Electronic Supplementary Material

Nucleotide/Tb$^{3+}$ coordination polymer as luminescent nanosensor:
synthesis and sensing iron (II) in human serum

Baoxia Liu, Chunlei Sun and Yang Chen*

State Key Laboratory of Bioelectronics, School of Biological Science and Medical Engineering,
Southeast University, Nanjing, 210096, P. R. China

*Corresponding author; Tel: +86 25 83790171; E-mail: yc@seu.edu.cn
Figure S1

Figure S1. Selected area electron diffraction (SAED) image of Tb-ADP-Phen CP.

Figure S2

Figure S2. Emission spectra of Tb-ADP and Tb-Phen complex prepared in water solution (a, c) and anhydrous ethanol (b, d). Inset is the corresponding color photos under a common UV lamp.
**Figure S3**

![Figure S3](image)

Figure S3. Effects of different molar ratios of Tb$^{3+}$ ion and Phen on the fluorescence of Tb-ADP-Phen CP.

**Figure S4**

![Figure S4](image)

Figure S4. Effects of pH value on the fluorescence of Tb-ADP-Phen CP.
Figure S5

Figure S5. Stability of fluorescence intensity (at 545 nm) of Tb-ADP-Phen CP during 30 days.

Figure S6

Figure S6. UV-vis spectrum of Fe(Phen)$_3$ complex (red) and emission spectrum of Tb-ADP-Phen (green).
Figure S7

Figure S7. Fluorescence quenching of Tb-ADP-Phen CP in the presence of Fe(Phen)$_3$ complex.