

Supplementary materials

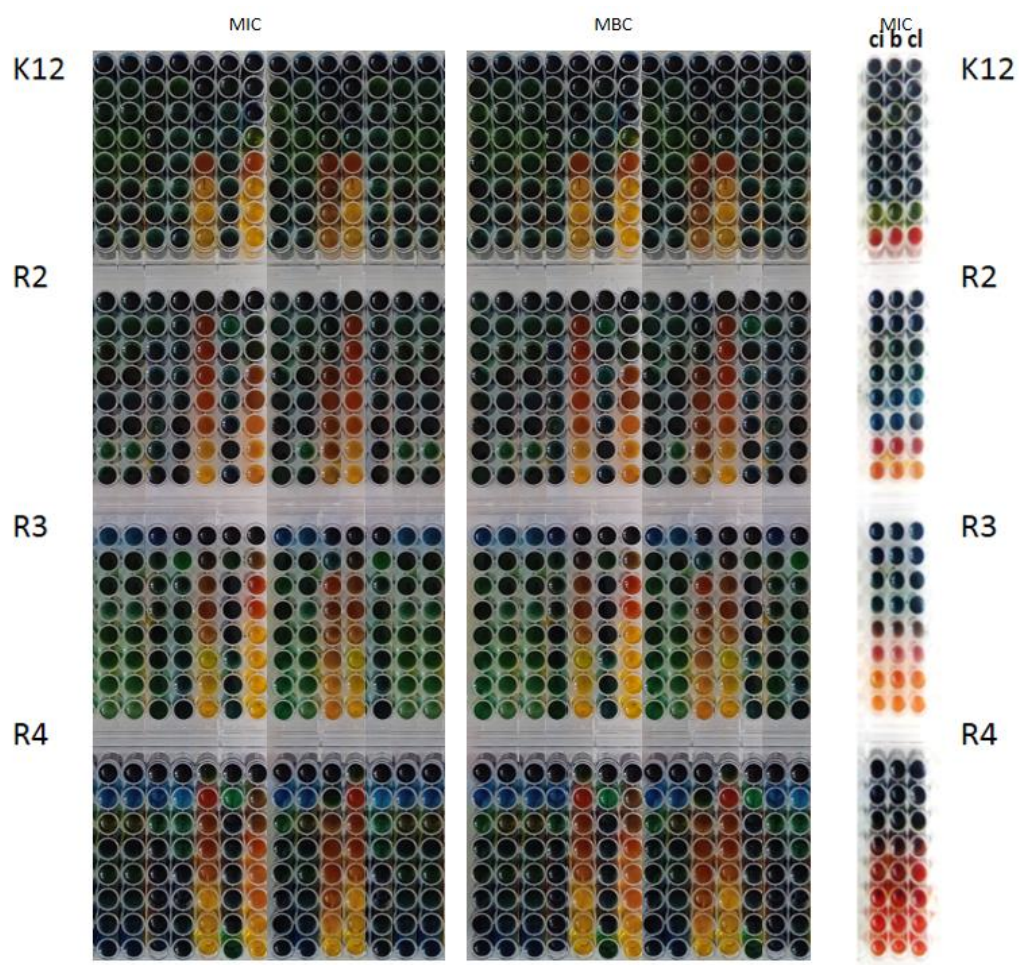
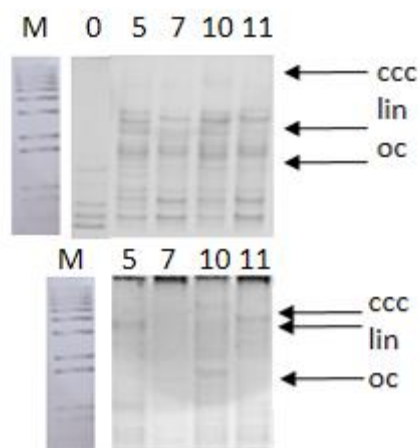


Figure S1. Examples of MIC and MBC on microplates with different concentration of studied compounds ($\mu\text{g/mL}^{-1}$). Resazurin was added as an indicator of microbial growth with K12, R2, R3, and R4 strains with tested compounds, as described in Figure 4 and 5. Additionally, examples of MIC with different strains K12, R2, R3, and R4 of studied antibiotics with ciprofloxacin (ci), bleomycin (b), and cloxacillin (cl) in ($\mu\text{g/mL}^{-1}$).

Panel A



Panel B

Figure S2. An example of an agarose gel electrophoresis separation of isolated plasmids DNA on R4 strains modified with selected coumarin derivatives (Panel A) from 4 selected compounds, as shown in Figure 3, and digested with repair Fpg protein (Panel B). M = marker.

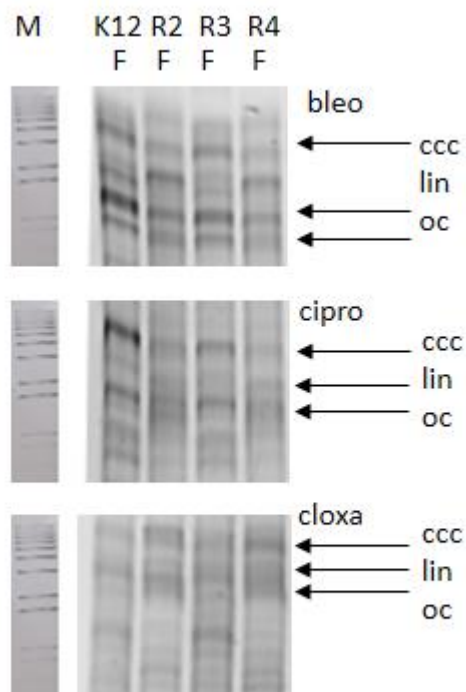


Figure S3. Example of an agarose gel electrophoresis separation of isolated plasmids DNA from K12 and R4 strains modified with antibiotics: bleomycin, ciprofloxacin, and cloxacillin digested (or not) with repair enzymes Fpg. M = marker.

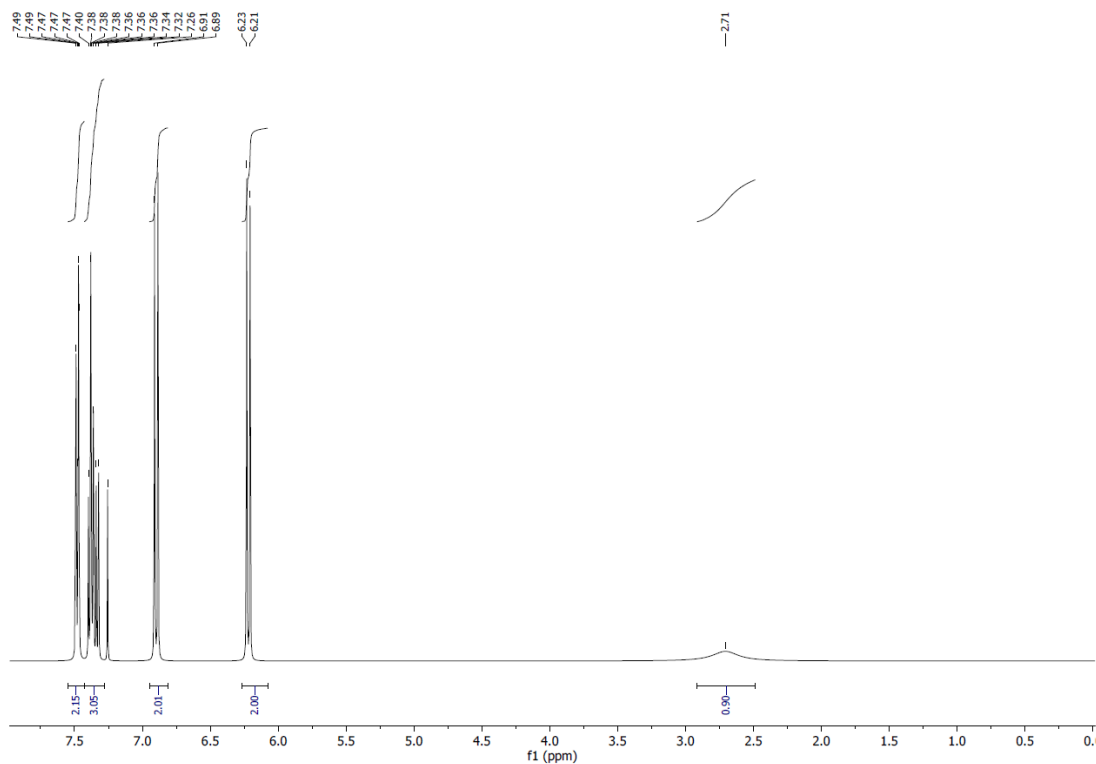


Figure S4. ¹H NMR spectra (400 MHz, CDCl₃) of 4-hydroxy-4-phenyl-cyclohexa-2,5-dienone (1)

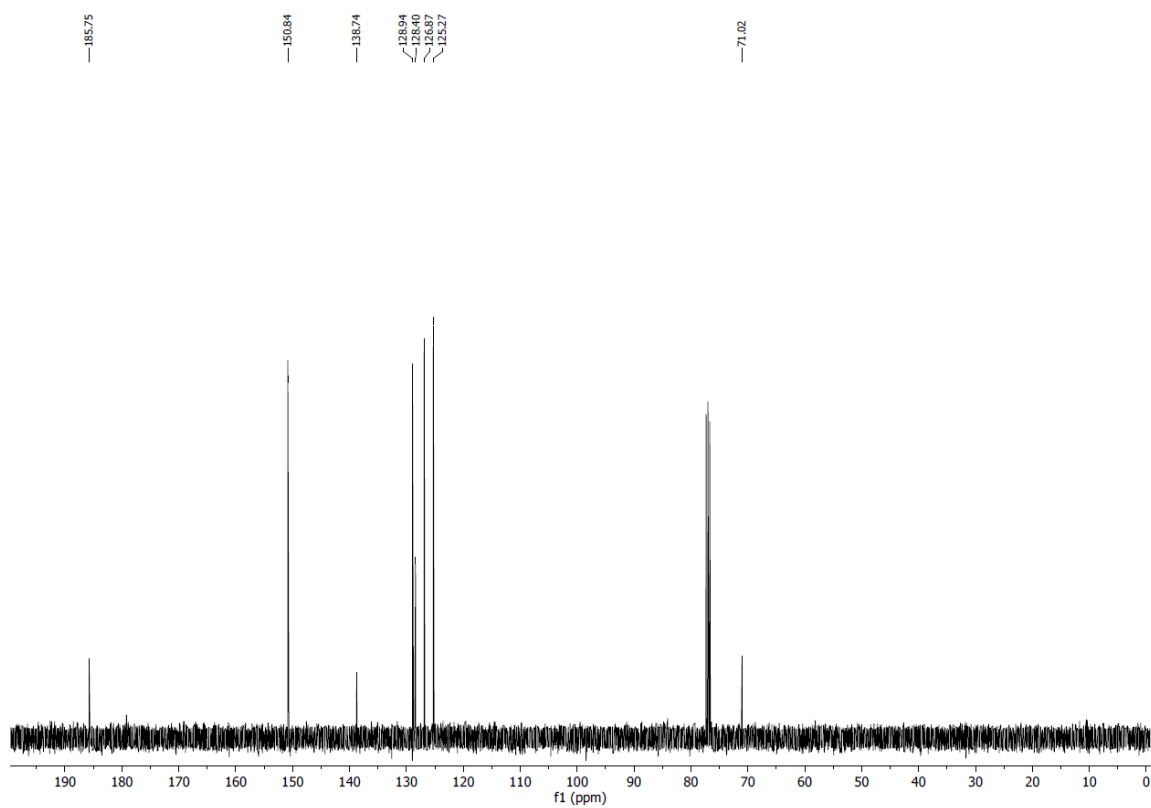


Figure S5. ¹³C NMR spectra (100 MHz, CDCl₃) of 4-hydroxy-4-phenyl-cyclohexa-2,5-dienone (1)

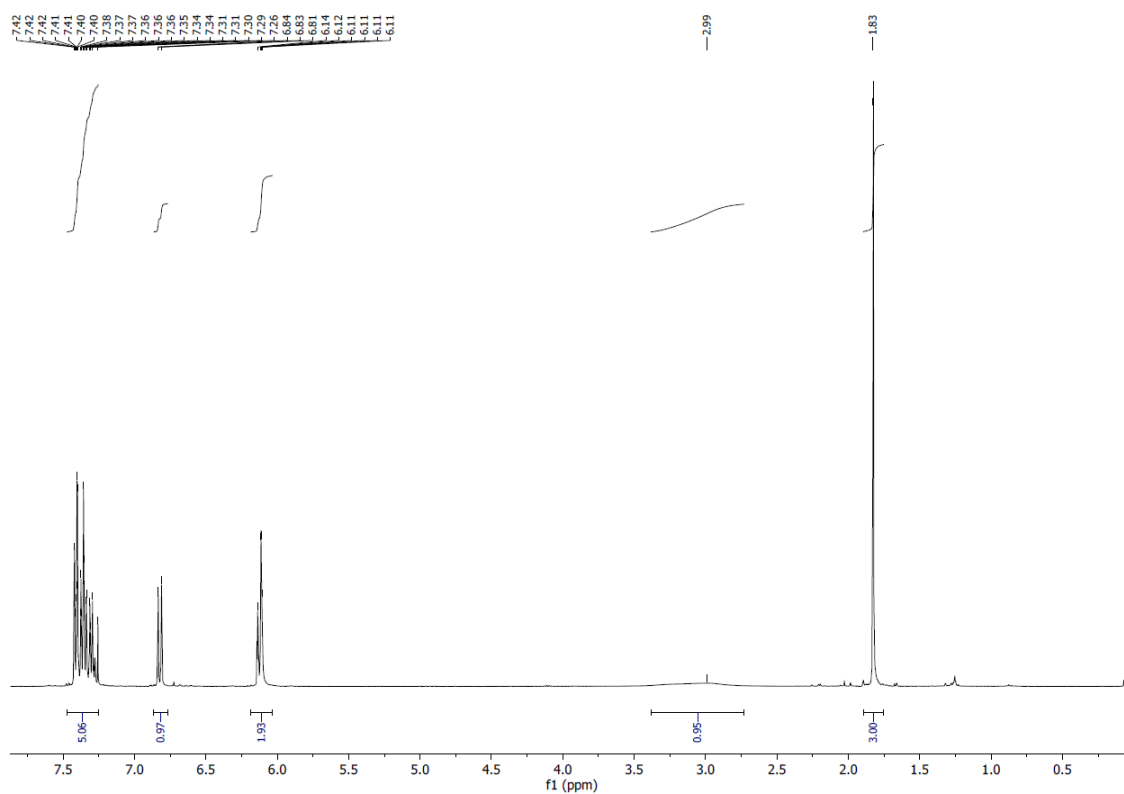


Figure S6. ^1H NMR spectra (400 MHz, CDCl_3) of 4-hydroxy-2-methyl-4-phenyl-2,5-cyclohexadienone (2)

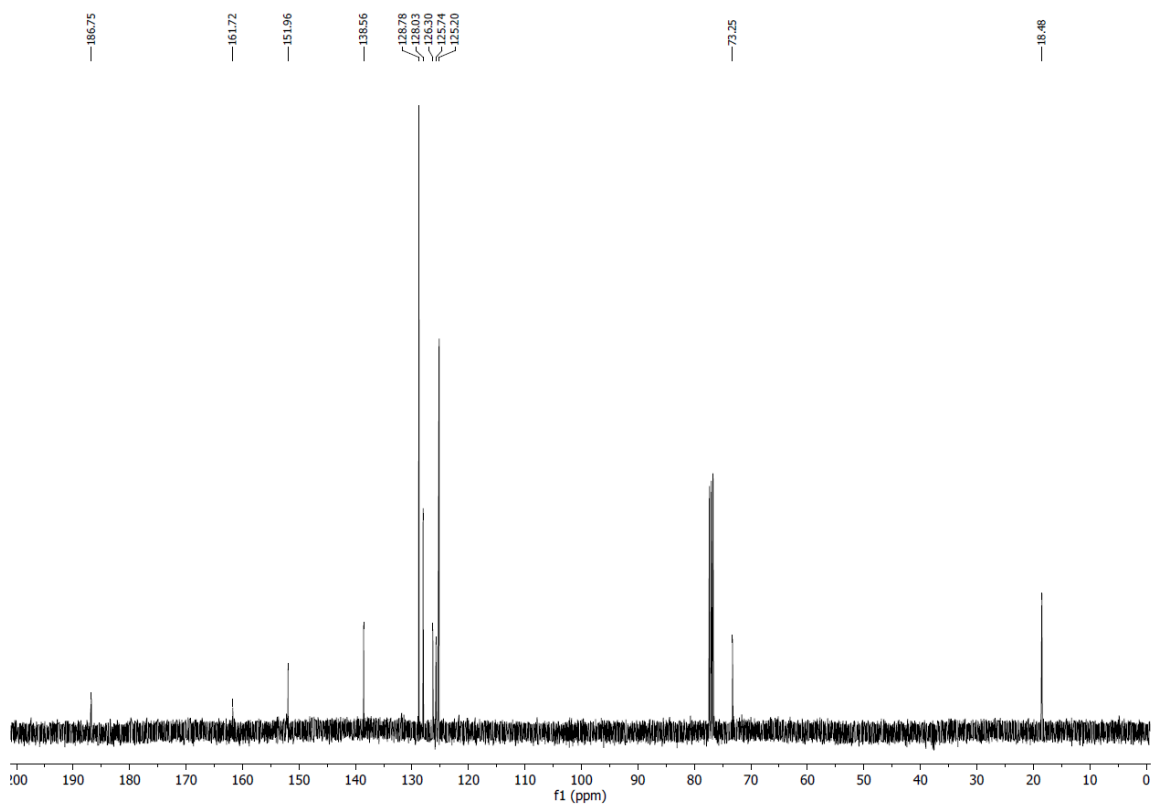


Figure S7. ^{13}C NMR spectra (100 MHz, CDCl_3) of 4-hydroxy-2-methyl-4-phenyl-2,5-cyclohexadienone (2)

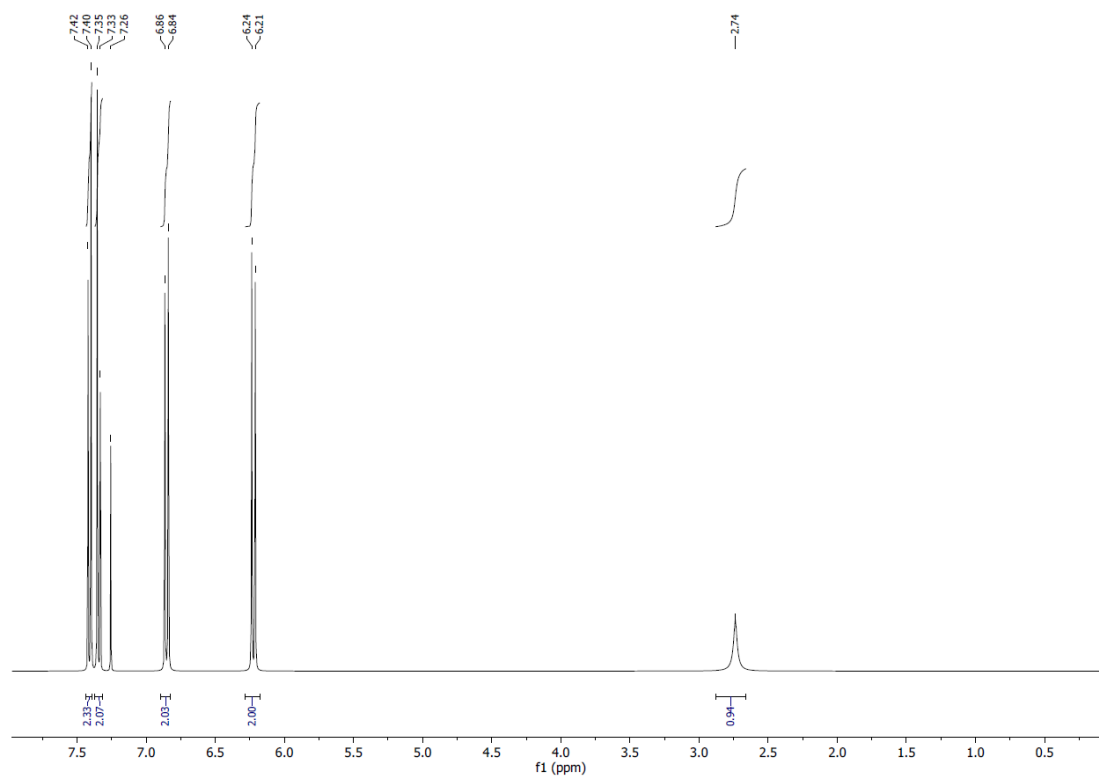


Figure S8. ¹H NMR spectra (400 MHz, CDCl₃) of 4-hydroxy-4-(4'-chloro)-phenyl-cyclohexa-2,5-dienone (3)

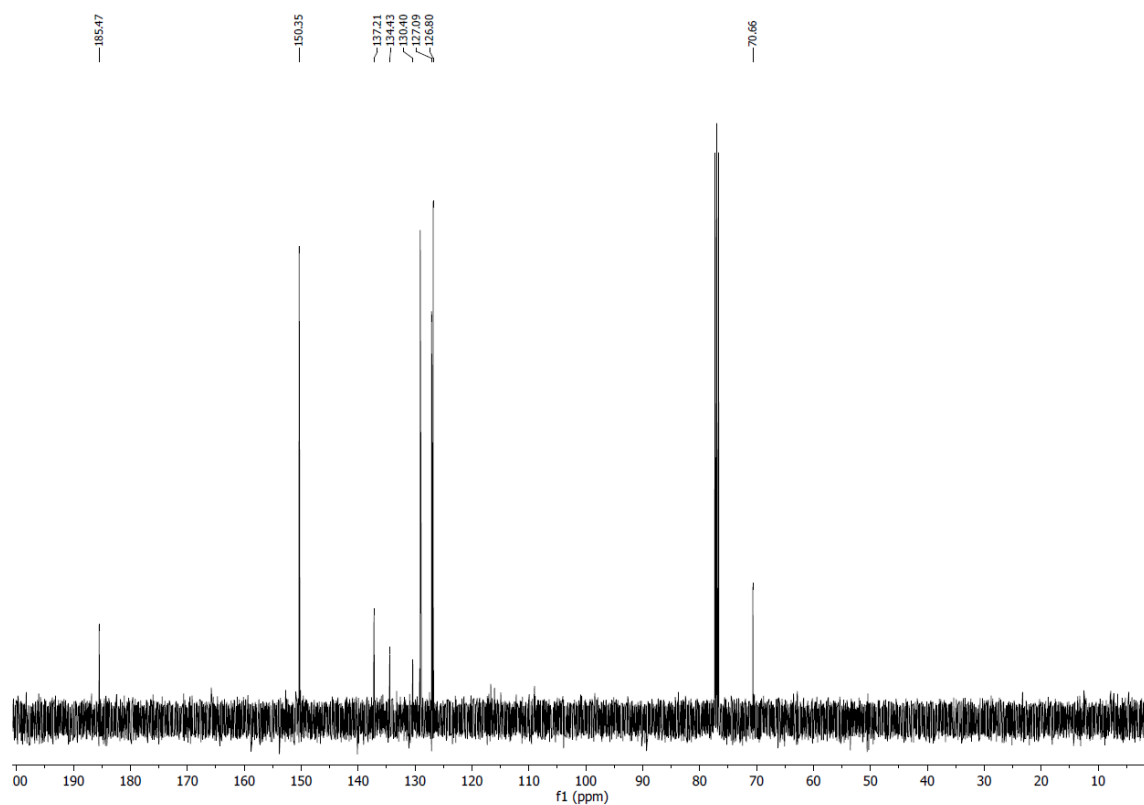


Figure S9. ¹³C NMR spectra (100 MHz, CDCl₃) of 4-hydroxy-4-(4'-chloro)-phenyl-cyclohexa-2,5-dienone (3)

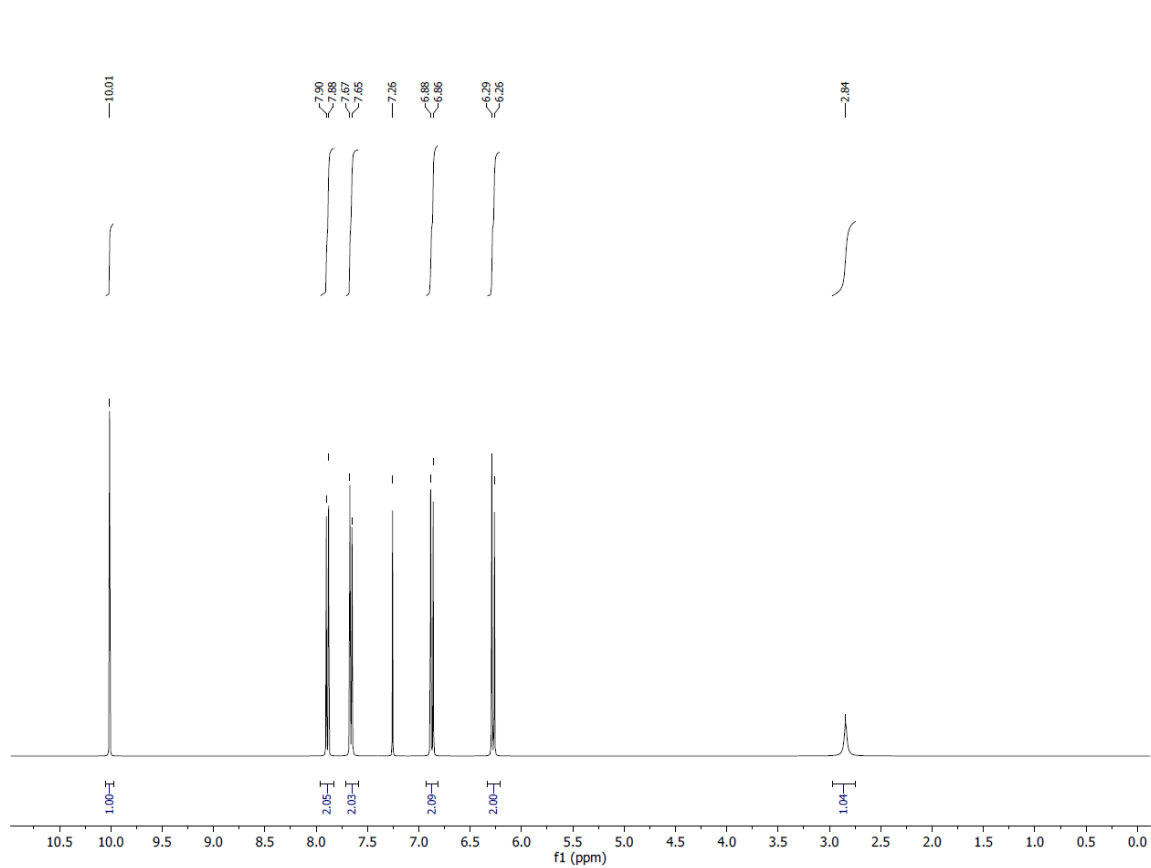


Figure S10. ¹H NMR spectra (400 MHz, CDCl₃) of 4-hydroxy-4-(4'-formyl)-phenyl-cyclohexa-2,5-dienone (4)

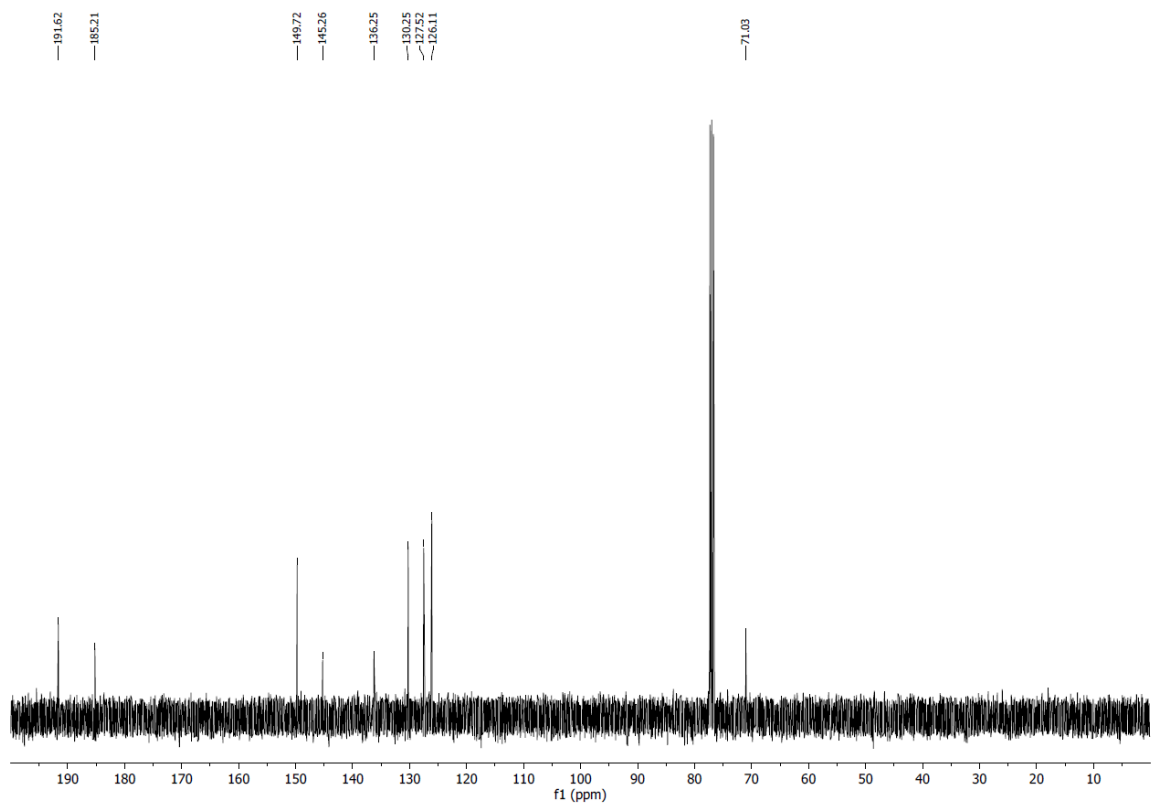


Figure S11. ¹³C NMR spectra (100 MHz, CDCl₃) of 4-hydroxy-4-(4'-formyl)-phenyl-cyclohexa-2,5-dienone (4)

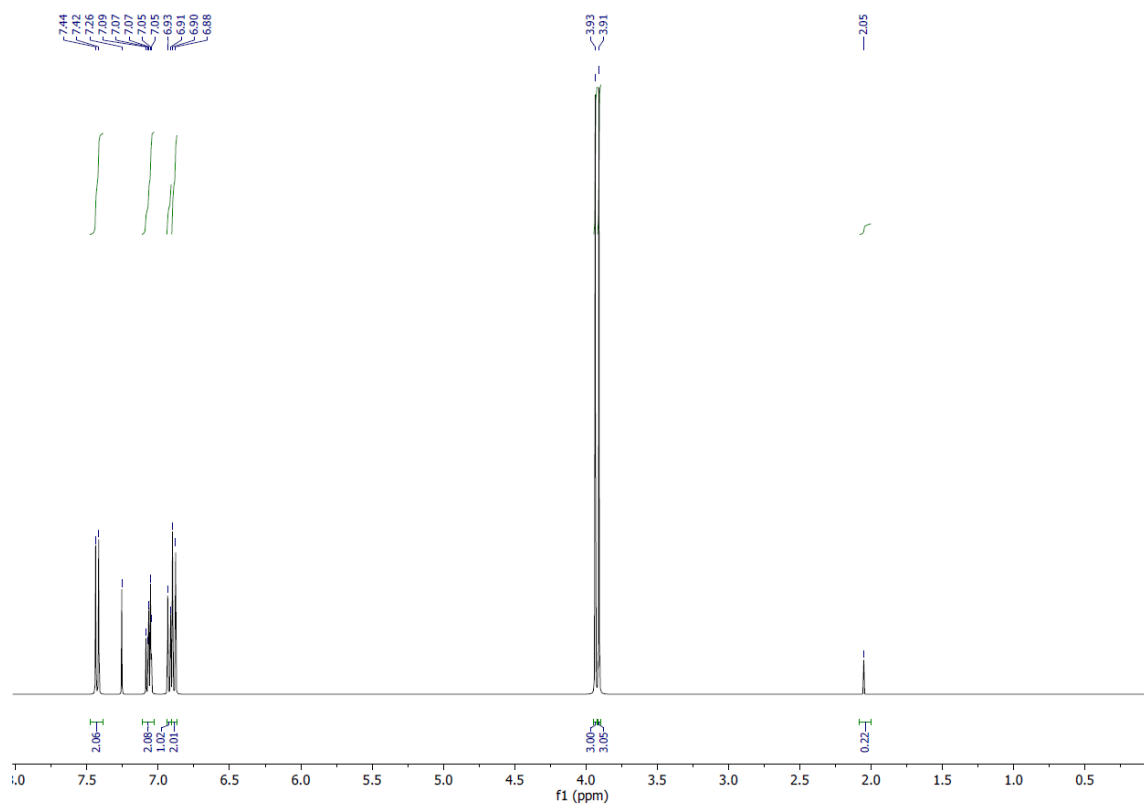


Figure S12. ¹H NMR spectra (400 MHz, CDCl₃) of 4-(3,4-dimethoxyphenyl)-4-hydroxycyclohexa-2,5-dien-1-one (5)

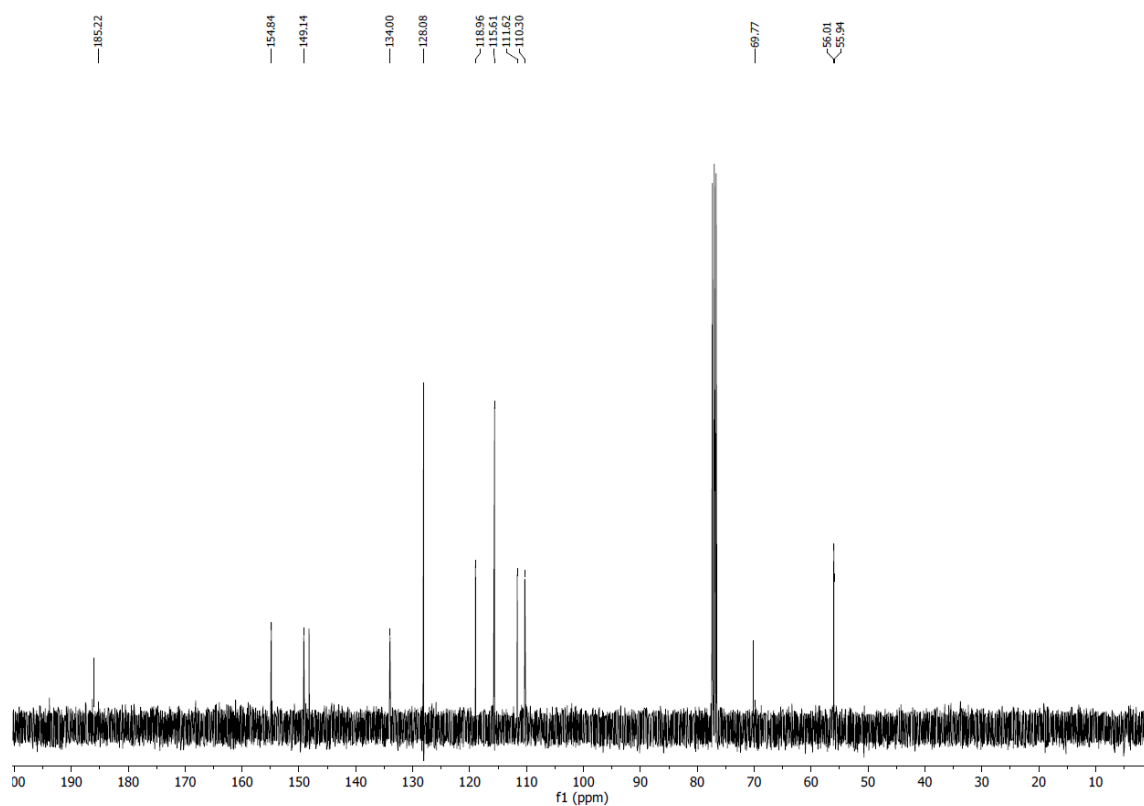
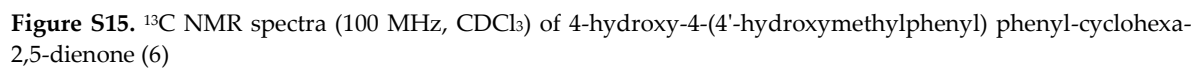
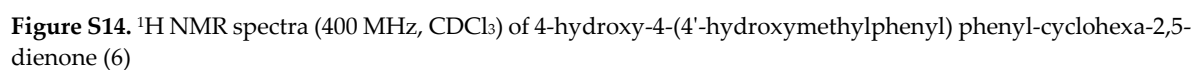


Figure S13. ¹³C NMR spectra (100 MHz, CDCl₃) of 4-(3,4-dimethoxyphenyl)-4-hydroxycyclohexa-2,5-dien-1-one (5)



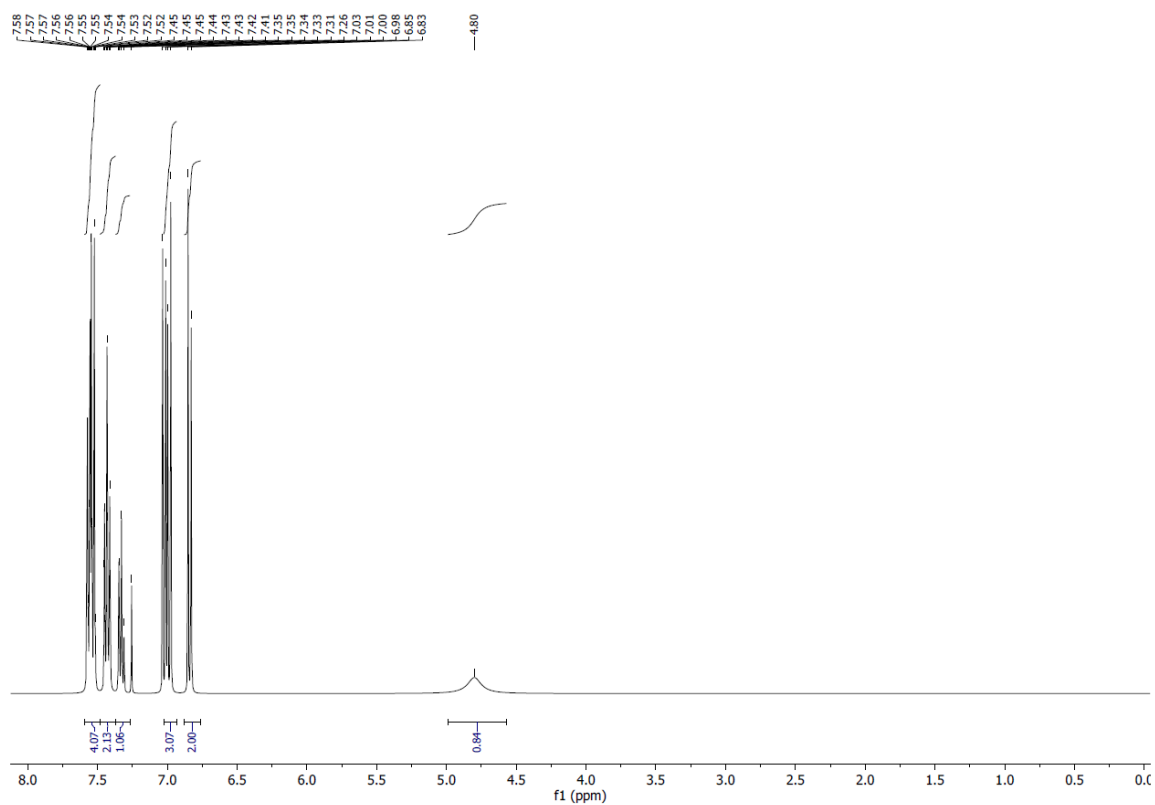


Figure S16. ¹H NMR spectra (400 MHz, CDCl₃) of 4-hydroxy-4-(4'-biphenyl) phenyl-cyclohexa-2,5-dienone (7)

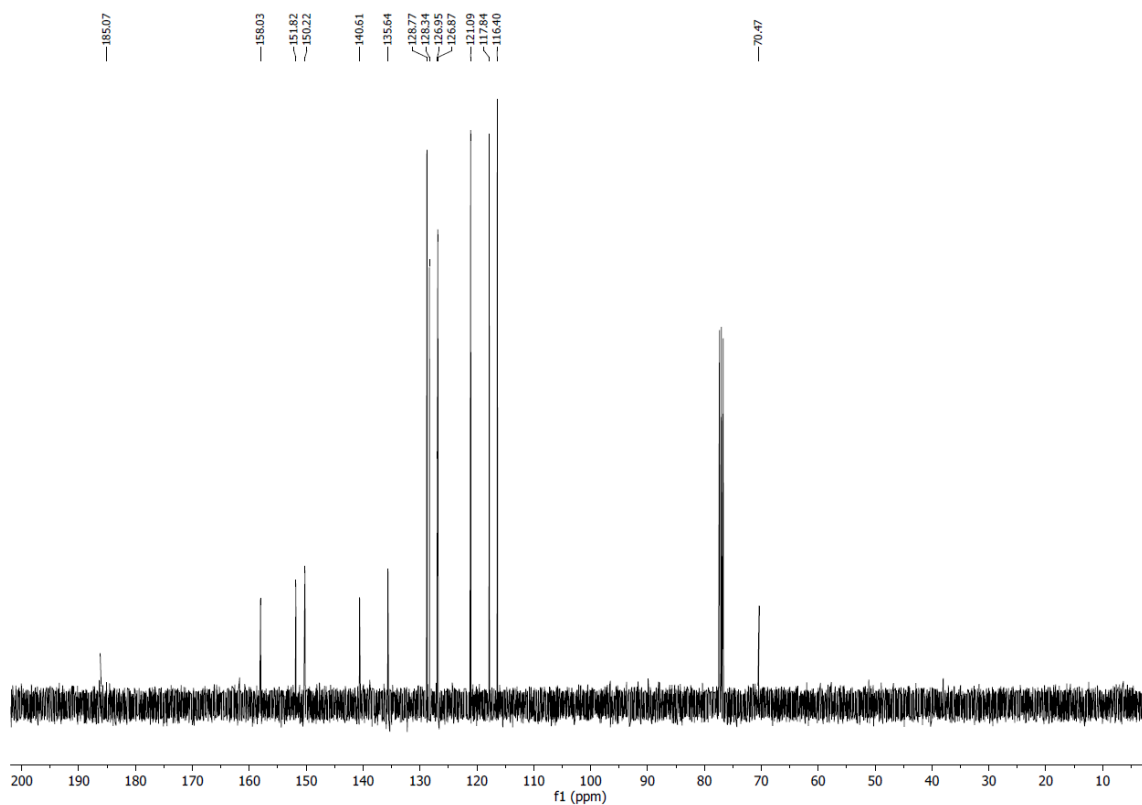


Figure S17. ¹³C NMR spectra (100 MHz, CDCl₃) of 4-hydroxy-4-(4'-biphenyl) phenyl-cyclohexa-2,5-dienone (7)

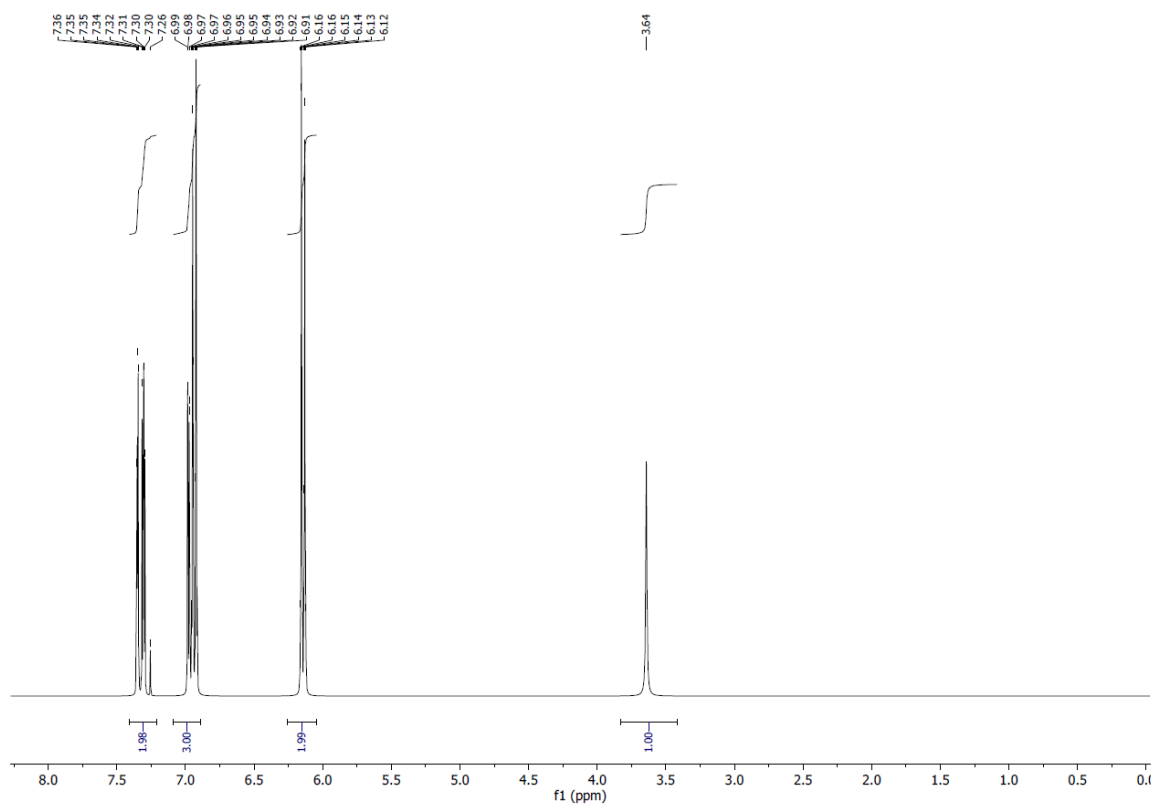


Figure S18. ^1H NMR spectra (400 MHz, CDCl_3) of 4-hydroxy-4-(thiophen-3-yl) phenyl-cyclohexa-2,5-dienone (8)

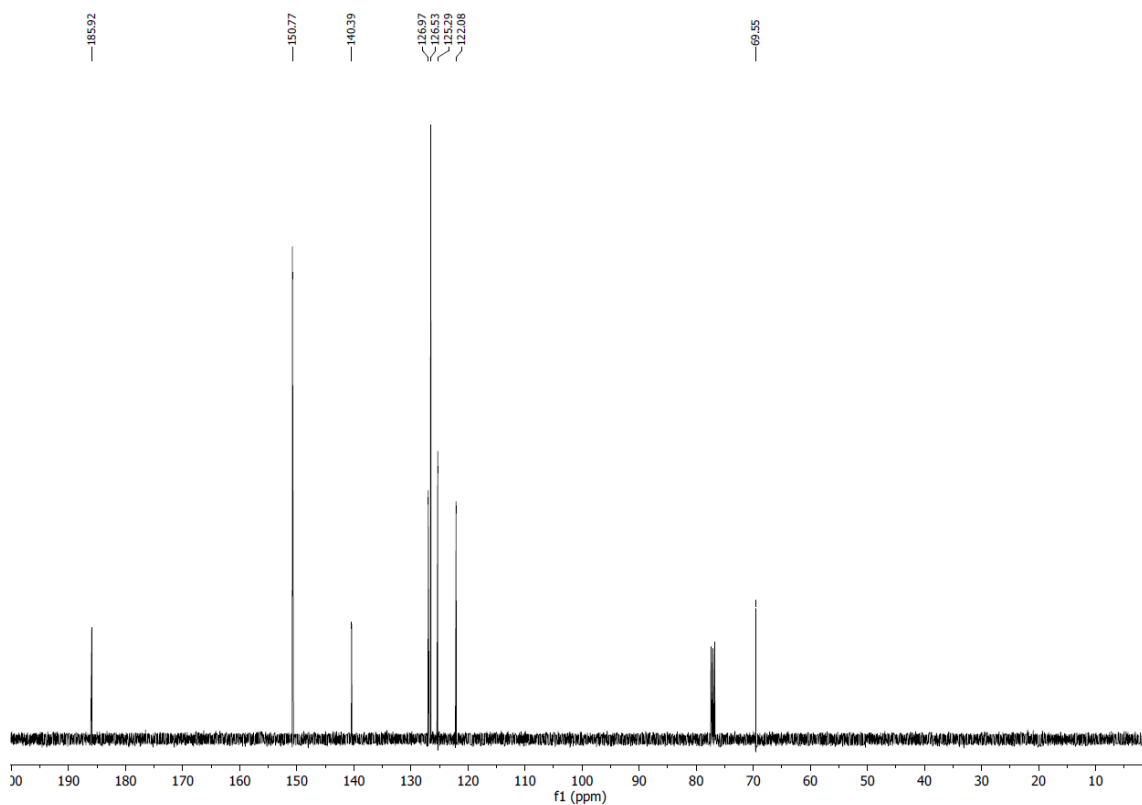


Figure S19. ^{13}C NMR spectra (100 MHz, CDCl_3) of 4-hydroxy-4-(thiophen-3-yl) phenyl-cyclohexa-2,5-dienone (8)

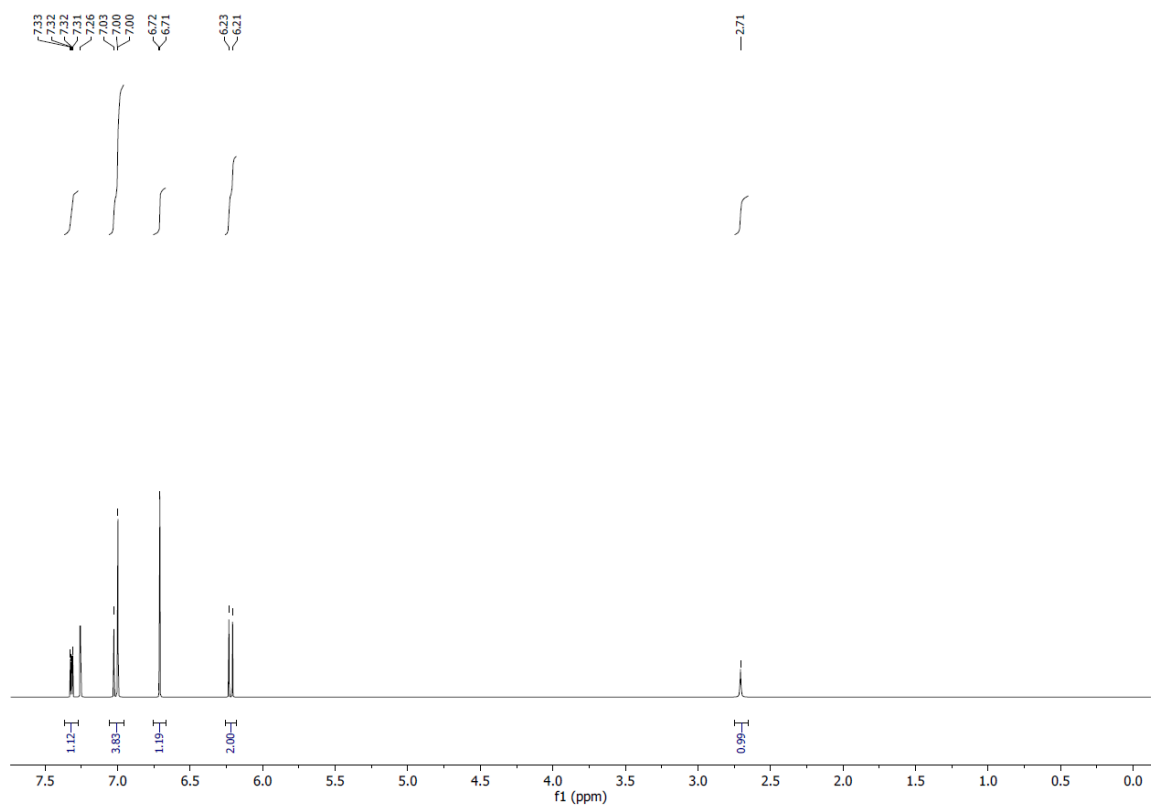


Figure S20. ¹H NMR spectra (400 MHz, CDCl₃) of 4-hydroxy-4-(furan-3-yl) phenyl-cyclohexa-2,5-dienone (9)

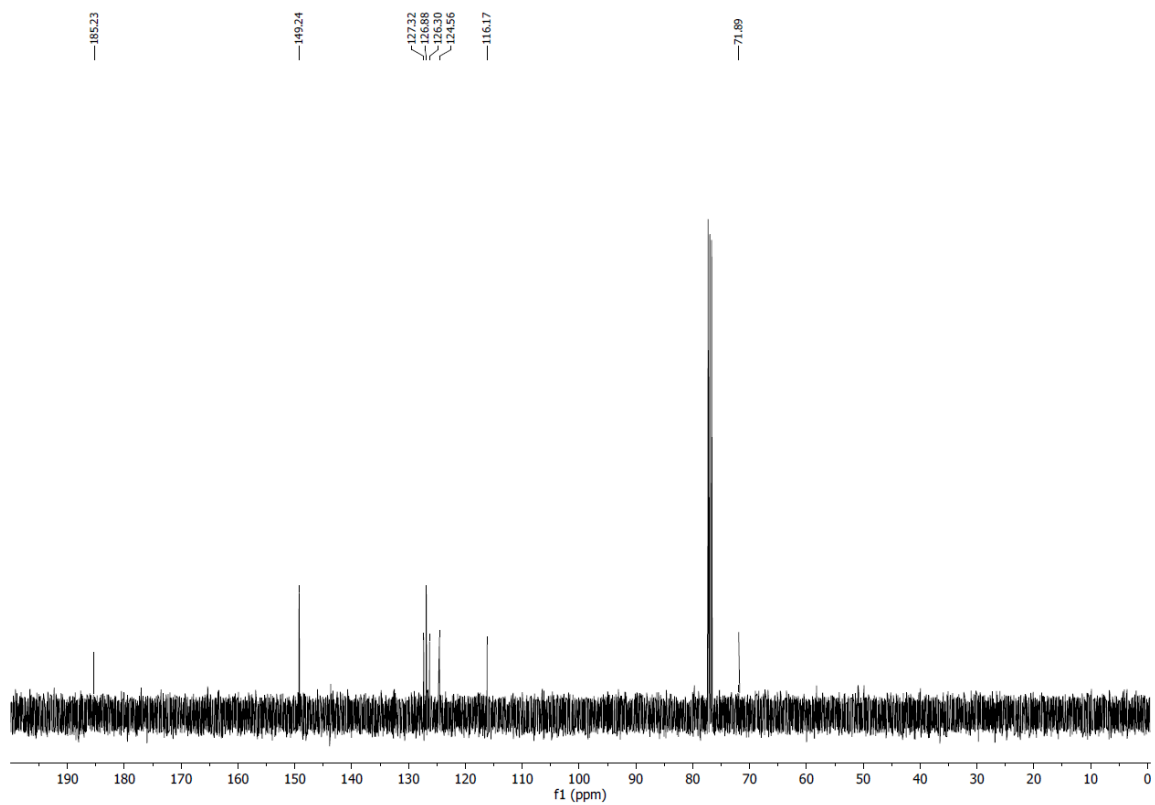


Figure S21. ¹³C NMR spectra (100 MHz, CDCl₃) of 4-hydroxy-4-(furan-3-yl) phenyl-cyclohexa-2,5-dienone (9)

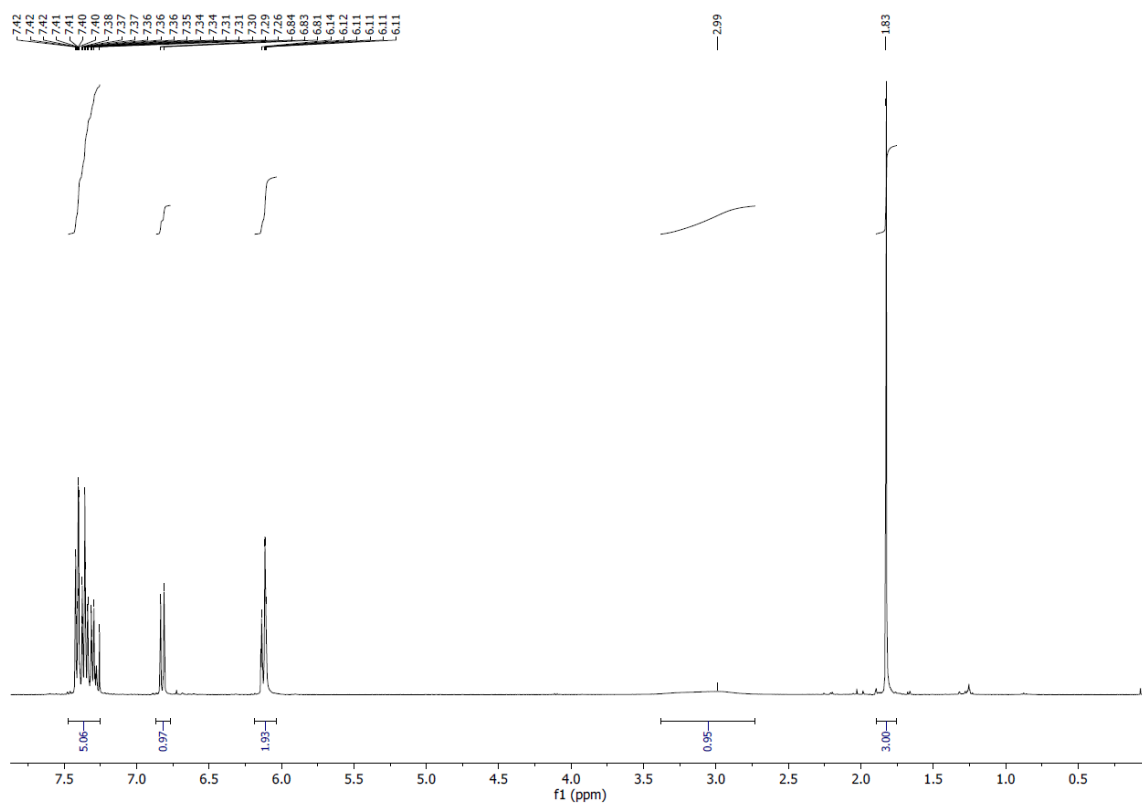


Figure S22. ¹H NMR spectra (400 MHz, CDCl₃) of 4-hydroxy-2-methyl-4-phenyl-2,5-cyclohexadienone (10)

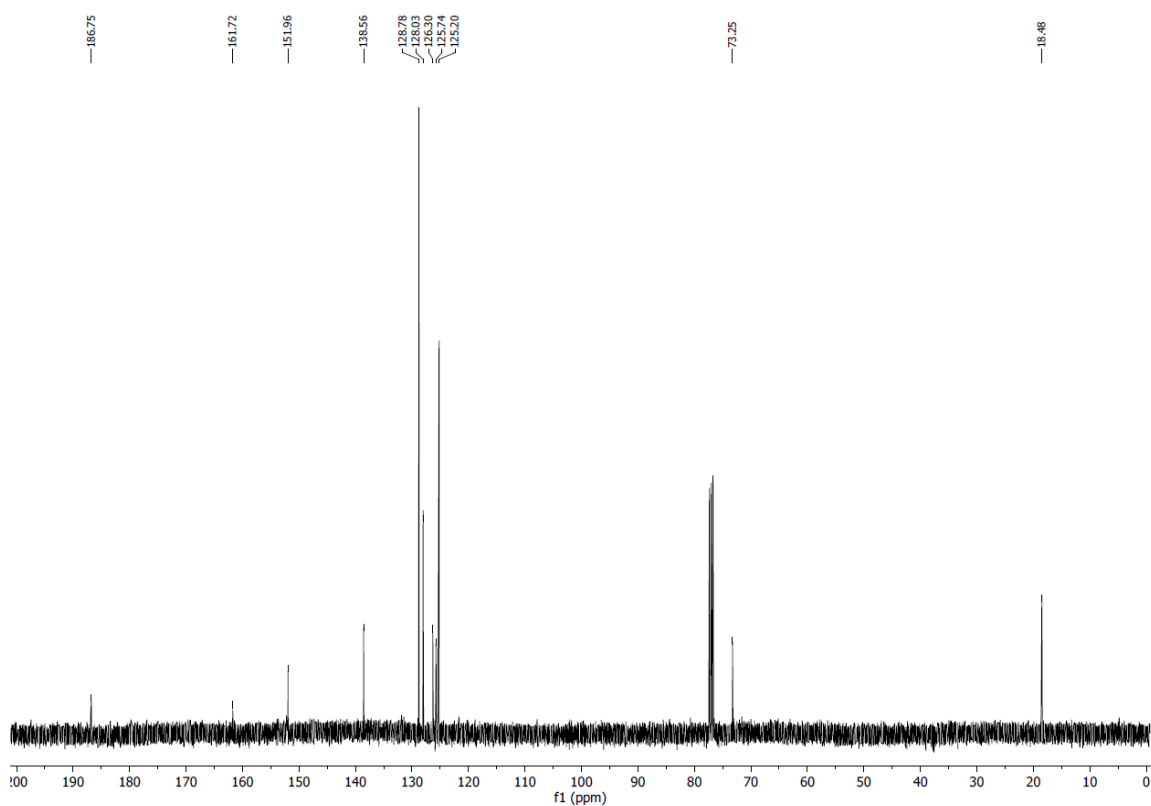


Figure S23. ¹³C NMR spectra (100 MHz, CDCl₃) of 4-hydroxy-2-methyl-4-phenyl-2,5-cyclohexadienone (10)

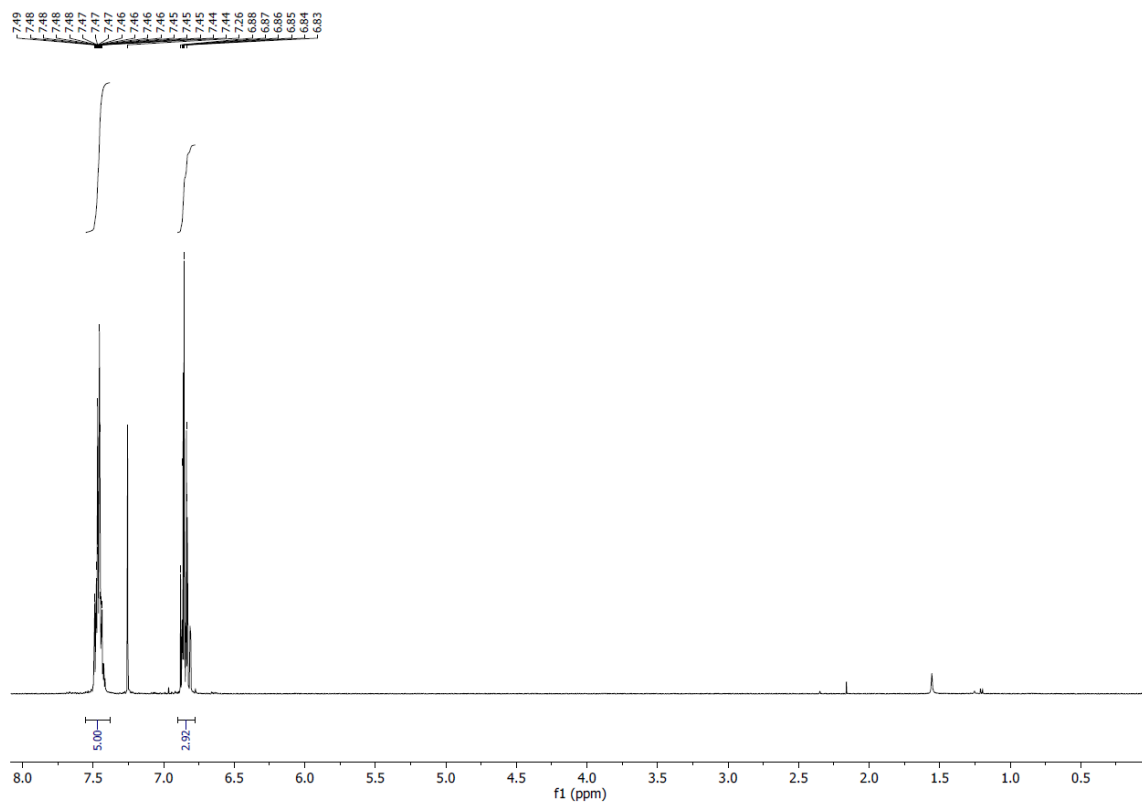


Figure S24. ^1H NMR spectra (400 MHz, CDCl_3) of 2-phenyl-1,4-benzoquinone (15)

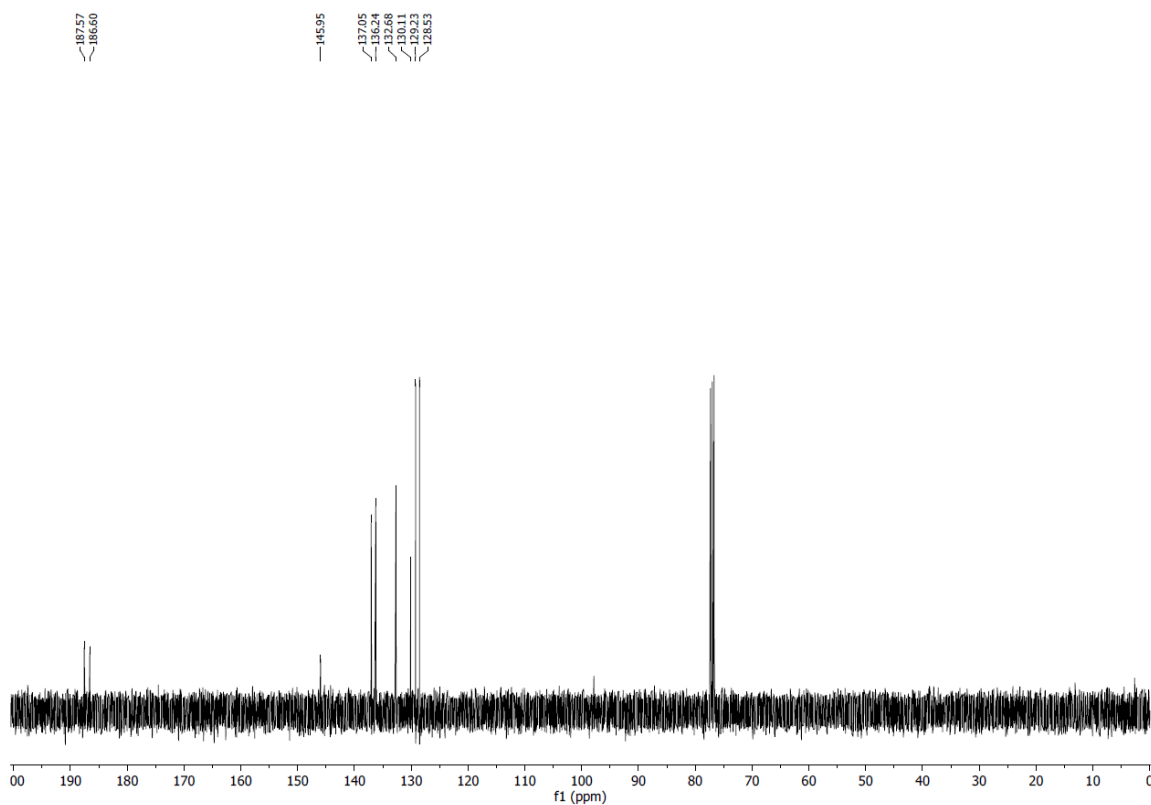


Figure S25. ^{13}C NMR spectra (100 MHz, CDCl_3) of 2-phenyl-1,4-benzoquinone (15)