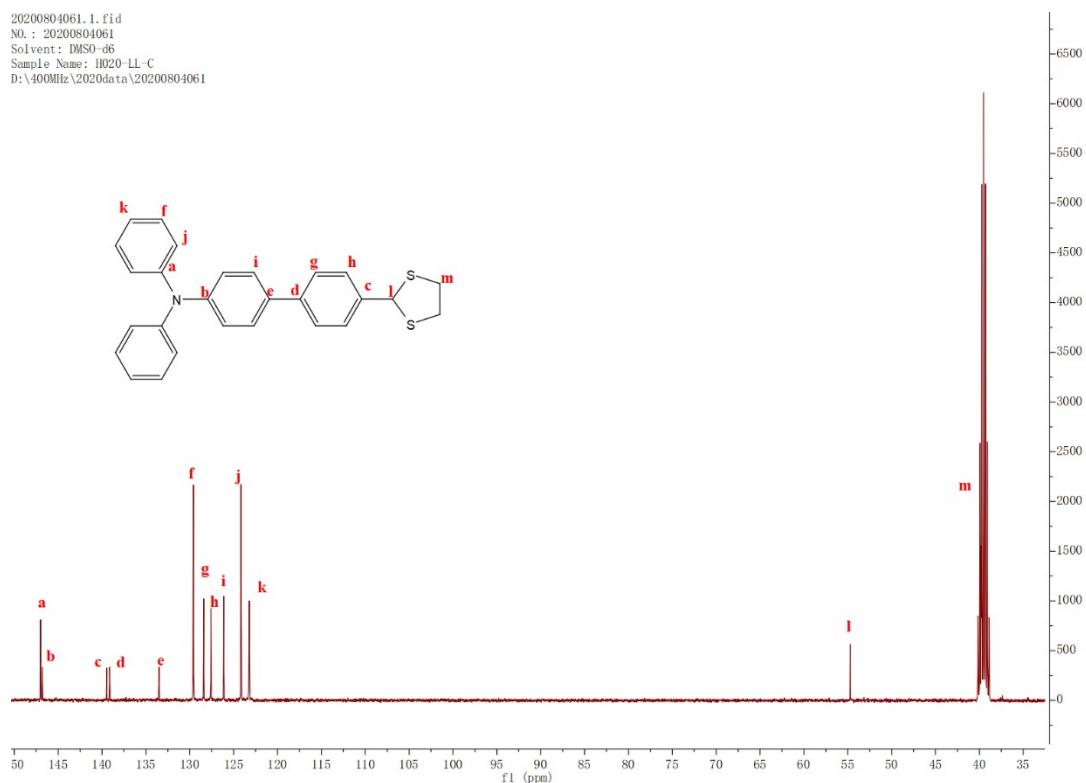
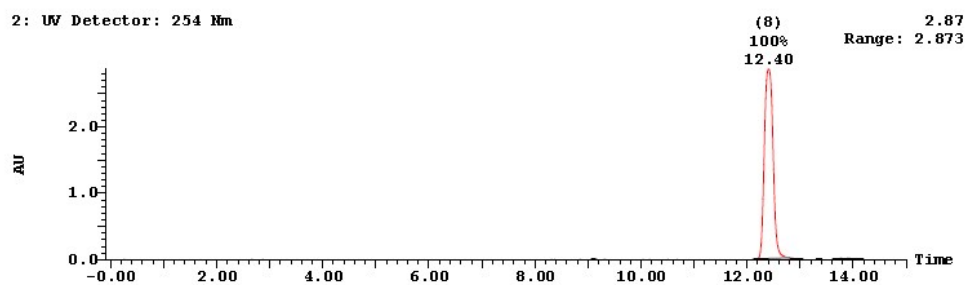


Figure S5. <sup>13</sup>C NMR spectra of TPA-ME

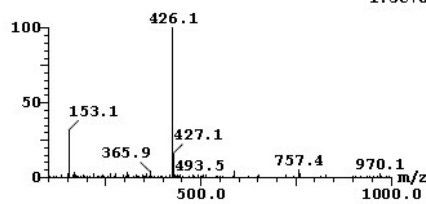
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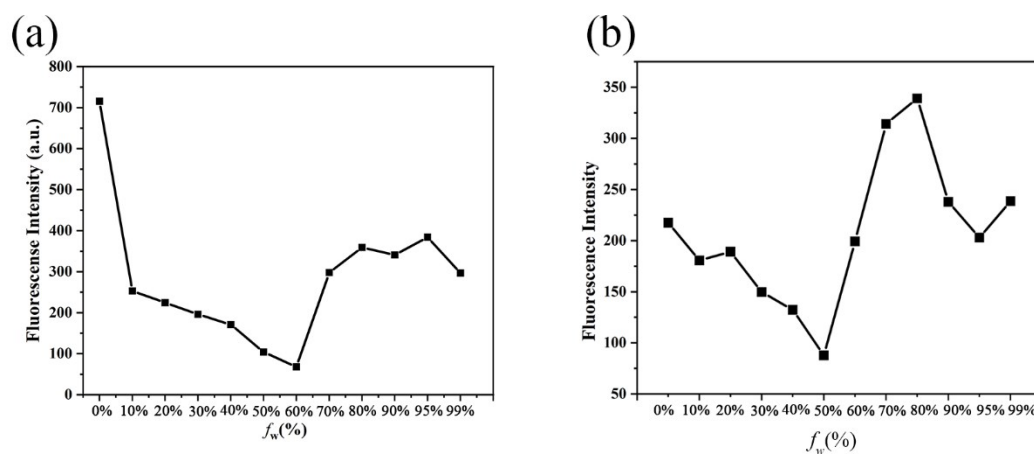


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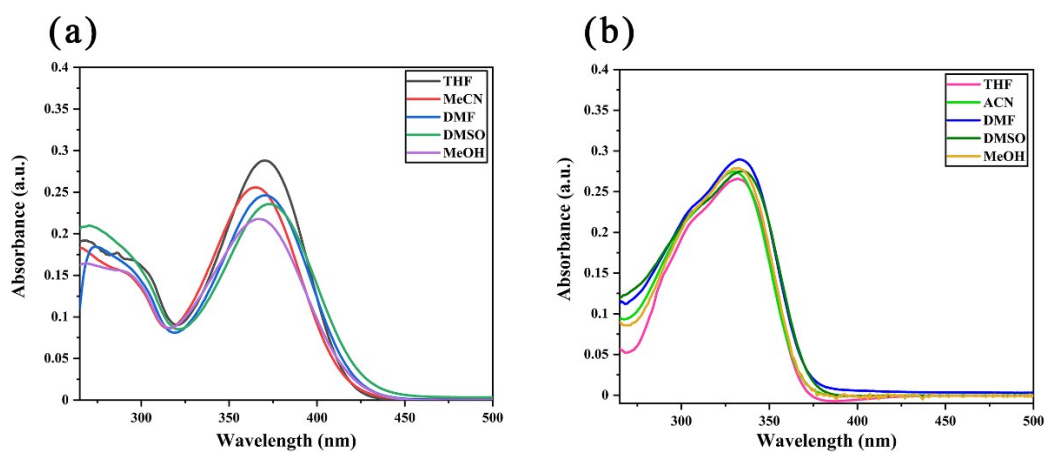
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1.5e+004



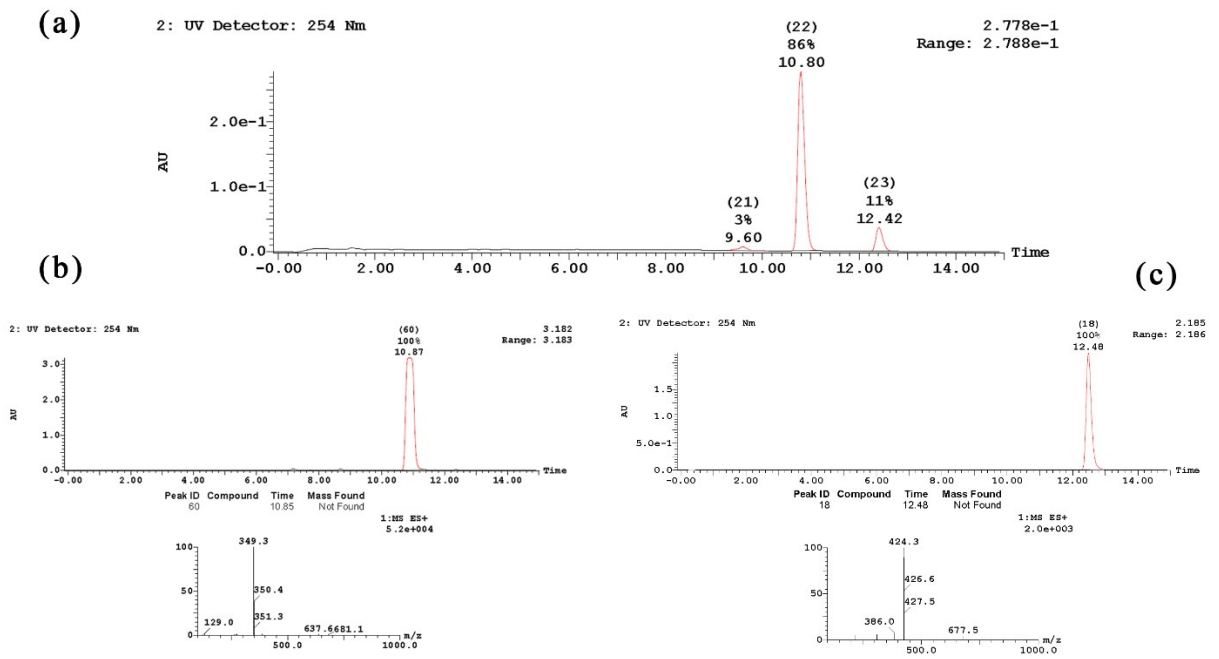
**Figure S6.** LC-MS spectra of TPA-ME



**Figure S7.** Fluorescence intensity of TPA-CHO and TPA-ME in DMF/H<sub>2</sub>O ( $f_w$  0 – 99%) medium



**Figure S8.** UV-vis absorption spectroscopies of two fluorophores in different solvents with various polarity ( $1 \times 10^{-5} \text{ mol} \cdot \text{L}^{-1}$ ). (a) TPA-CHO, (b) TPA-ME.



**Figure.S9** (a) LC-MS spectra of reaction mixture TPA-ME and Hg<sup>2+</sup>. (b) LC-MS spectra of pure TPA-CHO. (c) LC-MS spectra of pure TPA-ME