

Supplementary Material

In Vitro and in Vivo Assessment of the Efficacy of Bromoageliferin, an Alkaloid Isolated from the Sponge *Agelas dilatata*, against *Pseudomonas aeruginosa*

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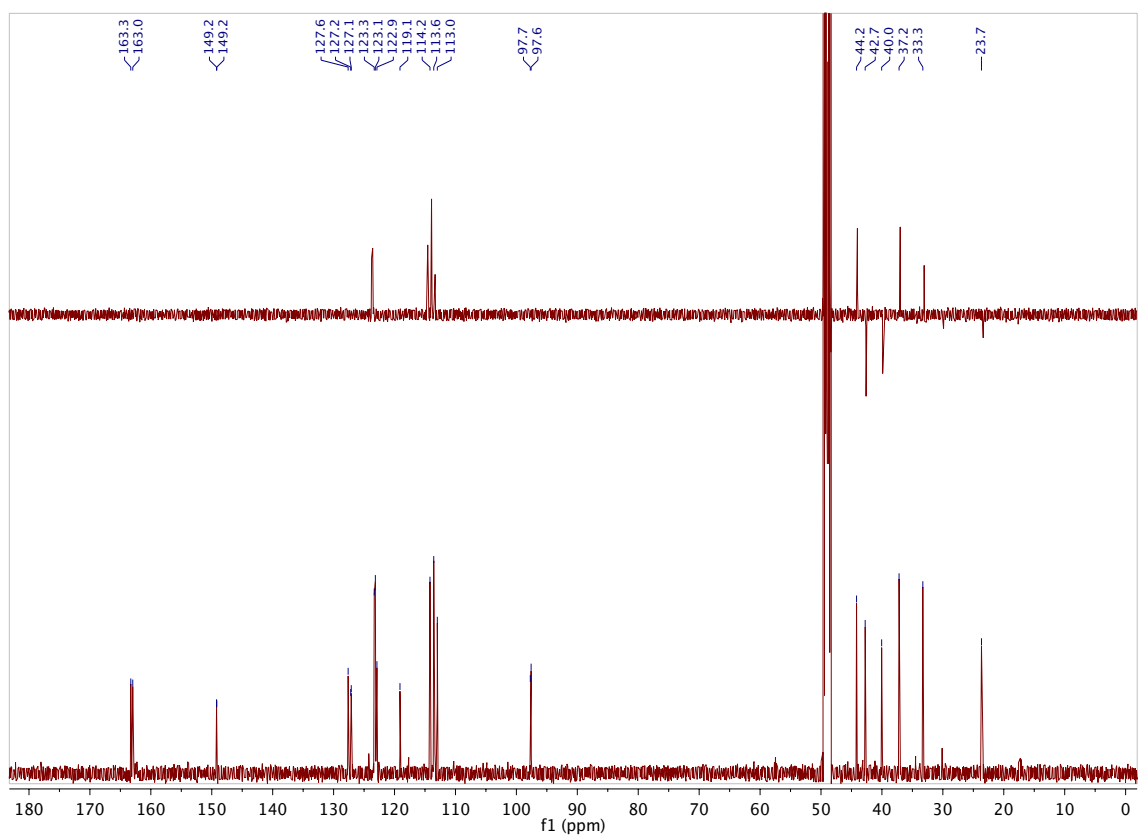
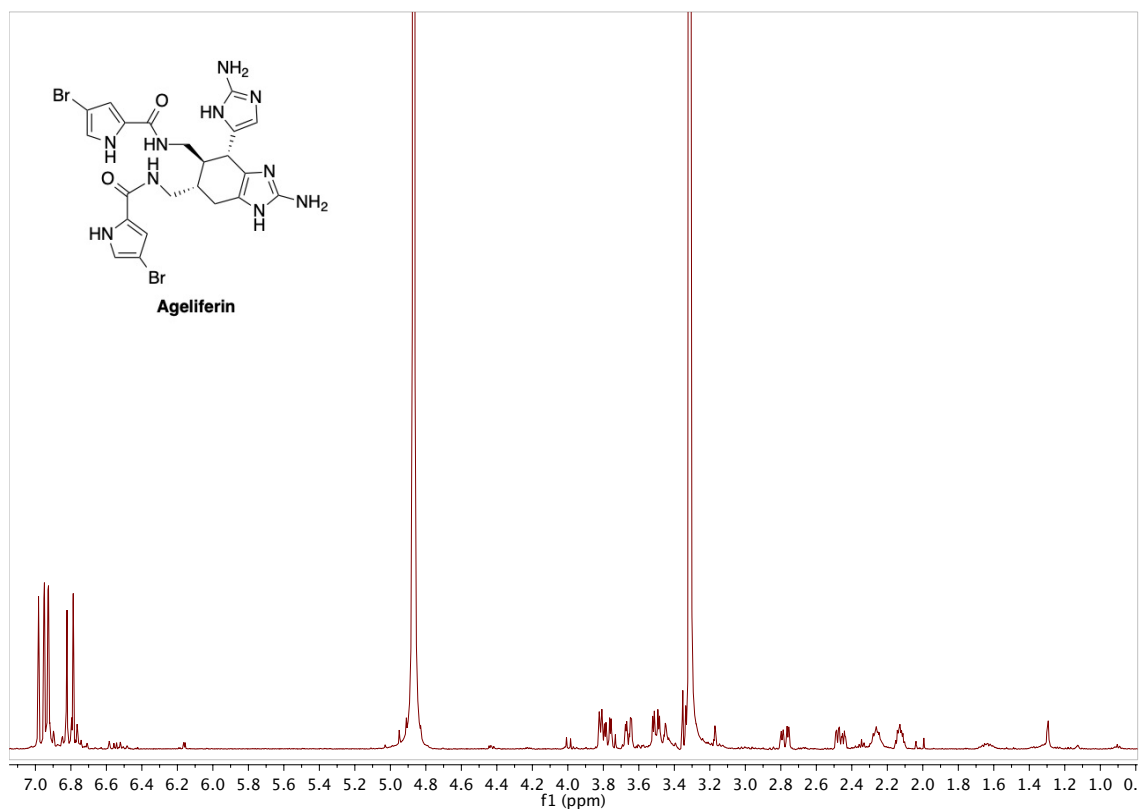
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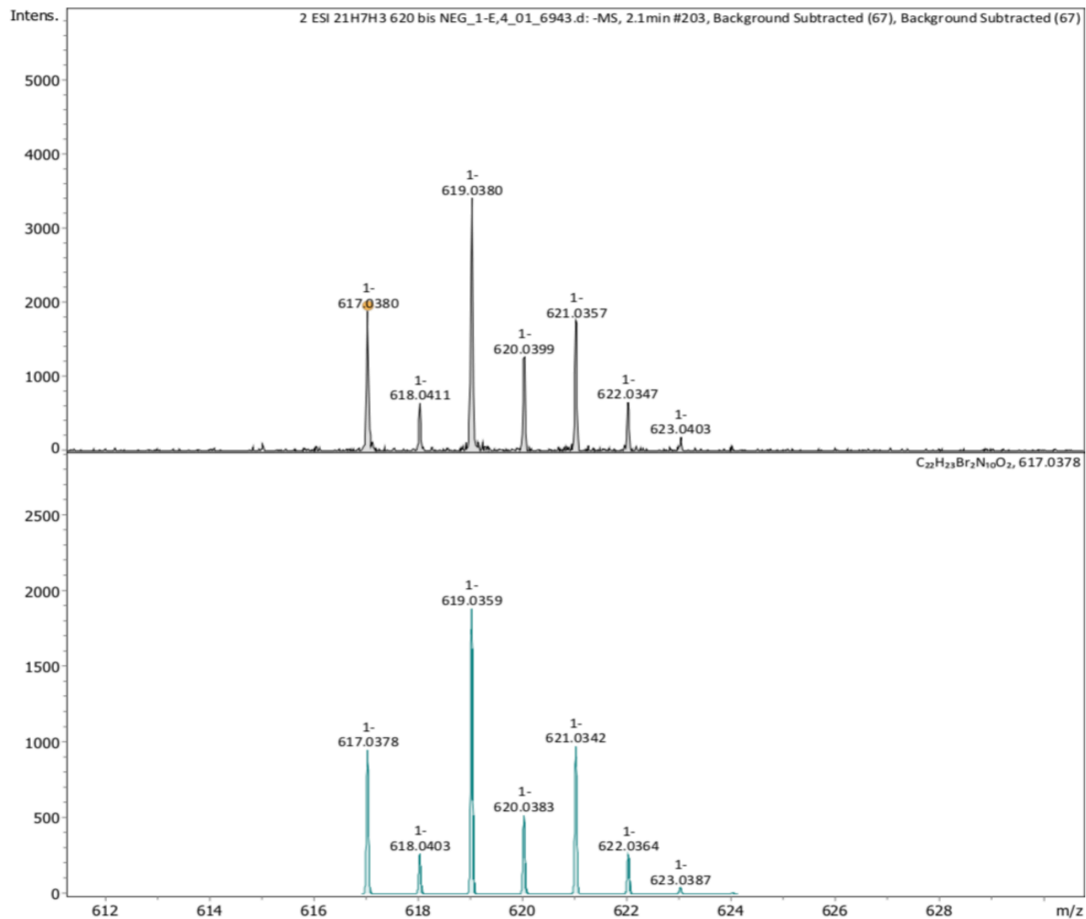
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| Meas. m/z | # | Ion Formula | Score | m/z | err [mDa] | err [ppm] | mSigma | rdb | e ⁻ Conf | N-Rule |
|-----------|---|----------------|--------|----------|-----------|-----------|--------|------|---------------------|--------|
| 617.0380 | 1 | C22H23Br2N10O2 | 100.00 | 617.0378 | -0.2 | -0.4 | 51.0 | 19.0 | even | ok |
| | 2 | C23H29Br2N3O7 | 86.31 | 617.0378 | -0.2 | -0.4 | 55.8 | 13.5 | odd | ok |

Figure S3. (-)-HRESIMS of 1.

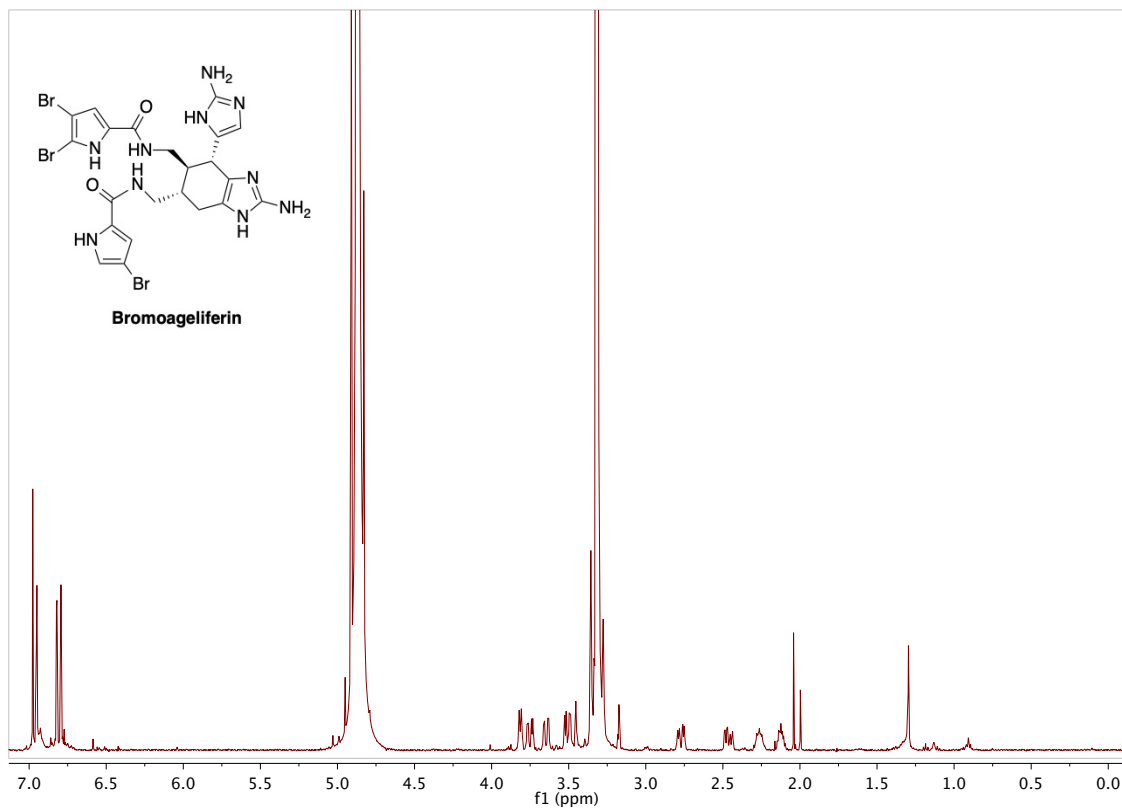


Figure S4. ^1H NMR spectrum of **2** (500 MHz, CD_3OD).

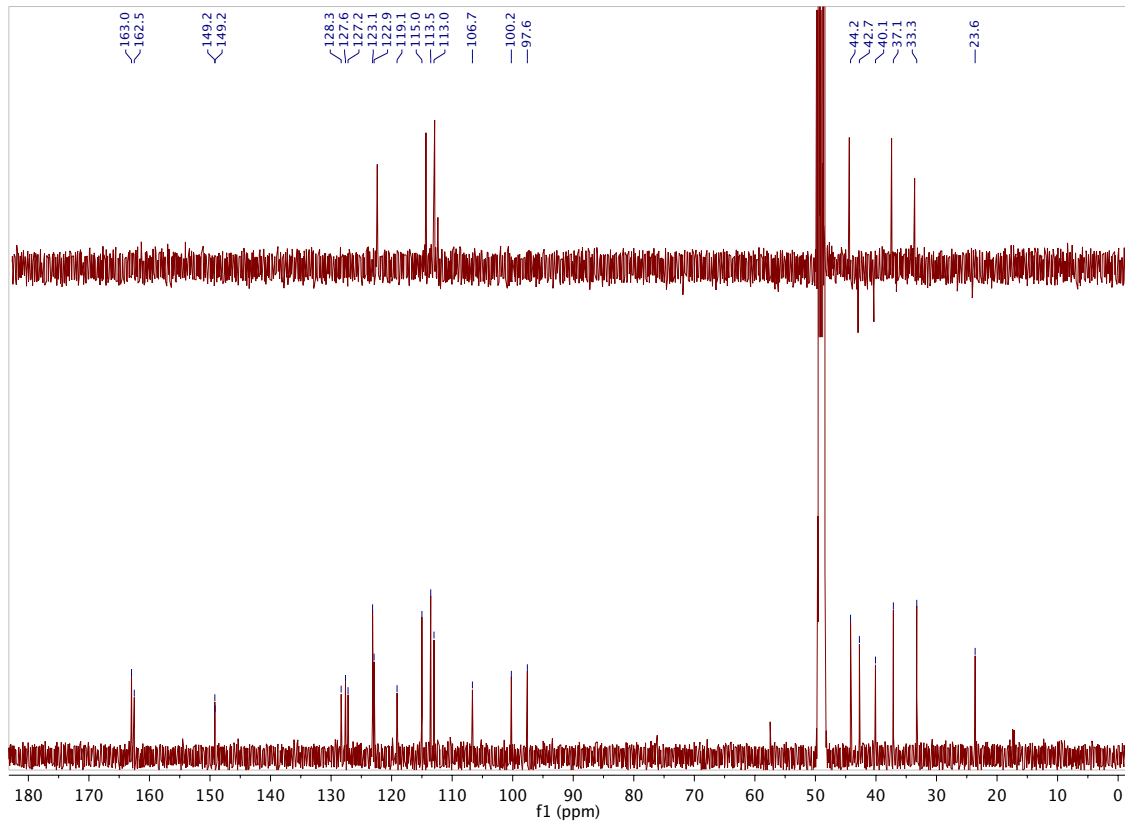
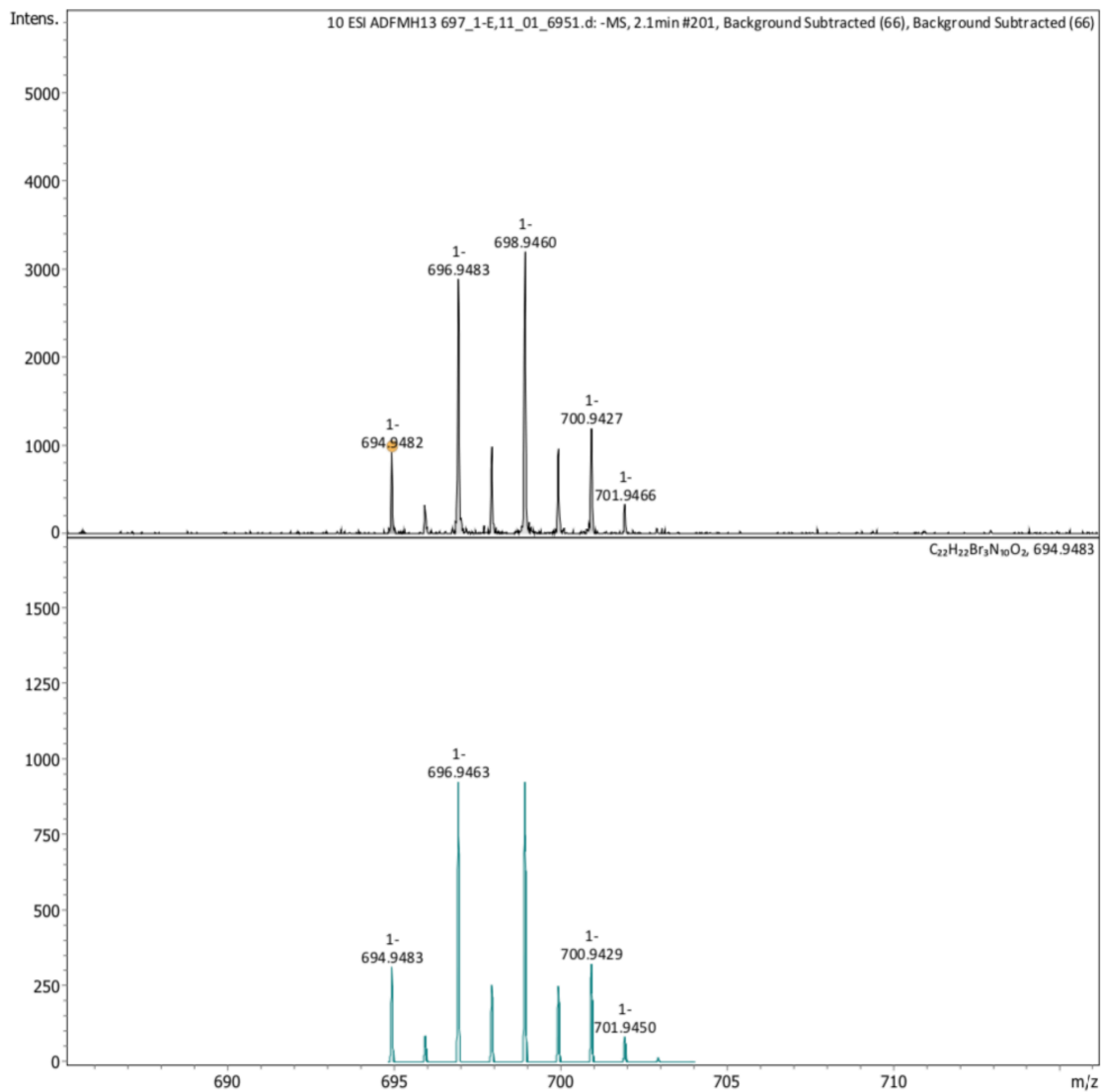
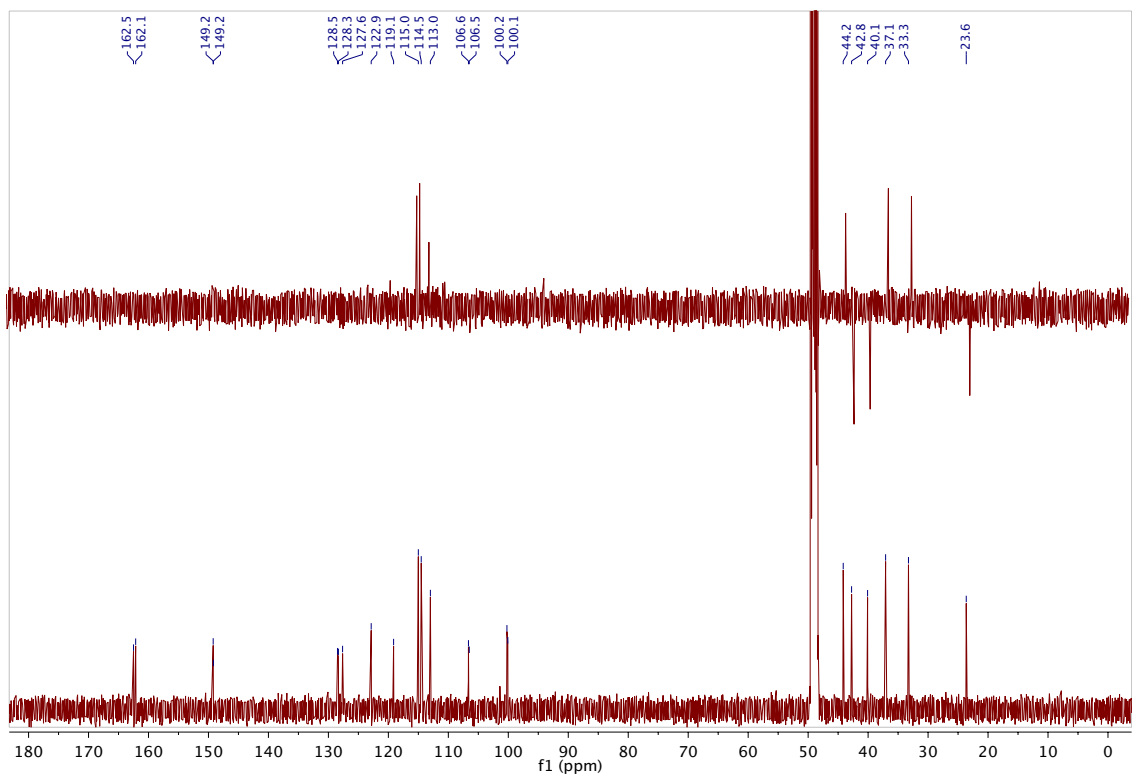
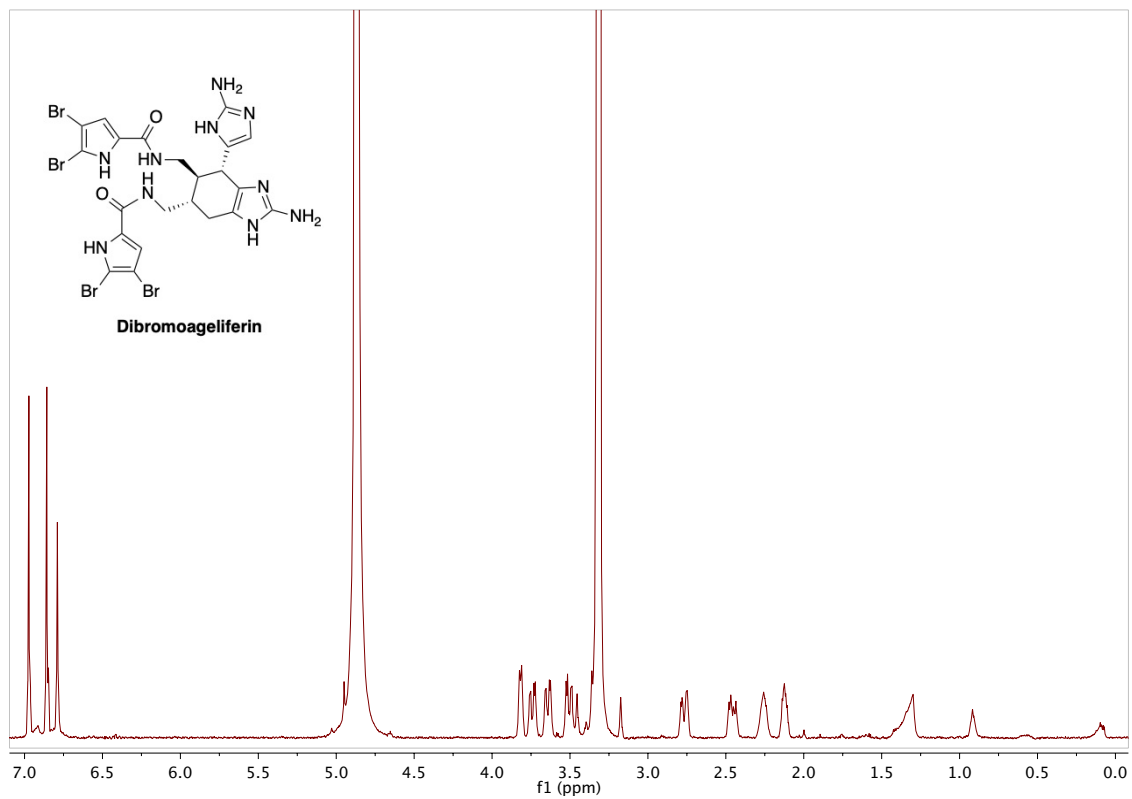


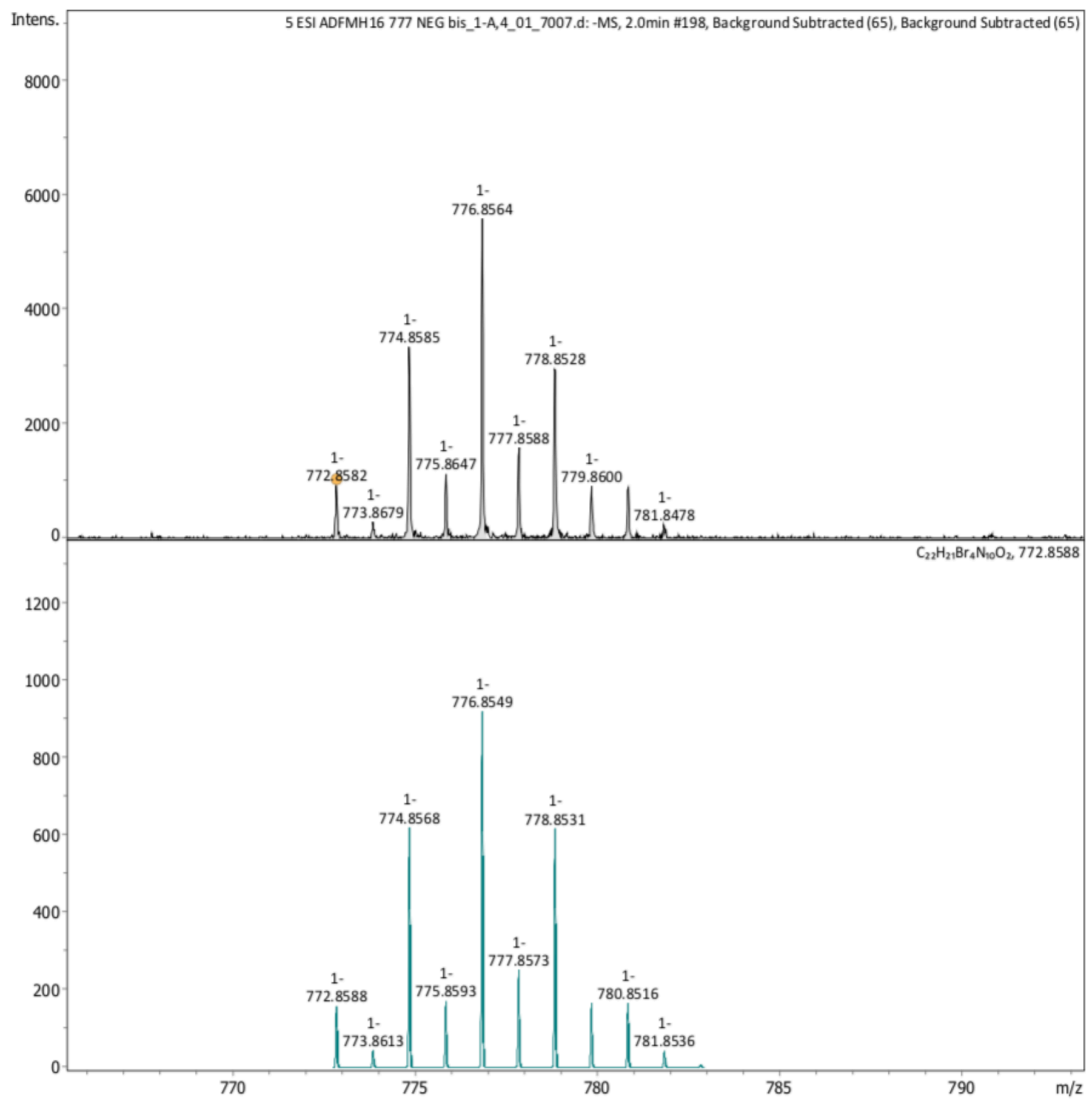
Figure S5. ^{13}C NMR and DEPT-135 spectra of **2** (125 MHz, CD_3OD).



| Meas. m/z | # | Ion Formula | Score | m/z | err [mDa] | err [ppm] | mSigma | rdb | e ⁻ Conf | N-Rule |
|-----------|---|--|--------|----------|-----------|-----------|--------|------|---------------------|--------|
| 694.9482 | 1 | C ₂₃ H ₂₈ Br ₃ N ₃ O ₇ | 100.00 | 694.9483 | 0.1 | 0.2 | 41.7 | 15.5 | odd | ok |
| | 2 | C ₂₂ H ₂₂ Br ₃ N ₁₀ O ₂ | 86.11 | 694.9483 | 0.1 | 0.2 | 42.9 | 21.0 | even | ok |

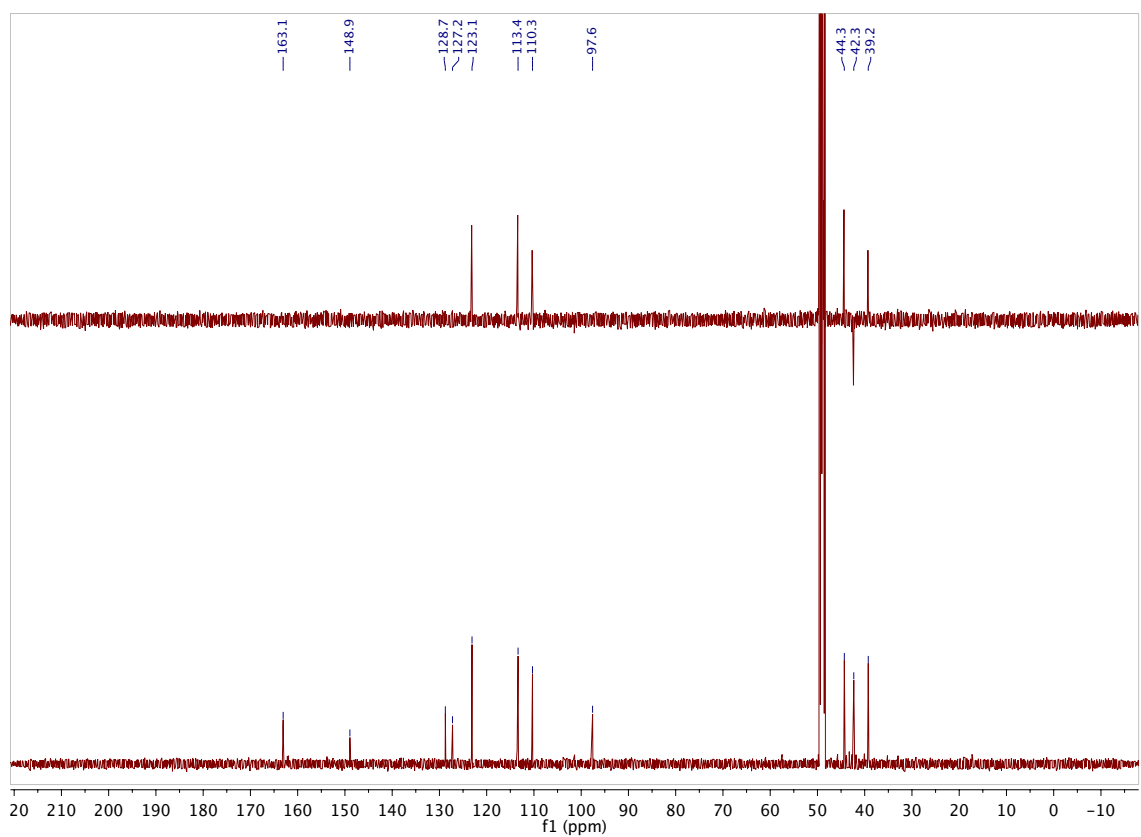
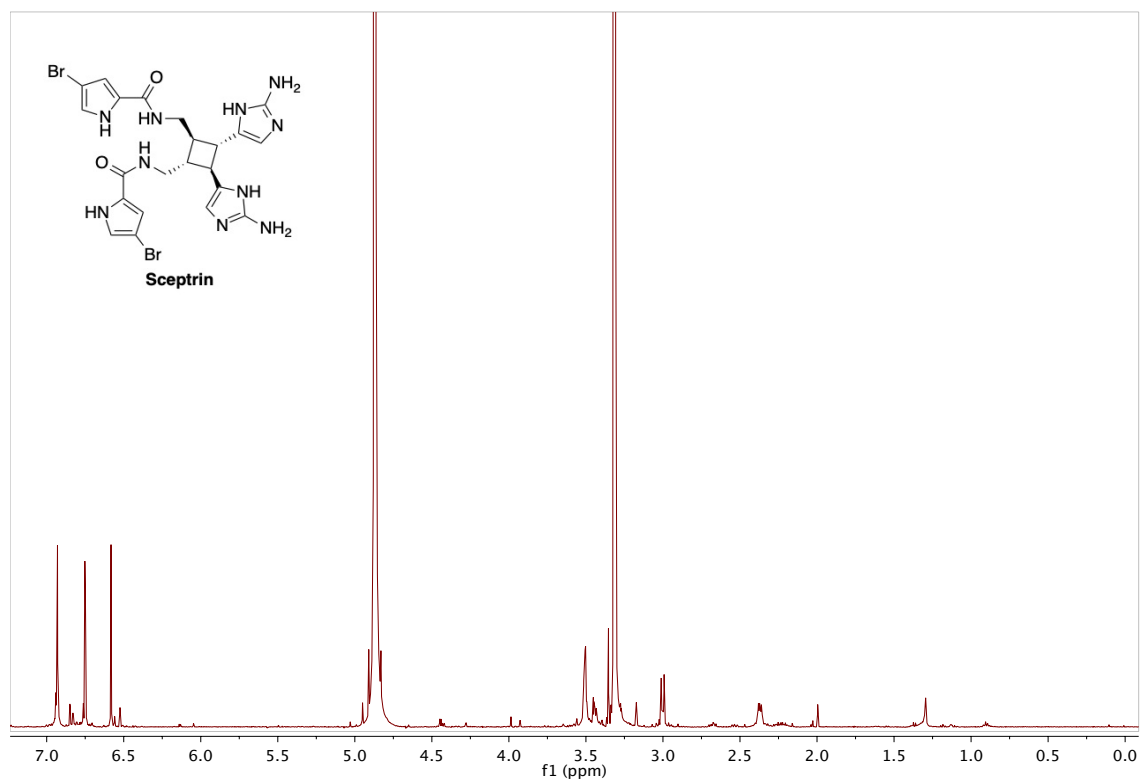
Figure S6. (-)-HRESIMS of 2.

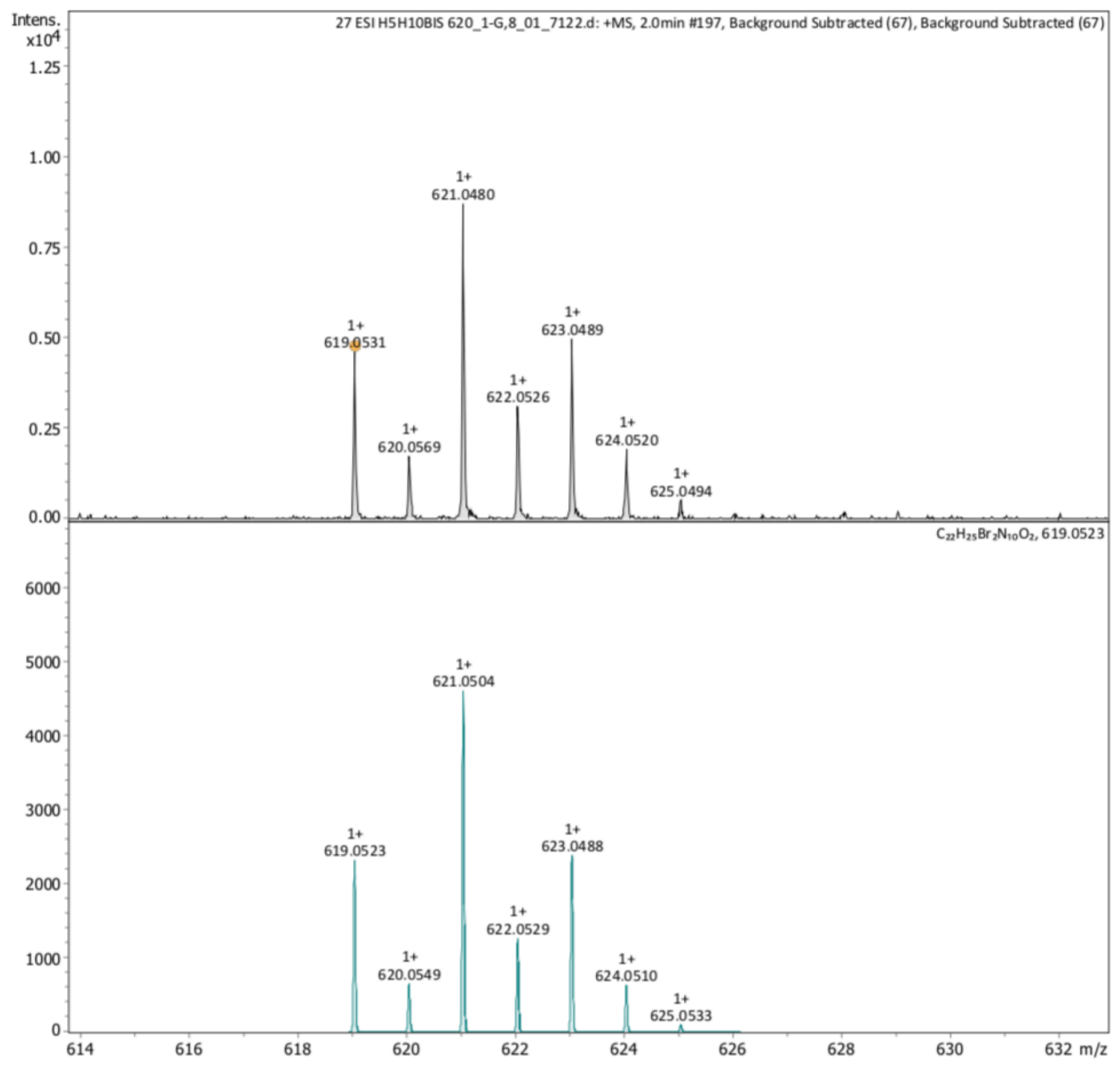




| Meas. m/z | # | Ion Formula | Score | m/z | err [mDa] | err [ppm] | mSigma | rdb | e ⁻ Conf | N-Rule |
|-----------|---|----------------|--------|----------|-----------|-----------|--------|------|---------------------|--------|
| 772.8582 | 1 | C20H19Br4N13O | 94.77 | 772.8575 | -0.7 | -1.0 | 52.5 | 23.5 | odd | ok |
| | 2 | C18H17Br4N16 | 39.54 | 772.8561 | -2.1 | -2.7 | 52.6 | 24.0 | even | ok |
| | 3 | C22H21Br4N10O2 | 100.00 | 772.8588 | 0.6 | 0.8 | 52.8 | 23.0 | even | ok |
| | 4 | C24H23Br4N7O3 | 42.17 | 772.8601 | 2.0 | 2.5 | 53.6 | 22.5 | odd | ok |
| | 5 | C23H27Br4N3O7 | 95.59 | 772.8588 | 0.6 | 0.8 | 54.2 | 17.5 | odd | ok |

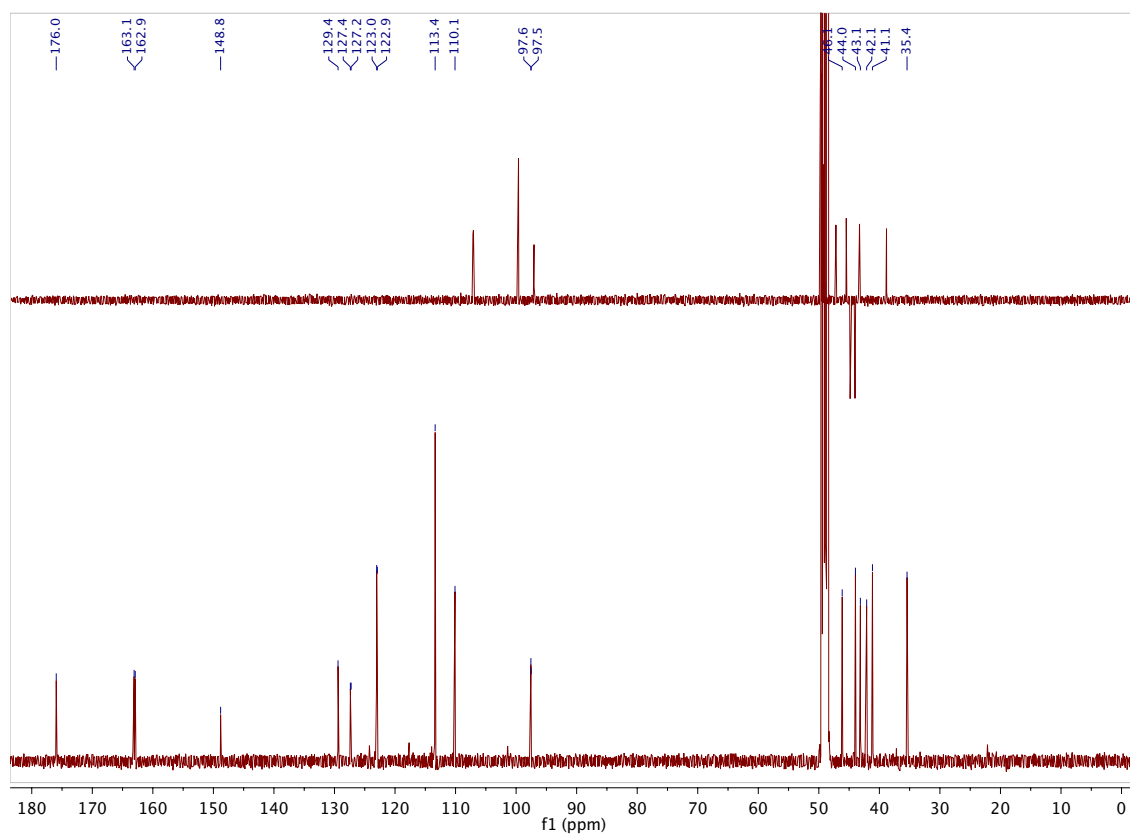
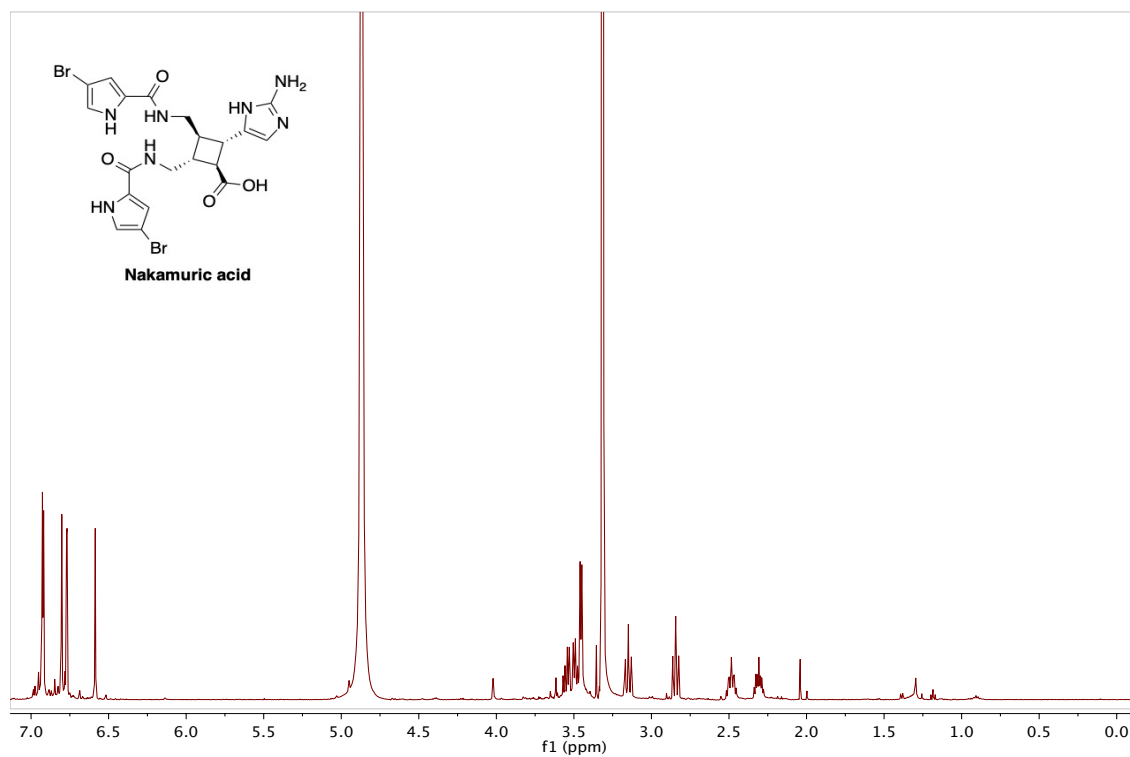
Figure S9. (-)-HRESIMS of 3.

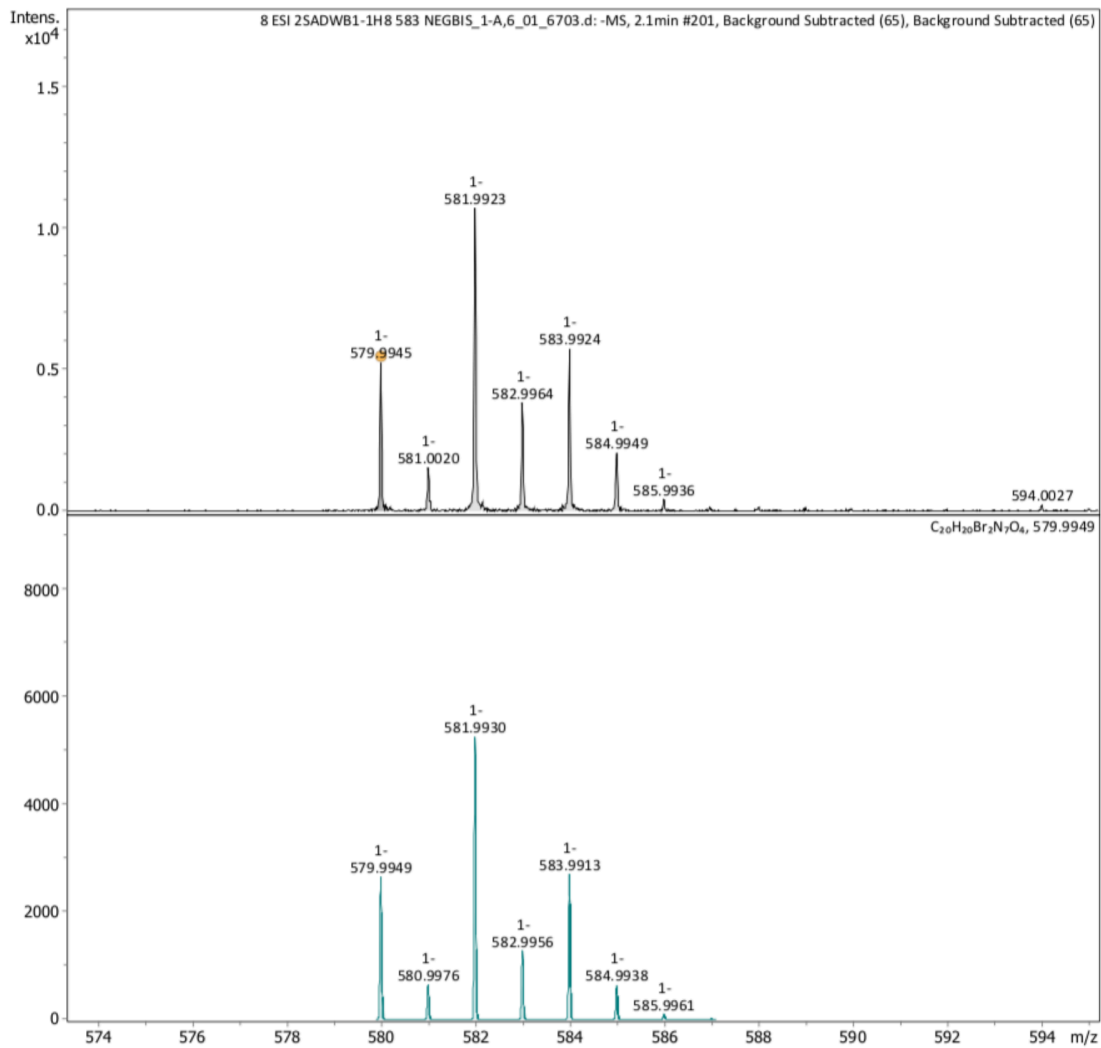




| Meas. m/z | # | Ion Formula | Score | m/z | err [mDa] | err [ppm] | mSigma | rdb | e ⁻ Conf | N-Rule |
|-----------|---|----------------|--------|----------|-----------|-----------|--------|------|---------------------|--------|
| 619.0531 | 1 | C26H29Br2N4O4 | 50.48 | 619.0550 | 1.9 | 3.1 | 47.1 | 18.0 | even | ok |
| | 2 | C24H27Br2N7O3 | 100.00 | 619.0537 | 0.6 | 0.9 | 52.0 | 18.5 | odd | ok |
| | 3 | C25H33Br2O8 | 89.48 | 619.0537 | 0.6 | 0.9 | 55.4 | 13.0 | even | ok |
| | 4 | C22H25Br2N10O2 | 77.93 | 619.0523 | -0.8 | -1.2 | 56.9 | 19.0 | even | ok |
| | 5 | C23H31Br2N3O7 | 69.50 | 619.0523 | -0.8 | -1.2 | 60.4 | 13.5 | odd | ok |

Figure S12. (+)-HRESIMS of 4.





| Meas. m/z | # | Ion Formula | Score | m/z | err [mDa] | err [ppm] | mSigma | rdb | e ⁻ Conf | N-Rule |
|-----------|---|----------------|--------|----------|-----------|-----------|--------|------|---------------------|--------|
| 579.9945 | 1 | C20H20Br2N7O4 | 100.00 | 579.9949 | 0.4 | 0.6 | 52.2 | 17.0 | even | ok |
| | 2 | C21H26Br2O9 | 86.64 | 579.9949 | 0.4 | 0.6 | 56.6 | 11.5 | odd | ok |
| | 3 | C18H18Br2N10O3 | 61.72 | 579.9936 | -1.0 | -1.7 | 57.4 | 17.5 | odd | ok |
| | 4 | C19H24Br2N3O8 | 53.34 | 579.9936 | -1.0 | -1.7 | 61.8 | 12.0 | even | ok |

Figure S15. (-)-HRESIMS of 5.

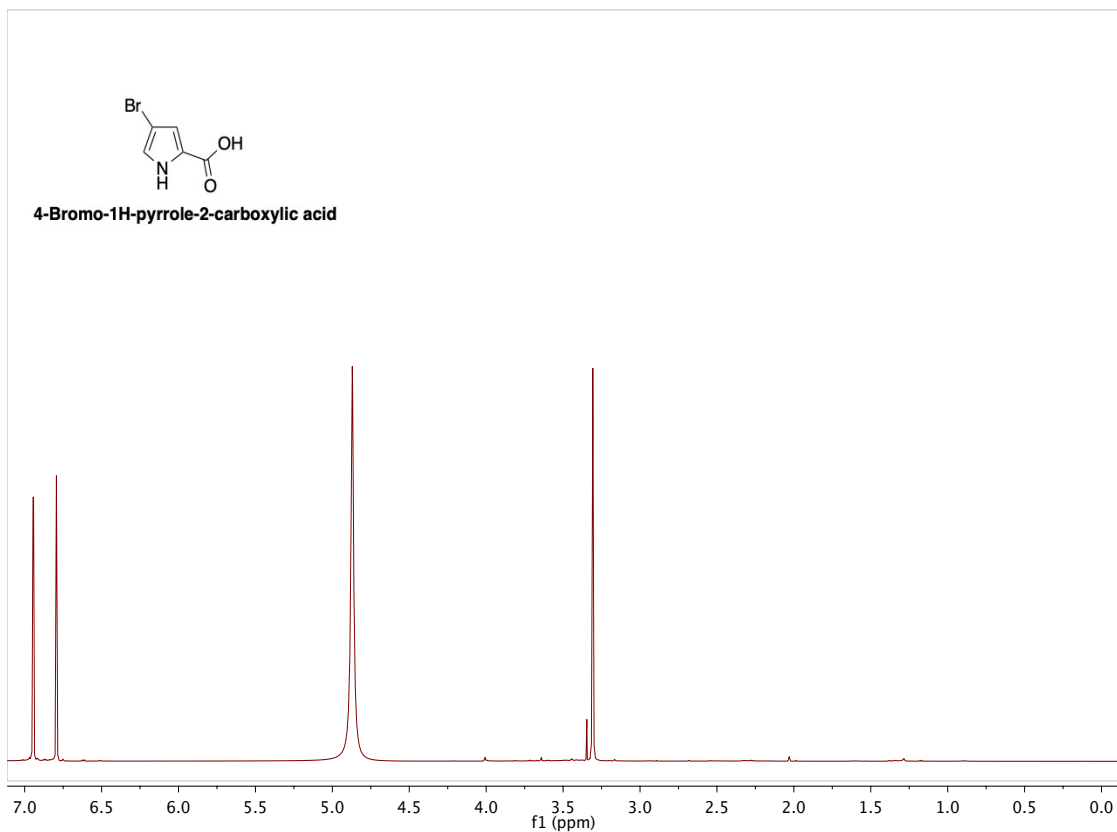


Figure S16. ^1H NMR spectrum of **6** (500 MHz, CD_3OD).

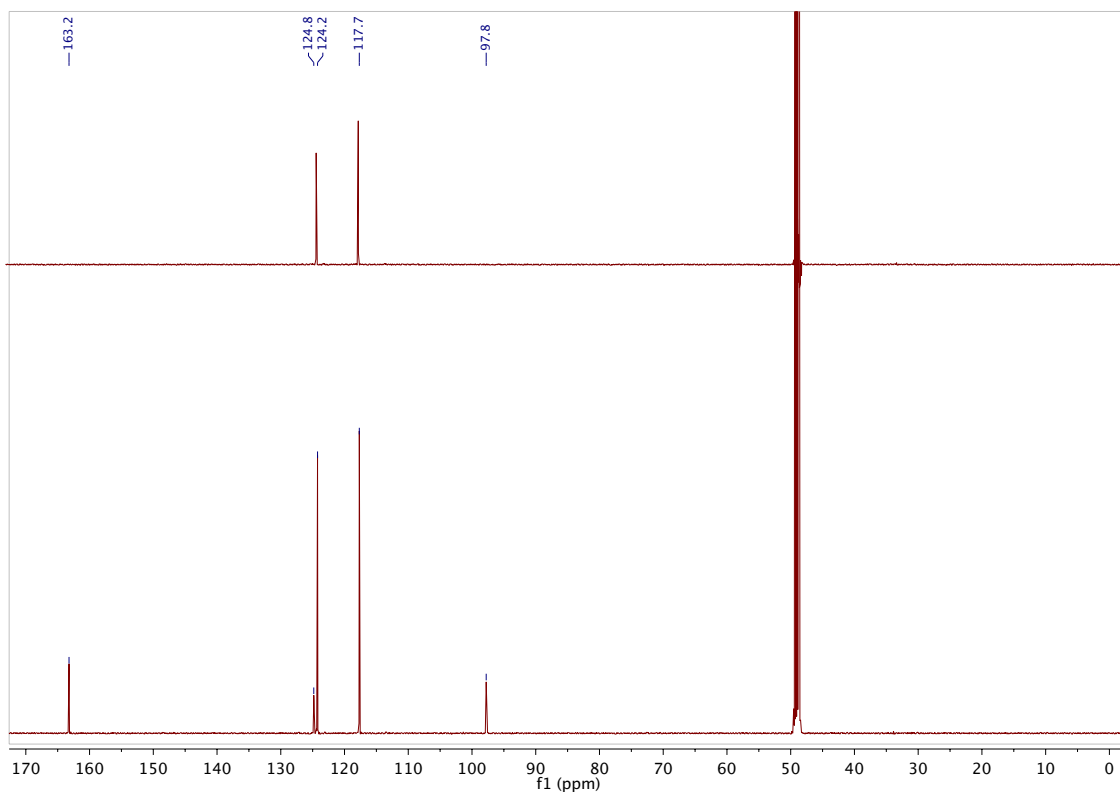


Figure S17. ^{13}C NMR and DEPT-135 spectra of compound **6** (125 MHz, CD_3OD).

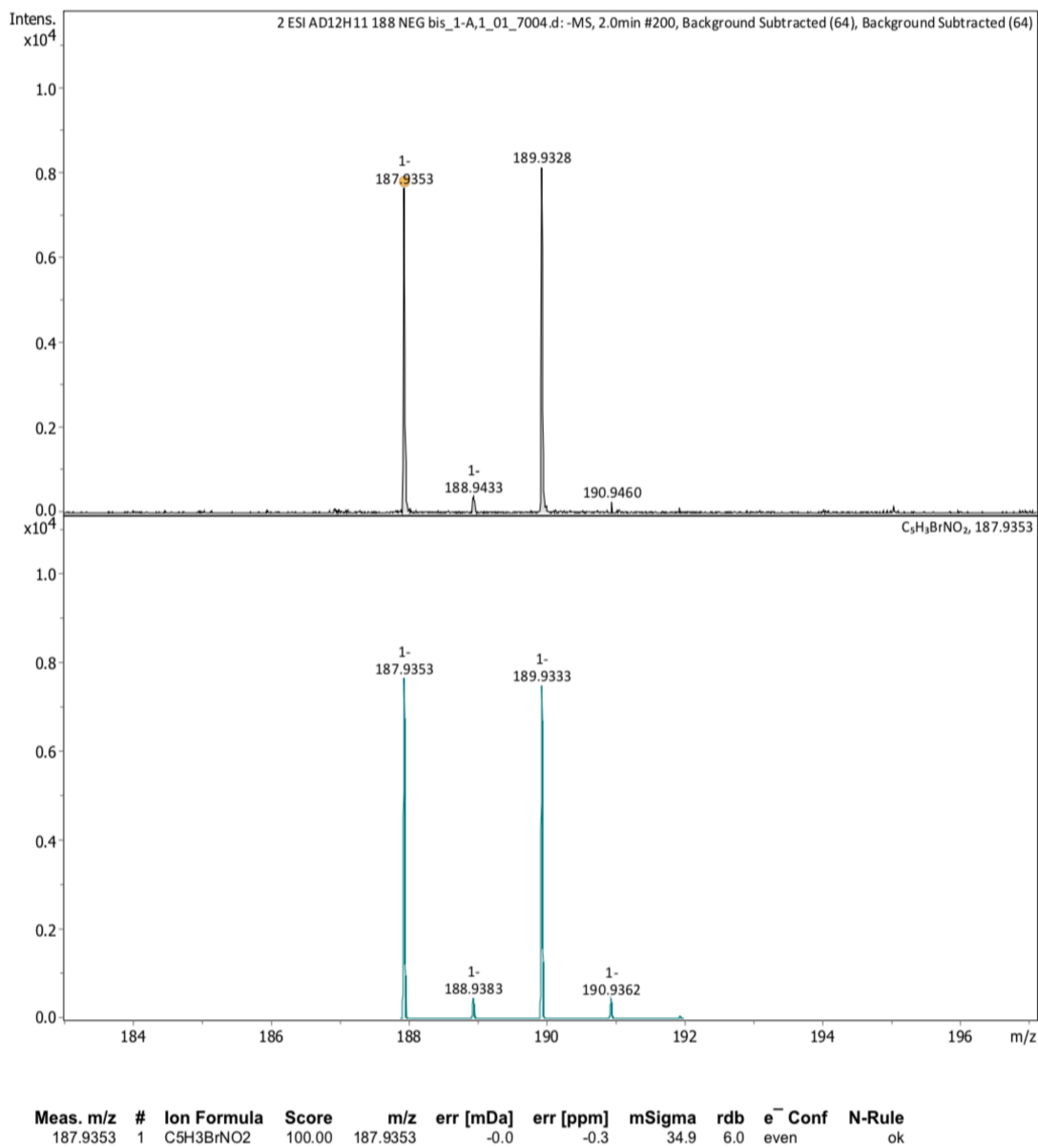


Figure S18. (-)-HRESIMS of 6.

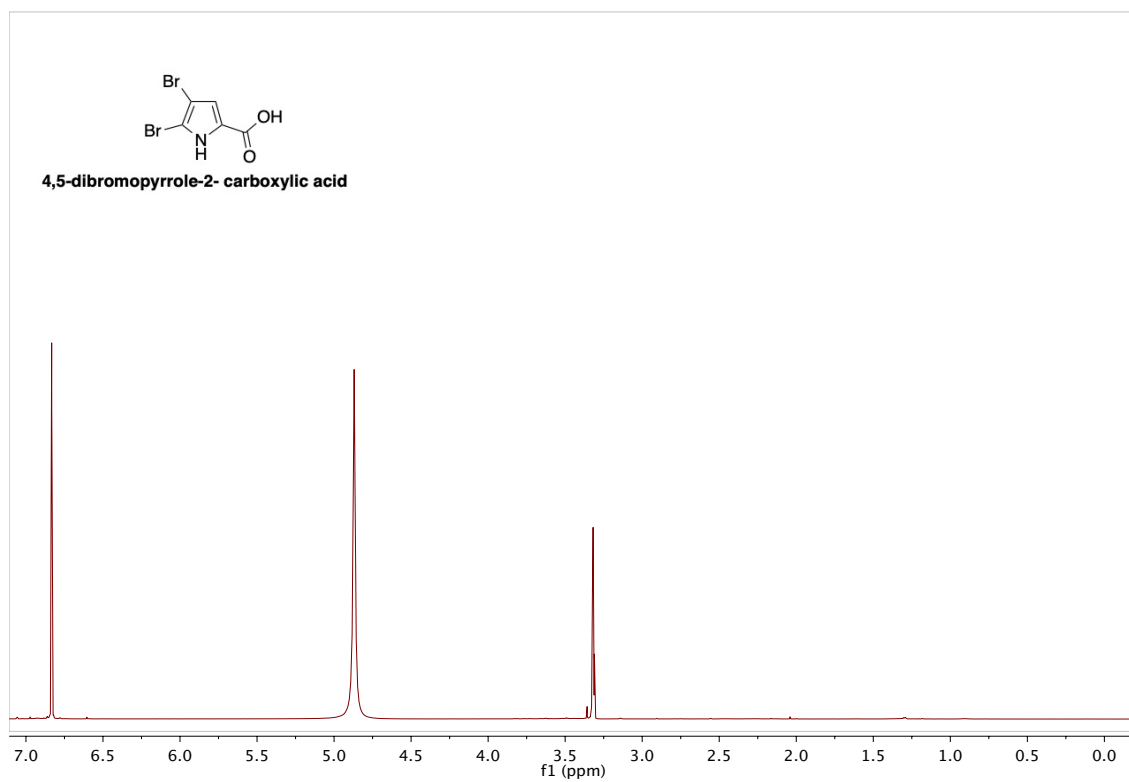


Figure S19. ^1H NMR spectrum of **7** (500 MHz, CD_3OD).

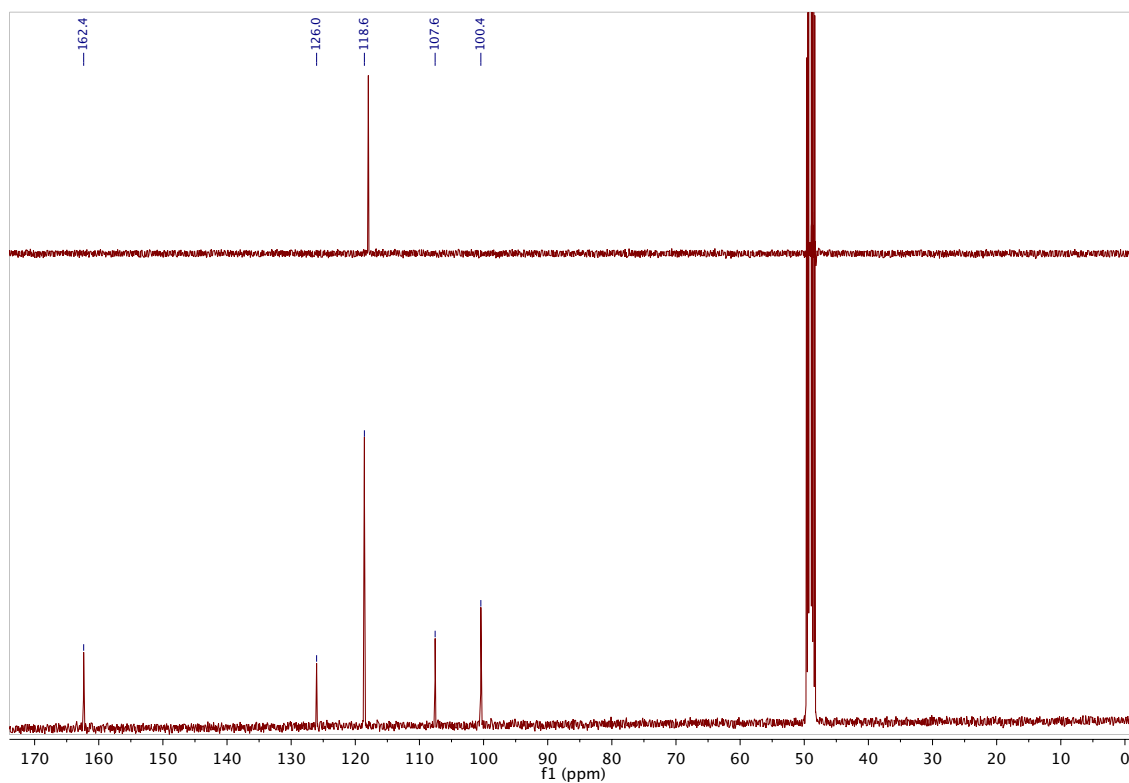
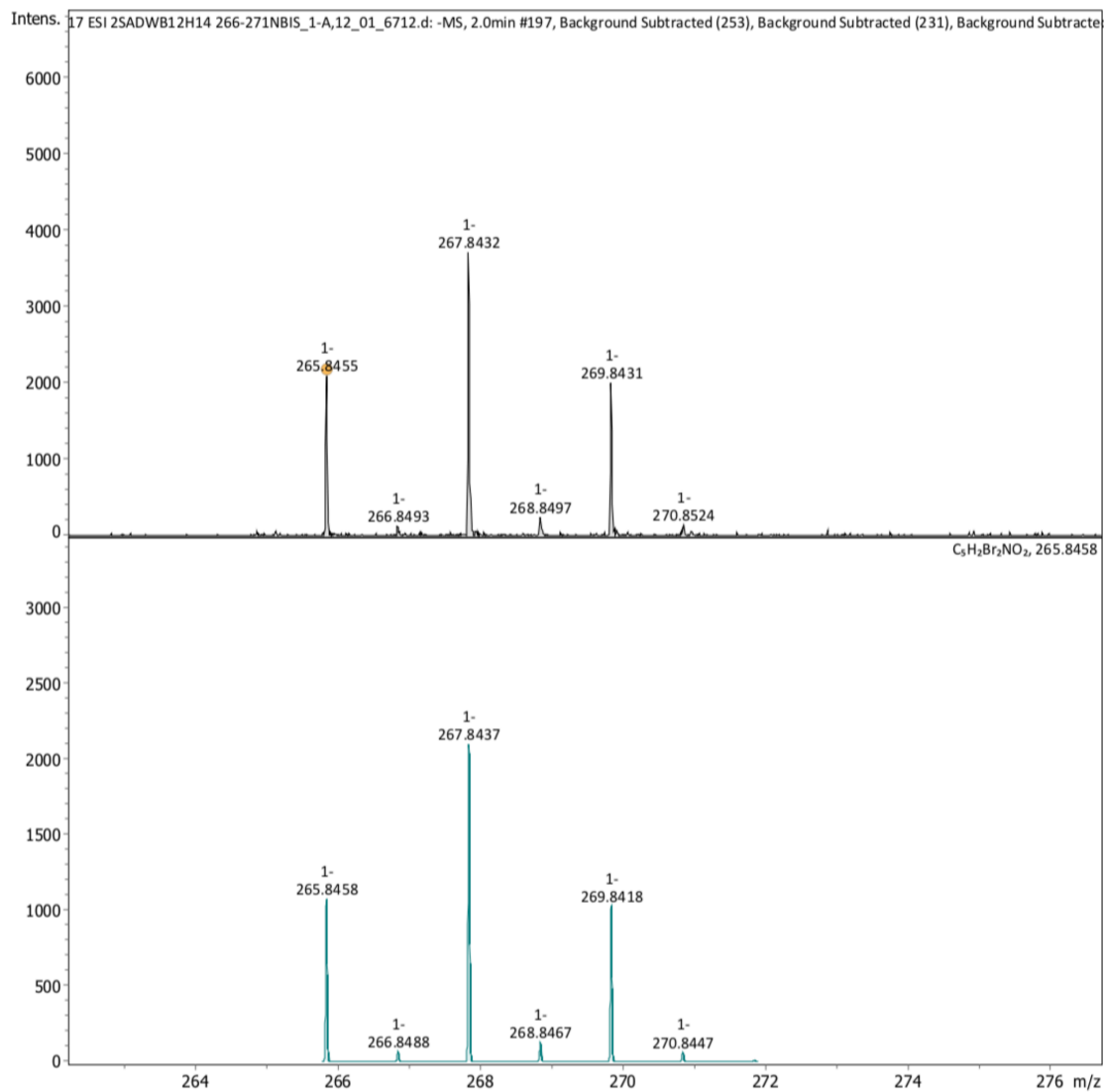


Figure S20. ^{13}C NMR and DEPT-135 spectra of **7** (125 MHz, CD_3OD).



| Meas. m/z | # | Ion Formula | Score | m/z | err [mDa] | err [ppm] | mSigma | rdb | e ⁻ Conf | N-Rule |
|-----------|---|---|--------|----------|-----------|-----------|--------|-----|---------------------|--------|
| 265.8455 | 1 | C ₅ H ₂ Br ₂ NO ₂ | 100.00 | 265.8458 | 0.2 | 0.9 | 28.7 | 8.0 | even | ok |

Figure S21. (-)-HRESIMS of 7.

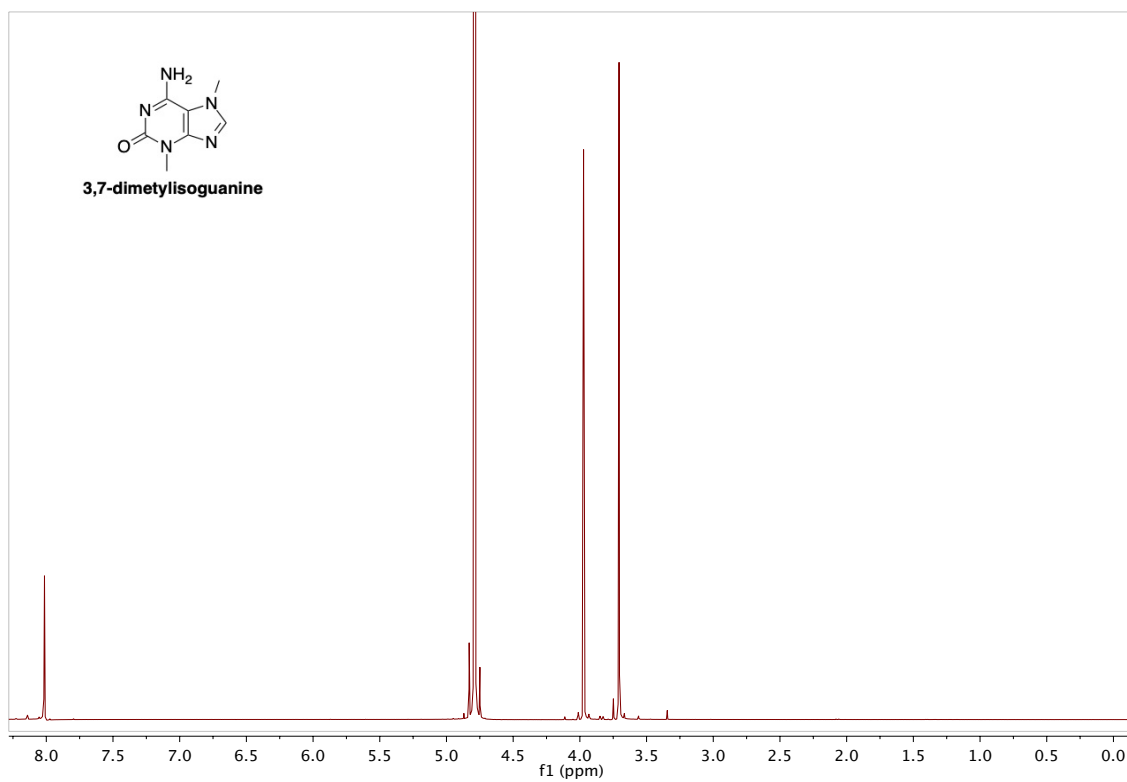


Figure S22. ¹H NMR spectrum of **8** (500 MHz, D₂O).

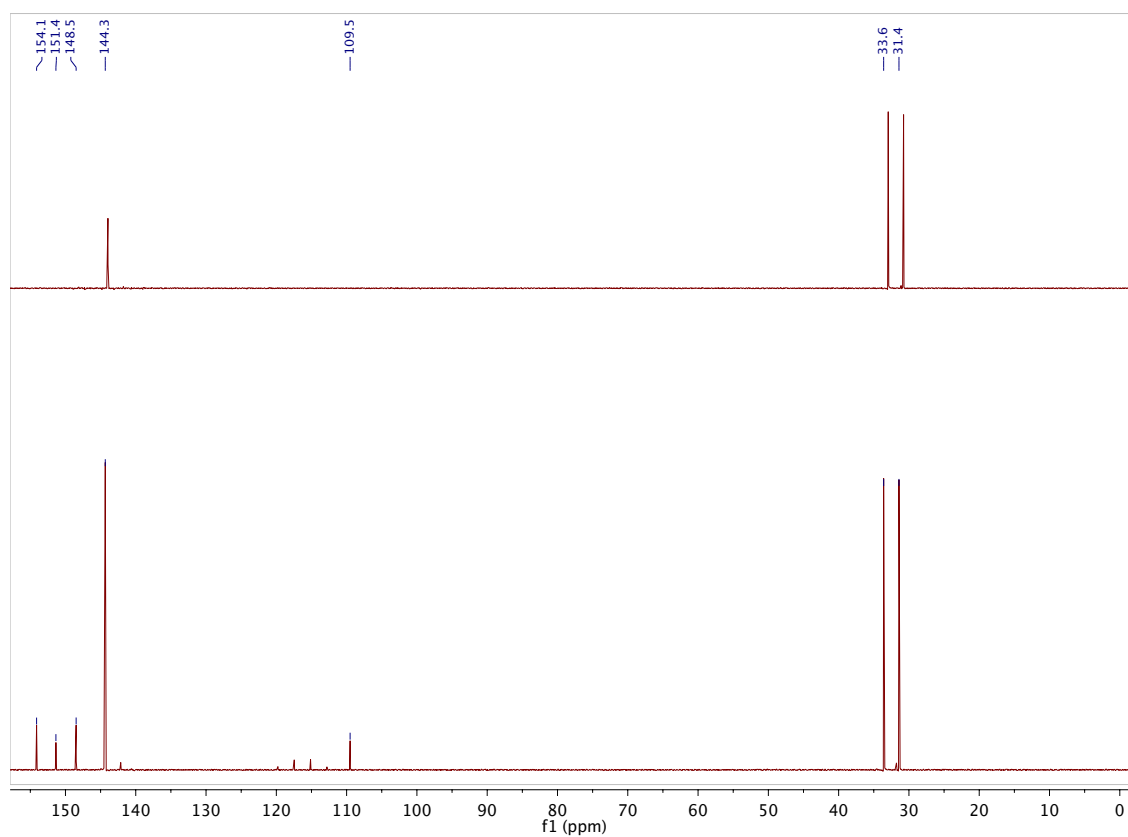
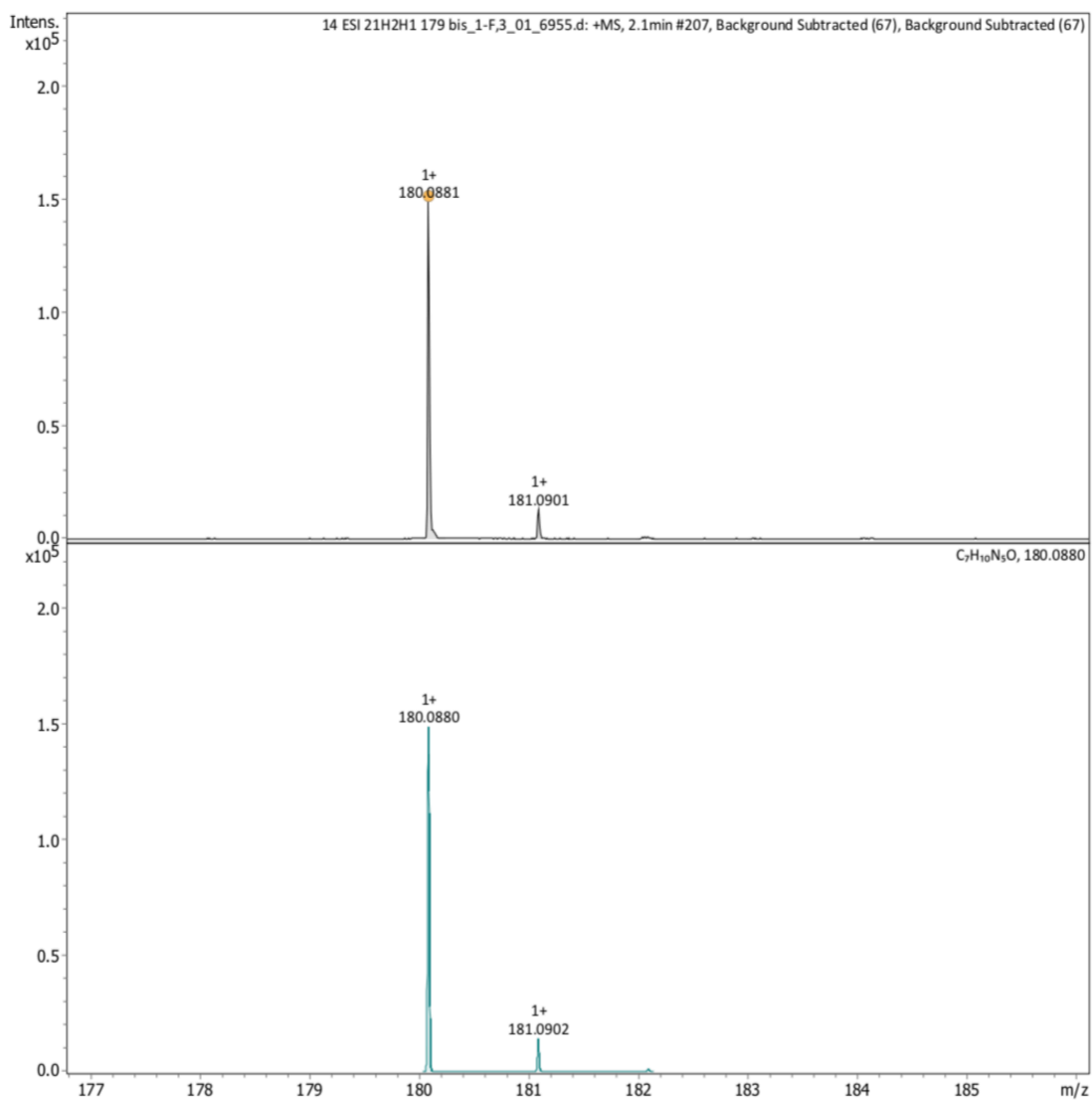


Figure S23. ¹³C NMR and DEPT-135 spectra of **8** (125 MHz, D₂O).



| Meas. m/z | # | Ion Formula | Score | m/z | err [mDa] | err [ppm] | mSigma | rdb | e ⁻ Conf | N-Rule |
|-----------|---|---|--------|----------|-----------|-----------|--------|-----|---------------------|--------|
| 180.0881 | 1 | C ₇ H ₁₀ N ₃ O | 100.00 | 180.0880 | -0.1 | -0.7 | 6.1 | 6.0 | even | ok |

Figure S24. (+)-HRESIMS of **8**.