

Supplementary Materials :

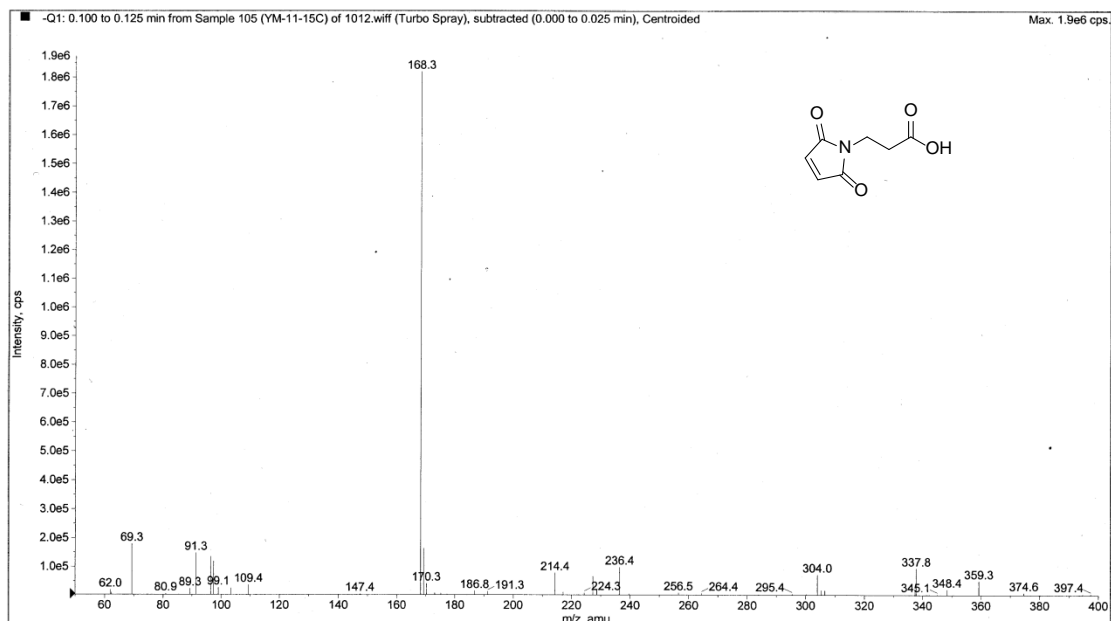


Figure S1. The ESI-MS spectrum of compound 3a.

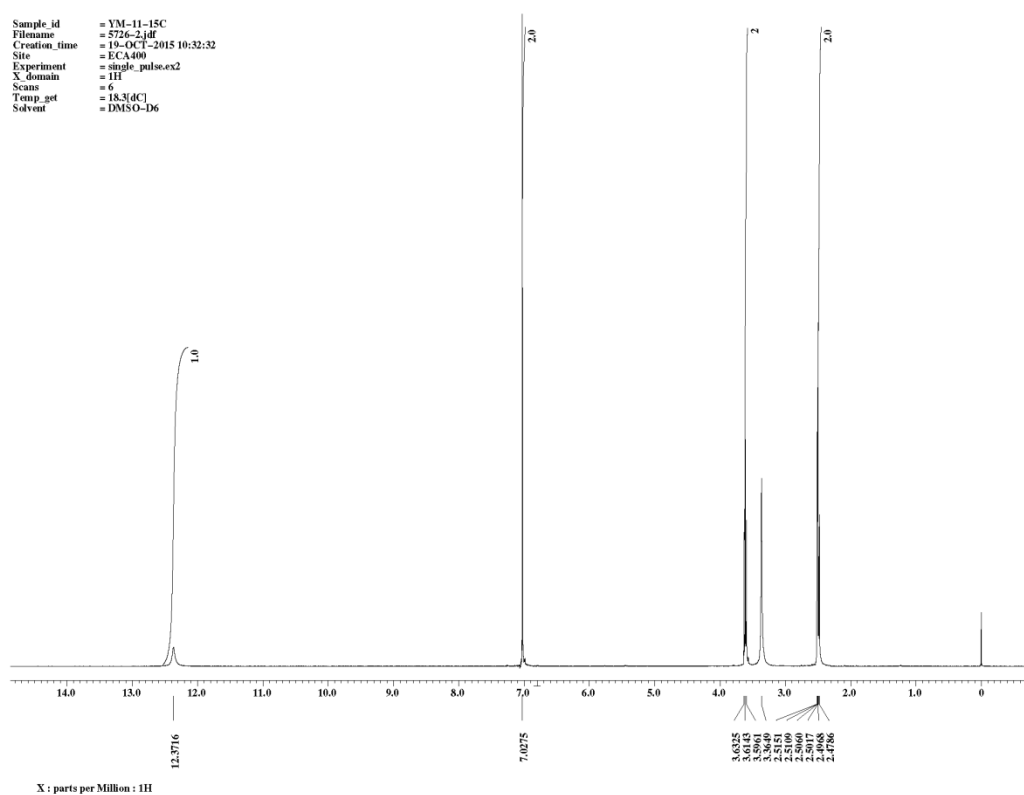


Figure S2. The ¹H-NMR spectrum of compound 3a.

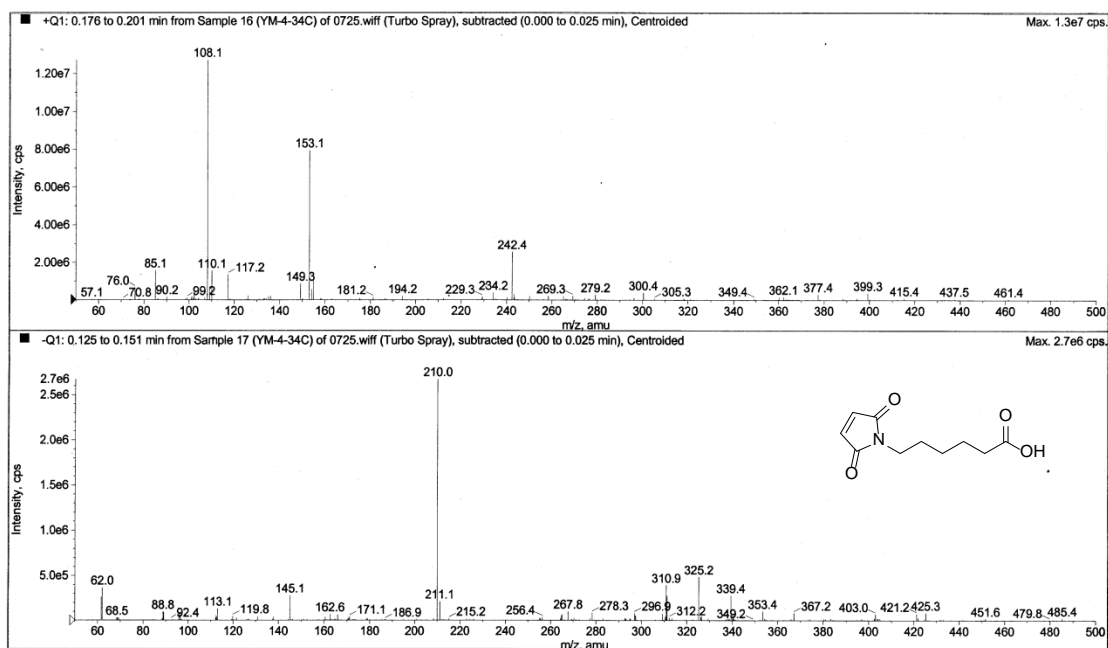


Figure S3. The ESI-MS spectrum of compound *3b*.

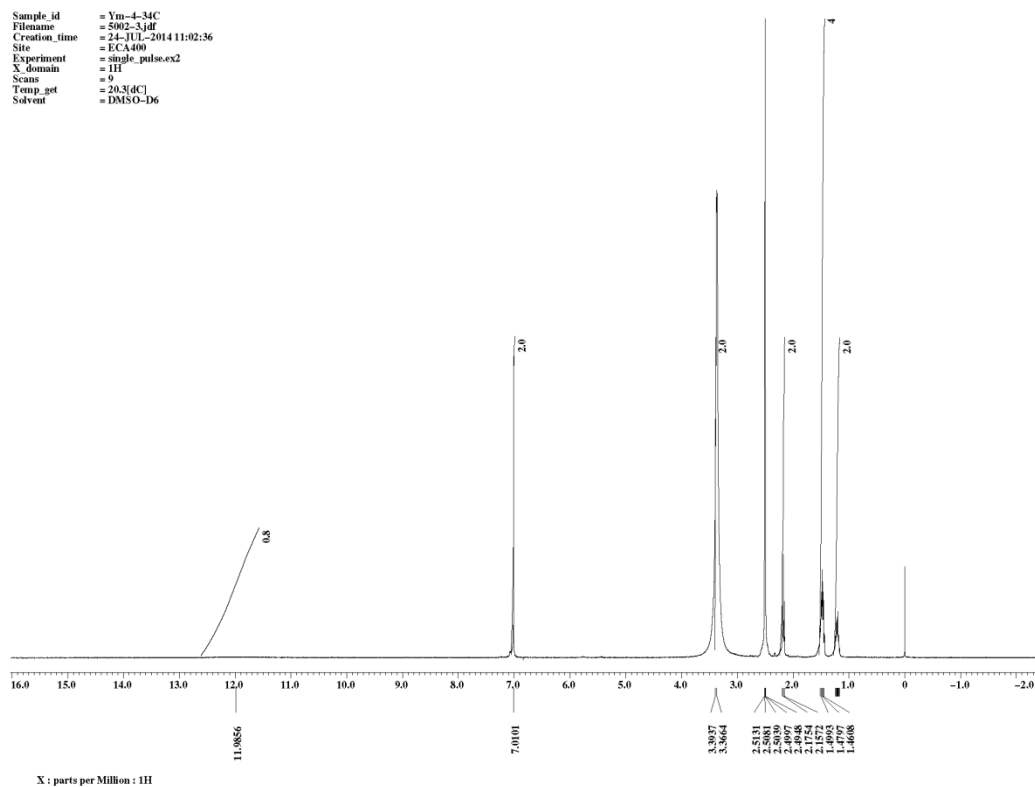


Figure S4. The ^1H -NMR spectrum of compound *3b*.

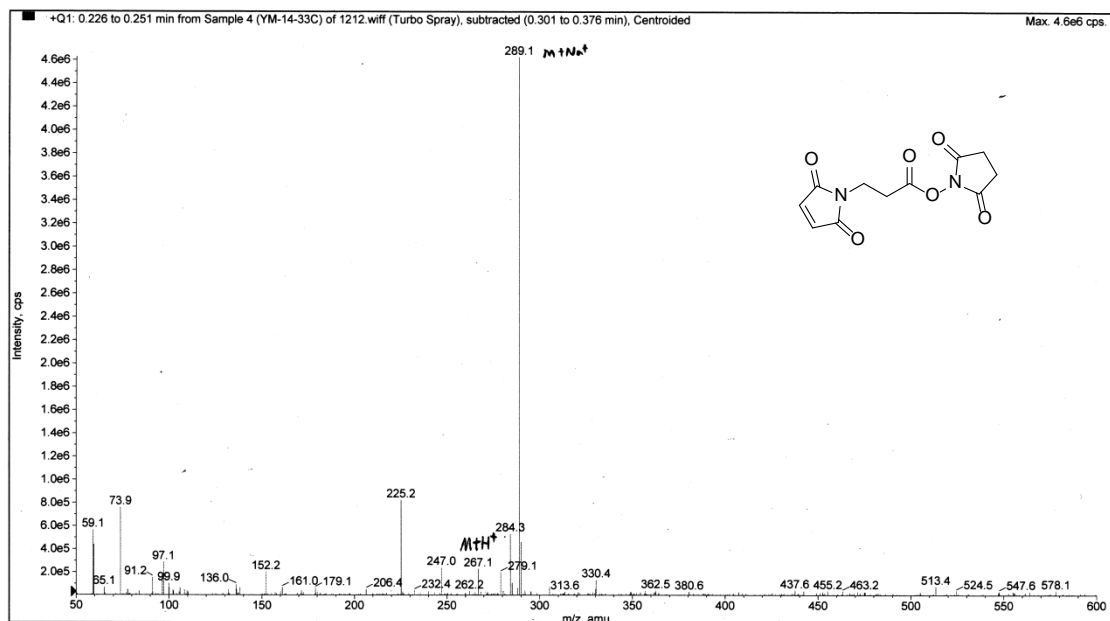


Figure S5. The ESI-MS spectrum of compound 4a.

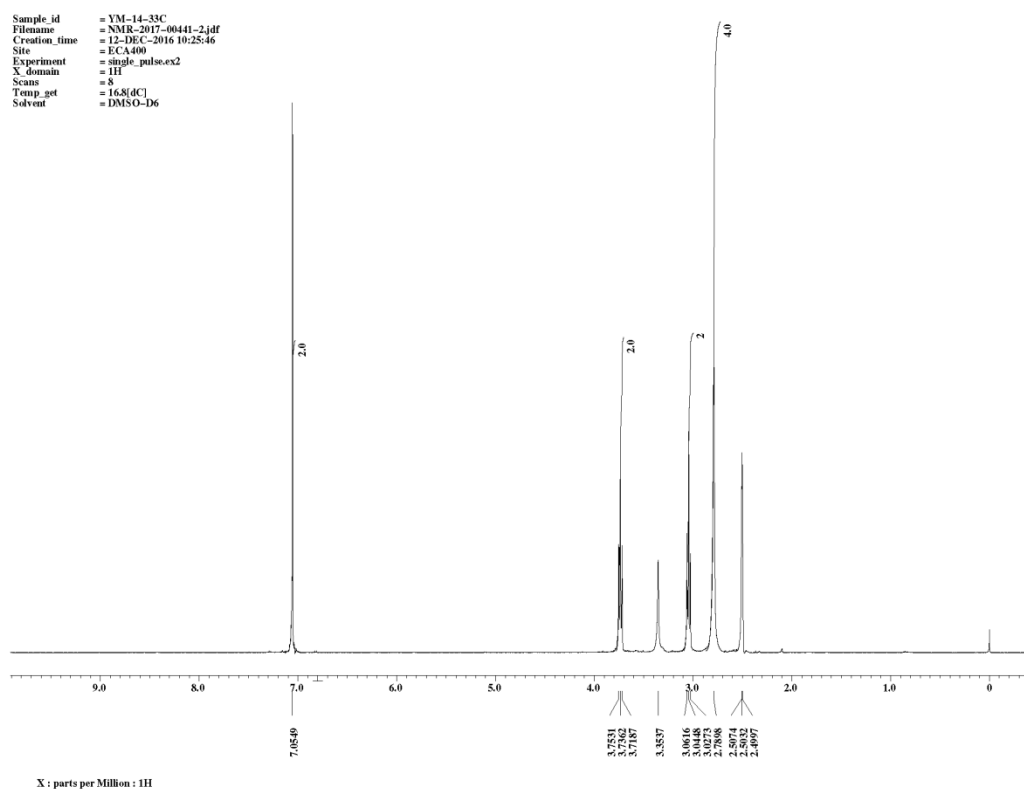


Figure S6. The ¹H-NMR spectrum of compound 4a.

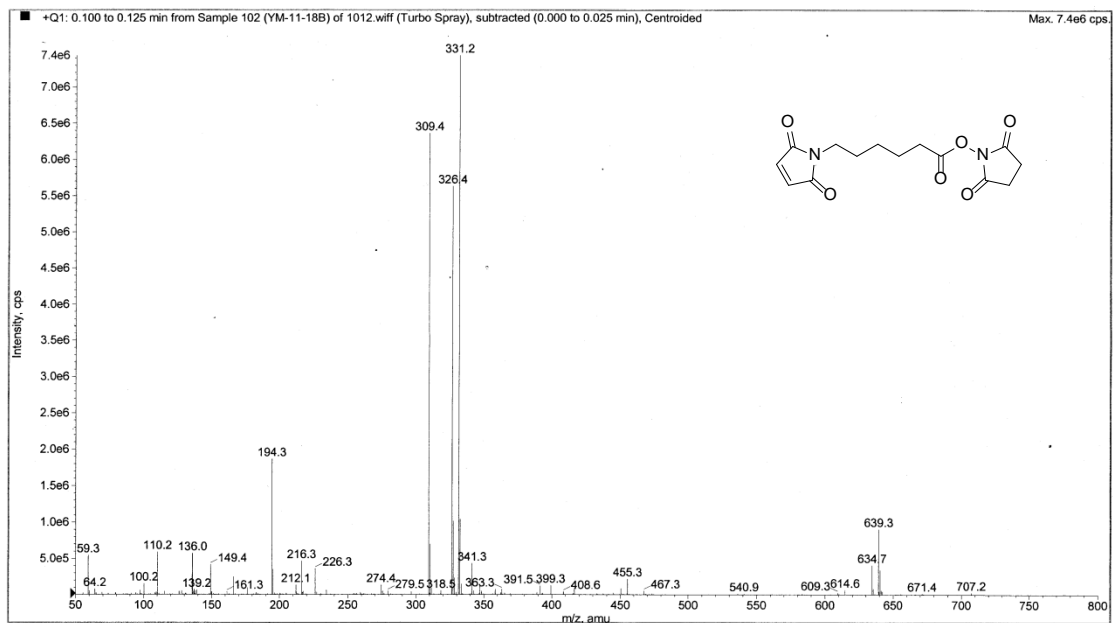


Figure S7. The ESI-MS spectrum of compound 4b.

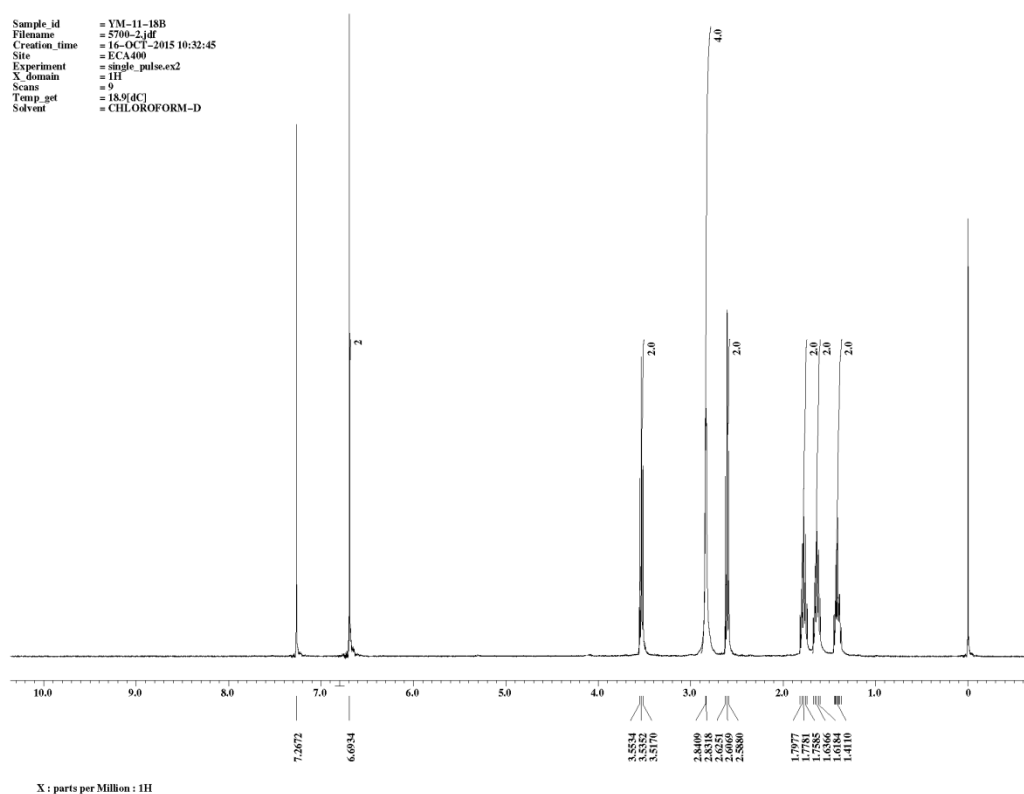


Figure S8. The ¹H-NMR spectrum of compound 4b.

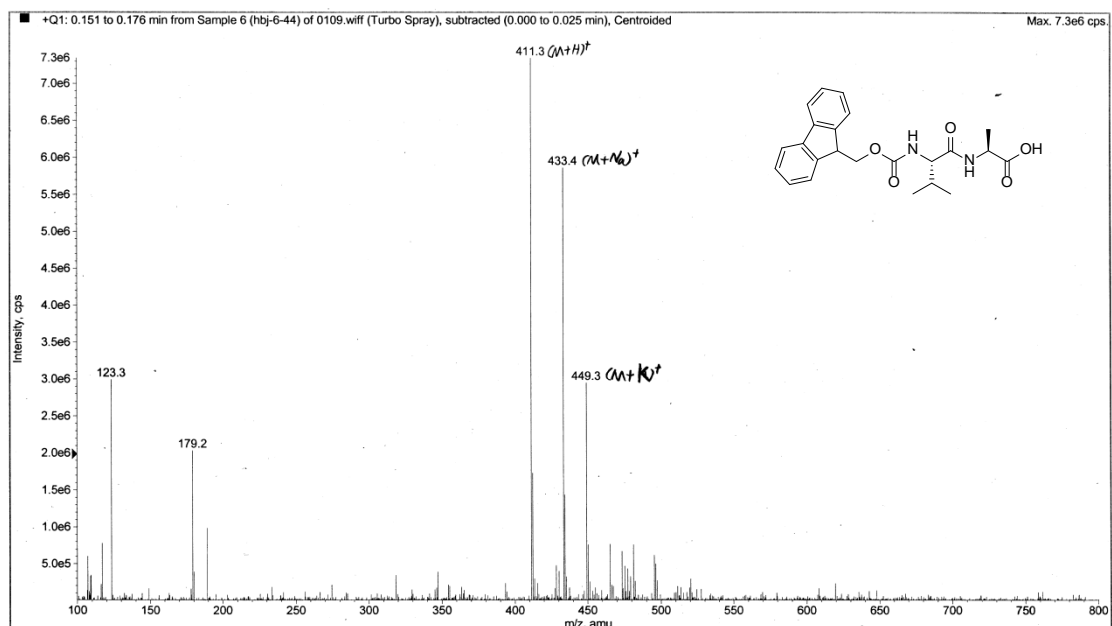


Figure S9. The ESI-MS spectrum of compound *7a*.

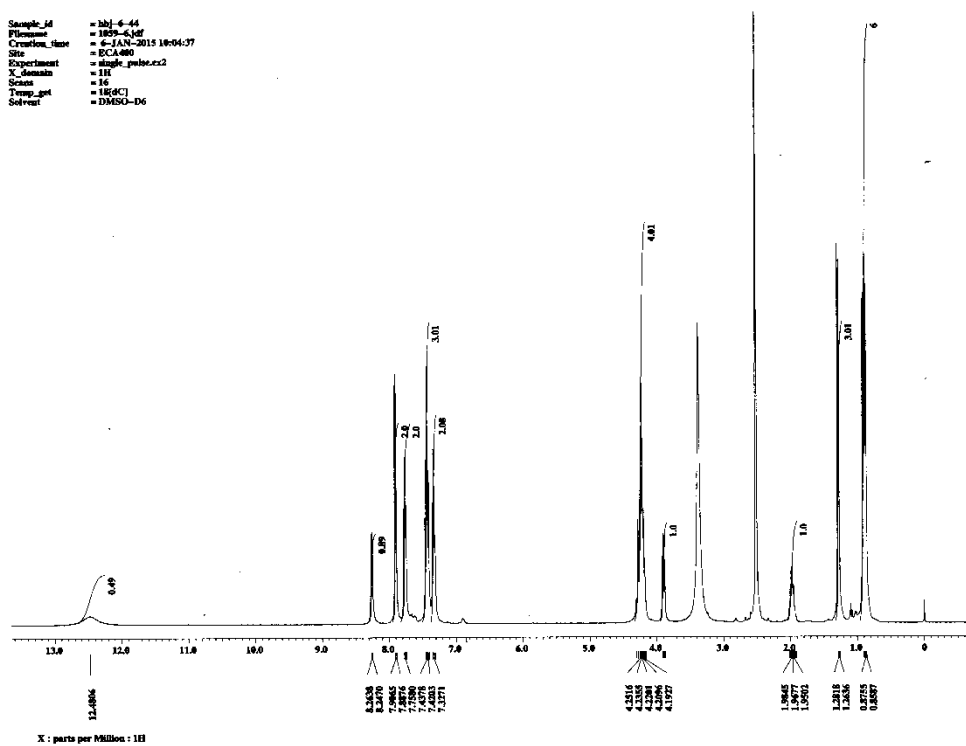


Figure S10. The ¹H-NMR spectrum of compound *7a*.

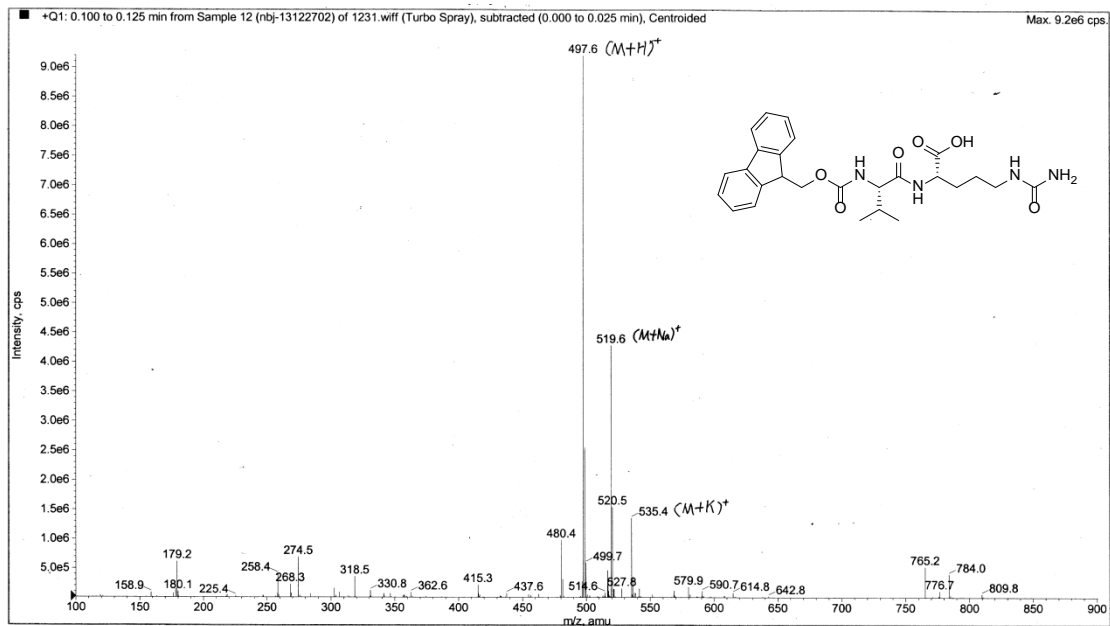


Figure S11. The ESI-MS spectrum of compound *7b*.

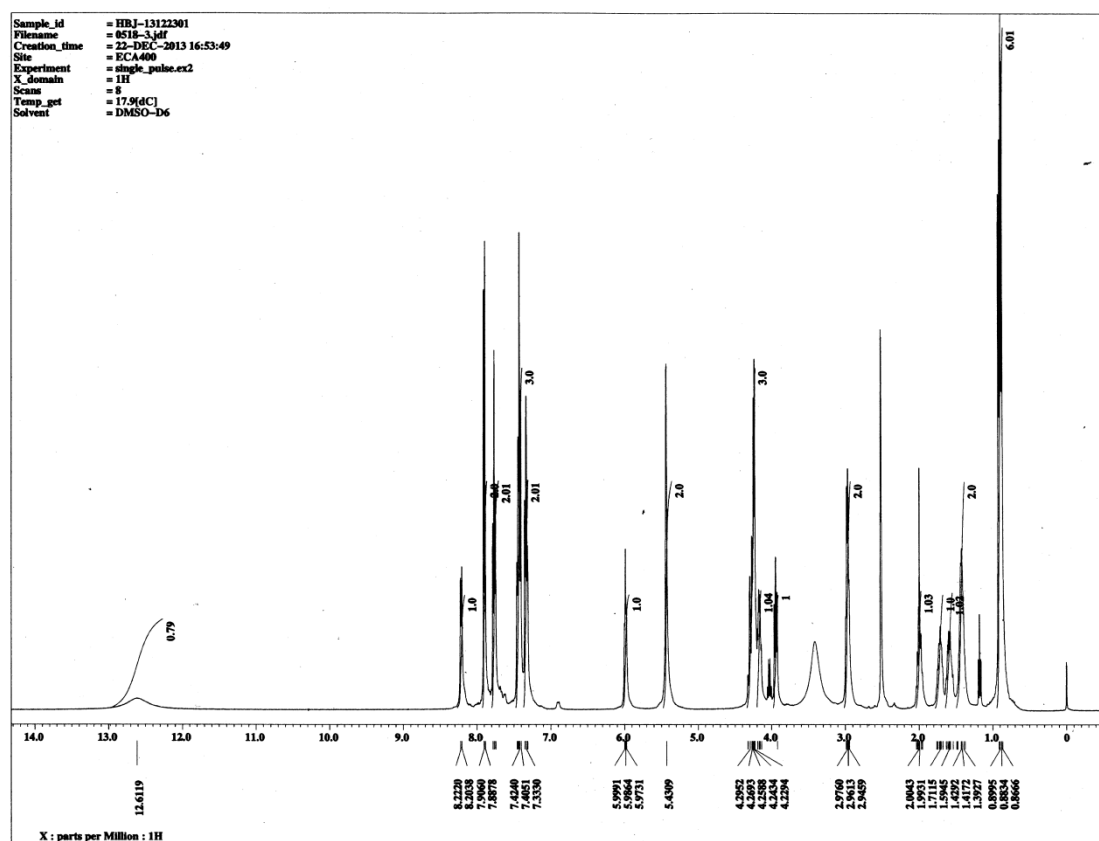


Figure S12. The ¹H-NMR spectrum of compound *7b*.

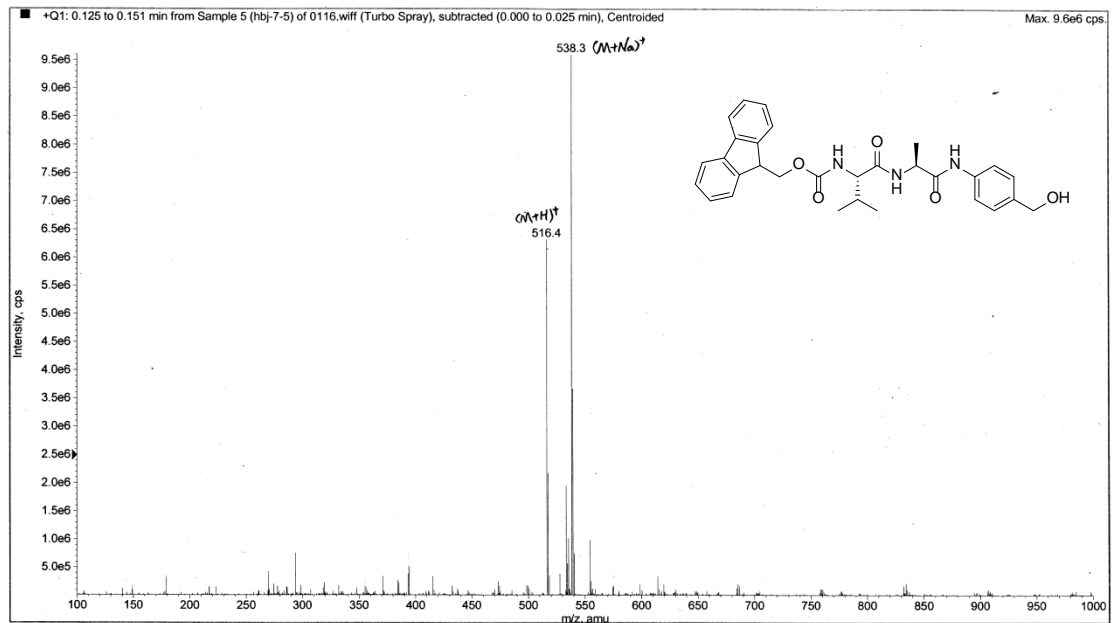


Figure S13. The ESI-MS spectrum of compound *8a*.

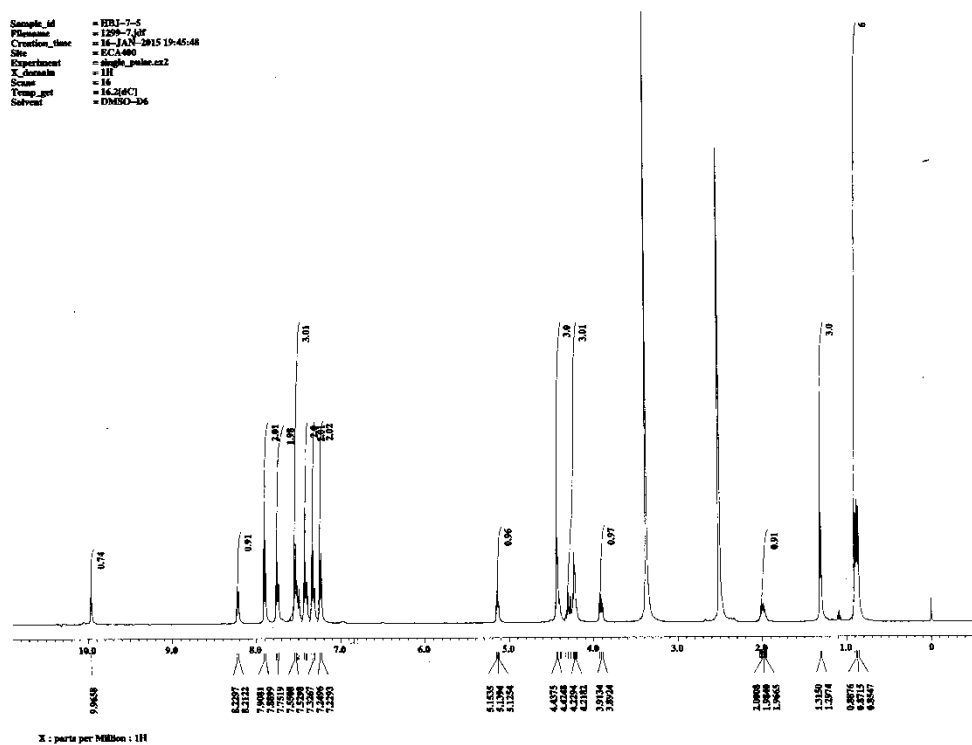


Figure S14. The ^1H -NMR spectrum of compound *8a*.

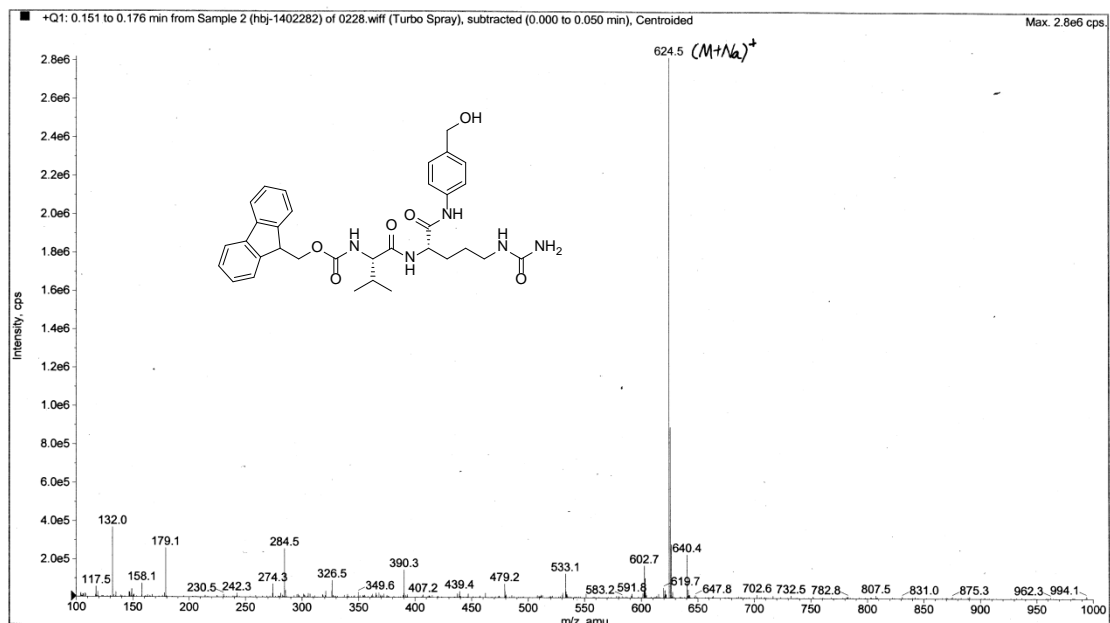


Figure S15. The ESI-MS spectrum of compound 8b.

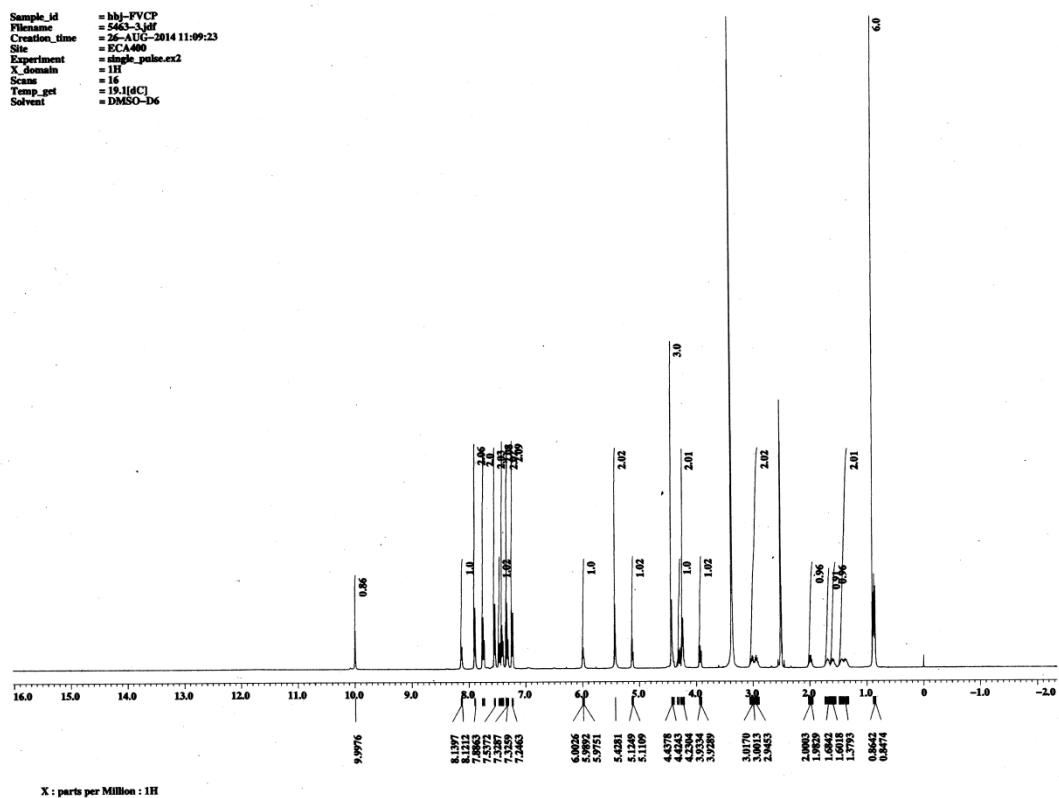


Figure S16. The ¹H-NMR spectrum of compound 8b.

Data Filename O850.d
Instrument Name TOF G6230A
Acq Method YCLM
IRM Calibration Status Success
User Chromatograms

Sample Name hbj-7-23
Acquired Time 2015.02.11
Acquired SW 6200 series TOF/6500 series

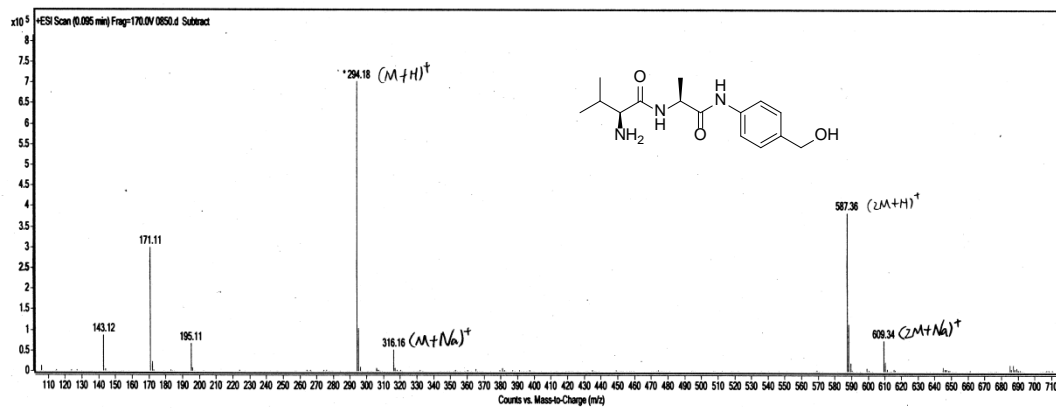


Figure S17. The ESI-MS spectrum of compound 9a.

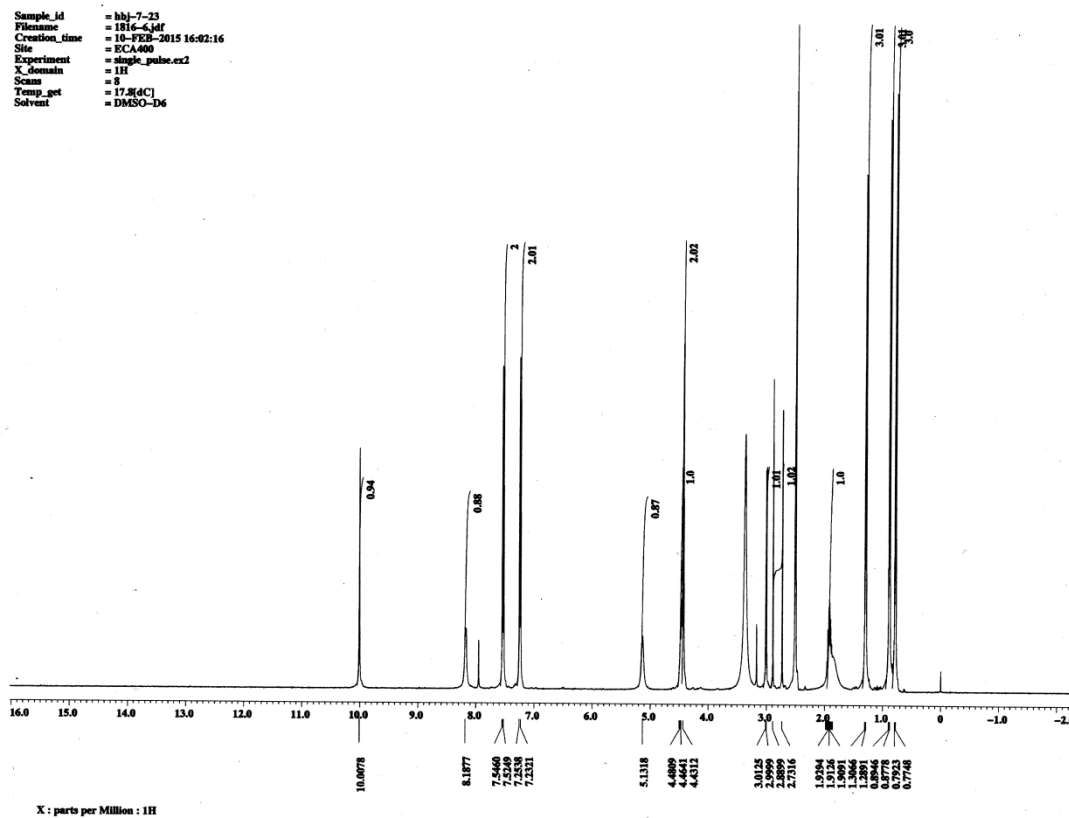


Figure S18. The ¹H-NMR spectrum of compound 9a.

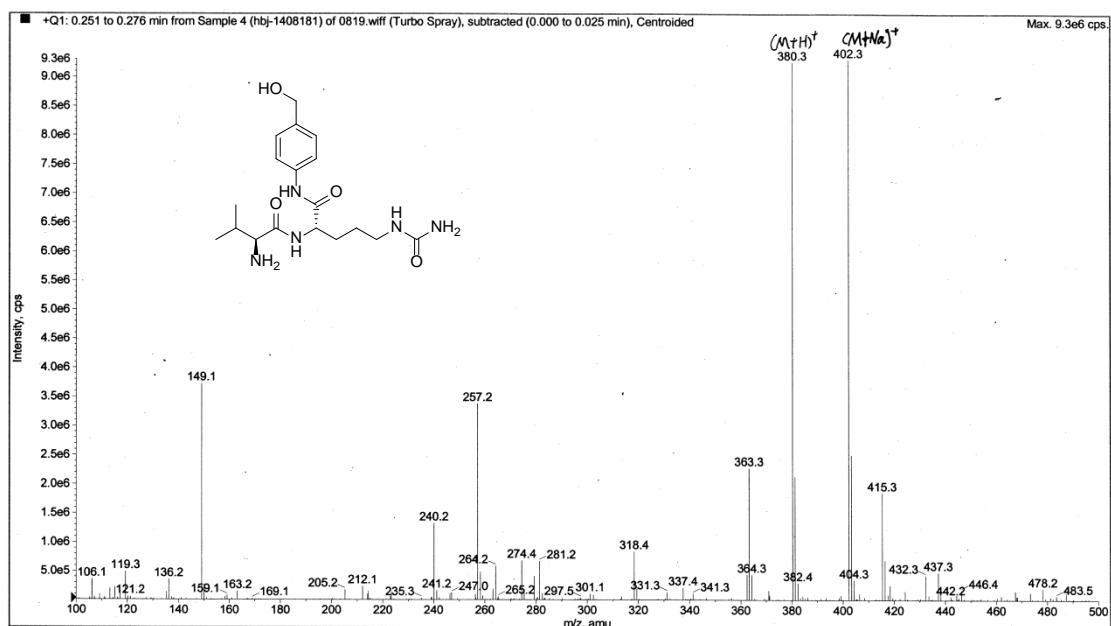


Figure S19. The ESI-MS spectrum of compound 9b.

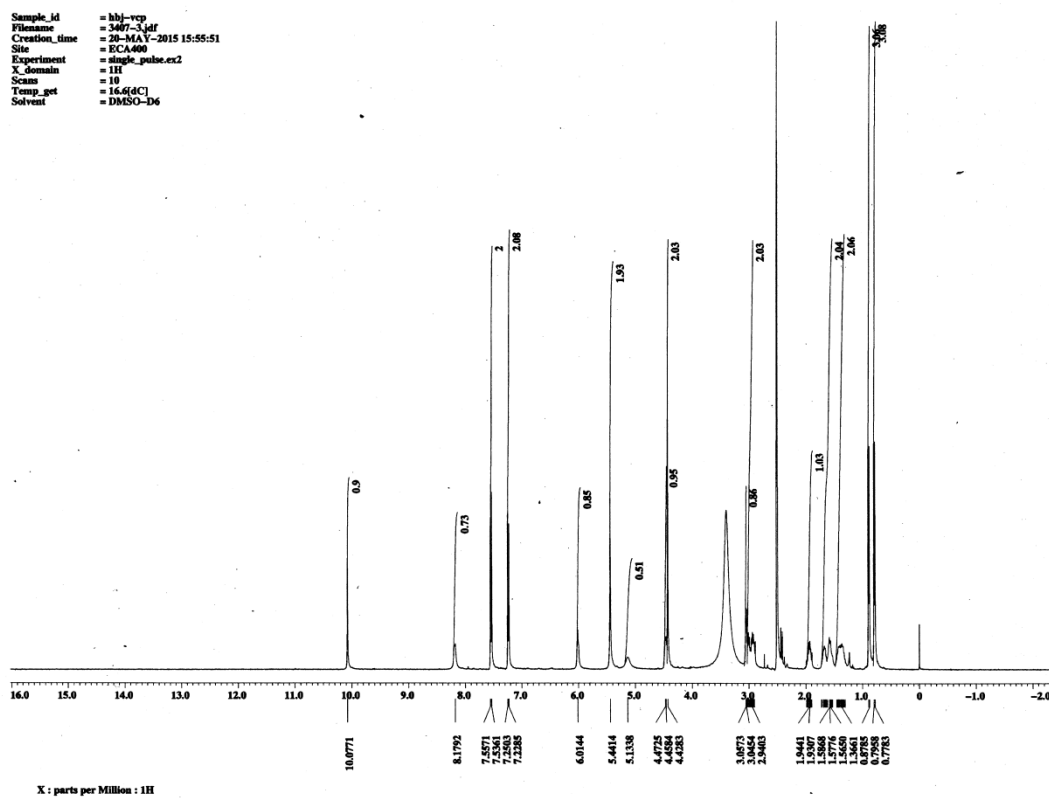


Figure S20. The ¹H-NMR spectrum of compound 9b.

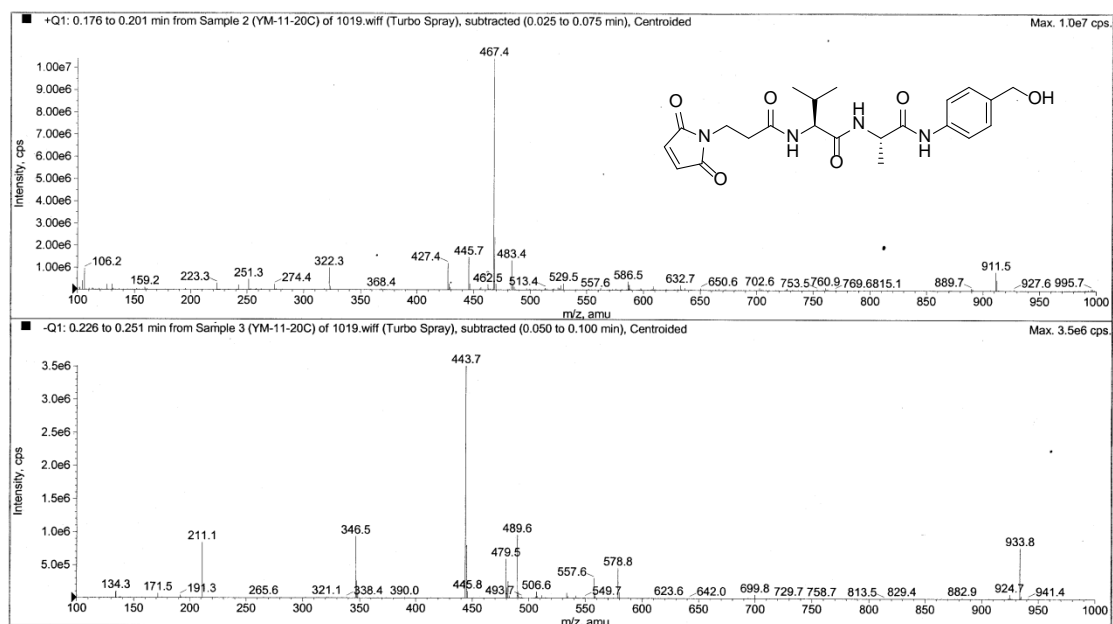


Figure S21. The ESI-MS spectrum of compound *10a*.

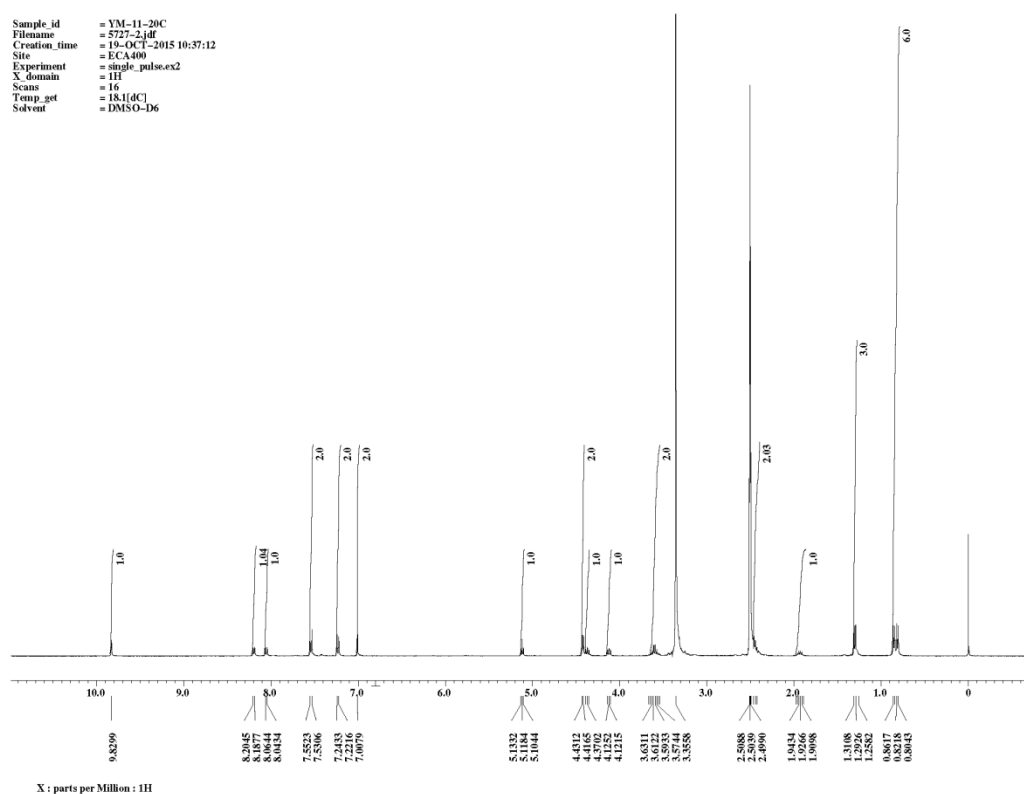


Figure S22. The ^1H -NMR spectrum of compound *10a*.

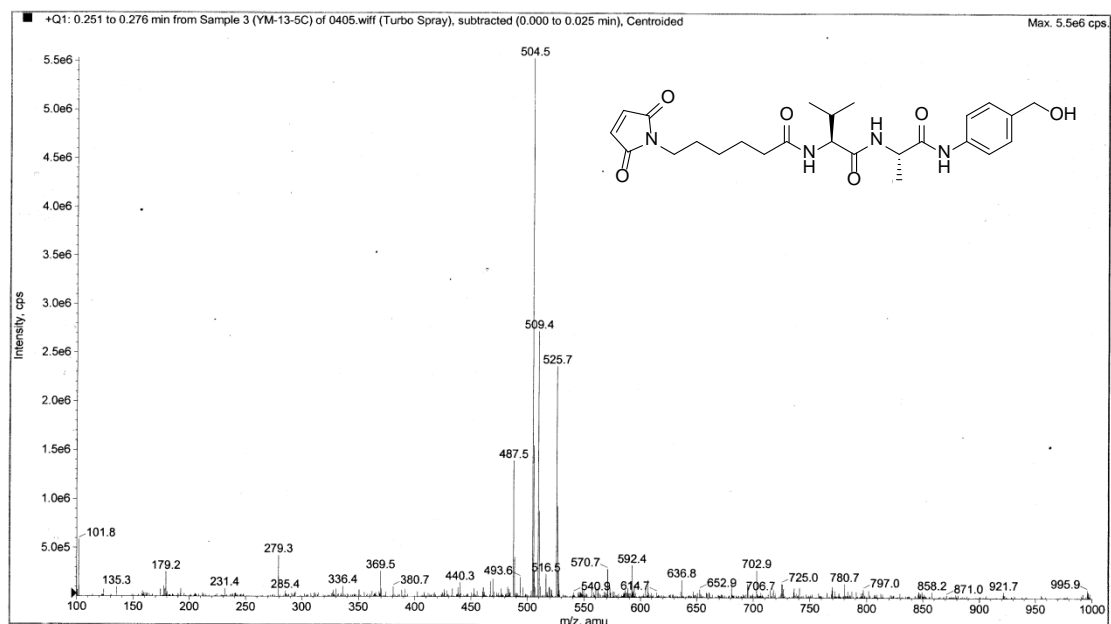


Figure S23. The ESI-MS spectrum of compound 10b.

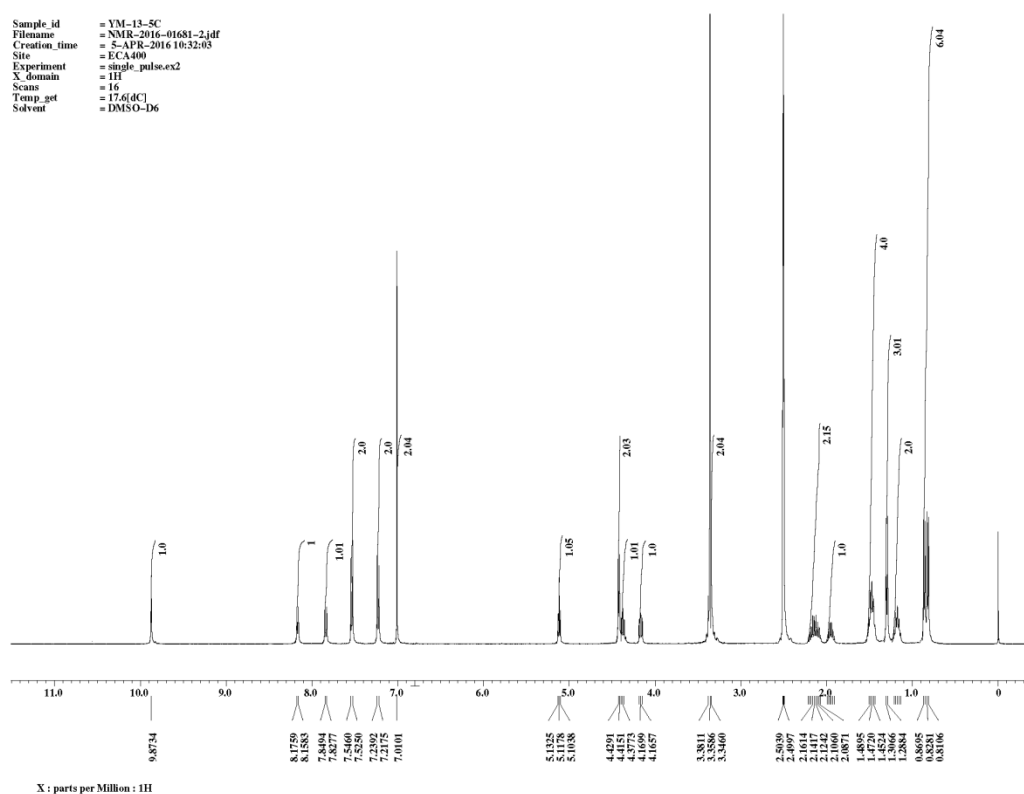


Figure S24. The ¹H-NMR spectrum of compound 10b.

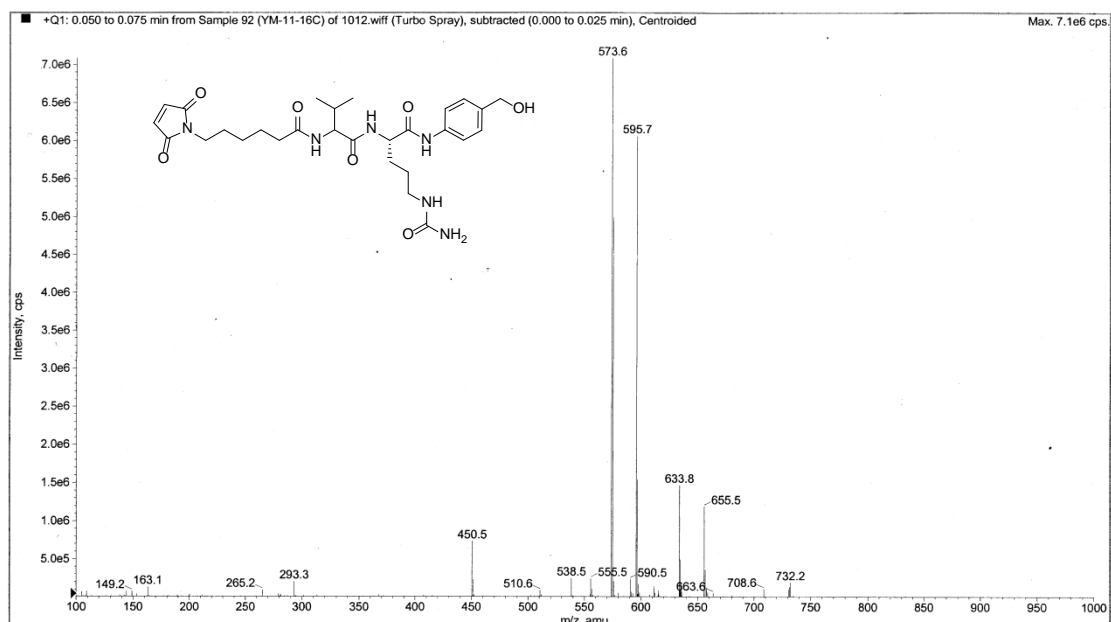


Figure S25. The ESI-MS spectrum of compound 10c.

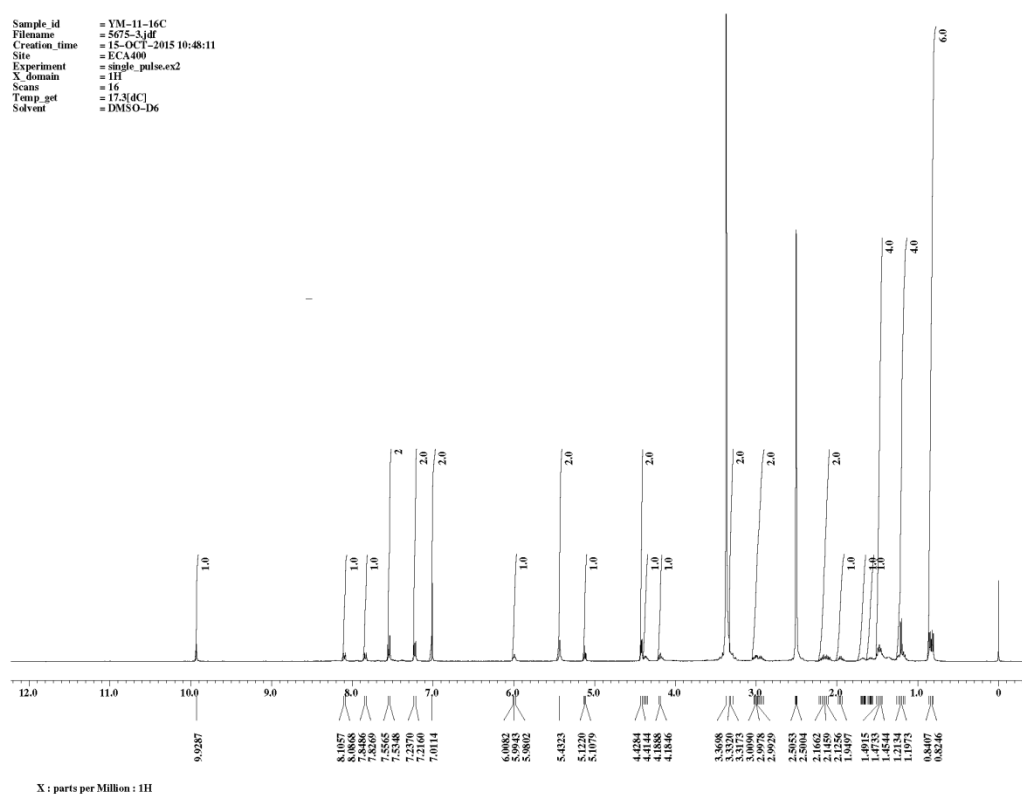


Figure S26. The ¹H-NMR spectrum of compound 10c.

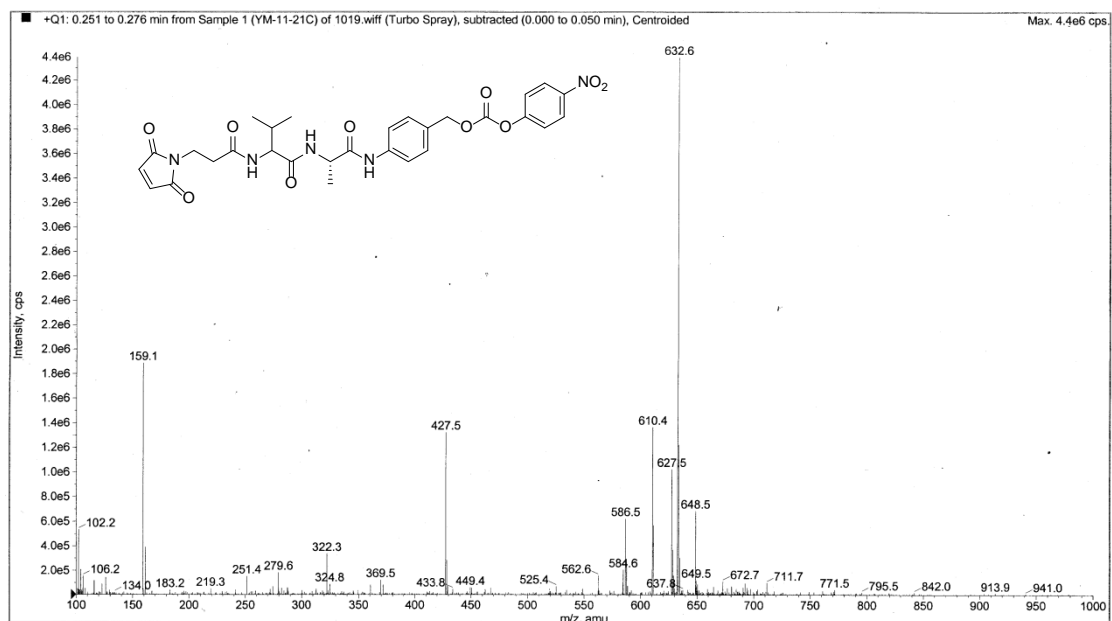


Figure S27. The ESI-MS spectrum of compound 11a.

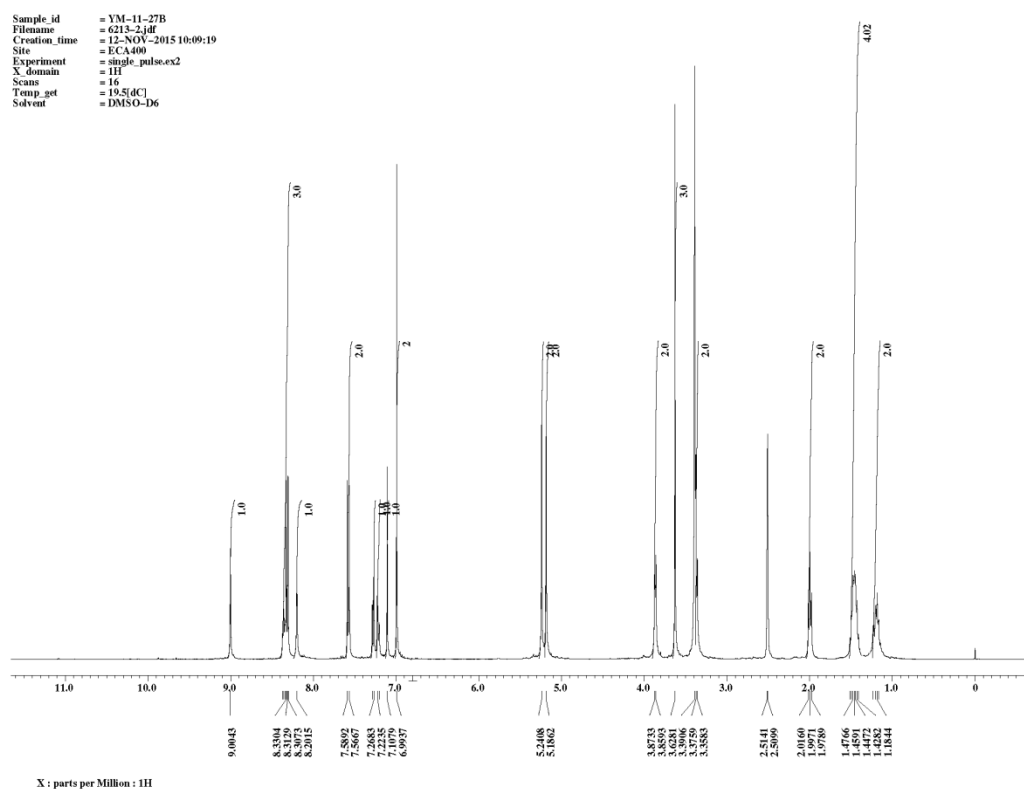


Figure S28. The ¹H-NMR spectrum of compound 11a.

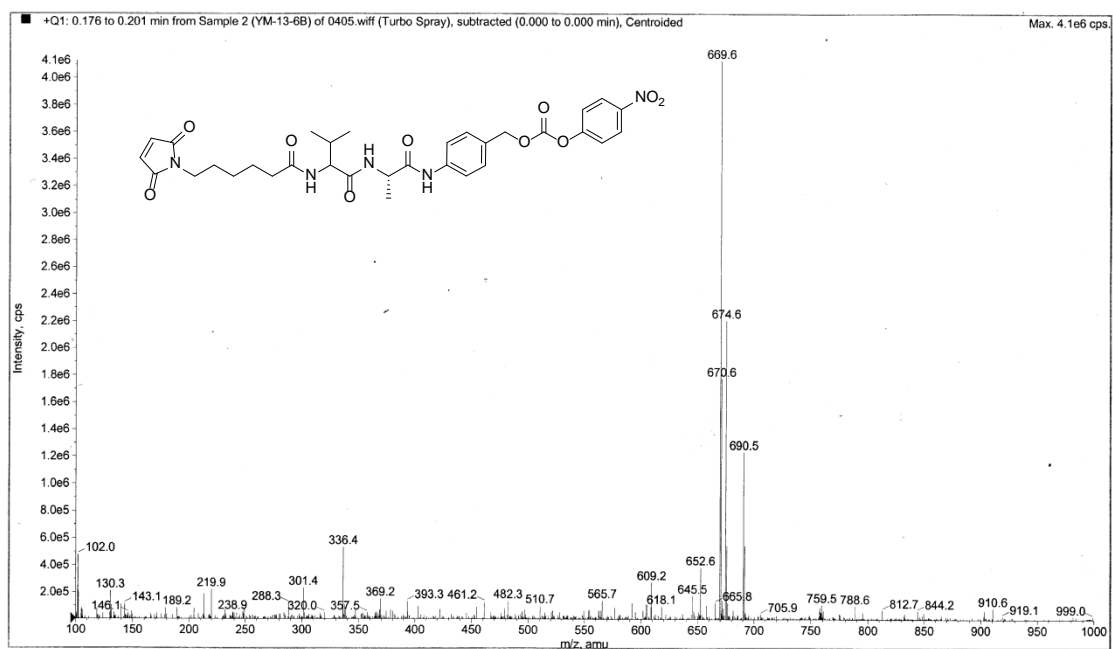


Figure S29. The ESI-MS spectrum of compound 11b.

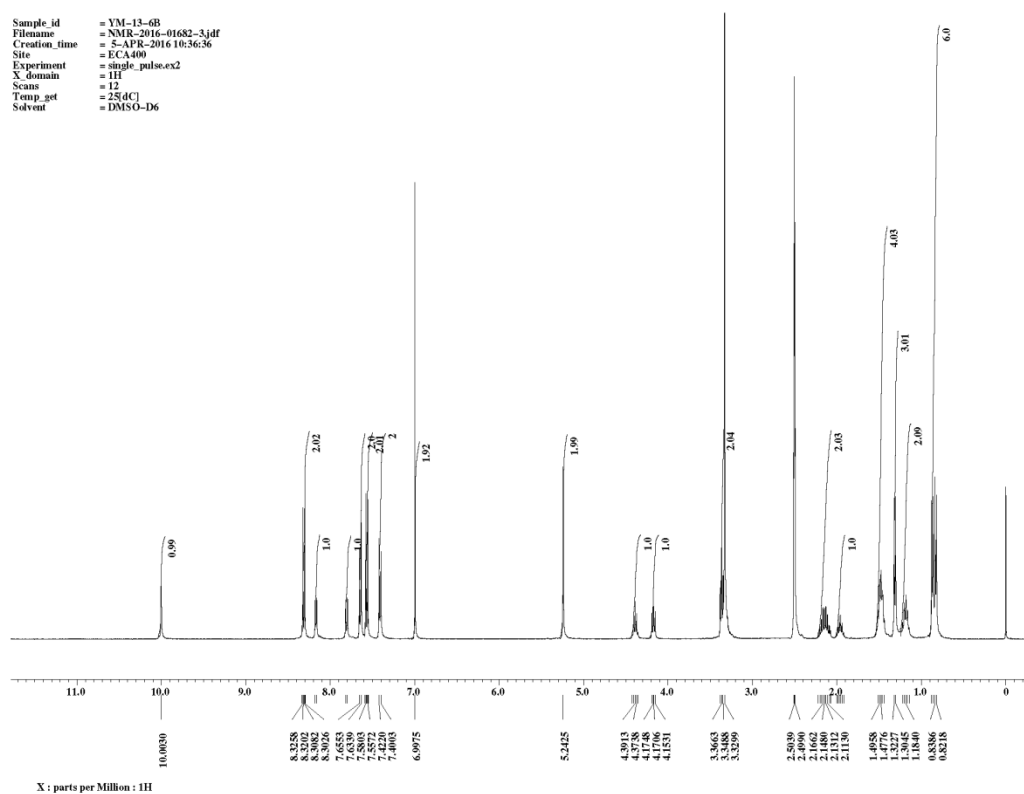


Figure S30. The ¹H-NMR spectrum of compound 11b.

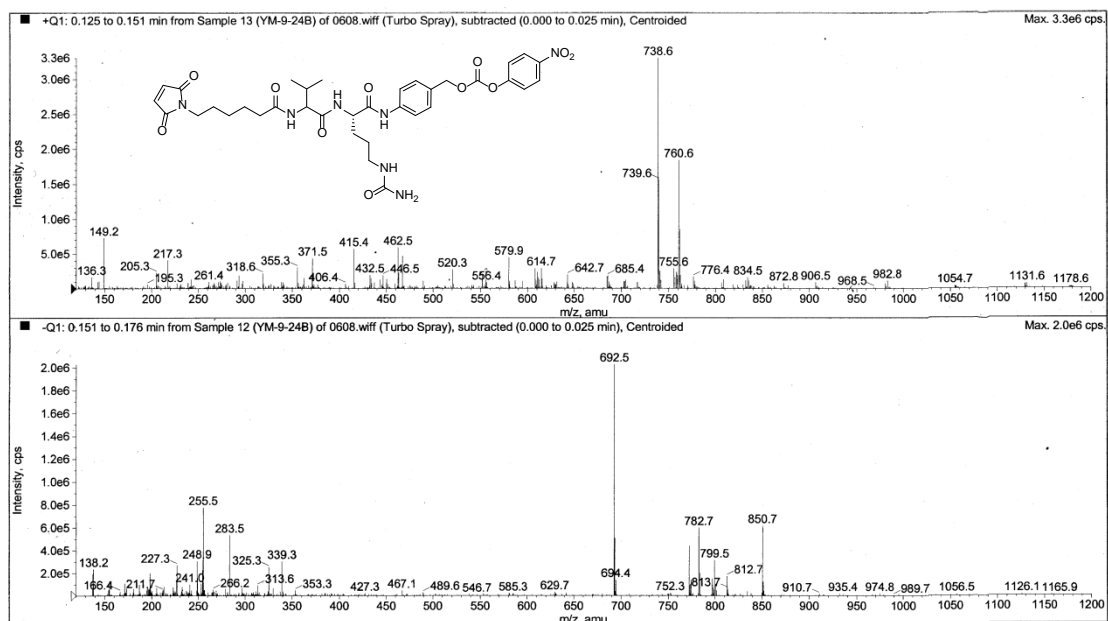


Figure S31. The ESI-MS spectrum of compound *11c*.

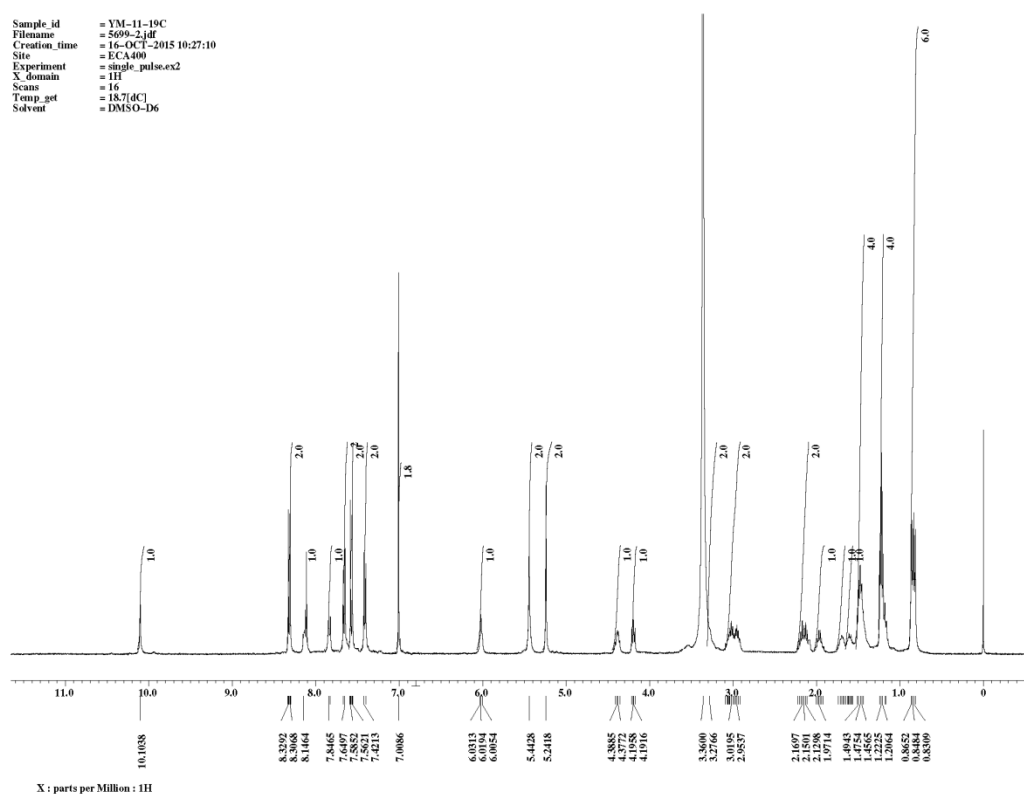


Figure S32. The ^1H -NMR spectrum of compound *11c*.

Data Filename O639.d
Instrument Name TOF G6230A
Acq Method YCL.M
IRM Calibration Status Success
User Chromatograms

Sample Name YM-11-24
Acquired Time 2017-02-10
Acquired SW 6200 series TOF/6500 series

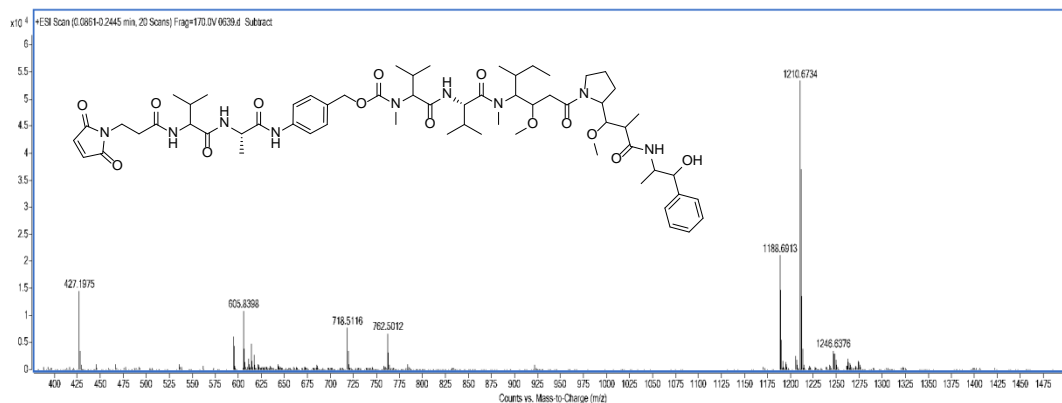


Figure S33. The ESI-MS spectrum of compound 12a.

Sample_id = ym-11-24
Filename = NMR-2017-01458-4.jdf
Creation_time = 10-FEB-2017 10:49:01
Site = ECA400
Experiment = single_pulse.ex2
X_domain = 1H
Scans = 16
Temp_set = 17.2(dC)
Solvent = DMSO-D6

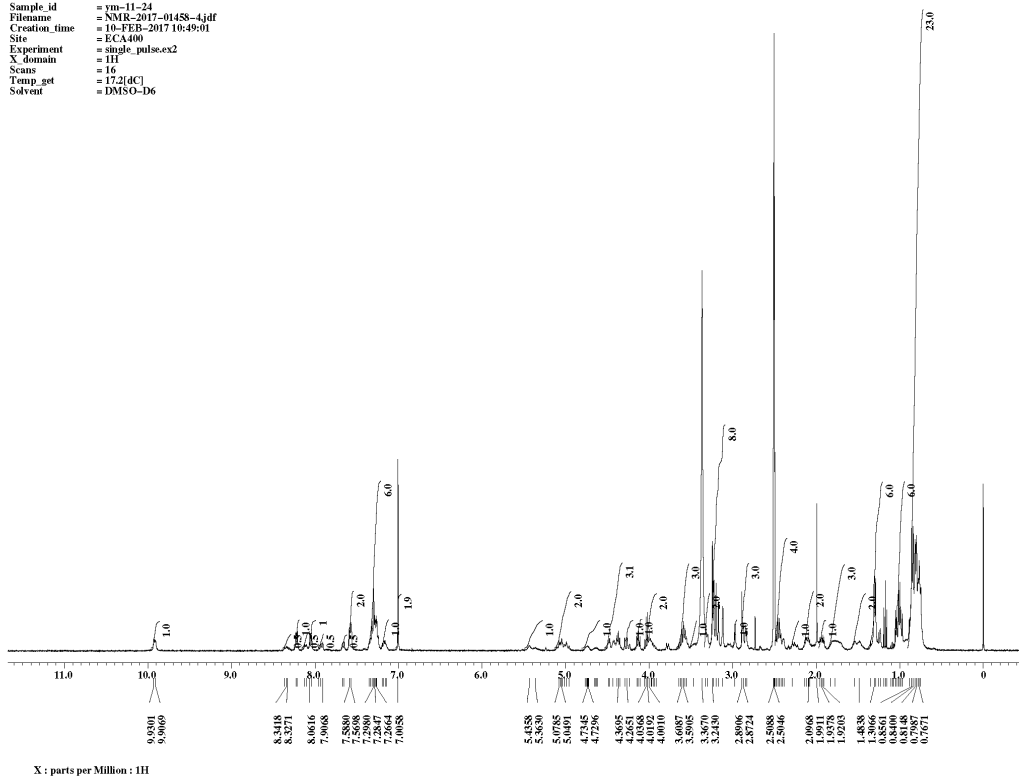


Figure S34. The ¹H-NMR spectrum of compound 12a.

Data Filename 0640.d
Instrument Name TOF G6230A
Acq Method YCL.M
IRM Calibration Status Success
User Chromatograms

Sample Name YM-13-7
Acquired Time 2017-02-10
Acquired SW 6200 series TOF/6500 series

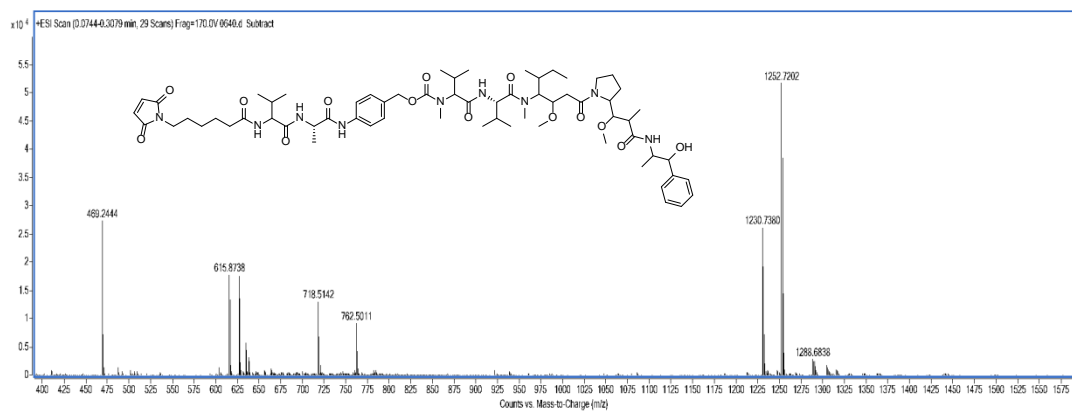


Figure S35. The ESI-MS spectrum of compound *12b*.

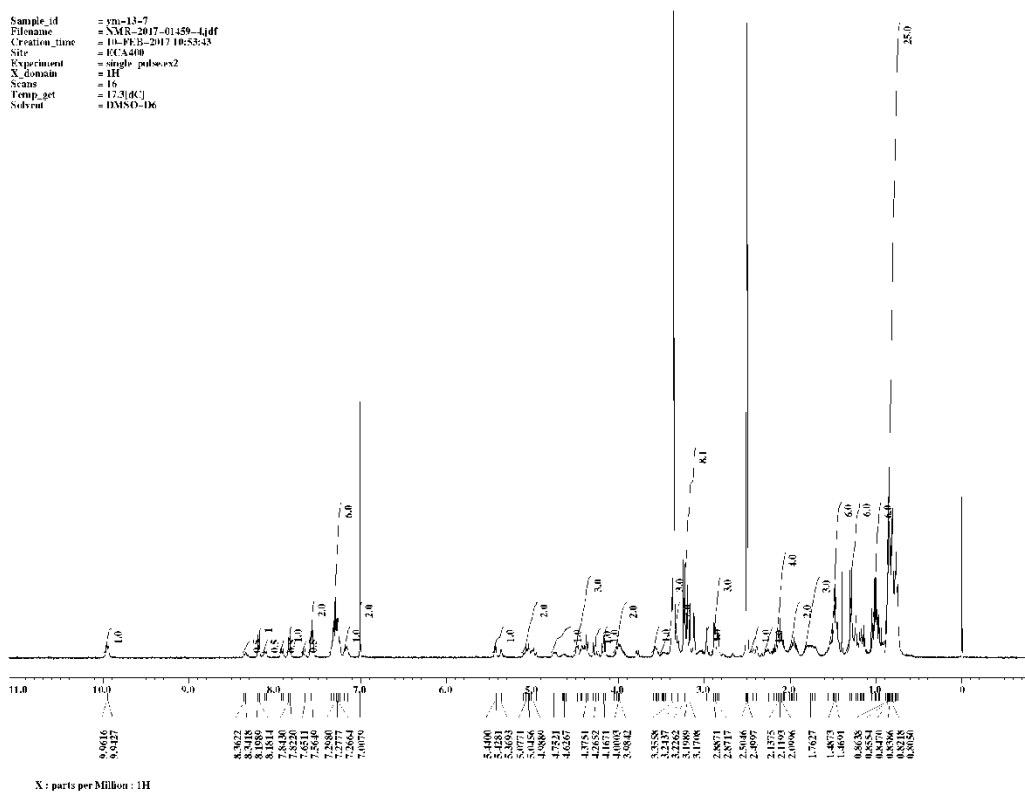


Figure S36. The ^1H -NMR spectrum of compound *12b*.

Data Filename 0642.d
Instrument Name TOF G6230A
Acq Method YCLM
IRM Calibration Status Success
User Chromatograms

Sample Name YM-12-50
Acquired Time 2017-02-10
Acquired SW 6200 series TOF/6500 series

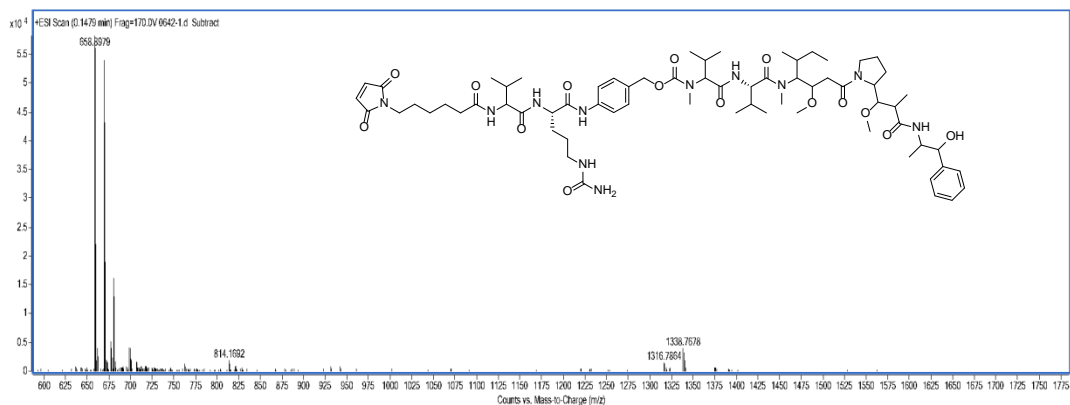


Figure S37. The ESI-MS spectrum of compound 12c.

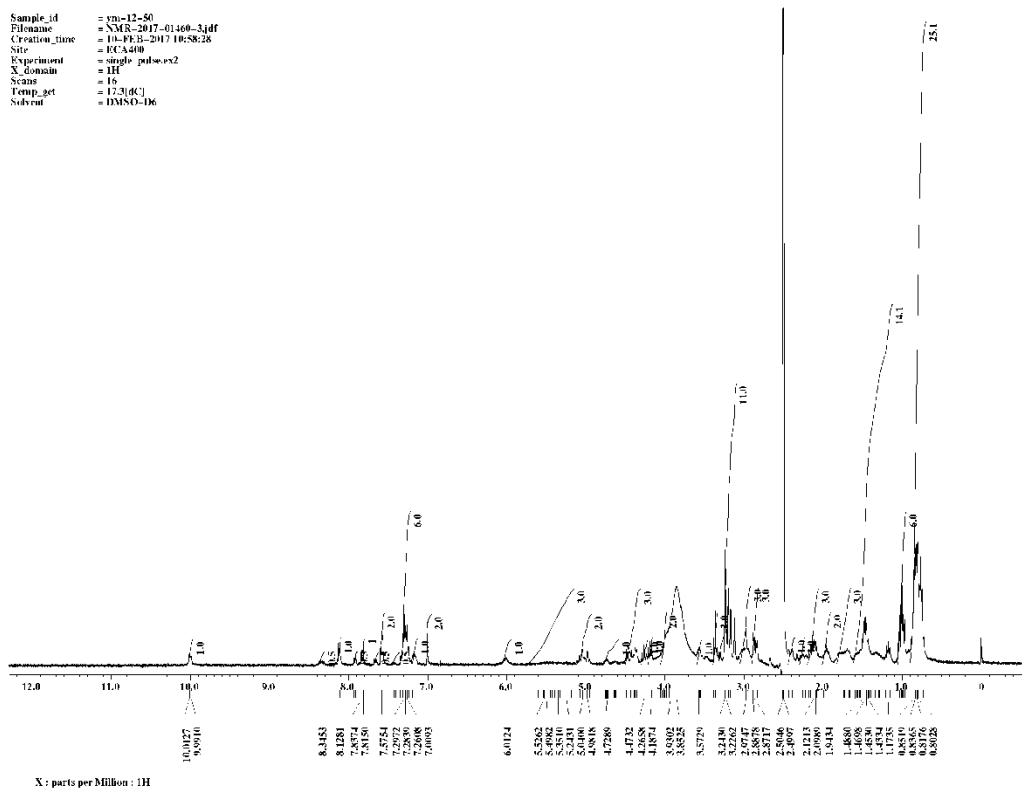


Figure S38. The ¹H-NMR spectrum of compound 12c.