Electronic Supplementary Information

Rhodamine-deoxylactam functionalized poly[styrene-alter-(maleic acid)] as lysosome activatable probes for intraoperative detection of tumors

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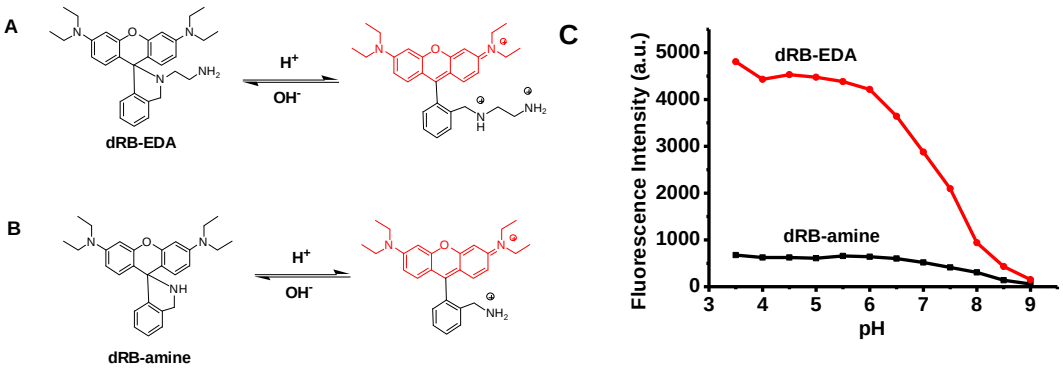

Fig. S1 pH titration of dRB-amine and dRB-EDA by fluorometry. Proton triggered opening of the dRB-EDA (**A**) and dRB-amine (**B**); (**C**) pH profiles of dRB-EDA (in red) and dRB-amine (in dark) were plotted by fluorescence emission intensities at 590 nm as a function of buffer pH (3.5-9) (*λex*@560 nm).

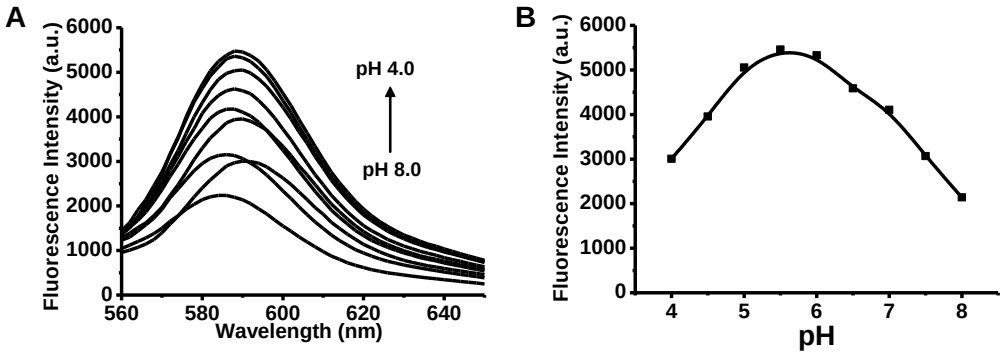

Fig. S2 pH titration of PSM-2-dRB. (A) Fluorescence emission spectra of PSM-2-dRB (50 μg ml^{-1}) in sodium phosphate buffer of various pH (4-8) (*λex*@560 nm); (B) the titration curve was plotted by fluorescence emission intensity at 590 nm *vs* buffer pH.

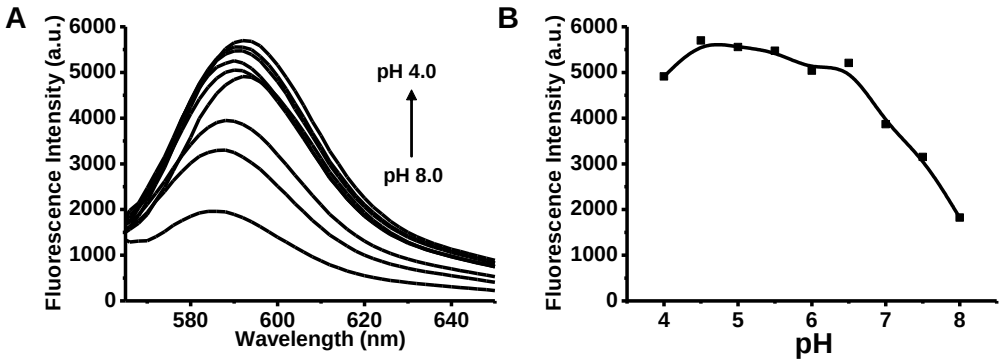

Fig. S3 pH titration of PSM-1-dRB. (A) Fluorescence emission spectra of PSM-1-dRB (50 μg ml^{-1}) in sodium phosphate buffer of various pH (4-8) (λex@560 nm); (B) The titration curve was plotted by fluorescence emission intensity at 590 nm *vs* buffer pH.

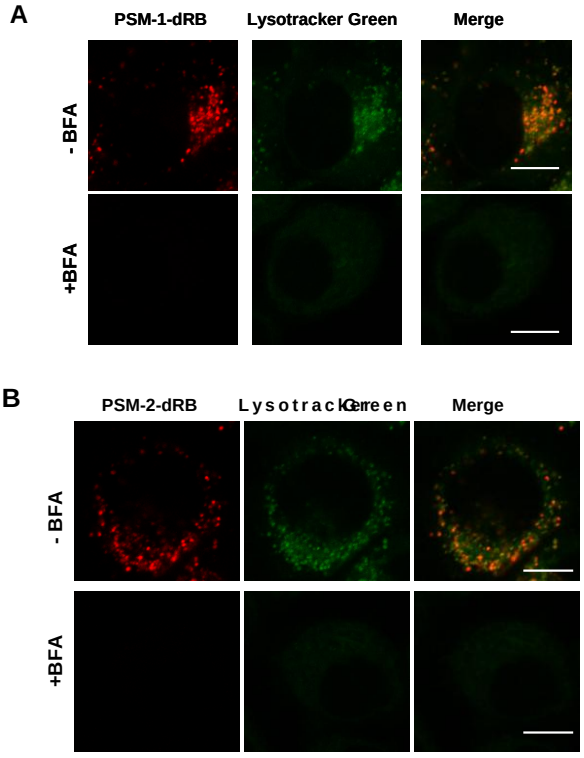

Fig. S4 Lysosomal pH dependent staining of L929 cells with PSM-1-dRB and PSM-2-dRB. L929 cells pretreated with or without BFA were respectively co-stained with Lysotracker green and PSM-1-dRB/PSM-2-dRB, and then analyzed by confocal microscopy. The intracellualr of dRB-polymer fluorescence was shown in red and that of Lysotracker green was shown in green. Merging of the signals of dRB-EDA and Lysotracker green was shown in yellow. Bars, 10 μm.

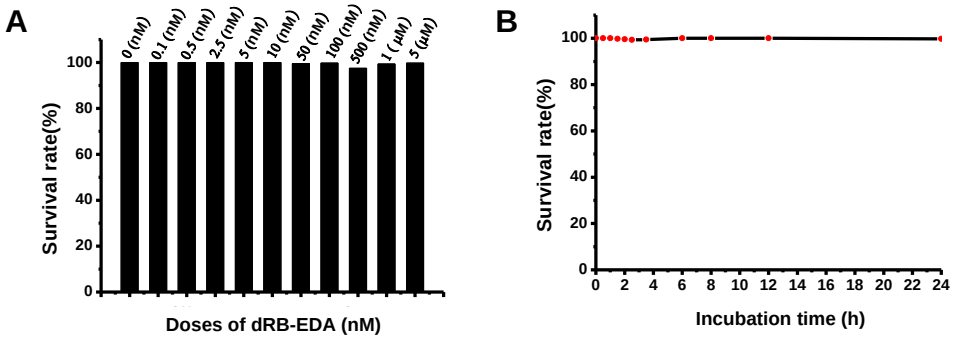

Fig. S5 Cell toxicities of dRB-EDA on L929 cells. Cells were seeded in 48-well plates in DMEM medium supplemented with various amounts of PSSM-dRB. The cells were cultured at 37 ^{o}C with 5% CO_2. Every 24 h, an aliquot of the cells was taken out and stained with trypan blue. Cell viability was determined using the trypan blue exclusion test.