**Supporting Information
for:**

**A convenient preparation of indolyl malonates via carbenoid
insertion**

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Manuscript submitted to the *Journal of Organic Chemistry*

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General Considerations.

All reactions were performed in anhydrous dichloromethane (except where indicated). TLC analysis was performed using on EM Science, Silica gel 60 F₂₅₄. Diazomalonate was prepared from malonate and 4-acetamidobenzenesulfonyl azide in acetonitrile. Products were purified by flash chromatography using silica gel (230-400 Mesh).

Melting points are uncorrected. Infrared spectra were recorded on NaCl plates. NMR experiments were performed at 400 MHz and spectra were obtained in CDCl₃. Mass spectra were obtained at an ionizing voltage of 70 eV.

Typical experimental procedure :

Dimethyl (1-methyl-3-pent-4-enyl-1*H*-indol-2-yl)malonate (3).

The reaction mixture was prepared using 1-methyl-3-(4-pentene)indole (190 mg, 0.95 mmol), Rh₂(OAc)₄ (31 mg, 0.07 mmol) and diazomalonate (56 mg, 0.35 mmol) in 10 ml of CH₂Cl₂. The mixture was stirred for approximately 12 hrs and purified in the usual way to afford compound (3) (21 mg, 0.06 mmol, 18%) as a colorless oil. ¹H NMR (400 MHz, CDCl₃) δ = 7.57 (d, *J* = 7.6 Hz, 1H), 7.30 (d, *J* = 8.4 Hz, 1H), 7.24 (m, 1H), 7.10 (m, 1H), 5.84 (m, 1H), 5.12 (s, 1H), 5.01 (m, 2H), 3.79 (s, 6H), 3.74 (s, 3H), 2.78 (m, 2H), 2.12 (m, 2H), 1.73 (m, 2H). ¹³CNMR (100 MHz, CDCl₃) 167.6, 138.5, 137.3, 126.7, 126.5, 122.1, 119.0, 118.9, 115.7, 114.5, 109.1, 53.0, 48.9, 33.5, 31.0, 30.2, 24.0. IR (thin film) ν = 1739 cm⁻¹. EIHMRS for C₁₉H₂₃NO₄: found 329.1634, requires 329.1627.

Dimethyl (1-methyl-1*H*-indol-3-yl)malonate (9a). To a solution of a 1-methylindole (113 μL, 0.88 mmol) and Rh₂(OAc)₄ (15 mg, 0.03 mmol) in CH₂Cl₂ (5 ml) at 23 °C was added diazomalonate (284 mg, 1.7 mmol) dissolved in CH₂Cl₂ (5 ml) via cannula syringe on a stream of argon. After 1.5 hrs the reaction mixture was filtered through celite and washed with CH₂Cl₂ (100 ml). The crude mixture was then pre-absorbed on silica (g). The product was purified by flash chromatography using gradient elution technique (97.5 % hexanes : 2.5% EtOAc, 95% hexanes : 5% EtOAc, 92.5% hexanes : 7.5% EtOAc, 90% hexanes : 10% EtOAc, 87.5% hexanes : 12.5% EtOAc, 85% hexanes : 15% EtOAc,) to afford product **9a** (223 mg, 0.85 mmol, 96%) as a white solid. mp = 98-99 °C; ¹H NMR (400 MHz, CDCl₃) δ = 7.64 (dd, *J* = 8.4, 0.8 Hz, 1H), 7.28 (m, 3H), 7.16 (m, 1H), 5.00 (s, 1H), 3.78 (s, 9H). ¹³CNMR (100 MHz, CDCl₃) 169.2, 136.8, 128.8, 127.1, 122.2, 199.8, 199.2, 109.7, 105.7, 53.2, 49.5, 33.3. IR (thin film) ν = 1747, 1737 cm⁻¹. EIHMRS for C₁₄H₁₅NO₄: found 261.1003, requires 261.1001.

Dimethyl (5-bromo-1-methyl-1*H*-indol-3-yl)malonate (9b).

The reaction mixture was prepared using 5-bromo-1-methylindole (222 mg, 1.05 mmol), Rh₂(OAc)₄ (18 mg, 0.04 mmol) and diazomalonate (378 mg, 2.39 mmol) in 10 ml of CH₂Cl₂. The mixture was stirred for approximately 1.5 hrs and purified in the usual way to afford compound **9b** (295 mg, 0.86 mmol, 82%) as a white solid. mp = 167-168 °C; ¹H NMR (400 MHz, CDCl₃) δ = 7.73 (d, *J* = 2.0 Hz, 1H), 7.29 (dd, *J* = 8.4, 2.0 Hz, 1H), 7.26 (s, 1H), 7.14 (d, *J* = 8.4 Hz, 1H), 4.89 (s, 1H), 3.77 (s, 6H), 3.74 (s, 3H). ¹³CNMR (100 MHz, CDCl₃) 168.4 135.1, 128.6, 128.3, 124.6, 121.4, 112.9, 110.8, 105.0, 52.8, 48.9, 33.0. IR (thin film) ν = 1737 cm⁻¹. EIHMRS for C₁₄H₁₄BrNO₄: found 339.0113, requires 339.0106.

Dimethyl (5-methoxy-1-methyl-1*H*-indol-3-yl)malonate (9c).

The reaction mixture was prepared using 5-methoxy-1-methylindole (124 mg, 0.76 mmol), Rh₂(OAc)₄ (22 mg, 0.05 mmol) and diazomalonate (264 mg, 1.66 mmol) in 10 ml of CH₂Cl₂. The mixture was stirred for approximately 1.5 hrs and purified in the usual way to afford compound **9c** (190 mg, 0.65 mmol, 85%) as a white solid. mp = 104-105 °C; ¹H NMR (400 MHz, CDCl₃) δ = 7.22 (s, 1H), 7.18 (d, *J* = 8.8 Hz, 1H), 7.08 (d, *J* = 2.4 Hz, 1H), 6.90 (dd, *J* = 9.2, 2.4 Hz, 1H), 4.95 (s, 1H), 3.86 (s, 3H), 3.77 (s, 6H), 3.69 (s, 3H). ¹³CNMR (100 MHz, CDCl₃) 168.6, 153.8, 131.6, 128.7, 126.9, 111.9, 110.0, 104.6, 100.4, 55.6, 52.5, 49.0, 32.8. IR (thin film) ν = 1754, 1735 cm⁻¹. EIHMS for C₁₅H₁₇NO₅: found 291.1107, requires 291.1106.

Dimethyl (1-benzyl-1*H*-indol-3-yl)malonate (9d).

The reaction mixture was prepared using 1-benzylindole (222 mg, 1.07 mmol), Rh₂(OAc)₄ (8 mg, 0.04 mmol) and diazomalonate (371 mg, 2.34 mmol) in 10 ml of CH₂Cl₂. The mixture was stirred for approximately 1.5 hrs and purified in the usual way to afford compound **9d** (282 mg, 0.83 mmol, 78%) as a colorless oil. ¹H NMR (400 MHz, CDCl₃) δ = 7.67 (dd, *J* = 6.8, 1.6 Hz, 1H), 7.38 (s, 1H), 7.27 (m, 4H), 7.17 (m, 4H), 5.30 (s, 2H), 5.01 (s, 1H), 3.78 (s, 6H). ¹³CNMR (100 MHz, CDCl₃) 168.7, 136.8, 136.0, 128.4, 127.8, 127.3, 126.9, 126.6, 121.9, 119.6, 119.0, 109.7, 106.0, 52.7, 50.1, 49.2. IR (thin film) ν = 1755, 1736 cm⁻¹. EIHMS for C₂₀H₁₉NO₄: found 337.1320, requires 337.1320.

Dimethyl (1-(triisopropylsilyl)-1*H*-indol-3-yl)malonate (9e).

The reaction mixture was prepared using 1-triisopropylindole (129 mg, 0.47 mmol), Rh₂(OAc)₄ (8 mg, 0.01 mmol) and diazomalonate (177 mg, 1.11 mmol) in 10 ml of CH₂Cl₂. The mixture was stirred for approximately 5 hrs and purified in the usual way to afford compound **9e** (160 mg, 0.39 mmol, 84%) as a white solid. mp = 96-97 °C; ¹H NMR (400 MHz, CDCl₃) δ = 7.65 (m, 1H), 7.52 (m, 1H), 7.48 (s, 1H), 7.17 (m, 2H), 5.01 (s, 1H), 3.77 (s, 6H), 1.75 (m, 3H), 1.19 (d, *J* = 7.2 Hz, 18H). ¹³CNMR (100 MHz, CDCl₃) 168.6, 140.5, 130.9, 128.6, 121.4, 119.7, 118.7, 113.8, 108.8, 52.6, 49.1, 18.0, 12.8. IR (thin film) ν = 1741 cm⁻¹. EIHMS for C₂₂H₃₃NO₄Si: found 403.2182, requires 403.2178.

Dimethyl {1-[(4-methylphenyl)sulfonyl]-1*H*-indol-3-yl}malonate (9f).

The reaction mixture was prepared using 1-tosylindole (198 mg, 0.73 mmol), Rh₂(OAc)₄ (27 mg, 0.06 mmol) and diazomalonate (115 mg, 0.73 mmol) in 10 ml of CH₂Cl₂. The mixture was stirred for approximately 12 hrs and purified in the usual way to afford compound **9f** (90 mg, 0.22 mmol, 31%) as a yellow oil. ¹H NMR (400 MHz, CDCl₃) δ = 7.95 (d, *J* = 8.0 Hz, 1H), 7.77 (m, 3H), 7.53 (d, *J* = 8.0 Hz, 1H), 7.30 (m, 1H), 7.20 (m, 3H), 4.87 (s, 1H), 3.75 (d, *J* = 1.6 Hz, 6H), 2.30 (s, 3H). ¹³CNMR (100 MHz, CDCl₃) 167.4, 144.8, 134.7, 134.4, 129.6, 129.1, 126.6, 125.6, 124.7, 123.1, 119.6, 113.4, 113.3, 53.0, 48.9, 21.5. IR (thin film) ν = 1754, 1739 cm⁻¹. EIHMS for C₂₀H₁₉NO₆S: found 401.0927, requires 401.0933.

Dimethyl (1,2-dimethyl-1*H*-indol-3-yl)malonate (9g).

The reaction mixture was prepared using 1,2-dimethylindole (128 mg, 0.88 mmol), Rh₂(OAc)₄ (12 mg, 0.03 mmol) and diazomalonate (311 mg, 1.9 mmol) in 10 ml of CH₂Cl₂. The mixture was stirred for approximately 1.5 hrs and purified in the usual way to afford compound **9g** (61 mg, 0.22 mmol, 67%) as a white solid. mp = 179-180 °C; ¹H NMR (400 MHz, CDCl₃) δ = 7.59 (d, *J* = 8.4 Hz, 1H), 7.26 (d, *J* = 8.0 Hz, 1H), 7.18 (m, 1H), 7.12 (m, 1H), 4.97 (s, 1H), 3.76 (s,

6H), 3.66 (s, 3H), 2.44 (s, 3H). ^{13}C NMR (100 MHz, CDCl_3) 168.9, 136.2, 135.2, 126.3, 120.8, 119.4, 118.5, 108.6, 102.5, 52.6, 49.0, 29.6, 10.8. IR (thin film) ν = 1744, 1732 cm^{-1} . EIHMS for $\text{C}_{15}\text{H}_{17}\text{NO}_4$: found 275.1162, requires 275.1157.

Dimethyl 3-(1-methyl-2-phenylindole)malonate (9h).

The reaction mixture was prepared using 1-methyl-2-phenylindole (201 mg, 0.97 mmol), $\text{Rh}_2(\text{OAc})_4$ (21 mg, 0.47 mmol) and diazomalonate (81 mg, 0.51 mmol) in 10 ml of CH_2Cl_2 . The mixture was stirred for approximately 12 hrs and purified in the usual way to afford compound (9h) (77 mg, 0.22 mmol, 44%) as a white solid. mp = 141-142 $^\circ\text{C}$; ^1H NMR (400 MHz, CDCl_3) δ = 7.81 (d, J = 8.4 Hz, 1H), 7.51 (m, 5H), 7.38 (d, J = 8.4 Hz, 1H), 7.30 (m, 1H), 7.21 (m, 1H), 4.85 (s, 1H), 3.73 (s, 6H), 3.63 (s, 3H). ^{13}C NMR (100 MHz, CDCl_3) 168.9, 139.9, 136.9, 130.6, 130.2, 128.5, 128.4, 126.0, 121.9, 120.5, 119.9, 109.3, 104.4, 52.5, 49.7, 30.9. IR (thin film) ν = 1741 cm^{-1} . EIHMS for $\text{C}_{20}\text{H}_{19}\text{NO}_4$: found 337.1326, requires 337.1314.

Dimethyl [2-(methoxymethyl)-1-methyl-1H-indol-3-yl]malonate (9i).

The reaction mixture was prepared using 2-(methoxymethyl)-1-methyl-1H-indole (159 mg, 0.90 mmol), $\text{Rh}_2(\text{OAc})_4$ (10 mg, 0.02 mmol) and diazomalonate (331 mg, 2.09 mmol) in 10 ml of CH_2Cl_2 . The mixture was stirred for approximately 12 hrs and purified in the usual way to afford compound (9i) (105 mg, 0.34 mmol, 38%) as a white solid. mp = 62-63 $^\circ\text{C}$; ^1H NMR (400 MHz, CDCl_3) δ = 7.68 (d, J = 8.0 Hz, 1H), 7.32 (d, J = 8.0 Hz, 1H), 7.25 (m, 1H), 7.15 (m, 1H), 5.06 (s, 1H), 4.68 (s, 2H), 3.78 (s, 3H), 3.75 (s, 6H), 3.37 (s, 3H). ^{13}C NMR (100 MHz, CDCl_3) 168.0, 136.4, 133.4, 125.4, 121.8, 119.4, 119.3, 108.8, 105.6, 63.6, 57.6, 52.8, 49.0, 30.4. IR (thin film) ν = 1737 cm^{-1} . EIHMS for $\text{C}_{16}\text{H}_{19}\text{NO}_5$: found 305.1265, requires 305.1263.

Dimethyl (2-methyl-1H-indol-3-yl)malonate (9j).

The reaction mixture was prepared using 2-methylindole (461 mg, 3.51 mmol), $\text{Rh}_2(\text{OAc})_4$ (25 mg, 0.05 mmol) and diazomalonate (278 mg, 1.75 mmol) in 10 ml of CH_2Cl_2 . The mixture was stirred for approximately 12 hrs and purified in the usual way to afford compound (9j) (196 mg, 0.75 mmol, 43%) white solid. mp = 129-130 $^\circ\text{C}$; ^1H NMR (400 MHz, CDCl_3) δ = 8.08 (bs, 1H), 7.58 (m, 1H), 7.12 (m, 3H), 4.92 (s, 1H), 3.74 (s, 6H), 2.30 (s, 3H). ^{13}C NMR (100 MHz, CDCl_3) 169.0, 134.7, 133.7, 127.1, 121.1, 119.6, 118.5, 110.3, 103.0, 52.6, 48.8, 11.8. IR (thin film) ν = 1735 cm^{-1} . EIHMS for $\text{C}_{14}\text{H}_{15}\text{NO}_4$: found 261.1000, requires 261.1001.

Dimethyl (1,3-dimethyl-1H-indol-2-yl)malonate (11).

The reaction mixture was prepared using 1,3-dimethylindole (302 mg, 2.07 mmol), $\text{Rh}_2(\text{OAc})_4$ (45 mg, 0.10 mmol) and diazomalonate (193 mg, 1.22 mmol) in 10 ml of CH_2Cl_2 . The mixture was stirred for approximately 12 hrs and purified in the usual way to afford compound (11) (171 mg, 0.62 mmol, 51%) as a white solid. mp = 79-80 $^\circ\text{C}$; ^1H NMR (400 MHz, CDCl_3) δ = 7.62 (dd, J = 8.8, 0.8 Hz, 1H), 7.31 (m, 2H), 7.18 (m, 1H), 5.19 (s, 1H), 3.84 (s, 6H), 3.79 (s, 3H), 2.40 (s, 3H). ^{13}C NMR (100 MHz, CDCl_3) 167.9, 137.5, 127.9, 126.9, 122.5, 119.3, 119.2, 111.2, 109.4, 53.4, 49.4, 31.2, 9.5. IR (thin film) ν = 1739 cm^{-1} . EIHMS for $\text{C}_{15}\text{H}_{17}\text{NO}_4$: found 275.1157, requires 275.1157.

Dimethyl (3-methyl-1*H*-indol-2-yl)malonate (13).

The reaction mixture was prepared using 3-methylindole (201 mg, 1.53 mmol), Rh₂(OAc)₄ (33 mg, 0.07 mmol) and diazomalonate (130 mg, 0.82 mmol) in 10 ml of CH₂Cl₂. The mixture was stirred for approximately 12 hrs and purified in the usual way to afford compound **(13)** (77 mg, 0.29 mmol, 36%) white solid. mp = 106-108 °C; ¹H NMR (400 MHz, CDCl₃) δ = 8.84 (bs, 1H), 7.54 (m, 1H), 7.35 (m, 1H), 7.19 (m, 1H), 7.11 (m, 1H), 5.02 (d, *J* = 0.8 Hz, 1H), 3.79 (d, *J* = 0.8 Hz, 6H), 2.32 (d, *J* = 0.8 Hz, 3H). ¹³CNMR (100 MHz, CDCl₃) 167.4, 135.6, 127.9, 123.9, 122.3, 119.1, 118.6, 110.9, 110.6, 53.2, 48.9, 8.6. IR (thin film) ν = 1747 cm⁻¹. EIHMS for C₁₄H₁₅NO₄: found 261.1003, requires 261.1001.

Dimethyl (3-methyl-1*H*-indol-1-yl)malonate (14).

The reaction mixture was prepared using 3-methylindole (201 mg, 1.53 mmol), Rh₂(OAc)₄ (33 mg, 0.07 mmol) and diazomalonate (130 mg, 0.82 mmol) in 10 ml of CH₂Cl₂. The mixture was stirred for approximately 12 hrs and purified in the usual way to afford compound **(14)** (95 mg, 0.36 mmol, 44%) white solid. mp = 79-80 °C; ¹H NMR (400 MHz, CDCl₃) δ = 7.60 (dd, *J* = 7.2, 1.6 Hz, 1H), 7.26 (m, 2H), 7.17 (m, 2H), 5.80 (s, 1H), 3.83 (s, 6H), 2.38 (d, *J* = 1.2 Hz, 3H). ¹³CNMR (100 MHz, CDCl₃) 166.0, 136.3, 128.8, 124.3, 122.0, 119.6, 119.1, 112.6, 108.4, 60.5, 53.3, 9.8. IR (thin film) ν = 1734 cm⁻¹. EIHMS for C₁₄H₁₅NO₄: found 261.1000, requires 261.1001.

Dimethyl (9-methyl-2,3,4,9-tetrahydro-1*H*-carbazol-7-yl)malonate (16).

The reaction mixture was prepared using 9-methyl-2,3,4,9-tetrahydro-1*H*-carbazole (458 mg, 2.47 mmol), Rh₂(OAc)₄ (5 mg, 0.01 mmol) and diazomalonate (179 mg, 1.13 mmol) in 10 ml of CH₂Cl₂. The mixture was stirred for approximately 12 hrs and purified in the usual way to afford compound **(16)** (101 mg, 0.32 mmol, 28%); ¹H NMR (400 MHz, CDCl₃) δ = 7.43 (d, *J* = 8 Hz, 1H), 7.32 (d, *J* = 1.2 Hz, 1H), 7.05 (dd, *J* = 8.0, 1.2 Hz, 1H), 4.77 (s, 1H), 3.75 (s, 6H), 3.62 (s, 3H), 2.71 (m, 4H), 1.89 (m, 4H). ¹³CNMR (100 MHz, CDCl₃) 169.0, 136.6, 136.4, 126.9, 124.3, 119.7, 117.6, 109.1, 109.0, 57.8, 52.7, 29.1, 23.2, 22.1, 21.1. IR (thin film) ν = 1736 cm⁻¹. EIHMS for C₁₈H₂₁NO₄: found 315.1478, requires 315.1470.

Dimethyl 1,2,3,4-tetrahydro-9*H*-carbazol-9-ylmalonate (17).

The reaction mixture was prepared using 2,3,4,9-tetrahydro-1*H*-carbazole (284 mg, 1.65 mmol), Rh₂(OAc)₄ (34 mg, 0.07 mmol) and diazomalonate (141 mg, 0.89 mmol) in 10 ml of CH₂Cl₂. The mixture was stirred for approximately 12 hrs and purified in the usual way to afford compound **(17)** (88 mg, 0.29 mmol, 33%) white solid. mp = 108-110 °C; ¹H NMR (400 MHz, CDCl₃) δ = 7.49 (dd, *J* = 8.0, 0.8 Hz, 1H), 7.27 (dd, *J* = 8.0, 0.8 Hz, 1H), 7.15 (m, 2H), 5.75 (s, 1H), 3.82 (d, *J* = 0.8 Hz, 6H), 2.73 (m, 4H), 1.95 (m, 4H). ¹³CNMR (100 MHz, CDCl₃) 166.1, 135.8, 134.8, 127.9, 121.2, 119.5, 117.8, 111.5, 109.6, 59.4, 53.1, 23.2, 22.8, 22.3, 21.0. IR (thin film) ν = 1748 cm⁻¹. EIHMS for C₁₇H₁₉NO₄: found 301.1310, requires 301.1314.

File # 2 : EX0151

Mode = 2 (Mid-IR)

2/25/02 2:16 PM

Sample Description: ex0151

Scans = 16

Res = 2 cm-1 11 scans/min

Apod = Cosine

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Creation Date/Time : 1/9/2002 at 13:21:09
File Type : Lo-Res Data - Ctd (Magnet)
File Source : Acquired on MASPEC II system [I132/A172]
File Title : Gibe EXO151 dprobe
Operator : Doug Hairsine
Instrument : MAT8400

SCAN GRAPH, Flagging=Low Resolution M/z. Highlighting=Base Peak.
Scan 357 - 400. Entries=628. Base M/z=274.3. 100% Int.=10.8388.

ex0155B
STANDARD 1H OBSERVE

exp11 s2pul

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/rglbc/ex0155B.1/P-		pu50	12.700
ROTON.fid	al7a		20.000
ACQUISITION		FLAGS	
sw	3549.9	il	n
st	1.995	in	n
ap	14164	dp	y
fb	not used	hs	nn
bs	16		
ss	2	fn	NOT used
d1	1.000		
nt	0	sp	26.6
ct	0	wp	3489.2
TRANSMITTER		DISPLAY	
tn	H1	rfl	24.3
sfrq	400.007	rfp	0
tof	-232.6	lp	-170.9
tpwr	50		-30.5
pw	6.350	vc	250
DECOUPLER		PLOT	
dn	C13	sc	0
dof	0	vs	50
dm	nnn	th	54
dm	c	at	cdc ph
dm	45		
dpr	17100

ex01558
STANDARD 1H OBSERVE

Automation directory: /export/home/vnmr1/walrus/auto_22.12.01
File: 0107

Pulse Sequence: sZpu1
Solvent: cdc13
Ambient temperature
Sample #1
File: 0107
Mercury-4000 "nuc400"

Relax. delay 1.000 sec
Pulse 30.0 degrees
Acq. time 1.199 sec
Width 25125.6 Hz
64 repetitions
OBSERVE C13, 100.6015568 MHz
DECOUPLE H1, 499.0074633 MHz
Power 39 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 38 min, 37 sec

File # 1 : EX0155B

Mode = 2 (Mid-IR)

2/25/02 10:25 AM

Sample Description: 1-methyl-3-malonate Indole

Scans = 32

Res = 2 cm⁻¹ 11 scans/min

Apod = Cosine

Transmittance / Wavenumber (cm⁻¹)

File Name : C:\WASPEC\Data\Gibe4.ms2
Creation Date/Time : 1/8/2002 at 13:17:31
File Type : Lo-Res Data - Ctd (Magnet)
File Source : Acquired on MASPEC II system [I132/A172]
File Title : Gibe EXO155B dprobe
Operator : Doug Hairsine
Instrument : MAT8400

SCAN GRAPH. Flagging=Low Resolution M/z. Highlighting=Base Peak.
Scan 46 - 67. Entries=441. Base M/z=202.2. 100% Int.=78.9183. Saturated.

ex0287
STANDARD 1H OBSERVE

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ACQUISITION		FLAGS	
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at	1.995	tn	n
np	25570	dp	y
fb	not used	hs	nn
bs	16		
ss	2	fn	not used
dl	1.000		
nt	8	sp	-341.4
ct	8	wp	3647.1
		rfl	884.6
TRANSMITTER		DISPLAY	
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DECOUPLER		PLOT	
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dm	nnn	th	54
dnn	c	ai	cdc ph
dpwr	45		
daf	17100

ex0207
STANDARD 1H OBSERVE

exp11 s2pu1

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solvent	cdcl3	gain	not used
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at	1.199	in	n
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tpwr	58	rp	94.5
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dof	8	sc	8
de	yyv	vs	56
daw	w	th	13
dpwr	39	ai	no
dof	8500	ph

File # 1 : EX0207

Mode = 2 (Mid-IR)

2/25/02 11:23 AM

Sample Description: ex0207

Scans = 16

Res = 2 cm-1 11 scans/min

Apod = Cosine

Transmittance / Wavenumber (cm-1)

File Name : C:\MASPEC\Data\Gibe22.ms2
Creation Date/Time : 2/11/2002 at 11:33:53
File Type : Lo-Res Data - Ctd (Magnet)
File Source : Acquired on MASPEC II system [I132/A172]
File Title : Gibe EX0207 dprobe
Operator : Doug Hainsine
Instrument : MAT3400

SCAN GRAPH: Flagging=Nominal M/z, Highlighting=Base Peak.
Scan 58 - 74, Entries=331, Base M/z=280.3, 100% Int.=2.7488

ex0134
STANDARD 1H OBSERVE

ex011 s2pu1

SAMPLE		SPECIAL	
date	Jan 24 2002	temp	not used
solvent	cdcl3	gain	not used
file	/export/home/~	spin	20
vnmr1/vnmr/sys/date		hst	0.000
/rglbc/ex0134/PROT		pu30	12.700
	ON.fid	alfa	20.000

ACQUISITION		FLAGS	
sw	3046.2	il	n
at	1.995	in	n
np	15346	dp	y
Tb	not used	hs	nn
bs	16	PROCESSING	
ss	2	fn	not used
d1	1.000	DISPLAY	
nt	0	sp	-229.0
ct	0	wp	3406.2
TRANSMITTER		rfl	350.9
tn	H1	rtp	0
sfrq	400.007	rp	-100.2
tof	-411.1	lp	-55.1
tpur	50	PLOT	
pv	6.350	wc	250
DECOUPLER		sc	0
dn	C13	vs	03
dof	0	th	54
dn	nan	al	cdc ph
dnn	c		
dpur	45		
dof	17100

ex0194
STANDARD 1H OBSERVE

expl1 s2pu1

SAMPLE		SPECIAL	
date	Jan 24 2002	temp	not used
solvent	cdcl3	gain	not used
file	/export/home/~	spin	not used
nmr1/vnmrsys/data-	hst	hst	0.000
/rglbe/ex0194/CARB-	pw90	pw90	11.200
	ON.fid	altm	20.000
ACQUISITION		FLAGS	
sw	25125.6	11	n
at	1.199	1n	n
ap	60270	dp	y
fb	13040	hs	nn
bs	64	PROCESSING	
dl	1.000	1b	1.00
nt	1012	fn	not used
ct	64	DISPLAY	
TRANSMITTER		sp	-1554.9
tn	C13	wp	25125.6
sfrq	100.613	rpl	9381.2
tof	1550.6	rtp	7746.3
tpwr	50	rp	114.4
pw	2.733	lp	-352.6
DECOUPLER		PLOT	
dn	H1	wc	200
dof	0	ac	0
dm	yyy	vs	30
dsm	w	th	0
dpr	30	at	no ph
dwt	0300

File # 1 : EX0194

Mode = 2 (Mid-IR)

2/25/02 11:26 AM

Sample Description: ex0194

Scans = 16

Res = 2 cm⁻¹ 11 scans/min

Apod = Cosine

Transmittance / Wavenumber (cm⁻¹)

File Name : C:\MASPEC\Data\GIBE16.ms2
Creation Date/Time : 1/29/2002 at 11:26:15
File Type : Lo-Res Data - Ctd (Magnet)
File Source : Acquired on MASPEC II system [I132/A172]
File Title : Gibe EXO194 dprobe
Operator : Doug Hairsine
Instrument : MAT8400

SCAN GRAPH. Flagging=Low Resolution M/z. Highlighting=Base Peak
Scan 24 - 78. Entries=157. Base M/z=232. 100% Int.=27.7568.

ex0288
STANDARD 1H OBSERVE

exp11 s2pul

SAMPLE		SPECIAL	
date	Feb 5 2002	temp	not used
solvent	cdcl3	gain	not used
file	/export/home/~	spin	20
vmwr1/vmwrsys/data-		hst	0.000
/rglbe/ex0288.1/PR-		pu00	12.700
OTOM.fid	alfa		20.000

ACQUISITION		FLAGS	
sw	640.3	11	n
at	1.000	1n	n
np	25570	dp	y
rb	not used	hs	nn
be	16		
se	2	fn	not used
d1	1.000		
nt	8	sp	-29.9
ct	8	wp	3547.1
TRANSMITTER		rfl	804.6
tn	H1	rfl	0
sfrq	400.000	rp	-151.1
tof	417.3	lp	-72.9
tpwr	50		
pw	6.350	vc	200
DECOUPLER		sc	0
de	C13	ve	45
sof	0	th	27
de	nnn	al	cdc ph
dna	c		
dpwr	45		
dat	17100

ex0209
STANDARD 1H OBSERVE

ex011 s2pu1

SAMPLE		SPECIAL	
date	Feb 5 2002	temp	not used
solvent	cdcl3	gain	not used
file	/export/home/~	spin	not used
vnmr1/vnmr2sys/data-	hst		8.000
/rgiba/ex0209.2/CA-	pw90		11.200
ROON.fid	alfa		20.000
ACQUISITION		FLAGS	
sw	25125.6	fl	n
at	1.199	in	n
np	60270	dp	y
fb	13000	hs	nn
bs	64	PROCESSING	
dl	1.000	lb	1.00
nt	512	fn	not used
ct	64	DISPLAY	
TRANSMITTER		PLOT	
tn	C13	sp	-1551.1
strq	100.613	wp	25125.6
tot	1550.5	rfl	8207.4
tpwr	59	rfp	7746.3
pw	3.733	rp	83.3
		lp	-310.3
DECOUPLER		PLOT	
dn	H1	wc	250
dof	8	sc	0
dm	yyy	vs	25
dma	w	th	8
dpwr	39	ai	no ph
dnt	8500

File # 1 : EX0209

Mode = 2 (Mid-IR)

2/25/02 10:48 AM

Sample Description:

Scans = 16

Res = 2 cm⁻¹ 11 scans/min

Apod = Cosine

Transmittance / Wavenumber (cm⁻¹)

File Name : C:\MASPEC\Data\Gibe21.ms2
Creation Date/Time : 2/11/2002 at 10:56:14
File Type : Lo-Res Data - Cld (Magnet)
File Source : Acquired on MASPEC II system [I132/A172]
File Title : Gibe EX0209 dprobe
Operator : Doug Hairsine
Instrument : MAT8400

SCAN GRAPH. Flagging=Low Resolution M/z. Highlighting=Base Peak.
Scan 111 - 118. Entries=495. Base M/z=278.3. 100% Int=52.2763.

input : output

SAMPLE		PROCES	
Date	Jan 28 1962	temp	not used
instrument	cdt13	gain	not used
File	/export/home/-	dp lo	70
vname1/vname2/path	-	bat	0.000
rglba/n=0100/p00-	-	p000	17.700
tem.fid	-	aifo	20.000
ACQUISITION		FLAGS	
bu	0035.5	ll	n
oc	1.000	to	n
sp	00122	dp	y
fb	not used	hc	m
bo	ss	PRIME BEAMS	
dy	z	fn	not used
dt	1.000	DISPLAY	
nd	0	sx	5.1
ct	0	px	2672.5
TRANSMISSION		rff	509.0
tx	ss	rpf	0
trfy	000.007	rp	-100.0
tuf	-450.5	ut	-61.2
tpar	ss	PLAY	
du	d.300	nc	200
DECOMPLEN		oc	77
dst	C3.0	tch	50
dm	nan	el	cde pb
dmr	c		
lprg	0		
lprg	A7100

000100
STANDARD ON 000000

0001 0001

SAMPLE		SPECIAL	
Date	Jan 28 2002	Temp	not used
Solvent	cdcl3	gala	not used
File	/export/home/	gala	not used
Vendor	/usr/lib/	not	0.000
Vendor	/usr/lib/	pu00	21.200
Vendor	/usr/lib/	clfo	20.000
ACQUISITION		PLANS	
sc	25125.0	11	m
sc	1.100	10	m
sc	0.000	dp	y
sc	1.000	sc	m
sc	1.000	10	1.00
sc	1.000	7m	not used
sc	1.000	00	000000
TRANSMITTER		DISPLAY	
sc	100.000	sp	-1214.0
sc	100.000	up	00000.0
sc	100.000	rf	00000.0
sc	100.000	rf	00000.0
sc	100.000	rf	00000.0
sc	100.000	rf	00000.0
RECEIVER		PLOT	
sc	100.000	sc	000
sc	100.000	sc	00
sc	100.000	sc	00
sc	100.000	sc	00
sc	100.000	sc	00

File # 1 : EX01100

Mode = 2 (Mid-IR)

2/25/02 1:10 PM

Sample Description: ex01100

Scans = 16

Res = 2 cm⁻¹ 11 scans/min

Apod = Cosine

Transmittance / Wavenumber (cm⁻¹)

File Name C:\MASPEC\Data\gibc20.ms2
Creation Date/Time 1/30/2002 at 8:16:23
File Type Lo-Res Data - Ctd (Magnat)
File Source Acquired on MASPEC II system [N32A172]
File Title Gibc EX011100 dprobe
Operator Doug Hainsine
Instrument MAT8400

SCAN GRAPH: Flipping=Low Resolution M/z. Highlighting=Base Peak.
Scan 49 - 72 Entries=214 Base M/z=403.1 100% Int.=18 9891

ex0185 #1
STANDARD IN OBSERVE

exp11 s2pu1

SAMPLE		SPECIAL	
date	Jan 21 2002	temp	not used
solvent	cdcl3	gain	not used
file	/export/home/~	spin	20
nmr1/vnmr1sys/data~	hst	0.000	
/rgtbe/ex0185/PROT~	pu00	12.700	
ON.fid	atfa	20.000	
ACQUISITION		FLAGS	
sw	4001.0	11	n
at	1.000	in	n
np	16266	dp	y
fb	not used	hs	nn
bs	10		
ss	2	fn	not used
di	1.000		
nt	0	sp	-20.1
ct	0	wp	3625.7
TRANSMITTER		rfl	364.0
ts	H1	rfl	0
sfrq	400.007	rp	-161.0
tof	-326.7	lp	-59.0
tpwr	10		
pw	0.350	wc	200
DECOUPLER		sc	0
dn	C13	vs	39
dof	0	th	54
dm	nmr	al	cdc ph
dms	c		
dpwr	45		
daf	17100

ex0185 #1
STANDARD 1H OBSERVE

exp11 s2pu1

SAMPLE		SPECIAL	
date	Jan 21 2002	temp	not used
solvent	cdcl3	gain	not used
file	/export/home/	spin	not used
vner1/vnersys/data-	hst	hst	8.000
/rgibe/ex0185/CARD-	pw90	pw90	11.200
ON.fid	atfa	atfa	20.000
ACQUISITION		FLAGS	
sw	25125.6	11	n
at	1.100	1a	n
np	69270	dp	y
tb	13000	hs	nn
bs	64	PROCESSING	
dl	1.000	1b	1.00
nt	1832	fn	not used
ct	64	DISPLAY	
TRANSMITTER		sp	-1370.9
tn	C13	wp	24999.9
sfrq	100.613	rfl	1490.6
tof	1550.8	rfl	0
tpwr	59	rp	66.3
pw	3.733	lp	-202.6
DECOUPLER		PLOT	
dn	H1	wc	250
dof	8	sc	0
dm	yyv	vs	47
dms	v	th	19
dpr	33	el	no ph
dnt	8500

File # 1 : EX0185

Mode = 2 (Mid-IR)

2/25/02 11:08 AM

Sample Description: ex0185

Scans = 16

Res = 2 cm⁻¹ 11 scans/min

Apod = Cosine

Transmittance / Wavenumber (cm⁻¹)

File Name : C:\MASPEC\Data\GIBE18.ms2
Creation Date/Time : 1/29/2002 at 13:54:15
File Type : Lo-Res Data - Ctd (Magnet)
File Source : Acquired on MASPEC II system [I132/A172]
File Title : Gibe EXO185 dprobe
Operator : Doug Hairsine
Instrument : MAT8400

SCAN GRAPH. Flagging=Low Resolution M/z. Highlighting=Base Peak.
Scan 59 - 73. Entries=250. Base M/z=342. 100% Int.=46.9163.

ex0158
STANDARD 1H OBSERVE

expt1 s2pu1

SAMPLE		SPECIAL	
date	Jan 19 2002	temp	not used
solvent	cdcl3	gain	not used
file	/export/home/~	spin	20
vnmr1/vnmr	sys/data/~	hst	8.886
/rglbe/ex0158/PROT~		pu08	12.780
	OH.fid	alfa	28.880
ACQUISITION		FLAGS	
sw	3527.3	il	n
at	1.997	in	n
np	14886	dp	y
Tb	not used	hs	nm
bs	16		
ss	Z	fn	not used
d1	1.900	DISPLAY	
nt	8	sp	489.6
ct	8	wp	1641.9
TRANSMITTER		rfl	24.6
tn	H1	rtp	0
cfrq	400.987	rp	-159.0
tof	-244.2	lp	-53.1
tpwr	50	PLOT	
pw	6.350	wc	250
DECOUPLER		sc	0
dn	C13	vs	50
dof	8	th	3
da	nm	ai	cdc ph
dms	c		
dpur	45		
daf	17100

ex0168
STANDARD 1H OBSERVE

ex011 szpul

SAMPLE		SPECIAL	
date	Jan 10 2002	temp	not used
solvent	cdcl3	gain	not used
file	/export/home/~	spin	not used
vnmr1/vnmr2/data~	hst	hst	0.000
/rgibe/ex0168/CARS-	pu00	pu00	11.200
ON.fid	al7a	al7a	20.000
ACQUISITION		FLAGS	
sv	25125.6	il	n
at	1.199	in	n
np	60270	dp	y
Tb	13000	hs	nn
ba	64	PROCESSING	
dl	1.000	lb	1.00
nt	1012	fn	not used
ct	64	DISPLAY	
TRANSMITTER		sp	-1541.9
tn	C13	wp	25125.6
sfreq	100.613	rf1	9280.2
tof	1550.0	rfp	7740.3
tpwr	50	rp	86.9
pv	3.733	lp	-313.6
DECOUPLER		PLOT	
dn	H1	wc	250
dof	0	sc	0
dm	yyy	vs	66
dma	v	th	9
dpr	30	at	no ph
daf	8500

File # 2 : EX0168

Mode = 2 (Mid-IR)

2/25/02 1:27 PM

Sample Description: ex0168

Scans = 16

Res = 2 cm-1 11 scans/min

Apod = Cosine

Transmittance / Wavenumber (cm-1)

File Name : C:\MASPEC\Data\GIBE10.ms2
Creation Date/Time : 1/29/2002 at 11:03:16
File Type : Lo-Res Data - Ctd (Magnet)
File Source : Acquired on MASPEC II system [I132/A172]
File Title : Gibe EXO168 dprobe
Operator : Doug Hairsine
Instrument : MAT8400

SCAN GRAPH. Flagging=Low Resolution M/z. Highlighting=Base Peak.
Scan 41 - 52. Entries=239. Base M/z=276. 100% Int.=70.703.

ex0186 #1
STANDARD 1H OBSERVE

exp11 s2pu1

SAMPLE		SPECIAL	
date	Jan 23 2002	temp	not used
solvent	cdcl3	gain	not used
file	/export/home/~	spin	20
vnari/vnmr	sys/data-	het	6.888
/rg1be/ex0186.3/PR-		pwse	12.788
OTON.fid	alfa	28.888	
ACQUISITION		FLAGS	
sw	3549.9	11	n
at	1.985	1n	n
ap	14185	dp	y
fb	not used	hs	nn
bs	15		
ss	2	fn	not used
di	1.088		
nt	8	sp	17.7
ct	8	wp	3483.5
		rfl	23.3
TRANSMITTER	H1	rpf	8
sfreq	400.887	rp	178.6
tof	-232.3	lp	-43.6
tpwr	58		
pw	6.358	vc	288
		sc	8
DECOUPLER	C13	vs	288
dn	8	th	54
dof	nnn	at	cdc ph
das	c		
dpwr	45		
dwt	17108

ex0186 #1
STANDARD 1H OBSERVE

exp11 s2pul

SAMPLE		SPECIAL	
date	Jan 23 2002	temp	not used
solvent	cdcl3	gain	not used
file	/export/home/~	spin	not used
nmr1/vnarsys/data/~		hst	0.005
/rg1be/ex0186.3/CA~		pw90	11.200
RSON.fid	alfa		20.000

ACQUISITION		FLAGS	
sw	25125.6	11	n
at	1.199	1n	n
np	60270	dp	y
fb	13600	hs	nn
bs	54		
di	1.000	1b	1.00
nt	1012	fn	not used
ct	192		
TRANSMITTER		DISPLAY	
tn	C13	sp	-1496.6
sfrq	100.613	wp	25125.6
tof	1558.8	rfl	1496.6
tpwr	59	rpf	0
pw	3.733	lp	34.5
			-269.7
DECOUPLER		PLOT	
dn	H1	vc	250
dot	0	sc	0
dm	yyy	vg	41
dmm	w	th	9
dpwr	39	a1	no ph
dnt	8500

File # 2 : EX0186

Mode = 2 (Mid-IR)

2/25/02 1:30 PM

Sample Description: ex0186

Scans = 16

Res = 2 cm⁻¹ 11 scans/min

Apod = Cosine

Transmittance / Wavenumber (cm⁻¹)

File Name : C:\MASPEC\Data\GIBE17.ms2
Creation Date/Time : 1/29/2002 at 13:13:20
File Type : Lo-Res Data - Ctd (Magnet)
File Source : Acquired on MASPEC II system [1132/A172]
File Title : Gibe EXO186 dprobe
Operator : Doug Hairsine
Instrument : MAT8400

SCAN GRAPH. Flagging=Low Resolution M/z. Highlighting=Base Peak.
Scan 32 - 54. Entries=245. Base M/z=218. 100% Int.=81.2915.

EX0212
STANDARD 1H OBSERVE

exp11 s2pul

SAMPLE		SPECIAL	
date	Feb 15 2002	temp	not used
solvent	cdcl3	gain	not used
file	/export/home/~	spin	29
nmr1/vnmrsvs/data/~	hst		0.000
/rgibe/ex0212/PROT-	pu99		12.700
	0N.fid	alpha	20.000

ACQUISITION		FLAGS	
sw	6410.3	tl	n
at	1.995	in	n
np	25576	dp	y
fb	not used	hs	nn
bs	16		
ss	2	fn	not used
dl	1.000	sp	DISPLAY
nt	0	wp	3360.7
ct	0	rt1	894.6

TRANSMITTER		PROCESSING	
tn	M1	rtp	0
strq	400.000	rp	-107.0
tof	417.3	lp	-94.4
tpwr	50		
pw	0.350	vc	250

DECOUPLER		PLOT	
dn	G13	sc	0
dof	0	vs	10
dm	nmn	th	56
dpr	C	al	cdg ph
smf	17100

000212
STANDARD IN OBSERVE

exp11 exp1

SAMPLE		SPECIAL	
date	Feb 15 2002	temp	not used
solvent	cdcl3	gain	not used
file	/export/home/~	spin	not used
nmr1/vnrsys/data~	hst		0.000
/egibe/ex0212/CAR5~	pw90		11.200
GM.fid	atfa		20.000
ACQUISITION		FLAGS	
sw	100000.0	l1	n
at	0.040	in	n
np	128000	dp	y
fb	55000	hs	nn
bs	64	PROCESSING	
d1	1.000	tb	1.00
nt	256	fn	not used
ct	256	DISPLAY	
TRANSMITTER		sp	-40.5
tn	C13	vp	23120.6
sfrq	100.652	rfl	8050.3
tof	40004.5	rff	7746.4
tpwr	59	rp	142.1
pw	3.733	lp	-1240.5
DECOUPLER		PLOT	
dn	H1	vc	250
dof	0	sc	0
dm	YYY	vs	21
dma	v	th	10
dpr	39	al	no ph
dnt	0500

9i

File # 1 : EX0212

Mode = 2 (Mid-IR)

2/25/02 10:52 AM

Sample Description: ex0212

Scans = 16

Res = 2 cm⁻¹ 11 scans/min

Apod = Cosine

Transmittance / Wavenumber (cm⁻¹)

File Name : C:\MASPEC\Data\Gibe25.ms2
Creation Date/Time : 2/19/2002 at 8:26:10
File Type : Lo-Res Data - Ctd (Magnet)
File Source : Acquired on MASPEC II system [I132/A172]
File Title : Gibe EX01212 dprobe
Operator : Doug Hairsine
Instrument : MAT8400

SCAN GRAPH. Flagging=Low Resolution M/z. Highlighting=Base Peak.
Scan 67 - 70. Entries=140. Base M/z=174.1. 100% Int.=4.2699.

ex0165a End fraction
STANDARD IN OBSERVE

expt1 s2pu1

SAMPLE		SPECIAL	
date	Jan 4 2002	temp	not used
solvent	cdcl3	gain	not used
file	/export/home/~	spin	20
nmr1/vnmrsta/data/~		het	8.888
/rglbe/ex0165a/PRO-		pw90	12.788
TON.fid	417a		20.000
ACQUISITION		FLAGS	
sv	6418.2	il	n
at	1.895	in	n
np	25578	dp	y
fb	not used	ht	nn
bs	16	PROCESSING	
ss	2	fn	not used
dl	1.000	DISPLAY	
nt	5	sp	827.1
cl	8	vp	2762.8
TRANSMITTER		rfl	804.6
ts	H1	rfp	0
sfrq	400.000	rp	-142.3
tof	417.3	lp	-95.6
tpwr	50	PLOT	
pv	8.350	vc	250
DECOUPLER		sc	0
dn	C13	vs	40
dof	8	th	27
dm	nnn	al	cdc ph
dsm	c		
dpwr	45		
dof	17100

2nd fraction
STANDARD 1H OBSERVE

exp11 s2pul

SAMPLE		SPECIAL	
date	Jan 4 2002	temp	not used
solvent	cdcl3	gain	not used
file	/export/home/~	spin	not used
vnmr1/vnmr5s/data~	hst		0.008
/rgibe/ex0165a.1/C-	pw99		11.200
ARBON.fid	alfa		20.000

ACQUISITION		FLAGS	
sw	25125.6	tl	n
at	1.189	in	n
np	60270	dp	y
fb	13800	ht	nn
bs	64		
dl	1.000	lb	1.00
nt	760	fn	not used
ct	64		

TRANSMITTER		DISPLAY	
tn	C13	sp	-1541.1
sfreq	100.613	vp	25125.6
tof	1550.6	rfl	9287.4
tpwr	59	rpf	7746.3
pw	3.733	rp	96.5
		lp	-312.2

DECOUPLER		PLOT	
dn	H1	vc	250
dof	0	sc	0
dw	yyy	vs	26
dnn	w	th	0
dpr	39	af	no ph
dof	8500

File # 2 : EX0165A

Mode = 2 (Mid-IR)

2/25/02 1:47 PM

Sample Description: ex0165a

Scans = 16

Res = 2 cm⁻¹ 11 scans/min

Apod = Cosine

Transmittance / Wavenumber (cm⁻¹)

244230.135-29 105

File Name	: C:\MASPEC\Data\Gibe6.ms2
Creation Date/Time	: 1/8/2002 at 13:59:37
File Type	: Lo-Res Data - Ctd (Magnet)
File Source	: Acquired on MASPEC II system [I132/A172]
File Title	: Gibe EXO165 #2 dprobe
Operator	: Doug Hairsine
Instrument	: MAT8400

SCAN GRAPH. Flagging=Low Resolution M/z. Highlighting=Base Peak.

cyclopropanation of 1,3-dimethylindole N
 Mr File #ex0155A.1
 STANDARD 1H OBSERVE

exp11 s2pul

SAMPLE		SPECIAL	
date	Dec 21 2001	temp	not used
solvent	cdc13	gain	not used
file	/export/home/~	spin	20
vnmr1/vnmr2/data-	hst	0.000	
/rgibe/ex0155A.1/P-	pw90	12.700	
ROTON.fid	alfa	20.000	
ACQUISITION		FLAGS	
sw	3494.1	11	n
at	1.330	1n	n
ap	13962	dp	y
fb	not used	hs	nn
bs	16		
ss	2	fn	not used
dl	1.000		
nt	8	sp	30.7
ct	8	wp	3300.0
		rfl	-11.4
TRANSMITTER	H1	rfl	0
sfrq	400.007	rp	-164.3
tof	-224.0	lp	-41.3
tpwr	50		
pw	6.350	wc	250
		sc	0
DECOUPLER	C13	vs	32
dn	0	th	54
dof	nnn	al	cdc ph
dm	C		
dpr	45		
dwt	17100

cyclopropanation of 1,3-dimethylindole N
 Mr File #ex0155A.1
 STANDARD 1H OBSERVE

exp11 s2pu)

SAMPLE		SPECIAL	
date	Dec 21 2001	temp	not used
solvent	cdcl3	gain	not used
file	/export/home/~	spin	not used
vner1/vnersys/data-	hst		0.000
/rgibe/ex0155A.1/C-	pw90		11.200
ARBON.Fid	alfa		20.000

ACQUISITION		FLAOS	
sw	25125.4	fl	n
at	1.199	fn	n
np	60270	dp	y
fb	13000	hs	nn
bs	64		
d1	1.000	tb	1.00
nt	1012	fn	not used
ct	64		

TRANSMITTER		PROCESSING	
tn	C13	sp	-1370.9
sfrq	100.613	wp	24999.9
tof	1550.0	rfl	1498.6
tpwr	50	rpf	110.0
pw	0.733	lp	-349.0

DECOUPLER		PLOT	
dm	M1	wc	250
dof	0	sc	0
dm	yyy	vs	35
dma	w	th	5
dpwr	35	ai	no
daf	0500	ph

File # 1 : EX0155A

Mode = 2 (Mid-IR)

2/25/02 11:11 AM

Sample Description: ex0155a

Scans = 16

Res = 2 cm-1 11 scans/min

Apod = Cosine

Transmittance / Wavenumber (cm-1)

File Name : C:\MASPEC\Data\Gibe9.ms2
Creation Date/Time : 1/9/2002 at 9:29:50
File Type : Lo-Res Data - Ctd (Magnet)
File Source : Acquired on MASPEC II system [I132/A172]
File Title : Gibe EXO155A dprobe
Operator : Doug Hairsine
Instrument : MAT8400

SCAN GRAPH. Flagging=Low Resolution M/z. Highlighting=Base Peak.
Scan 43 - 76. Entries=90. Base M/z=184.2. 100% Int.=24.2639.

ex9158a 2nd fraction
STANDARD 1H OBSERVE

exp11 szpul

SAMPLE		SPECIAL	
date	Dec 24 2001	temp	not used
solvent	cdcl3	gain	not used
file	/export/home/~	spin	20
vnar1/vnarsys/data/~	hst		8.000
/rgibe/ex9158a.5/p~	pu90		12.700
ROTON.rfd	atfa		20.000
ACQUISITION		FLAGS	
sw	4177.1	il	n
at	1.997	in	n
np	16602	dp	y
rb	not used	hs	nn
bs	10		
ss	2	fn	not used
dl	1.000		
nt	8	sp	-149.1
ct	8	wp	3952.0
		rfl	154.4
TRANSMITTER		DISPLAY	
tn	M1	rfl	0
effrq	400.807	rp	-166.6
tof	-49.1	lp	-46.5
tpwr	50		
pw	6.350	wc	250
DECOUPLER		PLOT	
dn	C13	sc	0
dof	8	vs	44
dnn	nnn	th	54
dpwr	C	al	cdc ph
dof	45		
dof	17100

ex0158a 2nd fraction
STANDARD 1H OBSERVE

exp11 szpu1

SAMPLE		SPECIAL	
date	Dec 24 2001	temp	not used
solvent	cdcl3	gain	not used
file	/export/home/~ spin	not used	
vnmr1/vnmrSYS/data~	hst	8.000	
/rgiba/ex0158a.S/C-	pw90	11.200	
ARSON.F1d	alpha	20.000	
ACQUISITION		FLAGS	
sw	25125.6	tl	n
at	1.199	tn	n
np	60270	dp	y
fb	13000	hs	nn
bs	64		
d1	1.000	lb	1.00
nt	1524	fn	not used
ct	448		
TRANSMITTER		DISPLAY	
tn	C13	wp	-1270.4
sfrq	100.613	rfl	24656.2
tof	1550.8	rfp	9200.5
tpwr	59	rp	7746.3
pw	3.733	lp	83.5
			-317.7
DECOUPLER		PLOT	
dn	H1	wc	250
dof	0	sc	9
dm	yyy	vs	93
dma	w	th	9
dpwr	39	ai	no
dmf	8500	ph

File # 2 : EX0158A

Mode = 2 (Mid-IR)

2/25/02 2:02 PM

Sample Description: ex0158a

Scans = 16

Res = 2 cm⁻¹ 11 scans/min

Apod = Cosine

Transmittance / Wavenumber (cm⁻¹)

File Name : C:\MASPEC\Data\Gibe7.ms2
Creation Date/Time : 1/8/2002 at 15:44:58
File Type : Lo-Res Data - Ctd (Magnet)
File Source : Acquired on MASPEC II system [I132/A172]
File Title : Gibe EXO168a #2 dprobe
Operator : Doug Hairsine
Instrument : MAT8400

SCAN GRAPH. Flagging=Low Resolution M/z. Highlighting=Base Peak.
Scan 30 - 56. Entries=398. Base M/z=202.2. 100% Int.=50.103.

ex0155a 1st fraction
STANDARD 1H OBSERVE

ex011 s2pu1

SAMPLE		SPECIAL	
date	Dec 24 2001	temp	not used
solvent	cdcl3	gain	not used
file	/export/home/~	spin	20
vner1/vnarsys/data-	hst	8.908	
/rglbe/ex0155a.4/p-	pw50	12.700	
ROTON.fid	alfa	20.000	
ACQUISITION		FLAGS	
sw	4046.9	tl	n
at	1.998	in	n
np	16168	dp	y
fb	not used	hs	nn
bs	16		
ss	2	fn	not used
dl	1.000	sp	-43.4
nt	8	wp	3637.4
ct	8	rfl	59.6
TRANSMITTER		PLOT	
tn	H1	rfl	0
sfrq	400.087	rp	-161.9
tof	-29.4	lp	-57.0
tpwr	50		
pw	6.350	wc	250
DECOUPLER			
dn	C13	sc	0
dof	0	th	30
dm	nnn	al	cdc ph
dmm	C		
dpwr	45		
daf	17100

ex0158a 1st fraction
STANDARD IN OBSERVE

exp11 s2pul

SAMPLE		SPECIAL	
date	Dec 24 2001	temp	not used
solvent	cdcl3	gain	not used
file	/export/home/~	spin	not used
vname1/vname2/data~	hst		0.000
/rgibe/ex0158a.4/C~	pw90		11.200
ARBON.fid	alfa		20.000

ACQUISITION		FLAGS	
sw	25125.6	fl	n
at	1.199	in	n
np	64279	dp	y
fb	12800	hs	nn
bs	64		
dl	1.000	lb	1.00
nt	1012	fn	not used
ct	64		

TRANSMITTER		DISPLAY	
tn	C13	wp	-1177.7
sfrq	100.613	rfl	24630.3
tof	1550.8	rfp	3286.7
tpwr	59	rp	7746.3
pw	3.733	lp	50.1
			-326.3

DECOUPLER		PLOT	
dn	H1	wc	250
dof	8	sc	0
dm	yyv	vs	00
dmm	w	th	0
dpwr	33	al	no
dnt	8500	ph

File # 2 : EX0158A1

Mode = 2 (Mid-IR)

2/25/02 2:40 PM

Sample Description: ex0158a1

Scans = 16

Res = 2 cm⁻¹ 11 scans/min

Apod = Cosine

Transmittance / Wavenumber (cm⁻¹)

File Name : C:\MASPEC\Data\Gibe8.ms2
Creation Date/Time : 1/9/2002 at 8:20:47
File Type : Lo-Res Data - Ctd (Magnet)
File Source : Acquired on MASPEC II system [I132/A172]
File Title : Gibe EXO158a #1 dprobe
Operator : Doug Hairsine
Instrument : MAT8400

SCAN GRAPH. Flagging=Low Resolution M/z. Highlighting=Base Peak.
Scan 29 - 78. Entries=283. Base M/z=202.2. 100% Int.=6.9914.

ex0159
STANDARD 1H OBSERVE

exp11 s2pul

SAMPLE		SPECIAL	
date	Dec 27 2001	temp	not used
solvent	cdcl3	gain	not used
file	/export/home/~	spin	20
vnmr1/vnmr/sys/data/~	hst	0.000	
/rgtbe/ex0159.2/PR~	pw90	12.700	
OTON.fid	alpha	29.000	

ACQUISITION		FLAGS	
sw	3450.7	il	n
at	1.956	in	n
np	13772	dp	y
fb	not used	hs	nn
bs	16		
ss	2	fn	not used
dl	1.000		
nt	8	sp	25.5
ct	8	vp	3341.5

TRANSMITTER		DISPLAY	
tn	H1	rfl	24.2
sfrq	400.007	rfp	0
tof	-282.1	lp	-165.7
tpwr	58		-48.6
pw	6.350	wc	250

DECOUPLER		PLOT	
dn	C13	sc	0
dof	8	vs	54
da	nnn	th	4
dsm	c	al	cdc ph
dpwr	45		
daf	17100

ex0159
STANDARD 1H OBSERVE

exp11 e2pu1

SAMPLE		SPECIAL	
date	Dec 27 2001	temp	not used
solvent	cdcl3	gain	not used
file	/export/home/~	spin	not used
vnmr1/vnmr2/data-	hst	hst	0.000
/rglbe/ex0159.2/CA-	pw90	pw90	11.200
RS0N.fid	altf	altf	20.000
ACQUISITION		FLAGS	
sw	25125.6	ll	n
at	1.100	in	n
np	60270	dp	y
fb	13000	hs	nm
bs	64		
d1	1.000	lb	1.00
nt	1012	fn	not used
ct	304		
TRANSMITTER		PROCESSING	
tn	C13	sp	-1535.0
sfrq	100.613	wp	25125.6
tof	1550.6	rfl	9201.3
tpwr	55	rfp	7746.3
pw	3.733	rp	92.2
		lp	-341.6
DECOUPLER		PLOT	
dn	M1	vc	250
dof	8	sc	0
dm	yyy	vs	64
dsm	w	th	10
dpwr	39	al	no ph
daf	8500

ex0155
STANDARD IN OBSERVE

Archive directory: /export/home/vmari/vmrays/data
Sample directory: auto_27Dec2001

Pulse Sequence: ghsoc
Solvent: cdcl3
Ambient temperature
File: ghsoc
Mercury-4000 "nuc4000"

ex8159
STANDARD IN OBSERVE

Archive directory: /export/home/vmr1/vmr/sys/data
Sample directory: auto_27Dec2001

Pulse Sequence: gHSQC
Solvent: cdcl3
Ambient temperature
File: gHSQC
Mercury-4000 "nmr400"

cx0159
STANDARD 1H OBSERVE

Archive directory: /export/home/vnmr1/vnmr/sys/data
Sample directory: auto_27Dec2001

Pulse Sequence: gHMBC
Solvent: cdcl3
Ambient temperature
File: gHMBC
Mercury-40000 "nrm400"

Relax. delay 1.000 sec
Acq. time 0.148 sec
Width 3448.3 Hz
2D width 24154.6 Hz
8 repetitions
480 increments
OBSERVE H1, 400.0054013 MHz
DATA PROCESSING
Sine bell 0.074 sec
F1 DATA PROCESSING
Sine bell 0.080 sec
FT size 1024 x 2048
Total time 1 hr, 10 min, 3 sec

ex8159
STANDARD IN OBSERVE

Archive directory: /export/home/vnmr1/vnmrjys/data
Sample directory: auto_27Dec2001

Pulse Sequence: gpmc
Solvent: cdcl3
Ambient temperature
File: gpmc
Mercury-4000B "nmr400"

sv0155
STANDARD 1H OBSERVE

Archive directory: /export/home/vnmr1/vnmrsys/data
Sample directory: auto_27Dec2001

Pulse Sequence: gpmhc
Solvent: cdcl3
Acquire temperature
File: gpmhc
Mercury-4000 "nuc400"

File # 2 : EX0159

Mode = 2 (Mid-IR)

2/25/02 2:19 PM

Sample Description: ex0159

Scans = 16

Res = 2 cm-1 11 scans/min

Apod = Cosine

Transmittance / Wavenumber (cm-1)

File Name : C:\MASPEC\Data\Gibe11.ms2
Creation Date/Time : 1/9/2002 at 11:14:21
File Type : Lo-Res Data - Ctd (Magnet)
File Source : Acquired on MASPEC II system [II32/A172]
File Title : Gibe EXO159 dprobe
Operator : Doug Hairsine
Instrument : MAT8400

SCAN GRAPH. Flagging=Low Resolution M/z. Highlighting=Base Peak.
Scan 25 - 60. Entries=183. Base M/z=256.3. 100% Int.=14.1643.

ex01578
STANDARD IN OBSERVE

exp11 s2pul

SAMPLE		SPECIAL	
date	Dec 23 2001	temp	not used
solvent	cdcl3	gain	not used
file	/export/home/~	spin	20
vnmr1/vnmr2/data-	hst	hst	0.000
/rglbe/ex01578.2/p-	pw90	pw90	12.700
ROTON.fid	alfa	alfa	20.000
ACQUISITION		FLOPS	
sv	3500.2	sl	n
at	1.997	in	n
np	15590	dp	y
fb	not used	hs	nn
bs	16		
ss	2	fn	not used
dl	1.000		
nt	8	sp	-55.7
ct	8	wp	3664.3
		rfl	60.5
TRANSMITTER		PROCESSING	
tn	H1	rtp	0
efrq	400.007	rp	-155.8
tof	-90.6	lp	-63.7
tpwr	58		
pw	6.350	wc	250
DECOUPLER		PLOT	
dn	C13	sc	0
dof	0	th	62
dnn	nnn	al	cdc ph
dpr	45		
daf	17100

17

ex0157b
STANDARD 1H OBSERVE

exp11 s2pu1

SAMPLE		SPECIAL	
date	Dec 23 2001	temp	not used
solvent	cdcl3	gain	not used
file	/export/home/~	spin	not used
nmr1/vnmr/sys/data/~	ht		0.008
/rglbe/ex0157b.2/C~	pw90		11.200
	ARBON-fid	alfa	20.000
ACQUISITION		FLAGS	
sw	25125.6	il	n
at	1.199	in	n
np	60270	dp	y
fb	13000	hs	nn
bs	64		
d1	1.000	lb	1.00
nt	1012	fn	not used
ct	128		
TRANSMITTER		PROCESSING	
tn	C13	sp	-1541.9
sfrq	100.613	wp	25125.6
tof	1550.8	rfl	9288.2
tpwr	59	rff	7746.3
pw	3.733	rp	84.8
		lp	-234.7
DECOUPLER		PLOT	
dn	H1	wc	250
dof	0	sc	0
dm	yyy	vs	28
dmm	w	th	0
dpr	38	al	no ph
dwf	8500

File # 2 : EX0157B

Mode = 2 (Mid-IR)

2/25/02 1:43 PM

Sample Description: ex0157b

Scans = 16

Res = 2 cm⁻¹ 11 scans/min

Apod = Cosine

Transmittance / Wavenumber (cm⁻¹)

File Name : C:\MASPEC\Data\Gibe10.ms2
Creation Date/Time : 1/9/2002 at 10:38:26
File Type : Lo-Res Data - Ctd (Magnet)
File Source : Acquired on MASPEC II system [II32/A172]
File Title : Gibe EXO157 dprobe
Operator : Doug Hairsine
Instrument : MAT8400

SCAN GRAPH. Flagging=Low Resolution M/z. Highlighting=Base Peak.
Scan 46 - 70. Entries=140. Base M/z=301.3. 100% Int.=16.7288.