Supporting Information

A simple, cyanovinylene-based, ratiometric, colorimetric and fluorescent chemodosimeter for the specific and sensitive detection of HClO in living cells

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Preparation of stock solutions of various analytes

The stock solutions of K^+, Na^+, Ca^{2+}, Zn^{2+}, Mg^{2+}, NO_3^-, and NO_2^- were prepared by dissolving the commercial reagents KCl, NaCl, $CaCl_2$, $ZnSO_4$, $MgCl_2$, $NaNO_3$, and $NaNO_2$ in ultrapure water. Nitric oxide (NO) was generated from potassium nitroprusside dehydrate in ultrapure water. The stock solutions of glutathione (GSH) and cysteine (Cys) were prepared by dissolving the commercial reagents reduced glutathione and DL-cysteine. H_2O_2 and *tert*-butylhydroperoxide (TBHP) were diluted from the commercially available solution to the desired concentration in ultrapure water. Hydroxyl radical ($^{\cdot}OH$) and *tert*-butoxy radical ($^{\cdot}O^tBu$) were generated by Fenton reactions. Superoxide (O_2^-) was prepared from KO_2 in DMSO. Singlet oxygen ($^1O_2$) was generated from HOCl and H_2O_2. The stock solutions of ascorbic acid (AA) and sodium periodate were prepared by dissolving the commercial corresponding reagents.