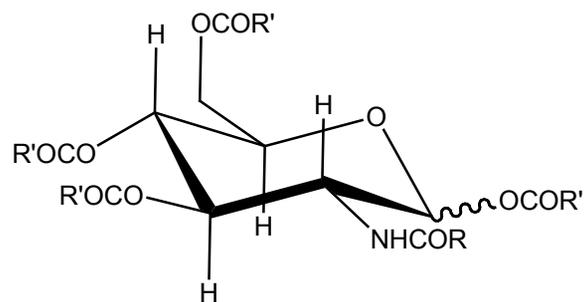


# SYNTHESIS OF *N*-ACYL-TETRA-*O*-ACYL GLUCOSAMINE DERIVATIVES AND THEIR NMR SPECTRA.

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## Supporting Information

**Fig S1.** Structure of *N*-acyl-tetra-*O*-acyl Glucosamine Derivatives



7: R = Pr, R' = Et

9: R = Et, R' = Pr

11: R = Pht ; R' = Et

12: R = Pht, R' = Pr

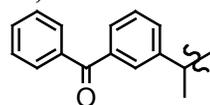
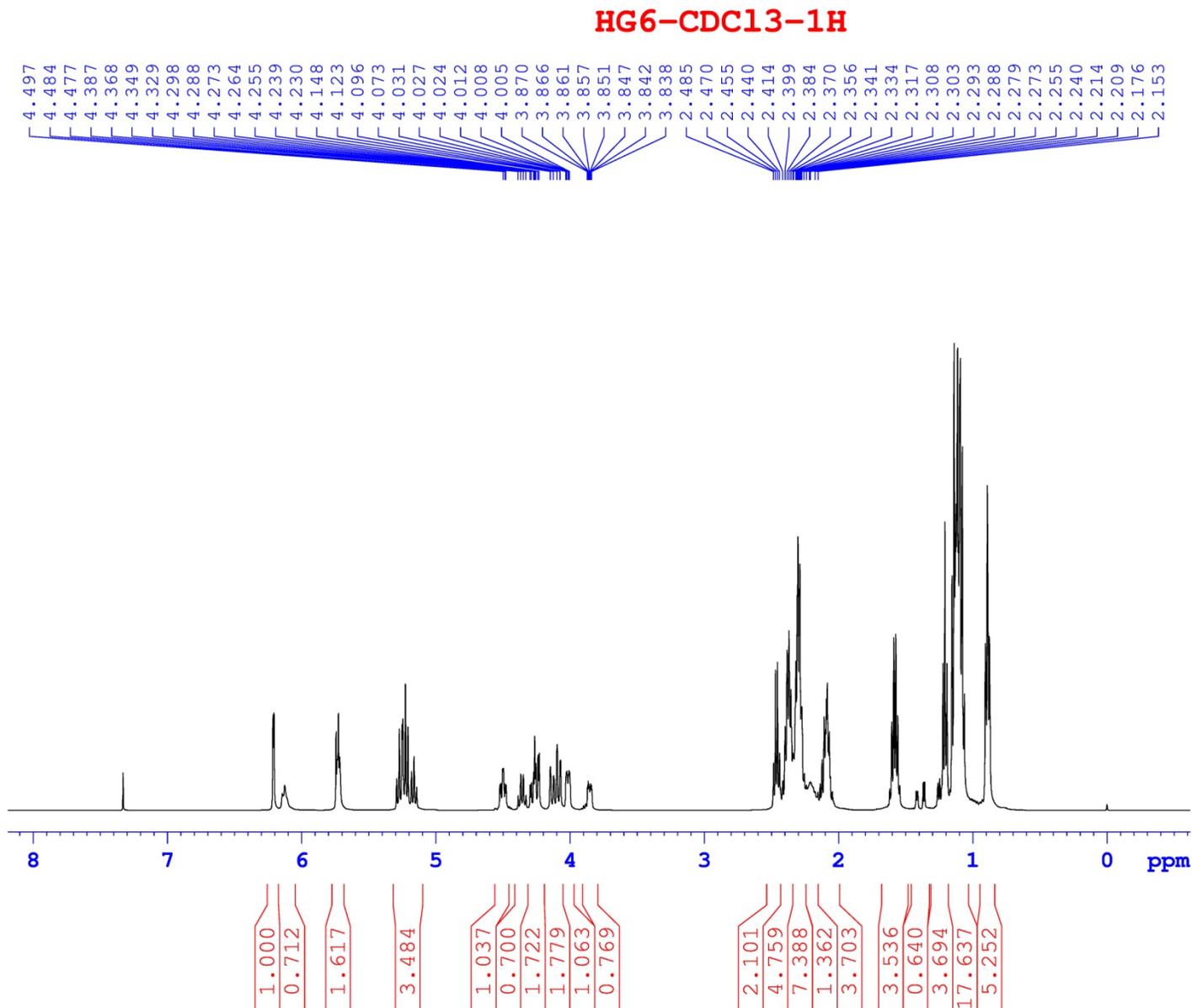
18: R = , R' = Me

Fig S2. <sup>1</sup>H NMR Spectrum of compound 7



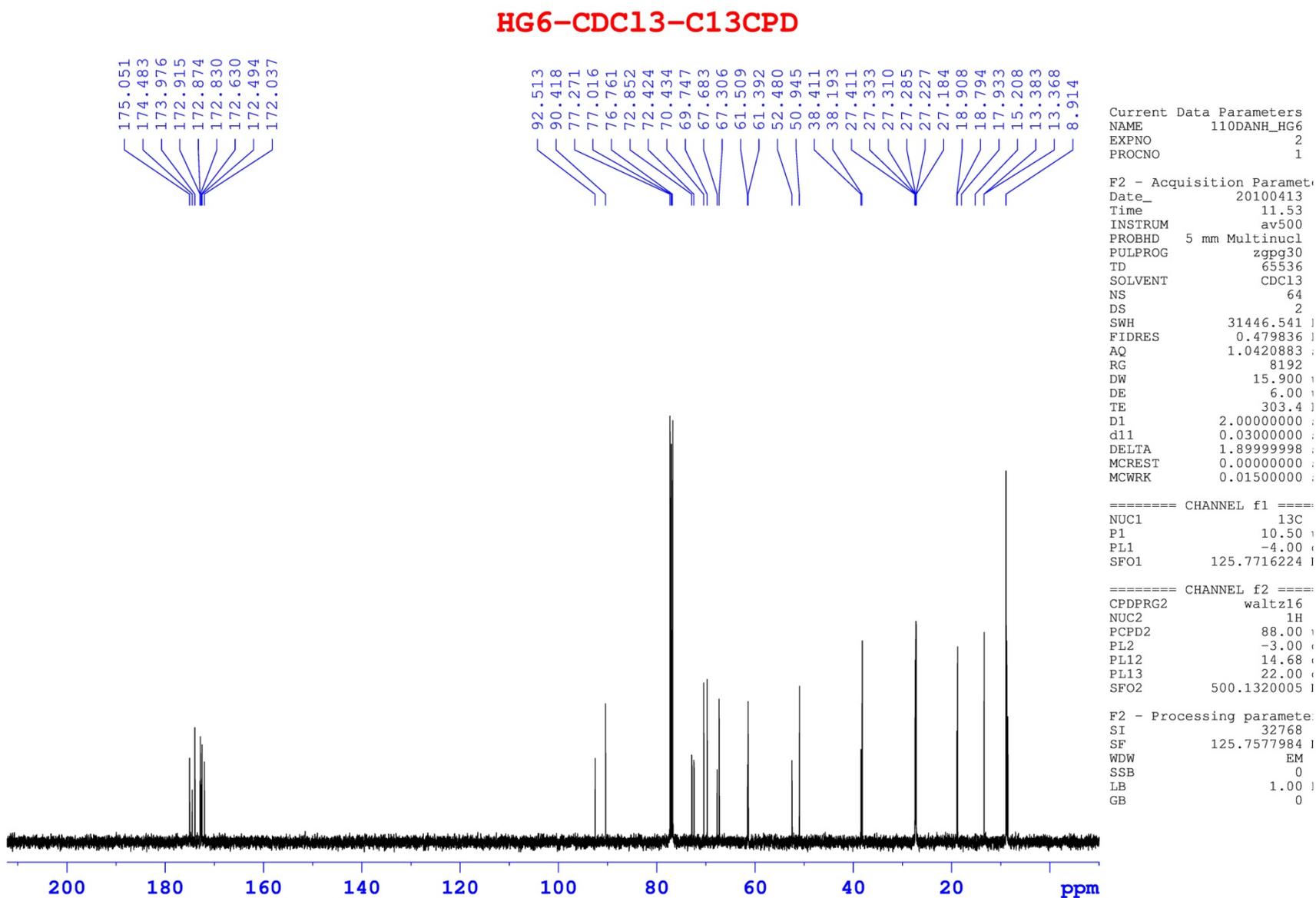
Current Data Parameters  
NAME 110DANH\_HG6  
EXPNO 1  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20100410  
Time 15.07  
INSTRUM av500  
PROBHD 5 mm Multinucl  
PULPROG zg30  
TD 65536  
SOLVENT CDC13  
NS 16  
DS 0  
SWH 10000.000 |  
FIDRES 0.152588 |  
AQ 3.2769001 |  
RG 20.2  
DW 50.000 |  
DE 6.00 |  
TE 303.4 |  
D1 1.00000000 |  
MCREST 0.00000000 |  
MCWRK 0.01500000 |

==== CHANNEL f1 ====  
NUC1 1H  
P1 10.50 |  
PL1 -3.00 |  
SFO1 500.1335009 |

F2 - Processing parameters  
SI 32768  
SF 500.1299787 |  
WDW EM  
SSB 0  
LB 0.30 |  
GB 0  
PC 1.00

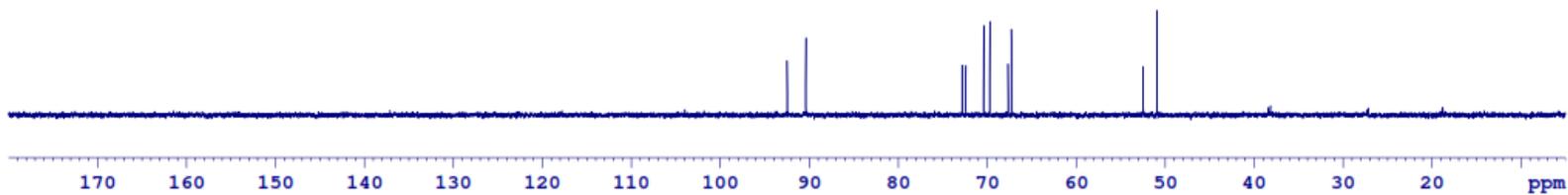
Fig S3.  $^{13}\text{C}$  NMR Spectrum of compound 7



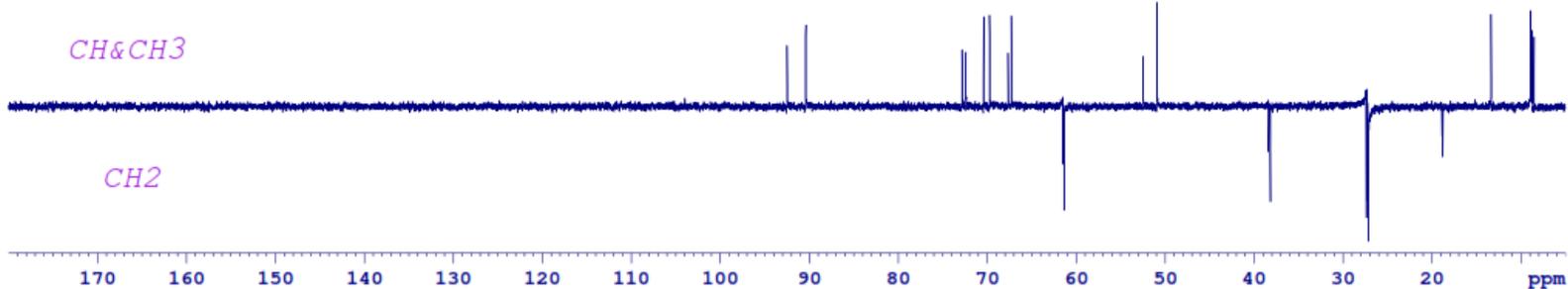
**Fig S4.** DEPT Spectrum of compound 7

**DANH-HG6-CDC13-C13CPD&DEPT**

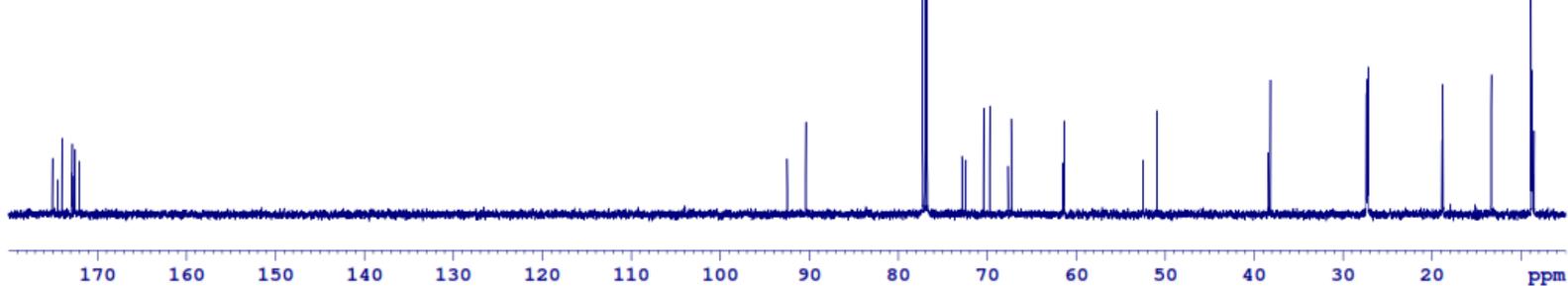
**DEPT90**



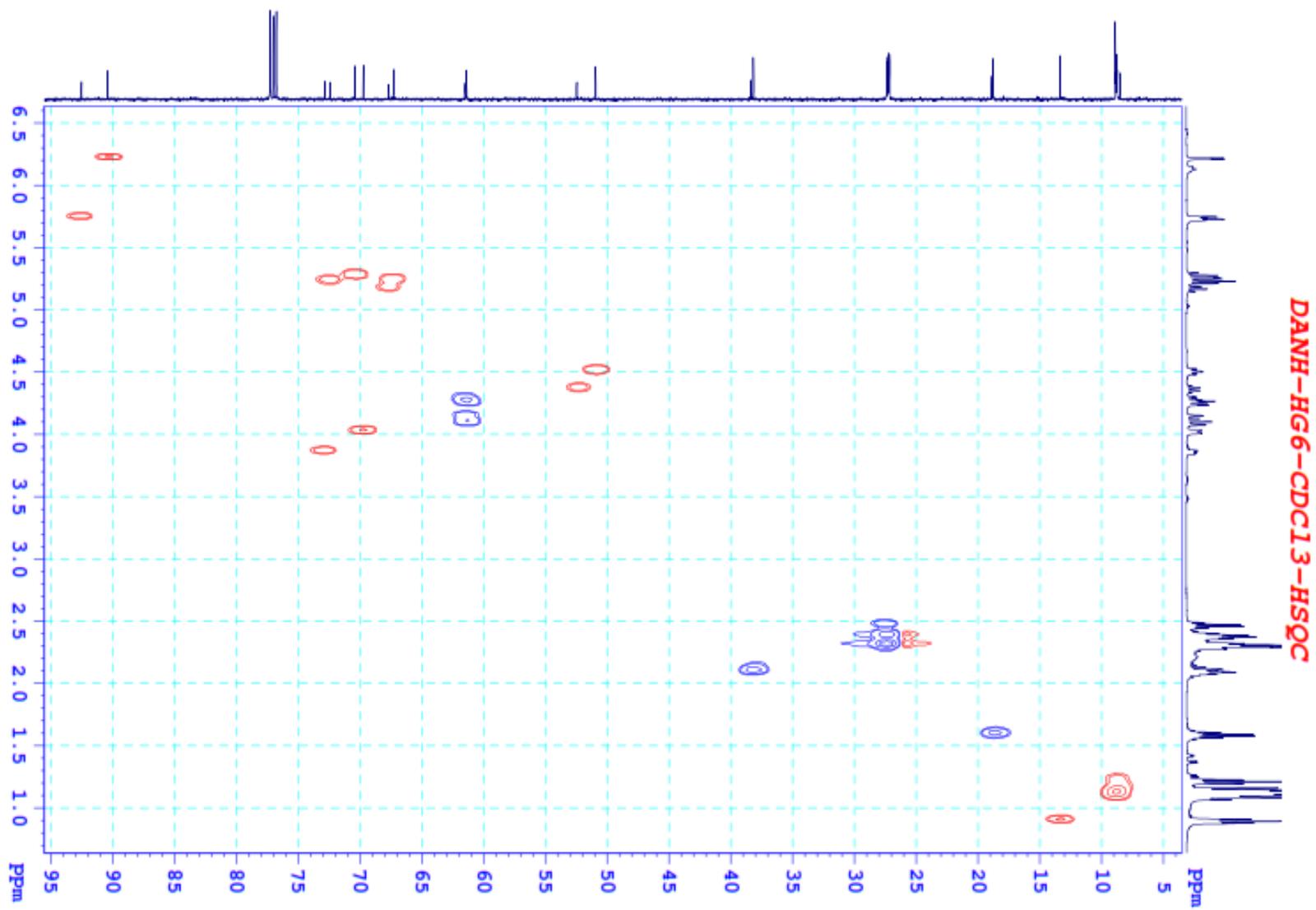
**DEPT135**



**C13CPD**



**Fig S5.** HSQC Spectrum of compound 7



**Fig S6.** HMBC Spectrum of compound 7

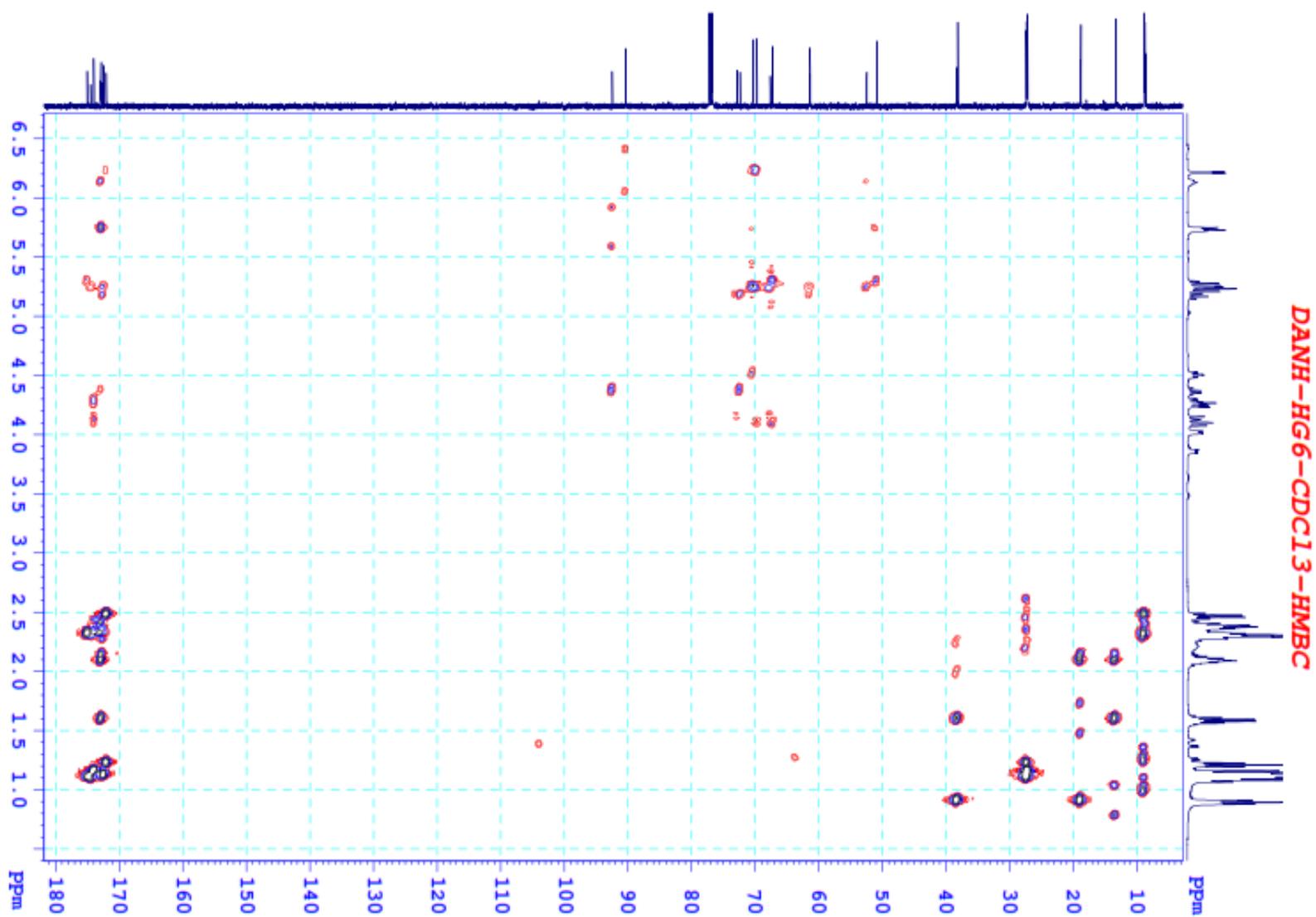
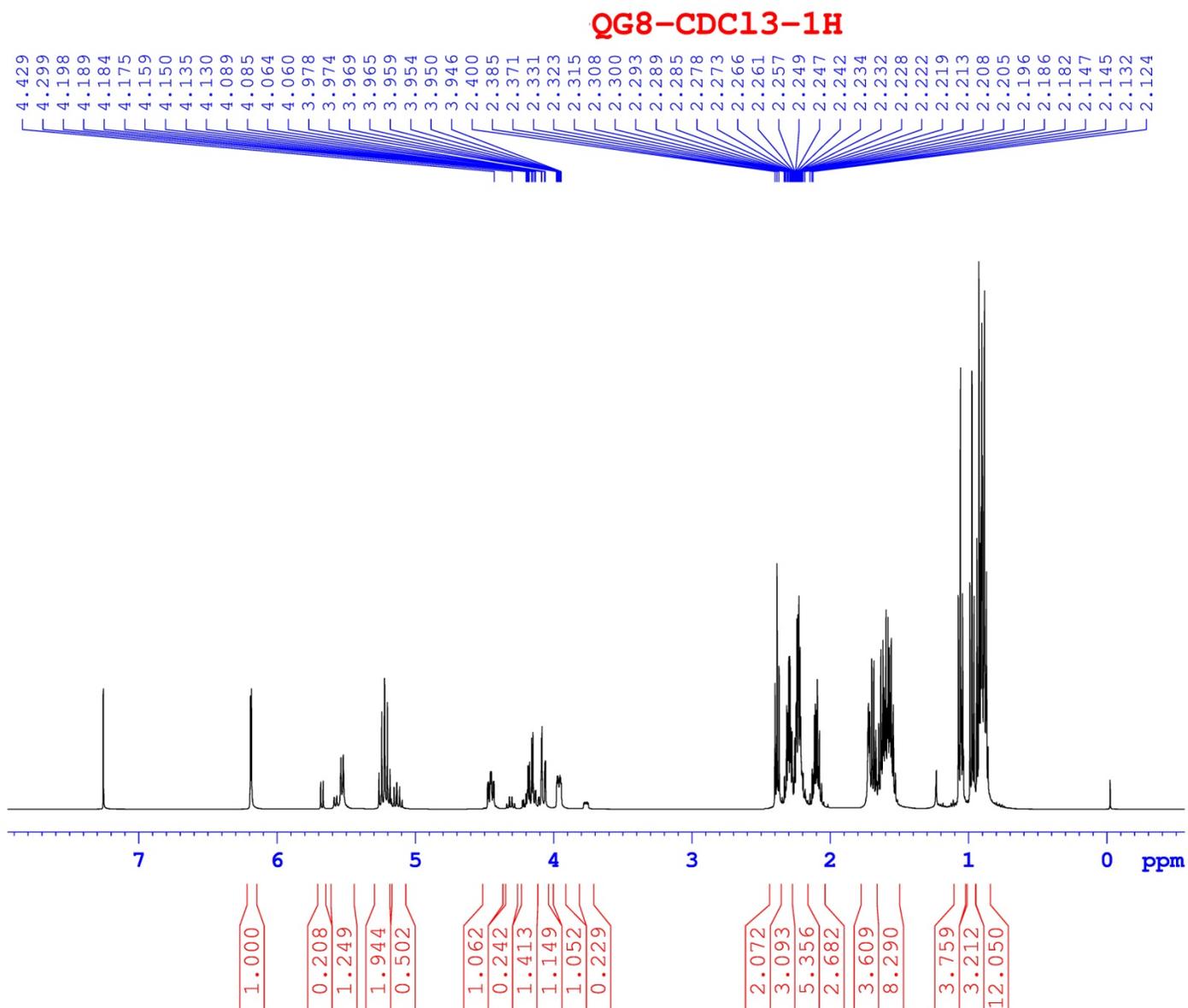


Fig S7. <sup>1</sup>H NMR Spectrum of compound 9



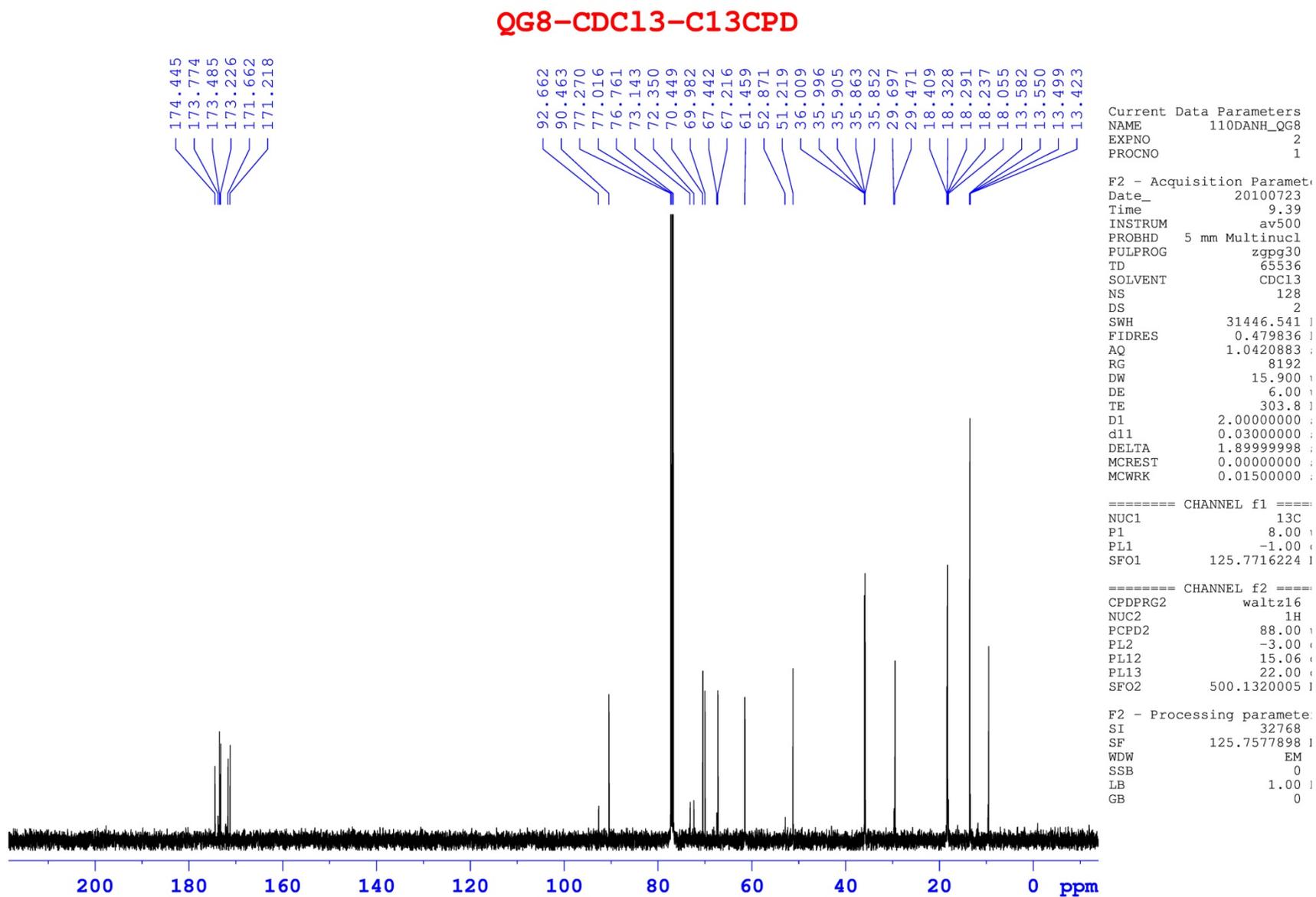
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EXPNO 1  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20100723  
Time 9.32  
INSTRUM av500  
PROBHD 5 mm Multinucl  
PULPROG zg30  
TD 65536  
SOLVENT CDCl3  
NS 16  
DS 0  
SWH 10000.000 |  
FIDRES 0.152588 |  
AQ 3.2769001 |  
RG 80.6  
DW 50.000 |  
DE 6.00 |  
TE 304.1 |  
D1 1.0000000 |  
MCREST 0.0000000 |  
MCWRK 0.0150000 |

===== CHANNEL f1 =====  
NUC1 1H  
P1 11.00 |  
PL1 -3.00 |  
SFO1 500.1335009 |

F2 - Processing parameters  
SI 32768  
SF 500.1300163 |  
WDW EM  
SSB 0  
LB 0.30 |  
GB 0  
PC 1.00

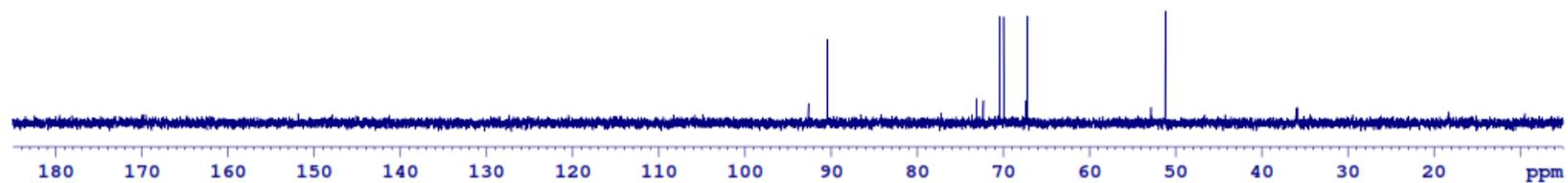
Fig S8.  $^{13}\text{C}$  NMR Spectrum of compound 9



**Fig S9. DEPT Spectrum of compound 9**

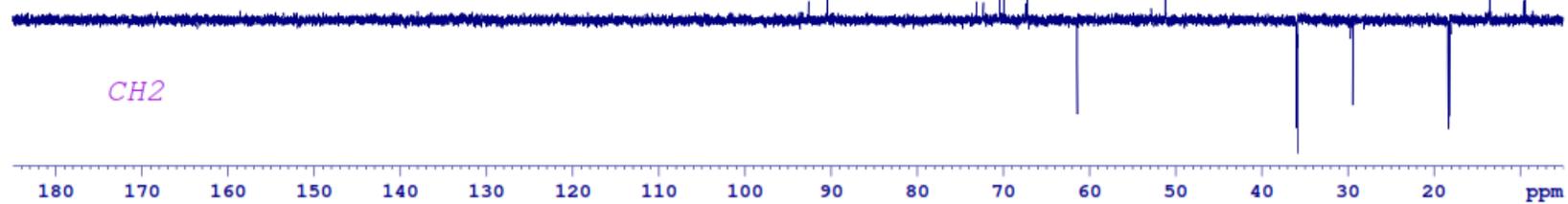
**DANH-QG8-CDC13-C13CPD &DEPT**

**DEPT90**



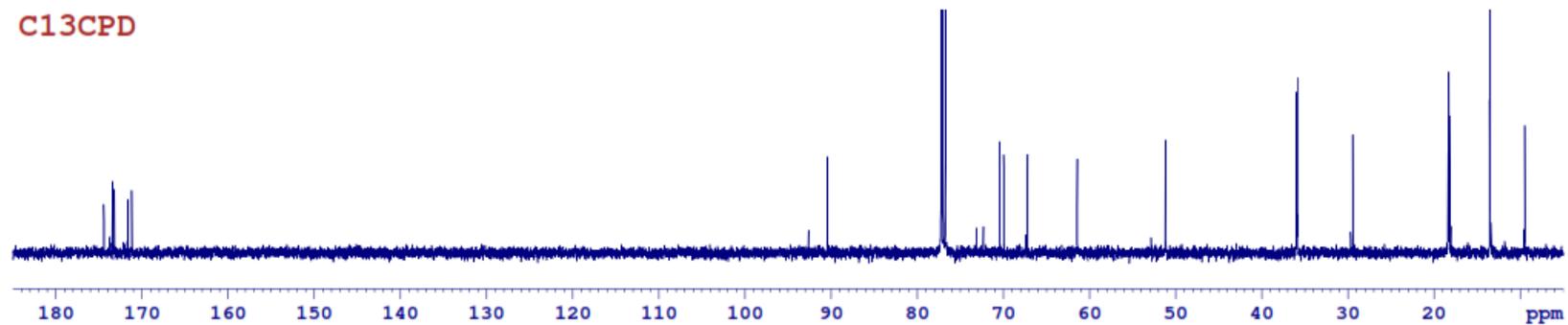
**DEPT135**

*CH&CH3*

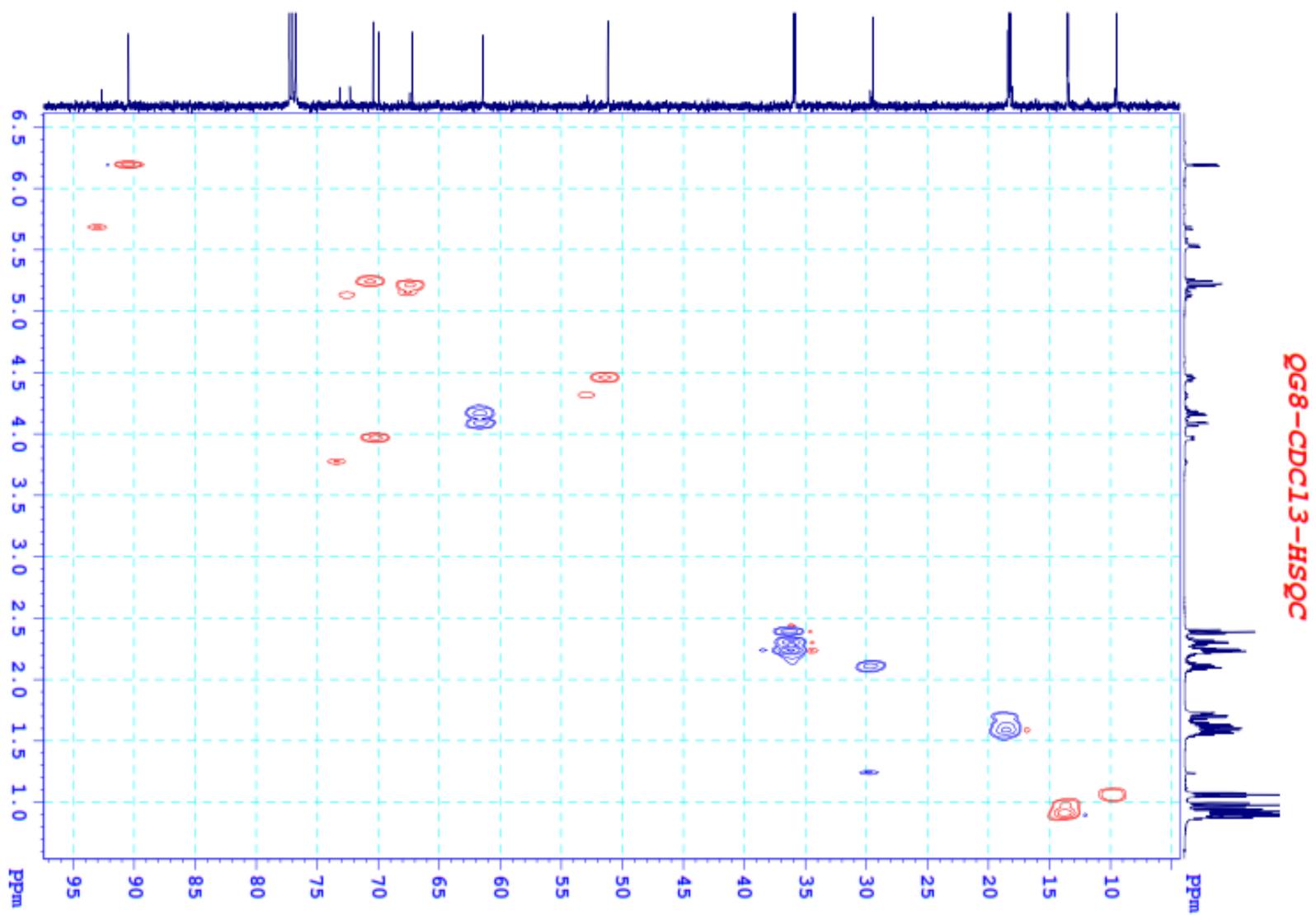


*CH2*

**C13CPD**



**Fig S10.** HSQC Spectrum of compound **9**



**Fig S11.** HMBC Spectrum of compound **9**

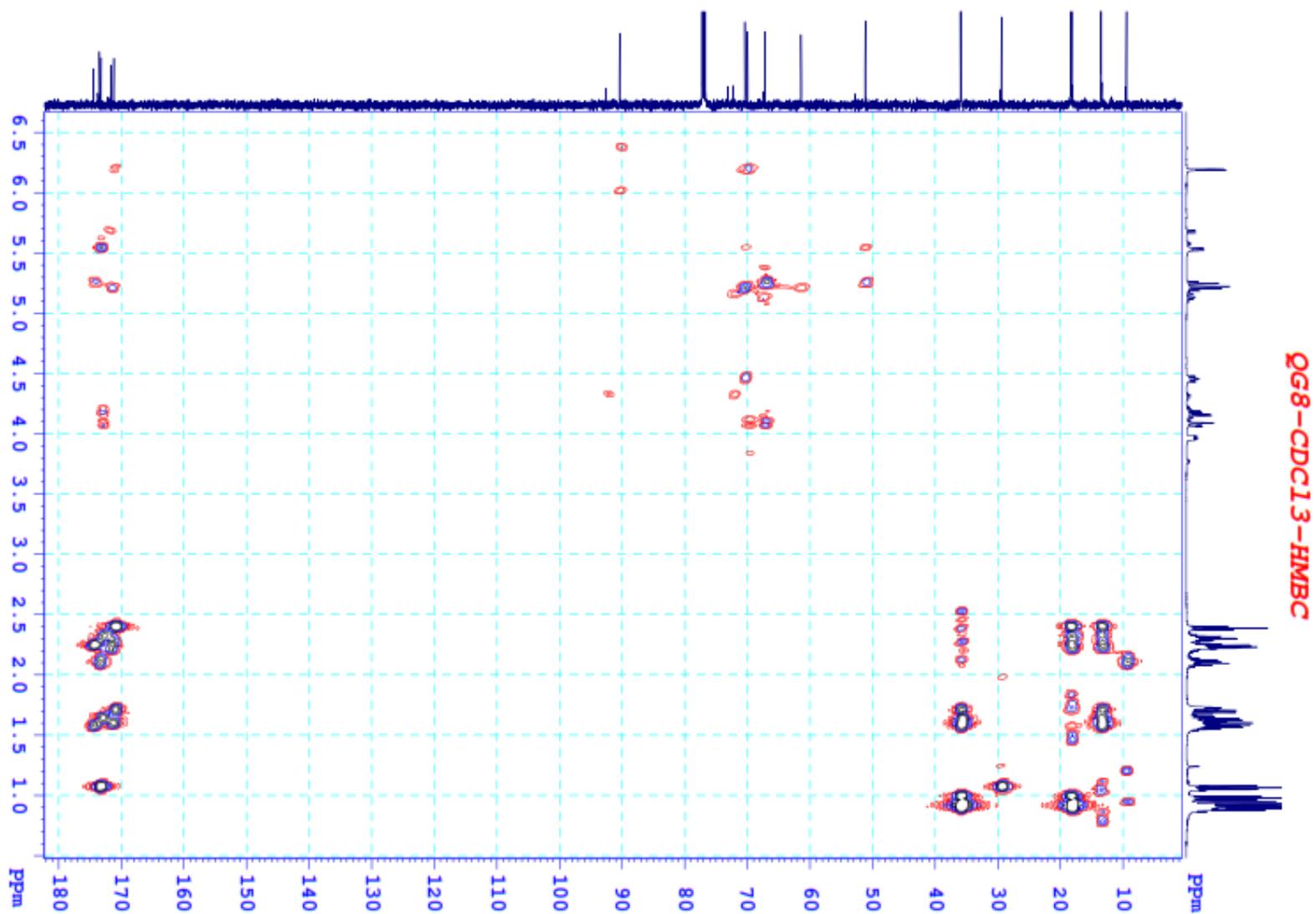


Fig S12. <sup>1</sup>H NMR Spectrum of compound 11

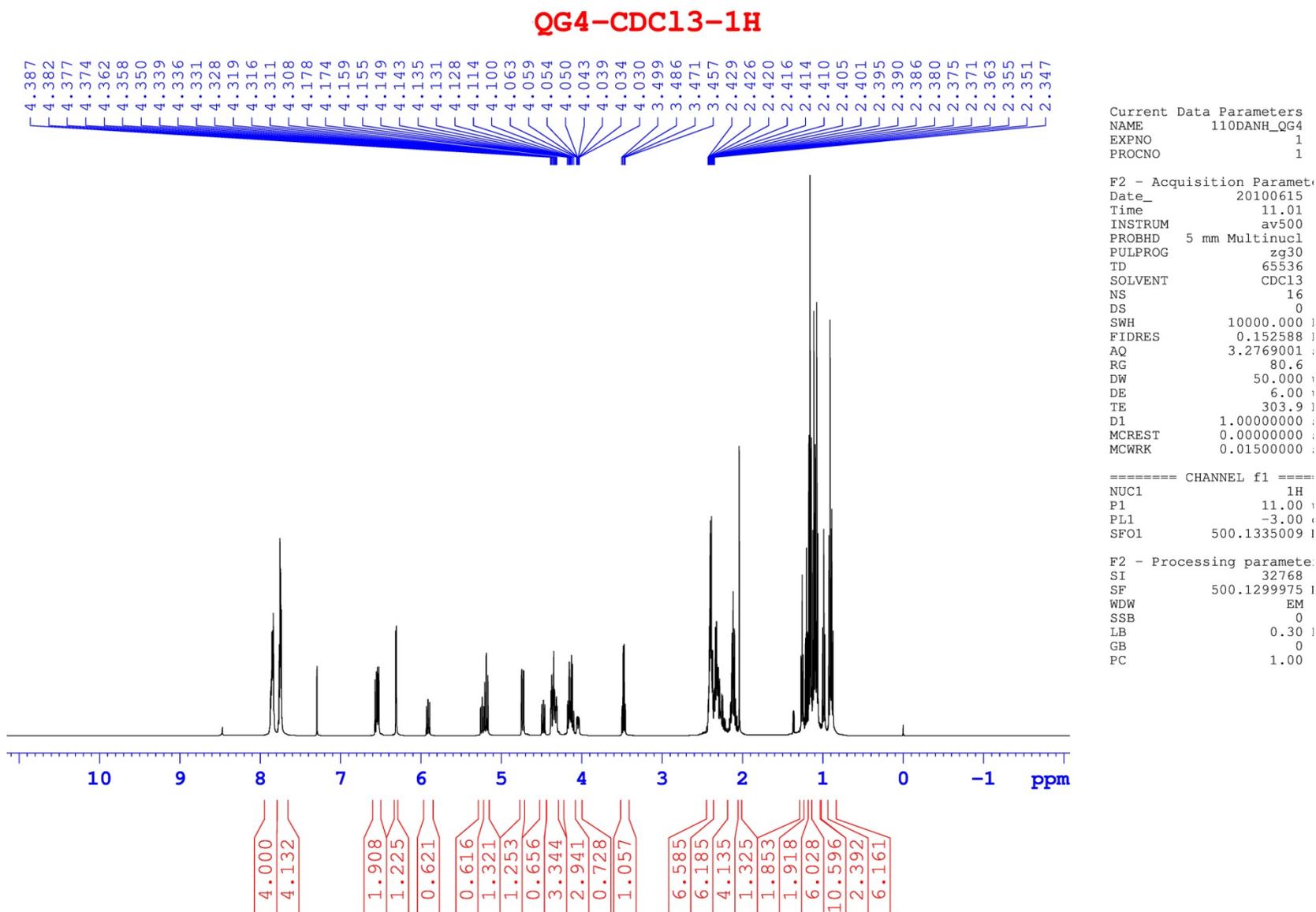
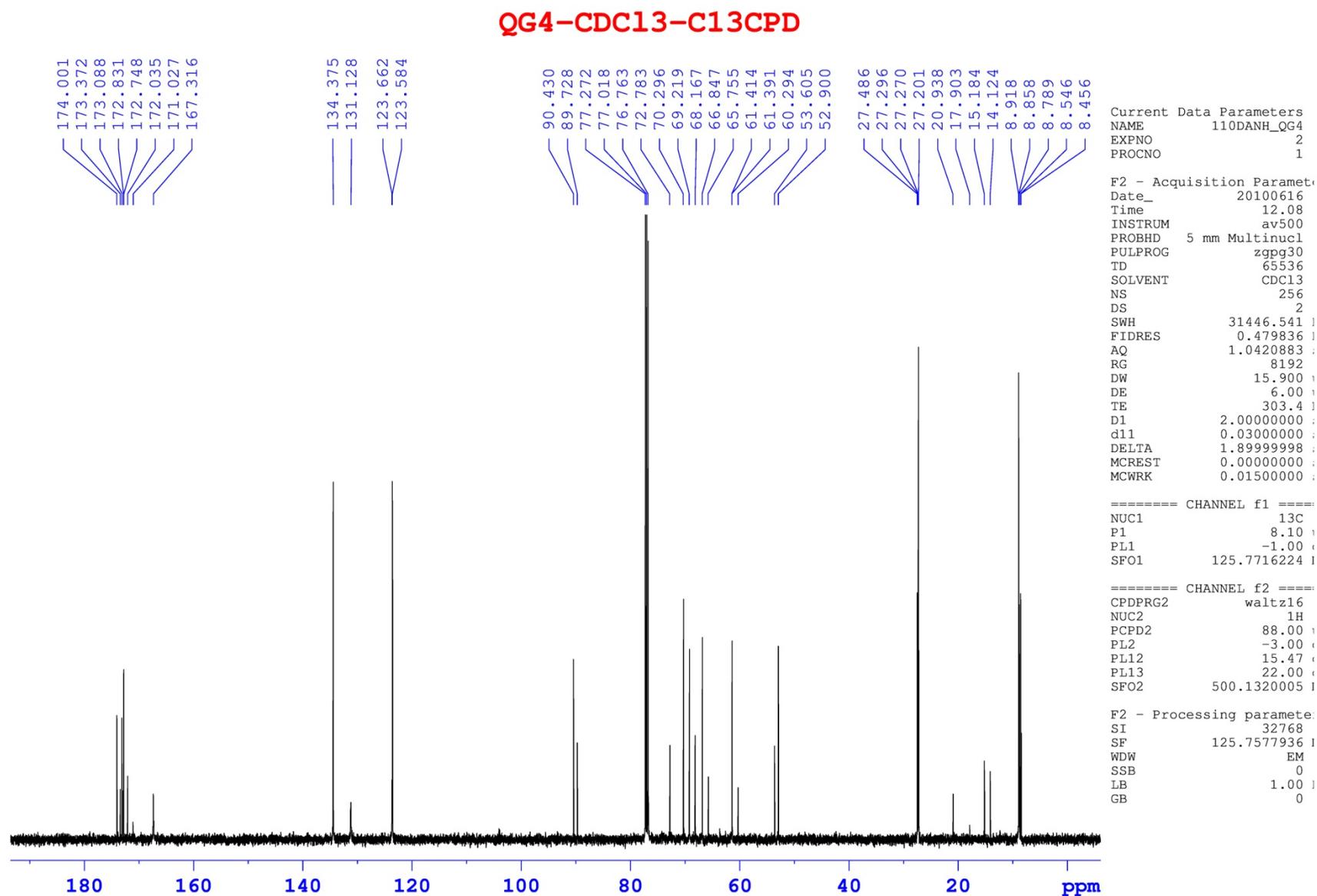
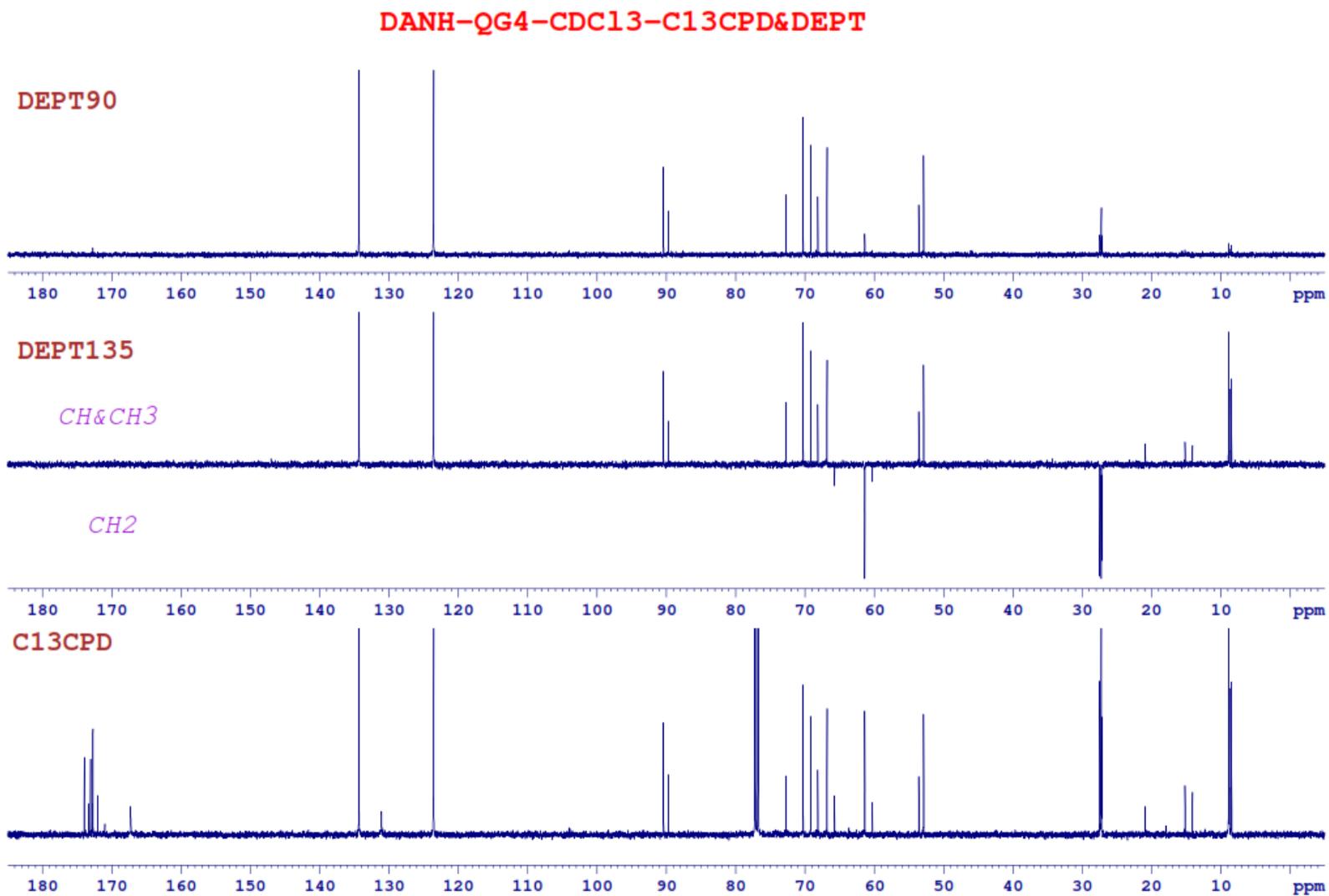


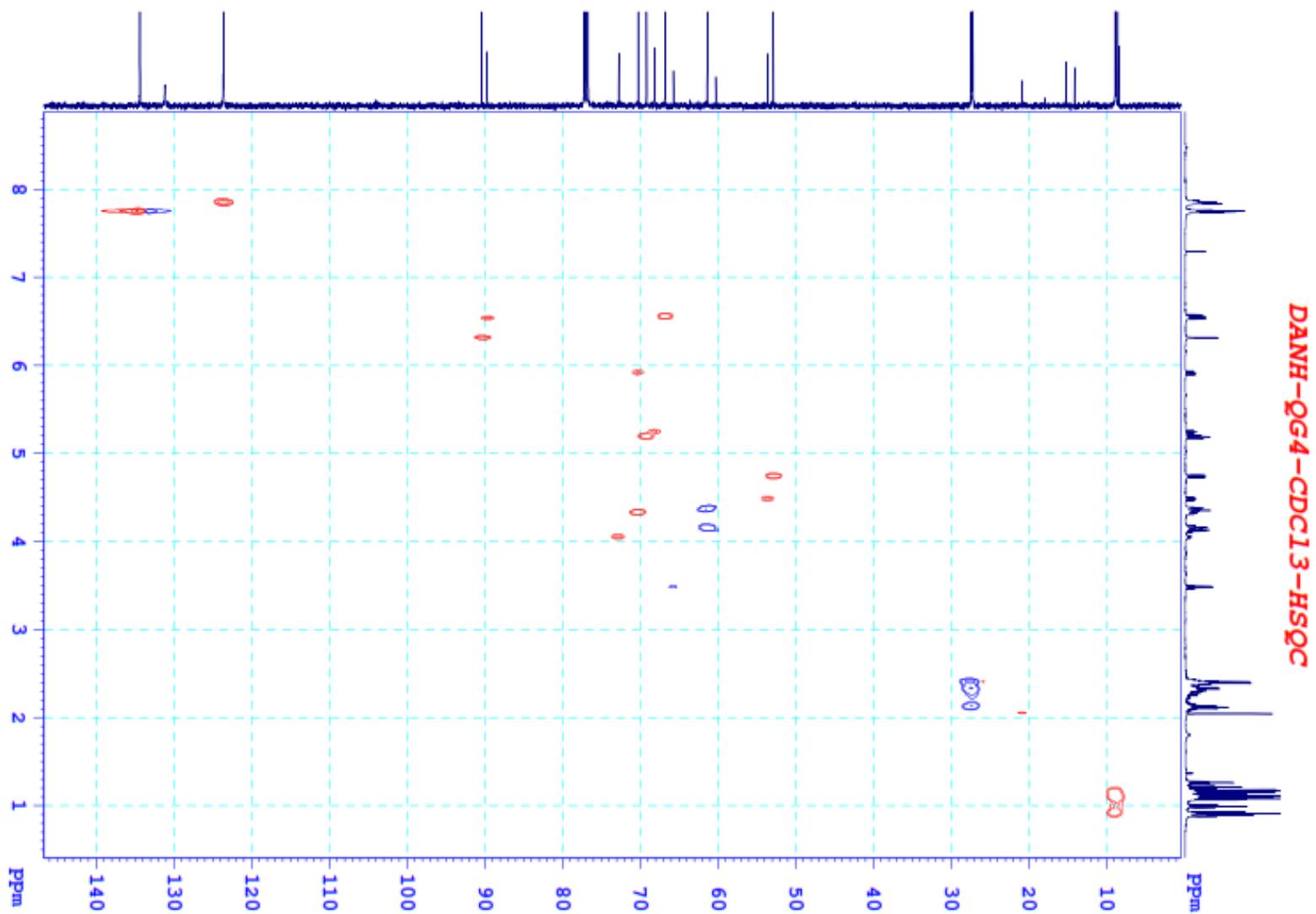
Fig S13.  $^{13}\text{C}$  NMR Spectrum of compound 11



**Fig S14. DEPT Spectrum of compound 11**



**Fig S15.** HSQC Spectrum of compound **11**



**Fig S16.** HMBC Spectrum of compound **11**

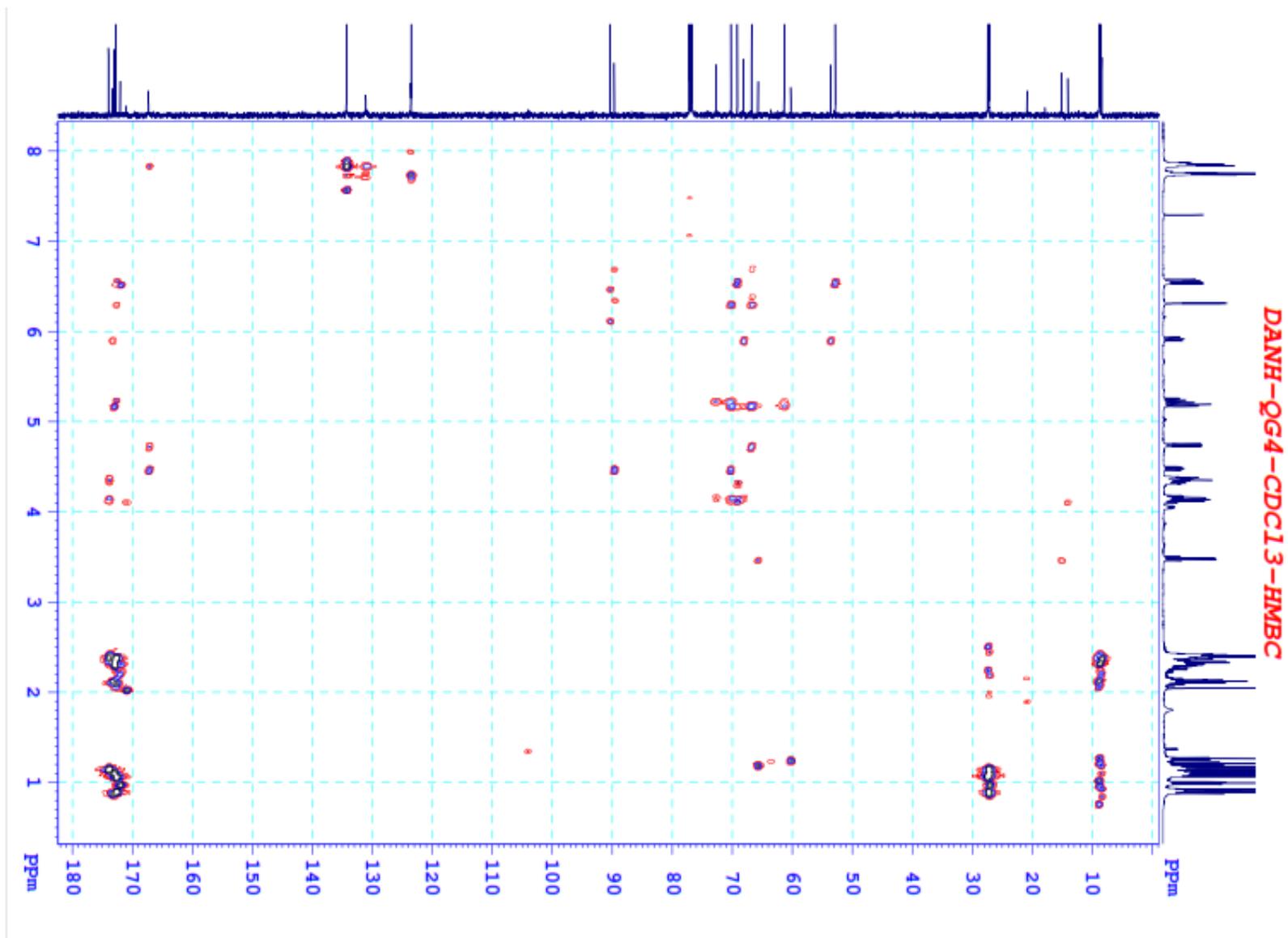
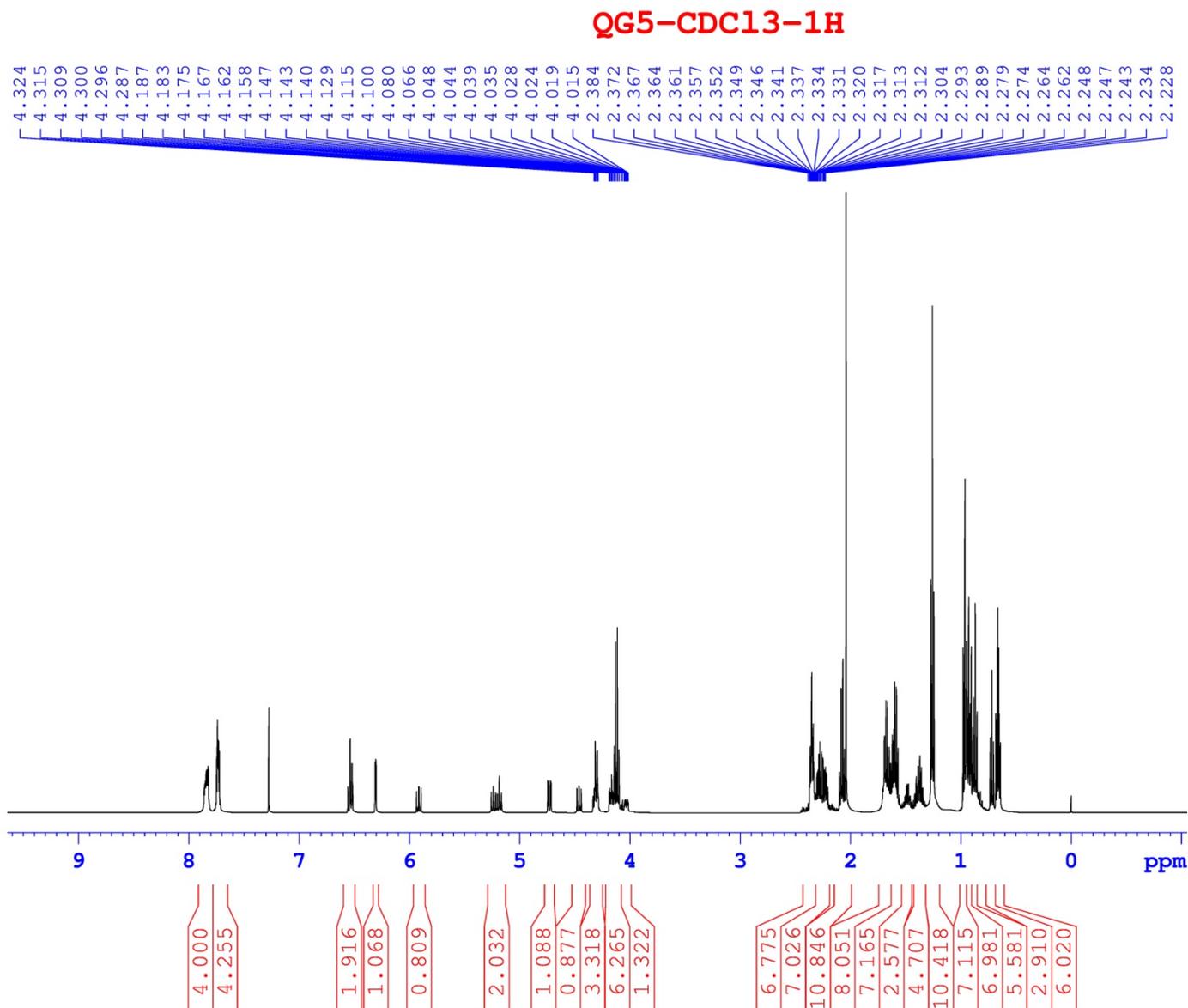


Fig S17. <sup>1</sup>H NMR Spectrum of compound 12



Current Data Parameters  
NAME 110DANH\_QG5  
EXPNO 1  
PROCNO 1

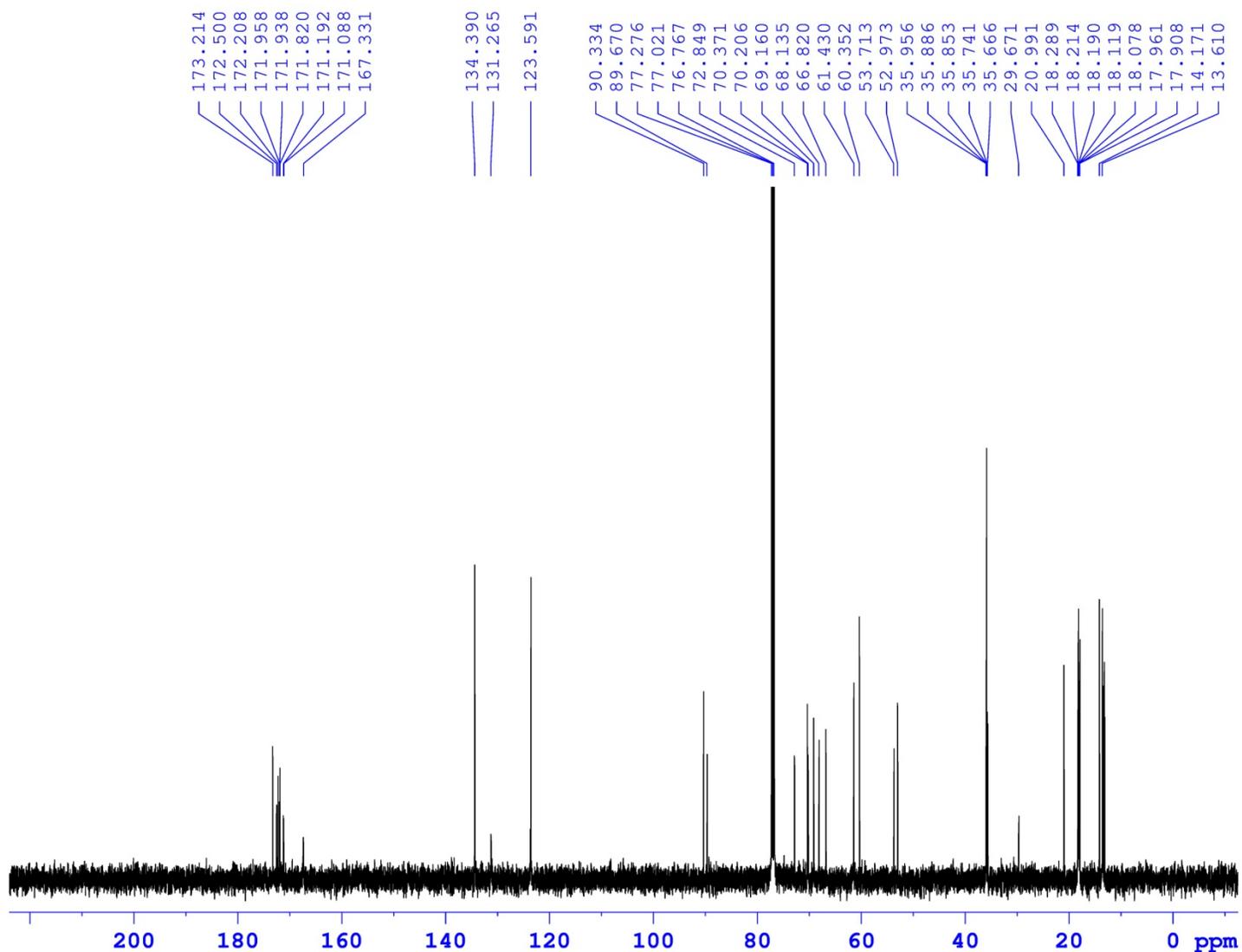
F2 - Acquisition Parameters  
Date\_ 20100615  
Time 8.48  
INSTRUM av500  
PROBHD 5 mm Multinucl  
PULPROG zg30  
TD 65536  
SOLVENT CDC13  
NS 16  
DS 0  
SWH 10000.000  
FIDRES 0.152588  
AQ 3.2769001  
RG 80.6  
DW 50.000  
DE 6.00  
TE 303.3  
D1 1.00000000  
MCREST 0.00000000  
MCWRK 0.01500000

==== CHANNEL f1 =====  
NUC1 1H  
P1 11.00  
PL1 -3.00  
SFO1 500.1335009

F2 - Processing parameters  
SI 32768  
SF 500.1300051  
WDW EM  
SSB 0  
LB 0.30  
GB 0  
PC 1.00

Fig S18.  $^{13}\text{C}$  NMR Spectrum of compound 12

QG5-CDC13-C13CPD



Current Data Parameters  
NAME 110DANH\_QG5  
EXPNO 2  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20100615  
Time 9.09  
INSTRUM av500  
PROBHD 5 mm Multinucl  
PULPROG zgpg30  
TD 65536  
SOLVENT CDC13  
NS 256  
DS 2  
SWH 31446.541 MHz  
FIDRES 0.479836 MHz  
AQ 1.0420883 sec  
RG 8192  
DW 15.900 sec  
DE 6.000 sec  
TE 303.6 K  
D1 2.00000000 sec  
d11 0.03000000 sec  
DELTA 1.89999998 sec  
MCREST 0.00000000 sec  
MCWRK 0.01500000 sec

==== CHANNEL f1 =====  
NUC1 13C  
P1 8.100 sec  
PL1 -1.000 dB  
SFO1 125.7716224 MHz

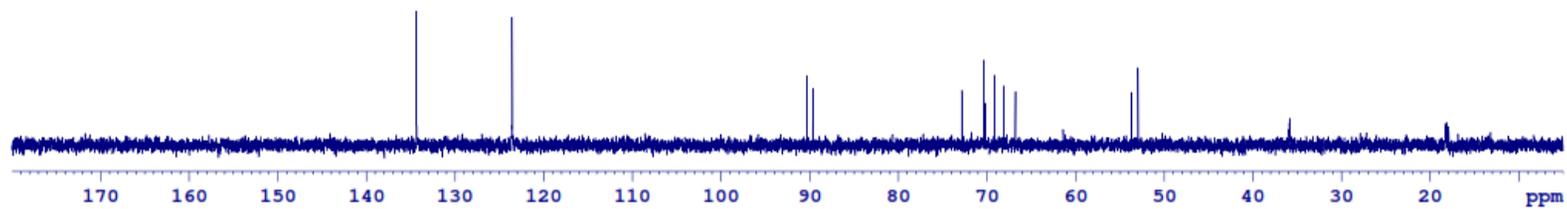
==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 88.000 sec  
PL2 -3.000 dB  
PL12 15.470 dB  
PL13 22.000 dB  
SFO2 500.1320005 MHz

F2 - Processing parameters  
SI 32768  
SF 125.7577890 MHz  
WDW EM  
SSB 0  
LB 1.000 MHz  
GB 0

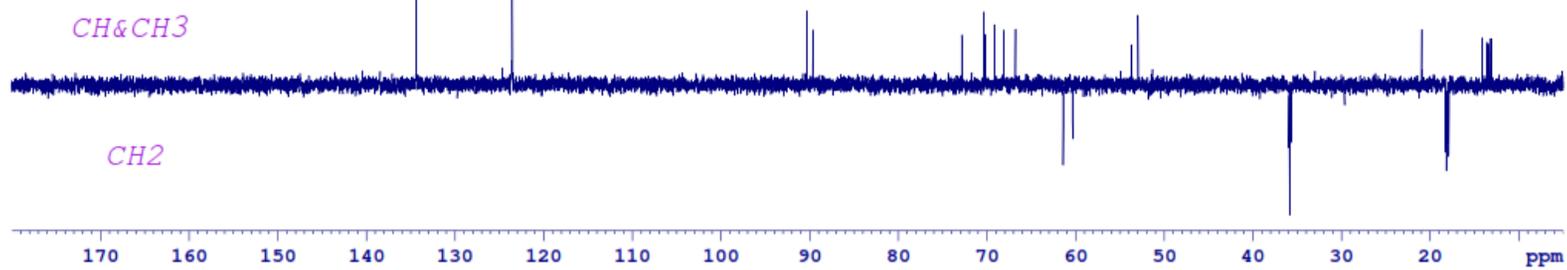
**Fig S19. DEPT Spectrum of compound 12**

**DANH-QG5-CDC13-C13CPD &DEPT**

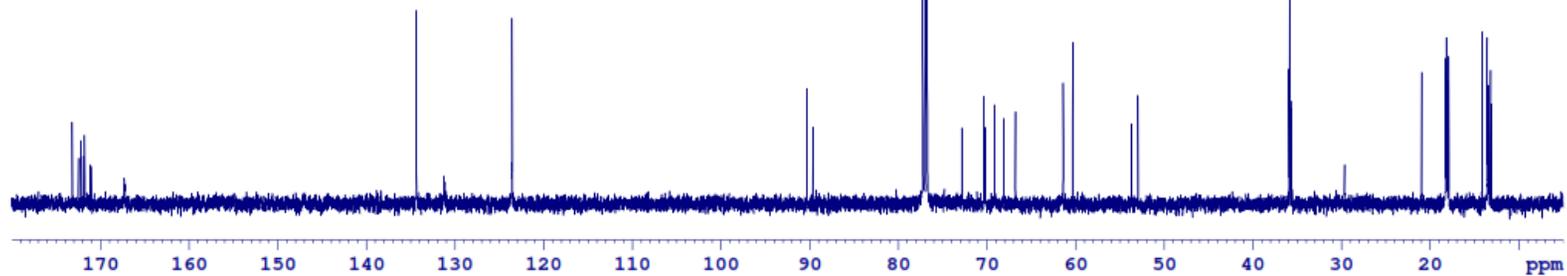
**DEPT90**



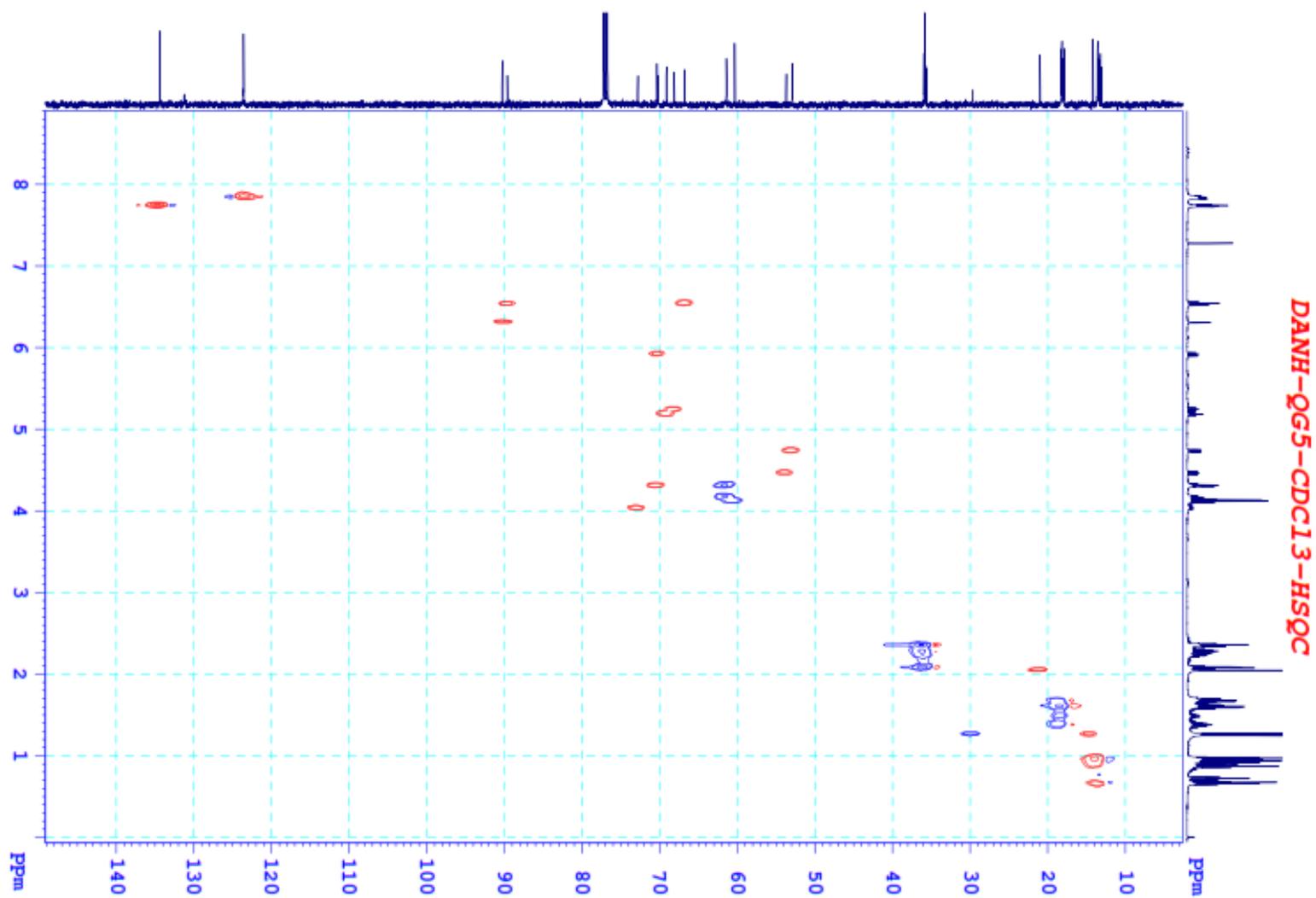
**DEPT135**



**C13CPD**



**Fig S20.** HSQC Spectrum of compound **12**.



**Fig S21.** HMBC NMR Spectrum of compound **12**.

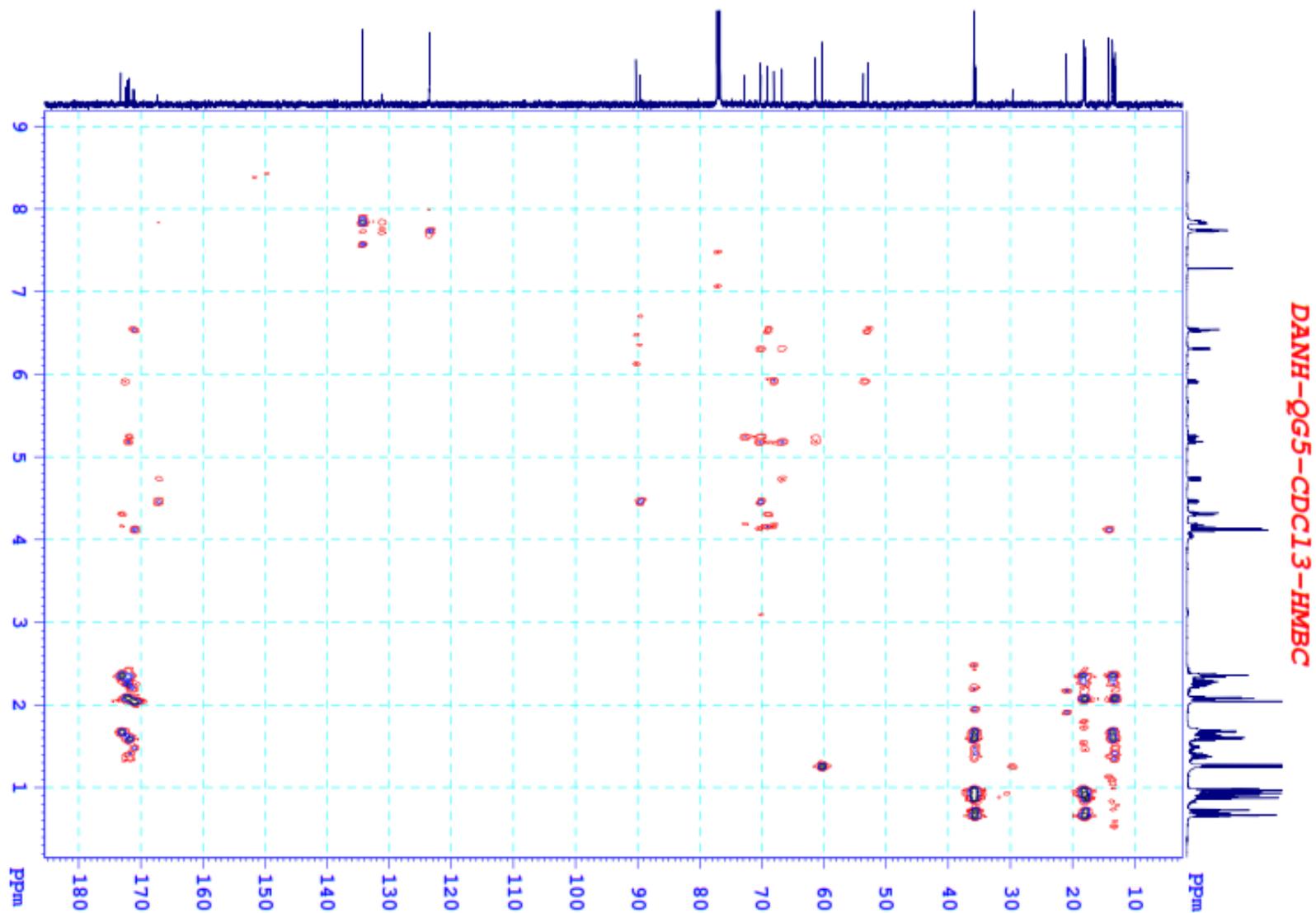


Fig S22. <sup>1</sup>H NMR Spectrum of compound 18

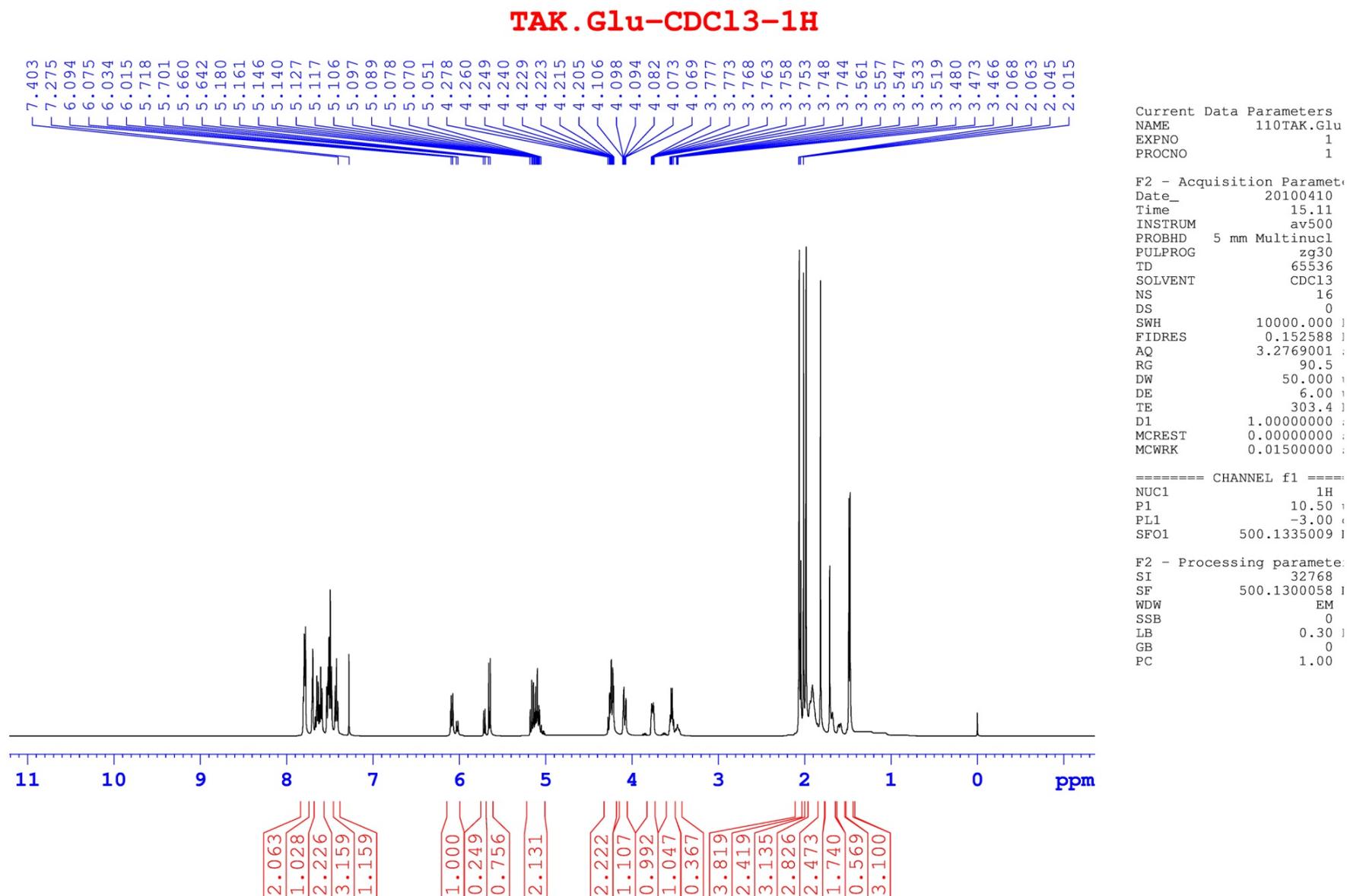


Fig S23.  $^{13}\text{C}$  NMR Spectrum of compound 18

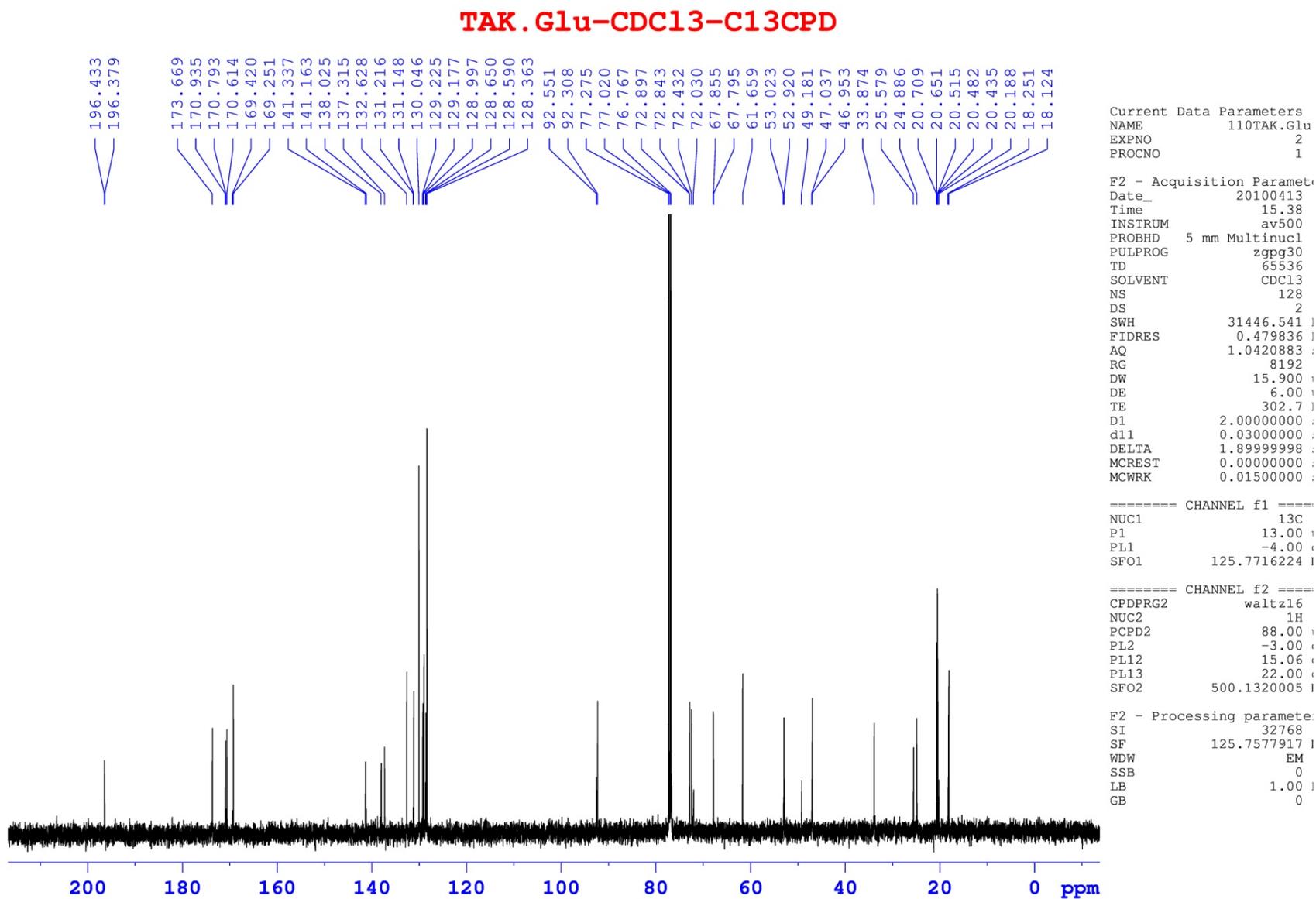
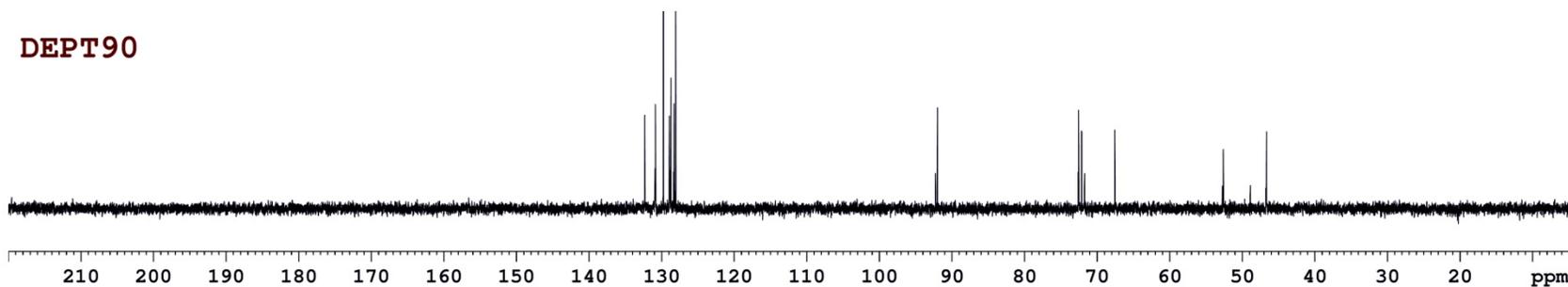


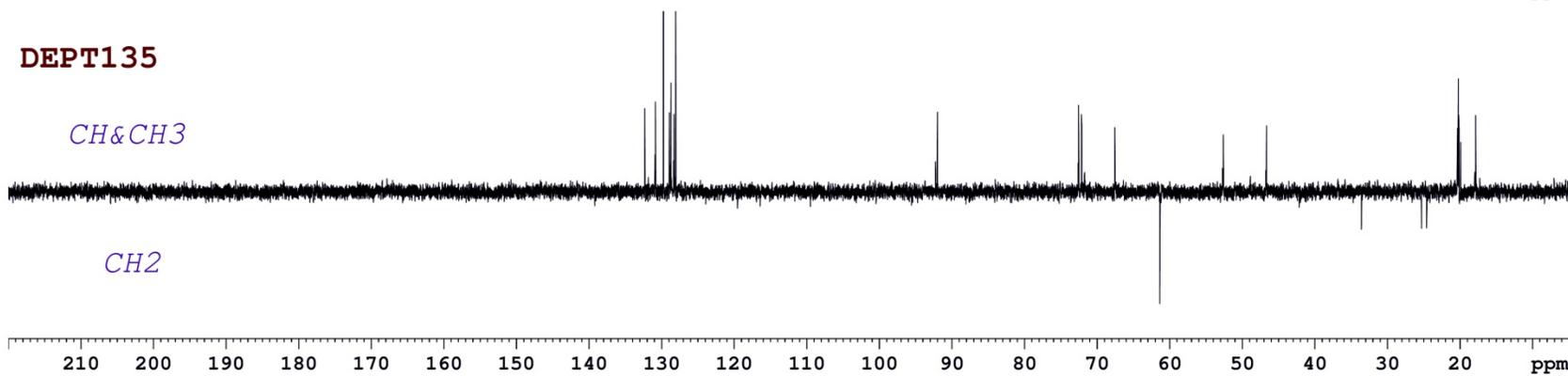
Fig S24. DEPT Spectrum of compound 18

TAK.Glu-CDCl3-C13CPD&DEPT

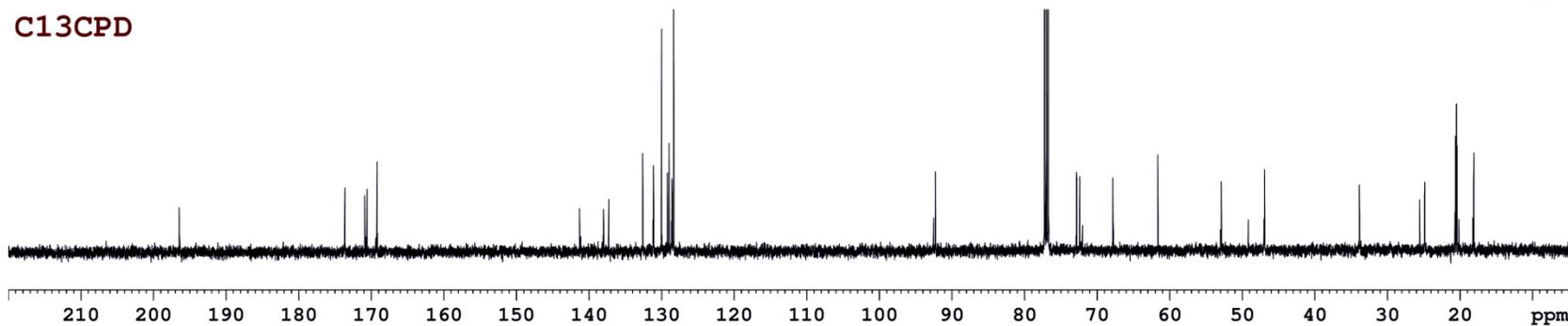
DEPT90



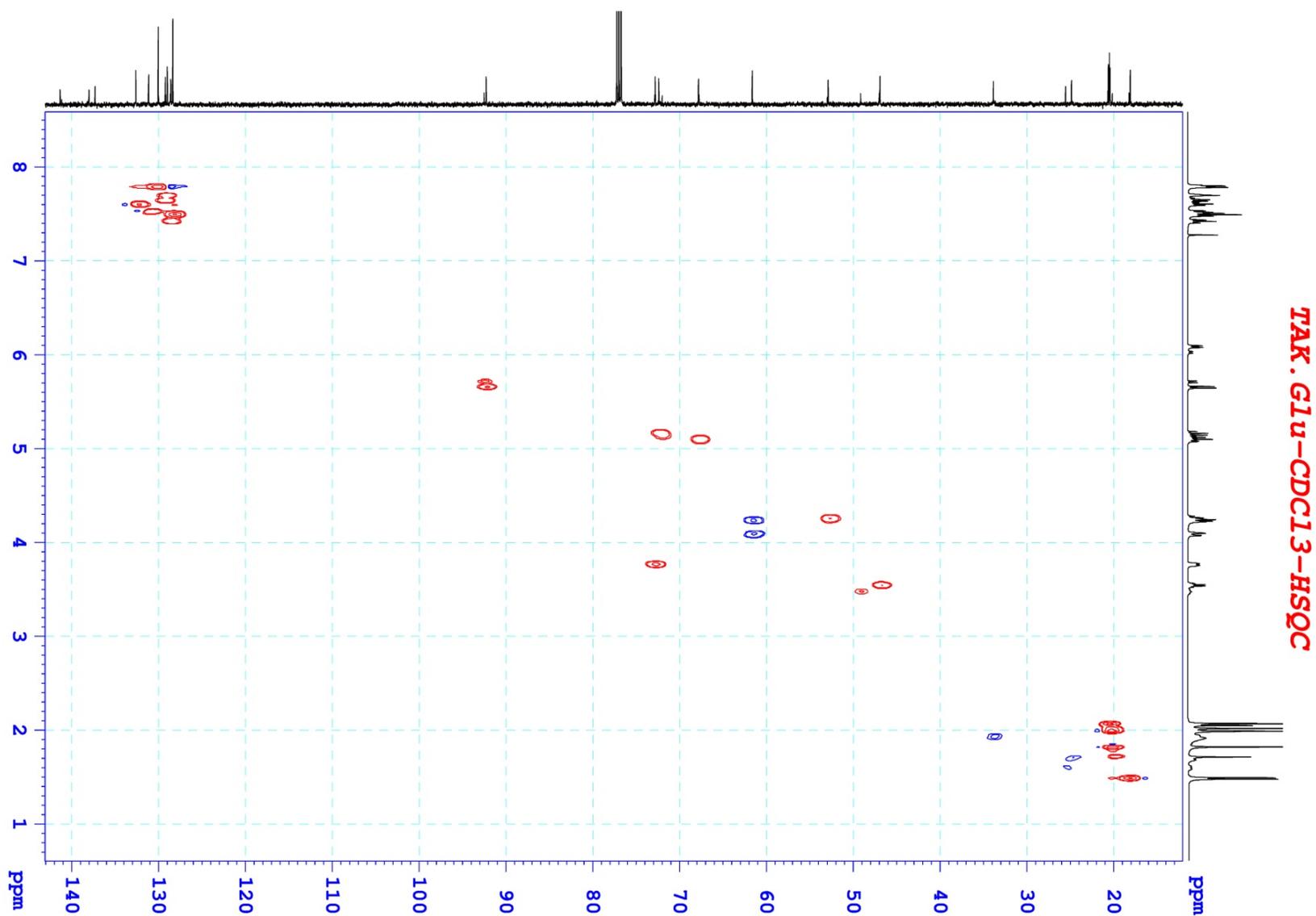
DEPT135



C13CPD



**Fig S25. HSQC Spectrum of compound 18**



**Fig S26. HMBC Spectrum of compound 18**

