Supporting Information

Non-Cryogenic I/Br-Mg Exchange of Aromatic Halides Bearing Sensitive Functional Groups Using *i*PrMgCl-Bis[2-(*N,N*-dimethylamino)ethyl] Ether Complex

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3c: ¹H NMR (400 MHz, CDCl₃) δ 7.60 (d, *J* = 7.5 Hz, 1H), 7.54 (d, *J* = 7.5 Hz, 1H), 7.44 (s, 1H), 3.86 (s, 3H), 3.85 (s, 3H). ¹³C NMR (400 MHz, CDCl₃) δ 166.2, 162.9, 135.0, 132.0, 128.4, 121.0, 109.9, 55.2, 52.1.

4c: ¹H NMR (400 MHz, CDCl₃) δ 8.06 (s, 1H), 7.82 (d, *J* = 7.9 Hz, 1H), 7.27 (d, *J* = 7.9 Hz, 1H), 3.83 (s, 3H), 2.46 (s, 3H). ¹³C NMR (400 MHz, CDCl₃) δ 166.5, 147.3, 136.5, 134.1, 129.6, 129.5, 125.8, 51.8, 22.2.

5c: ¹H NMR (400 MHz, CDCl₃) δ 7.48 (s, 2H), 3.85 (s, 3H), 2.22 (s, 6H). ¹³C NMR (400 MHz, CDCl₃) δ 169.8, 135.4, 135.1, 133.2, 132.8, 51.8, 19.4.

6c: ¹H NMR (400 MHz, CDCl₃) δ 8.43 (s, 1H), 8.29 (s, 2H), 8.05 (d, *J* = 7.4 Hz, 1H), 8.00 (dt, *J* = 1.4, 7.8 Hz, 1H), 7.50 (t, *J* = 7.6 Hz, 1H), 3.87 (s, 3H). ¹³C NMR (400 MHz, CDCl₃) δ 166.6, 138.8, 134.9, 130.7, 128.7, 127.8, 51.9.

7c: ¹H NMR (400 MHz, CDCl₃) δ 7.27 (d, *J* = 3.5 Hz, 1H), 7.17 (d, *J* = 3.5 Hz, 1H), 3.82 (s, 3H). ¹³C NMR (400 MHz, CDCl₃) δ 158.6, 146.5, 122.7, 118.2, 51.7.

8c: ¹H NMR (400 MHz, CDCl₃) δ 7.81 (d, *J* = 3.7 Hz, 1H), 7.68 (d, *J* = 3.7 Hz, 1H), 3.83 (s, 3H). ¹³C NMR (400 MHz, CDCl₃) δ 162.0, 143.8, 137.2, 136.1, 134.0, 52.1.

14c: ¹H NMR (400 MHz, DMSO-*d*₆) δ 2.23 (s, 3H), 1.64 (s, 6H). ¹³C NMR (400 MHz, DMSO-*d*₆) δ 177.0, 165.8, 105.1, 95.2, 24.4, 20.2.