Supporting Information

Ratiometric emission NIR-fluorescent probe for detection of lysosomal pH in living cells and in vivo

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Fig. S1 $^1$H NMR titration spectra of CzQl before and after adding H$^+$. 

Fig. S2 Changes in fluorescence emission ratio ($F_{530\text{ nm}}/F_{637\text{ nm}}$) for CzQl between pH 7.0 and 2.2 ($\lambda_{ex} = 415\text{ nm}$).
Fig. S3 Changes in fluorescence emission ratio \( \frac{F_{530\text{ nm}}}{F_{637\text{ nm}}} \) for CzQl with times at different pH under continuous irradiation by the 415nm light source. The excitation and emission bandwidths were both set at 1.5 nm.

Fig. S4 Cell cytotoxic effect of CzQl on B16-F10 cells. 1, control; 2, 0.1 μM; 3, 1 μM; 4, 10 μM; 5, 20 μM; 6, 30 μM. Data are expressed as mean values standard error of the mean of three independent experiments.
Fig. S5 $^1$H NMR spectra of CzQl.

Fig. S6 $^{13}$C NMR spectra of CzQl.
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