SYNTHESIS OF TEDANOLIDE AND 13-DEOXYTEDANOLIDE. ASSEMBLY OF A COMMON C(1)-C(11) SUBTARGET

SUPPORTING INFORMATION

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Oxazolidinone (+)-11. Colorless oil; $[a]_D^{20}$ +52° (*c* 0.42, $CHCl_3$); IR ($CHCl_3$) 3680 (w), 3540 (br), 3020 (m), 1780 (s), 1690 (m), 1380 (m), 1230 (m), 1210 (m), 910 (m), 690 (w) cm^{-1}; ^1H NMR (500 MHz, $CDCl_3$) δ 7.32 (m, 5 H), 4.66 (dddd, *J* = 3.1, 3.1, 3.1, 6.9 Hz, 1 H), 4.22-4.11 (m, 3 H), 4.02 (dd, *J* = 6.7, 8.2 Hz, 1 H), 3.87-3.77 (m, 3 H), 3.25 (dd, *J* = 3.1, 13.4 Hz, 1 H), 2.76 (dd, *J* = 9.5, 13.4 Hz, 1 H), 2.46 (d, *J* = 6.6 Hz, 1 H), 1.41 (s, 3 H), 1.34 (s, 3 H), 1.31 (d, *J* = 6.9 Hz, 3 H); ^{13}C NMR (125 MHz, $CDCl_3$) δ 175.2, 152.9, 135.1, 129.4, 128.9, 127.4, 109.6, 76.8, 71.6, 66.18, 66.16, 55.3, 41.2, 37.7, 26.4, 25.3, 12.2; high resolution mass spectrum (CI, NH_3) *m/z* 364.1752 $[(M+H)^+$; calcd for $C_{19}H_{26}NO_6$: 364.1759].

Anal. Calcd for $C_{19}H_{25}O_6NO_6$; C, 62.80; H, 6.93; N, 3.85. Found: C, 62.90; H, 7.20; N, 3.93.

Aldehyde (+)-12. Colorless oil; $[\alpha]_D^{20}$ +31° (*c* 1.4, C_6H_6); IR ($CHCl_3$) 2940 (s), 2860 (s), 1730 (s), 1460 (m), 1380 (s), 1370 (s), 1260 (s), 1210 (m), 1150 (s), 1120 (s), 1060 (s), 940 (w), 830 (s), 780 (s) cm^{-1}; ^1H NMR (500 MHz, C_6D_6) δ 9.4 (s, 1 H), 3.91 (m, 2 H), 3.57 (dd, *J* = 6.0, 8.0 Hz, 1 H), 3.34 (apparent t, *J* = 7.3 Hz, 1 H), 1.73 (dq, *J* = 3.0, 7.0 Hz, 1 H), 1.35 (s, 3 H), 1.24 (s, 3 H), 0.93 (m, 12 H), 0.11 (s, 3 H), 0.05 (s, 3 H); ^{13}C (125 MHz, C_6D_6) δ 201.5, 109.6, 77.8, 73.1, 65.7, 49.3, 26.5, 26.0, 25.5, 18.4, 8.1, -4.0, -4.8; high resolution mass spectrum (CI, NH_3) *m/z* 320.2251 $[(M+NH_4)^+$; calcd for $C_{15}H_{34}NO_4Si$: 320.2257].

Acetal (+)-13. Colorless oil; $[\alpha]_D^{20}$ +21° (*c* 0.44, $CHCl_3$); IR ($CHCl_3$) 3520 (s), 1620 (m), 1520 (m), 1460 (m), 1370 (m), 1360 (m), 1250 (s), 1220 (s), 1160 (m), 1130 (m), 1050 (s), 930 (m), 910 (m), 780 (s), 730 (s), 660 (s) cm^{-1}; ^1H NMR (500 MHz, $CDCl_3$) δ 7.39 (dd, *J* = 1.9, 8.6 Hz, 2 H), 6.86 (dd, *J* = 2.0, 8.8 Hz, 2 H), 5.41 (s, 1 H), 4.07 (m, 1 H), 4.00 (m, 2 H), 3.94 (dd, *J* = 5.9, 7.9 Hz, 1 H), 3.78 (m, 1 H), 3.77 (s, 3 H), 3.67 (dd, *J* = 1.4, 8.0 Hz, 1 H), 3.41 (dd, *J* = 8.2, 8.6 Hz, 1 H), 1.69 (m, 1 H), 1.45 (m, 1 H), 1.39 (s, 3 H), 1.33 (s, 3 H), 1.15 (d, *J* = 6.8 Hz, 3 H), 1.00 (d, *J* = 6.5 Hz, 3 H), 0.90 (s, 9 H), 0.12 (s, 3 H), 0.07 (s, 3 H); ^{13}C NMR (125 MHz, $CDCl_3$) δ 159.8, 131.5, 127.2, 113.5, 109.1, 101.9, 81.3, 79.0, 73.5, 73.1, 66.0, 55.2, 37.4, 29.3, 26.7, 26.0, 25.7,

18.5, 11.4, 9.6, -3.5, -5.2; high resolution mass spectrum (CI, NH_3) *m/z* 481.2980 [$(M+H)^+$; calcd for $C_{26}H_{45}O_6Si$: 481.2985].

(+)-14. Colorless oil; $[\alpha]_D^{20}$ +4.8° (*c* 1.6, $CHCl_3$); IR ($CHCl_3$) 2980 (m), 1620 (m), 1590 (w), 1520 (m), 1470 (m), 1370 (m), 1300 (m), 1250 (s), 1170 (s), 1120 (m), 1110 (m), 1080 (s), 1050 (s), 1000 (m), 970 (m), 930 (m), 870 (w), 830 (m), 620 (w) cm^{-1}; ^1H NMR (500 MHz, $CDCl_3$) δ 7.38 (dd, *J* = 1.9, 6.7 Hz, 2 H), 6.86 (dd, *J* = 1.9, 6.7 Hz, 2 H), 5.44 (s, 1 H), 4.25 (ddd, *J* = 6.0, 8.3, 8.3 Hz, 1 H), 4.07 (dd, *J* = 2.3, 11.2 Hz, 1 H), 4.01 (dd, *J* = 1.3, 11.2 Hz, 1 H), 3.97 (dd, *J* = 6.0, 8.1 Hz, 1 H), 3.82 (dd, *J* = 2.0, 9.7 Hz, 1 H), 3.77 (s, 3 H), 3.51 (s, 3 H), 3.46 (apparent t, *J* = 8.3 Hz, 1 H), 3.19 (dd, *J* = 1.8, 8.0 Hz, 1 H), 1.70 (m, 1 H), 1.55 (m, 1 H), 1.40 (s, 3 H), 1.36 (s, 3 H), 1.16 (d, *J* = 6.9 Hz, 3 H), 1.00 (d, *J* = 6.7 Hz, 3 H); ^{13}C (125 MHz, $CDCl_3$) δ 159.8, 131.5, 127.1, 113.5, 109.4, 101.8, 81.2, 81.0, 79.4, 73.6, 66.2, 59.9, 55.2, 36.9, 30.0, 26.7, 25.8, 11.3, 10.1; high resolution mass spectrum (CI, NH_3) *m/z* 381.2271 [$(M+H)^+$; calcd for $C_{21}H_{33}O_6$: 381.2277].

Anal. Calcd. for $C_{21}H_{32}O_6$; C, 66.28; H, 8.48. Found: C, 65.88; H, 8.58.

(-)-15. A solution of (+)-**16** (992 mg, 2.60 mmol) in dichloromethane (26 mL) was cooled to -78 °C, treated dropwise with DIBAL-H (neat, 1.40 mL, 7.80 mmol) and warmed to -10 °C. The reaction mixture was stirred for 15 minutes then immediately diluted with MeOH (5 mL) and saturated aqueous Rochelle's salt (30 mL). The resultant mixture was stirred vigorously until two clear layers were obtained (1 h). The layers were separated and the aqueous layer was extracted with Et_2O (3 x 50 mL). The combined organic layers were washed with brine (75 mL), dried over Na_2SO_4, filtered, and concentrated in vacuo. Flash chromatography (20%→40% ethyl acetate/hexanes) provided 905 mg (91% yield) as a colorless oil: $[\alpha]_D^{20}$ -18° (*c* 0.42, $CHCl_3$); IR ($CHCl_3$) 3640 (w), 3500 (br), 3000 (m), 1610 (m), 1520 (m), 1460 (m), 1380 (m), 1370 (m), 1300 (w), 1250 (br), 1040 (s), 920 (w), 840 (w), 820 (w) cm^{-1}; ^1H NMR (500 MHz, $CDCl_3$) δ 7.24 (d, *J* = 8.5 Hz, 2 H), 6.85 (d, *J* = 8.5 Hz, 2 H), 4.50 (q, J_{AB} = 10.8 Hz, $\Delta\upsilon_{AB}$ = 10.3 Hz, 2 H), 4.21 (m, 1 H), 3.95 (dd, *J* = 6.2, 8.0 Hz, 1 H), 3.77 (s, 3 H), 3.58 (m, 3 H), 3.51 (m, 4 H), 2.91 (dd, *J* = 2.9, 7.1 Hz, 1 H), 2.00 (m, 1 H),

1.84 (apparent t, J = 5.1 Hz, 1 H), 1.71 (m, 1 H), 1.39 (s, 3 H), 1.35 (s, 3 H), 1.03 (d, J = 1.0 Hz, 3 H), 0.88 (d, J = 6.9, 3 H); ^{13}C NMR (125 MHz, $CDCl_3$) δ 159.2, 130.8, 129.3, 113.8, 109.2, 83.0, 80.6, 78.6, 74.2, 66.2, 66.1, 60.1, 55.2, 38.1, 37.9, 26.6, 25.8, 10.9, 10.8; high resolution mass spectrum *m/z* 383.2433 [$(M+H)^+$; calcd for $C_{21}H_{35}O_6$: 383.2433].

Anal. Calcd for $C_{21}H_{34}O_6$; C, 65.94; H, 8.96. Found: C, 65.89; H, 8.86.

Aldehyde (+)-7. Colorless oil; $[\alpha]_D^{20}$ +23° (*c* 0.50, C_6H_6); IR (C_6H_6) 2980 (s), 2700 (w), 1730 (s), 1610 (m), 1510 (s), 1455 (m), 1380 (m), 1250 (s), 1040 (s), 730 (m) cm^{-1}; ^{1}H NMR (500 MHz, C_6H_6) δ 9.63 (s, 1 H), 7.15 (d, J = 8.1 Hz, 2 H), 6.76 (d, J = 8.6 Hz, 2 H), 4.26 (q, J_{AB} = 10.7 Hz, $\Delta\upsilon_{AB}$ = 33.1 Hz, 2 H), 4.17 (ddd, J = 6.3, 6.3, 8.5 Hz, 1 H), 3.93 (dd, J = 2.8, 7.7 Hz, 1 H), 3.70 (dd, J = 6.2, 8.0 Hz, 1 H), 3.39 (s, 3 H), 3.37 (apparent t, J = 8.2 Hz, 1 H), 3.27 (s, 3 H), 3.01 (dd, J = 2.6, 6.8 Hz, 1 H), 2.39 (dq, J = 2.8, 7.1 Hz, 1 H), 1.57 (m, 1 H), 1.38 (s, 3 H), 1.31 (s, 3 H), 1.05 (d, J = 7.0 Hz, 3 H), 0.99 (d, J = 6.9 Hz, 3 H); ^{13}C NMR (125 MHz, C_6H_6) δ 202.9, 159.8, 129.5, 128.1, 114.0, 109.4, 82.7, 79.5, 79.0, 73.6, 66.4, 59.5, 54.7, 49.4, 38.6, 26.8, 26.0, 11.3, 7.9; high resolution mass spectrum (CI, NH_3) *m/z* 398.2548 [$(M+NH_4)^+$; calcd for $C_{21}H_{36}NO_6$: 398.2542].

(-)-17. Colorless oil; $[\alpha]_D^{20}$ -20.9° (*c* 1.35, $CHCl_3$); IR ($CHCl_3$) 2980 (m), 1620 (w), 1450 (w), 1430 (w), 1380 (w), 1280 (w), 710 (w) cm^{-1}; ^{1}H NMR (500 MHz, $CDCl_3$) δ 6.43 (d, J = 9.4 Hz, 1 H), 4.05 (d, J = 6.0 Hz, 1 H), 2.92-2.83 (m, 5 H), 2.11-2.05 (m, 1 H), 1.89-1.82 (m, 1 H), 1.18 (d, J = 6.8 Hz, 3 H); ^{13}C NMR (125 MHz, $CDCl_3$) δ 139.8, 89.8, 52.4, 43.1, 30.5, 30.3, 25.8, 16.6; high resolution mass spectrum (CI, NH_3) *m/z* 330.8782 [$(M+H)^+$; calcd for $C_8H_{13}Br_2S_2$: 330.8825].

(-)-18. Colorless oil; $[\alpha]_D^{20}$ -12° (*c* 1.00, $CHCl_3$); IR ($CHCl_3$) 2900 (m), 2360 (w), 1450 (m), 1430 (m), 1380 (m), 1280 (m), 1250 (m), 1180 (m), 910 (w), 900 (w), 740 (m) cm^{-1}; ^{1}H NMR (500 MHz, $CDCl_3$) δ 4.04 (d, J = 5.8 Hz, 1 H), 2.84 (m, 4 H), 2.07 (m, 2 H), 1.86 (m, 1 H), 1.80 (d, J = 2.3 Hz, 3 H), 1.30 (d, J = 6.9 Hz, 3 H); ^{13}C NMR (125 MHz, $CDCl_3$) δ 79.7, 78.6, 53.3, 32.0, 30.54, 30.51,

25.8, 19.2, 3.6; high resolution mass spectrum (CI, NH_3) *m/z* 187.0606 [$(M+H)^+$; calcd for $C_9H_{15}S_2$: 187.0615].

Vinyl Iodide (-)-8. Pale yellow oil; $[\alpha]_D^{20}$ -30° (*c* 1.8, C_6H_6); IR (CCl_4) 2900 (s), 1630 (m), 1420 (m), 1380 (m), 1280 (m), 1180 (m), 1140 (m), 1090 (m), 1040 (m), 910 (m), 860 (m), 740 (m) cm^{-1}; ^1H NMR (500 MHz, $CDCl_3$) δ 6.27 (dq, *J* = 1.4, 2.9 Hz, 1 H), 3.60 (d, *J* = 6.7 Hz, 1 H), 2.62 (m, 1 H), 2.34-2.26 (m, 4 H), 2.13 (d, *J* = 1.5 Hz, 3 H), 1.50 (m, 1 H), 1.38 (m, 1 H), 1.01 (d, *J* = 6.8 Hz, 3 H); ^{13}C NMR (125 MHz, $CDCl_3$) δ 143.1, 95.2, 53.5, 40.7, 30.5, 30.3, 27.9, 26.0, 17.8; high resolution mass spectrum (CI, NH_3) *m/z* 314.9738 [$(M+H)^+$; calcd for $C_9H_{16}IS_2$: 314.9738].

(-)-20/(-)-21. To a solution of (-)-**8** (181 mg, 0.576 mmol) in Et_2O/pentane (4:1, 3 mL) at -78 °C was added *t*-BuLi (1.7 M in pentane, 0.64 mL, 1.094 mmol). After stirring for 25 min, a white precipitate was observed. The solution was added via cannula to a solution of (+)-**7** (109 mg, 0.288 mmol) in Et_2O/pentane (4:1, 3 mL) at -100 °C and stirred for 10 min before warming to -78 °C. After 15 min, the reaction mixture was quenched with MeOH (0.5 mL) and saturated aqueous $NaHCO_3$ (5 mL) and then diluted with Et_2O (15 mL). The layers were separated, and the aqueous layer was extracted with Et_2O (2 x 10 mL). The combined organic layers were washed with brine, dried over $MgSO_4$, filtered, and concentrated in vacuo. Flash chromatography (25% ethyl acetate/hexanes) afforded (-)-**20** and (-)-**21** as a 4:1 mixture of diastereomers (106 mg, 65% yield).

(-)-**20.** Colorless oil; $[\alpha]_D^{20}$ -49° (*c* 0.90, $CHCl_3$); IR ($CHCl_3$) 3600 (w), 3560-3400 (br), 2989 (s), 1620 (m), 1510 (m), 1460 (m), 1380 (m), 1370 (m), 1250 (s), 1110 (s), 1040 (s), 830 (w) cm^{-1}; ^1H NMR (500 MHz, $CDCl_3$) δ 7.25 (d, *J* = 8.6 Hz, 2 H), 6.84 (d, *J* = 8.6 Hz, 2 H), 5.50 (d, *J* = 9.7 Hz, 1 H), 4.59 (q, J_{AB} = 10.8 Hz, $\Delta\upsilon_{AB}$ = 35.0 Hz, 2 H), 4.22 (ddd, *J* = 6.3, 7.4, 7.4 Hz, 1 H), 4.17 (d, *J* = 4.7 Hz, 1 H), 4.03 (d, *J* = 6.5 Hz, 1 H), 3.95 (dd, *J* = 6.1, 8.0 Hz, 1 H), 3.77 (s, 3 H), 3.58 (dd, *J* = 2.7, 7.5 Hz, 1 H), 3.51 (s, 3 H), 3.49-3.43 (m, 2 H), 3.13 (dd, *J* = 2.7, 7.4 Hz, 1 H), 2.85-2.78 (m, 4 H), 2.41 (broad s, 1 H), 2.06 (m, 1 H), 1.90 (m, 1 H), 1.80 (m, 1 H), 1.68 (m, 1 H), 1.64 (s, 3 H), 1.39

(s, 3 H), 1.35 (s, 3 H), 1.15 (d, J = 6.7 Hz, 3 H), 1.03 (d, J = 6.9 Hz, 3 H), 0.90 (d, J = 6.9 Hz, 3 H); ^{13}C NMR (125 MHz, $CDCl_3$) δ 159.1, 136.5, 130.9, 129.0, 113.8, 109.3, 83.7, 82.8, 79.1, 74.3, 66.2, 60.1, 55.2, 54.8, 39.3, 38.0, 37.4, 30.8, 30.6, 26.7, 26.1, 25.8, 18.4, 13.2, 10.6, 7.4; high resolution mass spectrum (ESI) *m/z* 591.2831 [$(M+Na)^+$; calcd for $C_{30}H_{48}O_6S_2Na$: 591.2790].

(-)-**21.** Colorless oil; $[\alpha]_D^{20}$ -31° (*c* 0.90, $CHCl_3$); IR ($CHCl_3$) 3500-3400 (br), 2980 (s), 1620 (m), 1520 (m), 1450 (m), 1380 (m), 1370 (m), 1250 (m), 1110 (m), 840 (m) cm^{-1}; ^{1}H NMR (500 MHz, $CDCl_3$) δ 7.27 (d, J = 8.6 Hz, 2 H), 6.85 (d, J = 8.7 Hz, 2 H), 5.42 (d, J = 9.8 Hz, 1 H), 4.60 (q, J_{AB} = 10.9 Hz, $\Delta\upsilon_{AB}$ = 35.0 Hz, 2 H), 4.21 (ddd, J = 6.2, 8.3, 8.3 Hz, 1 H), 4.05 (d, J = 6.4 Hz, 1 H), 3.95 (dd, J = 6.1, 8.0 Hz, 1 H), 3.92 (dd, J = 3.3, 8.8 Hz, 1 H), 3.87 (dd, J = 1.7, 7.8 Hz, 1 H), 3.78 (s, 3 H), 3.53 (s, 3 H), 3.46 (apparent t, J = 8.2 Hz, 1 H), 3.08 (dd, J = 2.3, 7.4 Hz, 1 H), 2.88-2.80 (m, 5 H), 2.32 (d, J = 3.1 Hz, 1 H), 2.07 (m, 1 H), 1.94 (m, 1 H), 1.82 (m, 1 H), 1.67 (m, 1 H), 1.64 (s, 3 H), 1.40 (s, 3 H), 1.35 (s, 3 H), 1.13 (d, J = 6.7 Hz, 3 H), 1.03 (d, J = 6.9 Hz, 3 H), 0.73 (d, J = 6.9 Hz, 3 H); ^{13}C NMR (125 MHz, $CDCl_3$) δ 158.2, 137.3, 130.0, 129.1, 113.8, 109.4, 83.3, 80.1, 79.7, 78.8, 76.3, 73.9, 66.4, 60.0, 55.2, 54.8, 38.4, 37.5, 37.4, 30.9, 30.7, 26.7, 26.1, 25.8, 18.3, 11.4, 11.1, 10.7; high resolution mass spectrum (ESI) *m/z* 591.2786 [$(M+Na)^+$; calcd for $C_{30}H_{48}O_6S_2Na$: 591.2790].

(-)-3: Colorless oil; $[\alpha]_D^{20}$ -39° (*c* 1.3, $CHCl_3$); IR ($CHCl_3$) 2940 (s), 1610 (m), 1510 (m), 1460 (m), 1380 (m), 1370 (m), 1240 (s), 1040 (s), 870 (m) cm^{-1}; ^{1}H NMR (500 MHz, $CDCl_3$) δ 7.25 (d, J = 8.6 Hz, 2 H), 6.83 (d, J = 8.6 Hz, 2 H), 5.31 (d, J = 9.5 Hz, 1 H), 4.72 (d, J = 11.3 Hz, 1 H), 4.57 (d, J = 11.3 Hz, 1 H), 4.20 (m, 1 H), 4.18 (d, J = 9.8 Hz, 1 H), 4.03 (d, J = 5.7 Hz, 1 H), 3.94 (dd, J = 6.0, 7.9 Hz, 1 H), 3.77 (s, 3 H), 3.56 (apparent d, J = 8.1 Hz, 1 H), 3.50 (s, 3 H), 3.43 (apparent t, J = 8.3 Hz, 1 H), 3.13 (dd, J = 1.9, 7.7 Hz, 1 H), 2.86-2.80 (m, 5 H), 2.06 (m, 1 H), 1.86-1.80 (m, 2 H), 1.65 (s, 3 H), 1.55 (m, 1 H), 1.39 (s, 3 H), 1.34 (s, 3 H), 1.11 (d, J = 6.7 Hz, 3 H), 1.05-1.01 (m, 27 H); ^{13}C NMR (125 MHz, $CDCl_3$) δ 158.7, 138.2, 132.1, 131.3, 128.5, 113.6, 109.3, 82.7, 81.4, 80.3, 79.6, 74.2, 66.4, 59.8, 55.2, 40.2, 39.9, 37.5, 30.8, 30.6, 26.8, 26.2, 25.9, 18.4, 18.38, 18.31,

17.5, 12.8, 11.5, 11.1, 10.0; high resolution mass spectrum (ESI) *m/z* 747.4153 [(M+Na)$^+$; calcd for $C_{39}H_{68}O_6S_2SiNa$: 747.4124].

(-)-23. To a solution of (-)-**3** (8.5 mg, 0.0117 mmol) in 10% HMPA/THF (250 μL) at -78 °C was added *t*-BuLi (1.5 M in pentane, 15 μL, 0.0234 mmol) and the resulting yellow solution was stirred for 5 min before the addition of benzyl (*S*)-(+)-glycidyl ether (5 μL, 0.0351 mmol). After 10 min, the reaction mixture was quenched with saturated aqueous $NaHCO_3$ (5 mL) and diluted with Et_2O. The layers were separated, and the aqueous phase was extrated with Et_2O (2 x 5 mL). The organic layers were washed with brine, dried over $MgSO_4$, filtered and concentrated in vacuo. Flash chromatography (12% ethyl acetate/hexanes) provided 8.1 mg (78%) of (-)-**24** as a colorless oil. $[\alpha]_D^{20}$ -43° (*c* 0.40, $CHCl_3$); IR ($CHCl_3$) 3500 (w), 2920 (s), 1610 (w), 1510 (m), 1460 (m), 1450 (m), 1380 (m), 1370 (m), 1250 (s), 1040 (s) cm^{-1}; ^{1}H NMR (500 MHz, $CDCl_3$) δ 7.33-7.23 (m, 7 H), 6.81 (d, *J* = 8.6 Hz, 2 H), 5.59 (d, *J* = 9.8 Hz, 1 H), 4.82 (d, *J* = 11.0 Hz, 1 H), 4.59 (d, *J* = 11.0 Hz, 1 H), 4.50 (q, J_{AB} = 11.9 Hz, $\Delta\upsilon_{AB}$ = 21.4 Hz, 2 H), 4.25 (d, *J* = 9.8 Hz, 1 H), 4.25 (m, 1 H), 4.19 (ddd, *J* = 6.0, 8.6, 8.6 Hz, 1 H), 3.94 (dd, *J* = 6.0, 8.0 Hz, 1 H), 3.76 (s, 3 H), 3.65 (apparent d, *J* = 8.4 Hz, 1 H), 3.47 (s, 3 H), 3.43 (m, 2 H), 3.34 (dd, *J* = 7.2, 9.4 Hz, 1 H), 3.22 (m, 1 H), 3.15 (dd, *J* = 1.8, 7.7 Hz, 1 H), 2.88 (m, 1 H), 2.71 (m, 4 H), 2.13 (m, 2 H), 1.91 (m, 2 H), 1.78 (m, 1 H), 1.67 (d, *J* = 0.97 Hz, 3 H), 1.55 (m, 1 H), 1.39 (s, 3 H), 1.34 (s, 3 H), 1.15 (d, *J* = 6.8 Hz, 3 H), 1.05-0.99 (m, 27 H); ^{13}C NMR (125 MHz, $CDCl_3$) δ 158.8, 138.0, 137.7, 132.0, 130.4, 128.6, 128.4, 127.7, 127.6, 113.6, 109.3, 82.5, 81.5, 80.3, 79.7, 74.7, 74.4, 73.2. 68.0, 66.5, 59.7, 57.5, 55.2, 39.9, 39.8, 39.4, 38.8, 29.6, 26.8, 26.0, 25.9, 25.0, 18.4, 18.3, 15.0, 12.8, 11.6, 11.4, 9.9; high resolution mass spectrum (ESI) *m/z* 911.4972 [(M+Na)$^+$; calcd for $C_{49}H_{80}O_8S_2SiNa$: 911.4961].