Supplementary Information

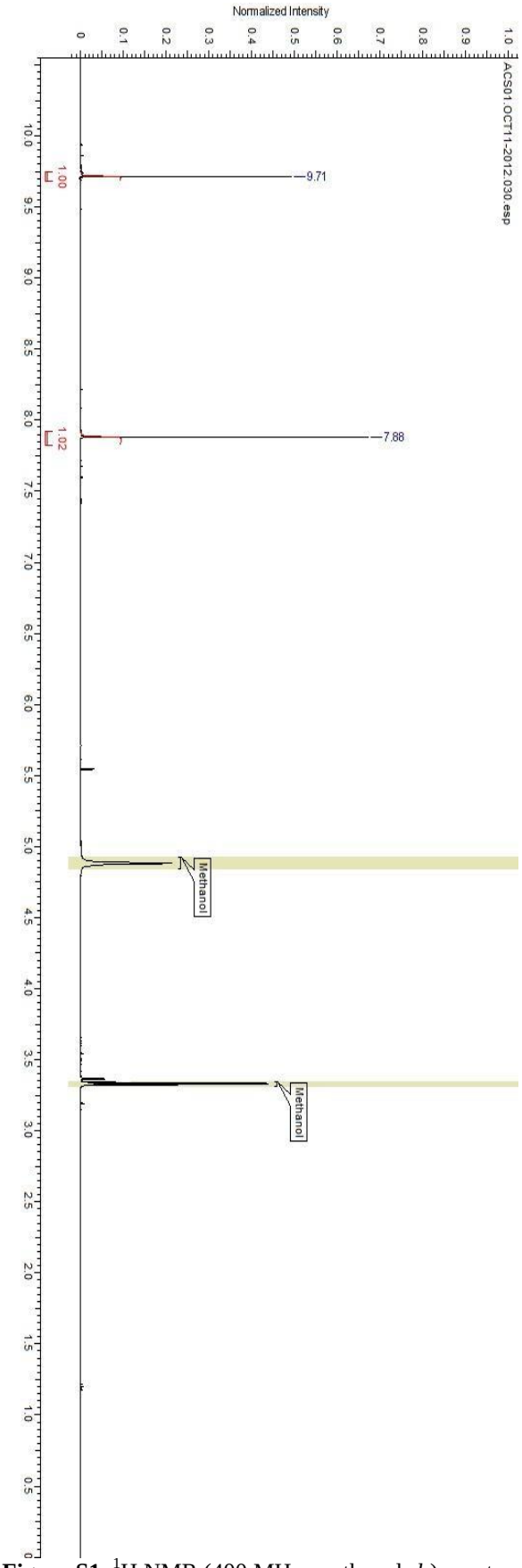
Total Synthesis of Altissimacoumarin D, a Small Molecule Sirtuin1 Activator

Anna C. Silva,[a] Hanae Benelkebir,[b] Rosangela S. C. Lopes,[a] Claudio C. Lopes[a] and A. Ganesan*[b]

[a]Departamento de Química Analítica, Instituto de Química, Universidade Federal do Rio de Janeiro, CT, Bloco A, 508, 21949-900 Rio de Janeiro-RJ, Brazil

[b]School of Pharmacy, University of East Anglia, Norwich Research Park, NR4 7TJ, Norwich, United Kingdom

*e-mail: a.ganesan@uea.ac.uk



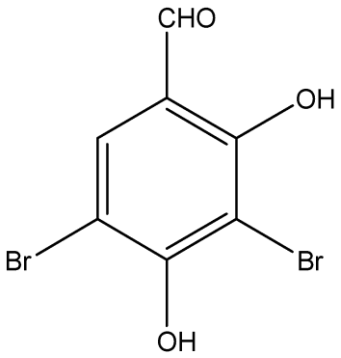
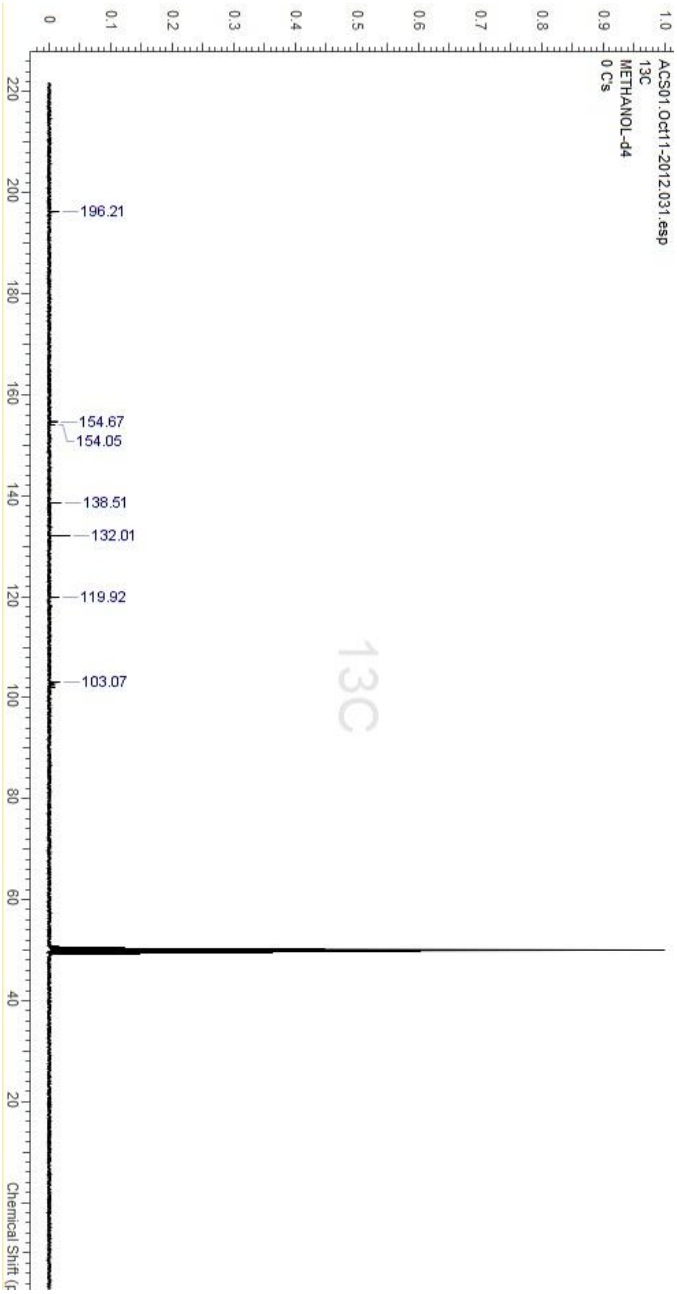


Figure S1. ^{1}H NMR (400 MHz, methanol-d_4) spectrum of compound **4**.



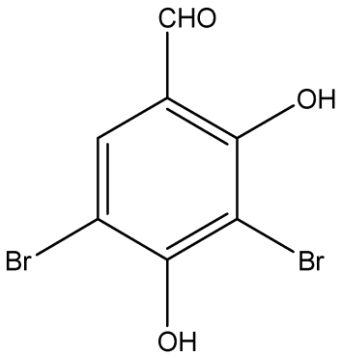
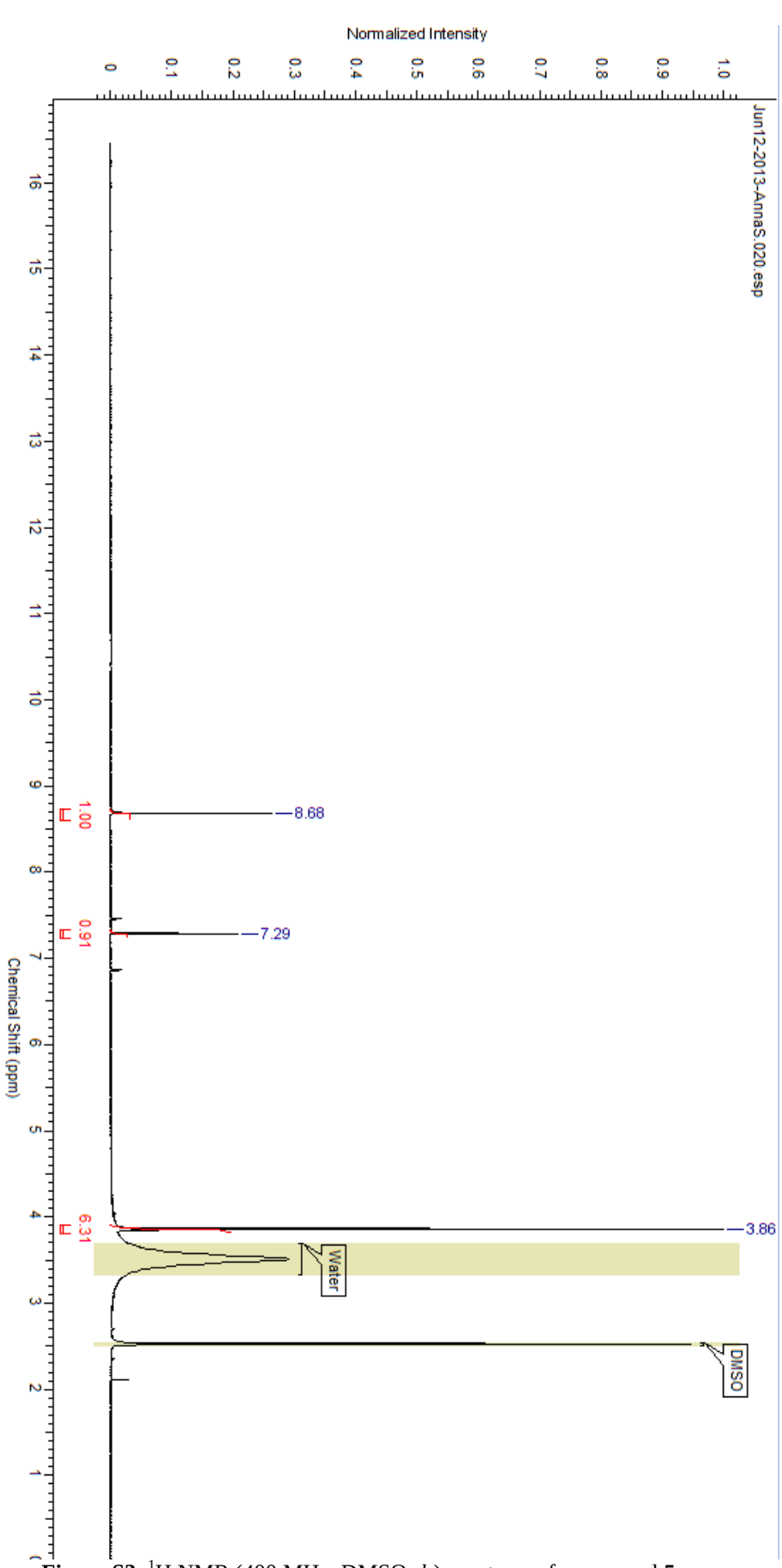


Figure S2. ^{13}C NMR (100 MHz, methanol-d_4) spectrum of compound **4**.



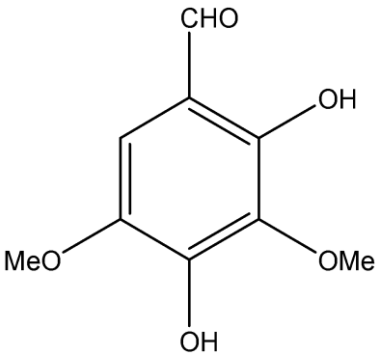
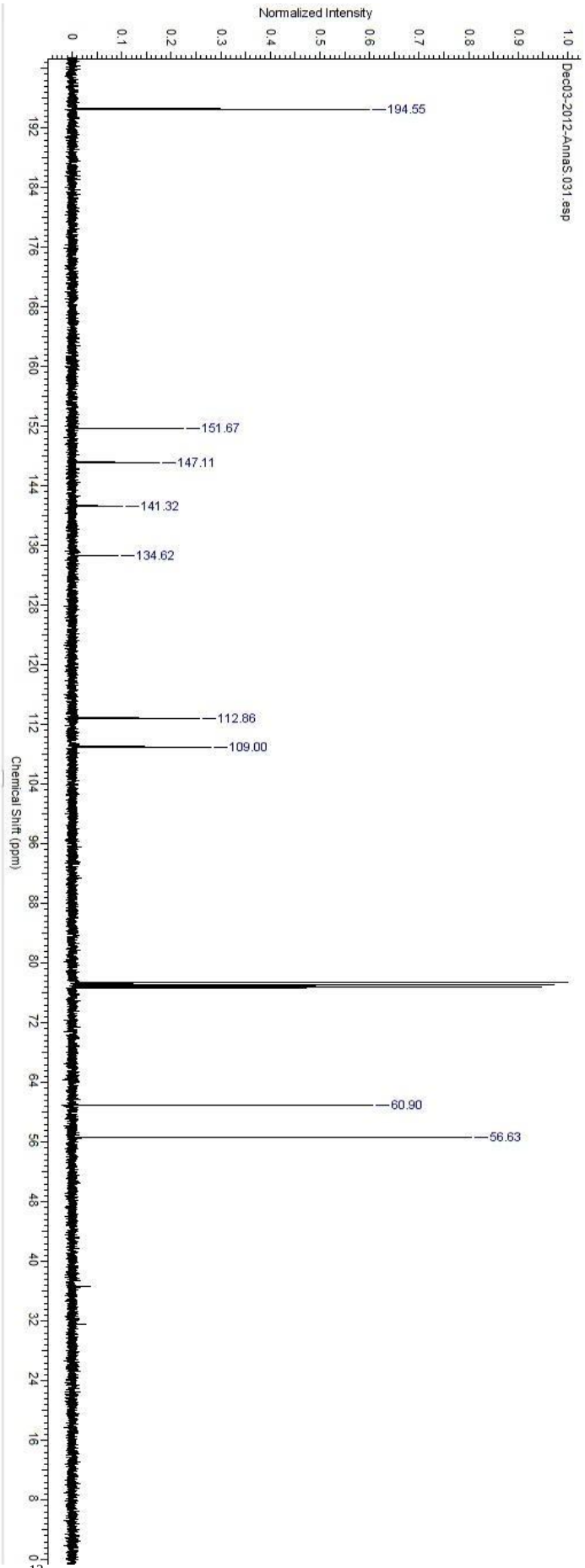


Figure S3. ^{1}H NMR (400 MHz, DMSO-d_6) spectrum of compound **5**.



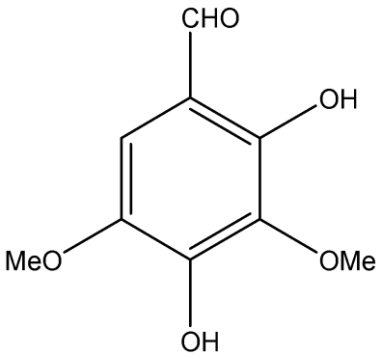
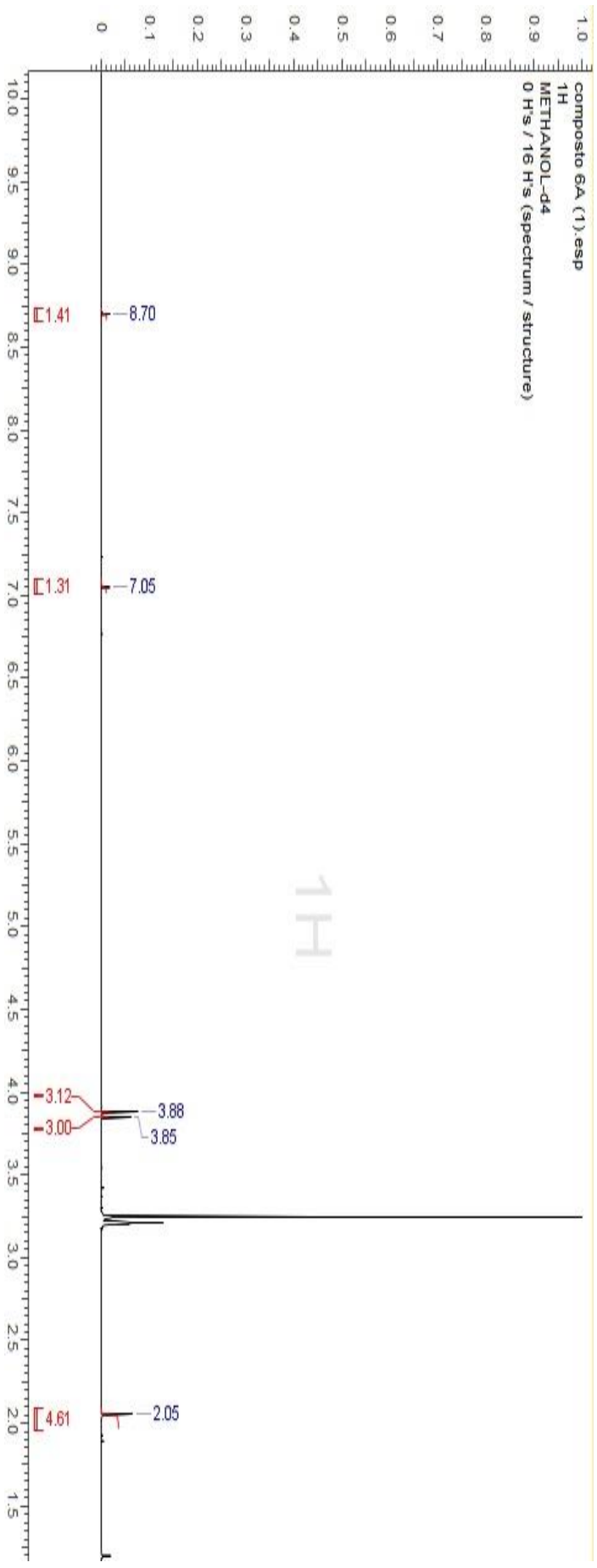


Figure S4. ^{13}C NMR (100 MHz, chloroform-*d*) spectrum of compound **5**.



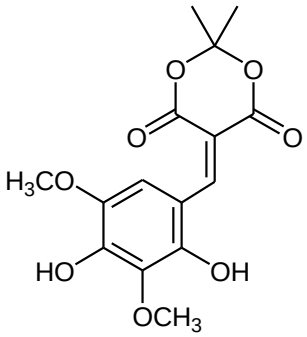
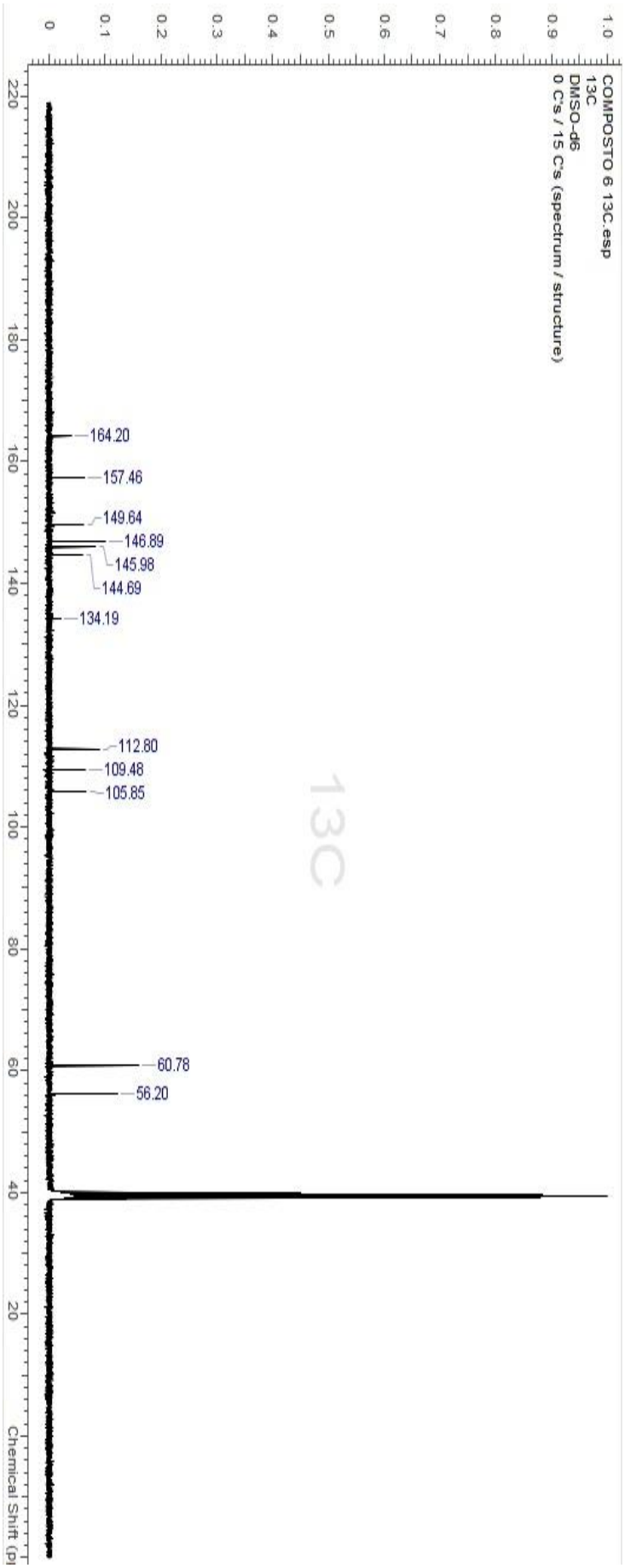


Figure S5. ^{1}H NMR (400 MHz, methanol-d_4) spectrum of compound **6**.



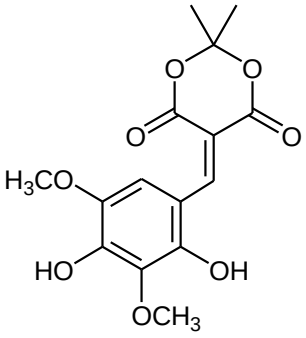
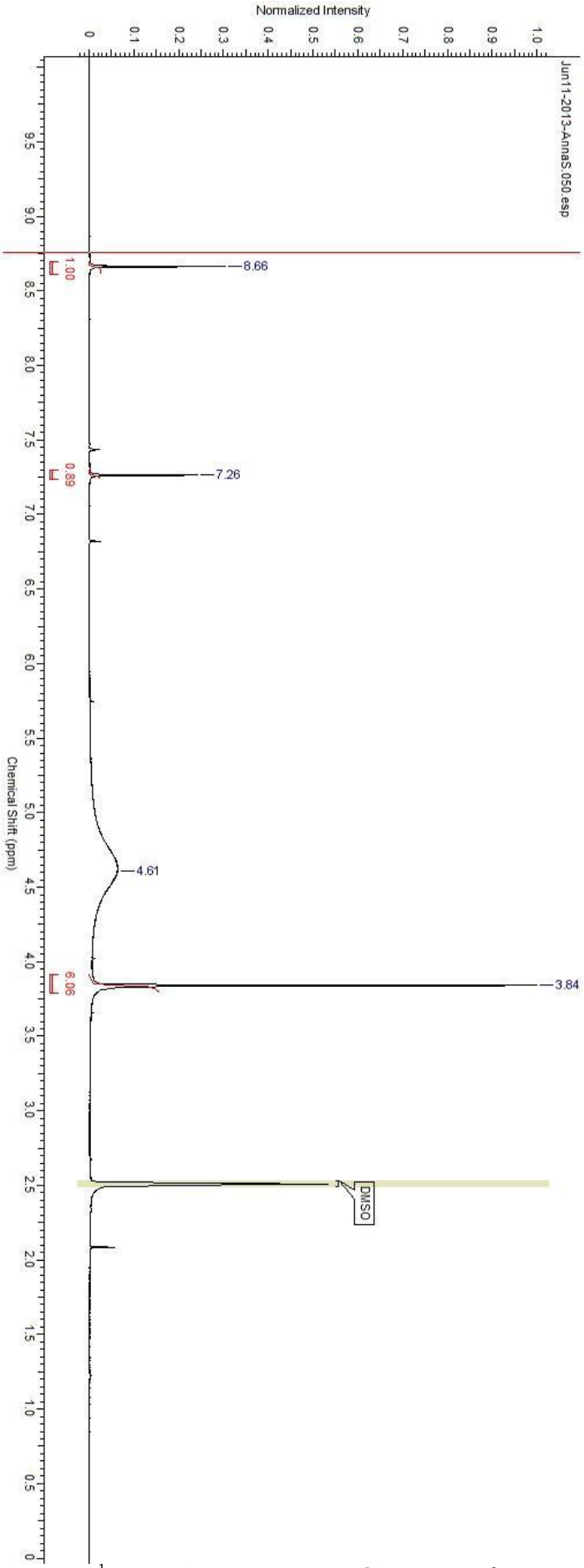


Figure S6. ^{13}C NMR (100 MHz, methanol-d_4) spectrum of compound **6**.



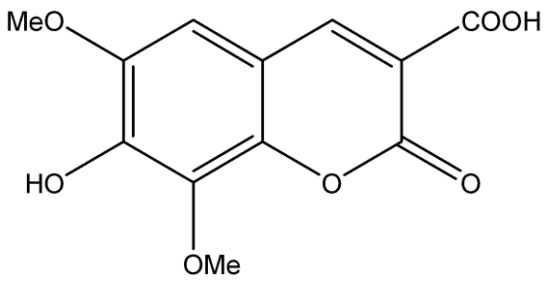
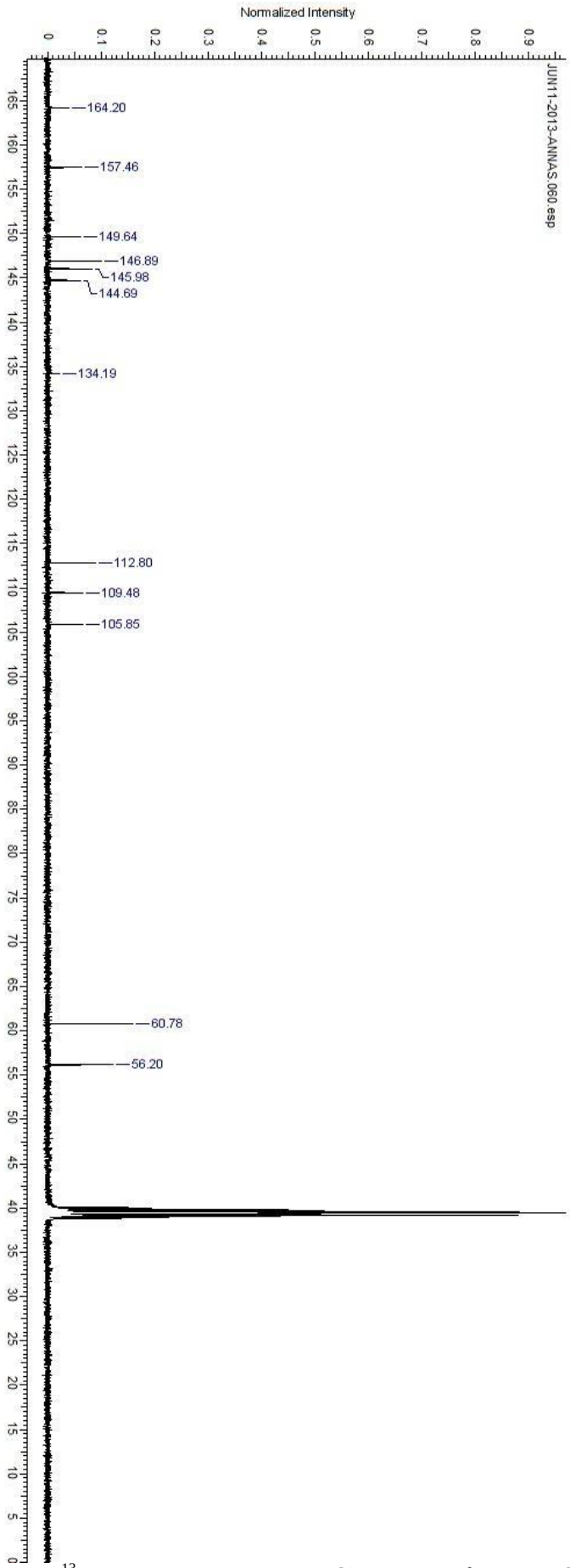


Figure S7. ^{1}H NMR (400 MHz, DMSO-d_6) spectrum of compound **7**.



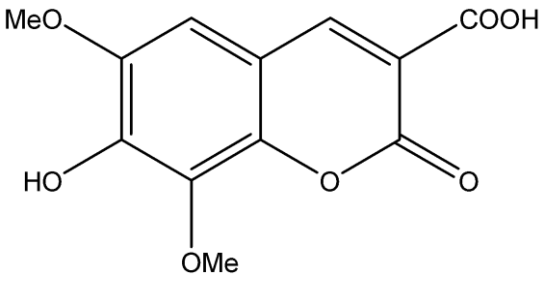
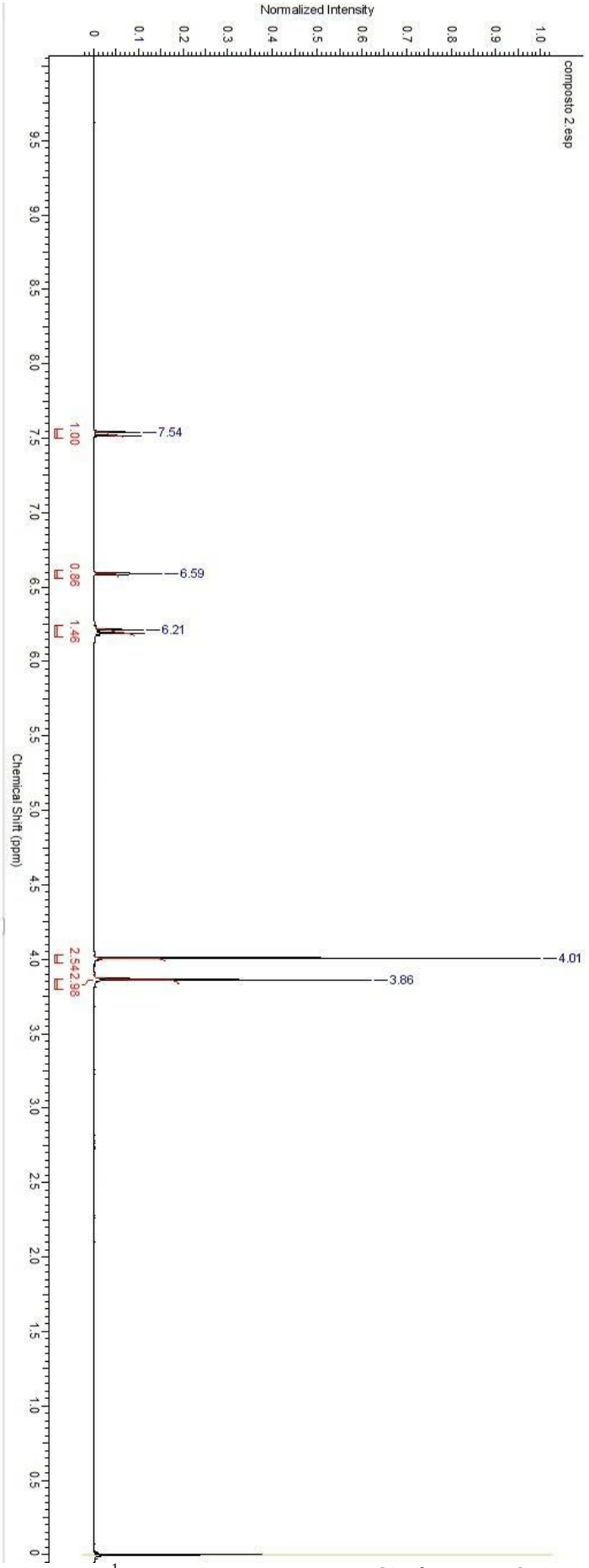


Figure S8. ^{13}C NMR (100 MHz, DMSO-d_6) spectrum of compound **7**.



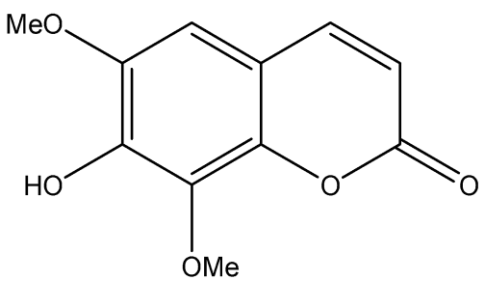
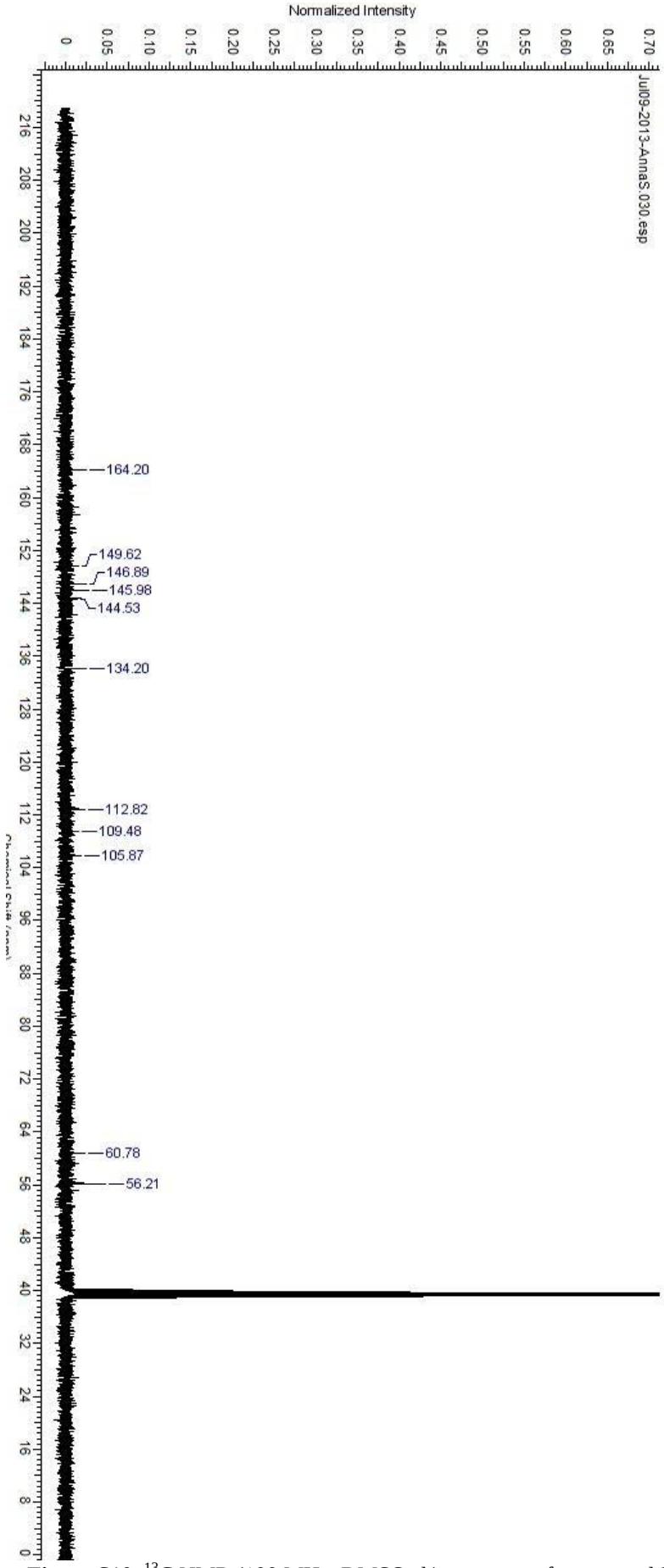


Figure S9. ^{1}H NMR (400 MHz, DMSO-d_6) of compound **2**.



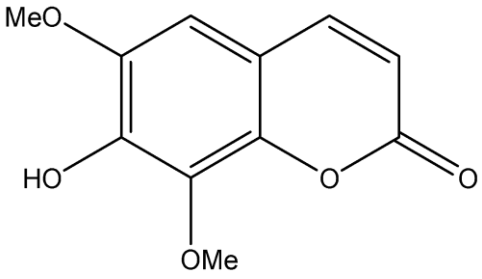


Figure S10. ^{13}C NMR (100 MHz, DMSO-d_6) spectrum of compound **2**.

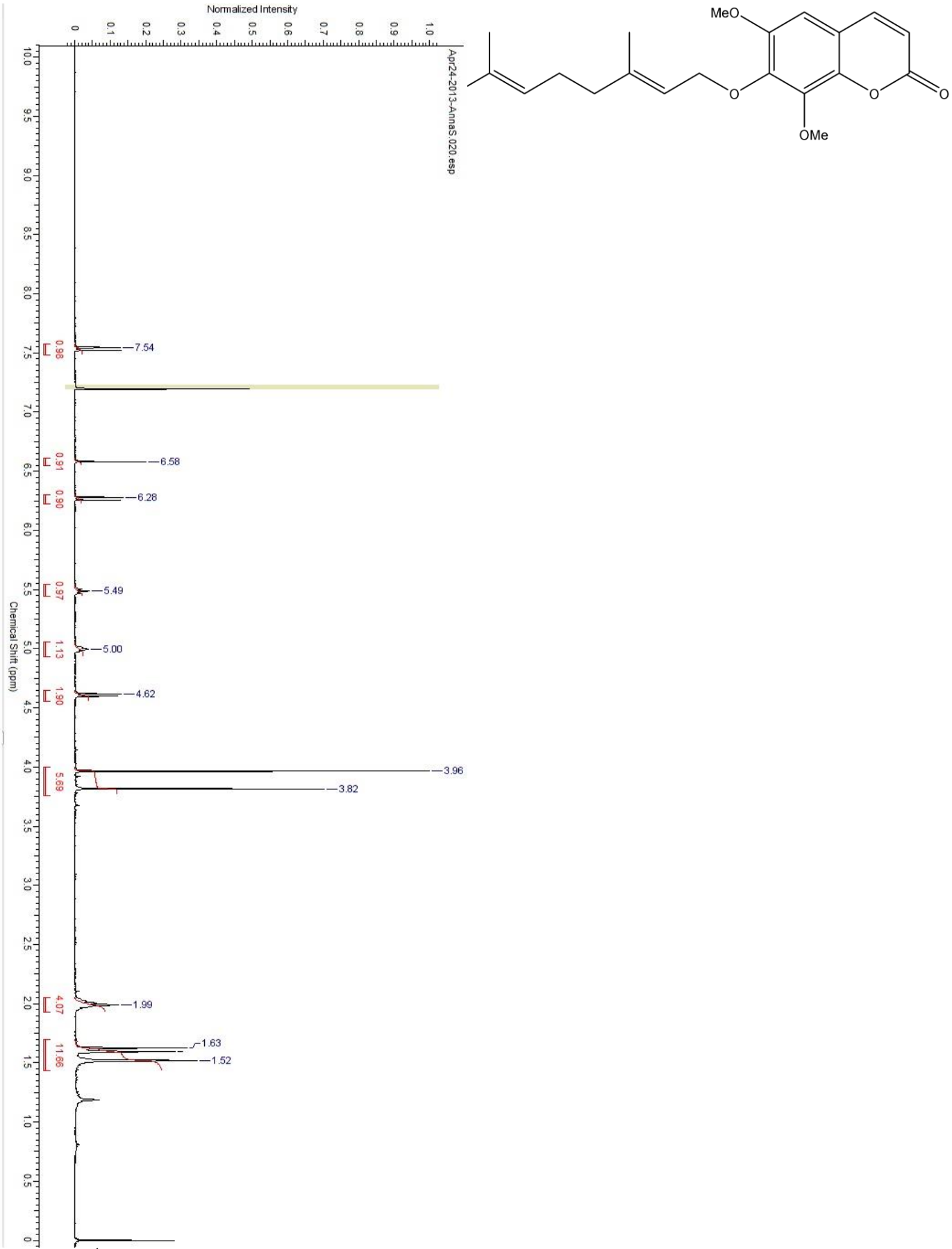


Figure S11. ^{1}H NMR (400 MHz, chloroform-*d*) spectrum of compound **1**.

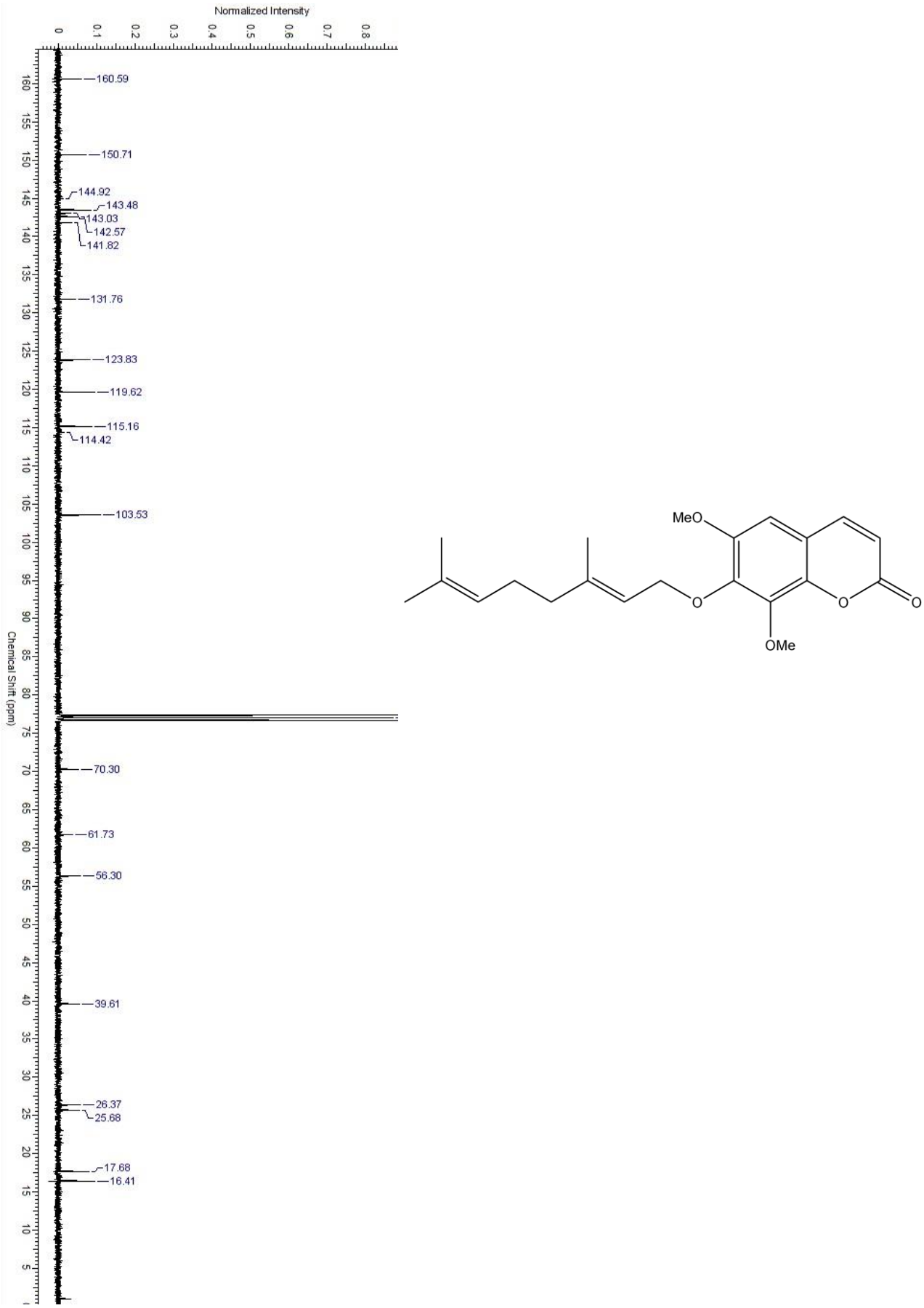


Figure S12. ^{13}C NMR (100 MHz, chloroform-*d*) spectrum of compound **1**.