

## Supporting Information

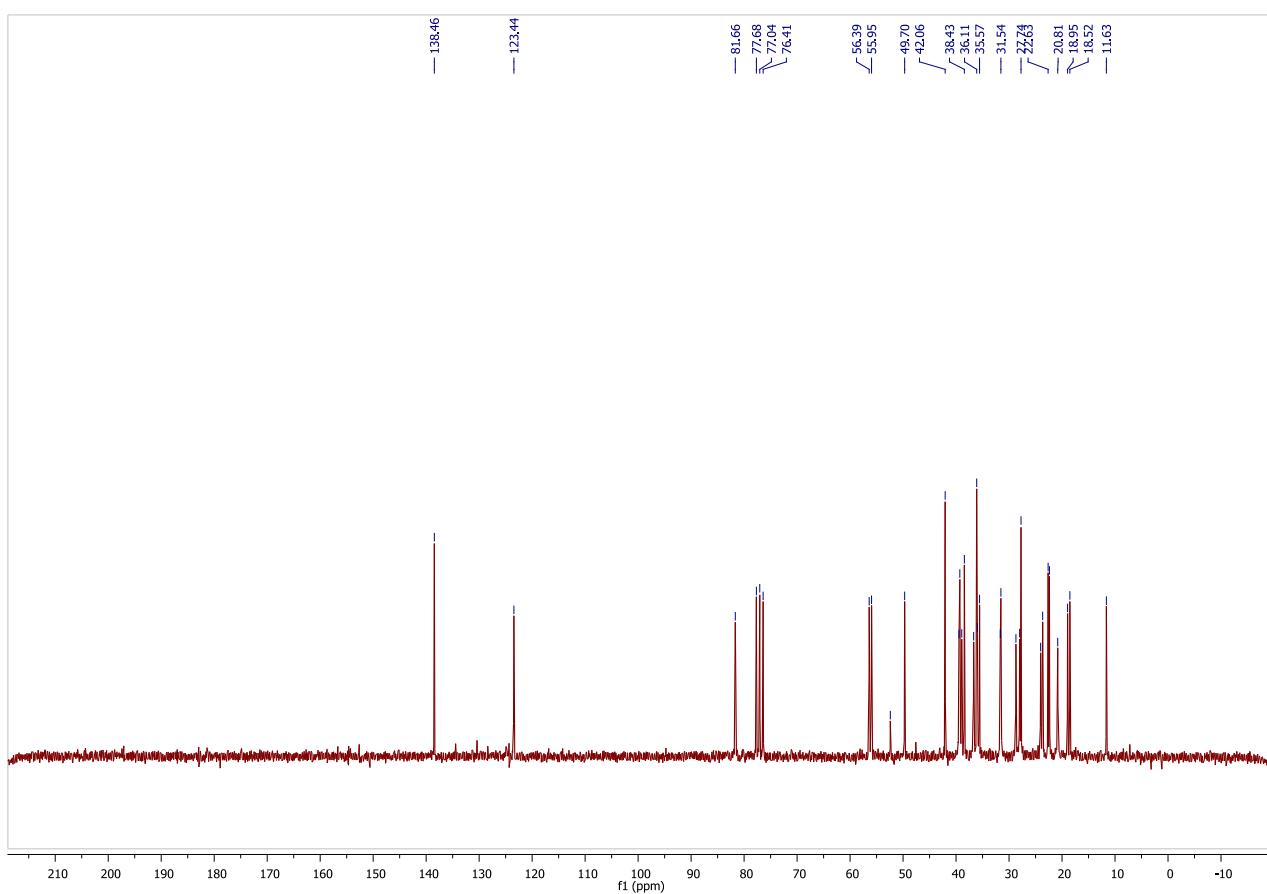
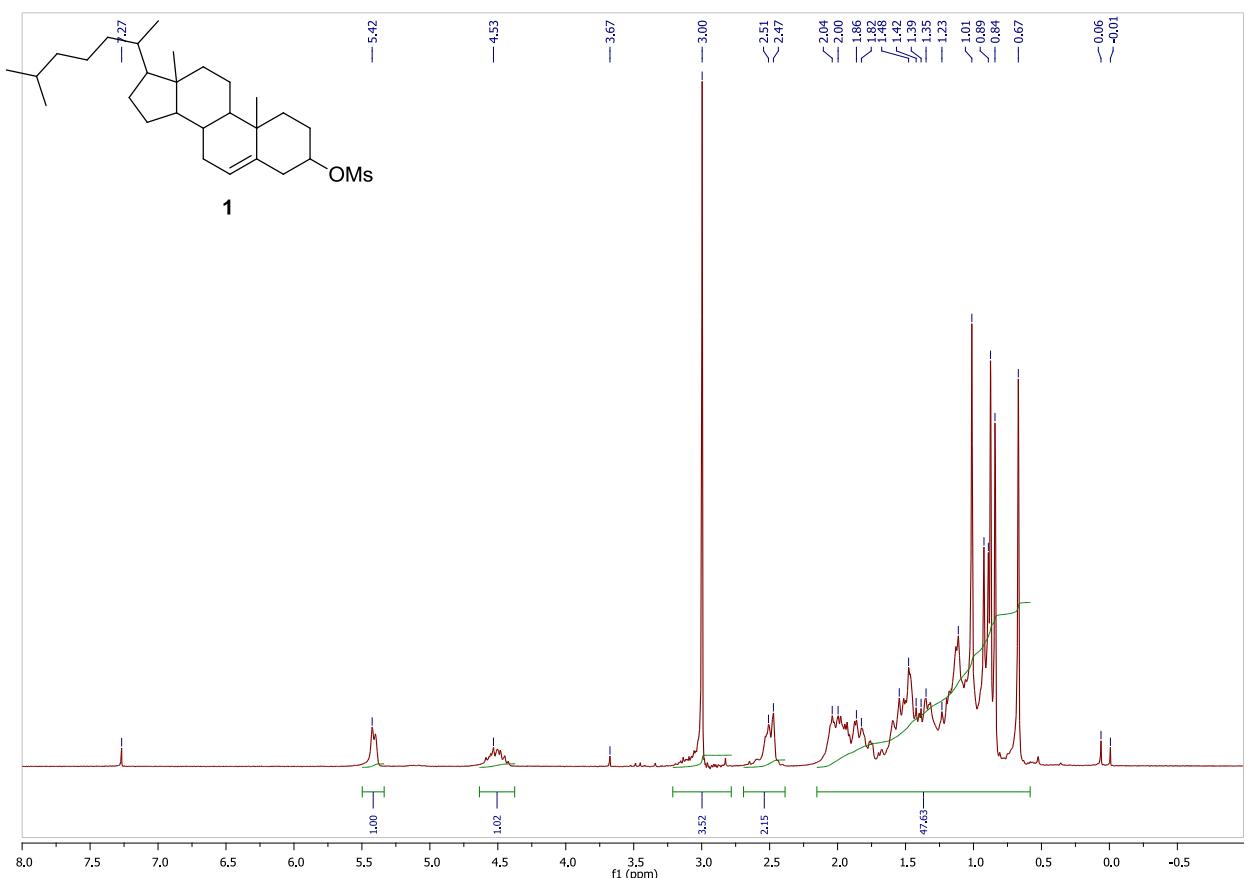
### Synthesis of Carborane-Containing Cholesterol Derivative and Evaluation as Potential Dual Agent for MRI-BNCT Applications

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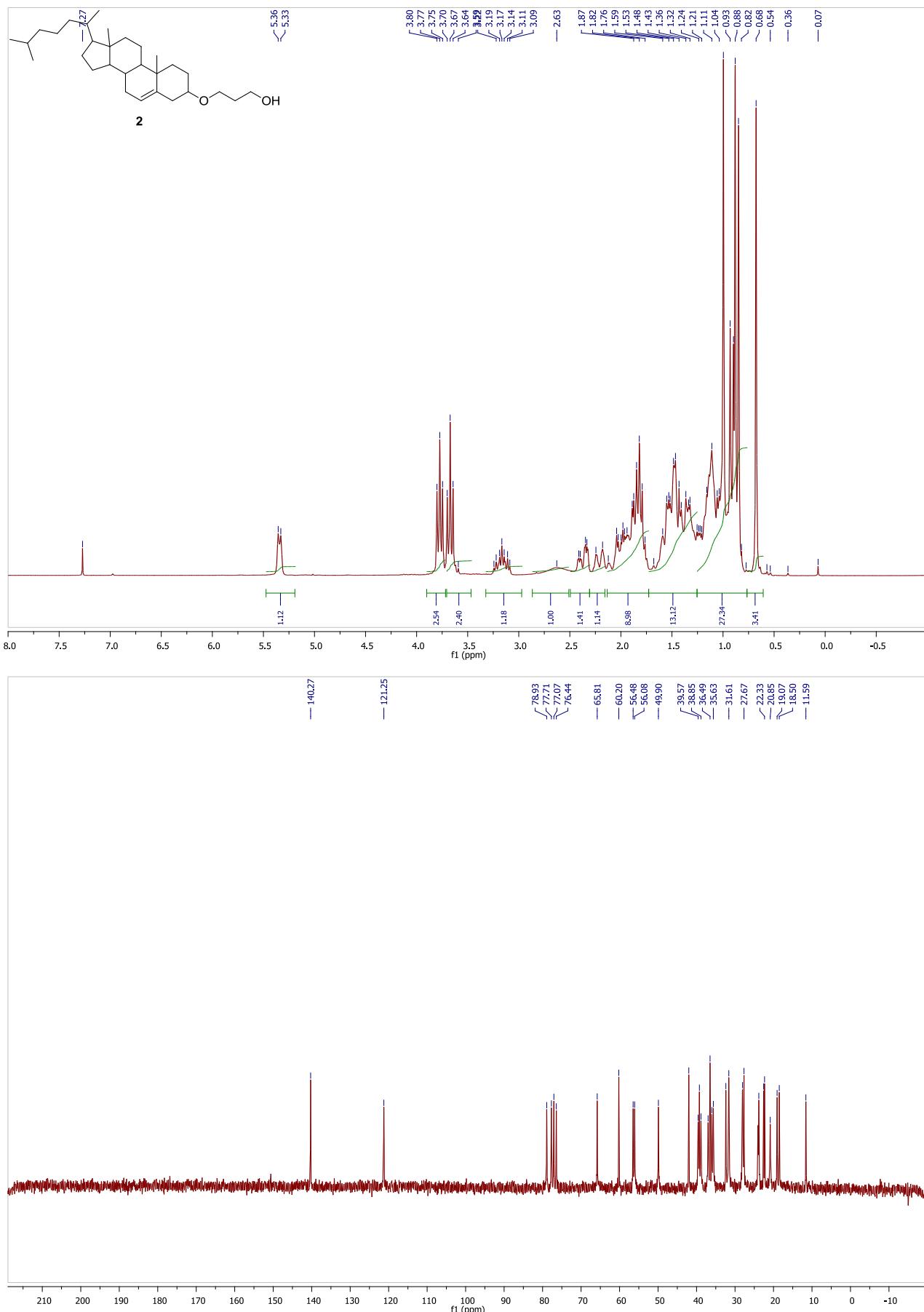
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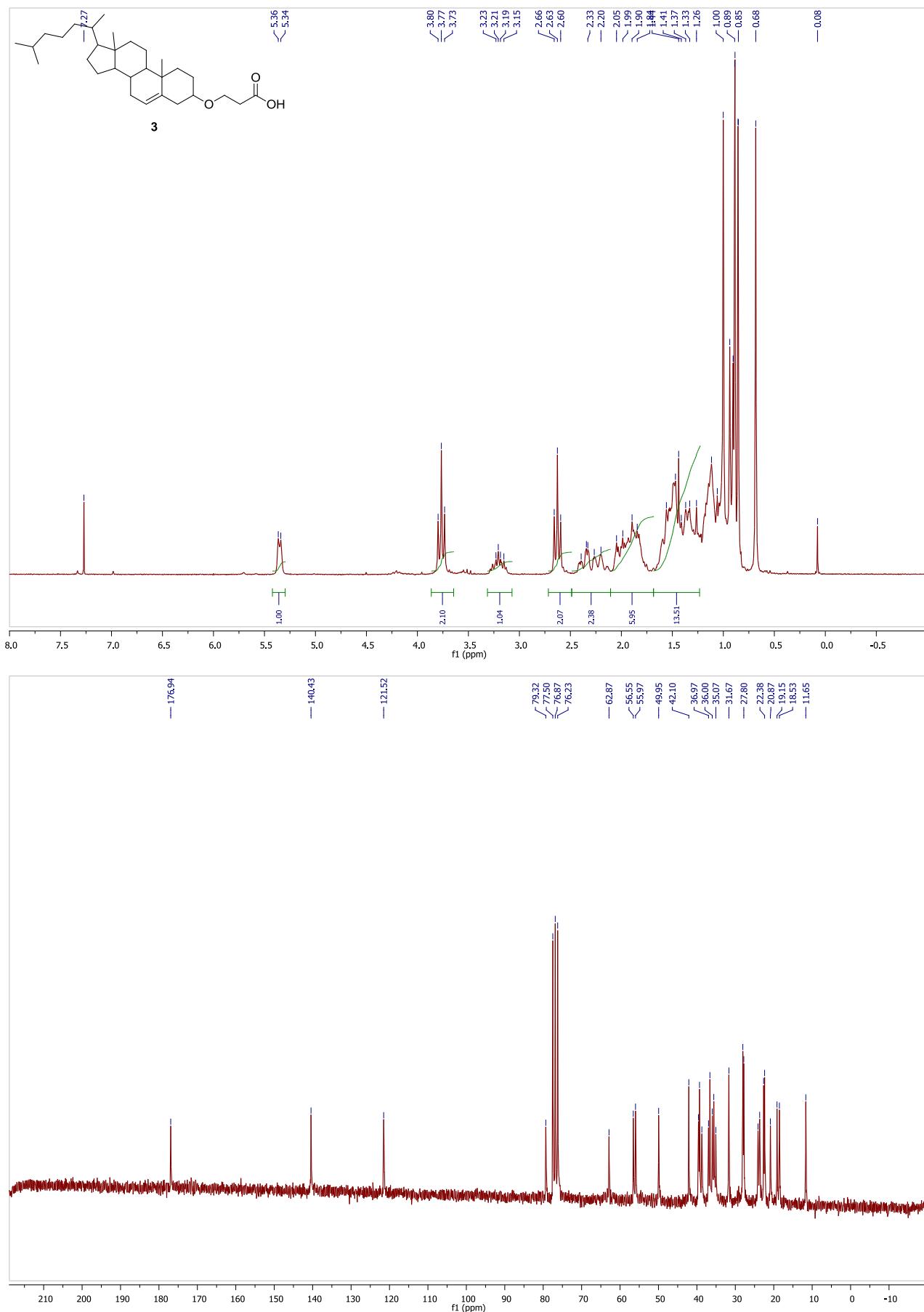
**Figure 1**  $^1\text{H}$ ,  $^{13}\text{C}$  of ( $3\beta$ )-colest-5-en-3-methanesulfonate (**1**)



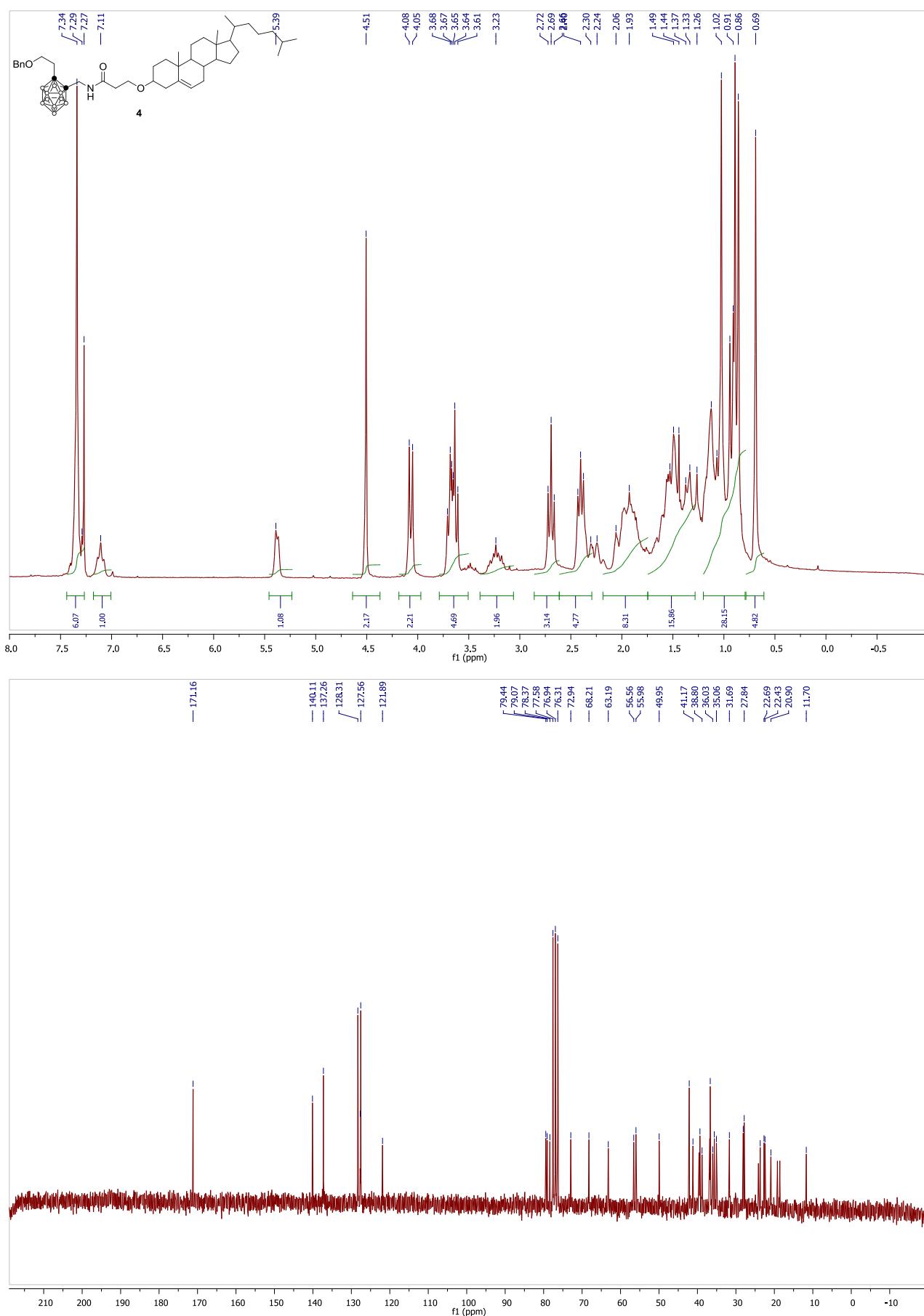
**Figure 2**  $^1\text{H}$ ,  $^{13}\text{C}$  of 3-((3 $\beta$ )-colest-5-en-3-yloxy)-propanol (**2**)



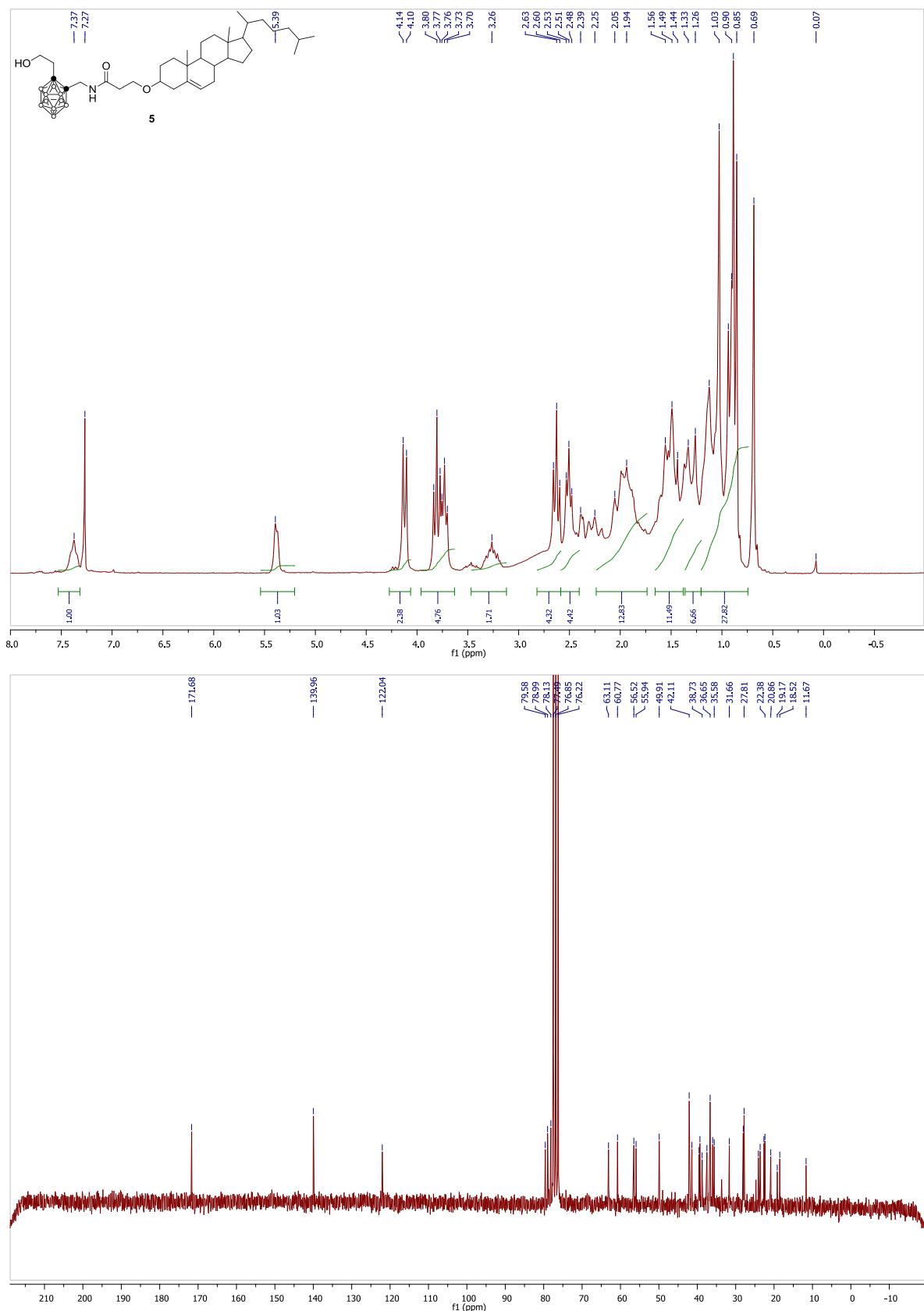
**Figure 3**  $^1\text{H}$ ,  $^{13}\text{C}$  of 3-(Cholesten-5-en-3 $\beta$ -yloxy)-propionic acid (**3**)



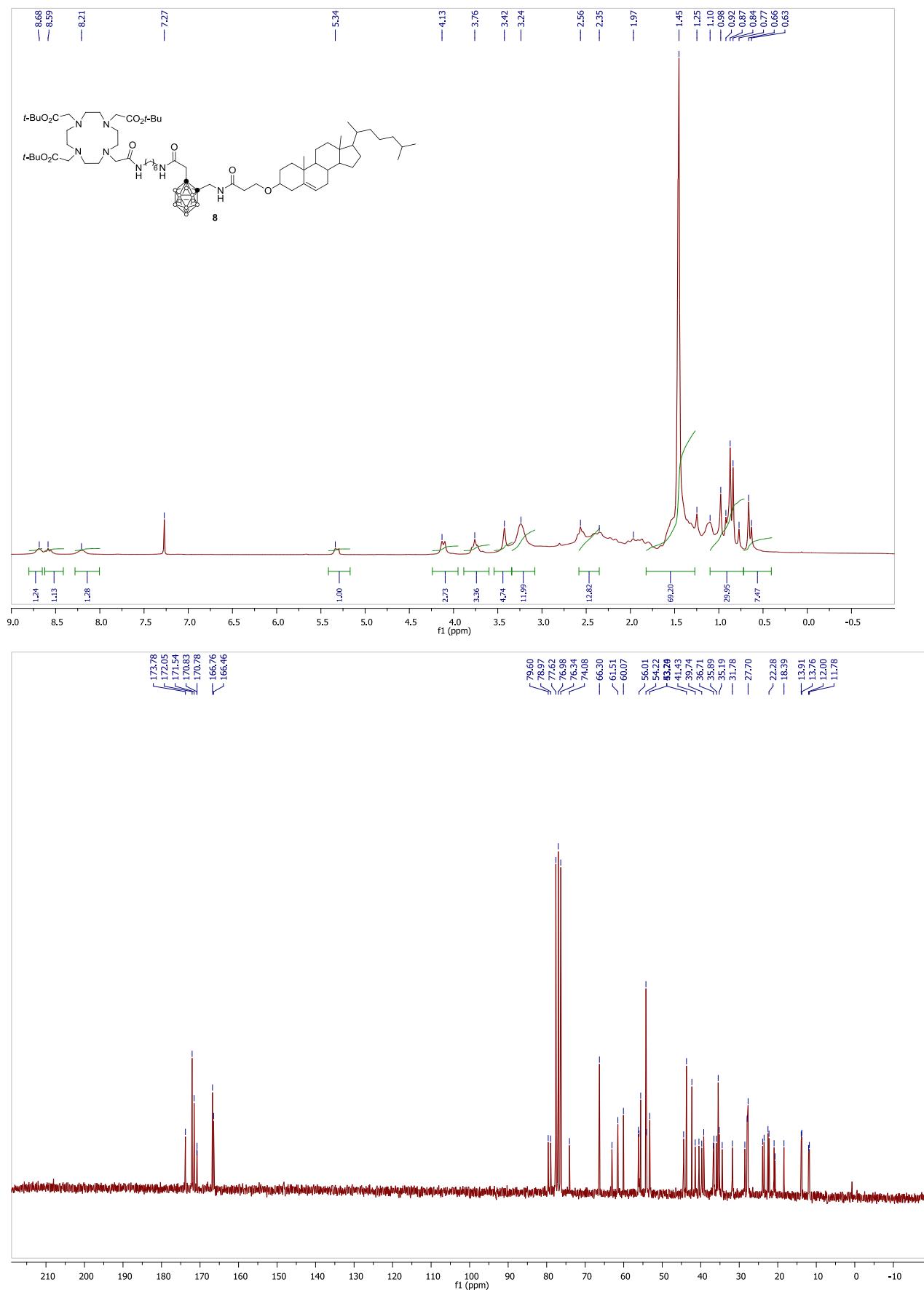
**Figure 4**  $^1\text{H}$ ,  $^{13}\text{C}$  of *C*-(2-Benzylxyethyl)-*C'*-[cholesten-5-en-3 $\beta$ -yloxy-(3-propionacetoamidomethyl)]-*o*-carborane (**4**)



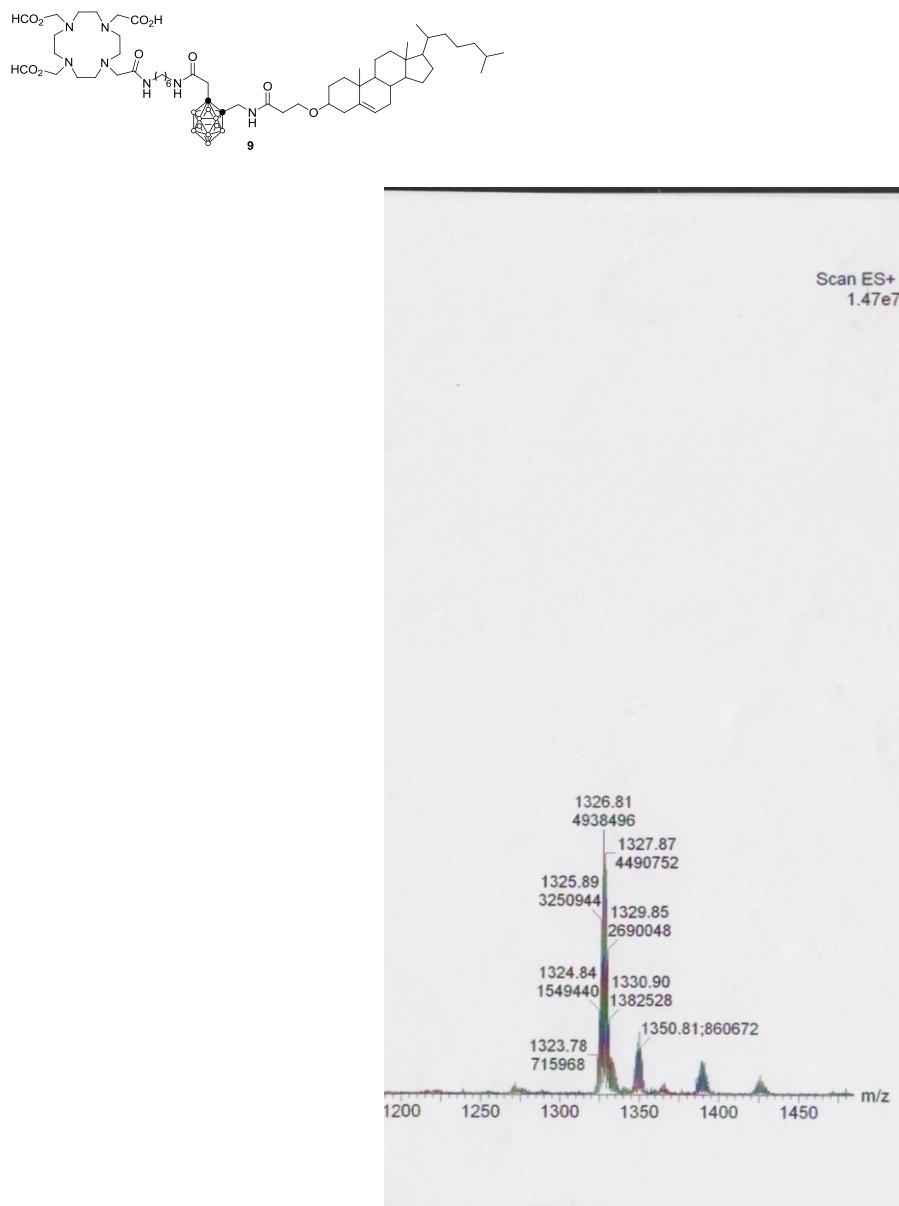
**Figure 5**  $^1\text{H}$ ,  $^{13}\text{C}$  of *C*-(Hydroxyethyl)-*C'*-[cholesten-5-en-3 $\beta$ -yloxy-(3-propionacetoamidomethyl)]-*o*-carborane (**5**)



**Figure 6**  $^1\text{H}$ ,  $^{13}\text{C}$  of *C*-[*N*-*tert*-ButylDOTAMA- $\text{C}_6$ -)-carbamoylmethyl]-*C*'-[cholesten-5-en-3 $\beta$ -yloxy-(3-propionacetoamidomethyl)-*o*-carborane (**8**)



**Figure 7** ESI mass spectra of *C*-[DOTAMA-C<sub>6</sub>-)-carbamoylmethyl]-*C'*-[cholesten-5-en-3 $\beta$ -yloxy-(3-propionacetoamidomethyl)-*o*-carborane (**9**)



**Figure 8**  $^1\text{H}$ ,  $^{13}\text{C}$  spectrum of *C*-(2-benzyloxyethyl)-*C'*-aminomethyl-*o*-carborane (**7**)