

Supporting Information to

An unexpected dual-response pH probe based on acridine

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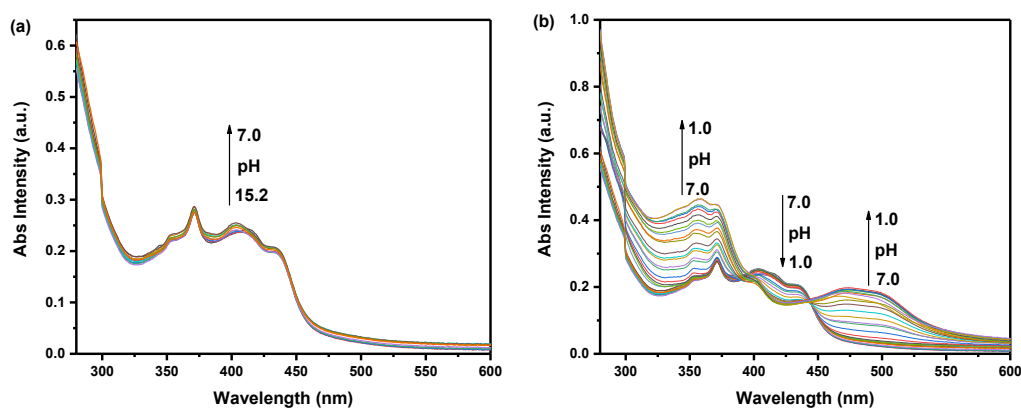


Fig. S1 UV-vis absorption of TBN (10 μM in H₂O/DMSO, v/v, 1/2) with different pH values. (a) pH decreased from 15.2 to 11.1. (b) pH decreased from 7.0 to 1.0.

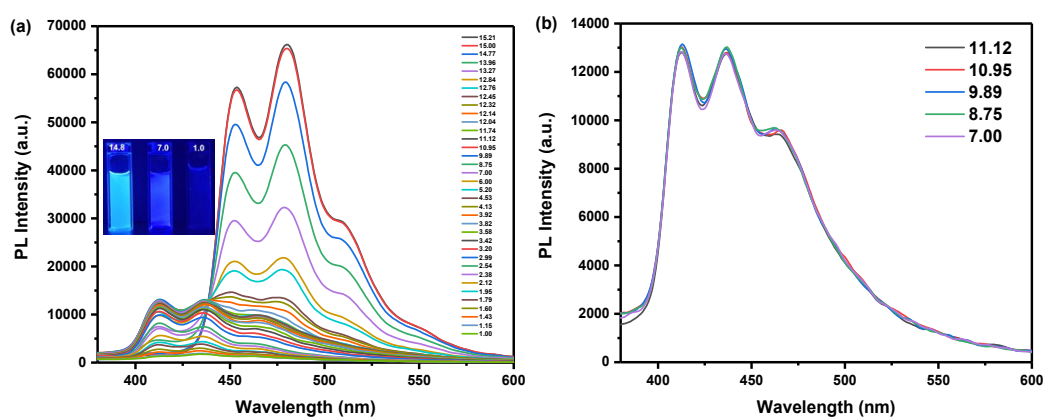


Fig. S2 Fluorescence spectra of TBN (10 μM in H₂O/DMSO, v/v, 1/2) with different pH values. (a) pH decreased from 15.2 to 1.0. Inset: photos of TBN under UV lamp (365 nm) at different pH values. (b) pH decreased from 11.1 to 7.0.

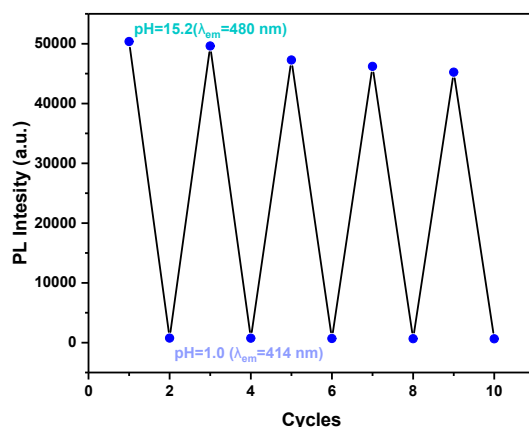


Fig. S3 The pH reversibility of probe **TBN** with pH 1.0–15.2.

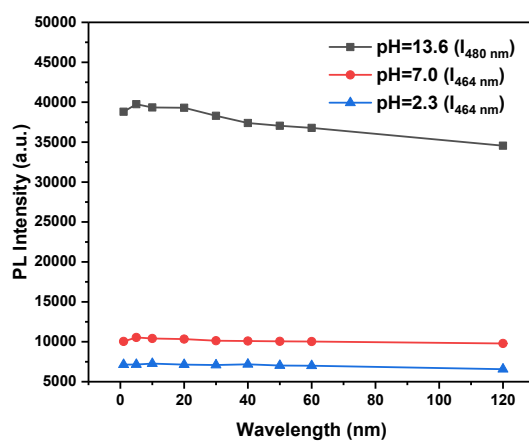


Fig. S4 Fluorescence intensity *versus* time for probe **TBN** (10 μ M) various pH values (2.3, 7.0 and 13.6). λ_{ex} = 320 nm.

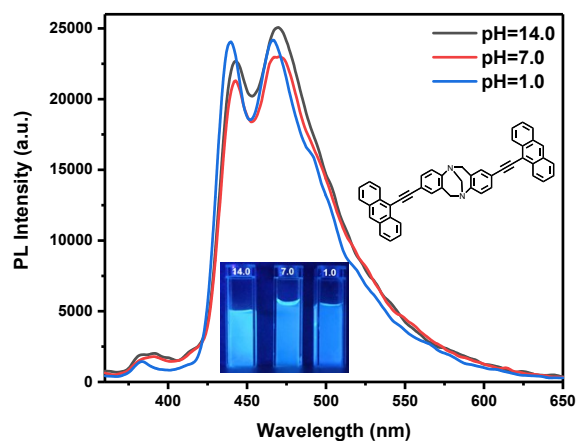


Fig. S5 Fluorescence spectra of **TBN1** (10 μ M in H₂O/DMSO, v/v, 1/2) with different pH values. Insert: photos of **TBN1** under UV lamp (365 nm) at different pH values and molecular structure of **TBN1**.

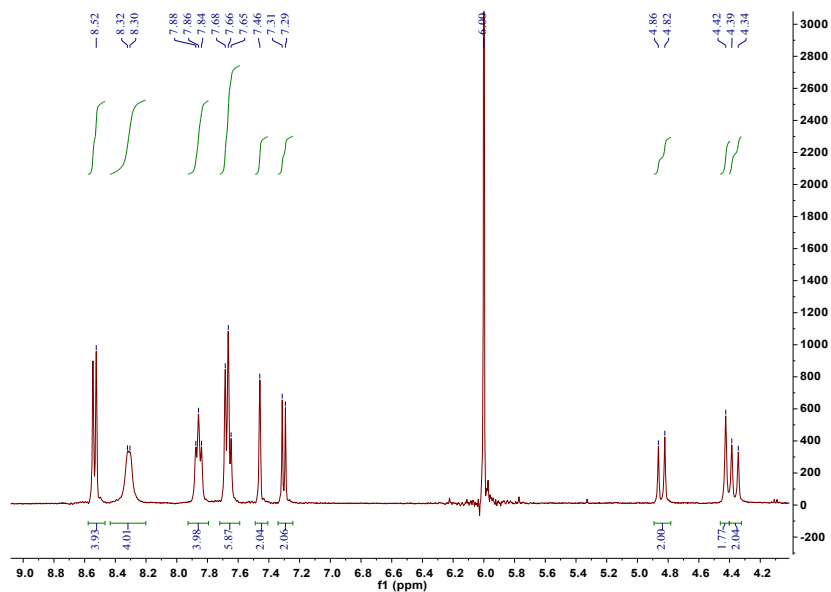


Fig. S6 ^1H NMR spectra of TBN in $\text{DMSO-}d_6$.

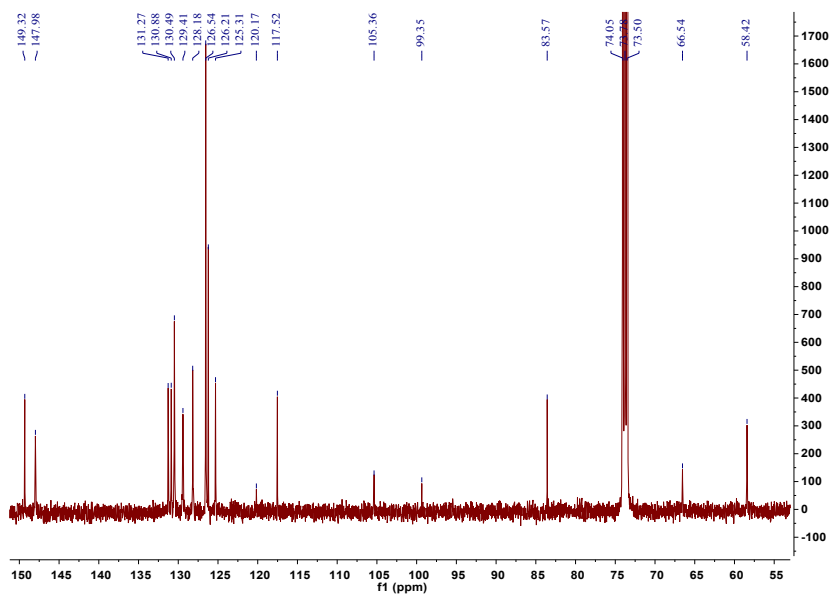


Fig. S7 ^{13}C NMR spectra of TBN in $\text{DMSO-}d_6$.

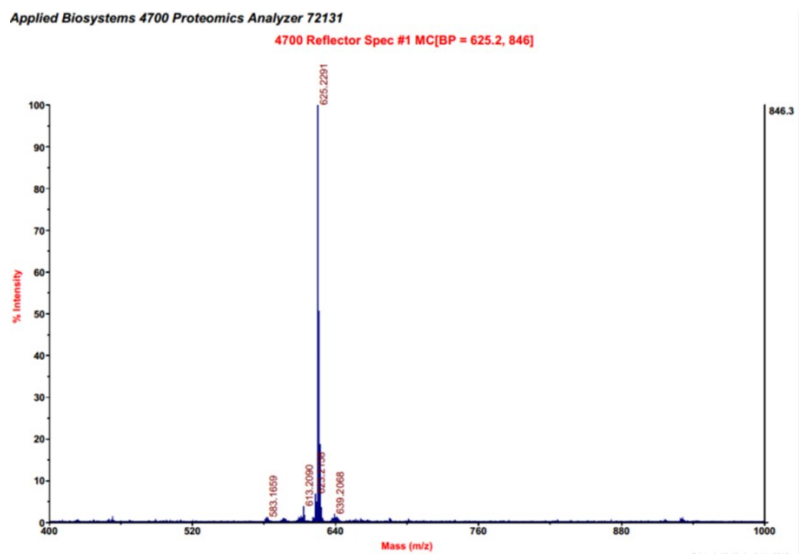


Fig. S8. HRMS spectra of TBN.