## Supporting Information: Independent Generation and Reactivity of 2'-Deoxyguanosin-N1yl Radical

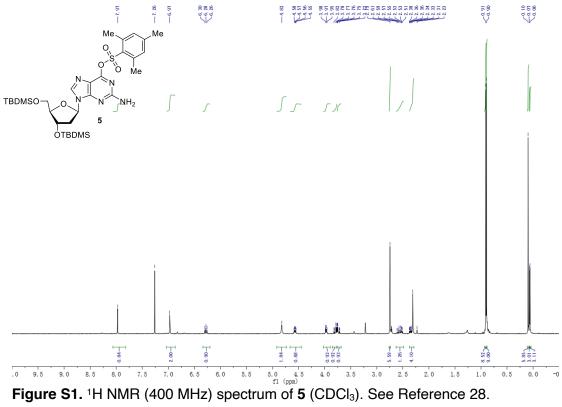
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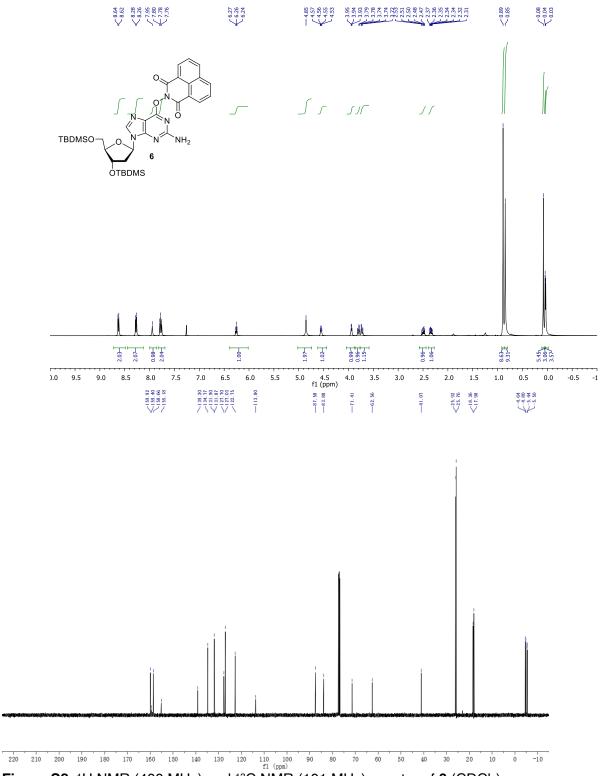
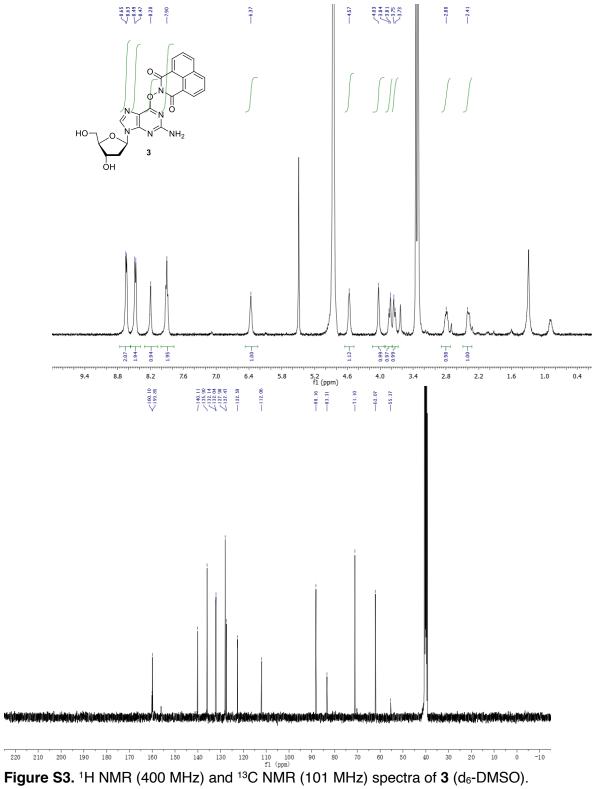


Figure S2. <sup>1</sup>H NMR (400 MHz) and <sup>13</sup>C NMR (101 MHz) spectra of 6 (CDCl<sub>3</sub>).



Compound	Retention time (min)	Response factor (260 nm)
Т	8.2	-
dG	7.4	0.84
3	15.5	2.2
NP	16	9.1

Table S1. Retention times and response factors for HPLC analysis.

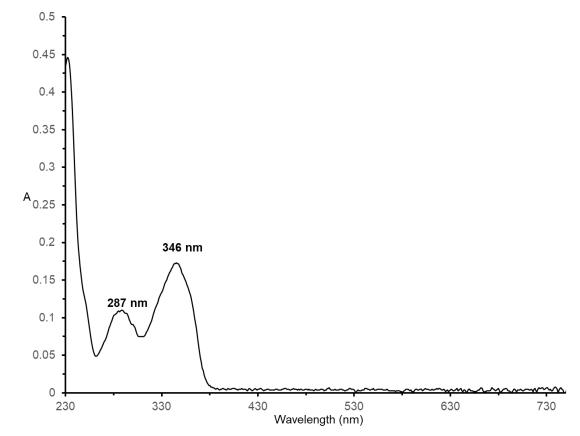
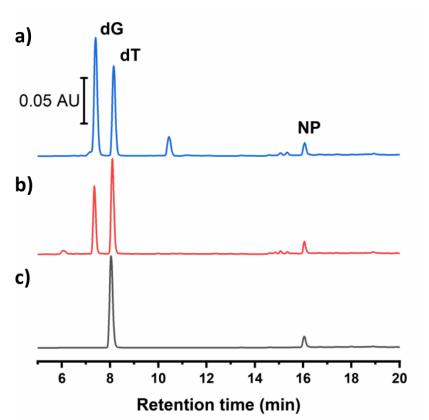
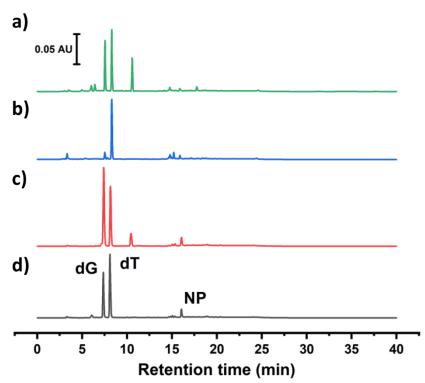


Figure S4. UV-Vis spectrum of 3 (0.1 mM, 1 cm pathlength).



**Figure S5.** HPLC chromatograms (260 nm detection) of photolysates (5 min) of **3** (0.1 mM) under anaerobic conditions in phosphate buffer (10 mM, pH = 7.2) (a) in the presence of BME (10 mM); (b) in the absence of BME. (c) Solution containing dT (0.1 mM) and NP (0.1 mM).



**Figure S6.** HPLC chromatograms (260 nm detection) of photolysates (3 h) of **3** (0.1 mM) under aerobic conditions in phosphate buffer (10 mM, pH = 7.2) (a) in the presence of BME (10 mM); (b) in the absence of BME, and photolysates (5 min) of **3** (0.1 mM) under anaerobic conditions in phosphate buffer (10 mM, pH = 7.2) (c) in the presence of BME (10 mM); (d) in the absence of BME.