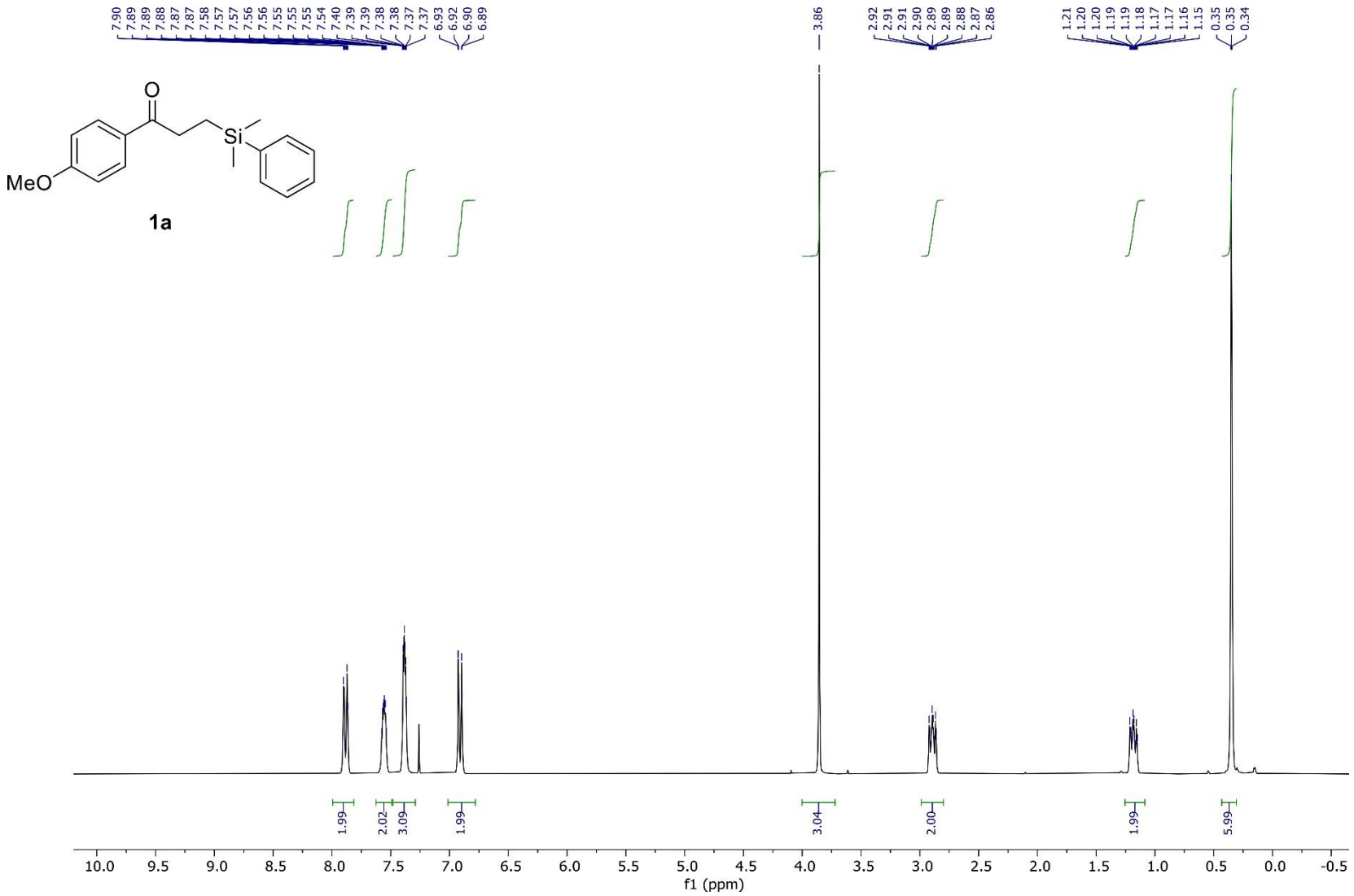


Figure S1 ^{1}H NMR spectrum ($CDCl_3$, 300 MHz) for compound **1a**.

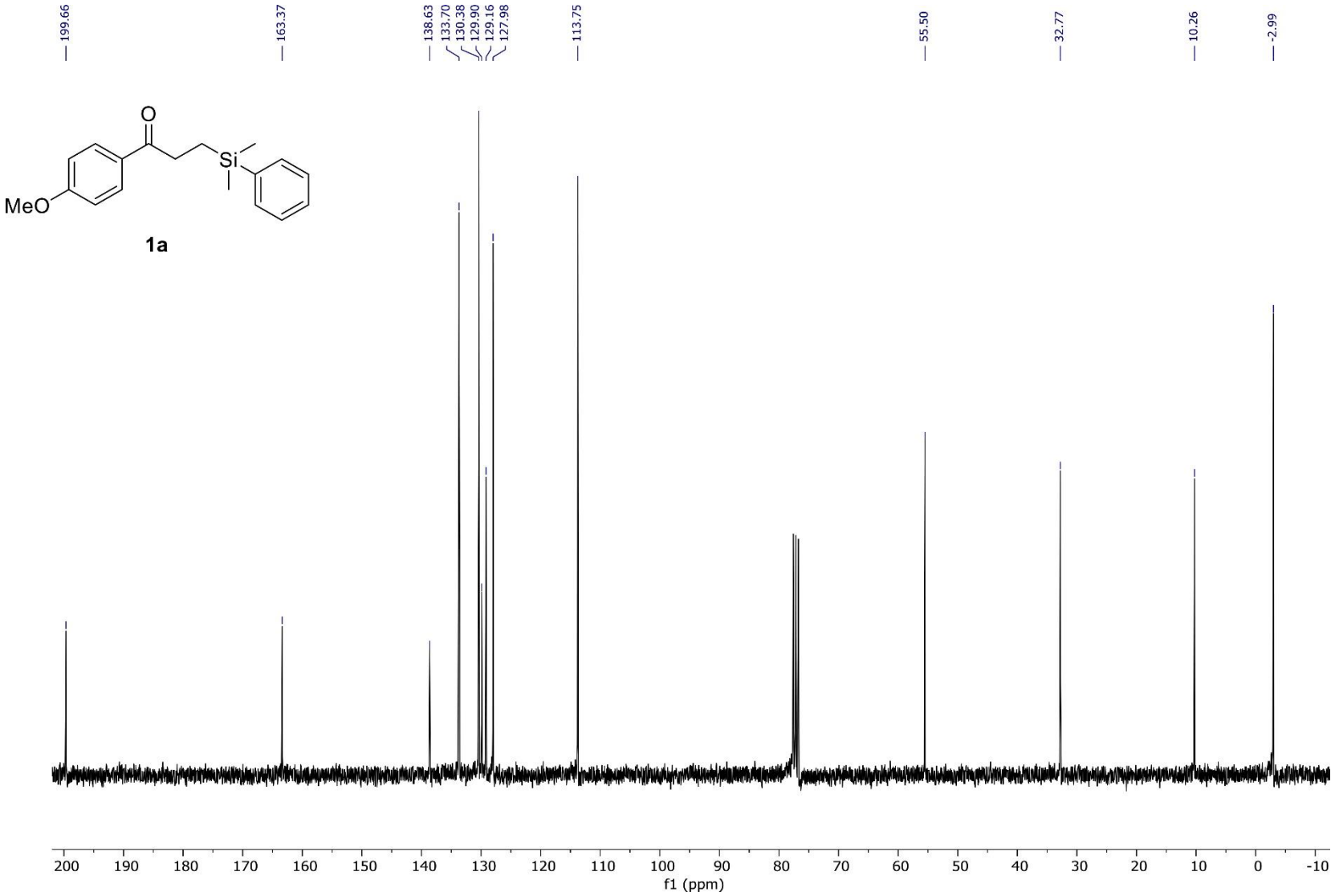


Figure S2 ^{13}C NMR spectrum ($CDCl_3$, 75 MHz) for compound **1a**.

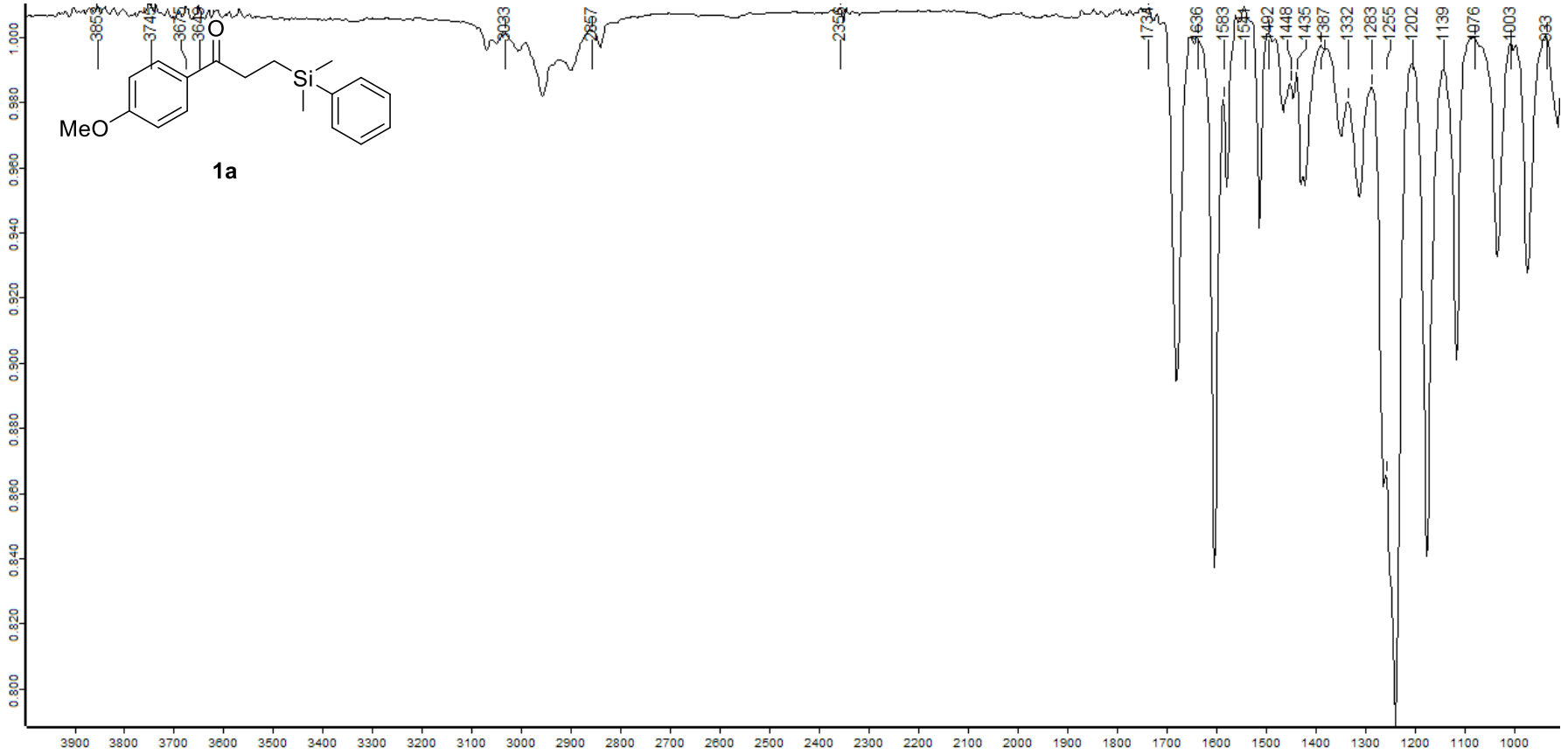
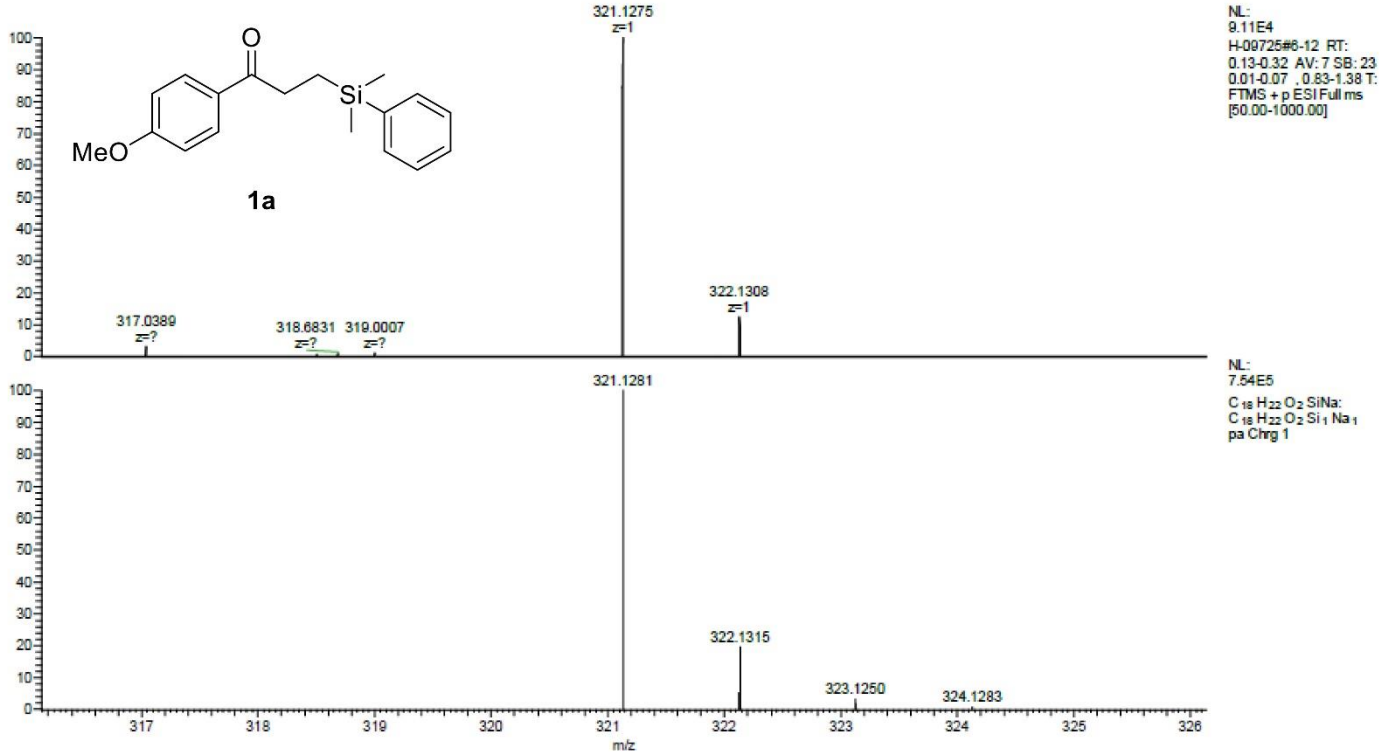


Figure S3 IR spectrum (Diamond ATR) for compound **1a**.



Experimental/theoretical isotopic pattern MS spectrum

Error = -2.0 ppm; Relative Intensity (%) 100

HRMS (ESI) m/z: [M+Na]+ Calcd for C18H22O2SiNa 321.1281. Found 321.1275; (Error: -2.0 ppm).

Figure S4 HRMS spectrum (ESI) for compound **1a**.

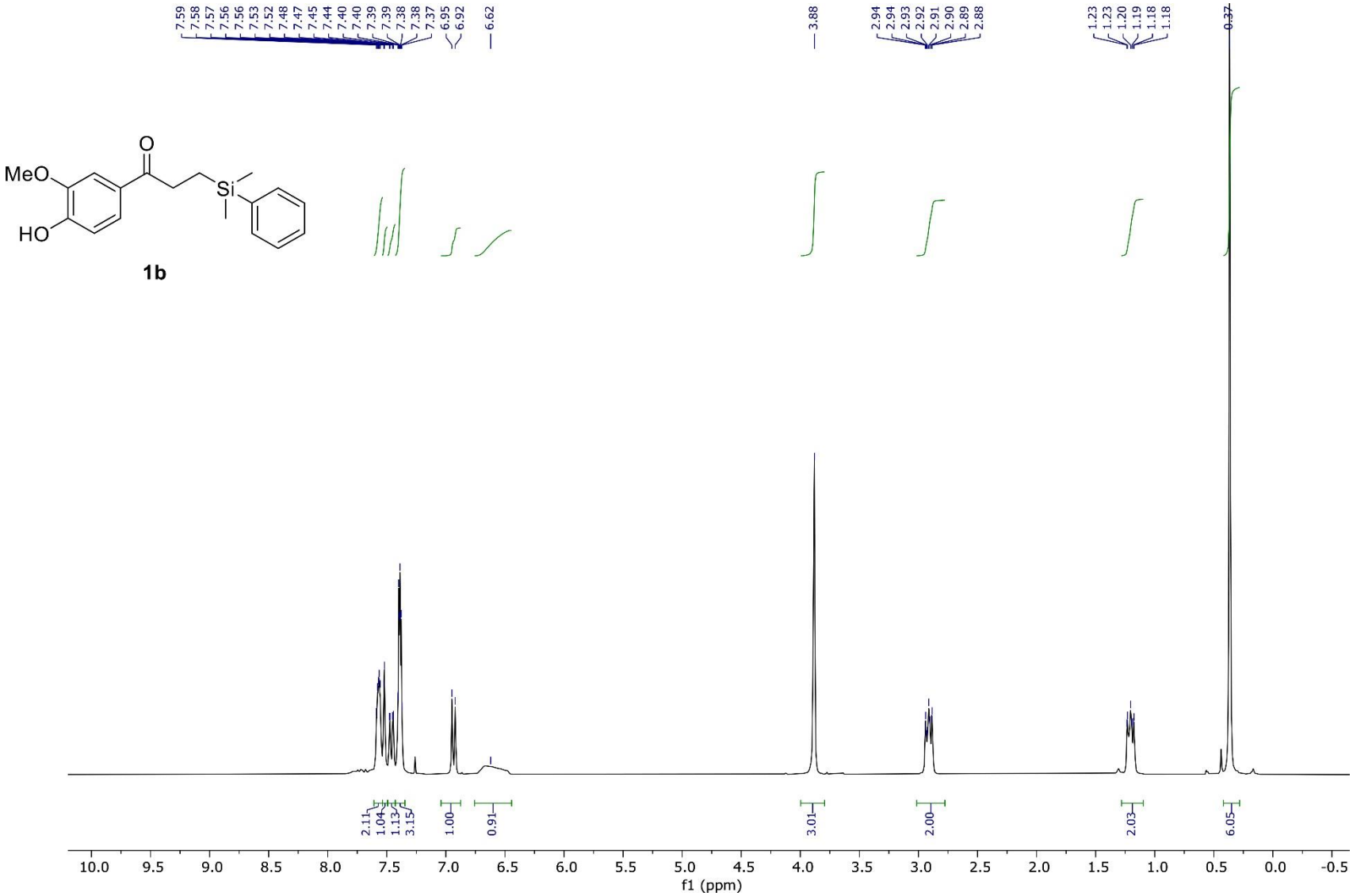


Figure S5 ^{1}H NMR spectrum ($CDCl_3$, 300 MHz) for compound **1b**.

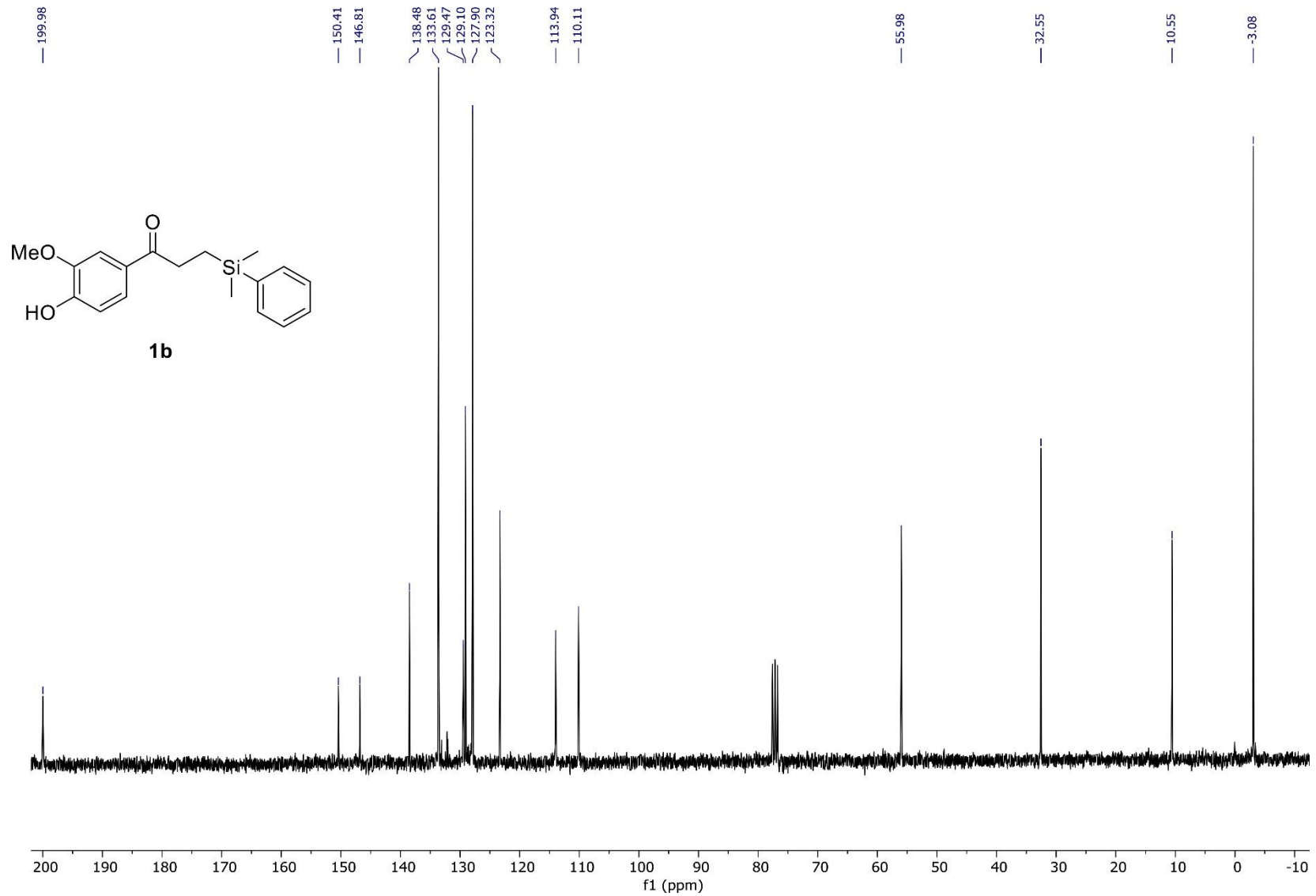


Figure S6 ^{13}C NMR spectrum ($CDCl_3$, 75 MHz) for compound **1b**.

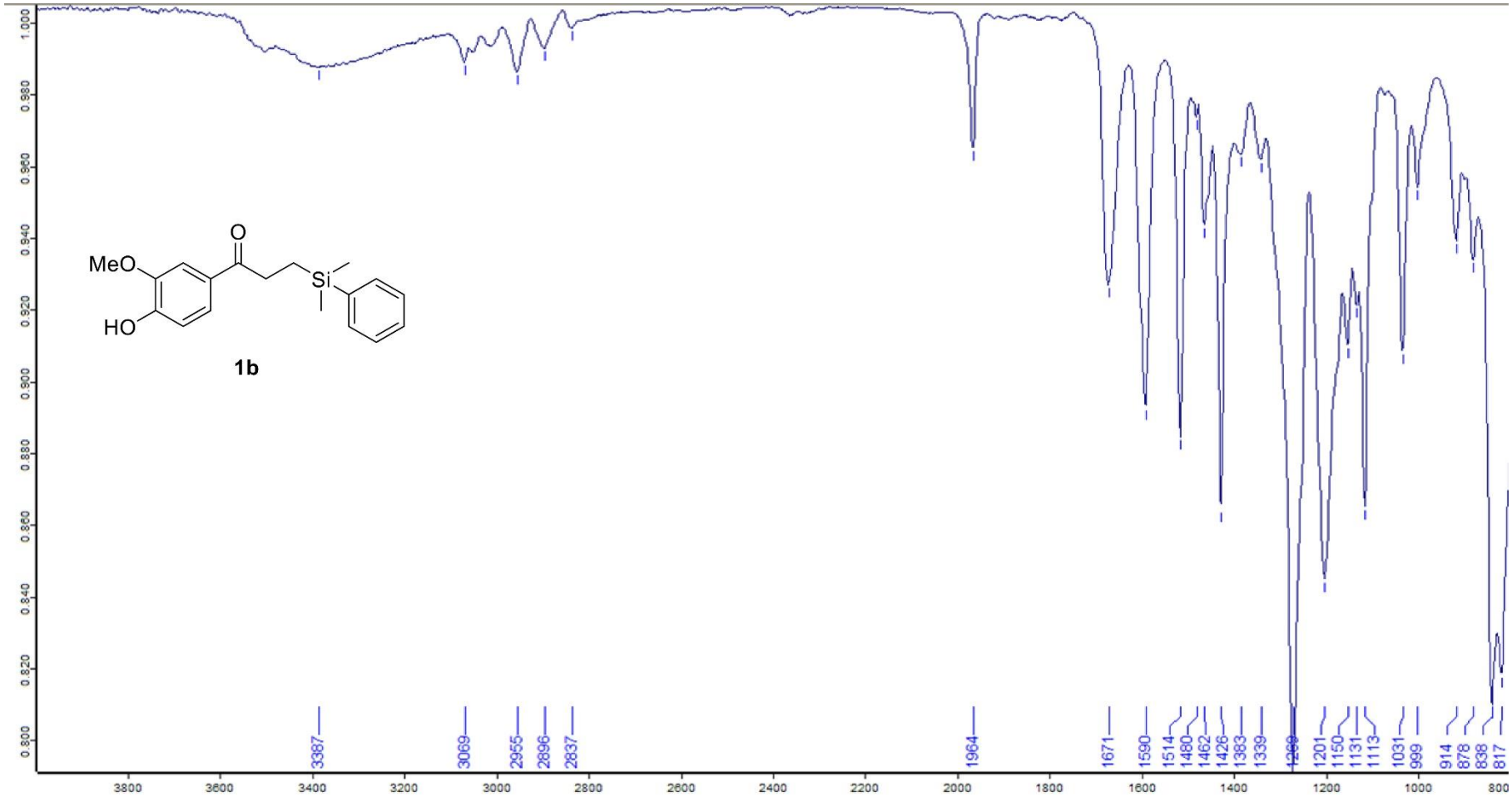
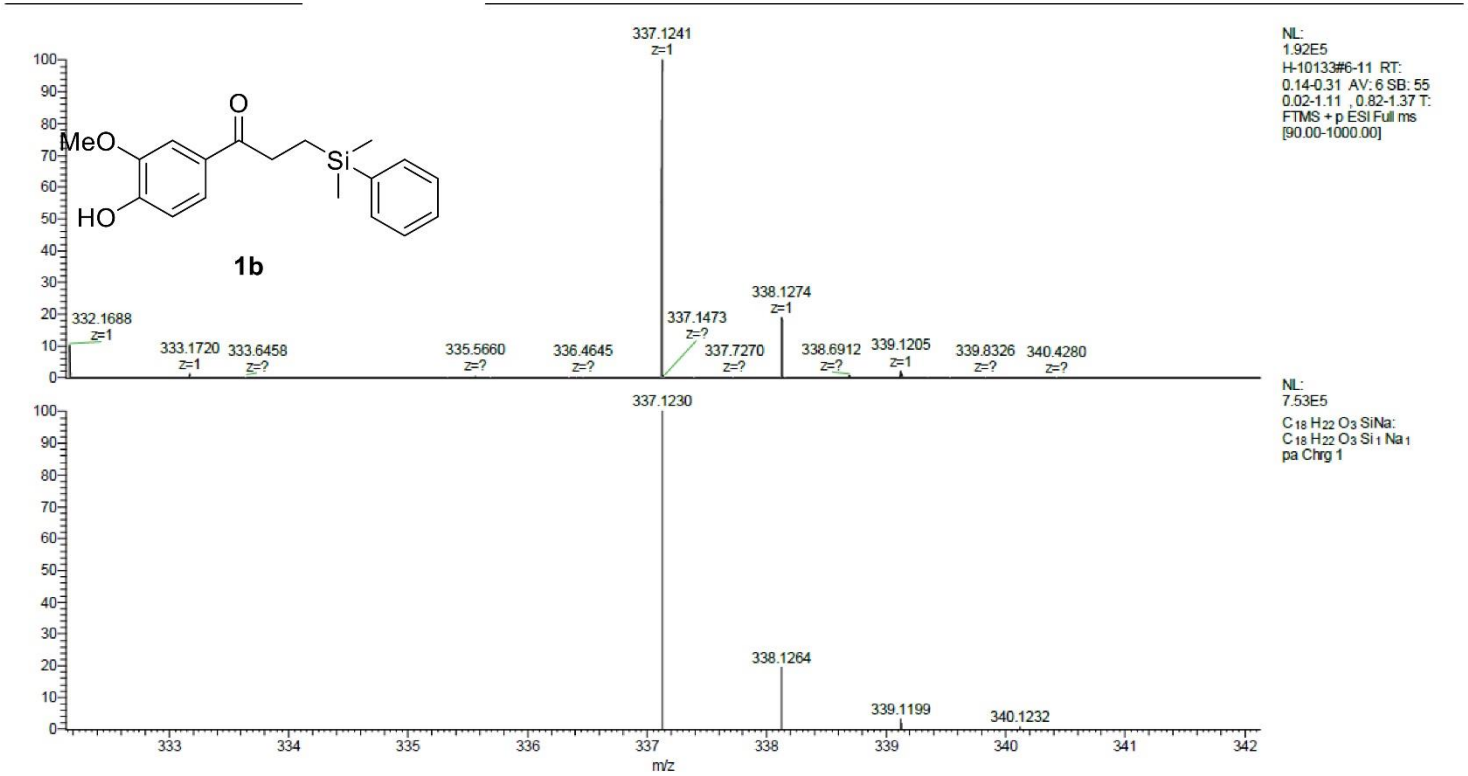


Figure S7 IR spectrum (Diamond ATR) for compound **1b**.



Experimental/theoretical isotopic pattern MS spectrum

Error = 3.1 ppm; Relative Intensity (%) 100

HRMS (ESI) m/z: [M+Na]+ Calcd for C18H22O3SiNa 337.1230. Found 337.1241; (Error: 3.1 ppm).

Figure S8 HRMS spectrum (ESI) for compound **1b**.

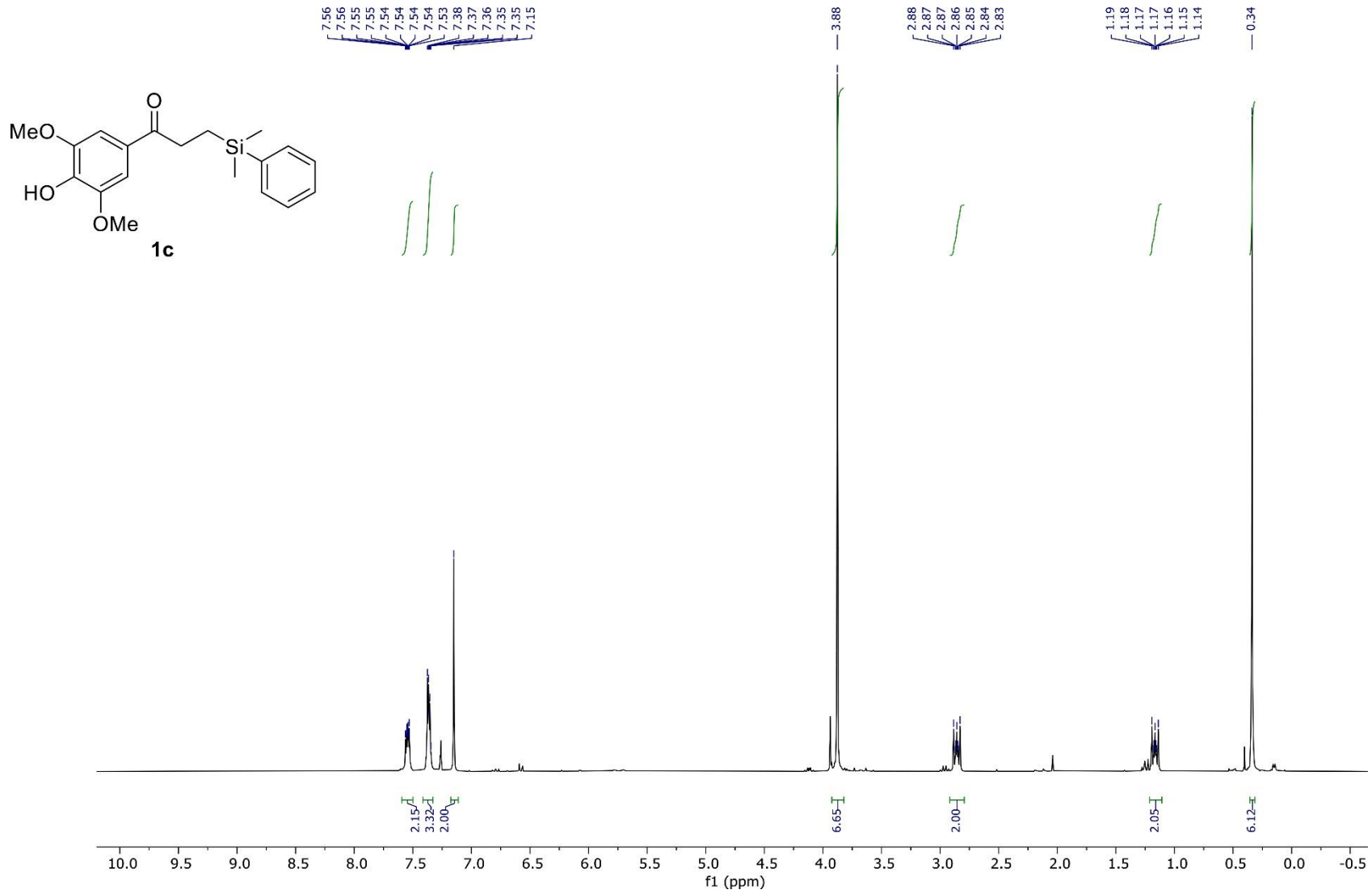


Figure S9 ^{1}H NMR spectrum ($CDCl_3$, 300 MHz) for compound **1c**.

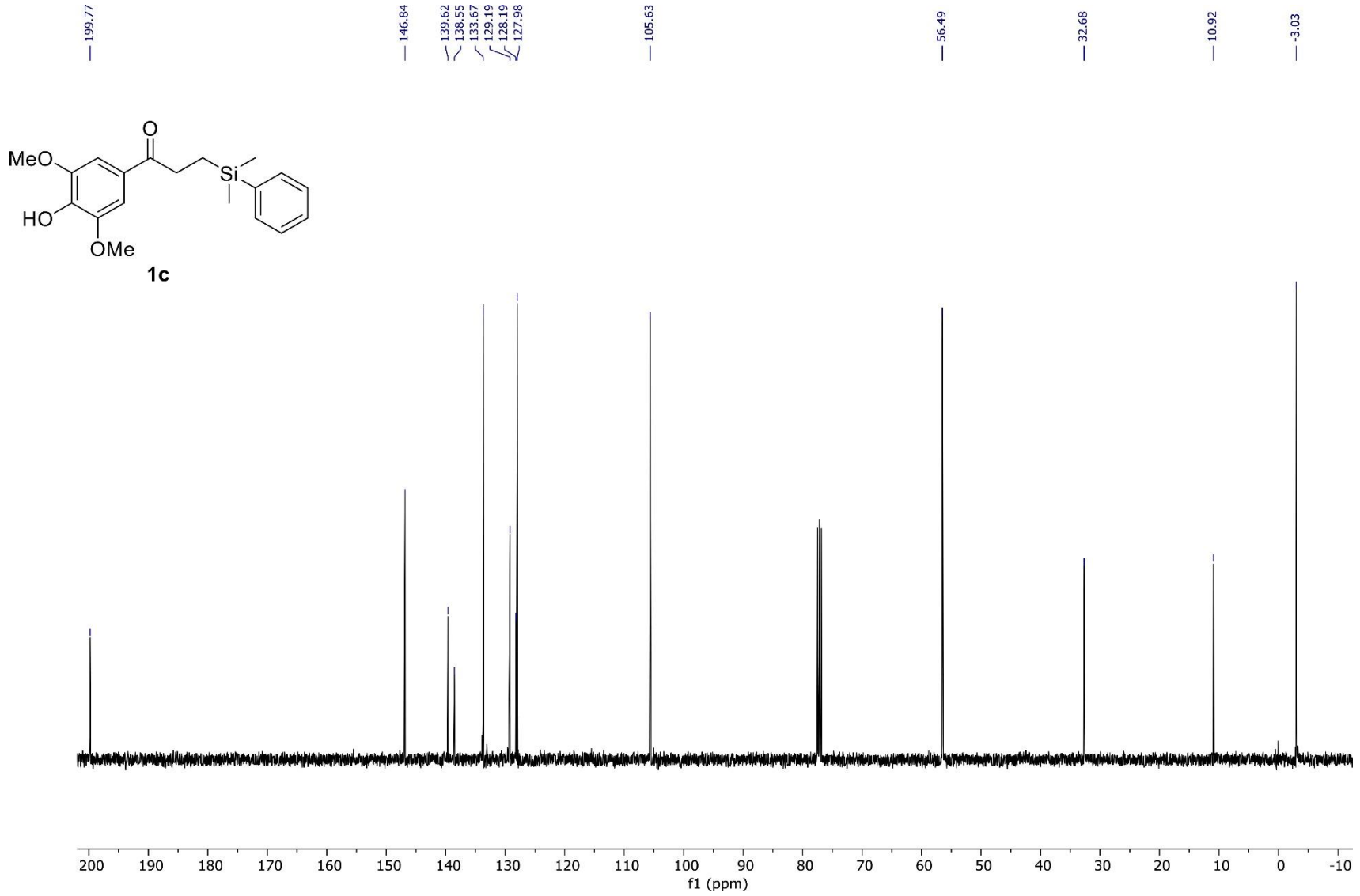


Figure S10 ^{13}C NMR spectrum ($CDCl_3$, 75 MHz) for compound **1c**.

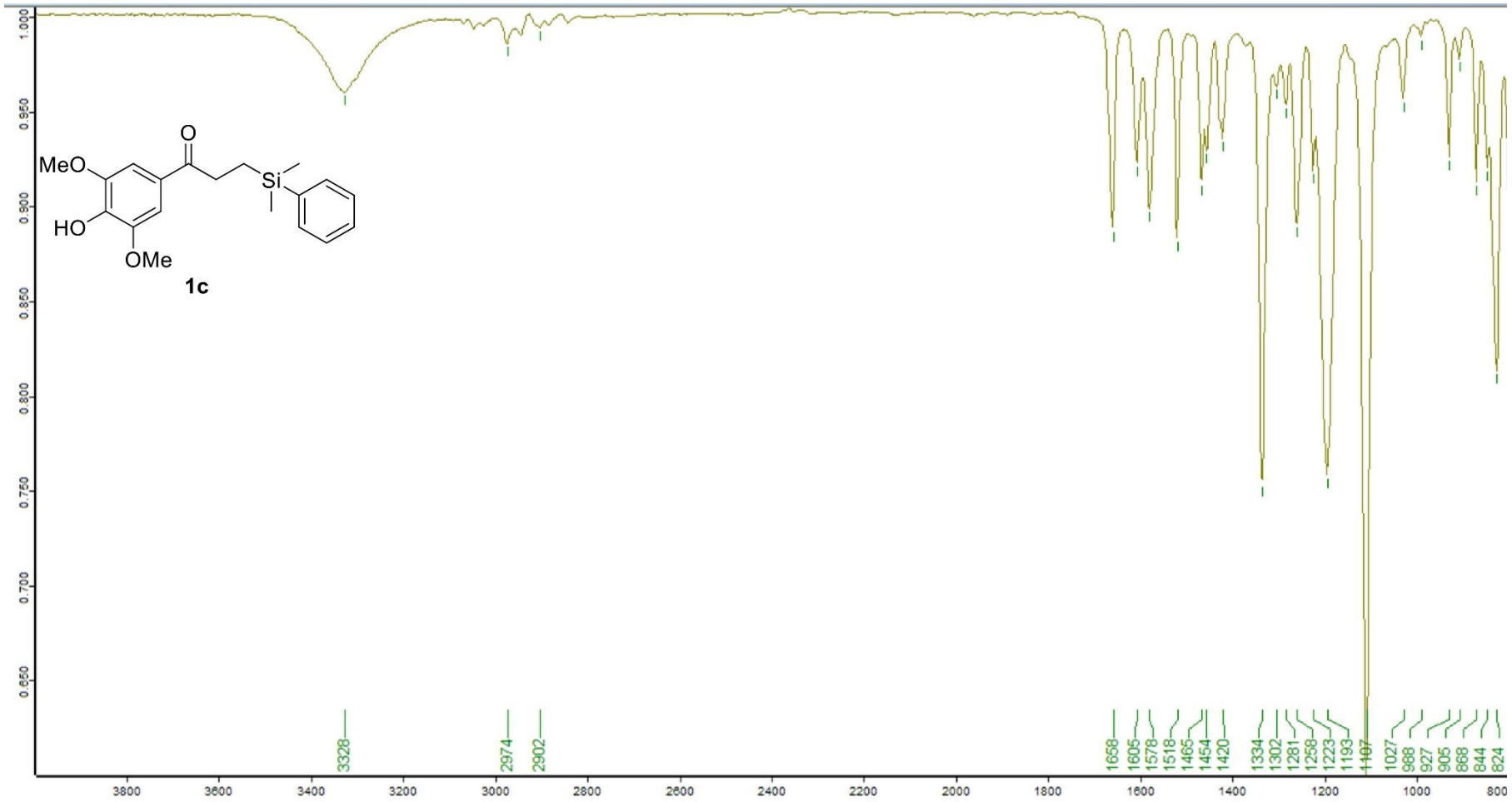
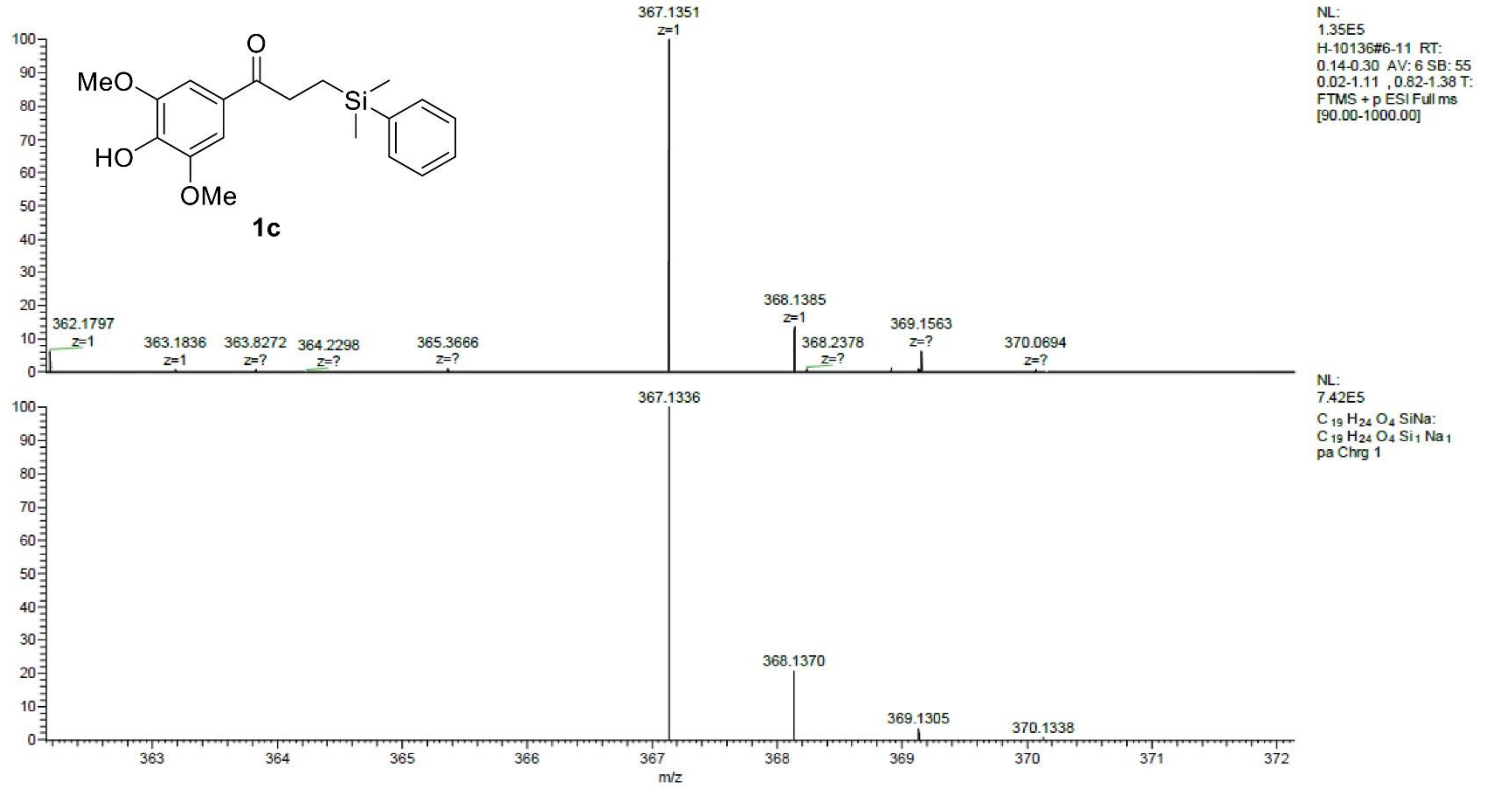


Figure S11 IR spectrum (Diamond ATR) for compound **1c**.



Experimental/theoretical isotopic pattern MS spectrum

Error = 4.1 ppm; Relative Intensity (%) 100

HRMS (ESI) m/z: [M+Na]+ Calcd for C19H24O4SiNa 367.1336. Found 367.1351; (Error: 4.1 ppm).

Figure S12 HRMS spectrum (ESI) for compound **1c**.

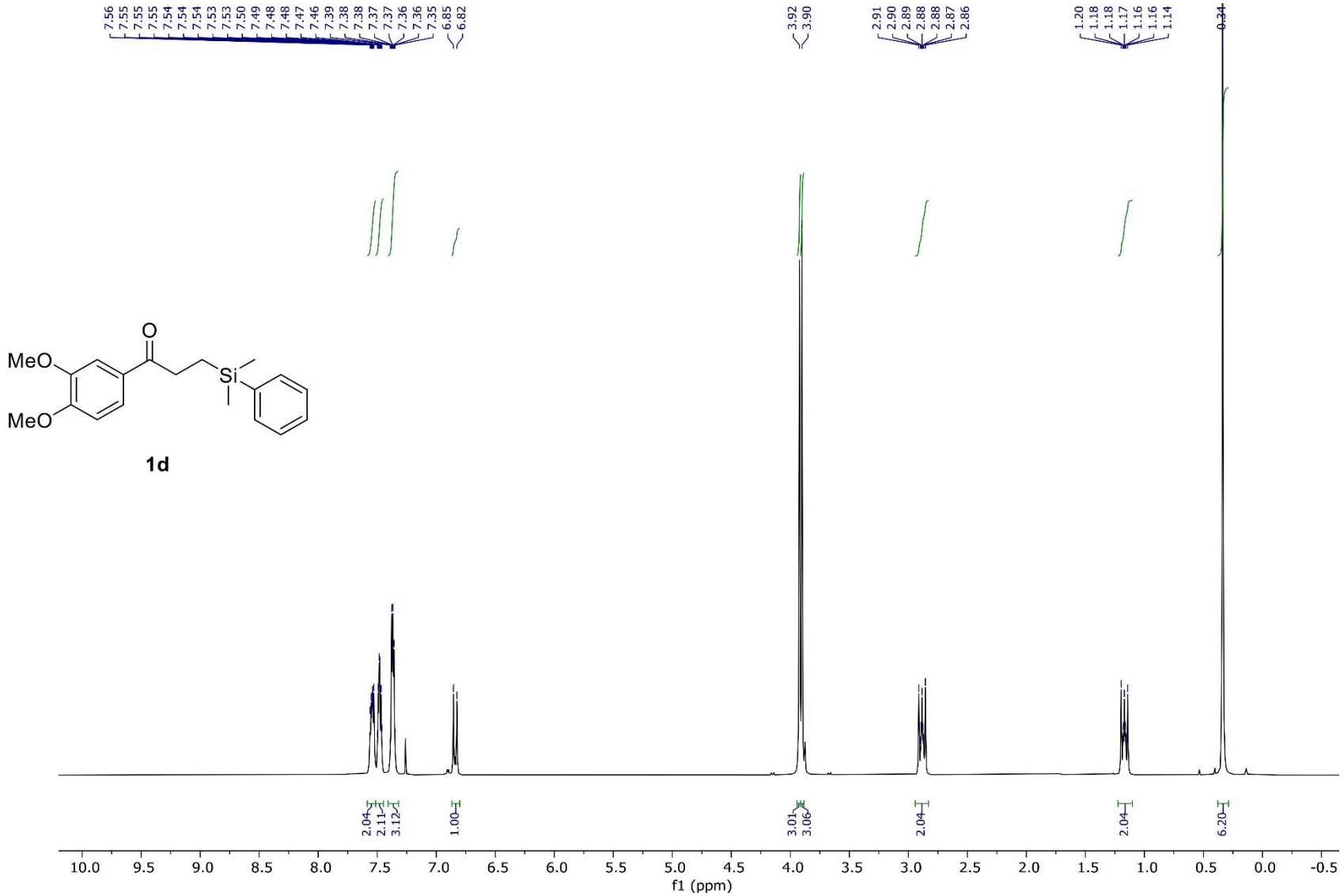


Figure S13 ^{1}H NMR spectrum ($CDCl_3$, 300 MHz) for compound **1d**.

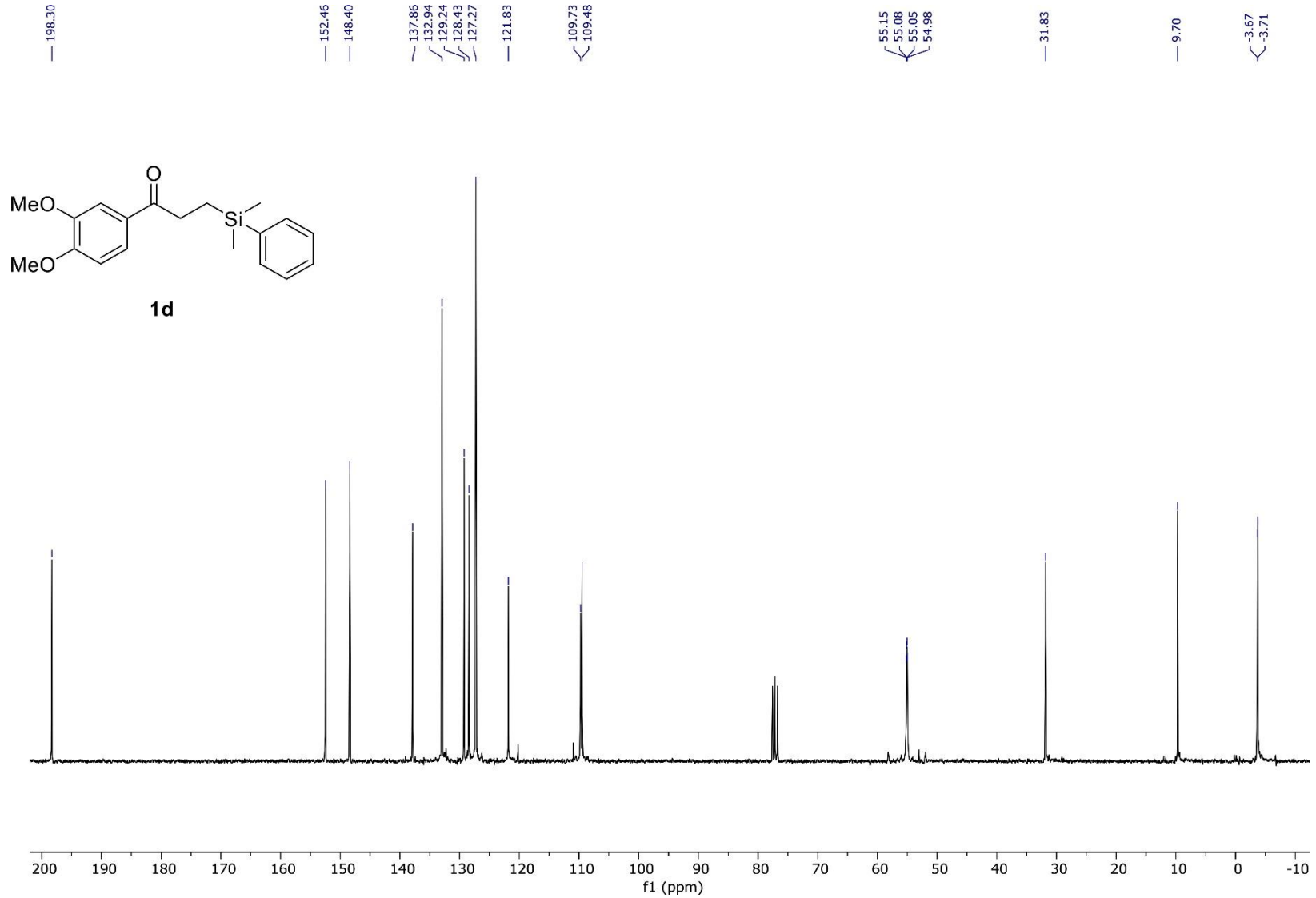


Figure S14 ^{13}C NMR spectrum ($CDCl_3$, 75 MHz) for compound **1d**.

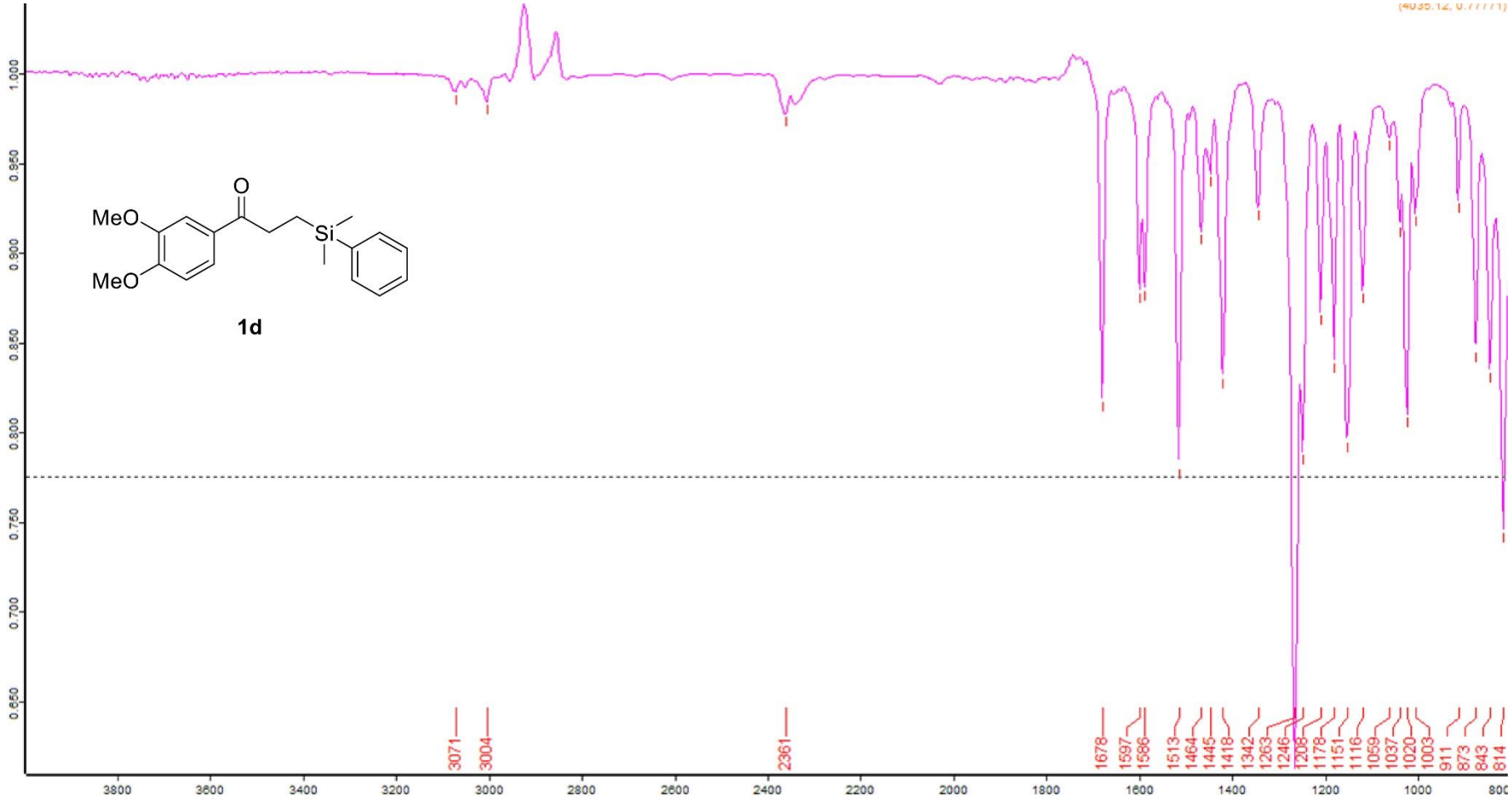
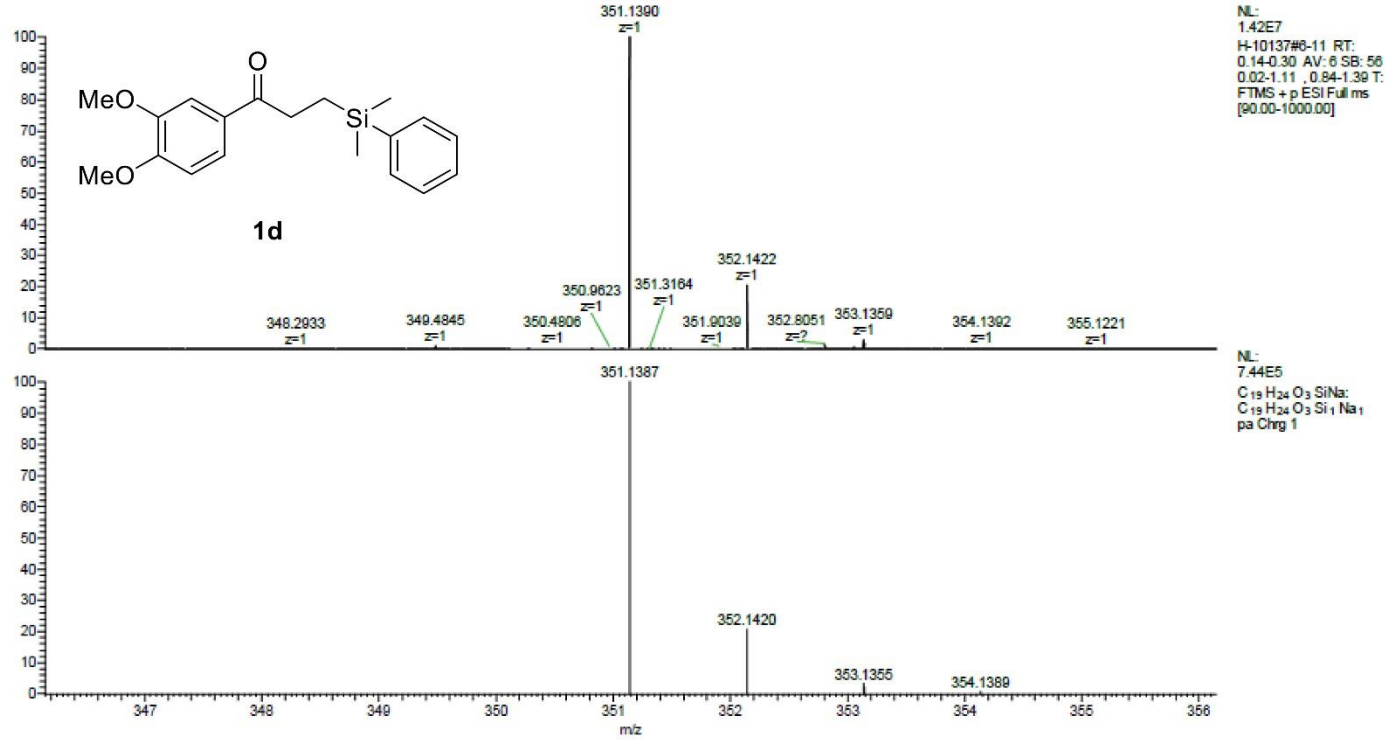


Figure S15 IR spectrum (Diamond ATR) for compound **1d**.



Experimental/theoretical isotopic pattern MS spectrum

Error = 0.9 ppm; Relative Intensity (%) 100

HRMS (ESI) m/z: [M+Na]+ Calcd for C19H24O3SiNa 351.1387. Found 351.139; (Error: 0.9 ppm).

Figure S16 HRMS spectrum (ESI) for compound **1d**.

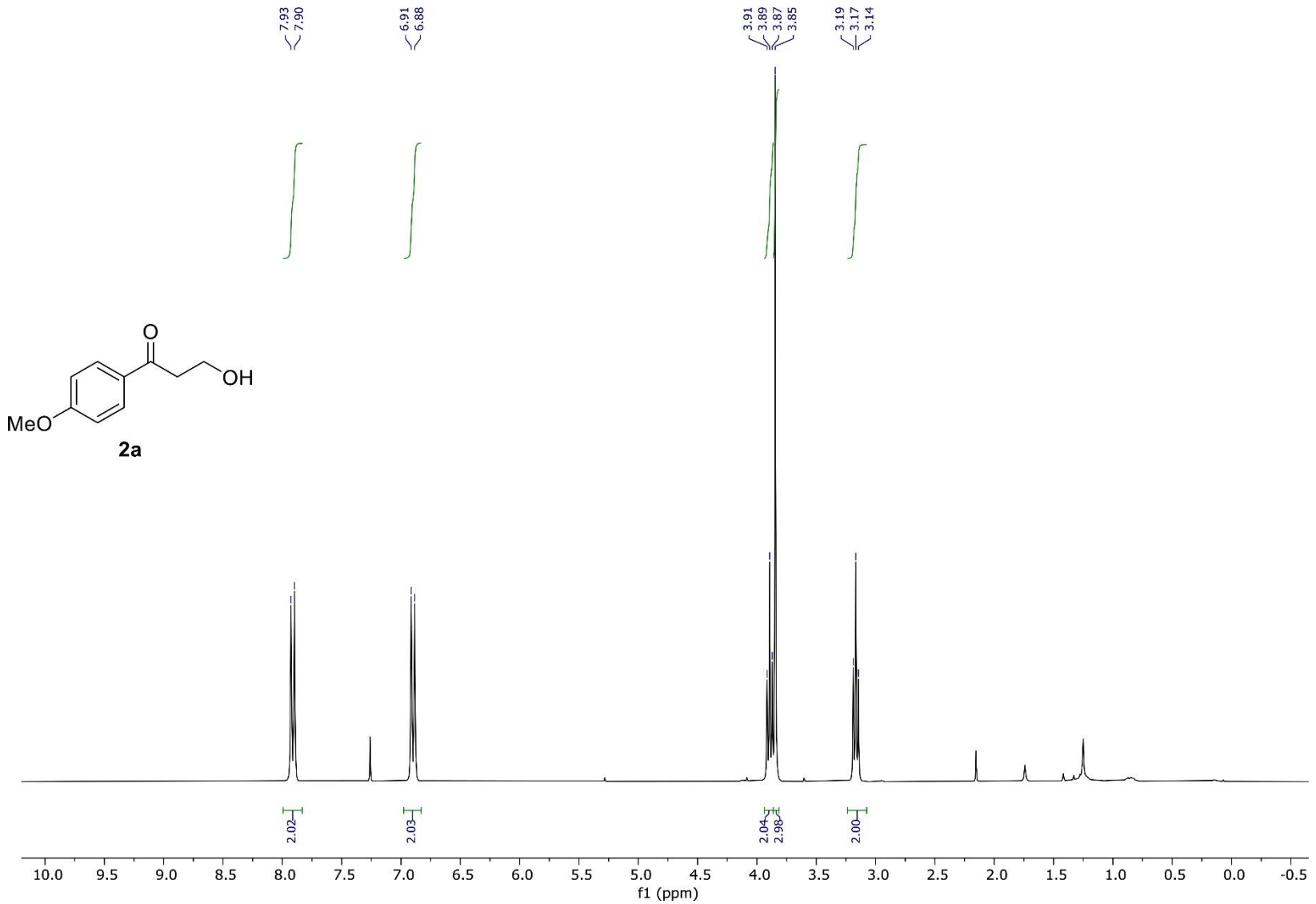


Figure S17 ^{1}H NMR spectrum ($CDCl_3$, 300 MHz) for compound **2a**.

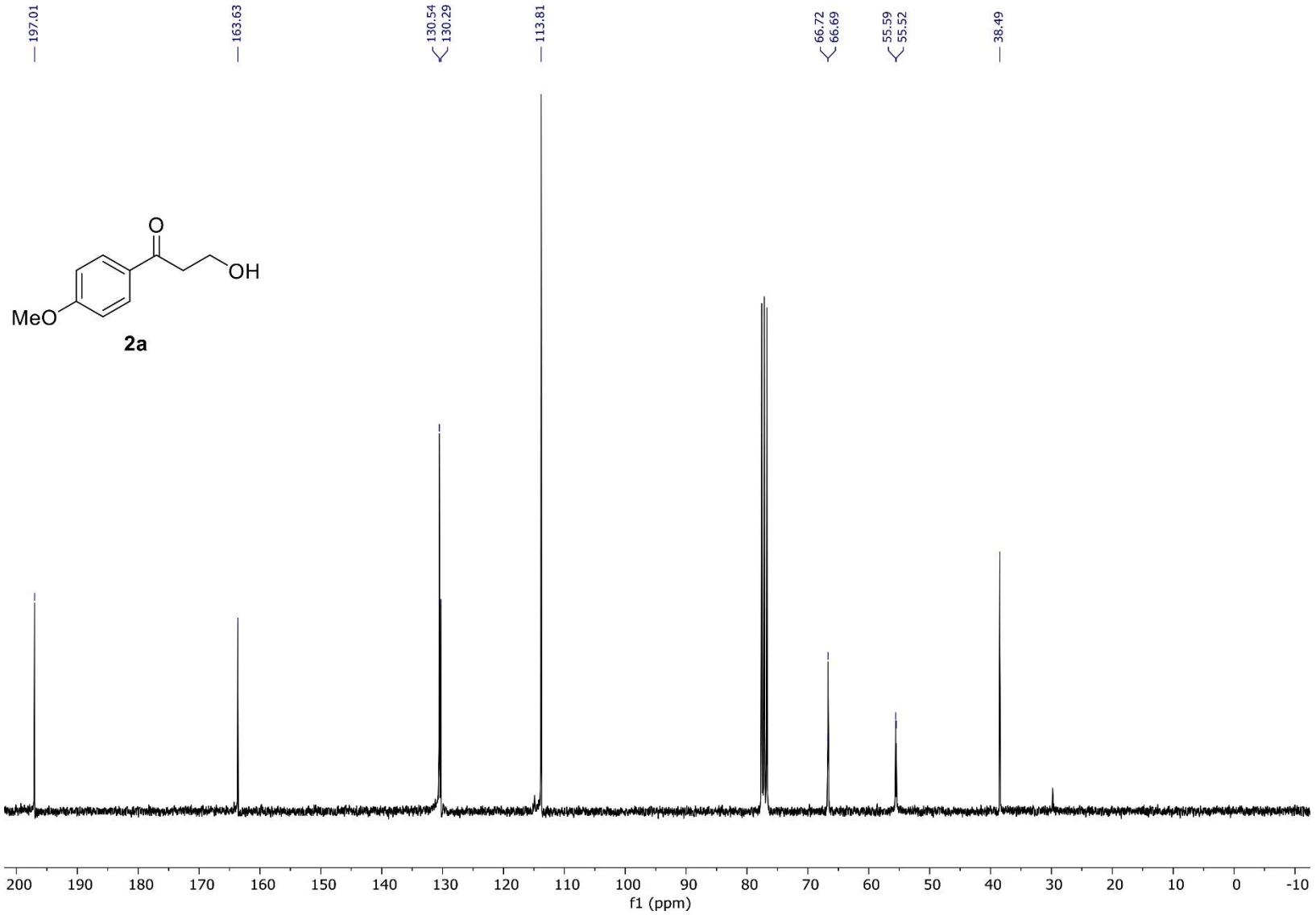


Figure S18 ^{13}C NMR spectrum ($CDCl_3$, 75 MHz) for compound **2a**.

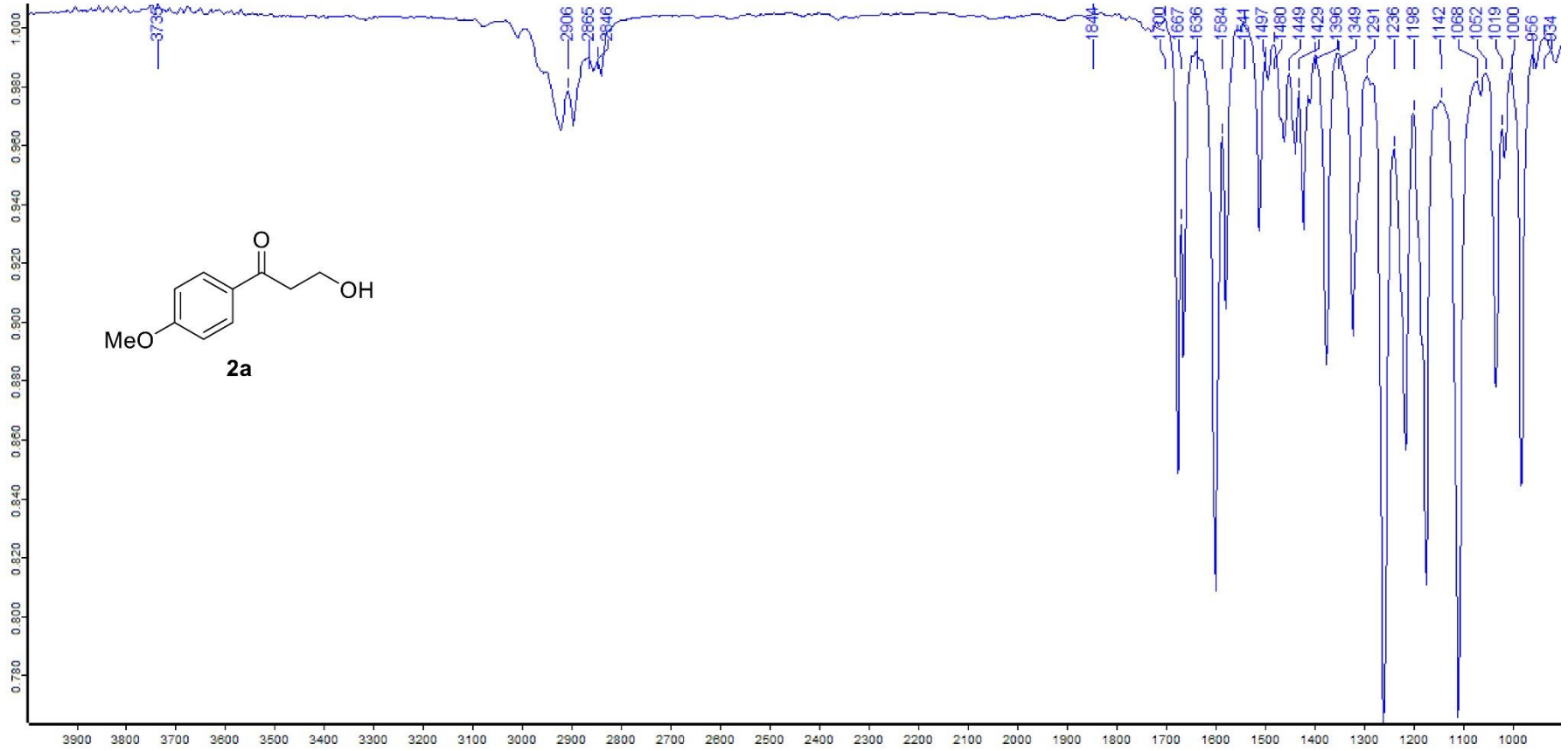
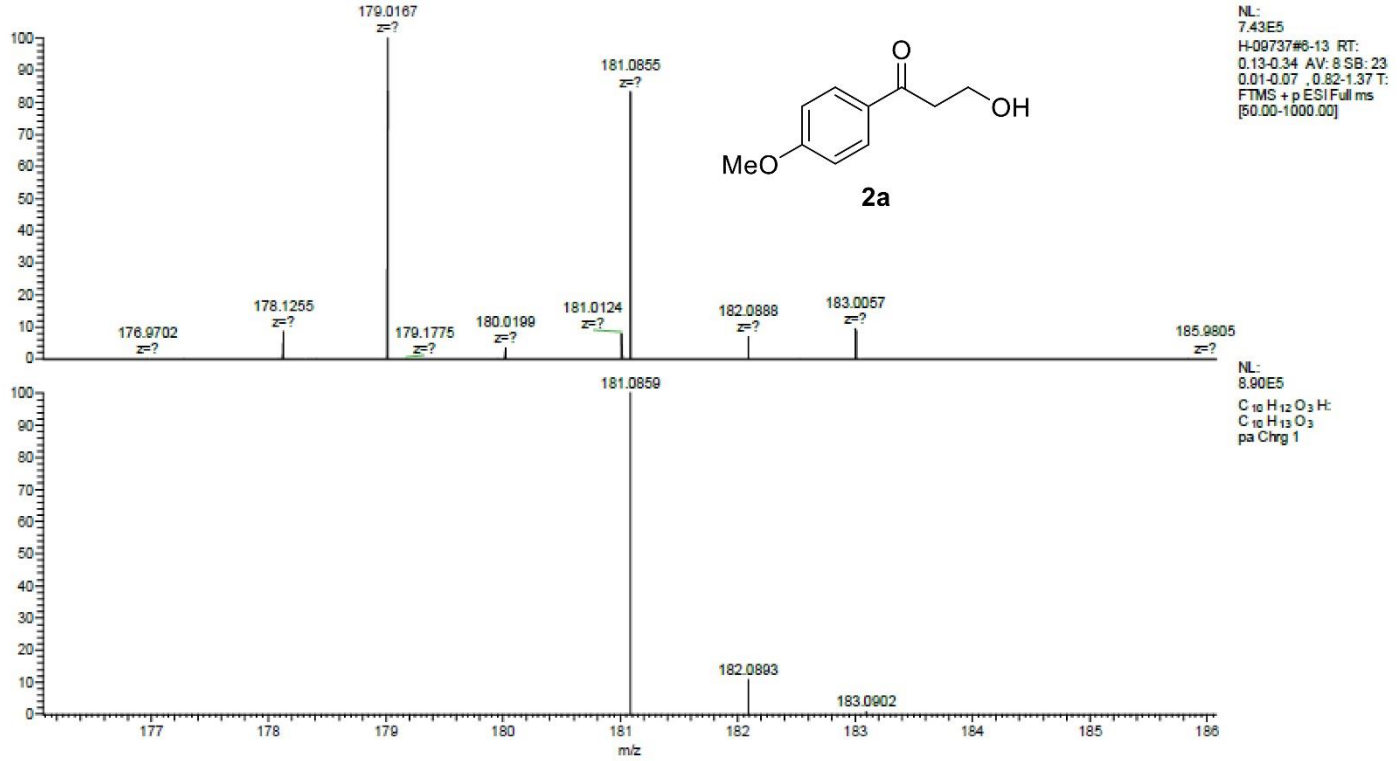


Figure S19 IR spectrum (Diamond ATR) for compound **2a**.



Experimental/theoretical isotopic pattern MS spectrum

Error = -2.3 ppm; Relative Intensity (%) 100

HRMS (ESI) m/z: [M+H]+ Calcd for C10H12O3H 181.0859. Found 181.0855; (Error: -2.3 ppm).

Figure S20 HRMS spectrum (ESI) for compound **2a**.

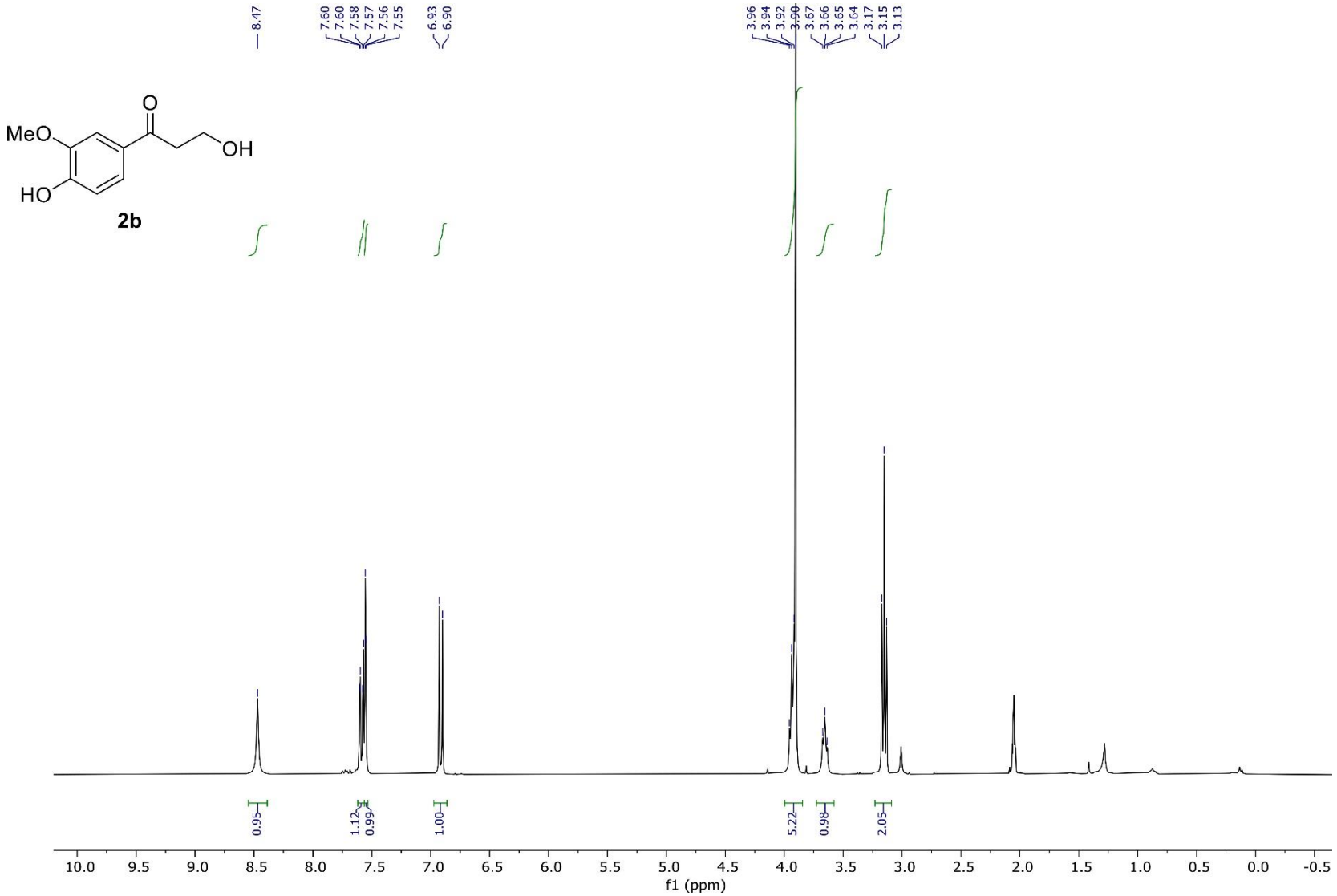


Figure S21 ^{1}H NMR spectrum (acetone-d_6, 300 MHz) for compound **2b**.

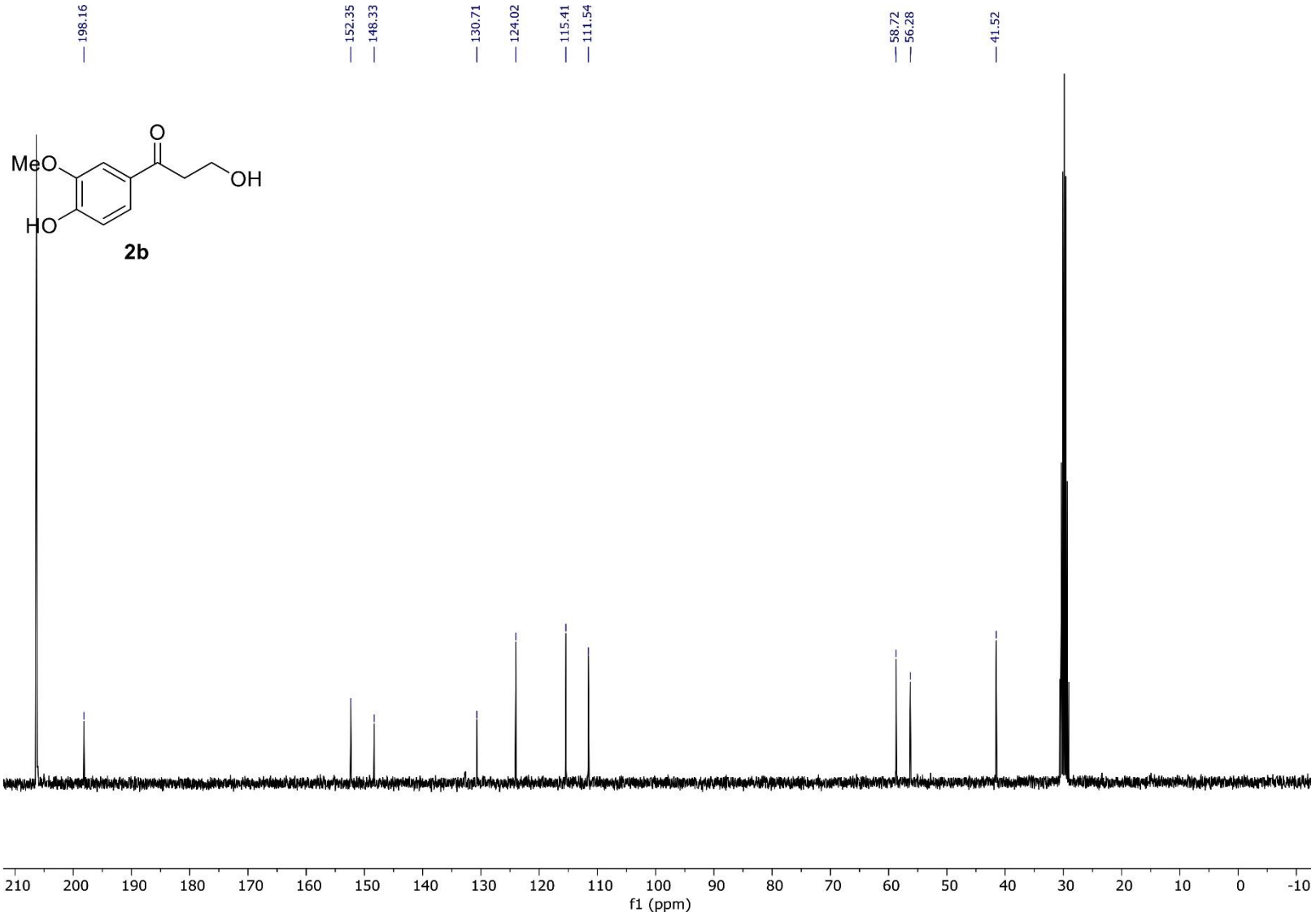


Figure S22 ^{13}C NMR spectrum (acetone-d_6, 75 MHz) for compound **2b**.

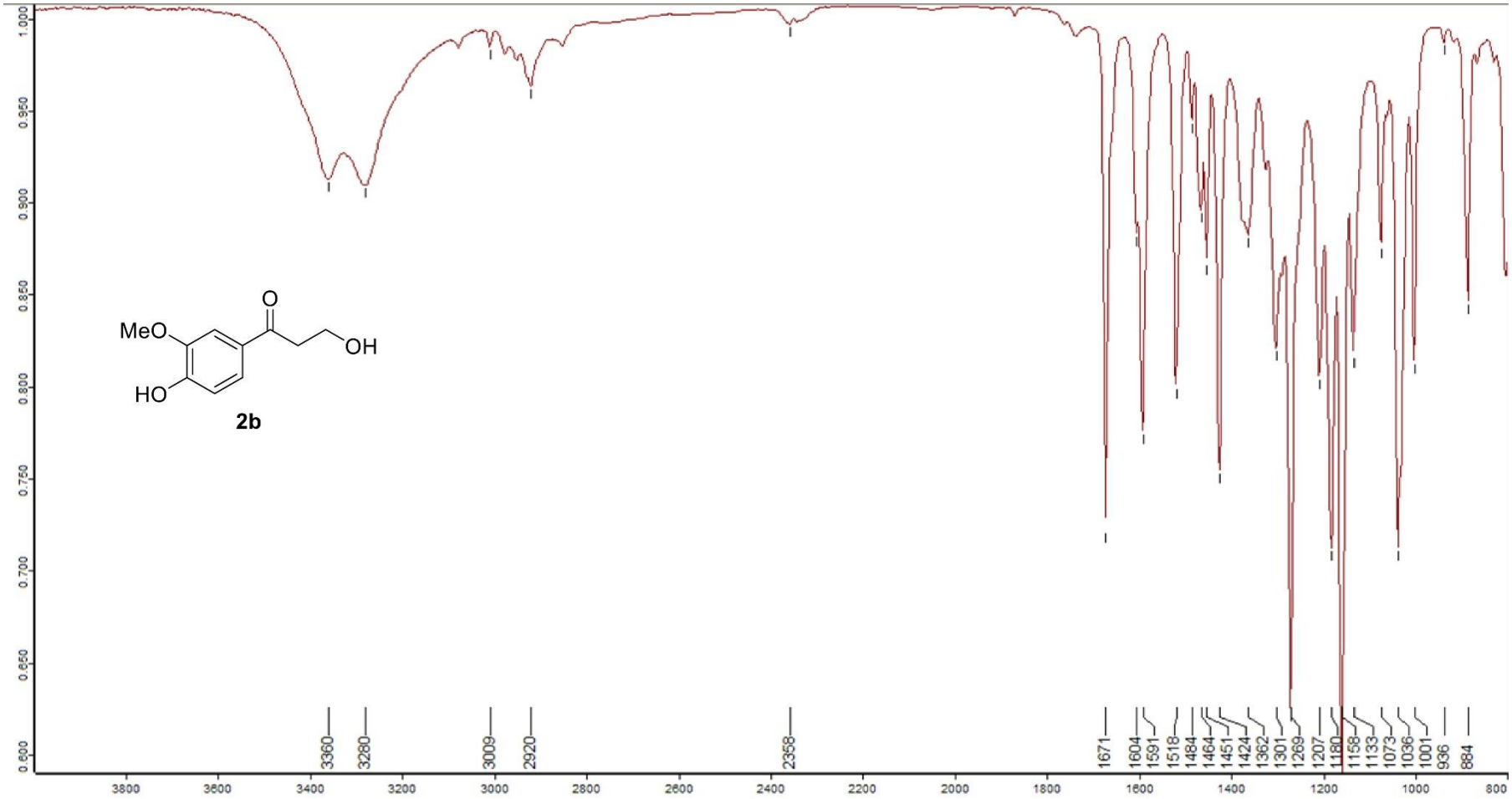
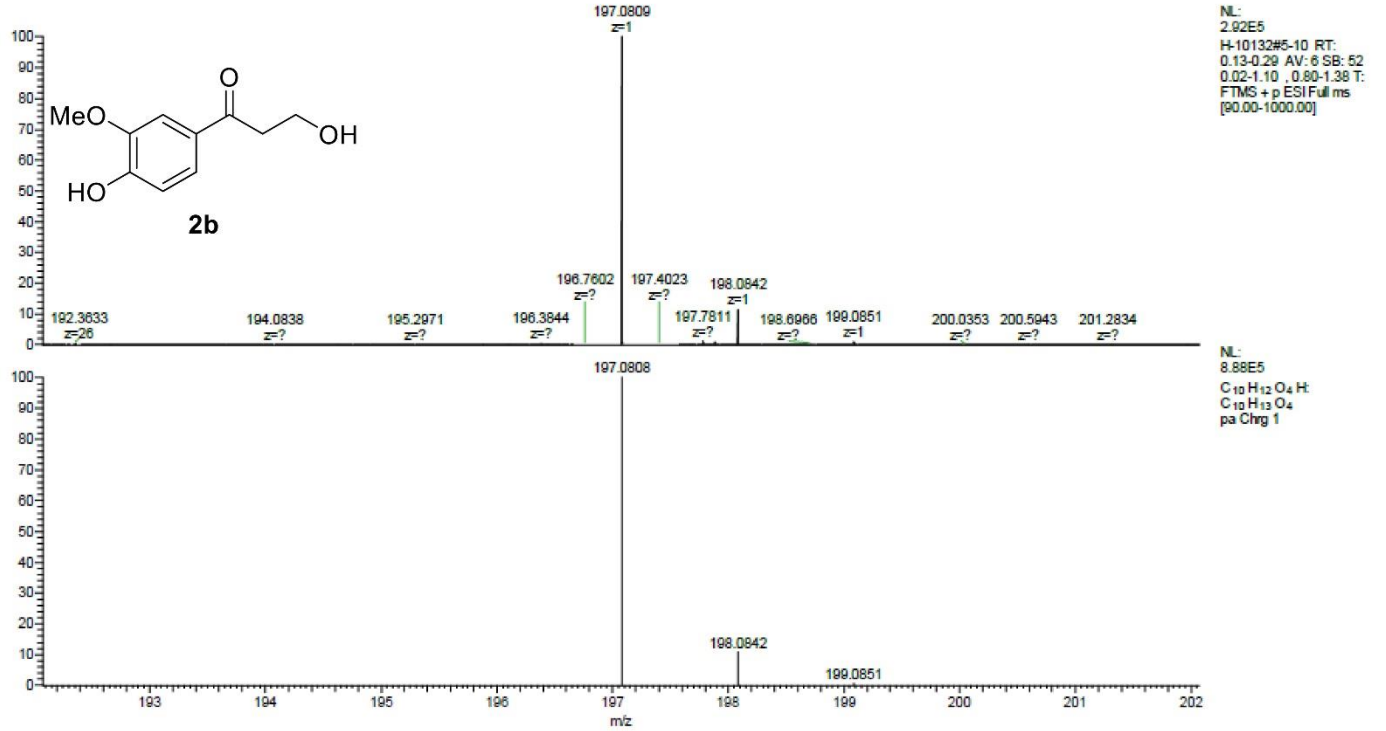


Figure S23 IR spectrum (Diamond ATR) for compound **2b**.



Experimental/theoretical isotopic pattern MS spectrum

Error = 0.3 ppm; Relative Intensity (%) 100

HRMS (ESI) m/z: [M+H]+ Calcd for C10H12O4H 197.0808. Found 197.0809; (Error: 0.3 ppm).

Figure S24 HRMS spectrum (ESI) for compound **2b**.

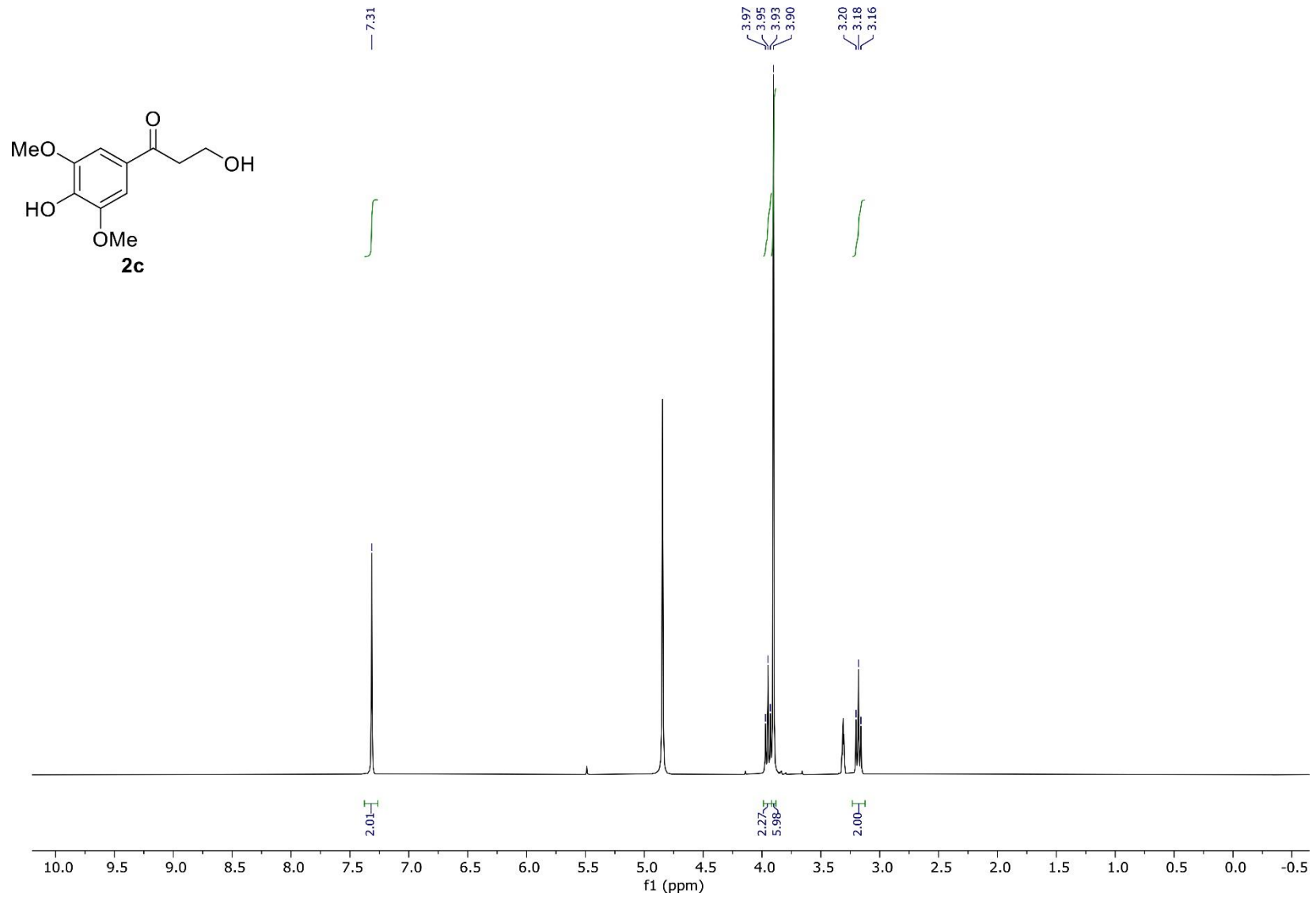


Figure S25 ^{1}H NMR spectrum (CD_3OD, 300 MHz) for compound **2c**.

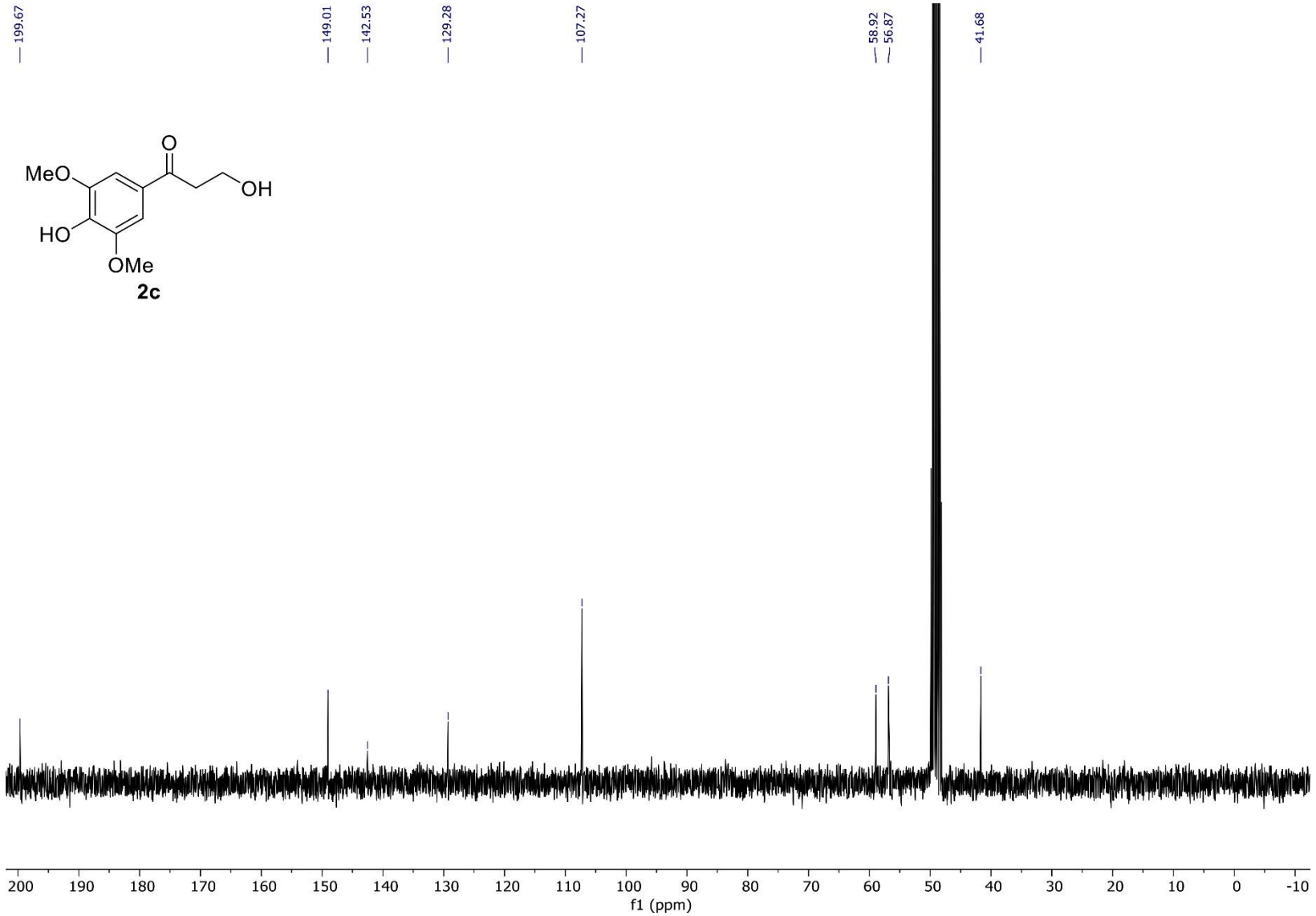


Figure S26 ^{13}C NMR spectrum (CD_3OD, 75 MHz) for compound **2c**.

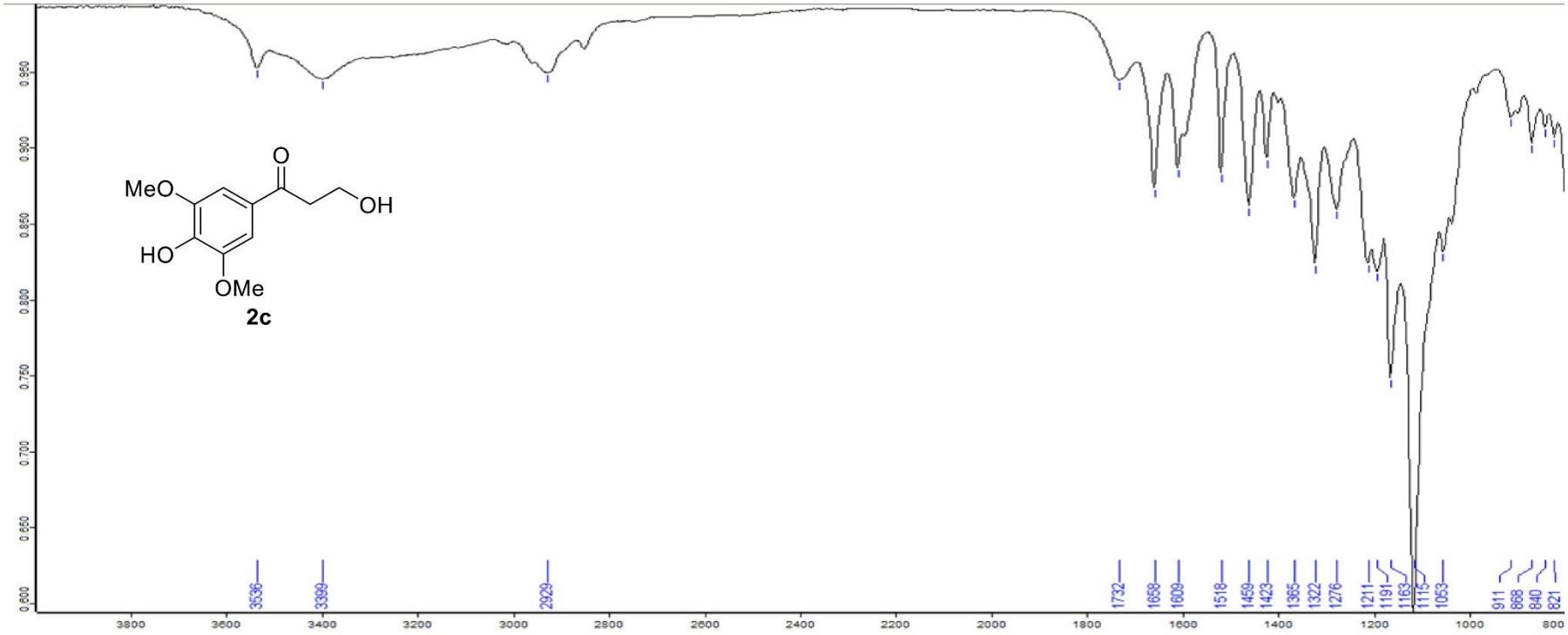
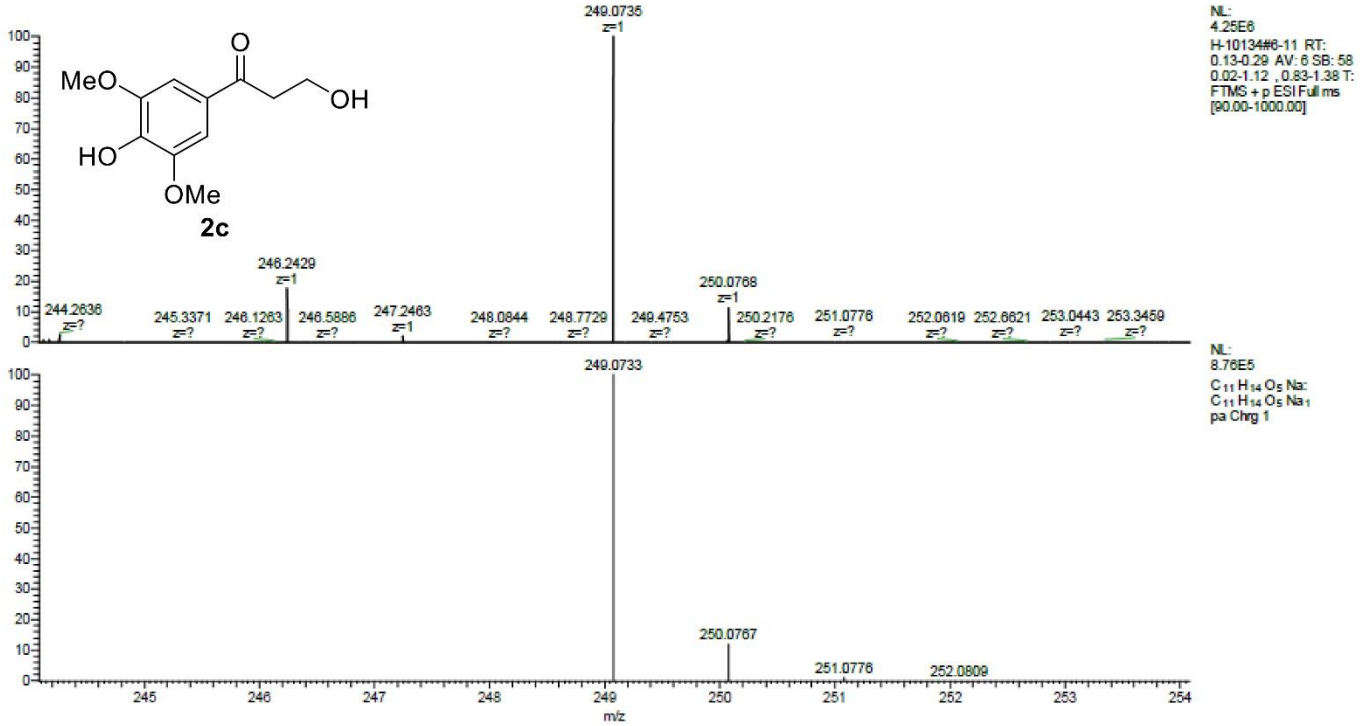


Figure S27 IR spectrum (Diamond ATR) for compound **2c**.



Experimental/theoretical isotopic pattern MS spectrum

Error = 0.6 ppm; Relative Intensity (%) 100

HRMS (ESI) m/z: [M+Na]+ Calcd for C11H14O5Na 249.0733. Found 249.0735; (Error: 0.6 ppm).

Figure S28 HRMS spectrum (ESI) for compound **2c**.

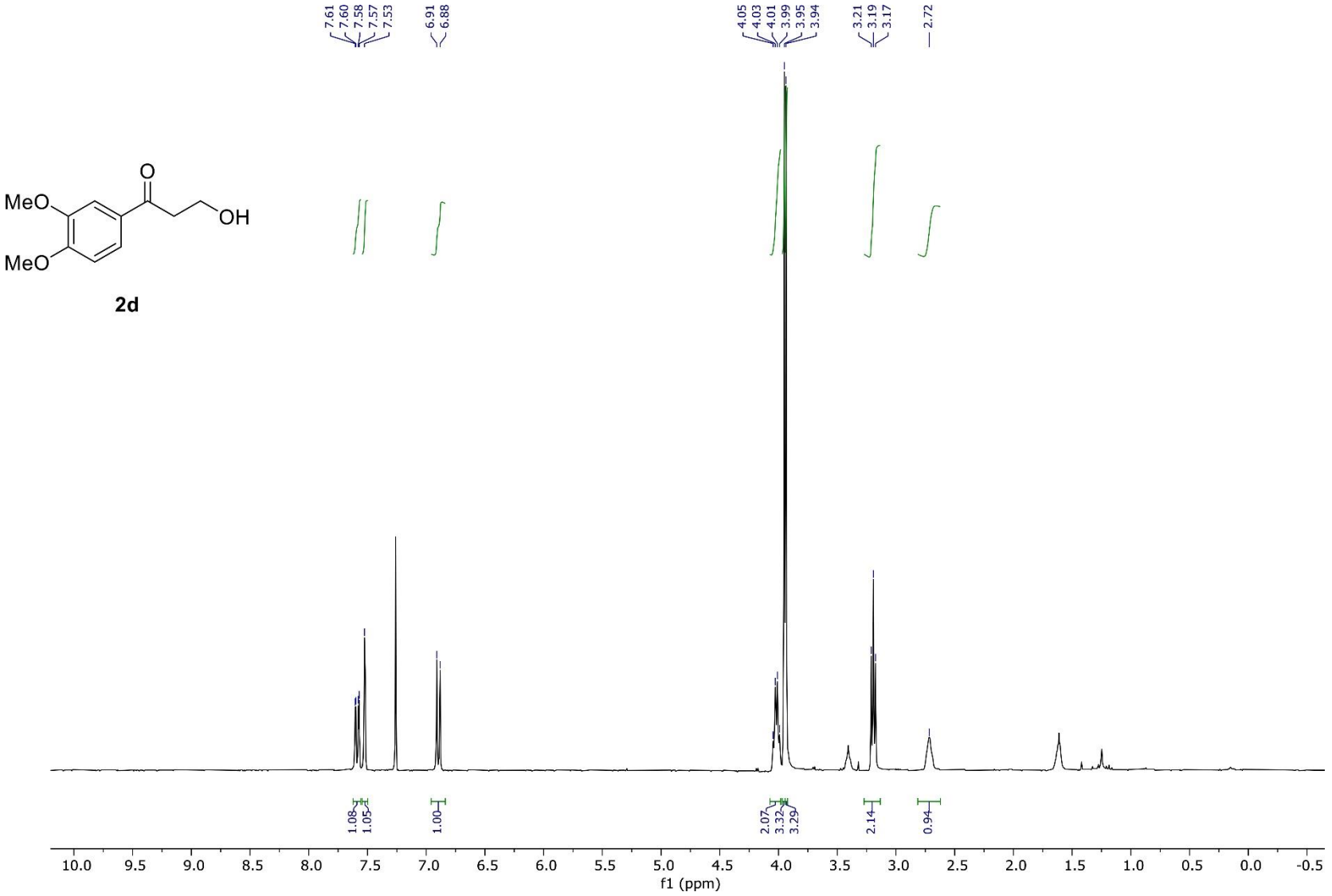


Figure S29 ^{1}H NMR spectrum ($CDCl_3$, 400 MHz) for compound **2d**.

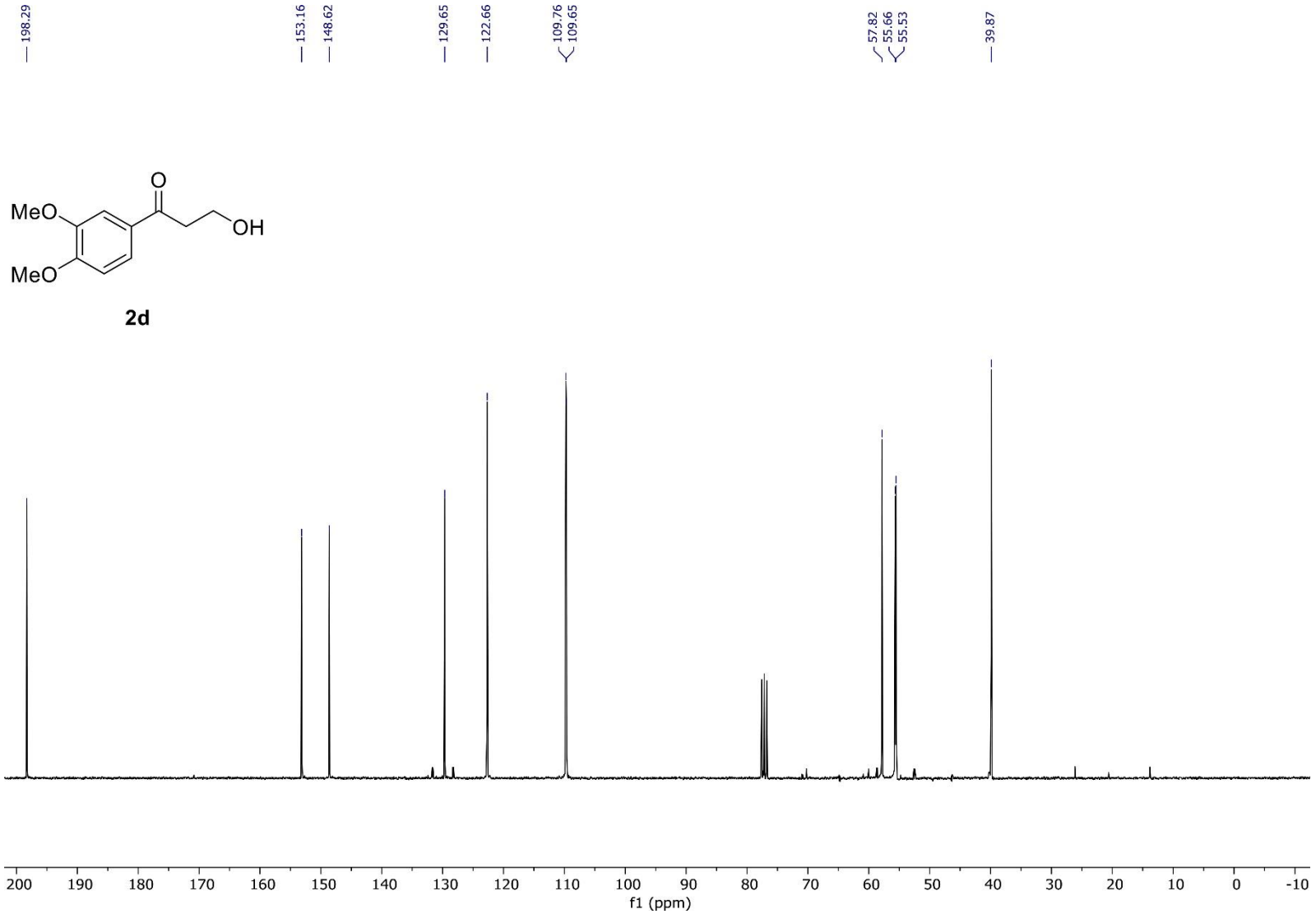


Figure S30 ^{13}C NMR spectrum ($CDCl_3$, 100 MHz) for compound **2d**.

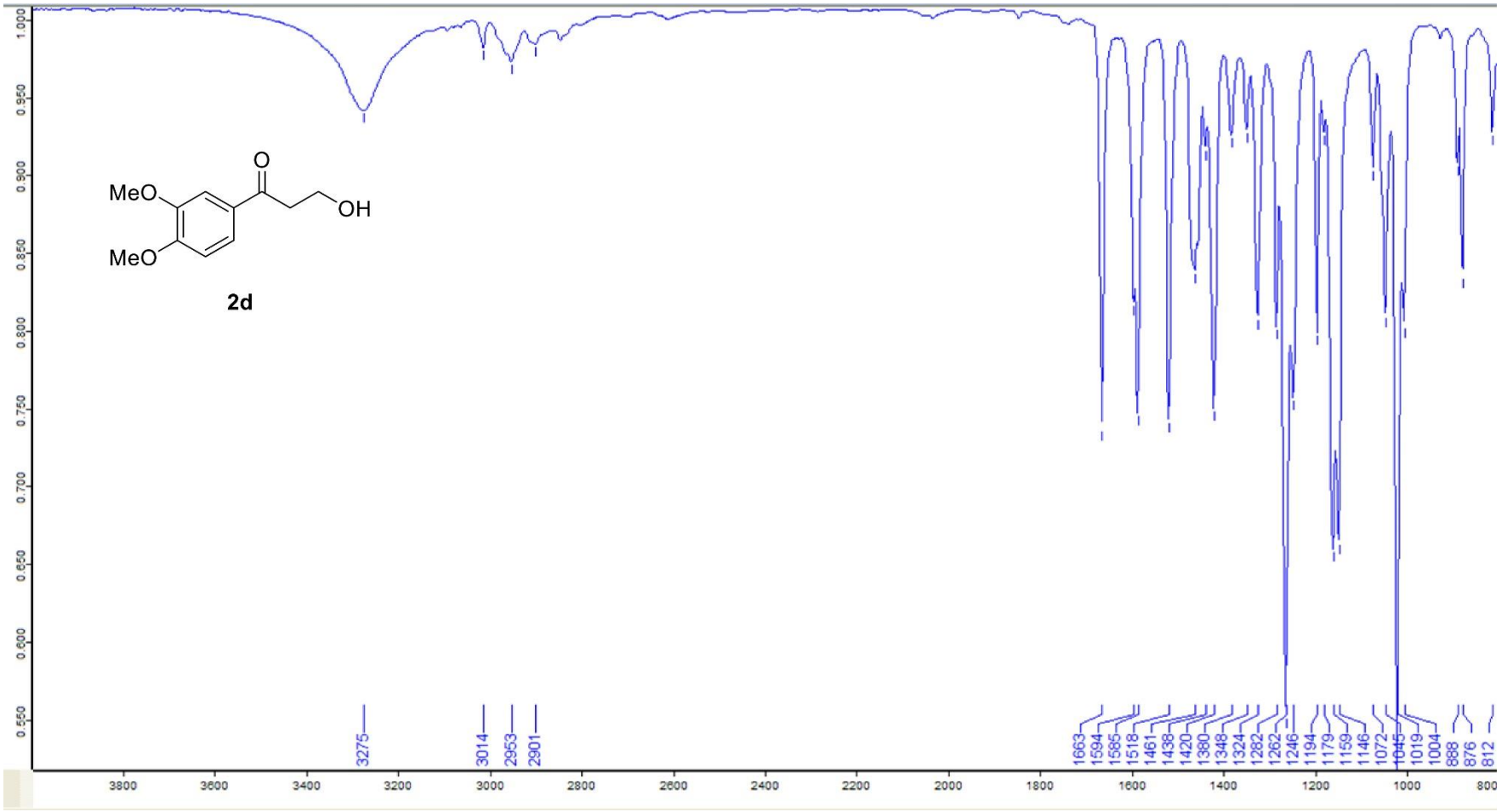
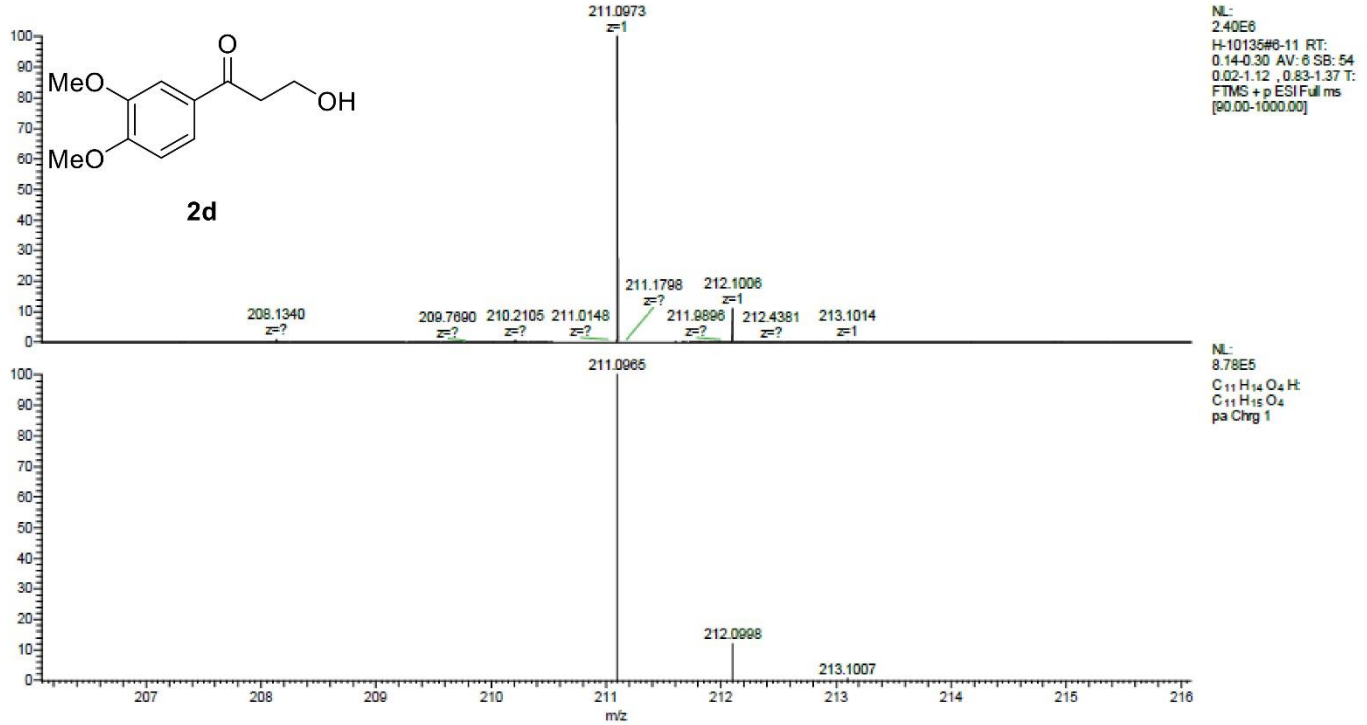


Figure S31 IR spectrum (Diamond ATR) for compound **2d**.



Experimental/theoretical isotopic pattern MS spectrum

Error = 3.9 ppm; Relative Intensity (%) 100

HRMS (ESI) m/z: [M+H]+ Calcd for C11H14O4H 211.0965. Found 211.0973; (Error: 3.9 ppm).

Figure S32 HRMS spectrum (ESI) for compound **2d**.