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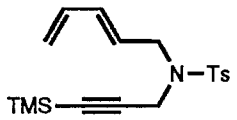
Supplementary Data



Data for compound **1**:

^{1}H-NMR ($CDCl_3$, 300 MHz) δ 7.73 (dm, J=8.2, 2H), 7.26 (dm, J=8.2, 2H), 6.39–6.16 (m, 2H), 5.60 (dt, J=14.1, 7.1, 1H), 5.21 (d, J=15.2, 1H), 5.13 (d, J=8.5, 1H), 4.09 (s, 2H), 3.85 (d, J=7.1, 2H), 2.43 (s, 3H), 0.01 (s, 9H) ppm.

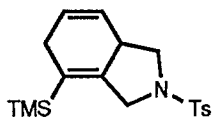
^{13}C-NMR ($CDCl_3$, 75 MHz) δ 143.34, 135.85, 135.76, 135.53, 129.45, 127.73, 126.87, 118.24, 97.74, 90.95, 48.00, 36.86, 21.48, –0.46 ppm.

FTIR (neat) 2960.1, 2177.0, 1599.7, 1428.0, 1350.5, 1250.2, 1162.6, 1093.4, 1002.0, 904.0, 844.6, 746.0, 665.4 cm^{-1}.

HRMS: (EI) Calculated for $C_{18}H_{24}NO_2SiS$: 346.12970 $(M–H)^+$; Found: 346.12890.

Melting Point (uncorrected): 95.5–98.0 °C.

TLC (17% EtOAc/hexanes): R_f = 0.30 (black stain with p-anisaldehyde).



Data for compound **2**:

^{1}H-NMR ($CDCl_3$, 300 MHz) δ 7.71 (dm, J=8.2, 2H), 7.30 (dm, J=8.0, 2H), 5.82 (dm, J=9.8, 1H), 5.67 (dm, J=9.9, 1H), 4.07 (dm, J=13.8, 1H), 3.84 (dd, J=8.1, 8.1, 1H), 3.73 (d, J=13.8, 1H), 3.04–2.87 (m, 1H), 2.75–2.49 (m, 2H), 2.56 (dd, J=11.6, 8.6, 1H), 2.43 (s, 3H), 0.07 (s, 9H) ppm.

^{13}C-NMR ($CDCl_3$, 75 MHz) δ 143.53, 143.19, 133.11, 129.67, 127.58, 127.43, 127.26, 123.41, 52.24, 50.93, 39.07, 29.74, 21.50, –1.26 ppm.

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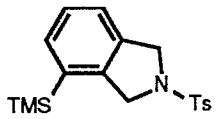
FTIR (neat) 3029.9, 2953.0, 2854.8, 2360.8, 2340.1, 1665.6, 1631.5, 1597.9, 1451.7, 1404.9, 1347.5, 1249.7, 1160.1, 1094.8, 1055.5, 1013.5, 882.3, 836.2, 753.0, 717.8, 668.0 cm^{-1}.

HRMS: (EI) Calculated for $C_{18}H_{24}NO_2SiS$: 346.12970 $(M–H)^+$; Found: 346.13070.

Melting Point (uncorrected): 118.5–120.5 °C.

TLC (17% EtOAc/hexanes): $R_f = 0.22$ (red-brown stain with p-anisaldehyde).



Data for compound **3**:

^{1}H-NMR ($CDCl_3$, 300 MHz) δ 7.77 (dm, J=8.3, 2H), 7.38–7.13 (m, 3H), 7.32 (dm, J=8.1, 2H), 4.65 (s, 2H), 4.60 (s, 2H), 2.40 (s, 3H), 0.27 (s, 9H) ppm.
13C-NMR (CDCl3, 75 MHz) d 143.65, 140.99, 135.29, 134.63, 133.56, 133.24, 129.78, 127.55, 127.08, 123.23, 54.31, 53.29, 21.49, –0.96 ppm.

^{13}C-NMR ($CDCl_3$, 75 MHz) δ 143.65, 140.99, 135.29, 134.63, 133.56, 133.24, 129.78, 127.55, 127.08, 123.23, 54.31, 53.29, 21.49, –0.96 ppm.

FTIR (neat) 3061.8, 2954.4, 2854.4, 1597.5, 1493.3, 1460.1, 1424.0, 1348.4, 1316.0, 1250.3, 1164.9, 1096.1, 1063.3, 1017.1, 909.3, 838.7, 780.7, 753.8, 709.0, 672.1, 649.9 cm^{-1}.

HRMS: (EI) Calculated for $C_{18}H_{23}NO_2SiS$: 345.121879 (M^+); Found: 345.120972.

TLC (17% EtOAc/hexanes): $R_f = 0.19$ (yellow stain with p-anisaldehyde).

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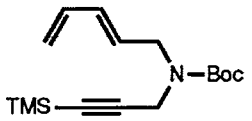


Data for compound **4**:

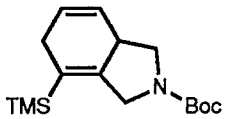
^{1}H-NMR ($CDCl_3$, 300 MHz) δ 6.33 (ddd, J=17.0, 10.2, 10.0, 1H), 6.19 (dd, J=14.8, 10.7, 1H), 5.65 (dt, J=15.1, 6.4, 1H), 5.19 (d, J=16.5, 1H), 5.08 (d, J=9.9, 1H), 4.15–3.94 (m, 2H), 3.97 (d, J=6.1, 2H), 1.47 (s, 9H), 0.16 (s, 9H) ppm.

^{13}C-NMR ($CDCl_3$, 75 MHz) δ 154.80, 136.21, 133.32, 128.97, 117.11, 101.43, 80.18, 47.45, 36.45, 28.31, –0.15 ppm.

FTIR (neat) 2970.2, 2177.3, 1811.9, 1701.2, 1604.1, 1451.3, 1403.6, 1364.7, 1247.6, 1167.1, 1114.4, 1008.3, 953.0, 904.8, 847.6, 763.3, 699.3, 640.9 cm^{-1}.

HRMS: (CI/NH_3) Calculated for $C_{16}H_{28}NO_2Si$: 294.1889328 $(MH)^+$; Found: 294.1891.

TLC (17% EtOAc/hexanes): R_f = 0.44 (yellow-brown with p-anisaldehyde).



Data for compound **5**:

^{1}H-NMR ($CDCl_3$, 300 MHz) δ 5.91–5.82 (m, 1H), 5.76 (dd, J=10.3, 9.7, 1H), 4.12–3.82 (m, 3H), 3.14–2.95 (m, 1H), 2.86 (dd, J=11.2, 9.8, 1H), 2.81–2.56 (m, 2H), 1.48 (s, 9H), 0.13 (s, 9H) ppm.

^{13}C-NMR ($CDCl_3$, 75 MHz) δ 164.66, 144.13, 126.89, 126.68, 126.46, 124.44, 124.26, 79.29, 50.57, 49.95, 49.62, 38.95, 38.34, 29.77, 29.66, 28.47, 28.27, –1.20, –1.32 ppm.

FTIR (neat) 3027.7, 2974.0, 2863.4, 2814.3, 1698.0, 1634.0, 1478.6, 1454.0, 1403.7, 1365.8, 1349.6, 1249.9, 1161.1, 1108.7, 1032.6, 882.3, 836.1, 771.1, 752.9, 711.8 cm^{-1}.

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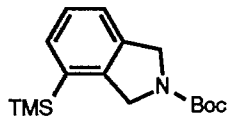
HRMS: (CI/NH_3) Calculated for $C_{16}H_{26}NO_2Si$: 292.1732827 $(M–H)^+$; Found: 292.1725.

TLC (17% EtOAc/hexanes): $R_f = 0.38$ (brown-yellow with p-anisaldehyde).



Data for compound **6**:

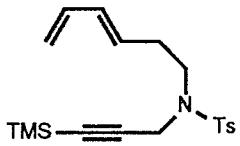
^{1}H-NMR ($CDCl_3$, 300 MHz) δ 7.44–7.37 (m, 1H), 7.29–7.20 (m, 2H), 4.77–4.62 (m, 4H), 1.53 (s, 9H), 0.30 (s, 9H) ppm.

^{13}C-NMR ($CDCl_3$, 75 MHz) δ 154.61, 154.50, 142.18, 141.84, 136.40, 136.07, 134.63, 134.23, 132.87, 126.70, 123.45, 123.20, 79.65, 52.96, 52.73, 51.86, 51.56, 28.52, 28.39, –0.84, –0.95 ppm.

FTIR (neat) 2971.6, 2902.3, 2862.3, 2360.5, 2341.2, 1701.9, 1477.4, 1395.7, 1365.4, 1250.2, 1171.7, 1142.2, 1112.2, 910.8, 883.7, 837.9, 775.2, 752.6 cm^{-1}.

HRMS: (EI) Calculated for $C_{16}H_{25}NO_2Si$: 291.165458 (M^+); Found: 291.165905.

TLC (17% Solvent/Solvent): Rf = 0.40 (bright yellow with p-anisaldehyde).



Data for compound **7**:

^{1}H-NMR ($CDCl_3$, 300 MHz) δ 7.72 (dm, J=8.4, 2H), 7.28 (dm, J=8.0, 2H), 6.30 (ddd, J=16.8, 10.3, 10.2, 1H), 6.12 (dd, J=15.2, 10.5, 1H), 5.66 (dt, J=15.3, 6.9, 1H), 5.13 (dd, J=16.3, 1.4, 1H), 5.02 (dd, J=10.2, 1.4), 4.14 (s, 3H), 3.22 (t, J=7.4, 2H), 2.42 (s, 3H), 2.38 (dt, J=7.2, 7.1, 2H), –0.12 (s, 9H) ppm.

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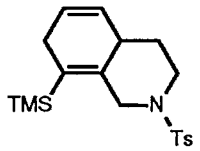
^{13}C-NMR ($CDCl_3$, 75 MHz) δ 143.25, 136.66, 135.76, 133.22, 130.23, 129.41, 127.64, 116.03, 97.75, 90.85, 45.71, 37.29, 31.01, 21.44, –0.50 ppm.

FTIR (neat) 2966.8, 2360.1, 2340.7, 2175.9, 1799.1, 1652.1, 1598.9, 1455.8, 1436.8, 1342.7, 1304.3, 1250.6, 1165.0, 1125.4, 1095.9, 1006.7, 976.1, 913.2, 837.3, 756.5, 667.4 cm^{-1}.

HRMS: (CI/NH_3) Calculated for $C_{19}H_{28}NO_2SiS$: 362.1610 $(MH)^+$; Found: 362.1604.

Melting Point (uncorrected): 84.0–84.5 °C.

TLC (17% EtOAc/hexanes): $R_f = 0.30$ (green stain with p-anisaldehyde).



Data for compound **8**:

^{1}H-NMR ($CDCl_3$, 300 MHz) δ 7.65 (dm, J=8.3, 2H), 7.34 (dm, J=7.9, 2H), 5.69 (dm, J=9.9, 1H), 5.47 (dm, J=10.2, 1H), 4.50 (dd, J=12.0, 1.5, 1H), 3.83 (dm, J=11.3, 1H), 2.77–2.68 (m, 2H), 2.64 (dm, J=11.3, 1H), 2.44 (s, 3H), 2.44–2.32 (m, 2H), 1.79 (dm, J=12.9, 1H), 1.62–1.46 (m, 1H), 0.22 (s, 9H) ppm.

^{13}C-NMR ($CDCl_3$, 75 MHz) δ 143.46, 138.93, 132.76, 130.52, 129.58, 127.84, 126.82, 124.41, 51.74, 46.88, 36.70, 33.28, 30.52, 21.49, –0.10 ppm.

FTIR (neat) 3023.0, 2951.4, 2810.2, 1620.0, 1597.5, 1494.0, 1460.8, 1351.5, 1304.7, 1250.0, 1163.2, 1095.9, 1043.3, 1023.6, 951.2, 925.7, 860.7, 837.9, 816.0, 751.0, 672.5 cm^{-1}.

HRMS: (EI) Calculated for $C_{19}H_{26}NO_2SiS$: 360.1453545 $(M–H)^+$; Found: 360.1469.

TLC (17% EtOAc/hexanes): $R_f = 0.25$ (orange stain with p-anisaldehyde).

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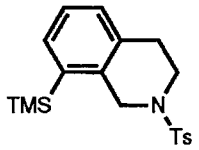


Data for compound **9**:

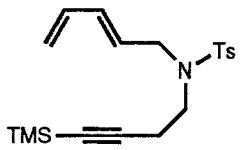
^{1}H-NMR ($CDCl_3$, 300 MHz) δ 7.72 (dm, J=8.2, 2H), 7.32 (dm, J=7.9, 2H), 7.36–7.30 (m, 1H), 7.17–7.05 (m, 2H), 4.31 (s, 2H), 3.33 (t, J=6.0, 2H), 2.95 (t, J=6.0, 2H), 2.42 (s, 3H), 0.32 (s, 9H) ppm.

^{13}C-NMR ($CDCl_3$, 75 MHz) δ 143.65, 137.00, 136.84, 133.05, 132.63, 132.37, 129.94, 129.60, 127.72, 126.07, 48.46, 43.29, 29.37, 21.46, –0.06 ppm.

FTIR (neat) 3061.9, 2955.4, 2849.6, 2359.7, 1597.4, 1463.3, 1424.0, 1355.0, 1337.2, 1251.7, 1165.8, 1093.8, 1028.8, 954.7, 861.6, 836.5, 746.2, 662.0 cm^{-1}.

HRMS: (EI) Calculated for $C_{19}H_{24}NO_2SiS$: 358.1297044 $(M–H)^+$; Found: 358.1285.

TLC (17% Solvent/Solvent): $R_f = 0.40$ (white stain with p-anisaldehyde).



Data for compound **10**:

^{1}H-NMR ($CDCl_3$, 300 MHz) δ 7.71 (dm, J=8.3, 2H), 7.49 (dm, J=8.0, 2H), 6.24 (ddd, J=16.8, 10.4, 10.2, 1H), 6.12 (dd, J=14.9, 10.5, 1H), 5.49 (dt, J=15.2, 6.7, 1H), 5.18 (dd, J=16.2, 1.6, 1H), 5.11 (dd, J=10.7, 1.4, 1H), 3.90 (d, J=6.9, 2H), 3.29 (t, J=7.7, 2H), 2.49 (t, J=7.7, 2H), 2.43 (s, 3H), 0.14 (s, 9H)ppm.

^{13}C-NMR ($CDCl_3$, 75 MHz) δ 7.71 (dm, J=8.3, 2H), 7.49 (dm, J=8.0, 2H), 6.24 (ddd, J=16.8, 10.4, 10.2, 1H), 6.12 (dd, J=14.9, 10.5, 1H), 5.49 (dt, J=15.2, 6.7, 1H), 5.18 (dd,

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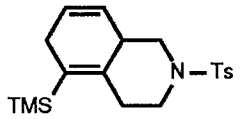
J=16.2, 1.6, 1H), 5.11 (dd, J=10.7, 1.4, 1H), 3.90 (d, J=6.9, 2H), 3.29 (t, J=7.7, 2H), 2.49 (t, J=7.7, 2H), 2.43 (s, 3H), 0.14 (s, 9H)ppm.

FTIR (neat) 2959.0, 2359.8, 2175.7, 1600.0, 1450.6, 1342.3, 1249.6, 1158.5, 1094.4, 1004.6, 948.4, 913.6, 842.4, 815.8, 759.0, 724.1, 659.5 cm^{-1}.

HRMS: (CI/NH_3) Calculated for $C_{19}H_{26}NO_2SiS$: 360.1453545 $(M–H)^+$; Found: 360.1458.

TLC (17% EtOAc/hexanes): $R_f = 0.25$ (brown stain with p-anisaldehyde).



Data for compound **11**:

^{1}H-NMR ($CDCl_3$, 300 MHz) δ 7.64 (dm, J=8.3, 2H), 7.32 (dm, J=8.0, 2H), 5.77 (dm, J=2.1, 1H), 5.43 (dm, J=2.7, 1H), 3.93–3.86 (m, 1H), 3.83 (ddd, J=10.8, 4.5, 2.1, 1H), 2.96–2.83 (m, 1H), 2.69–2.61 (m, 2H), 2.55 (dm, J=13.2, 1H), 2.42 (s, 3H), 2.34–2.21 (m, 1H), 2.21–2.11 (m, 1H), 1.98 (dd, J=11.2, 1H), 0.09 (s, 9H) ppm.

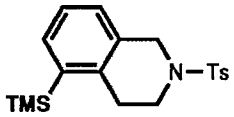
^{13}C-NMR ($CDCl_3$, 75 MHz) δ 143.42, 141.94, 133.15, 129.61, 127.55, 127.11, 126.78, 123.82, 52.69, 47.79, 37.59, 33.45, 30.41, 21.48, 0.03 ppm.

FTIR (neat) 2976.6, 2865.8, 2361.2, 1597.8, 1345.7, 1249.6, 1165.7, 1120.0, 1091.7, 1013.0, 916.6, 835.2, 736.6, 718.2, 668.4, 655.6 cm^{-1}.

HRMS: (EI) Calculated for $C_{19}H_{26}NO_2SiS$: 360.1453545 $(M–H)^+$; Found: 360.1448.

TLC (17% EtOAc/hexanes): $R_f = 0.30$ (orange stain with p-anisaldehyde).

G825-8



Data for compound **12**:

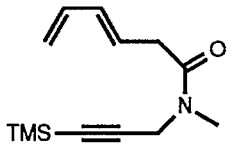
^{1}H-NMR ($CDCl_3$, 300 MHz) δ 7.72 (dm, J=8.3, 2H), 7.32 (dm, J=7.9, 2H), 7.35–7.32 (m, 1H), 7.14 (dd, J=7.6, 7.3, 1H), 7.03 (d, J=7.2, 1H), 4.23 (s, 2H), 3.35 (t, J=5.8, 2H), 3.01 (t, J=5.8, 2H), 2.42 (s, 3H), 0.28 (s, 9H) ppm.

^{13}C-NMR ($CDCl_3$, 75 MHz) δ 143.64, 138.96, 138.40, 133.00, 131.12, 129.64, 127.76, 127.58, 125.65, 48.06, 43.88, 29.78, 21.49, –0.08 ppm.

FTIR (neat) 3060.9, 2952.4, 2846.4, 1597.5, 1436.1, 1350.0, 1334.8, 1249.9, 1165.0, 1093.3, 1028.0, 964.3, 939.3, 874.1, 837.1, 816.3, 751.0, 659.5 cm^{-1}.

HRMS: (EI) Calculated for $C_{19}H_{25}NO_2SiS$: 359.137529 (M+); Found: 359.137418.

TLC (17% EtOAc/hexanes): R_f = 0.24 (white stain with p-anisaldehyde).



Data for compound **13**:

^{1}H-NMR ($CDCl_3$, 300 MHz) (mixture of rotamers) δ 6.43–6.28 (m, 1H), 6.20–6.07 (m, 1H), 5.91–5.78 (m, 1H), 5.15 (d, J=16.8, 1H), 5.06 (d, 10.1, 1H), 4.27 (s), 4.05 (s), 3.25 (d, J=6.9), 3.19 (d, J=6.3), 3.07 (s), 3.00 (s), 0.17 (s), 0.16 (s) ppm.

^{13}C-NMR ($CDCl_3$, 75 MHz) (mixture of rotamers) δ 170.63, 170.23, 136.41, 133.67, 126.55, 116.45, 100.30, 99.32, 89.76, 88.67, 40.43, 37.40, 37.35, 36.92, 34.17, 33.31, –0.23, –0.32 ppm.

FTIR (neat) 2958.4, 2360.0, 2341.5, 2177.3, 1657.6, 1397.7, 1340.3, 1250.3, 1114.0, 1005.8, 900.1, 843.4, 760.4, 668.1 cm^{-1}.

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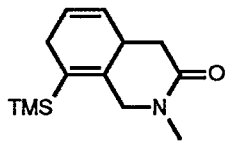
HRMS: (EI) Calculated for $C_{13}H_{21}NOSi$: 135.139243 (M^+); Found: 235.138602.

TLC (25% EtOAc/hexanes): $R_f = 0.22$.



Data for compound **14**:

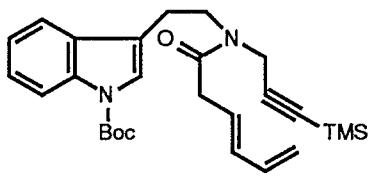
^{1}H-NMR ($CDCl_3$, 300 MHz) δ 5.76 (dm, J=10.1, 1H), 5.57 (dm, J=10.1, 1H), 4.01–3.87 (m, 2H), 3.10–2.98 (m, 1H), 2.96 (s, 3H), 2.81–2.72 (m, 2H), 2.61 (dd, J=16.7, 4.9, 1H), 2.15 (dd, J=16.7, 13.1, 1H), 0.17 (s, 9H) ppm.

^{13}C-NMR ($CDCl_3$, 75 MHz) δ 169.60, 138.25, 128.71, 125.68, 124.71, 54.68, 40.31, 33.98, 33.87, 30.21, –0.26 ppm.

FTIR (neat) 2951.0, 2894.2, 1651.3, 1500.7, 1401.1, 1308.9, 1250.0, 1143.0, 1010.6, 991.9, 926.8, 837.6, 751.8, 704.7, 616.1 cm^{-1}.

HRMS: (EI) Calculated for $C_{13}H_{21}NO_xSi$: 235.139243 (M^+); Found: 235.137259.

TLC (50% EtOAc/hexanes): Rf = 0.13.



Data for compound **16**:

^{1}H-NMR ($CDCl_3$, 300 MHz) (mixture of rotamers) δ 8.21–8.07 (m), 7.67 (d, J=7.4), 7.56 (d, J=7.4), 7.43–7.39 (m), 7.39–7.20 (m), 6.45–6.24 (m), 6.22–6.11 (m), 6.01–5.72 (m), 5.20–

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5.01 (m), 4.38 (s), 4.01 (s), 3.79–3.68 (m), 3.28 (d, J=6.9), 3.10–2.97 (m), 1.67 (s), 1.66 (s), 0.18 (s), 0.17 (s) ppm.

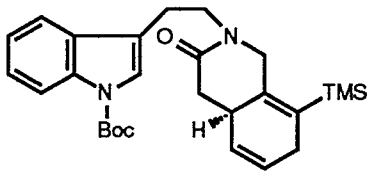
^{13}C-NMR ($CDCl_3$, 75 MHz) (mixture of rotamers) δ 170.55, 170.18, 149.54, 149.40, 136.42, 136.32, 135.38, 133.82, 133.51, 130.33, 129.90, 126.74, 126.64, 124.56, 124.28, 123.28, 122.94, 122.55, 122.41, 119.06, 118.45, 117.69, 116.61, 116.54, 115.41, 115.10, 100.71, 100.01, 89.76, 89.16, 83.61, 83.28, 47.14, 46.84, 39.32, 37.54, 37.05, 35.06, 28.09, 24.33, 23.31, –0.23, –0.35 ppm.

FTIR (neat) 2973.4, 2176.3, 1733.7, 1654.3, 1452.9, 1378.0, 1308.8, 1252.6, 1158.1, 1089.1, 1004.5, 845.4, 765.5, 748.1 cm^{-1}.

HRMS: (EI) Calculated for $C_{27}H_{36}N_2O_3Si$: 464.249522 (M_+); Found: 464.247930.

Elemental Analysis:	Calculated for $C_{27}H_{36}N_2O_3Si$:	C, 69.79%; H, 7.81%; N, 6.03.
	Found:	C, 70.09%; H, 8.02%; N, 6.11.

TLC (25% EtOAc/hexanes): $R_f = 0.40$.



Data for compound **17**:

^{1}H-NMR ($CDCl_3$, 300 MHz) δ 8.13 (brd, J=7.4, 1H), 7.63 (d, J=8.4, 1H), 7.43 (s, 1H), 7.35–7.22 (m, 2H), 5.75 (dm, J=10.0, 1H), 5.57 (dm, J=10.0, 1H), 3.97 (d, J=14.3, 1H), 3.83 (d, J=14.4, 1H), 378–3.57 (m, 2H), 3.08–2.90 (m, 3H), 2.78–2.68 (m, 2H), 2.63 (dd, J=16.5, 4.7, 1H), 2.18 (dd, J=16.5, 13.2, 1H), 1.66 (s, 9H), 0.06 (s, 9H) ppm.

^{13}C-NMR ($CDCl_3$, 75 MHz) δ 169.65, 149.59, 138.28, 135,49, 130.31, 128.49, 125.69, 124.77, 124.41, 123.05, 122.50, 118.86, 117.68, 115.27, 83.39, 53.43, 47.15, 40.36, 33.66, 30.18, 28.15, 22.96, –0.47 ppm.

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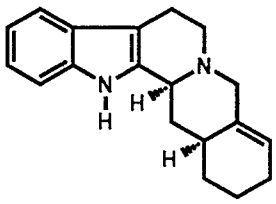
FTIR (neat) 2952.3, 2238.3, 1731.9, 1645.4, 1488.2, 1454.2, 1421.5, 1378.9, 1308.2, 1253.0, 1225.8, 1157.7, 1097.7, 1083.5, 1017.0, 924.9, 838.1, 748.2, 733.2 cm^{-1}.

HRMS: (EI) Calculated for $C_{27}H_{36}N_2O_3Si$: 464.249522 (M^+); Found: 464.251294.

TLC (50% EtOAc/hexanes): $R_f = 0.35$ (pink stain with p-anisaldehyde).



Data for compound **19**:

^{1}H-NMR ($CDCl_3$, 300 MHz) δ 7.71 (brs, 1H), 7.50 (dd, J=7.1, 1.2, 1H), 7.30 (dd, J=7.1, 1.2, 1H), 7.17–7.05 (m, 2H), 5.64 (brs, 1H), 3.39 (dm, J=11.5, 1H), 3.37 (d, J=12.1, 1H), 3.13–2.96 (m, 3H), 2.78–2.57 (m, 2H), 2.38–2.24 (m, 1H), 2.20 (ddd, J=12.3, 5.2, 2.5, 1H), 2.07–1.99 (m, 2H), 1.99–1.89 (m, 1H), 1.81–1.70 (m, 1H), 1.56–1.41 (m, 1H), 1.45–1.32 (m, 1H), 1.36–1.23 (m, 1H) ppm.

^{13}C-NMR ($CDCl_3$, 75 MHz) δ 135.96, 135.41, 134.61, 127.40, 122.79, 121.28, 119.34, 118.13, 110.67, 108.34, 62.28, 59.68, 52.78, 38.08, 35.83, 30.31, 25.25, 21.74, 21.67 ppm.

FTIR (neat) 3407.4, 3204.0, 3050.5, 2922.2, 2851.3, 2737.9, 2360.5, 1725.6, 1591.2, 1450.8, 1367.3, 1331.8, 1318.0, 1275.9, 1142.4, 1099.4, 1053.8, 1008.0, 983.2, 908.5, 792.3, 739.1 cm^{-1}.

HRMS: (EI) Calculated for $C_{19}H_{22}N_2$: 278.178299 (M^+); Found: 278.177208.

TLC (100% EtOAc/hexanes): $R_f = 0.38$ (red stain with p-anisaldehyde).
(20% EtOAc/hexanes on Et_3N-deactivated TLC plates): $R_f = 0.19$