Supporting Information

Ratiometric Polymer Probe for Detection of Peroxynitrite and the Application for Live-Cell Imaging

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1. Absorption Spectral Response of the Probe PB-PVA

![Figure S1](image1.png)

**Figure S1.** Probe fluorescence response to a wide range of concentration of ONOO\(^-\) from 0 to 80 \(\mu\)M.

![Figure S2](image2.png)

**Figure S2.** The absorption spectrum of the probe before and after the addition of ONOO\(^-\) (10 \(\mu\)M) in DMSO.
2. Characterization of intermediates and the probe PB-PVA

Compound 1 and 2 were characterized by $^1$H NMR (Figures S3–S4). EP was characterized by $^1$H NMR, $^{13}$C NMR, and MS (Figure S5A-C). P-PVA was characterized by $^1$H NMR (Figure S6). PB-PVA was characterized by $^1$H NMR (Figure S7).

![Figure S3. $^1$H NMR of Compound 1.](image)

![Figure S4. $^1$H NMR of Compound 2.](image)
Figure S5A. $^1$H NMR of EP.

Figure S5B. $^{13}$C NMR of EP.
Figure S5C. Q-TOF MS of EP. The molecular weight of EP is 358.46.

Figure S6. $^1$H NMR of P-PVA. The ratio of EP grafted to the corresponding monomer is 1:10.
Figure S7. $^1$H NMR of PB-PVA.