Electronic Supplementary Material (ESI) for RSC Advances.

A coumarin schiff's base two-photon fluorescent probe for hypochlorite in living cell and zebrafish

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Supporting information

1. Fluorescence selectivity of probe 1 for ClO^-

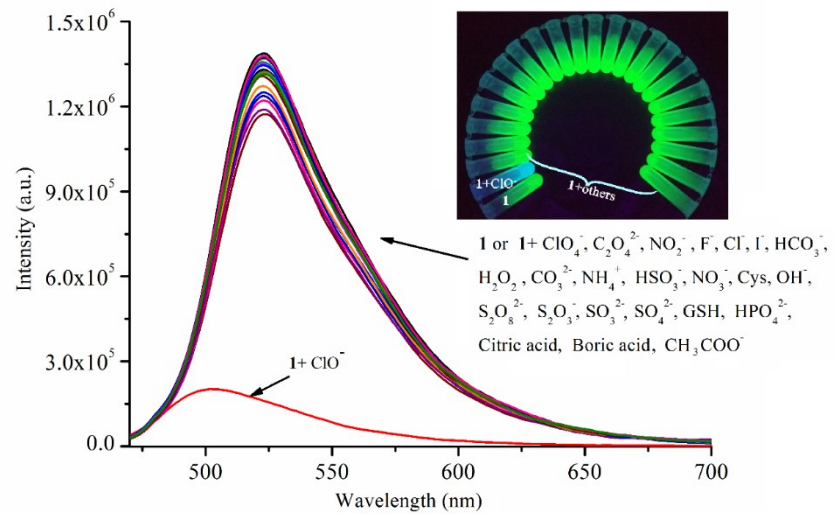
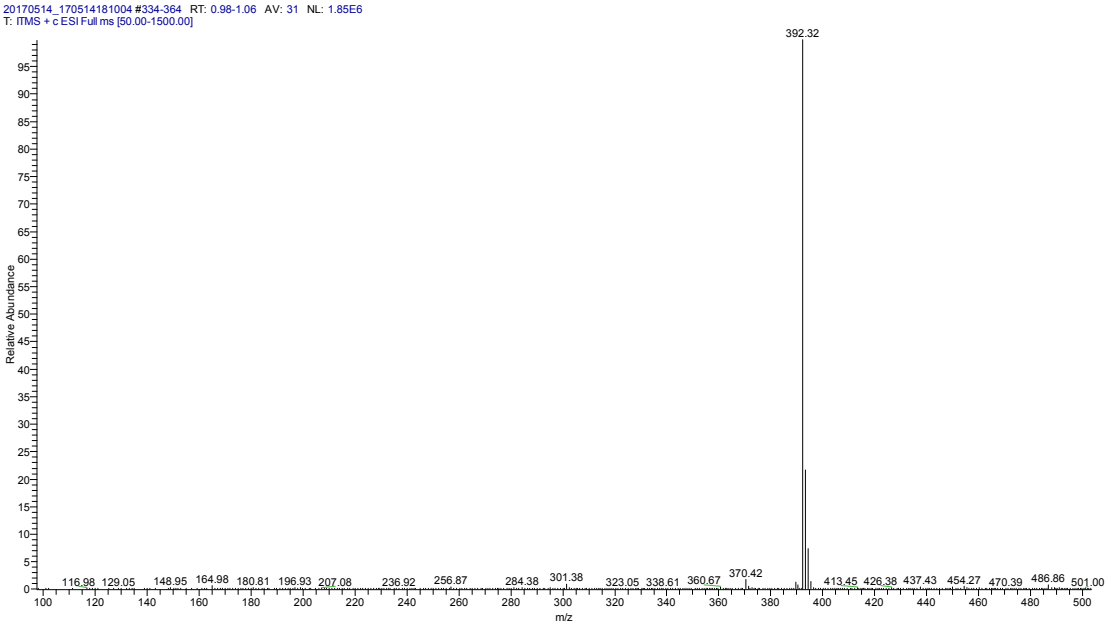
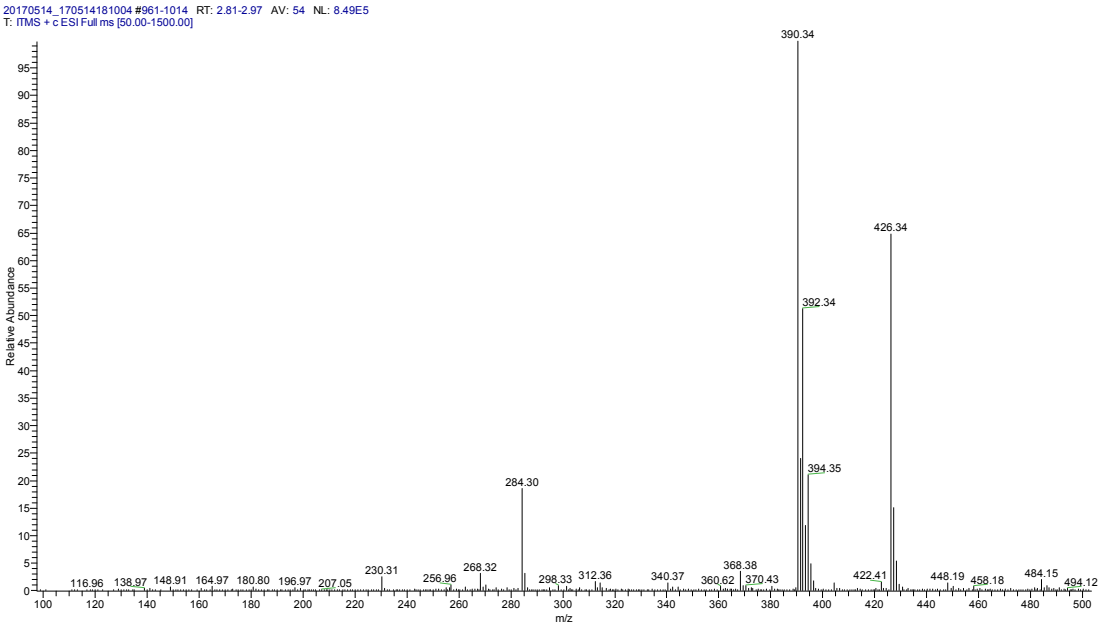


Fig. S1 Fluorescence spectra of probe **1** (10 μM) in the absence and presence of various analytes (150 μM) in potassium phosphate buffer (pH 7.4, containing 40% CH_3OH as co-solvent). Inset: a visual fluorescence change photograph.

2. Mass spectra of probe 1 before and after the addition of ClO^-



(a)



(b)

Fig. S2 Mass spectra of probe **1** before (a) and after (b) the addition of ClO^-.

3. Survivability of A549 cells after treatment with indicated various concentrations of probe 1

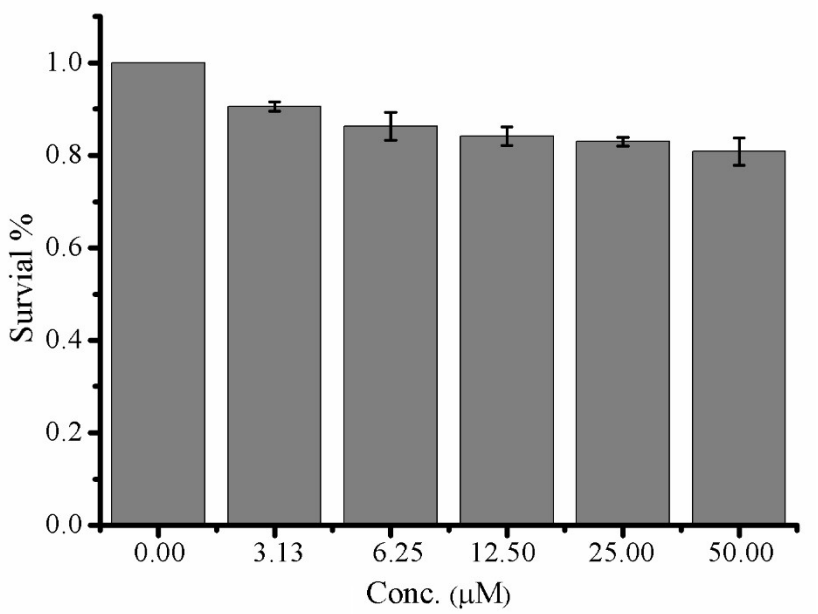


Fig. S3 Survivability of A549 cells after treatment with indicated various concentrations of probe **1**.

4. One-photon microscopy confocal fluorescence images of A549 cells and zebrafish after incubated with probe 1 for a series of time gradient

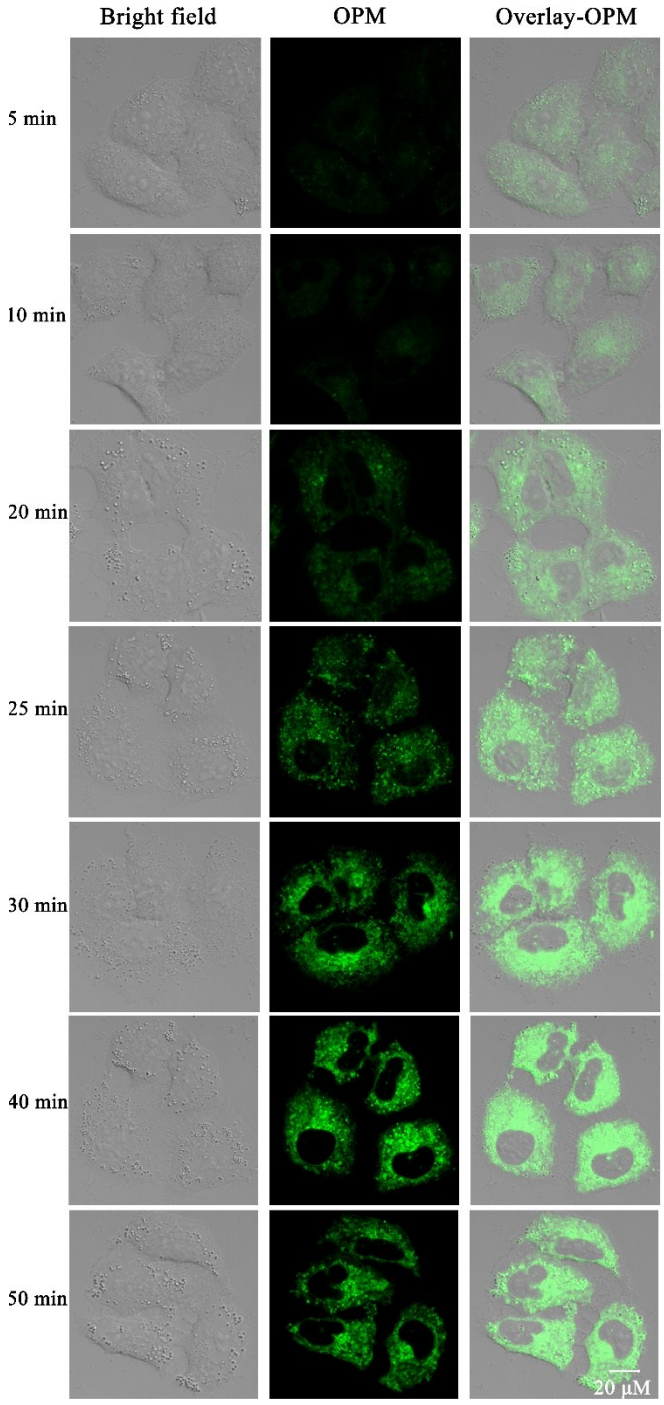


Fig. S4 One-photon microscopy (OPM) confocal fluorescence images of A549 cells after incubated with probe **1** (20 μM) for a series of gradient times excited at 458 nm (OPM). The emission was collected at 520±30 nm. Overlay-OPM: Overlay of the Bright field and OPM columns.

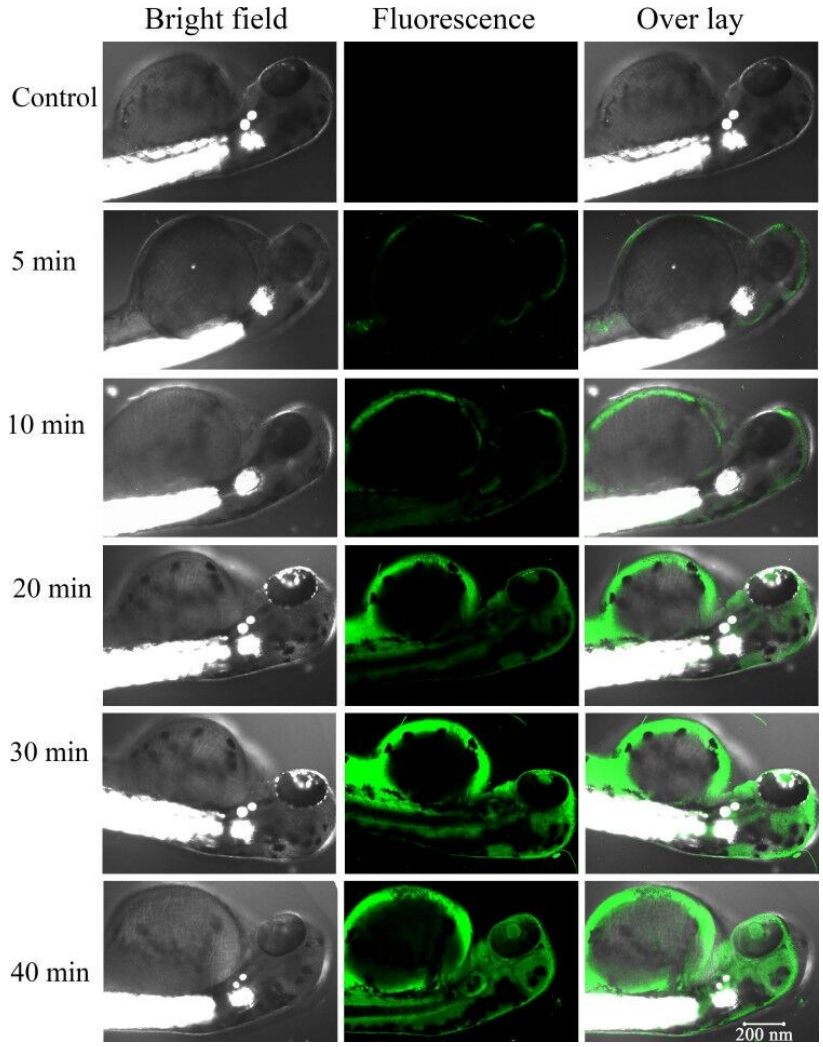


Fig. S5 Images of zebrafish treated with 20 μM probe **1** for a series of gradient times. The probe was excited at 458 nm (OPM). The emission was collected at 520±30 nm. Overlay-OPM: Overlay of the Bright field and OPM columns.

5. One-photon microscopy confocal fluorescence images of A549 cells and zebrafish after incubated with probe 1 and subsequently with ClO^- for a series of time gradient

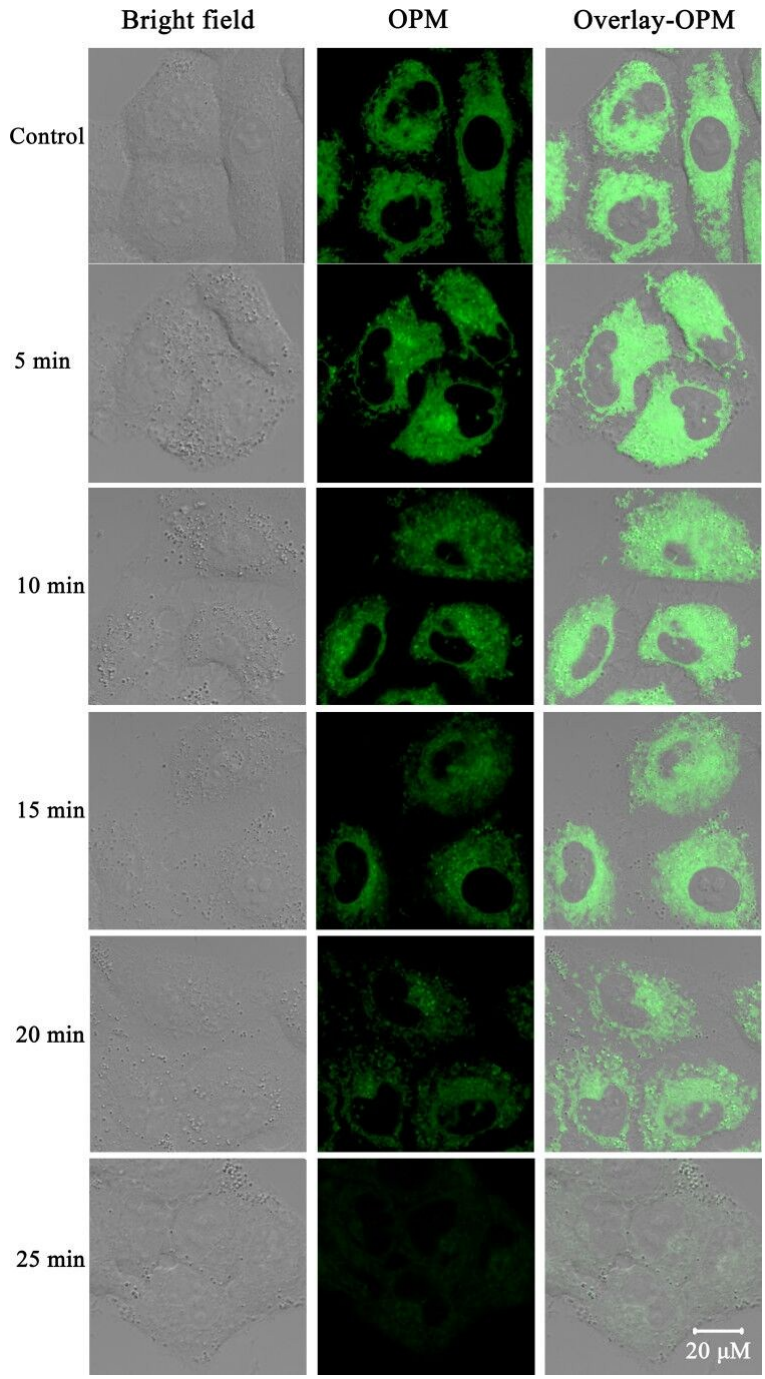


Fig. S6 One-photon microscopy (OPM) confocal fluorescence images of A549 cells after incubated with probe **1** (20 μM) for 30 min and subsequently with ClO^- (120 equiv.) for a series of time gradient excited at 458 nm (OPM). The emission was collected at 520±30 nm. Overlay-OPM: Overlay of the Bright field and OPM columns.

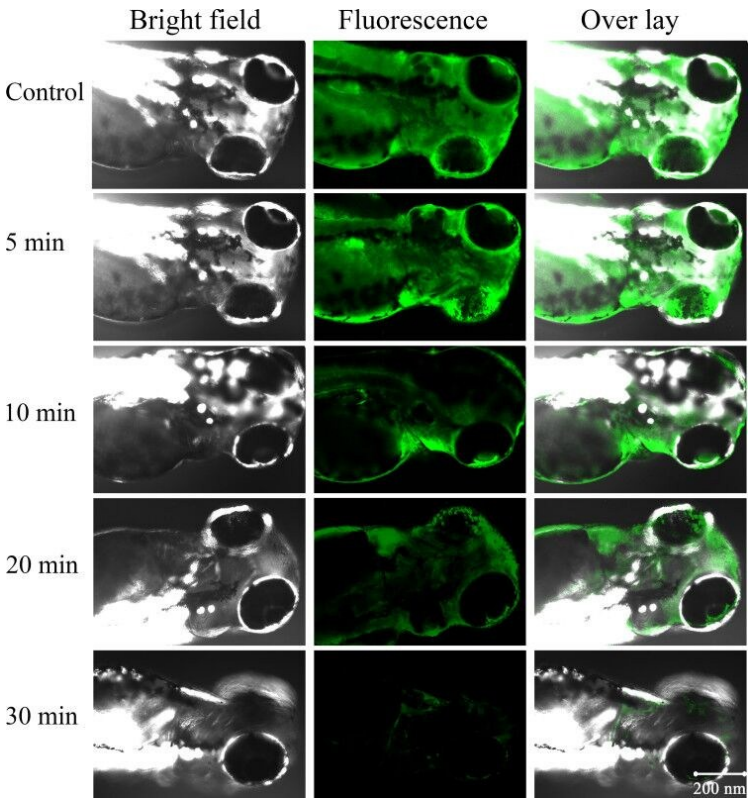


Fig. S7 Images of zebrafish treated with 20 μM probe **1** in the presence of 120 equiv. ClO^- for a series of time gradient. The probe was excited at 458 nm (OPM). The emission was collected at 520±30 nm. Overlay-OPM: Overlay of the Bright field and OPM columns.