Electronic Supplementary Information

A Near-Infrared Xanthene Fluorescence Probe for Monitoring Peroxynitrite in Living Cells and Mouse Inflammation Model

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Figure S1. Absorption spectra and Fluorescence spectra of 10 μM NOF2 in absence and presence of 80 μM ONOO- in PBS: DMSO=1:1 (v/v), \( \lambda_{\text{ex}} = 670 \) nm.

Figure S2. Time course of fluorescence intensity (\( \lambda_{\text{em}} = 742 \) nm) of NOF2 (10 μM) in DMSO/PBS (v/v, 1/1) in the presence of 10 μM, 40 μM, and 70 μM ONOO\(^{-}\) during a period of 45 minutes, \( \lambda_{\text{ex}} = 670 \) nm.
Figure S3. Fluorescence spectra of 10 μM NOF2 in presence of various species (ONO$\cdot$, ClO$\cdot$, H$_2$O$_2$, •OH, TBHP, O$_2$$^-$$^-$, ROO$^-$, GSH, Hcy, Cys), $\lambda_{ex} = 670$ nm.
Figure S4. Fluorescence confocal microscopic images of RAW264.7 cells exposed to oxidative stress. Macrophage cells were treated with various inducers and then loaded with 5 μM NOF2 for 60 min (a) control. (b) LPS (1 μg/mL) and IFN-γ (50 ng/mL) for 4 h then PMA (10 nM) for 30 min. (c) AG (1 mM), LPS (1 μg/mL), and IFN-γ (50 ng/mL) for 4 h then PMA (10 nM) for 30 min. (d) TEMPO (100 μM), LPS (1 μg/mL), and IFN-γ (50 ng/mL) for 4 h then PMA (10 nM) for 30 min. (e) Cells treated with 100 μM NaClO for 30 min. (f) cells treated with 100 μM H₂O₂ for 10 min.
**Figure S5.** (a) The mouse was given an i.p. injection of LPS for 4 h then injected with PMA and TEMPO, then followed by injection of NOF2 (100 μL, 50 μM in saline). (b) The mouse was i.p. injected with LPS for 4 h, injected with PMA, followed by injection of NOF2.

**Figure S6.** (a) The mouse was given an i.p. injection of LPS for 4 h then injected with PMA and AG (1 mM, 100 μL), then followed by injection of NOF2. (b) The mouse was i.p. injected with LPS for 4 h, injected with PMA, followed by injection of NOF2.