

Supporting Information

Evidences of a 1,2-dioxetanone as intermediate in the benzofuran-2(3H)-one chemiluminescence

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Table S1: Observed rate constants (k_{obs}) and maximum intensity (I_{max}) for the chemiluminescent emission of **4** in the presence of DBU.

[DBU] (mM)	I_{max} (a.u.)	k_{obs} (s^{-1})
10	332	0.01283
20	325	0.01278
40	332	0.01291
60	320	0.01209
100	329	0.01253

[**4**] = 0.1 mM; at 25 °C in acetonitrile. Conditions of fluorescence spectrometer: zero order on emission, PMT at 600 V, 2.5 nm emission slit.

Table S2: Observed rate constants (k_{obs}) for the reaction of **4** with DBU at different temperatures followed by UV-Vis spectrophotometry.

T (°C)	k_{obs} (s^{-1})
21.25	0.00924 ± 0.0002
25.25	0.01251 ± 0.00002
31.05	0.01593 ± 0.0003
37.40	0.02183 ± 0.0003
43.10	0.02802 ± 0.0007
49.60	0.03654 ± 0.0005
57.05	0.04316 ± 0.0006

[**4**] = 0.1 mM; [DBU] = 10 mM in acetonitrile. Measured at 376 nm.

Table S3: Observed rate constants (k_{obs}) for the reaction of **4** with DBU at different temperatures followed by light emission.

T (°C)	k_{obs} (s^{-1})
20	0.0075 ± 0.0001
25	0.010 ± 0.001
30	0.0126 ± 0.0005
35	0.0154 ± 0.0003
40	0.0182 ± 0.0002

[**4**] = 0.1 mM; [DBU] = 10 mM in acetonitrile.