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#### Supplementary information

#### A novel berberine-based colorimetric and fluorimetric probe for hydrazine detection

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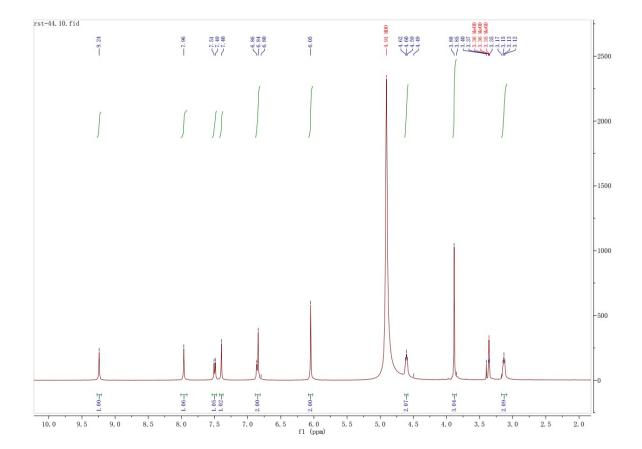
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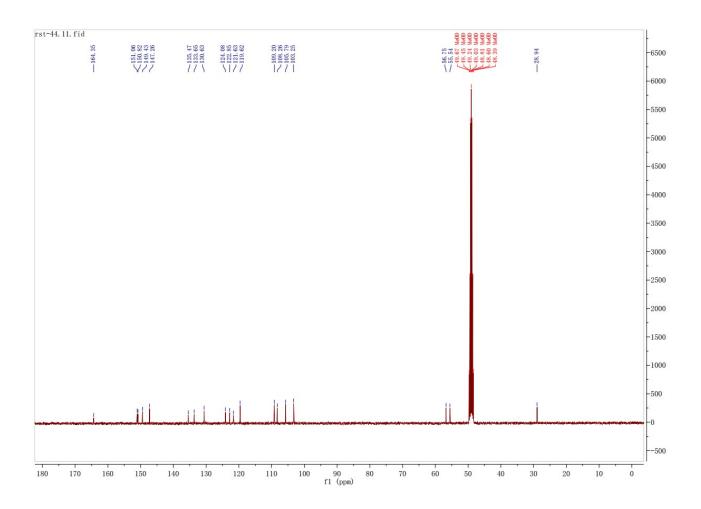
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<sup>1</sup>H NMR spectra and <sup>13</sup>C NMR spectra for compounds.

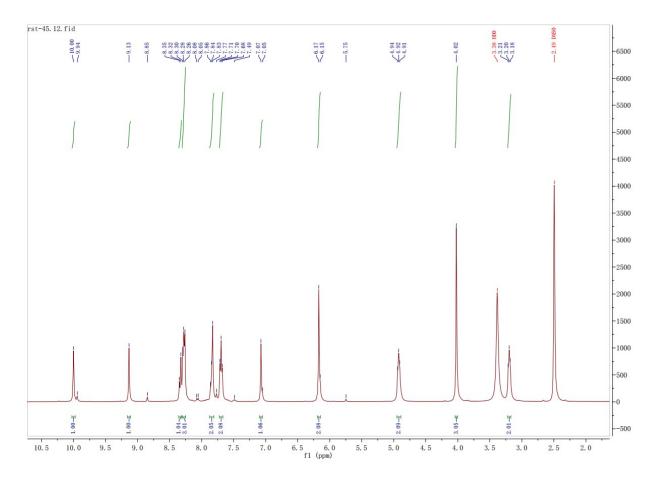


## <sup>1</sup>H NMR spectra of compound 2:

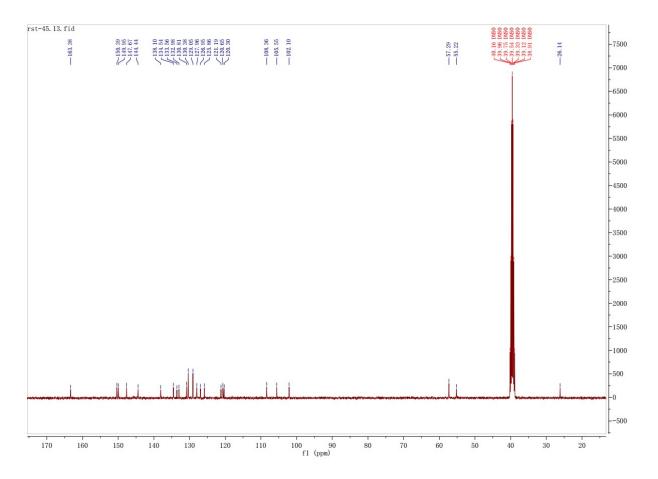
# <sup>13</sup>C NMR spectra of compound 2:



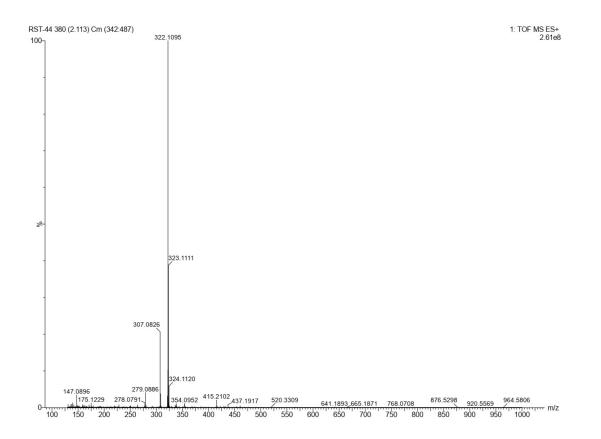
## <sup>1</sup>H NMR spectra of BP:



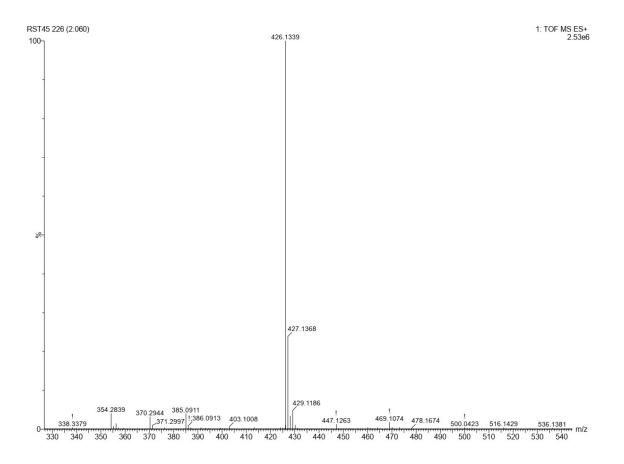
## <sup>13</sup>C NMR spectra of BP:



## **HR-MS of Compound 2:**



#### HR-MS of BP:



#### HR-MS of BP+N<sub>2</sub>H<sub>4</sub>

