

Supplementary Material

Structural Modification and Optimization of Hyperoside Oriented to Inhibit TGF- β Induced EMT Activity in Alveolar Epithelial Cells

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Experimental procedures and characterisation of all new compounds including ^1H ,
 ^{13}C NMR

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Figure S31. ^1H NMR spectra of compound **Z7**

Figure S32. ^{13}C NMR spectra of compound **Z7**

Figure S33 Effect of hypericin and its derivatives 48h on the activity of A549 cells

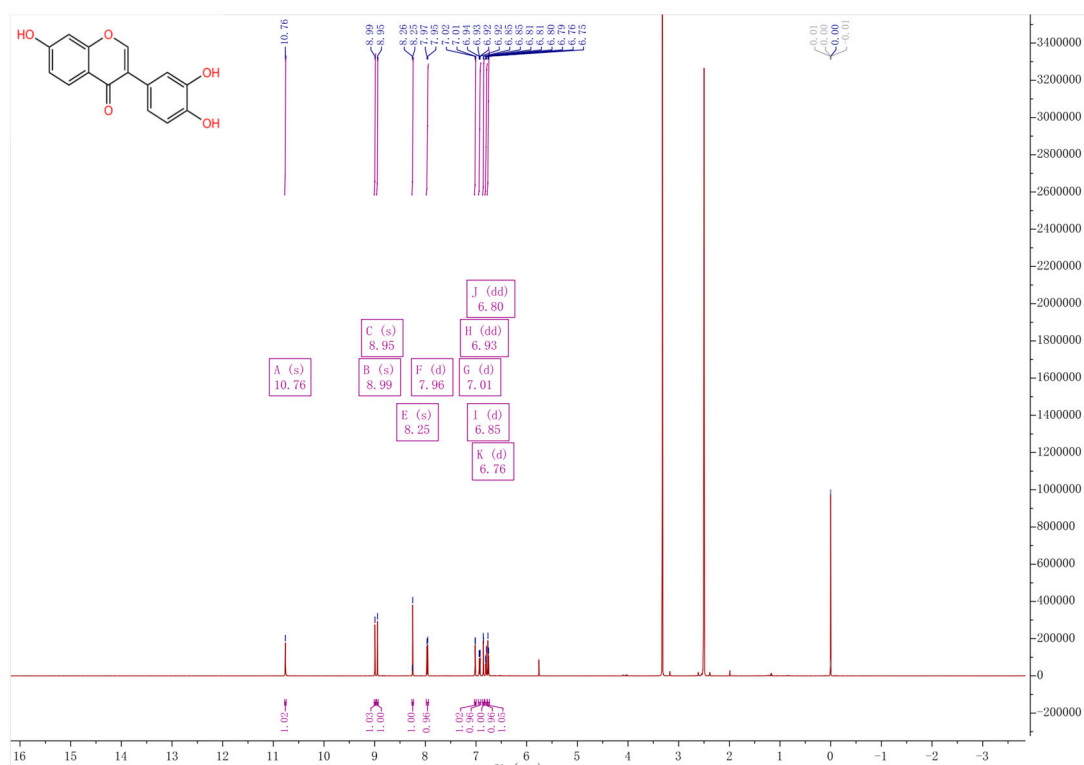


Figure S1. ¹H NMR spectra of compound **G0**

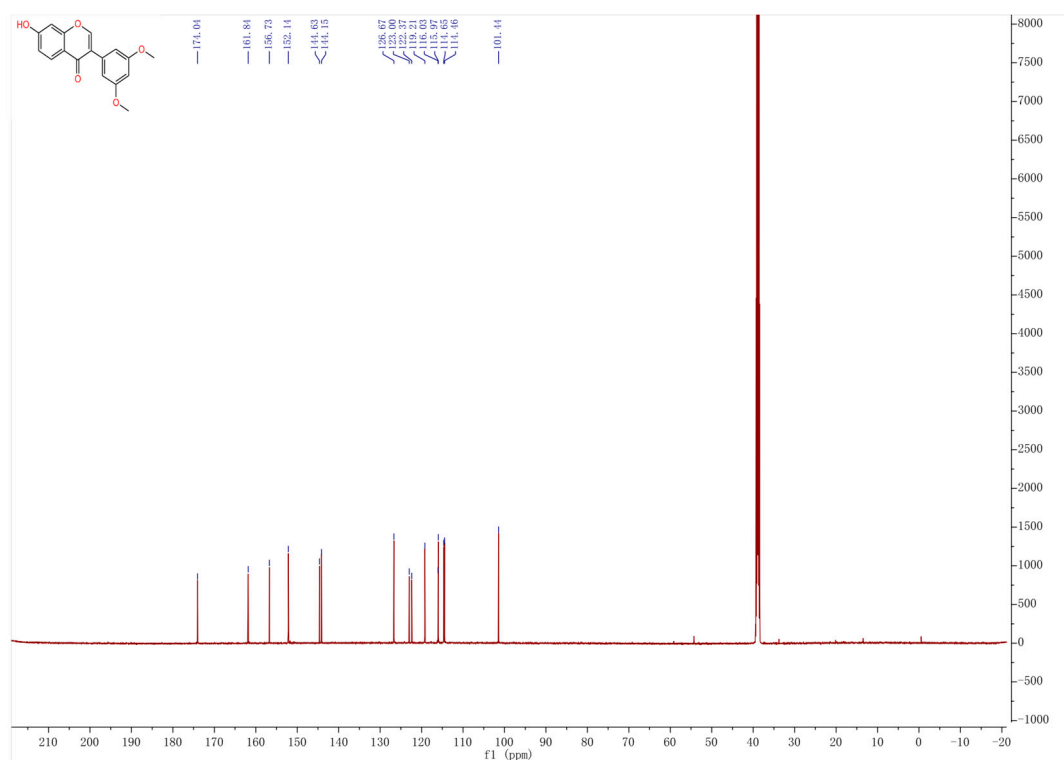


Figure S2. ¹³C NMR spectra of compound **G0**

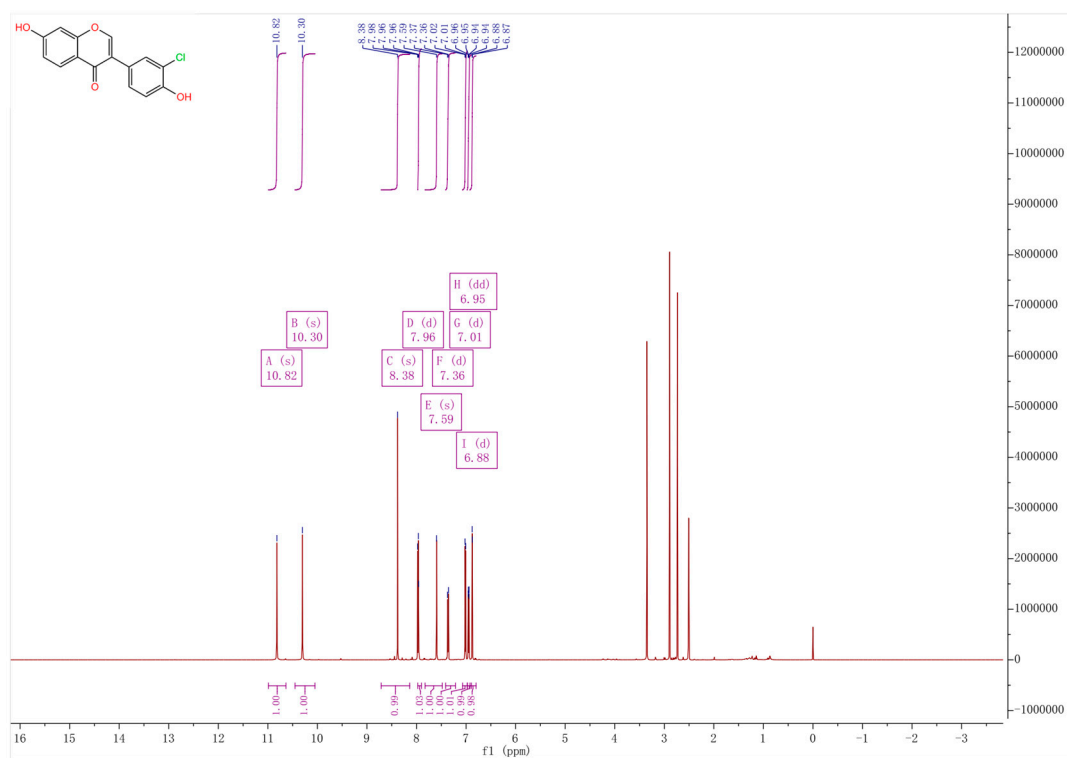


Figure S3. ¹H NMR spectra of compound G1

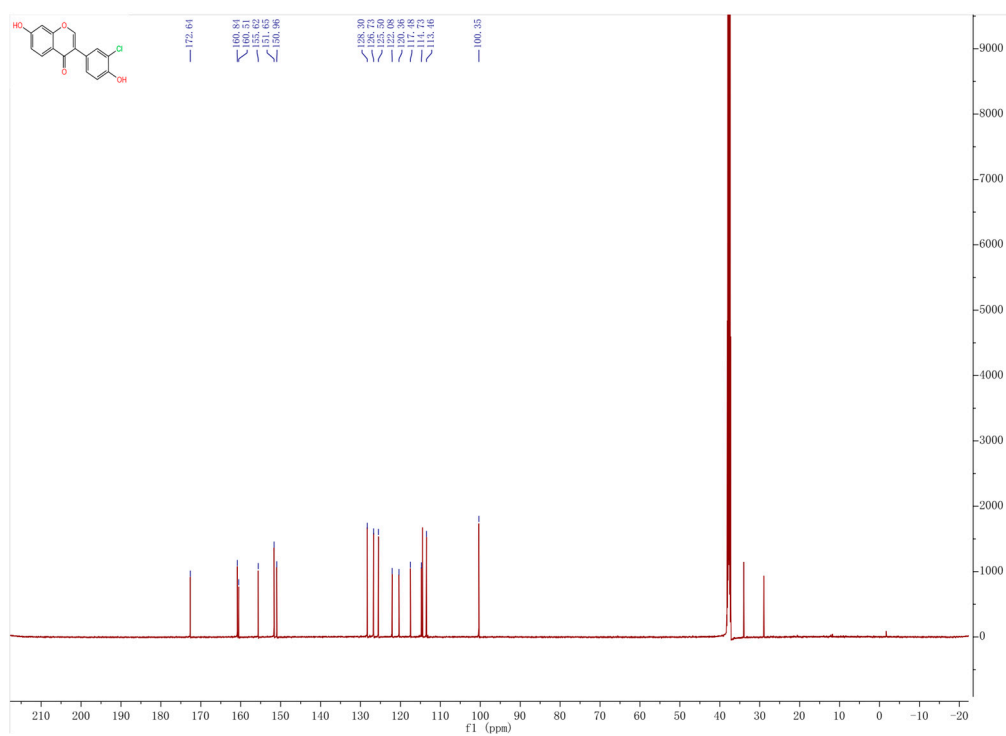


Figure S4. ¹³C NMR spectra of compound G1

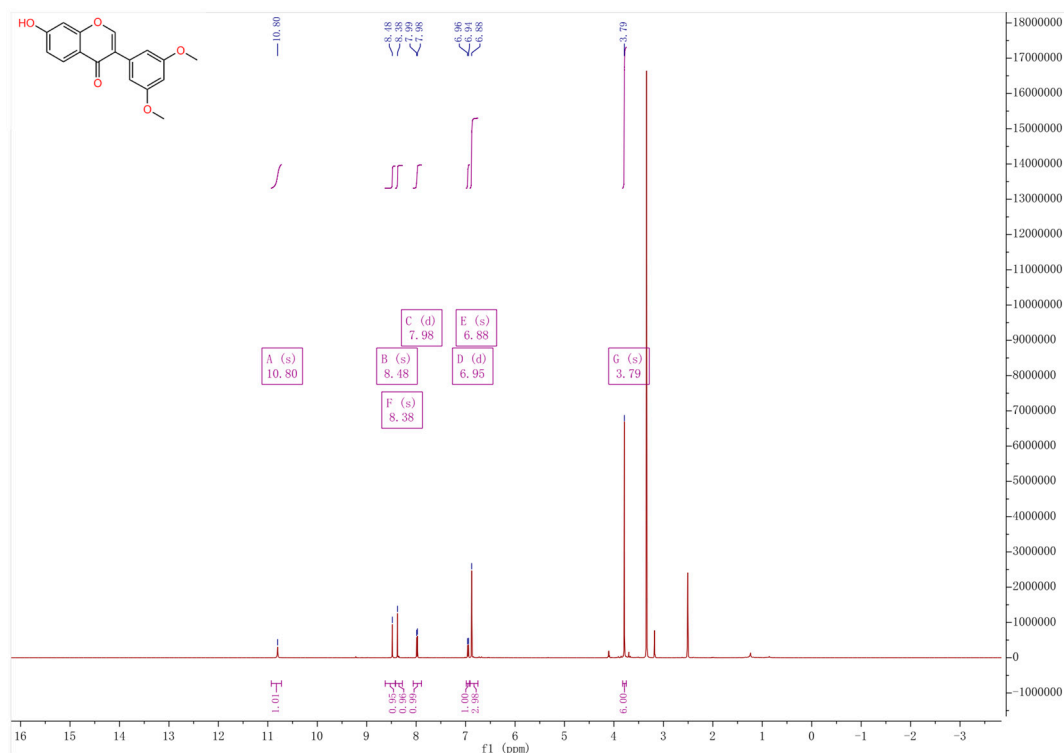


Figure S5. ^1H NMR spectra of compound G2

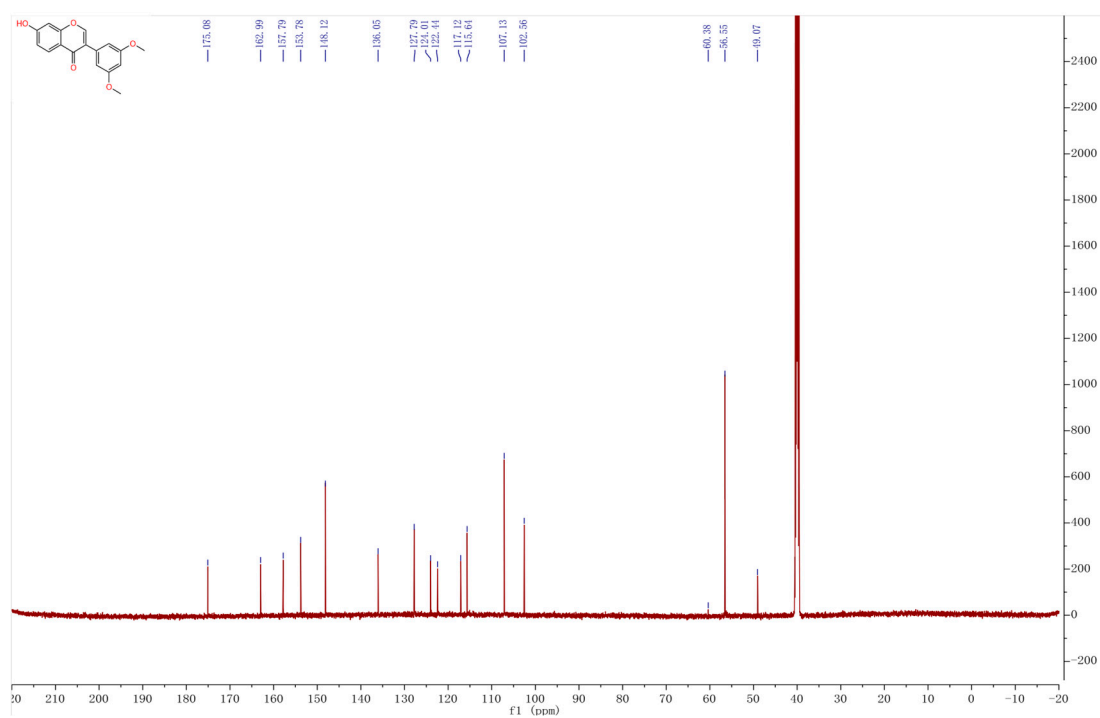


Figure S6. ^{13}C NMR spectra of compound G2

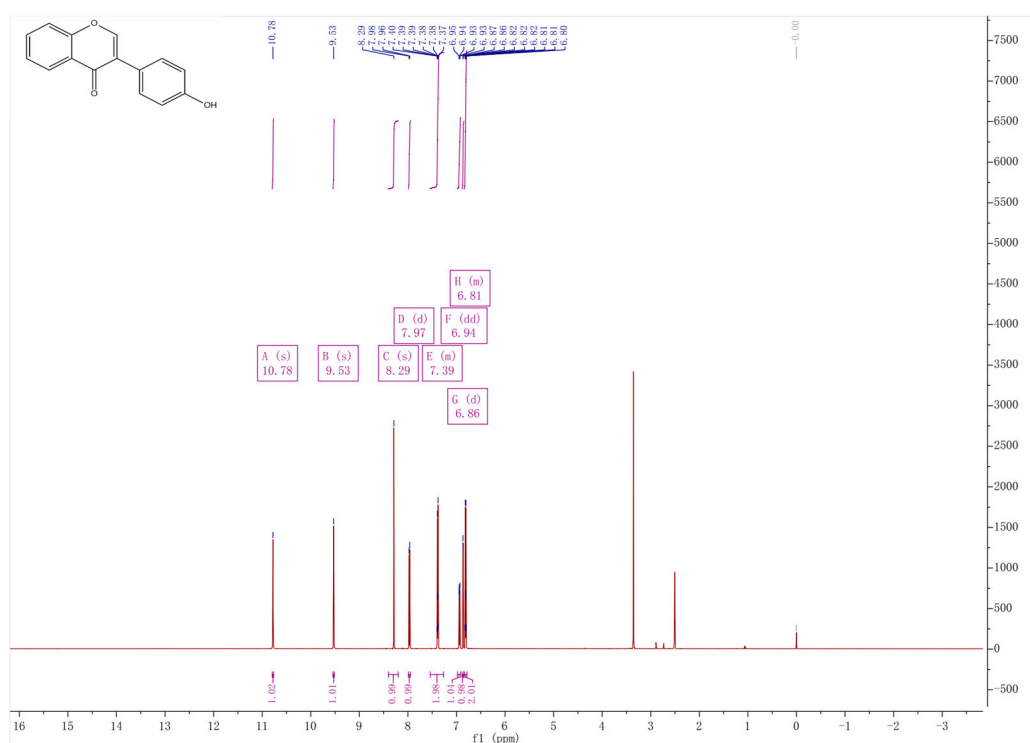


Figure S9. ¹H NMR spectra of compound G4

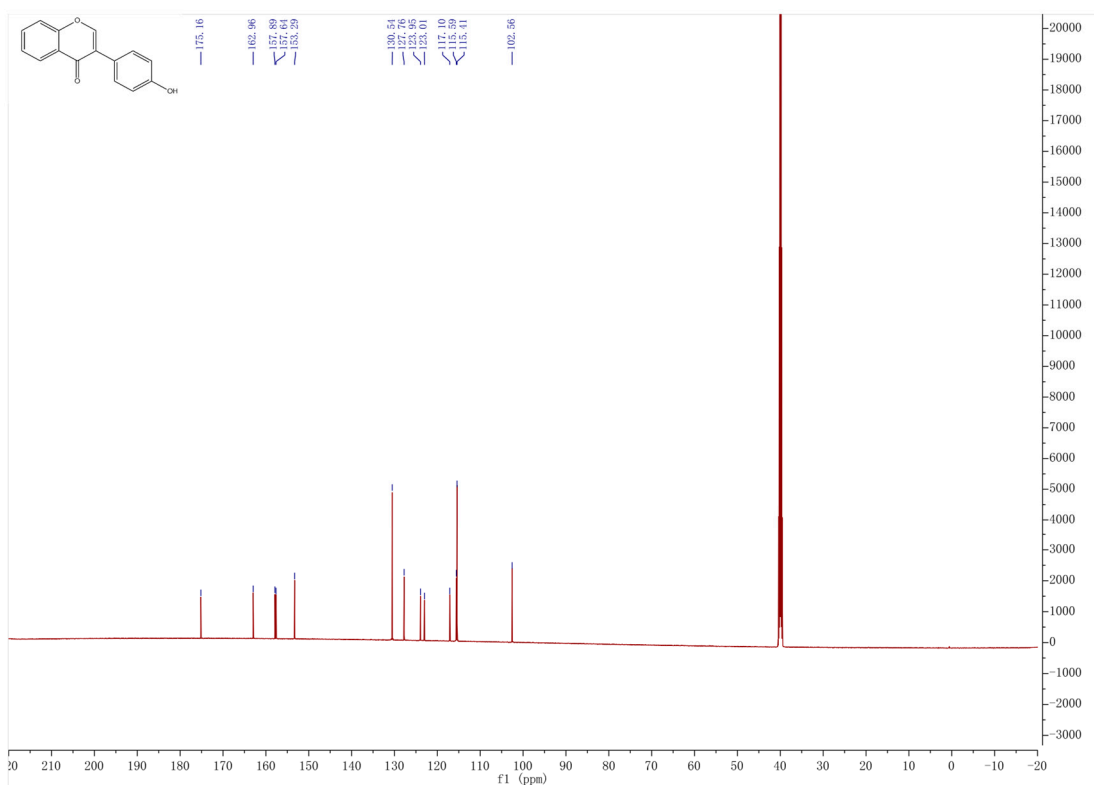


Figure S10. ¹³C NMR spectra of compound G4

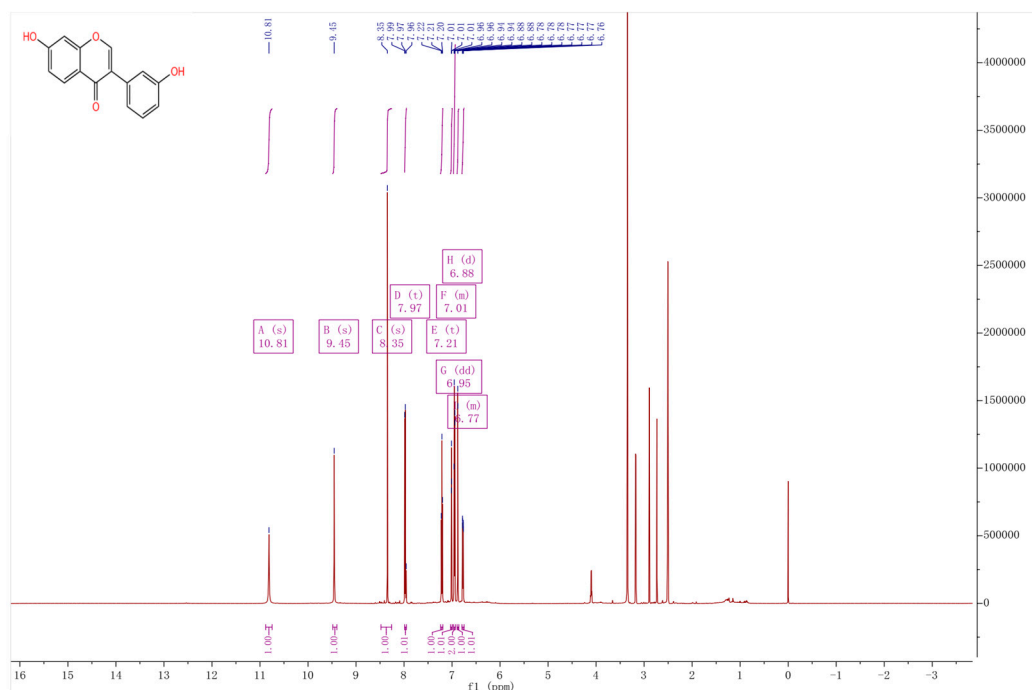


Figure S11. ¹H NMR spectra of compound G5

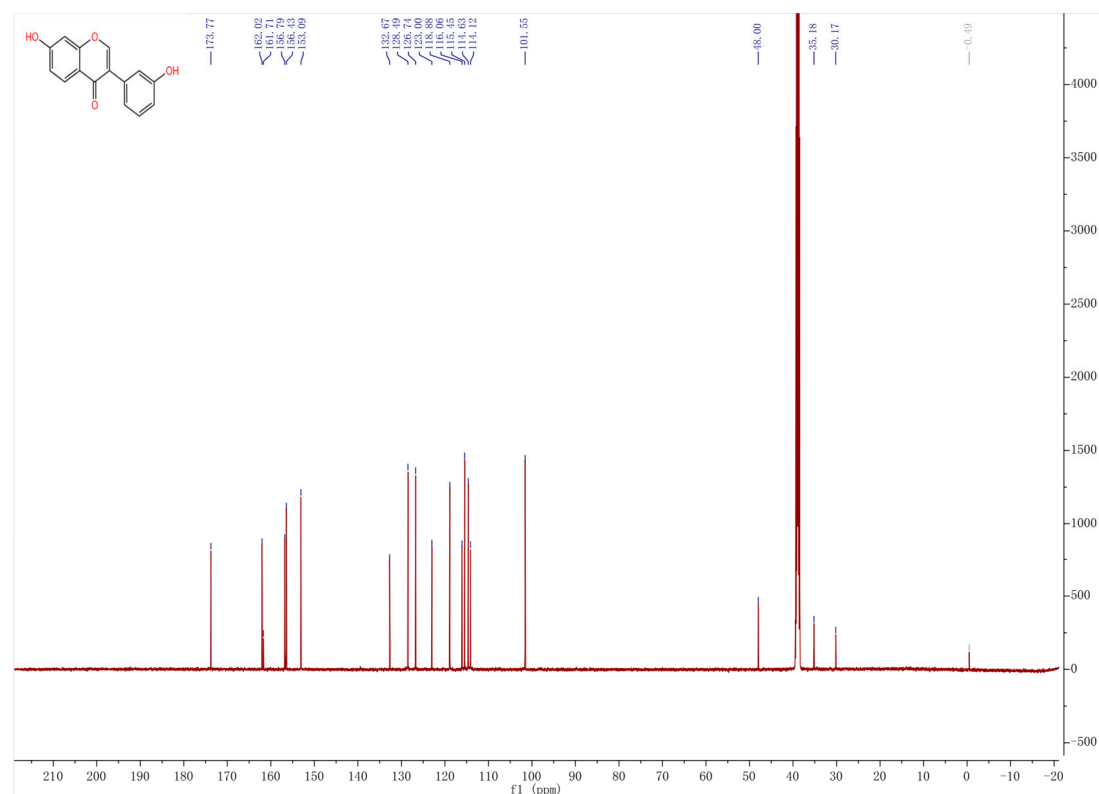


Figure S12. ¹³C NMR spectra of compound G5

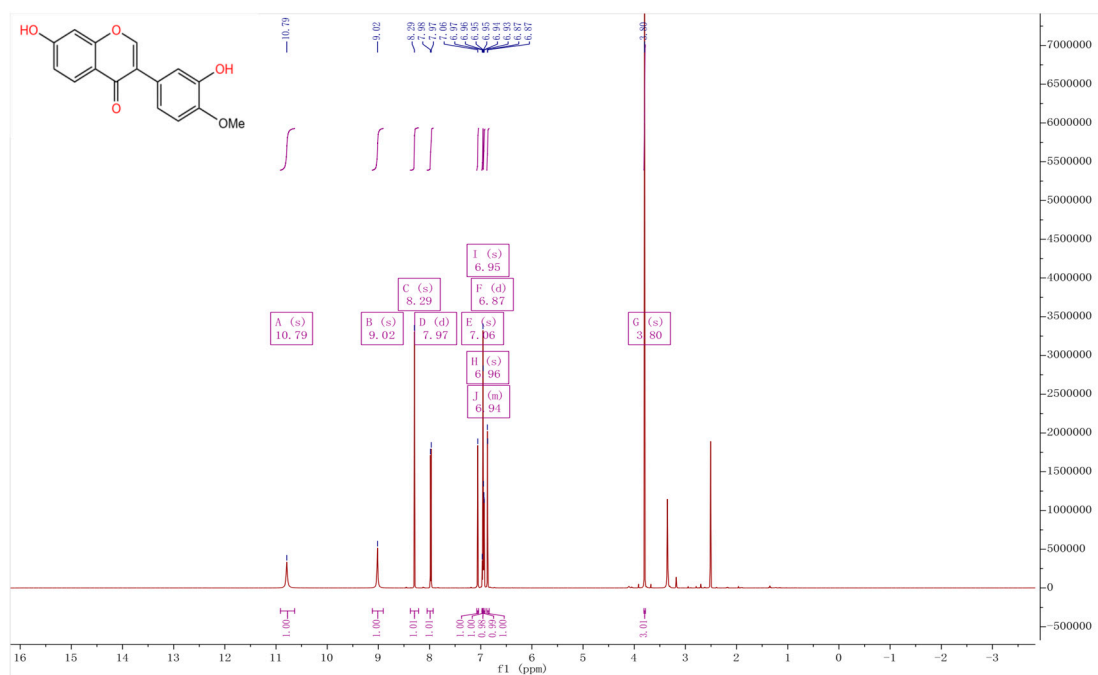


Figure S14. ¹³C NMR spectra of compound G6

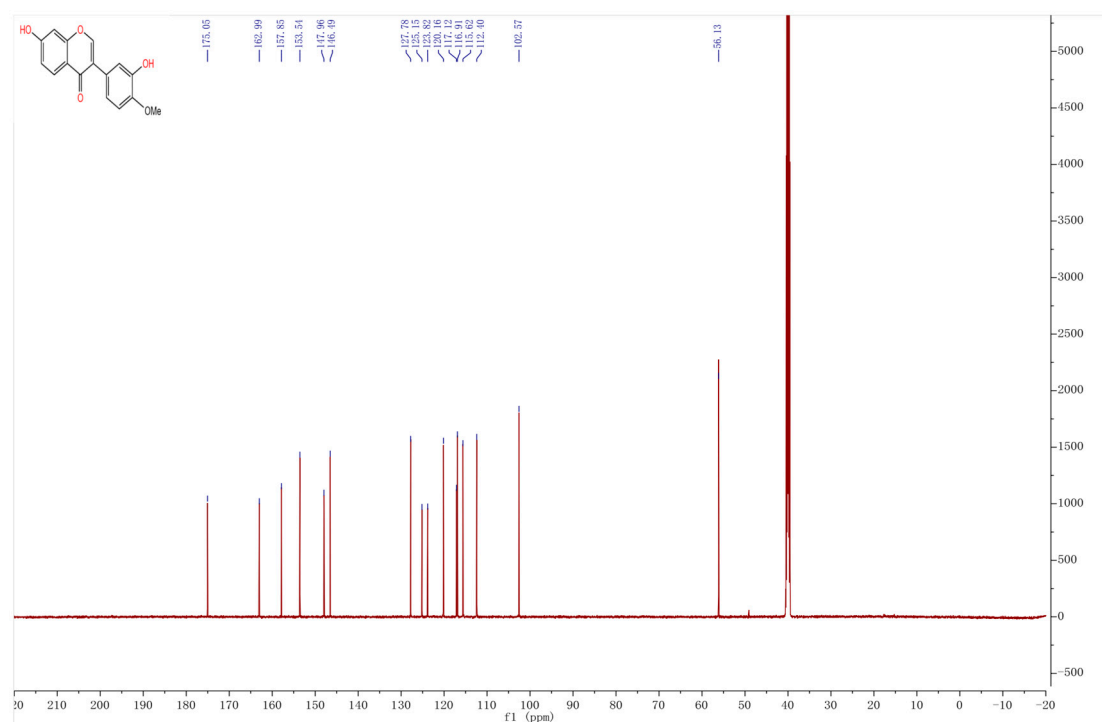


Figure S14. ¹³C NMR spectra of compound G6

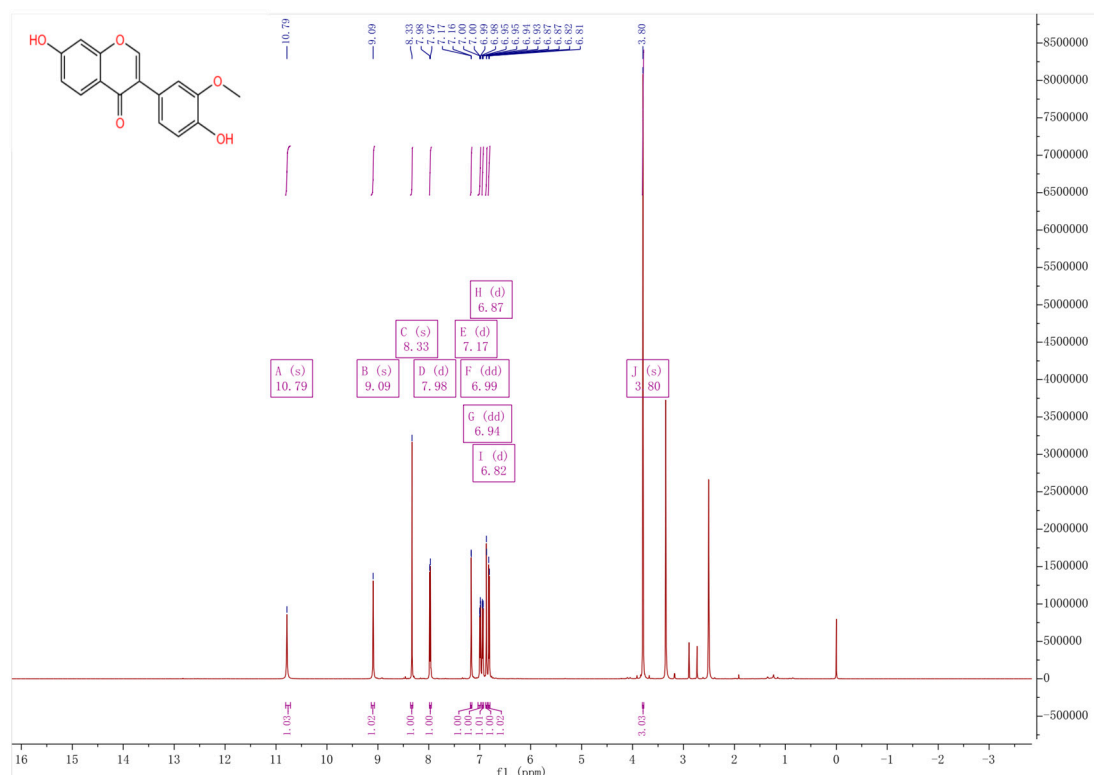


Figure S15. ^1H NMR spectra of compound G7

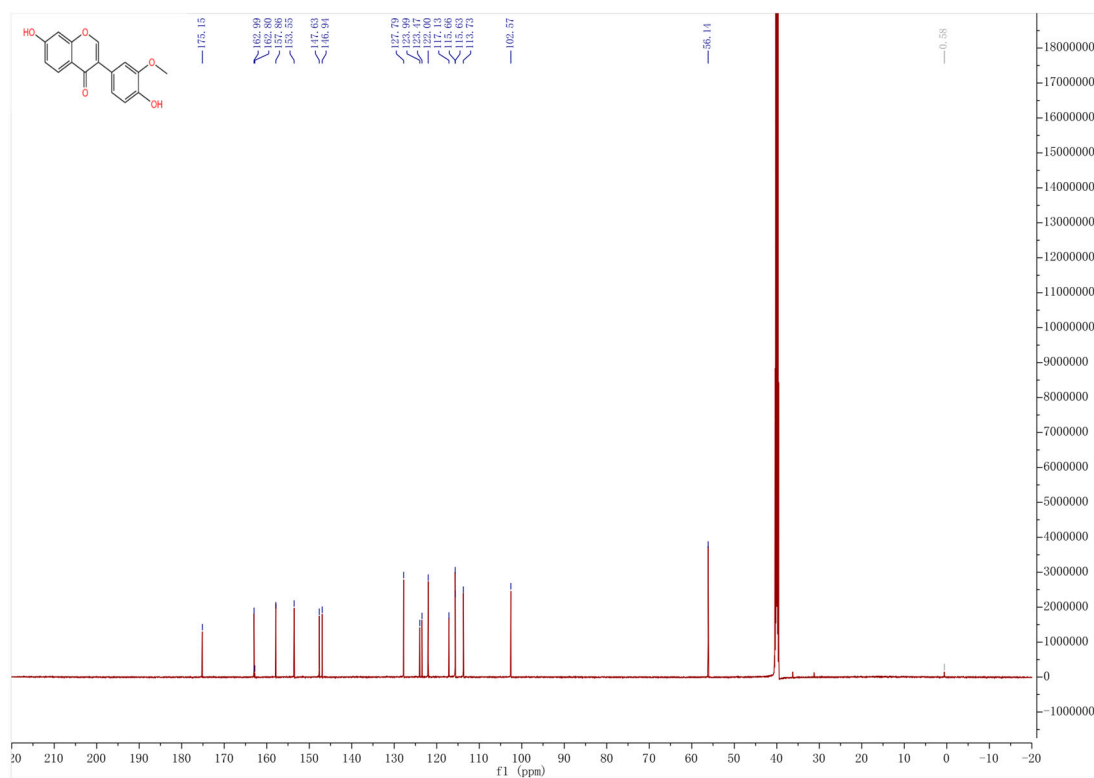


Figure S16. ^{13}C NMR spectra of compound G7

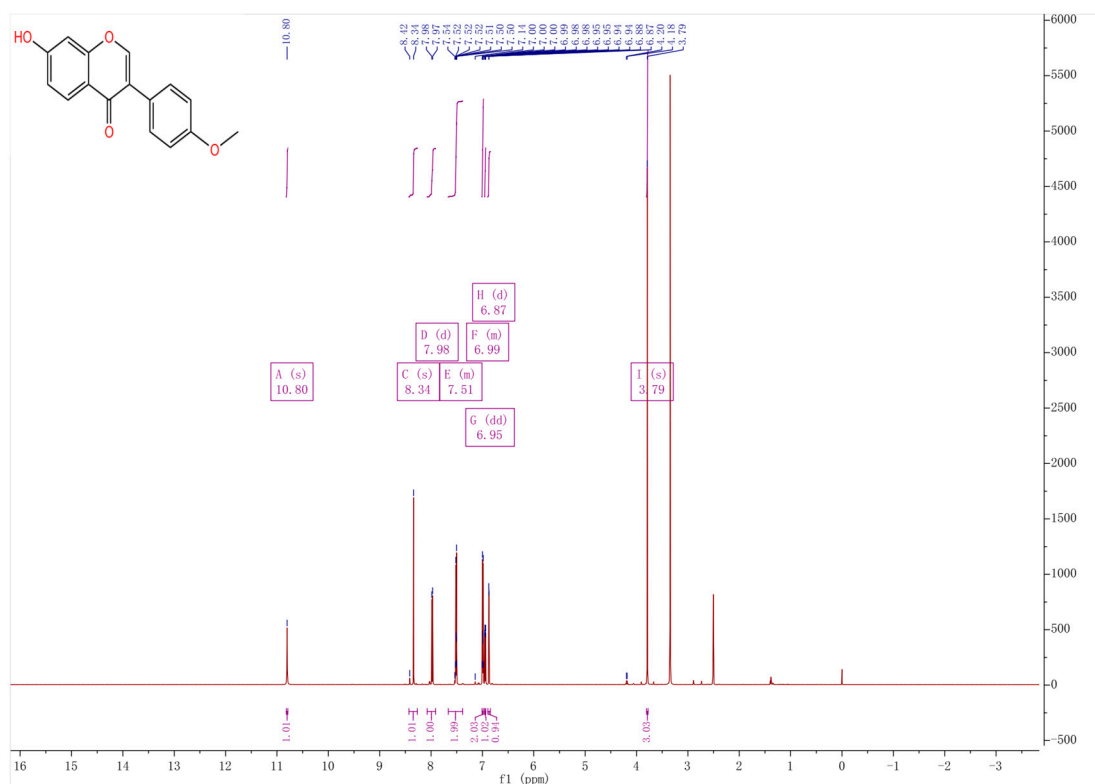


Figure S17. ^1H NMR spectra of compound G8

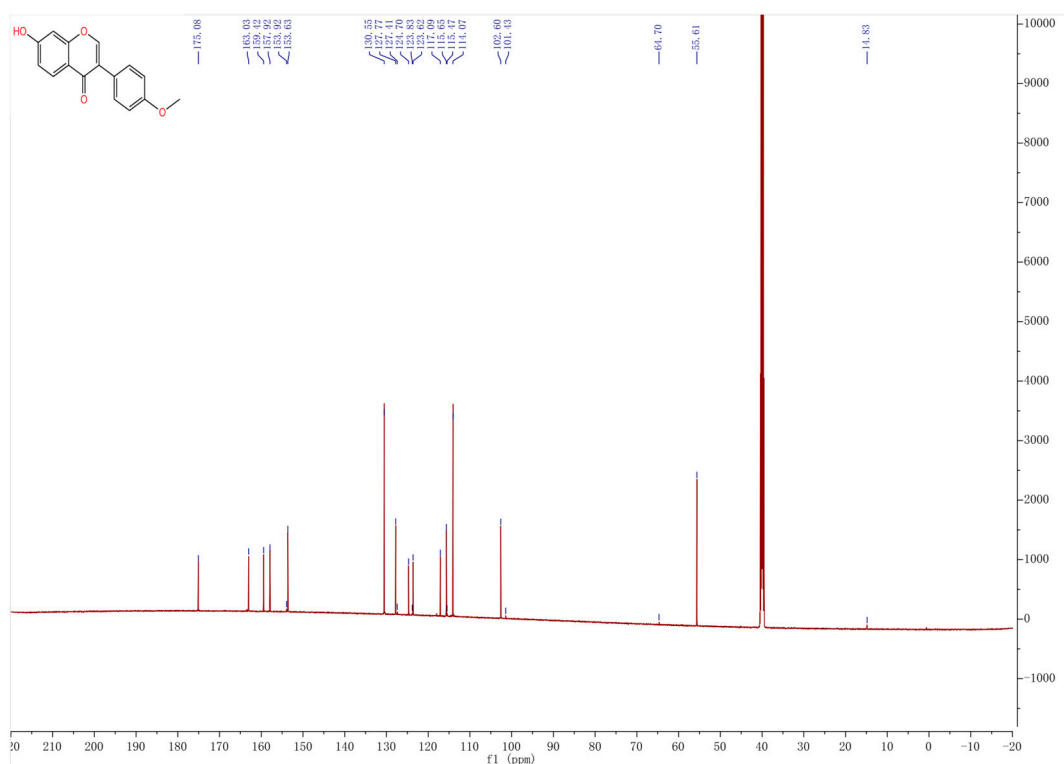


Figure S18. ^{13}C NMR spectra of compound G8

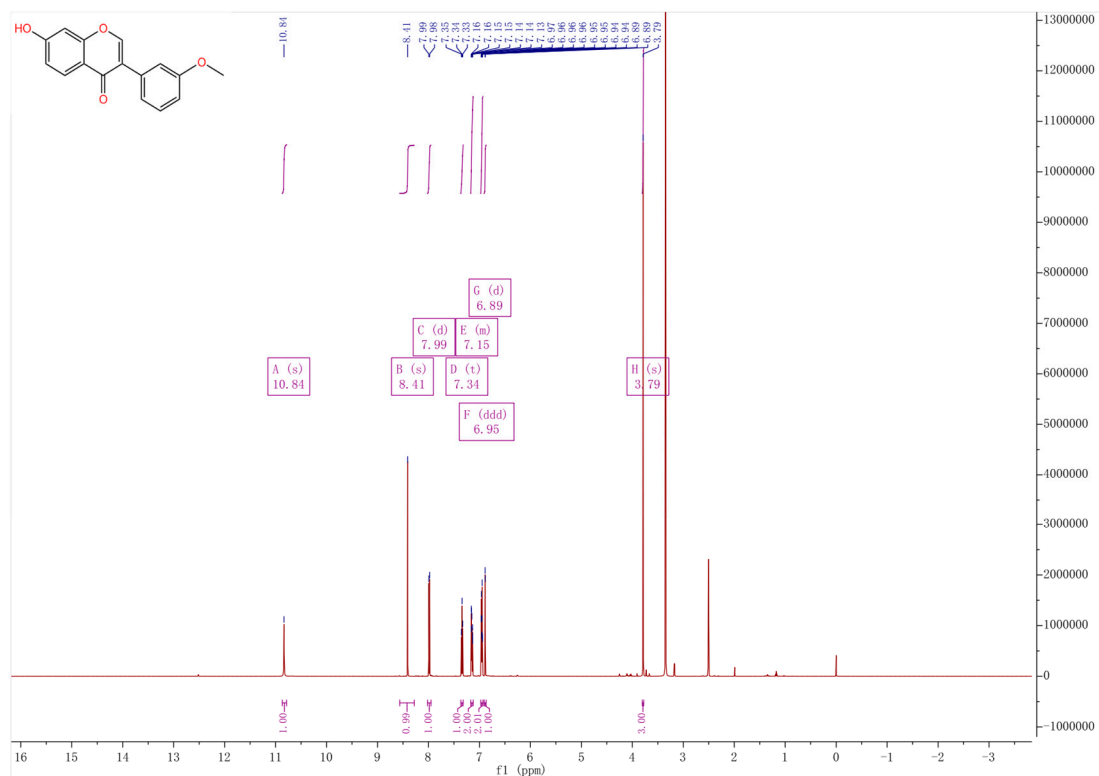


Figure S19. ¹H NMR spectra of compound **G9**

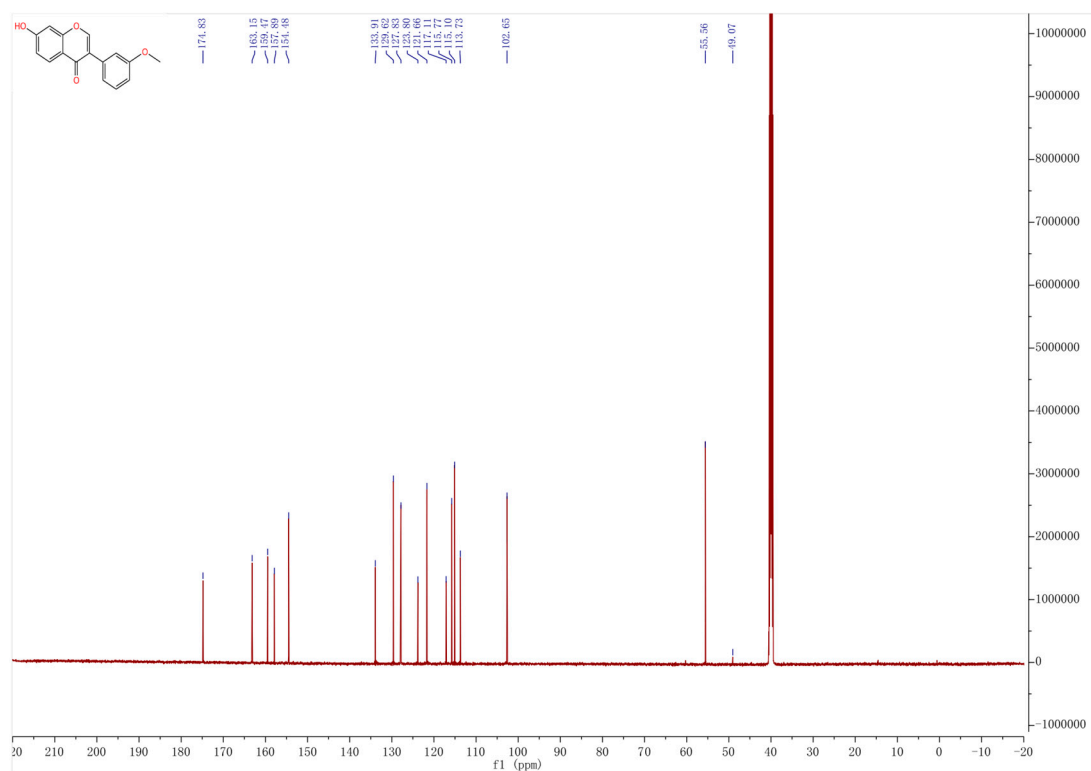


Figure S20. ¹³C NMR spectra of compound **G9**

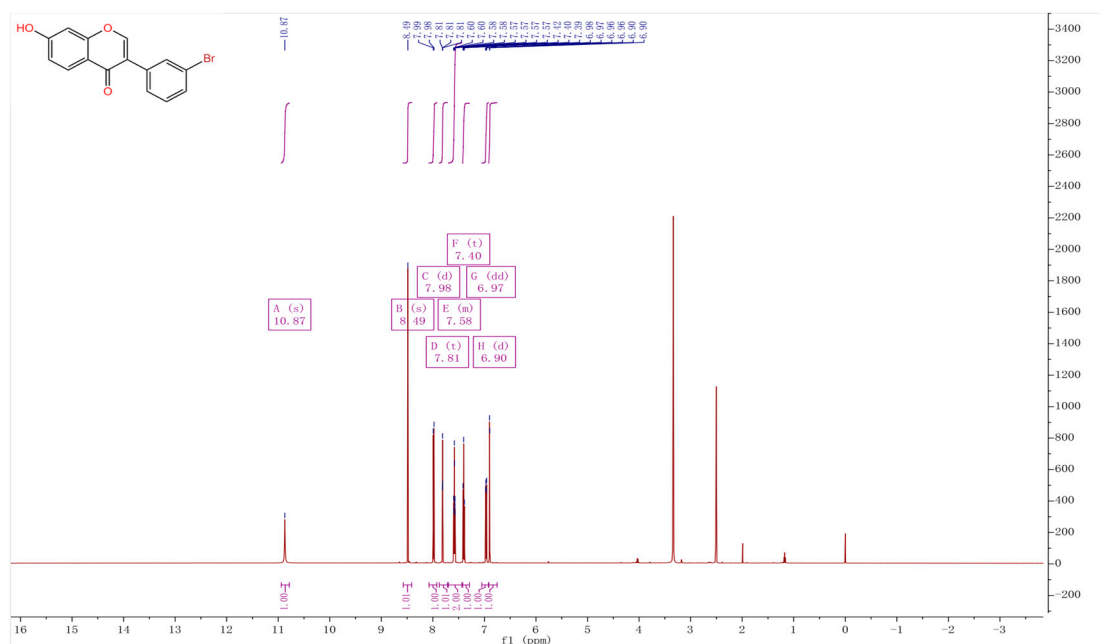


Figure S21. ¹H NMR spectra of compound G10

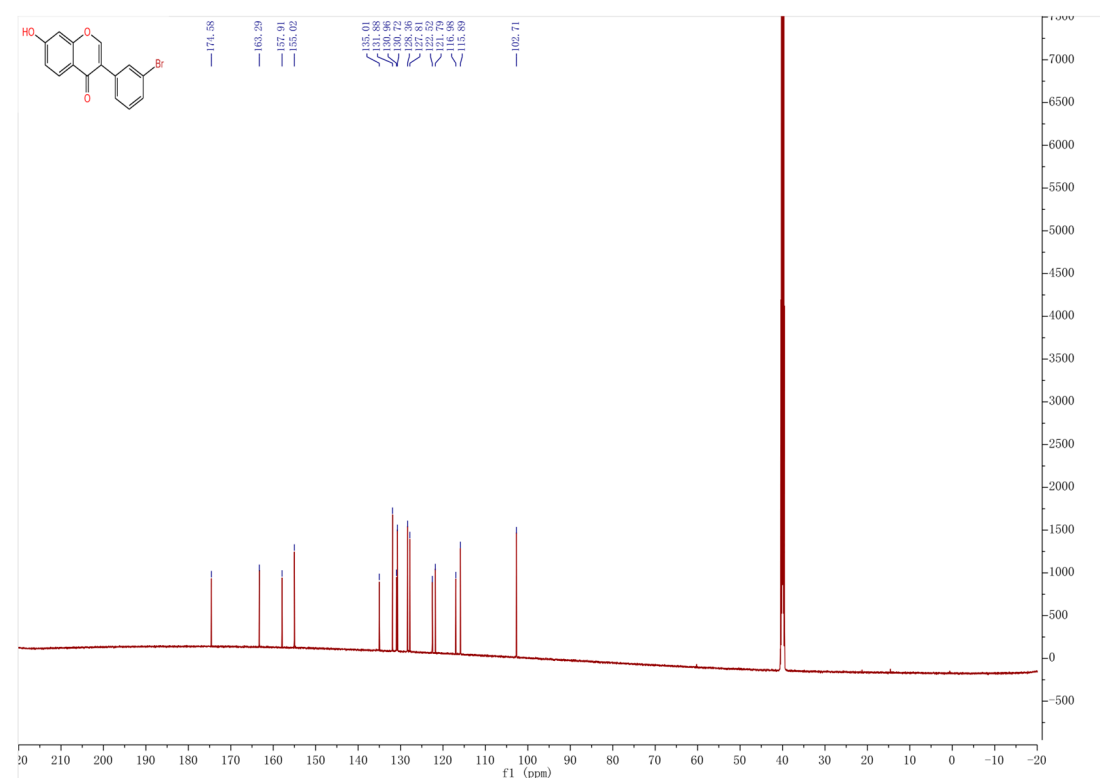


Figure S22. ¹³C NMR spectra of compound G10

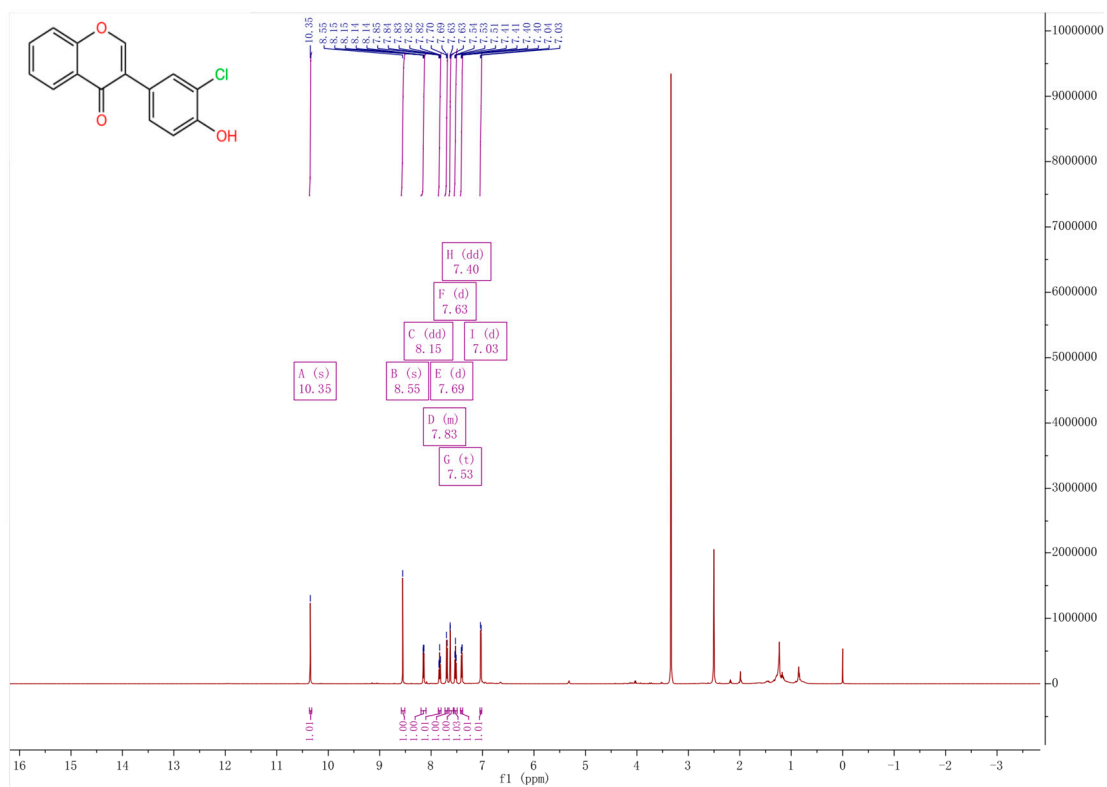


Figure S23. ¹H NMR spectra of compound Z1

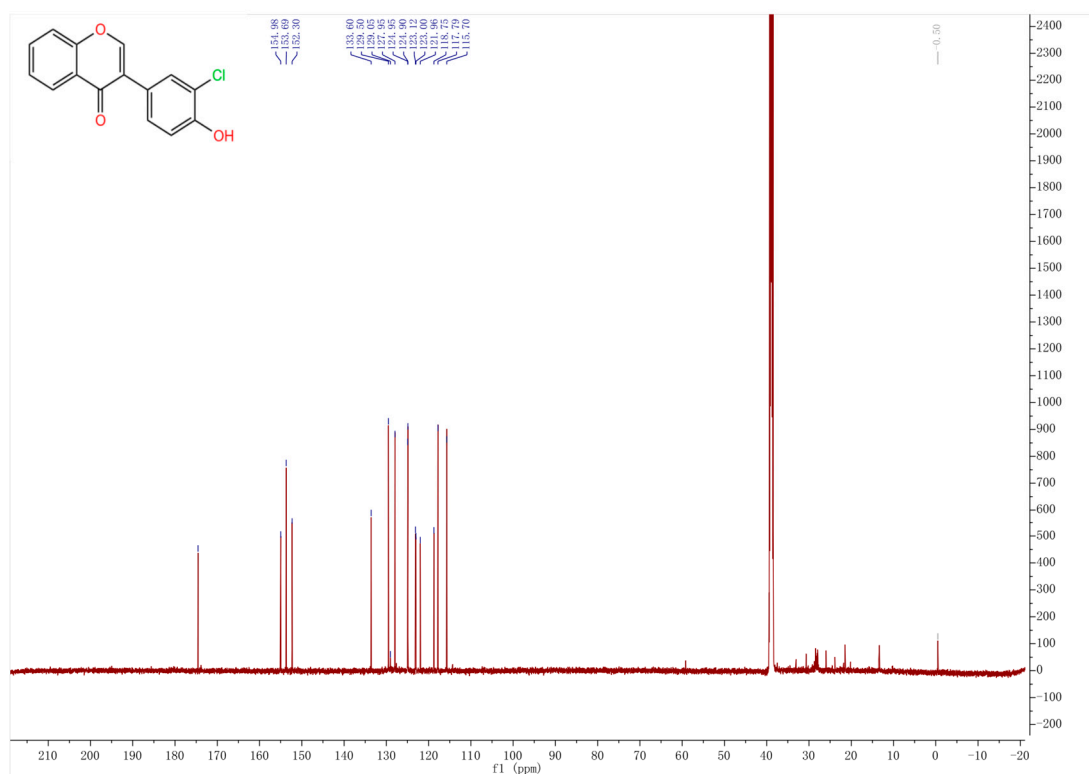


Figure S24. ¹³C NMR spectra of compound Z1

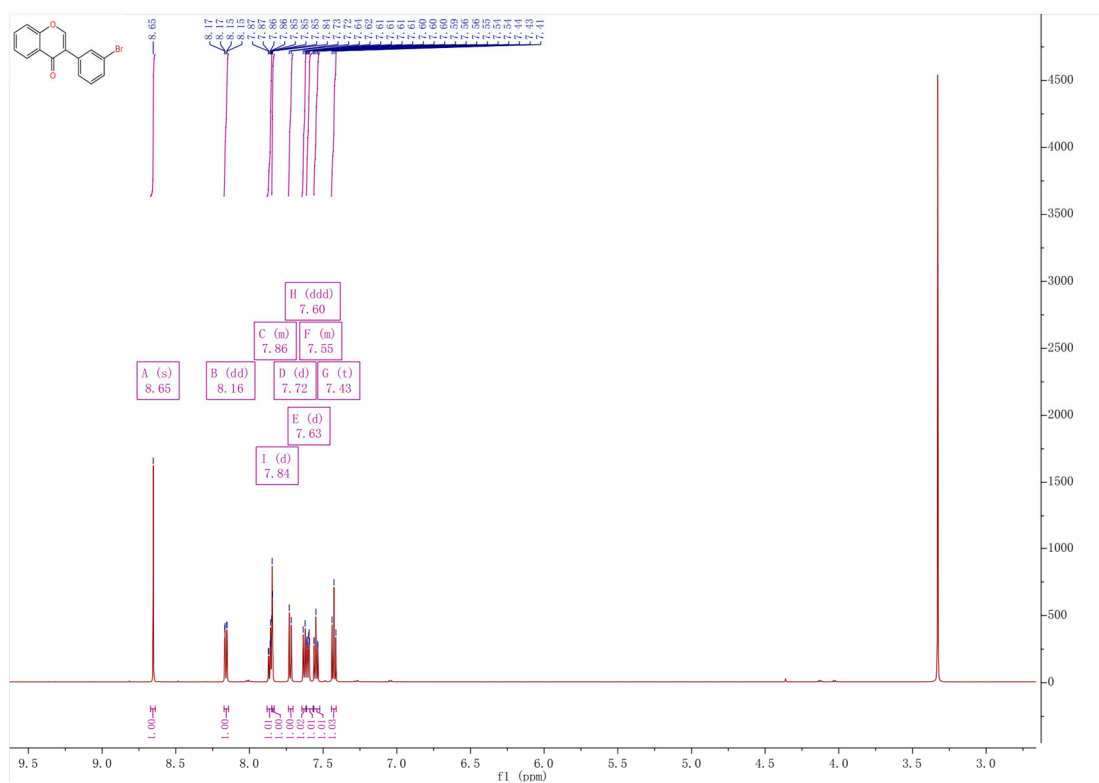
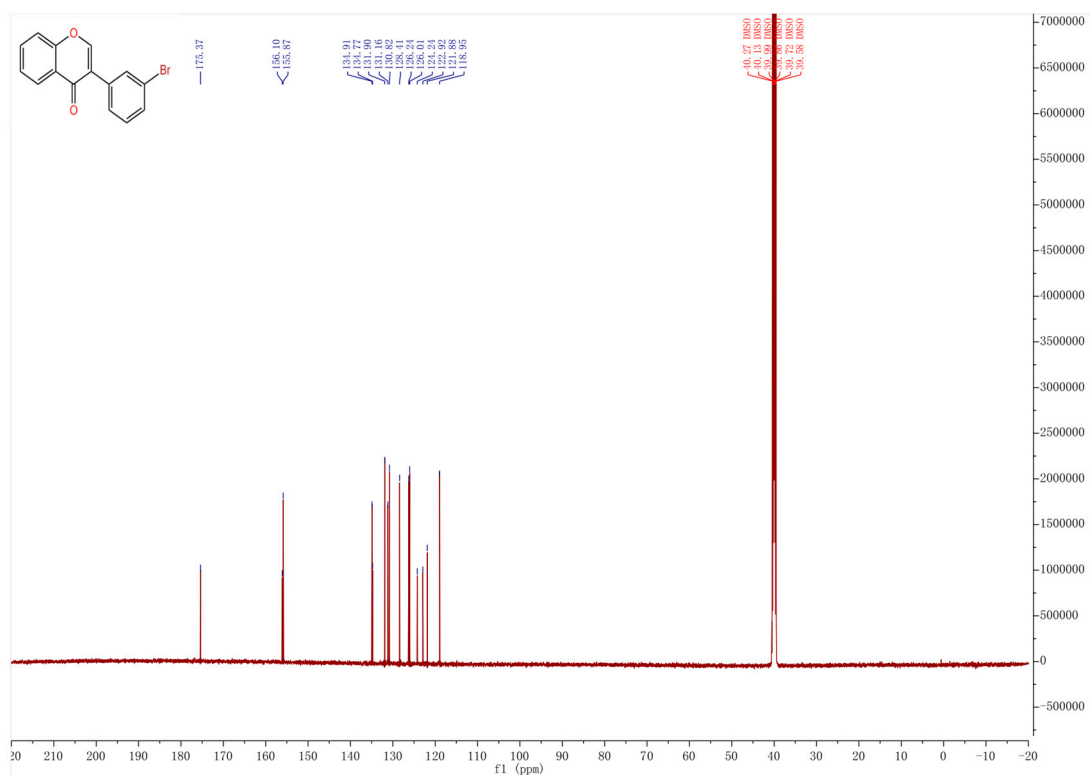


Figure S25. ¹H NMR spectra of compound **Z3**



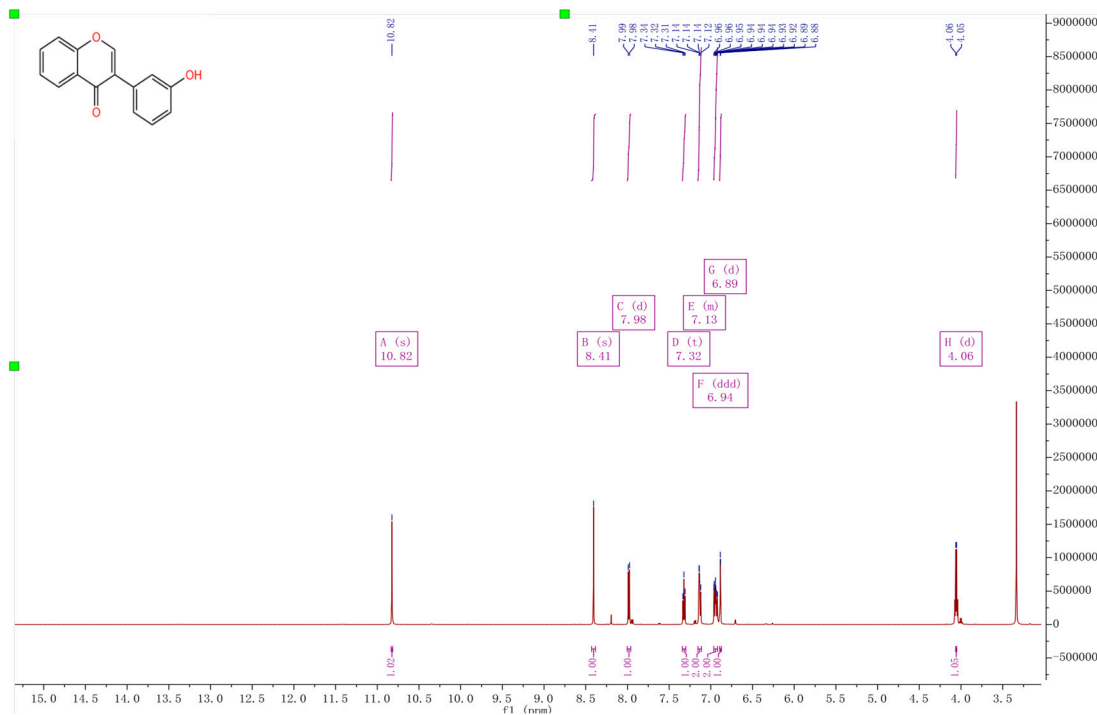


Figure S27. ¹H NMR spectra of compound **Z5**

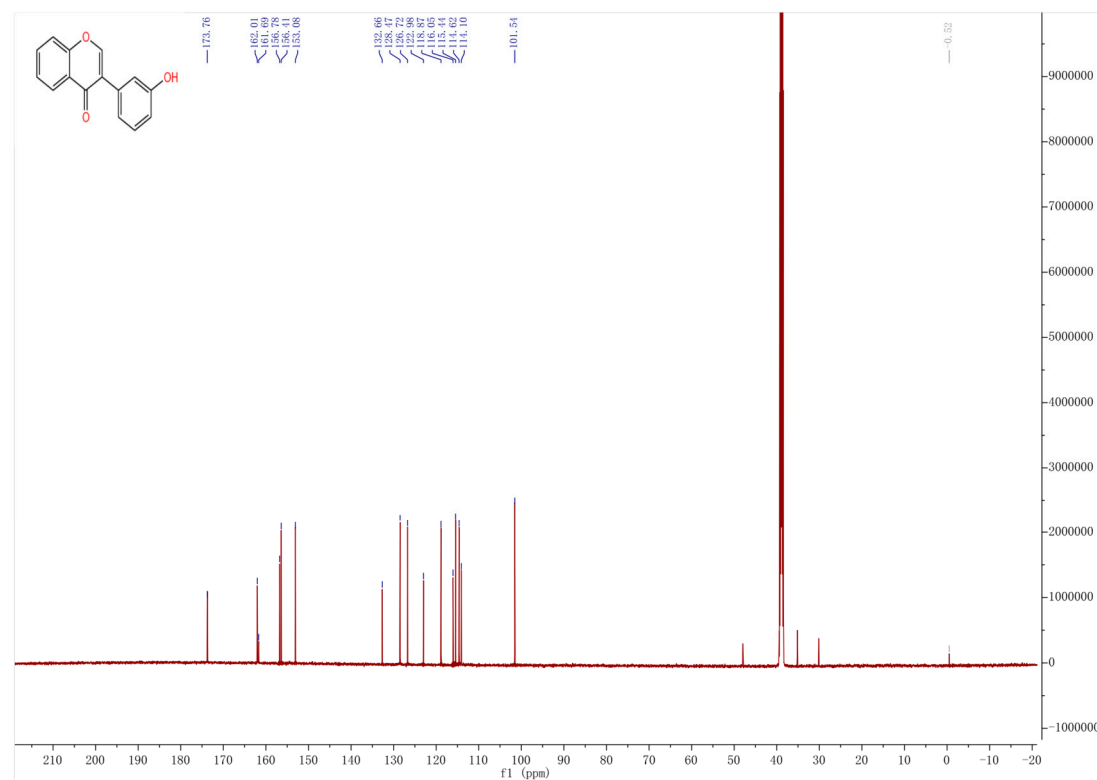


Figure S28. ¹³C NMR spectra of compound **Z5**

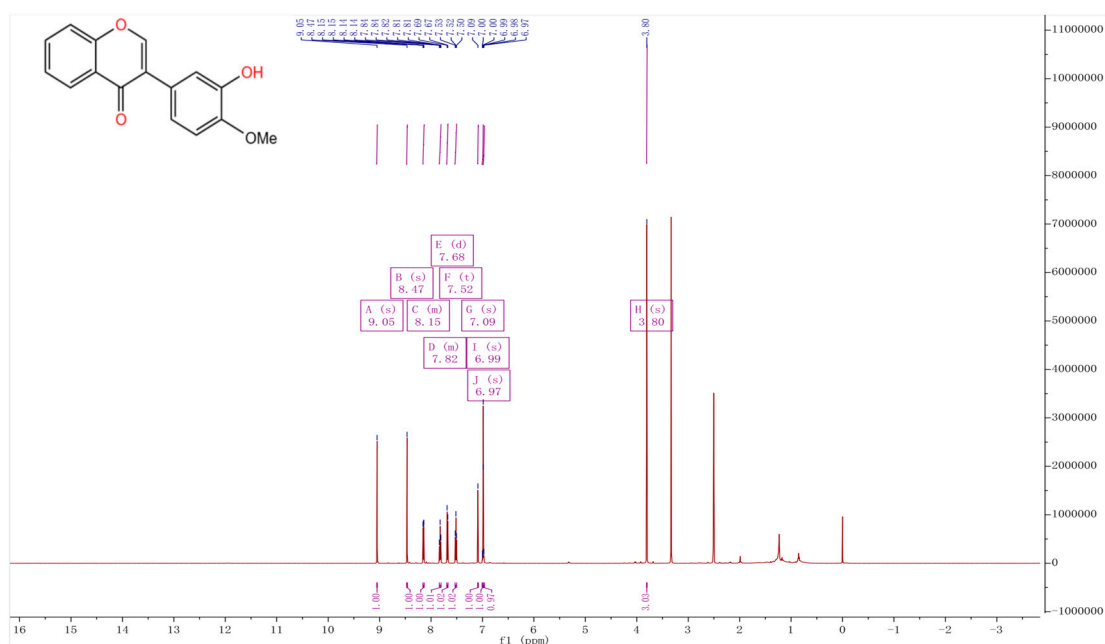


Figure S29. ^1H NMR spectra of compound **Z6**

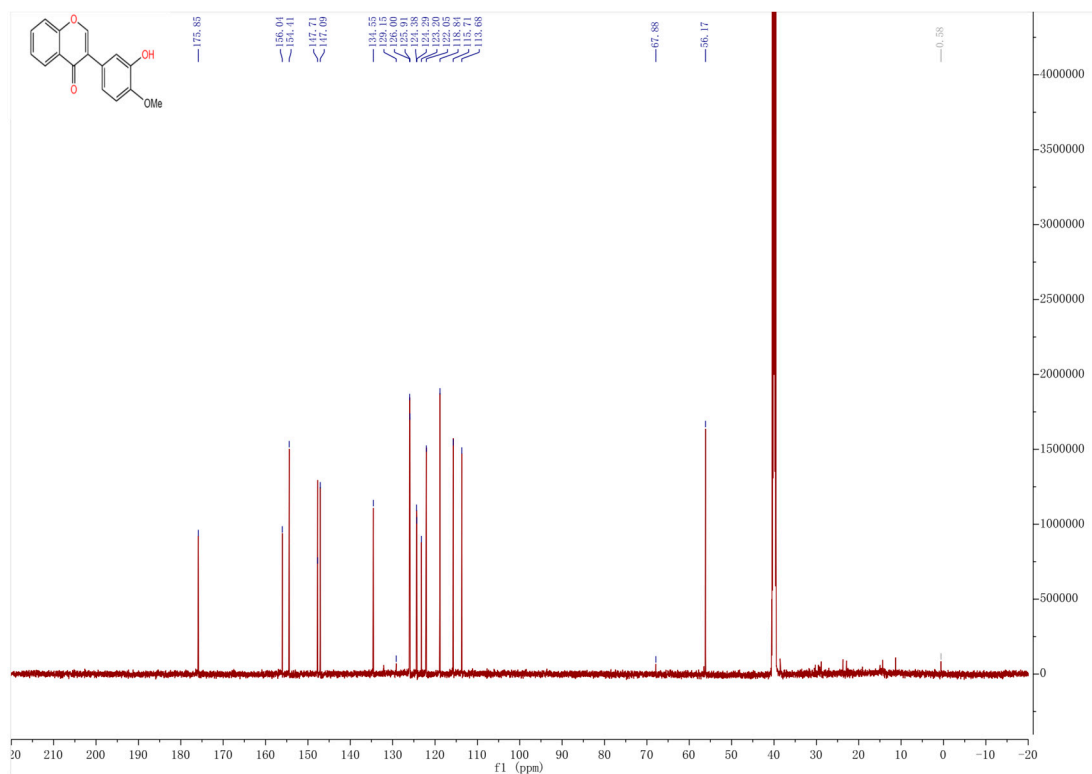


Figure S30. ^{13}C NMR spectra of compound **Z6**

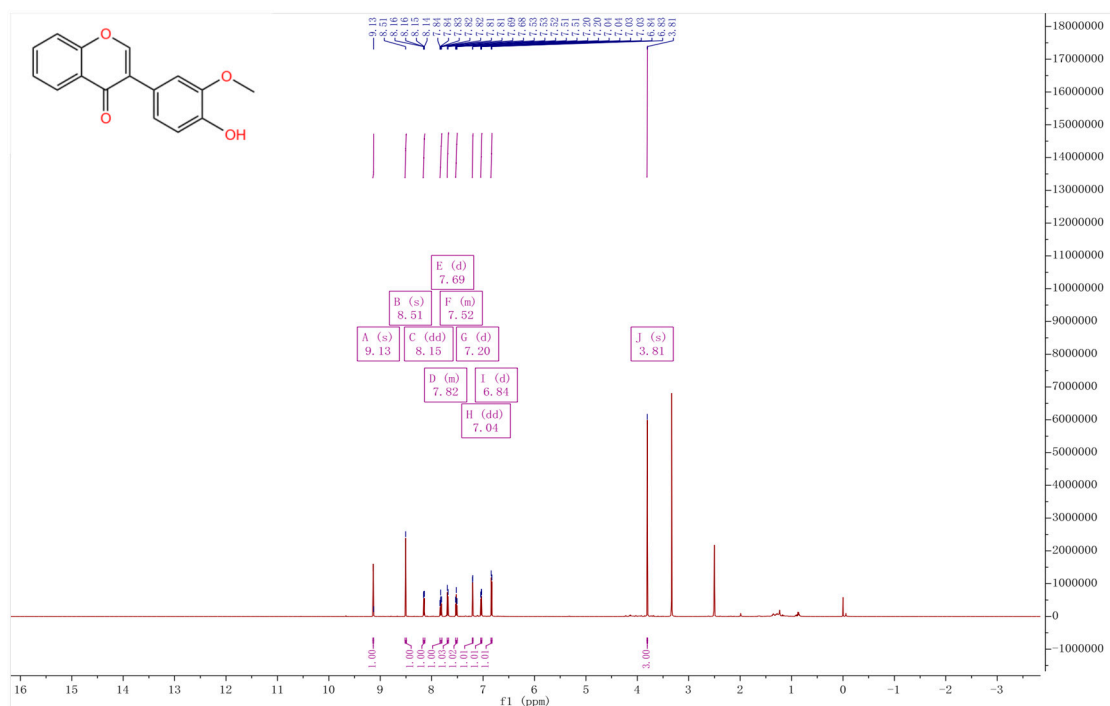


Figure S31. ¹H NMR spectra of compound **Z7**

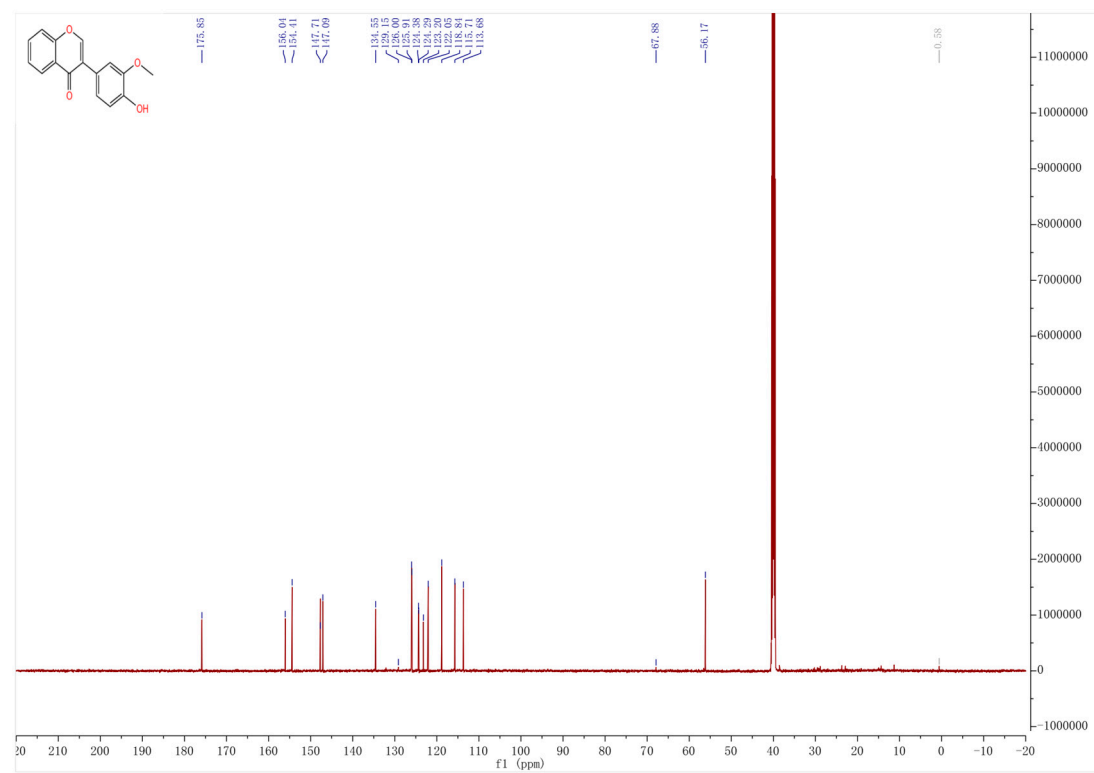


Figure S32. ¹³C NMR spectra of compound **Z7**

EXPERIMENTAL

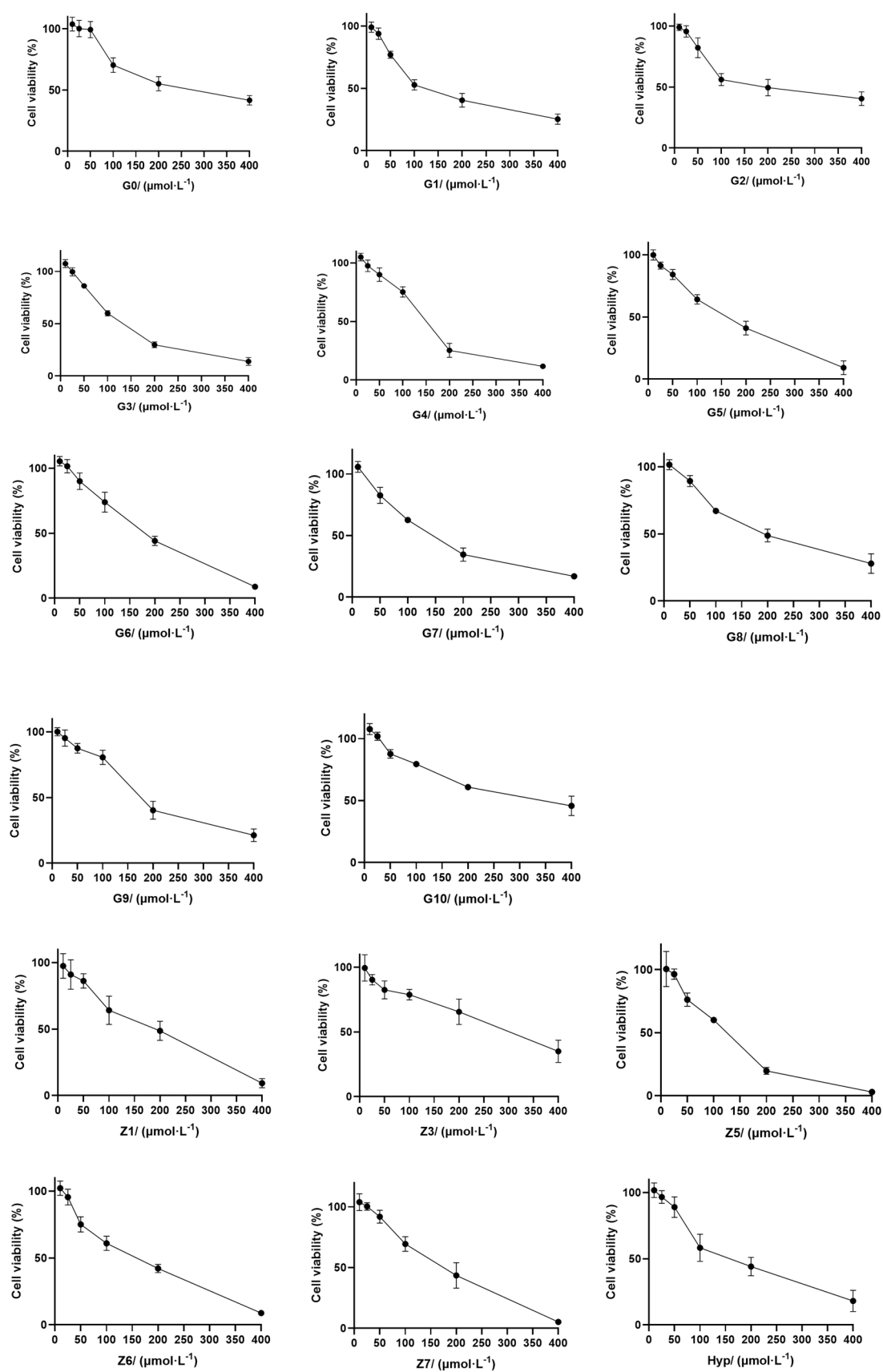


Figure S33 Effect of hypericin and its derivatives 48h on the activity of A549 cells