NIR fluorescence probe based on phenazine with large Stokes shift for detecting and imaging of endogenous H_2O_2 in RAW 264.7 cells

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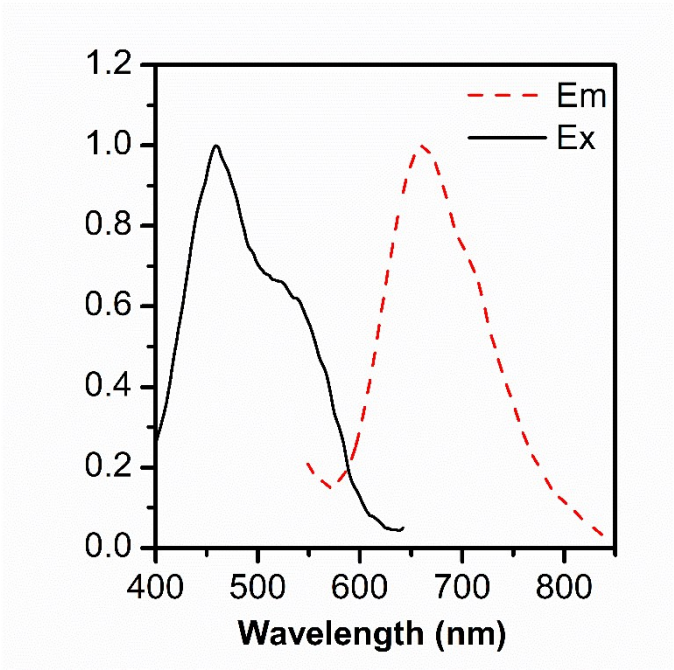


Figure S1. The normalized excitation spectra (the red line) and fluorescence spectra (the black line) of **PCN**.

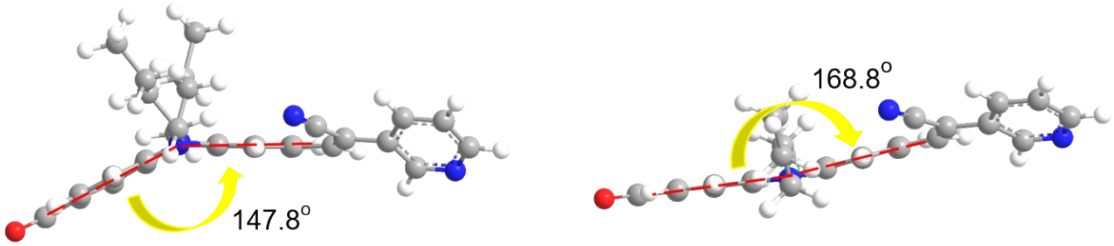


Figure S2. The dihedral angle of benzene rings in **PCN** at calculated ground state (S_0) and excited state (S_1)

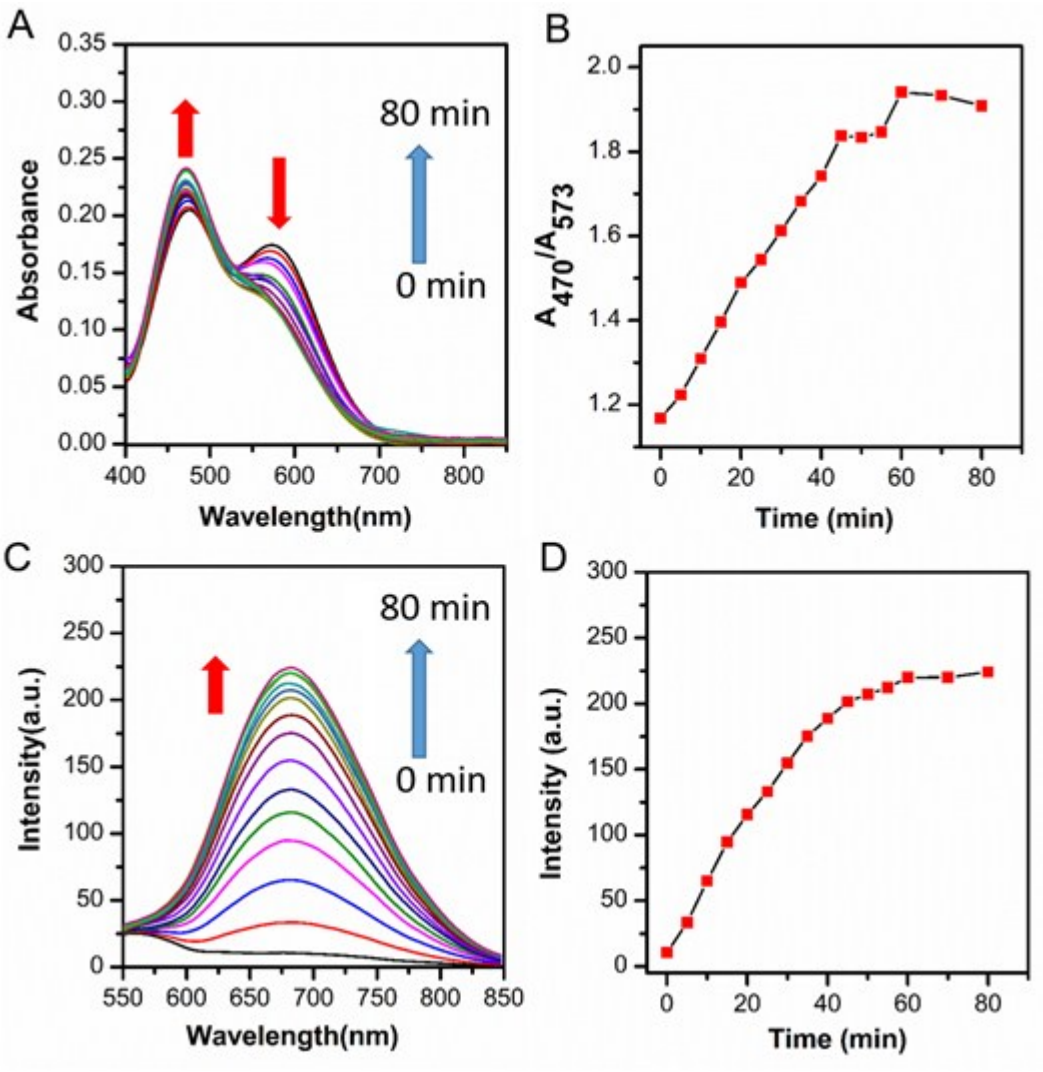


Figure S3. (A) The absorption spectra of **PCN-BP** towards to 20 eq H_2O_2 at different time in PBS:DMF (v: v = 6:4, pH = 7.4). (B) Relation of Ratio A_{470}/A_{573} with time. (C) The fluorescence spectra of **PCN-BP** towards to 20 eq H_2O_2 at different time in PBS:DMF (v: v = 6:4, pH = 7.4). (D) Relation of fluorescence at 680 nm with time.

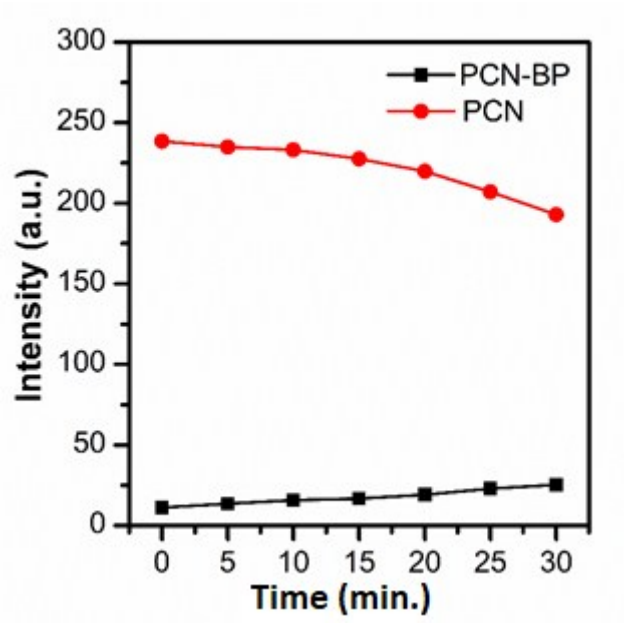


Figure S4. The intensity of **PCN-BP** and **PCN** after exposed to white light for different time.

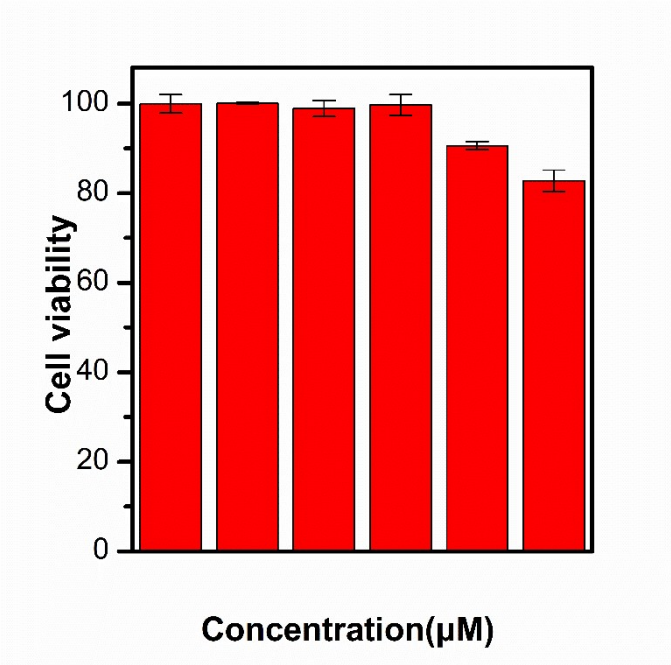


Figure S5. The cell viability of RAW 264.7 incubated with different concentration of **PCN-BP** for 24 h.

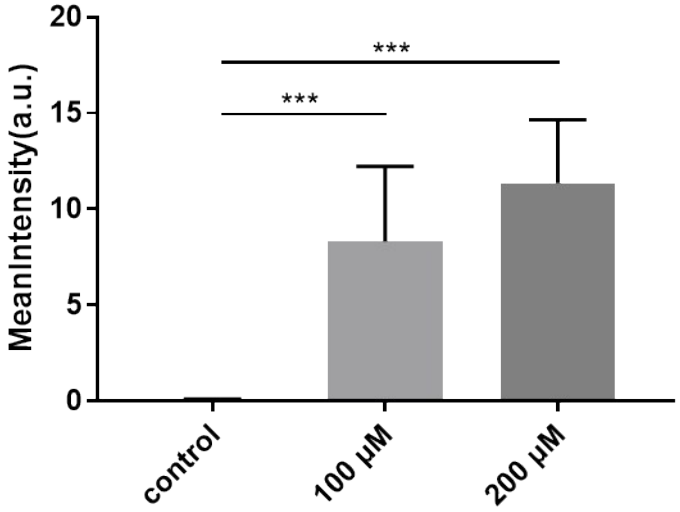


Figure S6. Mean intensity in cells of different group (RAW 264.7 were incubated with 0, 100 μM, 200 μM H_2O_2, n =20). The data are shown as the means ± SD. *P < 0.05, **P < 0.01, ***P < 0.001.

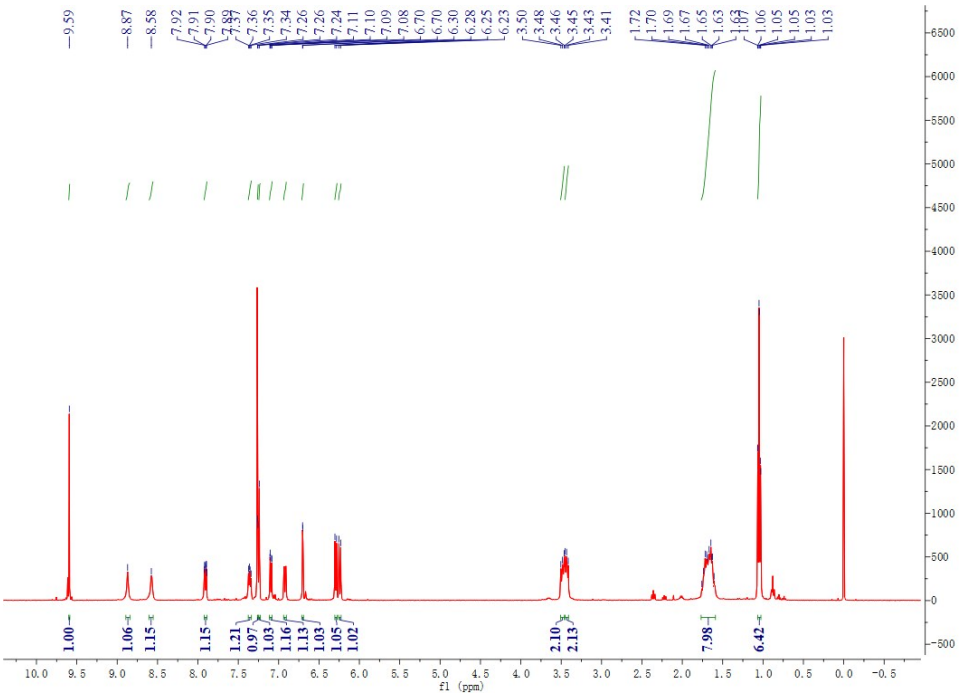


Figure S7. ^{1}H NMR spectrum of **PCN** in $CDCl_3$.

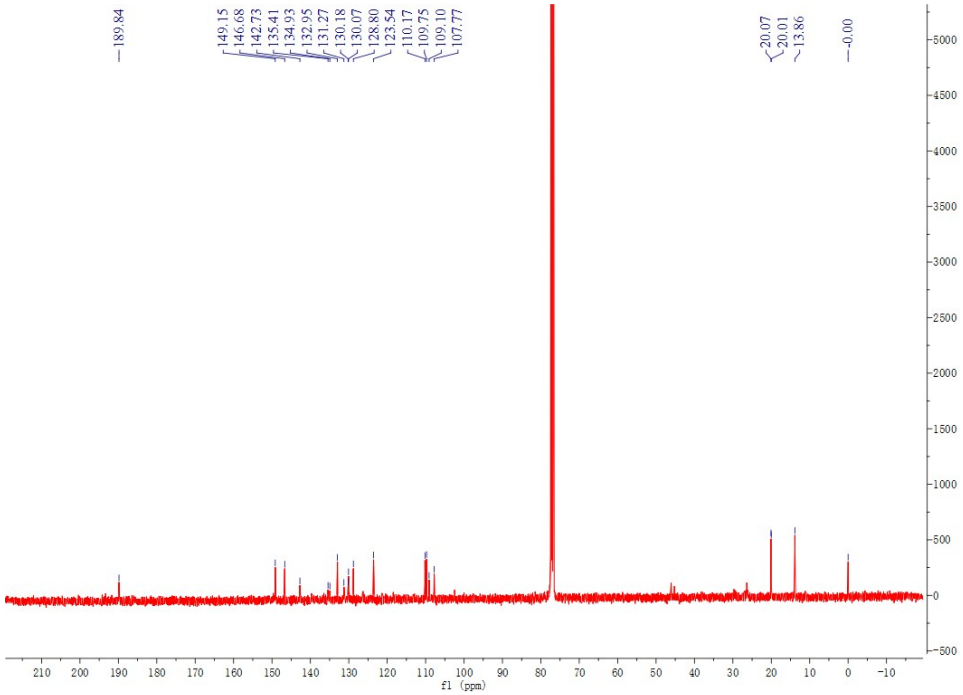


Figure S8. ^{13}C NMR spectrum of **PCN** in $CDCl_3$.

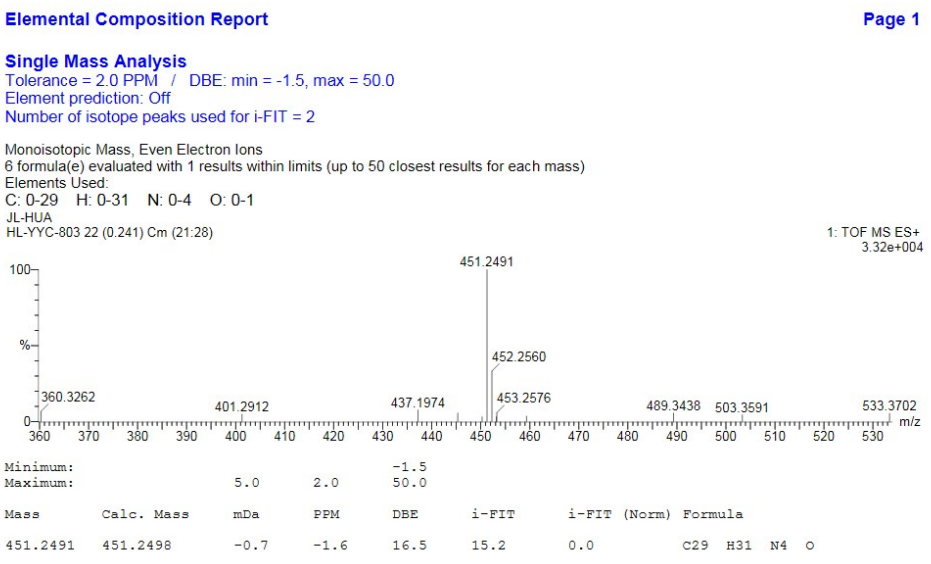


Figure S9. High resolution mass spectrum of **PCN.**

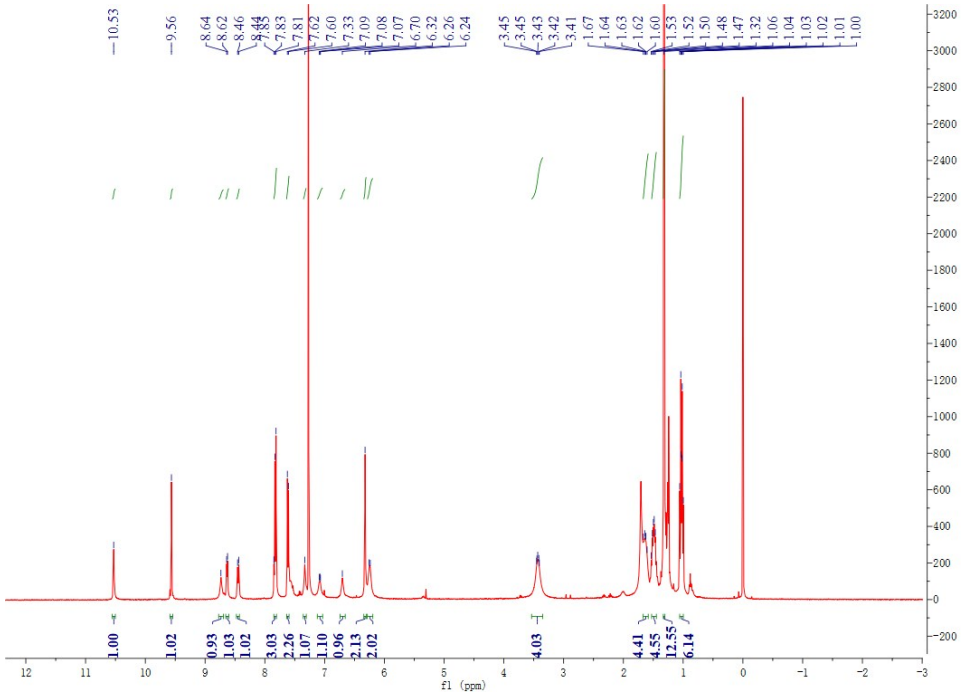


Figure S10. ^{1}H NMR spectrum of **PCN-BP** in $CDCl_3$.

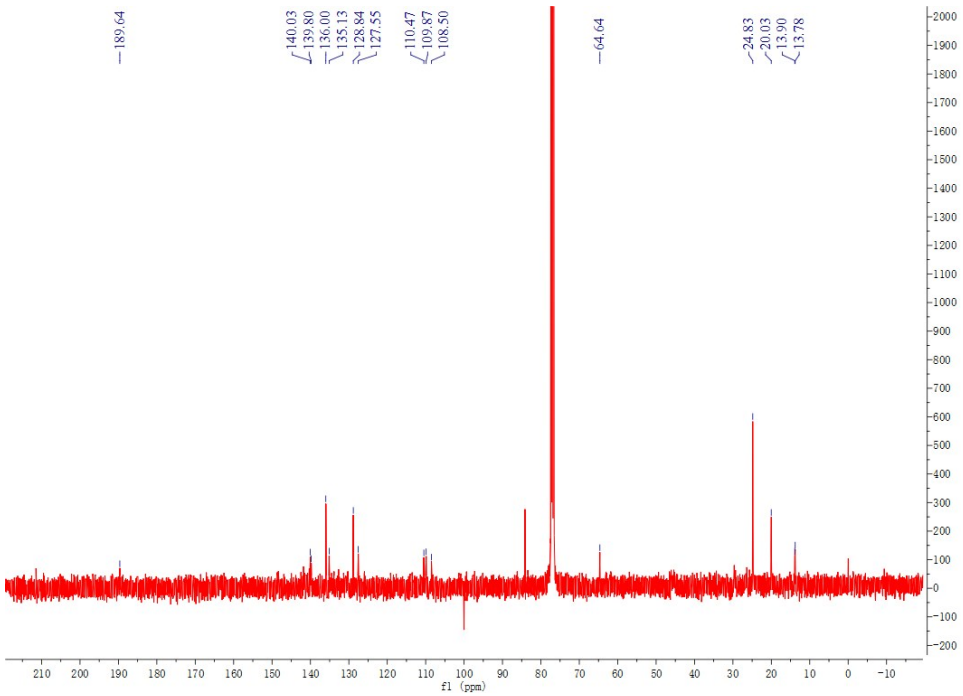
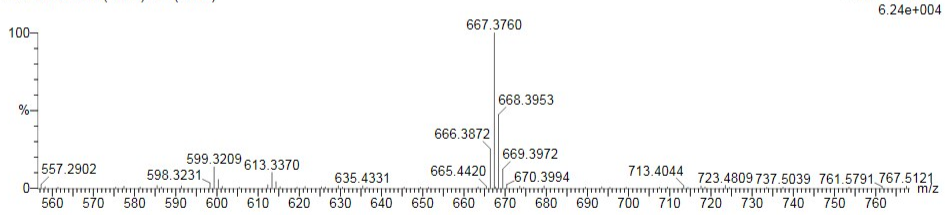


Figure S11. ^{13}C NMR spectrum of **PCN-BP** in $CDCl_3$.

Elemental Composition Report **Page 1**

Single Mass Analysis
Tolerance = 10.0 PPM / DBE: min = -1.5, max = 50.0
Element prediction: Off
Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions
27 formula(e) evaluated with 1 results within limits (up to 50 best isotopic matches for each mass)
Elements Used:
C: 0-45 H: 0-55 B: 0-1 N: 0-4 O: 0-3
JL-HUA
HL-YYC-904 40 (0.442) Cm (37:44)



Minimum:				-1.5			
Maximum:		5.0	10.0	50.0			
Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	i-FIT (Norm)	Formula
669.3972	669.3976	-0.4	-0.6	20.5	17.7	0.0	C42 H50 B N4 O3

Figure S12. High resolution mass spectrum of **PCN-BP.**