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Supporting Information

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

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Contents

igure S2. Steady-state 3D fluorescence emission-excitation spectra and their projections in methylcyclohexane 1 298 K 4 1 igure S3. Absorption spectra at 298 K, steady-state fluorescence excitation spectra recorded at the emission 1 iaxima at 298 K and 77 K in methylcyclohexane 6 1 igure S4. ¹ H-NMR of compound 1a in CDCl ₃ . 7 1 igure S5. MALDI-TOF mass spectrum of compound 1a. 1 igure S6. ¹ H-NMR of compound 1b in CDCl ₃ . 8 1 igure S7. MALDI-TOF mass spectrum of compound 1b. 1 igure S8. ¹ H-NMR of compound 1c in CDCl ₃ . 9 1 gure S9. MALDI-TOF mass spectrum of compound 1c. 1 igure S10. ¹ H-NMR of compound 1d in CDCl ₃ . 10 1 igure S11. MALDI-TOF mass spectrum of compound 1d. 1 igure S12. ¹ H-NMR of compound 1 d in CDCl ₃ . 10 1 igure S13. MALDI-TOF mass spectrum of compound 1d. 1 igure S14. ¹ H-NMR of compound 1 e in CDCl ₃ . 11 1 igure S14. ¹ H-NMR of compound 2 in DMSO- <i>d</i> ₆ . 12 1 igure S15. MALDI-TOF mass spectrum of compound 2a. 1 igure S15. MALDI-TOF mass spectrum of compound 2a. 1 igure S16. ¹ H-NMR of compound 2 b in DMSO- <i>d</i> ₆ . 13 1 igure S17. MALDI-TOF mass spectrum of compound 2b. 1 igure S17. MALDI-TOF mass spectrum of compound 2b. 1 igure S18. ¹ H-NMR of compound 2 b in DMSO- <i>d</i> ₆ . 13 1 igure S19. MALDI-TOF mass spectrum of compound 2b. 1 igure S10. ¹ H-NMR of compound 2b in DMSO- <i>d</i> ₆ . 13 1 igure S10. ¹ H-NMR of compound 2c. 1 4 1 igure S10. ¹ H-NMR of compound 2b in CDCl ₃ . 1 4 1 igure S10. ¹ H-NMR of compound 2c. 1 4 1 igure S20. ¹ H-NMR of compound 2c. 1 4 1 1 igure S21. MALDI-TOF mass spectrum of compound 2c. 1 4 1 1 igure S21. MALDI-TOF mass spectrum of compound 2c. 1 4 1 1 igure S21. MALDI-TOF mass spectrum of compound 2c. 1 4 1 1 igure S21. MALDI-TOF mass spectrum of compound 2c. 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
igure S3. Absorption spectra at 298 K, steady-state fluorescence excitation spectra recorded at the emission haxima at 298 K and 77 K in methylcyclohexane 6 igure S4. ¹ H-NMR of compound 1a in CDCl ₃ . 7 igure S5. MALDI-TOF mass spectrum of compound 1a. 7 igure S6. ¹ H-NMR of compound 1b in CDCl ₃ . 8 igure S7. MALDI-TOF mass spectrum of compound 1b. 8 igure S8. ¹ H-NMR of compound 1c in CDCl ₃ . 9 igure S9. MALDI-TOF mass spectrum of compound 1c. 9 igure S10. ¹ H-NMR of compound 1d in CDCl ₃ . 10 igure S10. ¹ H-NMR of compound 1d in CDCl ₃ . 10 igure S11. MALDI-TOF mass spectrum of compound 1d. 10 igure S12. ¹ H-NMR of compound 1e in CDCl ₃ . 11 igure S13. MALDI-TOF mass spectrum of compound 1e. 11 igure S13. MALDI-TOF mass spectrum of compound 1e. 11 igure S14. ¹ H-NMR of compound 2 in DMSO-d ₆ . 12 igure S15. MALDI-TOF mass spectrum of compound 2a. 12 igure S15. MALDI-TOF mass spectrum of compound 2a. 12 igure S16. ¹ H-NMR of compound 2b in DMSO-d ₆ . 13 igure S17. MALDI-TOF mass spectrum of compound 2b. 13 igure S18. ¹ H-NMR of compound 2c in CDCl ₃ . 14 igure S18. ¹ H-NMR of compound 2c in CDCl ₃ . 14 igure S19. MALDI-TOF mass spectrum of compound 2b. 13 igure S19. MALDI-TOF mass spectrum of compound 2c. 14 igure S19. MALDI-TOF mass spectrum of compound 2c. 14 igure S19. MALDI-TOF mass spectrum of compound 2c. 14 igure S19. MALDI-TOF mass spectrum of compound 2c. 15 igure S21. MALDI-TOF mass spectrum of compound 2d. 15 igure S21. H-NMR of compound 5a in DMSO-d ₆ . 16
axima at 298 K and 77 K in methylcyclohexane6igure S4. ¹ H-NMR of compound 1a in CDCl ₃ .7igure S5. MALDI-TOF mass spectrum of compound 1a.7igure S6. ¹ H-NMR of compound 1b in CDCl ₃ .8igure S8. ¹ H-NMR of compound 1b in CDCl ₃ .8igure S8. ¹ H-NMR of compound 1c in CDCl ₃ .9igure S9. MALDI-TOF mass spectrum of compound 1c.9igure S1. ¹ H-NMR of compound 1c in CDCl ₃ .10igure S1. ¹ H-NMR of compound 1d in CDCl ₃ .10igure S1. ¹ H-NMR of compound 1d in CDCl ₃ .10igure S1. ¹ H-NMR of compound 1e in CDCl ₃ .11igure S1. ¹ H-NMR of compound 1e in CDCl ₃ .11igure S1. ¹ H-NMR of compound 1e in CDCl ₃ .11igure S1. ¹ H-NMR of compound 2 in DMSO-d ₆ .12igure S15. MALDI-TOF mass spectrum of compound 2a.12igure S16. ¹ H-NMR of compound 2b in DMSO-d ₆ .13igure S17. MALDI-TOF mass spectrum of compound 2b.13igure S18. ¹ H-NMR of compound 2c in CDCl ₃ .14igure S19. MALDI-TOF mass spectrum of compound 2b.13igure S19. MALDI-TOF mass spectrum of compound 2b.13igure S19. MALDI-TOF mass spectrum of compound 2b.13igure S19. MALDI-TOF mass spectrum of compound 2b.14igure S19. MALDI-TOF mass spectrum of compound 2b.15igure S19. MALDI-TOF mass spectrum of compound 2c.14igure S19. MALDI-TOF mass spectrum of compound 2c.14igure S20. ¹ H-NMR of compound 2d in CDCl ₃ .15igure S21. MALDI-TOF mass spectrum of compound 2d.
igure S4. ¹ H-NMR of compound 1a in CDCl3.7igure S5. MALDI-TOF mass spectrum of compound 1a.7igure S6. ¹ H-NMR of compound 1b in CDCl3.8igure S7. MALDI-TOF mass spectrum of compound 1b.8igure S8. ¹ H-NMR of compound 1c in CDCl3.9igure S9. MALDI-TOF mass spectrum of compound 1c.9igure S10. ¹ H-NMR of compound 1d in CDCl3.10igure S11. MALDI-TOF mass spectrum of compound 1d.10igure S12. ¹ H-NMR of compound 1e in CDCl3.11igure S13. MALDI-TOF mass spectrum of compound 1e.11igure S14. ¹ H-NMR of compound 2a in DMSO-d ₆ .12igure S15. MALDI-TOF mass spectrum of compound 2a.12igure S16. ¹ H-NMR of compound 2b in DMSO-d ₆ .13igure S18. ¹ H-NMR of compound 2c.14igure S19. MALDI-TOF mass spectrum of compound 2b.13igure S19. MALDI-TOF mass spectrum of compound 2b.13igure S10. ¹ H-NMR of compound 2c.14igure S11. MALDI-TOF mass spectrum of compound 2b.13igure S12. ¹ H-NMR of compound 2c.14igure S13. MALDI-TOF mass spectrum of compound 2b.13igure S14. ¹ H-NMR of compound 2c.14igure S19. MALDI-TOF mass spectrum of compound 2c.15igure S20. ¹ H-NMR of compound 2d in CDCl3.15igure S21. MALDI-TOF mass spectrum of compound 2d.15igure S22
igure S5. MALDI-TOF mass spectrum of compound 1a.7igure S6. ¹ H-NMR of compound 1b in CDCl ₃ .8igure S7. MALDI-TOF mass spectrum of compound 1b.8igure S8. ¹ H-NMR of compound 1c in CDCl ₃ .9igure S9. MALDI-TOF mass spectrum of compound 1c.9igure S10. ¹ H-NMR of compound 1d in CDCl ₃ .10igure S11. MALDI-TOF mass spectrum of compound 1d.10igure S12. ¹ H-NMR of compound 1e in CDCl ₃ .11igure S13. MALDI-TOF mass spectrum of compound 1e.11igure S13. MALDI-TOF mass spectrum of compound 1e.11igure S14. ¹ H-NMR of compound 2a in DMSO-d ₆ .12igure S15. MALDI-TOF mass spectrum of compound 2a.12igure S16. ¹ H-NMR of compound 2b in DMSO-d ₆ .13igure S18. ¹ H-NMR of compound 2c in CDCl ₃ .14igure S19. MALDI-TOF mass spectrum of compound 2b.13igure S19. MALDI-TOF mass spectrum of compound 2c.14igure S19. MALDI-TOF mass spectrum of compound 2b.13igure S19. MALDI-TOF mass spectrum of compound 2b.13igure S19. MALDI-TOF mass spectrum of compound 2b.13igure S19. MALDI-TOF mass spectrum of compound 2c.14igure S19. MALDI-TOF mass spectrum of compound 2c.14igure S20. ¹ H-NMR of compound 2d in CDCl ₃ .15igure S21. MALDI-TOF mass spectrum of compound 2d.15igure S21. MALDI-TOF mass spectrum of compound 2d.15igure S21. MALDI-TOF mass spectrum of compound 2c.16igure S21. MALDI-TOF mass spectrum of compound 2d.15igure S22. ¹
igure S6. ¹ H-NMR of compound 1b in CDCl3.8igure S7. MALDI-TOF mass spectrum of compound 1b.8igure S8. ¹ H-NMR of compound 1c in CDCl3.9igure S9. MALDI-TOF mass spectrum of compound 1c.9igure S10. ¹ H-NMR of compound 1d in CDCl3.10igure S11. MALDI-TOF mass spectrum of compound 1d.10igure S12. ¹ H-NMR of compound 1e in CDCl3.11igure S13. MALDI-TOF mass spectrum of compound 1e.11igure S14. ¹ H-NMR of compound 2a in DMSO-d6.12igure S15. MALDI-TOF mass spectrum of compound 2a.12igure S16. ¹ H-NMR of compound 2b in DMSO-d6.13igure S18. ¹ H-NMR of compound 2c in CDCl3.14igure S19. MALDI-TOF mass spectrum of compound 2b.13igure S19. MALDI-TOF mass spectrum of compound 2b.13igure S19. MALDI-TOF mass spectrum of compound 2b.13igure S19. ¹ H-NMR of compound 2c in CDCl3.14igure S19. MALDI-TOF mass spectrum of compound 2c.14igure S20. ¹ H-NMR of compound 2d in CDCl3.15igure S21. MALDI-TOF mass spectrum of compound 2c.14igure S22. ¹ H-NMR of compound 2d in CDCl3.15igure S22. ¹ H-NMR of compound 2d in CDCl3.15igure S22. ¹ H-NMR of compound 5a in DMSO-d6.16
igure S7. MALDI-TOF mass spectrum of compound 1b.8igure S8. ¹ H-NMR of compound 1c in CDCl3.9igure S9. MALDI-TOF mass spectrum of compound 1c.9igure S10. ¹ H-NMR of compound 1d in CDCl3.10igure S11. MALDI-TOF mass spectrum of compound 1d.10igure S12. ¹ H-NMR of compound 1e in CDCl3.11igure S13. MALDI-TOF mass spectrum of compound 1e.11igure S14. ¹ H-NMR of compound 2a in DMSO- d_6 .12igure S15. MALDI-TOF mass spectrum of compound 2a.12igure S16. ¹ H-NMR of compound 2b in DMSO- d_6 .13igure S17. MALDI-TOF mass spectrum of compound 2b.13igure S18. ¹ H-NMR of compound 2c in CDCl3.14igure S19. MALDI-TOF mass spectrum of compound 2b.13igure S19. MALDI-TOF mass spectrum of compound 2b.14igure S19. MALDI-TOF mass spectrum of compound 2c.14igure S20. ¹ H-NMR of compound 2d in CDCl3.15igure S21. MALDI-TOF mass spectrum of compound 2d.15igure S22. ¹ H-NMR of compound 2d in CDCl3.15igure S21. MALDI-TOF mass spectrum of compound 2d.15igure S22. ¹ H-NMR of compound 5a in DMSO- d_6 .16
igure S8. ¹ H-NMR of compound 1c in CDCl3.9igure S9. MALDI-TOF mass spectrum of compound 1c.9igure S10. ¹ H-NMR of compound 1d in CDCl3.10igure S11. MALDI-TOF mass spectrum of compound 1d.10igure S12. ¹ H-NMR of compound 1e in CDCl3.11igure S13. MALDI-TOF mass spectrum of compound 1e.11igure S14. ¹ H-NMR of compound 2a in DMSO- d_6 .12igure S15. MALDI-TOF mass spectrum of compound 2a.12igure S16. ¹ H-NMR of compound 2b in DMSO- d_6 .13igure S16. ¹ H-NMR of compound 2c in CDCl3.13igure S18. ¹ H-NMR of compound 2c in CDCl3.14igure S19. MALDI-TOF mass spectrum of compound 2b.13igure S19. MALDI-TOF mass spectrum of compound 2c.14igure S19. MALDI-TOF mass spectrum of compound 2c.14igure S20. ¹ H-NMR of compound 2d in CDCl3.15igure S21. MALDI-TOF mass spectrum of compound 2c.15igure S22. ¹ H-NMR of compound 2d in CDCl3.15igure S21. MALDI-TOF mass spectrum of compound 2d.15igure S22. ¹ H-NMR of compound 2d in CDCl3.15igure S22. ¹ H-NMR of compound 5a in DMSO- d_6 .16
igure S9. MALDI-TOF mass spectrum of compound 1c.9igure S10. 1 H-NMR of compound 1d in CDCl ₃ .10igure S11. MALDI-TOF mass spectrum of compound 1d.10igure S12. 1 H-NMR of compound 1e in CDCl ₃ .11igure S13. MALDI-TOF mass spectrum of compound 1e.11igure S14. 1 H-NMR of compound 2a in DMSO- d_{6} .12igure S15. MALDI-TOF mass spectrum of compound 2a.12igure S16. 1 H-NMR of compound 2b in DMSO- d_{6} .13igure S17. MALDI-TOF mass spectrum of compound 2b.13igure S18. 1 H-NMR of compound 2c in CDCl ₃ .14igure S19. MALDI-TOF mass spectrum of compound 2b.13igure S19. MALDI-TOF mass spectrum of compound 2c.14igure S19. MALDI-TOF mass spectrum of compound 2c.14igure S20. 1 H-NMR of compound 2d in CDCl ₃ .15igure S21. MALDI-TOF mass spectrum of compound 2c.15igure S21. MALDI-TOF mass spectrum of compound 2d.15igure S22. 1 H-NMR of compound 2d in CDCl ₃ .15igure S21. MALDI-TOF mass spectrum of compound 2d.15igure S22. 1 H-NMR of compound 2d in CDCl ₃ .16
igure S10. 1 H-NMR of compound 1d in CDCl3.10igure S11. MALDI-TOF mass spectrum of compound 1d.10igure S12. 1 H-NMR of compound 1e in CDCl3.11igure S13. MALDI-TOF mass spectrum of compound 1e.11igure S14. 1 H-NMR of compound 2a in DMSO- d_{6} .12igure S15. MALDI-TOF mass spectrum of compound 2a.12igure S16. 1 H-NMR of compound 2b in DMSO- d_{6} .13igure S17. MALDI-TOF mass spectrum of compound 2b.13igure S18. 1 H-NMR of compound 2c in CDCl3.14igure S19. MALDI-TOF mass spectrum of compound 2c.14igure S20. 1 H-NMR of compound 2d in CDCl3.15igure S21. MALDI-TOF mass spectrum of compound 2d.15igure S22. 1 H-NMR of compound 2d in CDCl3.15igure S22. 1 H-NMR of compound 2d in CDCl3.16
igure S11. MALDI-TOF mass spectrum of compound 1d.10igure S12. 1 H-NMR of compound 1e in CDCl3.11igure S13. MALDI-TOF mass spectrum of compound 1e.11igure S14. 1 H-NMR of compound 2a in DMSO- d_{6} .12igure S15. MALDI-TOF mass spectrum of compound 2a.12igure S16. 1 H-NMR of compound 2b in DMSO- d_{6} .13igure S16. 1 H-NMR of compound 2b in DMSO- d_{6} .13igure S17. MALDI-TOF mass spectrum of compound 2b.13igure S18. 1 H-NMR of compound 2c in CDCl3.14igure S19. MALDI-TOF mass spectrum of compound 2c.14igure S20. 1 H-NMR of compound 2d in CDCl3.15igure S21. MALDI-TOF mass spectrum of compound 2d.15igure S22. 1 H-NMR of compound 5a in DMSO- d_{6} .16
igure S12. 1 H-NMR of compound 1e in CDCl ₃ .11igure S13. MALDI-TOF mass spectrum of compound 1e.11igure S14. 1 H-NMR of compound 2a in DMSO- d_{6} .12igure S15. MALDI-TOF mass spectrum of compound 2a.12igure S16. 1 H-NMR of compound 2b in DMSO- d_{6} .13igure S17. MALDI-TOF mass spectrum of compound 2b.13igure S18. 1 H-NMR of compound 2c in CDCl ₃ .14igure S19. MALDI-TOF mass spectrum of compound 2c.14igure S20. 1 H-NMR of compound 2d in CDCl ₃ .15igure S21. MALDI-TOF mass spectrum of compound 2d.15igure S22. 1 H-NMR of compound 5a in DMSO- d_{6} .16
igure S13. MALDI-TOF mass spectrum of compound 1e.11igure S14. 1 H-NMR of compound 2a in DMSO- d_{6} .12igure S15. MALDI-TOF mass spectrum of compound 2a.12igure S16. 1 H-NMR of compound 2b in DMSO- d_{6} .13igure S17. MALDI-TOF mass spectrum of compound 2b.13igure S18. 1 H-NMR of compound 2c in CDCl ₃ .14igure S19. MALDI-TOF mass spectrum of compound 2c.14igure S20. 1 H-NMR of compound 2d in CDCl ₃ .15igure S21. MALDI-TOF mass spectrum of compound 2d.15igure S22. 1 H-NMR of compound 2d in DMSO- d_{6} .16
igure S14. 1 H-NMR of compound 2a in DMSO- d_{6} .12igure S15. MALDI-TOF mass spectrum of compound 2a.12igure S16. 1 H-NMR of compound 2b in DMSO- d_{6} .13igure S17. MALDI-TOF mass spectrum of compound 2b.13igure S18. 1 H-NMR of compound 2c in CDCI3.14igure S19. MALDI-TOF mass spectrum of compound 2c.14igure S20. 1 H-NMR of compound 2d in CDCI3.15igure S21. MALDI-TOF mass spectrum of compound 2d.15igure S22. 1 H-NMR of compound 5a in DMSO- d_{6} .16
igure S15. MALDI-TOF mass spectrum of compound 2a.12igure S16. 1 H-NMR of compound 2b in DMSO- d_{6} .13igure S17. MALDI-TOF mass spectrum of compound 2b.13igure S18. 1 H-NMR of compound 2c in CDCI3.14igure S19. MALDI-TOF mass spectrum of compound 2c.14igure S20. 1 H-NMR of compound 2d in CDCI3.15igure S21. MALDI-TOF mass spectrum of compound 2d.15igure S22. 1 H-NMR of compound 5a in DMSO- d_{6} .16
igure S16. 1 H-NMR of compound 2b in DMSO- d_{6} .13igure S17. MALDI-TOF mass spectrum of compound 2b.13igure S18. 1 H-NMR of compound 2c in CDCI3.14igure S19. MALDI-TOF mass spectrum of compound 2c.14igure S20. 1 H-NMR of compound 2d in CDCI3.15igure S21. MALDI-TOF mass spectrum of compound 2d.15igure S22. 1 H-NMR of compound 5a in DMSO- d_{6} .16
igure S17. MALDI-TOF mass spectrum of compound 2b.13igure S18. 1 H-NMR of compound 2c in CDCI3.14igure S19. MALDI-TOF mass spectrum of compound 2c.14igure S20. 1 H-NMR of compound 2d in CDCI3.15igure S21. MALDI-TOF mass spectrum of compound 2d.15igure S22. 1 H-NMR of compound 5a in DMSO- d_{6} .16
igure S18. 1 H-NMR of compound 2c in CDCl3.14igure S19. MALDI-TOF mass spectrum of compound 2c.14igure S20. 1 H-NMR of compound 2d in CDCl3.15igure S21. MALDI-TOF mass spectrum of compound 2d.15igure S22. 1 H-NMR of compound 5a in DMSO- d_{6} .16
igure S19. MALDI-TOF mass spectrum of compound 2c.14igure S20. 1 H-NMR of compound 2d in CDCI3.15igure S21. MALDI-TOF mass spectrum of compound 2d.15igure S22. 1 H-NMR of compound 5a in DMSO- d_{6} .16
igure S20. 1 H-NMR of compound 2d in CDCI3.15igure S21. MALDI-TOF mass spectrum of compound 2d.15igure S22. 1 H-NMR of compound 5a in DMSO- d_{6} .16
igure S21. MALDI-TOF mass spectrum of compound 2d.15igure S22. 1 H-NMR of compound 5a in DMSO- d_{6} .16
igure S22. ¹ H-NMR of compound 5a in DMSO- d_6 . 16
igure S23. MALDI-TOF mass spectrum of compound 5a. 16
igure S24. ¹ H-NMR of compound 6a in DMSO- <i>d</i> ₆ . 17
igure S25. MALDI-TOF mass spectrum of compound 6a. 17
igure S26. ¹ H-NMR of compound 6b in DMSO- <i>d</i> ₆ . 18
igure S27. ¹ H-NMR of compound 11 in DMSO- <i>d</i> ₆ . 19
igure S28. MALDI-TOF mass spectrum of compound 11. 19
igure S29. ¹ H-NMR of compound 12 in DMSO- d_6 . 20
igure S30. MALDI-TOF mass spectrum of compound 12. 20

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

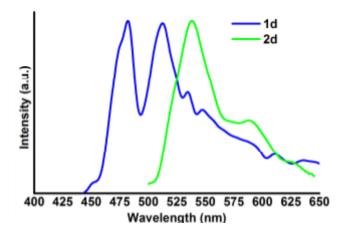
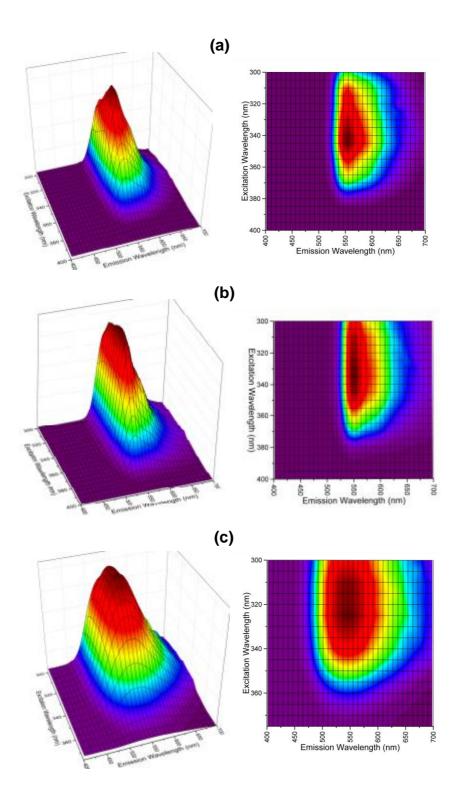
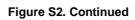


Figure S2. Steady-state 3D fluorescence emission-excitation spectra of 1a (a), 2a (b), 1b (c), 2b (d), 1c (e) and 2c (f) and their projections in methylcyclohexane at 298 K.





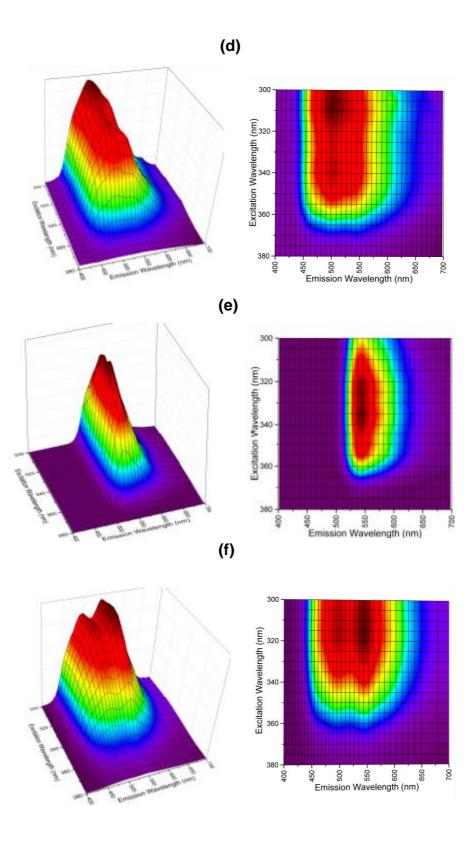
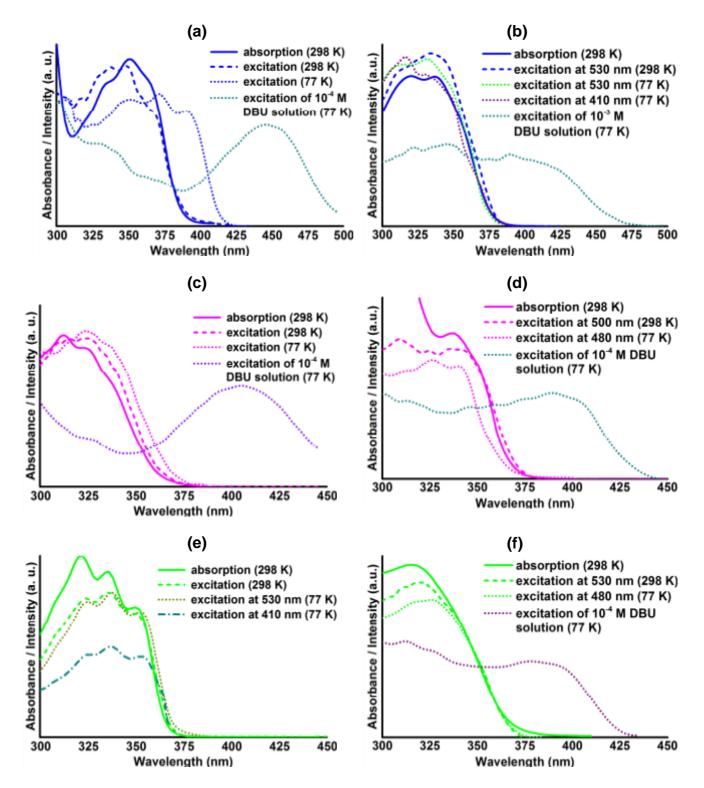
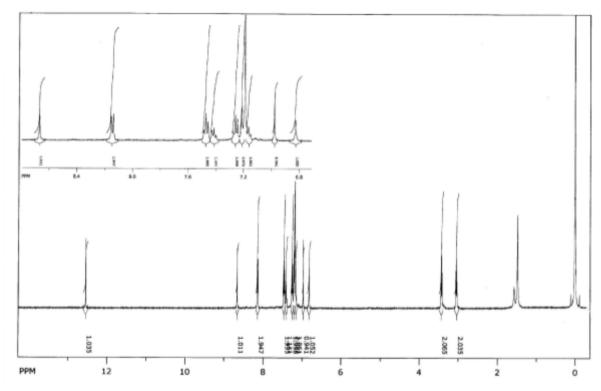


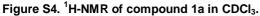
Figure S3. Absorption spectra at 298 K, steady-state fluorescence excitation spectra recorded at the emission maxima at 298 K and 77 K of 1a (a), 2a (b), 1b (c), 2b (d), 1c (e) and 2c (f) in methylcyclohexane.



6







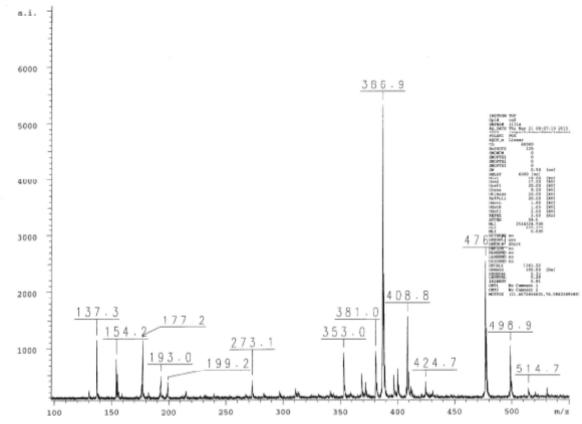


Figure S5. MALDI-TOF mass spectrum of compound 1a.

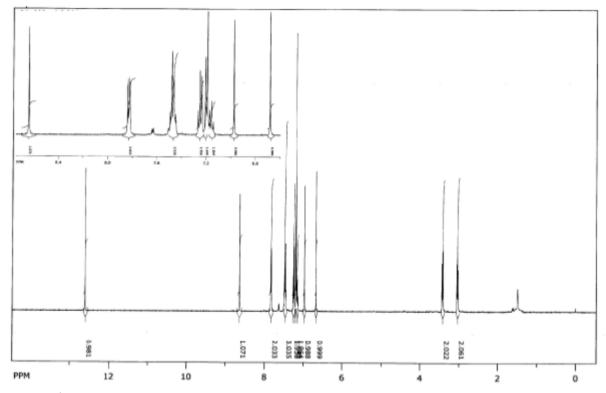


Figure S6. ¹H-NMR of compound 1b in CDCl₃.

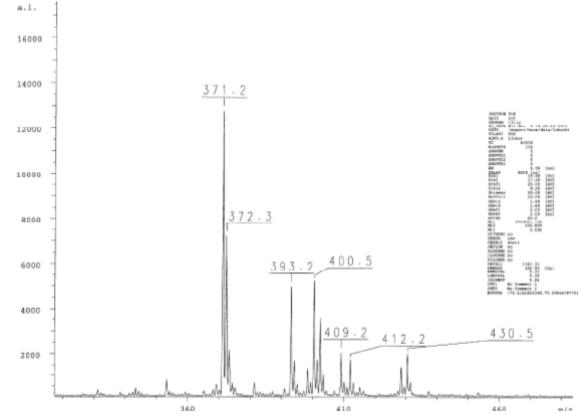


Figure S7. MALDI-TOF mass spectrum of compound 1b.

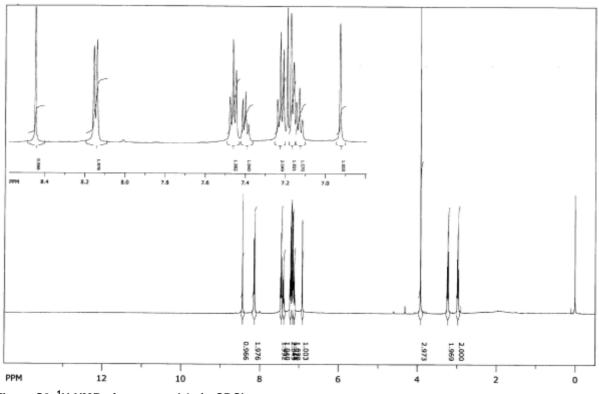
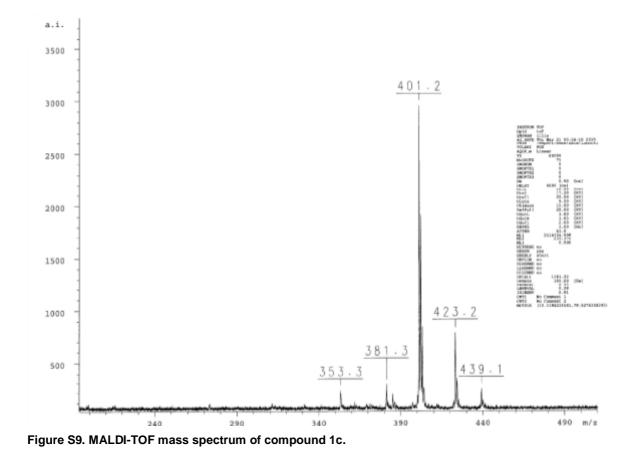


Figure S8. ¹H-NMR of compound 1c in CDCI₃.



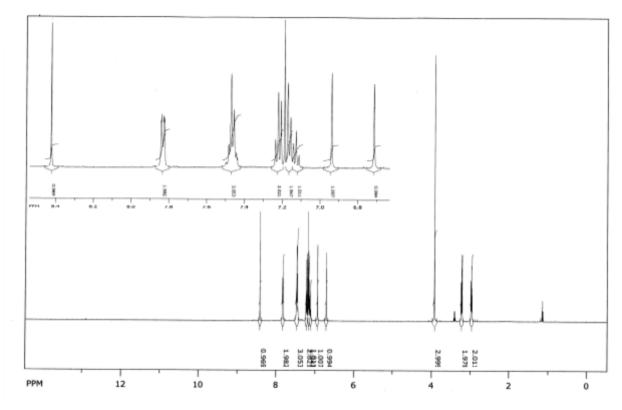


Figure S10. ¹H-NMR of compound 1d in CDCl₃.

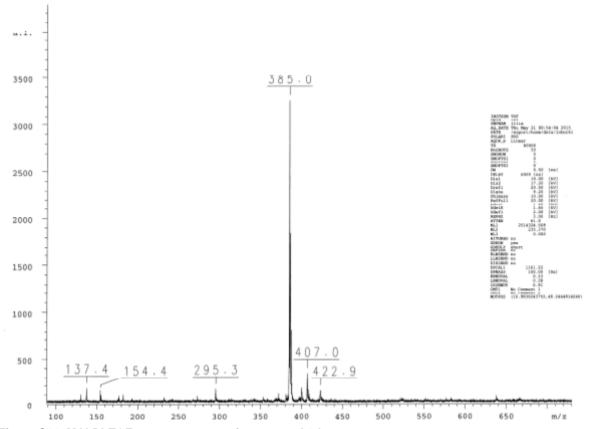
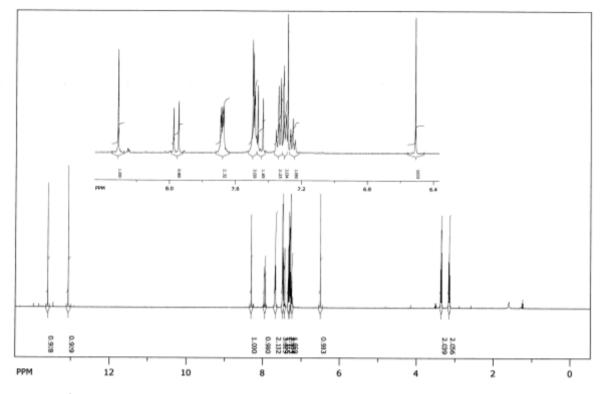


Figure S11. MALDI-TOF mass spectrum of compound 1d.





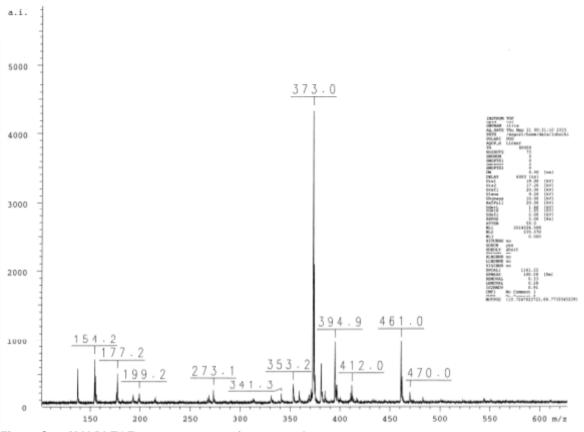


Figure S13. MALDI-TOF mass spectrum of compound 1e.

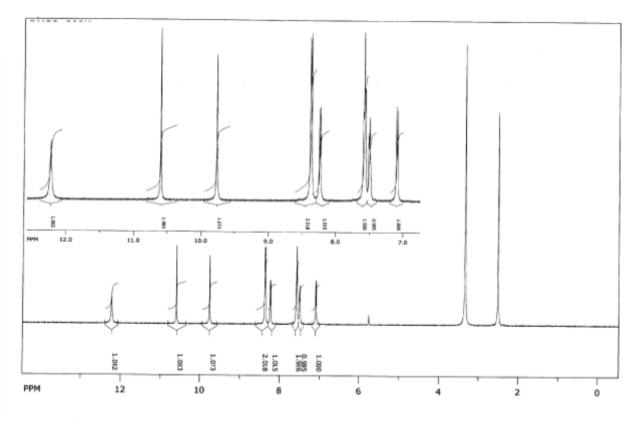


Figure S14. ¹H-NMR of compound 2a in DMSO-d₆.

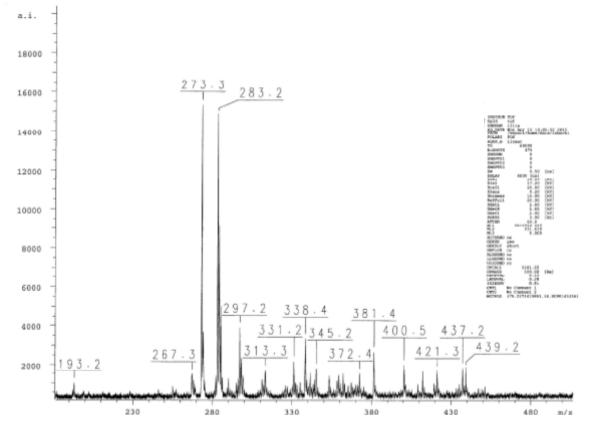


Figure S15. MALDI-TOF mass spectrum of compound 2a.

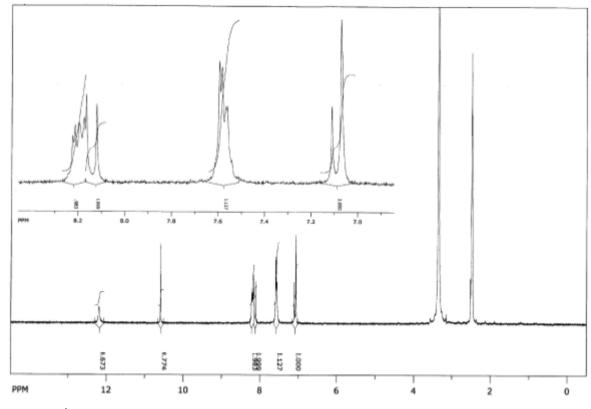


Figure S16. ¹H-NMR of compound 2b in DMSO-*d*₆.

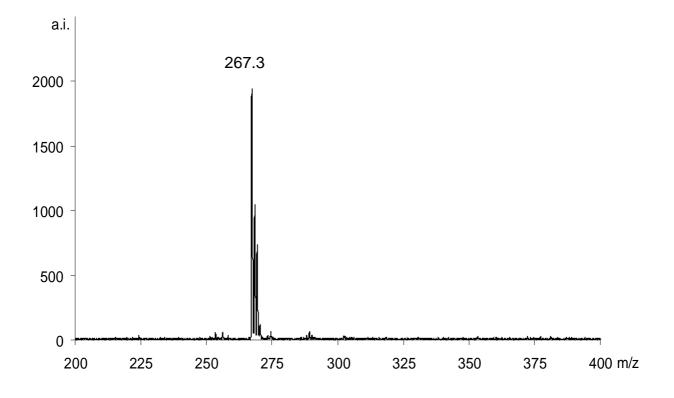


Figure S17. MALDI-TOF mass spectrum of compound 2b.

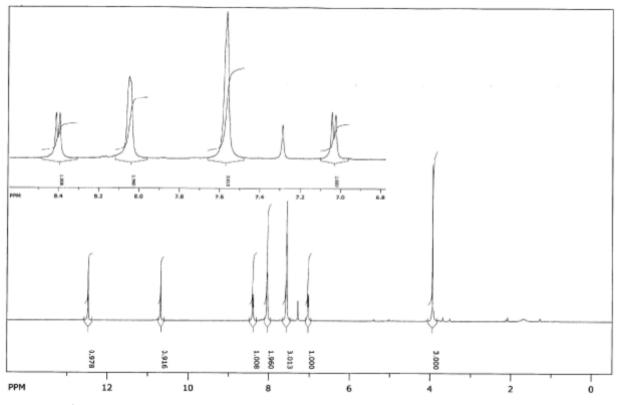


Figure S18. ¹H-NMR of compound 2c in CDCI₃.

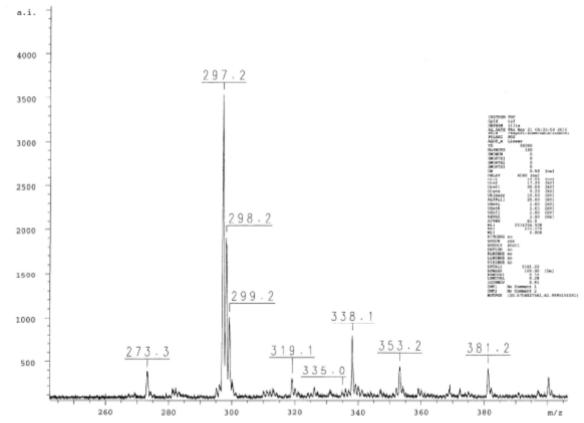


Figure S19. MALDI-TOF mass spectrum of compound 2c.

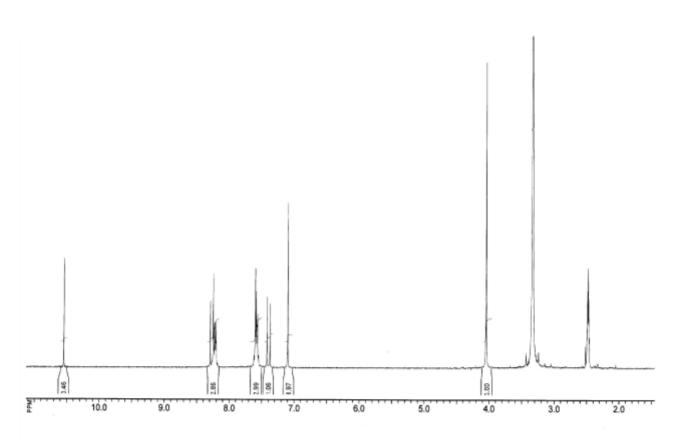


Figure S20. ¹H-NMR of compound 2d in DMSO-*d*₆.

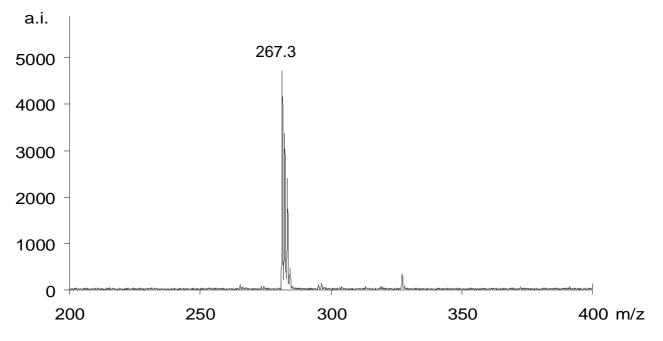
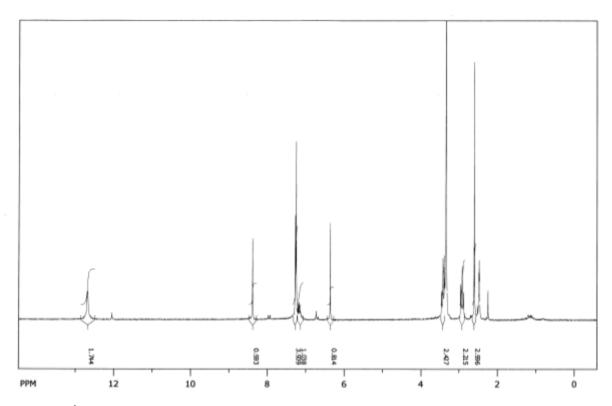


Figure S21. MALDI-TOF mass spectrum of compound 2d.





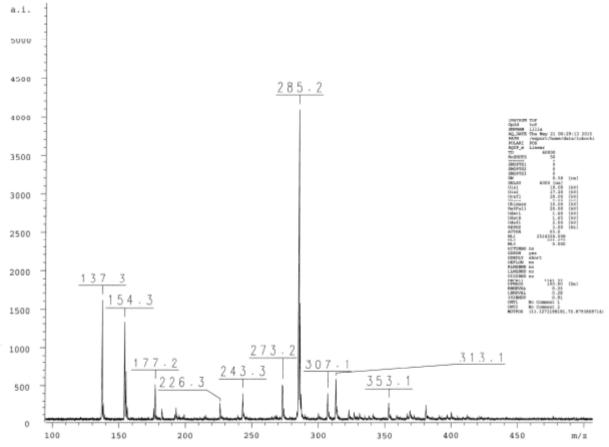


Figure S23. MALDI-TOF mass spectrum of compound 5a.

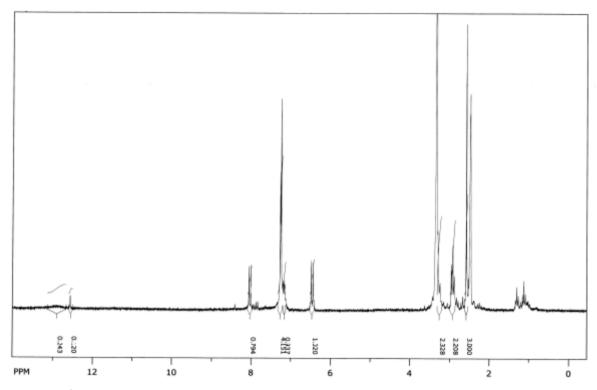


Figure S24. ¹H-NMR of compound 6a in DMSO-d₆.

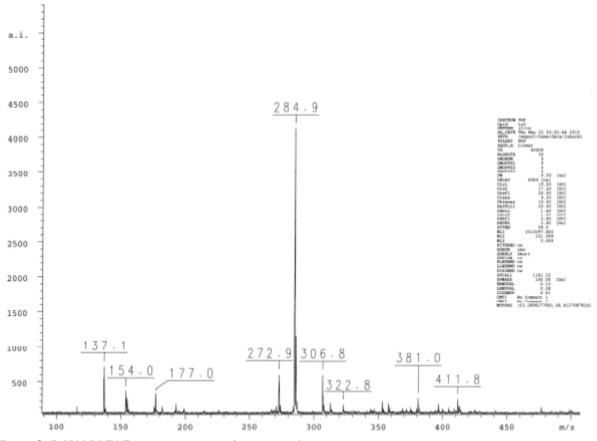


Figure S25. MALDI-TOF mass spectrum of compound 6a.

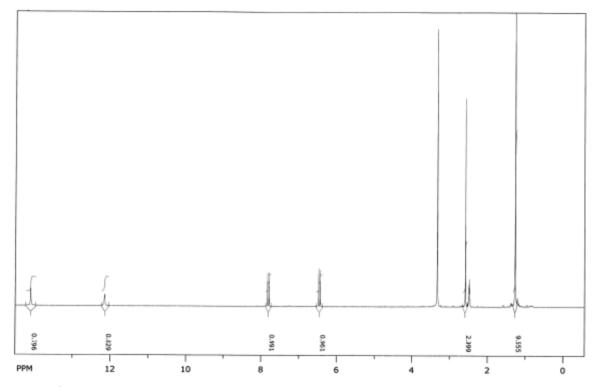


Figure S26. ¹H-NMR of compound 6b in DMSO-*d*₆.

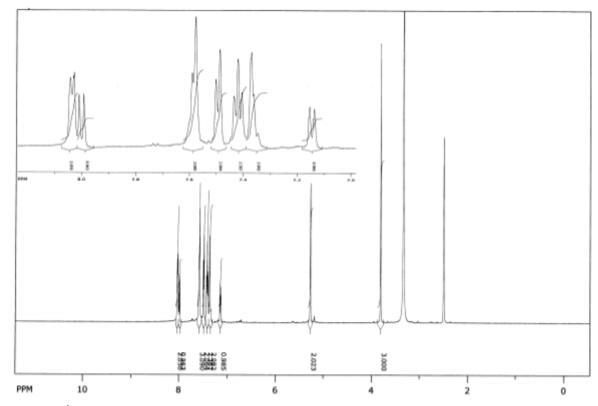


Figure S27. ¹H-NMR of compound 11 in DMSO-*d*₆.

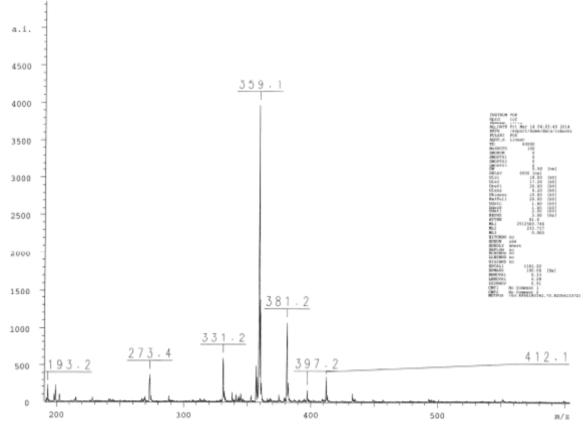


Figure S28. MALDI-TOF mass spectrum of compound 11.

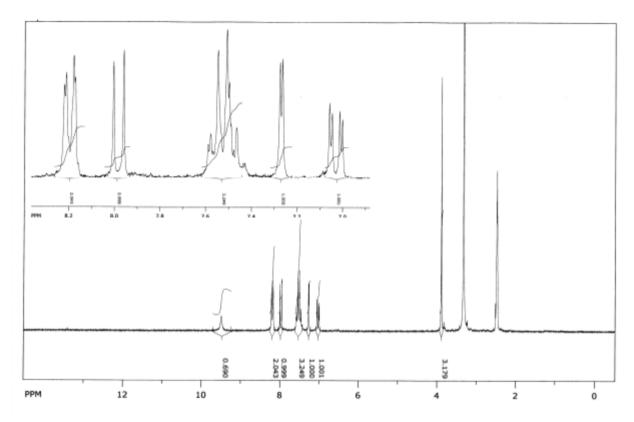


Figure S29. ¹H-NMR of compound 12 in DMSO-*d*₆.

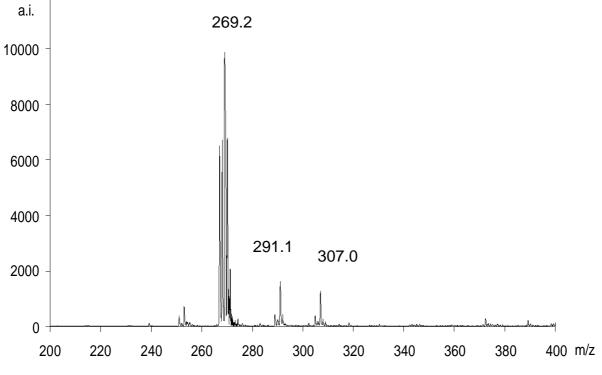


Figure S30. MALDI-TOF mass spectrum of compound 12.