

## **Supporting Material**

### **Conversion of natural narciclasine to its C-1 and C-6 derivatives and their biological evaluation. Some unusual chemistry of narciclasine.**

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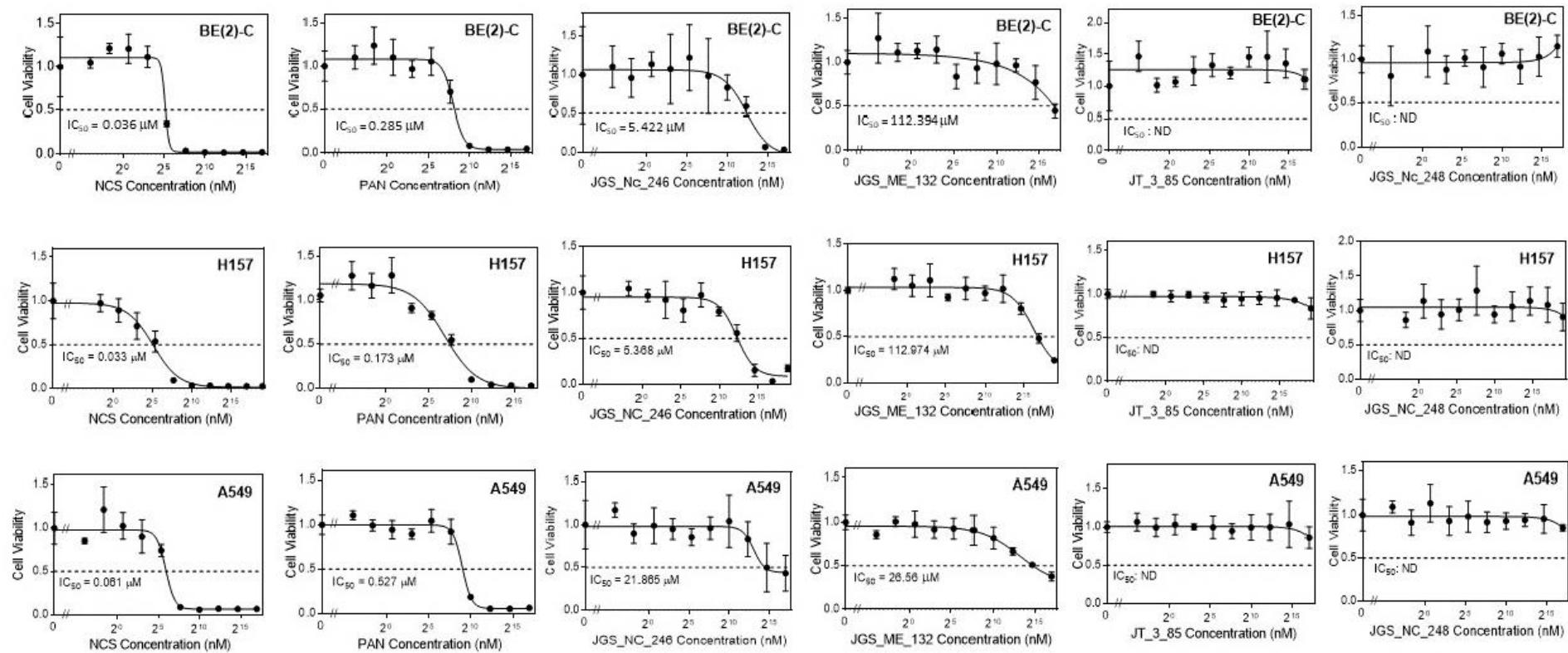
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## Table of Contents

Figure S1. Biological Activity.....	4
Selected Spectra .....	5
Figure S2. $^1\text{H}$ -NMR of <b>6</b> .....	5
Figure S3. $^{13}\text{C}$ -NMR of <b>6</b> .....	5
Figure S4. $^1\text{H}$ -NMR of <b>9</b> .....	6
Figure S5. $^{13}\text{C}$ -NMR of <b>9</b> .....	6
Figure S6. $^1\text{H}$ -NMR of <b>10</b> .....	7
Figure S7. $^{13}\text{C}$ -NMR of <b>10</b> .....	7
Figure S8. $^1\text{H}$ -NMR of <b>11</b> .....	8
Figure S. $^{13}\text{C}$ -NMR of <b>11</b> .....	8
Figure S10. $^1\text{H}$ -NMR of <b>12a</b> .....	9
Figure S11. $^{13}\text{C}$ -NMR of <b>12a</b> .....	9
Figure S12. $^1\text{H}$ -NMR of <b>12b</b> .....	10
Figure S13. $^{13}\text{C}$ -NMR of <b>12b</b> .....	10
Figure S14. $^1\text{H}$ -NMR of <b>14</b> .....	11
Figure S15. $^{13}\text{C}$ -NMR of <b>14</b> .....	11
Figure S16. $^1\text{H}$ -NMR of <b>15</b> .....	12
Figure S17. $^{13}\text{C}$ -NMR of <b>15</b> .....	12
Figure S18. $^1\text{H}$ -NMR of <b>16</b> .....	13
Figure S19. $^{13}\text{C}$ -NMR of <b>16</b> .....	14
Figure S20. $^1\text{H}$ -NMR of <b>17a</b> .....	15
Figure S21. $^{13}\text{C}$ -NMR of <b>17a</b> .....	15
Figure S22. $^1\text{H}$ -NMR of <b>24</b> .....	16
Figure S23. $^{13}\text{C}$ -NMR of <b>24</b> .....	16
Figure S24. $^1\text{H}$ - $^{15}\text{N}$ HSQC of <b>24</b> .....	17
Figure S25. $^1\text{H}$ - $^{15}\text{N}$ HMBC of <b>24</b> .....	17
Figure S26. $^1\text{H}$ -NMR of <b>25</b> .....	18
Figure S27. $^{13}\text{C}$ -NMR of <b>25</b> .....	18
Figure S28. $^{19}\text{F}$ -NMR of <b>25</b> .....	19
Figure S29. $^1\text{H}$ -NMR of <b>26</b> .....	20
Figure S30. $^{13}\text{C}$ -NMR of <b>26</b> .....	20
Figure S31. $^1\text{H}$ - $^{15}\text{N}$ HMBC of <b>26</b> .....	21

Figure S32. $^1\text{H}$ -NMR of <b>27</b> .....	22
Figure S33. $^{13}\text{C}$ -NMR of <b>27</b> .....	22
Figure S34. $^1\text{H}$ -NMR of <b>28</b> .....	23
Figure S35. $^{13}\text{C}$ -NMR of <b>28</b> .....	23
Figure S36. $^1\text{H}$ -NMR of <b>29</b> .....	24
Figure S37. $^{13}\text{C}$ -NMR of <b>29</b> .....	24
Figure S38. $^1\text{H}$ -NMR of <b>30</b> .....	25
Figure S39. $^{13}\text{C}$ -NMR of <b>30</b> .....	25
Figure S40. $^1\text{H}$ -NMR of <b>31</b> .....	26
Figure S41. $^{13}\text{C}$ -NMR of <b>31</b> .....	26
Figure S42. $^1\text{H}$ -NMR of <b>33</b> .....	27
Figure S43. $^{13}\text{C}$ -NMR of <b>33</b> .....	27

**Figure S1. Biological Activity**



**Suppl. Figure S1. Dose-dependent cytotoxicity of compounds in cancer cell lines.** Cells were treated with a serial of dilutions of each compound in three replicates in 96-well plates for 4 days, and cell viability was measured using MTT assay. Shown in each figure is dose-dependent response of the indicated cells to the indicated compound, with the dotted line signifying the  $IC_{50}$ . ND, not determined ( $>500 \mu M$ ). NCS = 1, PAN = 2, JGS\_Nc\_246 = 29, JGS\_ME\_132 = 30, JT\_3\_85 = 31, JGS\_Nc\_248 = 33.

## Selected Spectra

Figure S2.  $^1\text{H}$ -NMR of **6**

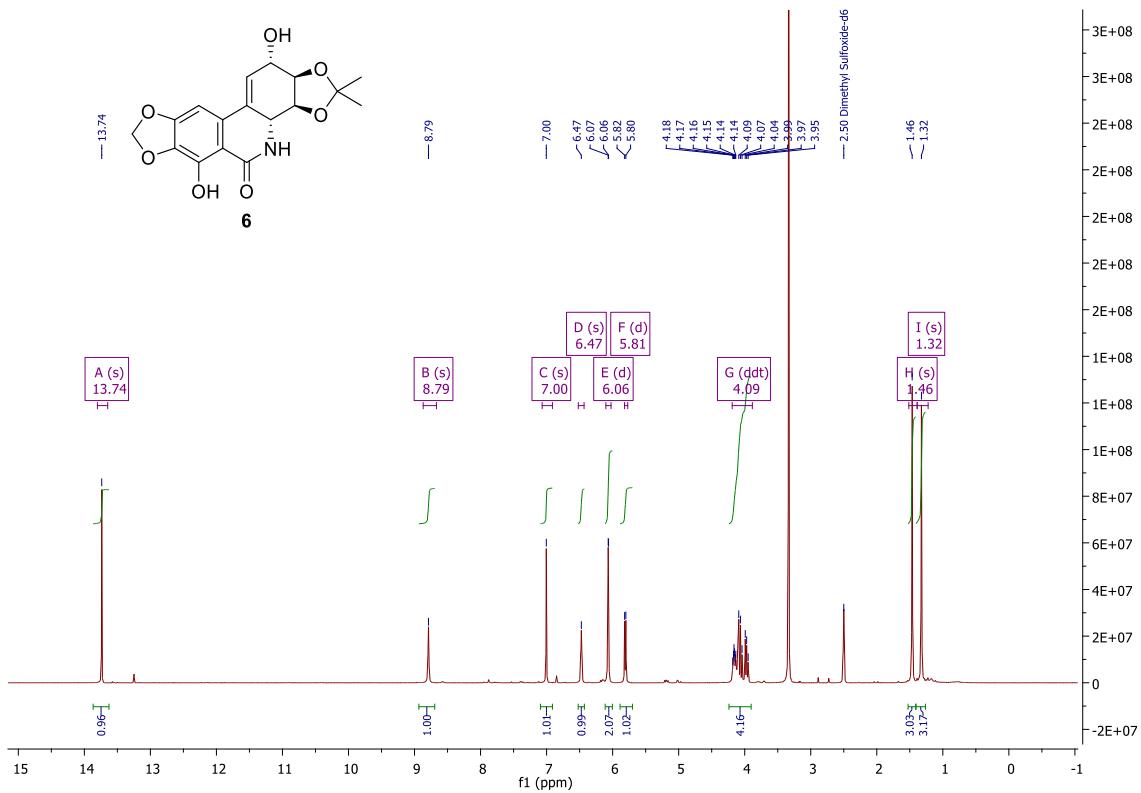


Figure S3.  $^{13}\text{C}$ -NMR of **6**

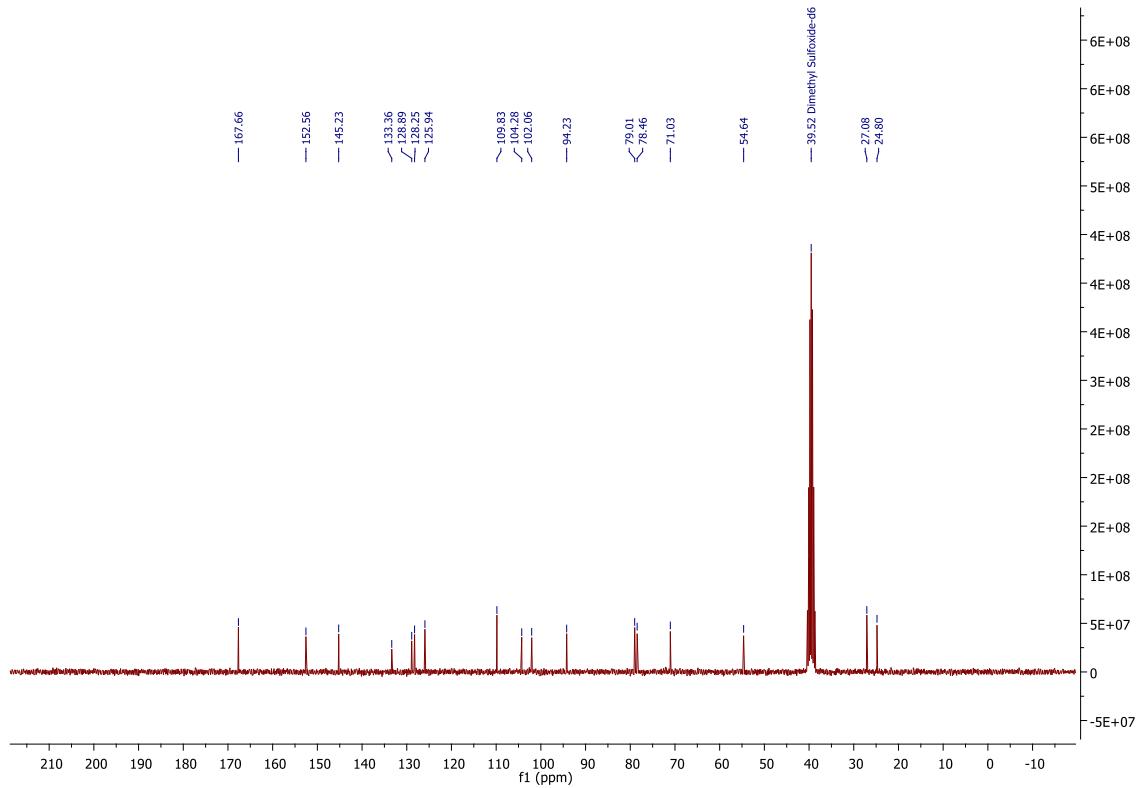


Figure S4.  $^1\text{H}$ -NMR of **9**

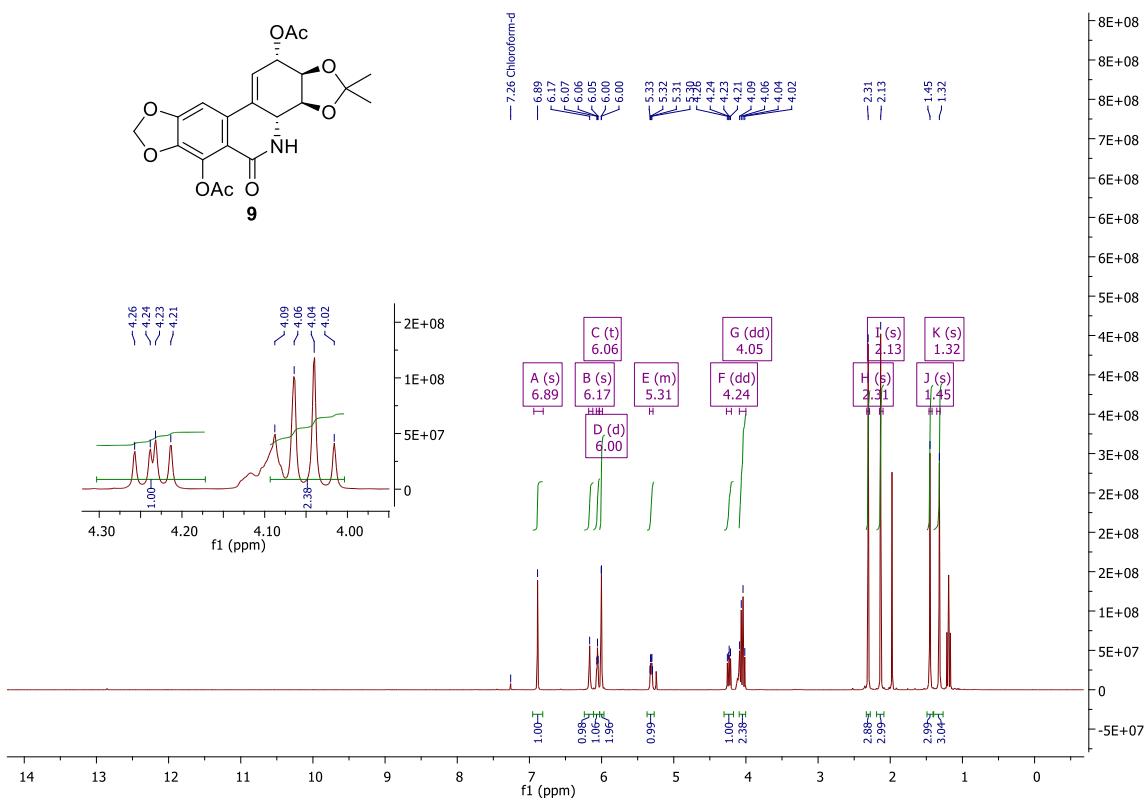


Figure S5.  $^{13}\text{C}$ -NMR of **9**

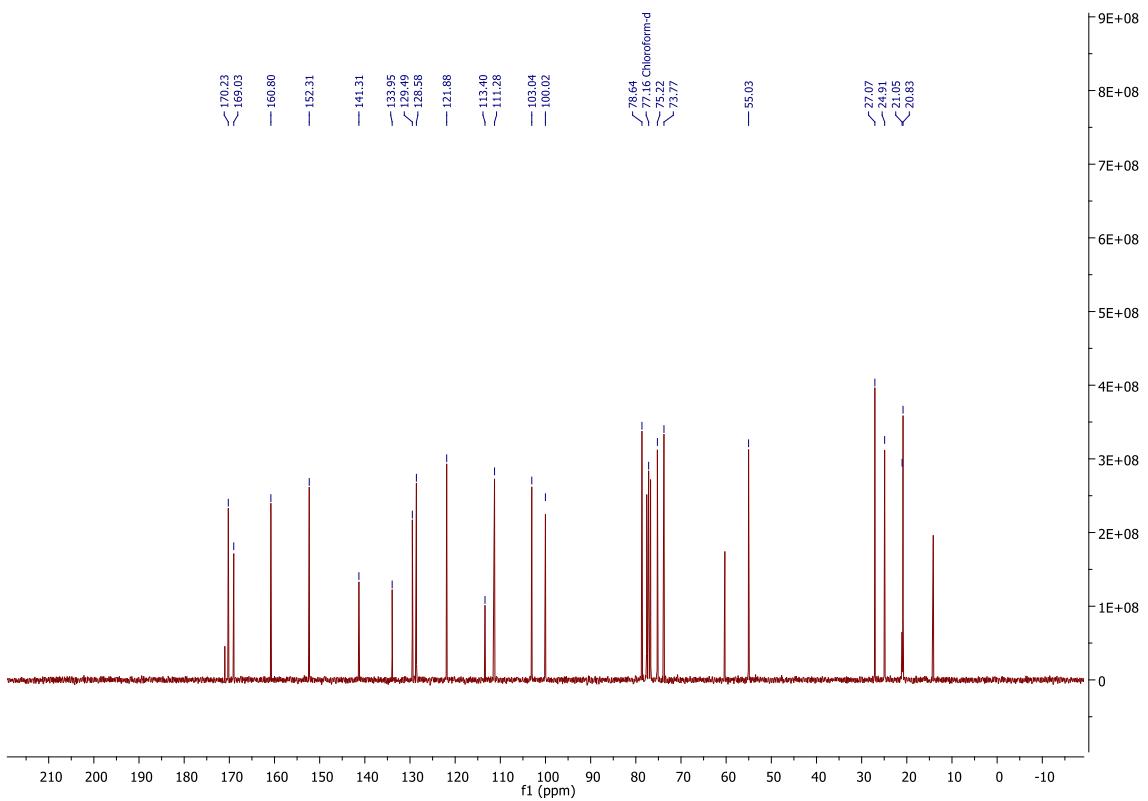


Figure S6.  $^1\text{H}$ -NMR of **10**

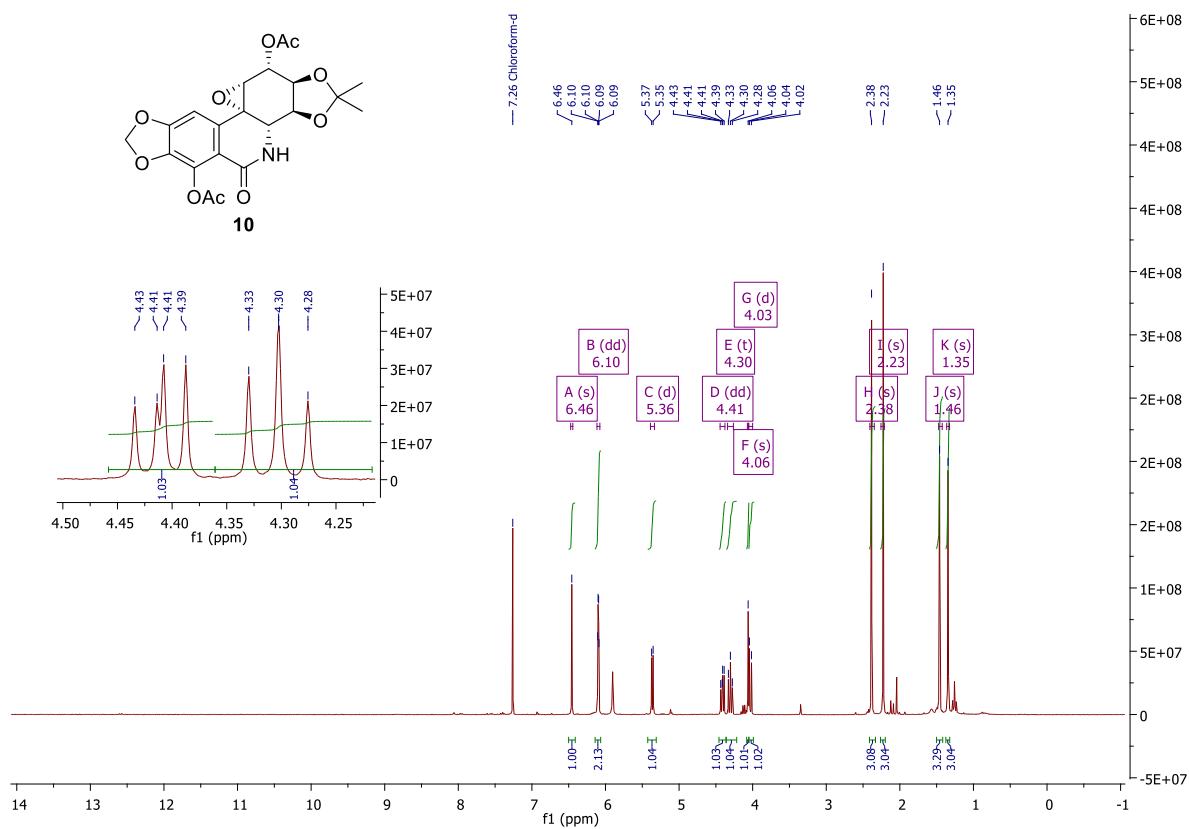


Figure S7.  $^{13}\text{C}$ -NMR of 10

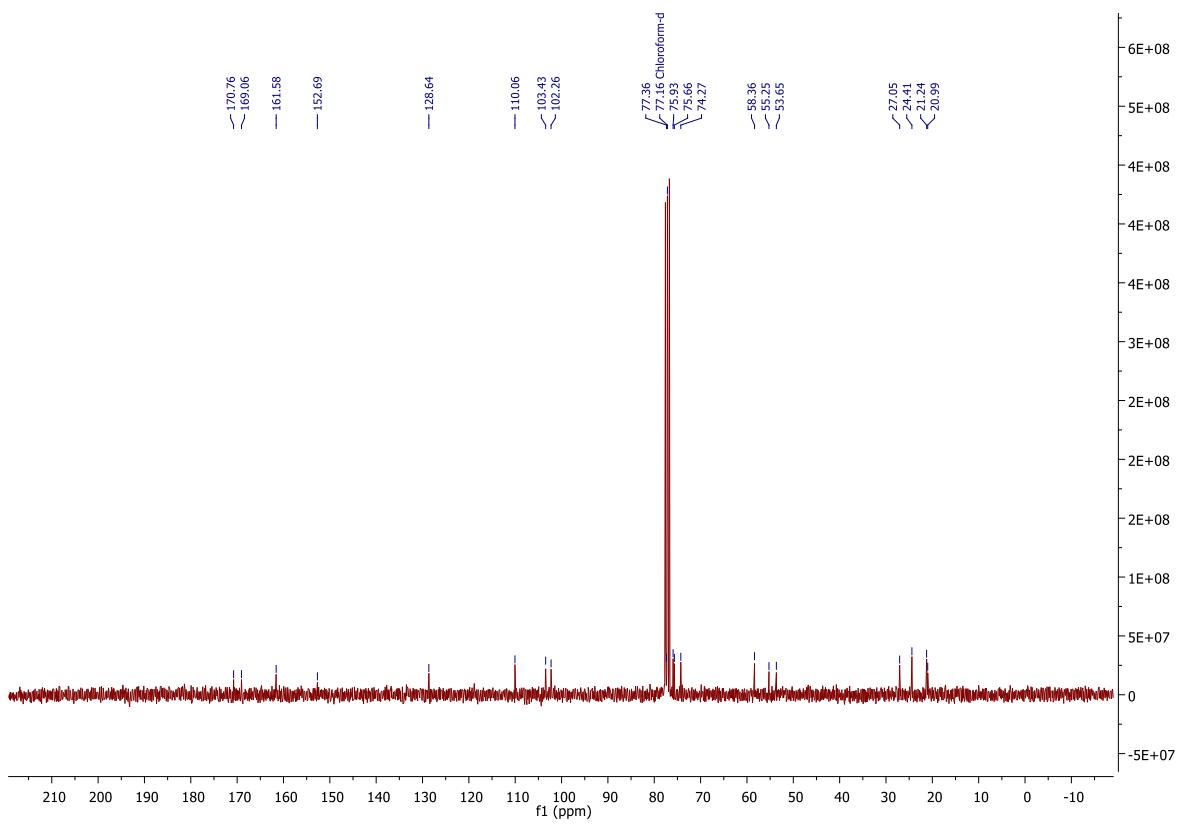


Figure S8.  $^1\text{H}$ -NMR of 11

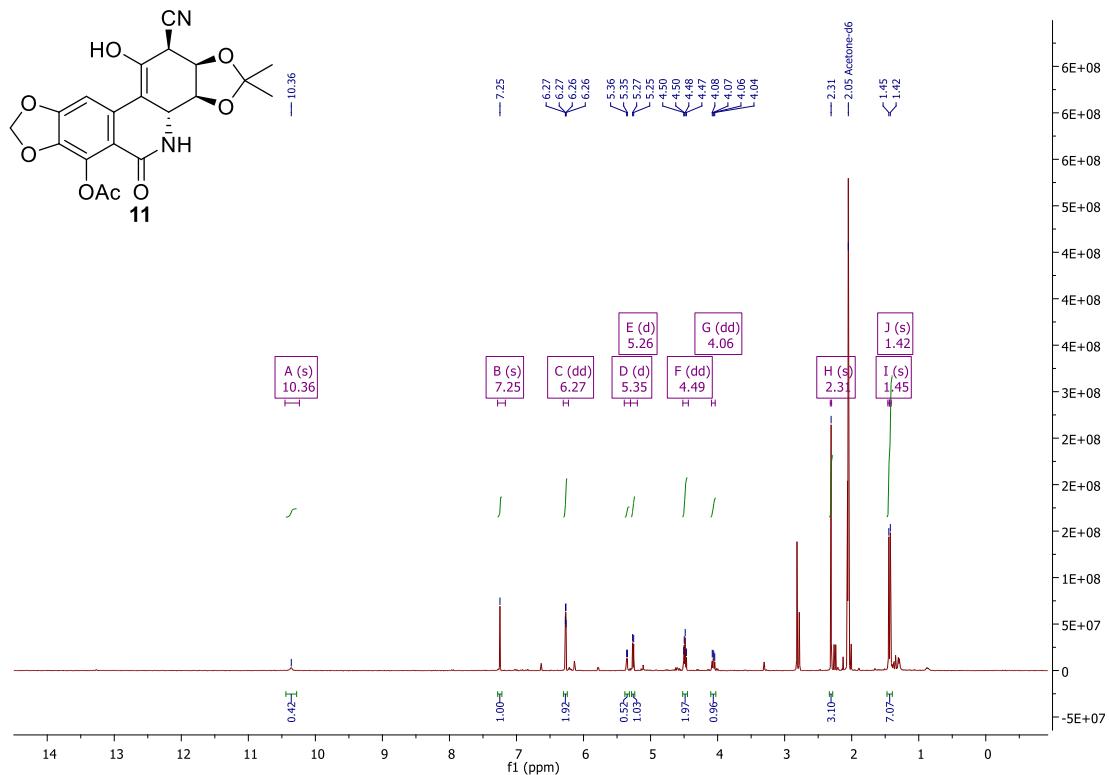


Figure S9.  $^{13}\text{C}$ -NMR of 11

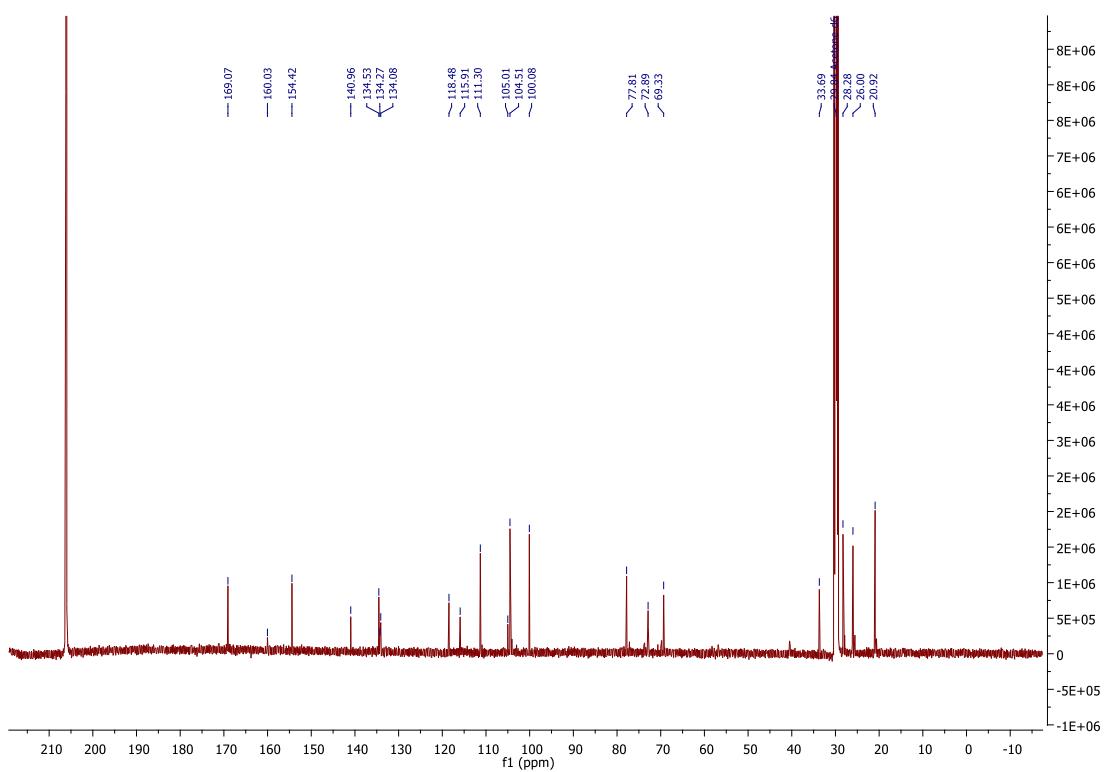


Figure S10.  $^1\text{H}$ -NMR of **12a**

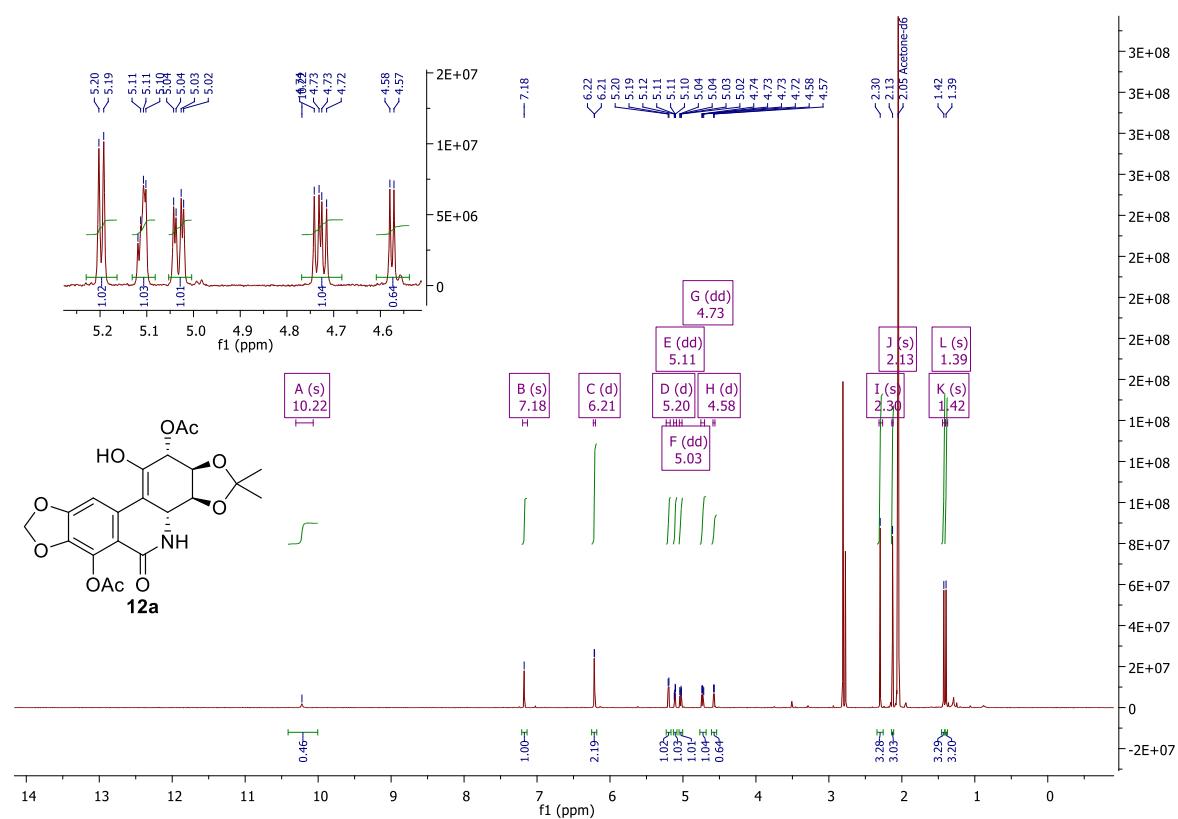


Figure S11.  $^{13}\text{C}$ -NMR of **12a**

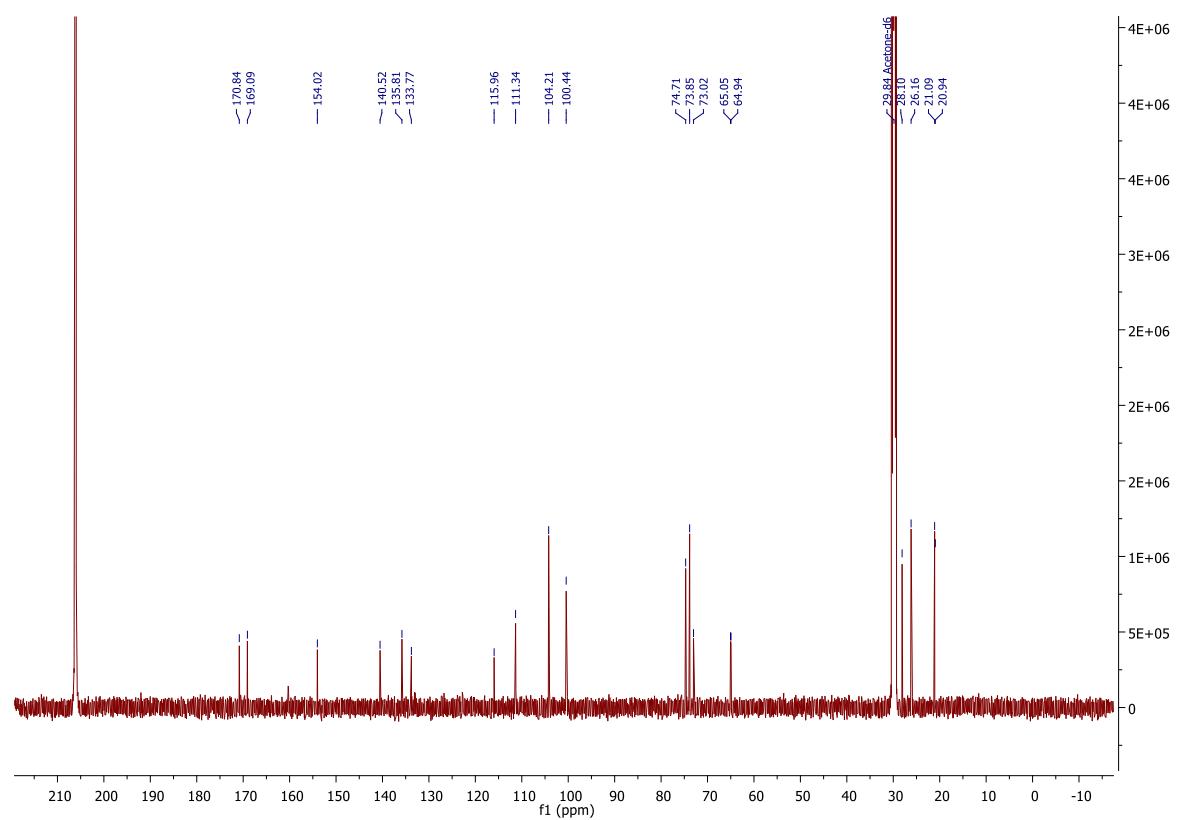


Figure S12.  $^1\text{H}$ -NMR of **12b**

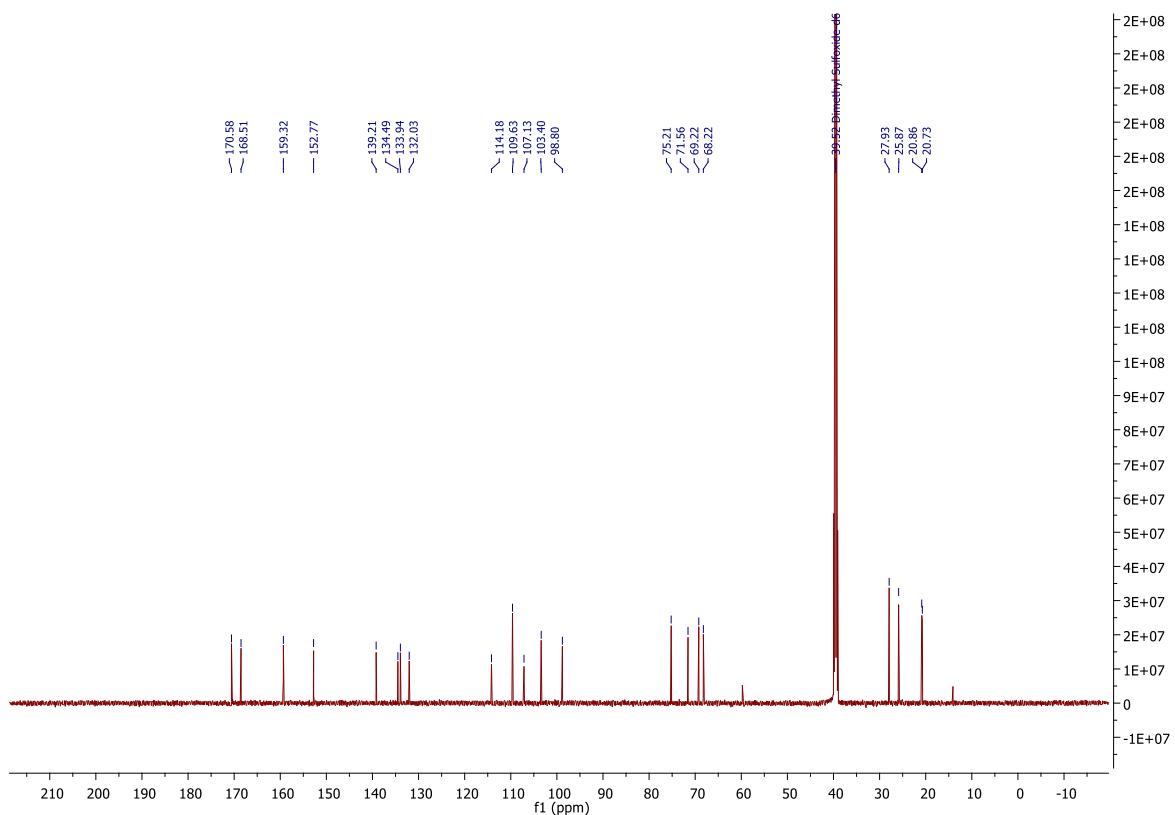
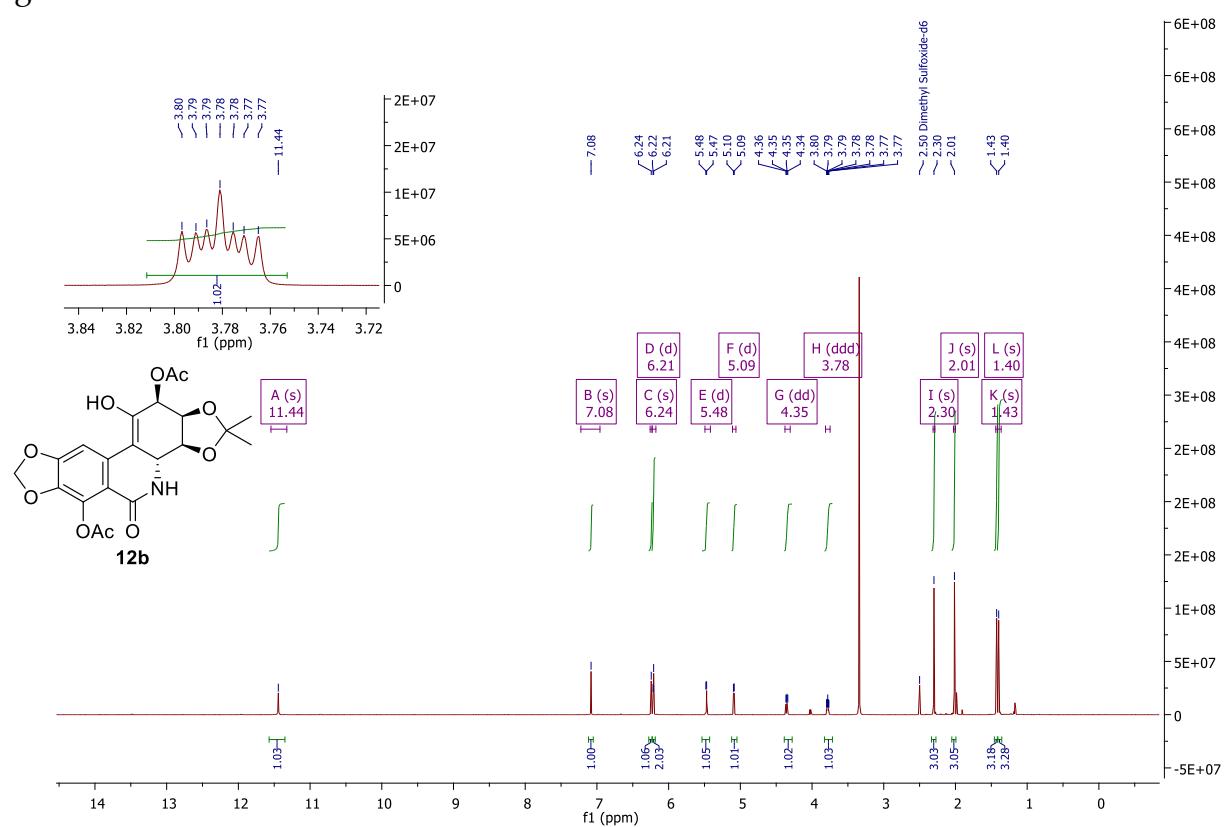


Figure S14.  $^1\text{H}$ -NMR of **14**

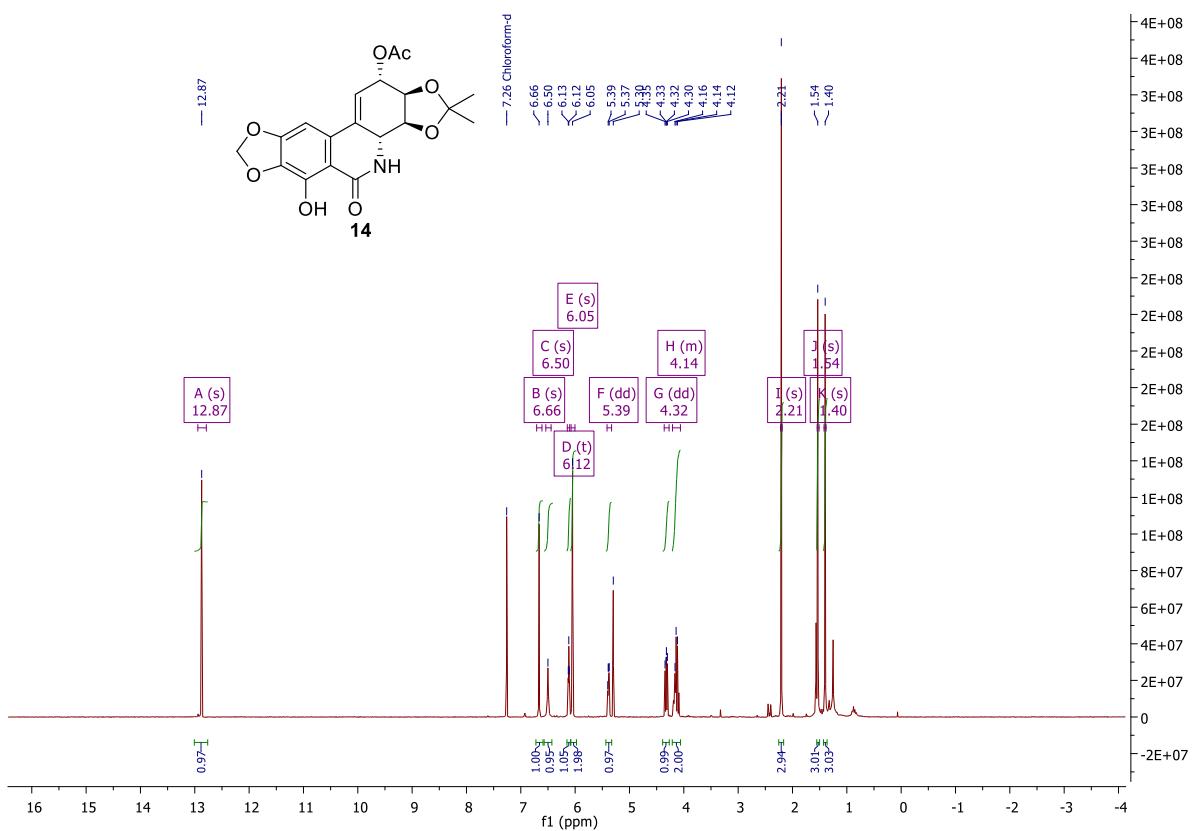


Figure S15.  $^{13}\text{C}$ -NMR of **14**

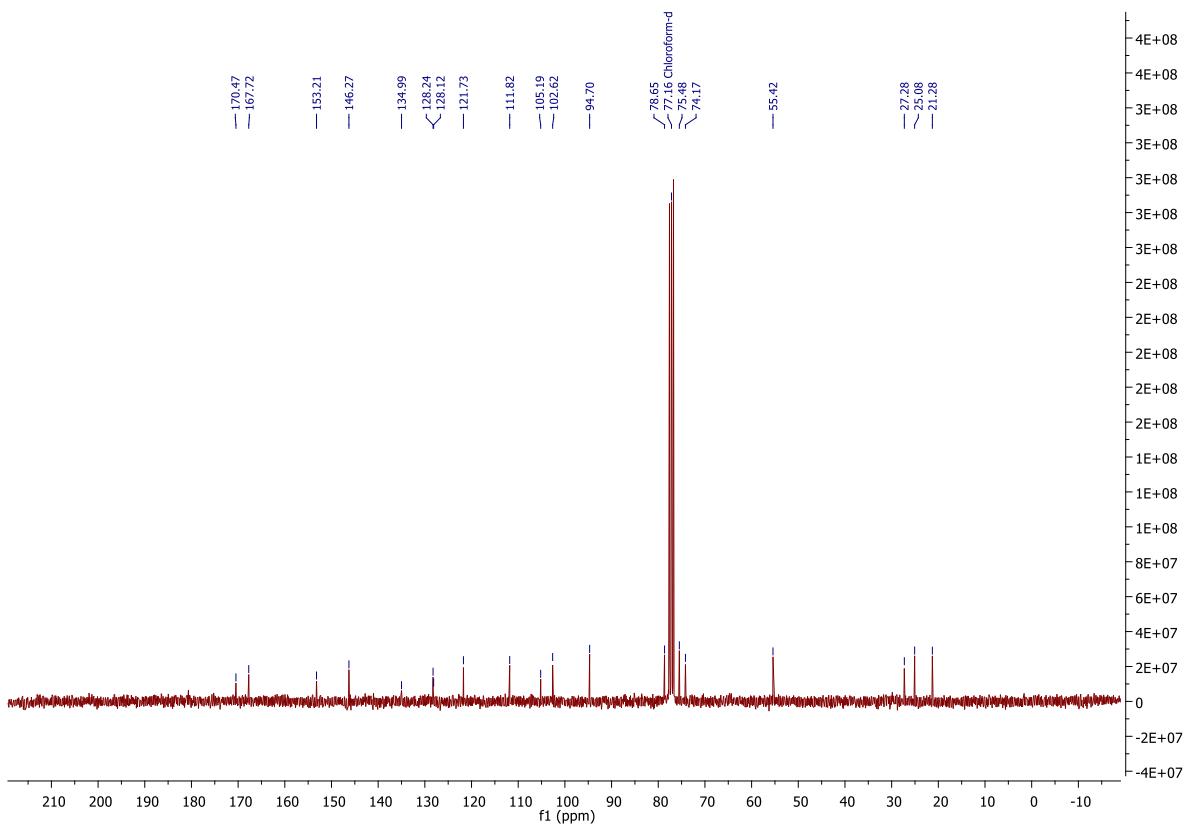


Figure S16.  $^1\text{H}$ -NMR of **15**

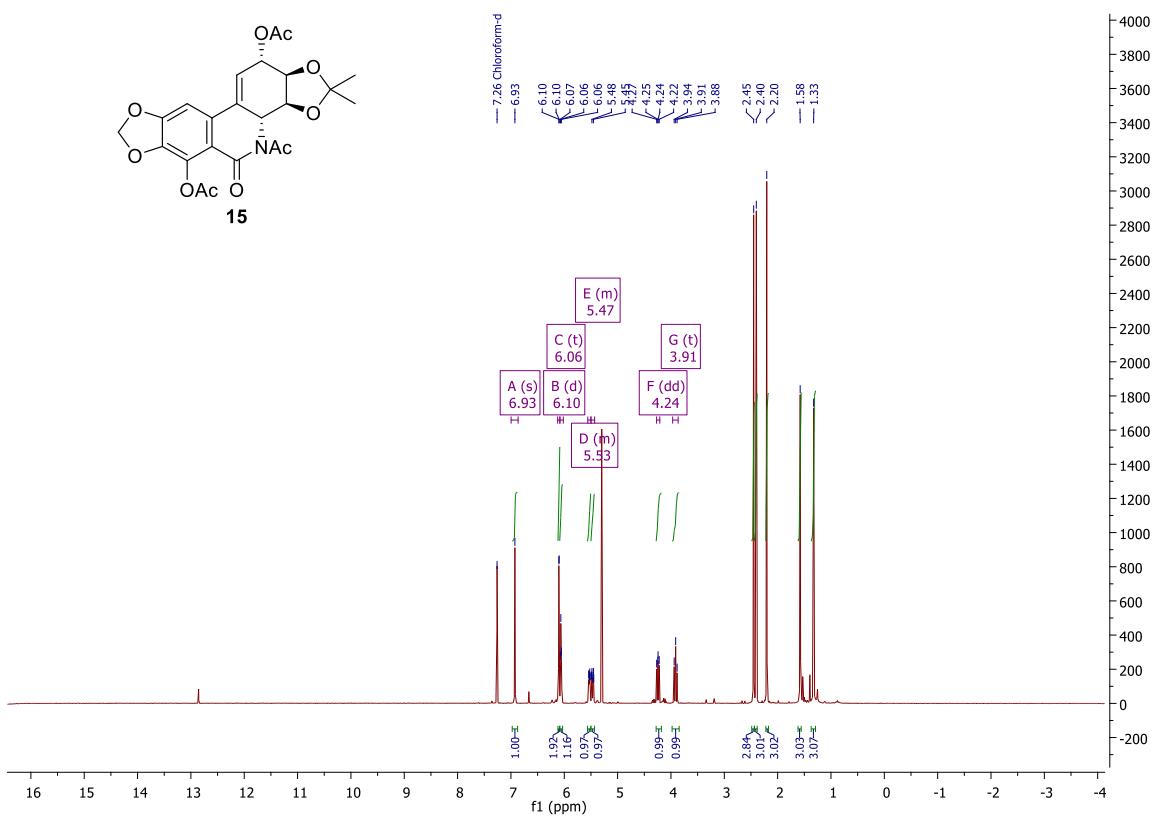


Figure S17.  $^{13}\text{C}$ -NMR of **15**

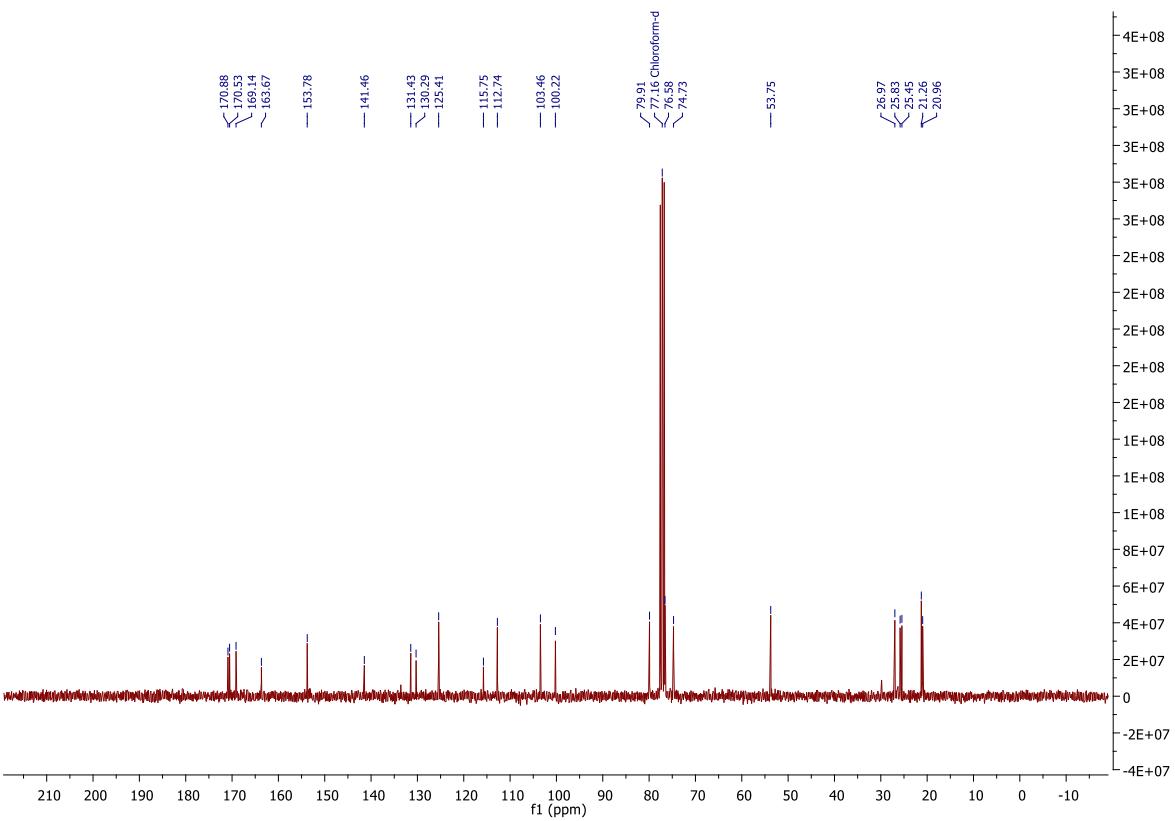


Figure S18.  $^1\text{H}$ -NMR of **16**

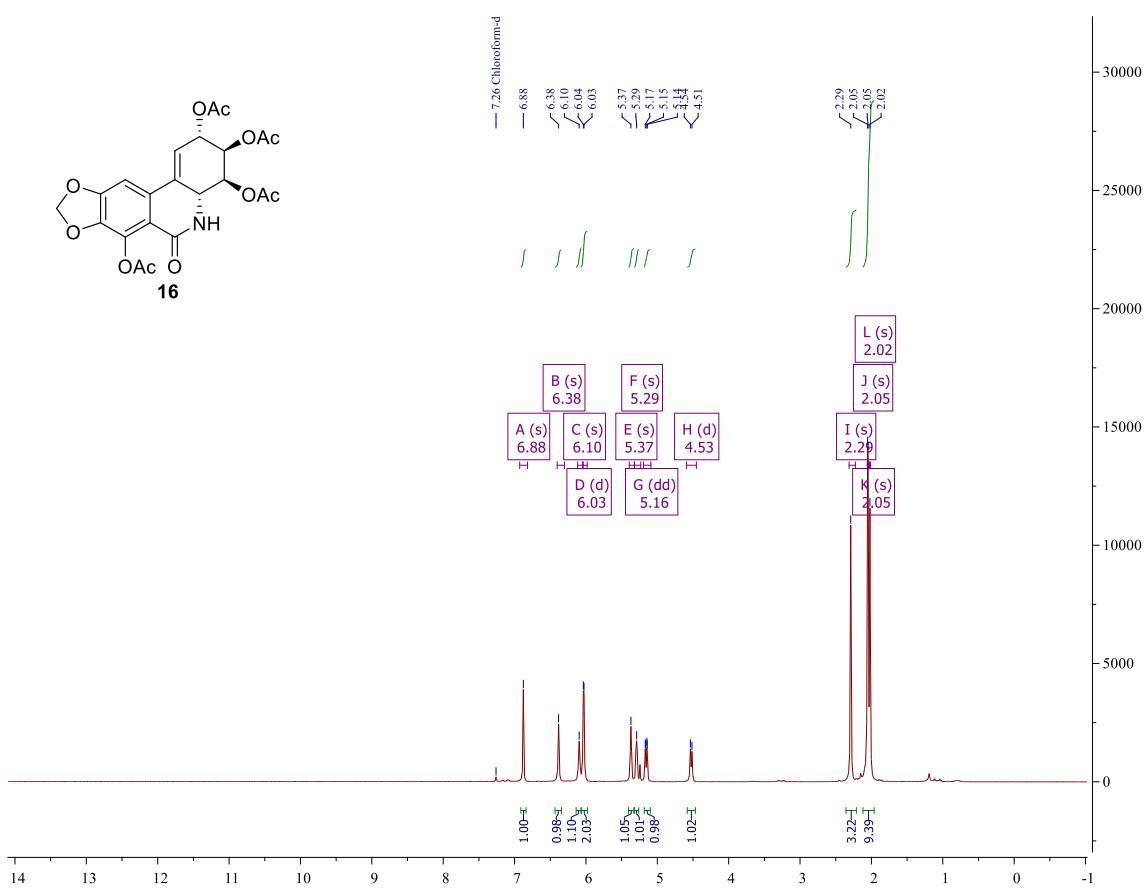


Figure S19.  $^{13}\text{C}$ -NMR of **16**

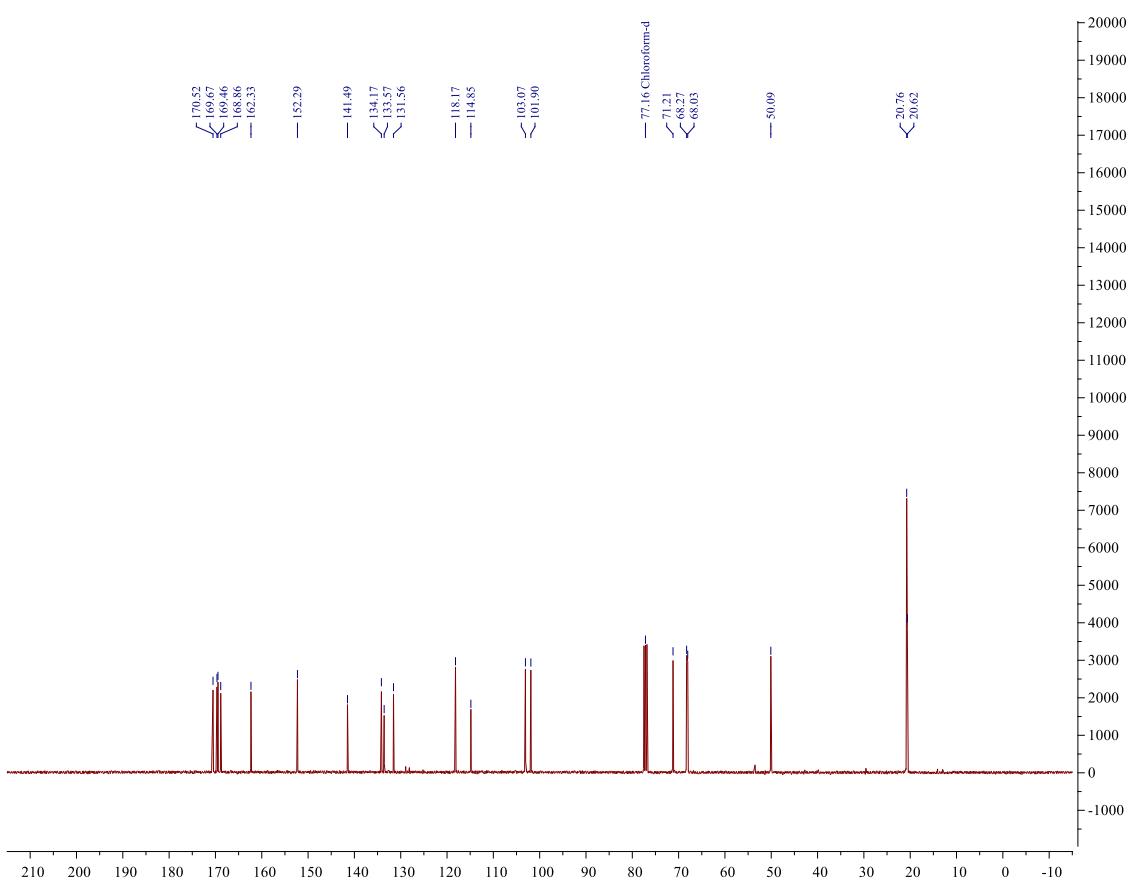


Figure S20.  $^1\text{H}$ -NMR of **17a**

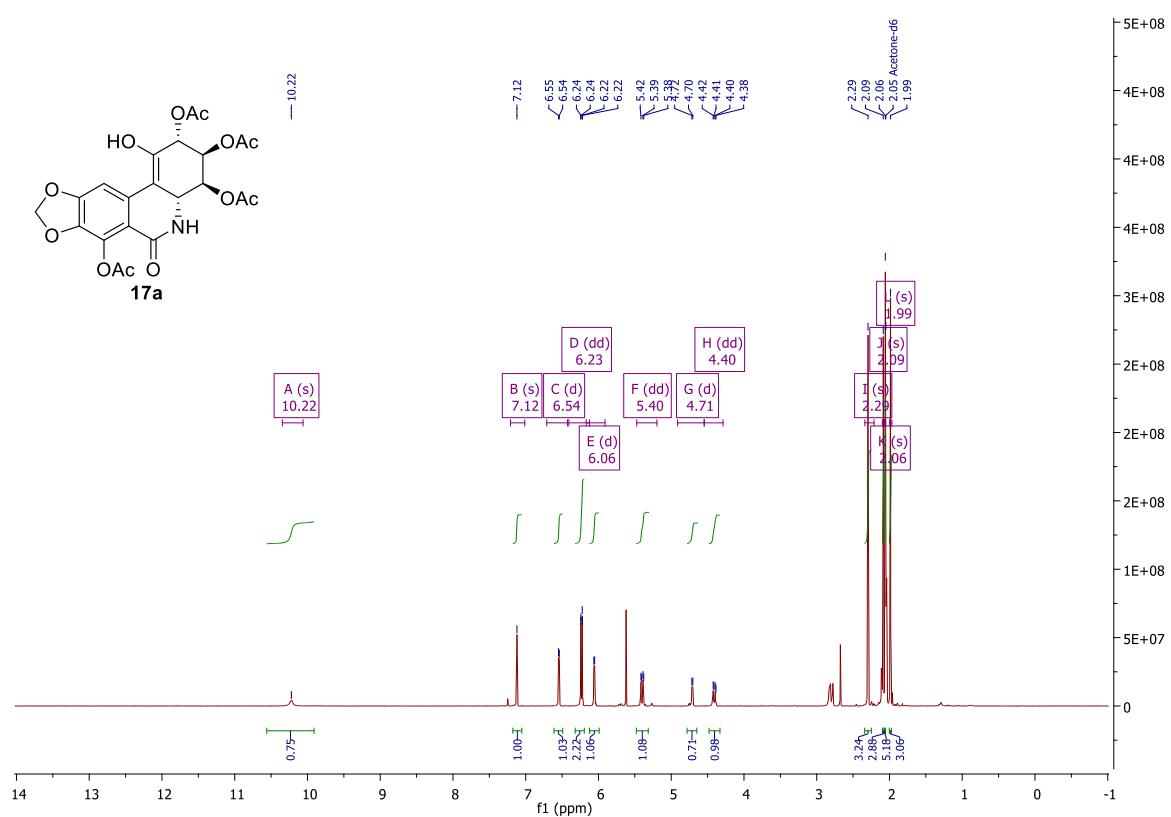


Figure S21.  $^{13}\text{C}$ -NMR of **17a**

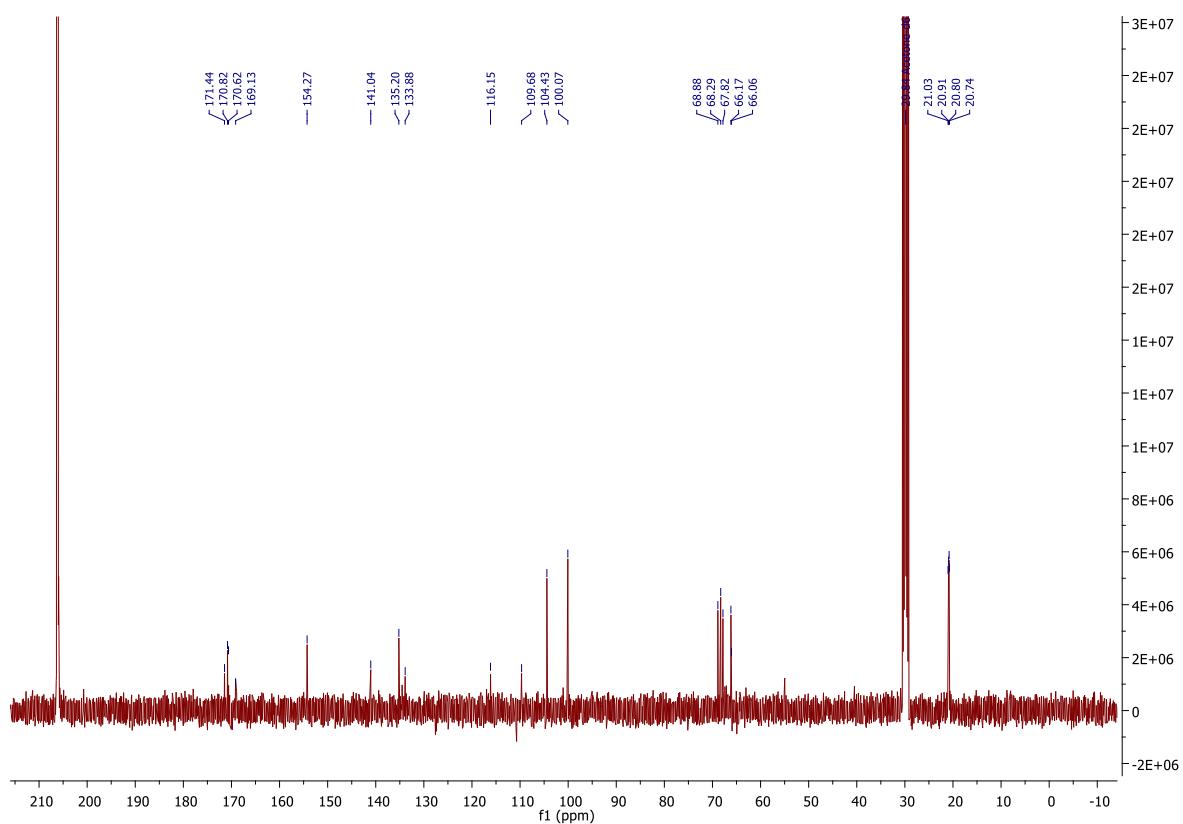


Figure S22.  $^1\text{H}$ -NMR of **24**

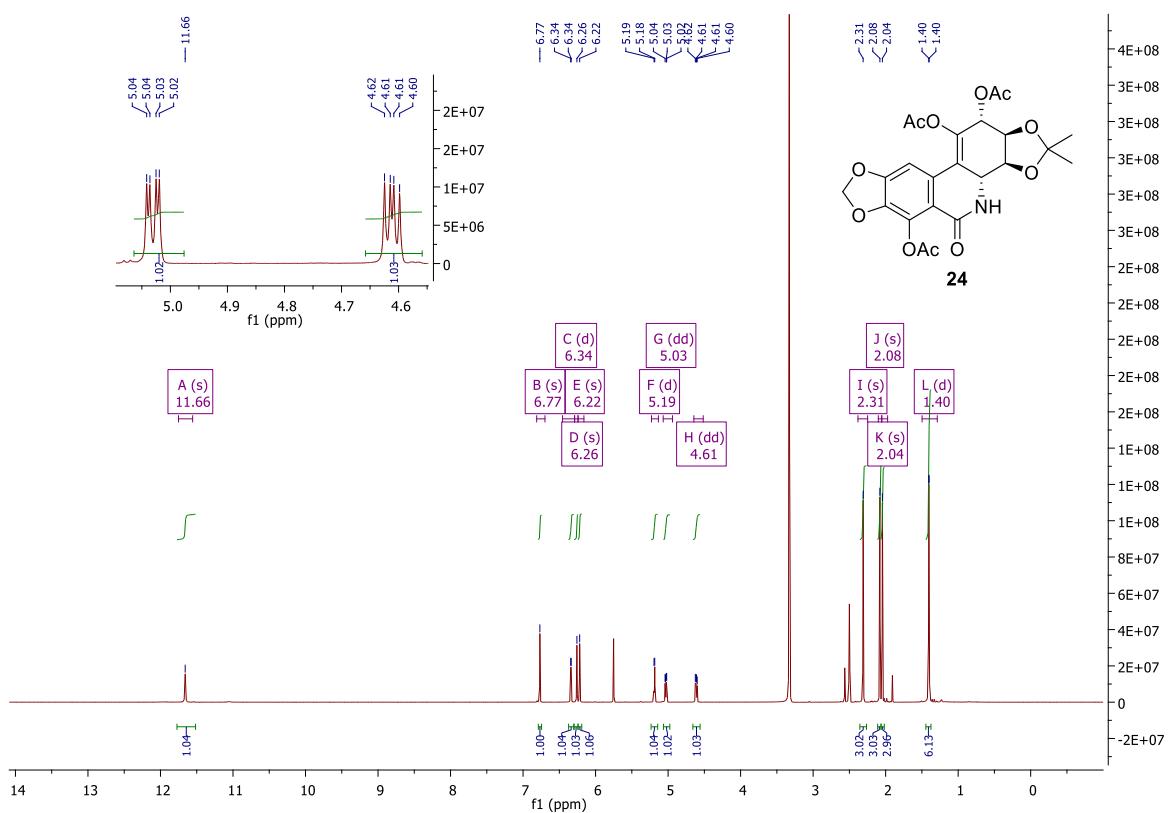


Figure S23.  $^{13}\text{C}$ -NMR of **24**

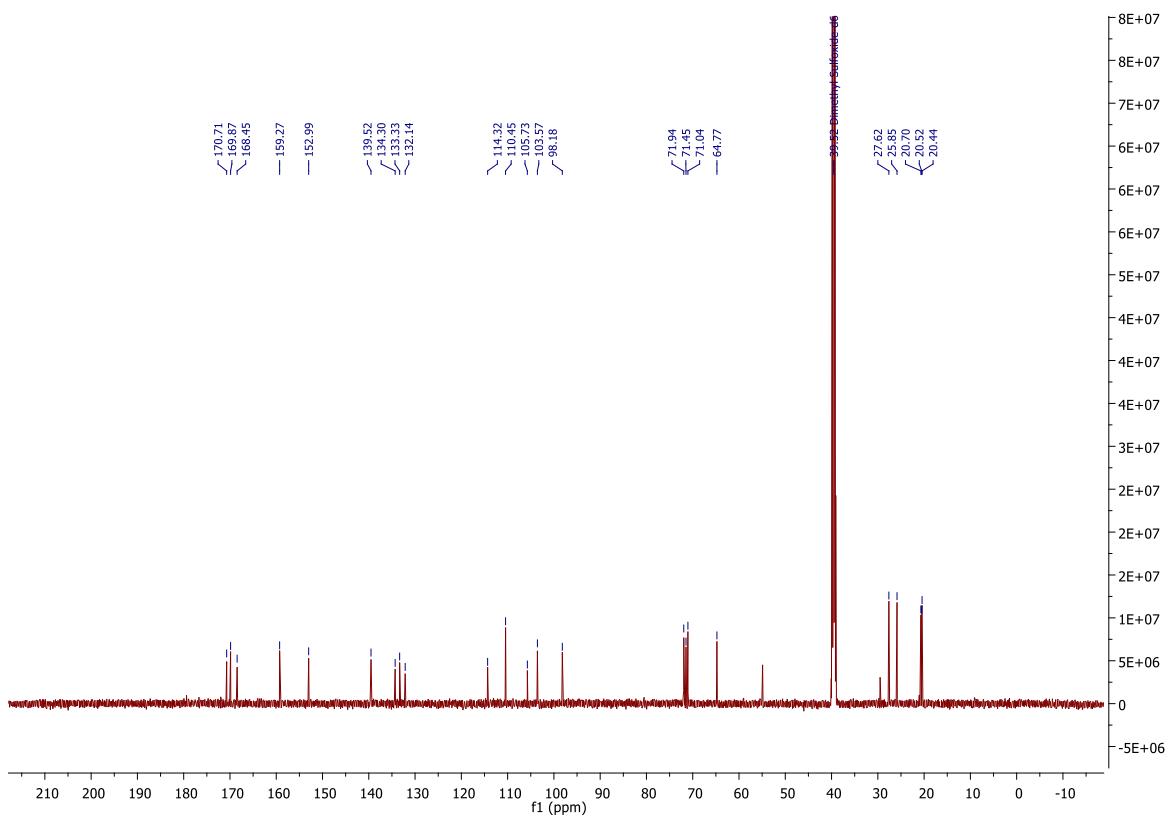


Figure S24.  $^1\text{H}$ - $^{15}\text{N}$  HSQC of **24**

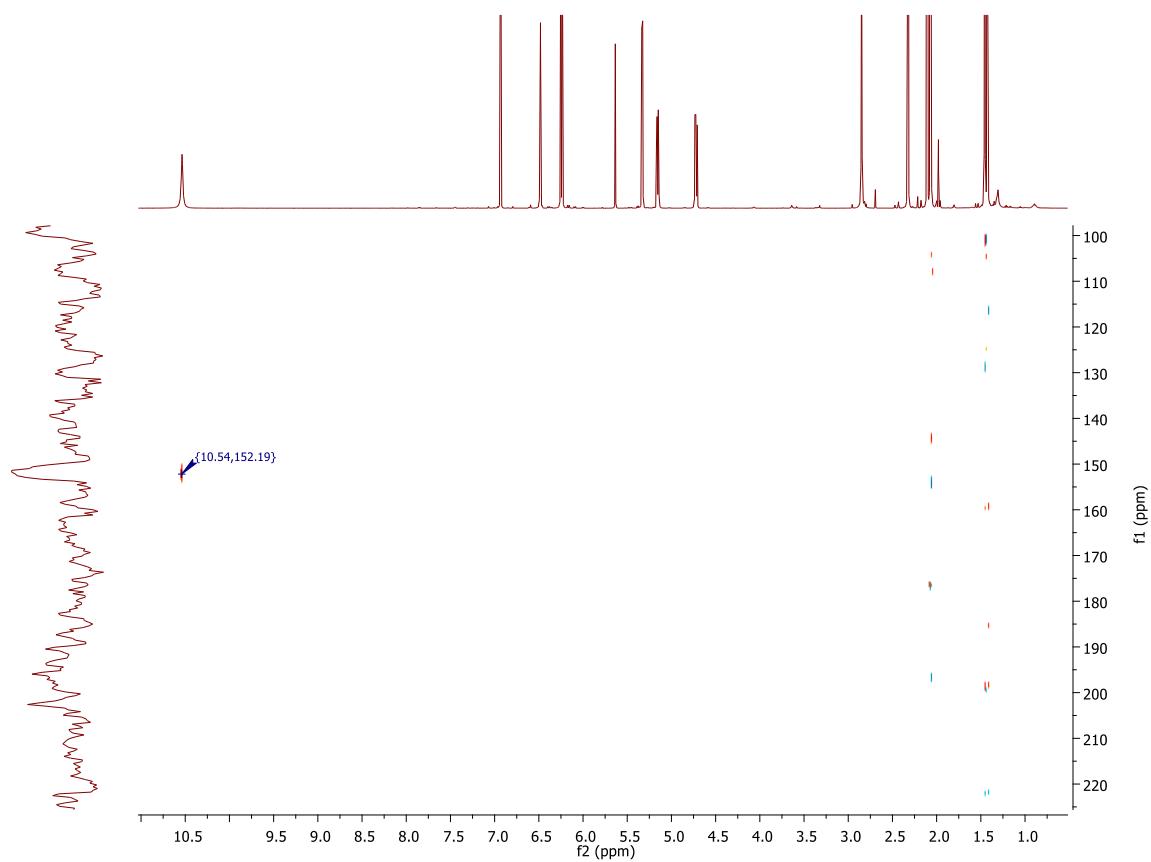


Figure S25.  $^1\text{H}$ - $^{15}\text{N}$  HMBC of **24**

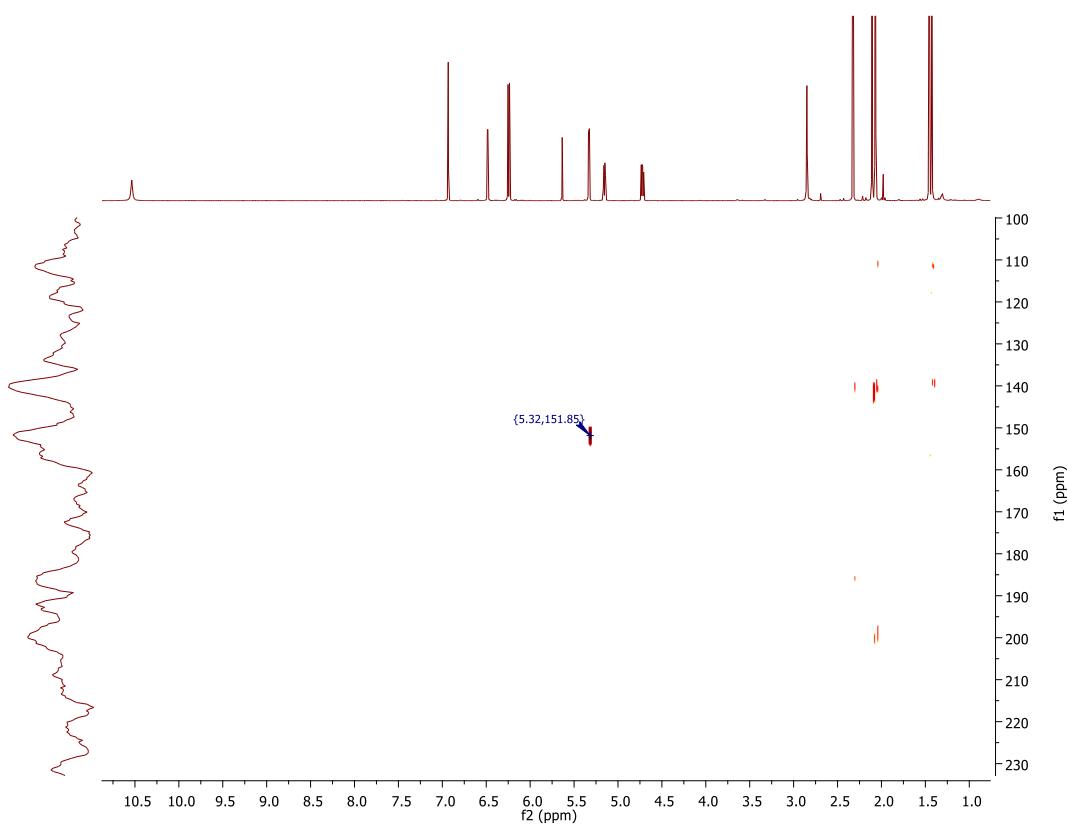


Figure S26.  $^1\text{H}$ -NMR of 25

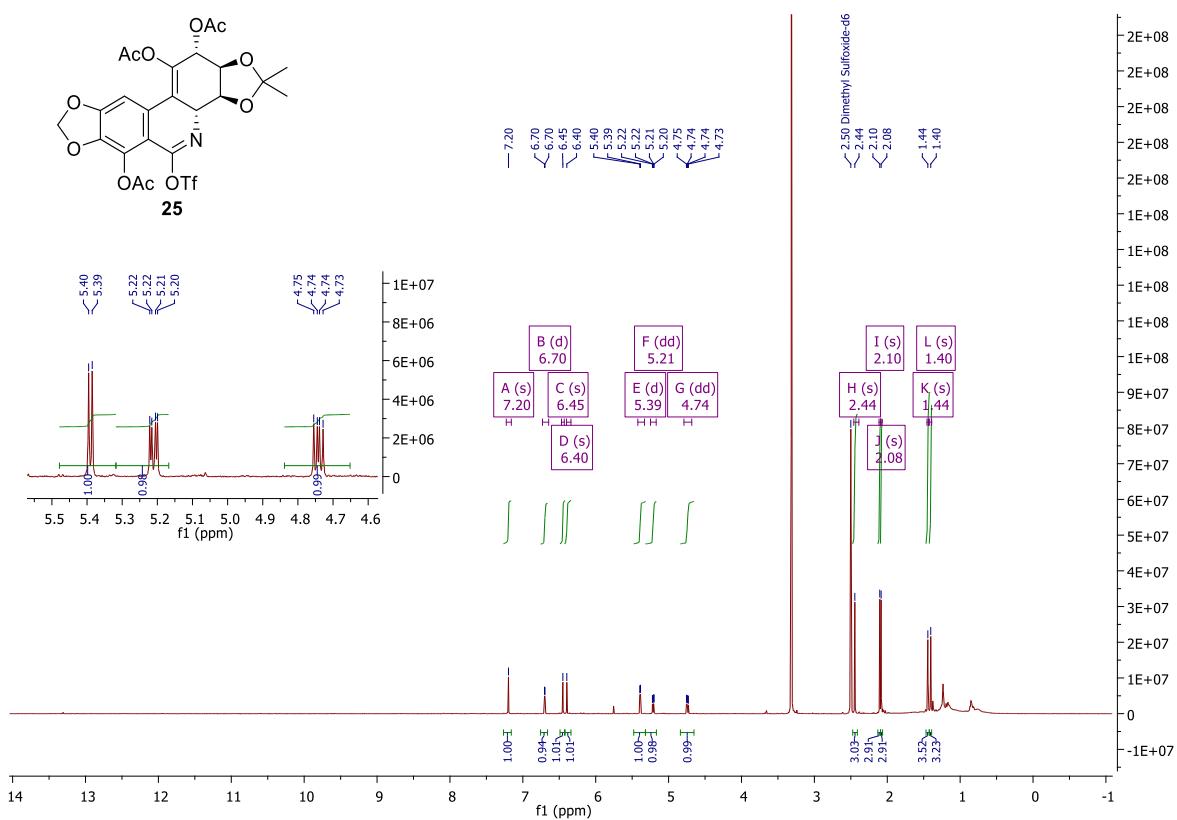


Figure S27.  $^{13}\text{C}$ -NMR of 25

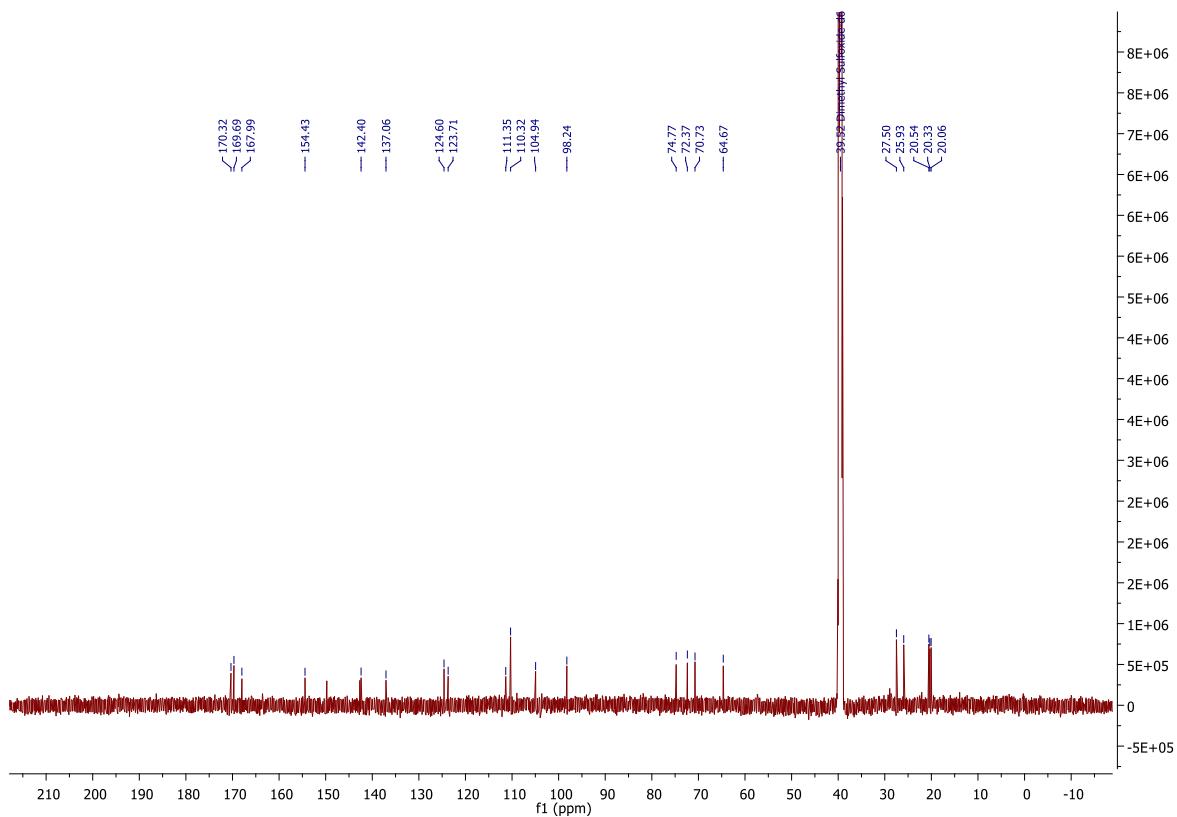


Figure S28.  $^{19}\text{F}$ -NMR of **25**

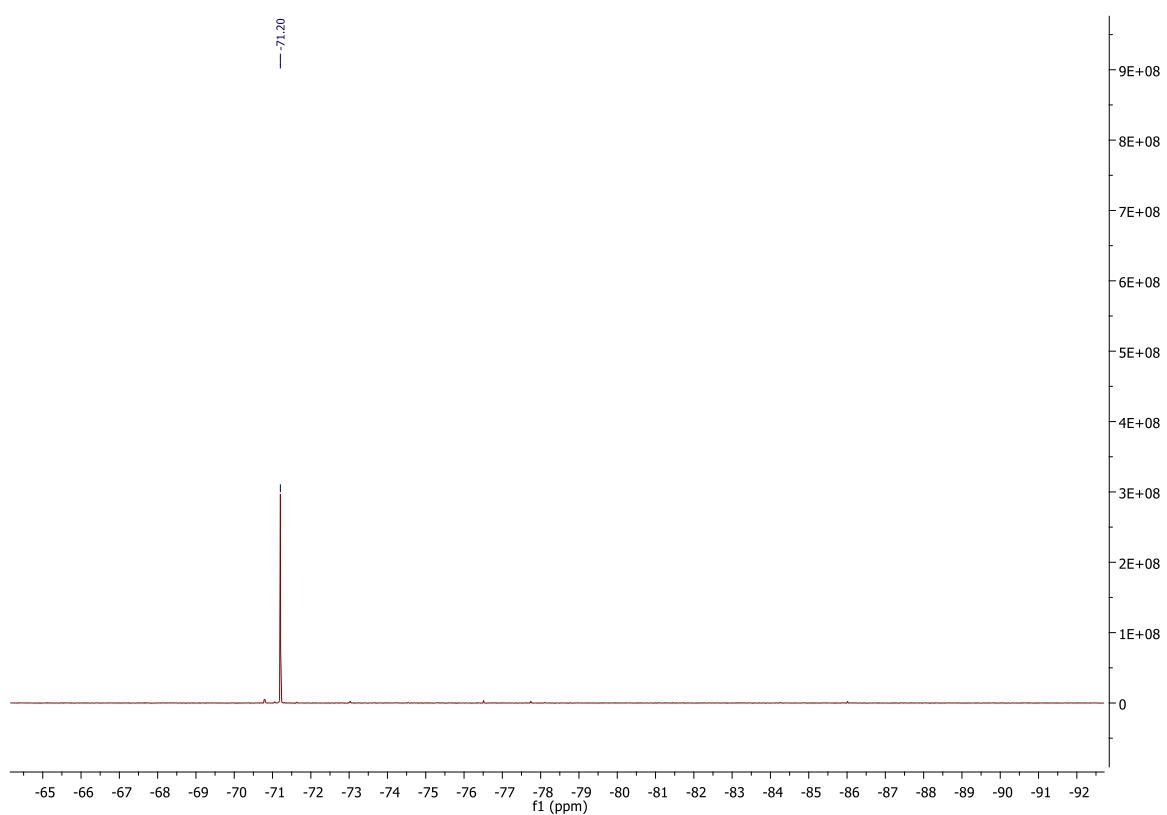


Figure S29.  $^1\text{H}$ -NMR of **26**

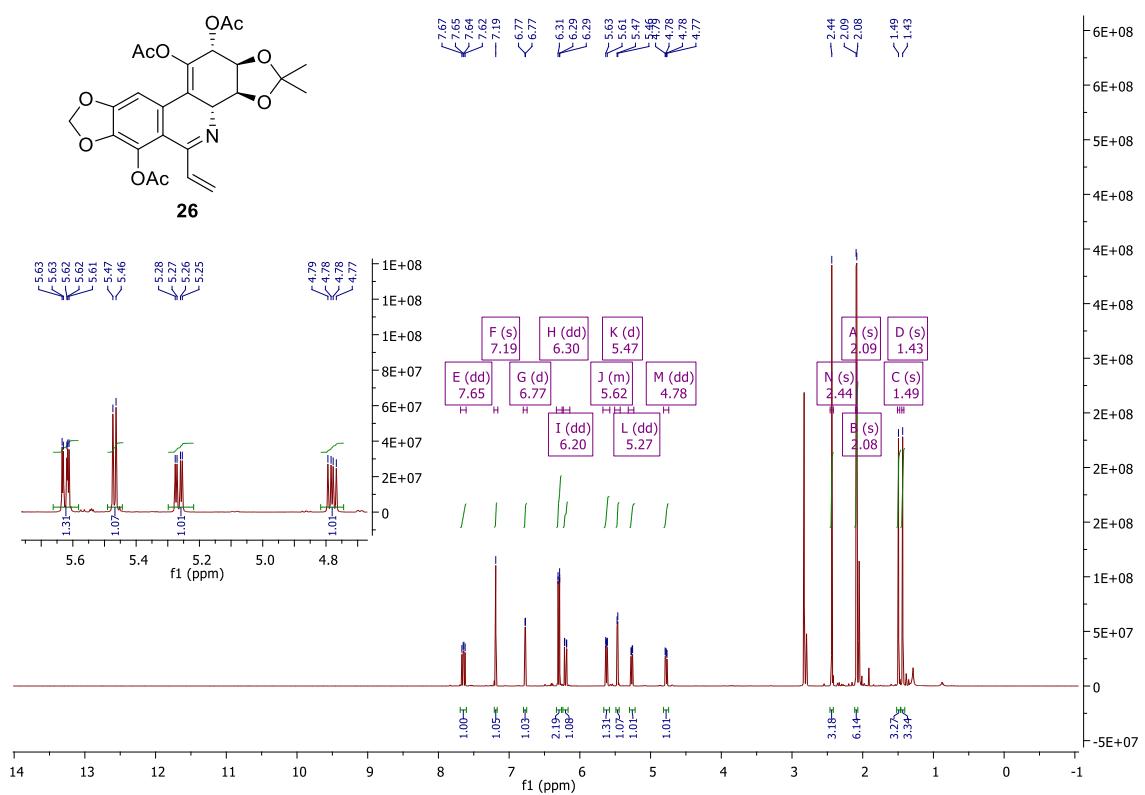


Figure S30.  $^{13}\text{C}$ -NMR of **26**

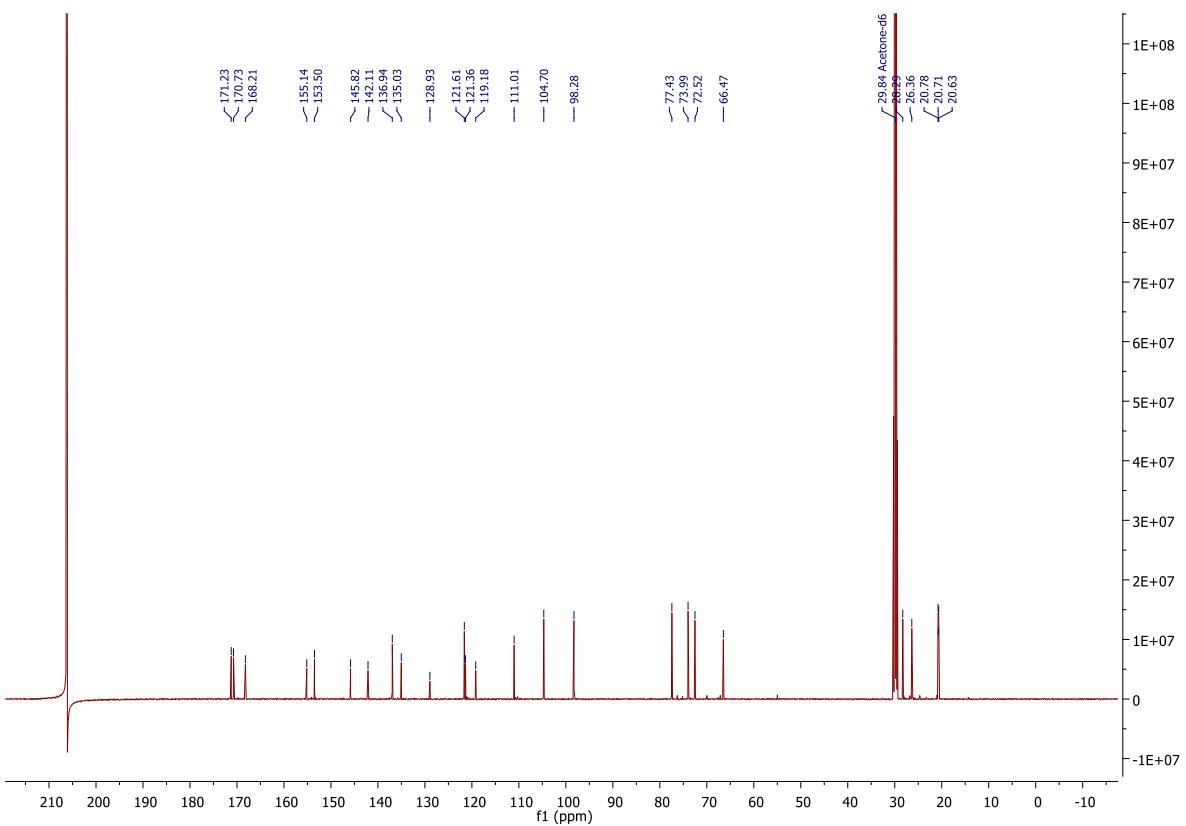


Figure S31.  $^1\text{H}$ - $^{15}\text{N}$  HMBC of **26**

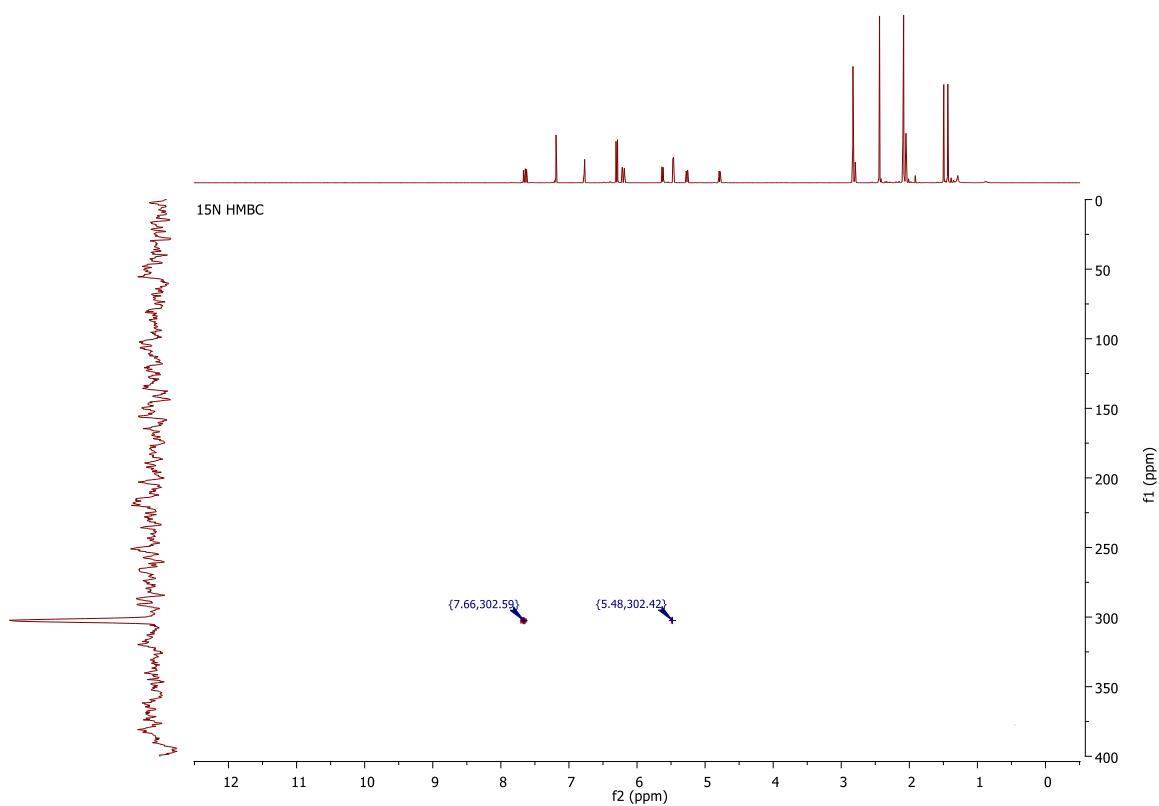


Figure S32.  $^1\text{H}$ -NMR of **27**

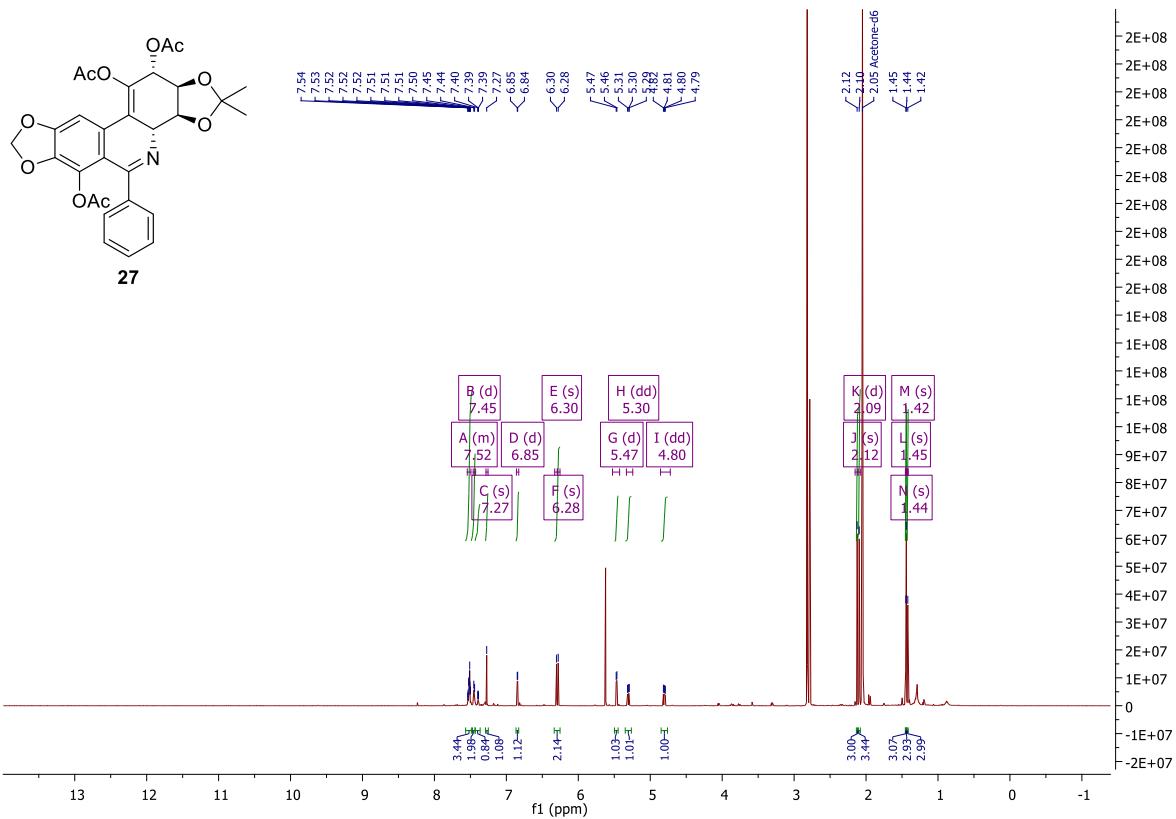


Figure S33.  $^{13}\text{C}$ -NMR of **27**

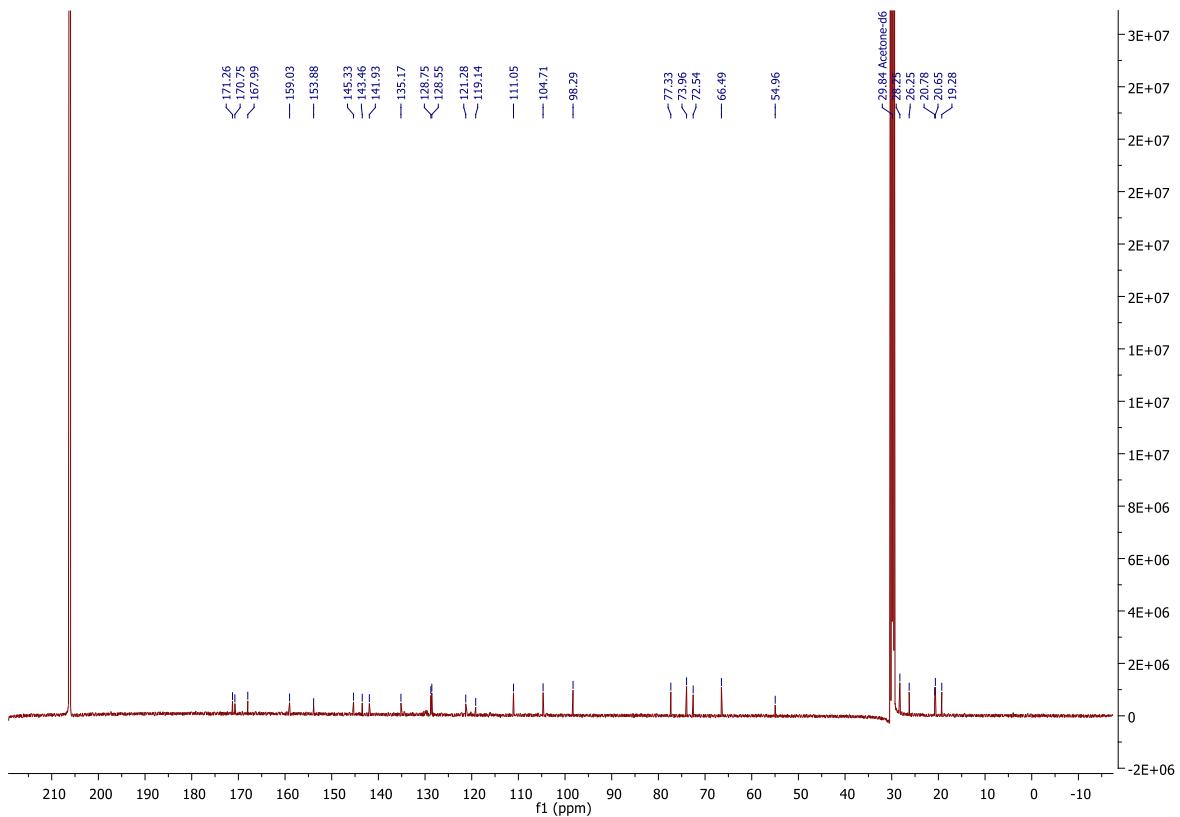


Figure S34.  $^1\text{H}$ -NMR of **28**

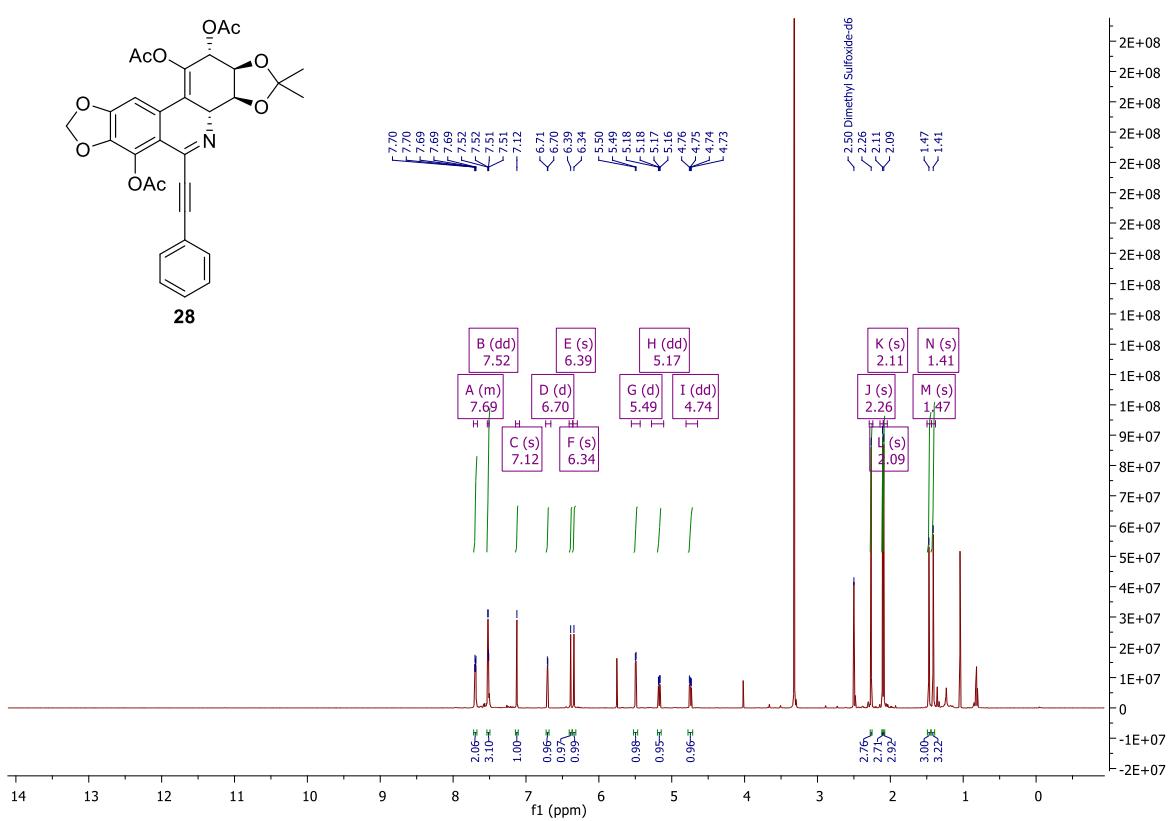


Figure S35.  $^{13}\text{C}$ -NMR of **28**

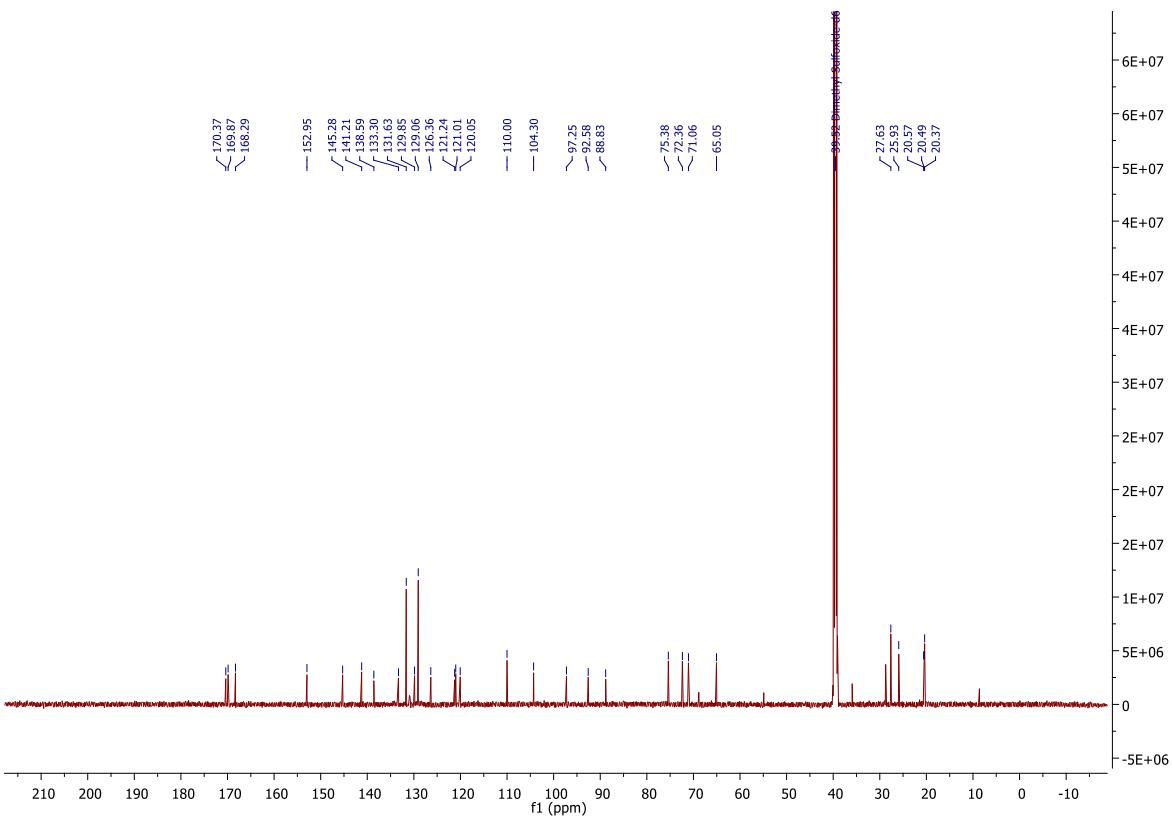


Figure S36.  $^1\text{H}$ -NMR of **29**

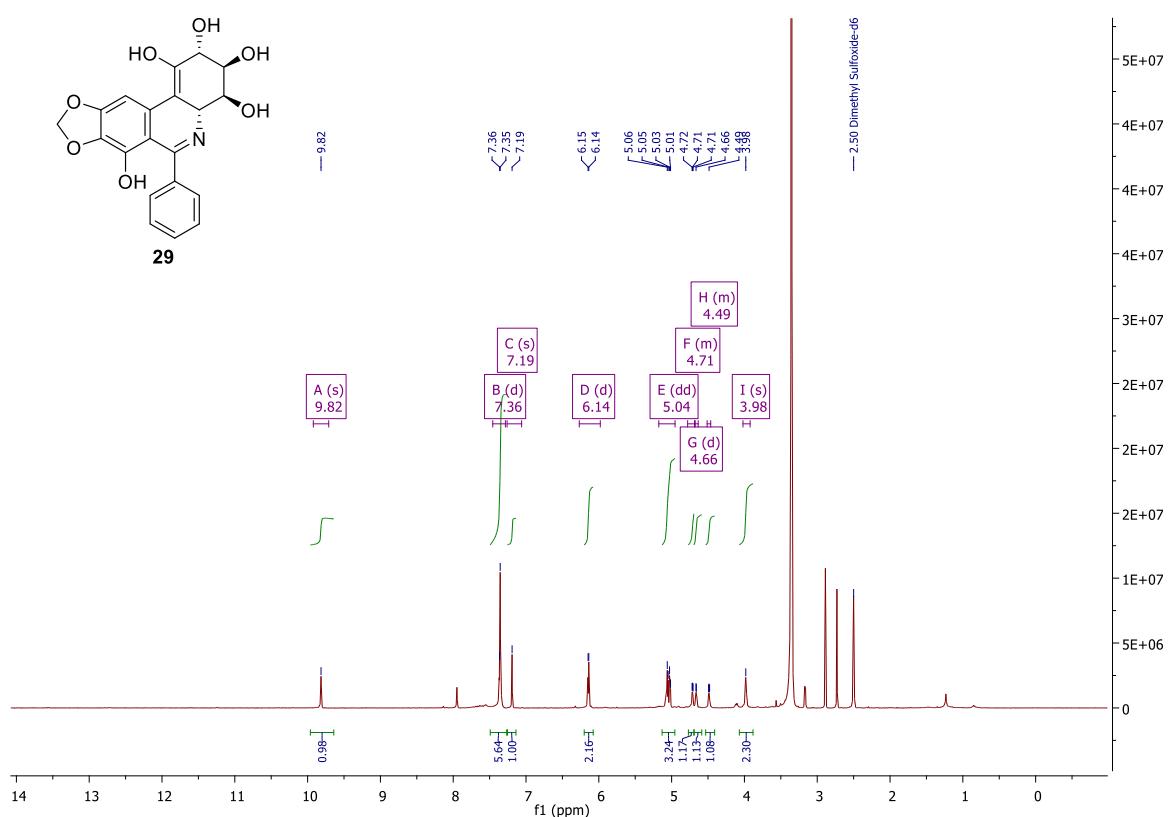


Figure S37.  $^{13}\text{C}$ -NMR of **29**

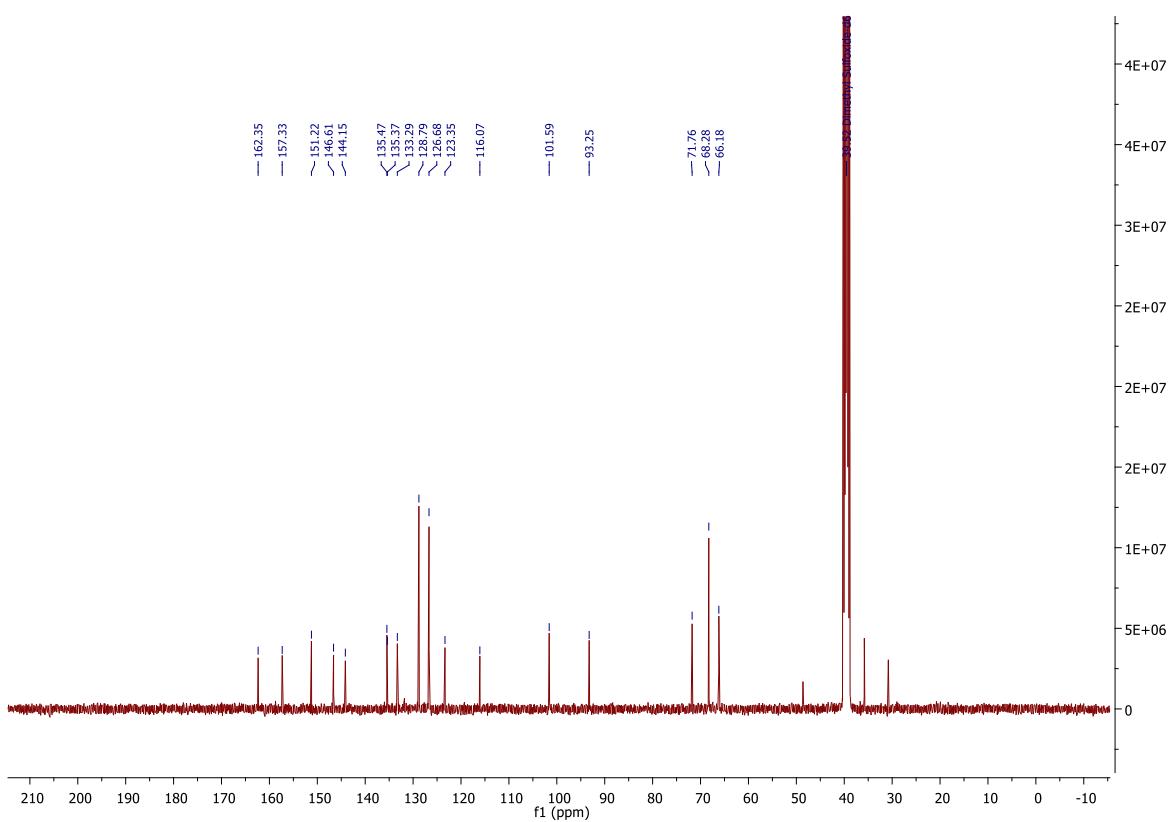


Figure S38.  $^1\text{H}$ -NMR of **30**

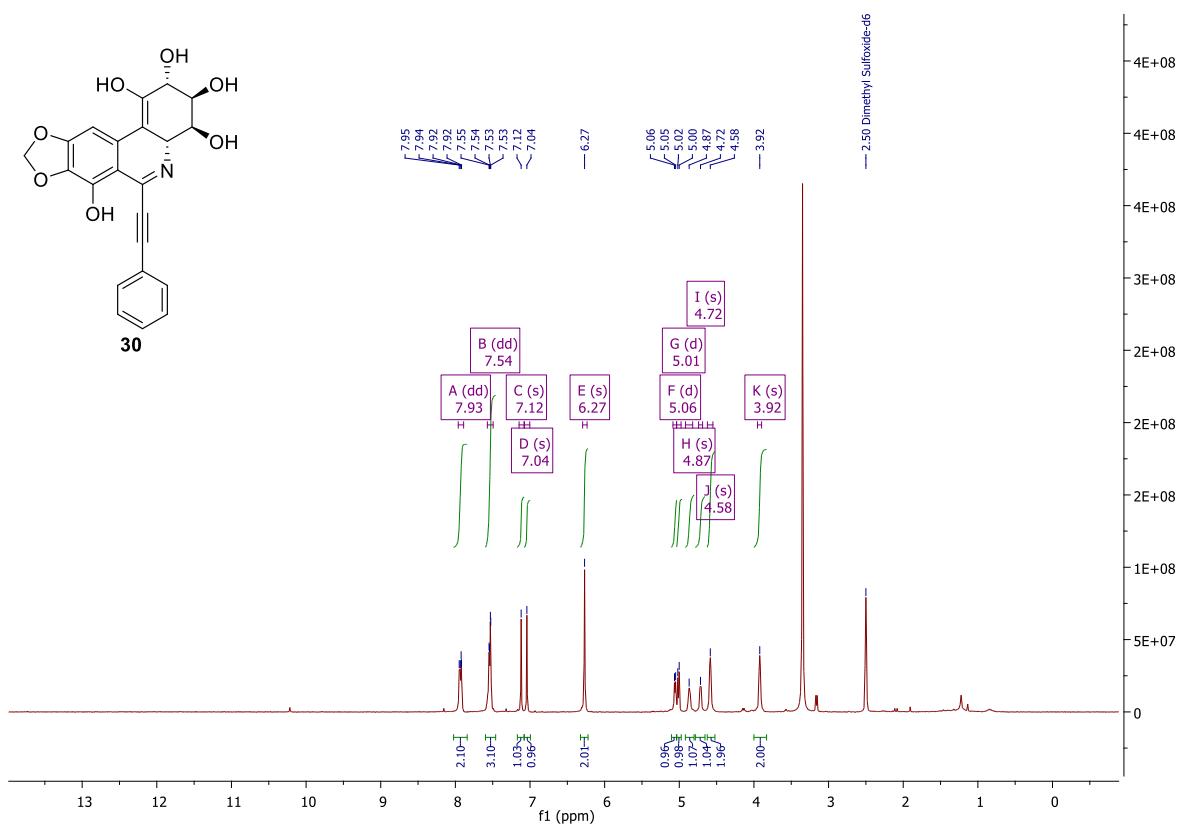


Figure S39.  $^{13}\text{C}$ -NMR of **30**

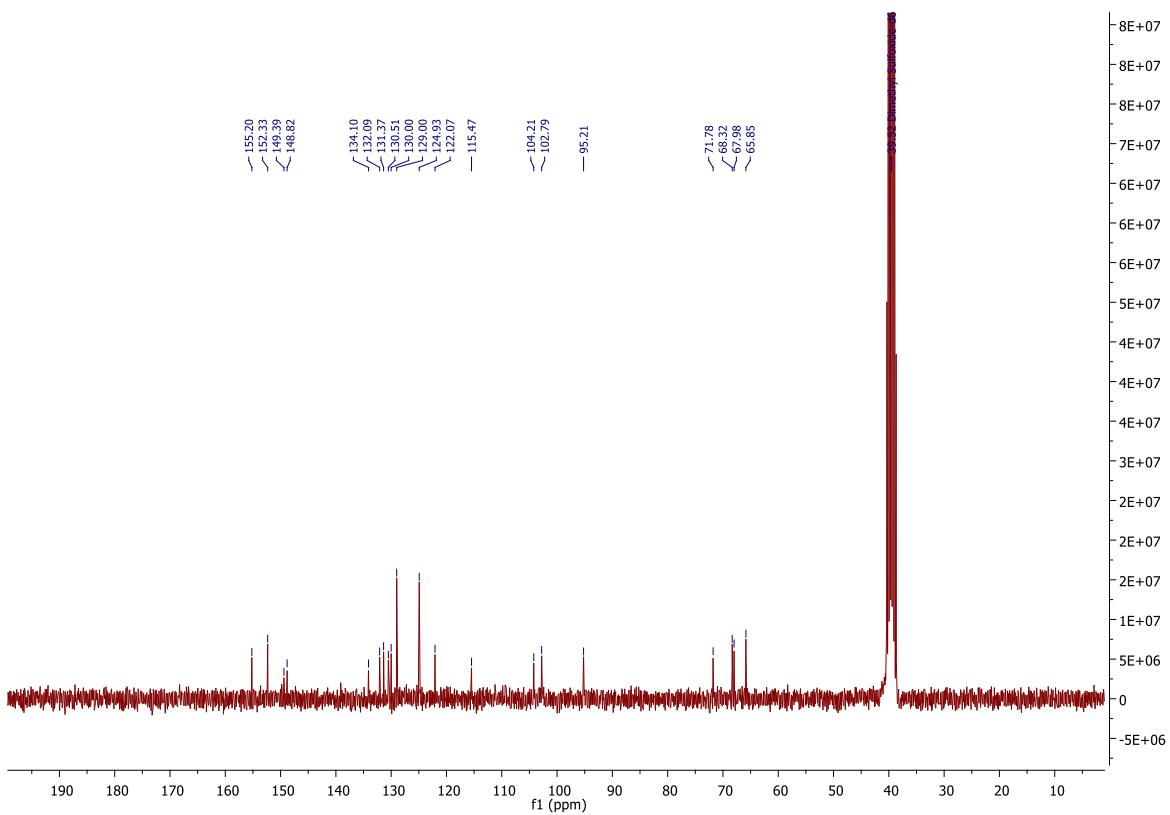


Figure S40.  $^1\text{H}$ -NMR of **31**

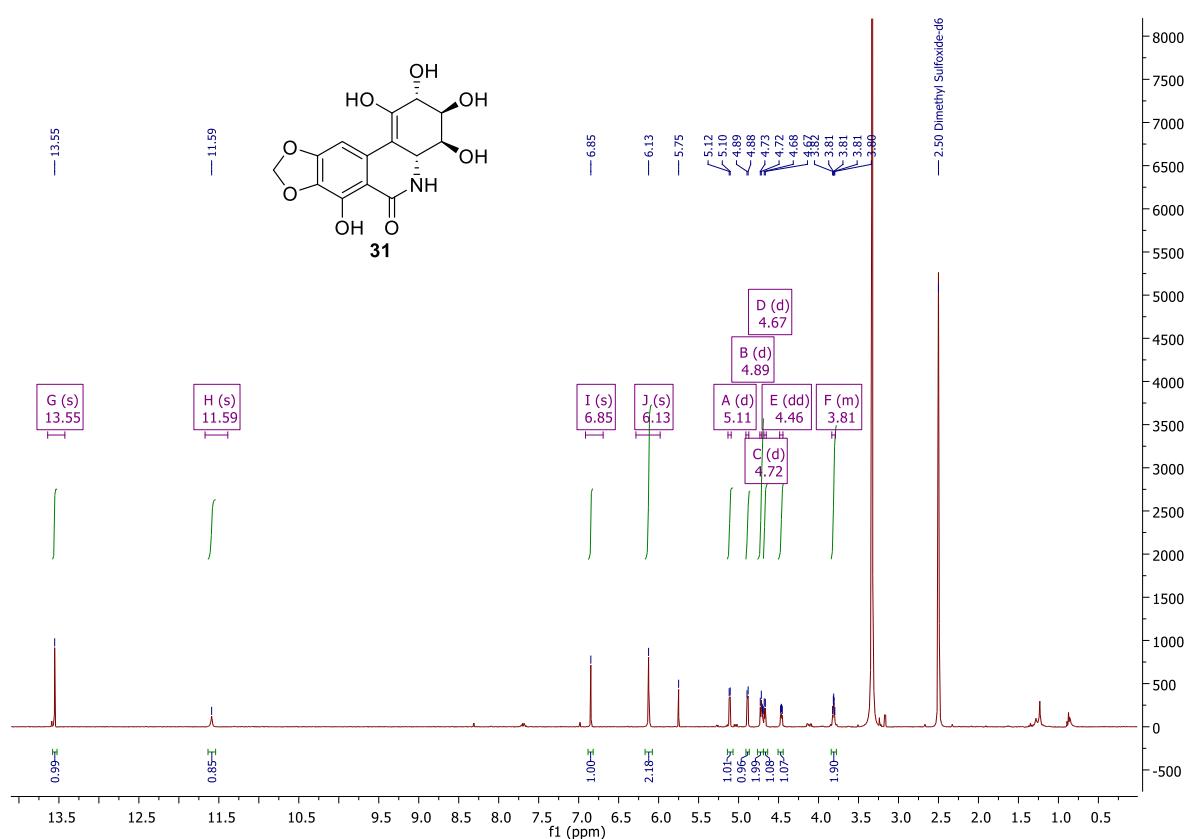


Figure S41.  $^{13}\text{C}$ -NMR of **31**

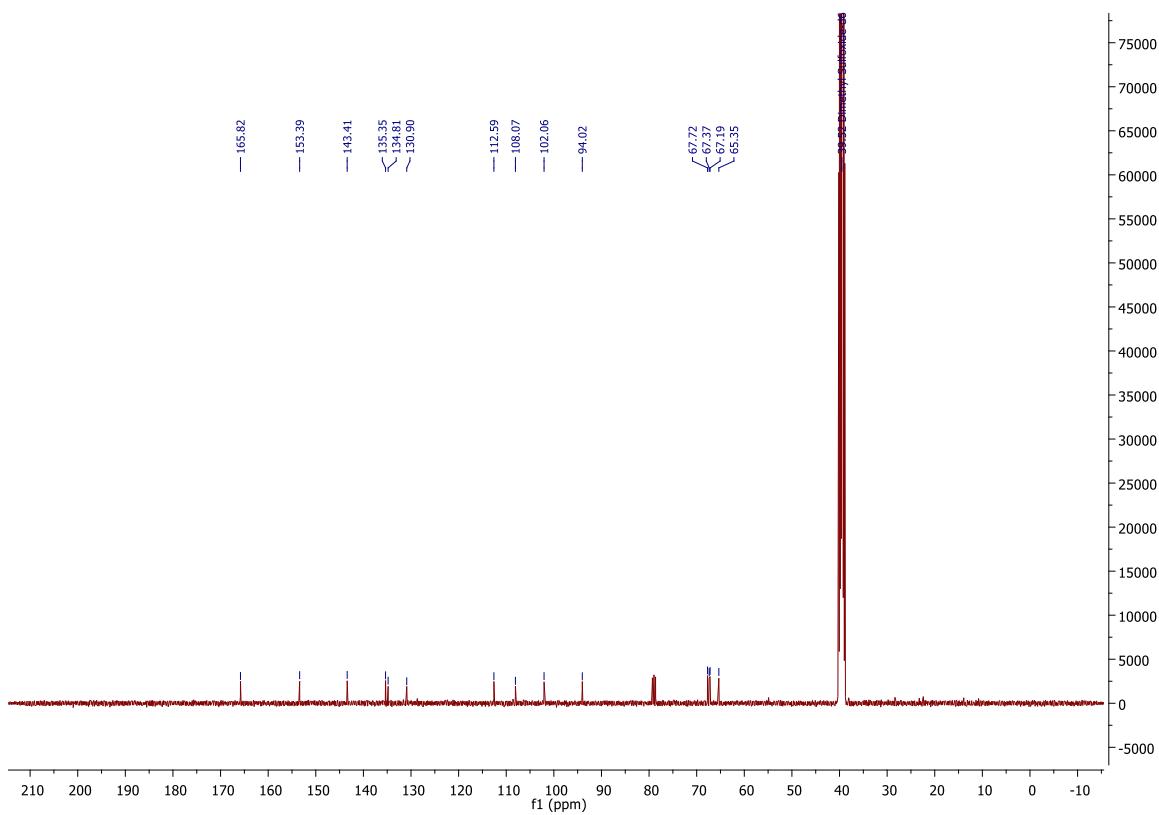


Figure S42.  $^1\text{H}$ -NMR of 33

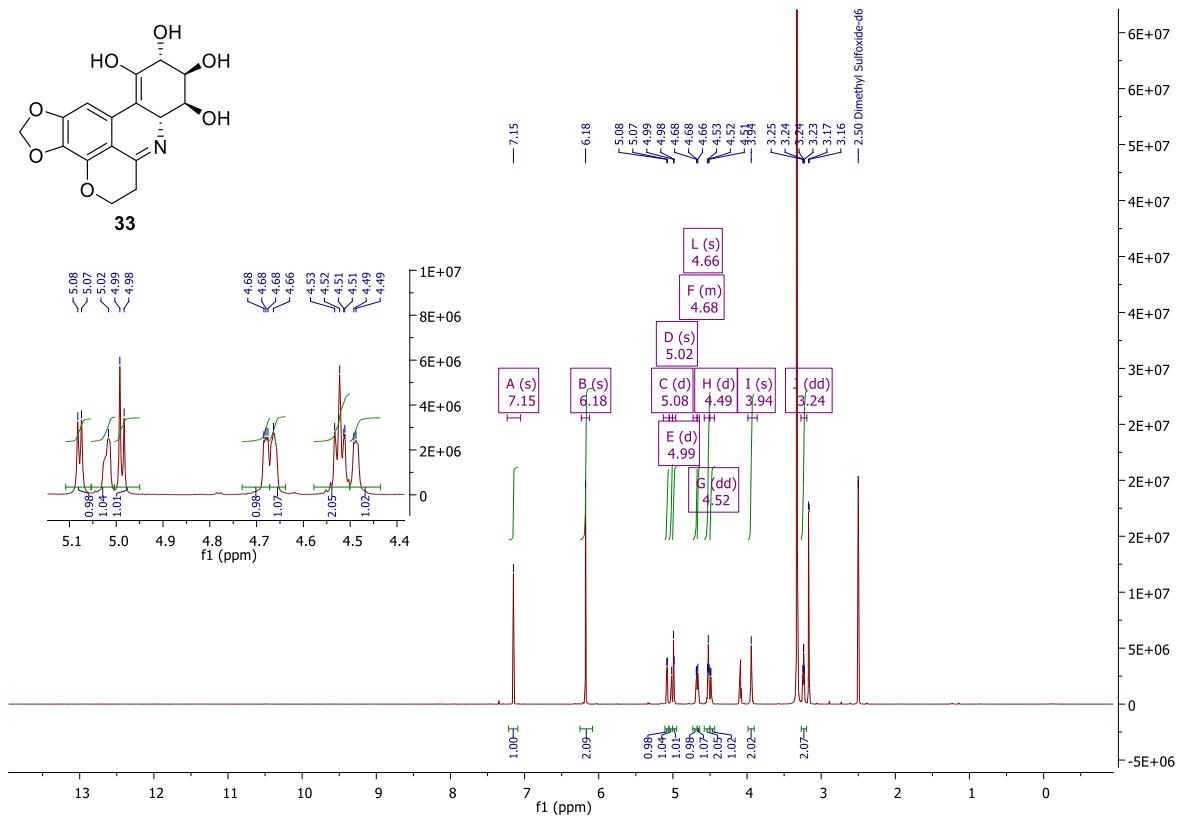


Figure S43.  $^{13}\text{C}$ -NMR of 33

