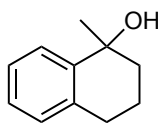
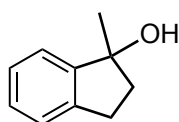


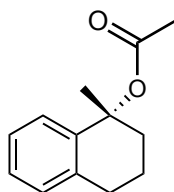
Dados Espectroscópicos e Espectrométricos para as reação de Resolução Cinética e Resolução Cinética Dinâmica de álcoois terciários bicíclicos



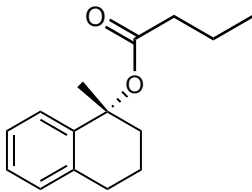
1-methyl-1,2,3,4-tetrahydronaphthalen-1-ol, $C_{11}H_{14}O$; **MM** 162.23 g mol⁻¹; white solid (76% yield, 1.85 g – purified via recrystallization with cold heptane). **MS** (EI, 70 eV) *m/z* (relative abundance %): 162 (1), 148 (12), 147 (100), 144 (29), 129 (49), 119 (22), 115 (12), 105 (3), 91 (38), 77 (5), 65 (4), 51 (3), 43 (5). **IR** ν_{max} (neat, cm⁻¹): 3309, 2935, 2354, 1437, 1369. **¹H NMR** (300 MHz, CDCl₃) δ (ppm): 7.63–7.60 (m, 1H), 7.22–7.16 (m, 2H), 7.11–7.08 (m, 1H), 2.90–2.72 (m, 2H), 1.99–1.80 (m, 4H), 1.58 (s, 3H). **¹³C NMR** (75 MHz, CDCl₃): 142.8, 136.3, 128.8, 127.1, 126.4, 126.3, 70.5, 39.8, 30.8, 29.9, 20.5. **Chiral GC-FID**: $t_{R-(S)}$ = 13.76 min e $t_{R-(R)}$ = 15.16 min (Column: CP-Chirasil-DEX CB)



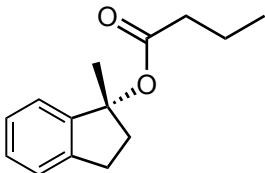
1-methyl-2,3-dihydro-1H-inden-1-ol, $C_6H_8O_2$; **MM** 148.20 g mol⁻¹; yellow oil (61% yield, 1.36 g – purified via flash chromatography). **IR** ν_{max} (neat, cm⁻¹): 3320, 2973, 2364, 1491. **¹H NMR** (600 MHz, CDCl₃) δ (ppm): 7.37–7.35 (m, 1H), 7.24 (m, 3H), 3.05–3.00 (m, 1H), 2.86–2.81 (m, 1H), 2.26–2.15 (m, 2H), 1.76 (br s, 1H), 1.57 (s, 3H). **¹³C NMR** (150 MHz, CDCl₃): 148.8, 142.7, 128.2, 126.4, 125.0, 123.1, 81.9, 42.4, 29.4, 27.3. **Chiral GC-FID**: $t_{R-(S)}$ = 8.93 min e $t_{R-(R)}$ = 9.20 min (Column: CP-Chirasil-DEX CB).



1-methyl-1,2,3,4-tetrahydronaphthalen-1-yl acetate, $C_{13}H_{16}O_2$; **MM** 204.26 g mol⁻¹; yellow oil (45% yield, 0.165 g). **MS** (EI, 70 eV) *m/z* (relative abundance %): 162 (7), 147 (28), 145 (59), 144 (100), 129 (100), 128 (50), 119 (4), 115 (24), 103 (4), 91 (16), 77 (6), 64 (6), 43 (11). **IR** ν_{max} (neat, cm⁻¹): 2935, 2362, 1730, 1490, 1437, 1240. **¹H NMR** (300 MHz, CDCl₃) δ (ppm): 7.43–7.40 (m, 1H), 7.20–7.17 (m, 2H), 7.09–7.06 (m, 1H), 2.85–2.74 (m, 2H), 2.00 (s, 3H), 1.97–1.83 (m, 4H), 1.74 (s, 3H). **¹³C NMR** (75 MHz, CDCl₃): 169.7, 141.4, 136.4, 128.8, 127.0, 126.2, 125.9, 80.7, 33.8, 29.8, 29.7, 21.3, 20.1. **Chiral GC-FID**: $t_{R-(R)}$ = 10.33 min e $t_{R-(S)}$ = 10.86 min (Column: CP-Chirasil-DEX CB).

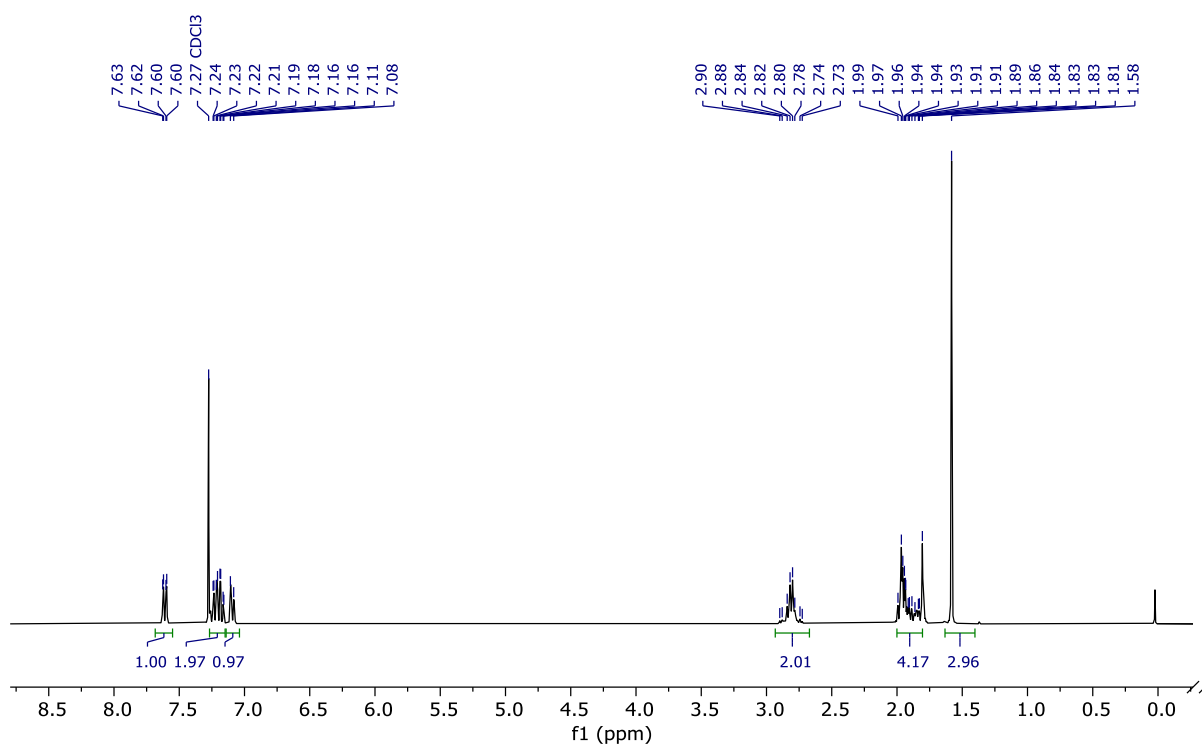


1-methyl-1,2,3,4-tetrahydronaphthalen-1-yl butyrate, C₁₅H₂₀O₂; **MM** 232.32 g mol⁻¹; yellow oil (54% yield, 0.200 g). **IR** ν_{max} (neat, cm⁻¹): 3318, 2947, 2358, 1745, 1431, 1320. **¹H NMR** (600 MHz, CDCl₃) δ (ppm): 7.40–7.39 (dd, $J = 1.9$ Hz, 1H), 7.21–7.16 (m, 2H), 7.10–7.09 (m, 1H), 2.93–2.88 (m, 1H), 2.79–2.74 (m, 1H), 2.59–2.55 (m, 1H), 2.29–2.21 (m, 3H), 2.17–2.13 (m, 1H), 2.03–1.96 (m, 1H), 1.84–1.76 (m, 1H), 1.76 (s, 3H), 1.66–1.60 (m, 2H), 0.96–0.93 (t, 3H). **¹³C NMR** (150 MHz, CDCl₃): 172.6, 140.5, 136.5, 128.7, 127.1, 126.1, 81.2, 37.5, 34.5, 29.6, 18.5, 14.0, 13.7. **Chiral GC-FID**: $t_{\text{R-(R)}}$ = 16.14 min e $t_{\text{R-(S)}}$ = 16.73 min (Column: CP-Chirasil-DEX CB).

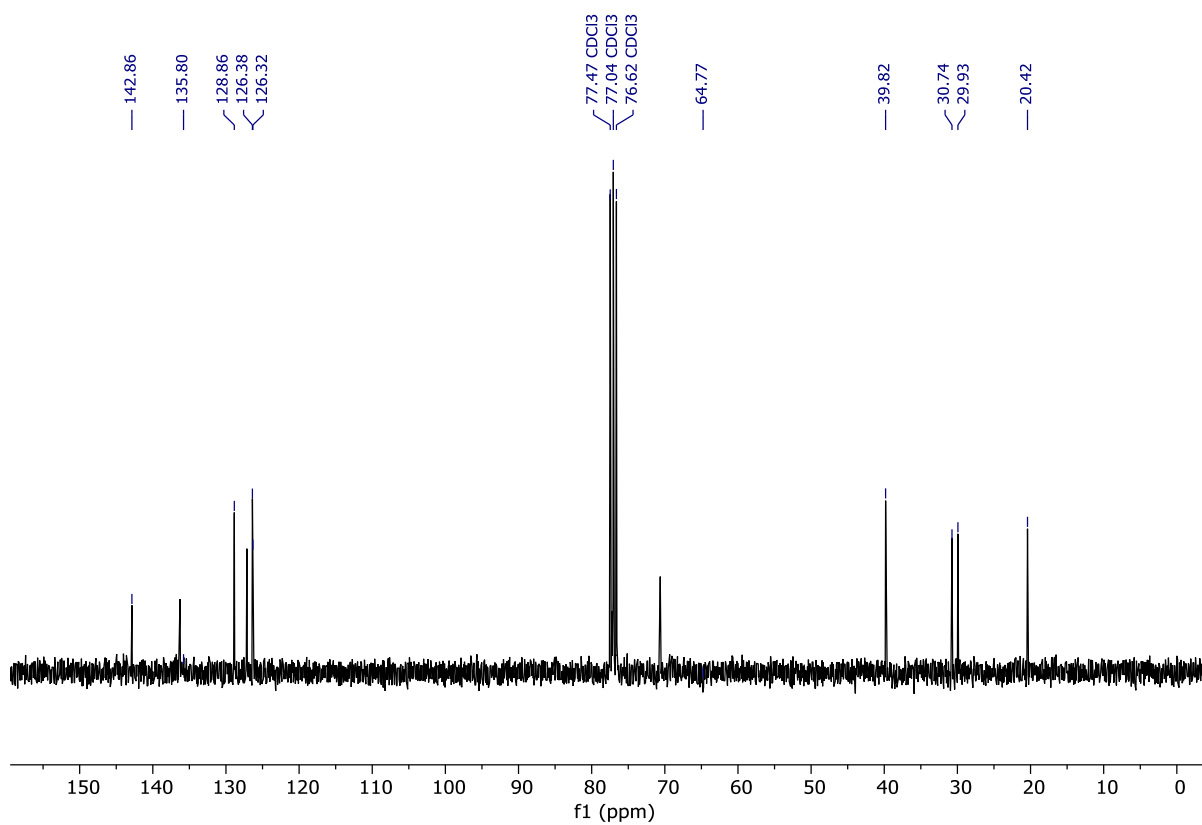


1-Methyl-2,3-dihydro-1H-inden-1-yl butyrate, C₁₄H₁₈O₂; **MM** 218.29 g mol⁻¹; yellow oil (90% yield, 1.10 g). **IR** ν_{max} (neat, cm⁻¹): 3318, 2947, 2358, 1745, 1431, 1320. **¹H NMR** (600 MHz, CDCl₃) δ (ppm): 7.34–7.32 (dd, $J = 1.8$ Hz, 1H), 7.19–7.15 (m, 2H), 7.11–7.09 (m, 1H), 2.93–2.88 (m, 1H), 2.79–2.74 (m, 1H), 2.29–2.21 (m, 3H), 2.13–2.05 (m, 1H), 1.79–1.74 (m, 1H), 1.52 (s, 3H), 1.46–1.41 (m, 2H), 0.91–0.87 (t, 3H). **¹³C NMR** (150 MHz, CDCl₃): 172.6, 140.5, 136.5, 128.7, 127.1, 126.1, 81.2, 37.5, 34.5, 29.6, 18.5, 14.0, 13.7. **Chiral GC-FID**: $t_{\text{R-(R)}}$ = 11.08 min e $t_{\text{R-(S)}}$ = 11.22 min (Column: CP-Chirasil-DEX CB).

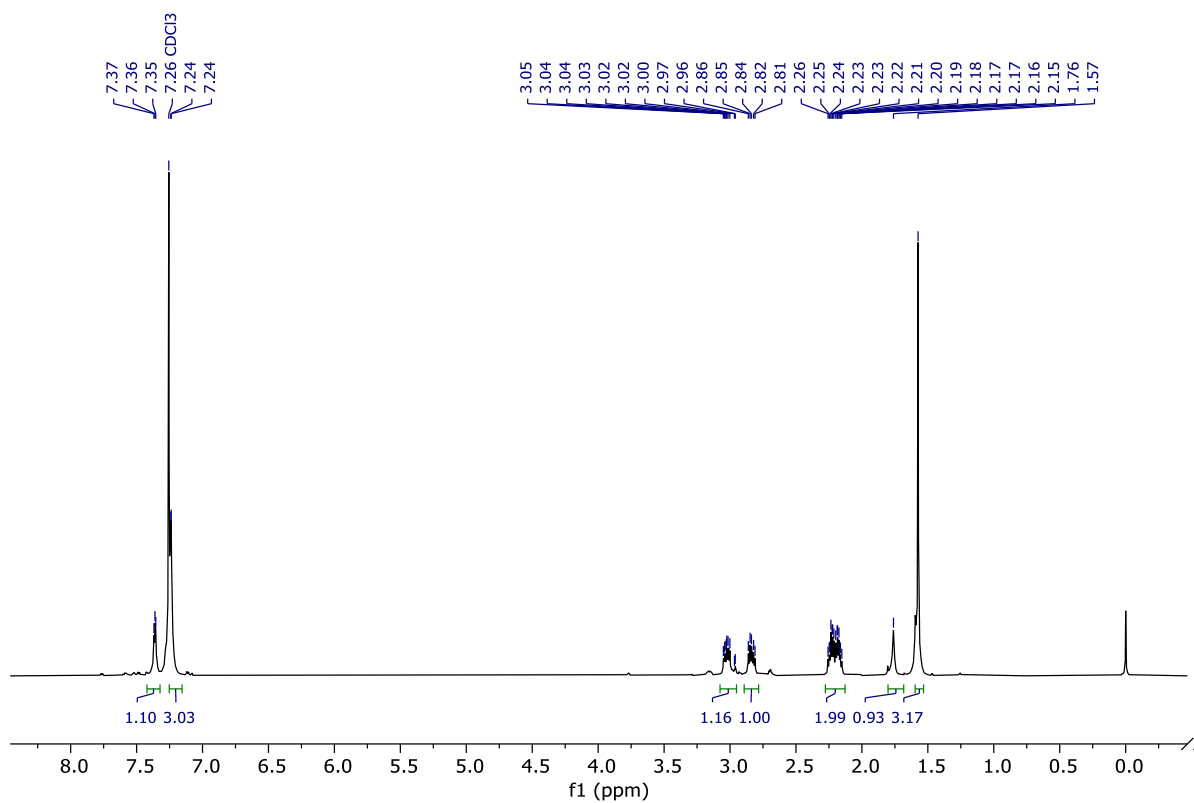
^1H and ^{13}C NMR spectra of 1-methyl-1,2,3,4-tetrahydronaphthalen-1-ol



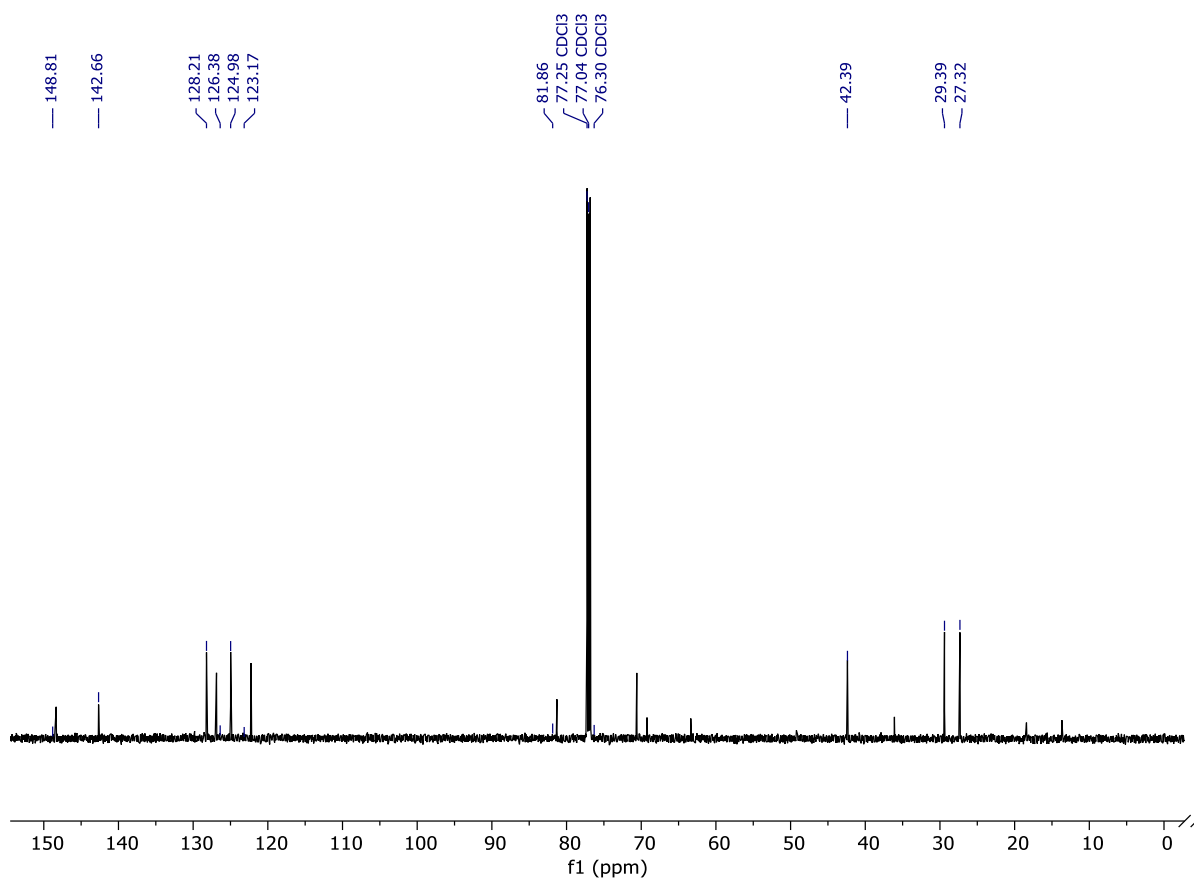
^{13}C NMR of 1-methyl-1,2,3,4-tetrahydronaphthalen-1-ol



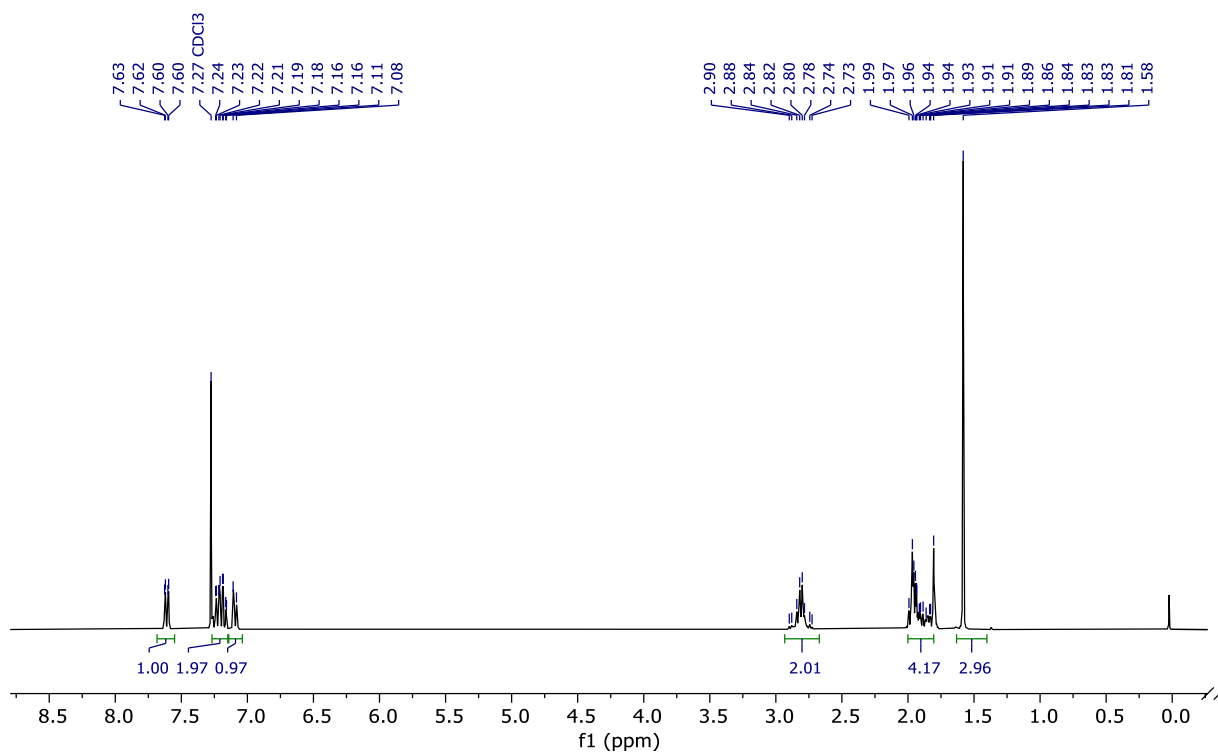
¹H NMR of 1-methyl-2,3-dihydro-1H-inden-1-ol



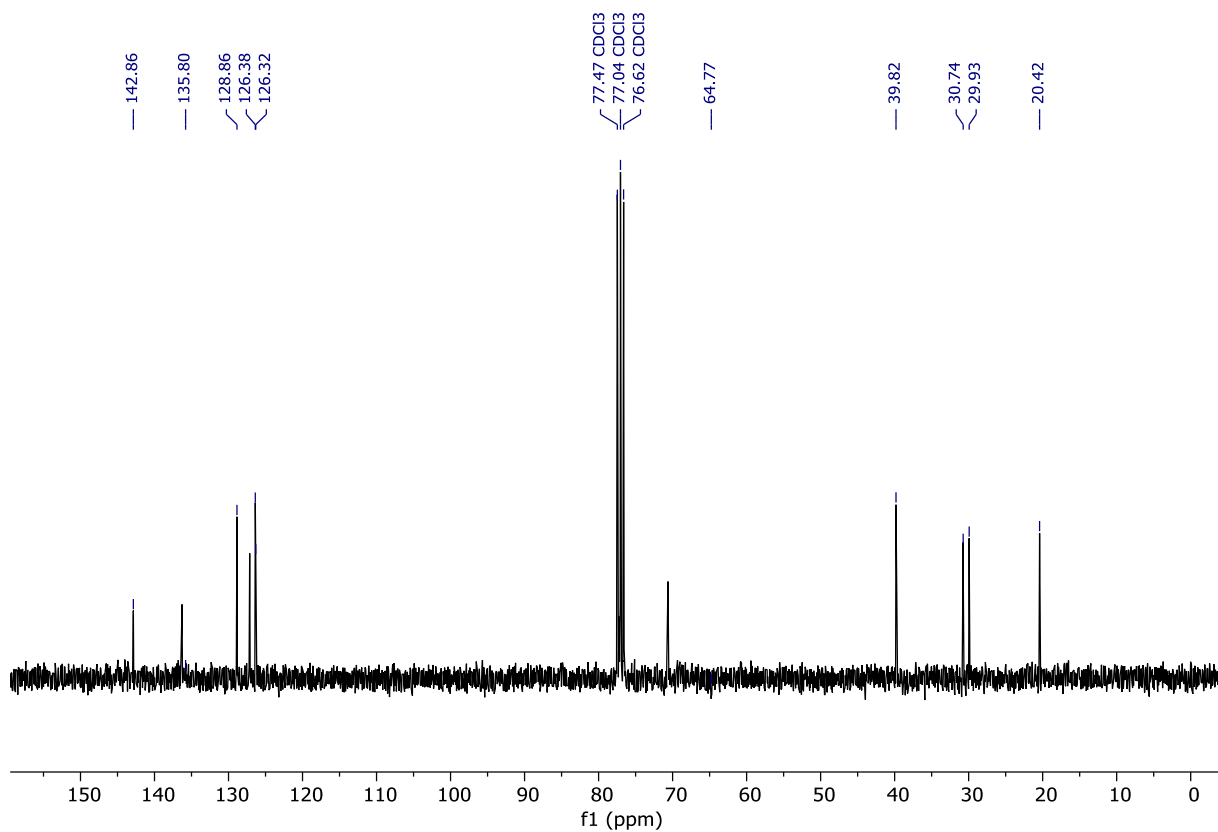
¹³C NMR of 1-methyl-2,3-dihydro-1H-inden-1-ol



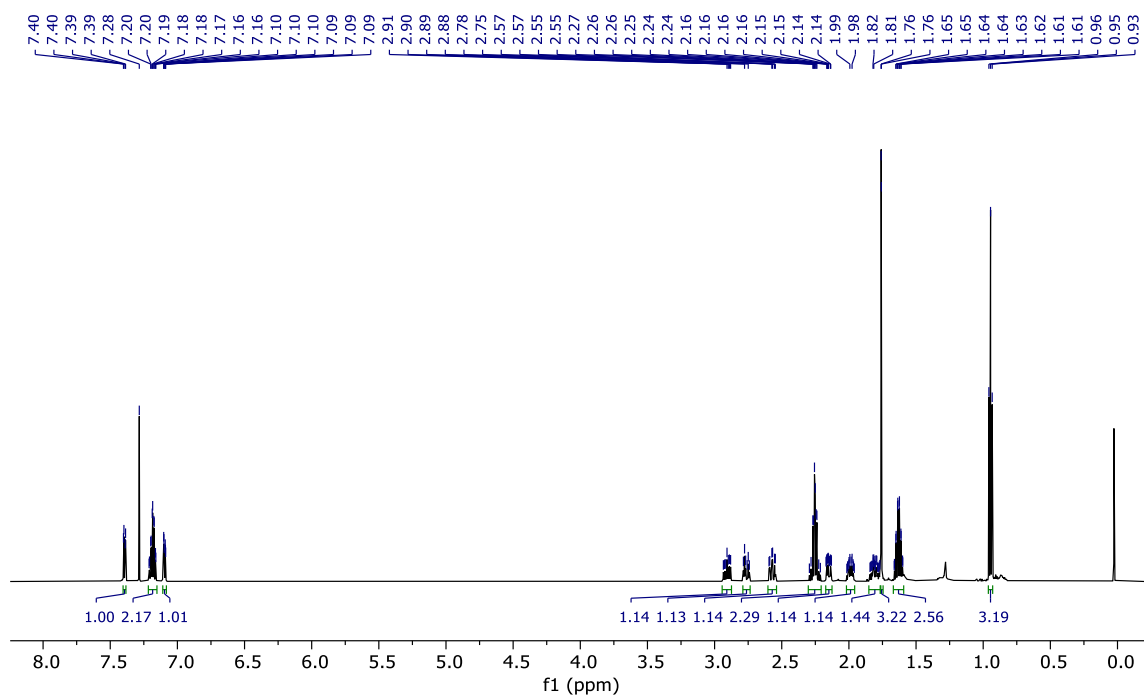
¹H NMR 1-methyl-1,2,3,4-tetrahydronaphthalen-1-yl acetate



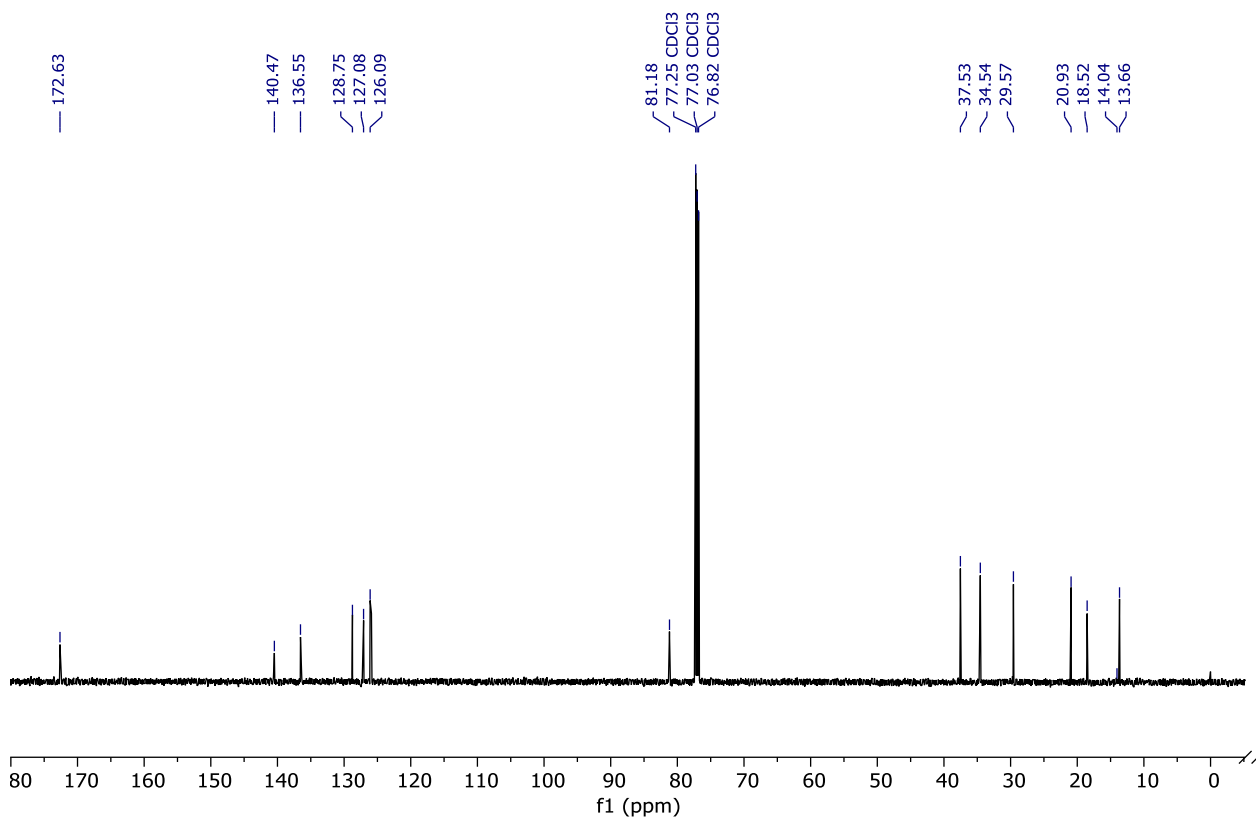
¹³C NMR of 1-methyl-1,2,3,4-tetrahydronaphthalen-1-yl acetate



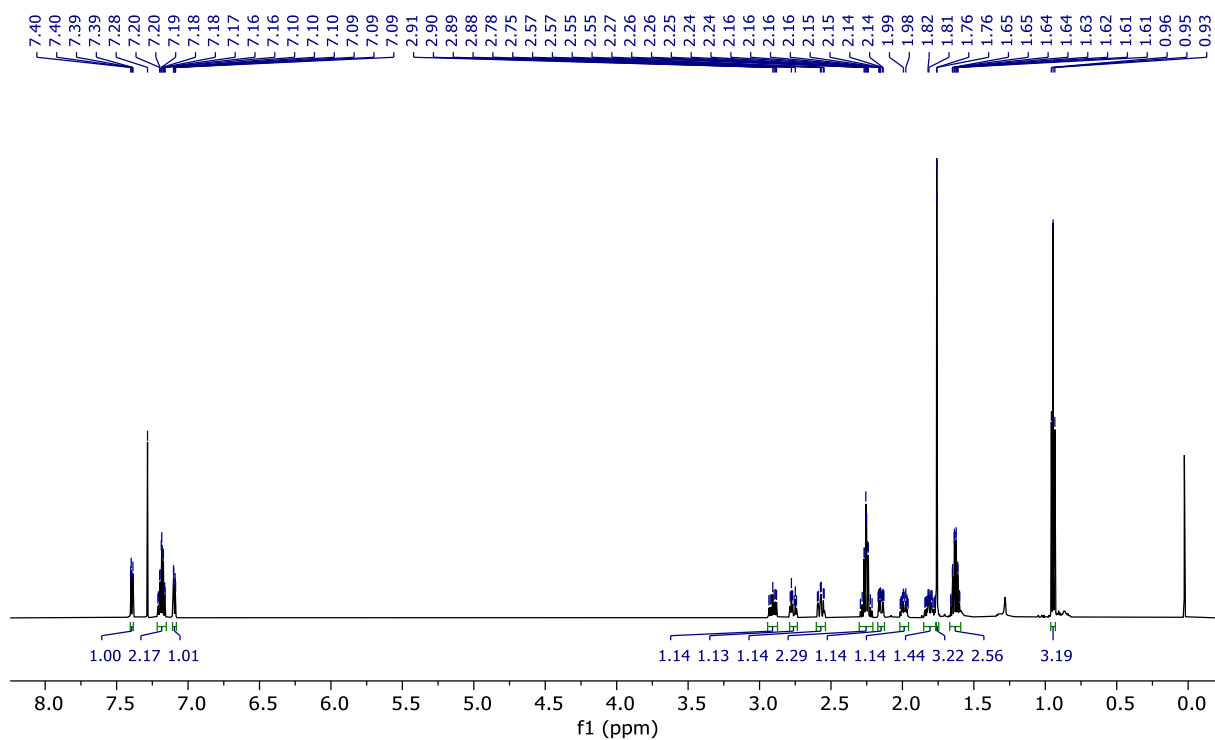
¹H NMR of 1-methyl-1,2,3,4-tetrahydronaphthalen-1-yl butyrate



¹³C NMR of 1-methyl-1,2,3,4-tetrahydronaphthalen-1-yl butyrate



¹H NMR of *rac-4b*



¹³C NMR of *rac-4b*

