# Supplementary Information 2

# In Search of Herbistasis: COT-Metsulfuron Methyl Displays Rare Herbistatic Properties

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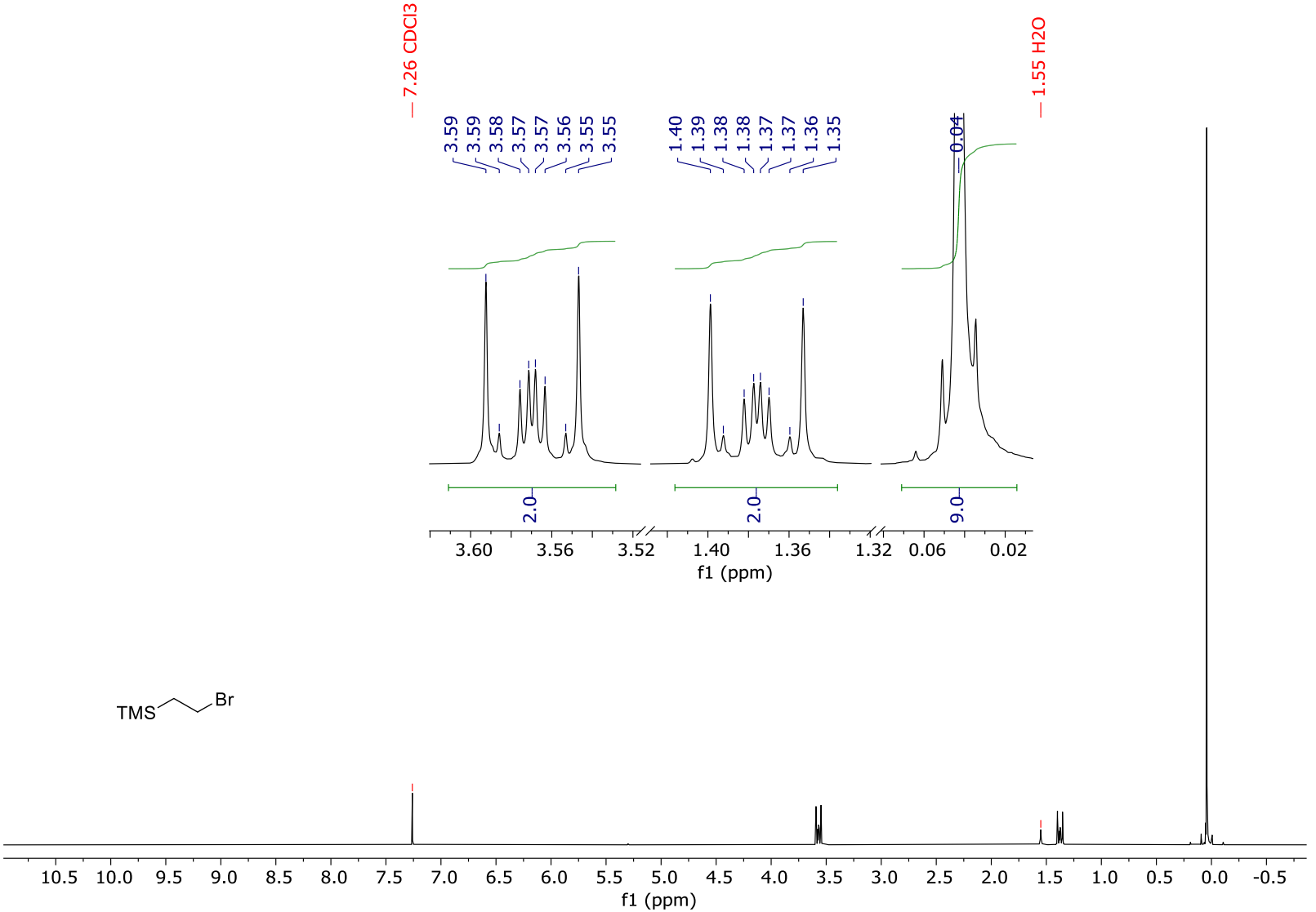
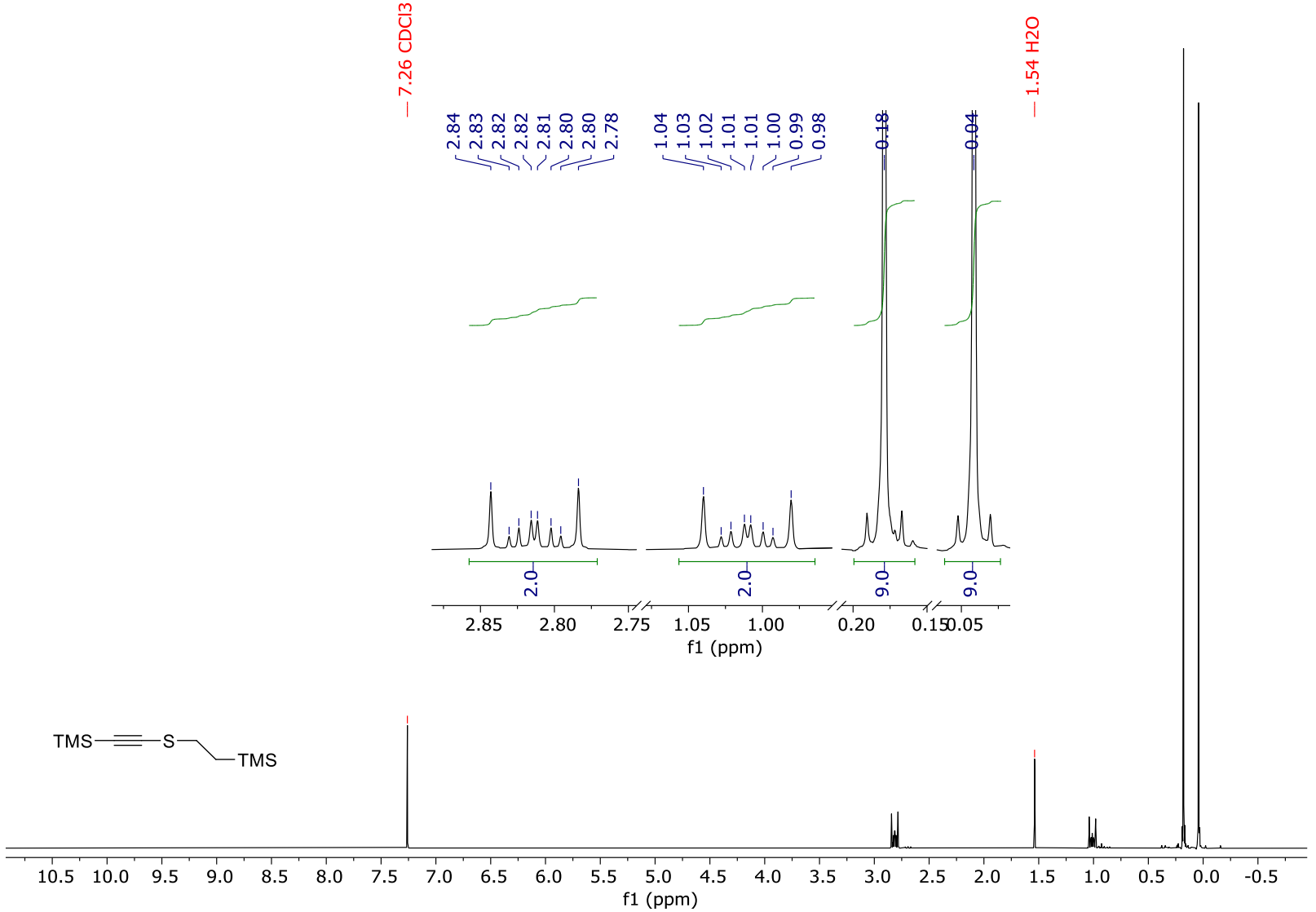
# Characterisation Spectra

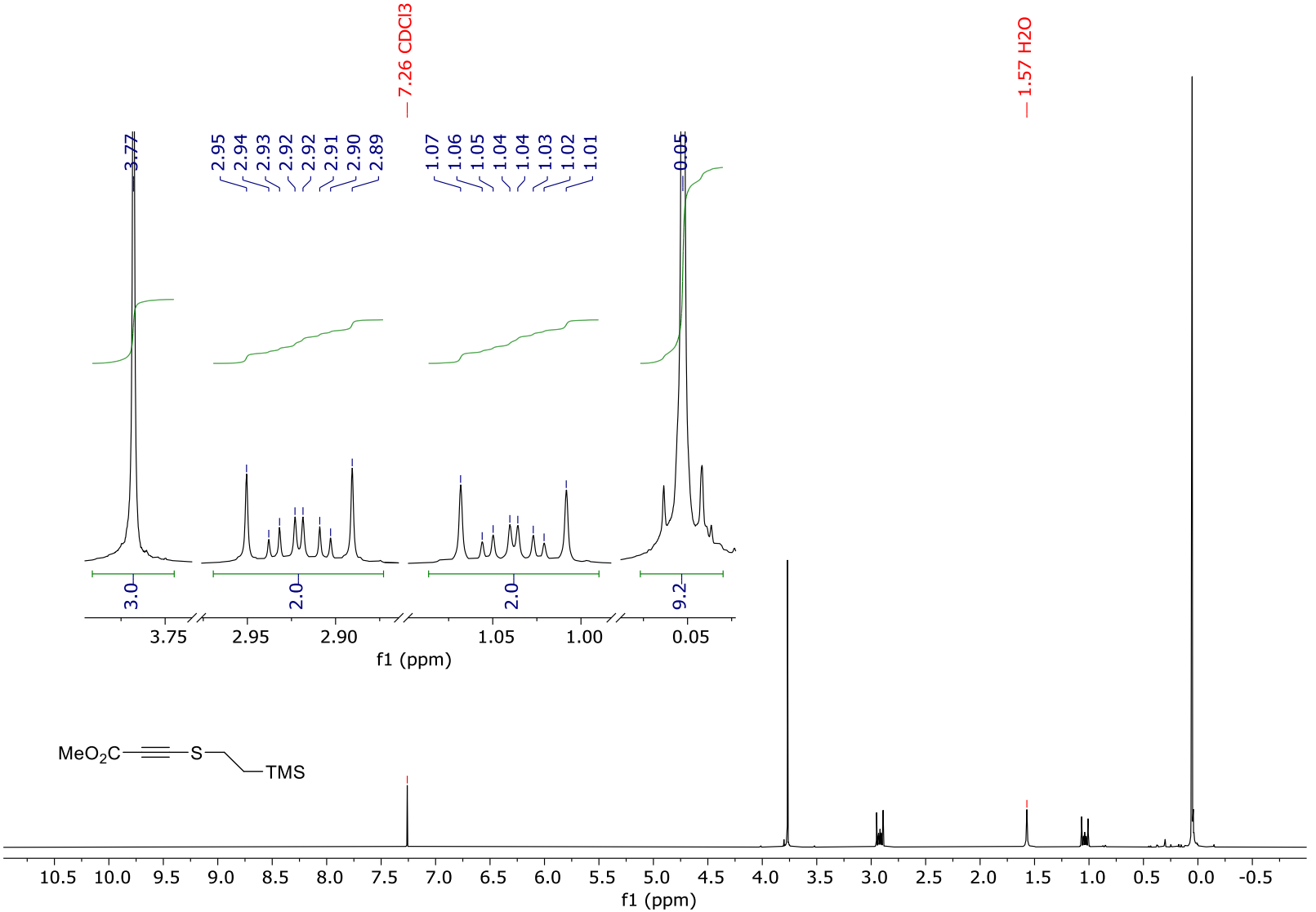
$^{1}$H NMR (400 MHz, $CDCl_3$) of **(2-Bromoethyl)trimethylsilane (18)**



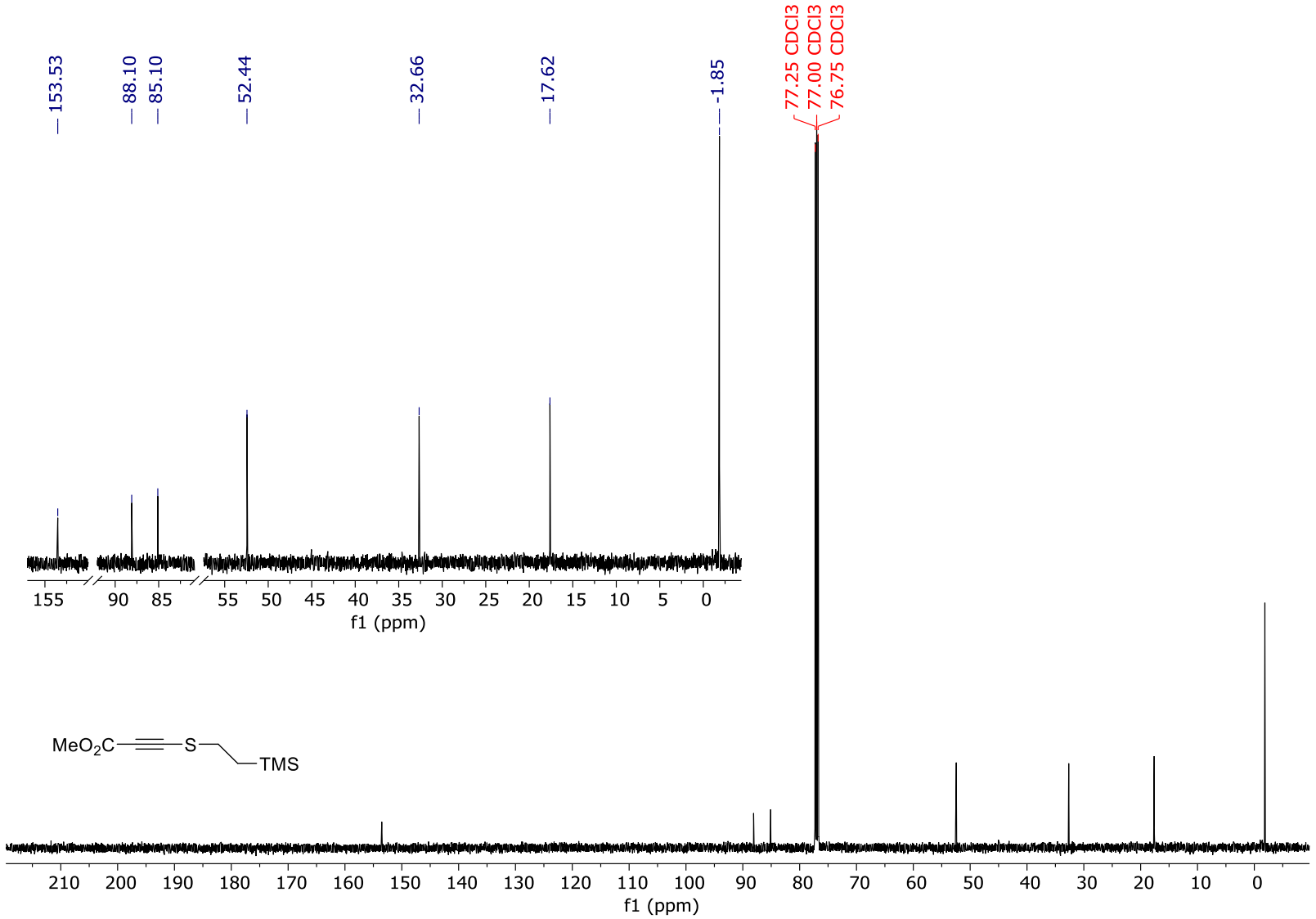
$^{1}$H NMR (300 MHz, $CDCl_3$) of **Trimethyl(((2-(trimethylsilyl)ethyl)thio)ethynyl)silane (21)**



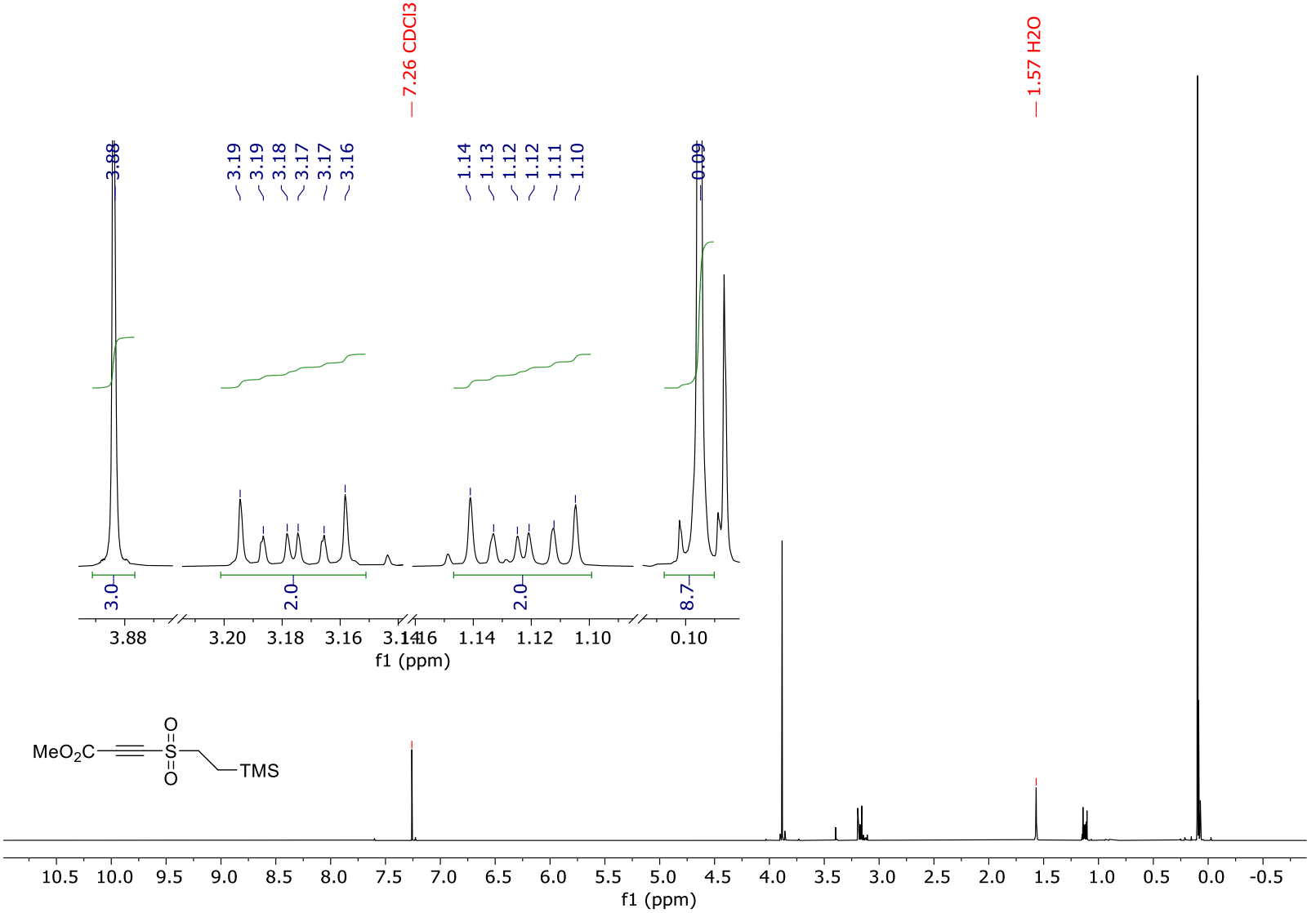
$^{1}$H NMR (300 MHz, $CDCl_3$) of **Methyl 3-((2-(trimethylsilyl)ethyl)thio)propiolate (22)**



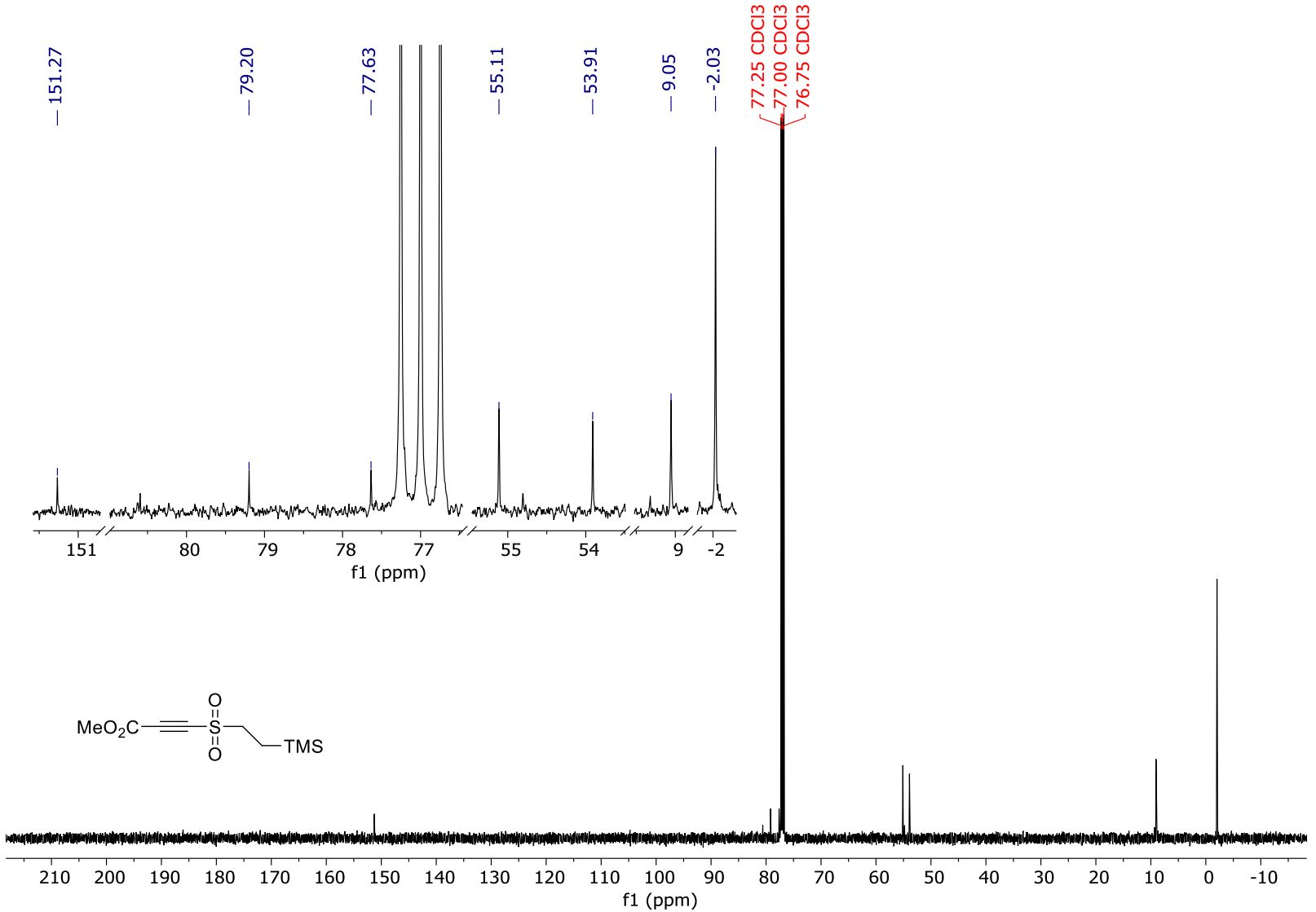
$^{13}C$ NMR (125 MHz, $CDCl_3$) of **Methyl 3-((2-(trimethylsilyl)ethyl)thio)propiolate (22)**



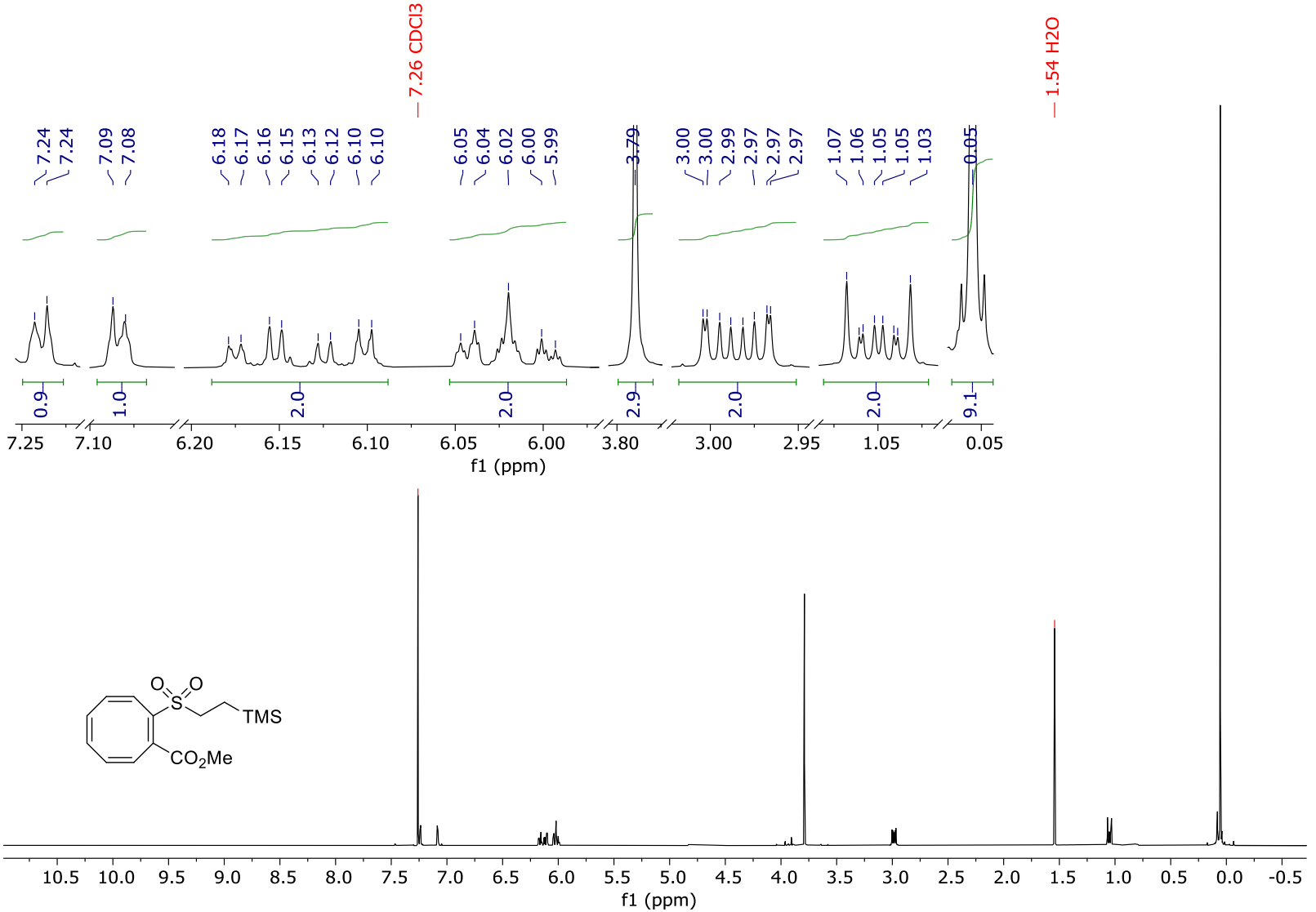
$^{1}$H NMR (500 MHz, $CDCl_3$) of **Methyl 3-((2-(trimethylsilyl)ethyl)sulfonyl)propiolate (15)**



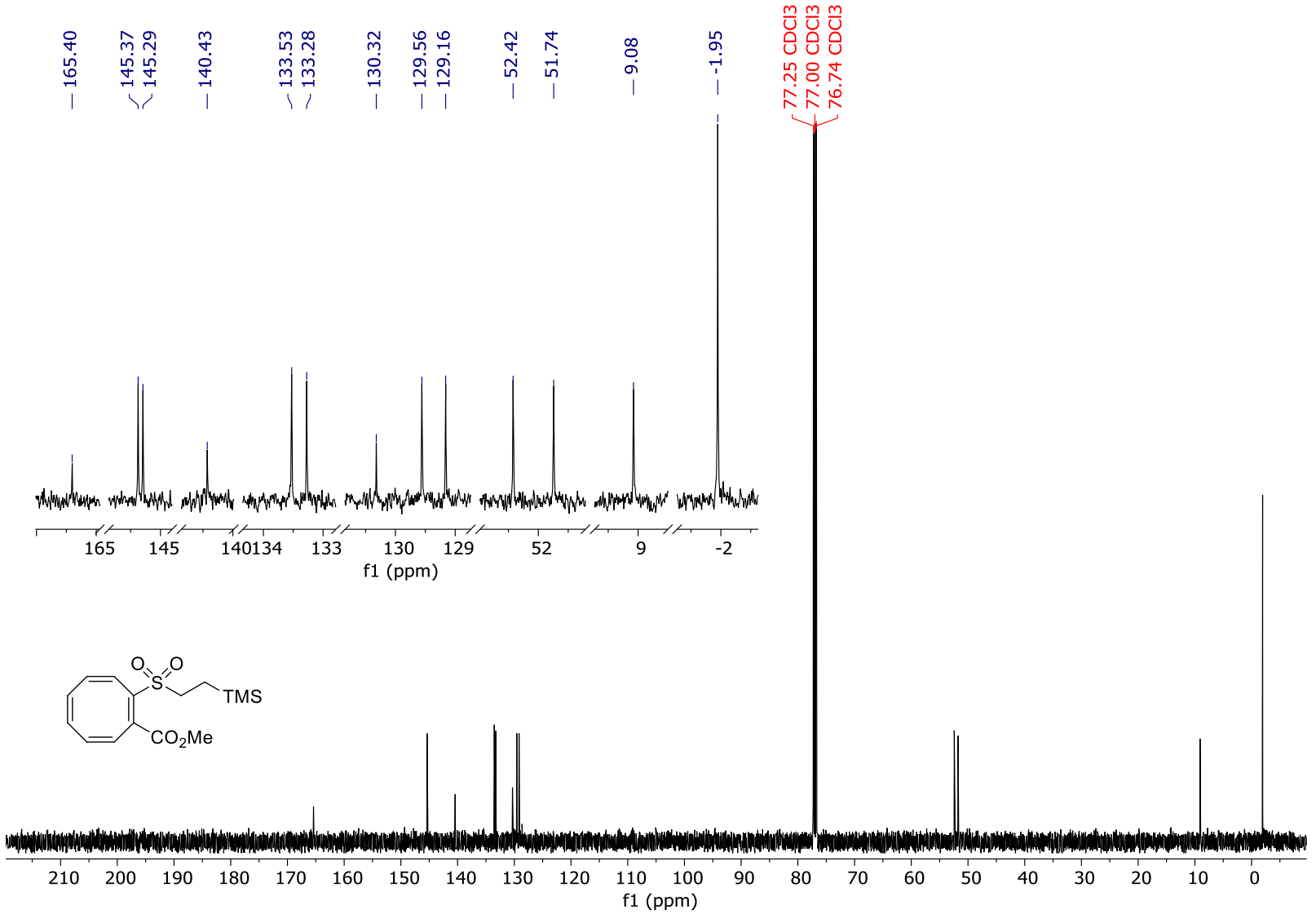
$^{13}C$ NMR (125 MHz, $CDCl_3$) of **Methyl 3-((2-(trimethylsilyl)ethyl)sulfonyl)propiolate (15)**



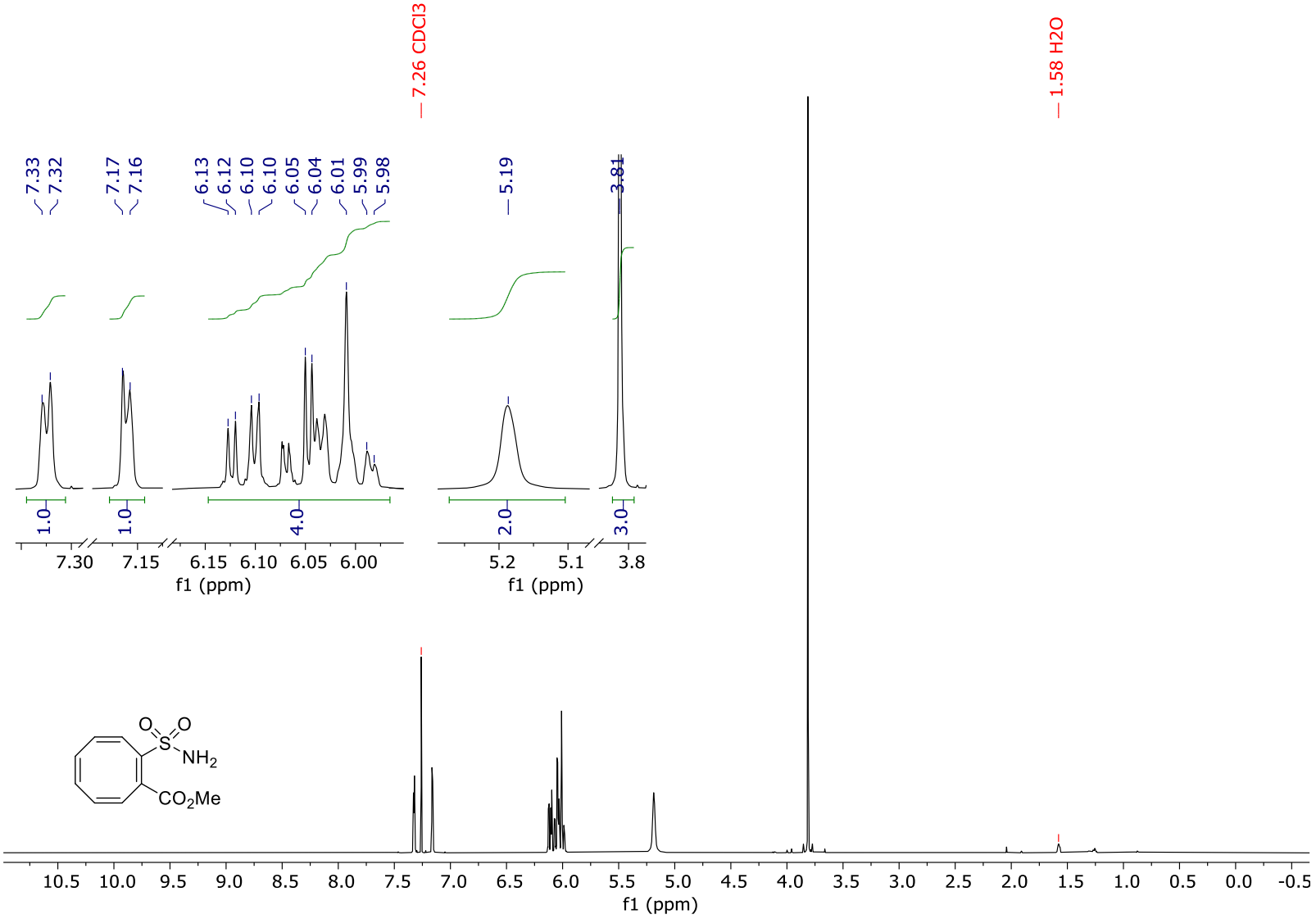
$^{1}$H NMR (500 MHz, $CDCl_3$) of **Methyl 2-((2-(trimethylsilyl)ethyl)sulfonyl)cycloocta-1,3,5,7-tetraene-1-carboxylate (23)**



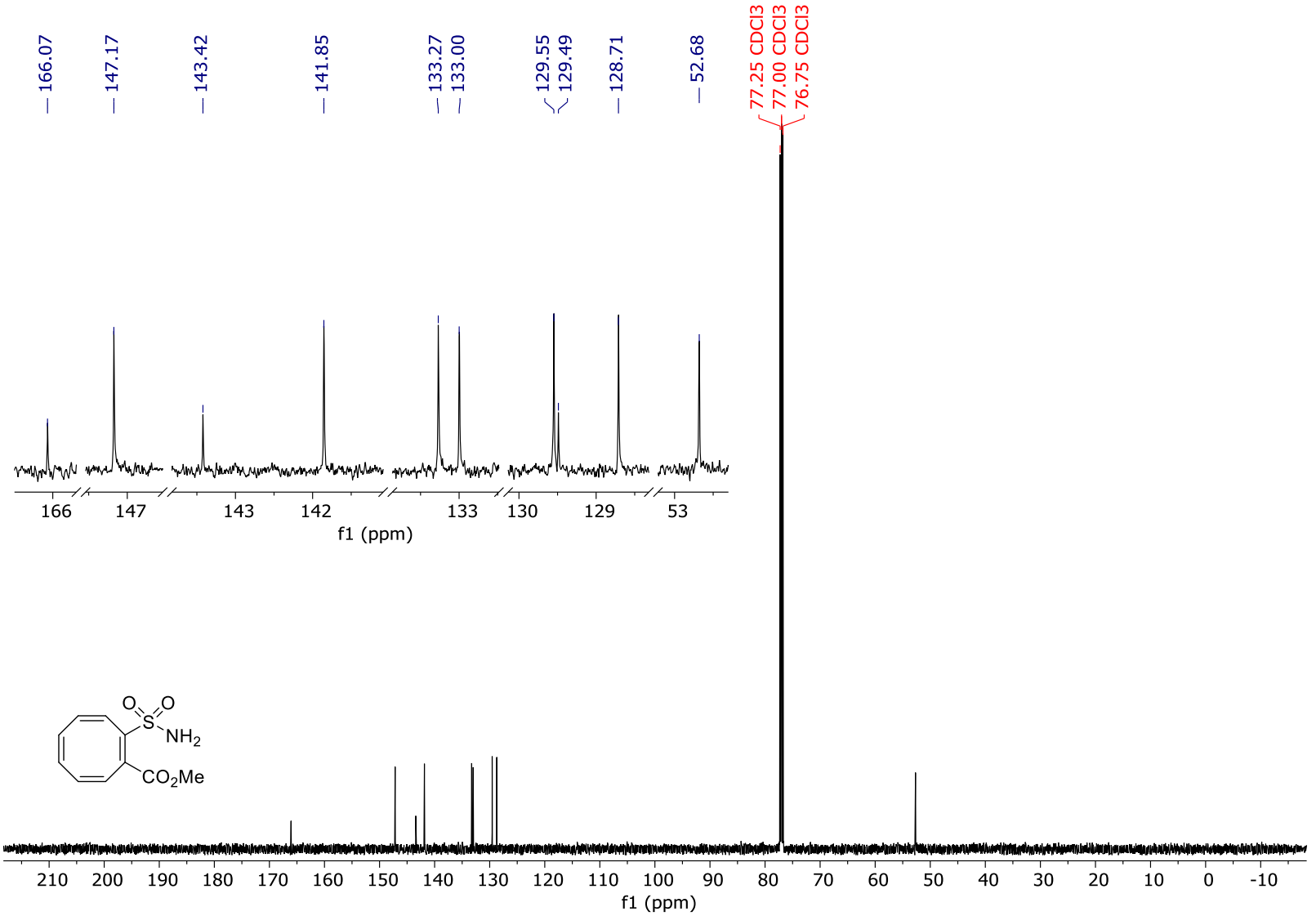
$^{13}C$ NMR (125 MHz, $CDCl_3$) of **Methyl 2-((2-(trimethylsilyl)ethyl)sulfonyl)cycloocta-1,3,5,7-tetraene-1-carboxylate (23)**



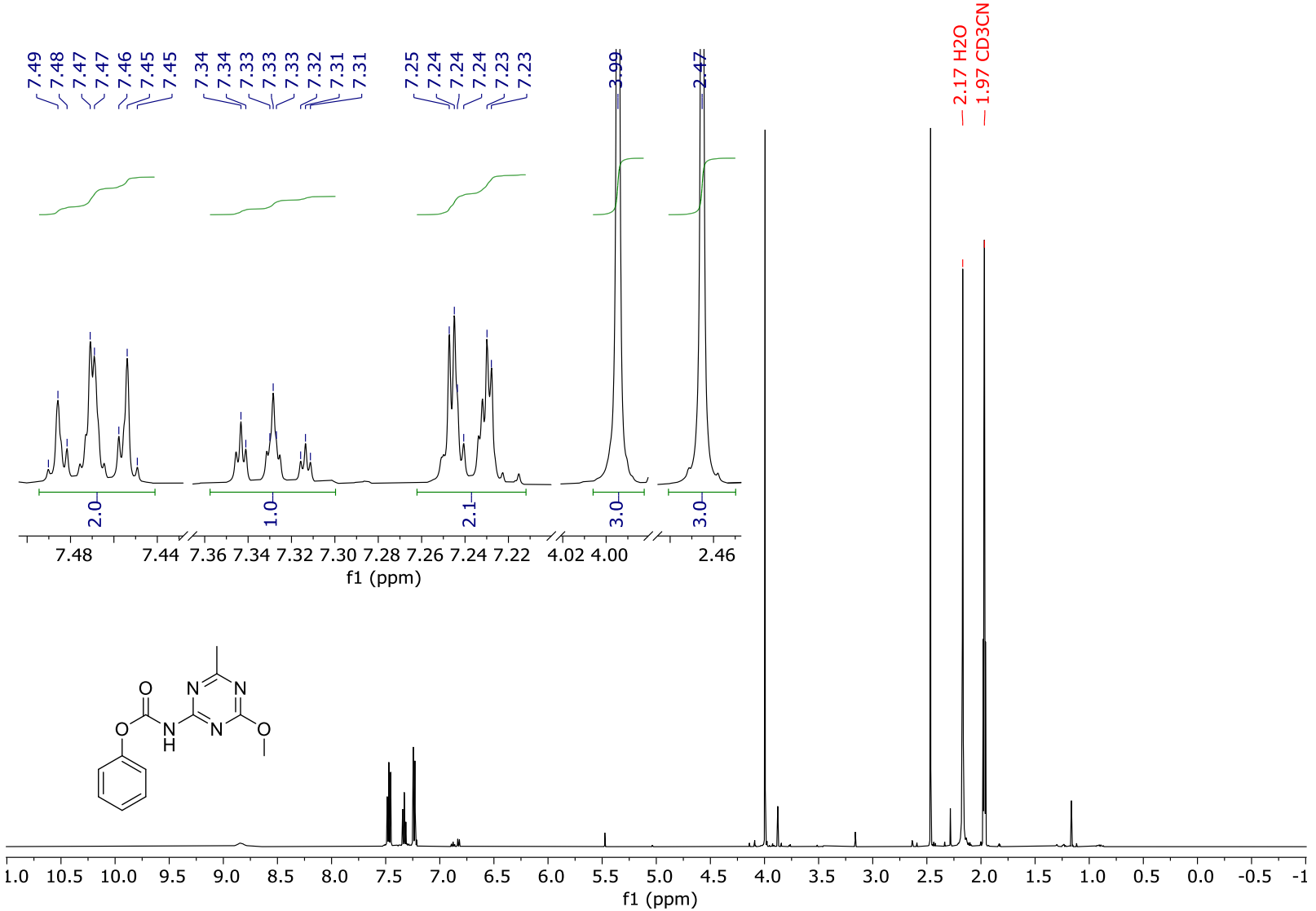
$^{1}$H NMR (500 MHz, $CDCl_3$) of **Methyl 2-sulfamoylcycloocta-1,3,5,7-tetraene-1-carboxylate (24)**



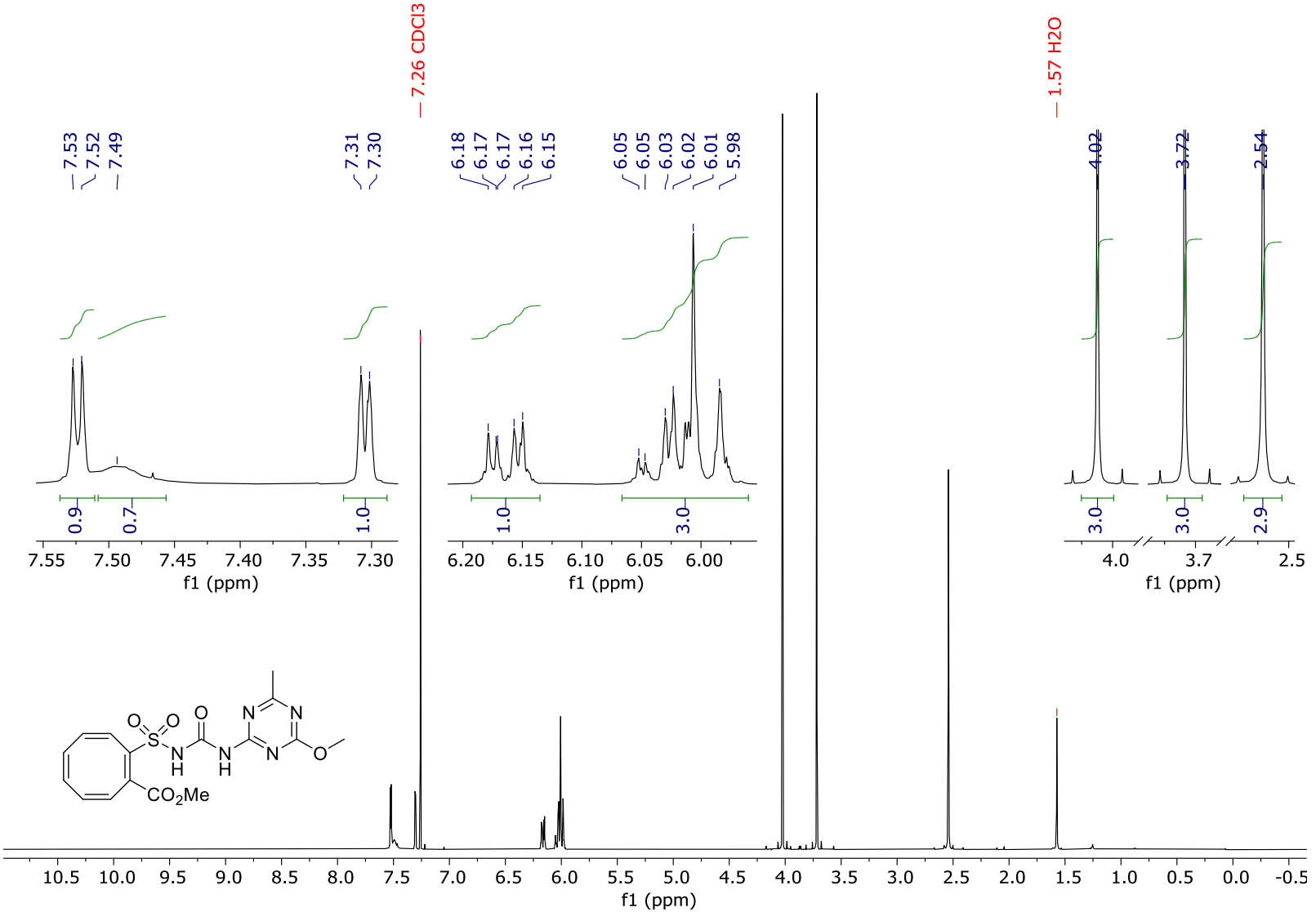
$^{13}$C NMR (125 MHz, $CDCl_3$) of **Methyl 2-sulfamoylcycloocta-1,3,5,7-tetraene-1-carboxylate (24)**



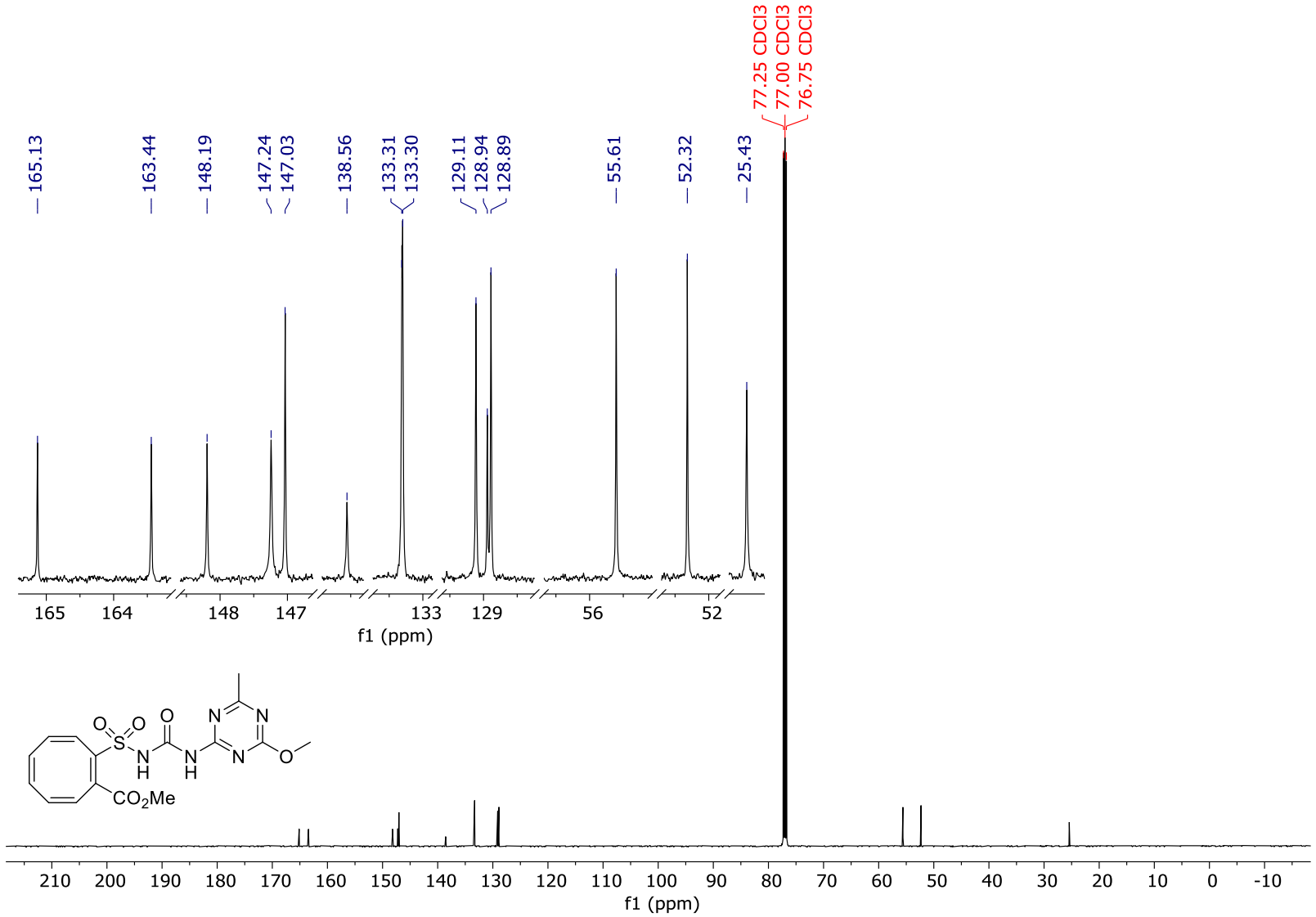
[1]H NMR (500 MHz, $CD_3CN$) of **Phenyl *N*-(4-methoxy-6-methyl-1,3,5-triazin-2-yl) (26)**



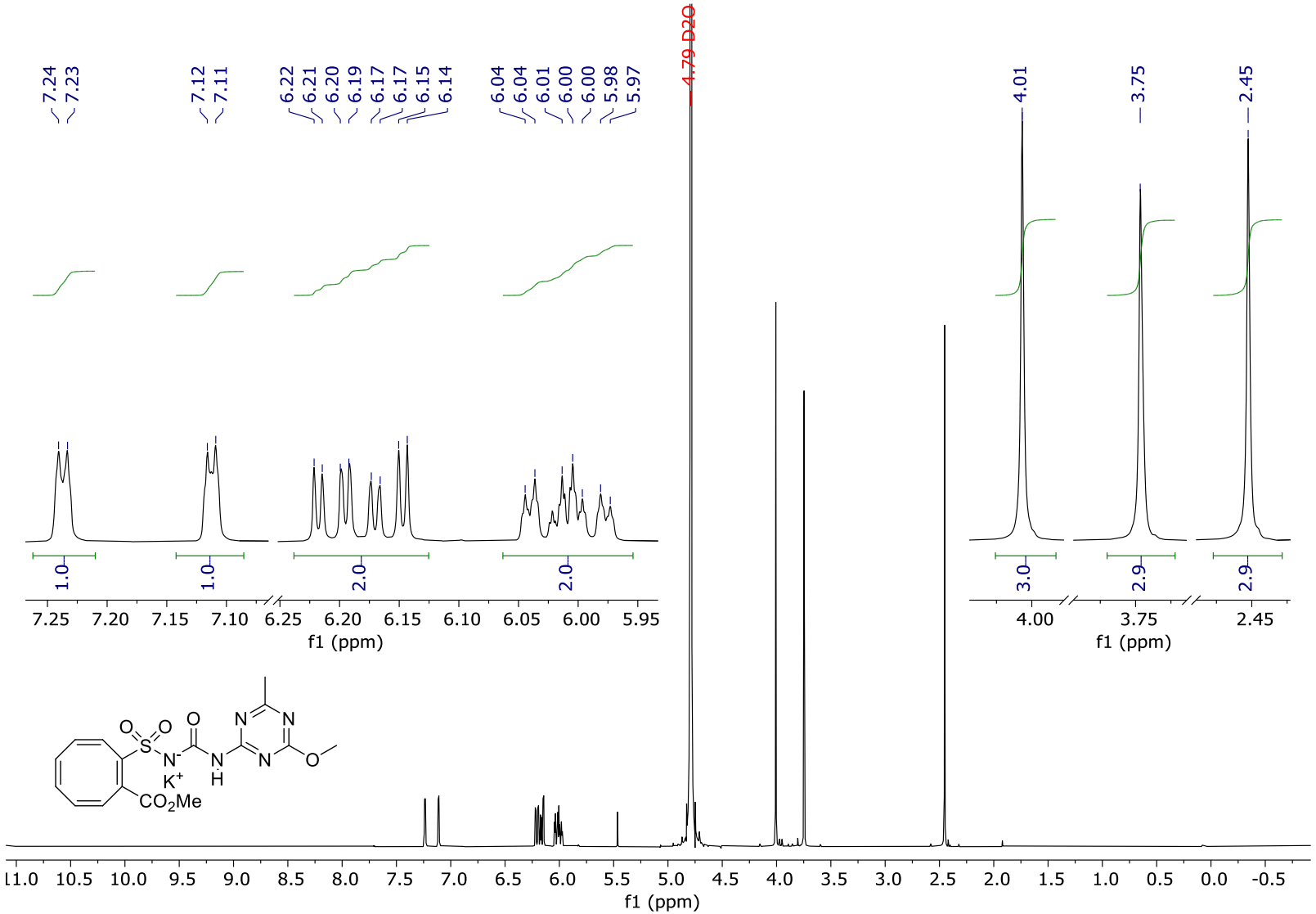
$^{1}$H NMR (500 MHz, $CDCl_3$) of **COT-MM (10)**



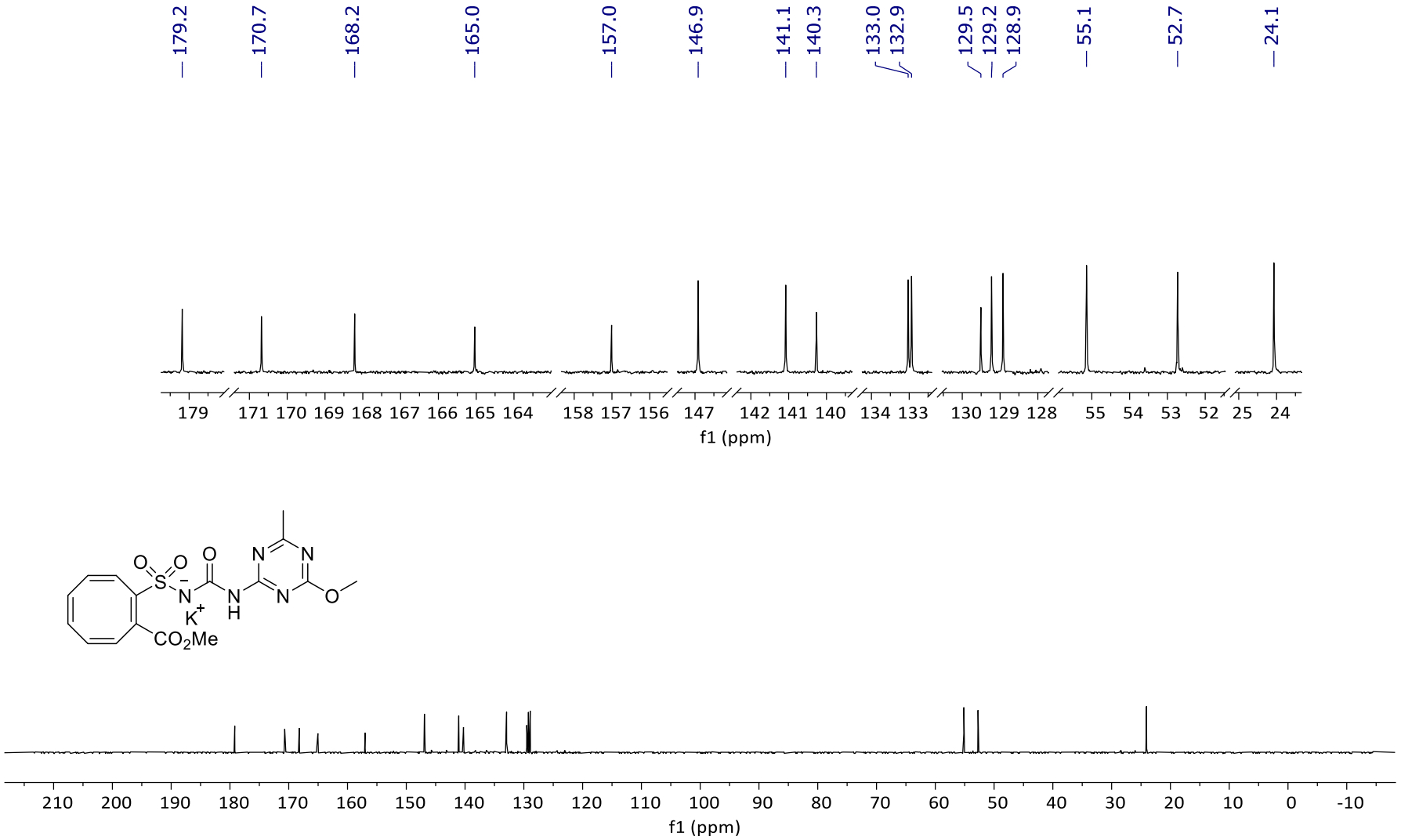
$^{13}$C NMR (125 MHz, $CDCl_3$) of **COT-MM (10)**



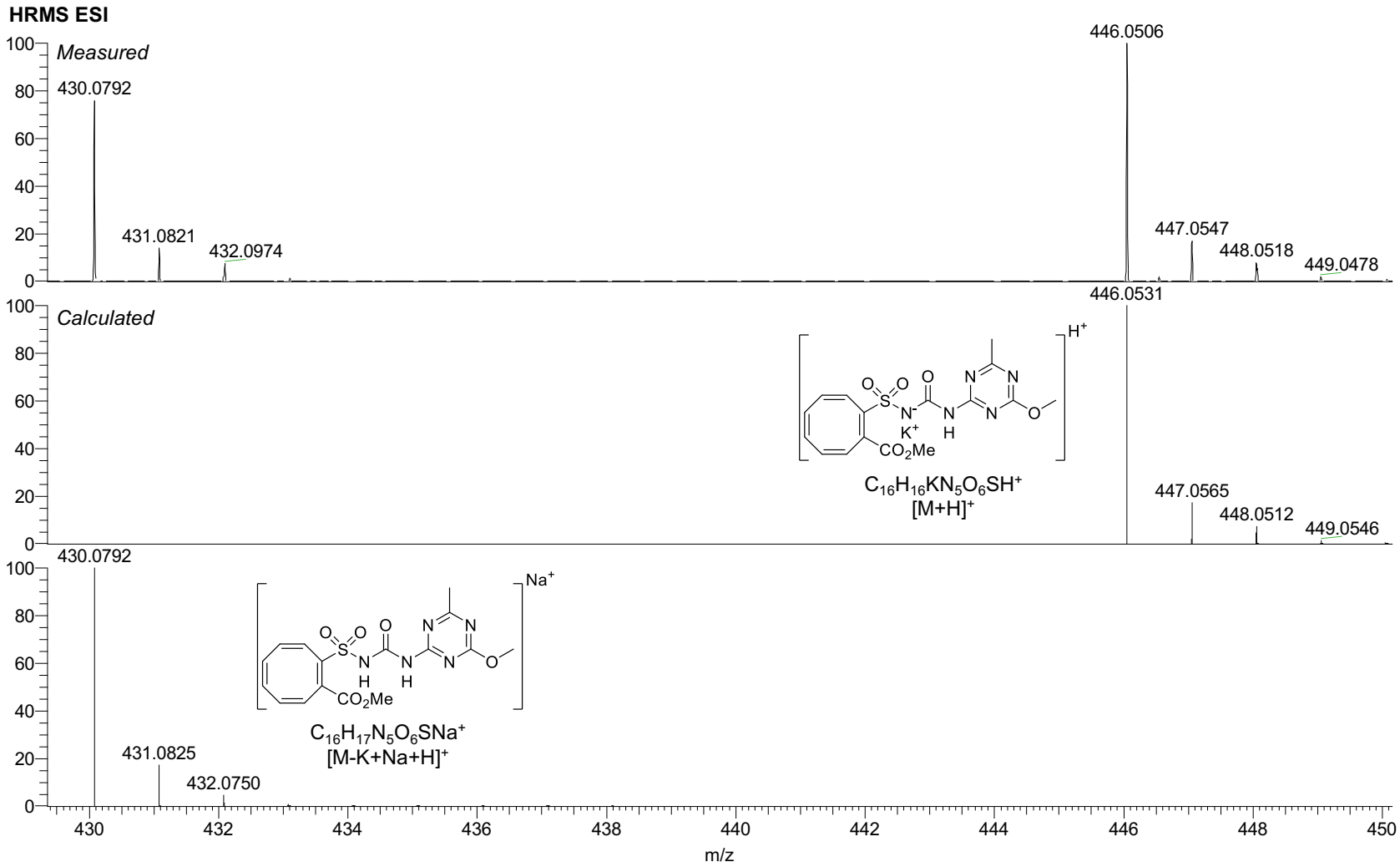
$^{1}$H NMR (500 MHz, $D_2O$) of **COT-MM K$^{+}$**



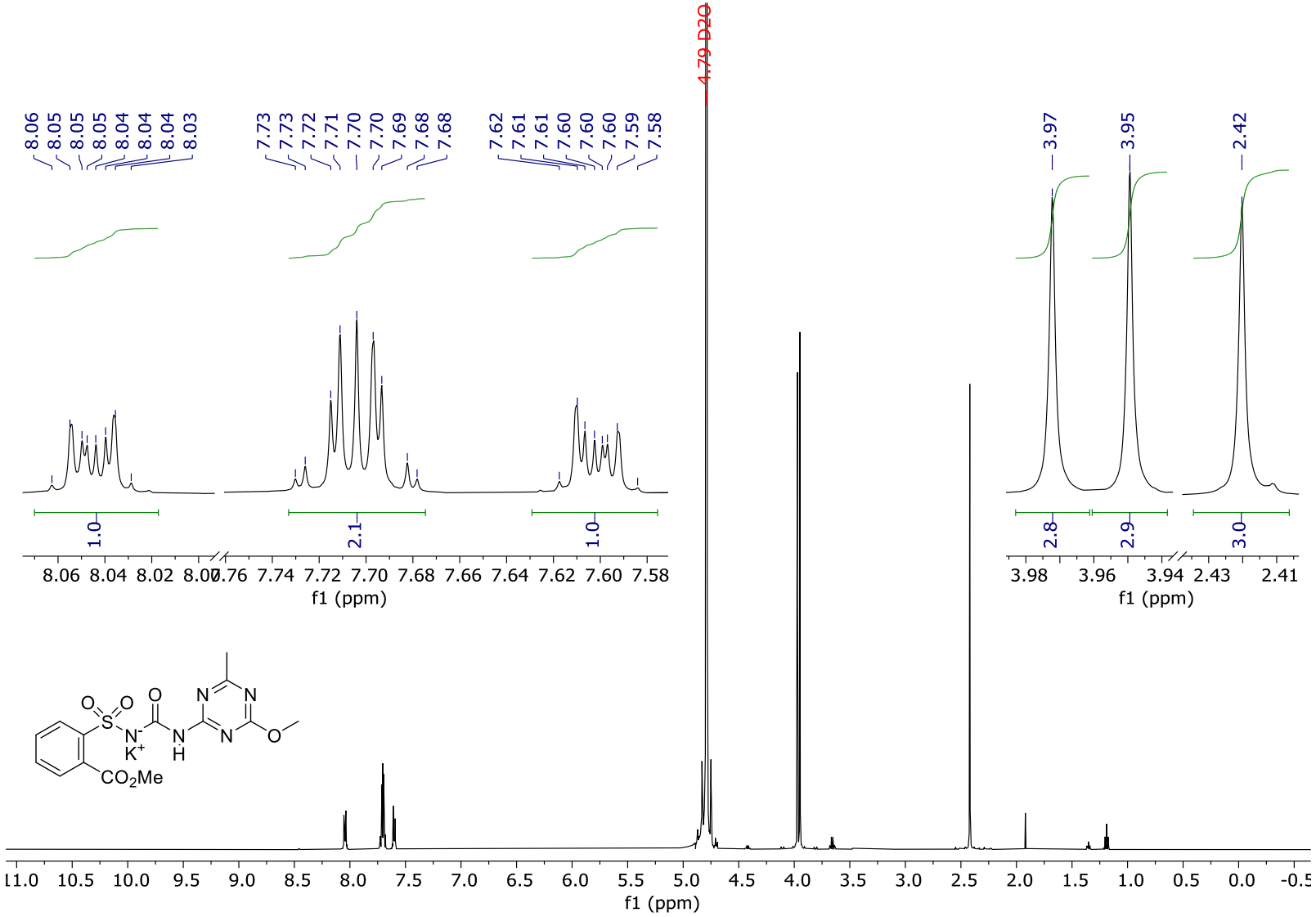
$^{13}C$ NMR (125 MHz, $D_2O$) of **COT-MM $K^+$**



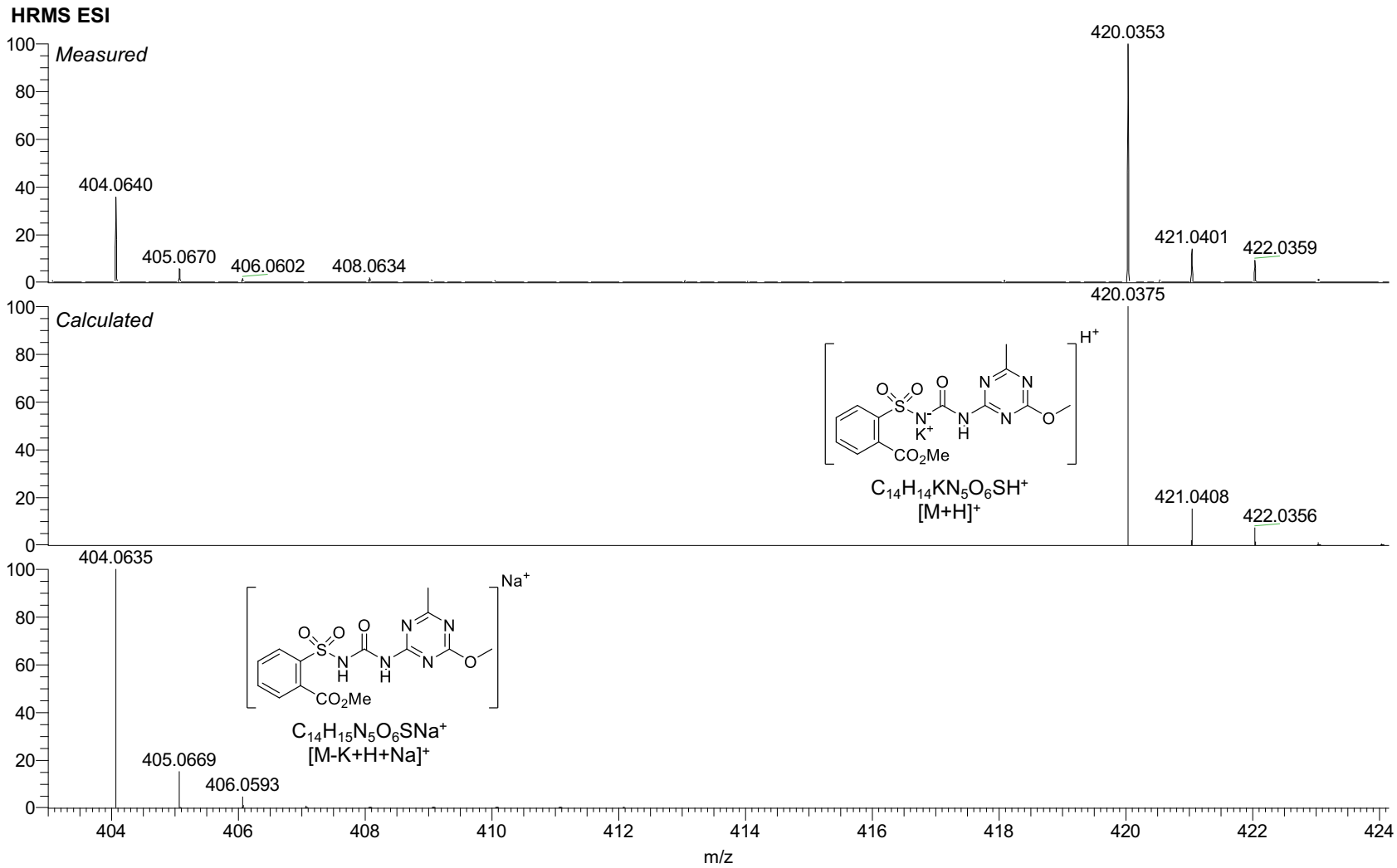
HRMS ESI of **COT-MM K$^+$**



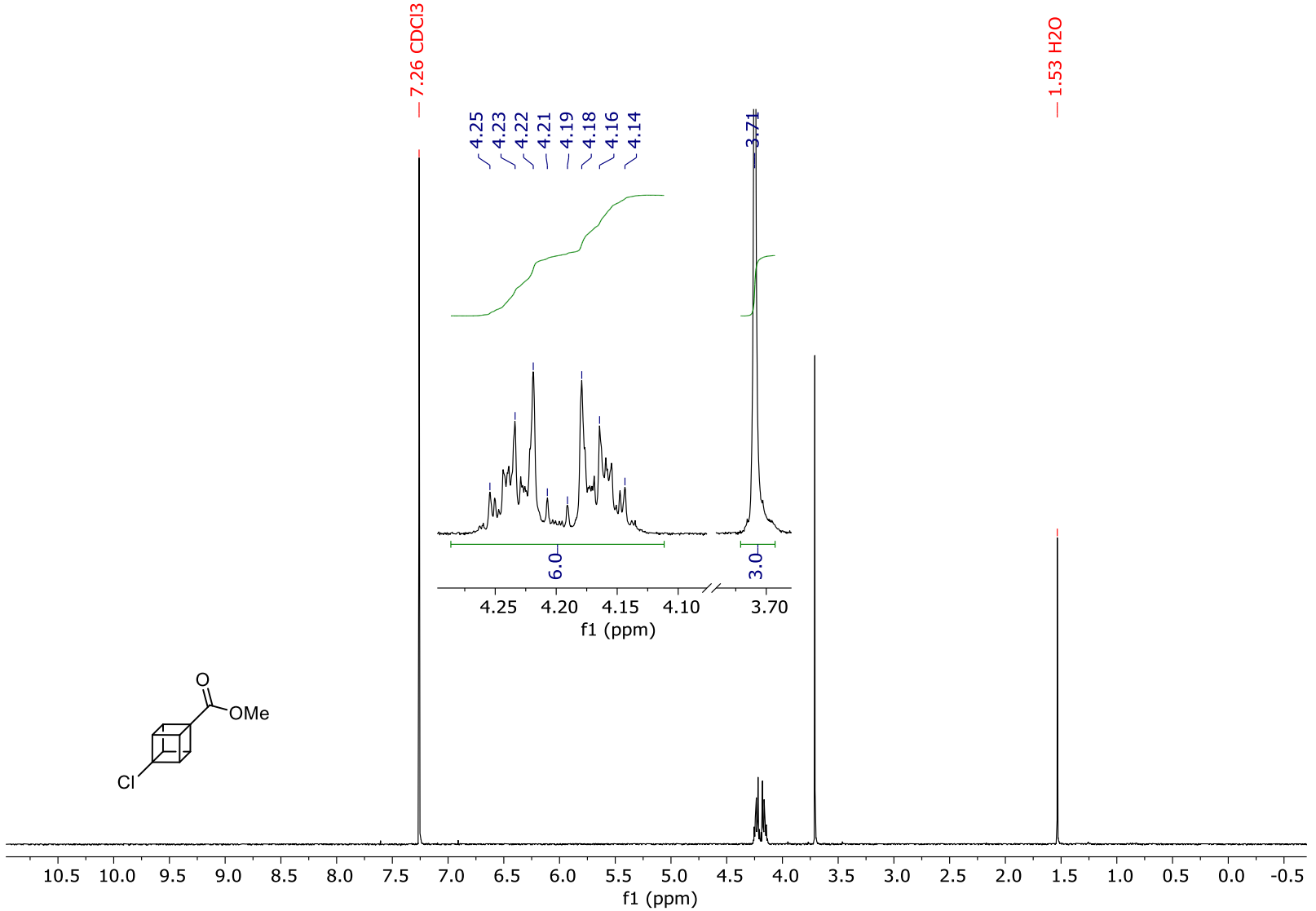
$^{1}$H NMR (500 MHz, $D_2O$) of **MM K$^{+}$**



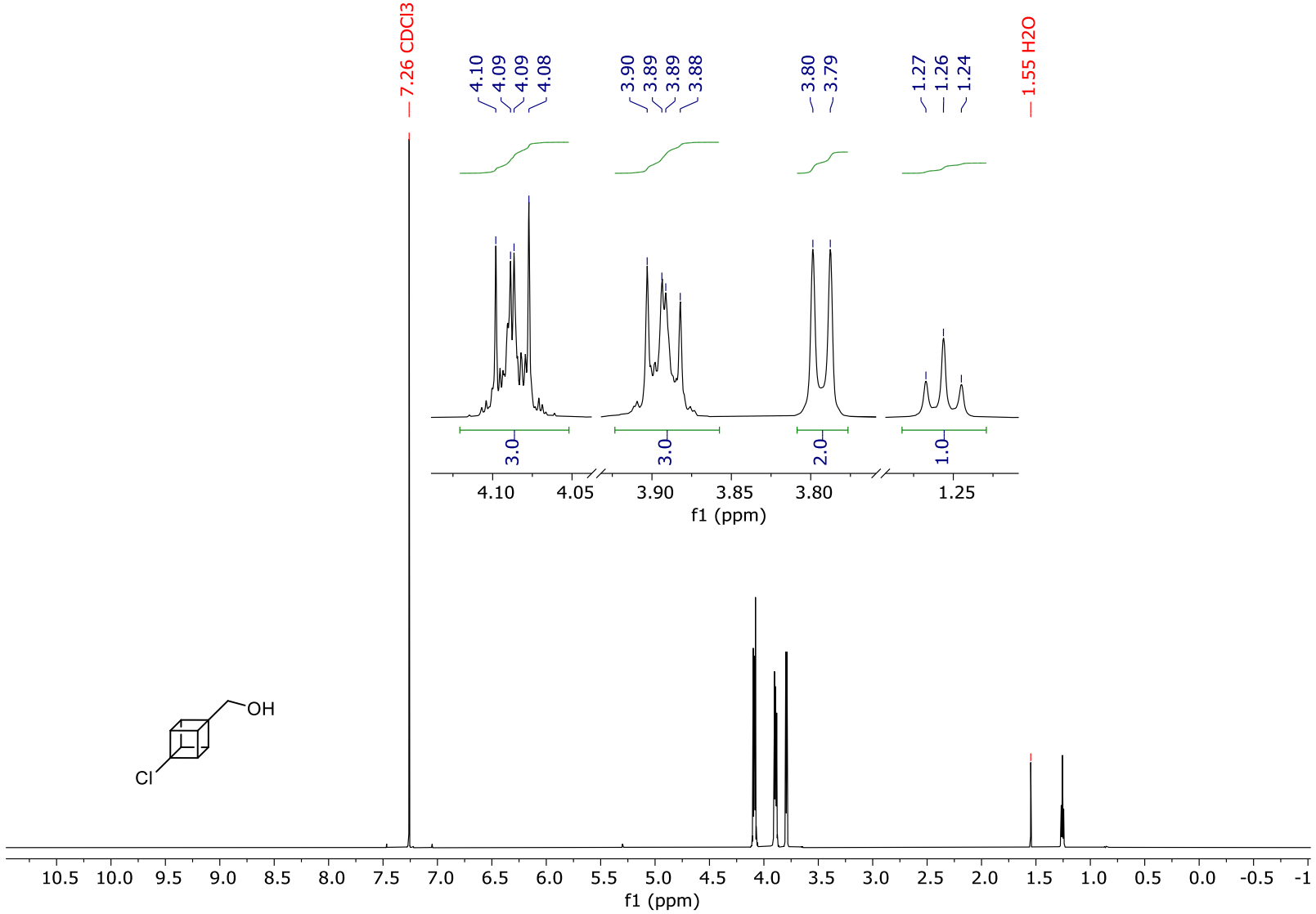
HRMS ESI of **MM K**$^+$



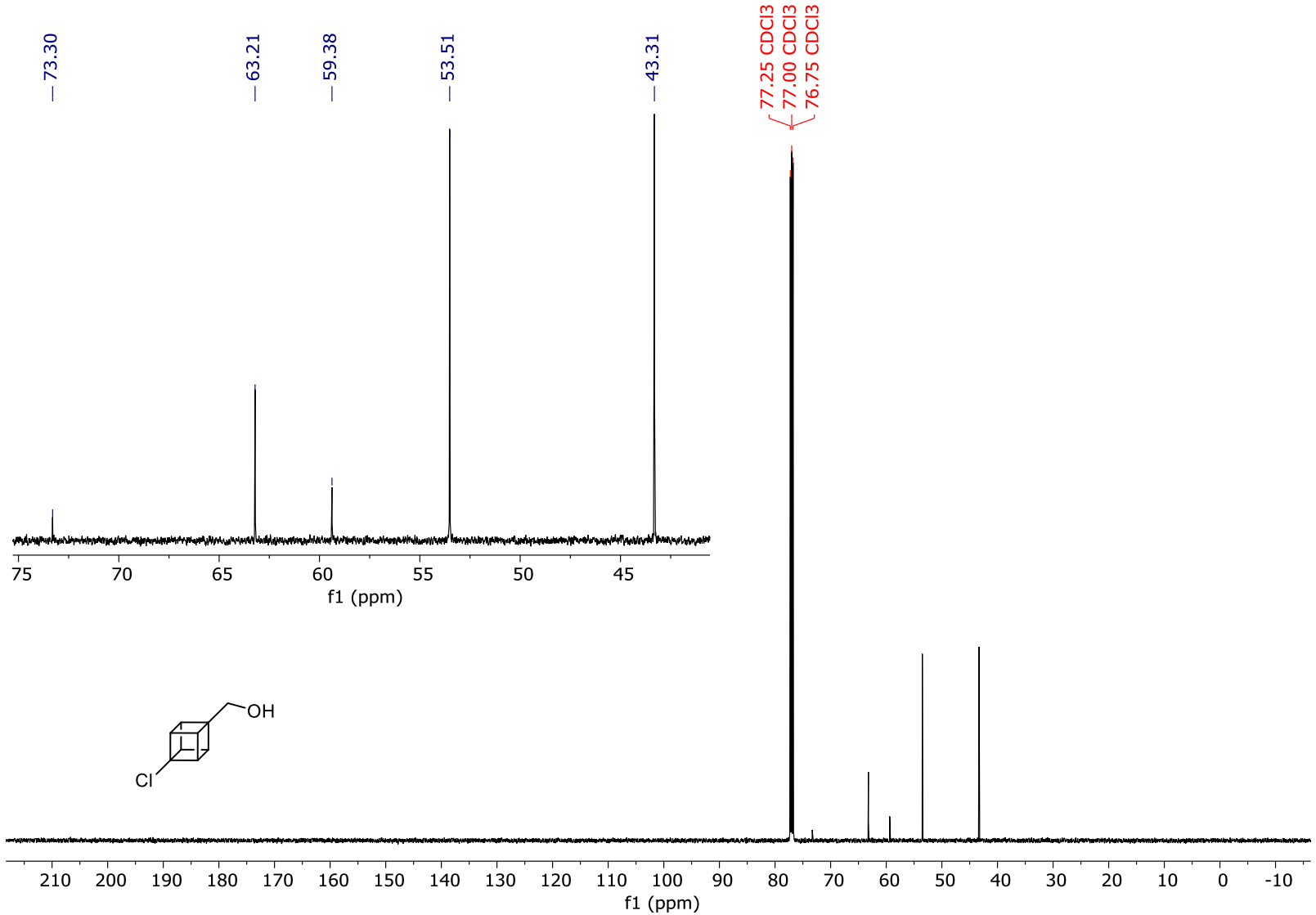
$^{1}$H NMR (300 MHz, $CDCl_3$) of **Methyl 4-chlorocubane-1-carboxylate (33)**



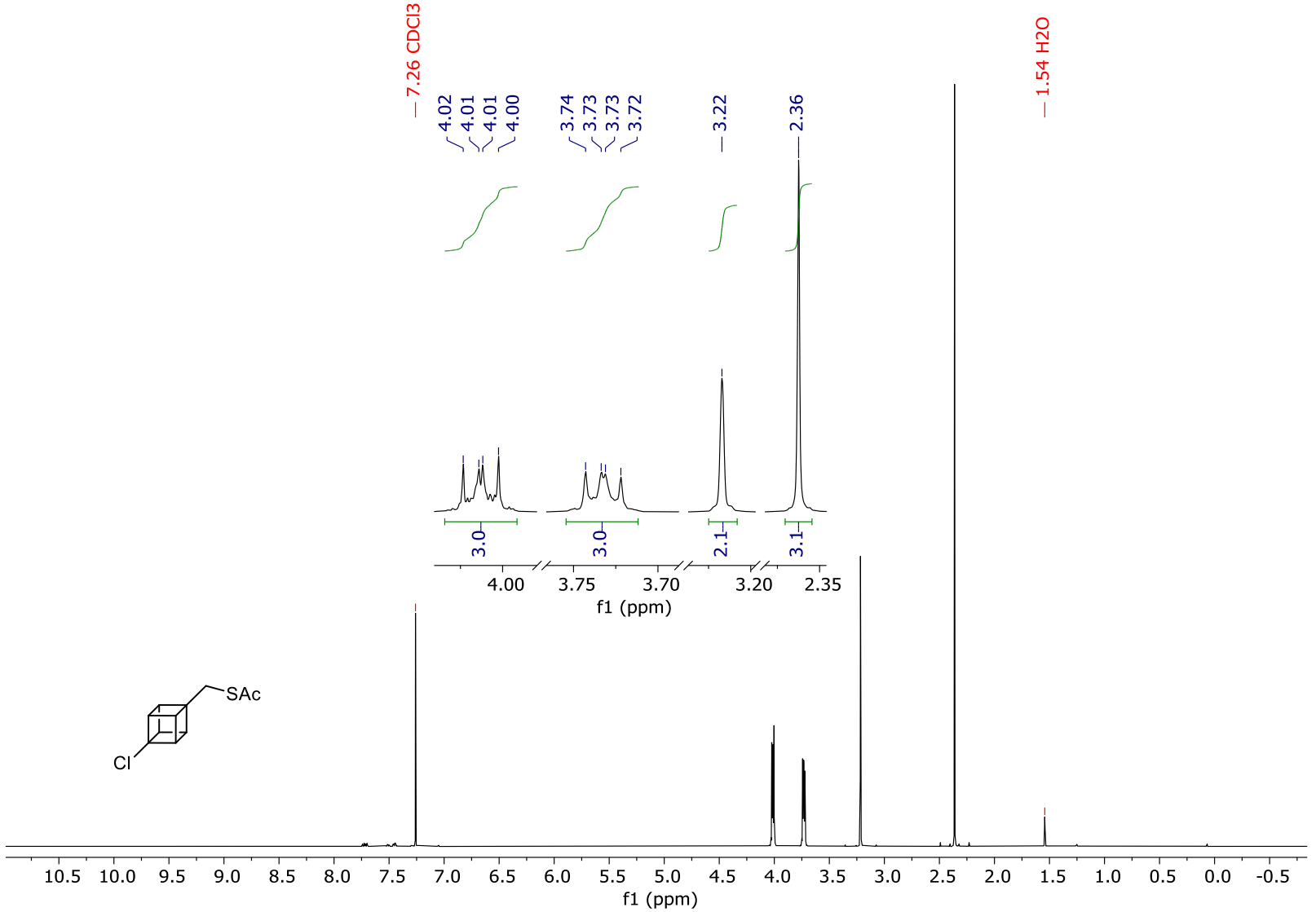
$^{1}$H NMR (500 MHz, $CDCl_3$) of **(4-chlorocuban-1-yl)methanol (34)**



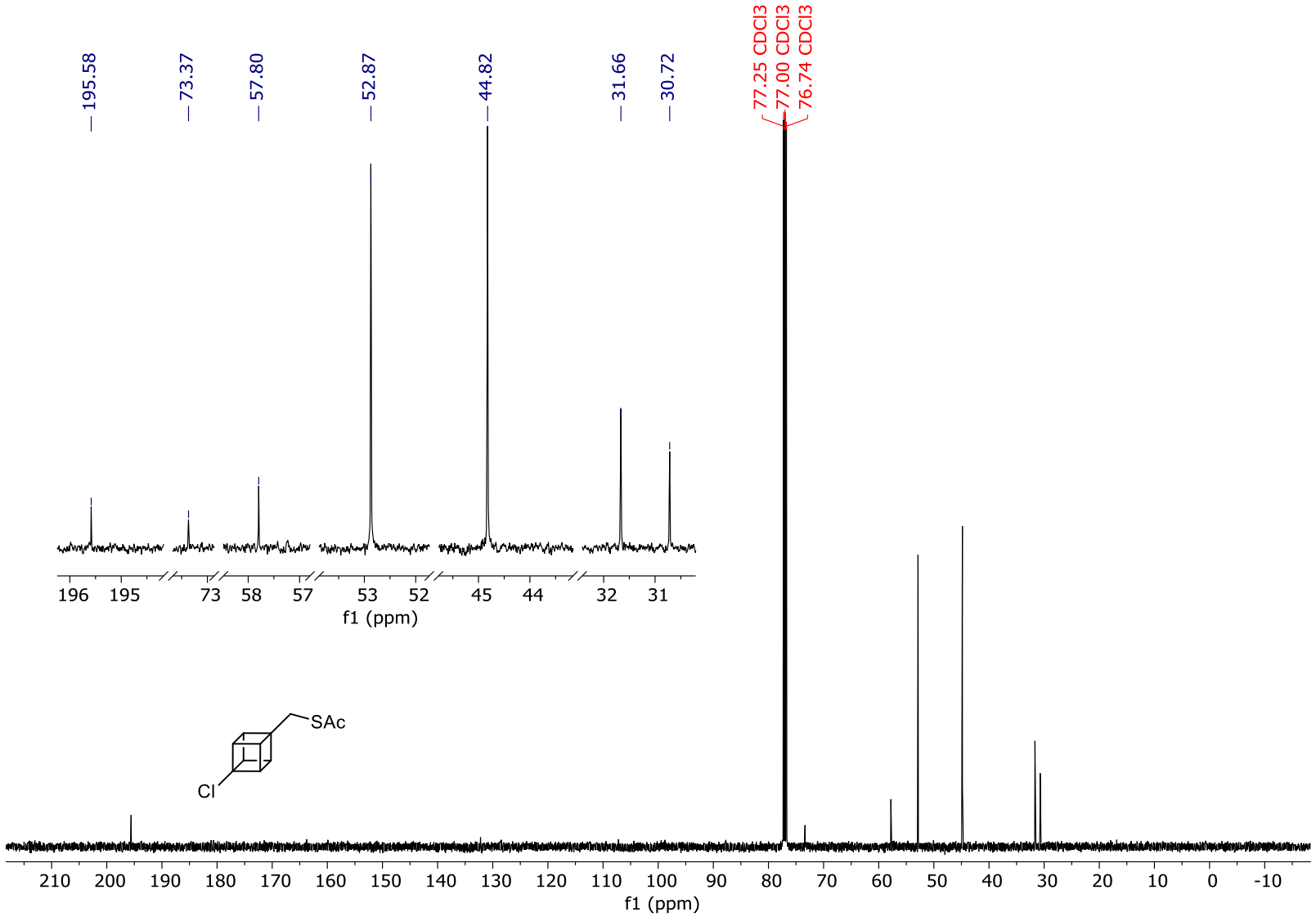
$^{13}$C NMR (125 MHz, $CDCl_3$) of **(4-chlorocuban-1-yl)methanol (34)**



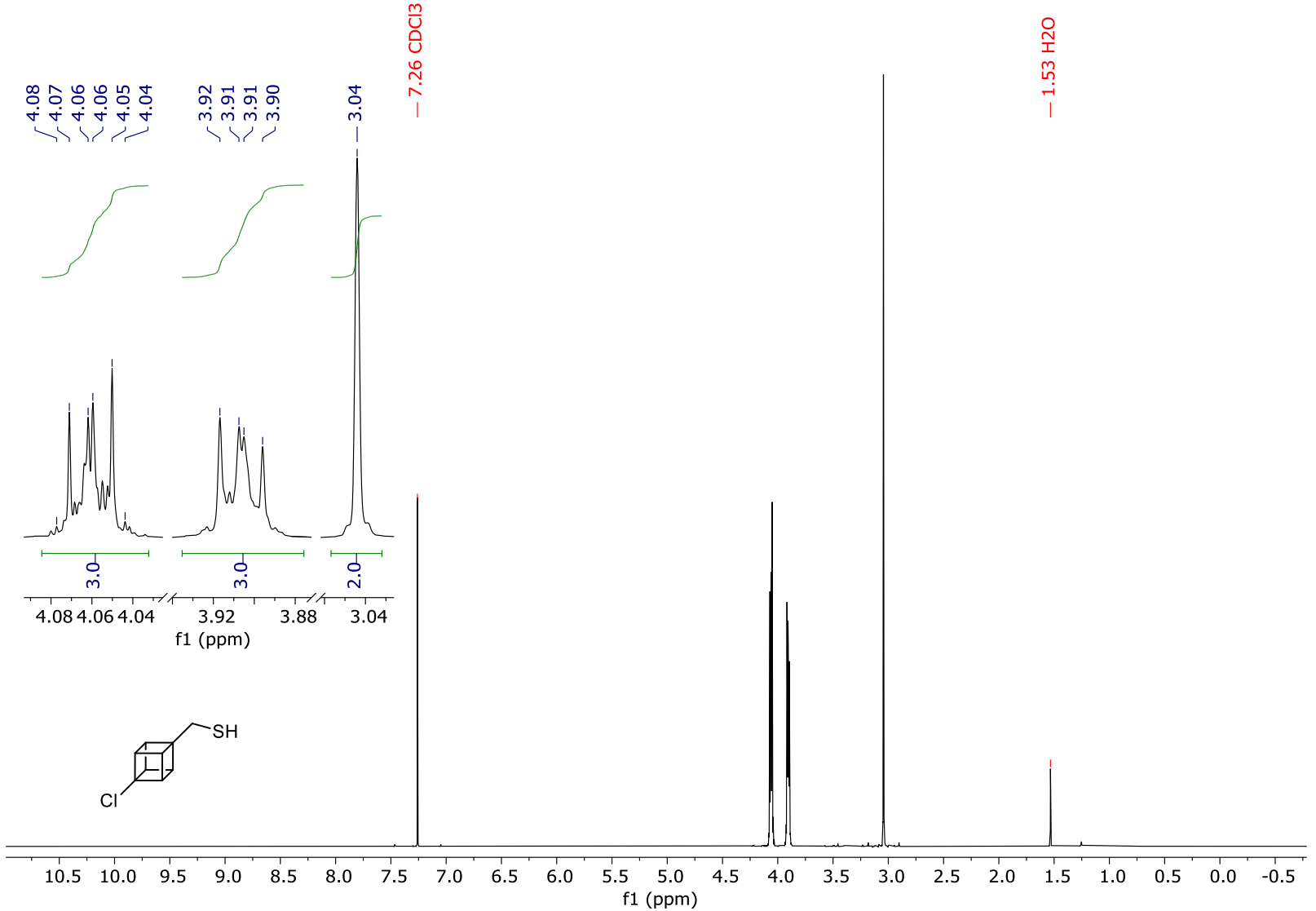
$^{1}$H NMR (500 MHz, $CDCl_3$) of **((4-Chlorocuban-1-yl)methyl) ethanethioate (35)**



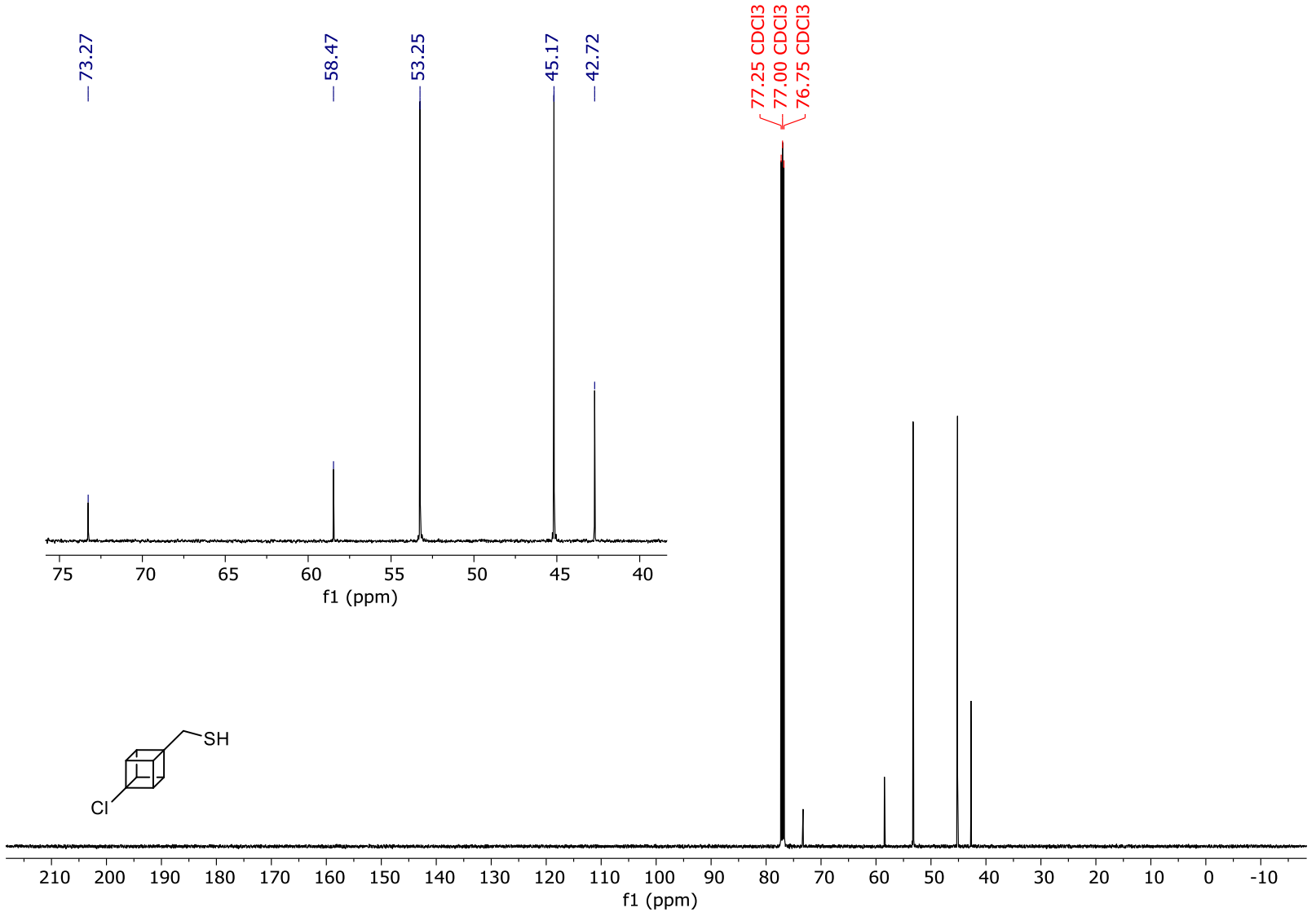
$^{13}C$ NMR (125 MHz, $CDCl_3$) of **((4-Chlorocuban-1-yl)methyl) ethanethioate (35)**



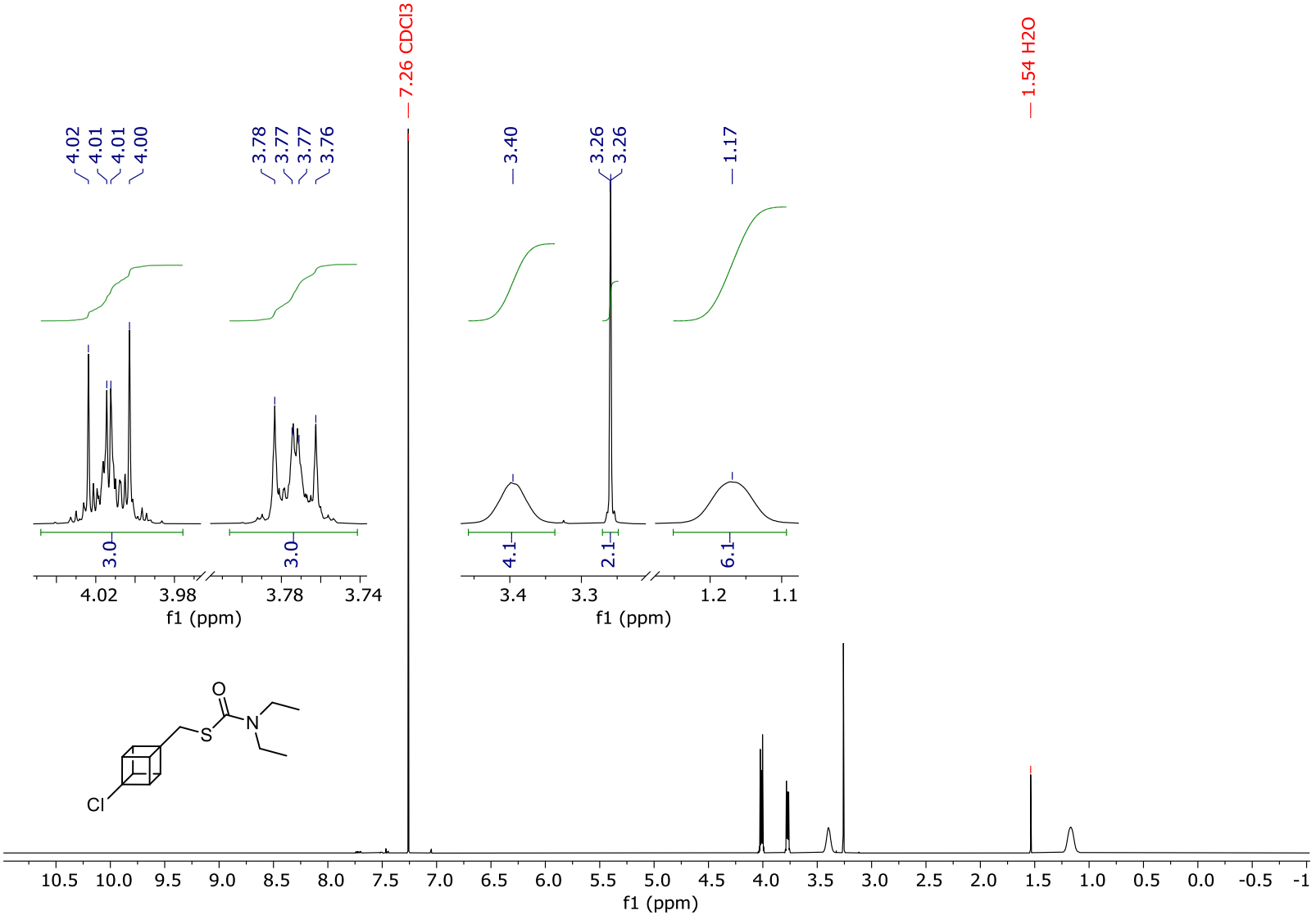
$^{1}$H NMR (500 MHz, $CDCl_3$) of **(4-chlorocuban-1-yl)methanethiol (36)**



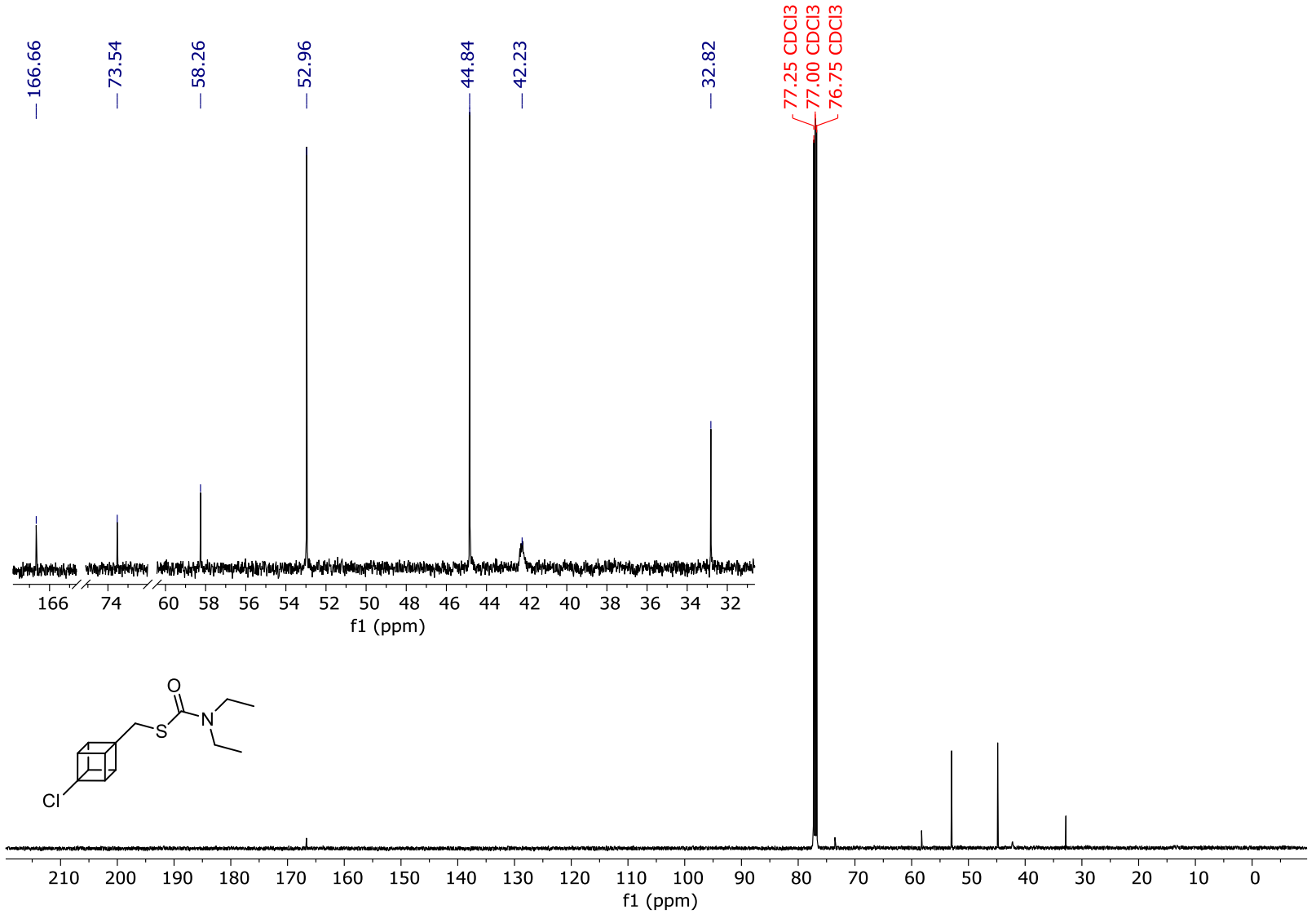
$^{13}$C NMR (125 MHz, $CDCl_3$) of **(4-chlorocuban-1-yl)methanethiol (36)**



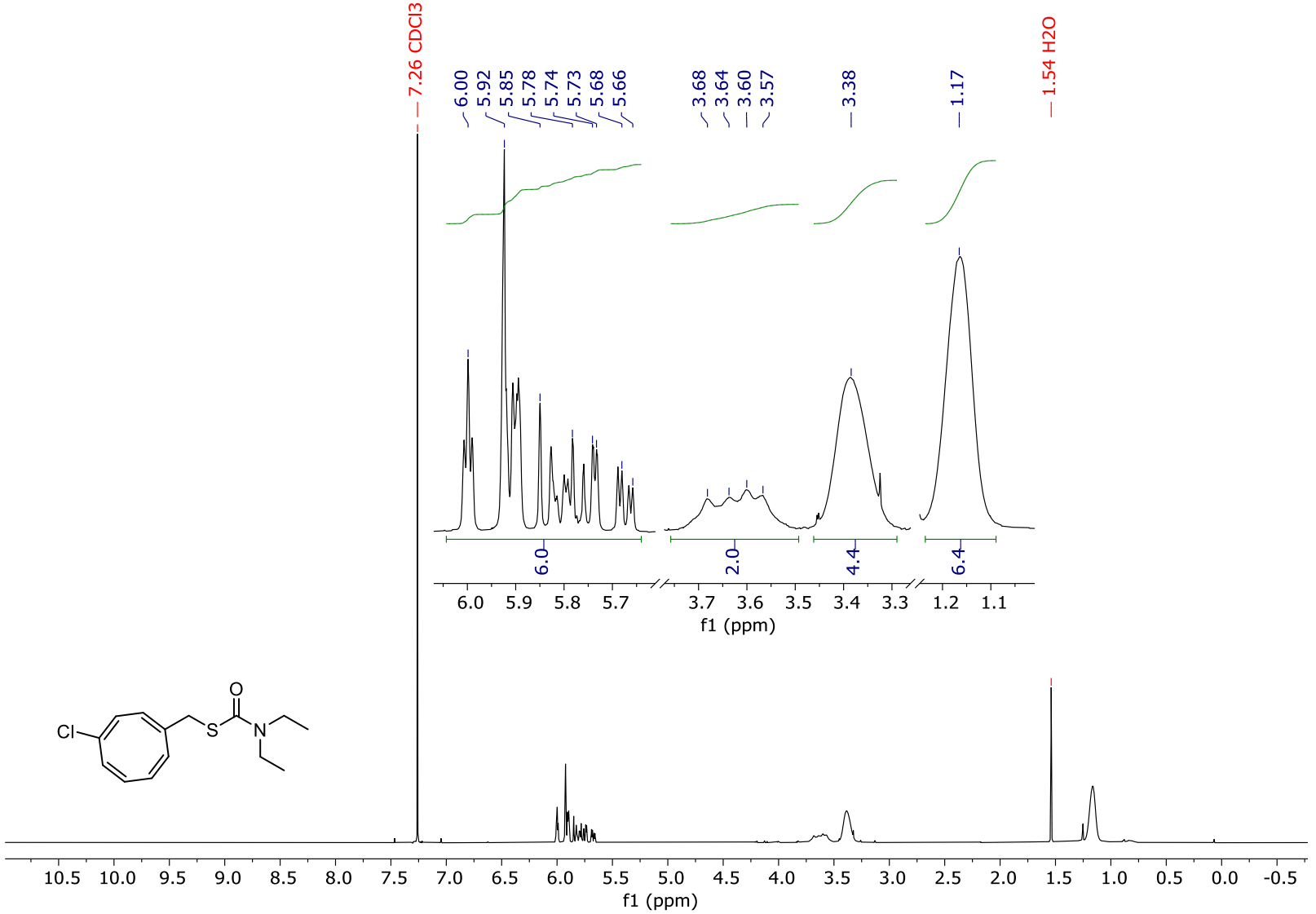
$^{1}$H NMR (500 MHz, $CDCl_3$) of **((4-Chlorocuban-1-yl)methyl)diethylcarbamothioate (38)**



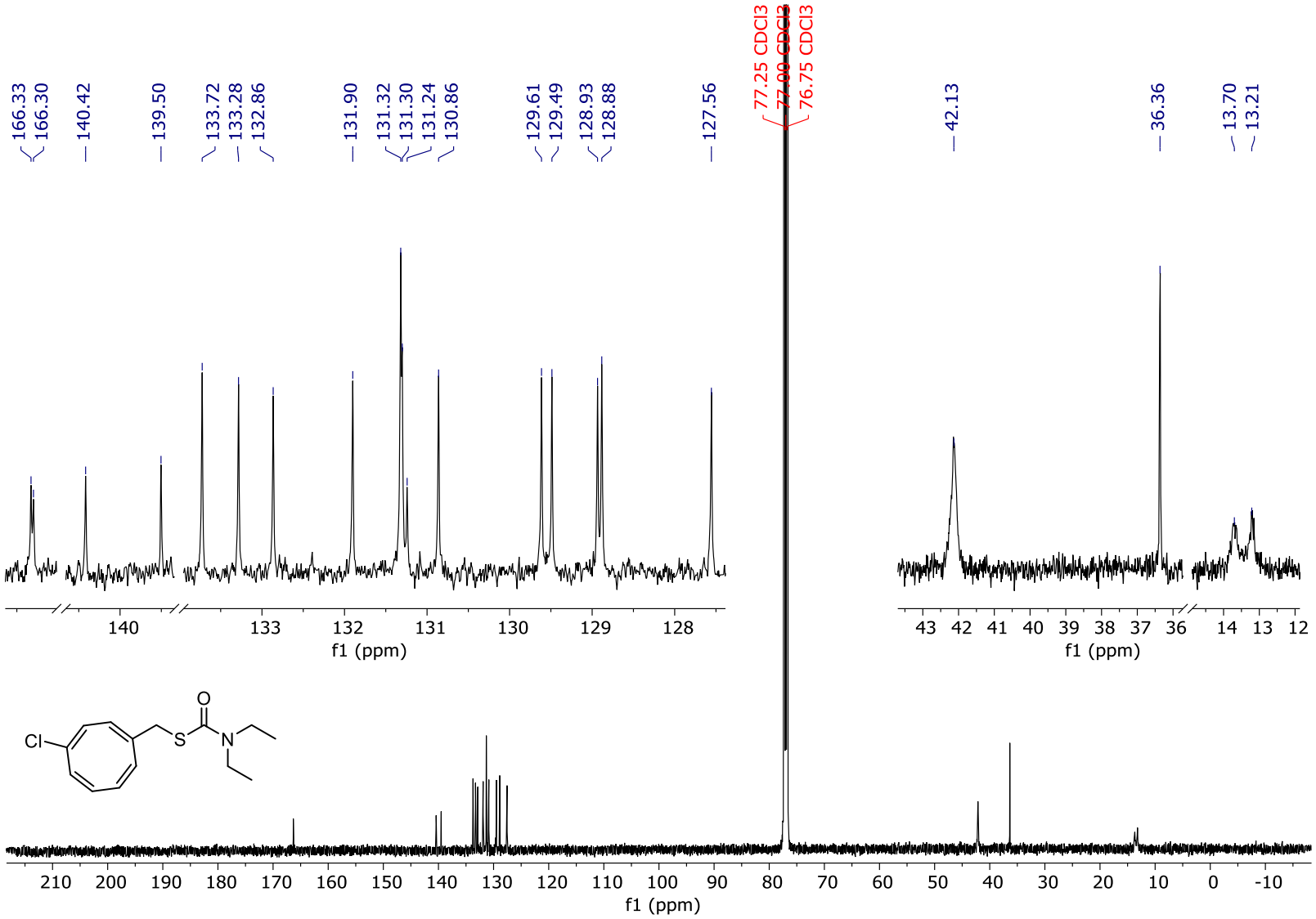
$^{13}$C NMR (125 MHz, $CDCl_3$) of **((4-Chlorocuban-1-yl)methyl)diethylcarbamothioate (38)**



$^{1}$H NMR (500 MHz, $CDCl_3$) of **COT-BT (28)**



$^{13}C$ NMR (125 MHz, $CDCl_3$) of **COT-BT (28)**



$^{1}H$–$^{13}C$ HSQC NMR (500 MHz, $CDCl_3$) of **COT-BT (28)**