

SUPPLEMENTARY INFORMATION

Lichen xanthones as models for new antifungal agents

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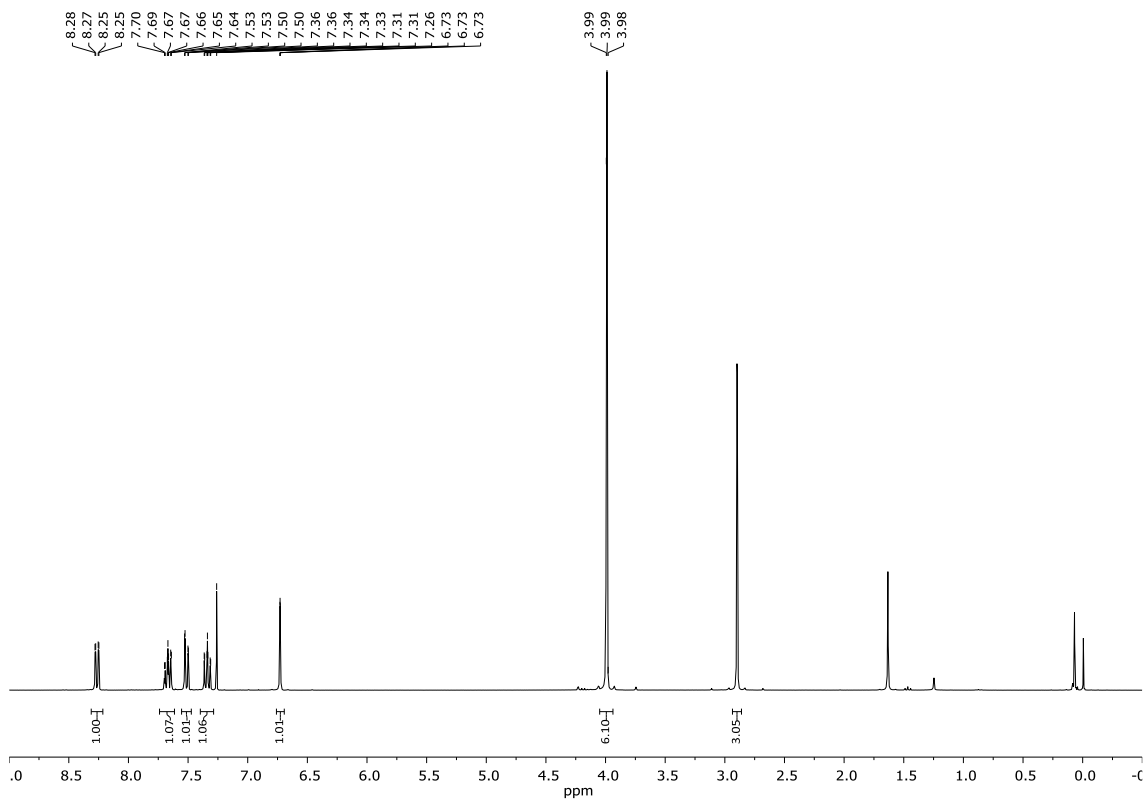


Figure S1. ^1H NMR spectrum of 3,4-dimethoxy-1-methyl-9H-xanthen-9-one (**6**) (CDCl_3 , 300 MHz).

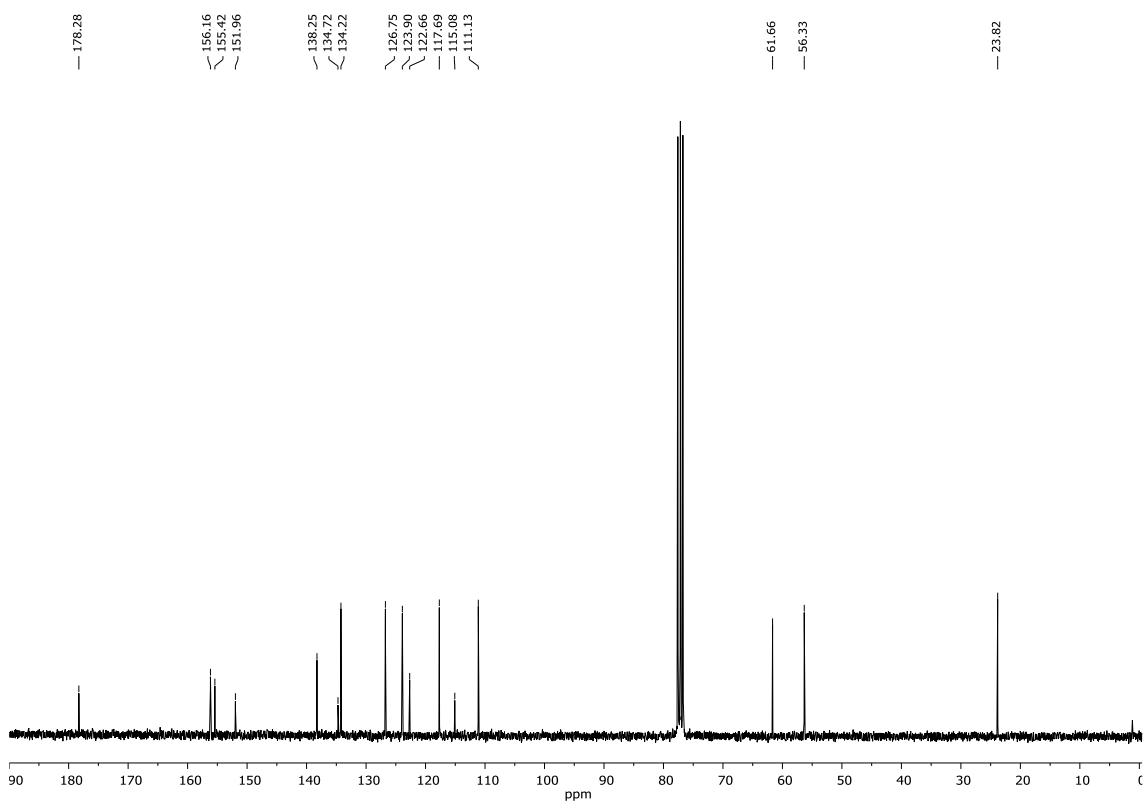


Figure S2. ^{13}C NMR spectrum of 3,4-dimethoxy-1-methyl-9H-xanthen-9-one (**6**) (CDCl_3 , 300 MHz).

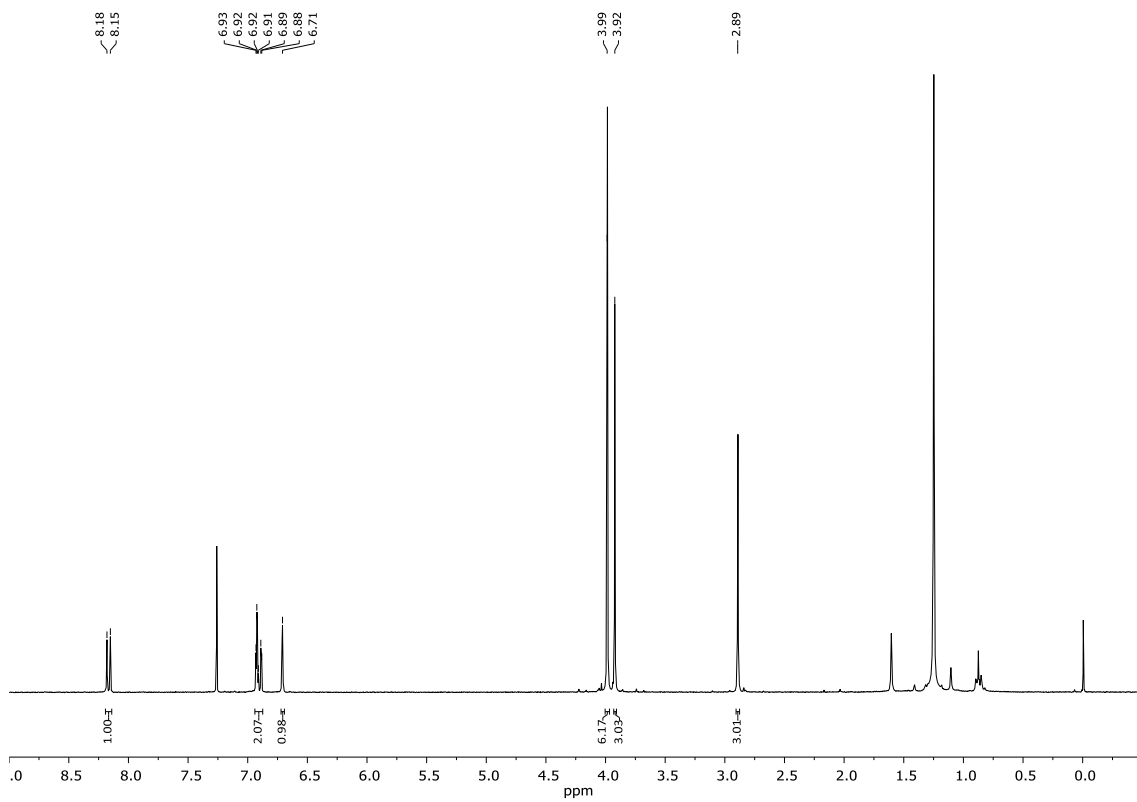


Figure S3. ^1H NMR spectrum of 3,4,6-trimethoxy-1-methyl-9H-xanthen-9-one (**7**) (CDCl_3 , 300 MHz).

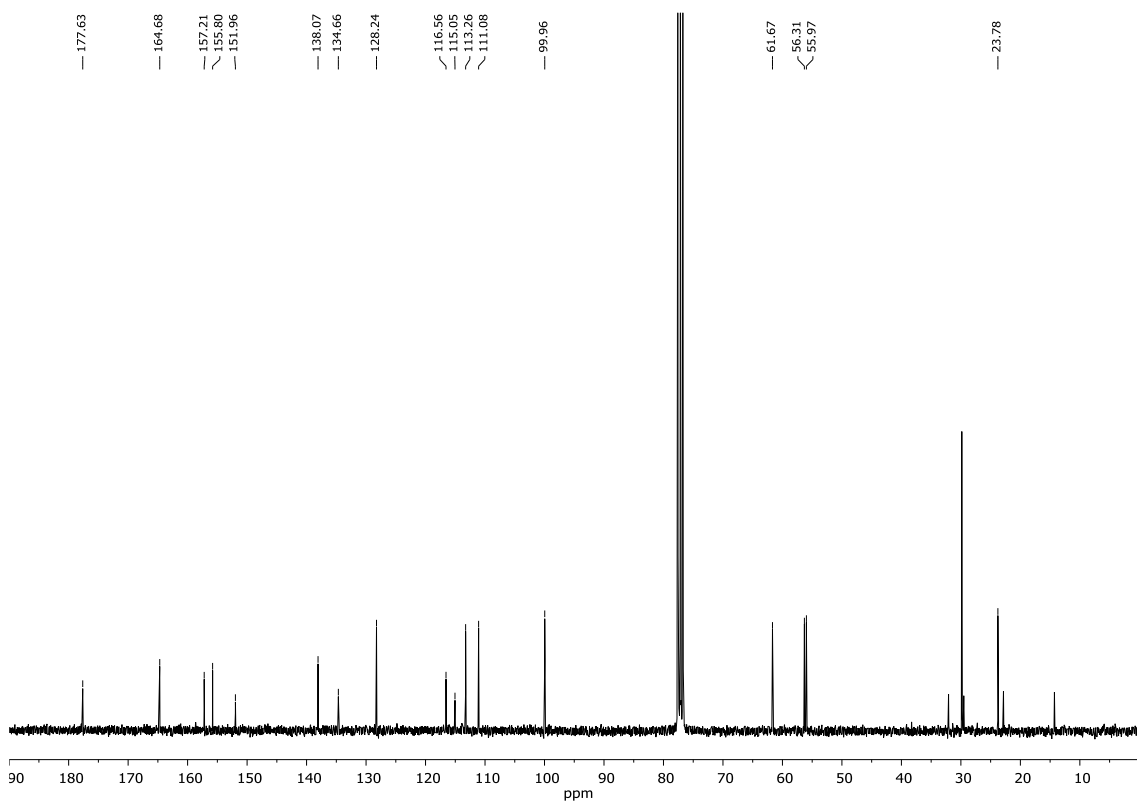


Figure S4. ^{13}C NMR spectrum of 3,4,6-trimethoxy-1-methyl-9H-xanthen-9-one (**7**) (CDCl_3 , 300 MHz).

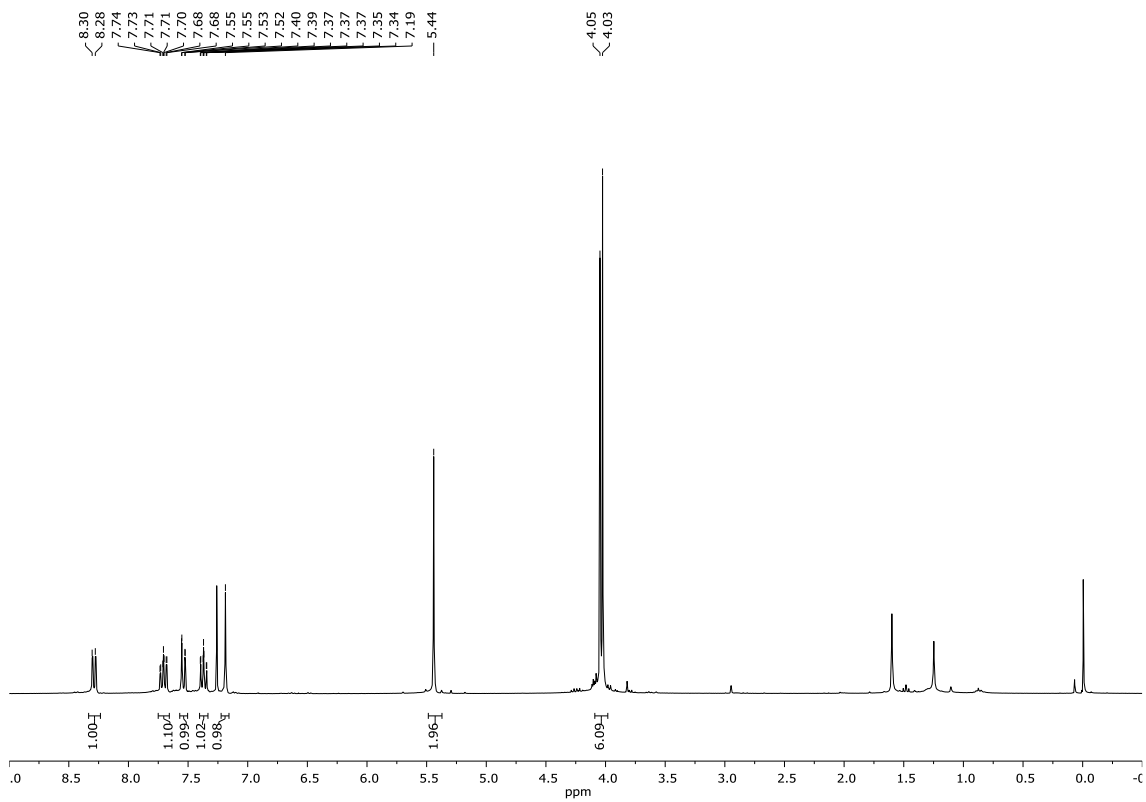


Figure S5. ^1H NMR spectrum of 1-(chloromethyl)-3,4-dimethoxy-9H-xanthen-9-one (**8**) (CDCl_3 , 300 MHz).

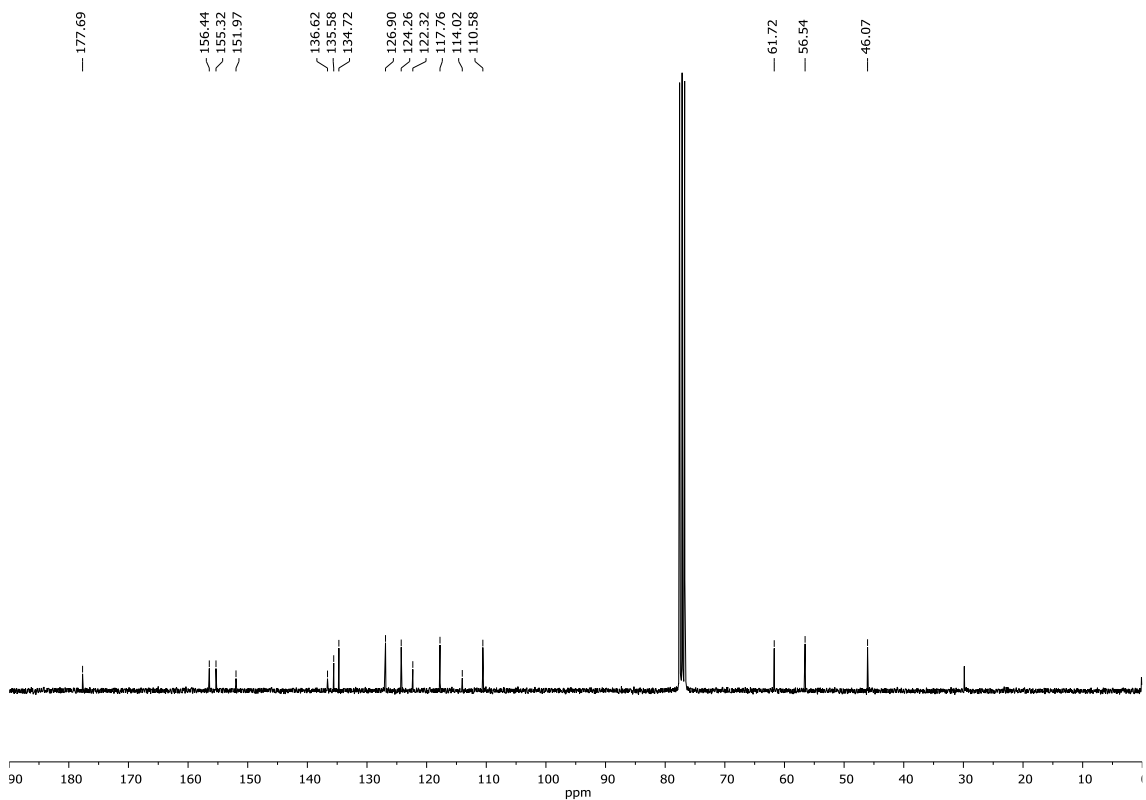


Figure S6. ^{13}C NMR spectrum of 1-(chloromethyl)-3,4-dimethoxy-9H-xanthen-9-one (**8**) (CDCl_3 , 300 MHz).

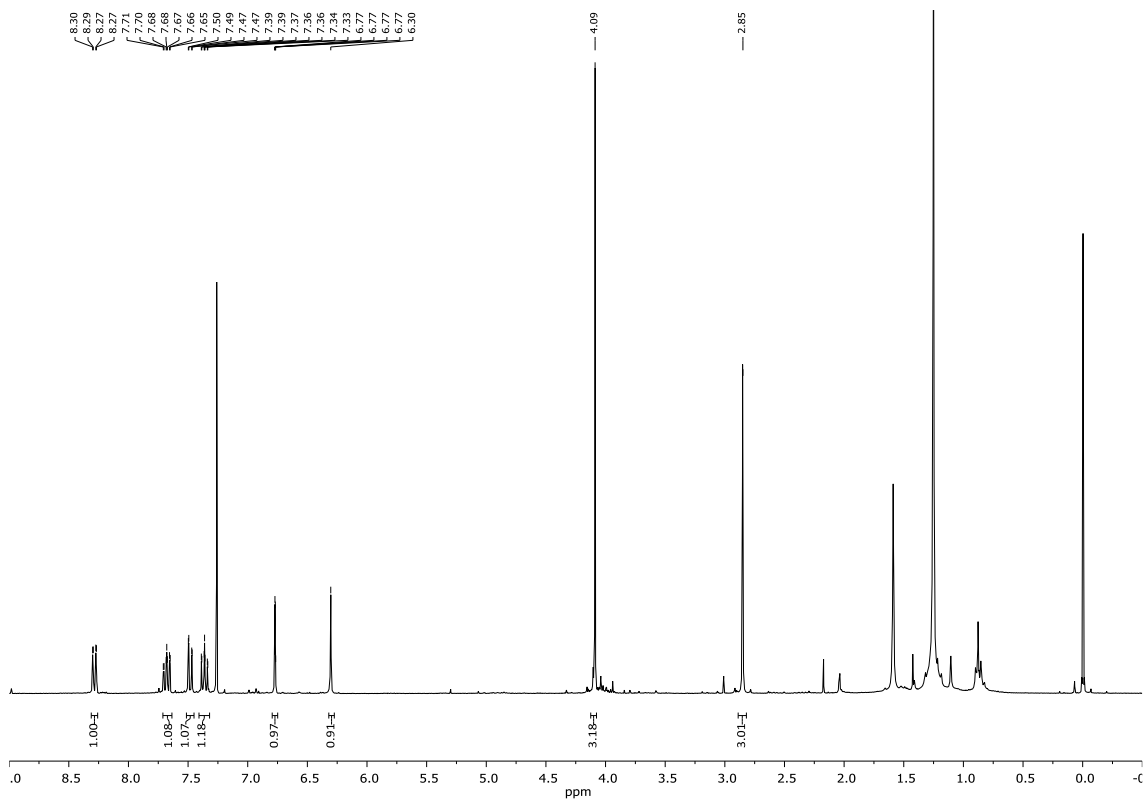


Figure S7. ^1H NMR spectrum of 3-chloro-4-methoxy-1-methyl-9H-xanthen-9-one (**9**) (CDCl_3 , 300 MHz).

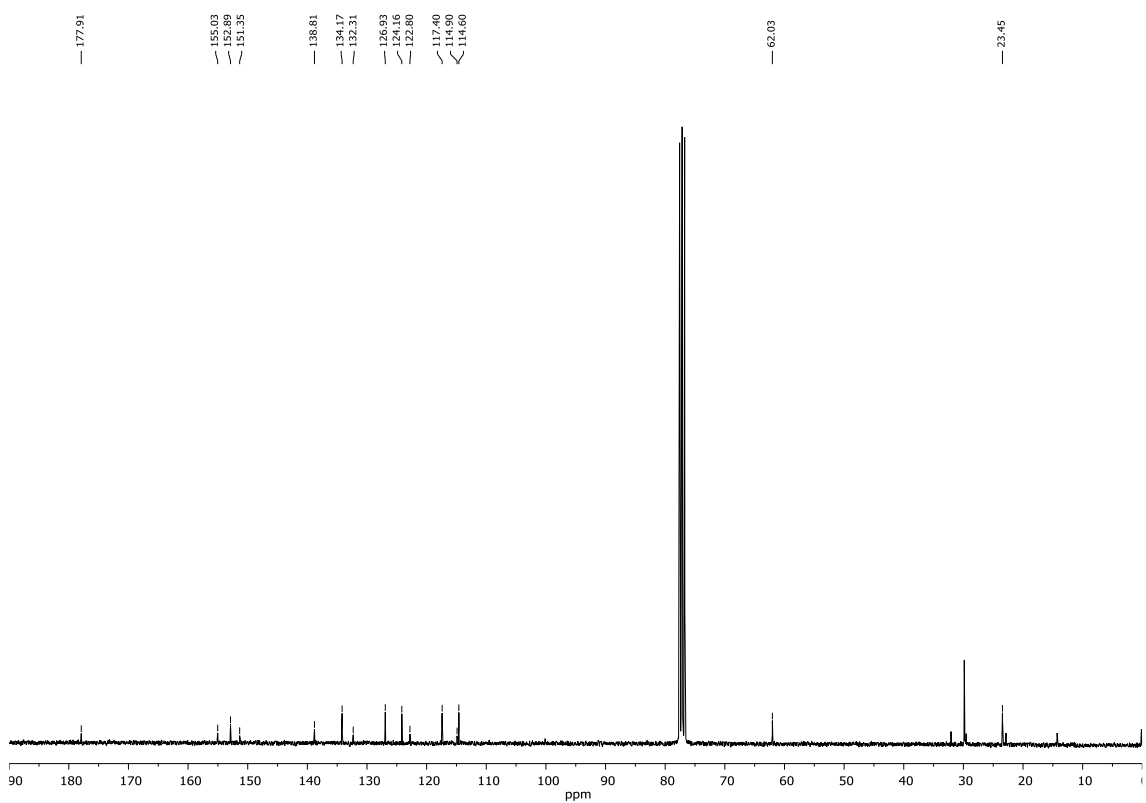


Figure S8. ^{13}C NMR spectrum of 3-chloro-4-methoxy-1-methyl-9H-xanthen-9-one (**9**) (CDCl_3 , 300 MHz).

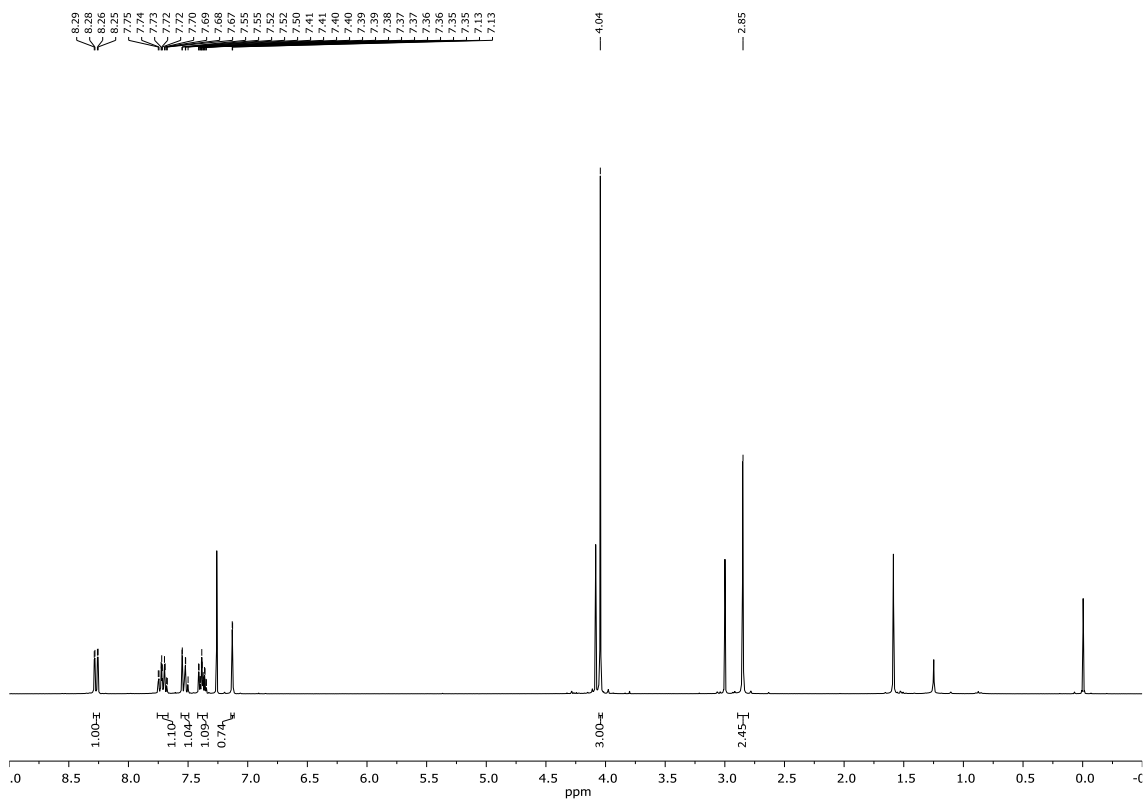


Figure S9. ^1H NMR spectrum of 3-hydroxy-4-methoxy-1-methyl-9H-xanthen-9-one (**10**) (CDCl_3 , 300 MHz).

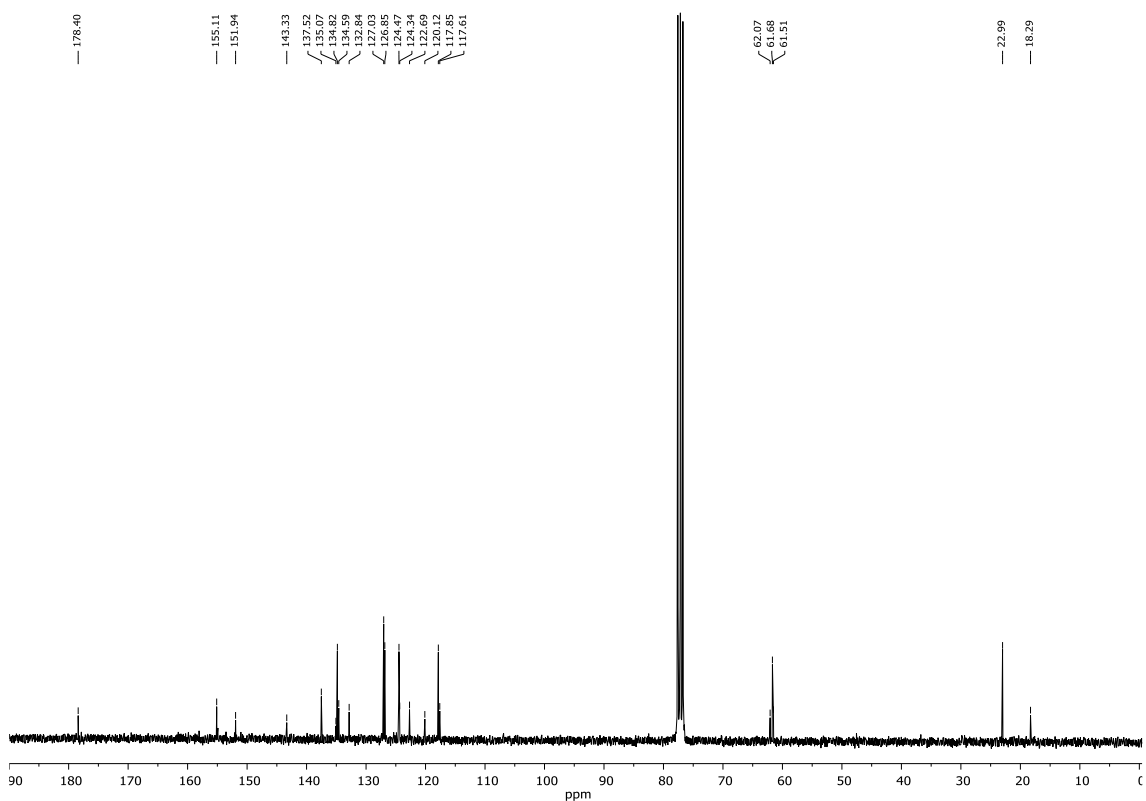


Figure S10. ^{13}C NMR spectrum of 3-hydroxy-4-methoxy-1-methyl-9H-xanthen-9-one (**10**) (CDCl_3 , 300 MHz).

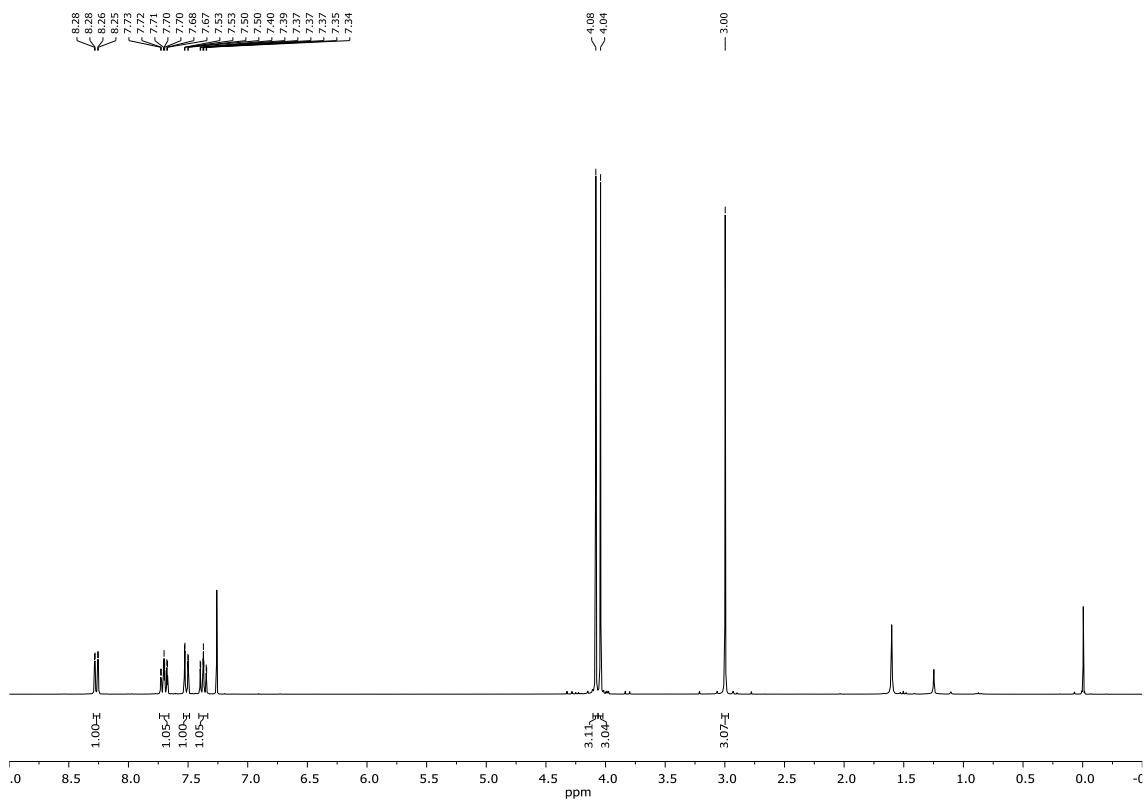


Figure S11. ^1H NMR spectrum of 2-chloro-3,4-dimethoxy-1-methyl-9H-xanthen-9-one (**11**) (CDCl_3 , 300 MHz).

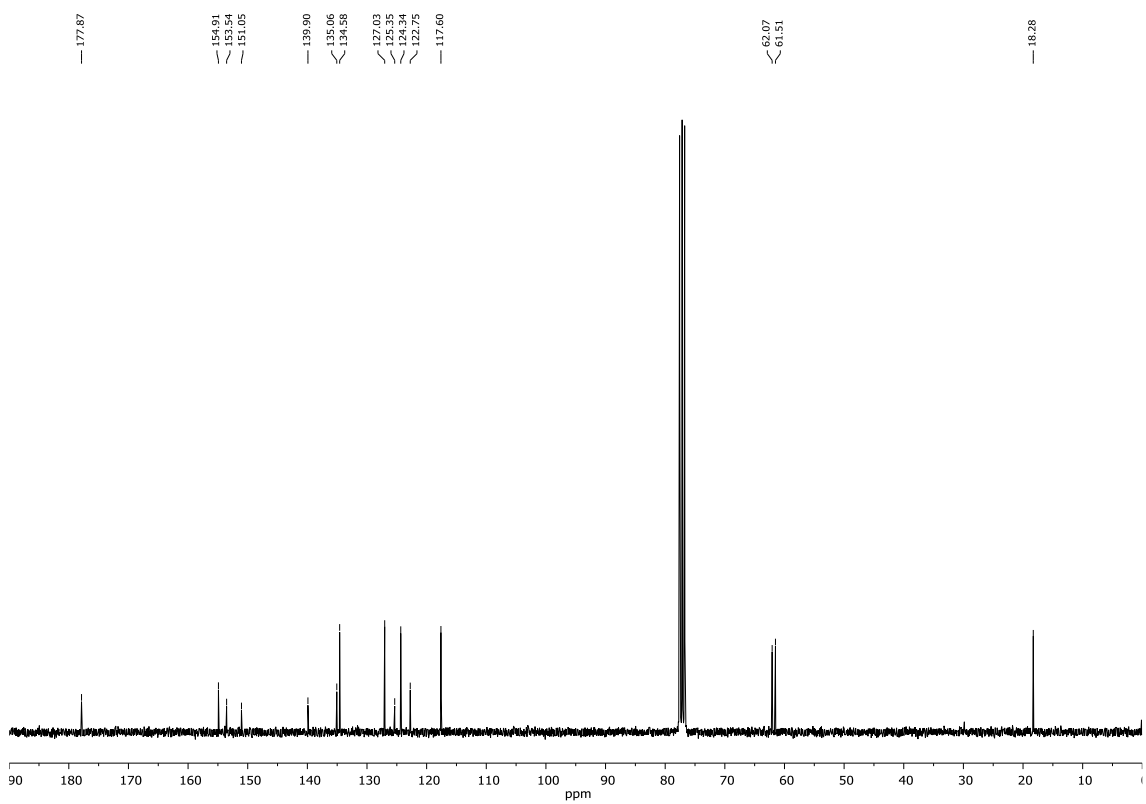


Figure S12. ^{13}C NMR spectrum of 2-chloro-3,4-dimethoxy-1-methyl-9H-xanthen-9-one (**11**) (CDCl_3 , 300 MHz).

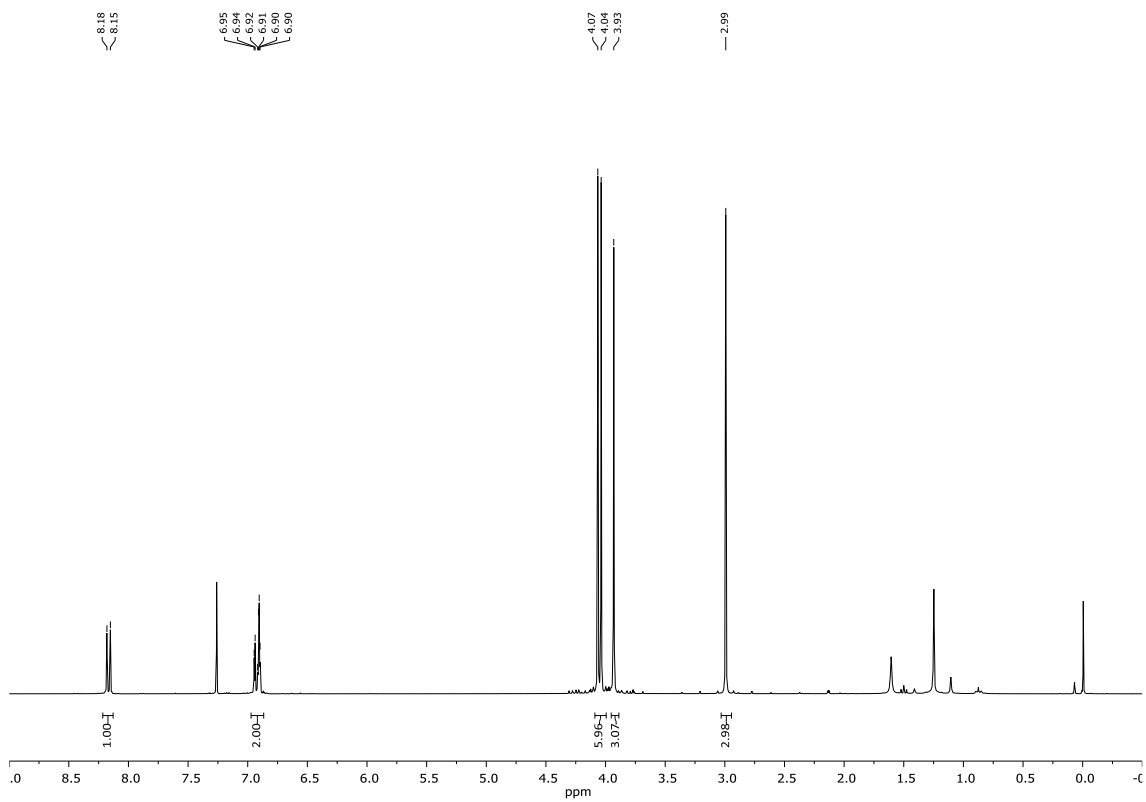


Figure S13. ^1H NMR spectrum of 2-chloro-3,4,6-trimethoxy-1-methyl-9H-xanthen-9-one (**12**) (CDCl_3 , 300 MHz).

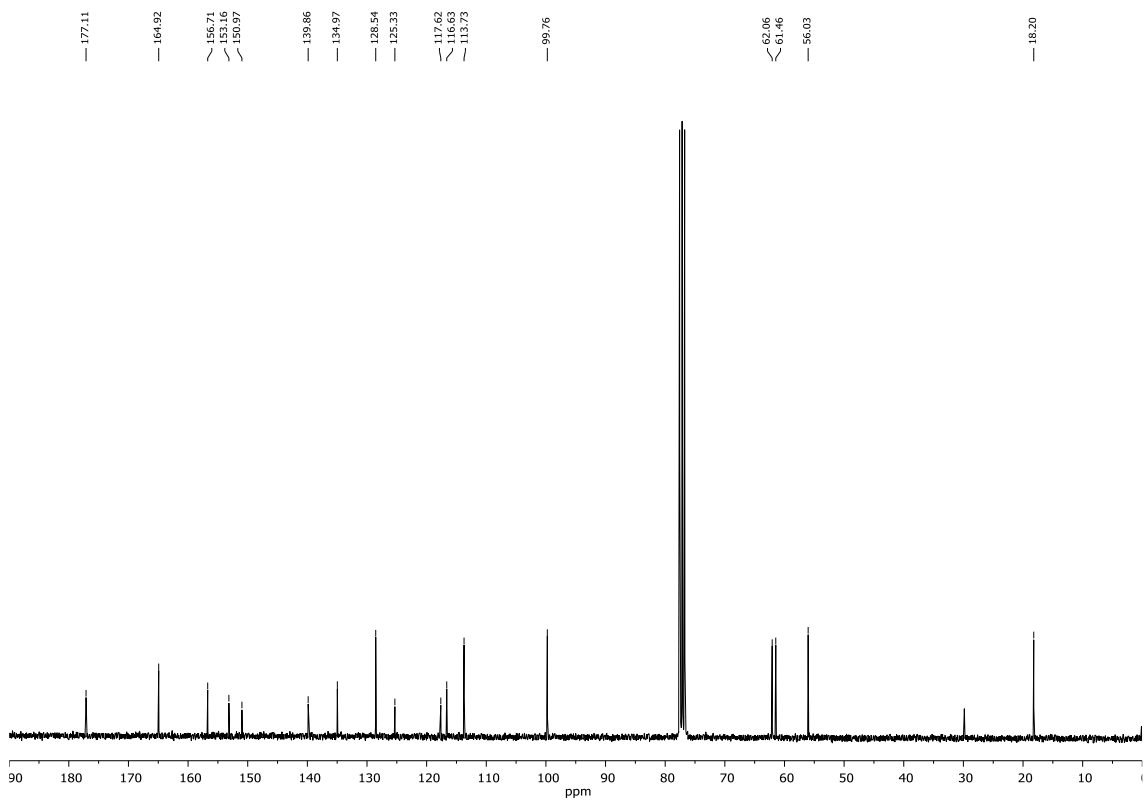


Figure S14. ^{13}C NMR spectrum of 2-chloro-3,4,6-trimethoxy-1-methyl-9H-xanthen-9-one (**12**) (CDCl_3 , 300 MHz).

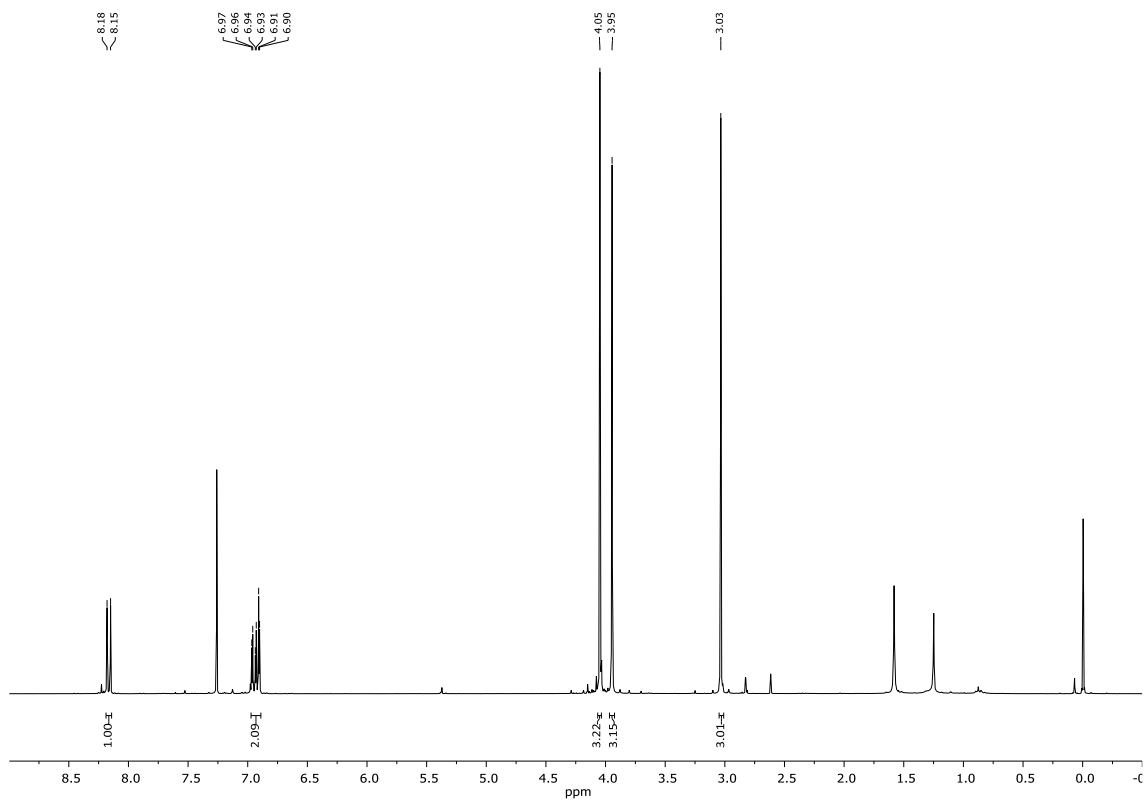


Figure S15. ^1H NMR spectrum of 2,3-dichloro-4,6-dimethoxy-1-methyl-9H-xanthen-9-one (**13**) (CDCl_3 , 300 MHz).

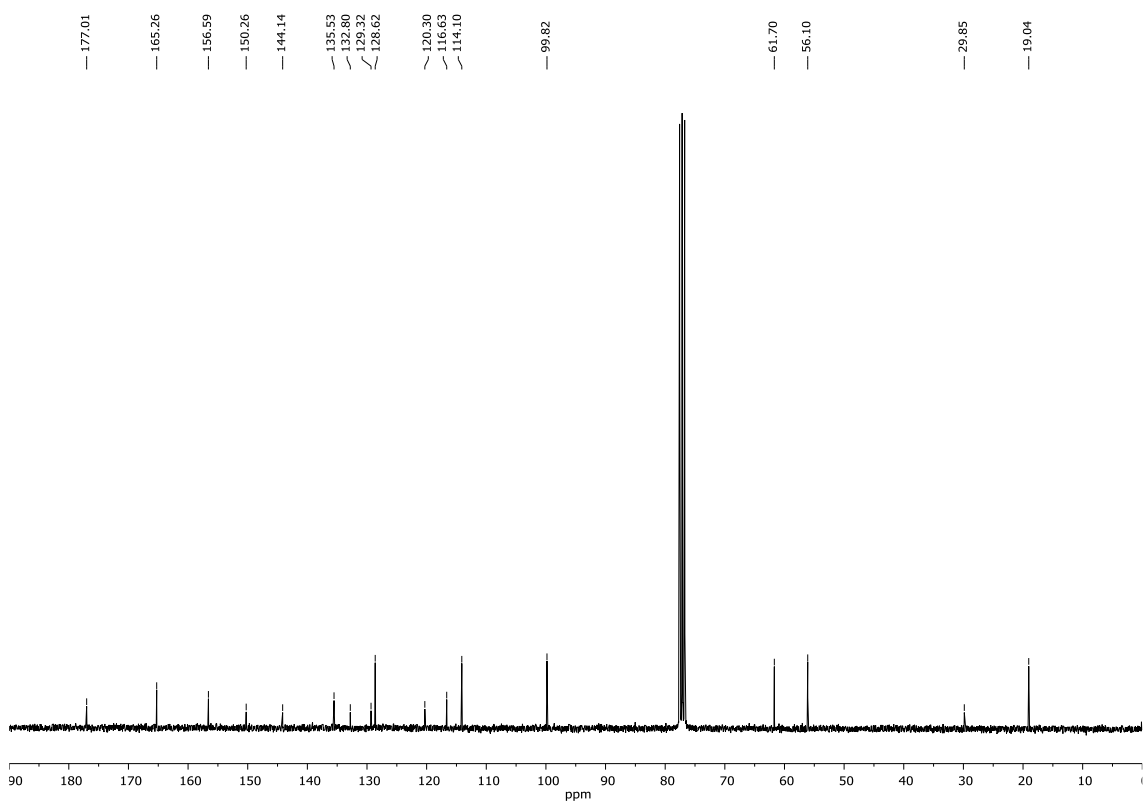


Figure S16. ^{13}C NMR spectrum of 2,3-dichloro-4,6-dimethoxy-1-methyl-9H-xanthen-9-one (**13**) (CDCl_3 , 300 MHz).

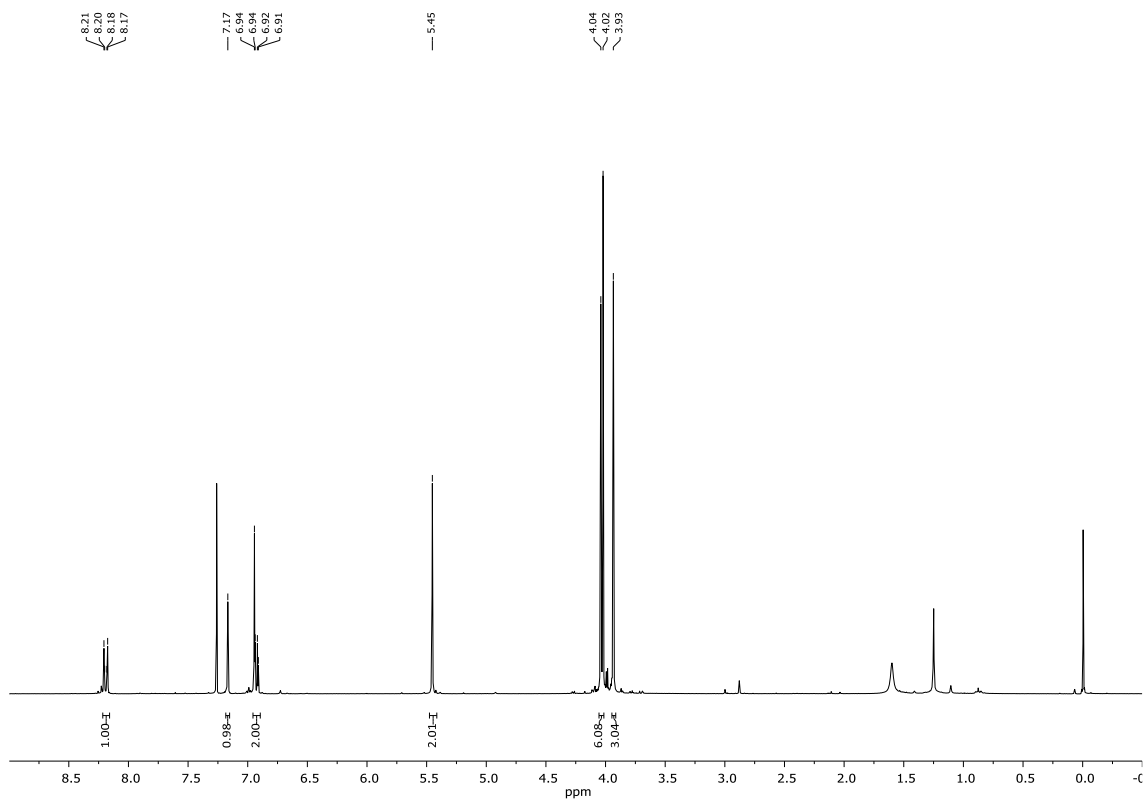


Figure S17. ^1H NMR spectrum of 1-(chloromethyl)-3,4,6-trimethoxy-9H-xanthen-9-one (**14**) (CDCl_3 , 300 MHz).

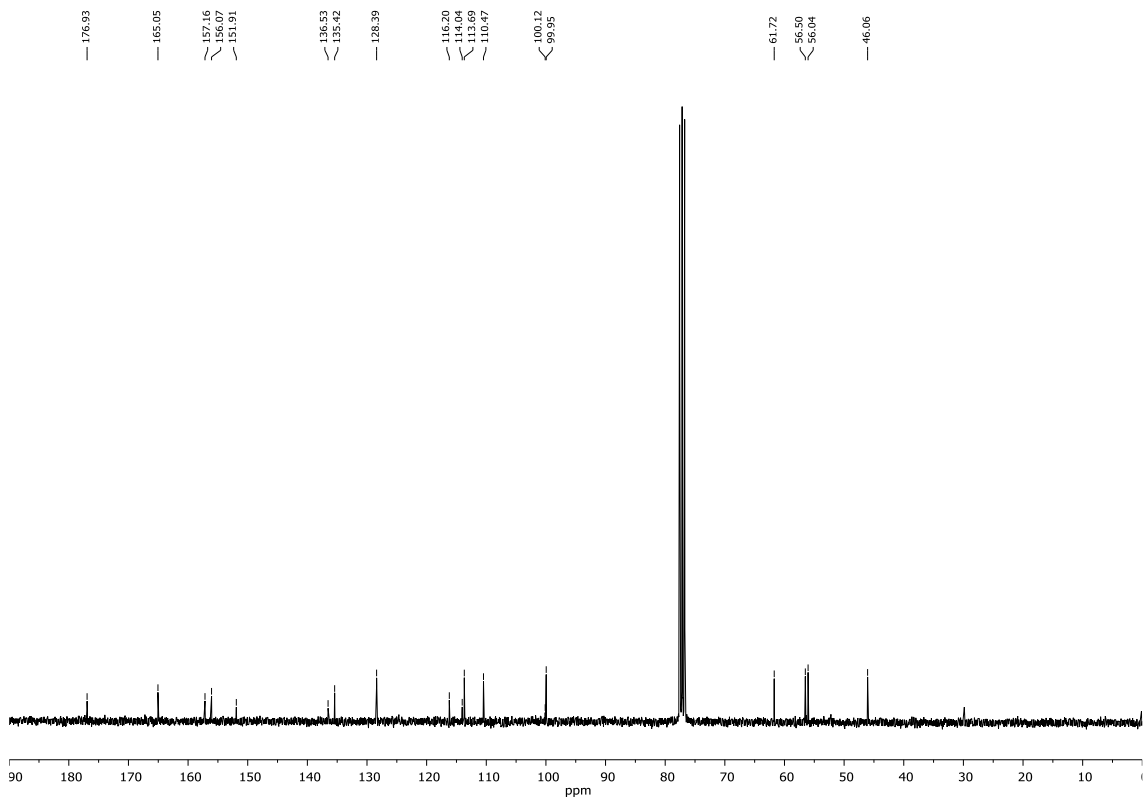


Figure S18. ^{13}C NMR spectrum of 1-(chloromethyl)-3,4,6-trimethoxy-9H-xanthen-9-one (**14**) (CDCl_3 , 300 MHz).

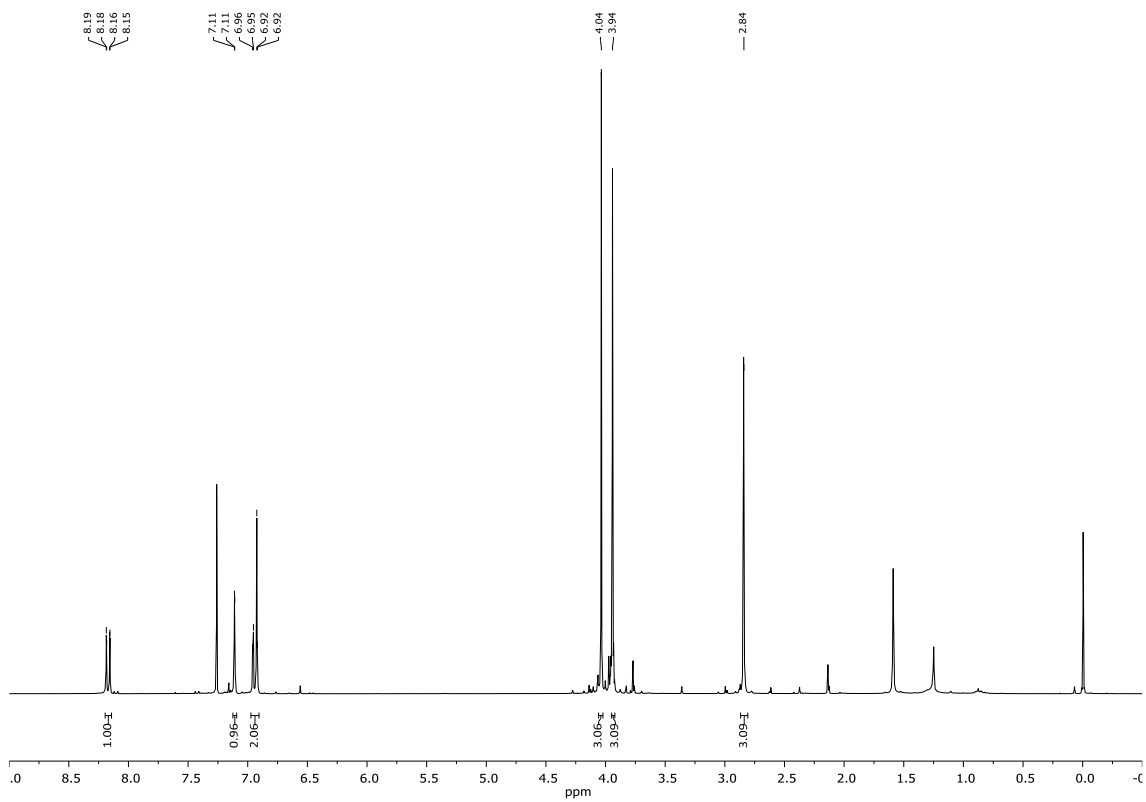


Figure S19. ^1H NMR spectrum of 3-chloro-4,6-dimethoxy-1-methyl-9H-xanthen-9-one (**15**) (CDCl_3 , 300 MHz).

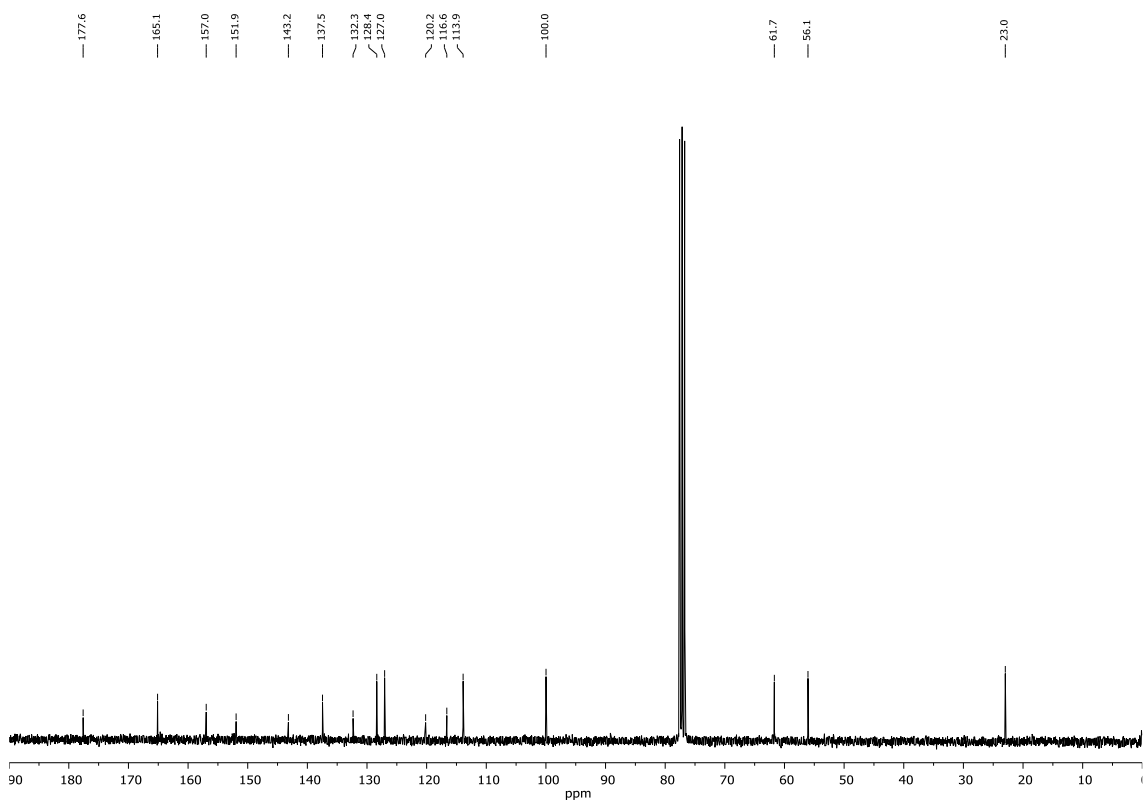


Figure S20. ^{13}C NMR spectrum of 3-chloro-4,6-dimethoxy-1-methyl-9H-xanthen-9-one (**15**) (CDCl_3 , 300 MHz).

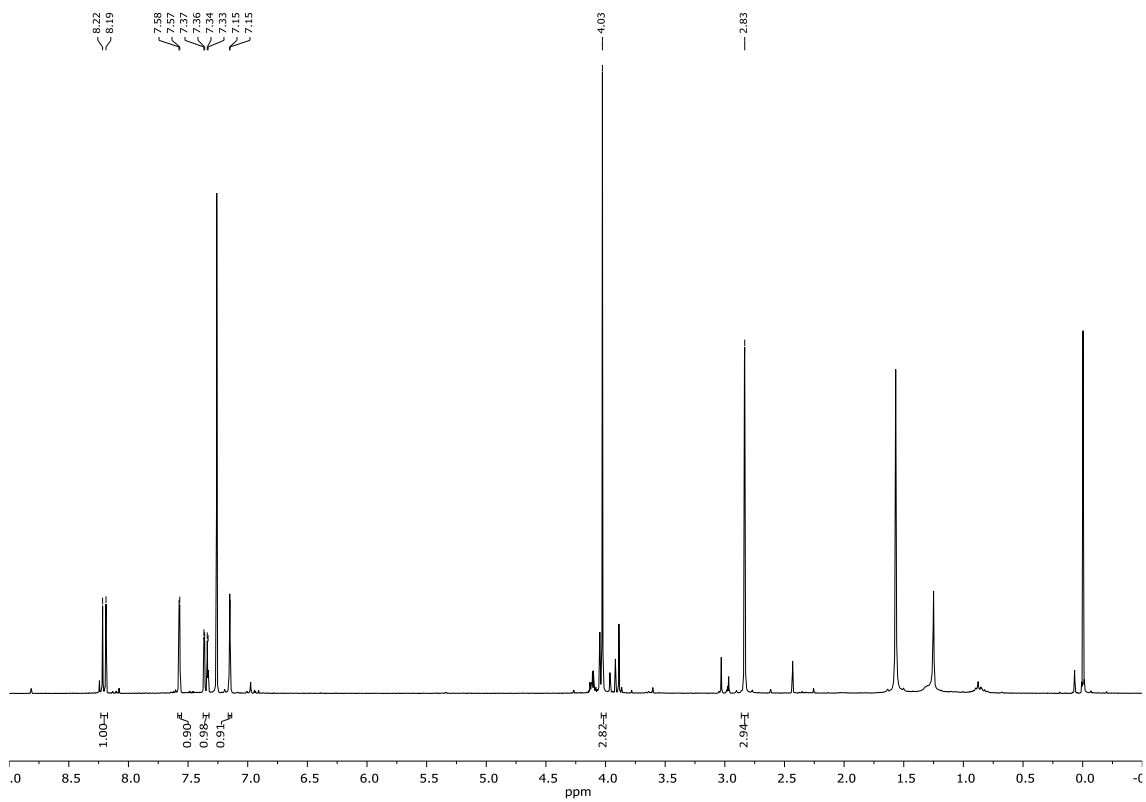


Figure S21. ^1H NMR spectrum of 3,6-dichloro-4-methoxy-1-methyl-9H-xanthen-9-one (**16**) (CDCl_3 , 300 MHz).

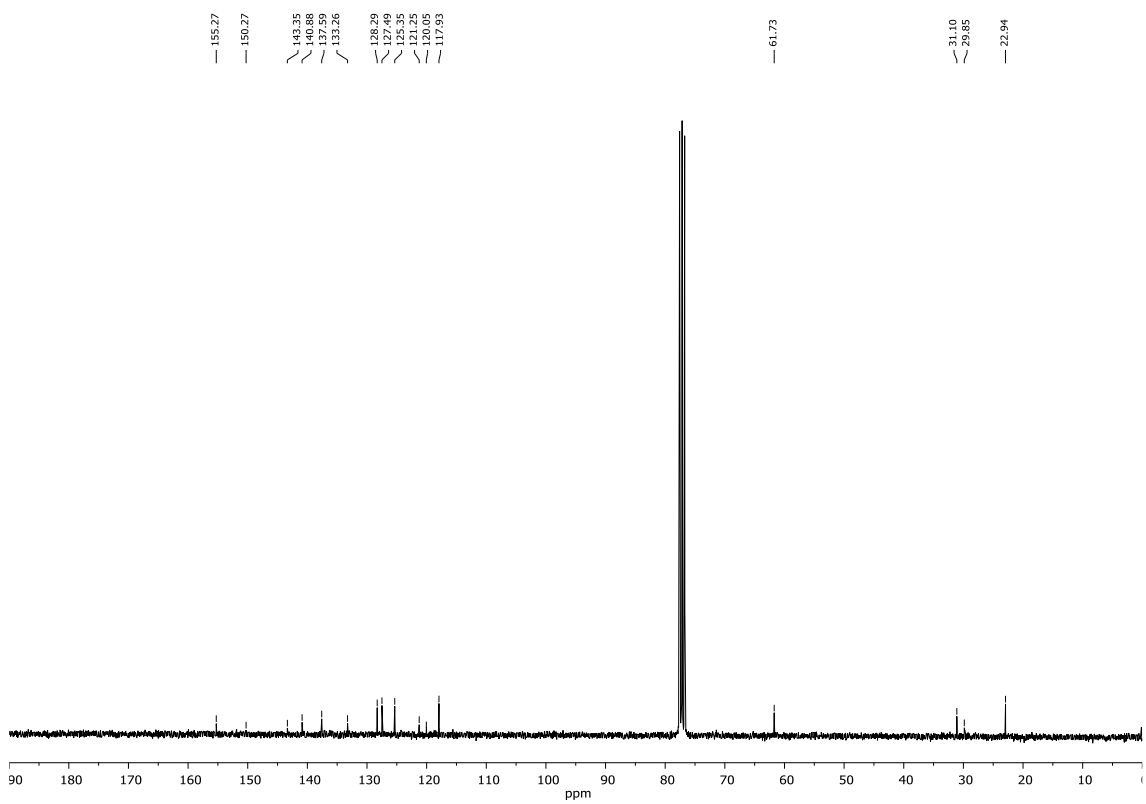


Figure S22. ^{13}C NMR spectrum of 3,6-dichloro-4-methoxy-1-methyl-9H-xanthen-9-one (**16**) (CDCl_3 , 300 MHz).

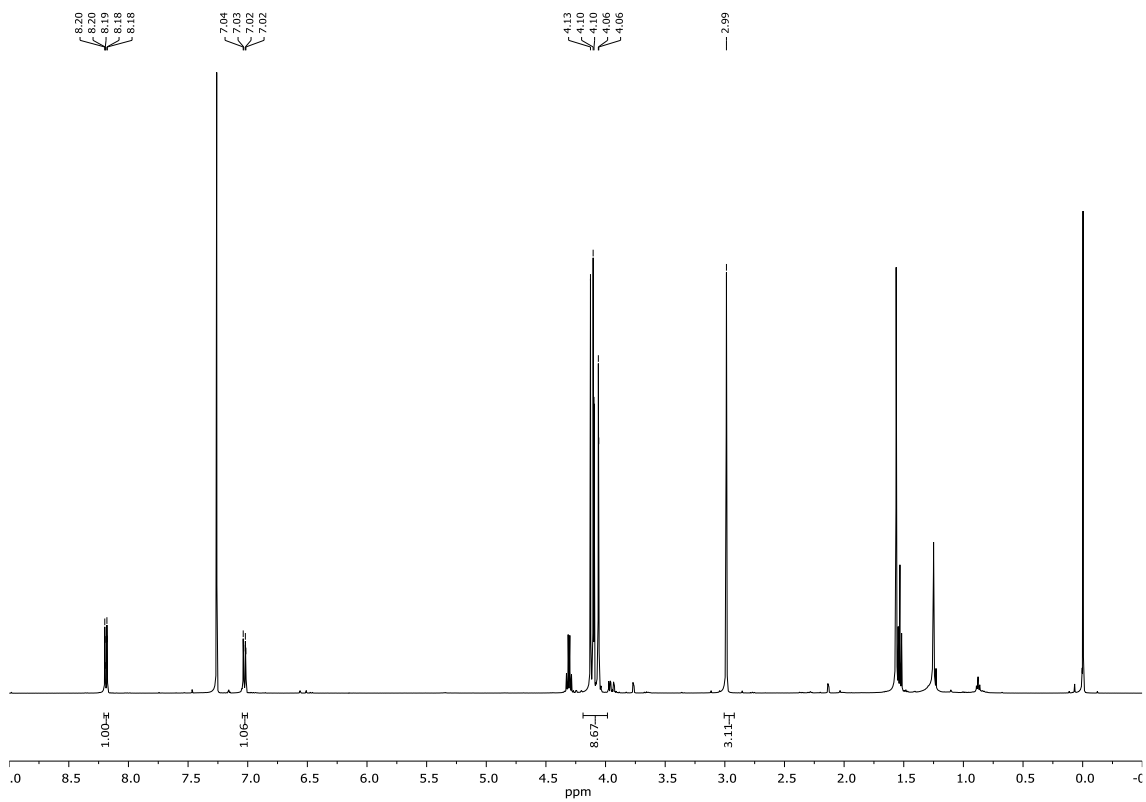


Figure S23. ^1H NMR spectrum of 2,5-dichloro-3,4,6-trimethoxy-1-methyl-9H-xanthen-9-one (**17**) (CDCl_3 , 300 MHz).

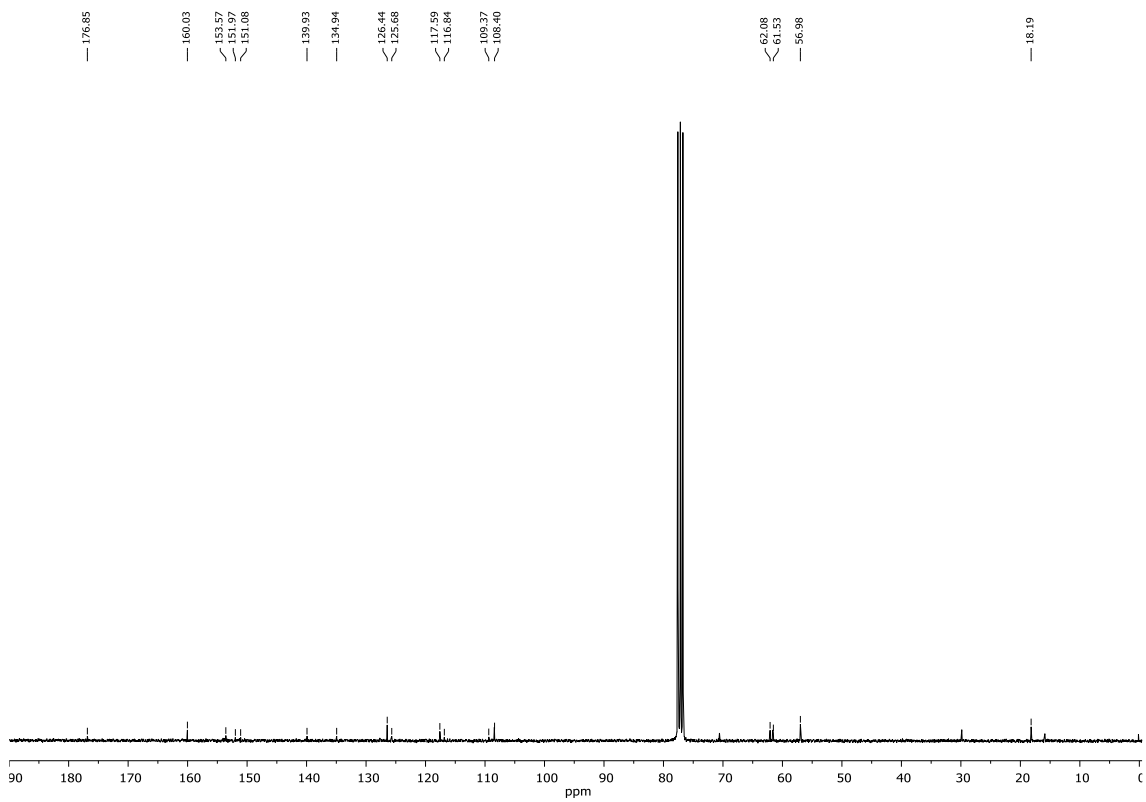


Figure S24. ^{13}C NMR spectrum of 2,5-dichloro-3,4,6-trimethoxy-1-methyl-9H-xanthen-9-one (**17**) (CDCl_3 , 300 MHz).

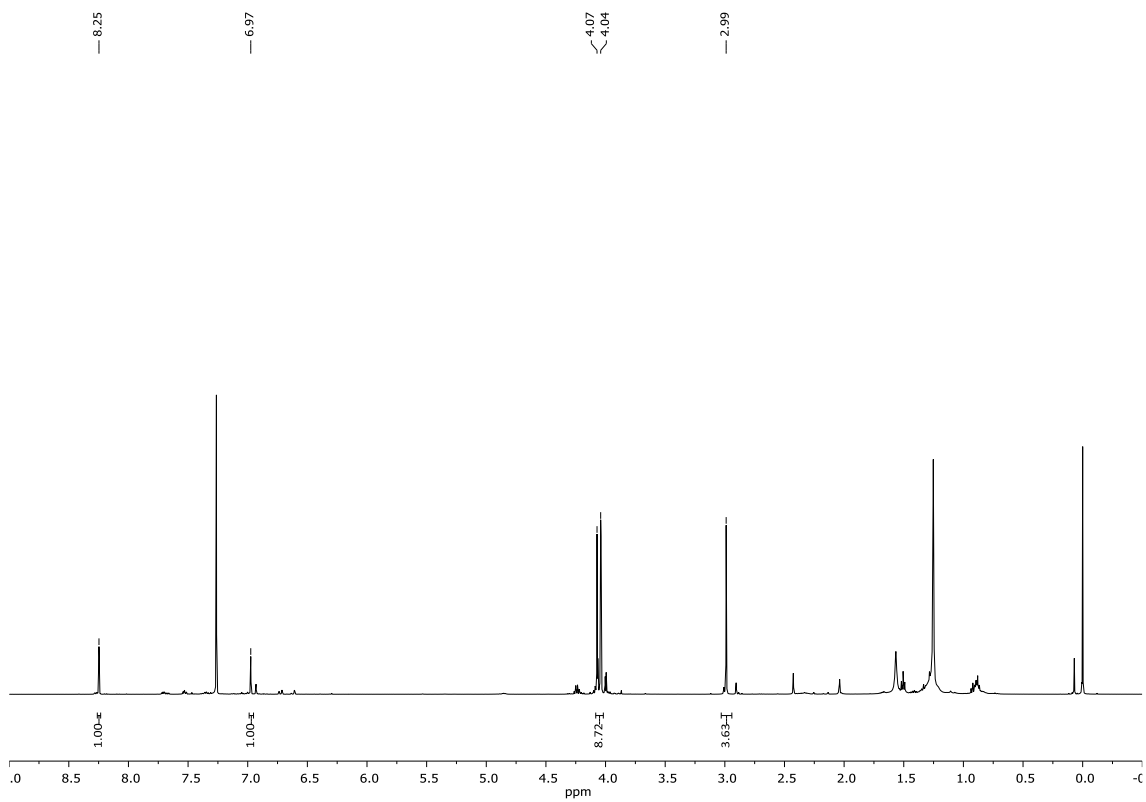


Figure S25. ^1H NMR spectrum of 2,7-dichloro-3,4,6-trimethoxy-1-methyl-9H-xanthen-9-one (**18**) (CDCl_3 , 300 MHz).

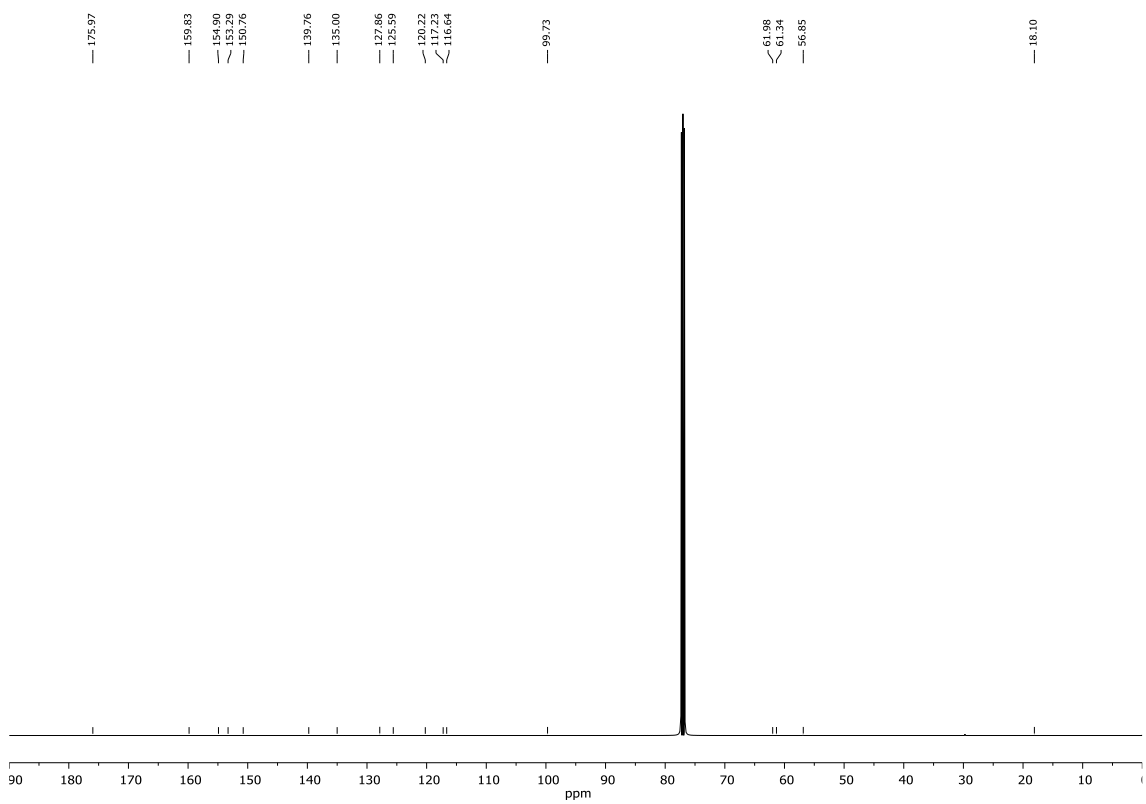


Figure S26. ^{13}C NMR spectrum of 2,7-dichloro-3,4,6-trimethoxy-1-methyl-9H-xanthen-9-one (**18**) (CDCl_3 , 300 MHz).

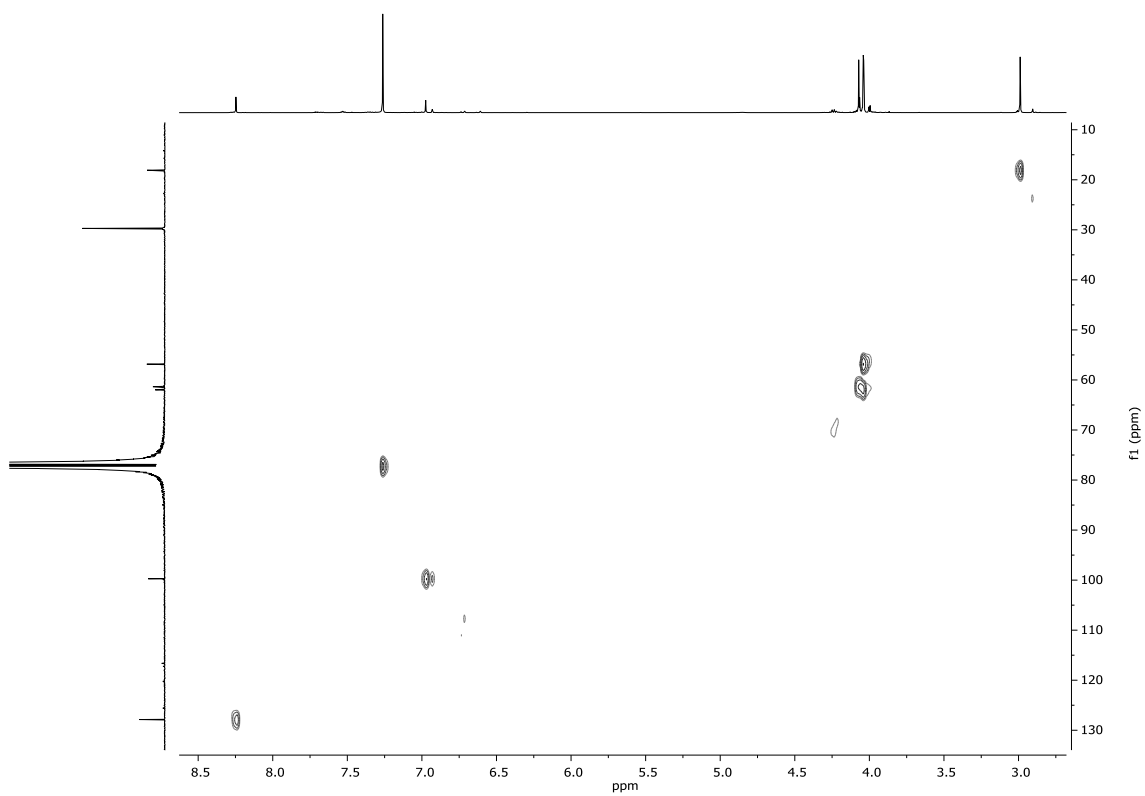


Figure S27. HSQC spectrum of 2,7-dichloro-3,4,6-trimethoxy-1-methyl-9H-xanthen-9-one (**18**) (CDCl₃, 300 MHz).

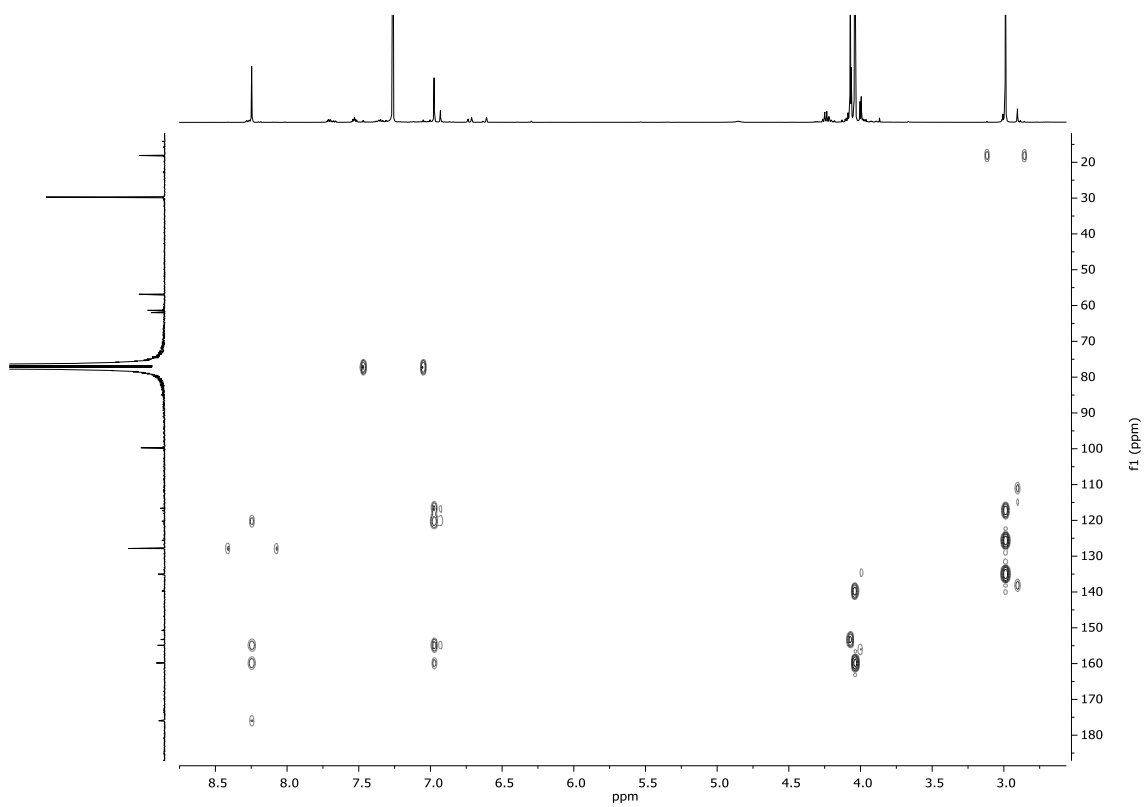


Figure S28. HMBC spectrum of 2,7-dichloro-3,4,6-trimethoxy-1-methyl-9H-xanthen-9-one (**18**) (CDCl₃, 300 MHz).

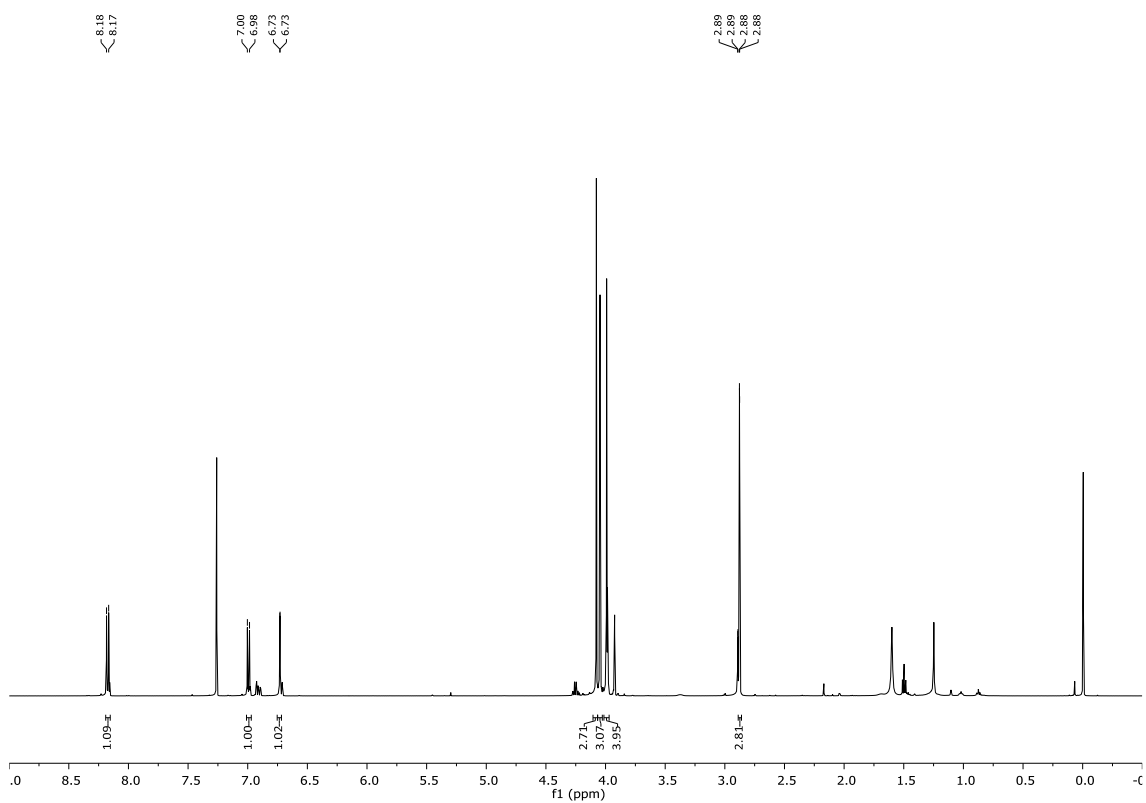


Figure S29. ^1H NMR spectrum of 5-chloro-3,4,6-trimethoxy-1-methyl-9H-xanthen-9-one (**19**) (CDCl_3 , 300 MHz).

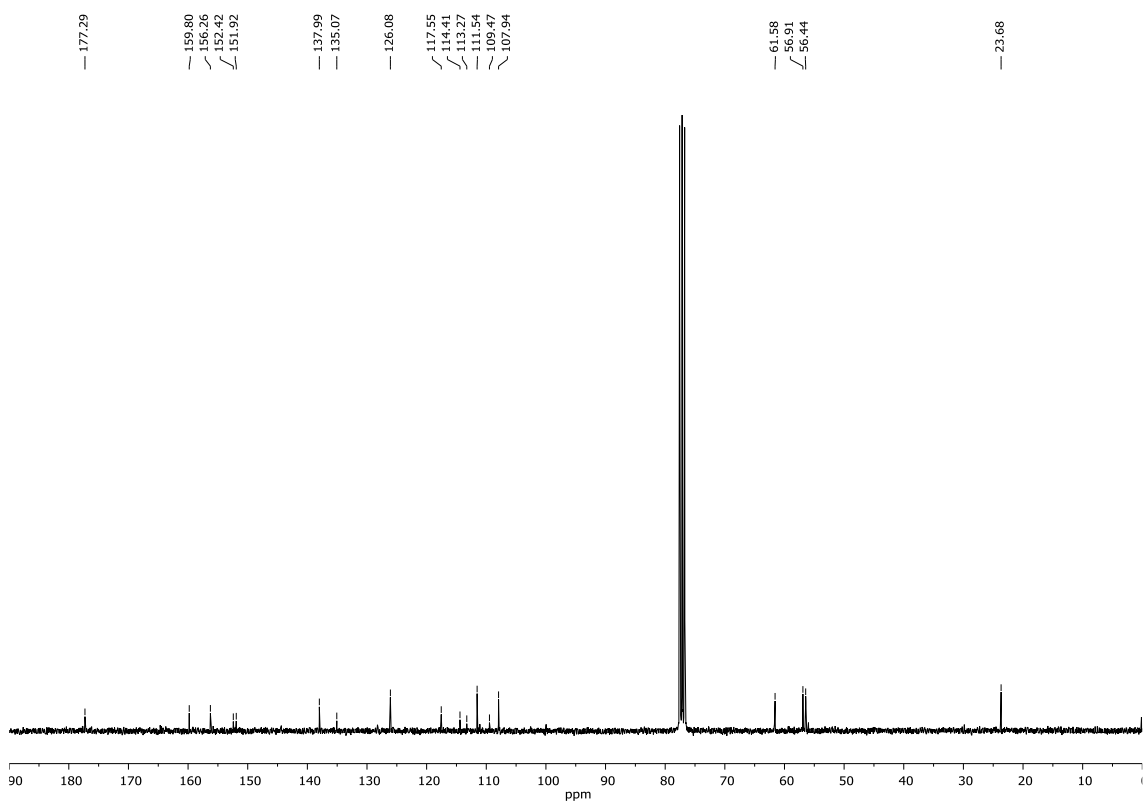


Figure S30. ^{13}C NMR spectrum of 5-chloro-3,4,6-trimethoxy-1-methyl-9H-xanthen-9-one (**19**) (CDCl_3 , 300 MHz).

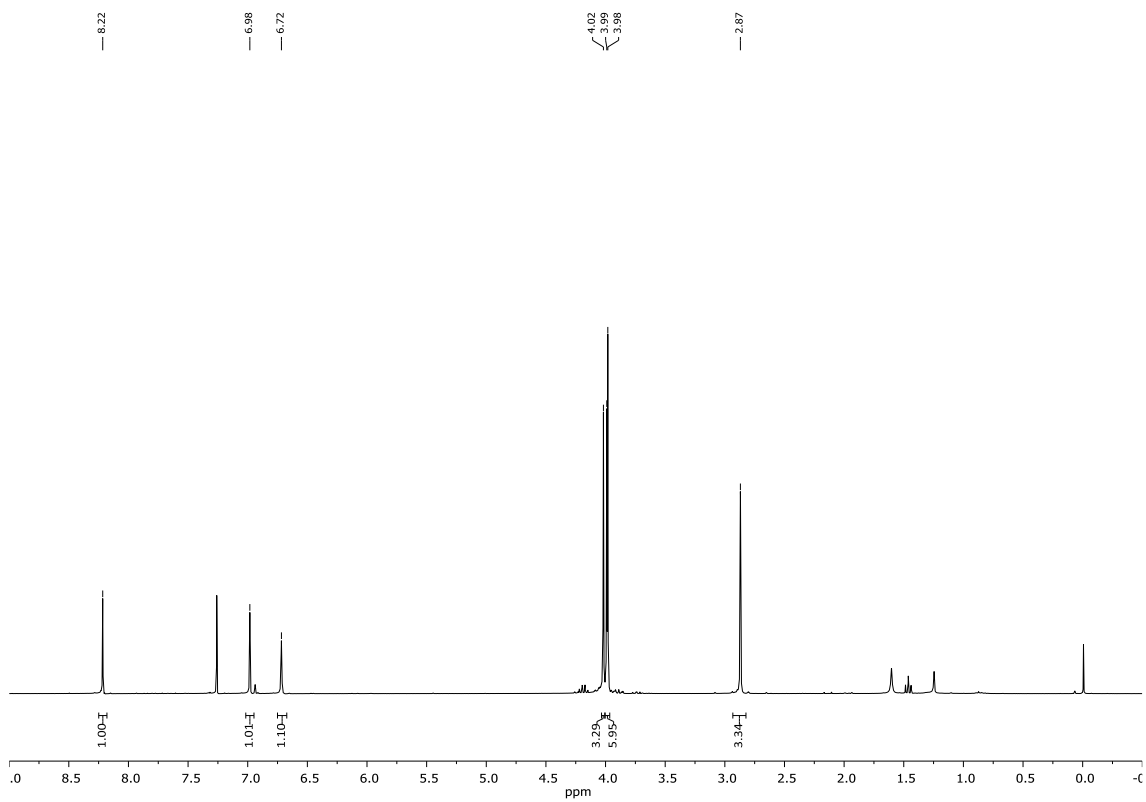


Figure S31. ^1H NMR spectrum of 7-chloro-3,4,6-trimethoxy-1-methyl-9H-xanthen-9-one (**20**) (CDCl_3 , 300 MHz).

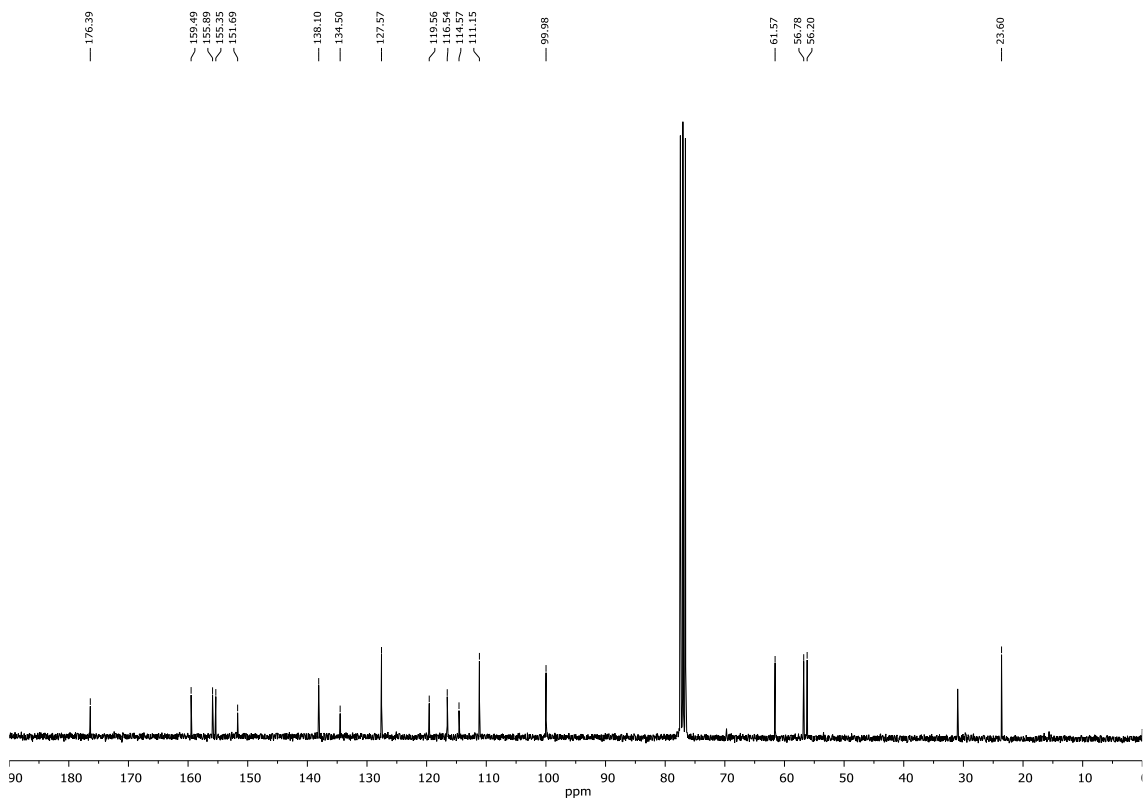


Figure S32. ^{13}C NMR spectrum of 7-chloro-3,4,6-trimethoxy-1-methyl-9H-xanthen-9-one (**20**) (CDCl_3 , 300 MHz).