Supplementary Information

A novel near-infrared probe for imaging of superoxide anions fluctuations and hydrogen ions enhancement in vivo

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1. Preparation of test solutions

Test solutions of IR-747-SAPH (10 µM) in pH 7.4 phosphate-buffered saline (PBS) (containing 1% DMSO) were prepared. Solutions of various test species were prepared by diluting the stock solution with PBS buffer solution. Different anions were prepared with metal ions forming ZnCl$_2$, MgSO$_4$, CuCl$_2$, CuNO$_3$, FeCl$_3$, and FeCl$_2$. Various ROS, including ClO$^-$, •OH, O$_2$•$^-$, •O$_2$, •NO, H$_2$O$_2$, and ONOO$^-$, were prepared according to a previously reported procedure.

2. Design and Synthesis of the probe IR-747-SAPH
Figure S1. $^1$H NMR(A), MS(B) and $^{13}$C NMR(C) spectra of IR-747-SAPH in DMSO-$d_6$