Supporting Informations

Total Synthesis of Batzelladine D

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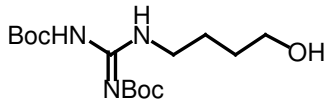
General

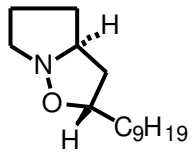
IR spectra were measured with a JASCO VALOR-III FT-IR spectrophotometer. ^{1}H and ^{13}C NMR spectra were recorded on JEOL GSX-500 instruments. Mass spectra were recorded on JEOL JMA-HX110 spectrometers.

Spectral data



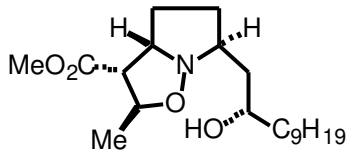
5

Compound **5**: IR (neat) 3331, 2979, 1722, 1642 1415 cm^{-1}; ^{1}H NMR ($CDCl_3$, 500 MHz) δ 11.47 (brs, 1H), 8.37 (brs, 1H), 3.69 (t, J = 6.1 Hz, 2H), 2.33 (q, J = 7.0 Hz, 2H), 1.72-1.60 (m, 4H), 1.49 (s, 9H), 1.48 (s, 9H); ^{13}C NMR ($CDCl_3$, 125 MHz) 163.5, 156.2, 153.3, 83.1, 79.3, 62.2, 40.3, 29.5, 28.3, 28.0, 25.6 ppm; HRMS (FAB, MH^+) calcd for $C_{15}H_{30}N_3O_5$ 332.2185, found 332.2179.



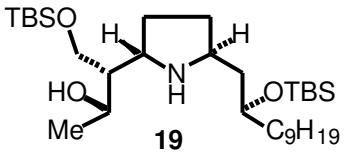
14

Compound **14**: IR (neat) 2926, 2855, 1465 cm^{-1}; ^{1}H NMR ($CDCl_3$, 500 MHz) δ 3.97 (m, 1H), 3.70 (n, 1H), 3.10 (m, 2H), 2.03-1.90 (m, 4H), 1.84-1.20 (m, 18H) 0.83 (t, *J* = 6.8 Hz, 3H); ^{13}C NMR ($CDCl_3$, 125 MHz) 76.4, 64.8, 57.0, 42.5, 33.9, 31.8, 31.7, 29.62, 29.57, 29.45, 29.21, 26.4, 24.3, 22.6, 14.0 ppm; HRMS (FAB, MH^+) calcd for $C_{15}H_{30}NO$ 240.2327, found 240.2383.



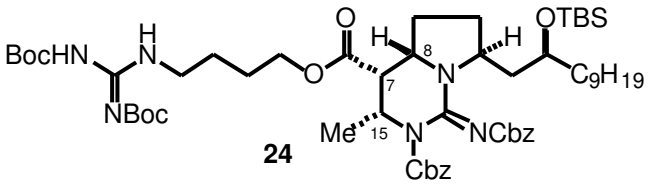
17

Compound **17**: IR (neat) 3361, 2925, 2853, 1736, 1437 cm^{-1}; ^{1}H NMR ($CDCl_3$, 500 MHz) δ 4.30 (m, 1H), 4.08 (q, *J* = 6.8 Hz, 1H), 3.92 (m, 1H), 3.70 (s, 3H), 3.37 (m, 1H), 3.04 (t, *J* = 9.8 Hz, 1H), 1.96-1.84 (m, 2H), 1.74 (ddd, *J* = 4.6, 10.1, 10.1 Hz, 1H), 1.59-1.24 (m, 19H), 1.32 (d, *J* = 6.8 Hz, 3H), 0.86 (t, *J* = 7.0 Hz, 3H); ^{13}C NMR ($CDCl_3$, 125 MHz) 170.3, 72.1, 69.1, 65.43, 65.35, 57.3, 51.8, 39.2, 37.6, 31.9, 29.7, 29.6, 29.5, 29.3, 28.9, 27.3, 25.7, 22.6, 16.6, 14.1 ppm; HRMS (FAB, MH^+) calcd for $C_{20}H_{38}NO_4$ 355.2801, found 355.2840.



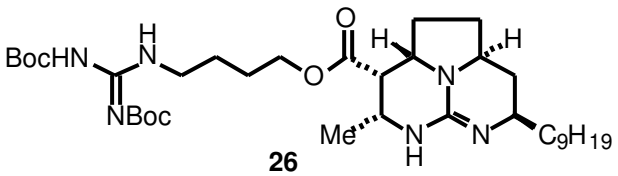
19

Compound **19**: IR (neat) 3360, 2954, 2928, 2856, 1470 cm^{-1}; ^1H NMR ($CDCl_3$, 500 MHz) δ 3.97, (m, 1H), 3.75 (m, 1H), 3.67 (m, 1H), 3.62 (dd, *J* = 4.0, 10.4 Hz, 1H), 3.51 (dd, *J* = 4.6, 10.4 Hz, 1H), 3.36 (m, 1H), 2.04 (m, 1H), 1.84 (m, 1H), 1.78 (m, 1H), 1.71 (m, 1H), 1.62-1.20 (m, 19H), 1.17 (d, *J* = 6.1 Hz, 3H), 0.88 (t, *J* = 7.0 Hz, 3H), 0.87 (s, 9H), 0.86 (s, 9H), 0.040 (s, 3H), 0.035 (s, 3H), 0.02 (s, 6H); ^{13}C NMR ($CDCl_3$, 125 MHz) 71.1, 66.7, 62.7, 58.9, 53.6, 48.7, 41.9, 36.7, 33.0, 31.9, 29.7, 29.6, 29.5, 29.3, 26.2, 25.9, 25.8, 25.5, 22.6, 21.9, 18.1, 18.0, 14.1 –4.47, -4.52, -5.56, -5.71 ppm; HRMS (FAB, MH^+) calcd for $C_{31}H_{68}NO_3Si_2$ 558.4738, found 558.4733.



24

Compound 24: IR (neat) 3332, 2929, 2856, 1724, 1614, 1455, 1416 cm^{-1}; ^1H NMR ($CDCl_3$, 500 MHz) δ 8.20 (brs, 1H), 7.25-7.12 (m, 10H), 5.05 (d, *J* = 11.5 Hz, 1H), 4.87 (d, *J* = 12.5 Hz, 1H), 4.80 (d, *J* = 12.5 Hz, 1H), 4.77 (d, *J* = 11.5 Hz, 1H), 4.39 (m, 1H), 3.99 (m, 3H), 3.76 (m, 2H), 3.31 (m, 2H), 3.11 (dd, *J* = 4.9, 7.3 Hz, 1H), 2.17 (m, 2H), 1.80-1.18 (m, 25H), 1.40 (s, 9H), 1.39 (s, 9H), 1.28 (d, *J* = 6.7 Hz, 3H), 0.78 (t, *J* = 7.0 Hz, 3H), 0.77 (s, 9H), -0.048 (s, 3H), -0.056 (s, 3H); ^{13}C NMR ($CDCl_3$, 125 MHz) 169.8, 163.6, 160.0, 156.1, 153.3, 152.9, 150.0, 137.2, 135.6, 128.3-128.0 (12 carbons), 127.4, 83.1, 79.2, 71.1, 68.1, 66.8, 64.8, 58.5, 56.2, 52.2, 50.1, 40.7, 40.5, 40.4, 40.2, 37.4, 31.9, 29.9, 29.6, 29.3, 28.8, 28.3, 28.02, 27.98, 27.5, 25.9, 25.8, 25.6, 24.4, 22.7, 18.0, 16.4, 14.1, -4.32, -4.40 ppm; HRMS (FAB, MH^+) calcd for $C_{57}H_{91}N_6O_{11}Si$ 1063.6515, found 1063.6475. NOEs were observed from H-7 to H-8 and H-15.



26

Compound **26**: IR (neat) 2929, 1720, 1615, 1457, 1416 cm^{-1}; ^{1}H NMR ($CDCl_3$, 500 MHz) δ 4.19 (t, *J* = 6.4 Hz, 2H), 3.96 (m, 1H), 3.85 (m, 1H), 3.52 (m, 2H), 3.38 (m, 2H), 3.15 (dd, *J* = 4.4, 4.8 Hz, 1H), 2.35 (dd, *J* = 2.0, 4.9, 12.7 Hz, 1H), 2.22 (m, 2H), 1.75-1.27 (m, 23H), 1.52 (s, 9H), 1.47 (s, 9H), 1.28 (d, *J* = 7.0 Hz, 3H), 0.89 (t, *J* = 6.8 Hz, 3H); ^{13}C NMR ($CDCl_3$, 125 MHz) 179.5, 164.5, 157.7, 154.2, 151.4, 84.6, 80.6, 65.8, 57.7, 57.3, 53.2, 49.8, 45.8, 41.4, 37.1, 34.3, 33.0, 31.4, 30.6, 30.5, 29.4, 28.6, 28.2, 27.0, 26.3, 23.7, 18.5, 14.4 ppm; HRMS (FAB, MH^+) calcd for $C_{35}H_{63}N_6O_6$ 663.4809, found 663.4835.