

Synthesis of Norabietyl and Nordehydroabietyl Imidazolidine-2,4,5-Triones and Their Activity against Tyrosyl-DNA Phosphodiesterase 1

Kseniya Kovaleva¹, Olga Yarovaya^{1*}, Irina Chernyshova², Alexandra Zakharenko², Sergey Cheresiz³, Amirhossein Azimirad³, Andrey Pokrovsky³, Olga Lavrik², Nariman Salakhutdinov¹

¹ N. N. Vorozhtsov Novosibirsk Institute of Organic Chemistry, Siberian Branch of the Russian Academy of Sciences, Lavrentiev Ave. 9, Novosibirsk 630090, Russia; kseniya.kovaleva3103@yandex.ru (K.S.K.); anvar@nioch.nsc.ru (N.F.S.)

² Novosibirsk Institute of Chemical Biology and Fundamental Medicine, Siberian Branch of the Russian Academy of Sciences, Lavrentiev Ave. 8, Novosibirsk 630090, Russia; chernyshova0305@gmail.com (I.A.C.); a.zakharenko73@gmail.com (A.L.Z.); lavrik@nioch.nsc.ru (O.I.L.)

³ V. Zelman Institute for the Medicine and Psychology; Novosibirsk State University, Pirogova St. 1, Novosibirsk 630090, Russia; cheresiz@yandex.ru (S.V.C.); azimirad@mail.ru (A.A.); agpok@inbox.ru (A.G.P.)

* Correspondence: ooo@nioch.nsc.ru (O.I.Y.); Tel.: +7-383-330-88-70

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1. High Resolution Mass Spectra of Compounds 8a-9b

Figure S1. High Resolution Mass Spectra of Compound 8a

KS-484 #16 RT: 1.10 AV: 1 NL: 6.40E6
T: + c EI Full ms [32.50-520.50]

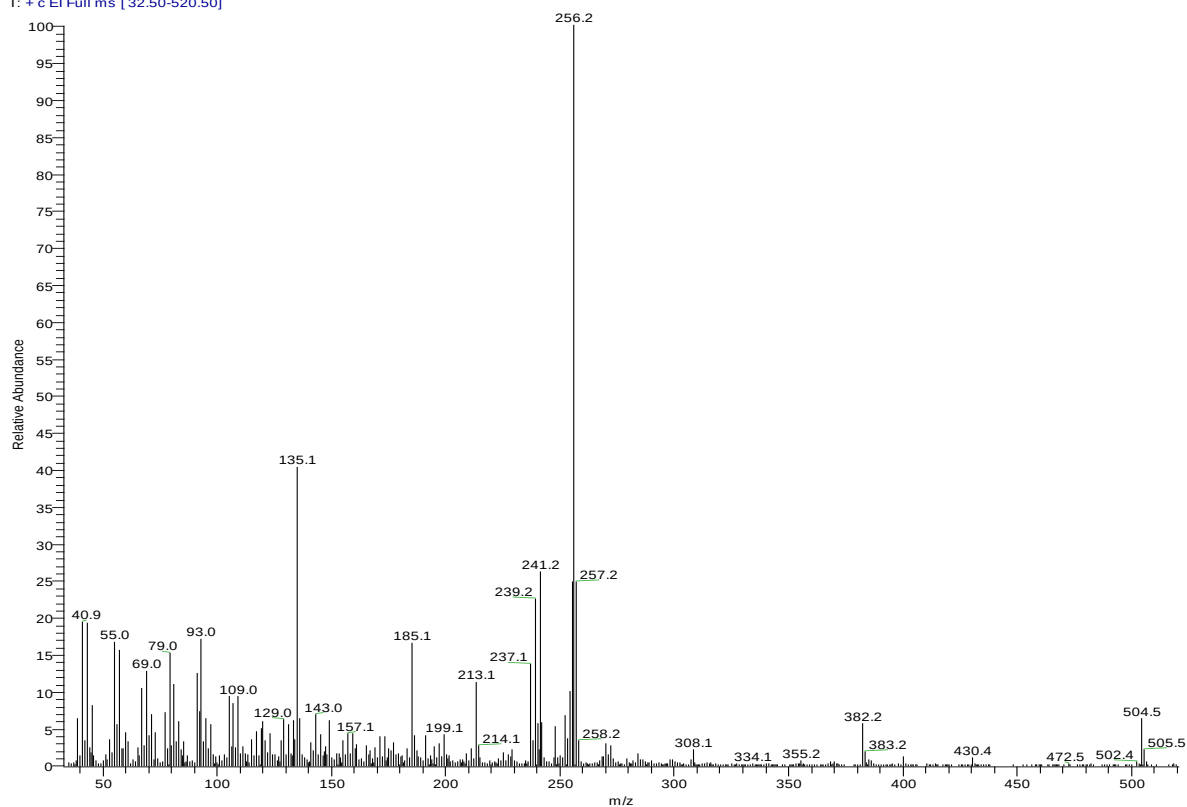


Figure S2. High Resolution Mass Spectra of Compound 8b

KS-479 #20 RT: 1.56 AV: 1 NL: 1.50E7
T: + c EI Full ms [14.50-530.50]

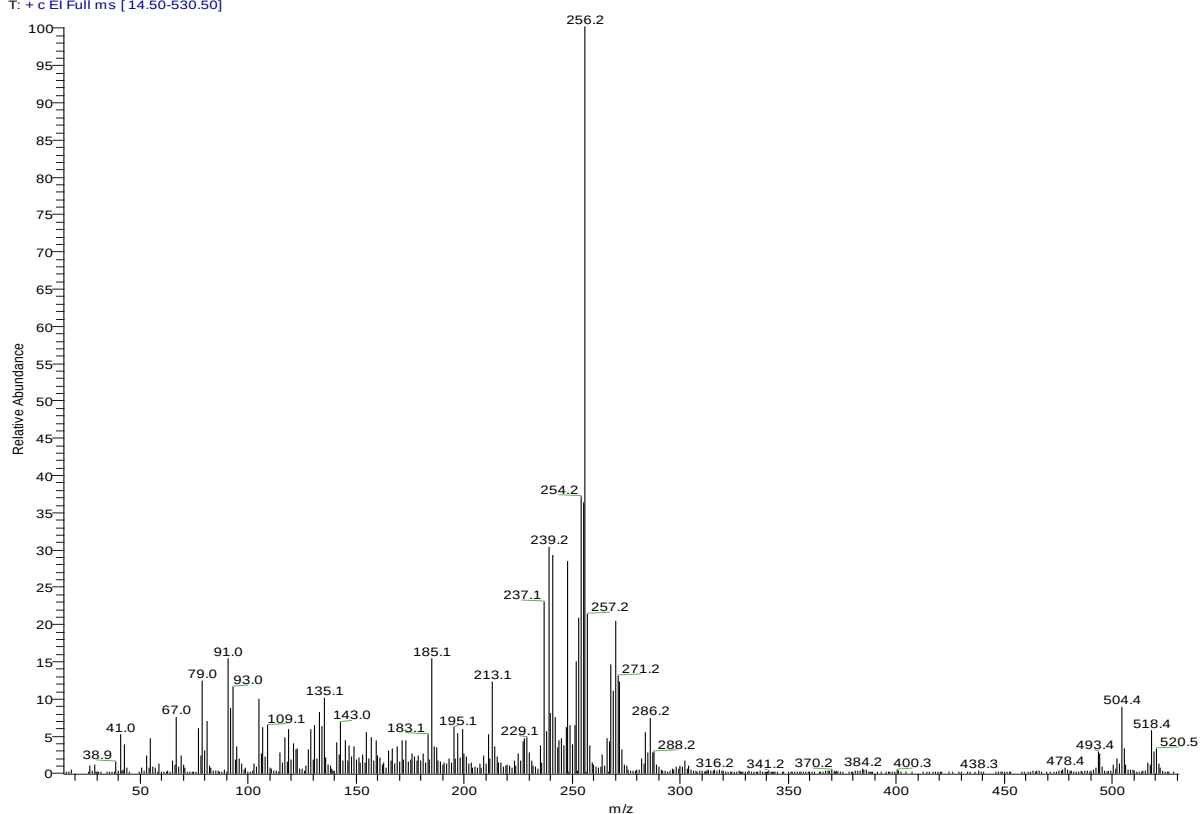


Figure S3. High Resolution Mass Spectra of Compound 9a

KS-480 #11 RT: 0.83 AV: 1 NL: 1.41E8
T: + c EI Full ms [14.50-550.50]

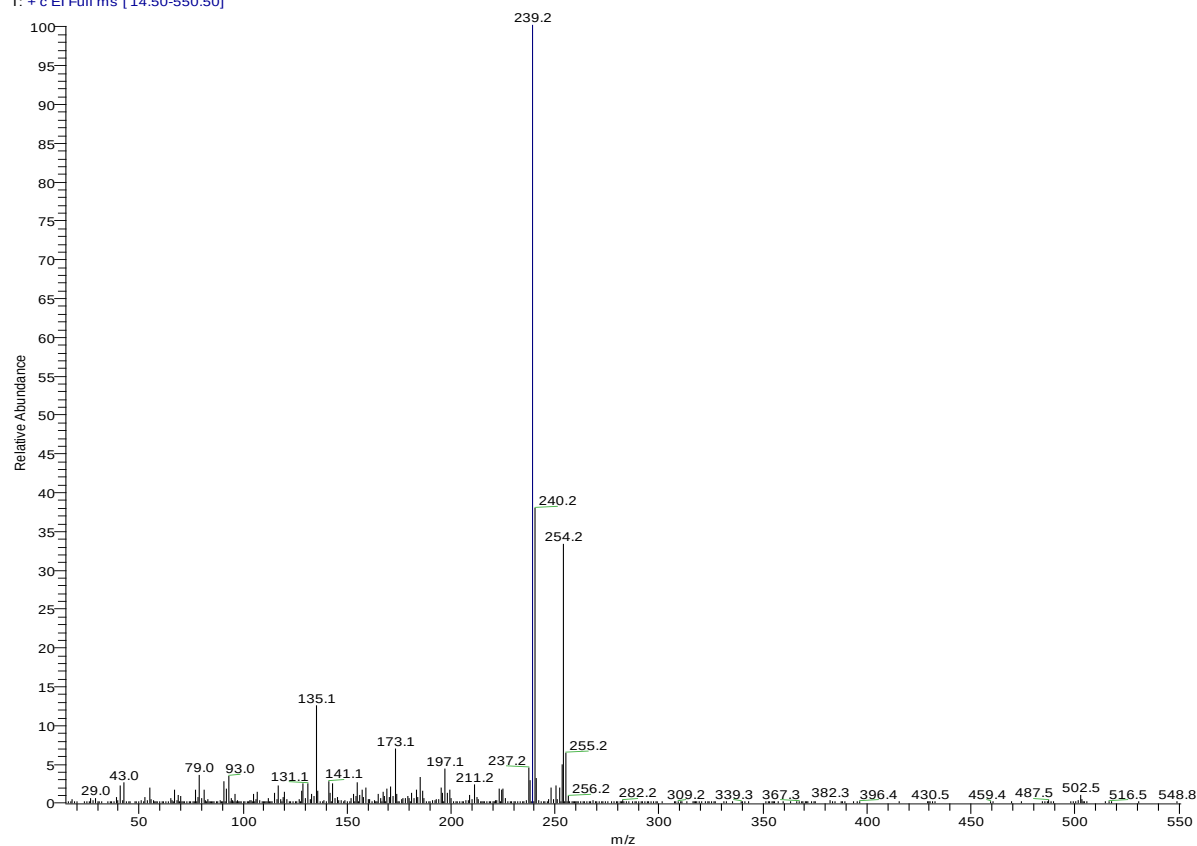
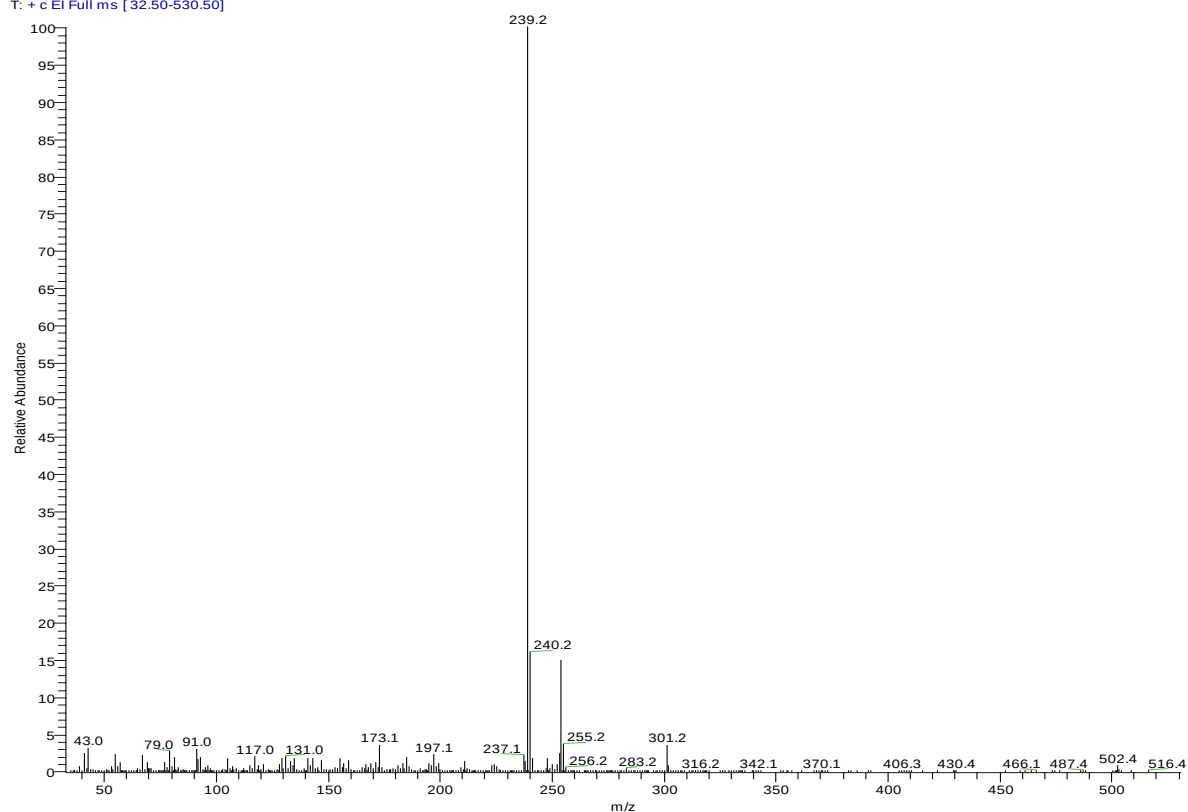


Figure S4. High Resolution Mass Spectra of Compound 9b

KS-481 #3 RT: 0.19 AV: 1 NL: 6.73E7
T: + c EI Full ms [32.50-530.50]



2. ^1H NMR and ^{13}C NMR spectra of compounds 8a-9b

Figure S5. ^1H NMR and ^{13}C NMR spectra of compound 8a

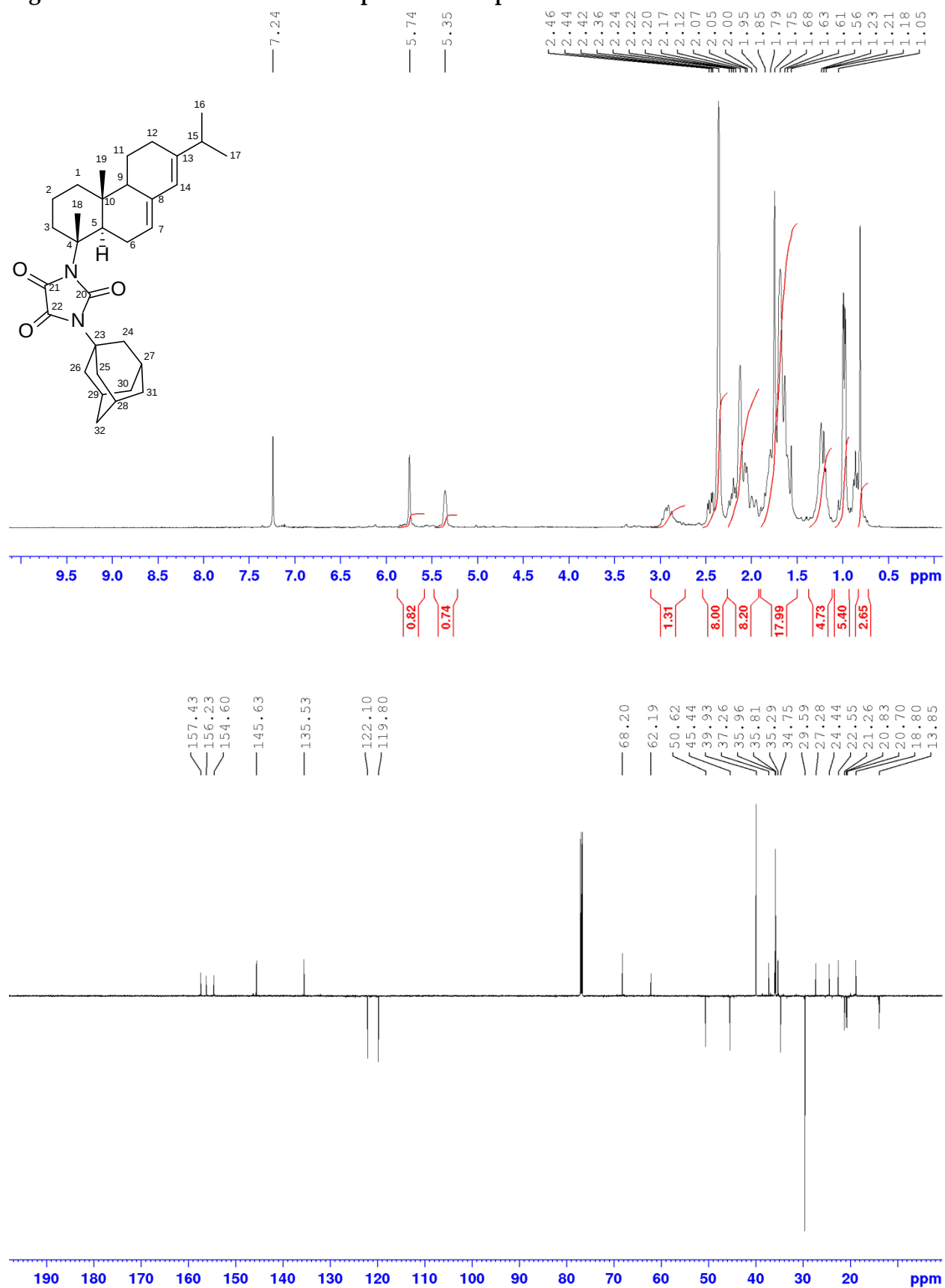


Figure S6. ^1H NMR and ^{13}C NMR spectra of compound 8b

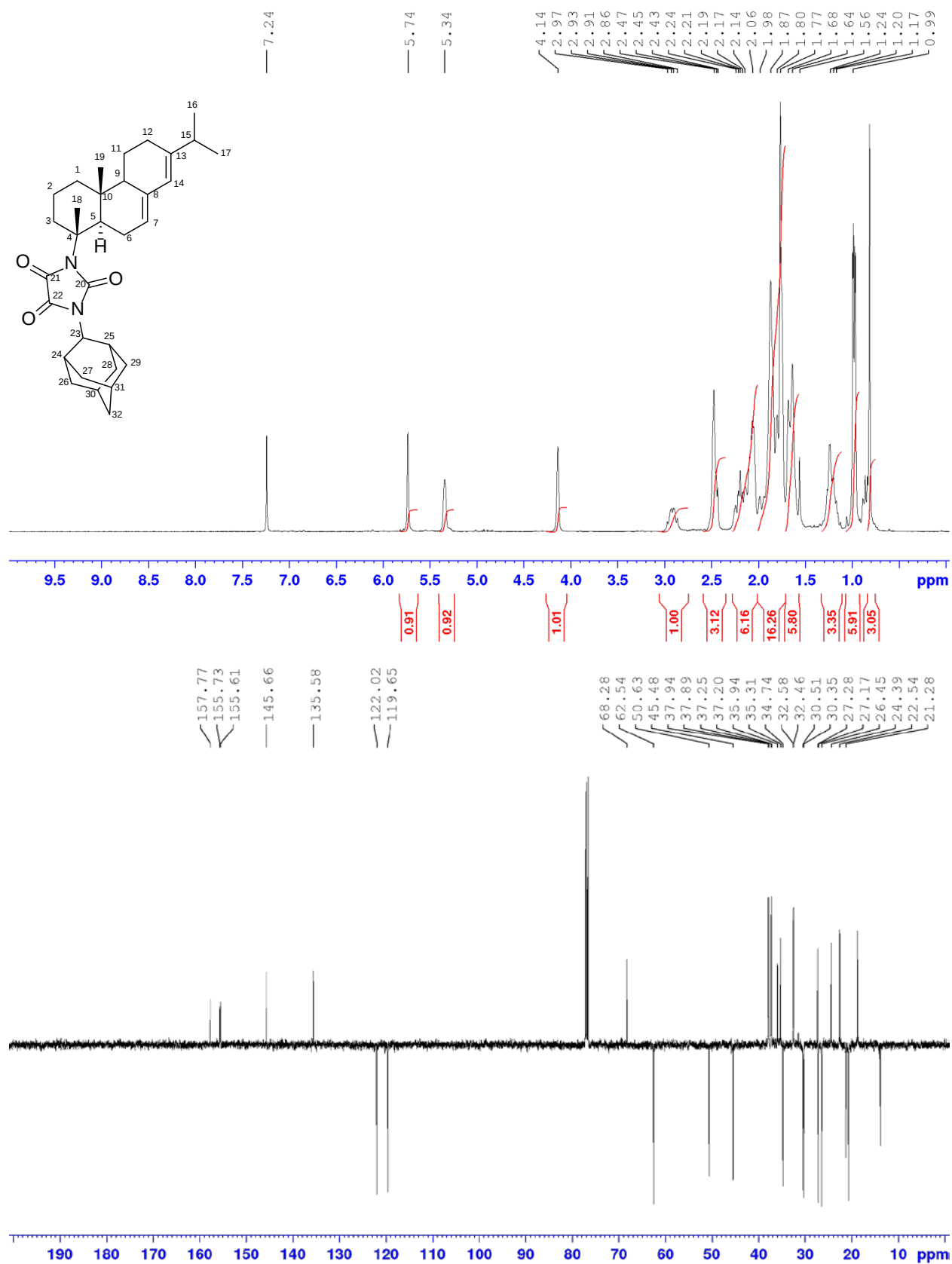
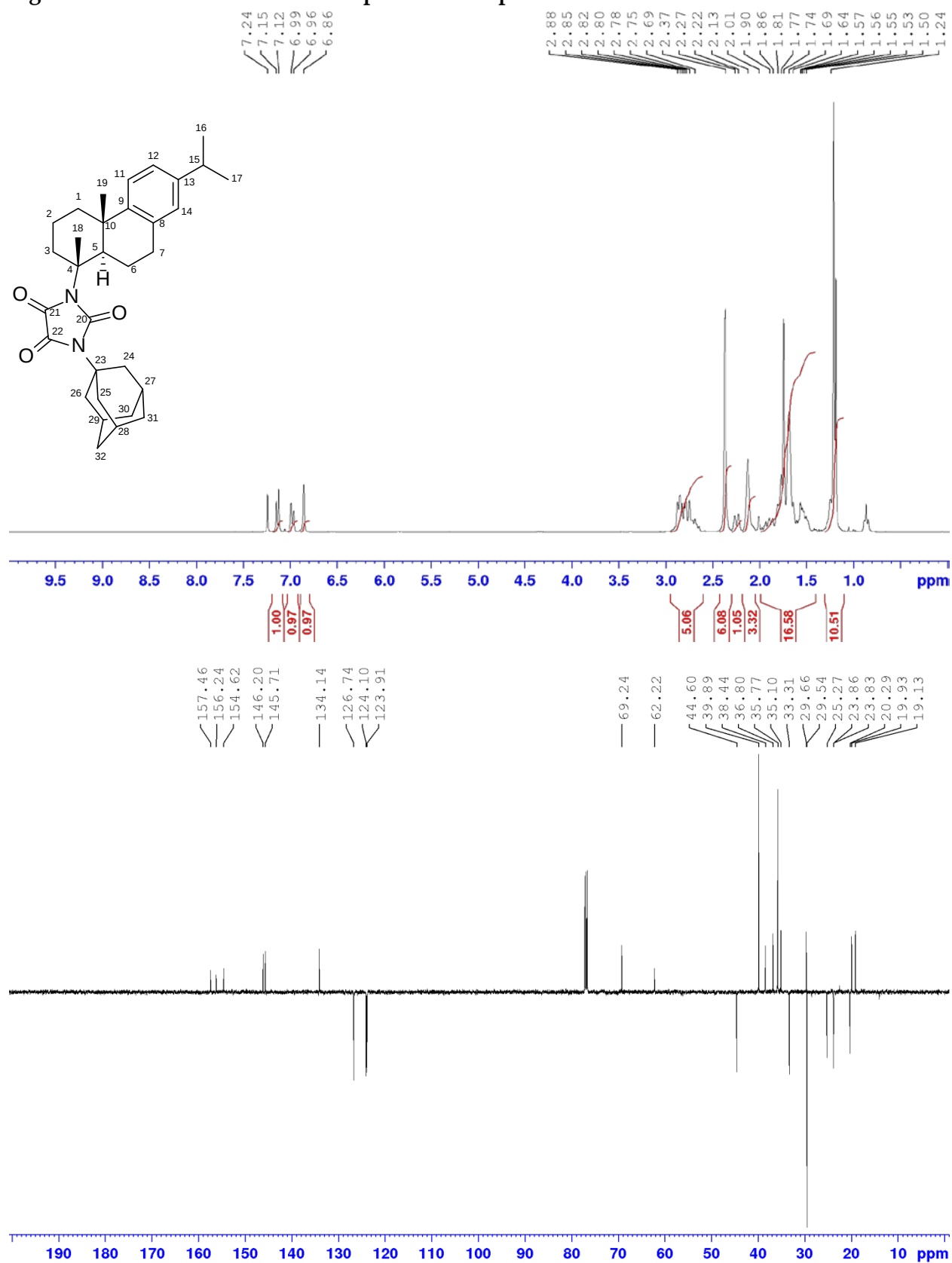
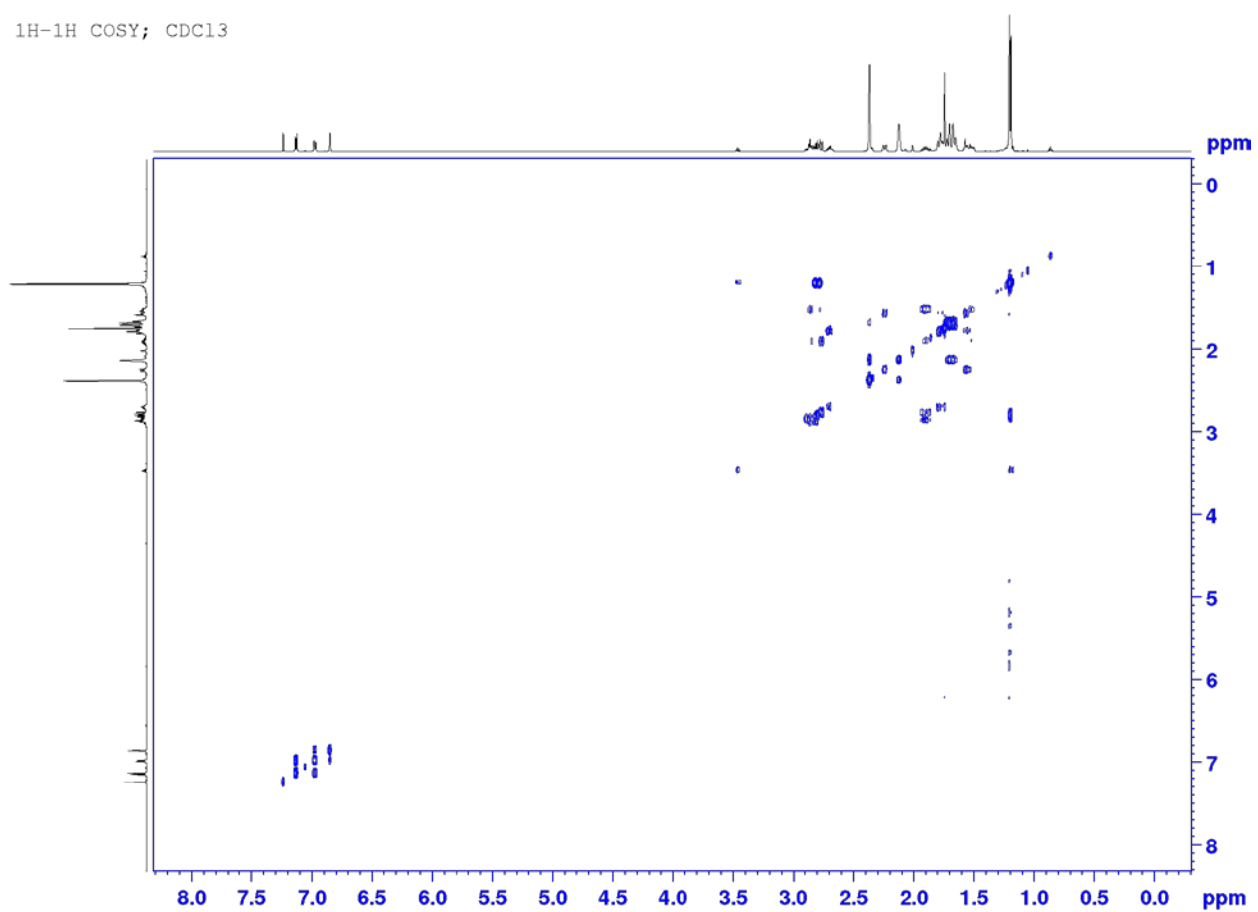


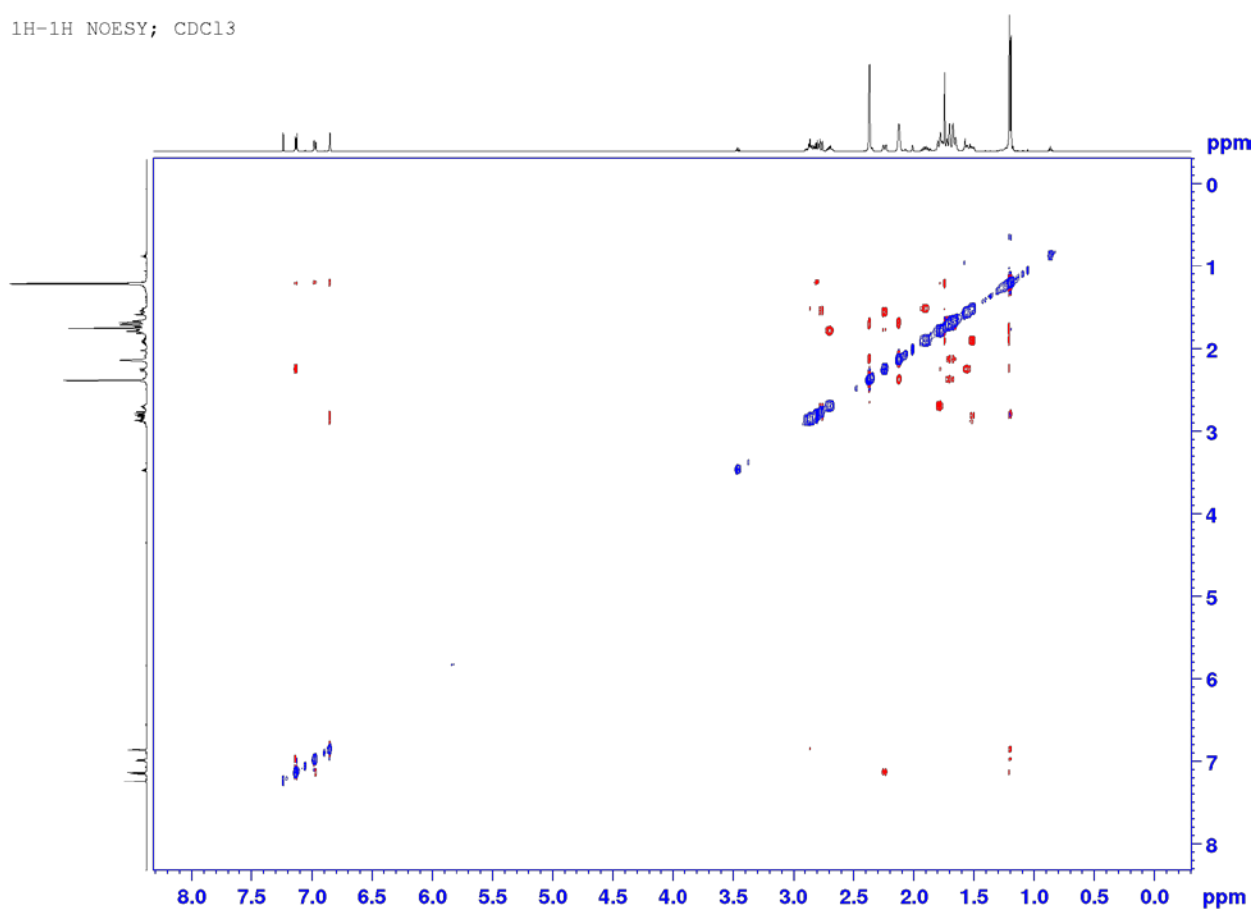
Figure S7. ^1H NMR and ^{13}C NMR spectra of compound 9a



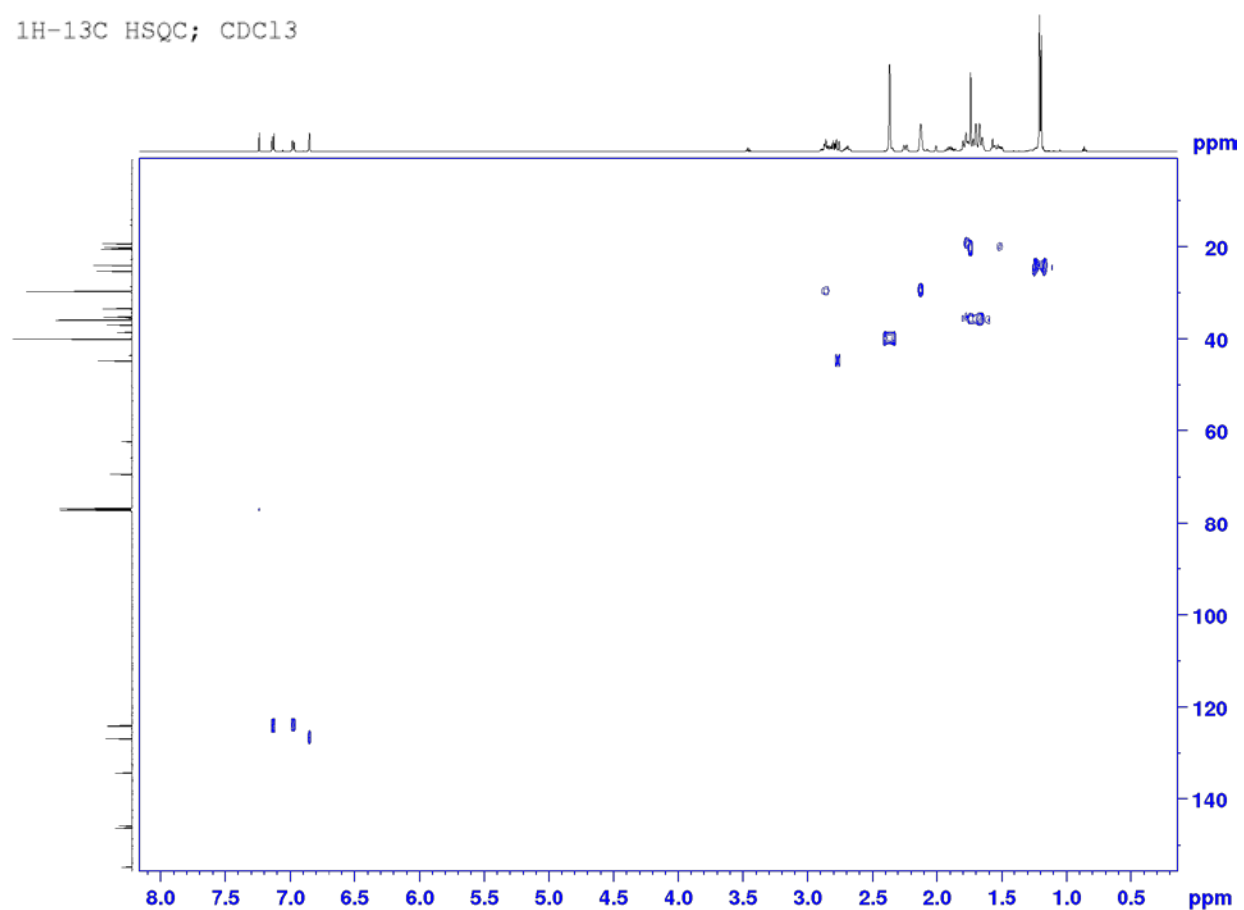
^1H - ^1H COSY; CDCl_3



^1H - ^1H NOESY; CDCl_3



1H-13C HSQC; CDCl3



1H-13C HMBC; CDCl3

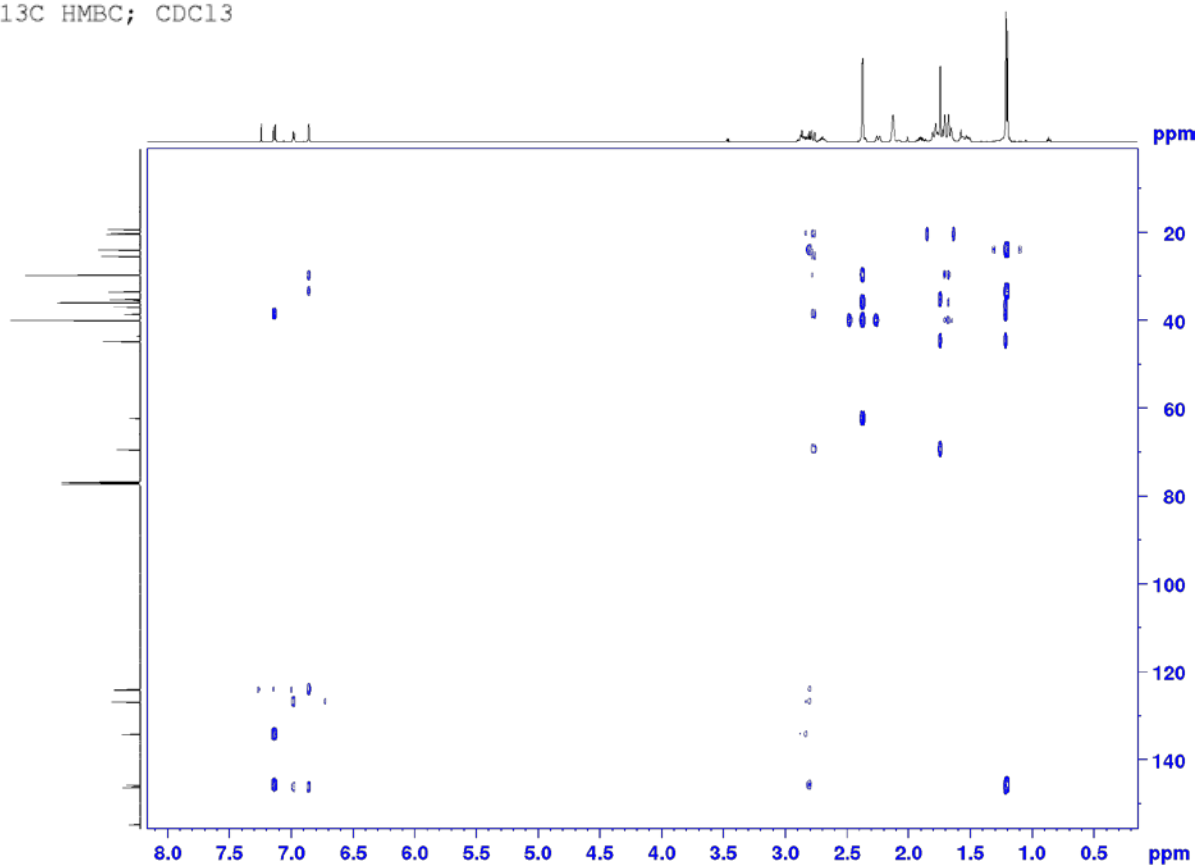
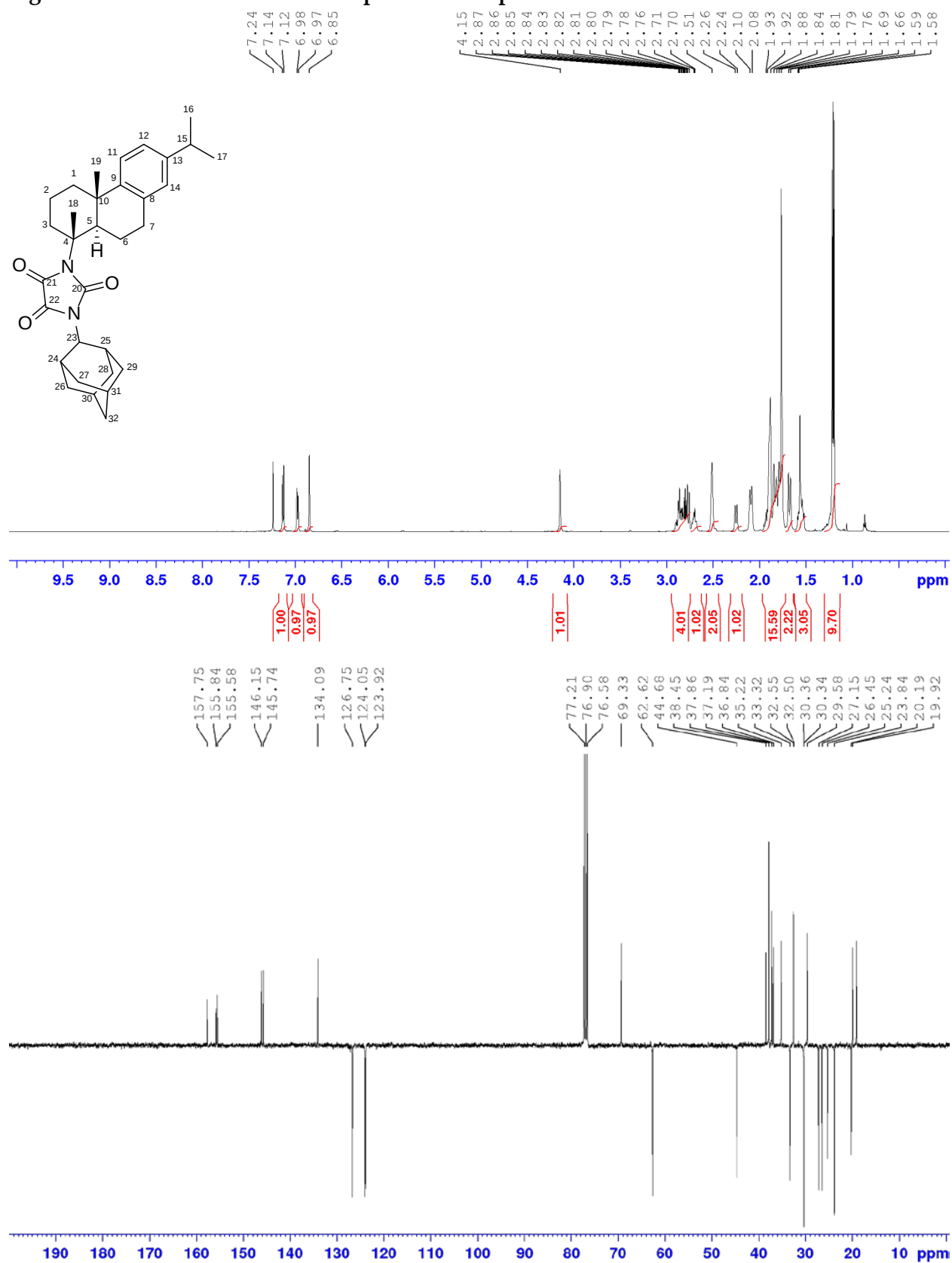
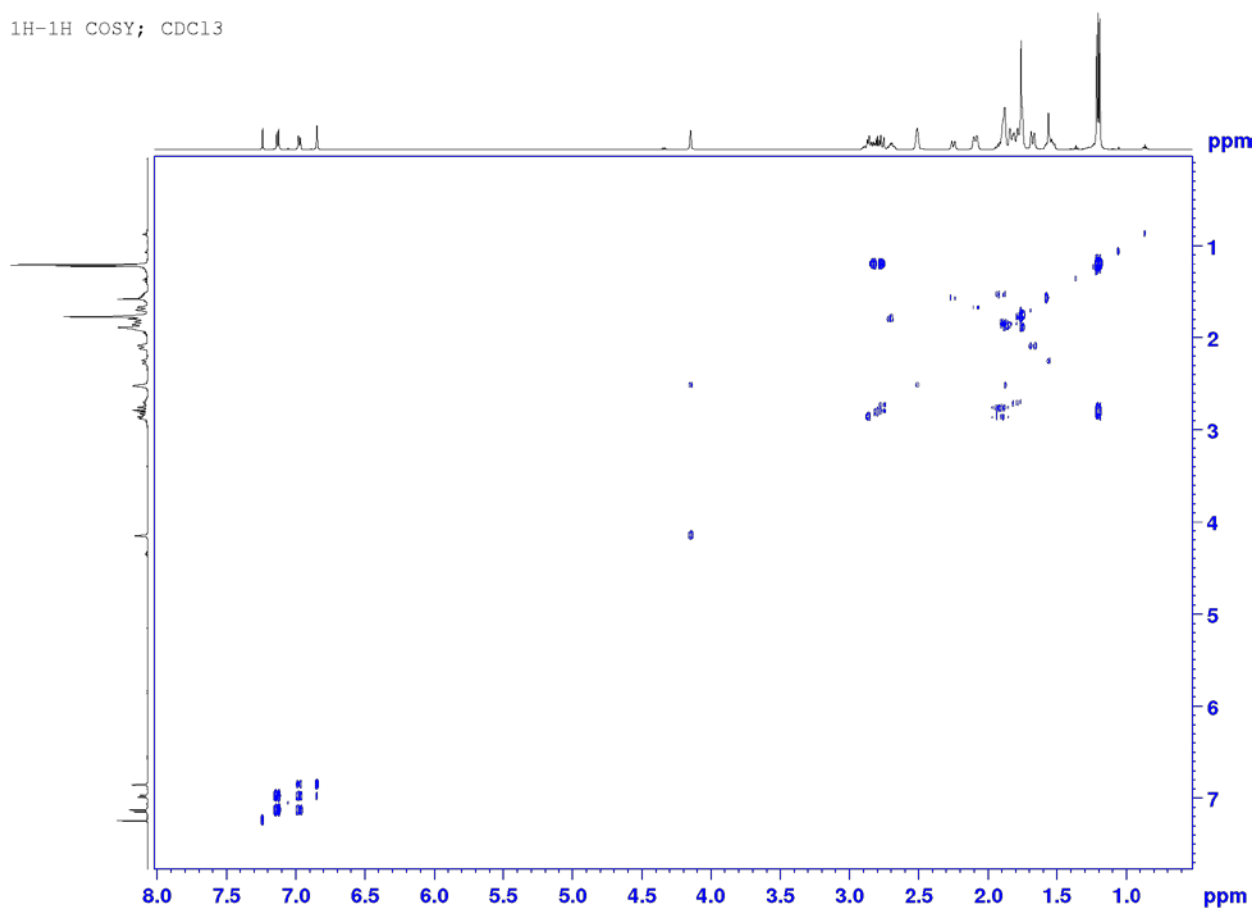


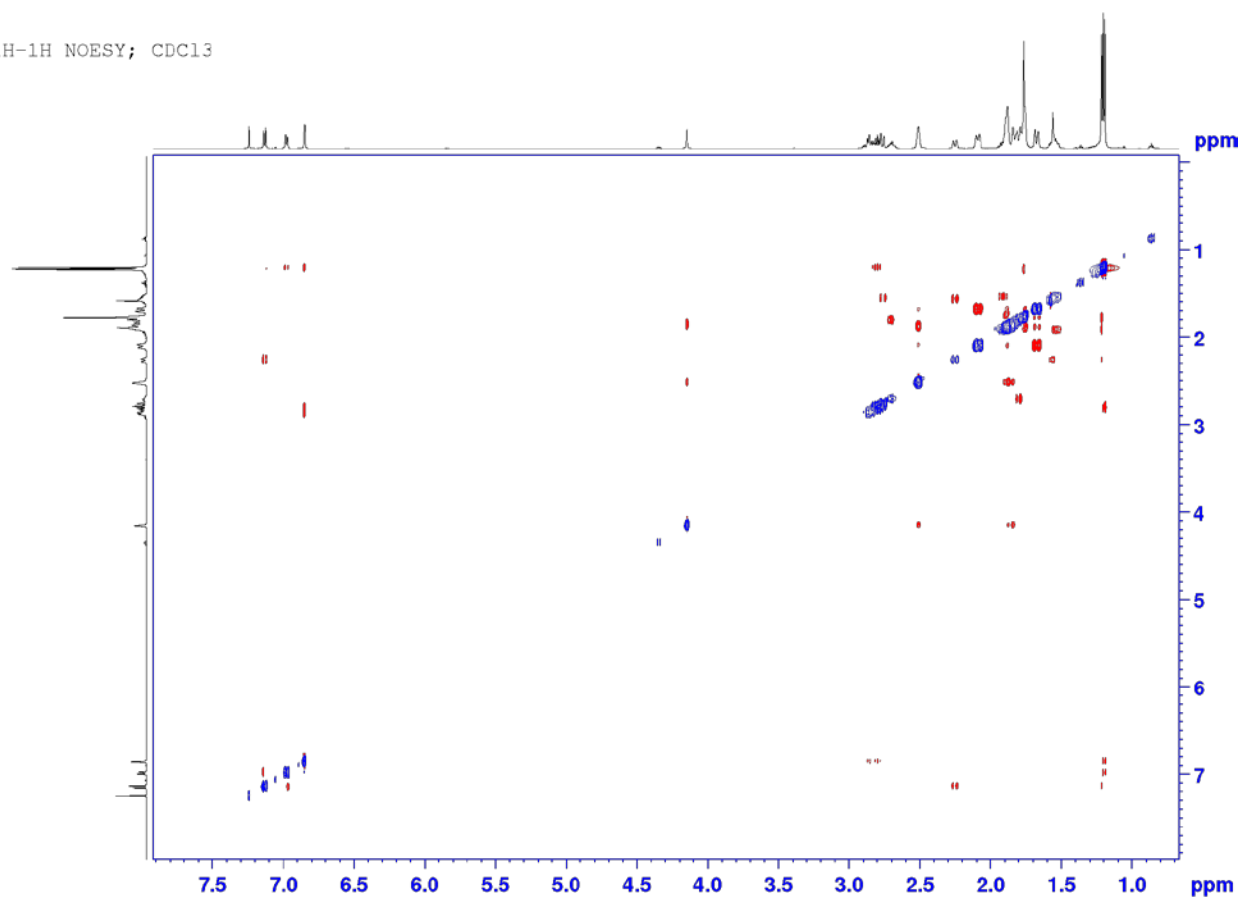
Figure S8. ^1H NMR and ^{13}C NMR spectra of compound 9b



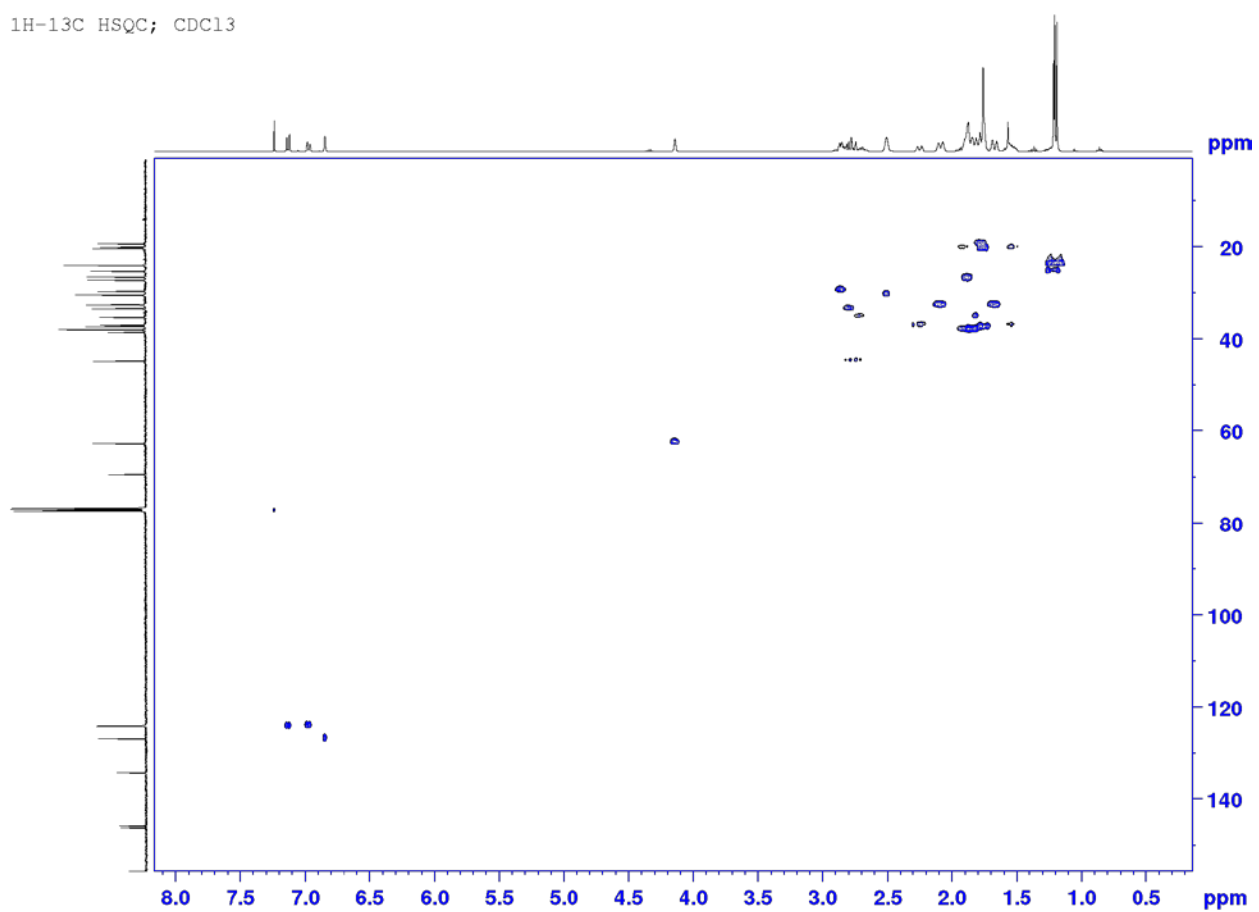
^1H - ^1H COSY; CDCl_3



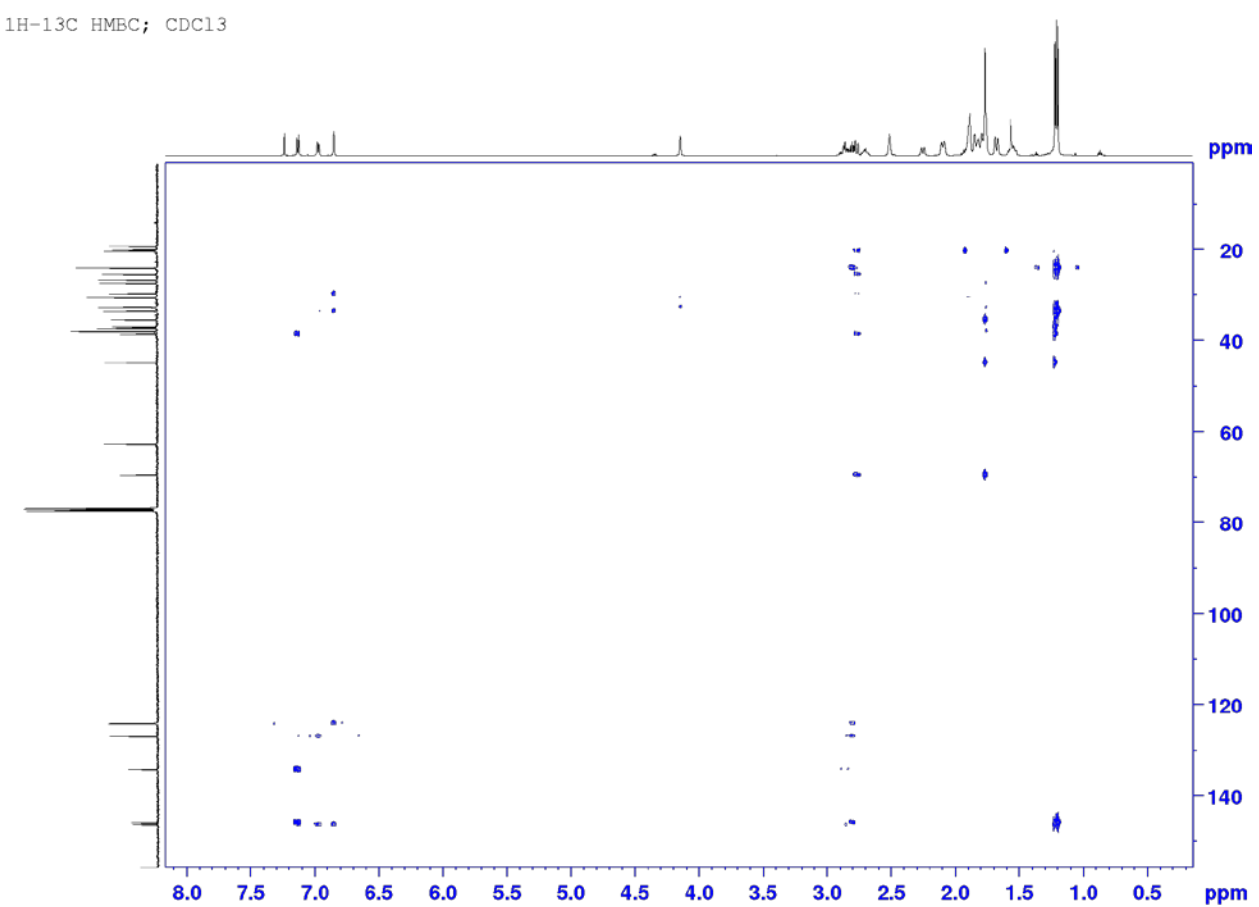
^1H - ^1H NOESY; CDCl_3



¹H-¹³C HSQC; CDCl₃



¹H-¹³C HMBC; CDCl₃



3. IR Spectra of Compounds 8a-9b

Figure S9. IR Spectra of Compound 8a

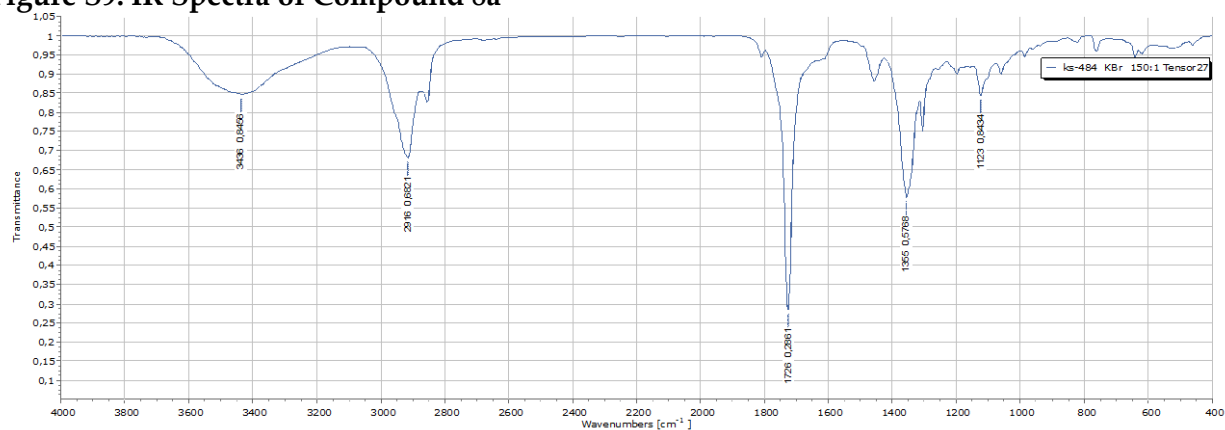


Figure S10. IR Spectra of Compound 8b

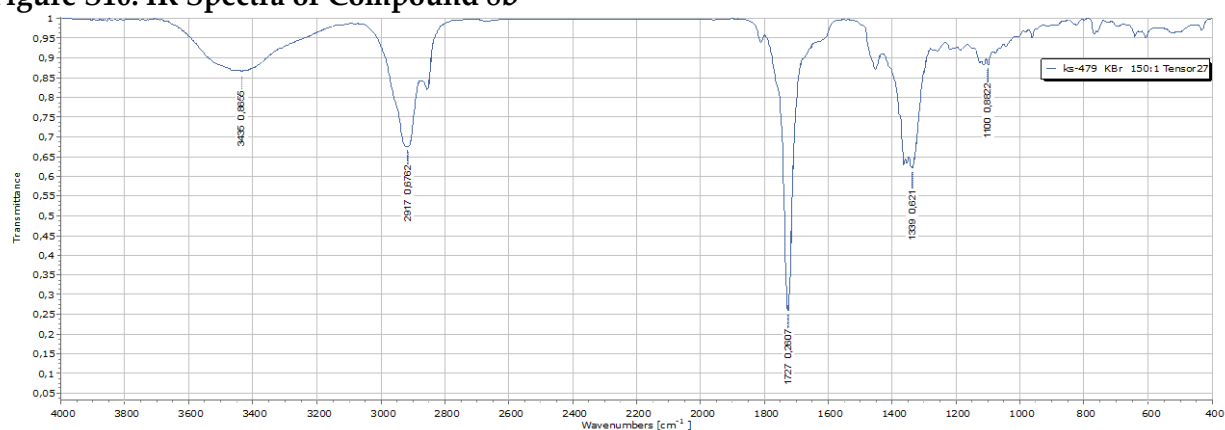


Figure S11. IR Spectra of Compound 9a

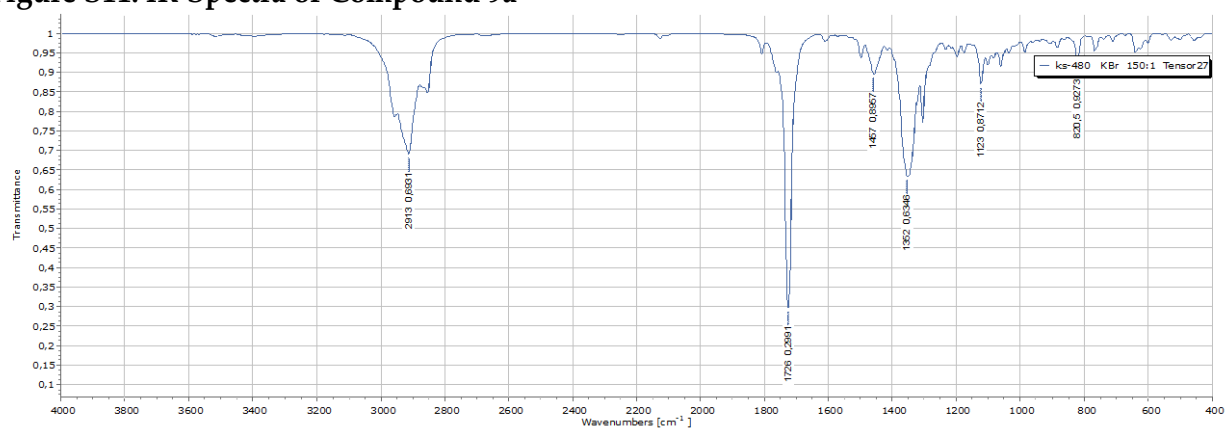


Figure S12. IR Spectra of Compound 9b

