Supporting information for

A sensitive and selective fluorescent probe for the detection of endogenous peroxynitrite ($ONOO^-$) in live cells

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Materials and instruments

The chemical reagents used in the experiments were all commercially available and could be used directly. The water in the experiment was double distilled water. Column chromatography used the silica gel (screen 200-300) purchased from Qingdao Ocean Chemicals Company. NMR spectra were recorded using an AVANCE III 400 MHz digital NMR spectrometer with tetramethylsilane as a standard compound. High resolution mass spectra (HRMS) were obtained using a Bruker APEX IV-FTMS 7.0 T mass spectrometer. The UV absorption spectrum was recorded using a Shimadzu UV-2600 spectrophotometer. The fluorescence emission spectrum was obtained using a Hitachi F4600 fluorescence spectrophotometer with a voltage of 600 V and an excitation slit and an emission slit width of 5 nm.

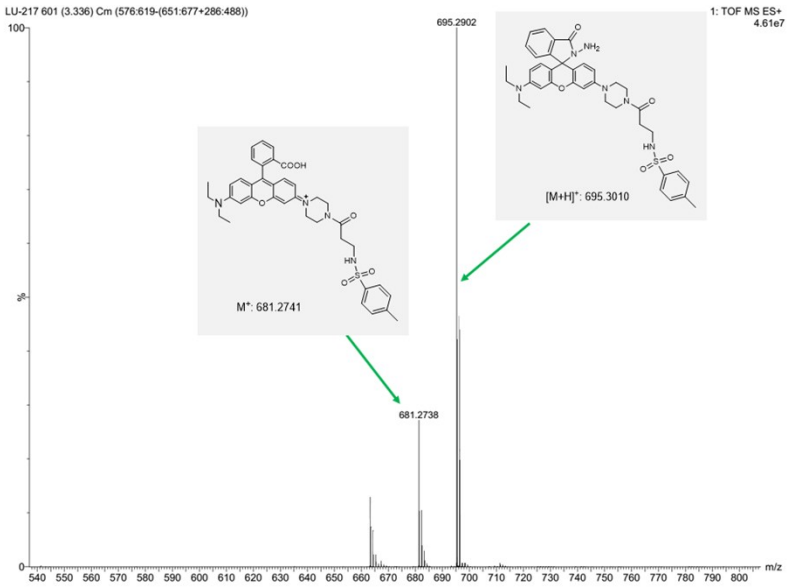

Fig. S1 HRMS data of the reaction product of the probe **RHPN** and $ONOO^-$.

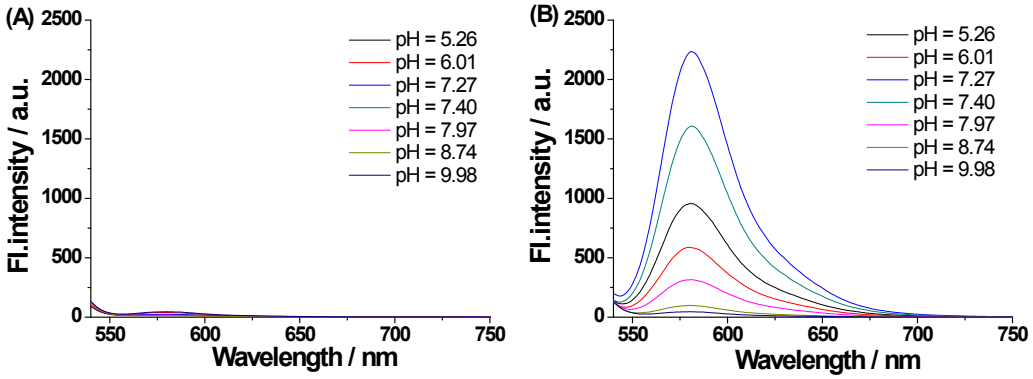

Fig. S2 (A) Fluorescence spectra of 5 μM **RHPN** at various pH values under excitation at 540 nm and (B) fluorescence spectra of 5 μM **RHPN** in the presence of 100 μM $ONOO^-$ at various pH values under excitation at 540 nm.

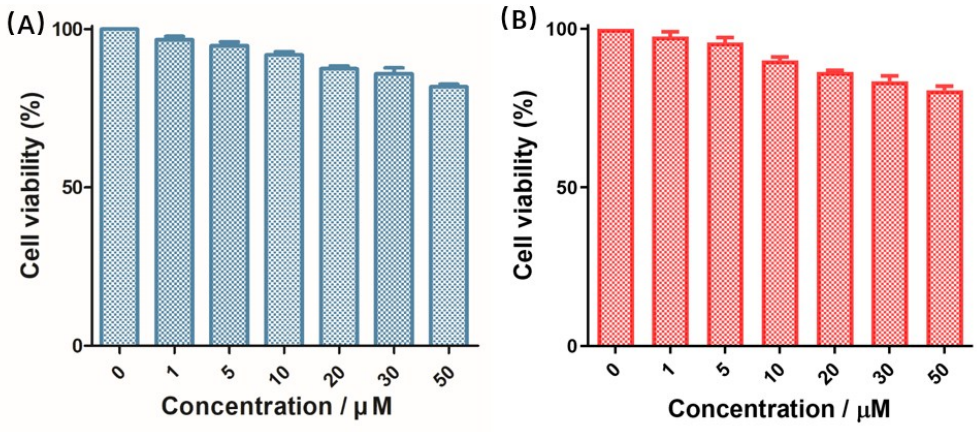

Fig. S3 (A)Viability of HepG2 cells treated with different concentrations of the probe **RHPN** for 8 h. (B) Viability of Raw 264.7 cells treated with different concentrations of the probe **RHPN** for 8 h.

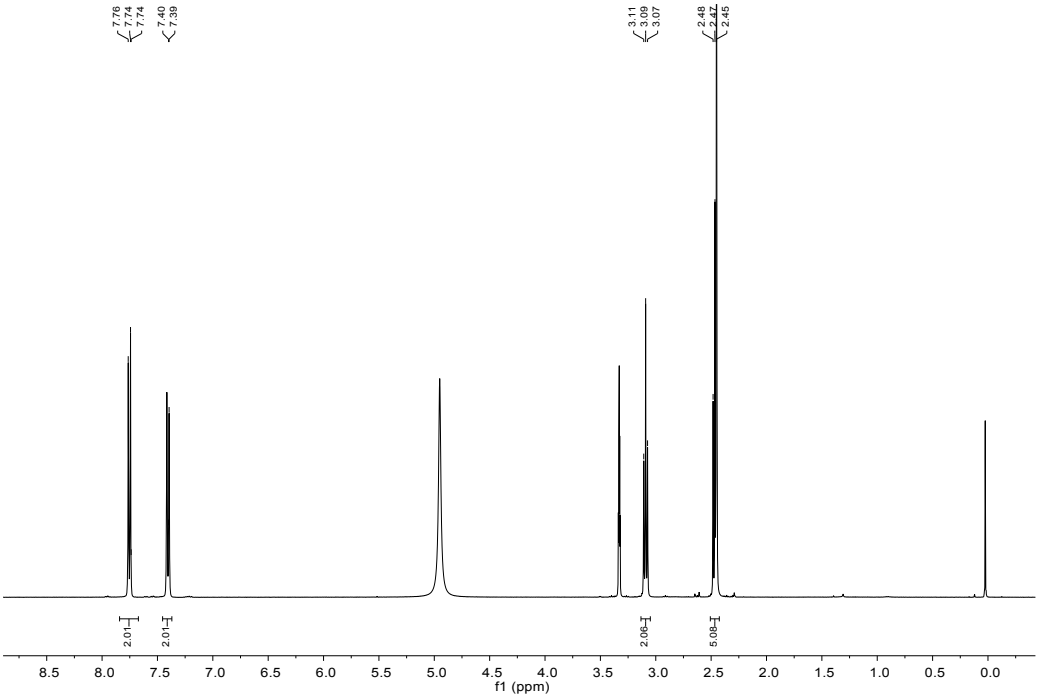

Fig. S4 ^{1}H-NMR data of compound A (MeOH- d_4,400 MHz)

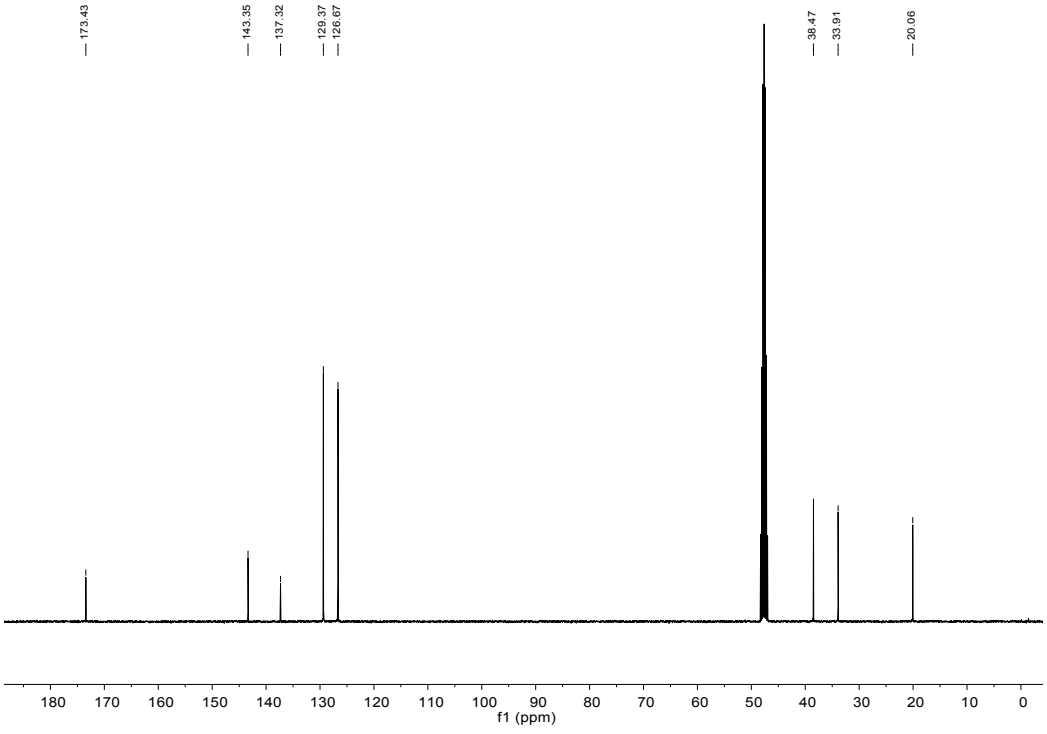

Fig. S5 ^{13}C-NMR data of compound A (MeOH-d_4, 100 MHz)

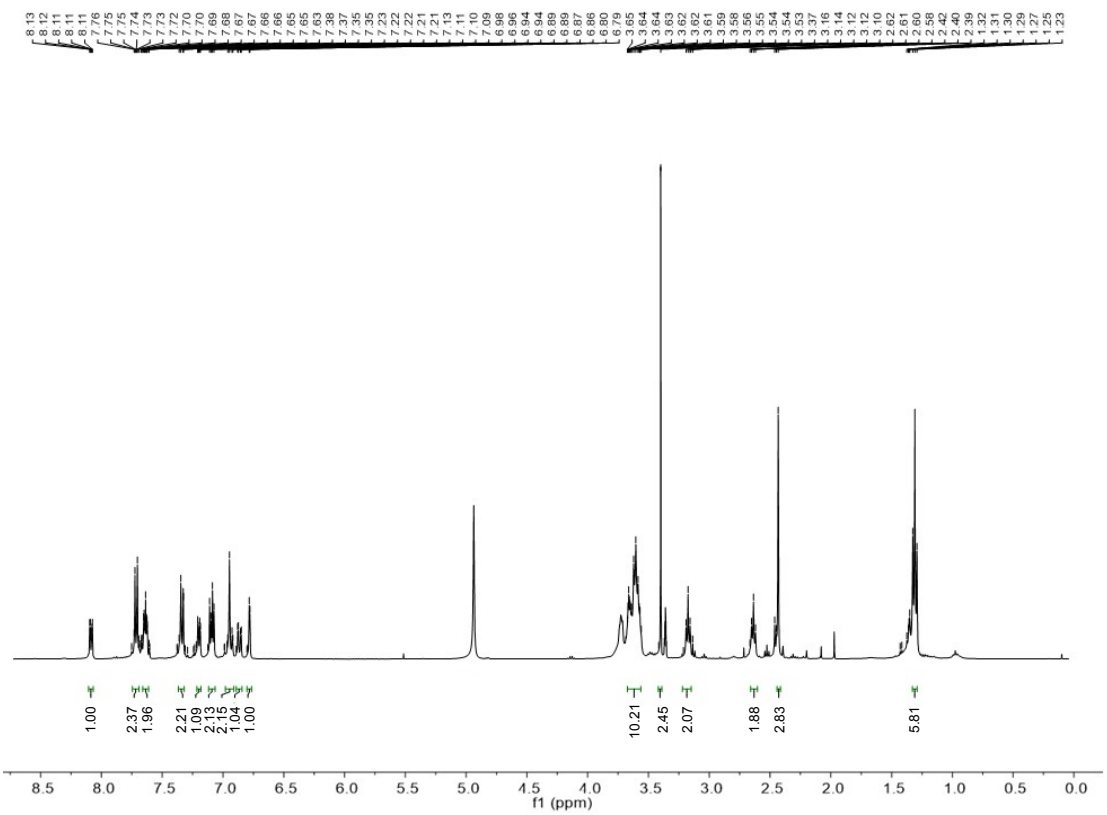

Fig. S6 ^{1}H-NMR data of compound C (MeOH- d_4, 400 MHz)

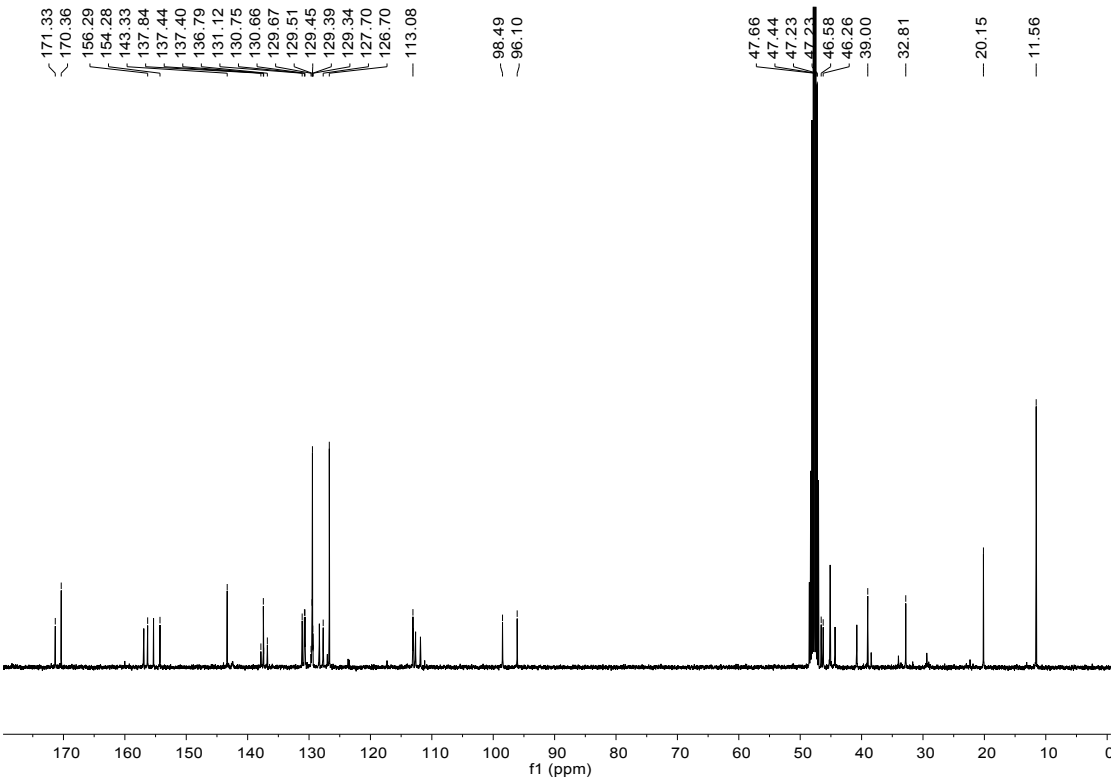

Fig. S7 ^{13}C-NMR data of compound C (MeOH- d_4, 100 MHz).

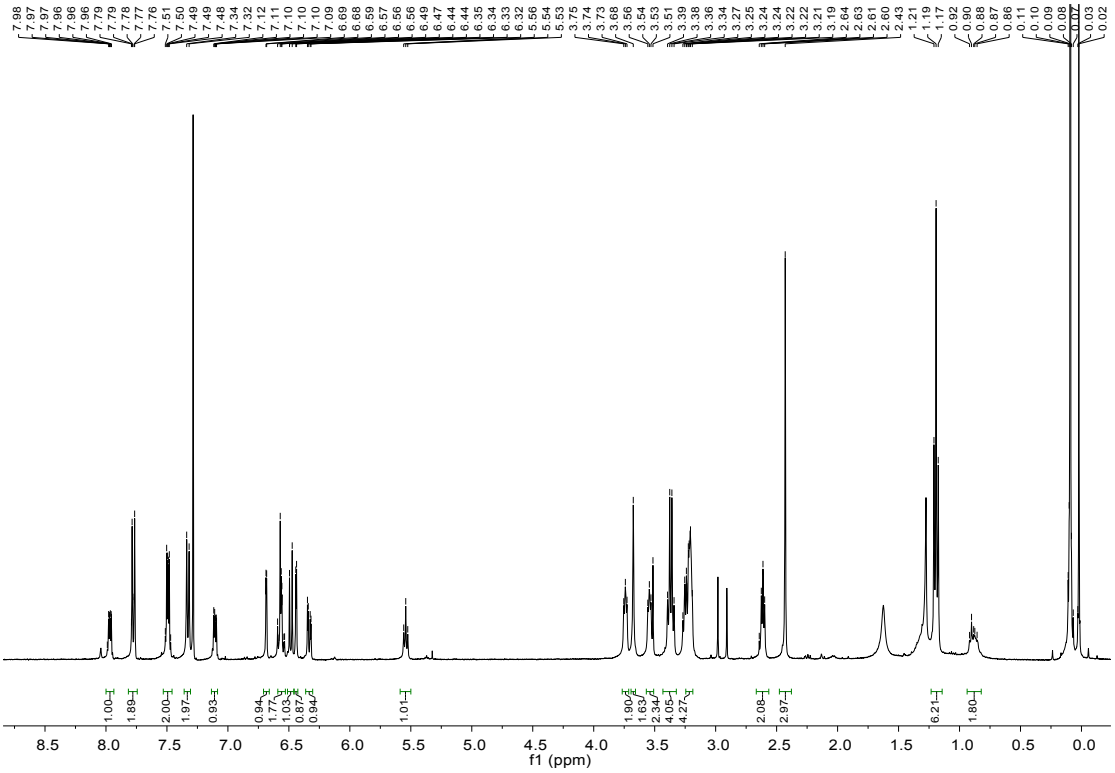

Fig. S8 ^{1}H-NMR data of **RHPN(**$CHCl_3$-*d*, 400 MHz**)**

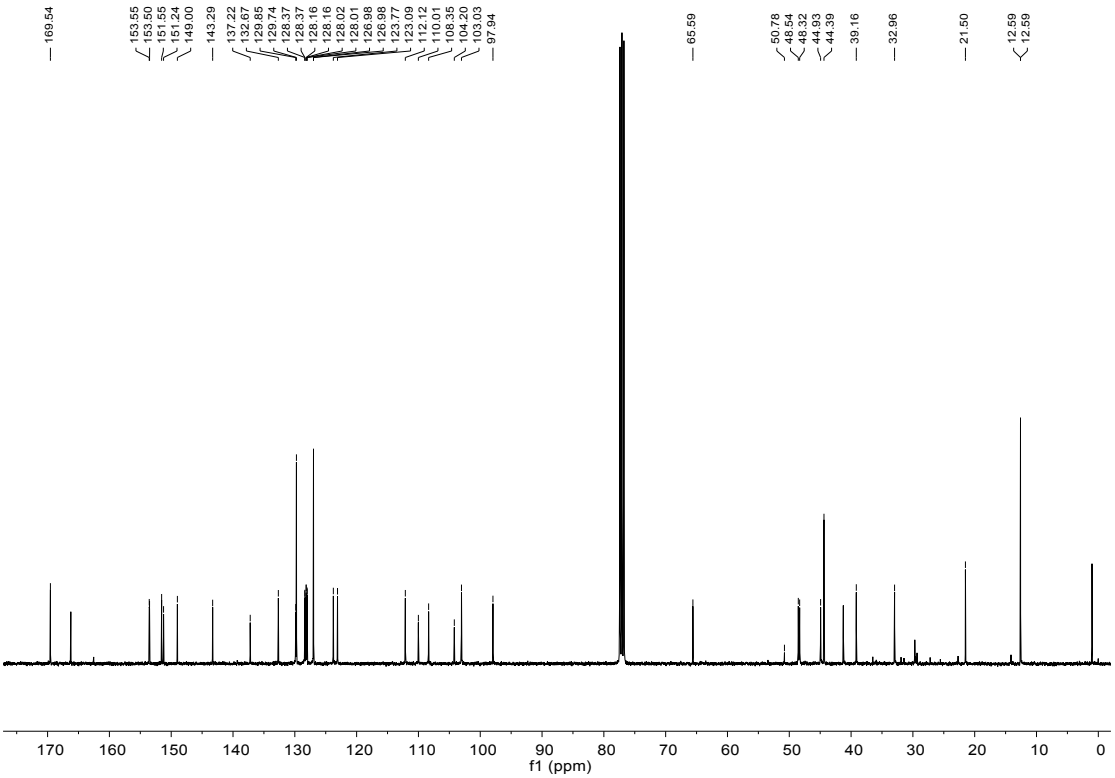

Fig. S9 ^{13}C-NMR data of **RHPN (**$CHCl_3$-*d*, 100 MHz**)**