Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information

Single and double intramolecular proton transfers in the electronically excited state of flavone derivatives

Authors

I. E. Serdiuk[a,b] and A. D. Roshal[b]*

Affiliations

[a]Faculty of Chemistry, University of Gdańsk, Gdańsk, 80-308 Poland

[b]Institute of Chemistry, V. N. Karazin Kharkiv National University, Kharkiv, 61022 Ukraine

*Corresponding author

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Figure S1. Phosphorescence spectra of 1d and 2d in methylcyclohexane at 77 K

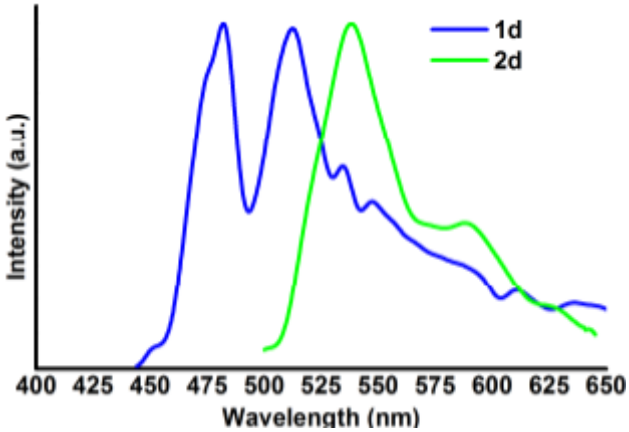


Figure S2. Steady-state 3D fluorescence emission-excitation spectra of 1a (a), 2a (b), 1b (c), 2b (d), 1c (e) and 2c (f) and their projections in methylcyclohexane at 298 K.

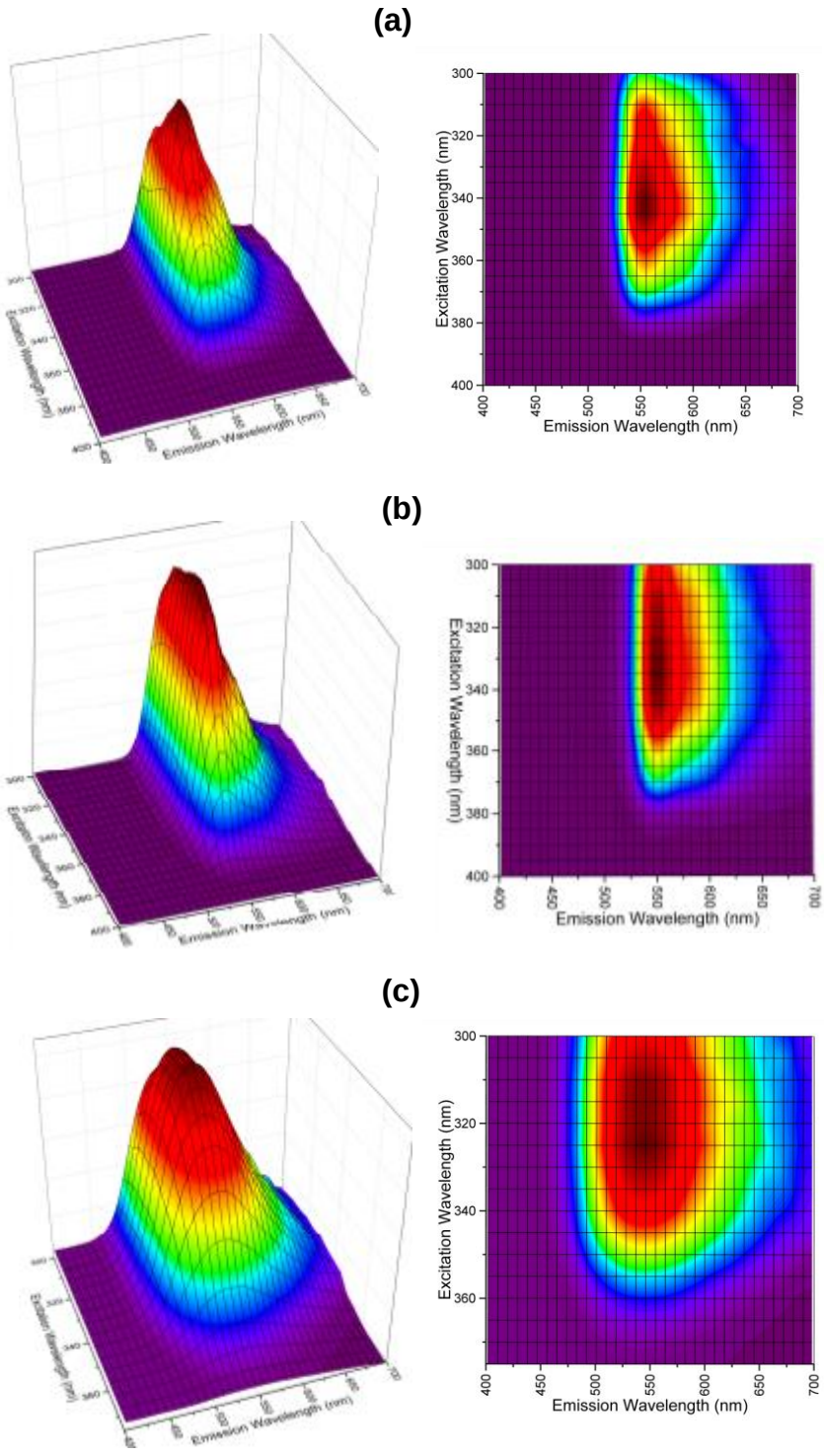
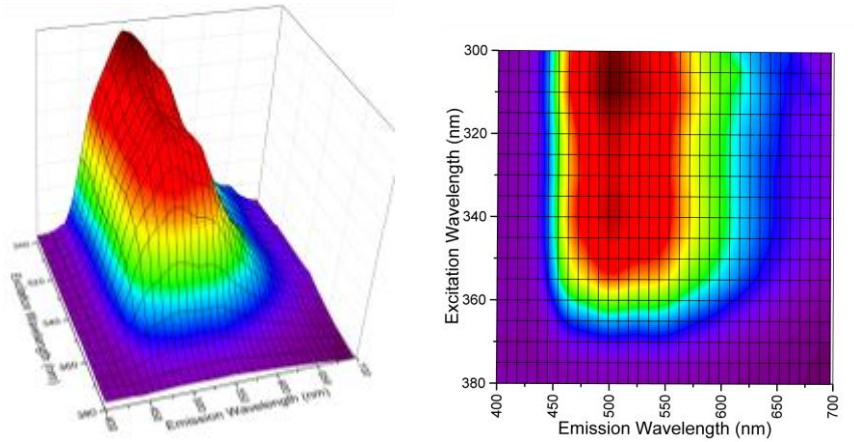


Figure S2. Continued

(d)



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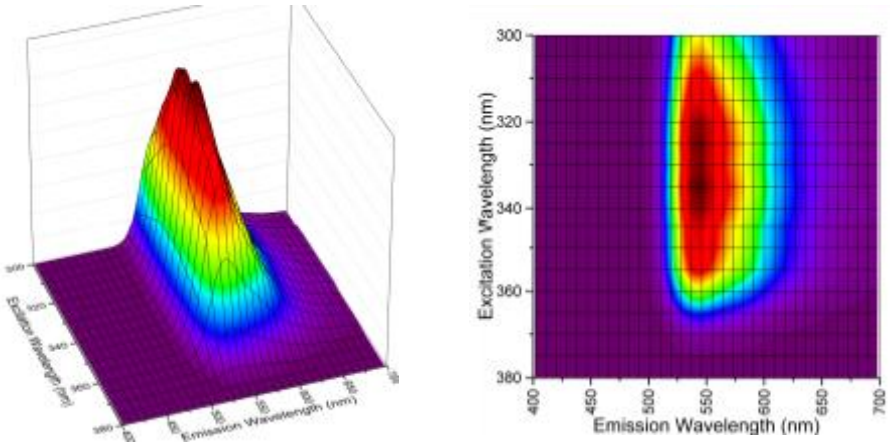

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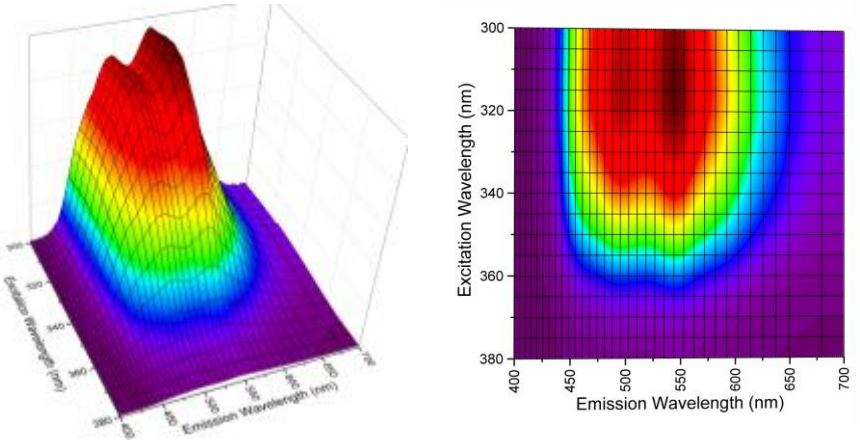
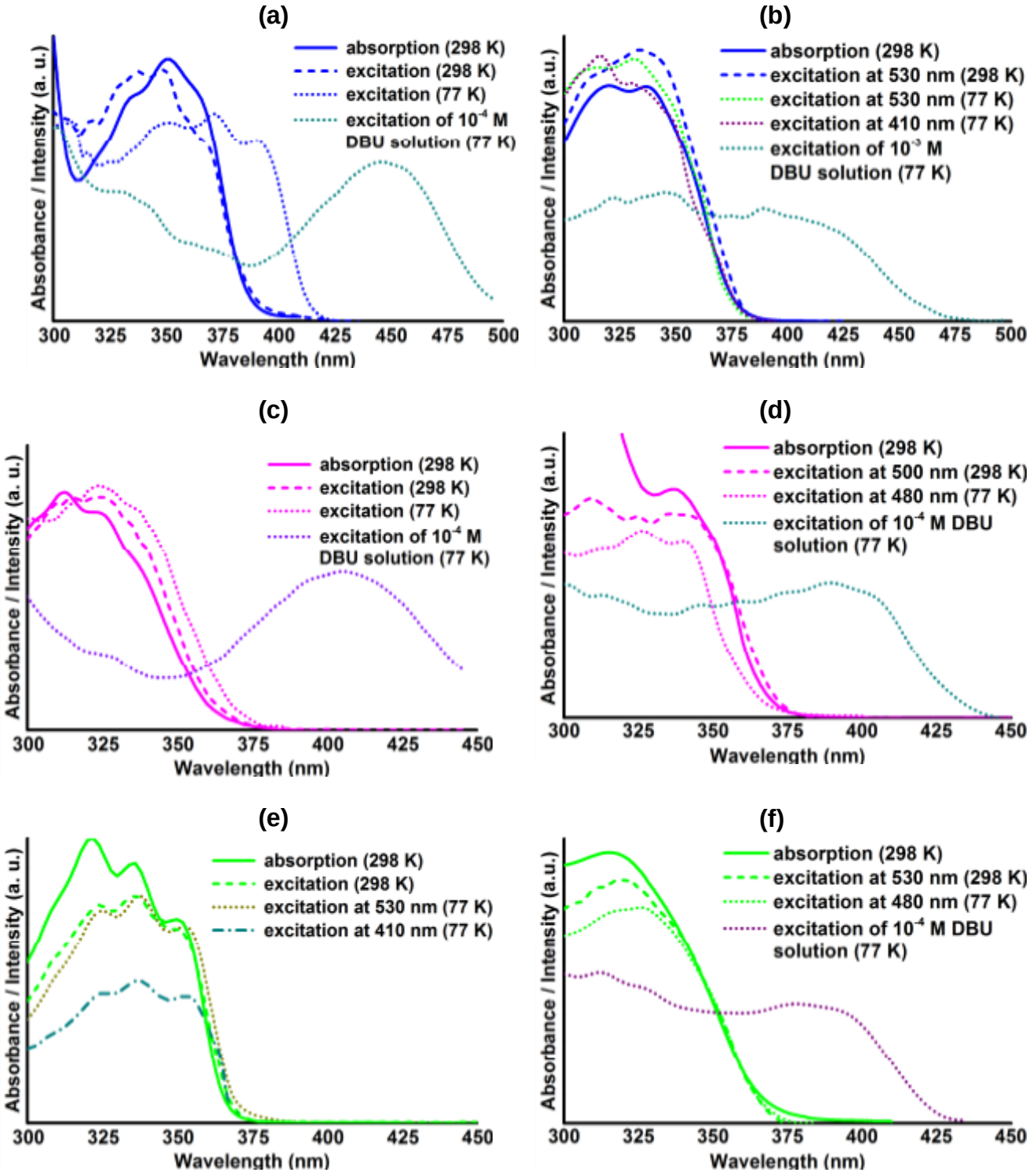


Figure S3. Absorption spectra at 298 K, steady-state fluorescence excitation spectra recorded at the emission maxima at 298 K and 77 K of 1a (a), 2a (b), 1b (c), 2b (d), 1c (e) and 2c (f) in methylcyclohexane.



^{1}H-NMR and mass spectra of new compounds

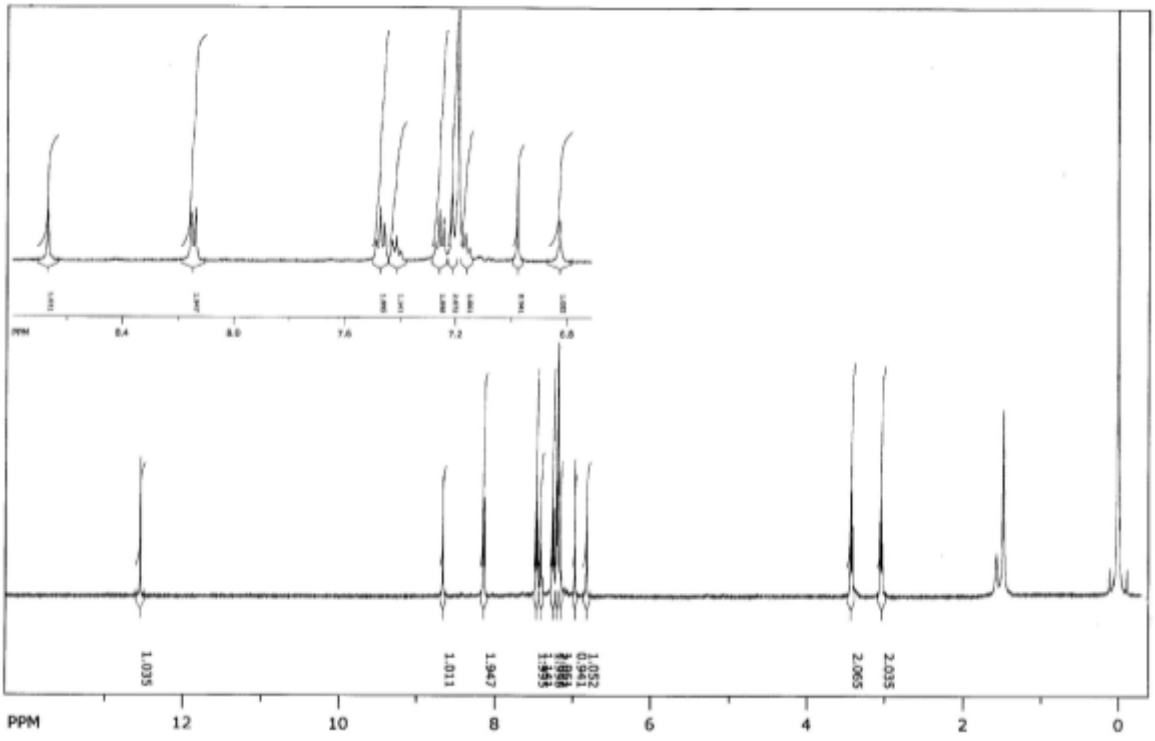


Figure S4. ^{1}H-NMR of compound 1a in $CDCl_3$.

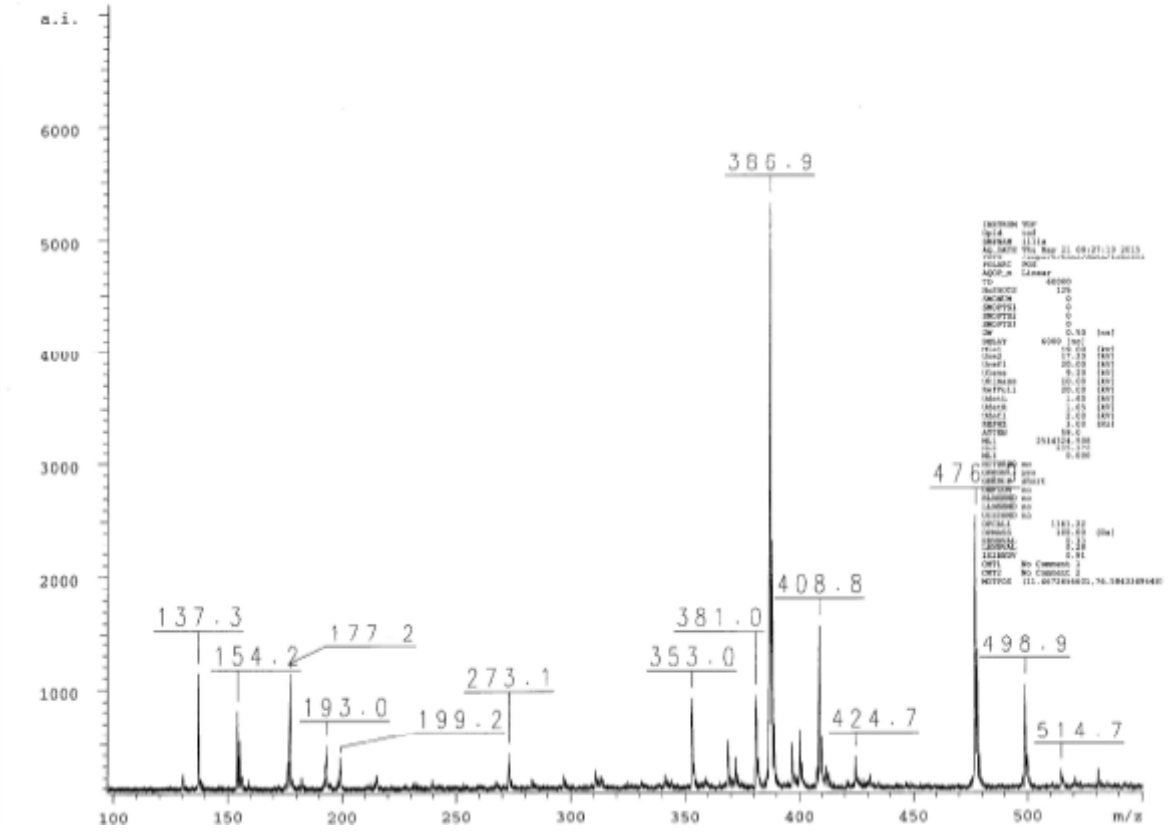


Figure S5. MALDI-TOF mass spectrum of compound 1a.

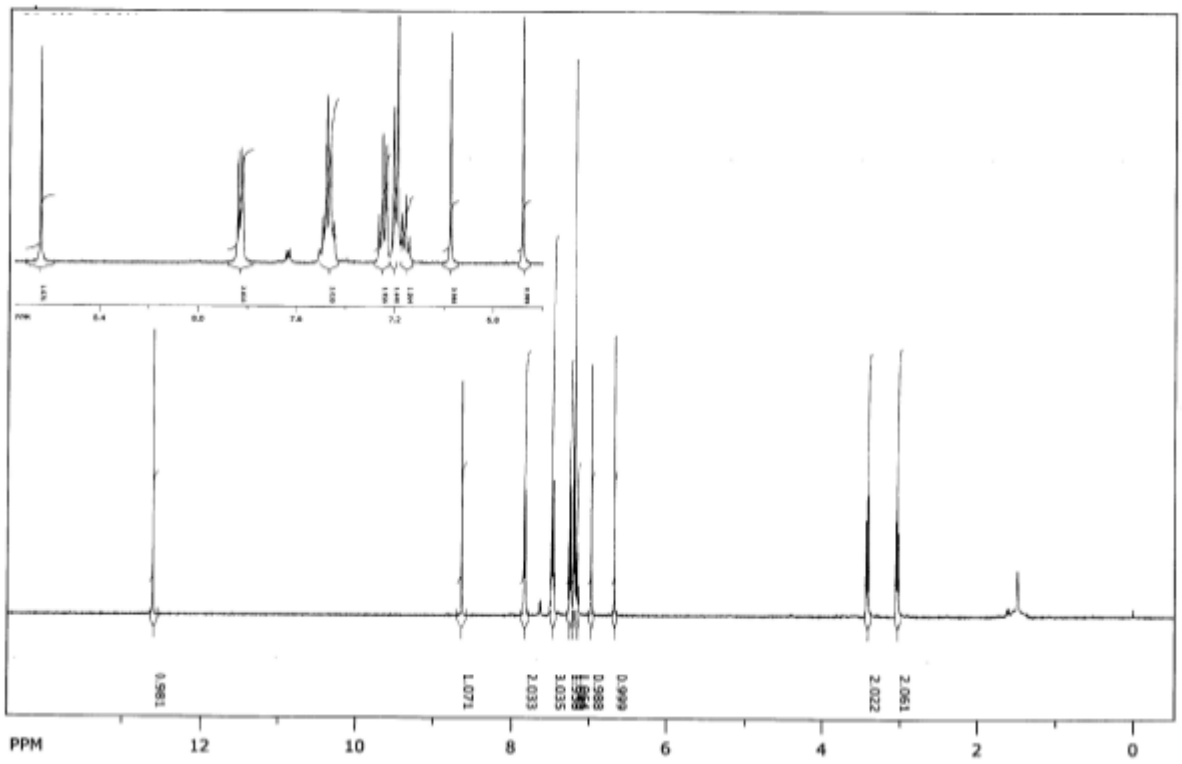


Figure S6. ^{1}H-NMR of compound 1b in $CDCl_3$.

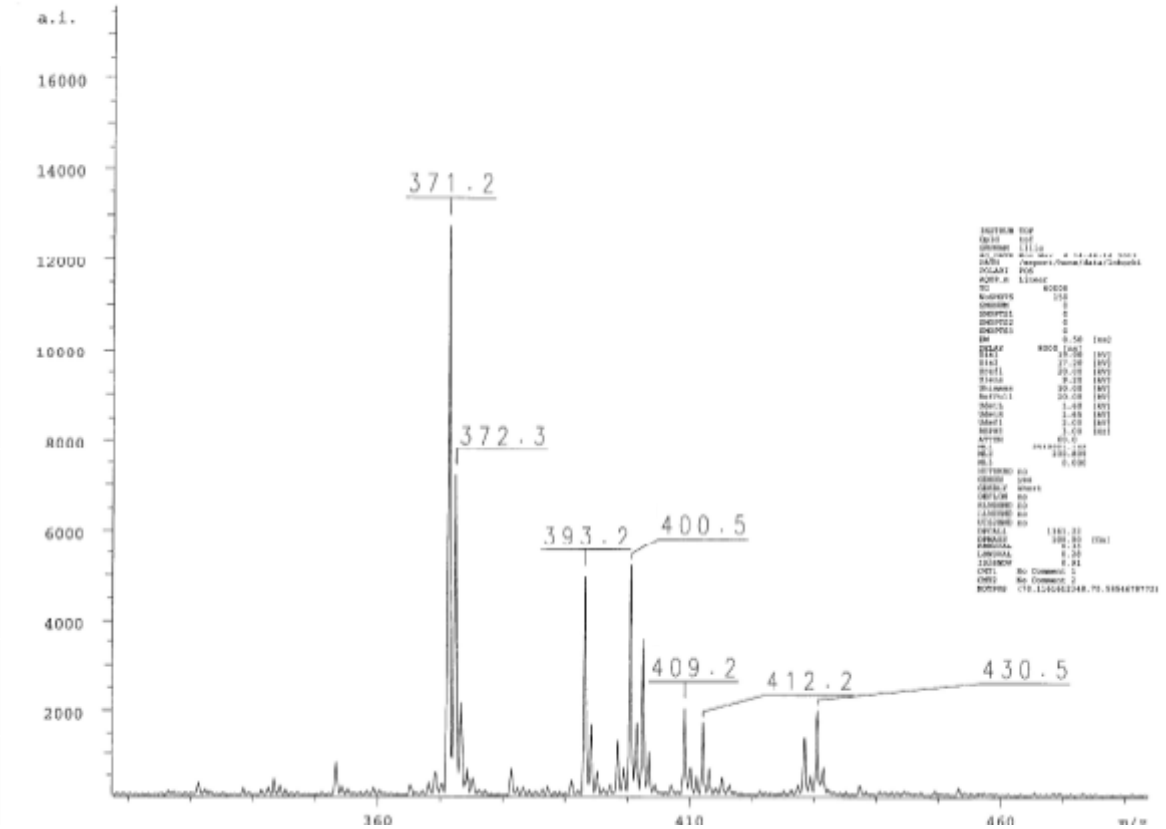


Figure S7. MALDI-TOF mass spectrum of compound 1b.

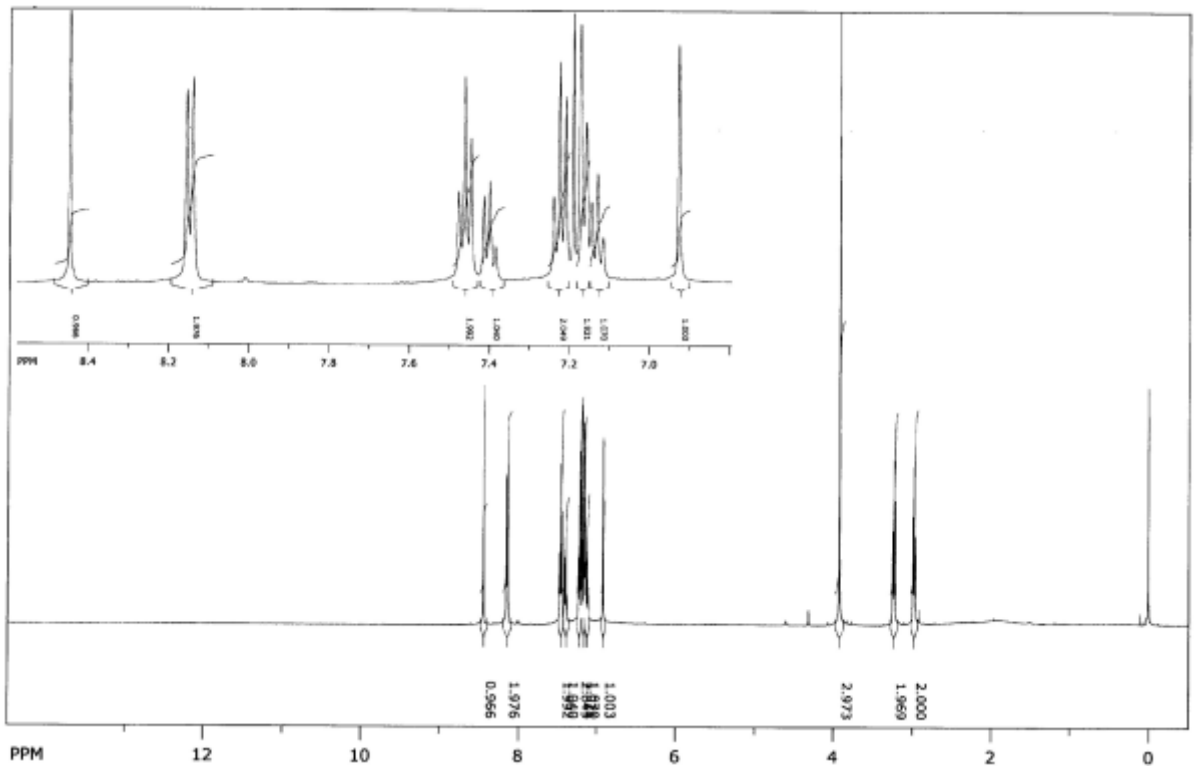


Figure S8. ^{1}H-NMR of compound 1c in $CDCl_3$.

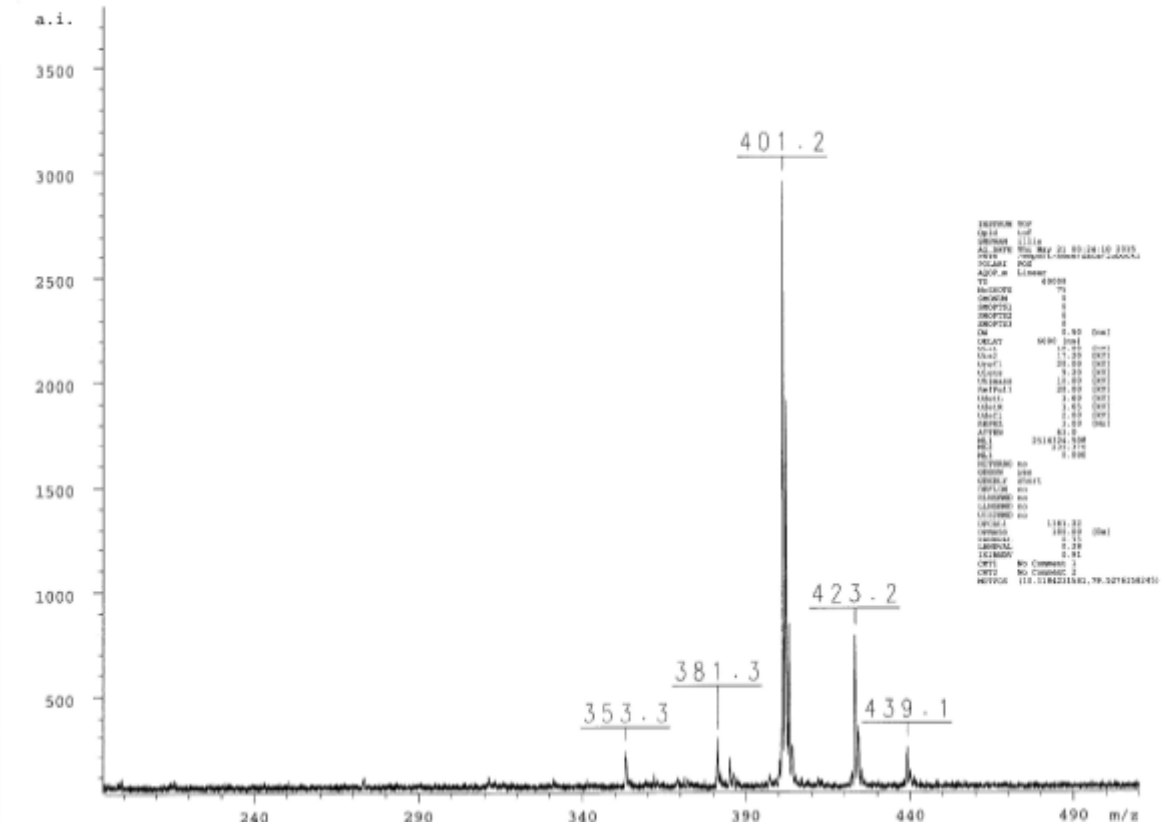


Figure S9. MALDI-TOF mass spectrum of compound 1c.

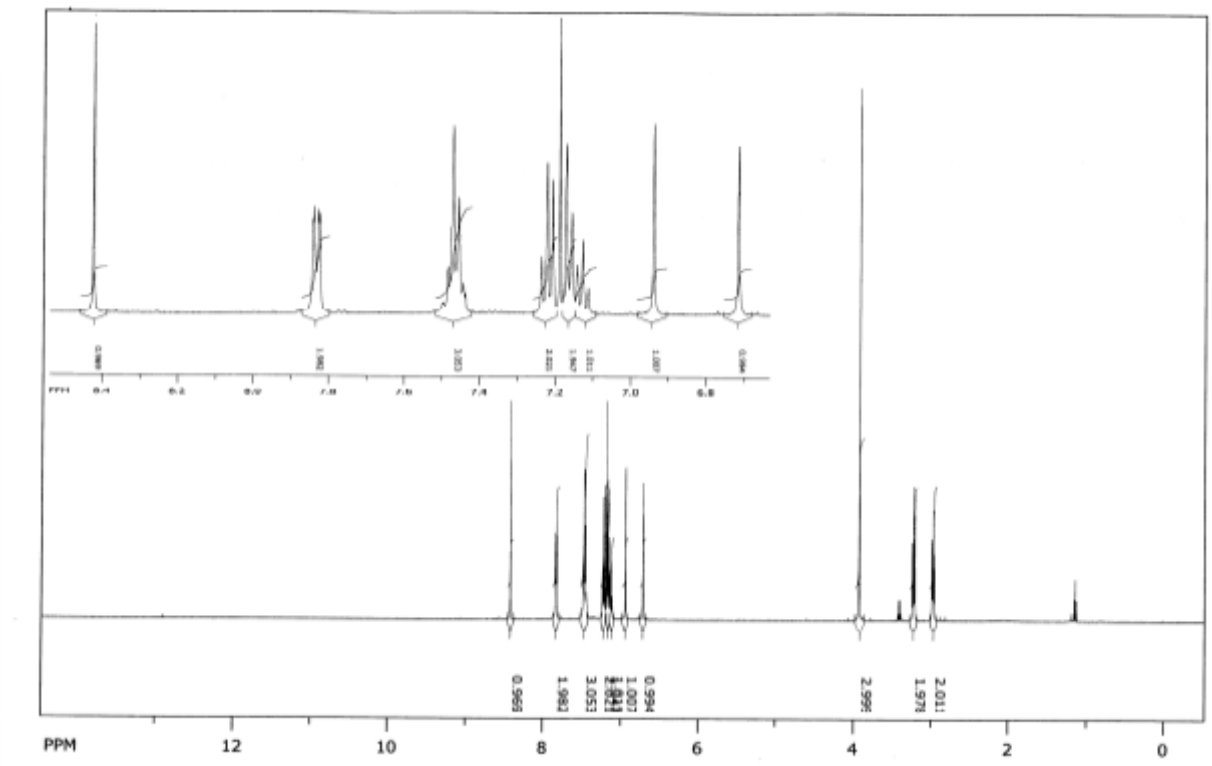


Figure S10. ^{1}H-NMR of compound 1d in $CDCl_3$.

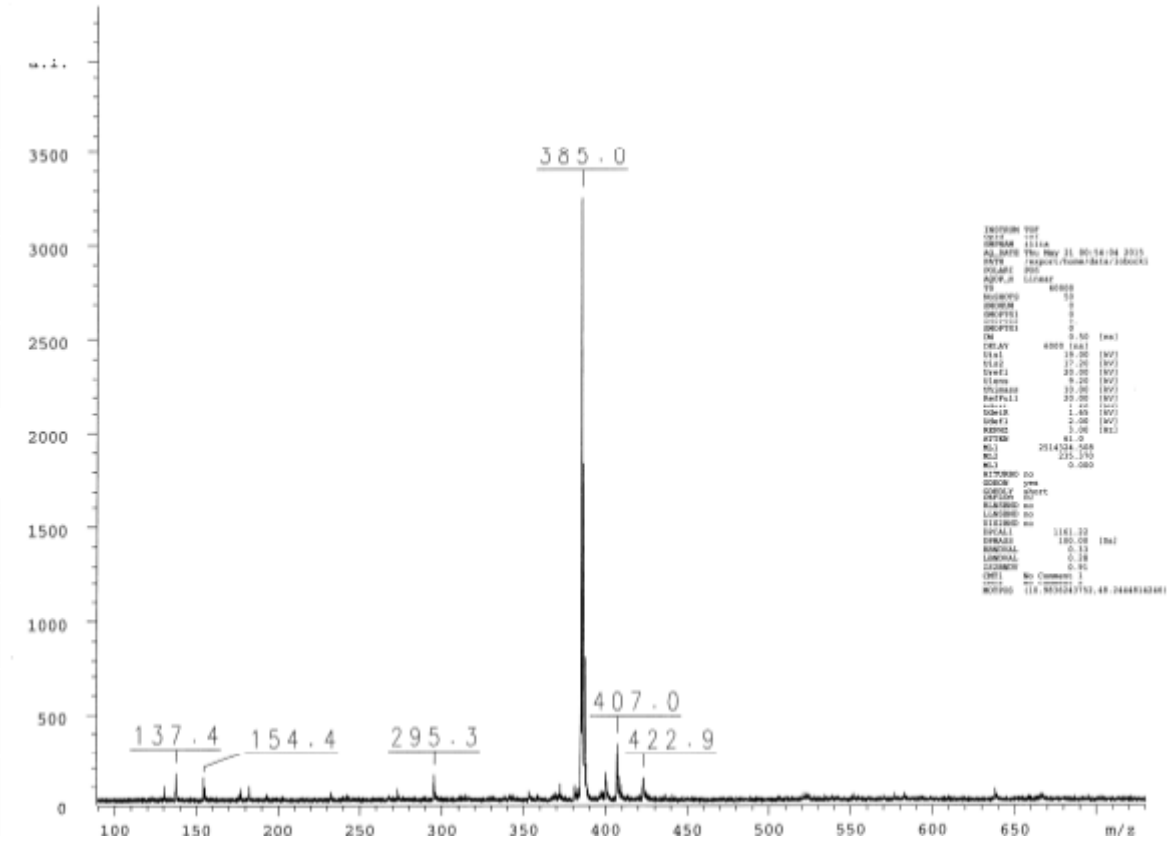


Figure S11. MALDI-TOF mass spectrum of compound 1d.

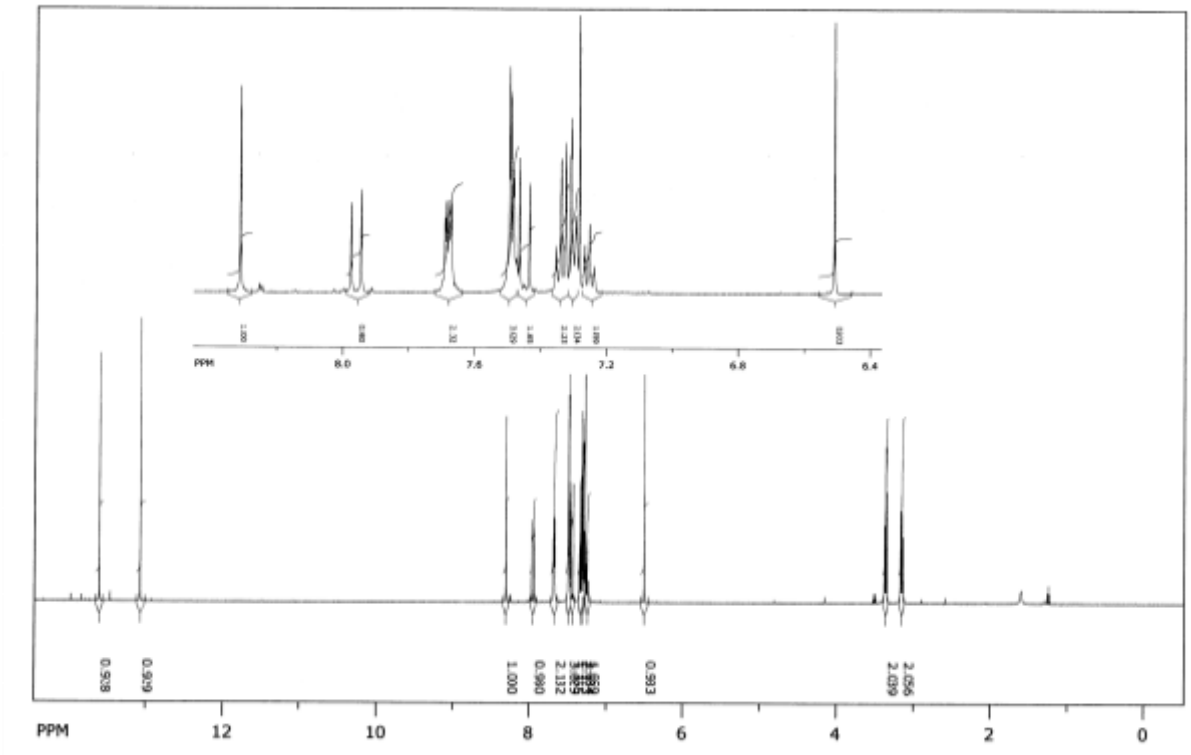


Figure S12. ^{1}H-NMR of compound 1e in $CDCl_3$.

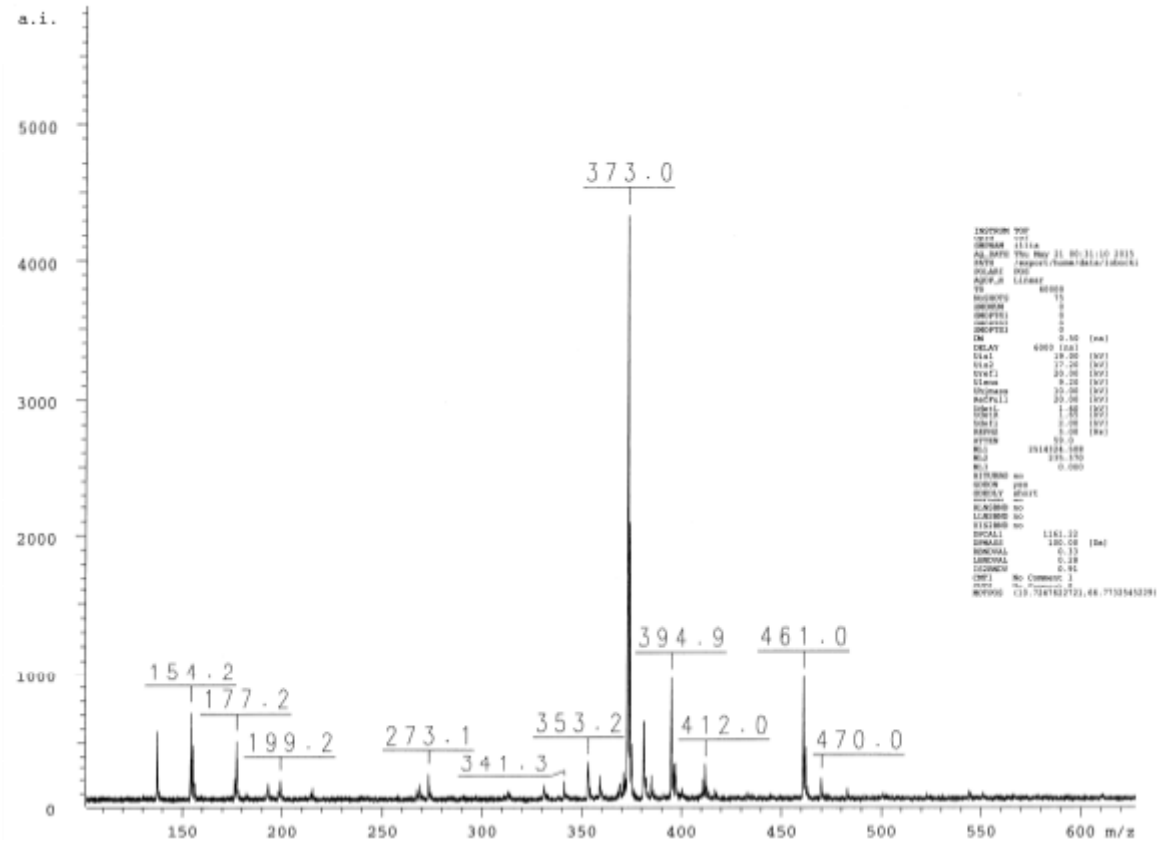


Figure S13. MALDI-TOF mass spectrum of compound 1e.

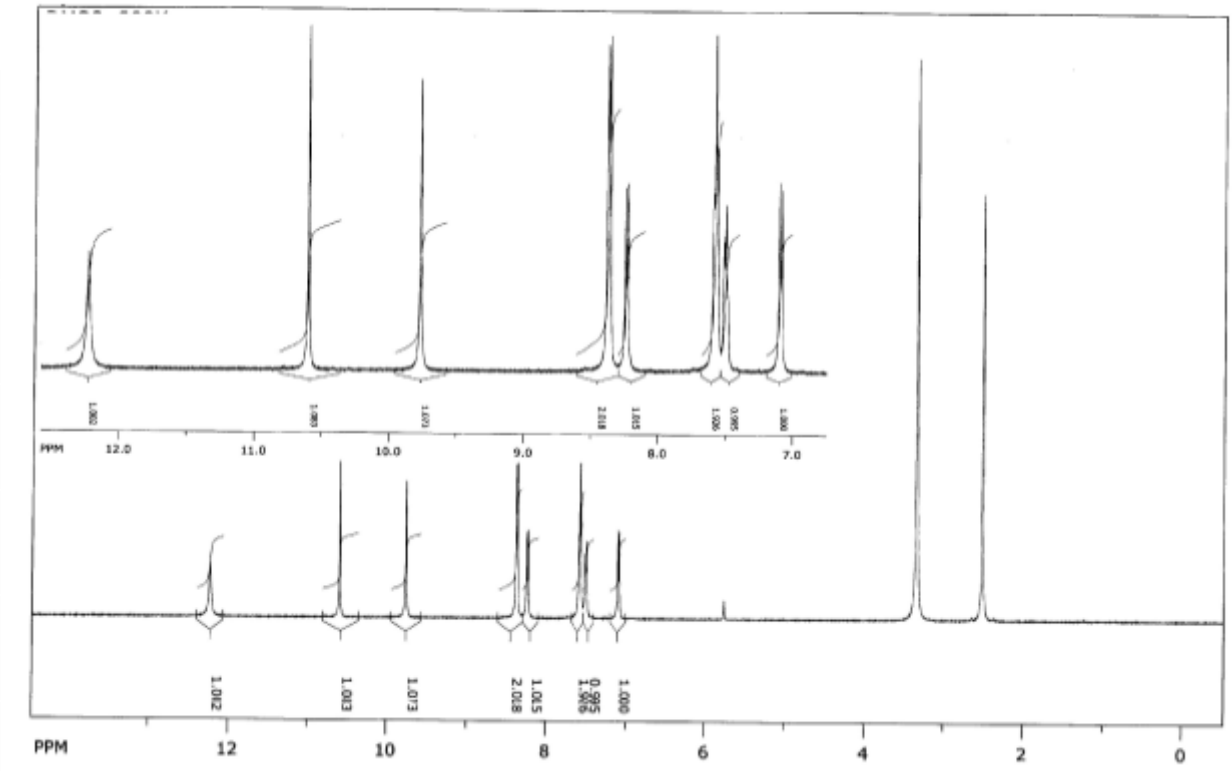


Figure S14. ^{1}H-NMR of compound 2a in DMSO-d_6.

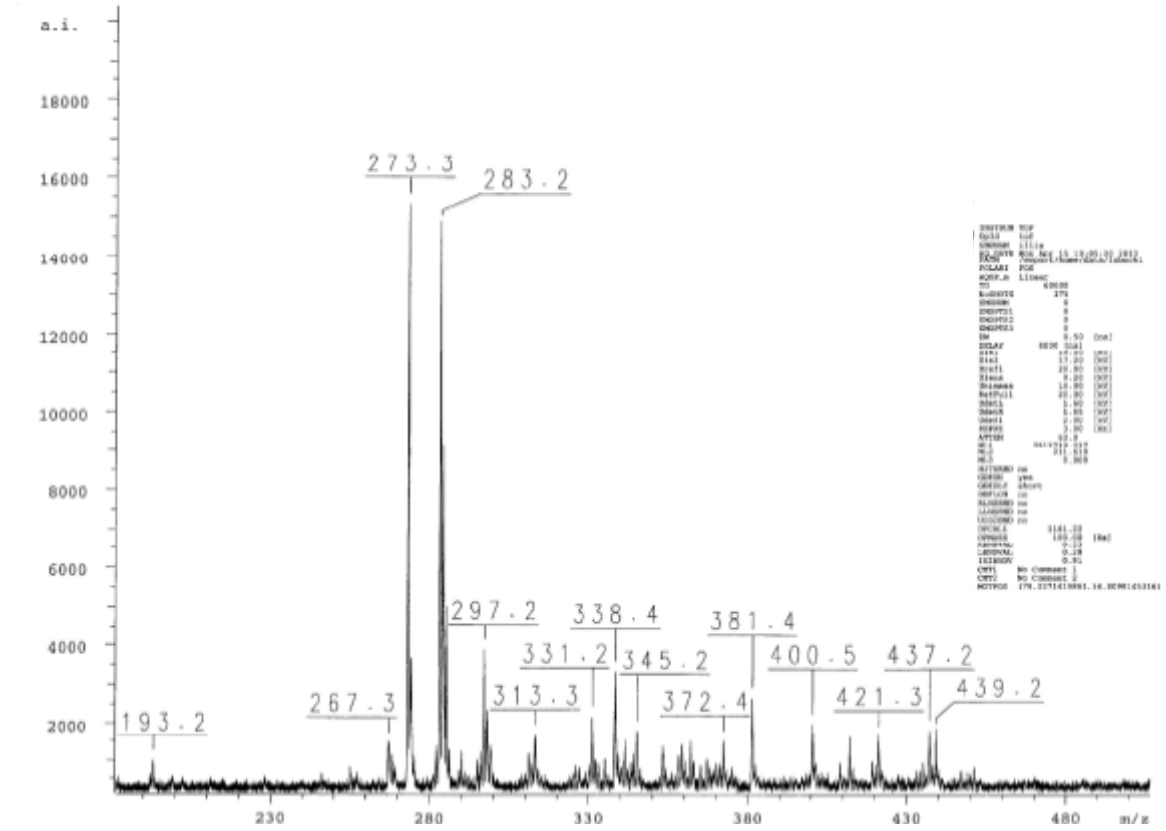


Figure S15. MALDI-TOF mass spectrum of compound 2a.

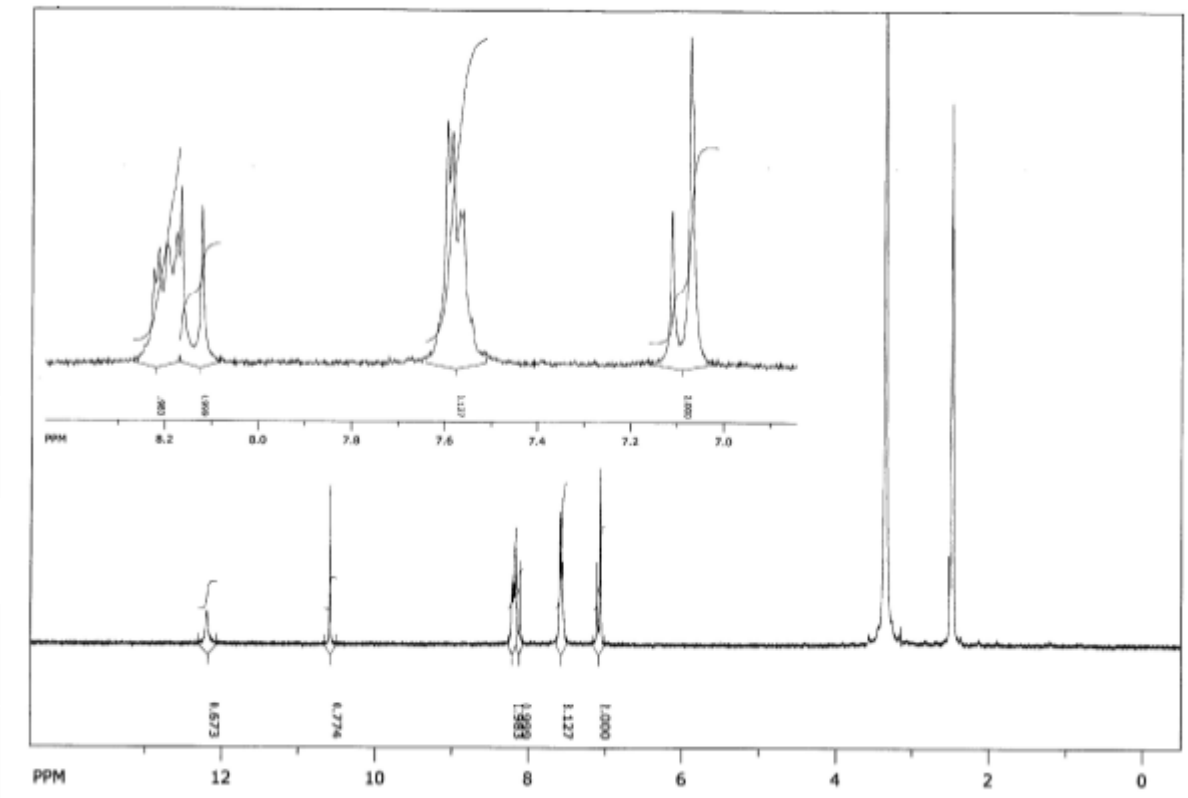


Figure S16. ^{1}H-NMR of compound 2b in DMSO-d_6.

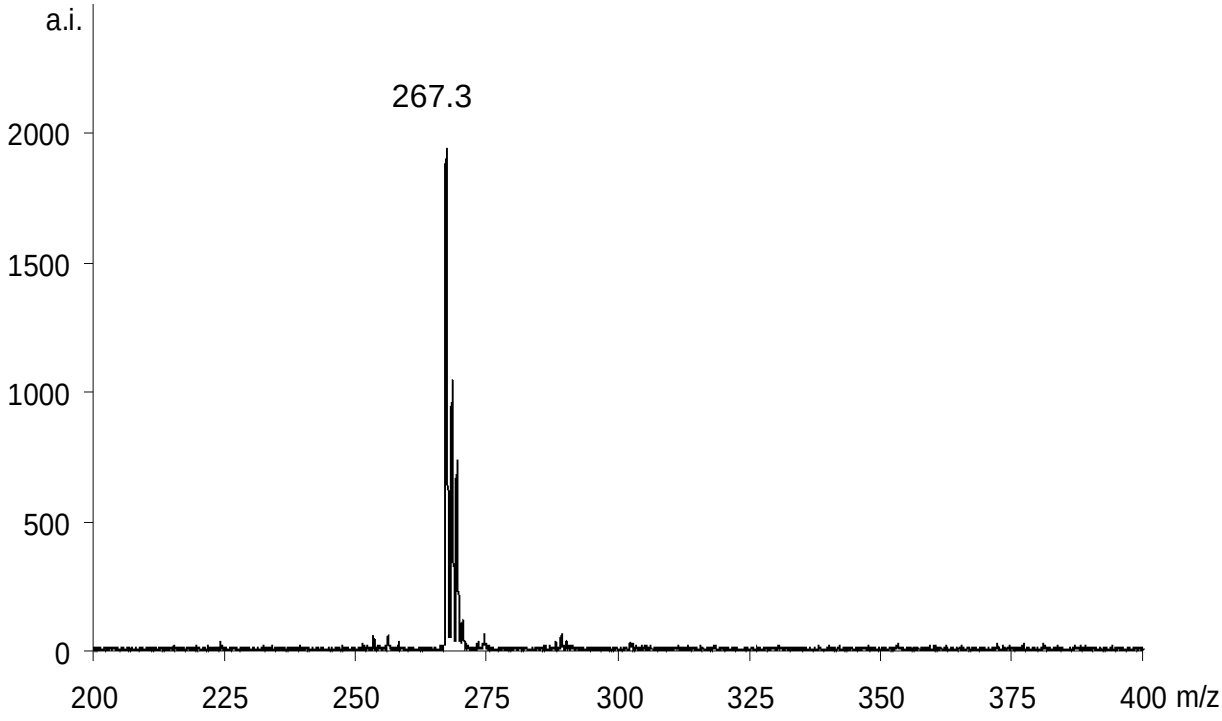


Figure S17. MALDI-TOF mass spectrum of compound 2b.

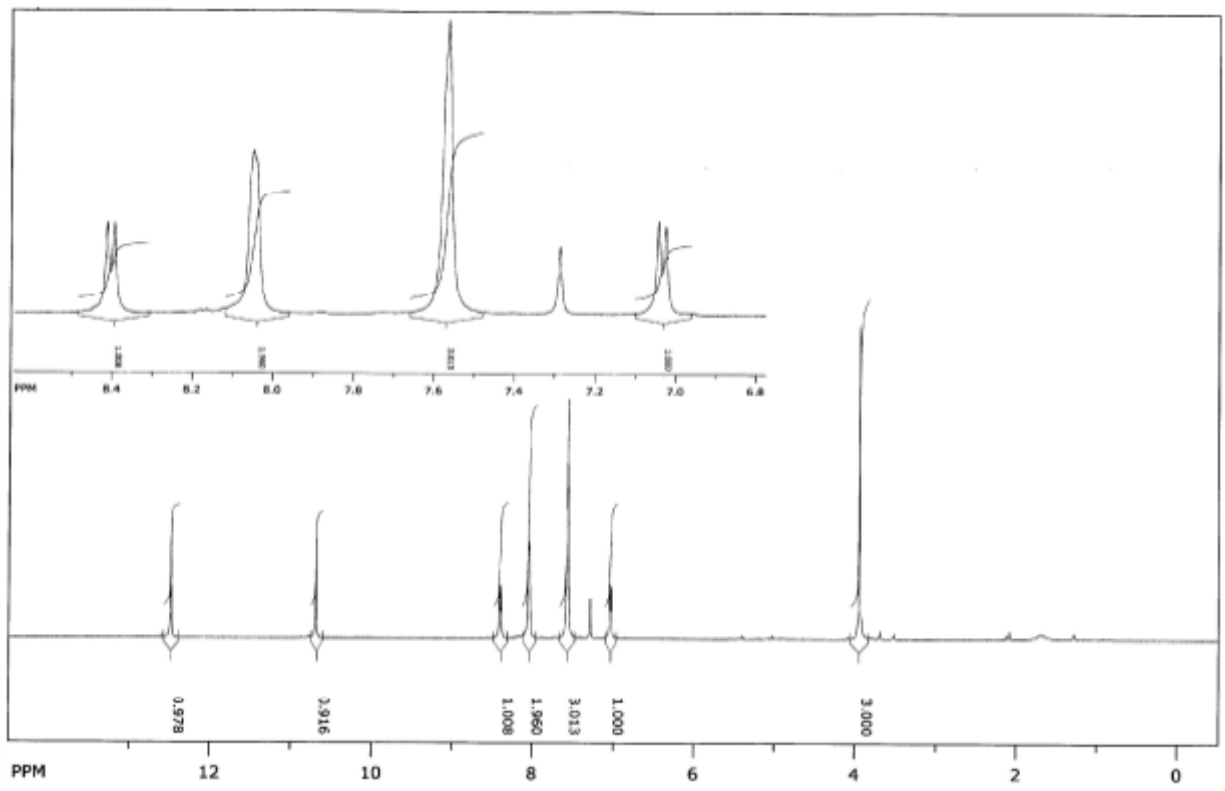


Figure S18. ^{1}H-NMR of compound 2c in $CDCl_3$.

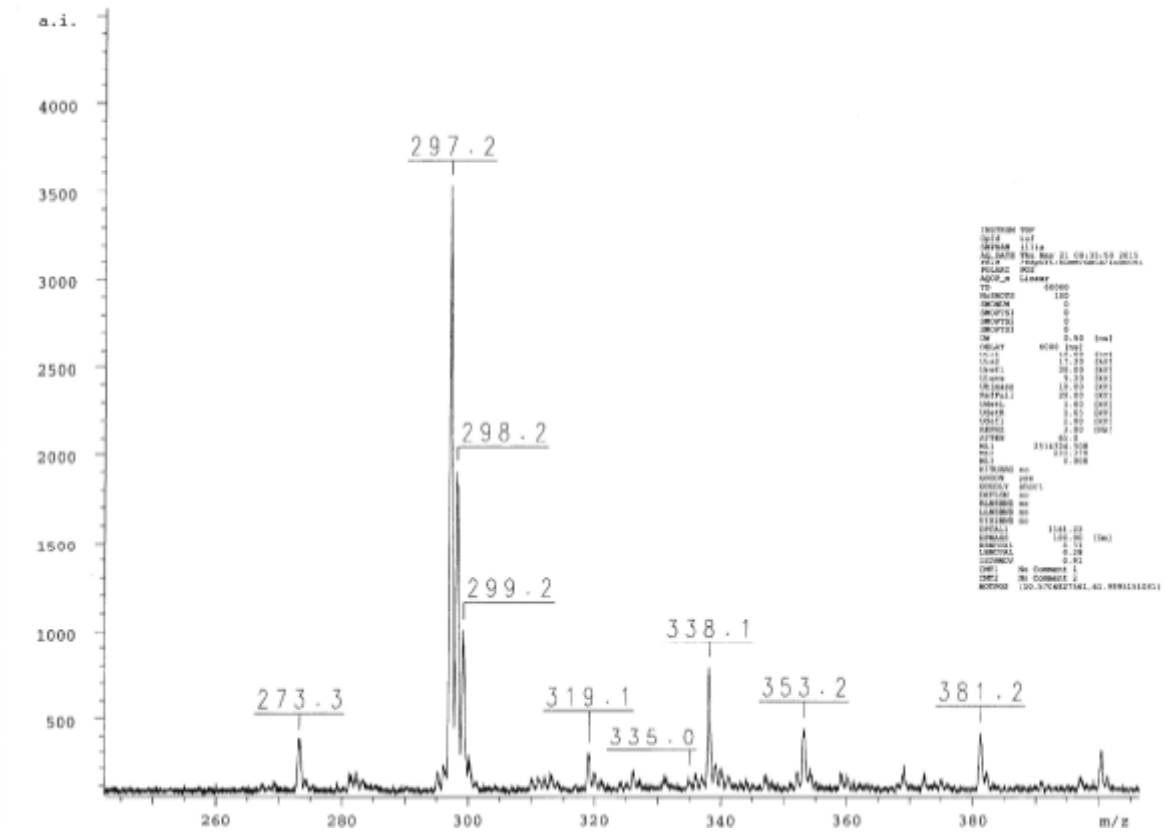


Figure S19. MALDI-TOF mass spectrum of compound 2c.

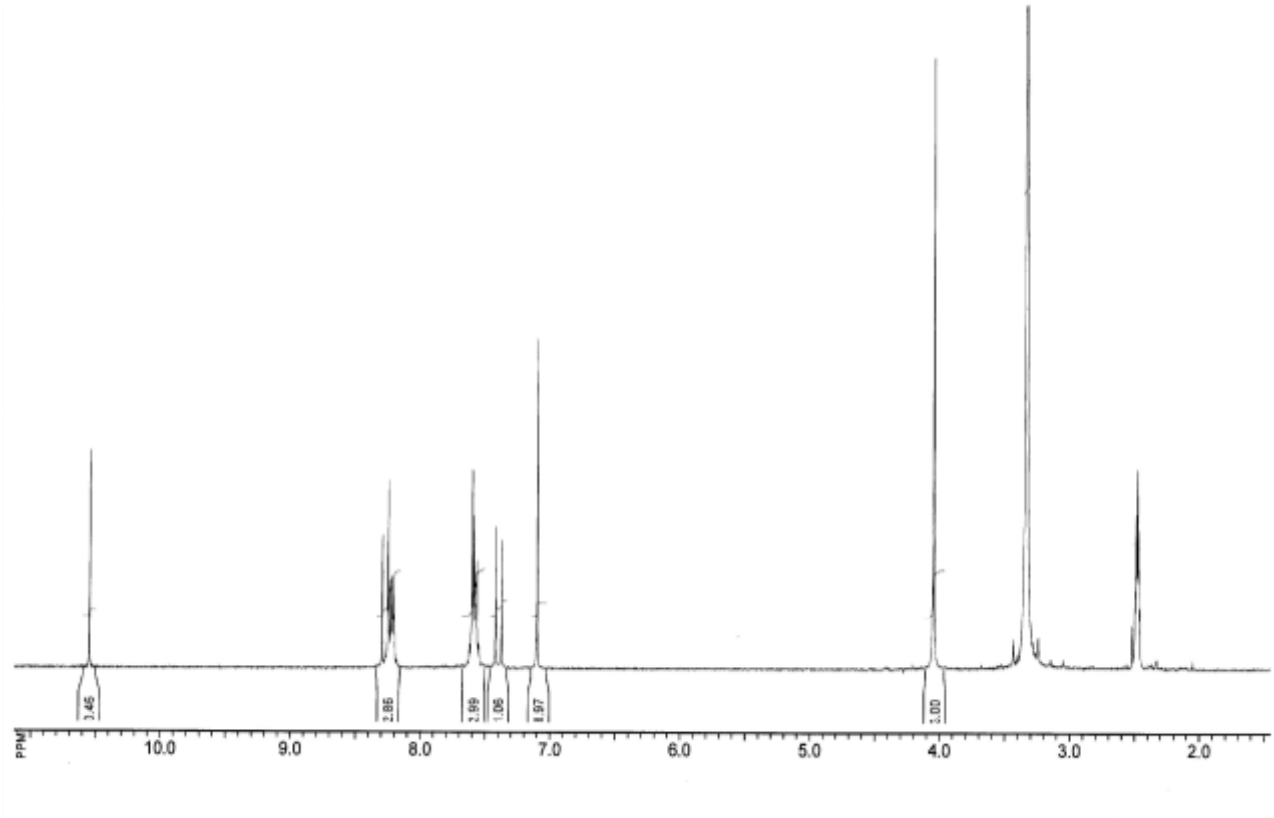


Figure S20. ^{1}H-NMR of compound 2d in DMSO-d_6.

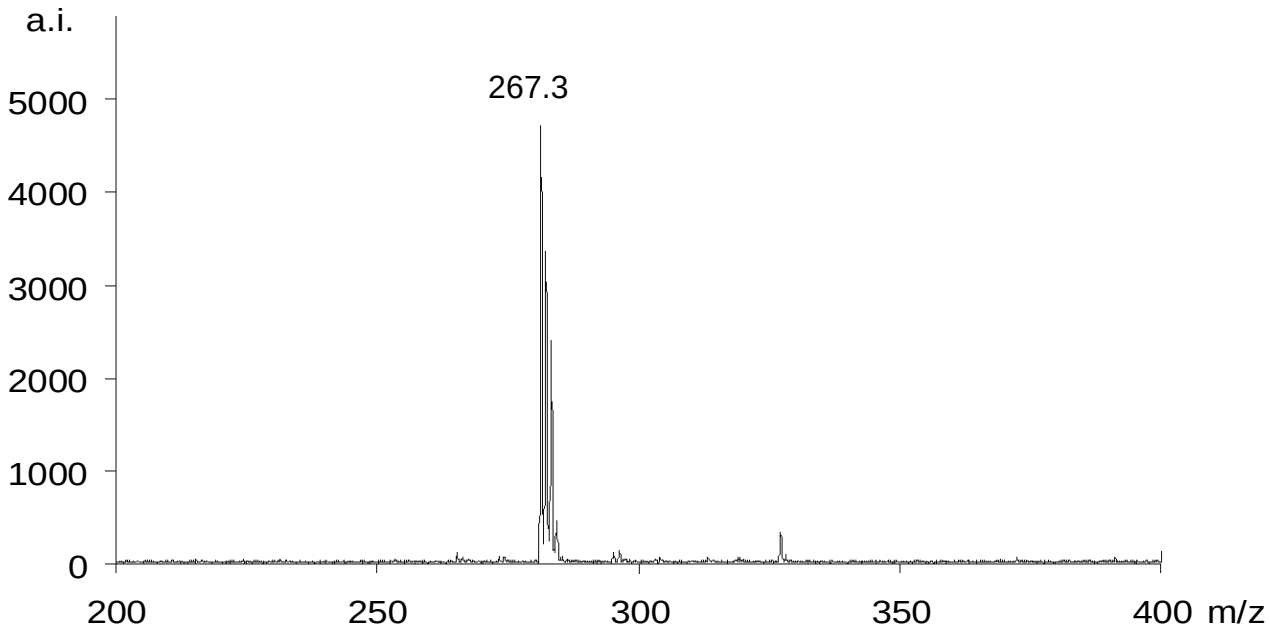


Figure S21. MALDI-TOF mass spectrum of compound 2d.

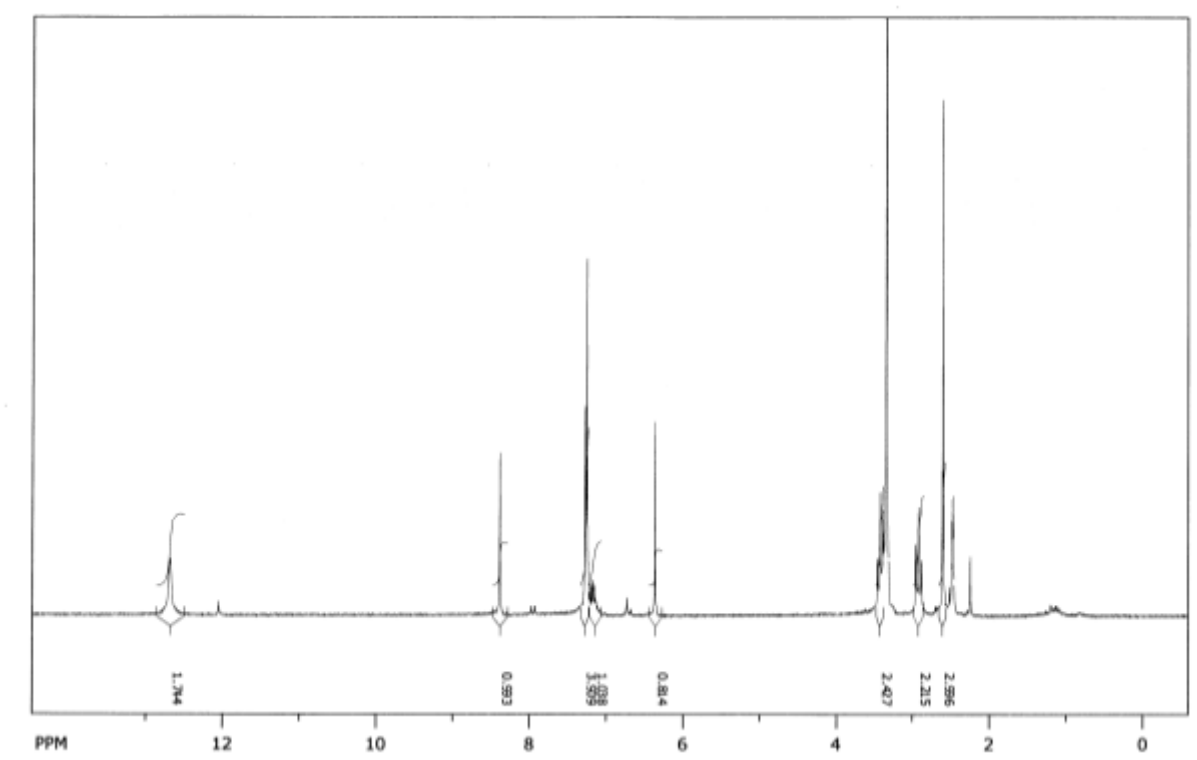


Figure S22. ^{1}H-NMR of compound 5a in DMSO-d_6.

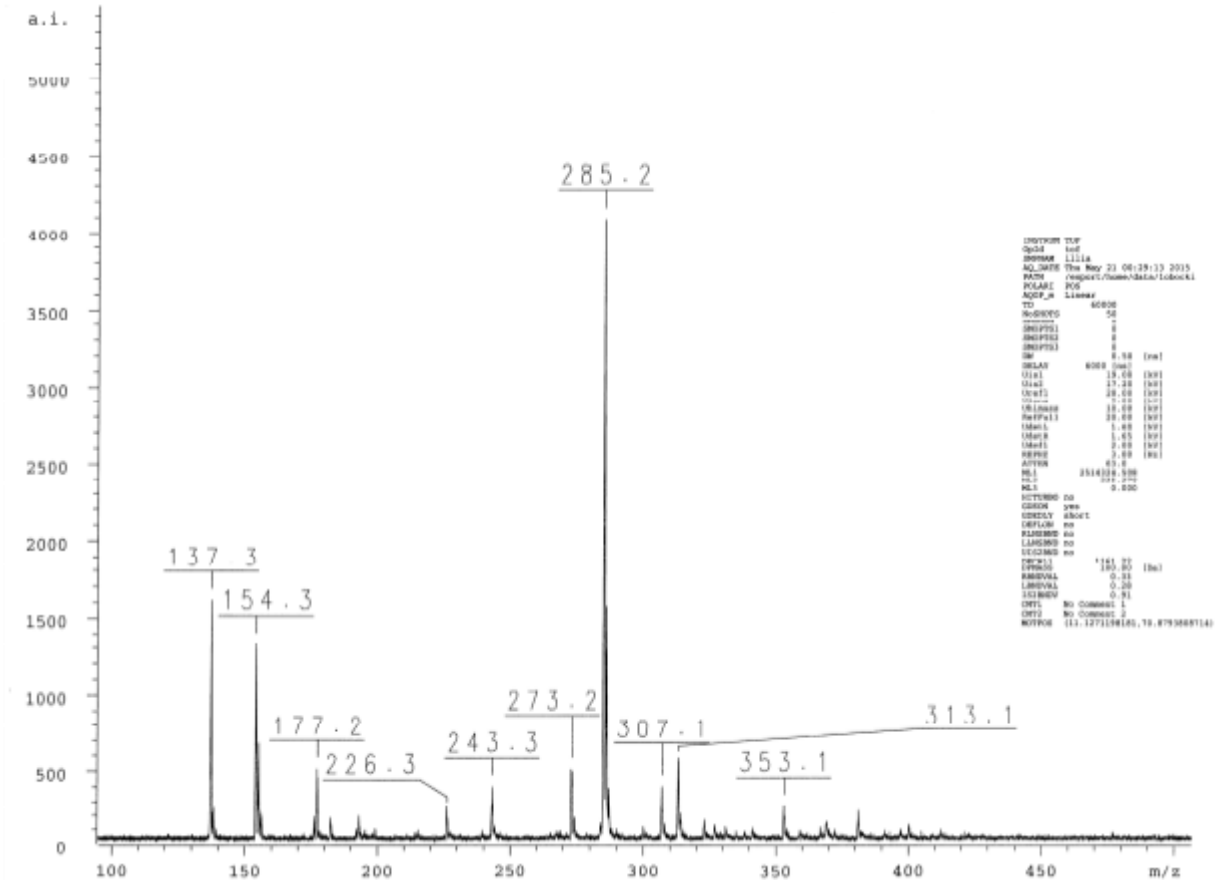


Figure S23. MALDI-TOF mass spectrum of compound 5a.

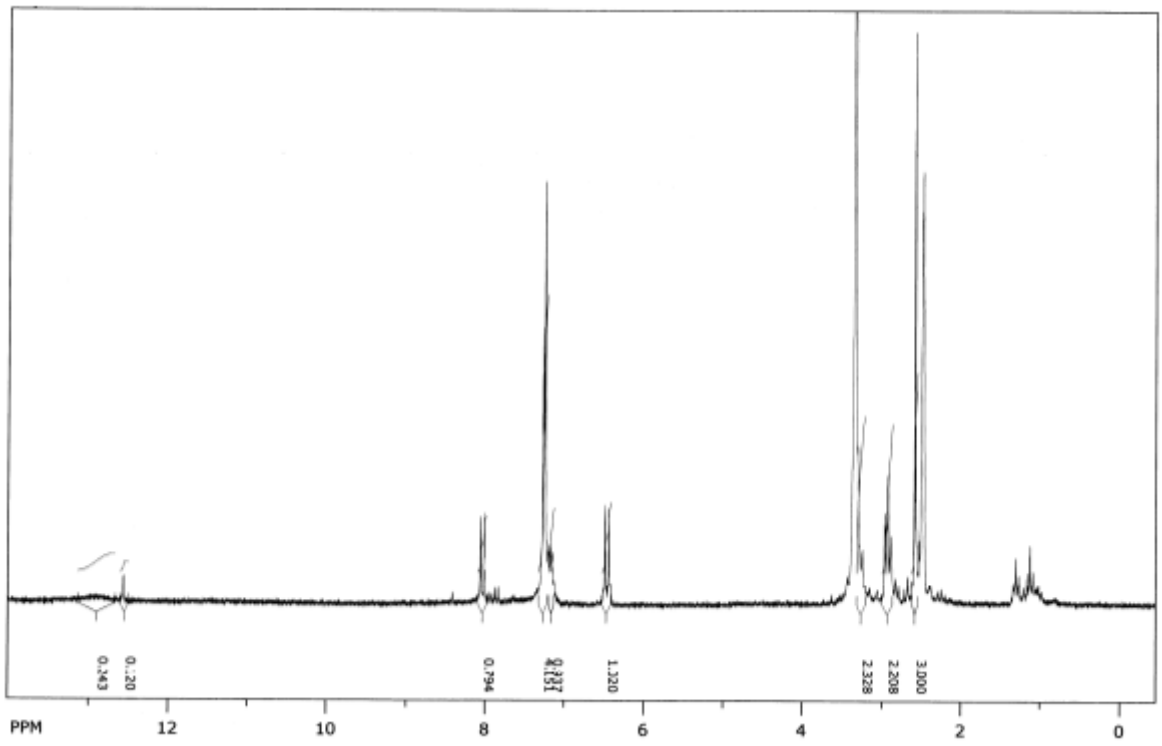


Figure S24. ^{1}H-NMR of compound 6a in DMSO-d_6.

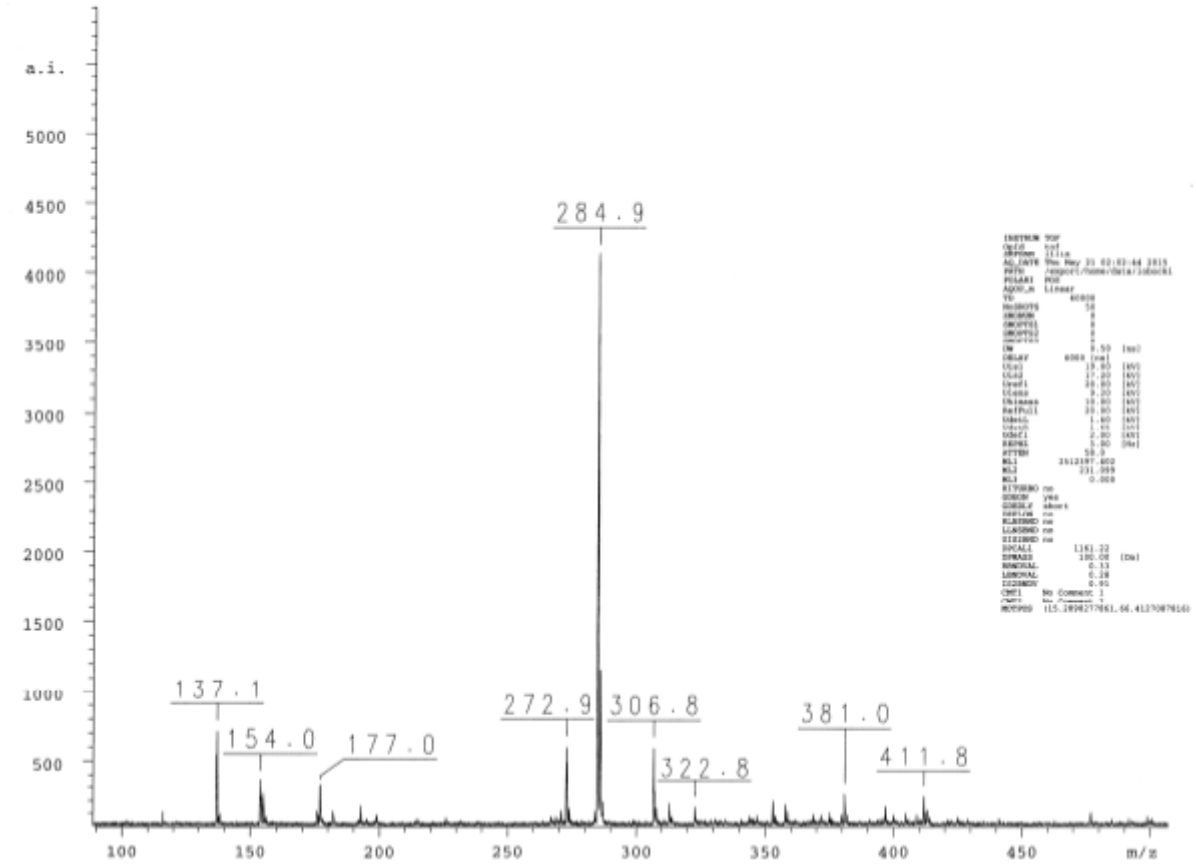


Figure S25. MALDI-TOF mass spectrum of compound 6a.

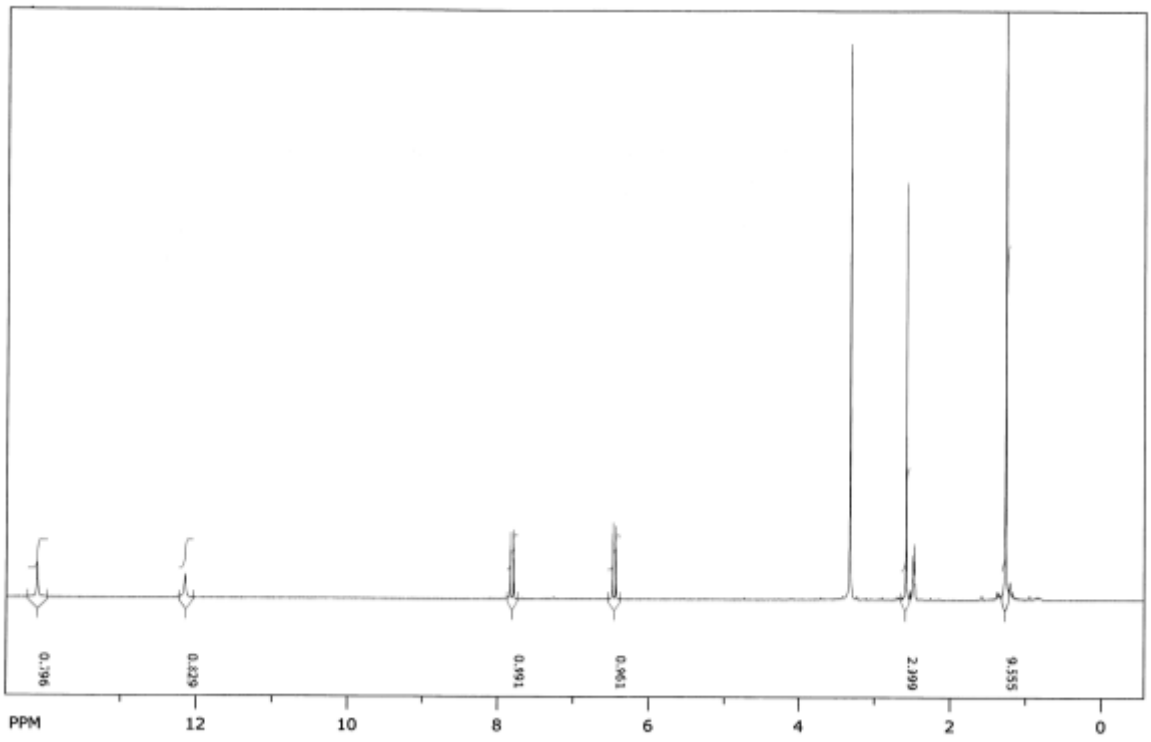


Figure S26. ^{1}H-NMR of compound 6b in DMSO-d_6.

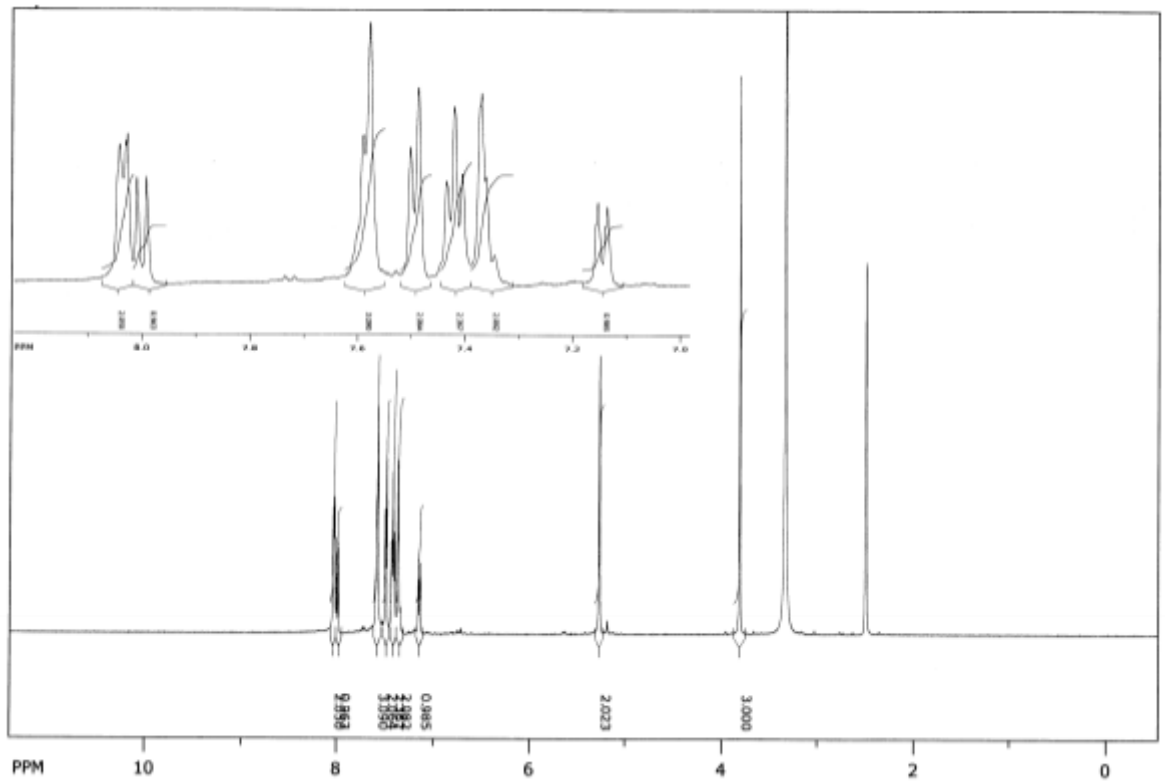


Figure S27. ^{1}H-NMR of compound 11 in DMSO-d_6.

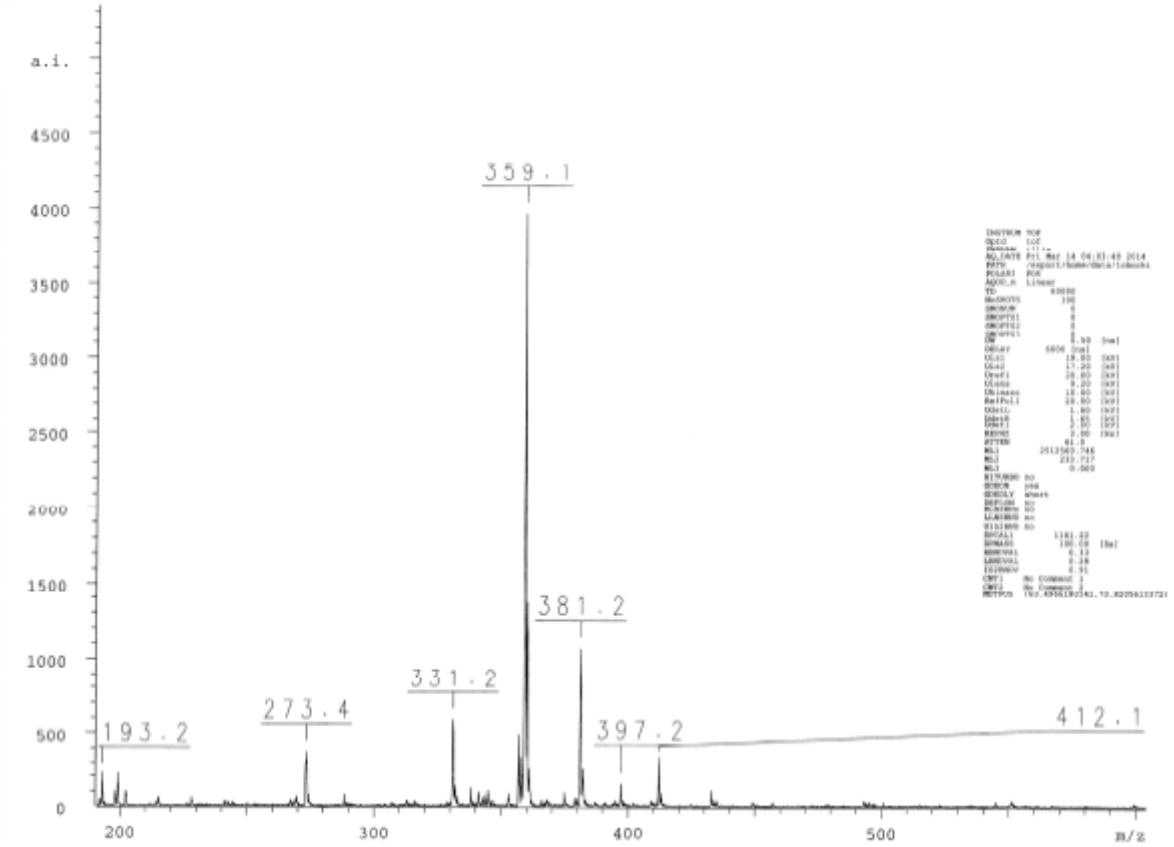


Figure S28. MALDI-TOF mass spectrum of compound 11.

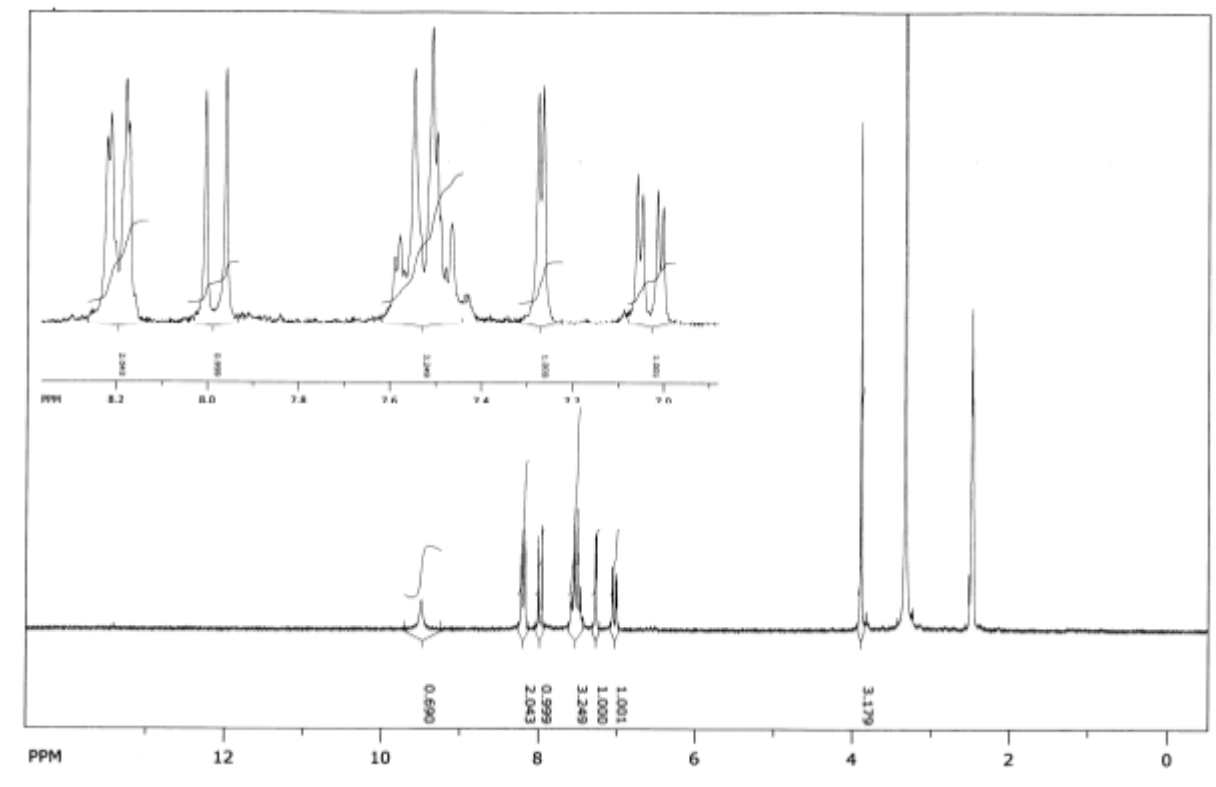


Figure S29. ^{1}H-NMR of compound 12 in DMSO-d_6.

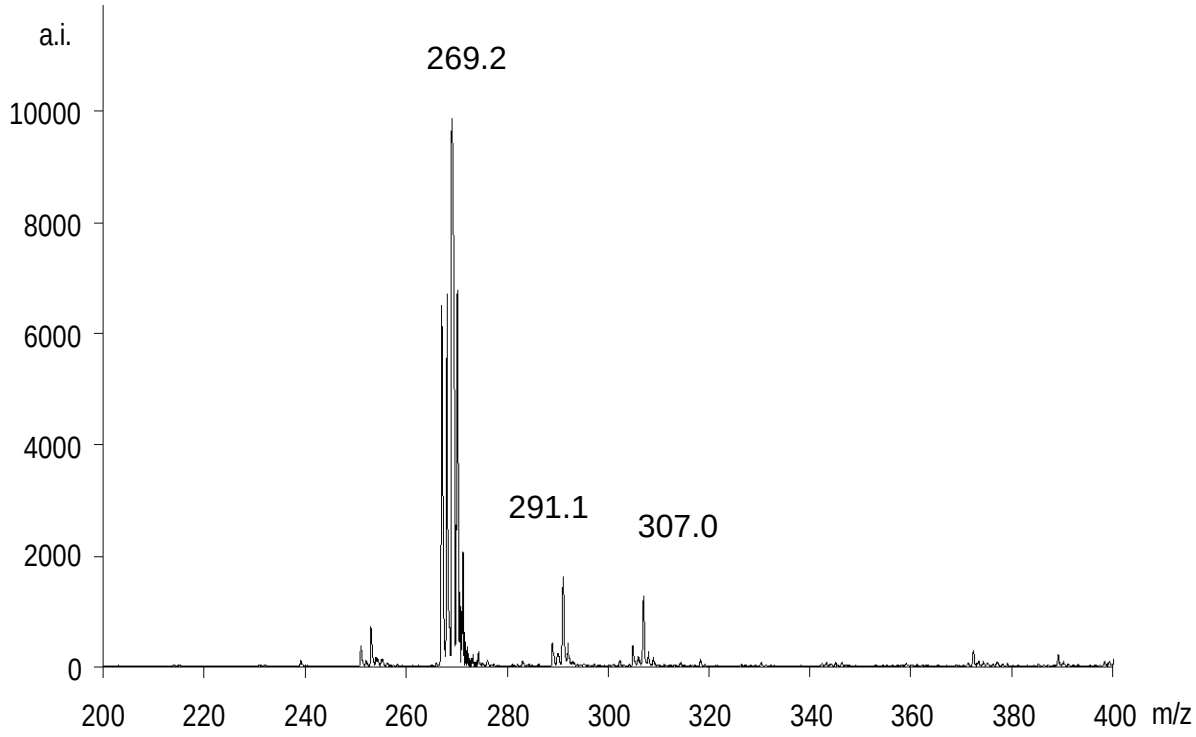


Figure S30. MALDI-TOF mass spectrum of compound 12.