## **Electronic Supplementary Information Fluorescence probe for the detection of HOCl in lysosomes**

Xiao-Qing Huang a,‡, Zhao-Yue Wang a,‡, Yan-Jing Lv a,‡, Shi-Li Shen a,\*, Yan Zhu a,\*, Juan Wang a, Yan-Ru Zhang b,\*, Jun-Mei Wang a, Yan-Qing Ge a, Xiao-Qun Cao a,\*

<sup>a</sup> School of Chemistry and Pharmaceutical Engineering, Taishan Medical University, Taian 271016, P. R. China

<sup>b</sup> Department of Medicinal Chemistry, School of Pharmacy, Qingdao University, Qingdao 266021, P. R. China.

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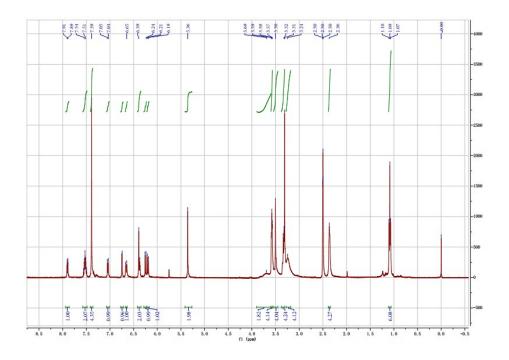


Figure S1 <sup>1</sup>H NMR spectrum of **LR1**.

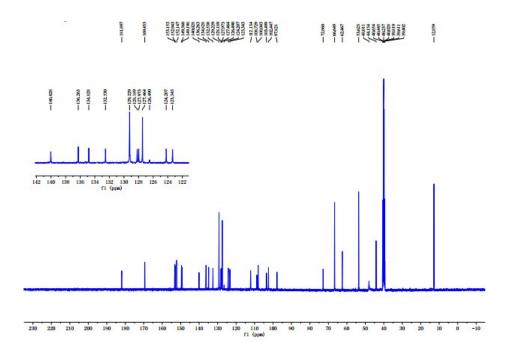


Figure S2 <sup>13</sup>C NMR spectrum of **LR1**.

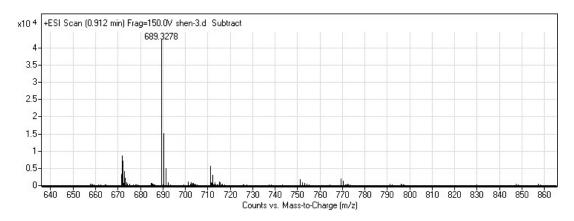


Figure S3 High resolution mass spectrum of LR1.

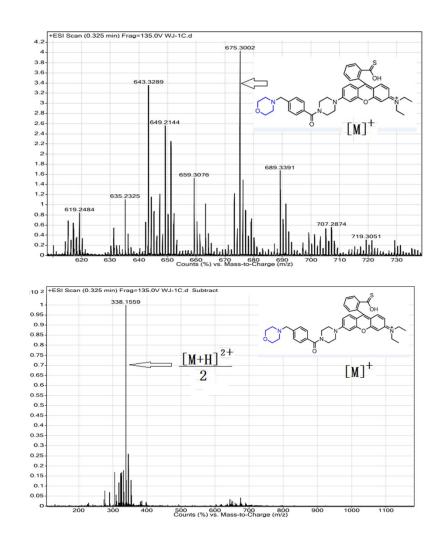


Figure S4 The HRMS spectra of the reaction mixture of LR1 with HOCl.

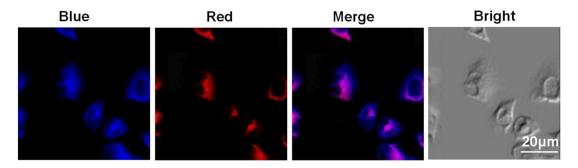


Figure S5 Fluorescence images of RAW264.7 cells co-stained with compound  $\bf 3$  (1  $\mu$ M) and Lyso Tracker Deep Red (0.2  $\mu$ M) in the presence of LPS. (a) Fluorescence of compound  $\bf 3$ . The fluorescence was colored as blue for discrimination. (b) Fluorescence of Mito Tracker Deep Red. (c) Merge images of (a) and (b). (d) Bright field images.

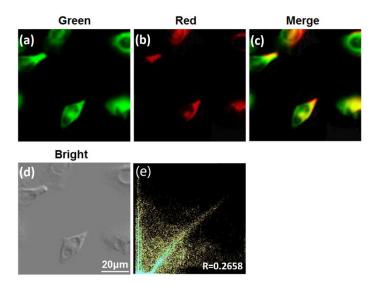


Figure S6 Fluorescence images of RAW264.7 cells co-stained with **LR1** (1  $\mu$ M) and Mito Tracker Deep Red (0.2  $\mu$ M) in the presence of LPS. (a) Fluorescence of **LR1**. The fluorescence was colored as green for discrimination. (b) Fluorescence of Mito Tracker Deep Red. (c) Merge images of (a) and (b). (d) Bright field images. (e) Quantitation of co-localization coefficient: 0.26.

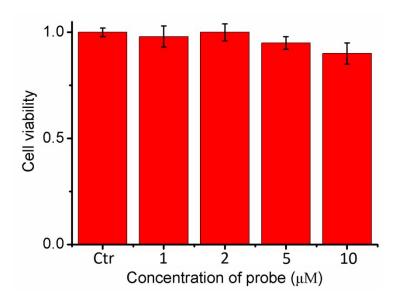


Figure S7 Effect of **LR1** on the cell viability of RAW264.7 cells. RAW264.7 cells were incubated with different concentrations of **LR1** (1, 2, 5, 10  $\mu$ M) for 12 h, followed by a standard SRB assay. The results were presented as means  $\pm$  SE with replicates n = 3.