Supporting Information

Title

**Radical Iodine Atom Transfer [3+2] Cycloaddition Reaction with
Electron-rich Alkenes using *N*-Tosyl Iodoaziridine Derivatives as Novel
Azahomoallyl Radical Precursors**

Authored by

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Supporting Information Available. Experimental procedures for the preparation and characterization data of products **3b-3e**, **4a**, **5a**, **6a**, **6d**, **6d'**, **6e**, **8a**, **8a'**. This material is available free of charge via Internet at <http://pubs.acs.org>.

***N*-(*p*-Toluenesulfonyl)-3-hydroxy-4-isopropilidenpyrrolidine (**3b**).** **3b** was prepared from **1b** (183 mg, 0.5 mmol) and trimethylsilyl vinyl ether (0.15 mL, 1 mmol) in accordance with the procedure for the preparation of **3a**. The residue was treated with DBU in accordance with the procedure for the preparation of **2a'**. Purification of the residue by column chromatography (hexane/AcOEt = 1) gave a mixture of *int*-**3b** having internal double bond and *ext*-**3b** having external double bond (89 mg, 63 %, *int*-**3b**/*ext*-**3b** = 4). *int*-**3b**: colorless oil; IR (neat) 3501, 1341, 1159 cm⁻¹; ¹H-NMR (CDCl₃) δ 7.72 (d, *J* = 8.2 Hz, 2H), 7.34 (d, *J* = 8.2 Hz, 2H), 4.62 (brt, *J* = 5.8 Hz, 1H), 4.04 (d, *J* = 14.2 Hz, 1H), 3.45-3.58 (m, 2H), 3.06 (dd, *J* = 4.7, 10.7 Hz, 1H), 2.43 (s, 3H), 1.77 (s, 3H), 1.68 (brs, 1H), 1.60 (s, 3H); ¹³C-NMR (CDCl₃) δ = 143.7, 132.0, 131.7, 131.2, 129.6, 127.9, 69.8, 57.2, 49.7, 21.5, 21.2, 20.5; MS (*m/z*) 281 (M⁺); HRMS calcd for C₁₆H₂₄NO₃S (M⁺-CH₃) 266.0851, found 266.0832.

***cis*- and *trans*-*N*-(*p*-Toluenesulfonyl)-3-hydroxy-4-iodomethyl-4-methylpyrrolidine and *N*-(*p*-Toluenesulfonyl)-3-hydroxy-4,4-dimethylpyrrolidine (*cis*- and *trans*-**3c**, and **3c'**).** **3c** and **3c'** were prepared from **1c** (176 mg, 0.5 mmol) and trimethylsilyl vinyl ether (0.15 mL, 1 mmol) in C₆H₆ (0.5 mL) in accordance with the procedure for the preparation of **3a**. Purification of the residue by column chromatography (hexane/AcOEt = 1) and subsequent MPLC (hexane/AcOEt = 2) gave *cis*-**3c** (86 mg, 43.5 %, less polar) and a mixture of *trans*-**3c** and **3c'** (38 mg, *trans*-**3c** 10 %, **3c'** 13.5 %, more polar). *cis*-**3c**: colorless oil; IR (neat) 3502, 1338, 1159 cm⁻¹; ¹H-NMR (CDCl₃) δ 7.72 (d, *J* = 7.9 Hz, 2H), 7.33 (d, *J* = 7.9 Hz, 2H), 3.86 (m, 1H), 3.67 (dd, *J* = 4.4, 11.4 Hz, 1H), 3.34 (brd, *J* = 11.4 Hz, 1H), 3.18-3.30 (m, 3H), 3.13 (d, *J* = 10.0 Hz, 1H), 2.44 (s, 3H), 1.74 (brs, 1H), 1.00 (s, 3H); ¹³C-NMR (CDCl₃) δ 143.4, 133.4, 130.0, 127.1, 76.1, 55.5, 55.2, 46.7, 23.5, 21.7, 12.4; MS (*m/z*) 395 (M⁺); Anal. Calcd for C₁₃H₁₈INO₃S: C, 39.50; H, 4.59, N, 3.54. found: C, 39.56; H, 4.78; N, 3.46. *trans*-**3c**: ¹³C-NMR (CDCl₃) δ 143.2, 133.2, 127.2, 127.1, 75.0, 56.7, 53.8, 45.7, 21.7, 18.4, 15.7. **3c'**: colorless solid; mp 70 °C; IR (KBr): 3519, 1331, 1160 cm⁻¹; ¹H-NMR (CDCl₃) δ = 7.72 (d, *J* = 8.2 Hz, 2H), 7.32 (d, *J* = 8.2 Hz, 2H), 3.74 (m, 1H), 3.63 (dd, *J* = 5.1, 10.8 Hz, 1H), 3.20 (dd, *J* = 2.9, 10.8 Hz, 1H), 3.11 (d, *J* = 10.0 Hz, 1H), 3.09 (d, *J* = 10.0 Hz,

1H), 2.43 (s, 3H), 1.46 (brs, 1H), 0.95 (s, 3H), 0.89 (s, 3H); ¹³C-NMR (CDCl₃) δ 143.2, 133.8, 129.4, 127.2, 77.6, 57.7, 54.4, 42.5, 24.8, 21.7, 19.6; MS (*m/z*) 269 (M⁺) Anal. Calcd for C₁₃H₁₉NO₃S: C, 57.97; H, 7.11, N, 5.20. found: C, 58.13; H, 7.26; N, 5.08.

(3*R,3*aR**,4*S**,7*aS**) - and (3*S**,3*aR**,4*S**,7*aS**)-*N*-(*p*-Toluenesulfonyl)-4-iodooctahydrocyclopenta[*b*]pyrrol-3-ol [α-**3d** and β-**3d**].** **3d** was prepared from iodoaziridine **1d** (182 mg, 0.5 mmol) and trimethylsilyl vinyl ether (0.15 mL, 1 mmol) in accordance with the procedure for the preparation of **3a**. Purification of the residue by column chromatography (hexane/AcOEt = 1) gave a mixture of α-**3d** and β-**3d**. Further purification of the mixture by MPLC (hexane/AcOEt = 2) gave α-**3d** (73 mg, 36 %, less polar) and β-**3d** (50 mg, 24 %, more polar), respectively. α-**3d**: colorless solid; mp 109-110 °C; IR (KBr) 3376, 1342, 1158 cm⁻¹; ¹H-NMR (CDCl₃) δ 7.69 (d, *J* = 8.0 Hz, 2H), 7.34 (d, *J* = 8.0 Hz, 2H), 4.57 (m, 1H), 4.11 (m, 1H), 3.87 (m, 1H), 3.36 (dd, *J* = 3.8, 10.9 Hz, 1H), 3.12 (dd, *J* = 5.0, 10.9 Hz, 1H), 3.01 (ddd, *J* = 4.0, 7.1, 9.2 Hz, 1H), 2.44 (s, 3H), 1.99-2.30 (m, 5H); ¹³C-NMR (CDCl₃) δ 144.0, 132.9, 129.8, 127.8, 69.5, 64.1, 60.7, 57.0, 40.4, 33.4, 23.1, 21.5; MS: (*m/z*) 407 (M⁺) Anal. Calcd for C₁₄H₁₈INO₃S: C, 41.29; H, 4.45, N, 3.44. found: C, 41.68; H, 4.63; N, 3.43. β-**3d**: colorless oil; IR (neat) 3501, 1340, 1158 cm⁻¹; ¹H-NMR (CDCl₃) δ 7.72 (d, *J* = 8.2 Hz, 2H), 7.34 (d, *J* = 8.2 Hz, 2H), 4.04 (m, 3H), 3.57 (dd, *J* = 5.2, 10.9 Hz, 1H), 3.03 (dd, *J* = 4.7, 10.9 Hz, 1H), 2.81 (td, *J* = 4.5, 8.2 Hz, 1H), 2.44 (s, 3H), 1.82-2.25 (m, 5H); ¹³C-NMR (CDCl₃) δ 143.9, 133.1, 129.7, 127.8, 73.2, 65.0, 62.9, 55.3, 37.6, 33.0, 25.8, 21.6; MS (*m/z*) 407 (M⁺); Anal. Calcd for C₁₄H₁₈INO₃S: C, 41.29; H, 4.45, N, 3.44. found: C, 41.38; H, 4.55; N, 3.32.

(3*S,3*aR**,4*S**,7*aS**) - and (3*R**,3*aR**,4*S**,7*aS**) -*N*-(*p*-Toluenesulfonyl)-4-iodooctahydro-1*H*-indol-3-ol [β-**3e** and α-**3e**].** **3e** was prepared from iodoaziridine **1e** (189 mg, 0.5 mmol) and trimethylsilyl vinyl ether (0.15 mL, 1 mmol) in accordance with the procedure for the preparation of **3a**. Purification of the residue by column chromatography (hexane/AcOEt = 1) gave a mixture of β-**3e** and α-**3e**. Further purification of the mixture by MPLC (hexane/AcOEt = 2) gave β-**3e** (76 mg, 36 %, less polar) and α-**3e** (55 mg, 26 %, more polar), respectively. β-**3e**: colorless solid; mp 114-115 °C; IR (KBr) 3510, 1320, 1155 cm⁻¹; ¹H-NMR (CDCl₃) δ 7.70 (d, *J* = 8.0 Hz, 2H), 7.33 (d, *J* = 8.0 Hz, 2H), 4.25 (m, 1H), 4.02 (dt, *J* = 4.2, 10.0 Hz, 1H), 3.81 (dd, *J* = 5.0, 12.1 Hz, 1H), 3.58 (m, 1H), 3.20 (dd, *J* = 2.2, 12.1 Hz, 1H), 2.43 (s, 3H), 2.40 (m, 1H), 2.18-

2.28 (m, 2H), 1.96 (m, 1H), 1.64-1.76 (m, 2H), 1.56 (m, 1H), 1.39 (d, $J = 3.9$ Hz, 1H); ^{13}C -NMR (CDCl_3) δ 143.6, 133.1, 129.6, 127.4, 72.0, 57.9, 57.0, 55.4, 36.3, 29.2, 27.9, 22.1, 21.4; MS (m/z) 421 (M^+); Anal. calcd for $\text{C}_{15}\text{H}_{20}\text{INO}_3\text{S}$: C, 42.76; H, 4.78, N, 3.32. found: C, 42.91; H, 4.95, N, 3.29. **α -3e**: colorless solid; mp 173-174 °C; IR (KBr) 3527, 1332, 1159 cm^{-1} ; ^1H -NMR (CDCl_3) δ 7.72 (d, $J = 8.0$ Hz, 2H), 7.32 (d, $J = 8.0$ Hz, 2H), 4.77 (td, $J = 4.1, 5.1$ Hz, 1H), 4.30 (dq, $J = 1.8, 4.8$ Hz, 1H), 3.95 (ddd, $J = 6.0, 8.0, 10.2$ Hz, 1H), 3.45 (dd, $J = 1.8, 11.5$ Hz, 1H), 3.34 (dd, $J = 4.9, 11.5$ Hz, 1H), 2.43 (s, 3H), 2.18 (m, 1H), 1.66-2.14 (m, 6H), 1.82 (d, $J = 4.8$ Hz, 1H); ^{13}C -NMR (CDCl_3) δ 143.6, 134.0, 129.7, 127.1, 72.1, 57.3, 56.3, 52.4, 34.1, 30.2, 30.0, 21.4, 20.7; MS (m/z) 422 (M^++1); Anal. calcd for $\text{C}_{15}\text{H}_{20}\text{INO}_3\text{S}$: C, 42.76; H, 4.78, N, 3.32. found: C, 42.96; H, 5.05, N, 3.29.

***cis*- and *trans*-*N*-(*p*-Toluenesulfonyl)-4-iodomethyl-3-methoxy-3-methylpyrrolidine (*cis*-**4a** and *trans*-**4a**).** **4a** was prepared from iodoaziridine **1a** (169 mg, 0.5 mmol) and methyl 2-propenyl ether (0.10 mL, 1 mmol) in C_6H_6 (0.5 mL) in accordance with the procedure for the preparation of **2a**. Purification of the residue by column chromatography (hexane/AcOEt = 7) gave a mixture of *cis*-**4a** and *trans*-**4a**. Further purification of the mixture by MPLC (hexane/AcOEt = 7) gave *cis*-**4a** (59 mg, 29 %, less polar) and *trans*-**4a** (87 mg, 42 %, more polar). *cis*-**4a**: colorless oil; IR (neat) 1339, 1160 cm^{-1} ; ^1H -NMR (CDCl_3) δ 7.71 (d, $J = 8.1$ Hz, 2H), 7.33 (d, $J = 8.1$ Hz, 2H), 3.76 (dd, $J = 7.3, 10.0$ Hz, 1H), 3.66 (d, $J = 11.6$ Hz, 1H), 3.16 (dd, $J = 3.8, 10.0$ Hz, 1H), 3.13 (t, $J = 10.0$ Hz, 1H), 3.03 (d, $J = 11.6$ Hz, 1H), 2.94 (dd, $J = 10.0, 11.1$ Hz, 1H), 2.87 (s, 3H), 2.43 (s, 3H), 2.25 (m, 1H), 1.17 (s, 3H); ^{13}C -NMR (CDCl_3) δ 143.4, 134.1, 129.6, 127.4, 81.3, 54.6, 53.8, 52.2, 49.8, 21.5, 18.3, 0.1; MS (m/z) 409 (M^+); Anal calcd for $\text{C}_{14}\text{H}_{20}\text{INO}_3\text{S}$: C, 41.08; H, 4.93, N, 3.42. found: C, 41.22; H, 5.25, N, 3.58. *trans*-**4a**: colorless oil; IR (neat) 1341, 1161 cm^{-1} ; ^1H -NMR (CDCl_3) δ 7.70 (d, $J = 7.9$ Hz, 2H), 7.33 (d, $J = 7.9$ Hz, 2H), 3.64 (dd, $J = 7.3, 10.0$ Hz, 1H), 3.29 (d, $J = 10.3$ Hz, 1H), 3.24 (d, $J = 10.3$ Hz, 1H), 3.12-3.20 (m, 2H), 3.06 (s, 3H), 2.69 (dd, $J = 10.0, 12.0$ Hz, 1H), 2.47 (m, 1H), 2.42 (s, 3H), 1.05 (s, 3H); ^{13}C -NMR (CDCl_3) δ 143.6, 133.5, 129.7, 127.4, 81.9, 56.3, 52.8, 50.7, 49.9, 21.5, 16.2, 2.1; MS (m/z) 409 (M^+); Anal calcd for $\text{C}_{14}\text{H}_{20}\text{INO}_3\text{S}$: C, 41.08; H, 4.93, N, 3.42. found: C, 40.93; H, 4.93, N, 3.48.

(*S,*S**,*S**)-6-Iodomethyl-4-(*p*-toluenesulfonyl)-hexahydro-furo[3,2-*b*]pyrrole (**5a**).** **5a** was prepared from iodoaziridine **1a** (169 mg, 0.5 mmol) and 2,3-dihydrofuran (0.08 mL, 1 mmol) in

C₆H₆ (0.5 mL) in accordance with the procedure for the preparation of **2a**. Purification of the residue by column chromatography (hexane/AcOEt = 7) gave a mixture of **5a** and **5a'**. Further purification of the mixture by MPLC (hexane/AcOEt = 6) gave **5a** and a mixture of **5a** and **5a'** (total 122 mg, **5a**; 54 %, **5a'**; 8 %). **5a**: colorless oil; IR (neat) 1342, 1158 cm⁻¹; ¹H-NMR (CDCl₃) δ 7.73 (d, *J* = 8.3 Hz, 2H), 7.33 (d, *J* = 8.3 Hz, 2H), 4.35 (dt, *J* = 1.5, 5.4 Hz, 1H), 4.27 (t, *J* = 4.3 Hz, 1H), 3.91 (dt, *J* = 3.3, 8.4 Hz, 1H), 3.72-3.85 (m, 2H), 3.20 (dd, *J* = 7.8, 9.9 Hz, 1H), 3.01-3.23 (m, 2H), 2.44 (s, 3H), 2.32 (m, 1H), 2.15 (m, 1H), 2.00 (1H, m); ¹³C-NMR (75 MHz, CDCl₃, 25 °C, TMS) δ = 143.8, 135.6, 130.0, 127.0, 83.8, 69.0, 65.9, 53.0, 47.2, 35.3, 21.6, -0.1; MS (*m/z*) 407 (M⁺) HRMS calcd for C₁₄H₁₈NO₃S (M⁺) 407.0052, found 407.0072.

4-Iodomethyl-2-(*p*-toluenesulfonyl)-6,11-dioxo-2-azaspiro-[4.6]undecane (6a). **6a** was prepared from iodoaziridine **1a** (169 mg, 0.5 mmol) and ketene acetal (114 mg, 1 mmol) in C₆H₆ (2 mL) in accordance with the procedure for the preparation of **2a**. Purification of the residue by column chromatography (hexane/AcOEt = 7) and subsequent MPLC (hexane/AcOEt = 6) gave **6a** (140 mg, 62 %). **6a**: colorless oil; IR (neat) 1345, 1163 cm⁻¹; ¹H-NMR (CDCl₃) δ 7.68 (d, *J* = 8.0 Hz, 2H), 7.30 (d, *J* = 8.0 Hz, 2H), 3.15-3.65 (m, 7H), 3.28 (d, *J* = 10.8 Hz, 1H), 3.13 (d, *J* = 10.8 Hz, 1H), 2.59 (dd, *J* = 10.0, 12.6 Hz, 1H), 2.46 (m, 1H), 2.40 (s, 3H), 1.40-1.60 (4H, m); ¹³C-NMR (CDCl₃) δ 143.5, 133.2, 129.6, 127.5, 107.9, 64.9, 63.4, 53.0, 52.8, 49.1, 29.0, 28.9, 21.5, 3.8; MS (*m/z*) 451 (M⁺); HRMS calcd for C₁₆H₂₂INO₄S (M⁺-I) 324.1270, found 324.1282.

(6d and 6d'). **6d** and **6d'** were prepared from iodoaziridine **1d** (182 mg, 0.5 mmol) and ketene acetal (114 mg, 1 mmol) in the presence of Et₃B (0.3 mL, 1M hexane solution) in C₆H₆ (0.5 mL) in accordance with the procedure for the preparation of **2a**. Purification of the residue by column chromatography (hexane/AcOEt = 10) gave **6d** (86 mg, 36 %, less polar) and **6d'** (49 mg, 28 %, more polar). **6d**: colorless solid; mp 139.0 – 139.5 °C; IR (KBr) 1328, 1166 cm⁻¹; ¹H-NMR (CDCl₃) δ = 7.71 (d, *J* = 8.1 Hz, 2H), 7.31 (d, *J* = 8.1 Hz, 2H), 4.47 (m, 1H), 4.14 (m, 1H), 3.77 (ddd, *J* = 3.2, 5.0, 12.0 Hz, 1H), 3.64 (ddd, *J* = 2.0, 7.0, 12.0 Hz, 1H), 3.30 (d, *J* = 12.0 Hz, 1H), 3.28 (m, 1H), 3.16 (d, *J* = 12.0 Hz, 1H), 3.03 (dd, *J* = 3.5, 7.6 Hz, 1H), 2.97 (m, 1H), 2.44 (s, 3H), 2.05-2.31 (m, 4H), 1.48-1.64 (m, 4H); ¹³C-NMR (CDCl₃) δ 143.1, 134.6, 129.3, 127.5, 108.1, 65.9, 65.7, 64.4, 63.4, 53.9, 38.9, 34.6, 29.3, 29.2, 23.5, 21.7; MS (*m/z*) 477 (M⁺); Anal calcd for C₁₈H₂₄INO₄S: C, 45.29; H, 5.07, N, 2.93. found: C, 44.87; H, 5.07, N, 2.86. **6d'**: colorless solid;

mp 147 °C; IR (KBr) 1337, 1164 cm⁻¹; ¹H-NMR (CDCl₃) δ 7.72 (d, *J* = 8.1 Hz, 2H), 7.29 (d, *J* = 8.1 Hz, 2H), 4.15 (dt, *J* = 2.6, 5.3 Hz, 1H), 3.69 (td, *J* = 3.2, 11.7 Hz, 1H), 3.48 (dt, *J* = 2.0, 11.7 Hz, 1H), 3.40 (d, *J* = 11.7 Hz, 1H), 3.26 (t, *J* = 11.7 Hz, 1H), 3.18 (d, *J* = 11.7 Hz, 1H), 2.88 (brd, *J* = 11.7 Hz, 1H), 2.45 (m, 1H), 2.42 (s, 3H), 2.17 (m, 1H), 1.38-1.83 (m, 9H); ¹³C-NMR (CDCl₃) δ 142.9, 135.8, 129.3, 127.5, 109.1, 66.1, 64.4, 62.7, 53.3, 50.5, 36.2, 29.1, 29.0, 26.2, 24.7, 21.5; MS (*m/z*) 351 (M⁺); Anal calcd for C₁₈H₂₅NO₄S: C, 61.51; H, 7.17, N, 3.99. found: C, 61.37; H, 7.23, N, 3.79.

(6e). **6e** was prepared from iodoaziridine **1e** (189 mg, 0.5 mmol) and ketene acetal (64 mg, 0.55 mmol) in C₆H₆ (2 mL) in accordance with the procedure for the preparation of **2a**. Purification of the residue by column chromatography (hexane/AcOEt = 10) and subsequent MPLC (hexane/AcOEt = 9) gave **6e** (146 mg, 59 %). **6e**: colorless oil; IR (neat) 1338, 1162 cm⁻¹; ¹H-NMR (CDCl₃) δ 7.70 (d, *J* = 8.2 Hz, 2H), 7.32 (d, *J* = 8.2 Hz, 2H), 4.42 (ddd, *J* = 4.4, 7.3, 8.8 Hz, 1H), 3.84 (dt, *J* = 3.5, 5.8 Hz, 1H), 3.64-3.74 (m, 2H), 3.47 (d, *J* = 12.0 Hz, 1H), 3.38 (d, *J* = 12.0 Hz, 1H), 3.31 (m, 1H), 3.11 (m, 1H), 2.43 (s, 3H), 2.35 (t, *J* = 6.5 Hz, 1H), 2.24-2.44 (m, 2H), 1.98 (m, 1H), 1.40-1.78 (m, 7H); ¹³C-NMR (CDCl₃) δ 143.5, 134.1, 129.6, 127.7, 107.3, 66.4, 63.9, 60.0, 54.7, 54.3, 38.2, 29.6, 29.2, 28.3, 26.9, 21.8, 21.6; MS (*m/z*) 474 (M⁺-Me); Anal calcd for C₁₉H₂₆INO₄S: C, 46.44; H, 5.33, N, 2.85. found: C, 46.47; H, 5.28, N, 2.79.

cis- and trans-N-(p-Toluenesulfonyl)-3-n-butyl-4-iodomethylpyrrolidine (cis-8a and trans-8a). **8a** was prepared from **1a** (169 mg, 0.5 mmol) and 1-hexene (0.13 mL, 1 mmol) in accordance with the procedure for the preparation of **7a**. Purification of the residue by column chromatography (hexane/AcOEt = 9) gave a mixture of *cis*-**8a** and *trans*-**8a** (72 mg, 34 %, *cis/trans* = 2.1).

N-(p-Toluenesulfonyl)-3-n-butyl-4-methylenepyrrolidine (8a'). The inseparable mixture of *cis*-**8a** and *trans*-**8a** (270 mg, 0.64 mmol) were converted to **8a'** in accordance with the procedure for the preparation of **2a'**. Purification of the residue by column chromatography (hexane/AcOEt = 30) gave **2a'** (182 mg, 97 %). **8a'**: colorless oil; IR (neat) 1348, 1164 cm⁻¹; ¹H-NMR (CDCl₃) δ 7.68 (d, *J* = 8.3 Hz, 2H), 7.30 (d, *J* = 8.3 Hz, 2H), 4.87 (q, *J* = 2.1 Hz, 1H), 4.83 (q, *J* = 2.3 Hz, 1H), 3.85 (td, *J* = 2.1, 14.0 Hz, 1H), 3.72 (qd, *J* = 2.1, 14.0 Hz, 1H), 3.47 (dd, *J* = 7.3, 9.3 Hz, 1H), 2.80 (dd, *J* = 7.1, 9.3 Hz, 1H), 2.50 (m, 1H), 2.40 (s, 3H), 1.47 (m, 1H), 1.10-1.33

(m, 5H), 0.84 (t, $J = 6.9$ Hz, 3H); ^{13}C -NMR (CDCl_3) δ 147.9, 143.4, 132.5, 129.5, 127.6, 106.3, 53.3, 52.0, 42.7, 31.7, 29.4, 22.5, 21.3, 13.8; MS (m/z) 293 (M^+); Anal. calcd for $\text{C}_{16}\text{H}_{23}\text{NO}_2\text{S}$: C, 65.49; H, 7.90, N, 4.77. Found: C, 65.24; H, 7.93, N, 4.81.