

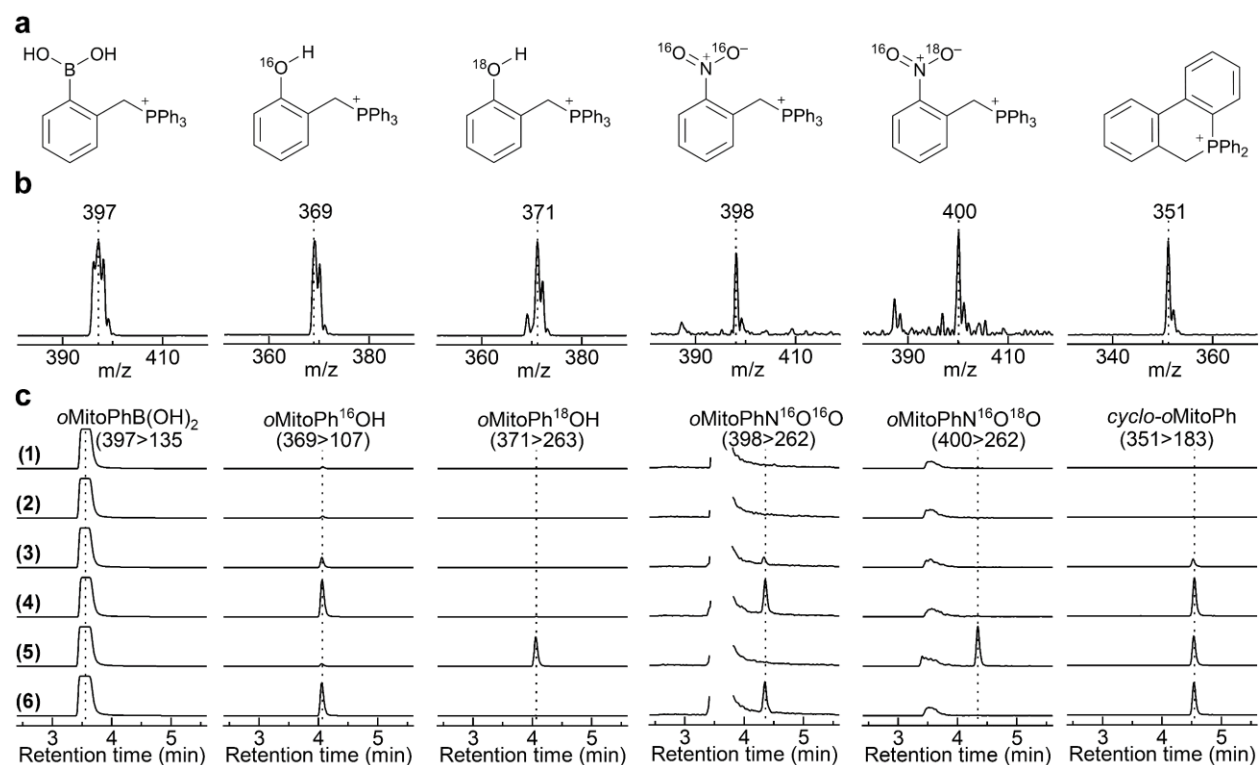
Tracking isotopically labeled oxidants using boronate-based redox probes

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SUPPORTING INFORMATION

Supplementary Figure S-1..... S-2



Supplementary Figure S-1. Generation of peroxyntirite and incorporation of oxygen atom into the phenolic and nitrated products during oxidation of *o*MitoPhB(OH)₂ by ONOO⁻. (a) Chemical structures of the products; (b) online mass spectra of the detected products; and (c) LC-MS/MS traces of the probe and products detected. LC-MS/MS analyses were performed after incubation (30 min) of *o*MitoPhB(OH)₂ (20 μM) alone (1), or with *in situ*-generated fluxes of O₂⁻ (2, 0.2 μM O₂⁻/min, formed during XO-catalyzed oxidation of HX in the solution saturated with oxygen), [•]NO (3, 0.2 μM/min, formed from thermal decomposition of spermine-NONOate), ON¹⁶O¹⁶O⁻ (4, 6), or ON¹⁸O¹⁸O⁻ (5). ON¹⁶O¹⁶O⁻ and ON¹⁸O¹⁸O⁻ were produced by co-generated fluxes of [•]NO and ¹⁶O₂⁻ or ¹⁸O₂⁻. All samples contained phosphate buffer (25 mM, pH = 7.4), dtpa (0.1 mM), and catalase (5 kU/mL) in H₂¹⁶O (samples 1-5) or in H₂¹⁸O (sample 6), purged with ¹⁶O₂ (samples 1-4, 6) or ¹⁸O₂ (sample 5).