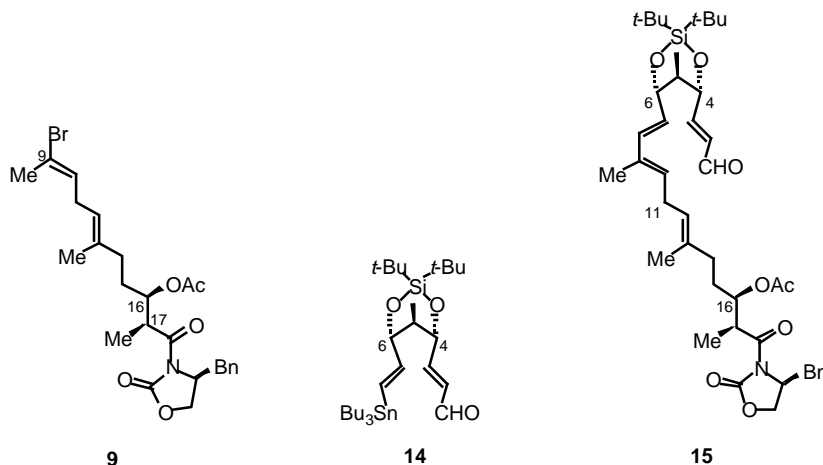


Supporting Information for:

## Postulated Biogenesis of WS9885B and Progress Towards an Enantioselective Synthesis

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**Acetate bromide 9:**  $[\alpha]_D^{25} +55.2$  (c 1.0,  $\text{CHCl}_3$ ); TLC:  $R_f = 0.55$  [silica gel, hexanes : EtOAc (3:1)]; IR (film):  $\nu_{\text{max}} = 1780, 1735, 1700 \text{ cm}^{-1}$  (C=O);  $^1\text{H NMR}$  (250 MHz,  $\text{CDCl}_3$ ):  $\delta = 7.33\text{--}7.18$  (m, 5H, ArH), 5.81–5.74 (m, 1H, C-10), 5.20–5.14 (m, 1H, C-16), 5.09–5.02 (m, 1H, C-12), 4.59–4.50 (m, 1H, CHN), 4.31–4.25 (m, 1H,  $\text{CHHOCON}$ ), 4.17–4.13 (m, 1H,  $\text{CHHOCON}$ ), 4.01–3.91 (m, 1H, C-17), 3.27 (dd, 1H,  $\text{CHHAr}$ ,  $J = 3.3, 13.2 \text{ Hz}$ ), 2.80–2.75 (m, 1H,  $\text{CHHAr}$ ), 2.71–2.66 (m, 2H, C-11), 2.22 (s, 3H, C-9  $\text{CH}_3$ ), 2.03 (s, 3H,  $\text{OCOCH}_3$ ), 1.61 (s, 3H, C-13  $\text{CH}_3$ ), 1.20 (d, 3H, C-17,  $J = 6.9 \text{ Hz}$ );  $^{13}\text{C NMR}$  (125 MHz,  $\text{CDCl}_3$ ):  $\delta = 173.9, 170.8, 153.7, 135.4, 135.3, 130.6, 129.4, 128.9, 127.2, 121.4, 119.3, 73.0, 66.4, 55.8, 41.4, 37.9, 35.5, 30.3, 28.4, 23.1, 20.8, 15.9, 9.8$ ; HRMS (MALDI-FTMS):  $m/z$  calcd for  $[M + \text{Na}]^+$  528.1362, found 528.1344.

**Enal stannane 14:** TLC:  $R_f = 0.50$  [silica gel, hexanes :  $\text{Et}_2\text{O}$  (4:1)]; IR (film):  $\nu_{\text{max}} = 1700 \text{ cm}^{-1}$  (C=O);  $^1\text{H NMR}$  (250 MHz,  $\text{CDCl}_3$ ):  $\delta = 9.63$  (d, 1H, CHO,  $J = 8.0 \text{ Hz}$ ), 6.72 (dd, 1H, C-3,  $J = 2.9, 15.4 \text{ Hz}$ ), 6.47 (ddd, 1H, C-2,  $J = 1.8, 2.9, 15.4 \text{ Hz}$ ), 6.27 (dd, 1H, C-8,  $J = 1.8, 19.0 \text{ Hz}$ ), 5.87 (dd, 1H, C-7,  $J = 3.7, 19.0 \text{ Hz}$ ), 5.18–5.15 (m, 1H, C-4), 4.93–4.90 (m, 1H, C-6), 1.97–1.90 (m, 1H, C-5), 1.58–1.23 (m, 18H,  $n\text{-BuCH}_2$ ), 1.09 (s, 9H,  $\text{SiC}(\text{CH}_3)_3$ ), 1.08 (s, 9H,  $\text{SiC}(\text{CH}_3)_3$ ), 0.93–0.85 (m, 9H,  $n\text{-BuCH}_3$ ), 0.82 (d, 3H, C-5  $\text{CH}_3$ ,  $J = 6.9 \text{ Hz}$ );  $^{13}\text{C NMR}$  (62 MHz,  $\text{CDCl}_3$ ):  $\delta = 193.4, 158.2, 148.0, 131.2, 126.9, 78.8, 76.1, 40.0, 29.1, 28.6, 27.6, 27.2, 23.5, 20.8, 13.7, 9.5, 6.4$ ; HRMS (FAB):  $m/z$  calcd for  $[M + \text{Na}]^+$  623.2924, found 623.2947.

**Stille coupling product 15:**  $[\alpha]_D^{25} +45.3$  (c 1.0,  $\text{CHCl}_3$ ); TLC:  $R_f = 0.73$  [silica gel, hexanes : EtOAc (2:1)]; IR (film):  $\nu_{\text{max}} = 1780, 1735, 1695 \text{ cm}^{-1}$  (C=O);  $^1\text{H NMR}$  (600 MHz,  $\text{CDCl}_3$ ):  $\delta = 9.64$  (d, 1H, CHO,  $J = 7.9 \text{ Hz}$ ), 7.34–7.20 (m, 5H, Ph), 6.72 (dd, 1H, C-3,  $J = 2.8, 15.6 \text{ Hz}$ ), 6.48 (dd, 1H, C-2,  $J = 8.3, 15.3 \text{ Hz}$ ), 6.33 (d, 1H, C-8,  $J = 15.8 \text{ Hz}$ ), 5.50 (dd, 1H, C-7,  $J = 4.8, 15.4 \text{ Hz}$ ), 5.46 (m, 1H, C-10), 5.20–5.18 (m, 2H, C-4 and C-16), 5.12 (m, 1H, C-12), 5.02 (m, 1H, C-6), 4.57–4.54 (m, 1H, CHN), 4.28–4.26 (m, 1H,  $\text{CHHOCON}$ ), 4.17–4.14 (m, 1H,  $\text{CHHOCON}$ ), 4.00–3.96 (m, 1H, C-17), 3.27 (dd, 1H,  $\text{CHHAr}$ ,  $J = 3.1, 13.6 \text{ Hz}$ ), 2.84–2.82 (m, 2H, C-11), 2.78–2.74 (m, 1H,  $\text{CHHAr}$ ), 2.03 (s, 3H,  $\text{OCOCH}_3$ ), 2.00–1.95 (m, 2H, C-14), 1.92–1.88 (m, 1H, C-5), 1.78 (s, 3H, C-9  $\text{CH}_3$ ), 1.71–1.68 (m, 2H, C-15), 1.64 (s, 3H, C-13  $\text{CH}_3$ ), 1.21 (d, 3H, C-17  $\text{CH}_3$ ,  $J = 6.6 \text{ Hz}$ ), 1.09 (s, 9H,  $\text{SiC}(\text{CH}_3)_3$ ), 1.08 (s, 9H,  $\text{SiC}(\text{CH}_3)_3$ ), 0.86 (d, 3H, C-5  $\text{CH}_3$ ,  $J = 7.0 \text{ Hz}$ );  $^{13}\text{C NMR}$  (100 MHz,  $\text{CDCl}_3$ ):  $\delta = 193.4, 174.0, 170.9, 158.0, 153.7, 135.4, 134.4, 134.2, 132.8, 131.2, 129.4, 128.9, 127.3, 122.8, 77.2, 76.1, 73.2, 66.3, 55.8, 41.4, 40.6, 37.9, 35.6, 30.4, 28.6, 27.6, 27.2, 23.5, 20.8, 20.7, 16.0, 12.5, 9.8, 6.4$ ; HRMS (FAB):  $m/z$  calcd for  $[M + \text{Cs}]^+$  868.3221, found 868.3239.