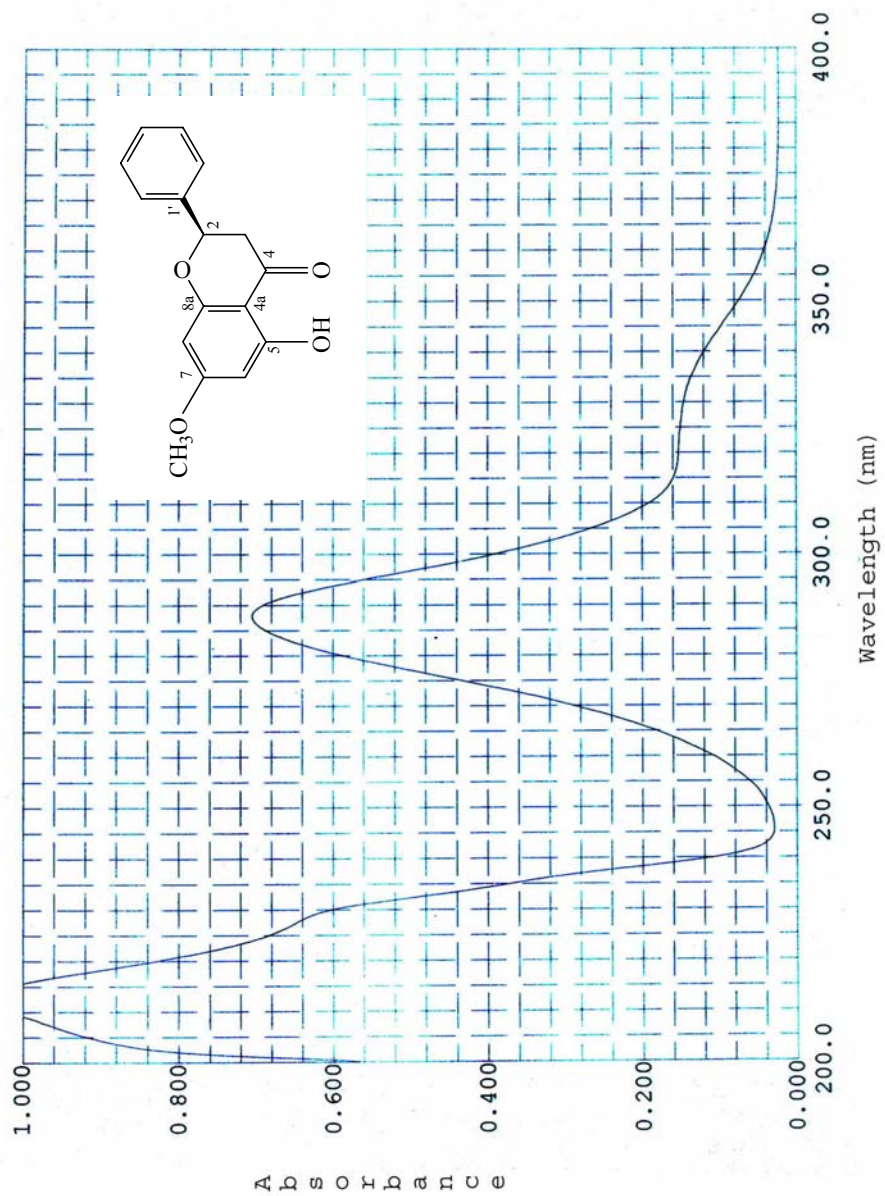


Appendix
Characteristic Data of Compounds

Figure A-1 UV spectrum of compound **1** (MeOH)

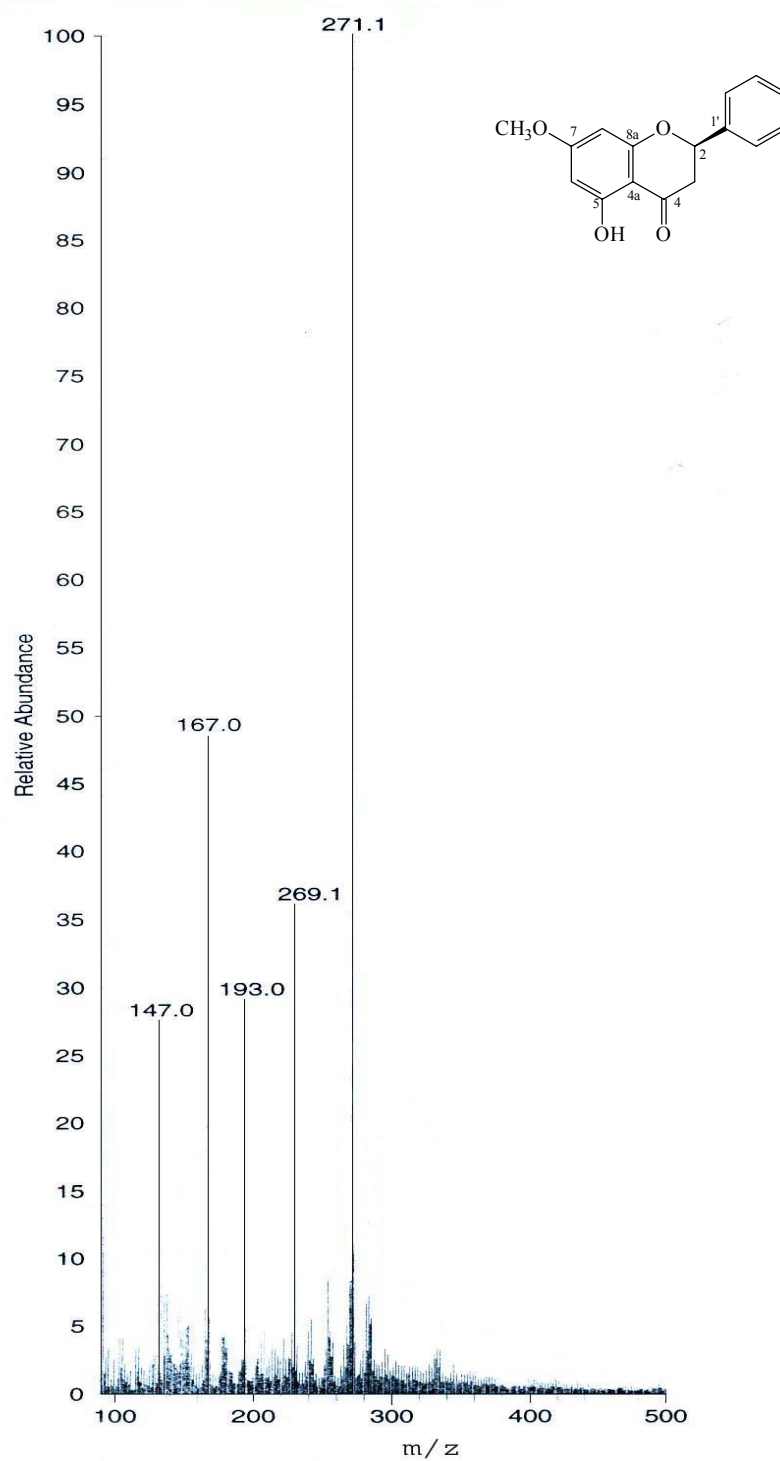


Figure A-2 FAB mass spectrum of compound 1

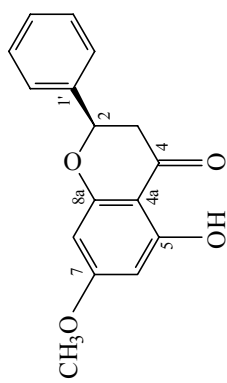


Figure A-3 IR spectrum of compound 1 (KBr)

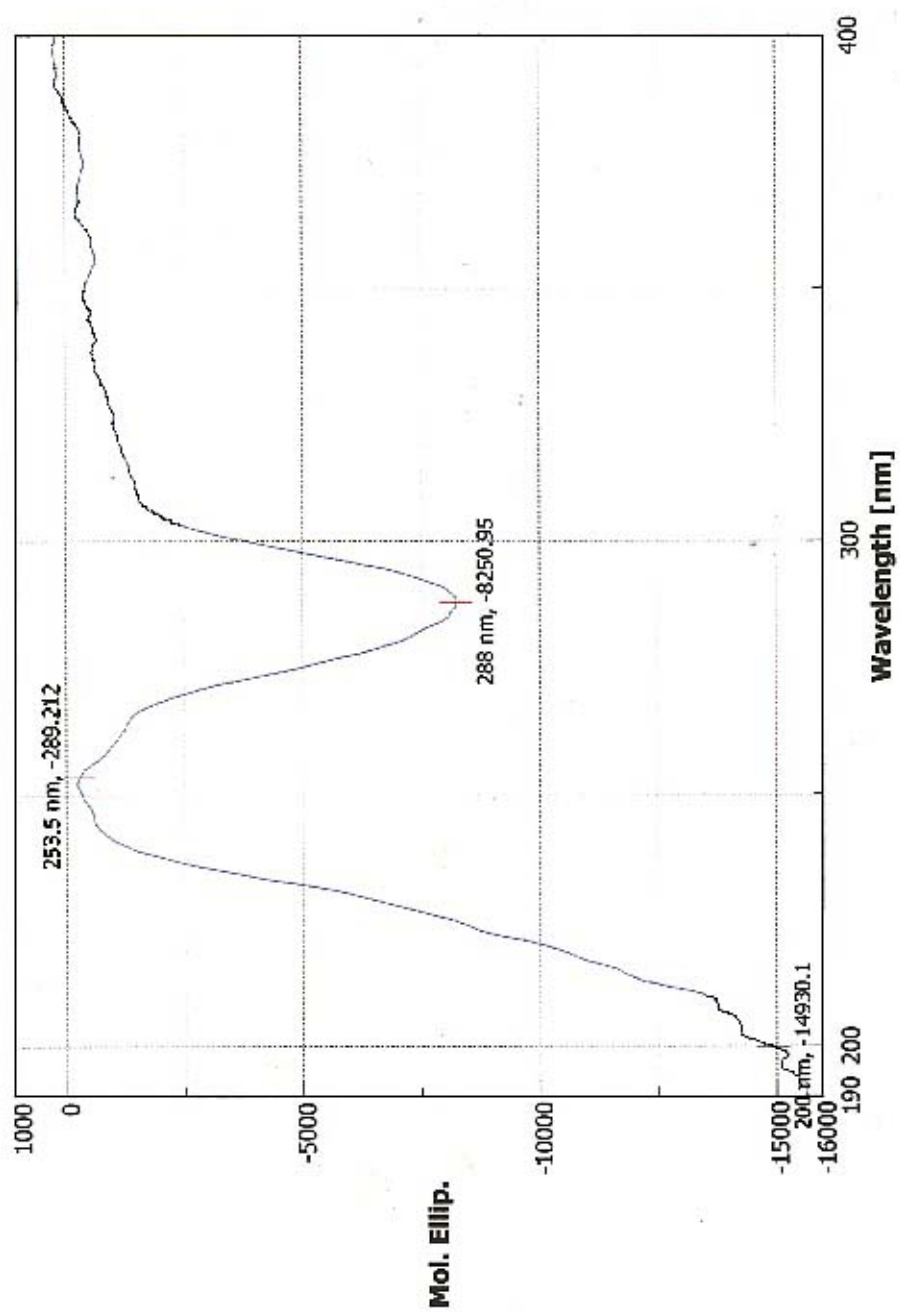
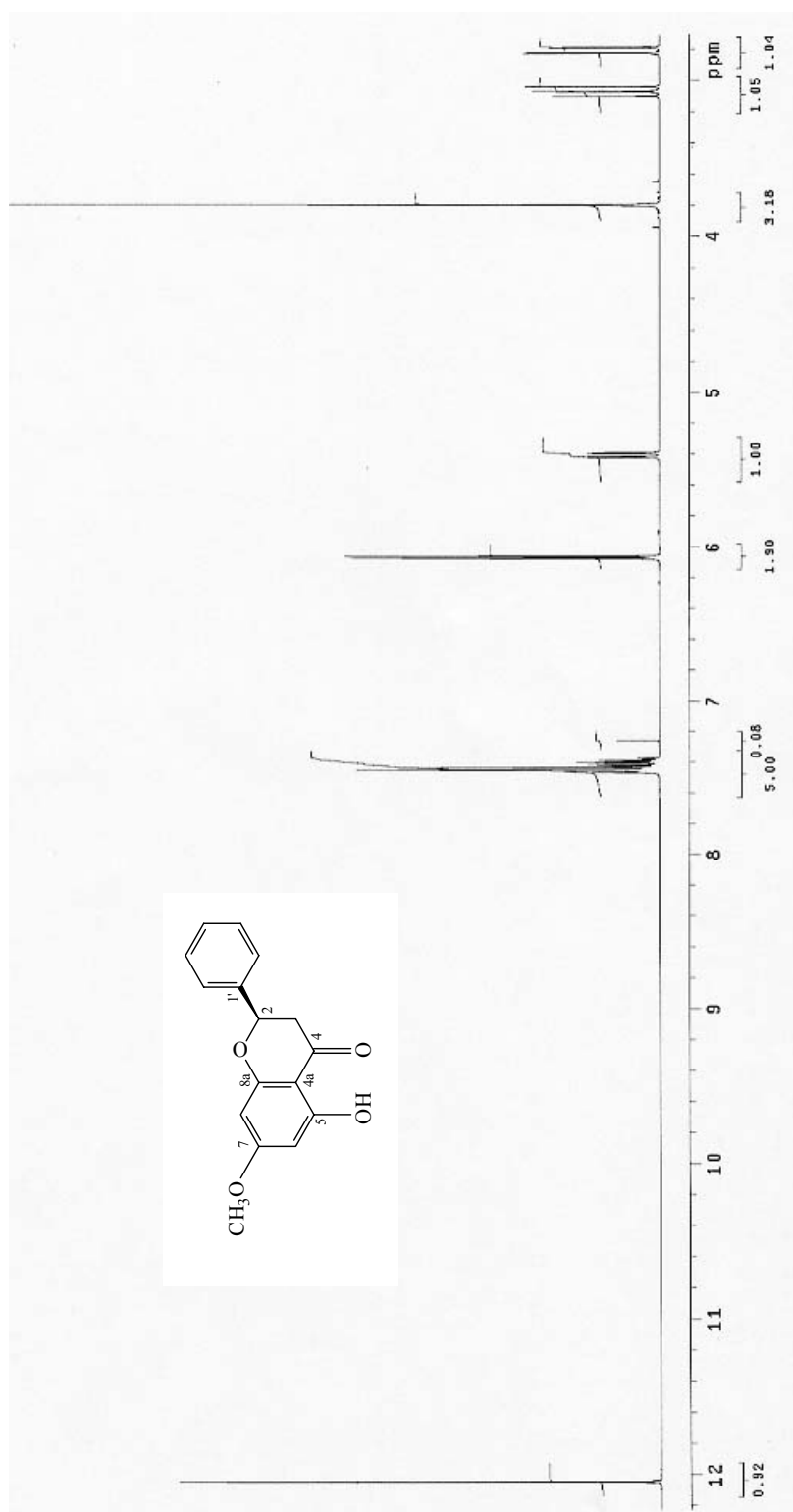
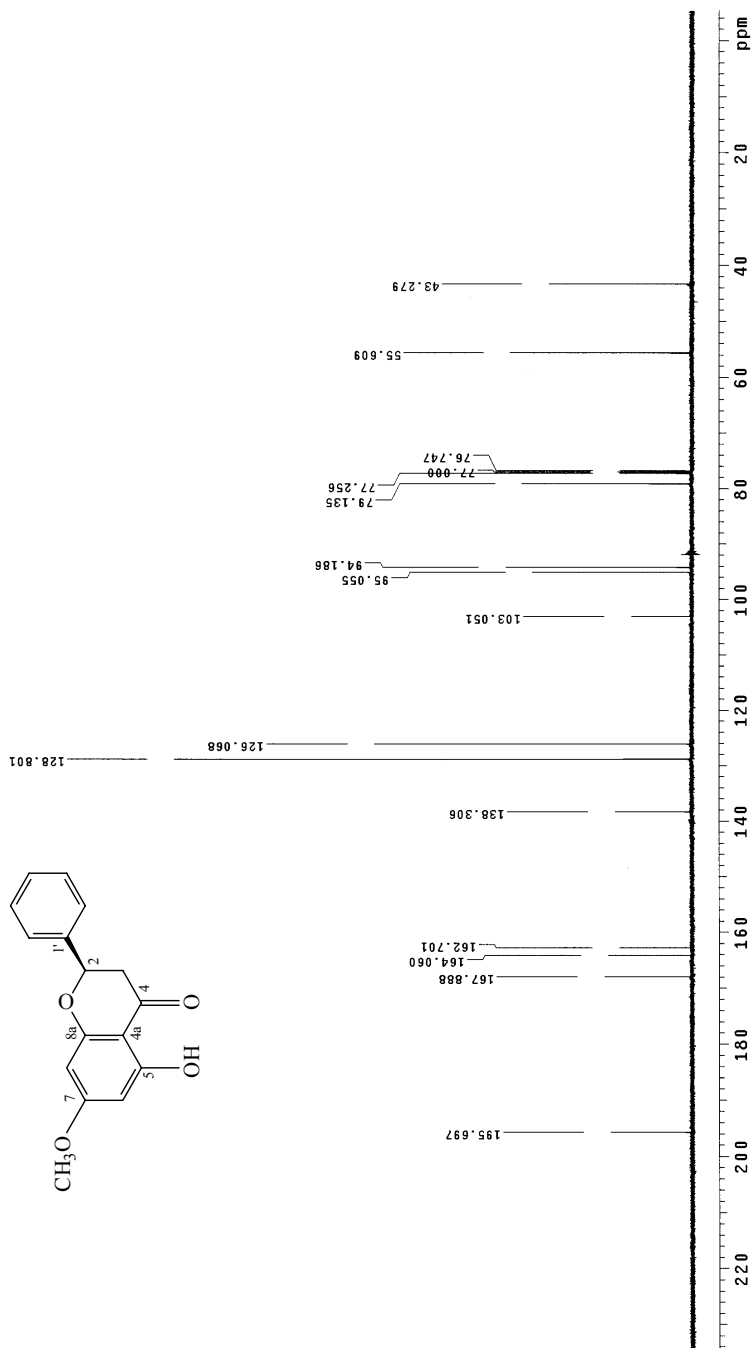
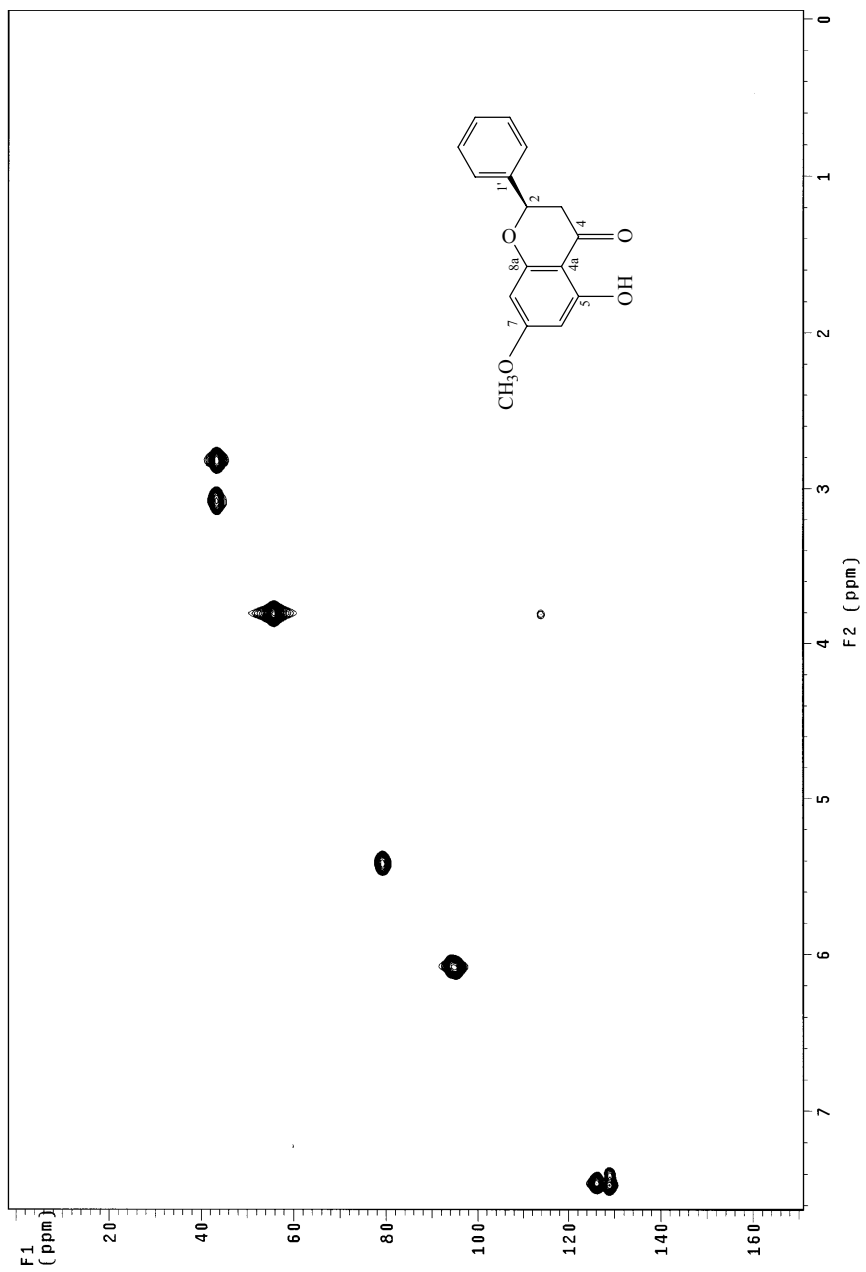


Figure A-4 CD of compound 1

Figure A-5 ¹H NMR spectrum of compound **1** (500 MHz; CDCl₃)

Figure A-6 ¹³C NMR spectrum of compound 1 (500 MHz; CDCl₃)

Figure A-8 HMQC spectrum of compound **1** (500 MHz; CDCl₃)

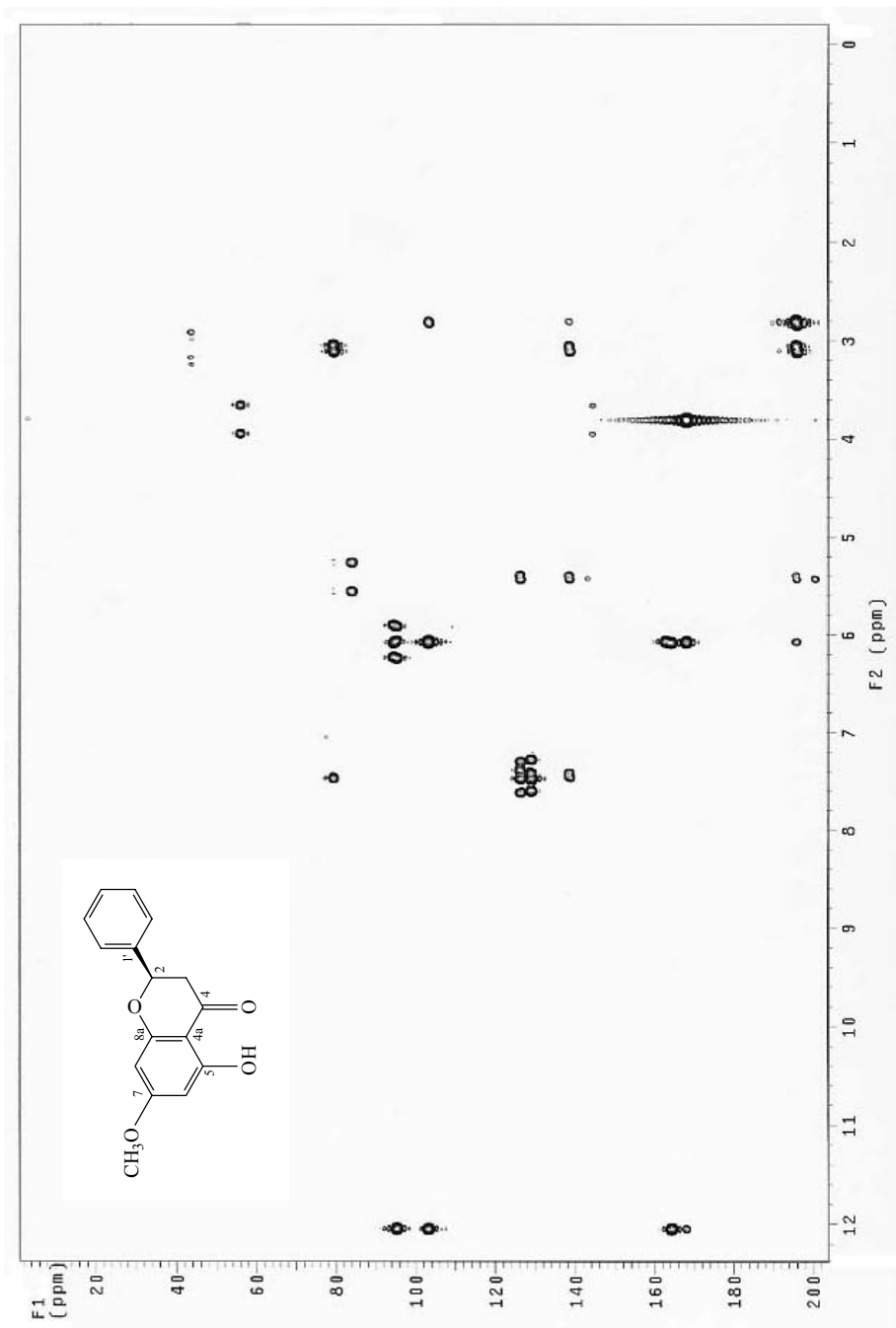


Figure A-9 HMBC spectrum of compound **1** (500 MHz; CDCl_3)

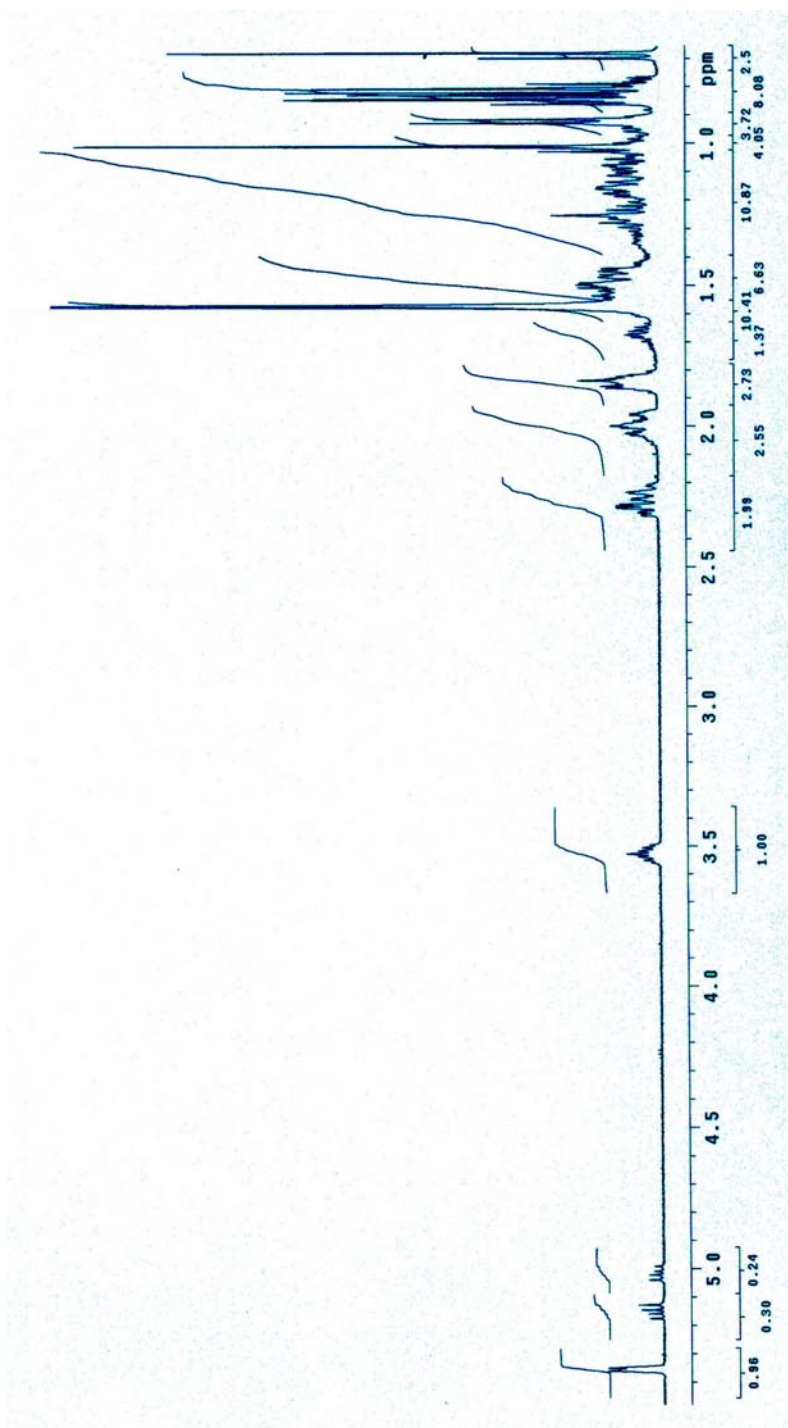
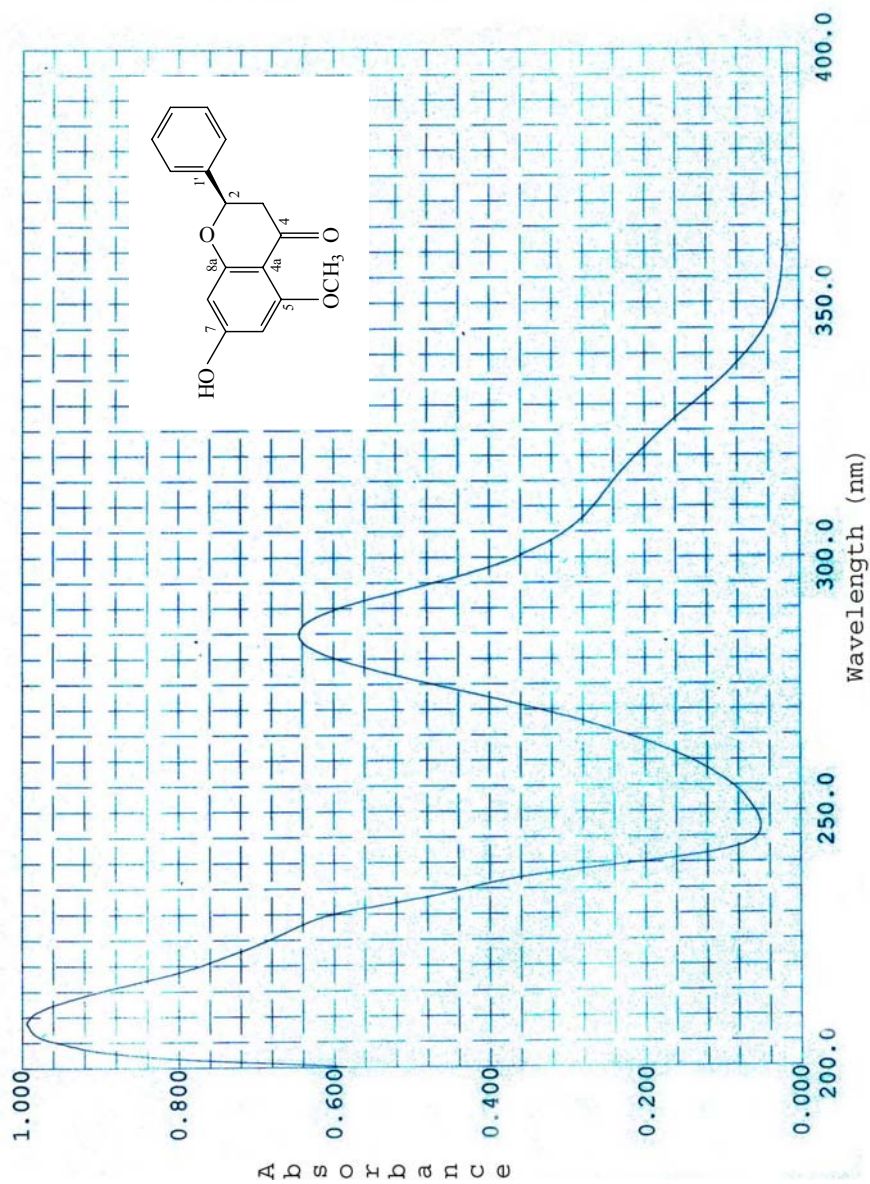
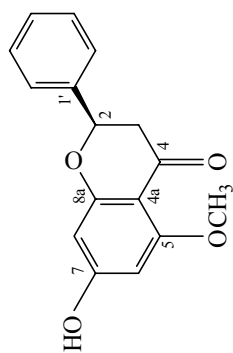
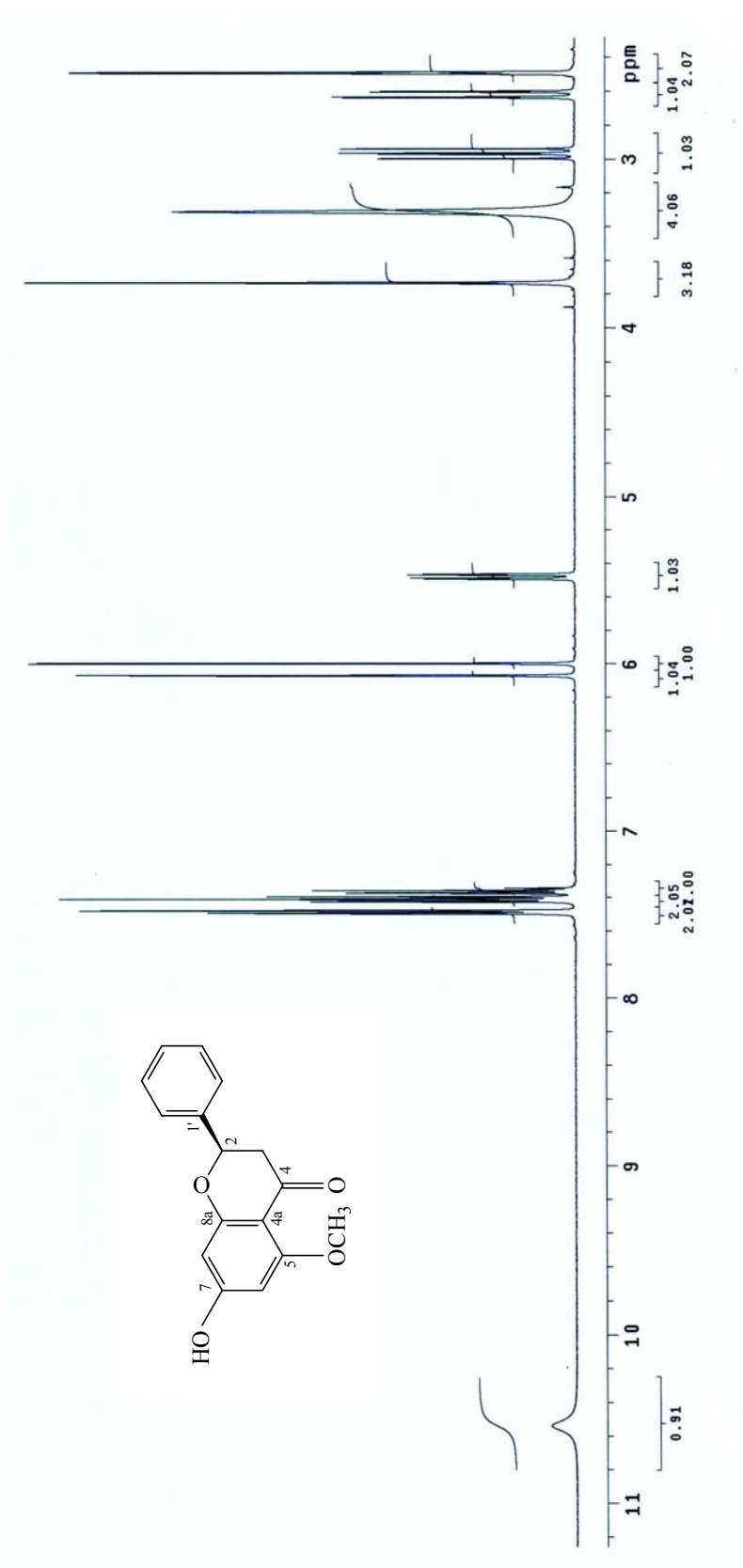
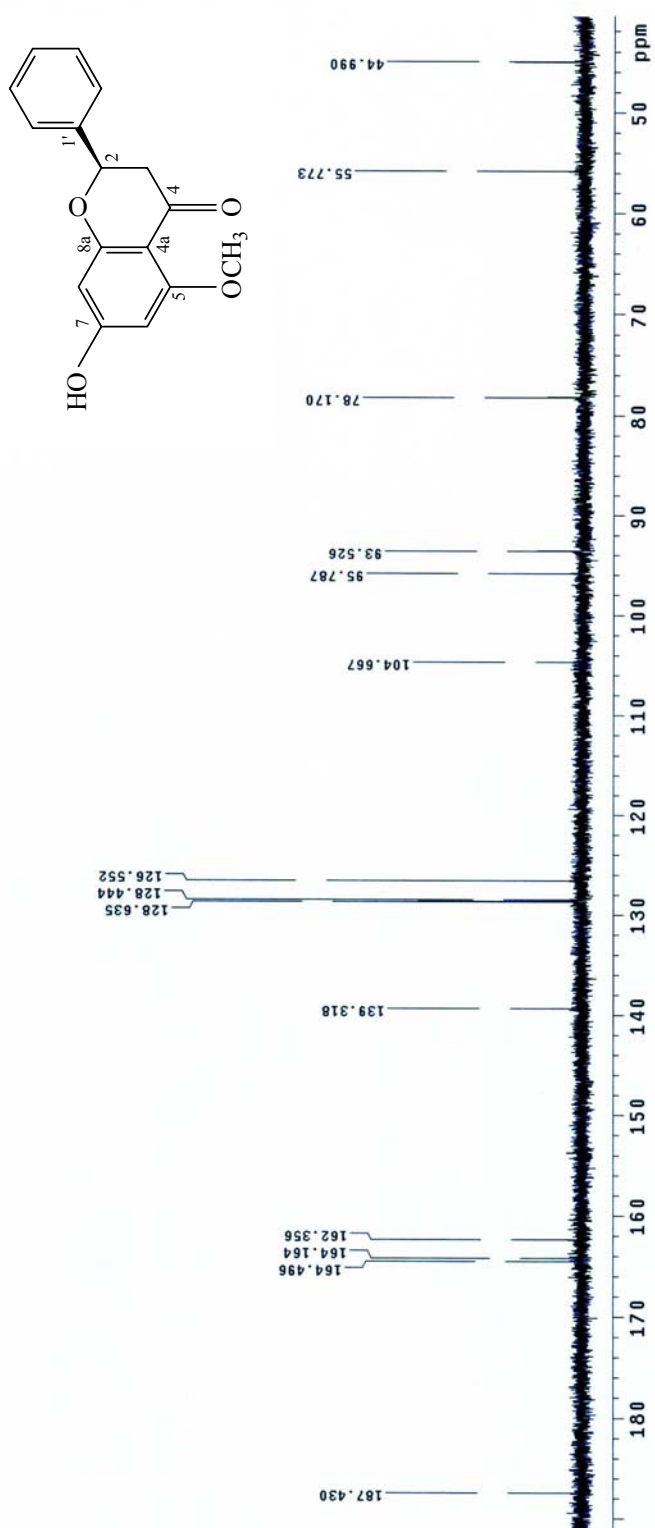


Figure A-10 ^1H NMR spectrum of compound **2** (500 MHz; CDCl_3)

Figure A-24 UV spectrum of compound **5** (MeOH)

Figure A-25 IR spectrum of compound **5** (KBr)

Figure A-26 ^1H NMR spectrum of compound **5** (500 MHz; $\text{DMSO-}d_6$)

Figure A-27 ^{13}C NMR spectrum of compound **5** (500 MHz, $\text{DMSO-}d_6$)

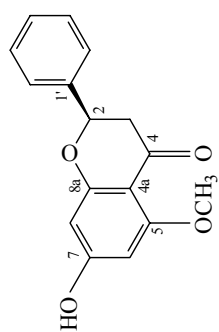


Figure A-28 ^1H - ^1H COSY spectrum of compound **5** (500 MHz; DMSO- d_6)

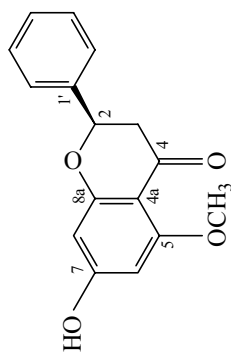


Figure A-30 HMBC spectrum of compound **5** (500 MHz; DMSO-*d*₆)

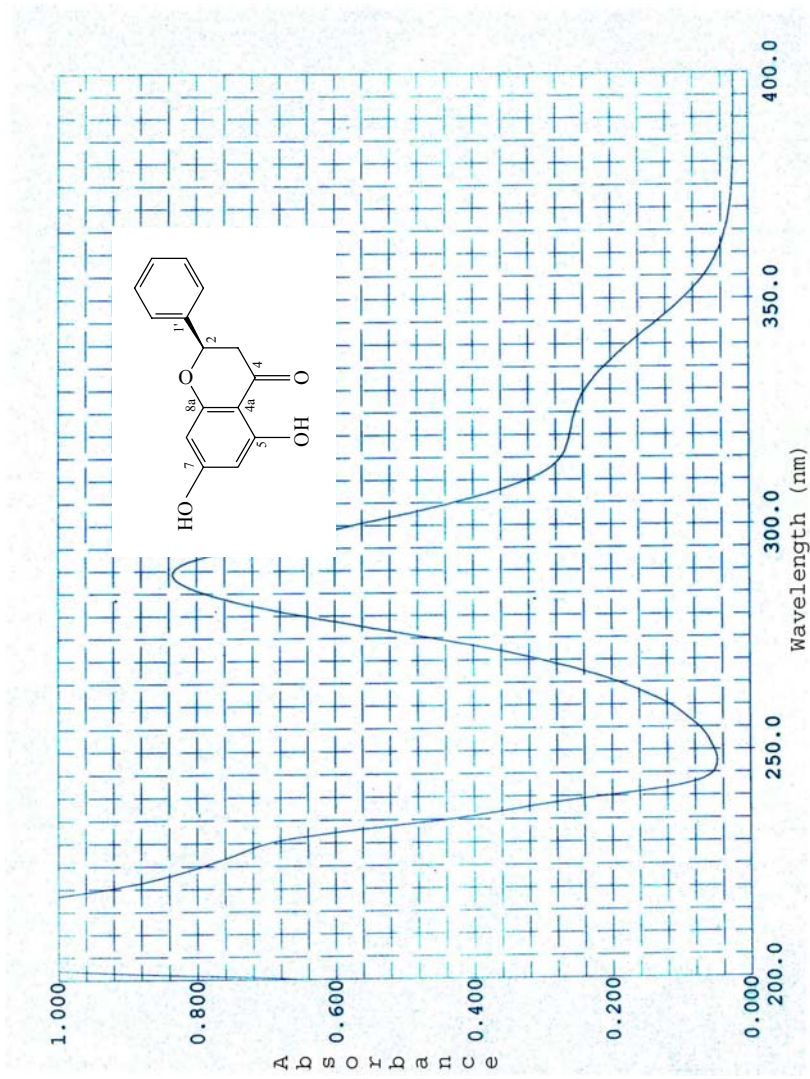


Figure A-11 UV spectrum of compound 3 (MeOH)

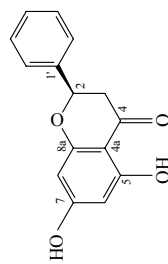
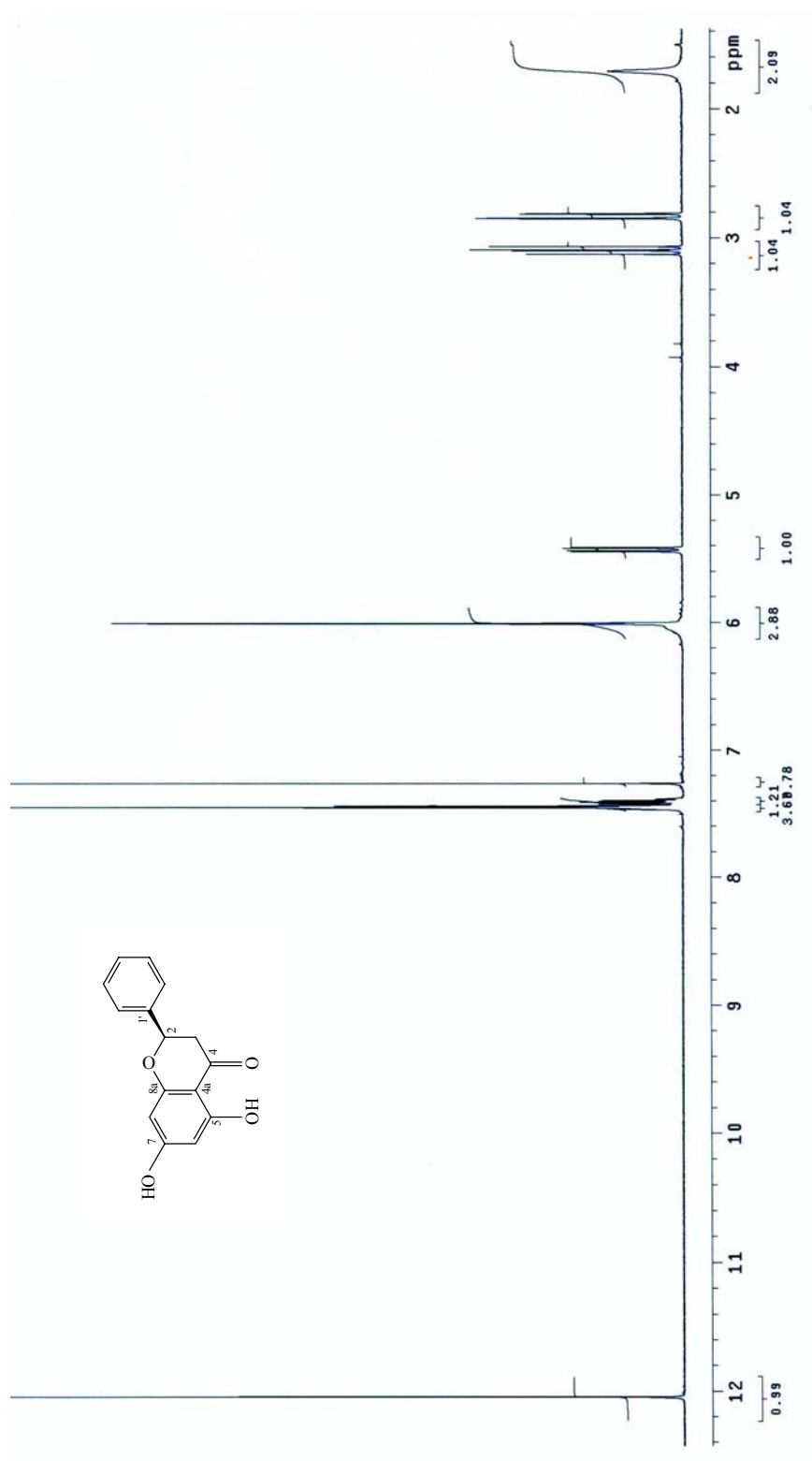
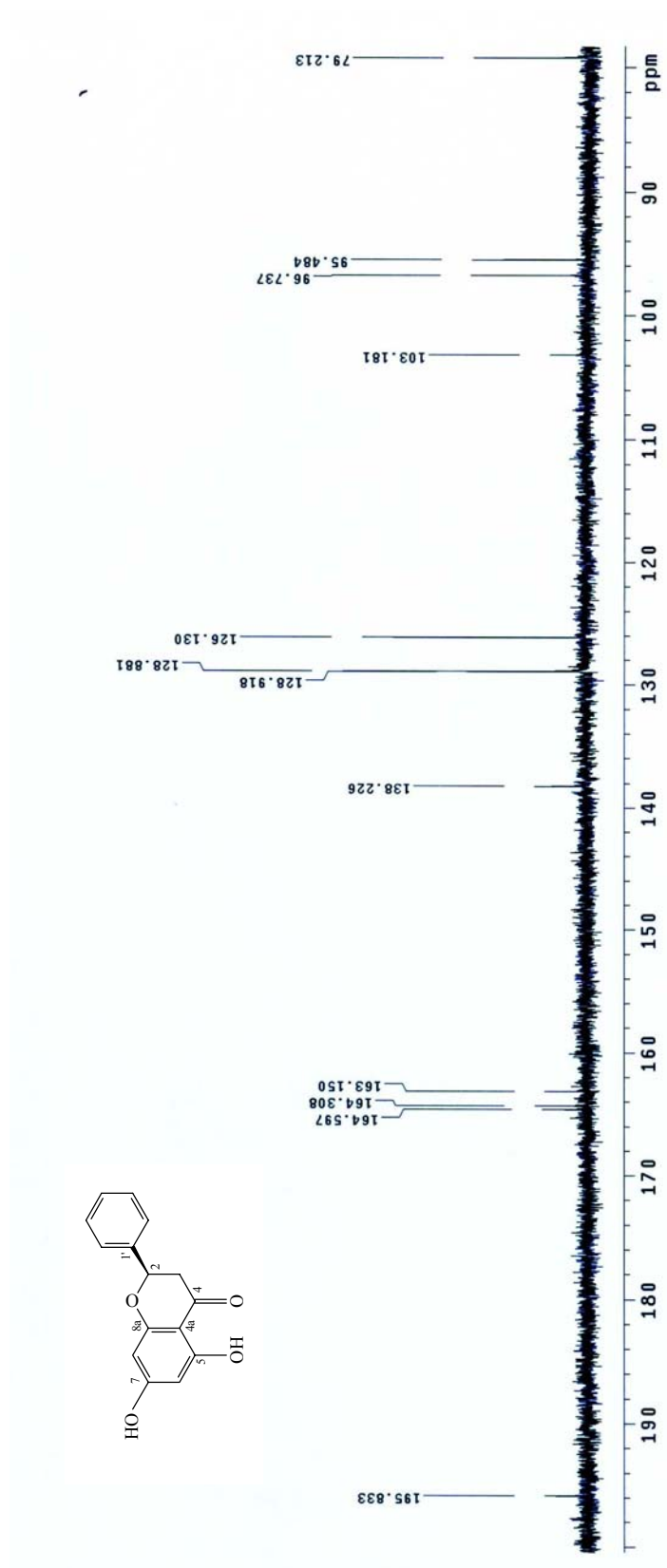


Figure A-12 IR spectrum of compound **3** (KBr)

Figure A-13 ¹H NMR spectrum of compound **3** (500 MHz; CDCl₃)

Figure A-14 ^{13}C NMR spectrum of compound **3** (500 MHz; CDCl_3)

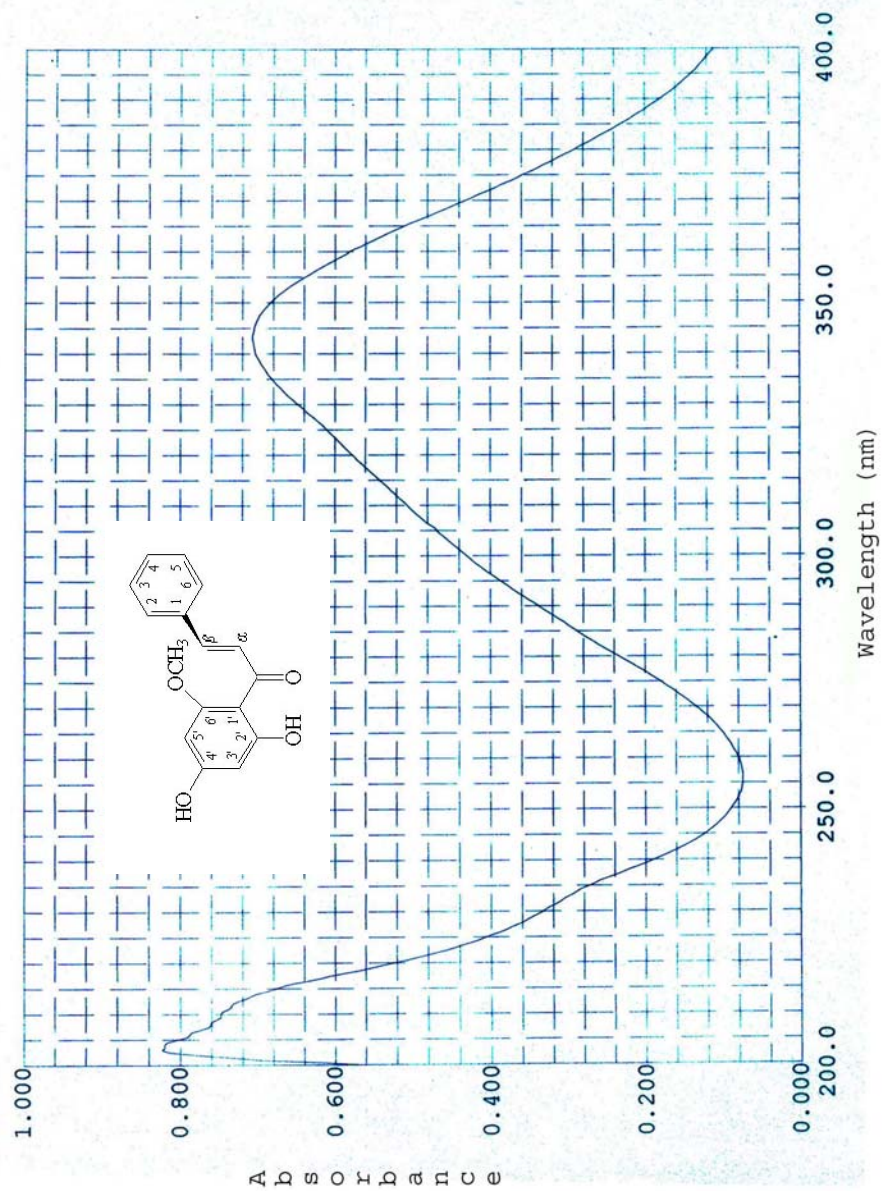


Figure A-15 UV spectrum of compound **4** (MeOH)

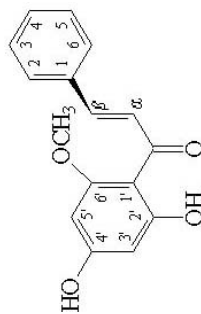


Figure A-16 IR spectrum of compound 4 (KBr)

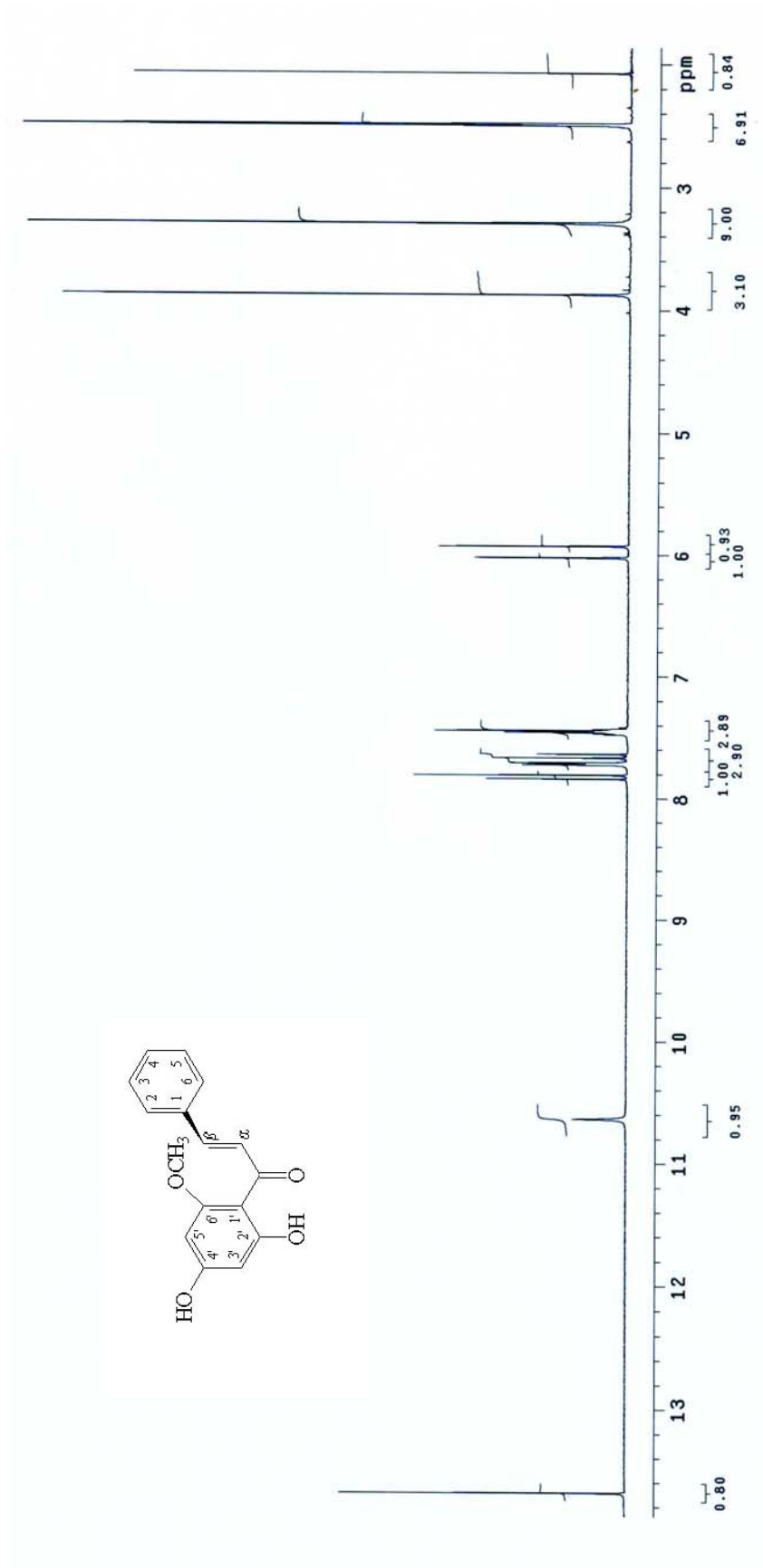


Figure A-17 ¹H NMR spectrum of compound 4 (500 MHz; DMSO-*d*₆)

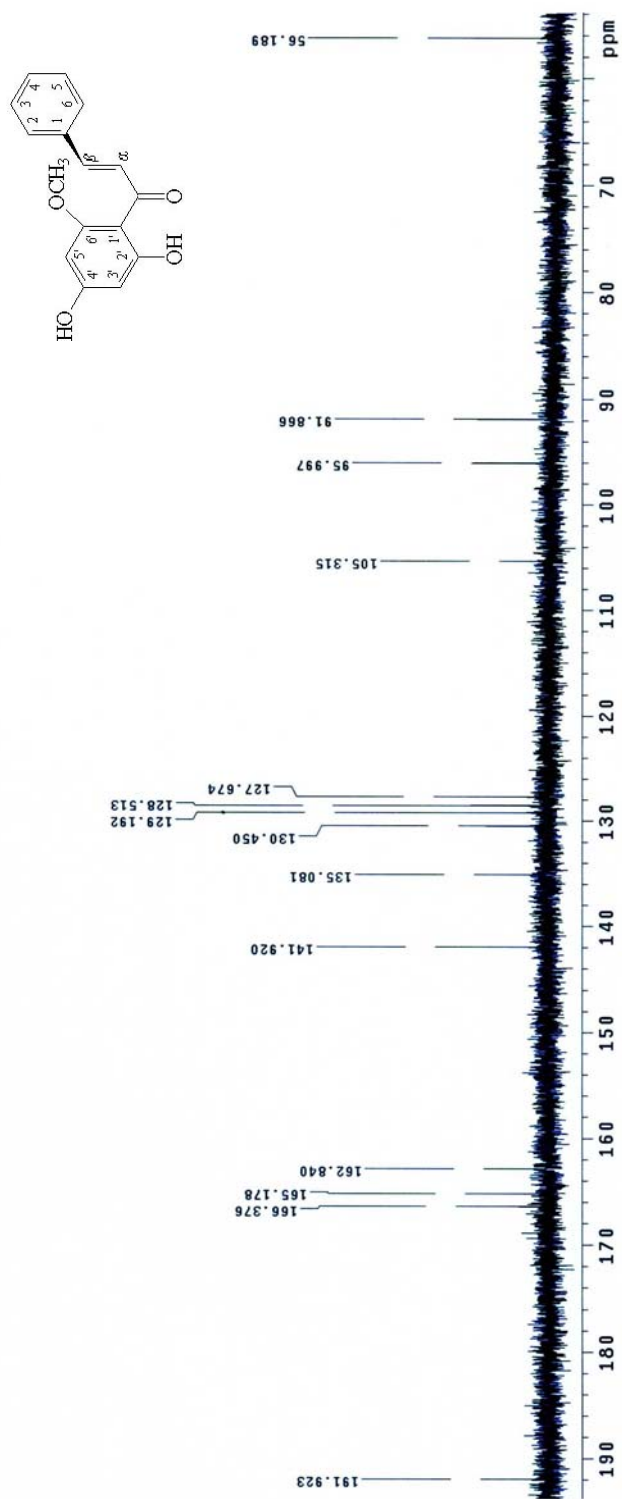


Figure A-18 ^{13}C NMR spectrum of compound **4** (500 MHz; $\text{DMSO-}d_6$)

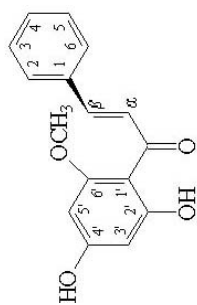


Figure A-19 ¹H-¹H COSY spectrum of compound 4 (500 MHz; DMSO-*d*₆)

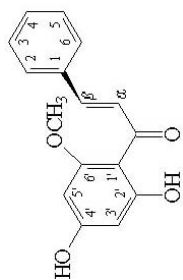


Figure A-20 HMQC spectrum of compound **4** (500 MHz; DMSO-*d*₆)

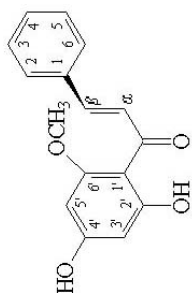


Figure A-21 HMBC spectrum of compound 4 (500 MHz; DMSO-*d*₆)

Figure A-22 NOE difference spectrum of compound **4** after irradiation at δ_{H} 3.9

Figure A-23 NOE difference spectrum of compound **4** after irradiation at δ_{H} 6.02