

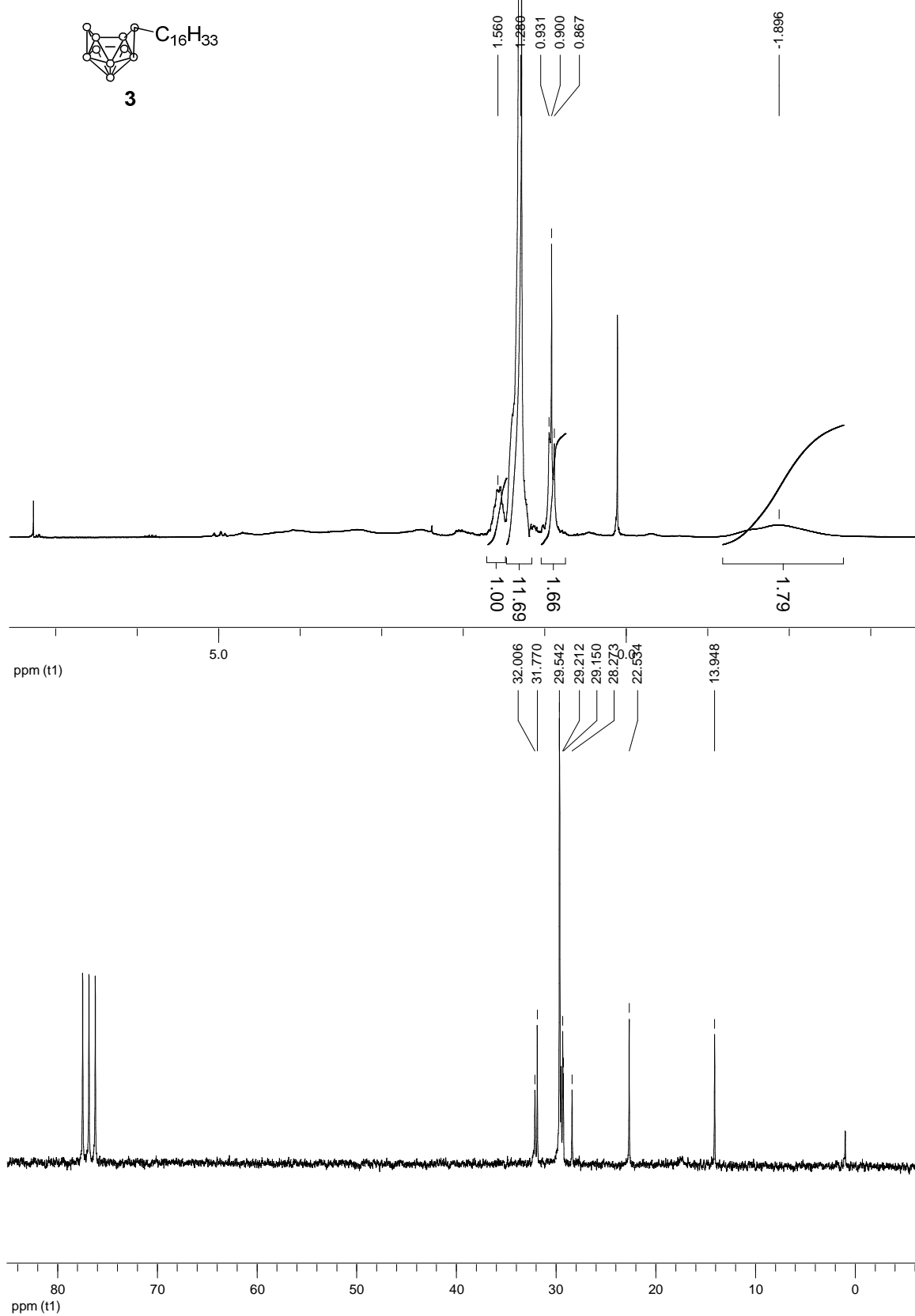
**The Hydroboration Reaction as a Key for a Straightforward Synthesis
of New MRI-NCT agents**

Paolo Boggio, Antonio Toppino, Simonetta Geninatti-Crich, Diego Alberti, Domenica Marabello,
Claudio Medana, Cristina Prandi, Paolo Venturello, Silvio Aime, Annamaria Deagostino.

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Figure 1 ^1H , ^{13}C , DEPT, ^{11}B of hexadecyldecaborane (**3**)



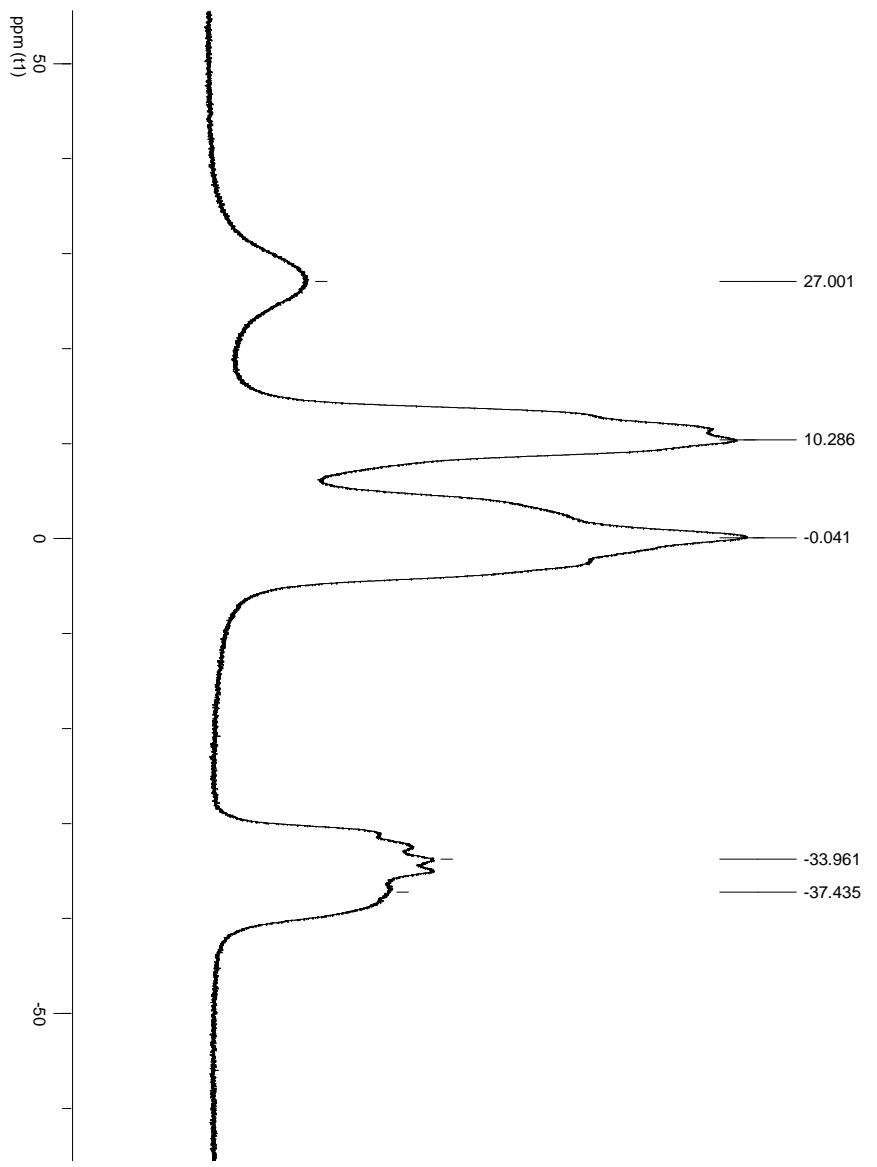
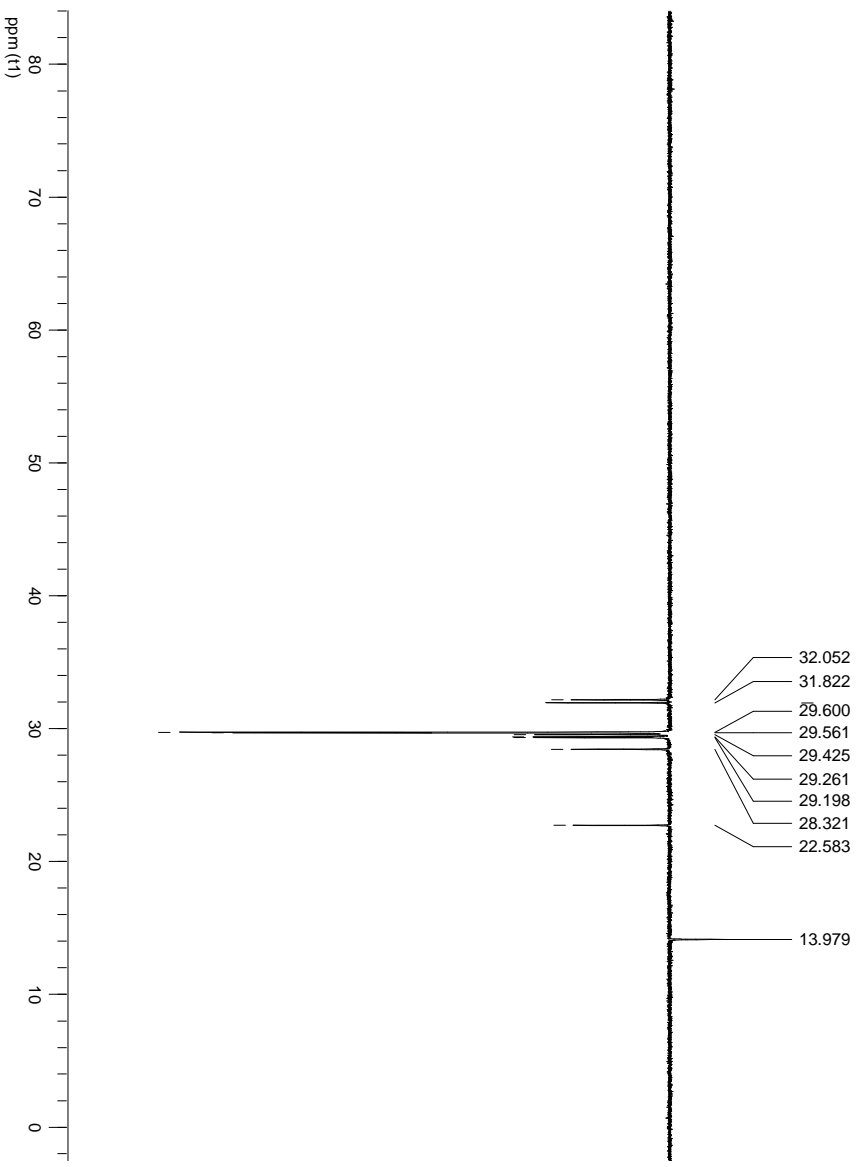
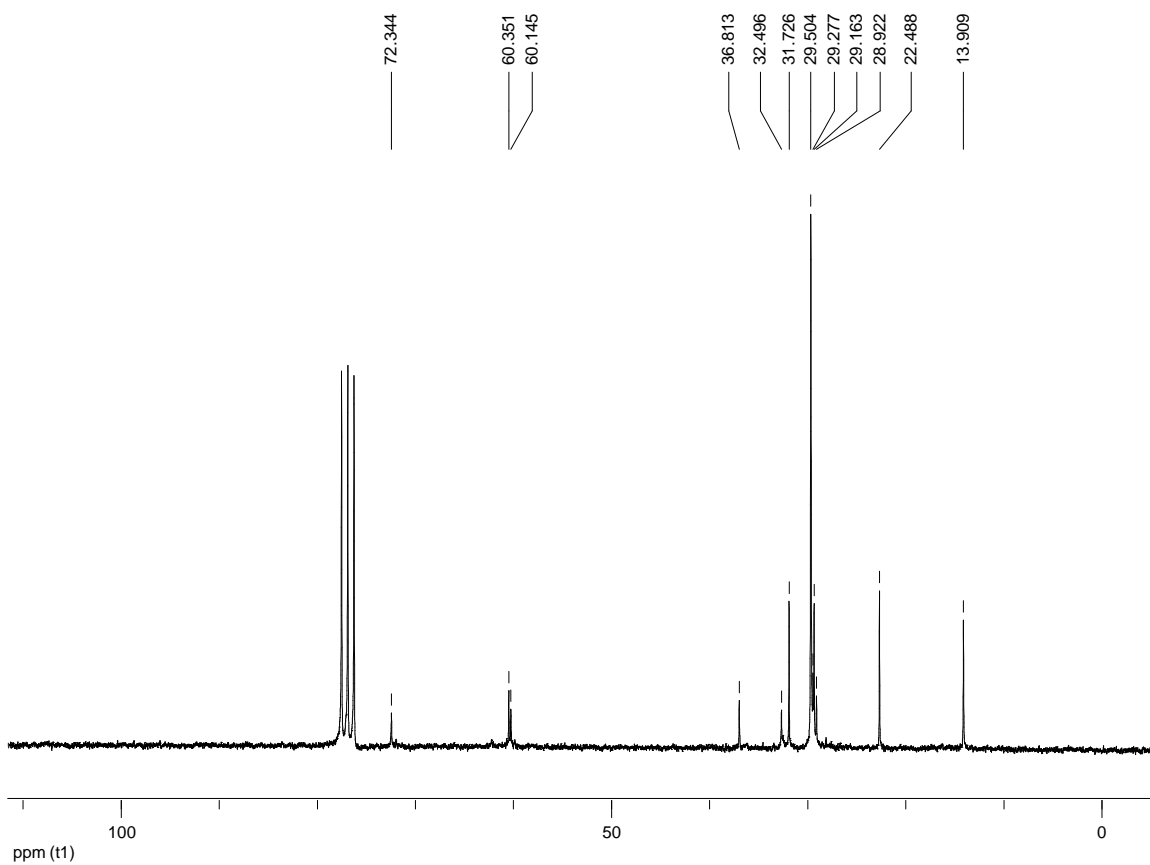
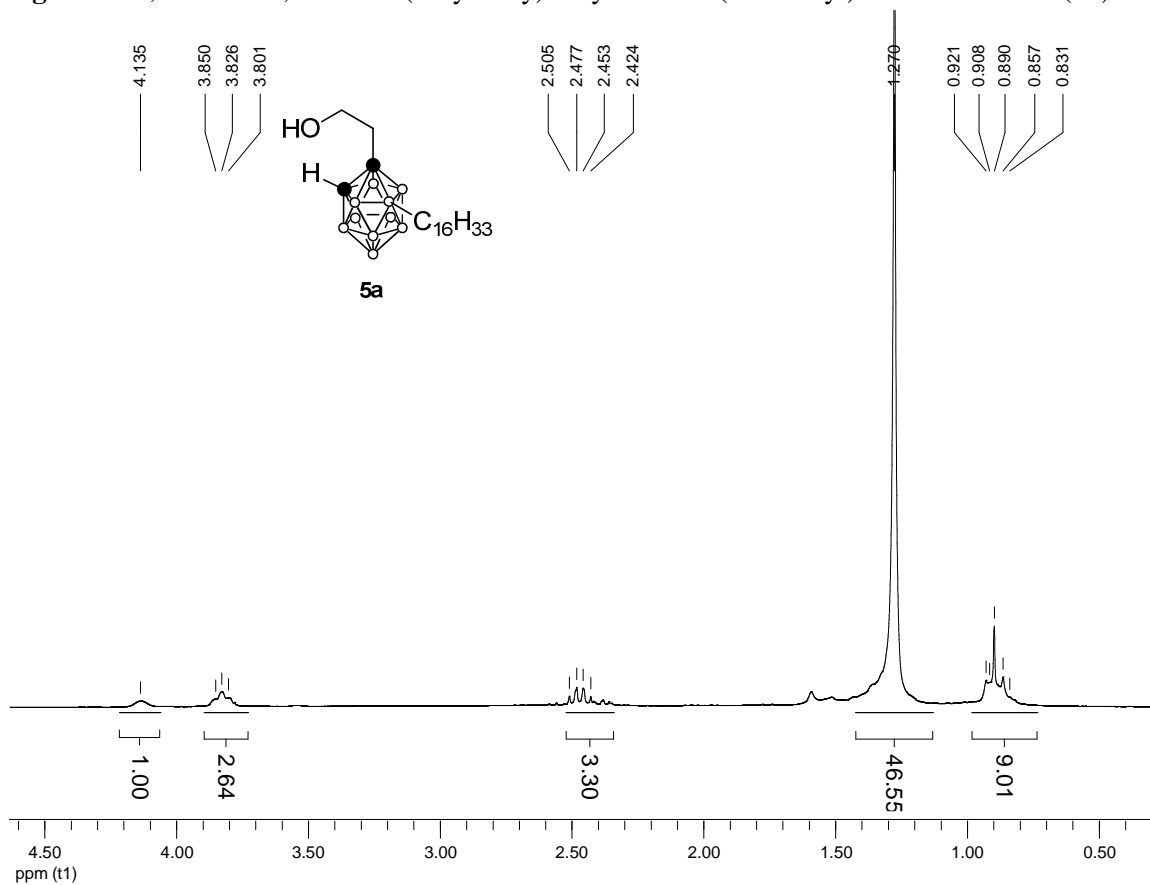


Figure 2 ^1H , ^{13}C DEPT, ^{11}B of *C*-(2-hydroxy)-ethyl-*C'*-H-4-(hexadecyl)-*ortho*-carborane (**5a**)



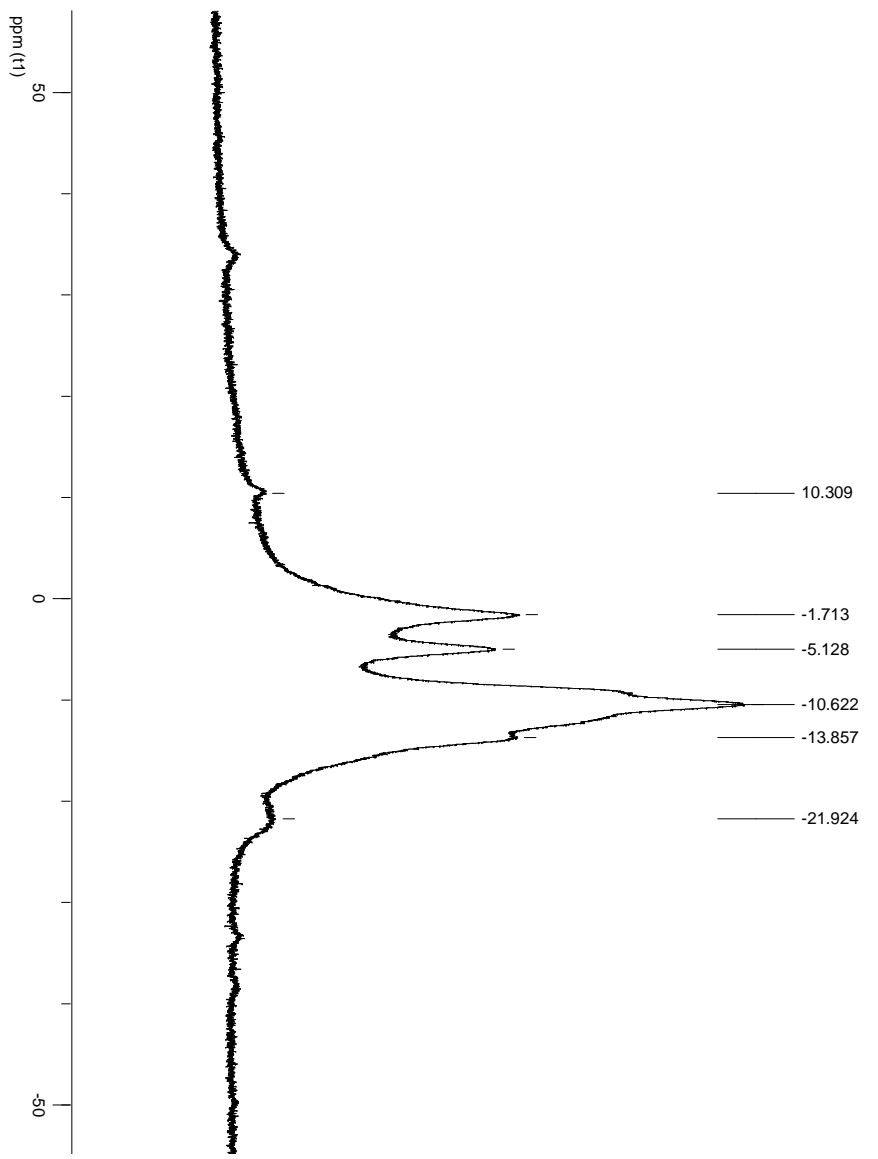
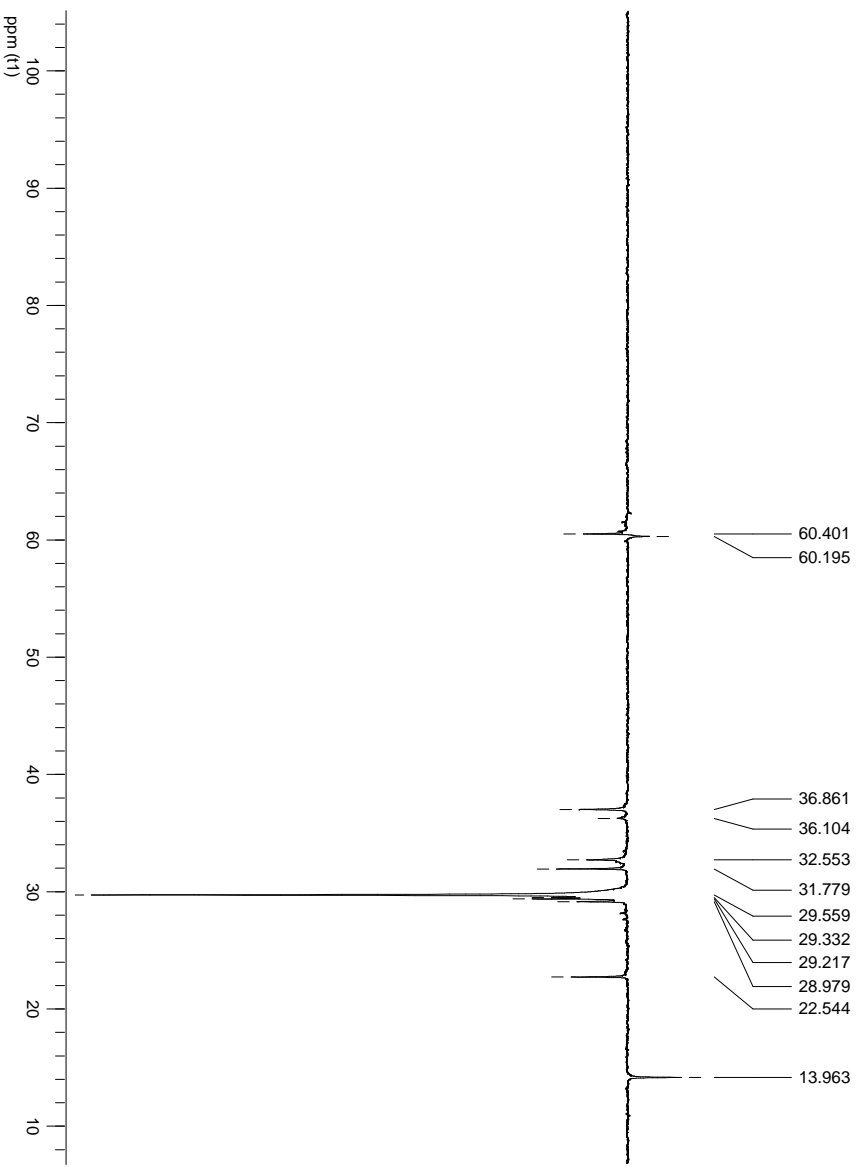
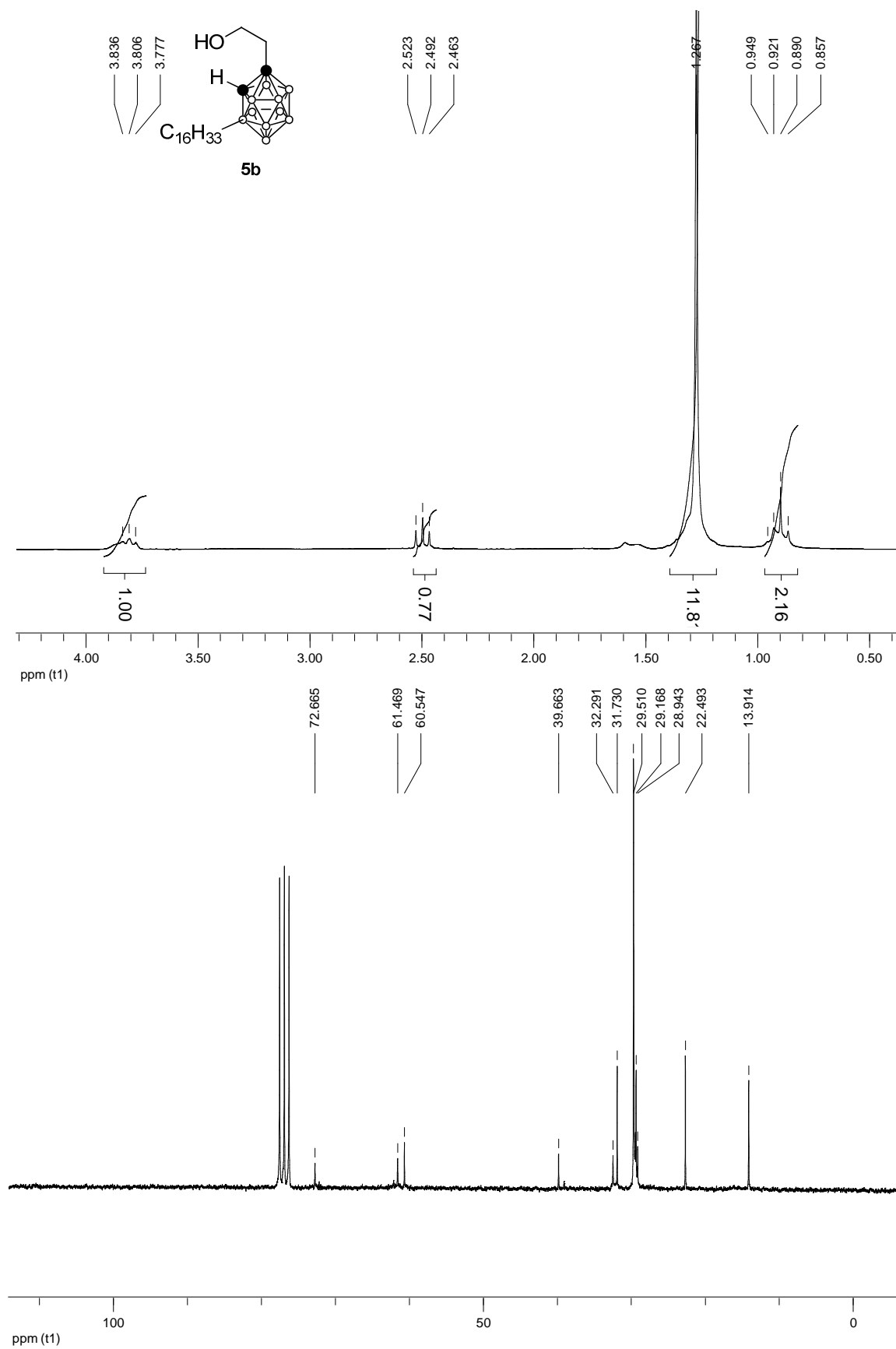


Figure 3 ^1H , ^{13}C DEPT, ^{11}B of *C*-(2-hydroxy)-ethyl-*C'*-H-9-(hexadecyl)-*ortho*-carborane (**5b**)



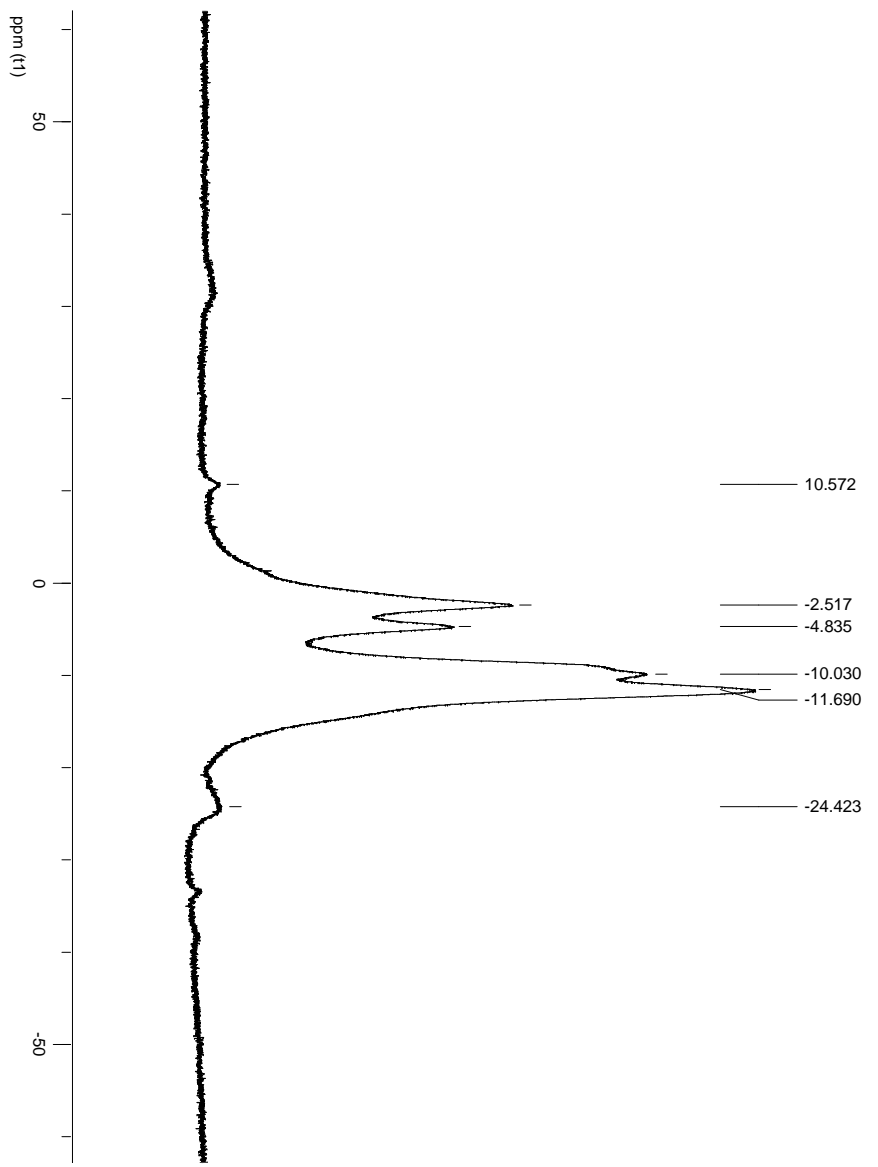
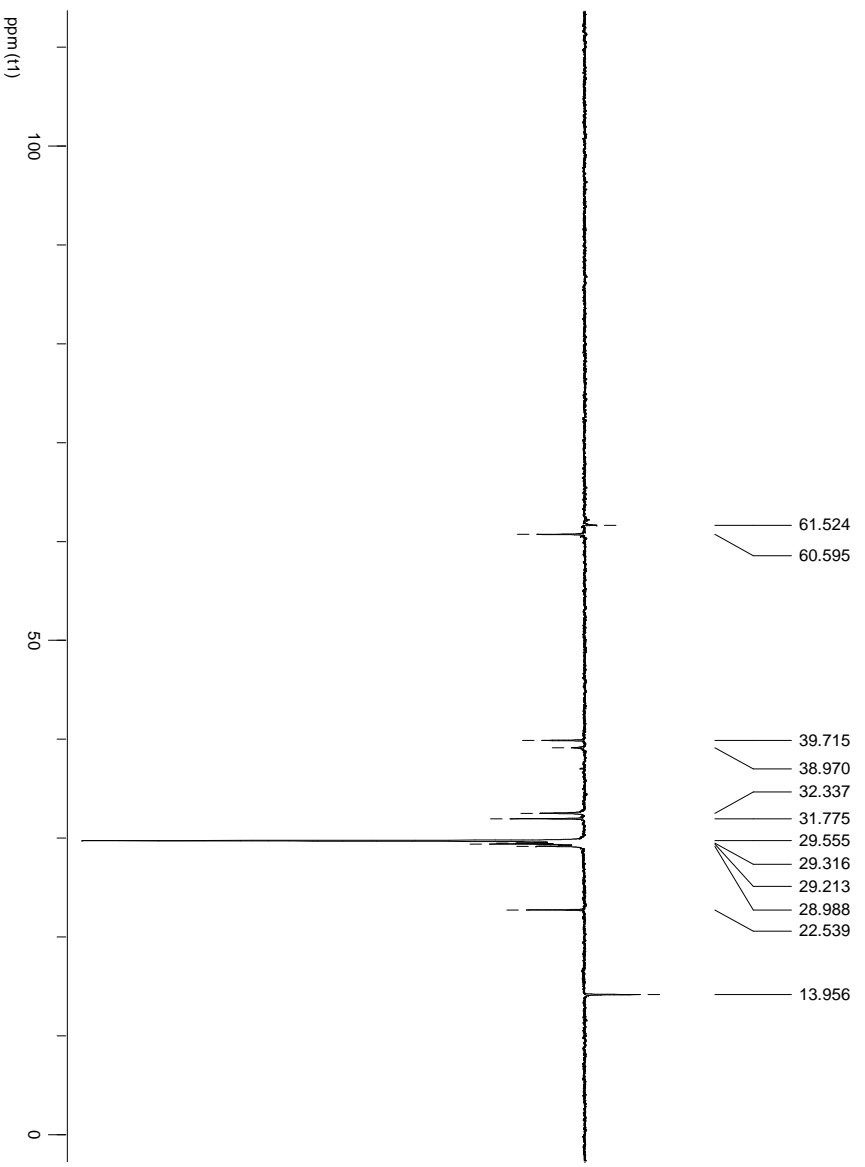
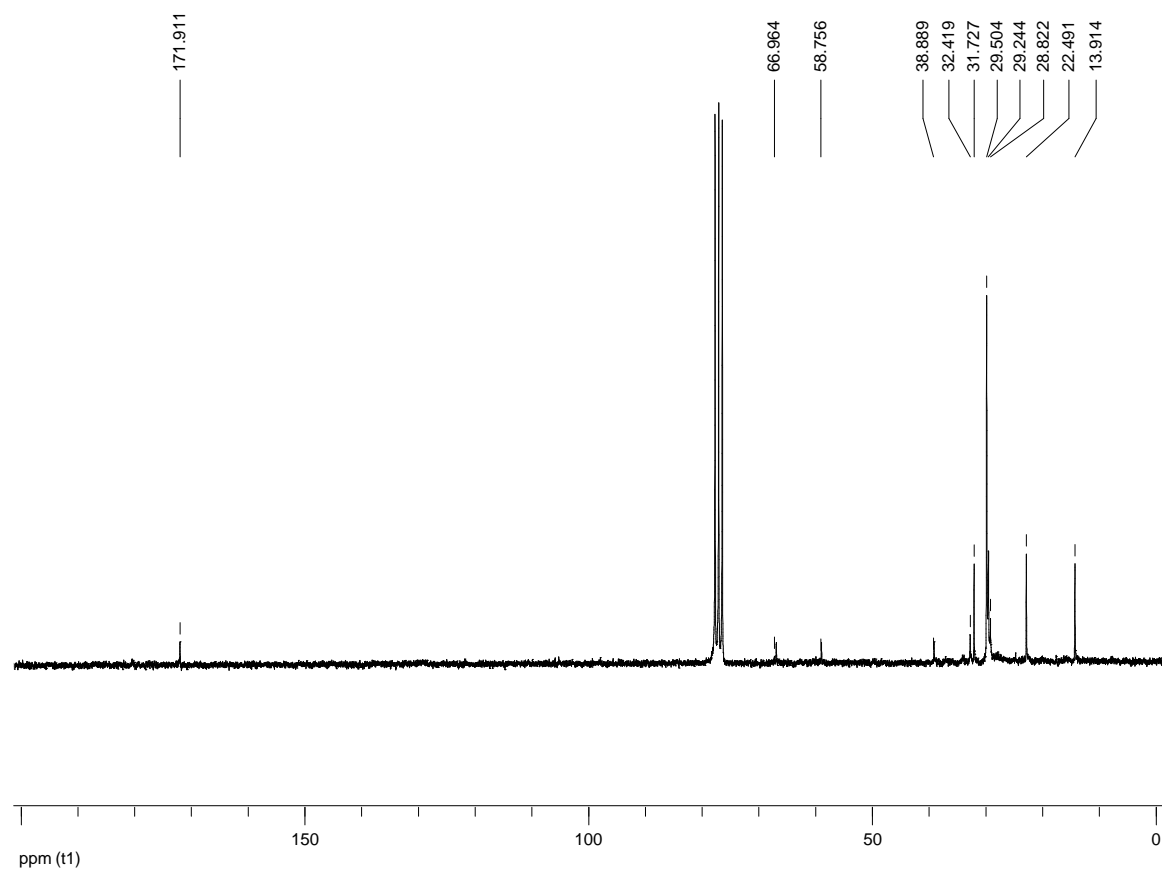
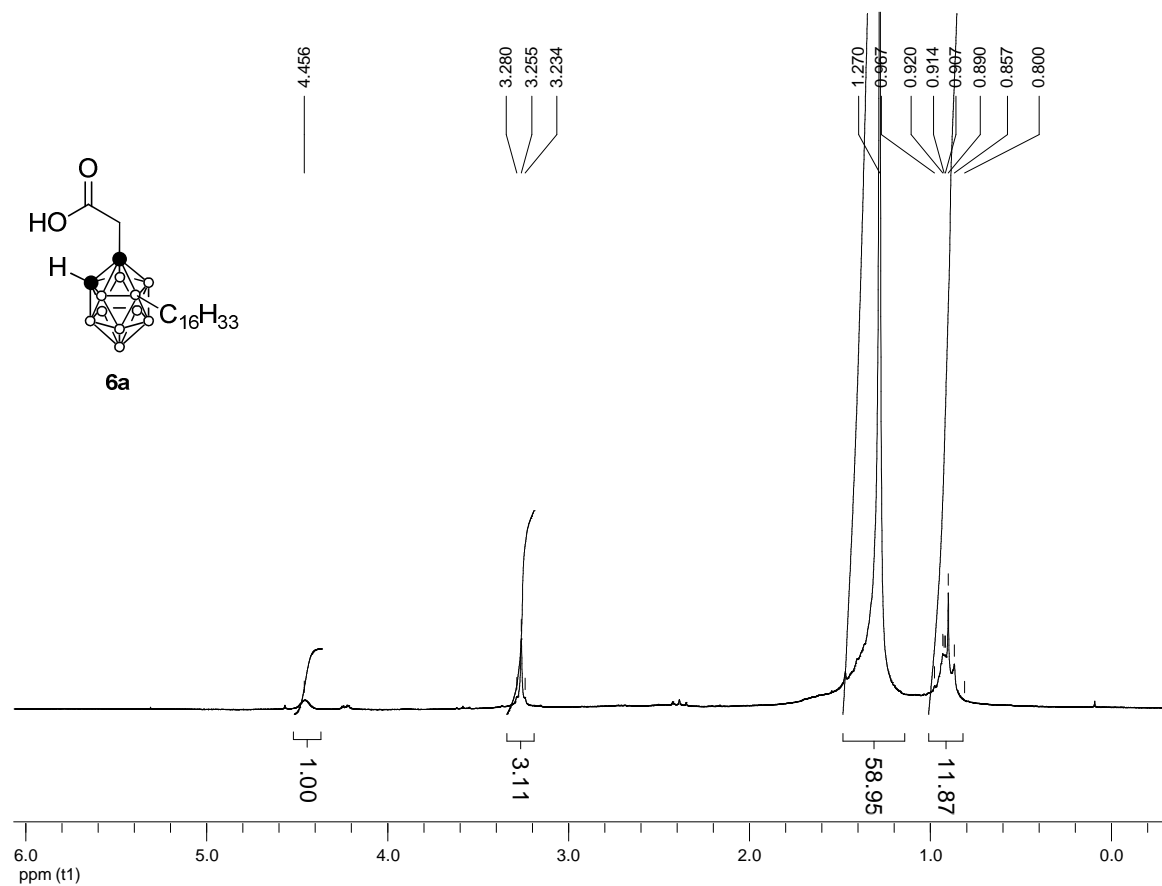


Figure 4 ^1H , ^{13}C , DEPT of *C*-(carboxymethyl)-*C'*-H-4-(hexadecyl)-*o*-carborane (**6a**)



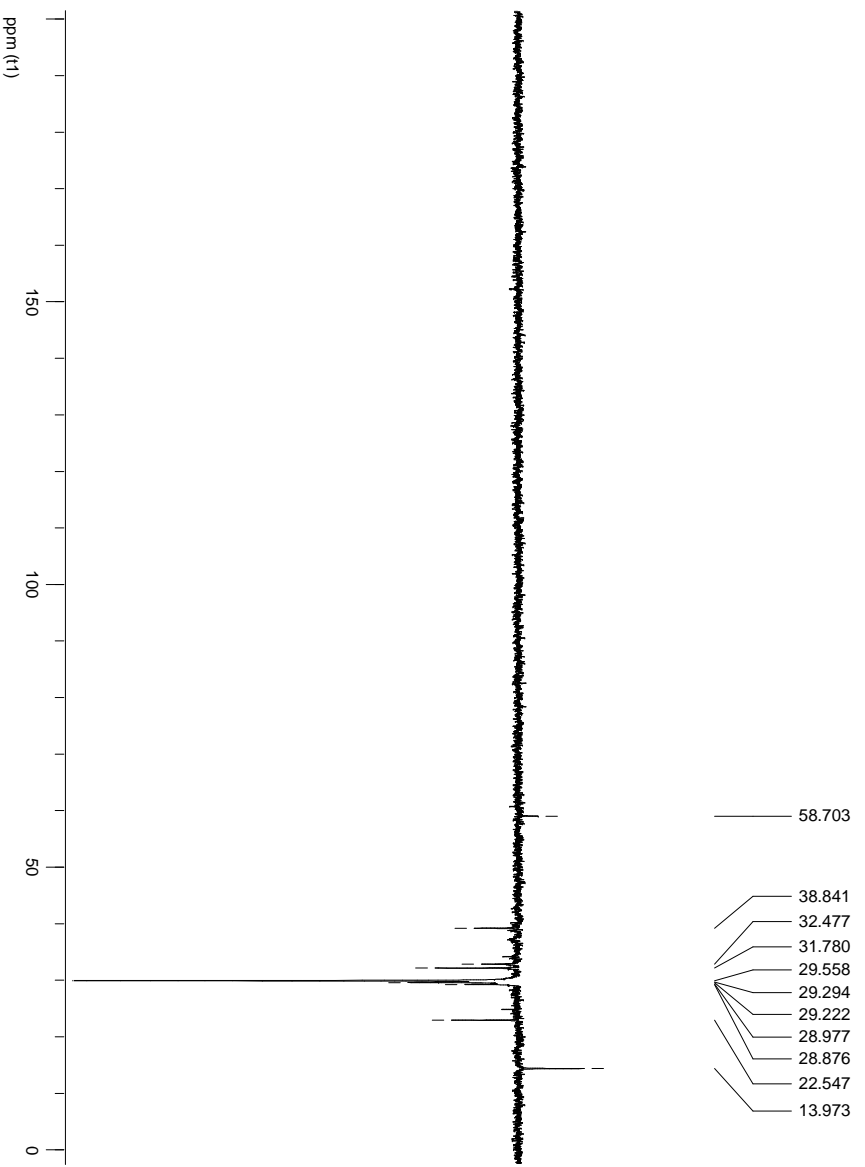
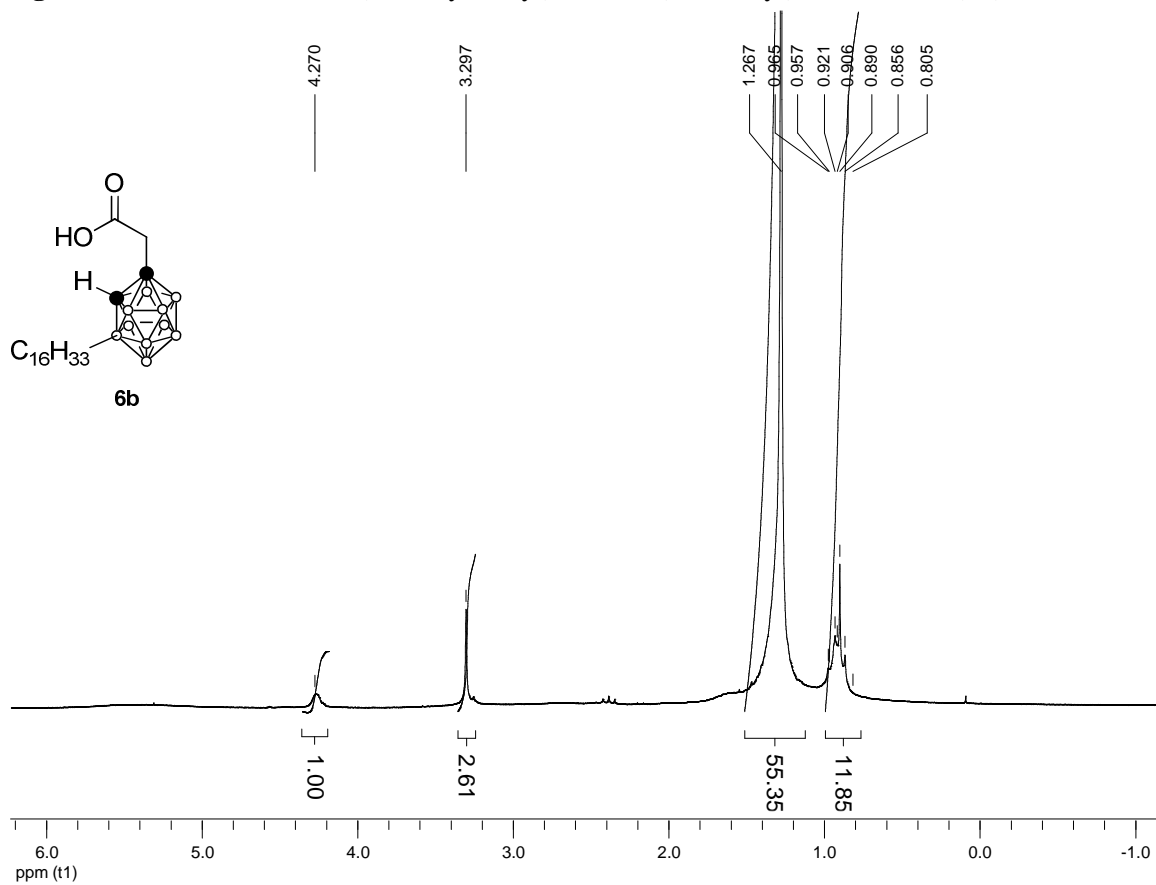


Figure 5 ^1H , ^{13}C , DEPT of *C*-(carboxymethyl)-*C'*-H-4-(hexadecyl)-*o*-carborane (**6b**)



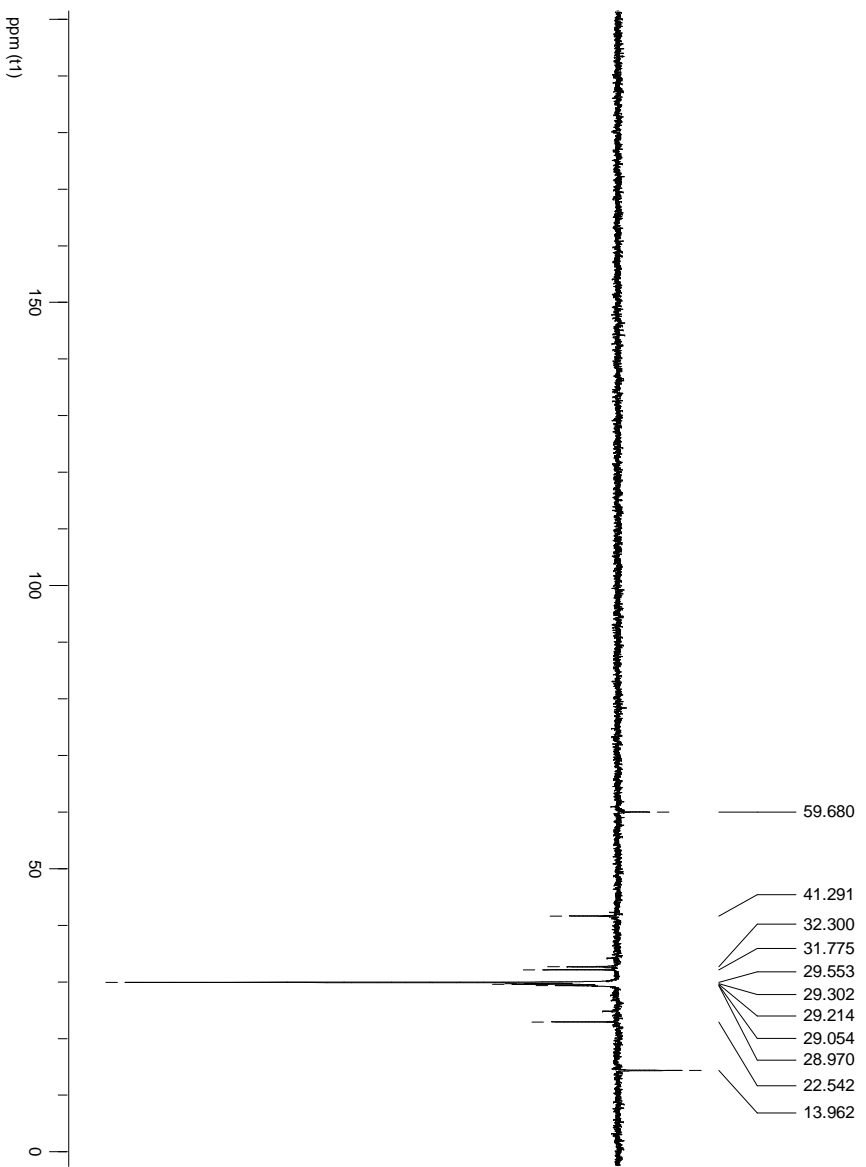
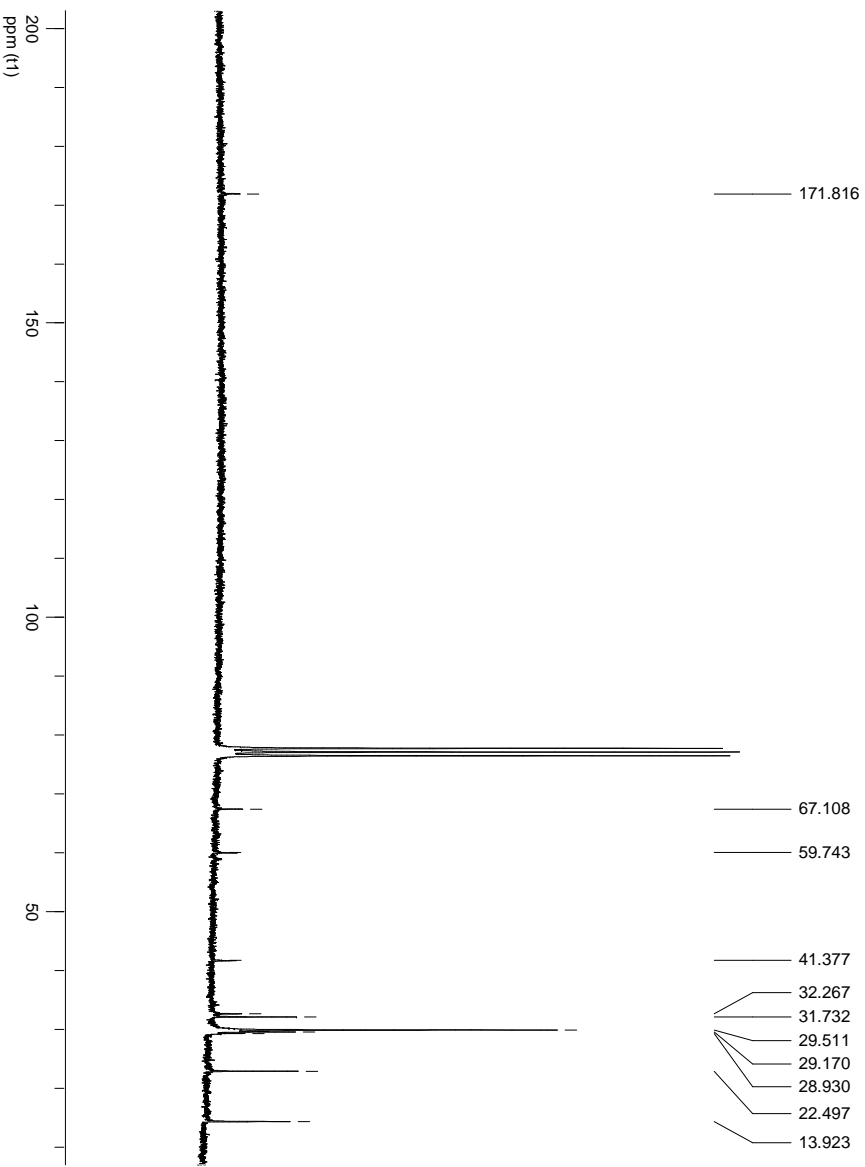
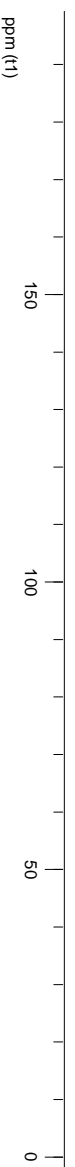
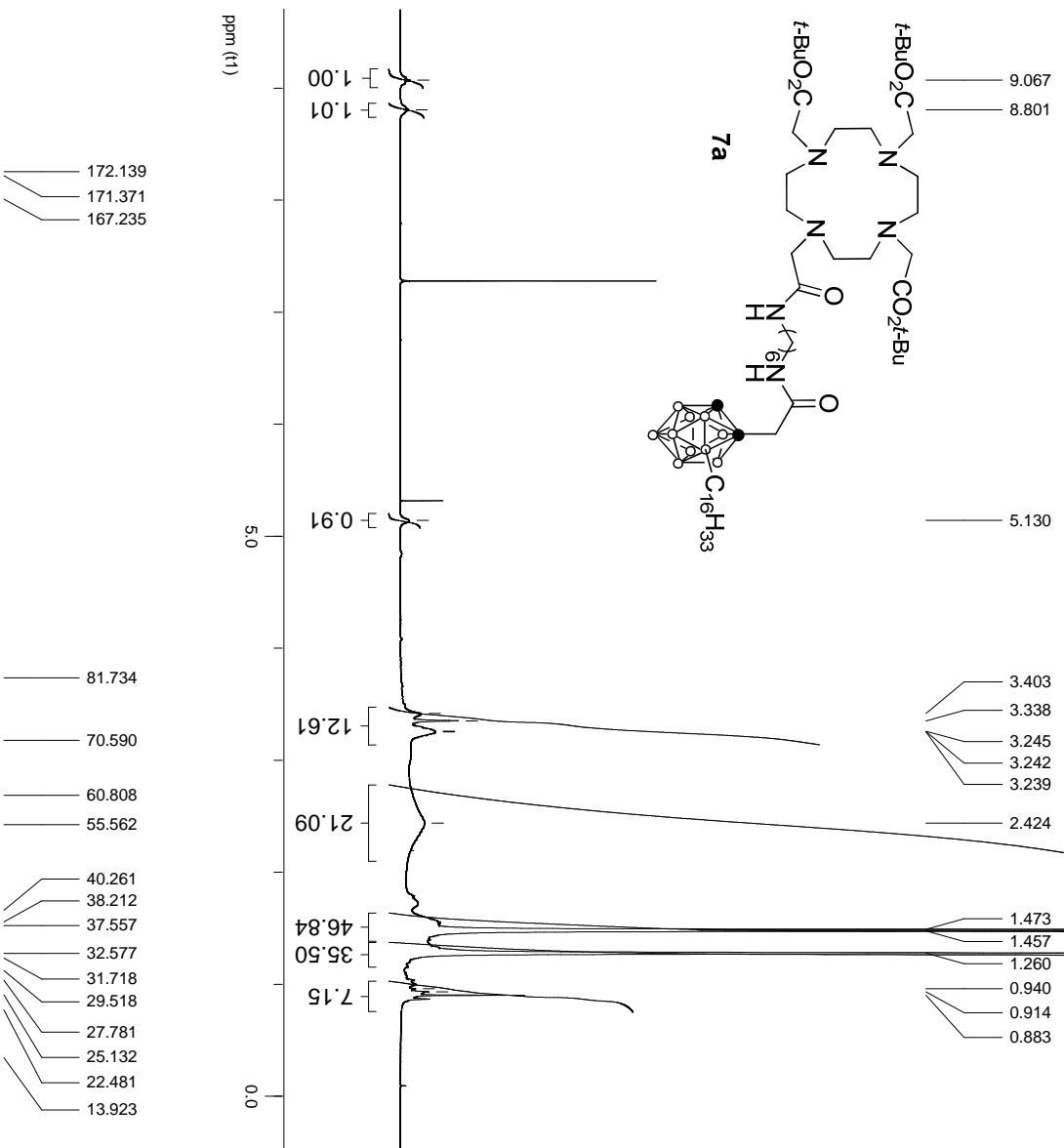


Figure 6 ^1H , ^{13}C , DEPT of C-[*tert*-butyl]DOTAMA-C₆] -acetamido-C'-H-4-(hexadecyl)-*o*-carborane (**7a**)



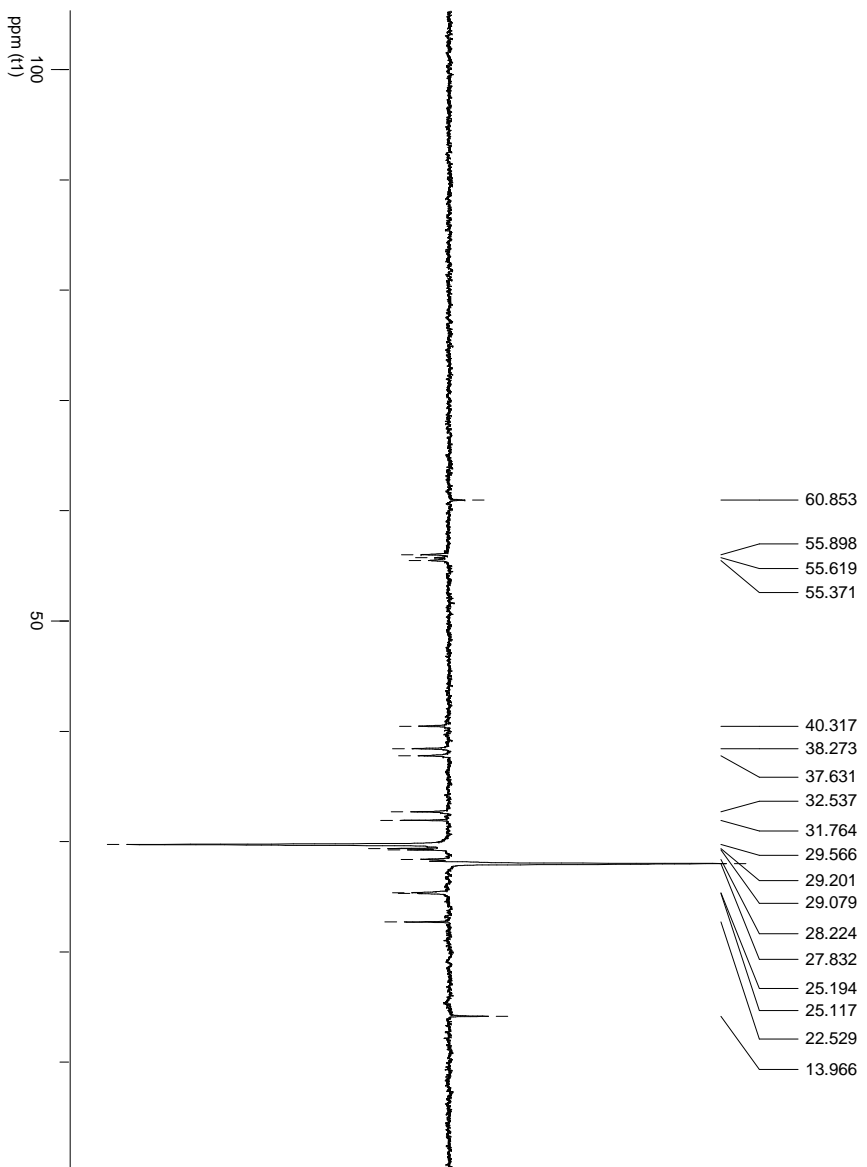
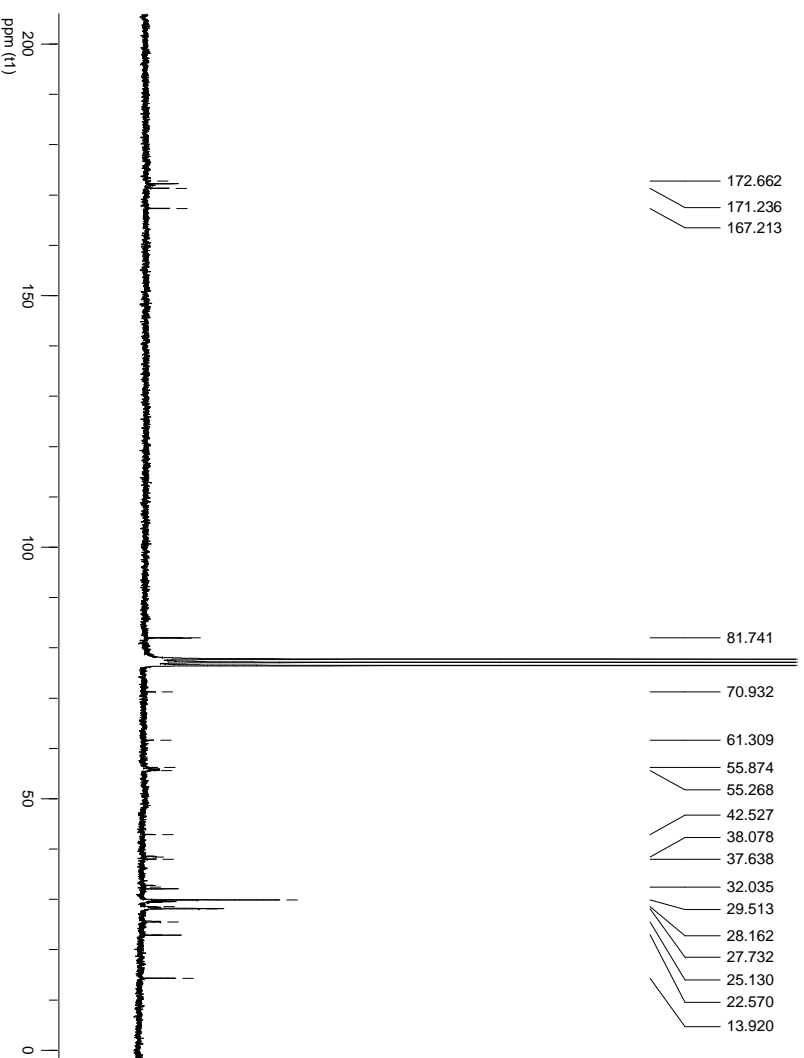
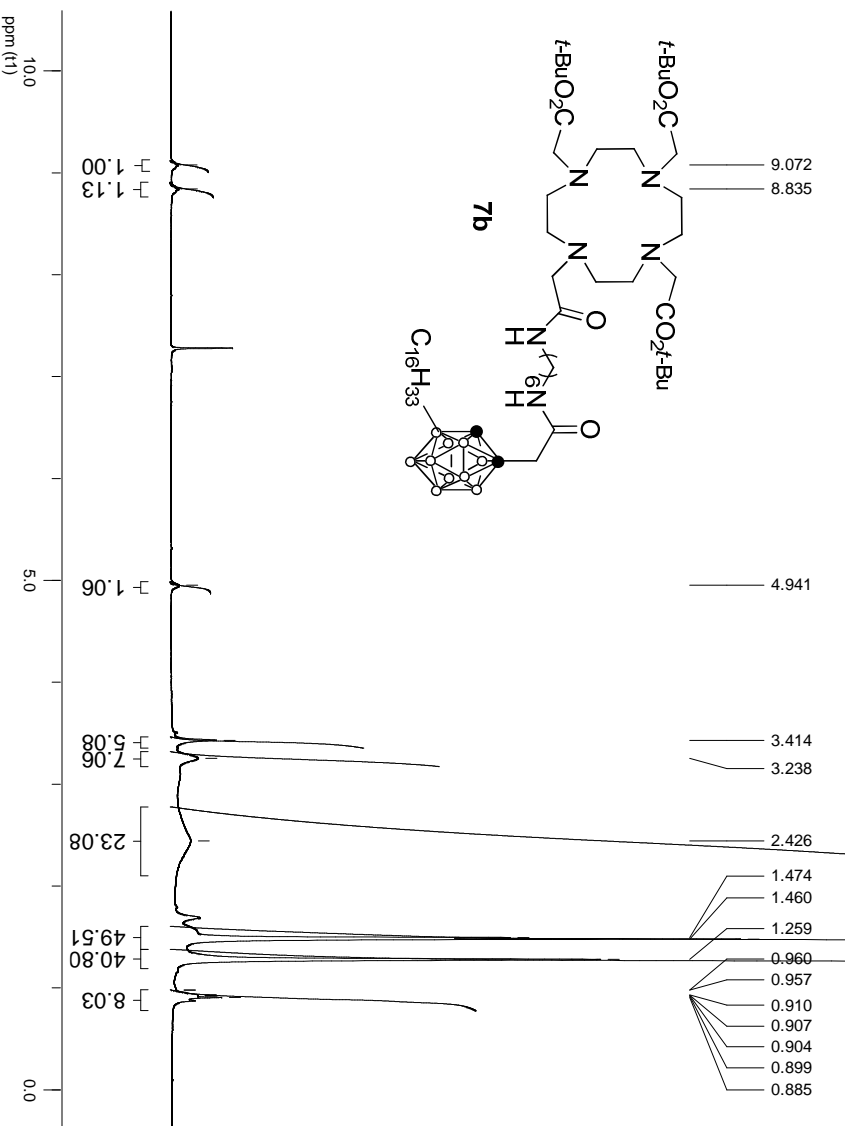


Figure 7 ^1H , ^{13}C , DEPT of C -[*tert*-butyl]DOTAMA- C_6]-acetamido- C^* -H-9-(hexadecyl)-*o*-carborane (**7b**)



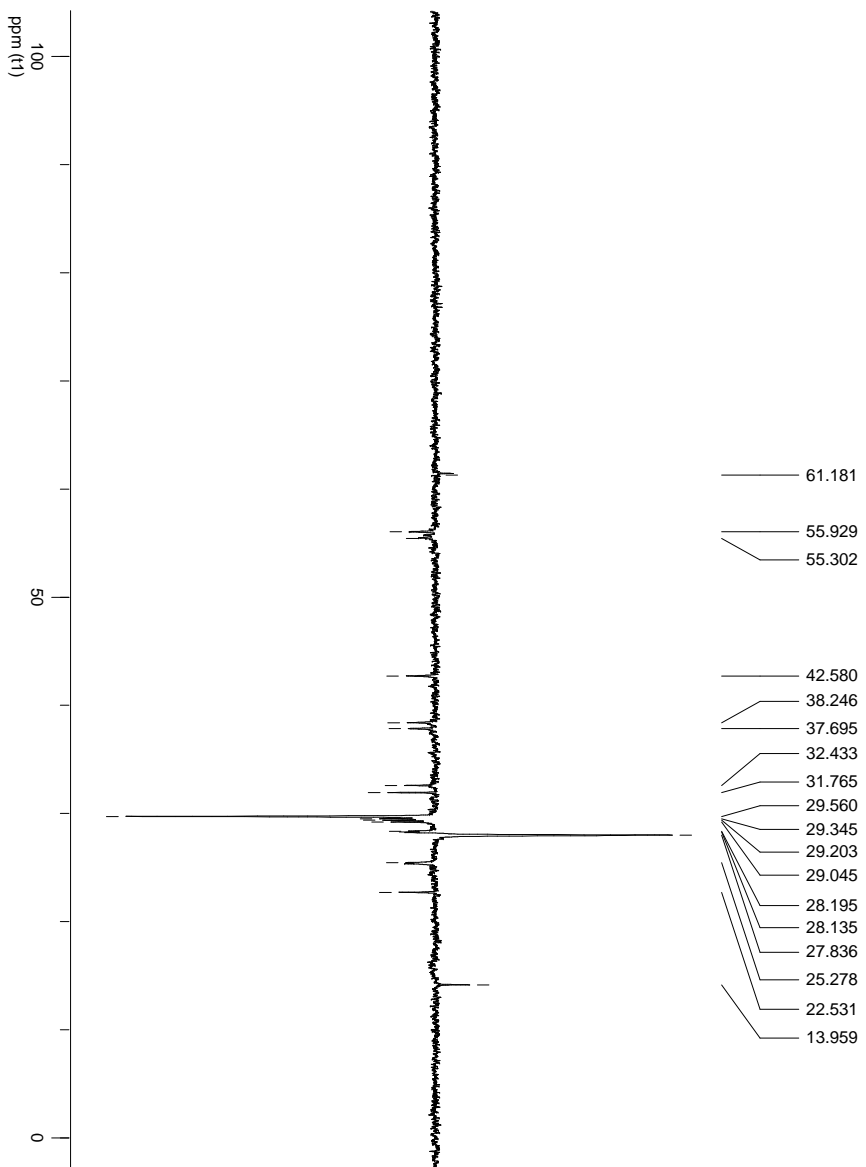
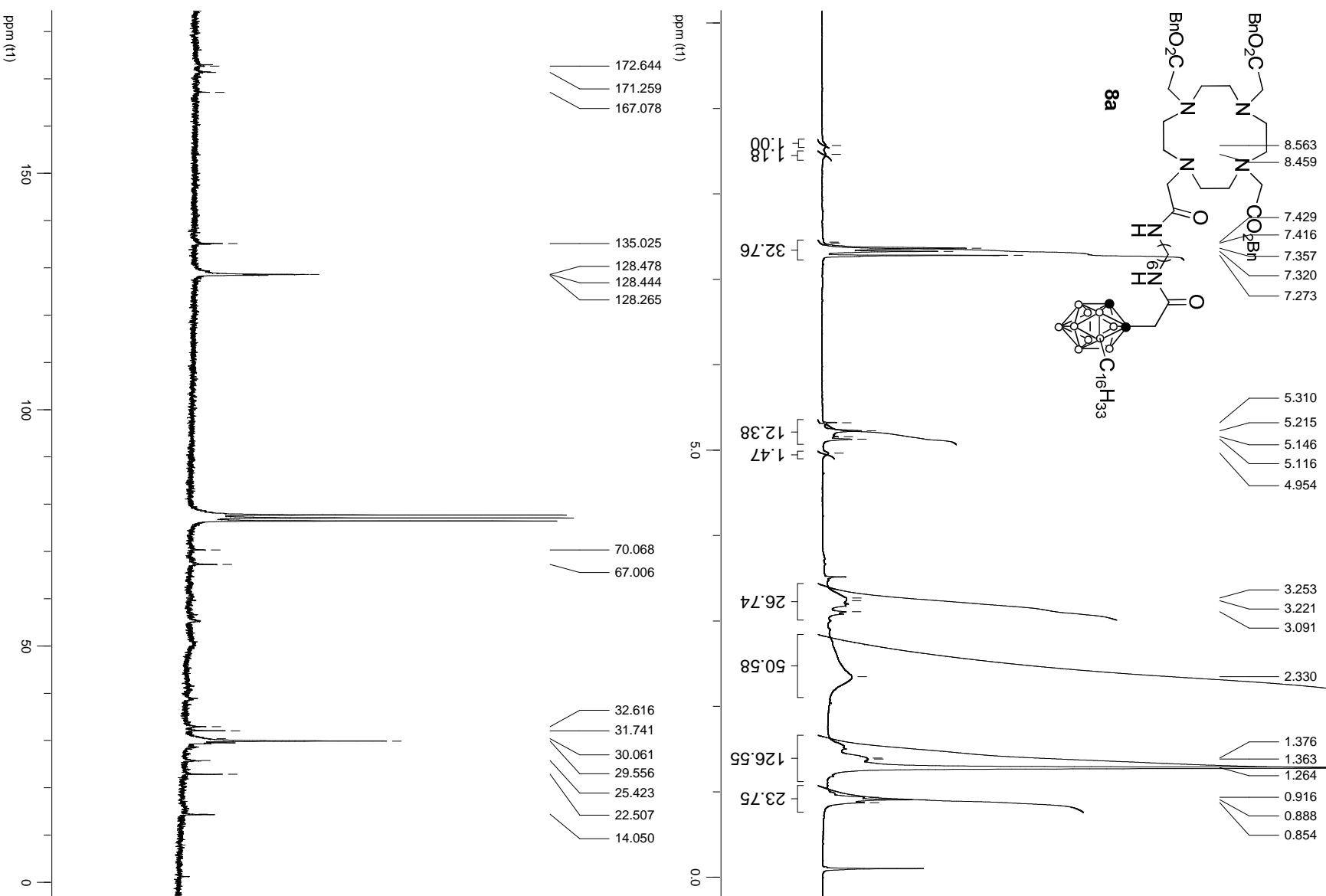


Figure 8 ^1H , ^{13}C , DEPT of C-[benzyl]DOTAMA-C₆]acetamido-C'-H-4-(hexadecyl)-o-carborane (**8a**)



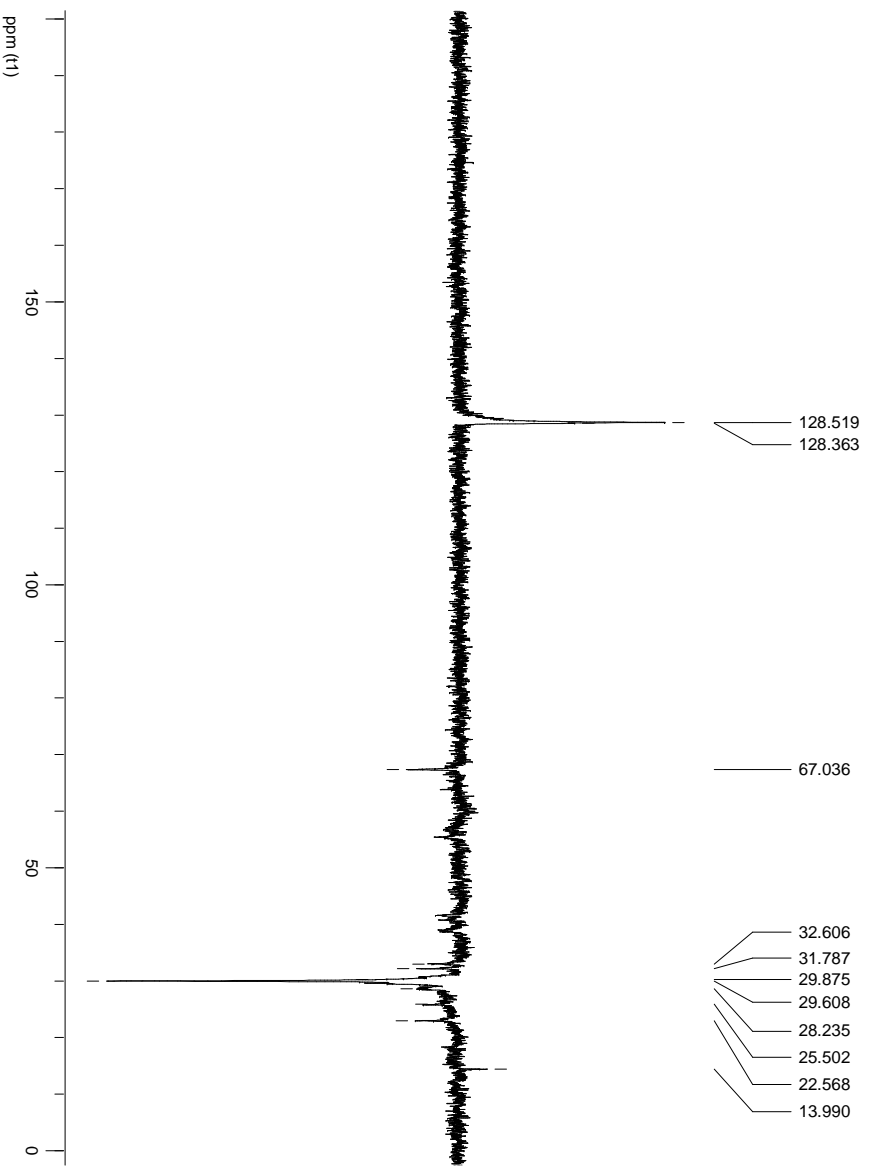
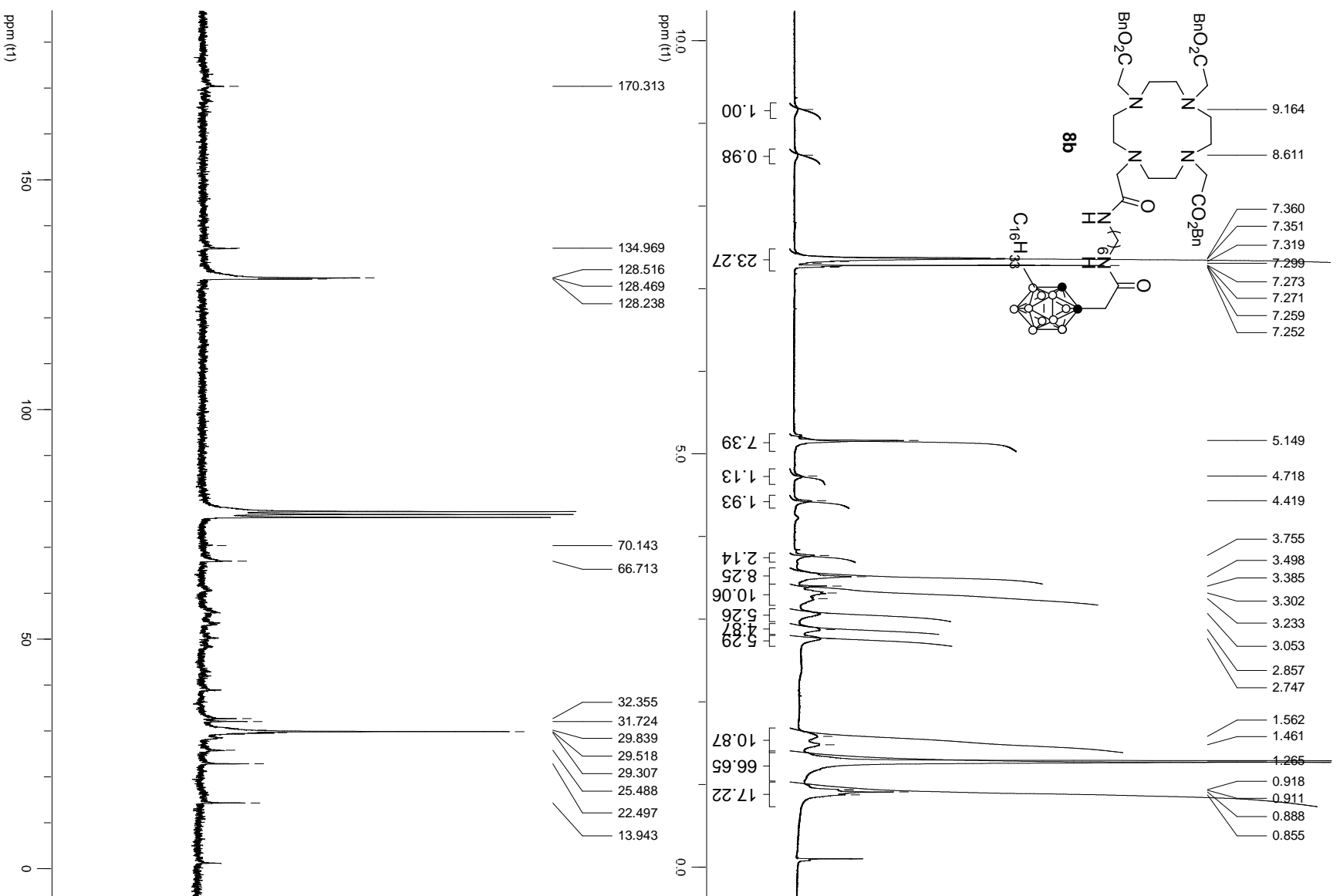


Figure 9 ^1H , ^{13}C , DEPT of C-[benzyl]DOTAMA-C₆]acetamido-C'-H-9-(hexadecyl)-*o*-carborane (**8b**)



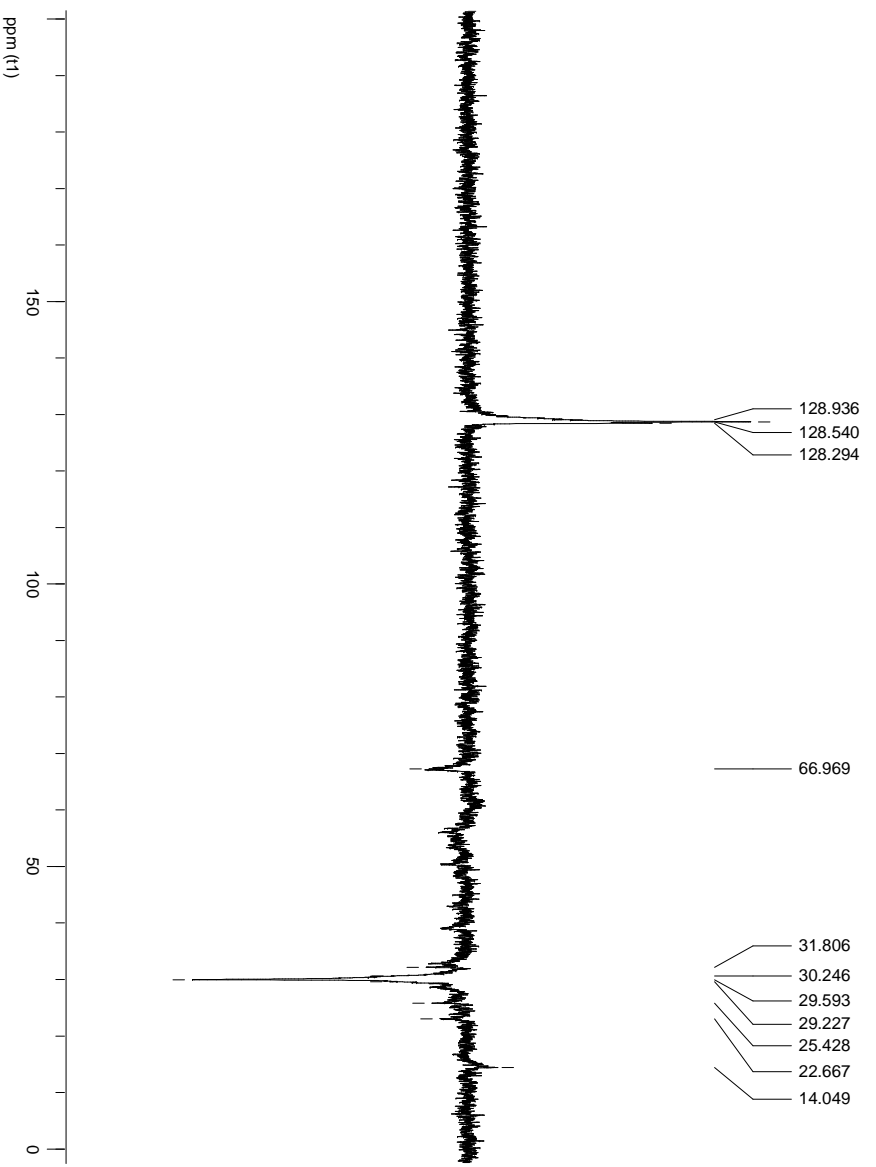
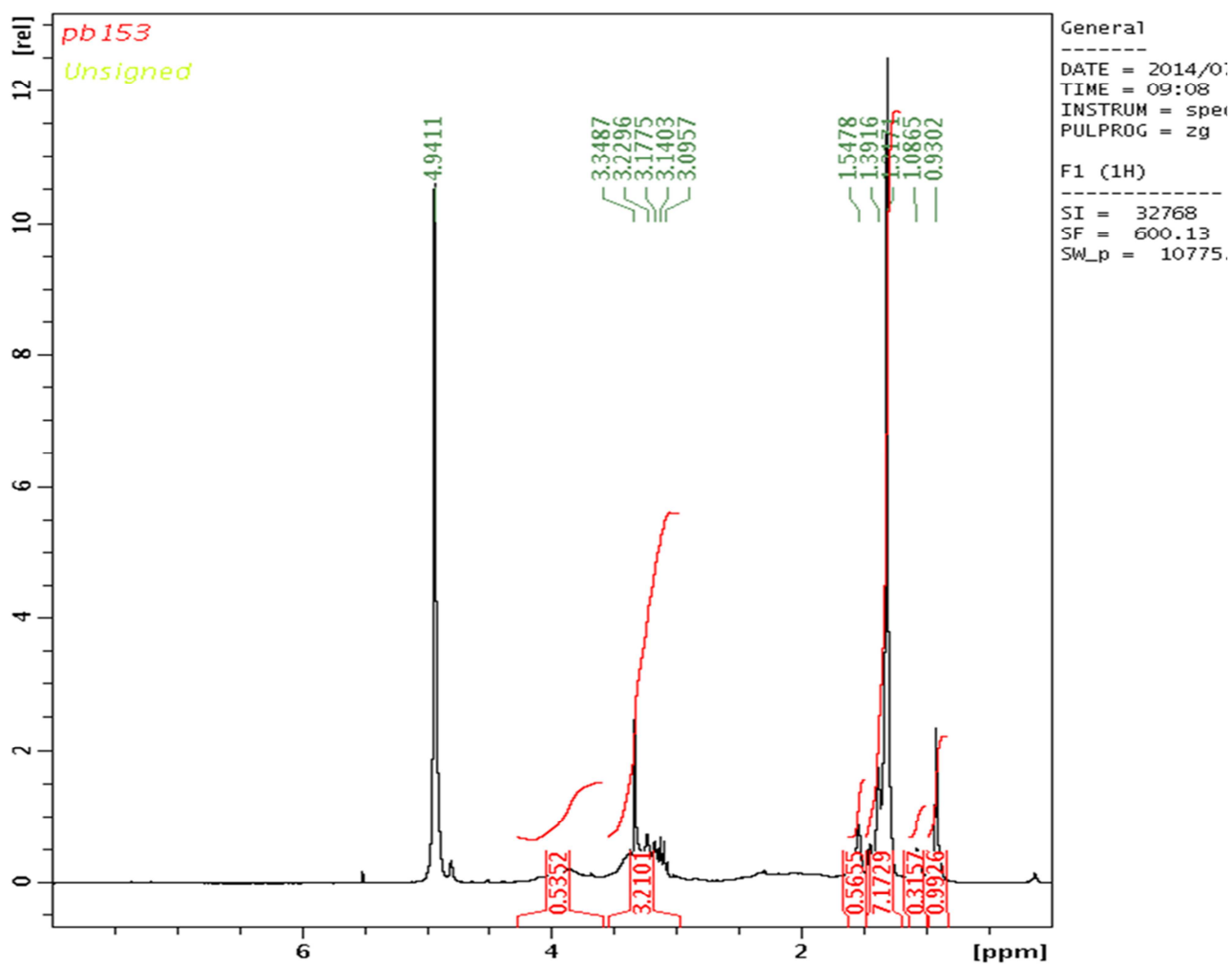
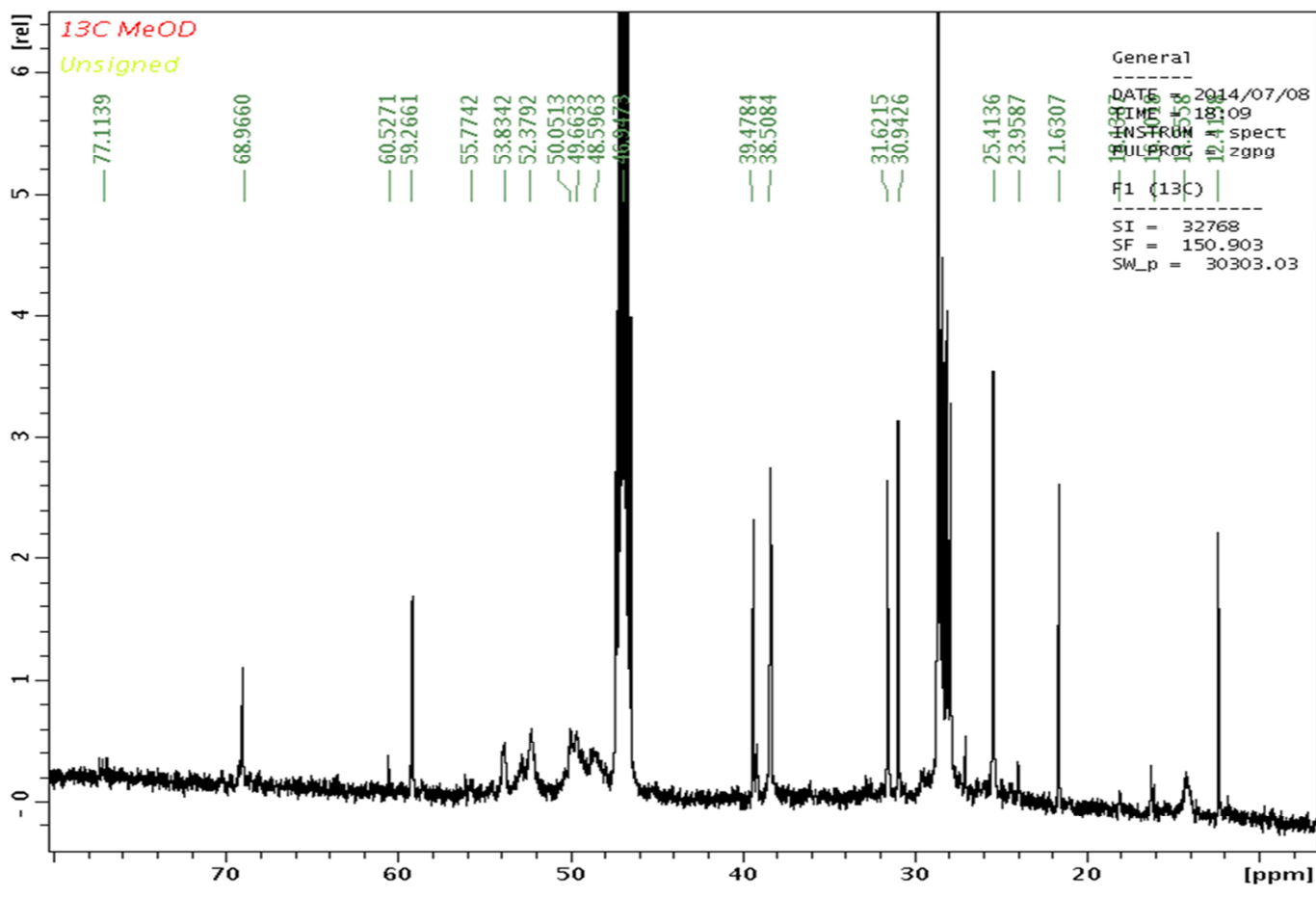
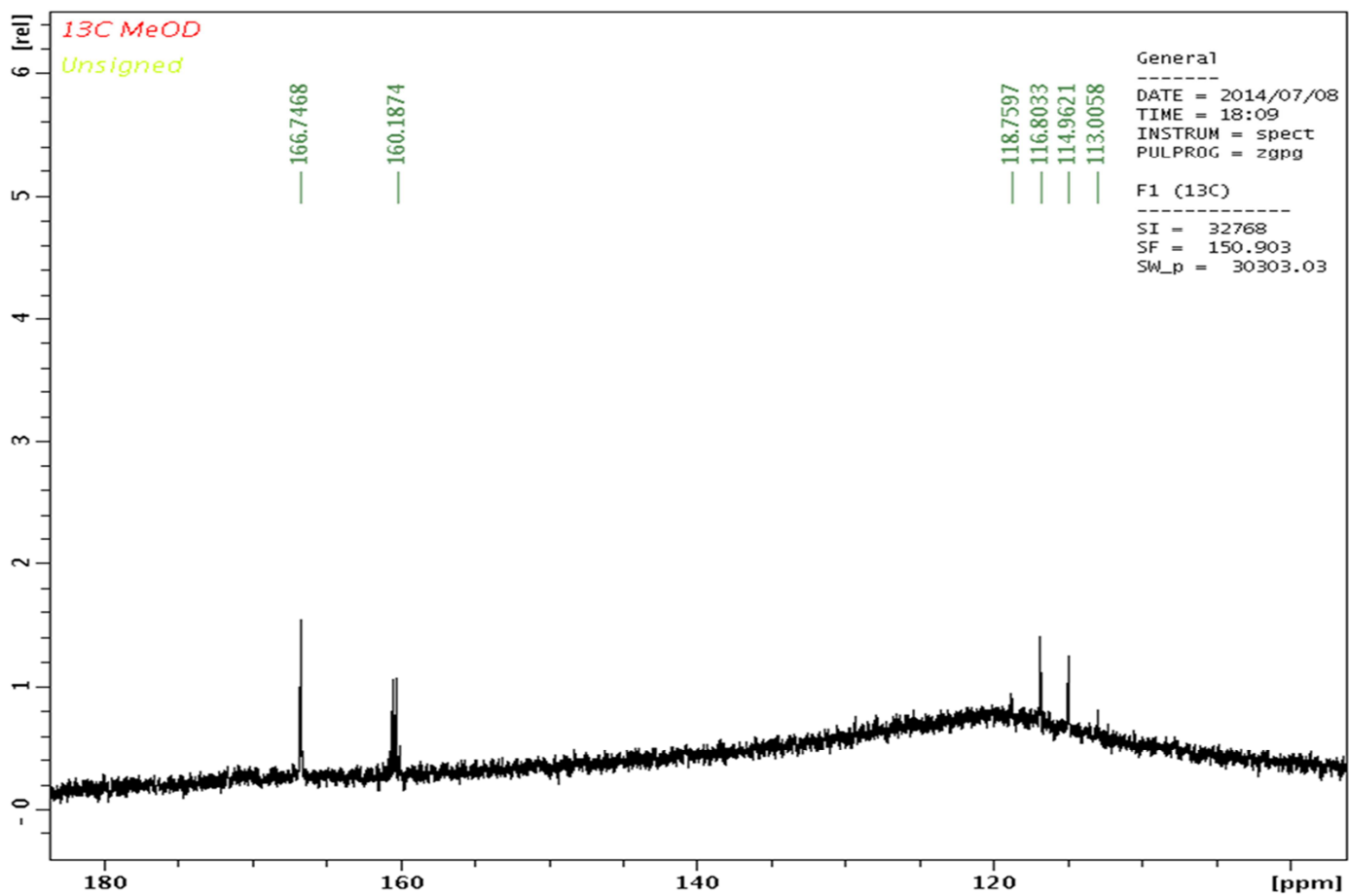
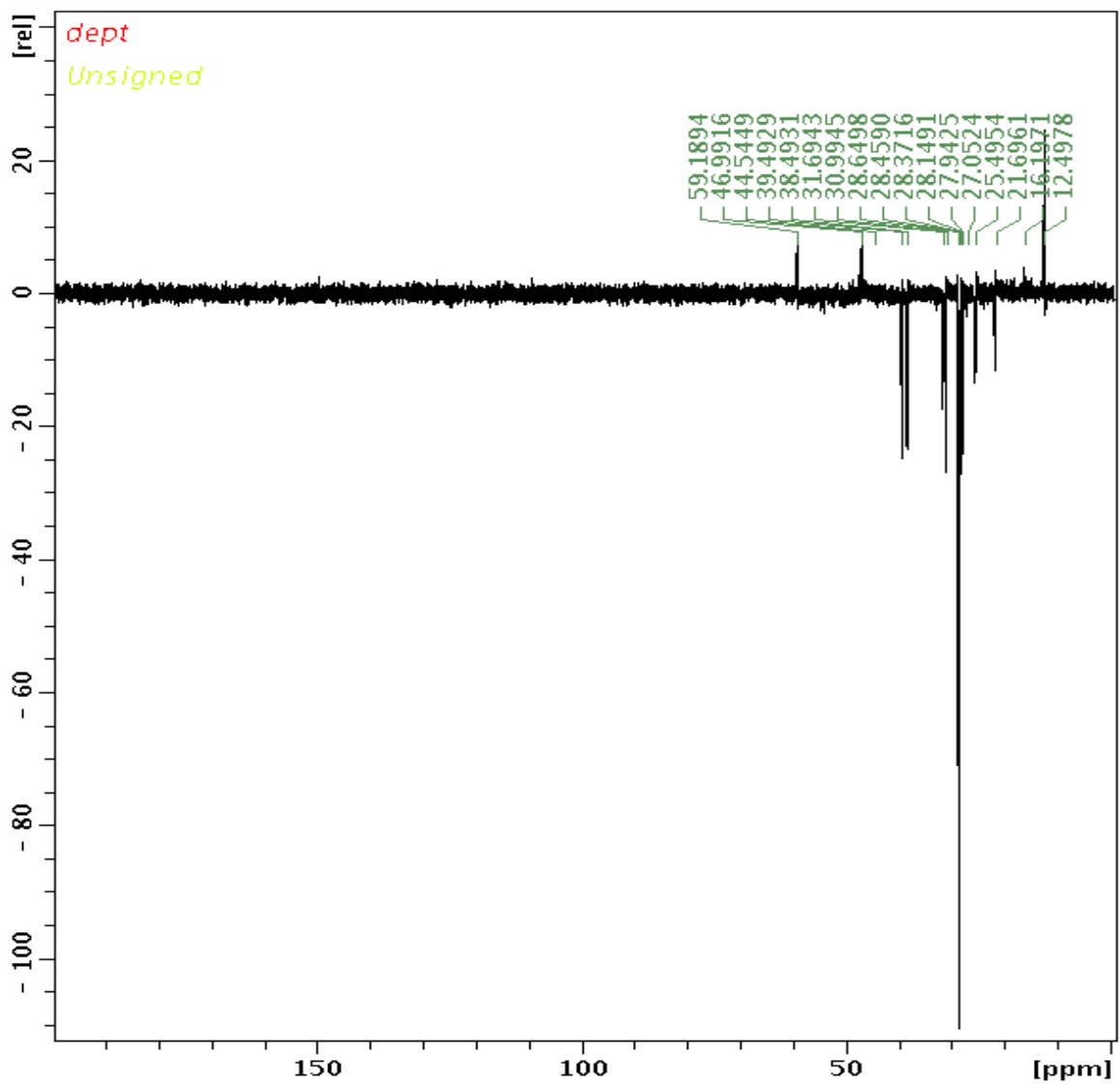


Figure 10 ^1H , ^{13}C , DEPT of C-[DOTAMA- C_6]-acetamido- $\text{C}'\text{-H-4}$ -(hexadecyl)- o -carborane (**9a**)









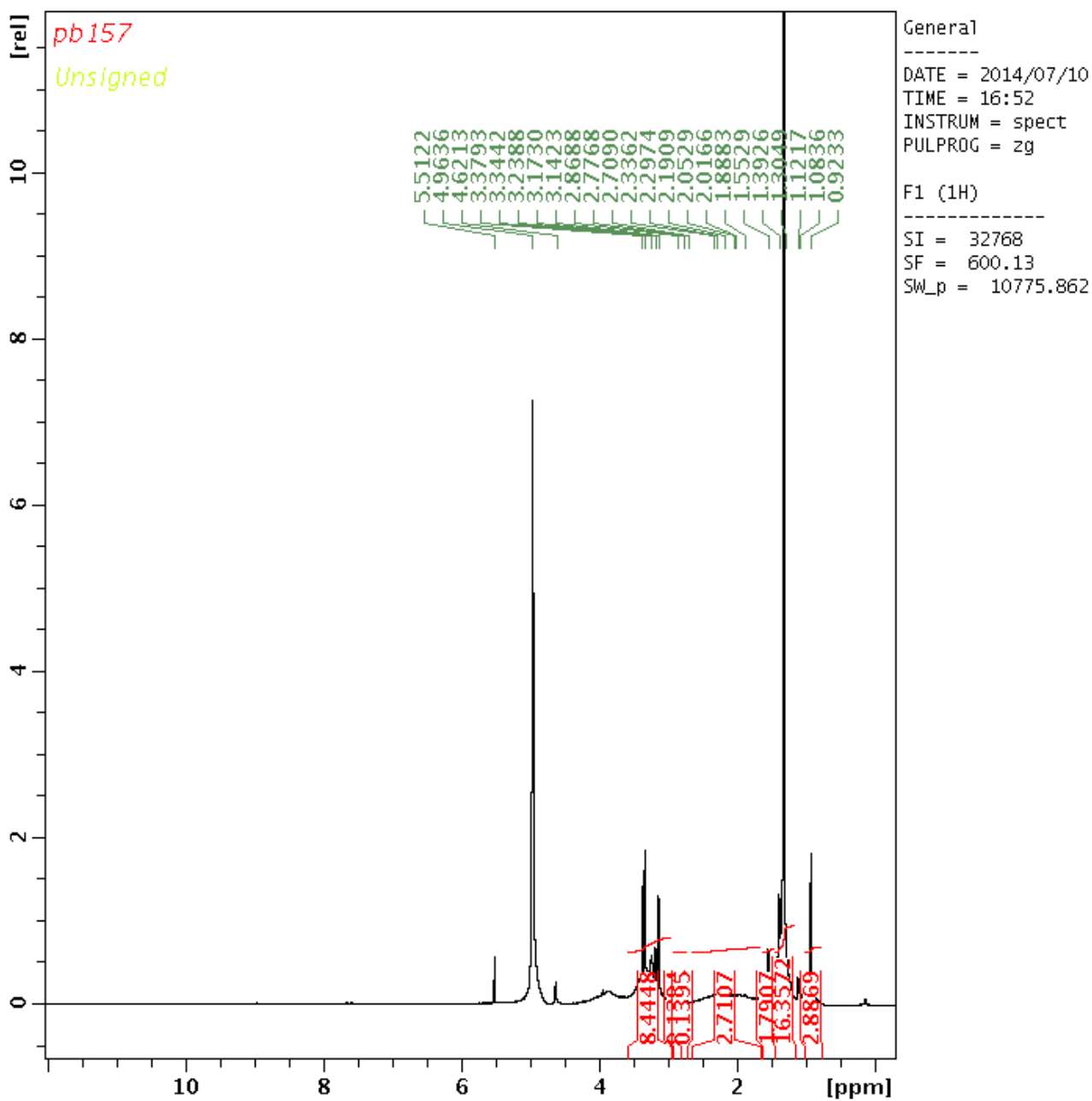
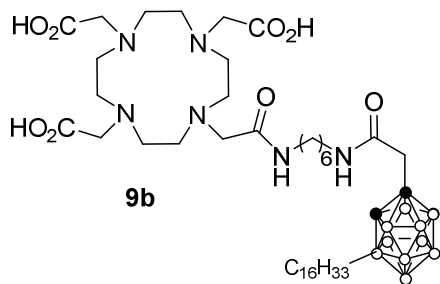
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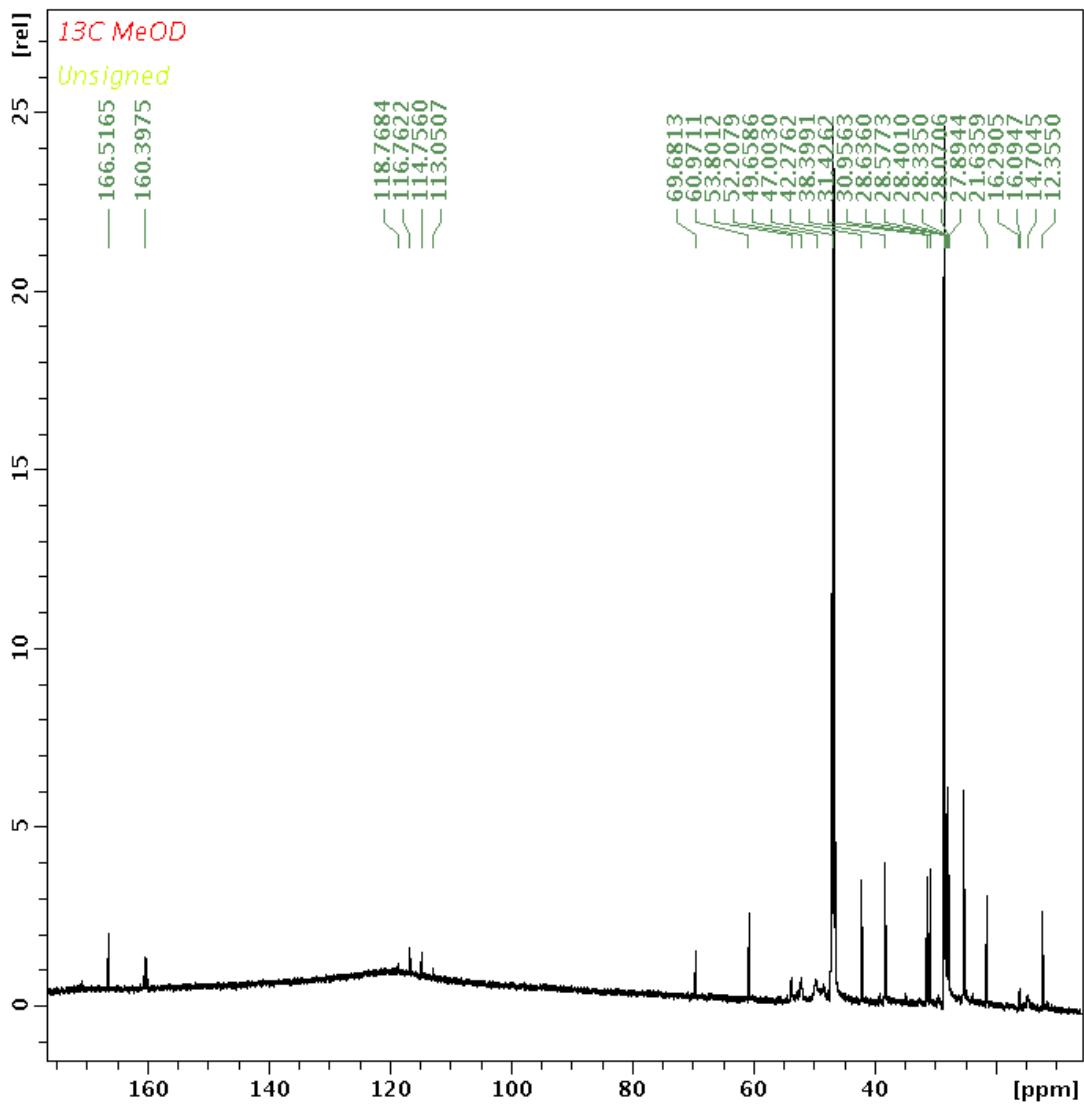
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Figure 11 ^1H , ^{13}C , DEPT of C-[DOTAMA- C_6]-acetamido- $\text{C}'\text{-H-9}$ -(hexadecyl)- o -carborane (**9b**)



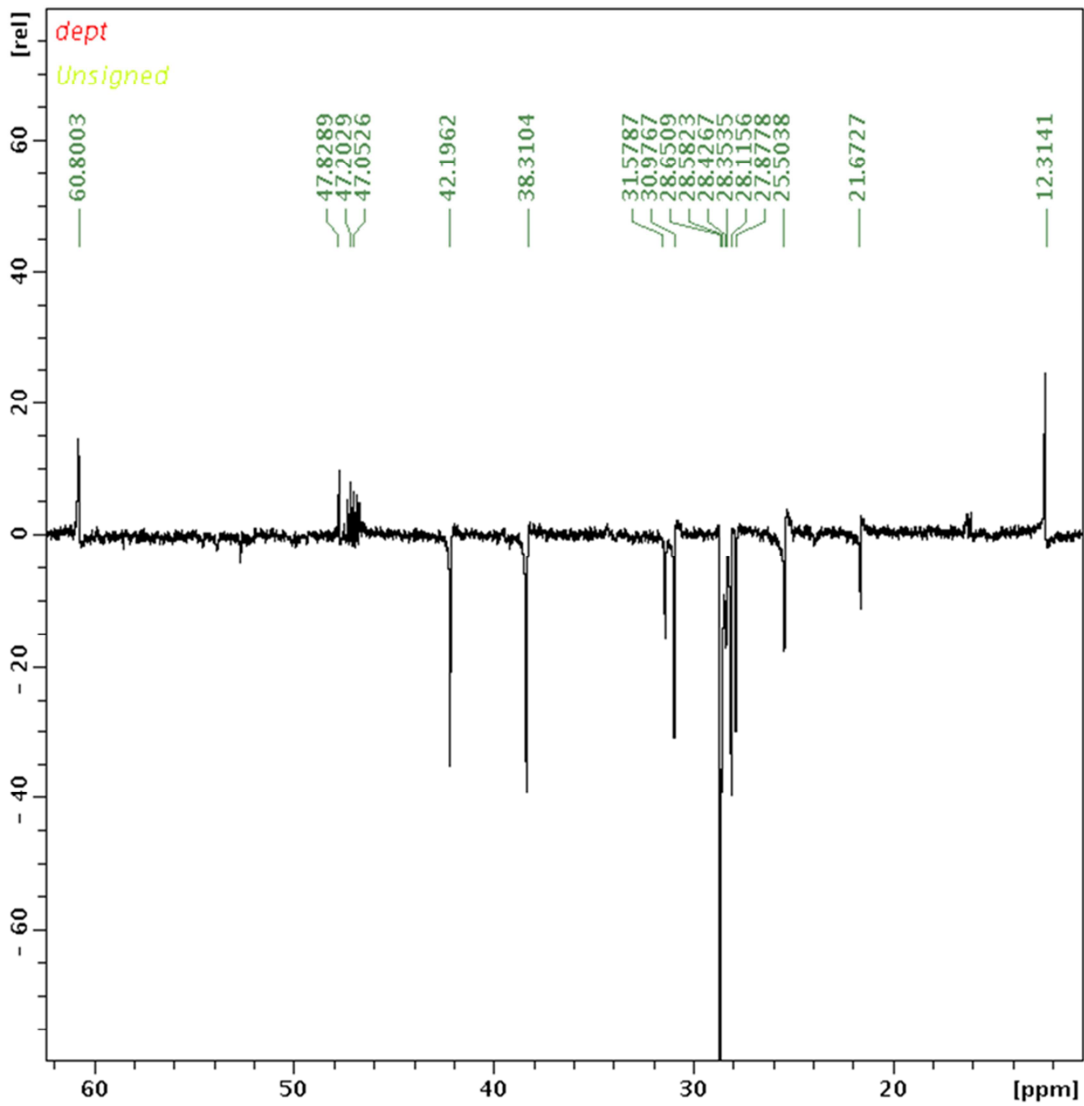


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Figure 12 Effect of HP β CD concentration on the $R_{1\text{obs}}$ values (21,5 MHz) for PB01a and PB01b

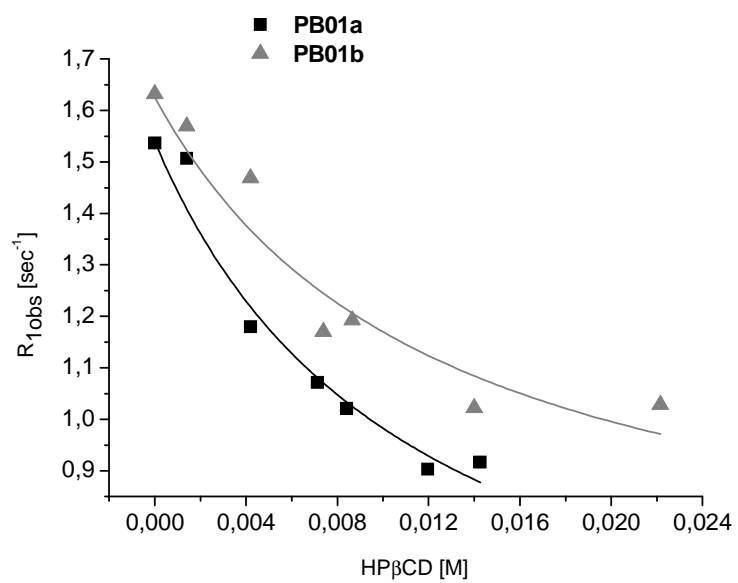


Figure 13 Determination of the Critical Micellar Concentration (CMC) of PB01a and PB01b by measuring the longitudinal water proton relaxation rates ($R_{1\text{ obs}}$) of solutions containing decreasing amounts of complex.

