

Supporting Information

Fluorescently labeled xylosides offer insight into the biosynthetic pathways of glycosaminoglycans.

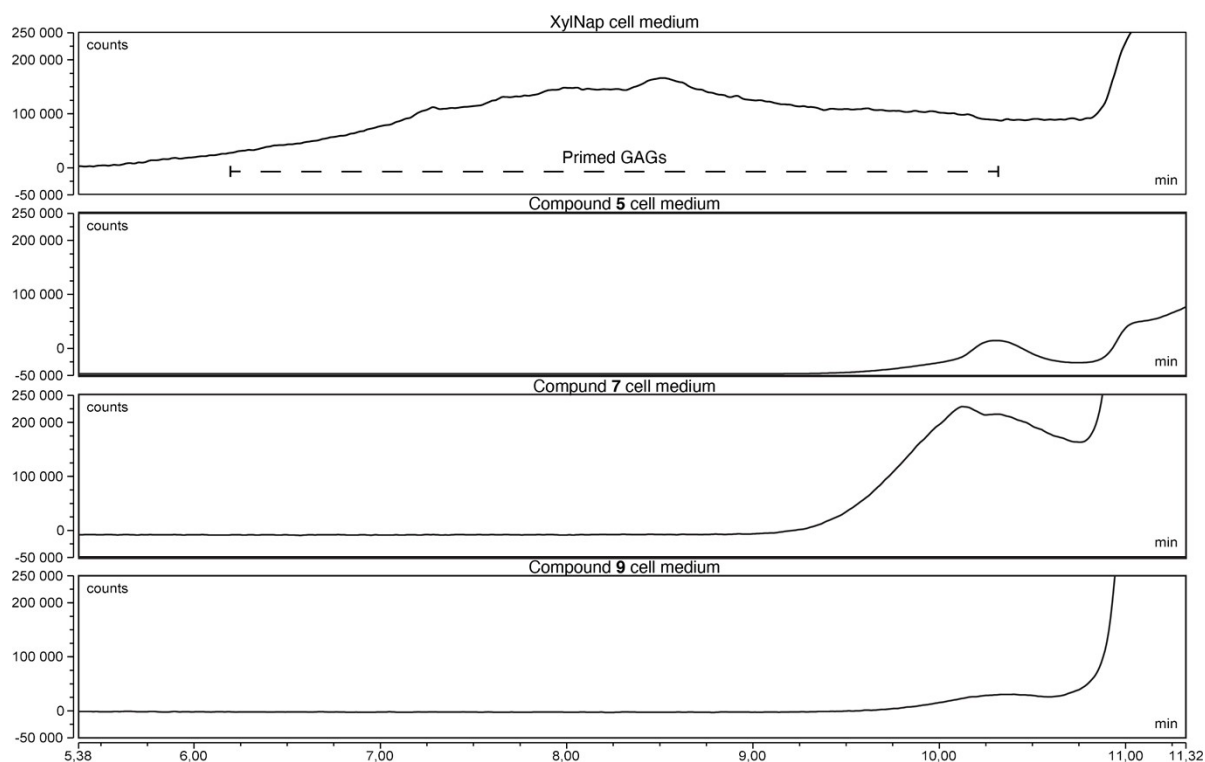
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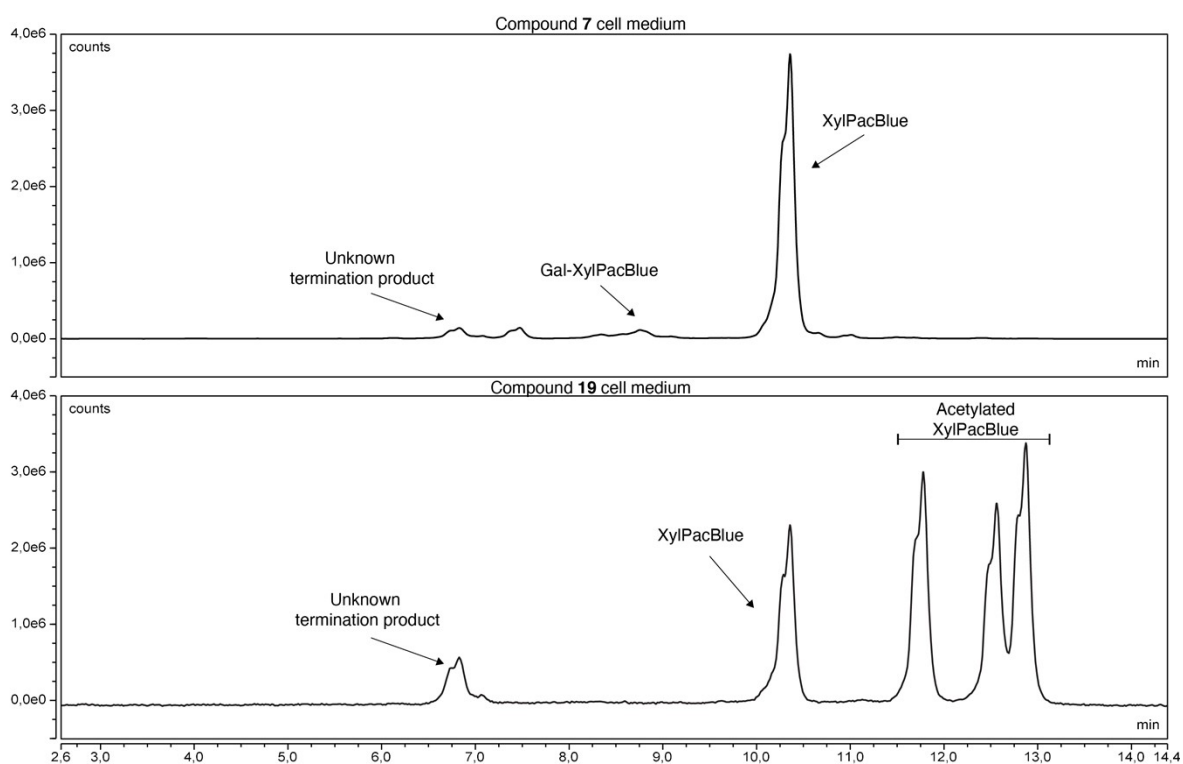
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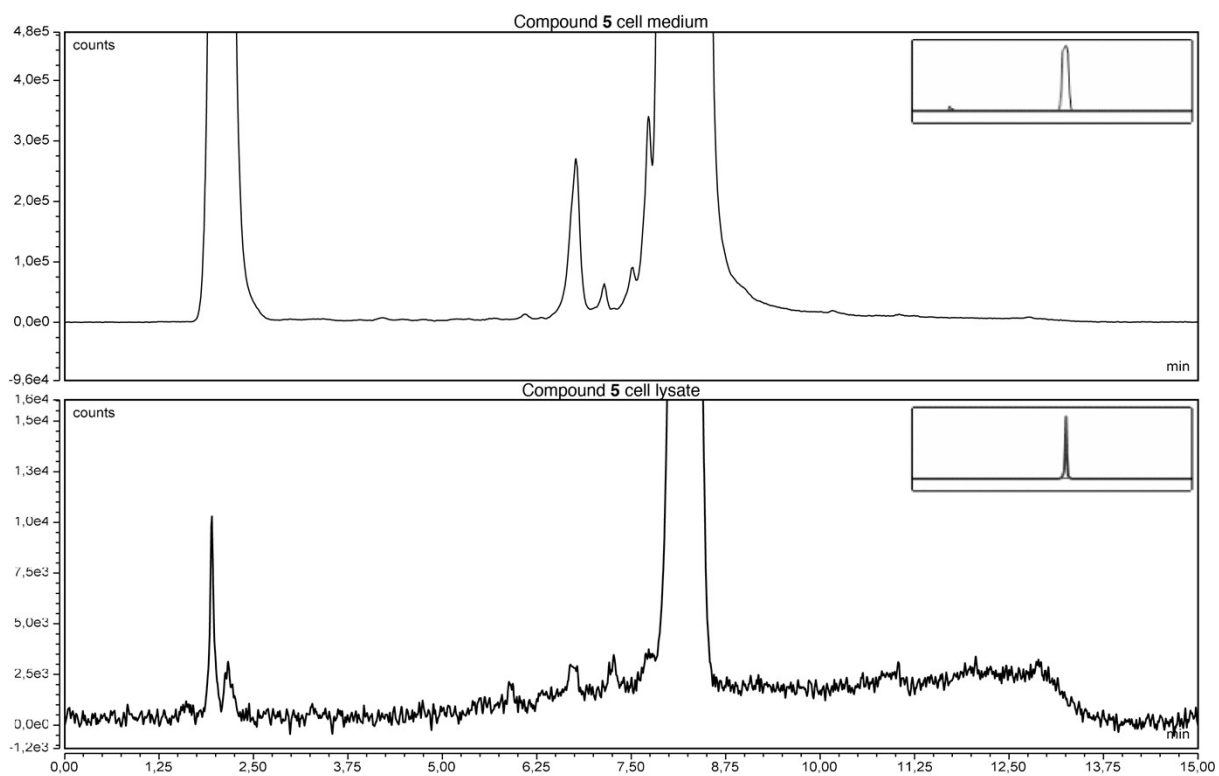
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|---|--------|
| 1. Chromatographic analysis | S2-S3 |
| 2. ¹ H-NMR and ¹³ C-NMR spectra | S4-S23 |



Supplementary Figure 1. Size-exclusion chromatography analysis of conditioned medium from A549 cells treated with 0.1 mM XylNap, 5, 7 or 9. Fluorescence was monitored at 229/372 (Ex./Em.) for XylNap and 410/455 (Ex./Em.) for PacBlue compounds.



Supplementary Figure 2. Reversed-phase chromatography analysis of products secreted by A549 cells after stimulation with 0.1 mM non-acetylated (top, 7) or fully acetylated (bottom, 19) compound.



Supplementary Figure 3. Reversed-phase chromatography analysis of conditioned medium and cell lysate from A549 cells treated with 0.1 mM **5**.

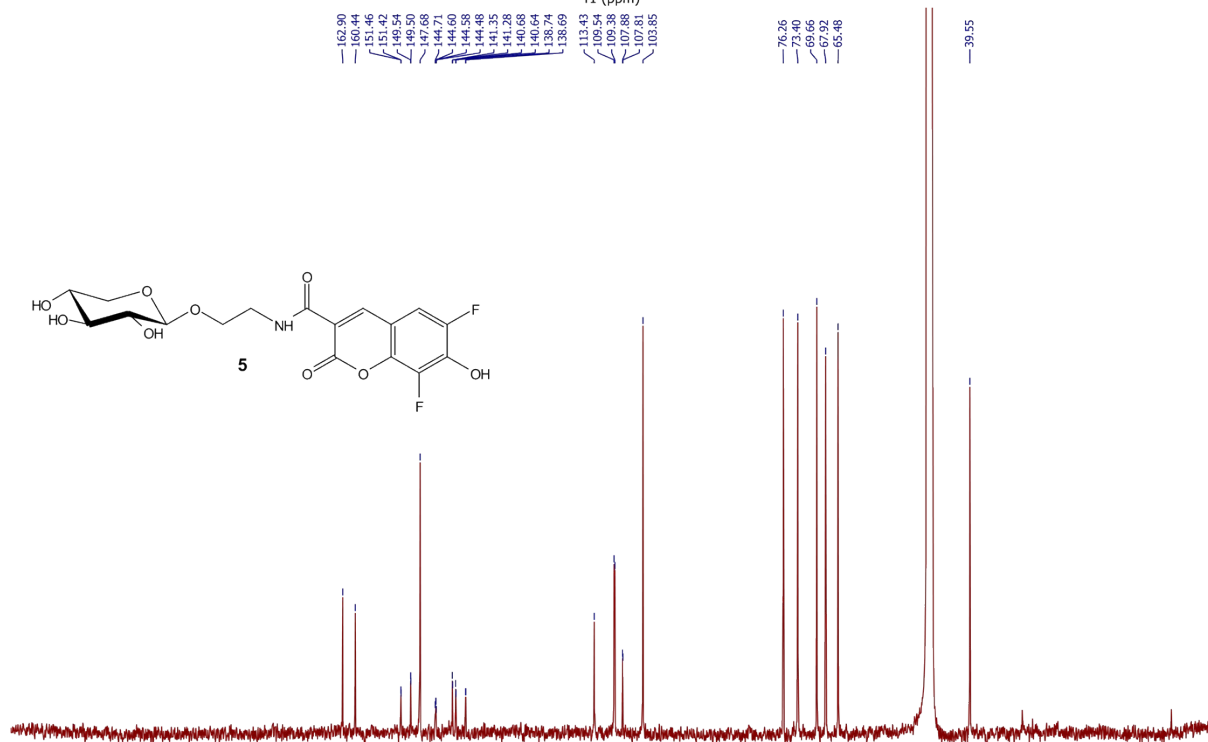
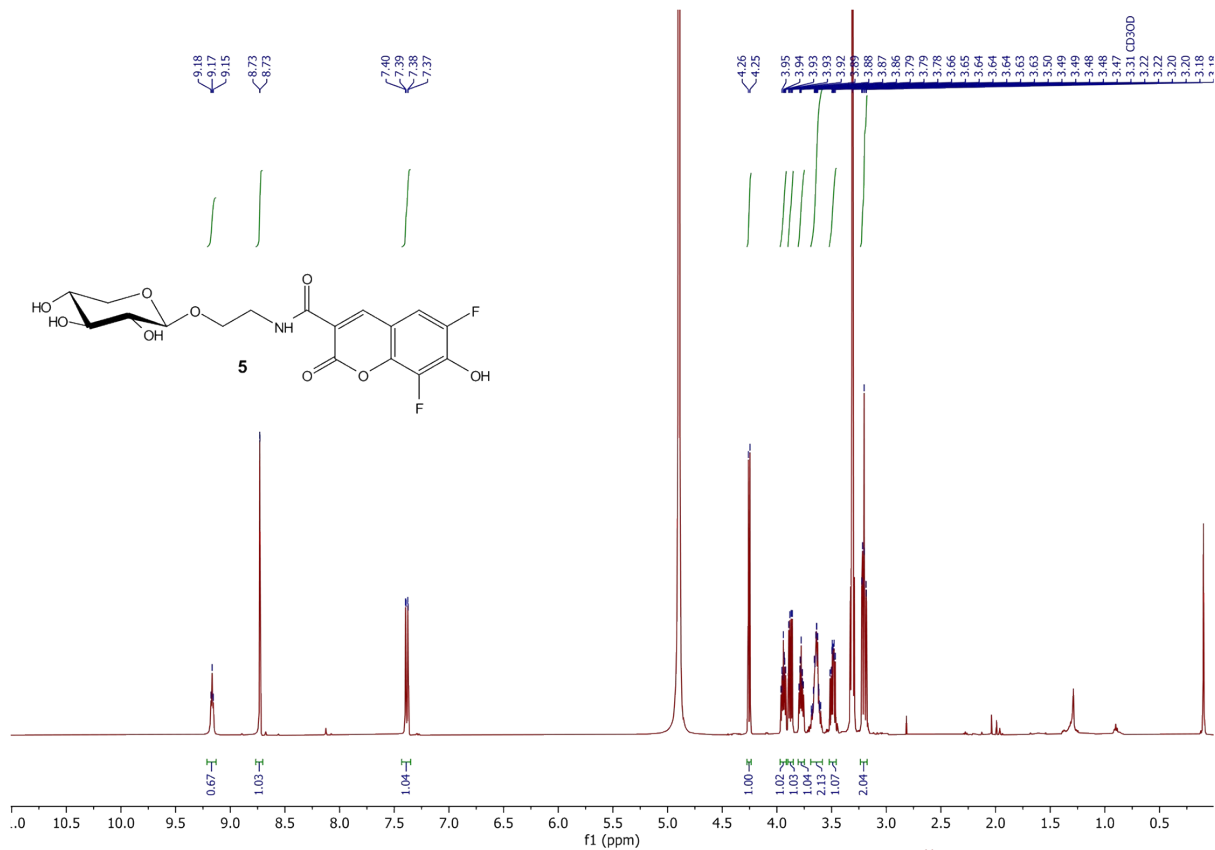


Figure S5 – ¹H and ¹³C spectrum for compound 5

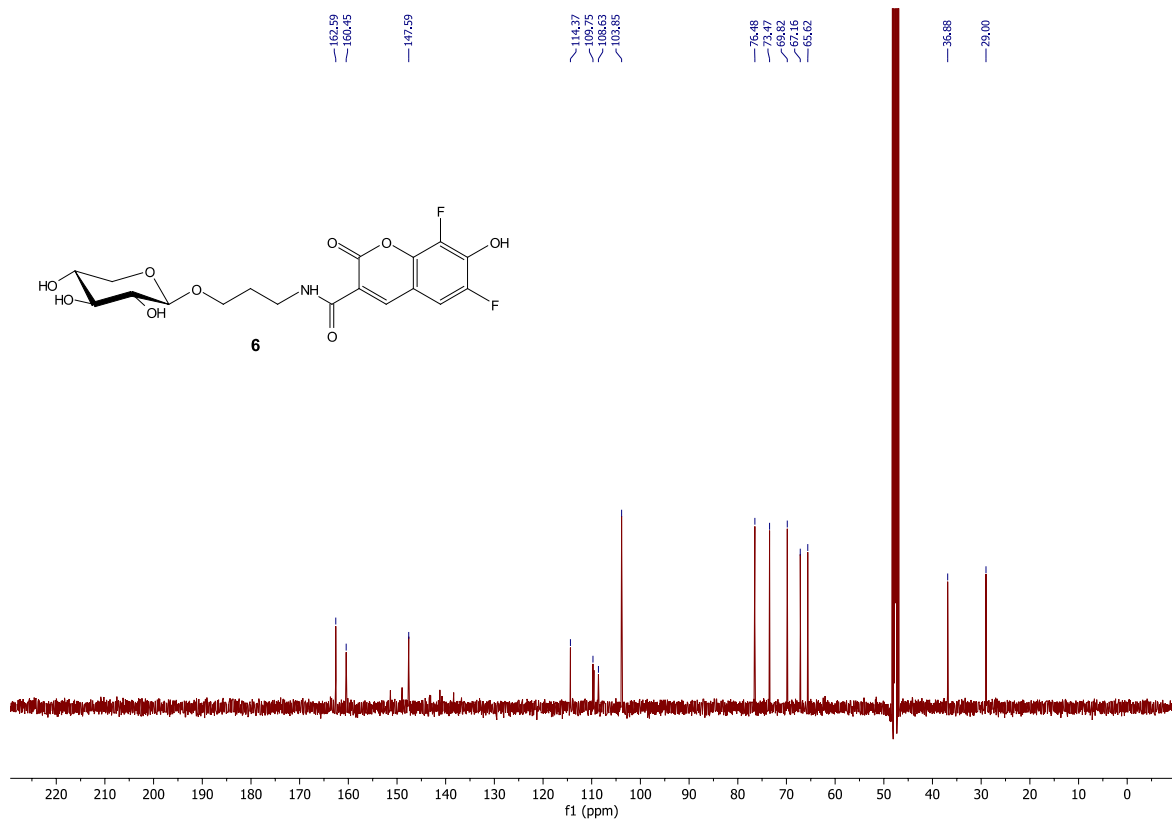
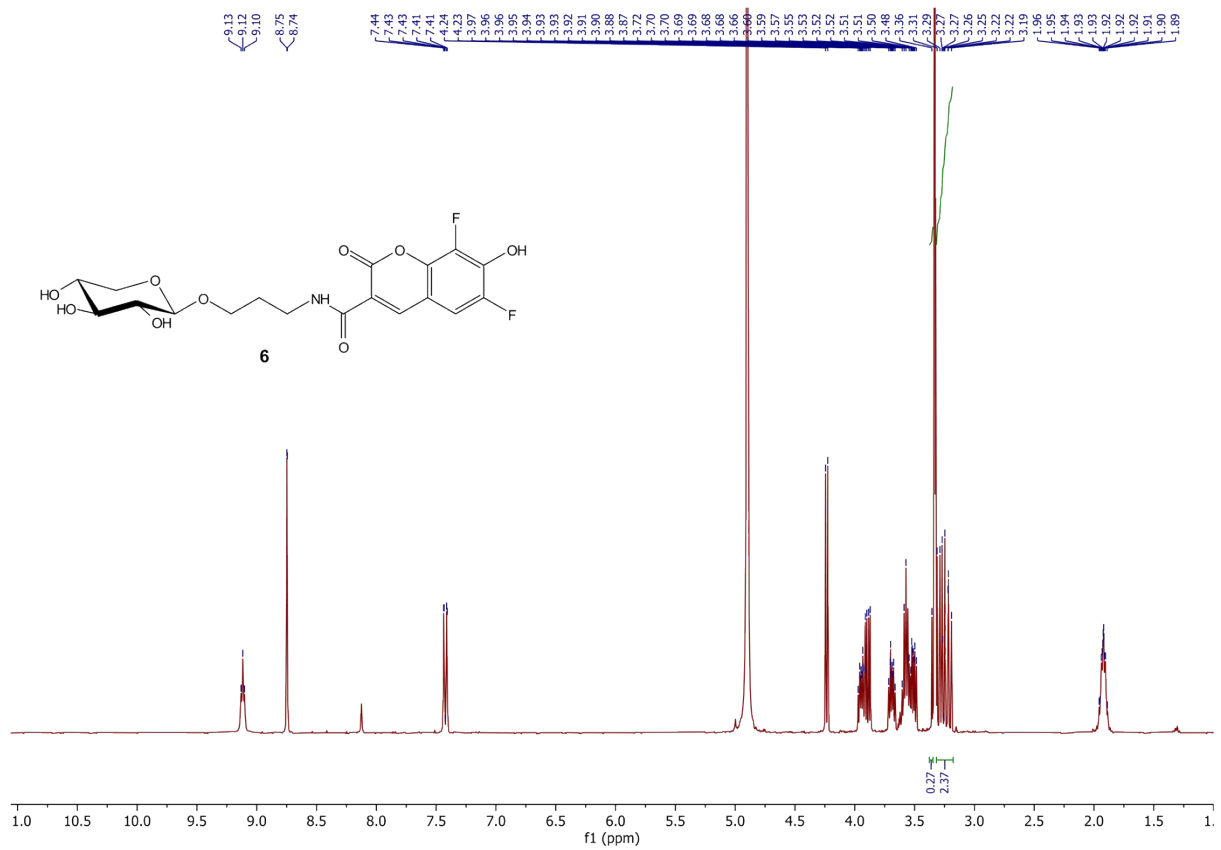


Figure S6 – ^1H and ^{13}C spectrum for compound 6

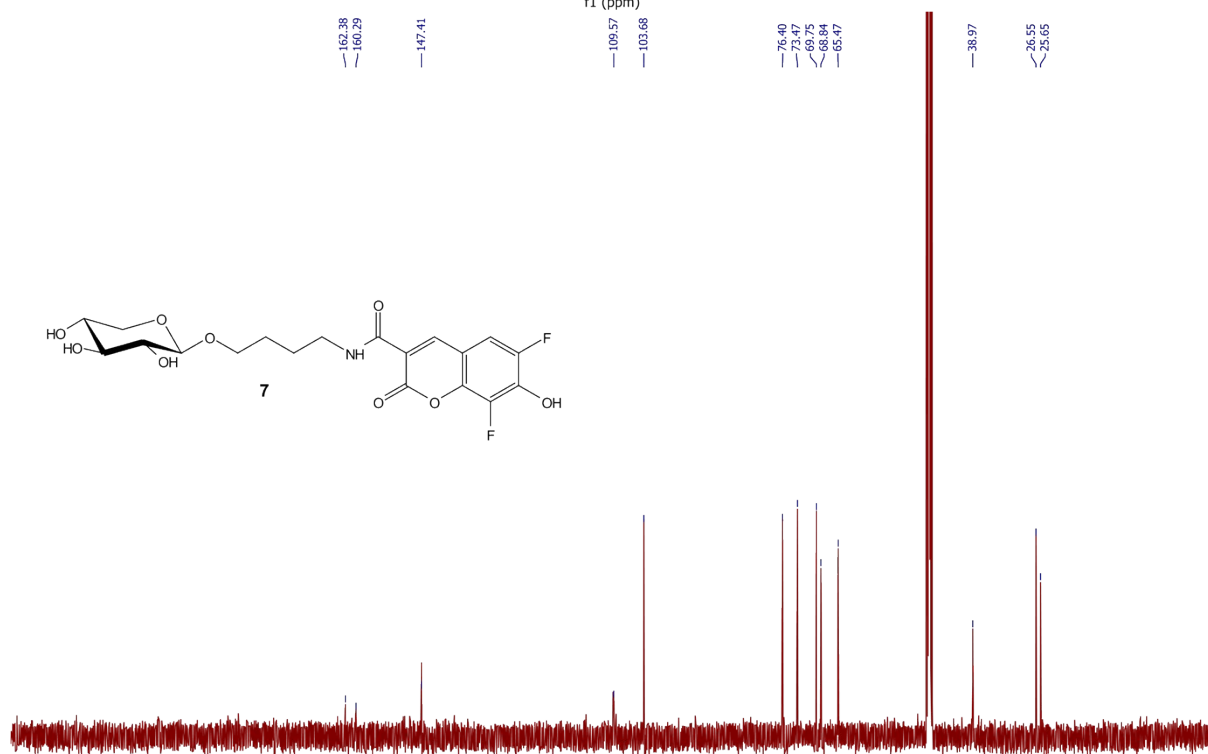
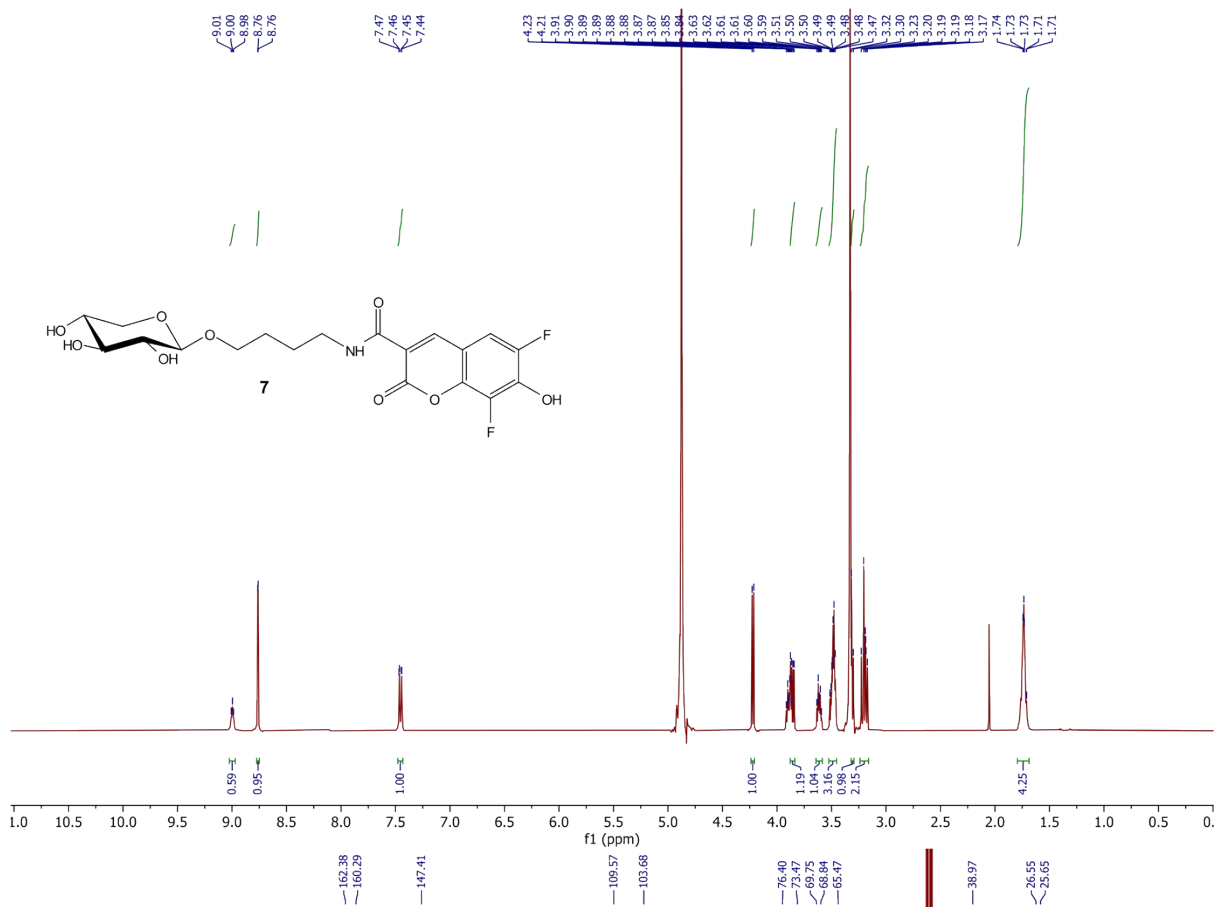


Figure S7 – ¹H and ¹³C spectrum for compound 7

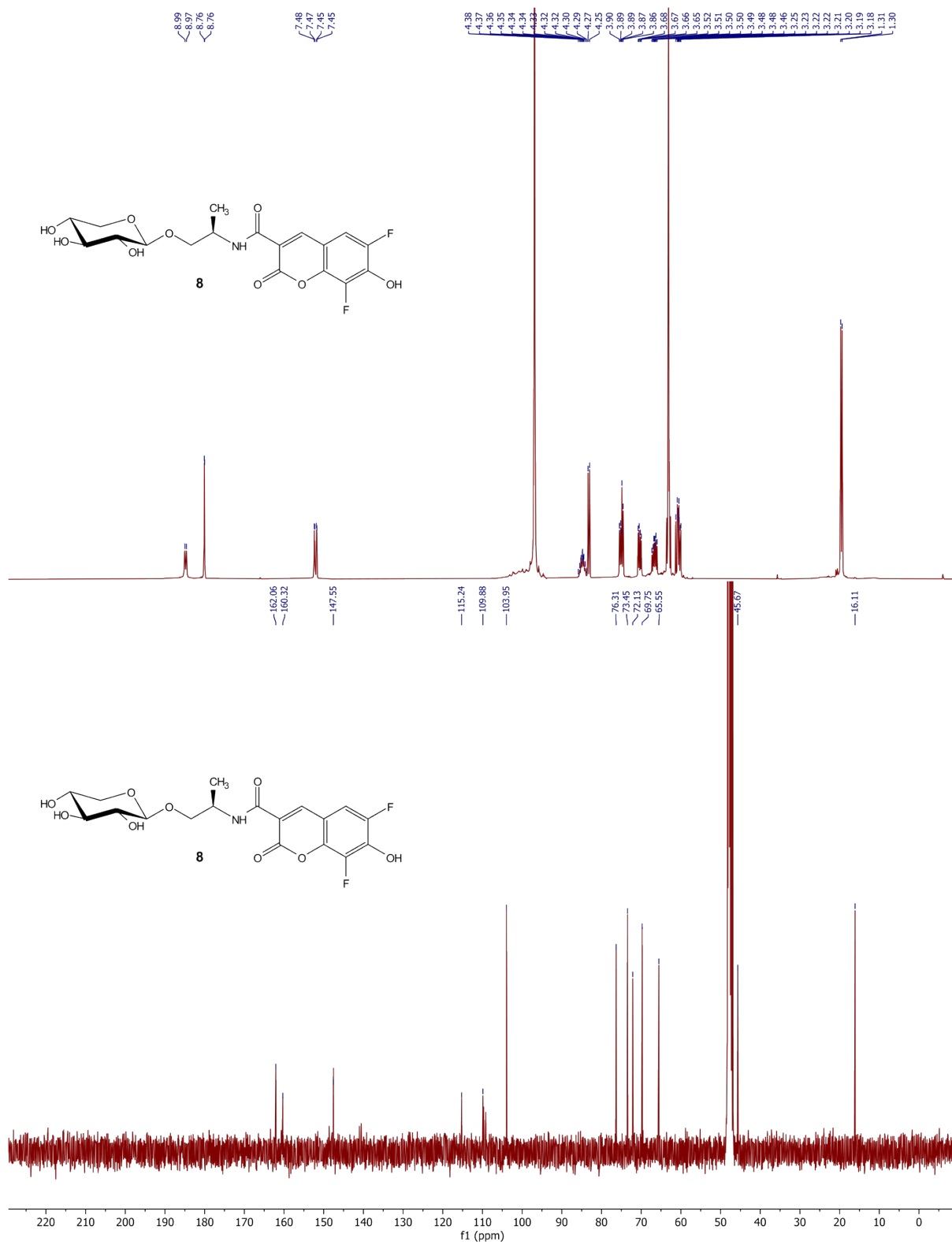


Figure S8 – ¹H and ¹³C spectrum for compound 8

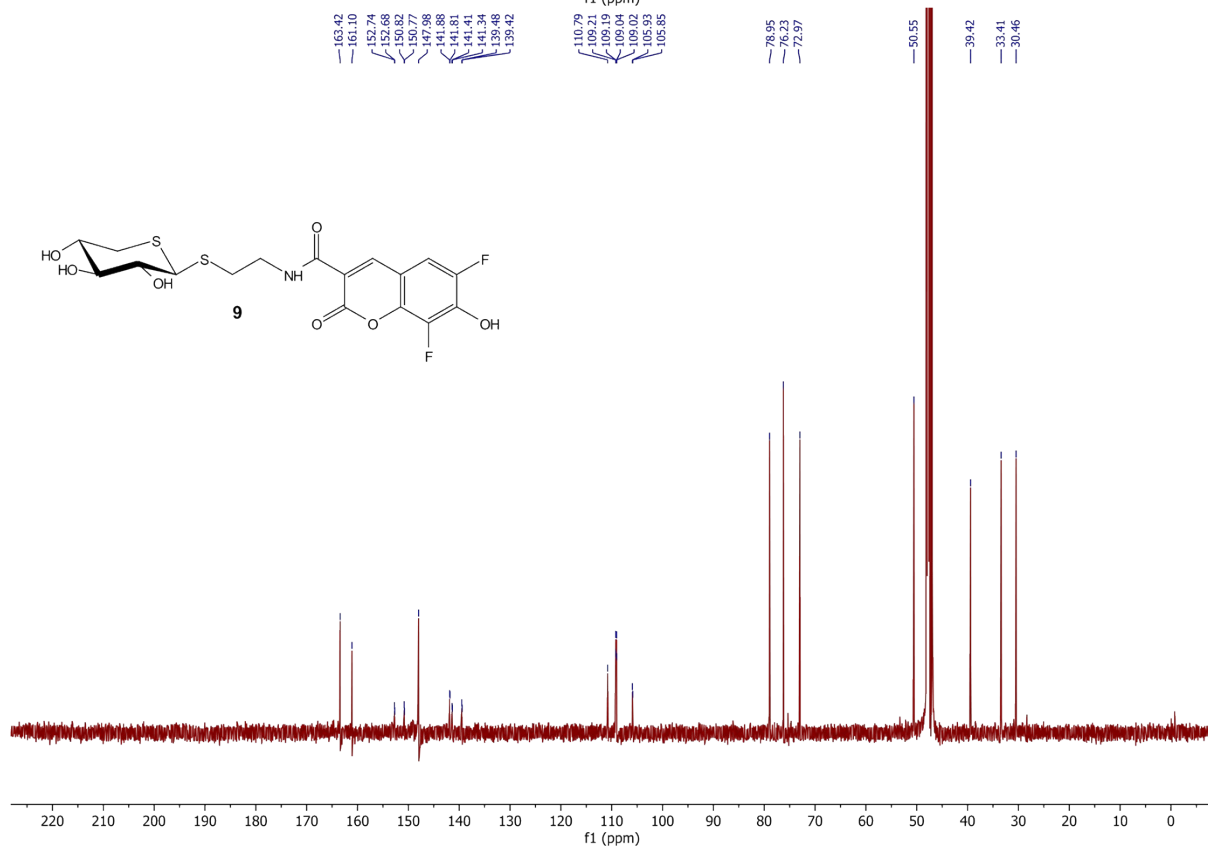
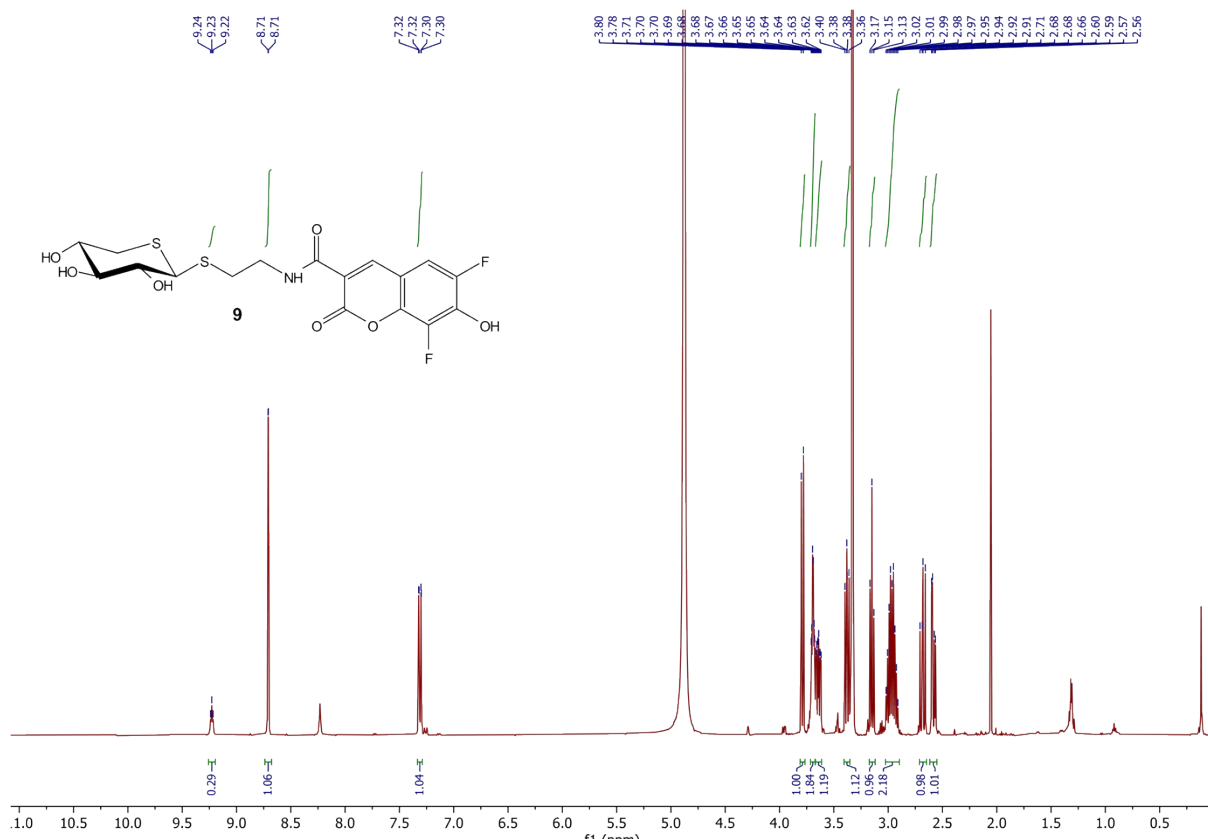


Figure S9 – ¹H and ¹³C spectrum for compound 9

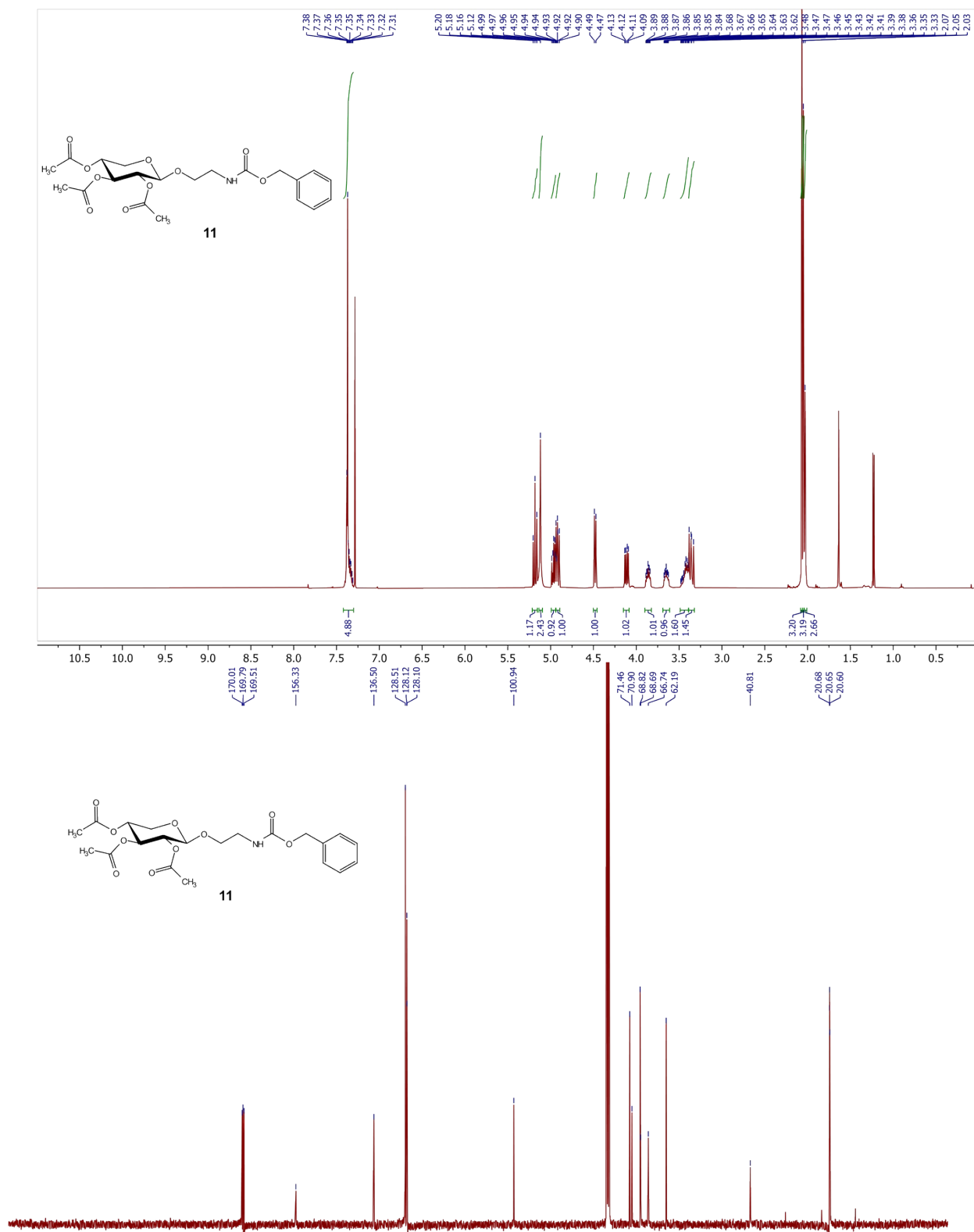


Figure S10 – ¹H and ¹³C spectrum for compound 11

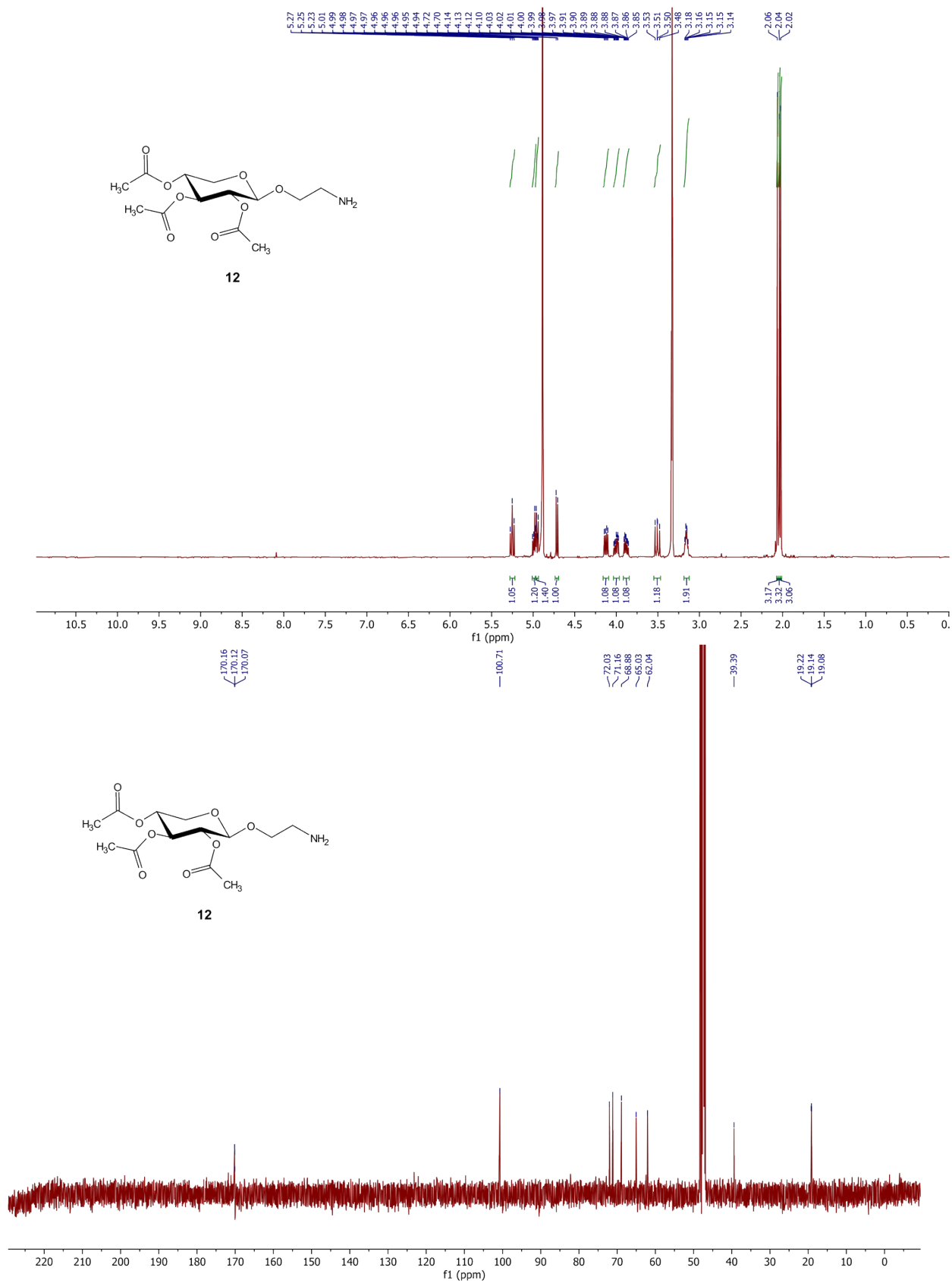


Figure S11 – ¹H and ¹³C spectrum for compound 12

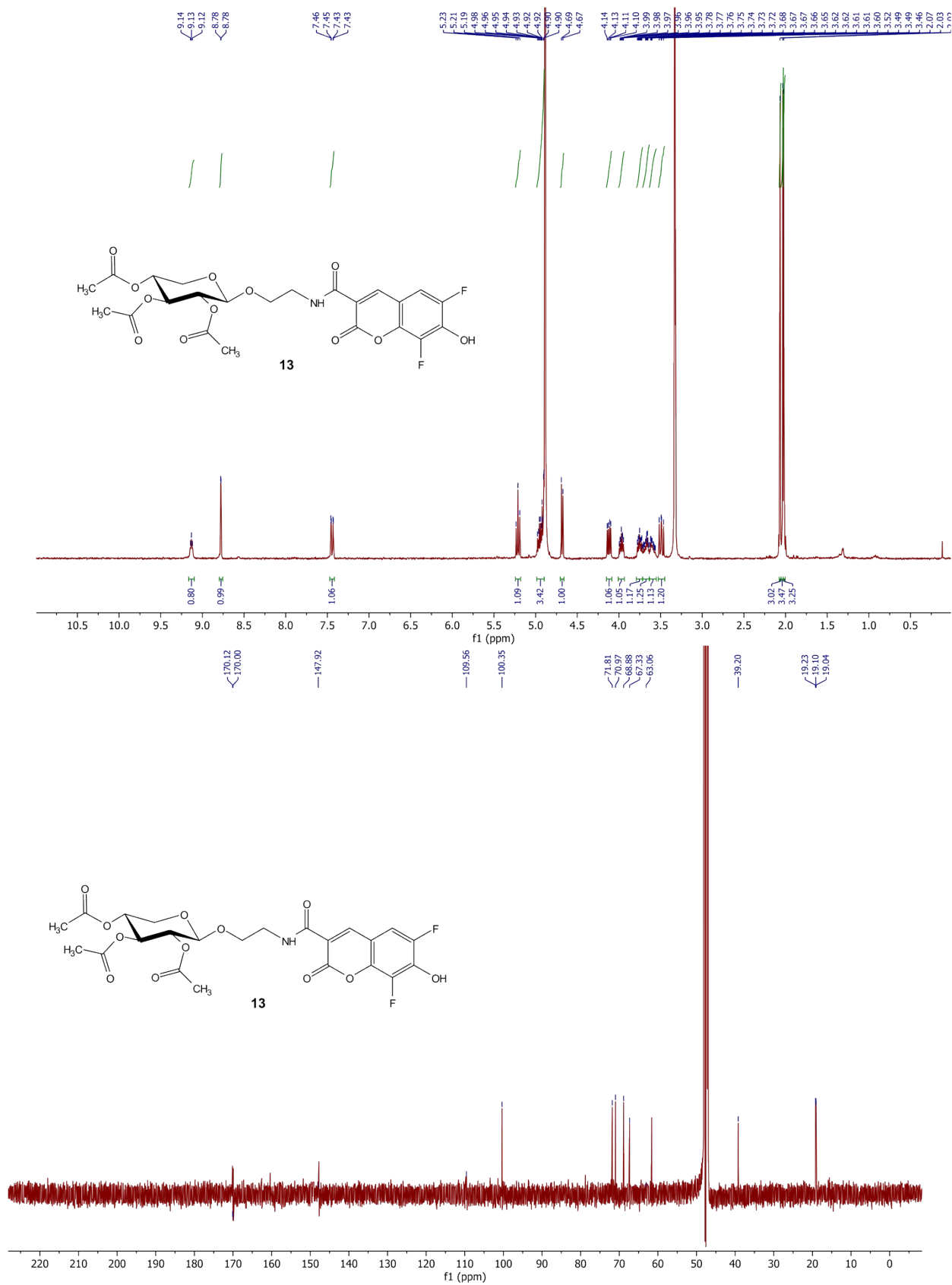


Figure S12 – ¹H and ¹³C spectrum for compound 13

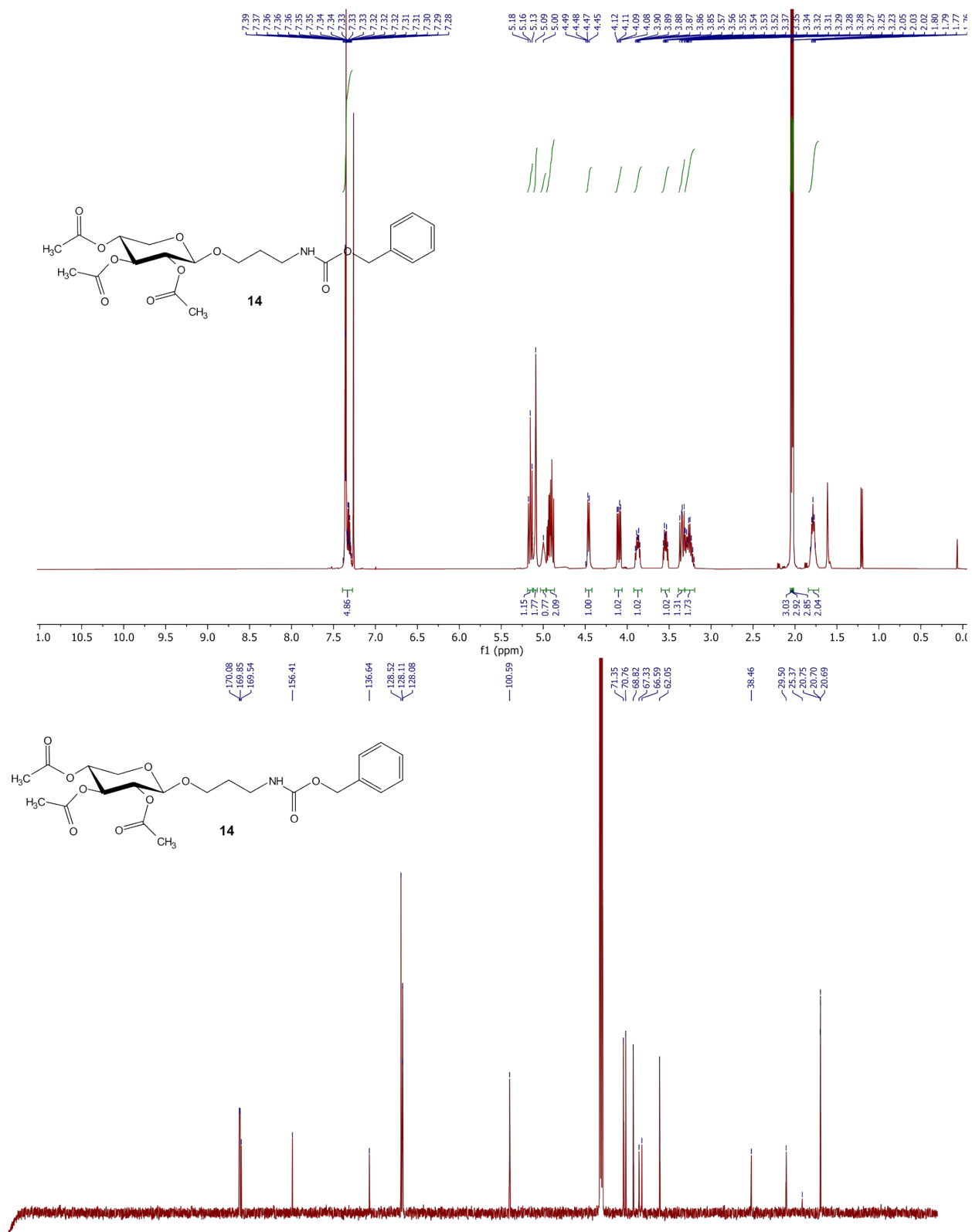


Figure S13 – ¹H and ¹³C spectrum for compound 14

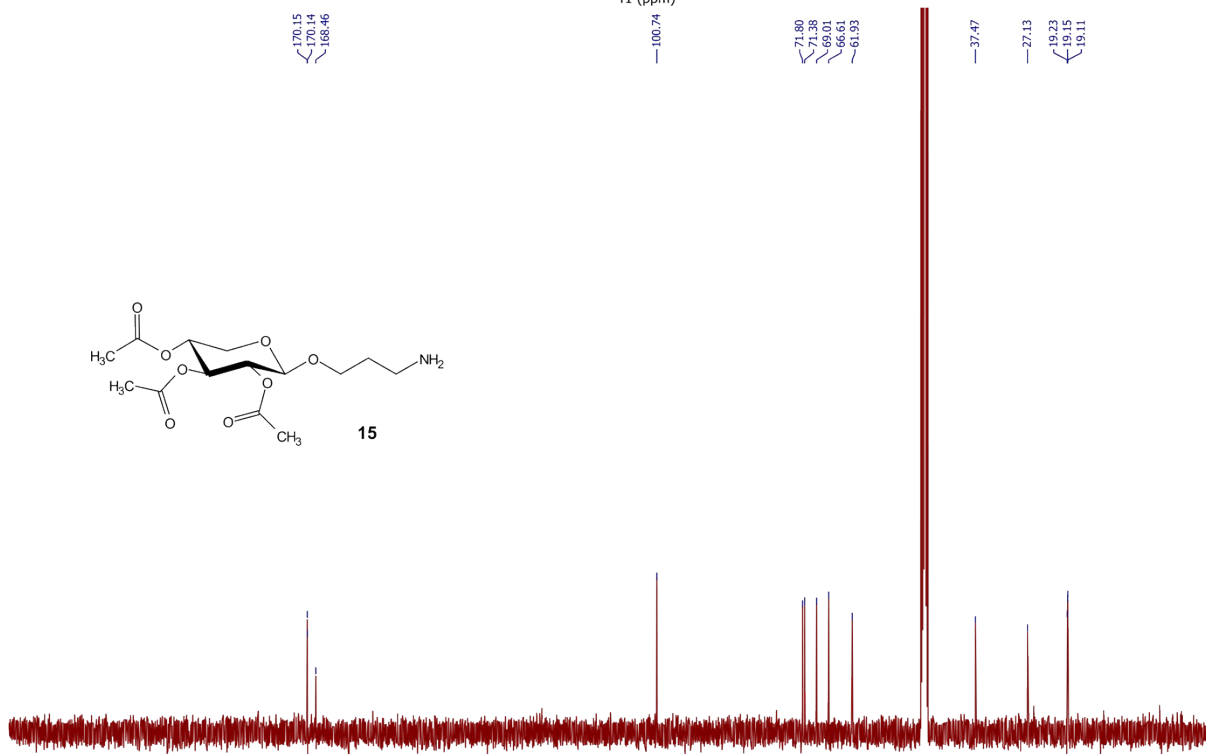
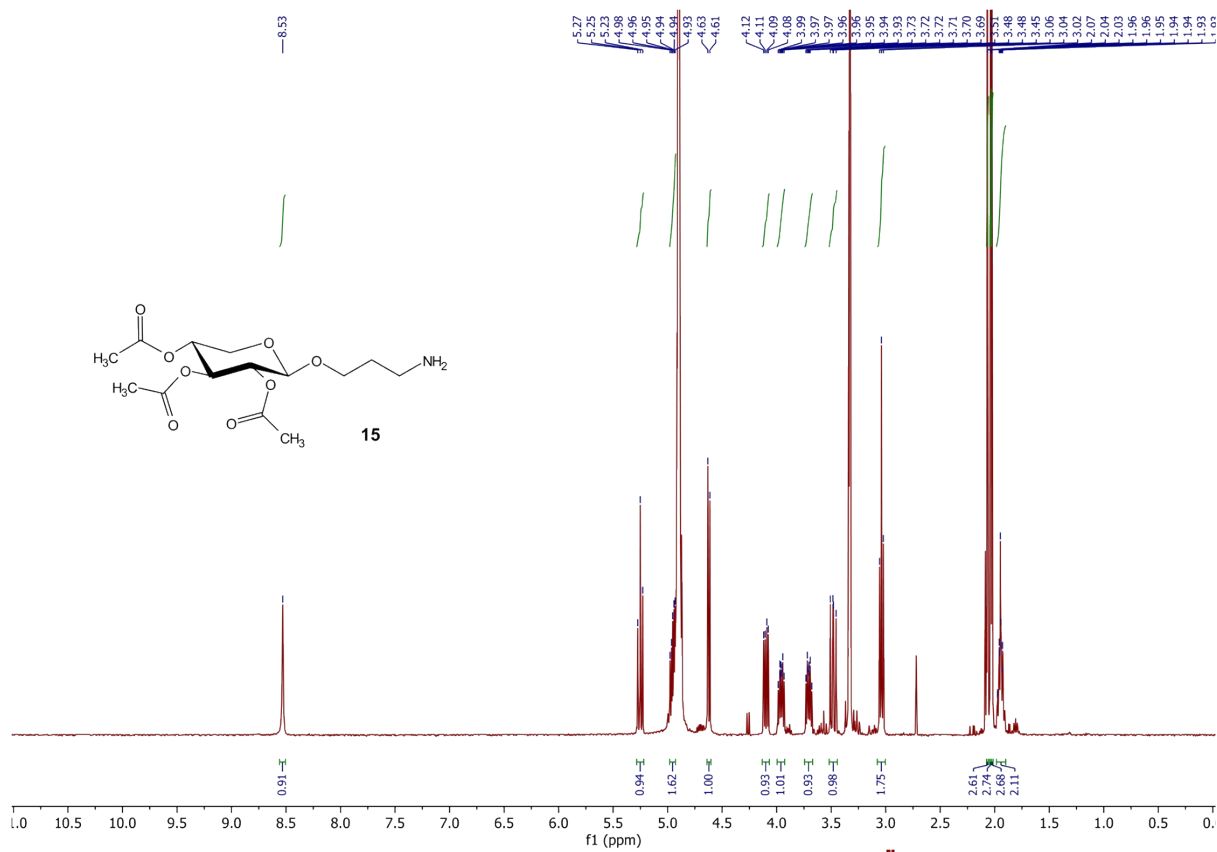


Figure S14 – ¹H and ¹³C spectrum for compound 15

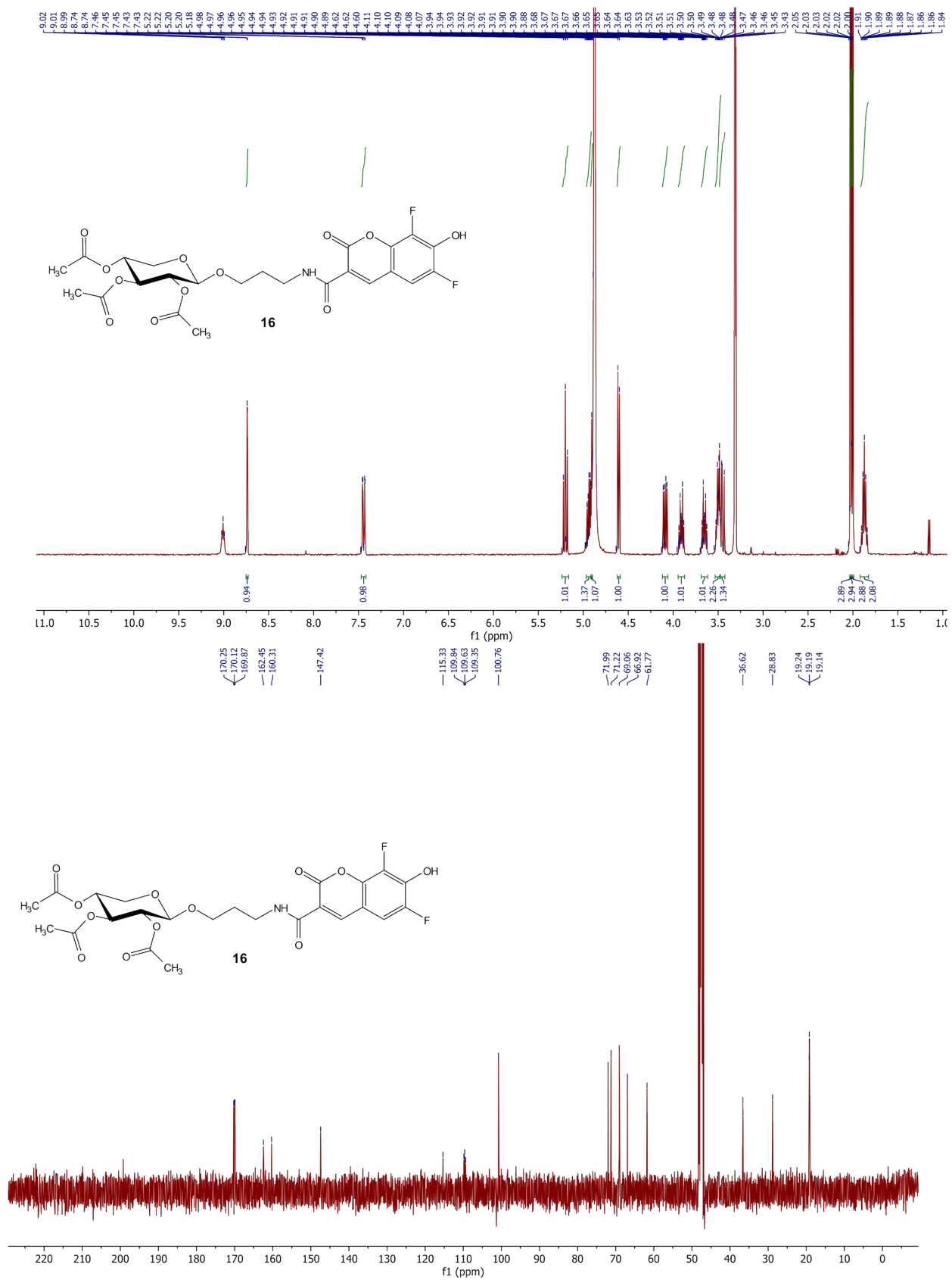


Figure S15 – ¹H and ¹³C spectrum for compound 16

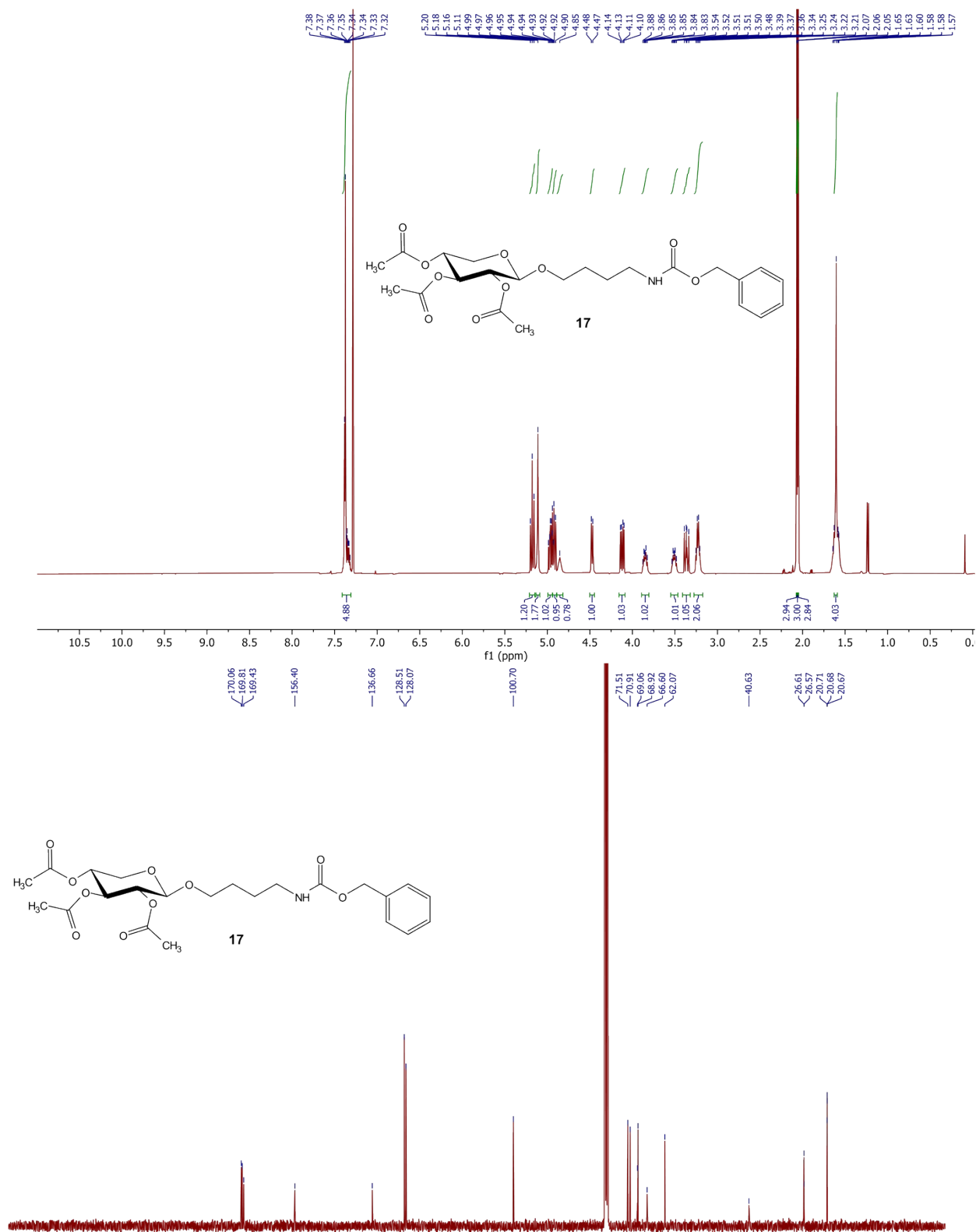


Figure S16 – ¹H and ¹³C spectrum for compound 17

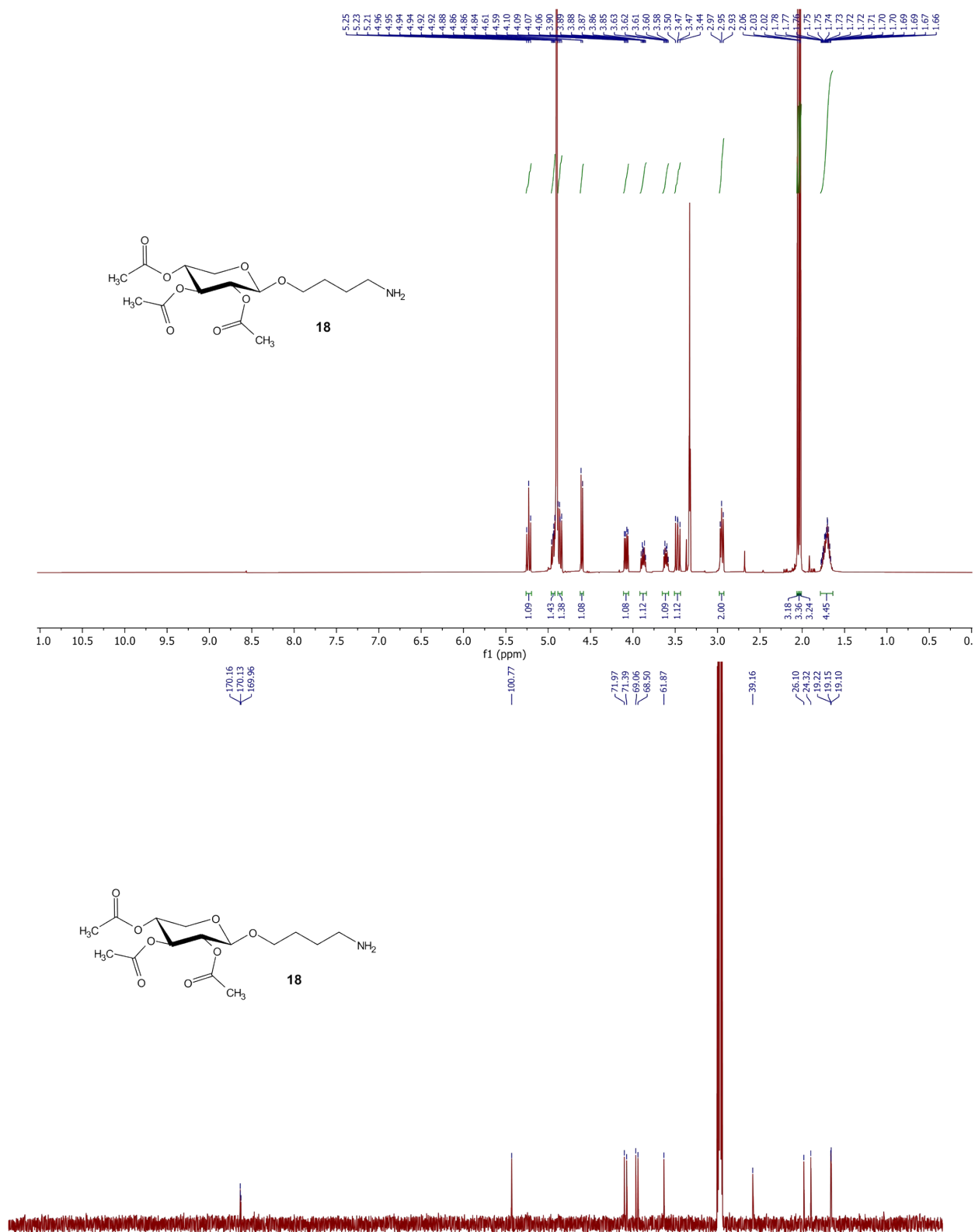


Figure S17– ¹H and ¹³C spectrum for compound 18

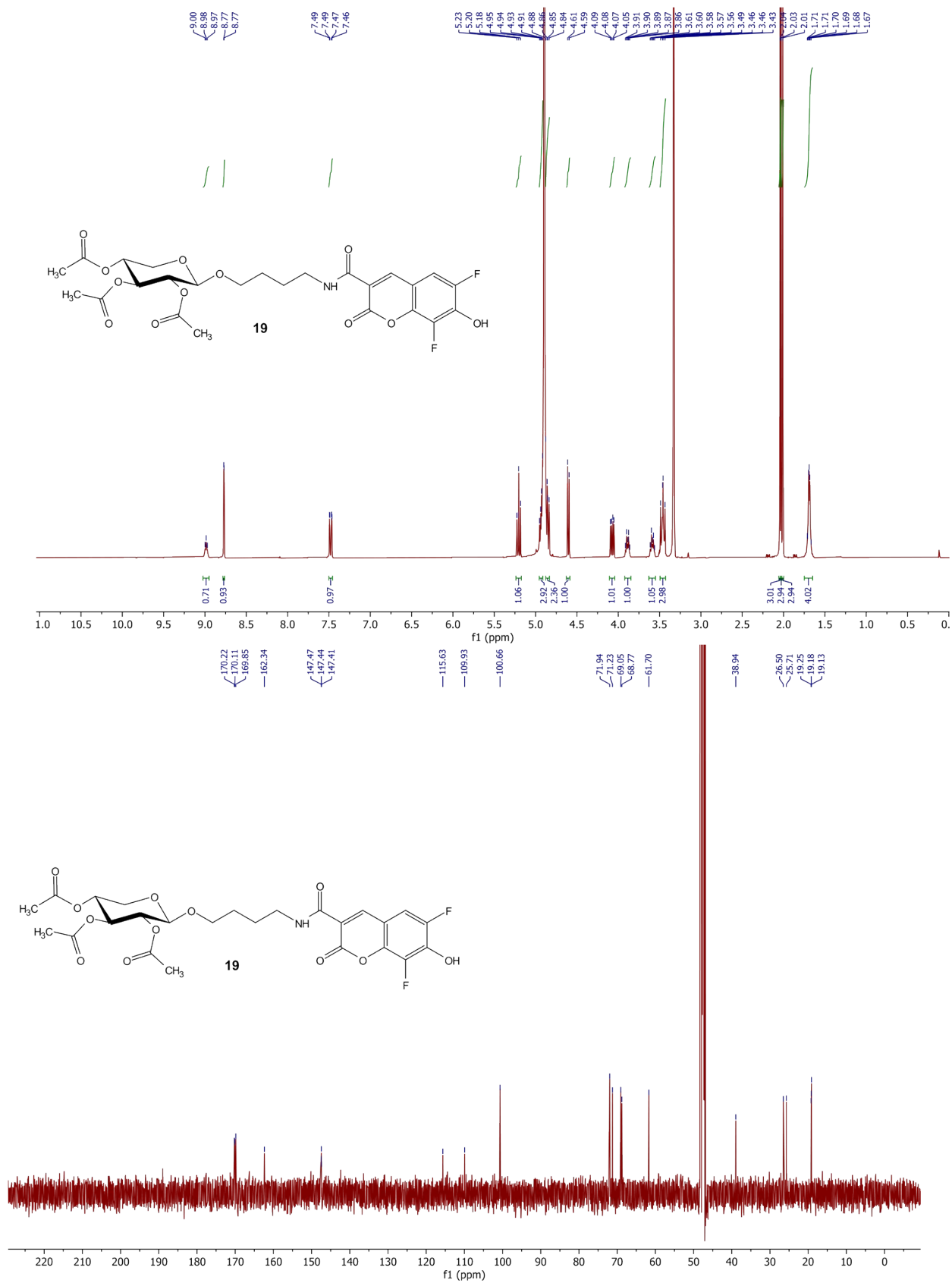


Figure S18– ¹H and ¹³C spectrum for compound 19

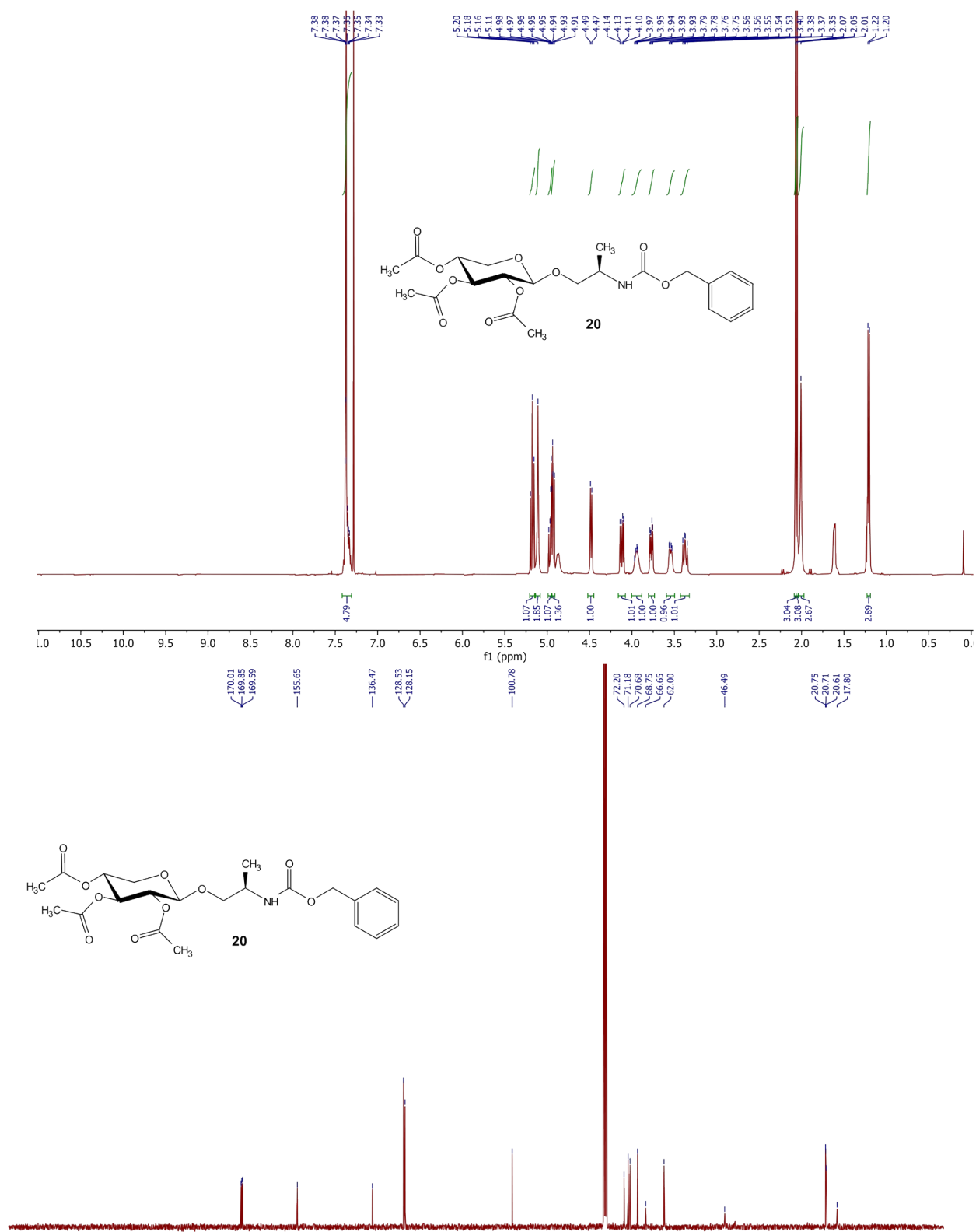


Figure S19 – ¹H and ¹³C spectrum for compound 20

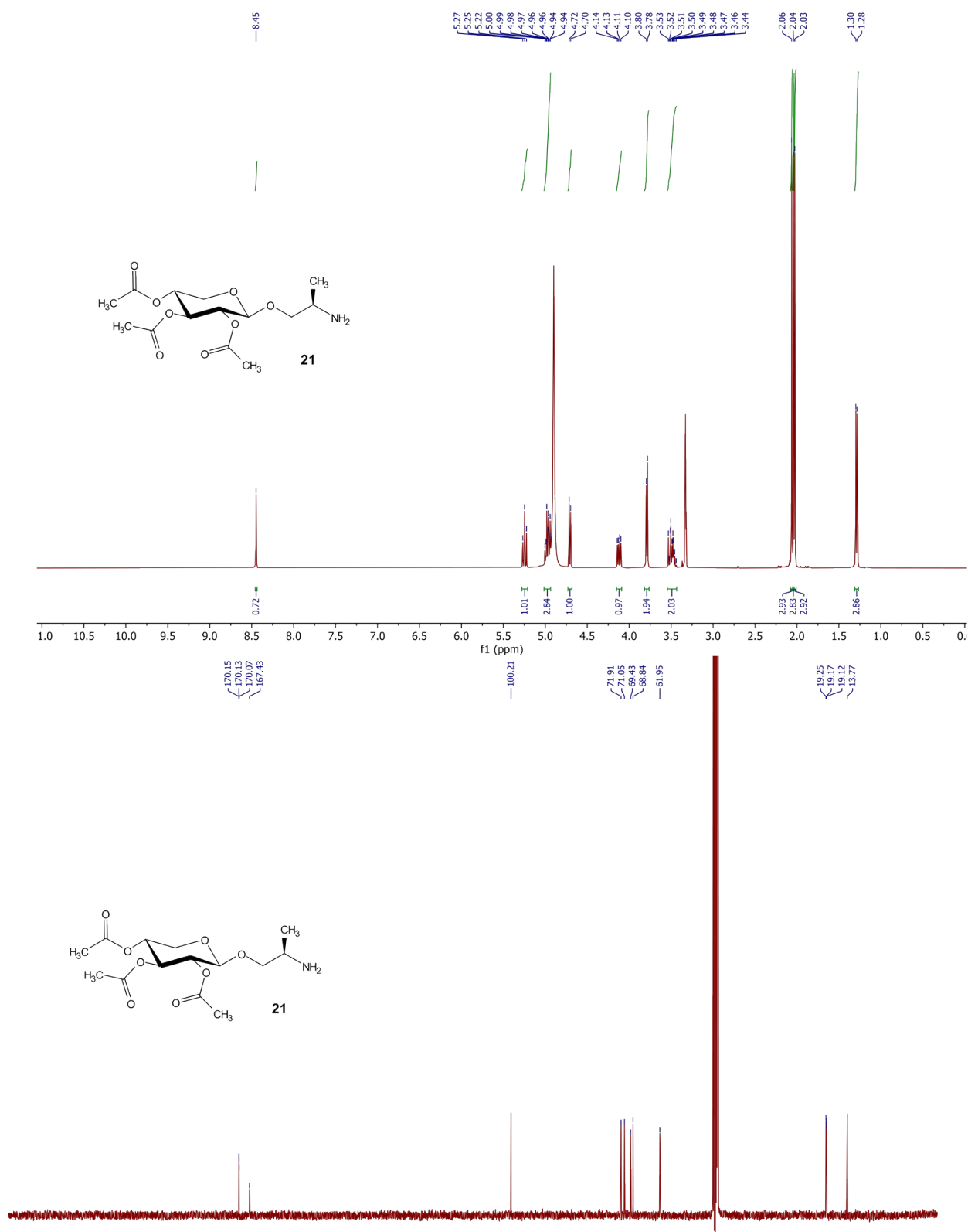


Figure S20 – ¹H and ¹³C spectrum for compound **21**

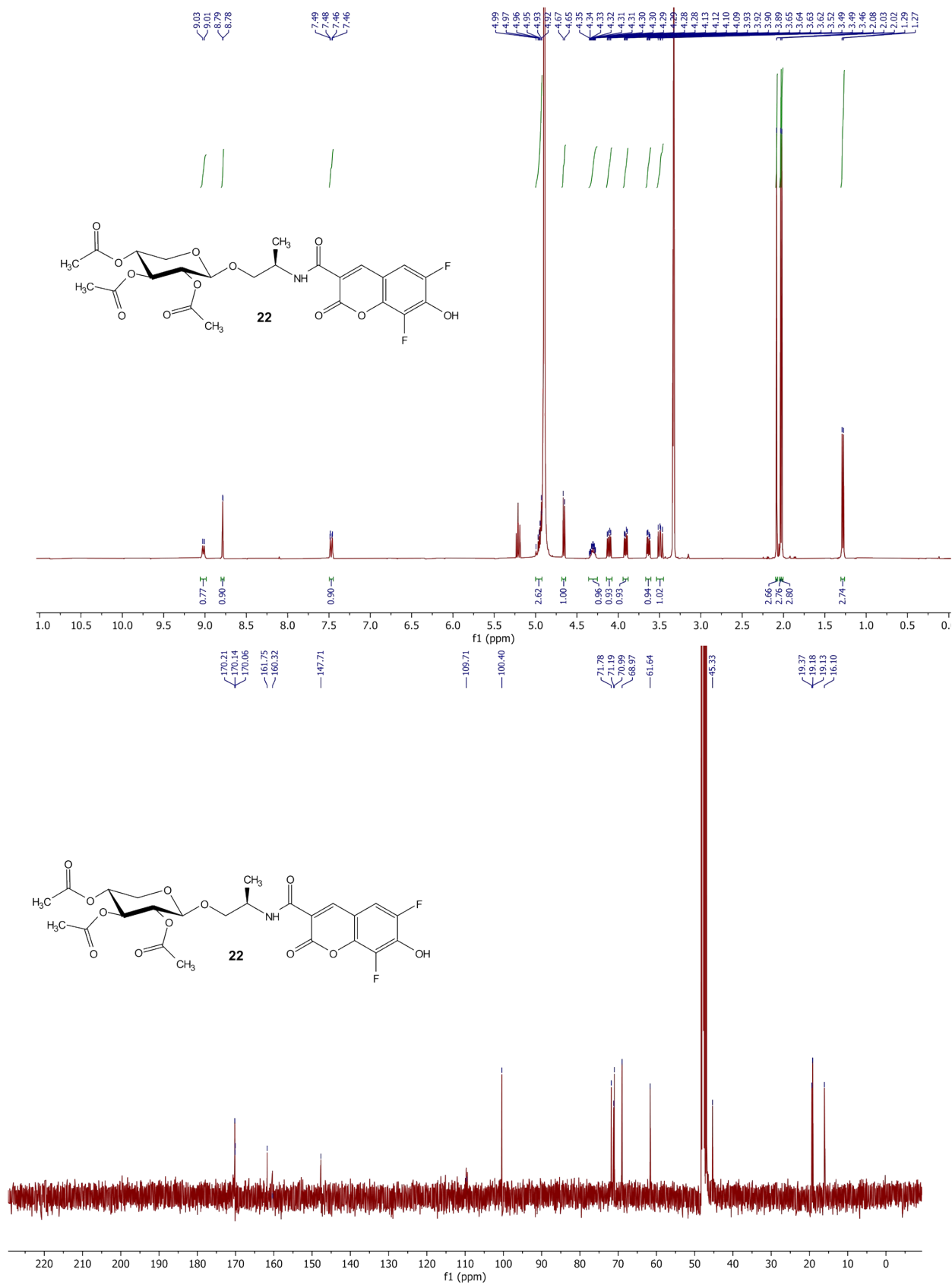


Figure S21 – ^1H and ^{13}C spectrum for compound **22**

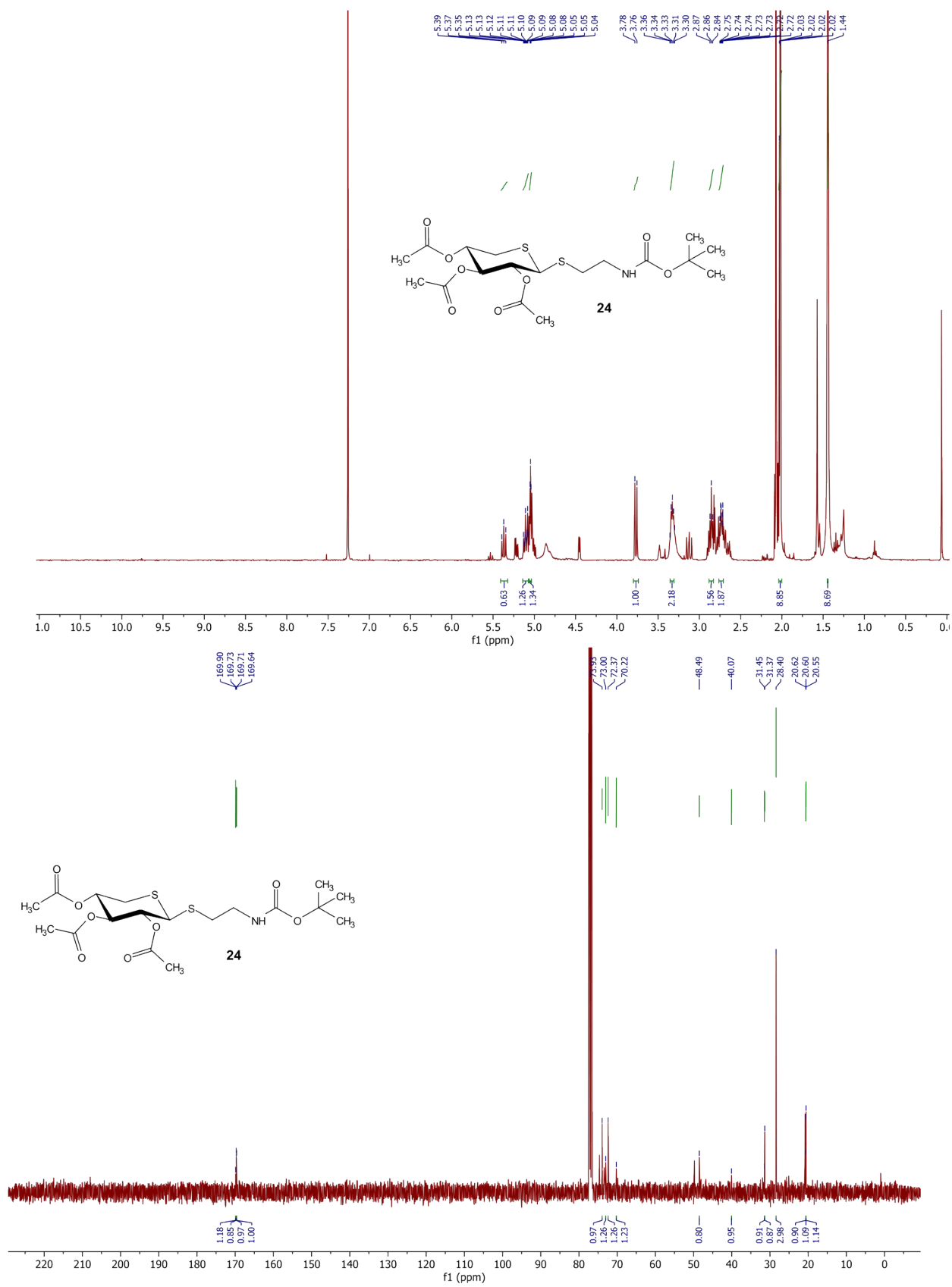


Figure S22 – ¹H and ¹³C spectrum for compound 24

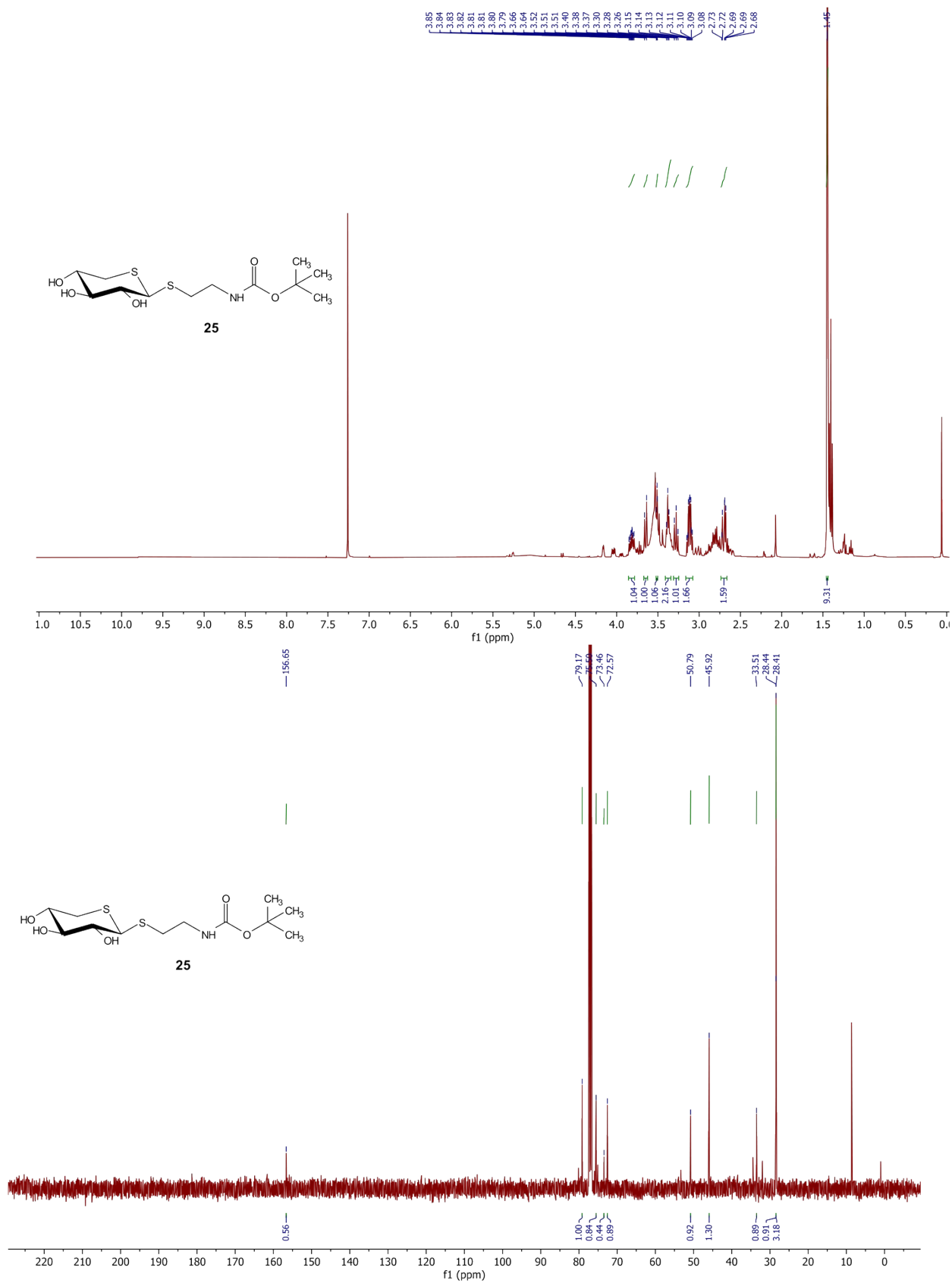


Figure S23 – ¹H and ¹³C spectrum for compound 25

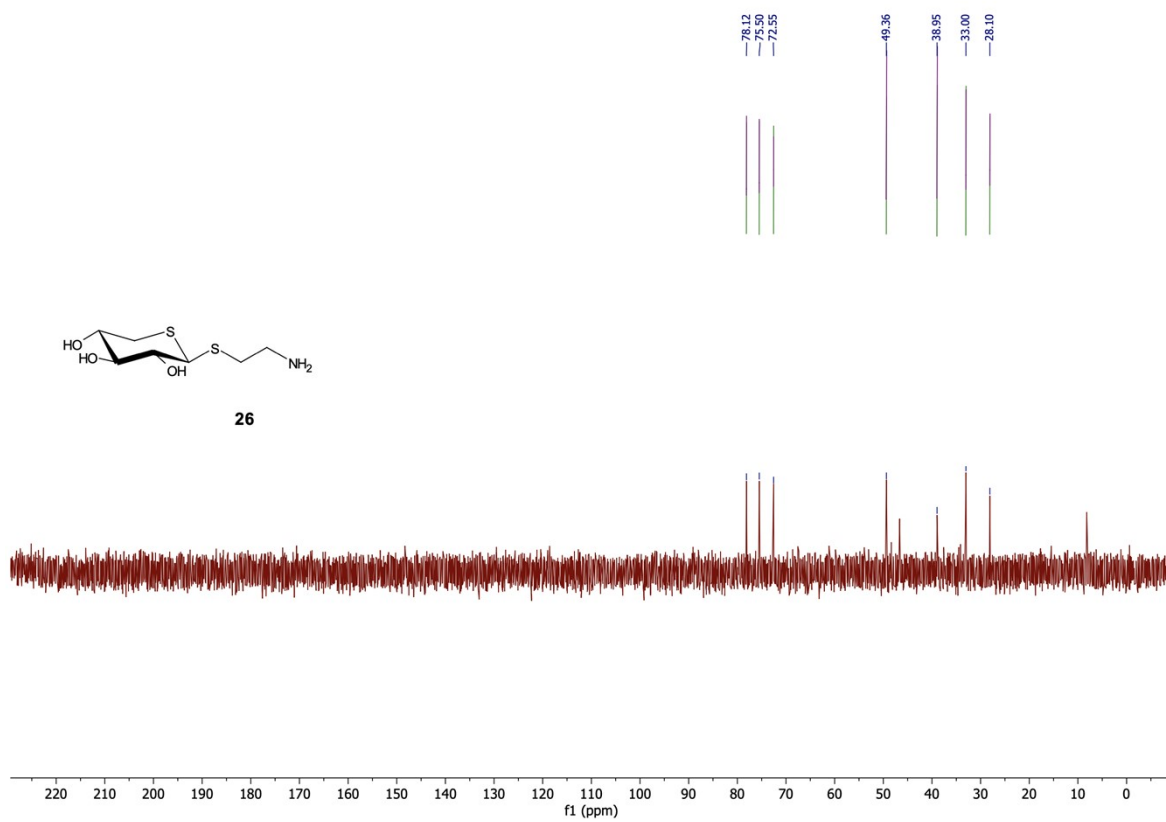
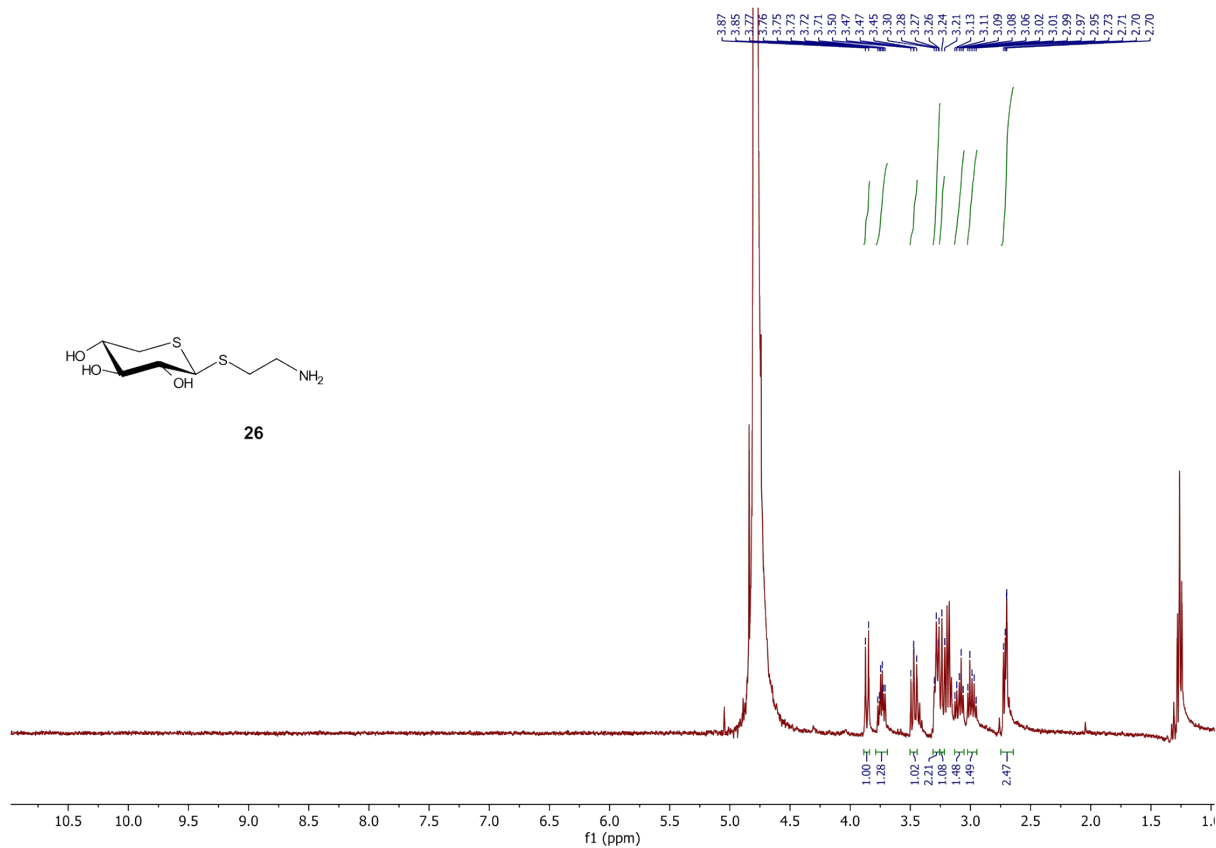


Figure S24 – ^1H and ^{13}C spectrum for compound 26