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## **Supporting information**

## Preparation and performance study of a fluorescent probe of rhodamine B naphthylamide for the detection of Fe<sup>3+</sup>

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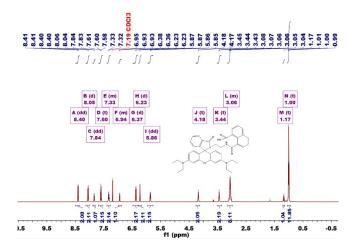


Figure S1. NMR <sup>1</sup>H spectra of the fluorescent probe NA-RhBEA.

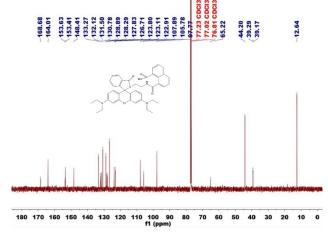


Figure S2. NMR <sup>13</sup>C spectra of the fluorescent probe NA-RhBEA.

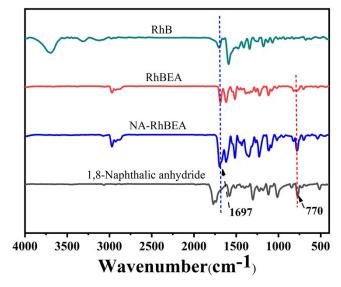


Figure S3. FT-IR spectra of RhB, RhBEA, 1,8-NA and NA-RhBEA;

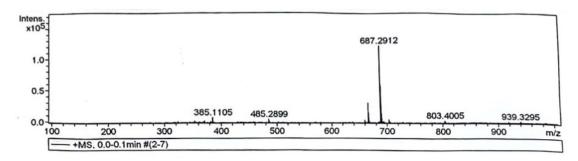


Figure S4. Mass spectra of NA-RhBEA.

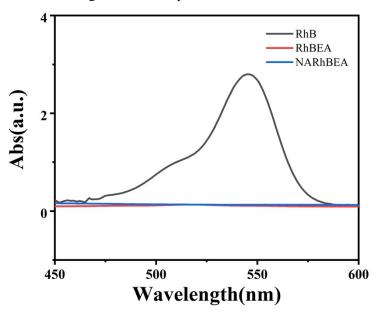


Figure S5. UV-Vis absorption spectra of RhB, RhBEA and NA-RhBEA.

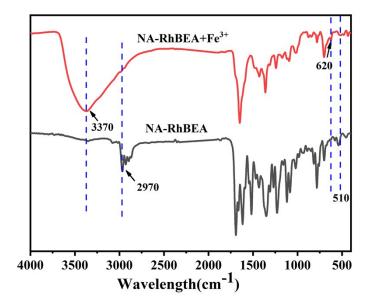


Figure S6. Group changes of NA-RhBEA before and after complexation with Fe<sup>3+</sup>.